Confidential Draft Submission No. 8 submitted to the Securities and Exchange Commission on June 30, 2023. This draft registration statement has not been publicly filed with the Securities and Exchange Commission and all information herein remains strictly confidential.

Registration No. 333-

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-1

REGISTRATION STATEMENT

UNDER

THE SECURITIES ACT OF 1933

NEUMORA THERAPEUTICS, INC.

(Exact Name of Registrant as Specified in Its Charter)

Delaware (State or Other Jurisdiction of Incorporation or Organization)

(Primary Standard Industrial Classification Code Number 490 Arsenal Way, Suite 200 Watertown, Massachusetts 02472

84-4367680 (I.R.S. Employer Identification Number)

(Address, Including Zip Code, and Telephone Number, Including Area Code, of Registrant's Principal Executive Offices)

Paul Berns Chief Executive Officer Neumora Therapeutics, Inc. 490 Arsenal Way, Suite 200

Watertown, Massachusetts 02472 (857) 760-0900 (Name, Address, Including Zip Code, and Telephone Number, Including Area Code, of Agent For Service)

Phillip S. Stoup Shayne Kennedy Latham & Watkins LLP 505 Montgomery Street, Suite 2000 San Francisco, California 94111 (415) 391-0600

Copies to: Joshua Pinto Chief Financial Officer Neumora Therapeutics, Inc. 490 Arsenal Way, Suite 200 Watertown, Massachusetts 02472 (857) 760-0900

Charles S. Kim Kristin VanderPas **Dave Peinsipp** Denny Won Cooley LLP 10265 Science Center Dr San Diego, California 92121 (858) 550-6000

Approximate date of commencement of proposed sale to the public: As soon as practicable after the effective date of this Registration Statement.

If any of the securities being registered on this form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box. \Box

If this form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. \Box

If this form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. $\hfill\square$

If this form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. \Box

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer Non-accelerated filer \mathbf{X}

Accelerated filer Smaller reporting company X Emerging growth company X

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act.

The Registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, or until the registration statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

The information in this preliminary prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This preliminary prospectus is not an offer to sell these securities and we are not soliciting offers to buy these securities in any jurisdiction where the offer or sale is not permitted.

> SUBJECT TO COMPLETION, DATED , 2023

Shares



Common Stock

This is an initial public offering of shares of common stock of Neumora Therapeutics, Inc.

We are offering shares of our common stock. Prior to this offering, there has been no public market for our common stock. It is currently estimated that the initial public offering price per share will be between \$ per share of common stock. We intend to apply to and \$ list our common stock on the Nasdaq Global Market under the symbol "NMRA," and this offering is contingent upon obtaining such approval.

We are an emerging growth company under the federal securities laws and, as such, have elected to comply with certain reduced public company reporting requirements.

Investing in our common stock involves a high degree of risk. See the section titled "Risk Factors" beginning on page 12.

	Per	Per	
	Share	Total	
Initial public offering price	\$	\$	
Underwriting discounts and commissions ⁽¹⁾	\$	\$	
Proceeds, before expenses, to us	\$	\$	

(1) See the section titled "Underwriting" for additional information regarding the estimated underwriting discounts and commissions and estimated offering expenses.

We have granted the underwriters an option for a period of 30 days to purchase up to an additional

The underwriters expect to deliver the shares against payment in New York, New York on , 2023.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the accuracy or adequacy of this prospectus. Any representation to the contrary is a criminal offense.

Stifel

J.P. Morgan

BofA Securities

Citigroup

Guggenheim Securities

RBC Capital Markets

shares of our common stock.

, 2023

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We have not, and the underwriters have not, authorized anyone to provide you any information or to make any representations other than those contained in this prospectus or in any free writing prospectus prepared by or on behalf of us or to which we have referred you. Neither we nor the underwriters take responsibility for, or provide any assurance as to the reliability of, any other information others may give you. This prospectus is an offer to sell only the shares offered hereby, and only under circumstances and in jurisdictions where it is lawful to do so. We are not, and the underwriters are not, making an offer to sell these securities in any jurisdiction where the offer or sale is not permitted. The information contained in this prospectus is accurate only as of the date of this prospectus, regardless of the time of delivery of this prospectus or any sale of the shares of our common stock. Our business, financial condition, results of operations and prospects may have changed since that date.

For investors outside the United States: We have not, and the underwriters have not, done anything that would permit this offering or the possession or distribution of this prospectus or any free writing prospectus in connection with this offering in any jurisdiction where action for that purpose is required, other than in the United States. Persons outside the United States who come into possession of this prospectus must inform themselves about, and observe any restrictions relating to, the offering of the shares of common stock and the distribution of this prospectus outside the United States. See the section titled "Underwriting."

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In this prospectus, "Neumora Therapeutics," "Neumora," the "company," "we," "us" and "our" refer to Neumora Therapeutics, Inc. and, where appropriate, our subsidiaries.

"NEUMORA," the Neumora logos and other trade names, trademarks or service marks of Neumora appearing in this prospectus are the property of Neumora. Other trade names, trademarks or service marks appearing in this prospectus are the property of their respective holders. Solely for convenience, trade names, trademarks and service marks referred to in this prospectus appear without the $^{(R)}$, TM and SM symbols, but those references are not intended to indicate, in any way, that we will not assert, to the fullest extent under applicable law, our rights or that the applicable owner will not assert its rights, to these trade names, trademarks and service marks.

Through and including , 2023 (the 25th day after the date of this prospectus), all dealers that buy, sell or trade shares of our common stock, whether or not participating in this offering, may be required to deliver a prospectus. This delivery requirement is in addition to the obligation of dealers to deliver a prospectus when acting as underwriters and with respect to their unsold allotments or subscriptions.

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PROSPECTUS SUMMARY

This summary highlights information contained elsewhere in this prospectus. This summary may not contain all of the information that you should consider before deciding to invest in our common stock. You should read this entire prospectus carefully, including the sections titled "Risk Factors," "Management's Discussion and Analysis of Financial Condition and Results of Operations" and "Business," and our audited consolidated financial statements, unaudited condensed consolidated financial statements and related notes included elsewhere in this prospectus before making an investment decision. Some of the statements in this prospectus are forward-looking statements. See the section titled "Special Note Regarding Forward-Looking Statements."

Overview

We are a clinical-stage biopharmaceutical company founded to confront the global brain disease crisis by taking a fundamentally different approach to the way treatments for brain diseases are developed. We have rapidly scaled our therapeutic pipeline, which currently consists of seven clinical and preclinical neuroscience programs that target novel mechanisms of action for a broad range of underserved neuropsychiatric disorders and neurodegenerative diseases. Our most advanced product candidate, NMRA-140, is a novel once-daily oral kappa opioid receptor (KOR) antagonist that is being developed for the treatment of major depressive disorder (MDD), which we believe has the potential to provide significant advantages relative to the standard of care, if approved. We are initiating a Phase 3 program for NMRA-140 monotherapy in patients with moderate to severe MDD in

Brain diseases collectively represent one of the largest areas of unmet medical need globally, affecting upwards of 1.5 billion patients. Despite the commercial success of historically approved drugs, the markets for many of the most prevalent brain disorders have been dominated by a single class of drugs, such as serotonin-targeting antidepressants for MDD, leaving patients with a high degree of unmet medical need given the lack of diverse treatment options and mechanisms of action. For example, there are currently over 21 million adults in the United States diagnosed with MDD, 85% of whom either do not receive treatment with a pharmacological agent or fail to achieve remission with first-line selective serotonin reuptake inhibitors (SSRI)/serotonin and norepinephrine reuptake inhibitors (SNRI) and thus progress onto second-line treatment with another SSRI/SNRI. In addition, patients with common neuropsychiatric disorders and neurodegenerative diseases are heterogeneous, presenting diverse symptoms and multiple underlying disease drivers. Despite the inherent heterogeneity of these disorders, patients are generally diagnosed based on broad disease classifications defined by subjective clinical symptoms rather than by specific underlying genetic and biological mechanisms. As a result, clinical development in neuroscience to date has taken a "one-size-fits-all" approach, in contrast to other areas that have employed more of a targeted patient selection approach. From 2011 to 2020, clinical development success rates for new drug candidates that employed patient selection biomarkers were approximately 16% compared to approximately 8% for those without patient selection biomarkers according to the Biotechnology Innovation Organization (BIO); however, clinical success depends on a number of factors and employing a patient selection biomarker approach does not guarantee that our product candidates will be approved and commercialized. We believe the relative lack of progress and innovation within the broader central nervous system (CNS) therapeutic landscape is due in large part to an insufficient degree of focus on novel, potentially more therapeutically relevant targets implicated in CNS diseases and clinical development strategies that often yield inconclusive results due to the inherent heterogeneity known to occur in patient populations classified by broad symptomatic domains.

We founded Neumora to confront these challenges by taking a fundamentally different approach to the way treatments for brain diseases are developed. We are redefining neuroscience drug development by:

• **Building a diversified neuroscience company at scale with a broad therapeutic pipeline and significant capital resources**: We have raised over \$600 million in funding and purpose-built an

industry-leading team of company builders and neuroscience drug developers. As a result, we have quickly scaled a broad therapeutic pipeline consisting of seven clinical and preclinical programs, which we aim to develop to meet unmet medical need across brain health disorders.

- *Focusing on therapeutic candidates with novel mechanisms of action*: We have built a pipeline of seven clinical and preclinical programs that target novel mechanisms of action with the potential to provide new treatment options to patients that alleviate unmet medical need.
- Leveraging a precision neuroscience approach with the goal of improving our programs' probability of success: To better understand the biological drivers of heterogeneous brain diseases and to identify targeted patient populations of interest, we have built our Precision Toolbox, which integrates a suite of translational and clinical tools with proprietary machine learning algorithms and methods, and incorporates insights from analyzing longitudinal, multimodal patient data. We believe our Precision Toolbox will enable us to execute potential strategies to help identify biomarkers, enroll the right patients in our clinical studies, optimize clinical trial designs and expand life cycle management opportunities; ultimately, supporting our goal of increasing the likelihood of matching the right drug for the right patient.

Our Pipeline

We have rapidly scaled our therapeutic pipeline through both business development activities and internal discovery capabilities. Our therapeutic pipeline is comprised of programs for neuropsychiatric disorders and neurodegenerative diseases, each targeting a novel mechanism of action that, where beneficial, can leverage our precision neuroscience approach. As shown in the table below, our current pipeline comprises seven programs, two of which are in clinical development and five of which are in preclinical development. We expect to continue to rapidly progress the development of our pipeline with the planned initiation of up to clinical trials across our programs over the next 12 to 18 months.

PROGRAM Target/Mechanism	INDICATION US Prevalence	Preclinical	Phase 1	Phase 2	Phase 3	
Neuropsychiatry P	rograms					
		Study 301 (Mono	Study 301 (Monotherapy, U.S.)			
NMRA-140 KOR Antagonist	Major Depressive Disorder 21M	Study 302 & 303	Study 302 & 303 (Monotherapy, 2 Global Studies)			
		Study 501 (Open-Label Extension)				
NMRA-511 V1aR Antagonist	Neuropsychiatric Disorders NA					
NMRA-M4R M4R Modulator	Schizophrenia 3M					
NMRA-NMDA NMDA Modulator	Schizophrenia 3M					
Neurodegeneration	Programs					
NMRA-CK18 CK18 Inhibitor	ALS 25K					
NMRA-NLRP3 NLRP3 Inhibitor	Parkinson's Disease					
NMRA-GCASE GCASE Activator	Parkinson's Disease					

NMRA-140 is a novel, oral once-daily, selective KOR antagonist in development for the monotherapy treatment of MDD, which is a chronic neuropsychiatric disorder with significant unmet medical need. There are currently over 21 million adults in the United States diagnosed with MDD, 85% of whom either do not receive treatment with a pharmacological agent or fail to achieve remission with first-line SSRI/SNRI. We are developing NMRA-140 as a once-daily oral medication designed to modulate the dopamine and reward processing pathways that play an important role in the regulation of mood, cognition, reward and behavior. The KOR/dynorphin system is well-characterized and known to modulate depression, anhedonia and anxiety, and represents a novel approach to treating MDD and other major neuropsychiatric disorders. Following the completion of an End-of-Phase 2 meeting with the U.S. Food & Drug Administration (FDA) in June 2023, we are initiating a Phase 3 program for NMRA-140 monotherapy in patients with moderate to severe MDD in . In addition, we intend to explore and evaluate the potential of NMRA-140 as treatment for other neuropsychiatric populations beyond MDD, such as schizophrenia, post-traumatic stress disorder, generalized anxiety disorder, bipolar disorder and others.

NMRA-511 is an investigational antagonist of the vasopressin 1a receptor (V1aR). Vasopressin plays a role in the regulation of aggression, affiliation, stress and anxiety response. Based on our preclinical findings in non-human primates as well as preclinical and clinical results from third parties, we believe V1aR has the potential to be a promising novel target for multiple neuropsychiatric disorders and neurodegenerative diseases across the spectrum of anxiety, aggression and stress. We had previously completed a Phase 1 single ascending dose (SAD)/multiple ascending dose (MAD) clinical trial of NMRA-511 at doses up to 10 mg, and we are conducting an additional Phase 1 MAD clinical trial of NMRA-511 at higher doses up to 20 mg. We plan to use the Phase 1 MAD clinical trial to guide dose selection for future development. We plan to advance clinical development for the treatment of agitation associated with dementia due to Alzheimer's disease.

NMRA-M4R is a positive allosteric modulator of the M4 muscarinic receptor (M4R) for the treatment of schizophrenia and other neuropsychiatric disorders. Our M4R-positive allosteric modulator program is designed to be highly selective for the M4 receptor subtype of the muscarinic receptor family. Muscarinic receptor-targeting compounds have demonstrated clinical validation in third-party trials as an approach to treating schizophrenia, with the potential to treat other neuropsychiatric disorders such as dementia-related psychosis and cognitive disorders, where innovation has been stagnant for decades. Selective M4R-positive allosteric modulators have the potential to deliver the antipsychotic efficacy associated with targeting this receptor subtype, while minimizing the side effects associated with current antipsychotics and other non-selective muscarinic agonists. Our NMRA-M4R program is in preclinical development. We exclusively licensed certain intellectual property rights related to NMRA-M4R from Vanderbilt University.

NMRA-NMDA is an NMDA positive allosteric modulator program designed to target the NMDA receptor that we intend to develop for the treatment of schizophrenia. Recent breakthroughs in third-party psychiatric genetic studies have provided genetic evidence in support of the role of NMDA receptors in schizophrenia. Further, human studies suggest NMDA receptor antagonists (such as ketamine) lead to a schizophrenia-like syndrome, which provides compelling evidence for this target. Our NMRA-NMDA program was internally discovered and is in preclinical development.

*NMRA-CK1*d is a CK1d inhibitor program that we intend to develop for amyotrophic lateral sclerosis (ALS). CK1d is a kinase that has been identified as a proximal upstream regulator of TDP-43 phosphorylation, a key driver of TDP-43-driven pathology in approximately 95% of sporadic ALS cases. There is also genetic evidence supporting the role of TDP-43 in ALS. Our NMRA-CK1d program is in preclinical development. We exclusively licensed certain intellectual property rights related to NMRA-CK1d from Amgen Inc. (Amgen).

NMRA-NLRP3 is an inhibitor program focused on targeting the NLRP3 inflammasome for the treatment of certain neurodegenerative conditions. The inflammasome is a critical part of the innate immune system that

responds to pathogens and cellular damage and is implicated in brain disorders, such as Parkinson's disease (PD), as well as immune disorders. The NLRP3 inflammasome can be activated in brain microglia, a type of cell in the brain, and other cell types by a range of proteins linked to neurodegeneration, including alpha-synuclein (a neuronal protein that regulates synaptic vesicle trafficking), which suggests the inflammasome may have a mechanistic role in PD. Our NMRA-NLRP3 program was internally discovered and is in preclinical development.

NMRA-GCase is an activator program focused on elevating the activity of the enzyme glucocerebrocidase (GCase) that we are developing for the treatment of PD. Mutations in the GBA gene, which codes for the enzyme GCase, are the single largest genetic risk factor for PD. GCase deficiencies lead to storage disorders of the lysosome, which plays an important role in maintaining cellular balance, and a group of patients with PD has lysosomal dysfunction. Our NMRA-GCase program is in preclinical development. We exclusively licensed certain intellectual property rights related to NMRA-GCase from Amgen.

Our Team

Our people are the backbone of the company and our most important asset. We have assembled a diverse team of experienced company builders and leading neuroscience drug developers, complemented by world-class scientific and technical advisors and an experienced board of directors and syndicate of investors. This group shares a long-term commitment to execute our mission to redefine neuroscience drug development by bringing forward the next generation of novel therapies that offer improved treatment outcomes and quality of life for patients suffering from brain diseases.

- Experienced Company Builders. We have multiple individuals with experience building disruptive biopharmaceutical companies. Our Co-Founder, Chief Executive Officer and Chairman of our board of directors, Paul Berns, has over 30 years of drug development and commercialization experience and was previously the President, Chief Executive Officer and Chairman of the Board of Anacor Pharmaceuticals before it was acquired by Pfizer in 2016. Carol Suh, our Co-Founder and Chief Operating Officer, has co-founded and built multiple biotechnology companies in her role as a Partner of ARCH Venture Partners. Dr. Joshua Pinto, our Chief Financial Officer, spent a decade advising leading biotechnology companies across their life cycles from his career as an investment banker after completing his Ph.D. in neuroscience and working in research.
- Leading Neuroscience Drug Developers. Our scientific leadership team includes world-class physicians and scientists with extensive neuroscience drug development experience. Dr. Michael Gold, our Chief Medical Officer, previously served as Vice President of Neuroscience Development at AbbVie where he was involved in the successful approval of CNS therapies including the recent approval of VRAYLAR as an adjunctive treatment for MDD. Dr. Bill Aurora, our Chief Development Officer, previously served as Chief Scientific Affairs Officer of Dermira, Inc. and held medical and scientific affairs leadership roles at Neurocrine Biosciences, Merck Research Laboratories and Amgen. Dr. Nick Brandon, our Chief Scientific Officer, previously served as Chief Scientist of AstraZeneca's Neuroscience Innovative Medicines and Early Development Division, as well as Head of Psychiatry and Behavioral Disorders for a period that bridged the Wyeth and Pfizer Neuroscience organizations.
- Scientific and Technical Advisory Boards. We have built a scientific advisory board with research and drug development expertise spanning molecular genetics, neurobiology, molecular cell biology, neural circuitry, medicinal chemistry, translational medicine and the development of statistical methodologies across a broad spectrum of neuropsychiatric disorders and neurodegenerative diseases. We have also established a technical advisory board with expertise that includes computational and cognitive neuroscience, brain-behavior mapping, the identification of biomarkers and treatment response, and the application of data science, artificial intelligence and machine learning (AI/ML) and digital tools to the development and delivery of therapeutics.

• **Board of Directors and Investors with Shared Long-Term Vision**. Our board of directors is comprised of renowned company builders, operators, leaders, scientists and drug developers with experience across a diverse array of companies. Together with our investors, who have supported us with over \$600 million in funding, we share a long-term vision to confront the global brain disease crisis at scale.

Our Strategy

We founded our company to confront the global brain disease crisis by taking a fundamentally different approach to the way treatments for brain diseases are developed across neuropsychiatric disorders and neurodegenerative diseases. Our mission is to redefine neuroscience drug development by bringing forward the next generation of novel therapies that offer improved treatment outcomes and quality of life for patients suffering from brain diseases. The key components of our business strategy to deliver on our mission are to:

- Build a broad industry-leading pipeline of novel neuroscience therapeutics
- Advance NMRA-140 towards commercialization
- Strategically allocate capital across our pipeline to achieve our mission
- Leverage our Precision Toolbox to enhance our development efforts
- Capitalize upon our IP position to realize the full value of our programs that target novel mechanisms of action

Risks Associated with Our Business

Our business is subject to a number of risks of which you should be aware before making a decision to invest in our common stock. These risks are more fully described in the section titled "Risk Factors" immediately following this prospectus summary. These risks include, among others, the following:

- We are a clinical-stage biopharmaceutical company and have incurred significant losses since our inception, and we expect to incur losses for the foreseeable future. We have no products approved for commercial sale and may never achieve or maintain profitability.
- Our substantial contingent consideration and related obligations from our acquisitions of assets and license and collaboration agreements may result in dilution to our stockholders, may be a drain on our cash resources, or may cause us to incur debt obligations to satisfy the payment obligations.
- Our limited operating history may make it difficult to evaluate our prospects and likelihood of success.
- Even if this offering is successful, we will require additional funding in order to finance operations. If we are unable to raise capital when needed, or on acceptable terms, we could be forced to delay, reduce or eliminate our product development programs or commercialization efforts.
- If we are unable to successfully identify, develop and commercialize any product candidates, or experience significant delays in doing so, our business, financial condition and results of operations will be materially adversely affected.
- We were founded with a mission to redefine neuroscience drug development, a field that has seen very limited success. The ability to successfully develop drugs in this field is extremely difficult and is subject to a number of unique challenges.
- We have invested and expect to continue to invest in acquiring product candidates, technologies and assets, as well as research and development efforts that further enhance our product pipeline. Such investments may affect our operating results, and, if the return on these investments is lower or develops more slowly than we expect, our revenue and operating results may suffer.

- We have experienced rapid growth since our inception in November 2019, and expect to continue to grow in the future. If we fail to effectively manage our growth, we may not be able to execute on our business objectives.
- We operate in highly competitive and rapidly changing industries, which may result in others discovering, developing or commercializing competing products before or more successfully than we do.
- Clinical and preclinical drug development is a lengthy and expensive process, with an uncertain outcome. Our clinical and preclinical programs have experienced delays and may experience additional delays or may never advance, which would adversely affect our ability to obtain regulatory approvals or commercialize our product candidates on a timely basis or at all, which could have an adverse effect on our business.
- The development and commercialization of drug products is subject to extensive regulation, and the regulatory approval processes of the FDA and comparable foreign authorities are lengthy, time-consuming, and inherently unpredictable. If we are ultimately unable to obtain regulatory approval for our product candidates on a timely basis or at all, our business will be substantially harmed.
- We depend on intellectual property licensed from third parties and we are currently party to in-license agreements under which we acquired rights to use, develop, manufacture and/or commercialize certain of our proprietary technologies and product candidates. If we breach our obligations under these agreements or if any of these agreements is terminated, or otherwise experience disruptions to our business relationships with our licensors, we may be required to pay damages, lose our rights to such intellectual property and technology, or both, which would harm our business.

Our Corporate Information

We were founded in November 2019 as a Delaware corporation under the name RBNC Therapeutics, Inc. We changed our name to Neumora Therapeutics, Inc. in October 2021. Our principal executive offices are located at 490 Arsenal Way, Suite 200, Watertown, Massachusetts 02472, and our telephone number is (857) 760-0900.

In 2020, we acquired Abelian Therapeutics, Inc. (Abelian), BlackThorn Therapeutics, Inc. (BlackThorn), Syllable Life Sciences, Inc. (Syllable), Propellex Bio, Inc. (Propellex) and Alairion, Inc. (Alairion), each of which became our wholly owned subsidiary. As of March 31, 2023, we have dissolved Abelian, BlackThorn, Syllable, Propellex and Alairion.

Our website address is www.neumoratx.com. The information on, or that can be accessed through, our website is not part of this prospectus and is not incorporated by reference herein. We have included our website address as an inactive textual reference only.

Implications of Being an Emerging Growth Company and a Smaller Reporting Company

We are an "emerging growth company," as defined in the Jumpstart Our Business Startups Act of 2012 (the JOBS Act). We will remain an emerging growth company until the earliest of: (i) the last day of the fiscal year following the fifth anniversary of the consummation of this offering; (ii) the last day of the fiscal year in which we have total annual gross revenue of at least \$1.235 billion; (iii) the last day of the fiscal year in which we have total annual gross revenue of at least \$1.235 billion; (iii) the last day of the fiscal year in which we are deemed to be a "large accelerated filer" as defined in Rule 12b-2 under the Securities Exchange Act of 1934, as amended (the Exchange Act), which would occur if the market value of our common stock held by non-affiliates exceeded \$700.0 million as of the last business day of the second fiscal quarter of such year; or (iv) the date on which we have issued more than \$1.0 billion in non-convertible debt securities during the prior three-year period. An emerging growth company may take advantage of specified reduced reporting

requirements and is relieved of certain other significant requirements that are otherwise generally applicable to public companies. As an emerging growth company:

- we will present in this prospectus only two years of audited annual financial statements, plus any required unaudited financial statements, and related management's discussion and analysis of financial condition and results of operations;
- we will avail ourselves of the exemption from the requirement to obtain an attestation and report from our independent registered public accounting firm on the assessment of our internal control over financial reporting pursuant to the Sarbanes-Oxley Act of 2002;
- we will provide less extensive disclosure about our executive compensation arrangements; and
- we will not require non-binding, advisory stockholder votes on executive compensation or golden parachute arrangements.

In addition, the JOBS Act provides that an emerging growth company can take advantage of an extended transition period for complying with new or revised accounting standards. This provision allows an emerging growth company to delay the adoption of some accounting standards until those standards would otherwise apply to private companies. We have elected to use the extended transition period for any other new or revised accounting standards during the period in which we remain an emerging growth company; however, we have and may adopt certain new or revised accounting standards early.

We are also a "smaller reporting company," as defined in the Exchange Act. We may continue to be a smaller reporting company even after we are no longer an emerging growth company. We may take advantage of certain of the scaled disclosures available to smaller reporting companies and will be able to take advantage of these scaled disclosures for so long as the market value of our voting and non-voting common stock held by non-affiliates is less than \$250.0 million measured on the last business day of our second fiscal quarter, or our annual revenue is less than \$100.0 million during the most recently completed fiscal year and the market value of our voting and non-voting common stock held by non-affiliates is less than \$700.0 million measured on the last business day of our second fiscal quarter.

As a result, the information in this prospectus and that we provide to our investors in the future may be different than what you might receive from other public reporting companies.

THE OFFERING			
Common stock offered by us	shares.		
Option to purchase additional shares of common stock	shares.		
Common stock to be outstanding immediately after this offering	s shares (or shares if the underwriters exercise their option to purchase additional shares in full).		
Use of proceeds	We estimate that the net proceeds to us from this offering will be approximately \$ million (or approximately \$ million if the underwriters exercise their option to purchase additional shares in full) assuming an initial public offering price of \$ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.		
	We currently intend to use the net proceeds from this offering, together with our existing cash, cash equivalents and marketable securities, to fund the clinical and preclinical development of our current programs, to fund research and development activities for additional programs, and the remainder for working capital and other general corporate purposes. We may also use a portion of the net proceeds to in-license, acquire, or invest in, complementary technologies, assets, or intellectual property. We regularly evaluate strategic opportunities; however, we have no current commitments to enter into any such license arrangements or acquisition agreements or to make any such investments. See the section titled "Use of Proceeds."		
Risk factors	See the section titled "Risk Factors" and other information included in this prospectus for a discussion of factors you should carefully consider before deciding whether to invest in our common stock.		
Proposed Nasdaq trading symbol	"NMRA"		
	ext otherwise requires, the number of shares of our common stock to be outstanding after n stock outstanding as of March 31, 2023 (after giving effect to the conversion of all of our March 31, 2023 into an aggregate of shares of our common stock immediately		

shares of convertible preferred stock outstanding as of March 31, 2023 into an aggregate of prior to the completion of this offering), and excludes:

- shares of our common stock issuable upon the exercise of stock options outstanding as of March 31, 2023, with a weightedaverage exercise price of \$ per share;
- shares of our common stock issuable upon the exercise of stock options outstanding as of March 31, 2023, subject to market and performance vesting conditions, with a weighted-average exercise price of \$ per share;
- shares of our common stock issuable upon the exercise of stock options granted subsequent to March 31, 2023, with a weighted-average exercise price of \$ per share;

- shares of our common stock reserved for future issuance under our 2020 Plan as of March 31, 2023;
- shares of our common stock reserved for future issuance under our 2023 Incentive Award Plan (the 2023 Plan), which will become effective on the date immediately prior to the date our registration statement relating to this offering becomes effective, as well as any future increases in the number of shares of common stock reserved for issuance under the 2023 Plan; and
 - shares of our common stock reserved for future issuance under our Employee Stock Purchase Plan (the ESPP), which will become effective on the date immediately prior to the date our registration statement relating to this offering becomes effective, as well as any future increases in the number of shares of common stock reserved for issuance under the ESPP.

Unless we specifically state otherwise or the context otherwise requires, this prospectus reflects and assumes the following:

- the adoption, filing and effectiveness of our amended and restated certificate of incorporation immediately prior to the completion of this offering;
- the conversion of all outstanding shares of our convertible preferred stock outstanding as of March 31, 2023 into shares of our common stock immediately prior to the completion of this offering;
- no exercise, settlement or termination of the outstanding stock options referred to above;
- a -for- stock split of our capital stock to be effected prior to the completion of this offering; and
- no exercise by the underwriters of their option to purchase additional shares of our common stock in this offering.

SUMMARY CONSOLIDATED FINANCIAL DATA

The following tables summarize our consolidated financial data for the periods and as of the dates indicated. We have derived the summary consolidated statements of operations and comprehensive loss data for the years ended December 31, 2021 and 2022, except for pro forma amounts, from our audited consolidated financial statements and related notes included elsewhere in this prospectus. We have derived the summary consolidated statements of operations and comprehensive loss data for the three months ended March 31, 2022 and 2023, except for pro forma amounts, and the summary consolidated balance sheet data as of March 31, 2023, except for pro forma amounts, from our unaudited condensed consolidated financial statements and related notes as of and for the three months ended March 31, 2023 and 2022 included elsewhere in this prospectus. Our unaudited condensed consolidated financial statements were prepared on a basis consistent with our audited consolidated financial information set forth in those statements included elsewhere in this prospectus. Our historical results are not necessarily indicative of results that may be expected in the future and our interim results are not necessarily indictive of the results that may be expected for the full year. You should read the following summary consolidated financial data together with our audited consolidated financial statements, unaudited condensed consolidated financial data together with our audited consolidated financial statements, unaudited condensed consolidated financial data together with our audited consolidated financial statements and the related notes included elsewhere in this prospectus and the information in the section titled "Management's Discussion and Analysis of Financial Condition and Results of Operations."

	Decem	Year Ended December 31,		Three Months Ended March 31,	
	<u>2021</u>	2022 Isands, except sha	2022	2023	
Consolidated Statements of Operations and Comprehensive Loss Data:	(iii thot	isanus, except sna	ire and per share	cuata)	
Operating expenses					
Research and development	\$ 55,776	\$ 91,749	\$ 22,149	\$ 29,485	
Acquired in-process research and development	157,000	13,000	13,000	_	
General and administrative	24,547	31,121	8,087	9,683	
Total operating expenses	237,323	135,870	43,236	39,168	
Loss from operations	(237,323)	(135,870)	(43,236)	(39,168)	
Other income (expense):					
Interest income	—	4,561	86	3,569	
Other income (expense), net	11	405	108	(26)	
Total other income	11	4,966	194	3,543	
Net loss	\$(237,312)	\$(130,904)	\$ (43,042)	\$ (35,625)	
Other comprehensive income (loss):					
Unrealized gain (loss) on marketable securities	—	(774)	(178)	476	
Comprehensive loss	\$(237,312)	\$(131,678)	\$ (43,220)	\$ (35,149)	
Net loss per share, basic and diluted	\$ (1.38)	\$ (0.61)	\$ (0.21)	\$ (0.16)	
Weighted average shares outstanding, basic and diluted	171,815	213,477	204,122	229,715	
Pro forma net loss per share, basic and diluted ⁽¹⁾		\$		\$	
Pro forma weighted-average shares outstanding, basic and diluted $^{(1)}$					

(1) The unaudited pro forma basic and diluted net loss per share for the year ended December 31, 2022 and for the three months ended March 31, 2023 have been prepared to give effect to the assumed conversion of outstanding shares of convertible preferred stock to common stock at December 31, 2022 and March 31, 2023, respectively, as if the convertible preferred stock was outstanding as of January 1, 2022 or January 1, 2023, respectively, irrespective of when the convertible preferred stock was issued.

		As of March 31, 2023		
	Actual	Pro Forma ⁽¹⁾	Pro Forma as Adjusted ⁽²⁾⁽³⁾	
Concellidated Balance Cheet Date:	(ur	unaudited, in thousands)		
Consolidated Balance Sheet Data:				
Cash, cash equivalents and marketable securities	\$ 363,832	\$	\$	
Working capital ⁽⁴⁾	338,181			
Total assets	392,093			
Convertible preferred stock	843,687			
Additional paid-in capital	25,496			
Accumulated deficit	(503,134)			
Total stockholders' (deficit) equity	(477,920)			

(1) The proforma consolidated balance sheet data gives reflects (i) the conversion of all outstanding shares of our convertible preferred stock as of March 31, 2023 into an aggregate of shares of our common stock immediately prior to the completion of this offering, (ii) the related reclassification of our convertible preferred stock aggregate carrying value to permanent equity and (iii) the filing and effectiveness of our amended and restated certificate of incorporation, which will be effective immediately prior to the completion of this offering.

(2) The proforma as adjusted consolidated balance sheet data gives effect to (i) the proforma adjustments described in footnote (1) above and (ii) the sale and issuance of shares of common stock by us in this offering, at the assumed initial public offering price of \$ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.

(3) Each \$1.00 increase or decrease in the assumed initial public offering price of \$ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, would increase or decrease, as applicable, the pro forma as adjusted amount of each of our cash, cash equivalents and marketable securities, working capital, total assets, additional paid-in capital and total stockholders' equity by \$ million, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same, after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us. Similarly, an increase or decrease of 1.0 million shares in the number of shares of common stock offered would increase or decrease, as applicable, each of our cash, cash equivalents and marketable securities, working capital, total assets, additional paid-in capital and total stockholders' equity by \$ million, assuming the initial public offering price remains the same, after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us. The pro forma as adjusted consolidated balance sheet data discussed above is illustrative only and will depend on the actual initial public offering price and other terms of this offering determined at pricing.

(4) We define working capital as current assets less current liabilities. See our audited consolidated financial statements, unaudited condensed consolidated financial statements and related notes thereto included elsewhere in this prospectus for further details regarding our current assets and current liabilities.

RISK FACTORS

Investing in shares of our common stock involves a high degree of risk. You should carefully consider the following risks and uncertainties, together with all of the other information contained in this prospectus, including our audited consolidated financial statements, unaudited condensed consolidated financial statements and related notes included elsewhere in this prospectus, before making an investment decision. The risks described below are not the only ones facing us. Many of the following risks and uncertainties are, and will be, exacerbated by any worsening of the global business and economic environment. The occurrence of any of the following risks, or of additional risks and uncertainties not presently known to us or that we currently believe to be immaterial, could materially and adversely affect our business, financial condition, reputation, or results of operations. In such case, the trading price of shares of our common stock could decline, and you may lose all or part of your investment.

Risks Related to Our Limited Operating History, Financial Condition and Need for Additional Capital

We are a clinical-stage biopharmaceutical company and have incurred significant losses since our inception, and we expect to incur losses for the foreseeable future. We have no products approved for commercial sale and may never achieve or maintain profitability.

We are a clinical-stage biopharmaceutical company with a limited operating history. Biopharmaceutical product development is a highly speculative undertaking and involves a substantial degree of risk. We have incurred significant losses since our inception in November 2019, have no products approved for commercial sale, have not generated any revenue from product sales, have financed our operations principally through private placements of convertible preferred stock and convertible promissory notes and expect to incur significant losses for the foreseeable future. We expect that it will be several years before we have a commercialized product and generate revenue from product sales. Our net loss was \$237.3 million and \$130.9 million for the years ended December 31, 2021 and 2022, respectively, and \$43.0 million and \$35.6 million for the three months ended March 31, 2022 and 2023, respectively. As of March 31, 2023, we had an accumulated deficit of \$503.1 million. Our losses have resulted principally from acquired in-process research and development from our acquisitions of assets, expenses incurred in the research and development of our product candidates, as well as from costs associated with our preclinical studies and clinical trials and management and administrative costs and other expenses that we have incurred while building our business infrastructure.

We expect our expenses and operating losses will continue to increase substantially for the foreseeable future as we expand our research and development efforts, advance our clinical candidates to potentially registrational trials, identify and acquire product candidates, complete preclinical studies and initiate additional clinical trials, seek regulatory approval and commercialization of our product candidates and operate as a public company. We anticipate that our expenses will continue to increase substantially as we:

- continue clinical and preclinical development of our current and future product candidates and initiate additional preclinical studies and clinical trials;
- seek regulatory approval of our current and future product candidates;
- acquire additional product candidates, technologies, multimodal patient datasets and other assets for our business;
- expand our operational, financial and management systems and increase personnel, including personnel to support our clinical and preclinical development, manufacturing and commercialization efforts;
- continue to develop, perfect, maintain and defend our intellectual property portfolio; and
- incur additional legal, accounting or other expenses in operating our business, including the additional costs associated with operating as a public company.

We have devoted a significant portion of our financial resources and efforts to building our organization, acquiring technologies and companies, executing clinical and preclinical studies, conducting research and development, identifying and developing potential product candidates, building our precision neuroscience approach, organizing and staffing our company, business planning, establishing, maintaining and protecting our intellectual property portfolio, raising capital and providing general and administrative support for these operations. We have not completed development and commercialization of any of our product candidates with most still being in relatively early development.

To become and remain profitable, we must succeed in identifying, developing, conducting successful clinical trials, obtaining regulatory approval for, and eventually commercializing, products that generate significant revenue. This will require us to be successful in a range of challenging activities, including completing preclinical studies and clinical trials of our product candidates, continuing to discover and develop additional product candidates, obtaining regulatory and marketing approval for any product candidates that successfully complete clinical trials, accessing manufacturing capacity, establishing marketing capabilities, commercializing and ultimately selling any products. We may never succeed in any or all of these activities and, even if we do, we may never generate revenue that is sufficient to achieve profitability. Even if we do achieve profitability, we may not be able to sustain profitability or meet outside expectations for our profitability. If we are unable to achieve or sustain profitability or to meet outside expectations for our profitability, the price of our common stock could be materially adversely affected.

Because of the numerous risks and uncertainties associated with biopharmaceutical and biotechnology products and drug development, we are unable to accurately predict the timing or amount of increased expenses or when, or if, we will be able to achieve profitability. If we are required by the U.S. Food and Drug Administration (FDA) or comparable foreign regulatory authorities to perform studies in addition to those we currently anticipate, or if there are any delays in commencing or completing our clinical trials or the development of any of our product candidates, our expenses could increase and commercial revenue could be further delayed and become more uncertain, which will have a material adverse impact on our business.

Our substantial contingent consideration and related obligations from our acquisitions of assets and license and collaboration agreements may result in dilution to our stockholders, may be a drain on our cash resources, or may cause us to incur debt obligations to satisfy the payment obligations.

In connection with our acquisitions of assets in late 2020, we entered into arrangements whereby the former stockholders of those companies are entitled to substantial contingent consideration payments upon the occurrence of certain events. For example, in connection with our acquisition of BlackThorn Therapeutics, Inc. (BlackThorn), a privately held company, the former BlackThorn stockholders are entitled to contingent consideration (i) with respect to NMRA-140, in the form of development and regulatory approval milestones of up to an aggregate amount of \$365.0 million, which includes a milestone payment of \$90.0 million that will become due upon dosing the first patient in the Phase 3 clinical trial for NMRA-140, and salesbased milestones of up to an aggregate amount of \$100.0 million and (ii) with respect to NMRA-511, in the form of development and regulatory approval milestones of up to an aggregate amount of \$100.0 million and salesbased milestones of up to an aggregate amount of \$100.0 million and salesbased milestones of up to an aggregate amount of \$100.0 million and salesbased milestones of up to an aggregate amount of \$100.0 million and salesbased milestones of up to an aggregate amount of \$100.0 million and salesbased milestones of up to an aggregate amount of \$100.0 million (BlackThorn Milestone Payments). With the exception of one development milestone in the amount of \$10.0 million that is required to be settled in cash, the remaining BlackThorn Milestone Payments may be settled in cash or shares of our equity, or a combination of both, at our sole discretion. In connection with the BlackThorn acquisition, we also became obligated under its license agreement with TSRI for, among other obligations, development and regulatory milestone payments of up to \$1.5 million in aggregate for the first product from each of the TSRI programs and commercial milestone payments of up to \$3.5 million in aggregate for each occurrence.

Under the terms of our September 2021 license agreements with Amgen, we are obligated to pay Amgen up to an aggregate of \$720.0 million in commercial milestone payments upon the achievement of certain sales thresholds and single digit royalties on potential annual worldwide net sales related to the CK1d or GCase programs. In addition, under the collaboration agreement with Amgen, we are committed to making quarterly

payments to Amgen for their collaboration activities over the next three years totaling \$62.5 million, or \$75.0 million if certain progress milestones are achieved.

Under the terms of our February 2022 license agreement with Vanderbilt University (Vanderbilt), we are obligated to pay Vanderbilt up to an aggregate of \$422.0 million in development and commercial milestone payments upon the achievement of certain development milestones and sales thresholds, and mid-single digit royalties on potential future net sales.

In order to satisfy our obligations to make these payments, if and when they are triggered, we may need to issue equity or convertible debt securities that may cause dilution to our stockholders, or we may use our existing cash or incur debt obligations to satisfy the payment obligations in cash, which may adversely affect our financial position. In addition, these obligations may impede our ability to raise money in future public offerings of debt or equity securities or to obtain a third-party line of credit.

See the sections titled "Management's Discussion and Analysis of Financial Condition and Results of Operations—Recent Acquisitions of Assets" and "Management's Discussion and Analysis of Financial Condition and Results of Operations—Strategic License and Collaboration Agreements" elsewhere in this prospectus for additional information regarding these agreements.

Our limited operating history may make it difficult to evaluate our prospects and likelihood of success.

We are a clinical-stage biopharmaceutical company with a limited operating history upon which you can evaluate our business and prospects. Since our inception in November 2019, we have devoted substantially all of our resources and efforts to building our organization, acquiring technologies and companies, executing preclinical studies and clinical trials, conducting research and development, identifying and developing potential product candidates, building our precision neuroscience tools, organizing and staffing our company, business planning, establishing, maintaining and protecting our intellectual property portfolio, raising capital and providing general and administrative support for these operations. All of our product candidates are in either clinical development or in preclinical stages of development, and we have not yet demonstrated our ability to successfully complete any late-stage or registrational/pivotal clinical trials, obtain regulatory approvals, manufacture a commercial scale product or arrange for a third party to do so on our behalf or conduct sales and marketing activities necessary for successful product commercialization. Additionally, we expect our financial condition and operating results to continue to fluctuate significantly from period to period due to a variety of factors, many of which are beyond our control. Consequently, any predictions you may make about our future success or viability may not be as accurate as they could be if we had a longer operating history.

In addition, we may encounter unforeseen expenses, difficulties, complications, delays and other known and unknown factors and risks frequently experienced by clinical-stage biotechnology and biopharmaceutical companies in rapidly evolving fields. We also may need to transition from a company with a research focus to a company capable of supporting commercial activities. If we do not adequately address these risks and difficulties or successfully make such a transition, it could have a material adverse effect on our business.

Even if this offering is successful, we will require additional funding in order to finance operations. If we are unable to raise capital when needed, or on acceptable terms, we could be forced to delay, reduce or eliminate our product development programs or commercialization efforts.

Developing biopharmaceutical products, including conducting preclinical studies and clinical trials, is a very time-consuming, expensive and uncertain process that takes years to complete. We expect our expenses to continue to increase in connection with our ongoing activities, particularly as we conduct clinical trials of, and seek regulatory and marketing approval for, our product candidates. Even if one or more of our product candidates is approved for commercial sale, we anticipate incurring significant costs associated with commercializing any approved product candidate. To date, we have funded our operations principally through private financings. We expect our expenses to increase in connection with our ongoing activities, particularly as we continue the clinical and preclinical development of our product candidates, continue to develop and deploy our precision neuroscience approach, commence additional preclinical studies and clinical trials, and continue to

identify and develop additional product candidates either through internal development or through acquisitions or in-licensing product candidates.

In addition, if we obtain regulatory approval for any of our product candidates, we expect to incur significant commercialization expenses related to product manufacturing, marketing, sales and distribution. Furthermore, upon the completion of this offering, we expect to incur additional costs associated with operating as a public company. Accordingly, we will need to obtain substantial additional funding in order to support our continuing operations. If we are unable to raise capital when needed or on attractive terms, we could be forced to delay, reduce or eliminate our research and development programs or any future regulatory approval or commercialization efforts.

As of March 31, 2023, we had \$363.8 million of cash, cash equivalents and marketable securities. Based upon our current operating plan, we believe that our existing cash, cash equivalents and marketable securities as of the date of this prospectus will enable us to fund our operating expenses and capital expenditure requirements through at least the next 12 months from the date of this offering. In addition, based upon our current operating plan, we believe that the net proceeds from this offering together with our existing cash, cash equivalents and marketable securities will enable us to fund our operating expenses and capital expenditure requirements through at least the next months from the date of this offering. We have based this estimate on assumptions that may prove to be wrong, and we could utilize our available capital resources sooner than we expect. We may also raise additional financing on an opportunistic basis in the future. We expect to continue to expend significant resources for the foreseeable future. In addition, we may seek additional capital due to favorable market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans. Attempting to secure additional financing may divert our management from our day-to-day activities, which may adversely affect our ability to develop our product candidates. Our future capital requirements will depend on many factors, including but not limited to:

- the scope, timing, progress, costs and results of discovery, preclinical development and clinical trials for our current or future product candidates;
- the number of clinical trials required for regulatory approval of our current or future product candidates;
- the costs, timing and outcome of regulatory review of any of our current or future product candidates;
- the costs associated with acquiring or licensing additional product candidates, technologies or assets, including the timing and amount of any milestones, royalties or other payments due in connection with our acquisitions and licenses;
- the cost of manufacturing clinical and commercial supplies of our current or future product candidates;
- the costs and timing of preparing, filing and prosecuting patent applications, maintaining and enforcing our intellectual property rights and defending any intellectual property-related claims, including any claims by third parties that we are infringing upon their intellectual property rights;
- the effectiveness of our precision neuroscience approach at identifying target patient populations and utilizing our approach to enrich our patient population in our clinical trials;
- our ability to maintain existing, and establish new, strategic collaborations or other arrangements and the financial terms of any such agreements, including the timing and amount of any future milestone, royalty or other payments due under any such agreement;
- our ability to access additional multimodal patient datasets;
- the costs and timing of future commercialization activities, including manufacturing, marketing, sales and distribution, for any of our product candidates for which we receive marketing approval;
- the revenue, if any, received from commercial sales of our product candidates for which we receive marketing approval;
- expenses to attract, hire and retain skilled personnel;

- the costs of operating as a public company;
- our ability to establish a commercially viable pricing structure and obtain approval for coverage and adequate reimbursement from thirdparty and government payers;
- the effect of macroeconomic trends including inflation and rising interest rates;
- addressing any potential supply chain interruptions or delays, including those related to the COVID-19 pandemic;
- the effect of competing technological and market developments; and
- the extent to which we acquire or invest in business, products and technologies.

Our ability to raise additional funds will depend on financial, economic, political and market conditions and other factors, over which we may have no or limited control. Our ability to raise additional funds may be adversely impacted by potential worsening global economic conditions and the recent disruptions to, and volatility in, the credit and financial markets in the United States and worldwide resulting from the ongoing COVID-19 pandemic. Additional funds may not be available when we need them, on terms that are acceptable to us, or at all. If we fail to obtain necessary capital when needed on acceptable terms, or at all, it could force us to delay, limit, reduce or terminate our product development programs, future commercialization efforts or other operations. Because of the numerous risks and uncertainties associated with research, product development and commercialization of product candidates, we are unable to predict the timing or amount of our working capital requirements or when or if we will be able to achieve or maintain profitability.

Accordingly, we will need to continue to rely on additional financing to achieve our business objectives and adequate additional financing may not be available to us on acceptable terms, or at all.

Raising additional capital may cause dilution to our stockholders, restrict our operations or require us to relinquish rights to our technologies or product candidates.

Until such time, if ever, as we can generate substantial product revenue, we expect to finance our operations with our existing cash, cash equivalents and marketable securities, the net proceeds from this offering, any future equity or debt financings and upfront and milestone and royalties payments, if any, received under any future licenses or collaborations. If we raise additional capital through the sale of equity or convertible debt securities, your ownership interest will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect your rights as a holder of our common stock. In addition, the possibility of such issuance may cause the market price of our common stock to decline. Debt financing, if available, may result in increased fixed payment obligations and involve agreements that include covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures, declaring dividends or acquiring, selling or licensing intellectual property rights or assets, which could adversely impact our ability to conduct our business.

If we raise additional funds through collaborations, strategic alliances or marketing, distribution or licensing arrangements with third parties, we may have to relinquish valuable rights to our intellectual property, technologies, future revenue streams or product candidates or grant licenses on terms that may not be favorable to us. We could also be required to seek funds through arrangements with collaborators or others at an earlier stage than otherwise would be desirable. Any of these occurrences may have a material adverse effect on our business, operating results and prospects.

We maintain the majority of our cash and cash equivalents in accounts with major U.S. and multi-national financial institutions, and our deposits at certain of these institutions exceed insured limits. Market conditions and changes in financial regulations and policies can impact the viability of these institutions. In the event of failure of any of the financial institutions where we maintain our cash and cash equivalents, there can be no

assurance that we would be able to access uninsured funds in a timely manner or at all. Any inability to access or delay in accessing these funds could adversely affect our business and financial position. In addition, changes in regulations governing financial institutions are beyond our control and difficult to predict; consequently, the impact of such changes on our business and results of operations is difficult to predict and may have an adverse effect on us.

Risks Related to Our Business

If we are unable to successfully identify, develop and commercialize any product candidates, or experience significant delays in doing so, our business, financial condition and results of operations will be materially adversely affected.

Our ability to generate revenue from sales of any of our approved product candidates, which we do not expect will occur for at least the next several years, depends heavily on the successful identification, development, regulatory approval and eventual commercialization of any product candidates, which may never occur. We have never generated revenue from sales of any products, and we may never be able to develop, obtain regulatory approval for, or commercialize, a marketable product. All of our product candidates will require significant clinical development, regulatory approval, establishment of sufficient manufacturing supply, including commercial manufacturing supply, and may require us to build a commercial organization and make substantial investment and significant marketing efforts before we generate any revenue from product sales. We are not permitted to market or promote any of our product candidates before we receive regulatory approval from the FDA or comparable foreign regulatory authorities, and we may never receive such regulatory approval for any of our product candidates.

The successful development of our product candidates will depend on several factors, including, but not limited to, the following:

- successful and timely completion of preclinical studies and clinical trials for which the FDA, or any comparable foreign regulatory authority, agree with the design, endpoints, or implementation;
- sufficiency of our financial and other resources to complete the necessary preclinical studies and clinical trials;
- receiving regulatory approvals or authorizations for conducting future clinical trials;
- initiation and successful patient enrollment in, and completion of, clinical trials on a timely basis;
- our ability to demonstrate to the satisfaction of the FDA or any comparable foreign regulatory authority that the applicable product candidate is safe and effective as for its intended uses;
- our ability to demonstrate to the satisfaction of the FDA or any comparable foreign regulatory authority that the applicable product candidate's risk-benefit ratio for its proposed indication is acceptable;
- timely receipt of marketing approvals for our product candidates from applicable regulatory authorities;
- addressing any potential supply chain interruptions or delays. including those related to the COVID-19 pandemic;
- the extent of any required post-marketing approval commitments to applicable regulatory authorities; and
- establishing, scaling up and scaling out, either alone or with third-party manufacturers, manufacturing capabilities of clinical supply for our clinical trials and commercial manufacturing, if any of our product candidates are approved.

If we do not achieve one or more of these factors in a timely manner or at all, we could experience significant delays or an inability to successfully develop and commercialize our product candidates, which would materially adversely affect our business, financial condition, and results of operations.

Additionally, clinical or regulatory setbacks to other companies developing similar products or within adjacent fields may impact the clinical development of and regulatory pathway for our current or future product candidates, or may negatively impact the perceptions of value or risk of our technologies.

We were founded with a mission to redefine neuroscience drug development, a field that has seen very limited success. The ability to successfully develop drugs in this field is extremely difficult and is subject to a number of unique challenges.

Drug development in the field of brain diseases, and neuropsychiatric disorders and neurodegenerative diseases in particular, has seen very limited success historically. We estimate over \$110 billion have been spent on neuroscience research and development since 2019 in the United States alone, representing approximately 33% of all disease-specific spending. However, only approximately 12% of all new therapies approved during this time period have been for the treatment of brain diseases. From 2011 to 2020, clinical development success rates for new drug candidates that employed patient selection biomarkers were approximately 16% compared to approximately 8% for patients without patient selection biomarkers according to the BIO; however, clinical success depends on a number of factors and employing a patient selection biomarker approach does not guarantee that our product candidates will be approved and commercialized. Developing a product candidate for treatment of these brain diseases is extremely difficult and subjects us to a number of unique challenges, including obtaining regulatory approval from the FDA and other regulatory authorities who have only a limited set of precedents to rely on.

We intend to work closely with the FDA and comparable foreign regulatory authorities to perform the requisite scientific analyses and evaluation in an effort to obtain regulatory approval for our product candidates; however, the process of developing our product candidates may be more complex and time-consuming relative to other more well-known approaches to drug development. We cannot be certain that our approach will lead to the development of product candidates that effectively and safely address the underlying brain diseases.

Moreover, given the history of clinical failures in this field, future clinical or regulatory failures by us or others may have result in further negative perception of the likelihood of success in this field, which may significantly and adversely affect the market price of our common stock.

We have invested and expect to continue to invest in acquiring product candidates, technologies and assets, as well as research and development efforts that further enhance our product pipeline. Such investments may affect our operating results, and, if the return on these investments is lower or develops more slowly than we expect, our revenue and operating results may suffer.

We have invested and expect to continue to invest in acquiring potential product candidates to enhance our product pipeline and technologies and assets to advance our precision neuroscience approach. These activities and investments involve significant time, risks, and uncertainties, including the risk that the associated expenses may affect our operating results, that such investments may not generate products that can be successfully developed or technologies that can be effectively used by us, and cause significant drains on capital resources and commit us to substantial financial obligations. While we believe that we must continue to invest a significant amount of time and resources in the development of our product pipeline, if we do not achieve the benefits anticipated from these investments, or if the achievement of these benefits is delayed, our business, operating results and prospects may be materially adversely affected.

We have experienced rapid growth since our inception in November 2019, and expect to continue to grow in the future. If we fail to effectively manage our growth, we may not be able to execute on our business objectives.

As of March 31, 2022, we had 94 full-time employees and, as of March 31, 2023, we had grown to 108 full-time employees. We expect continued growth in the number of our employees and the scope of our operations, particularly

as we continue our current and future clinical trials and preclinical studies, initiate and conduct investigational new drug (IND)-enabling studies and build out our clinical operations, regulatory, quality and manufacturing infrastructure. In addition to headcount growth, we have made a number of acquisitions of assets, and entered into a significant strategic collaboration with Amgen and in-licensed programs from Amgen and Vanderbilt. These activities have added significant complexity to our organization, including a number of clinical and preclinical programs that we are now developing. These programs require significant infrastructure and headcount to effectively prosecute.

To manage our anticipated future growth, we will continue to implement and improve our managerial, operational, and financial systems, expand our facilities, and continue to recruit and train additional qualified personnel. Due to the complexity in managing a company that has scaled very quickly and anticipates continued growth, we may not be able to scale our headcount and operations effectively to manage the expansion of our product pipeline or recruit and train the necessary additional personnel. The expansion of our operations may lead to significant costs and may divert our management and business development resources. Any inability to manage growth could delay the execution of our business plans or disrupt our operations.

In addition, future growth imposes significant added responsibilities on members of management, including: identifying, recruiting, integrating, maintaining, and motivating additional employees; managing our internal development efforts effectively, including the clinical and FDA review process for our product candidates, while complying with our contractual obligations to contractors and other third parties; and improving and scaling our operational, financial and management controls, reporting systems and procedures.

We currently rely on certain independent organizations, advisors, and consultants to provide certain services, including strategic, financial, business development, and research and development services, as well as certain aspects of regulatory approval and manufacturing. There can be no assurance that the services of independent organizations, advisors, and consultants will continue to be available to us on a timely basis when needed, or that we can find qualified replacements. In addition, if we are unable to effectively manage our outsourced activities or if the quality or accuracy of the services provided by consultants or contract manufacturing organizations is compromised for any reason, our clinical trials may be extended, delayed, or terminated, and we may not be able to obtain regulatory approval of our product candidates or otherwise advance our business. There can be no assurance that we will be able to manage our existing consultants or find other competent outside contractors and consultants on reasonable terms, or at all.

Our ability to develop product candidates, leverage our precision neuroscience approach and our future growth depends on attracting, hiring and retaining our key personnel and recruiting additional qualified personnel.

Our success depends upon the continued contributions of our key management and scientific personnel, many of whom have been instrumental for us and have substantial experience with developing therapies, identifying potential product candidates and building the technologies related to the clinical development of our product candidates. Given the specialized nature of brain diseases and our approach, there is an inherent scarcity of experienced personnel in these fields. As we continue developing our product candidates in our pipeline, we will require personnel with medical, scientific, or technical qualifications specific to each program. The loss of key personnel, in particular our neuroscientists, would delay our research and development activities. Despite our efforts to retain valuable employees, members of our team may terminate their employment with us on short notice. The competition for qualified personnel in the biotechnology and biopharmaceutical industries is intense, and our future success depends upon our ability to attract, retain, and motivate highly skilled scientific, technical and managerial employees. We face competition for personnel from other companies, universities, public and private research institutions, and other organizations. If our recruitment and retention efforts are unsuccessful in the future, it may be difficult for us to implement our business strategy, which would have a material adverse effect on our business.

In addition, our clinical operations and research and development programs depend on our ability to attract and retain highly skilled scientists, data scientists, and engineers, particularly in Massachusetts and California.

There is powerful competition for skilled personnel in these geographical markets, and we have from time to time experienced, and we expect to continue to experience, difficulty in hiring and retaining employees with appropriate qualifications on acceptable terms, or at all. Many of the companies with which we compete for experienced personnel have greater resources than we do, and any of our employees may terminate their employment with us at any time. If we hire employees from competitors or other companies, their former employers may attempt to assert that these employees or we have breached legal obligations, resulting in a diversion of our time and resources and, potentially, damages. In addition, job candidates and existing employees often consider the value of the stock awards they receive in connection with their employment. If the perceived benefits of our stock awards decline, it may harm our ability to recruit and retain highly skilled employees. If we fail to attract new personnel or fail to retain and motivate our current personnel, our business and future growth prospects would be harmed.

We may not realize the benefits of assets that we have acquired, or will acquire in the future, or other strategic transactions that we have or will consummate.

Our approach represents an aggregation of innovation and assets from multiple companies and academic institutions, including BlackThorn, Syllable and Alairion as well as Amgen, TSRI and Vanderbilt. Further, a key component of our strategy is to acquire and in-license assets and technologies to support the growth of our product pipeline and to enhance our Precision Toolbox. As such, we actively evaluate various strategic transactions on an ongoing basis. We may acquire other assets, businesses, products or technologies, as well as pursue joint ventures or investments in complementary businesses. The success of our strategic transactions and any future strategic transactions depends on the risks and uncertainties involved including:

- unanticipated liabilities related to acquired companies or joint ventures;
- difficulties integrating acquired personnel, technologies, and operations into our existing business;
- retention of key employees;
- diversion of management time and focus from operating our business to the management of acquisition and integration efforts, strategic alliances or joint ventures challenges;
- increases in our expenses and reductions in our cash available for operations and other uses;
- disruption in our relationships with collaborators or suppliers; and
- possible write-offs or impairment charges relating to acquired businesses or joint ventures.

If any of these risks or uncertainties occur, we may not realize the anticipated benefit of any acquisition or strategic transaction. For example, less than one year following the acquisition of Propellex, we terminated and are no longer developing the program we acquired from Propellex. We have ceased the development of our NMRA-094 product candidate for the treatment of obstructive sleep apnea (OSA) that we acquired from Alairion based on pre-IND feedback we received from the FDA. Additionally, foreign acquisitions and joint ventures are subject to additional risks, including those related to integration of operations across different cultures and languages, currency risks, potentially adverse tax consequences of overseas operations and the particular economic, political and regulatory risks associated with specific countries.

Future acquisitions or dispositions could result in potentially dilutive issuances of our equity securities, the incurrence of debt, contingent liabilities or amortization expenses, impairments or write-offs of goodwill or impairments and write-offs of in-process research and development assets, any of which could harm our financial condition.

We have relied on, and in the future will continue to rely on, third-party datasets and databases to build and enhance our precision neuroscience approach. If we are not able to access additional data sets or develop enhancements to our precision neuroscience approach, our ability to execute on our strategy may be limited.

Our ability to execute on our drug development strategy depends in part on our ability to enhance and improve our precision neuroscience approach. As part of this approach, we interrogate public, partnered and

proprietary datasets across neuropsychiatric and neurodegenerative diseases, currently encompassing genetic, imaging, electroencephalogram (EEG), digital and clinical data. We rely on these datasets and data analytics for identifying or validating some of our biomarker-target relationships. The success of our precision neuroscience approach and any enhancement to our approach depends on several factors, including access to and generation of additional multimodal patient datasets, whether public, partnered or proprietary, development of more advanced proprietary machine learning capabilities and increased computational storage and processing capacity. If we are unable to access additional datasets or they are not available on acceptable terms, or if we are otherwise unsuccessful in enhancing our approach, we may be limited in our precision neuroscience capabilities and not be able to fully utilize a precision neuroscience drug development strategy.

In addition, access to public data sets may be limited by governmental or other restrictions, including restrictions on commercial application by government or government sponsored organizations or privacy related restrictions. See the risk factor "We face potential liability related to the privacy of health information we utilize in the development of product candidates, as well as information we obtain from clinical trials sponsored by us from research institutions and directly from individuals" for additional information on privacy related considerations.

The ongoing pandemic caused by COVID-19, or another pandemic, epidemic, or infectious disease outbreak in the United States or worldwide, could materially and adversely affect our preclinical studies and development, any clinical trials we subsequently commence, and our business, financial condition and results of operations.

The COVID-19 pandemic continues to evolve. As a result of the COVID-19 pandemic or any other pandemic, epidemic or outbreak of an infectious disease, we may experience disruptions that could severely impact our business, preclinical studies and clinical trials. Potential disruptions to the development of our product candidates include, but are not limited to:

- interruption of key clinical trial activities, such as clinical trial site data monitoring and efficacy and safety data collection, processing and analyses, due to limitations on travel imposed or recommended by federal, state, or local governments, employers and others or interruption of clinical trial subject visits, which may impact the collection and integrity of subject data and clinical trial endpoints;
- delays or difficulties in initiating or expanding clinical trials, including delays or difficulties with clinical site initiation and recruiting clinical site investigators and clinical site staff;
- delays or difficulties in enrolling and retaining patients in our clinical trials;
- increased rates of patients withdrawing from our clinical trials following enrollment as a result of contracting COVID-19 or other health conditions or being forced to quarantine;
- interruption of, or delays in receiving, supplies of our product candidates from our contract manufacturing organizations due to staffing shortages, production slowdowns, or stoppages and disruptions in materials and reagents;
- diversion of healthcare resources away from the conduct of clinical trials, including the diversion of hospitals serving as our clinical trial sites and hospital staff supporting the conduct of our clinical trials;
- interruption or delays in the operations of the FDA and comparable foreign regulatory agencies;
- changes in regulations as part of a response to the COVID-19 pandemic which may require us to change the ways in which our clinical trials are conducted, which may result in unexpected costs, or to discontinue the clinical trials altogether;
- delays in receiving approval from local regulatory authorities to initiate our planned clinical trials;
- delays or disruptions in preclinical experiments and IND-enabling studies due to restrictions of on-site staff, limited or no access to animal facilities, ongoing supply chain issues that are impacting supplies of laboratory reagents and unforeseen circumstances at contract research organizations (CROs) and vendors;

- limitations on employee or other resources that would otherwise be focused on the conduct of our and preclinical work, including because
 of sickness of employees or their families, the desire of employees to avoid travel or contact with large groups of people, an increased
 reliance on working from home, school closures, or mass transit disruptions;
- delays in necessary interactions with regulators, ethics committees, and other important agencies and contractors due to limitations in employee resources or forced furlough of government or contractor personnel;
- limitations in maintaining our corporate culture that facilitates the transfer of institutional knowledge within our organization and fosters innovation, teamwork, and a focus on execution;
- limitations on employee resources that would otherwise be focused on the conduct of our preclinical studies and clinical trials, including because of sickness of employees or their families or the desire of employees to avoid contact with large groups of people;
- interruption of, or delays in receiving, supplies of our product candidates from our contract manufacturing organizations due to staffing shortages, production slowdowns or stoppages and disruptions in delivery systems;
- refusal of the FDA or comparable regulatory authorities to accept data from clinical trials in affected geographies; and
- additional delays, difficulties or interruptions as a result of current or future shutdowns due to the COVID-19 pandemic in countries where we or our third-party service providers operate.

The COVID-19 pandemic delayed patient enrollment in our Phase 2 clinical trial of NMRA-140, caused difficulties in accessing animal models for our preclinical evaluation of our product candidates and has posed challenges to the development timeline of preclinical studies and manufacturing services provided to us by third-party vendors located in China. The ongoing pandemic may further delay our initiation of preclinical studies and clinical trials, interrupt our supply chain, disrupt regulatory activities or have other adverse effects on our business and operations.

The COVID-19 pandemic continues to rapidly evolve, and the extent to which it and any other pandemic, epidemic, or other outbreak may affect our preclinical studies, clinical trials, business, financial condition and results of operations will depend on future developments, which continue to be highly uncertain and unpredictable and present material uncertainty and risk to our business.

We operate in highly competitive and rapidly changing industries, which may result in others discovering, developing or commercializing competing products before or more successfully than we do.

The biotechnology and biopharmaceutical industries are highly competitive and subject to significant and rapid technological change. Our success is highly dependent on our ability to discover, develop and obtain marketing approval for new and innovative products on a cost-effective basis and to market them successfully. In doing so, we face and will continue to face intense competition from a variety of businesses, including large biopharmaceutical and biotechnology companies, academic institutions, government agencies and other public and private research organizations. These organizations may have significantly greater resources than we do and conduct similar research, seek patent protection and establish collaborative arrangements for research, development, manufacturing, and marketing of products that compete with our product candidates. Mergers and acquisitions in the biotechnology and biopharmaceutical industries may result in even more resources being concentrated in our competitors. Competition may increase further as a result of advances in the commercial applicability of technologies and greater availability of capital for investment in these industries.

With the proliferation of new drugs and therapies for our target indications, we expect to face increasingly intense competition as new technologies become available. If we fail to stay at the forefront of technological

change, we may be unable to compete effectively. Any product candidates that we successfully develop and commercialize will compete with existing therapies and new therapies that may become available in the future. The highly competitive nature of and rapid technological changes in the biotechnology and biopharmaceutical industries could render our product candidates or our technology obsolete, less competitive or uneconomical. Our competitors may, among other things:

- have significantly greater financial, manufacturing, marketing, drug development, technical, and human resources than we do;
- develop and commercialize products that are safer, more effective, less expensive, more convenient or easier to administer, or have fewer or less severe side effects;
- obtain quicker regulatory approval;
- establish superior proprietary positions covering our products and technologies;
- implement more effective approaches to sales and marketing; or
- form more advantageous strategic alliances.

Should any of these factors occur, our business, financial condition and results of operations could be materially adversely affected.

In addition, any collaborators may decide to market and sell products that compete with the product candidates that we have agreed to license to them, and any competition by our collaborators could also have a material adverse effect on our future business, financial condition, and results of operations.

Smaller and other early stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies. These third parties compete with us in recruiting and retaining qualified scientific and management personnel, establishing clinical trial sites and patient registration for clinical trials, as well as in developing or acquiring technologies complementary to, or necessary for, our programs.

We may expend our limited resources to pursue a particular product candidate or indication and fail to capitalize on product candidates or indications that may be more profitable or for which there is a greater likelihood of success.

Because we have limited financial and managerial resources, we focus on research programs, therapeutic platforms, and product candidates that we identify for specific indications. Additionally, we have contractual commitments under the agreements for various product candidate assets that we acquired from third parties, as well as our license and collaboration agreements, to use commercially reasonable efforts to develop certain programs and, thus, do not have unilateral discretion to vary from such agreed to efforts. In addition, we have contractual commitments to conduct certain development plans, and thus may not have discretion to modify such development plans, including clinical trial designs, without agreement from our collaboration partner. As a result, we may forego or delay pursuit of opportunities with other therapeutic platforms or product candidates or for other indications that later prove to have greater commercial potential. Our resource allocation decisions may cause us to fail to capitalize on viable commercial products or profitable market opportunities. Our spending on current and future research and development programs, therapeutic platforms, and product candidates for specific indications may not yield any commercially viable products. If we do not accurately evaluate the commercial potential or target market for a particular product candidate, we may relinquish valuable rights to that product candidate through collaboration, licensing, or other royalty arrangements in cases in which it would have been more advantageous for us to retain sole development and commercialization rights.

We rely upon third-party providers of cloud-based infrastructure to host our platforms. Any disruption in the operations of these third-party providers, limitations on capacity, or interference with our use could adversely affect our business, financial condition, and results of operations.

We outsource substantially all of the technological infrastructure relating to our hosted platform to third-party hosting services, such as Amazon Web Services. We have no control over any of these third parties, and while we attempt to reduce risk by minimizing reliance on any single third party or its operations, we cannot guarantee that such third-party providers will not experience system interruptions, outages or delays, or deterioration in their performance. We need to be able to access our computational platform at any time, without interruption or degradation of performance. Our hosted platform depends on protecting the virtual cloud infrastructure hosted by third-party hosting services by maintaining its configuration, architecture, features, and interconnection specifications, as well as protecting the information stored in these virtual data centers, which is transmitted by third-party Internet service providers. We have experienced, and expect that in the future we may again experience interruptions, delays and outages in service and availability from time to time due to a variety of factors, including infrastructure changes, human or software errors, website hosting disruptions and capacity constraints. Any limitation on the capacity of our third-party hosting services' infrastructure that may be caused by cyber-attacks, natural disasters, fire, flood, severe storm, earthquake, power loss, telecommunications failures, terrorist or other attacks, and other disruptive events beyond our control could negatively affect our cloud-based solutions. A prolonged service disruption affecting our cloud-based solutions could damage our reputation or otherwise harm our business. We may also incur significant costs for using alternative equipment or taking other actions in preparation for, or in reaction to, events that damage the third-party hosting services we use.

In the event that our service agreements with our third-party hosting services are terminated, or there is a lapse of service, elimination of services or features that we utilize, interruption of internet service provider connectivity, or damage to such facilities, we could experience interruptions in access to our platform as well as significant delays and additional expense in arranging or creating new facilities and services and/or re-architecting our hosted software solutions for deployment on a different cloud infrastructure service provider, which could adversely affect our business, financial condition, and results of operations.

If our security measures are breached or unauthorized access to our other data is otherwise obtained, our data may be perceived as not being secure and we may incur significant liabilities.

We use a set of proprietary tools to generate, analyze, and derive novel insights from our data. As a result, unauthorized access to or security breaches of our data, as a result of third-party action, employee or contractor error, malfeasance, or otherwise could require notification to individuals, governmental authorities, supervisory bodies, the media and other parties pursuant to privacy and security laws and result in the loss or corruption of, or other damage to information, claims and litigation, indemnity obligations, damage to our reputation, and other liability. Our collaborators and other third parties we work with may also suffer similar security breaches of data that we rely on. Because the techniques used to obtain unauthorized access or sabotage systems change frequently and generally are not identified until they are launched against a target, we and those we collaborate with may be unable to anticipate these techniques or implement adequate preventative measures. Even if identified, we may be unable to adequately investigate or remediate incidents or breaches due to attackers increasingly using tools and techniques that are designed to circumvent controls, to avoid detection, and to remove or obfuscate forensic evidence. In addition, if our employees or contractors fail to adhere to practices we have established to maintain a firewall between our internal drug discovery team and our teams that work with external individuals, including our collaborators, or if the technical solutions we have adopted to maintain the firewall malfunction, our collaborators may lose confidence in our ability to maintain the confidentiality of their intellectual property, we may have trouble attracting new collaborators, we may be subject to breach of contract claims by our collaborators, and we may suffer reputational and other harm as a result. Federal, state and foreign laws and regulations may also expose us to enforcement actions and investigations by regulatory authorities, and potentially result in regulatory

result in reputational damage or subject us to third-party lawsuits or other action or liability, which could adversely affect our operating results and the further development and commercialization of our products. Our insurance may not be adequate to cover losses associated with such events, and in any case, such insurance may not cover all of the types of costs, expenses, and losses we could incur to respond to and remediate a security breach.

Our precision neuroscience tools utilize third-party open source software, and any failure to comply with the terms of one or more of these open source software licenses could adversely affect our business, subject us to litigation, or create potential liability.

Our precision neuroscience tools include software licensed by third parties under any one or more open source licenses, and we expect to continue to incorporate open source software in our precision neuroscience tools in the future. While we have a process in place for monitoring the use of open source software by our employees, we cannot ensure we are aware of every instance of such use or have validated the quality or source of such software, or that we are in compliance with the terms of the applicable open source licenses or our current policies and procedures. There have been claims against companies that use open source software in their products and services asserting that the use of such open source software infringes the claimants' intellectual property rights. As a result, we could be subject to suits by third parties claiming that what we believe to be licensed open source software were to allege that we had not complied with the conditions of one or more of these licenses, we could be required to incur significant legal expenses defending against such allegations and could be subject to significant damages and required to comply with onerous conditions or restrictions on these solutions, which could disrupt the distribution and sale of these solutions. Litigation could be costly for us to defend, have a negative effect on our business, financial condition, and results of operations, or require us to devote additional research and development resources to change our precision neuroscience tools. Furthermore, these third-party open source providers could experience service outages, data loss, privacy breaches, cyber-attacks, and other events relating to the applications and services they provide that could diminish the utility of these services and which could harm our business as a result.

Use of open source software may entail greater risks than use of third-party commercial software, as open source licensors generally do not provide warranties or other contractual protections regarding infringement claims or the quality of the code, including with respect to security vulnerabilities where open source software may be more susceptible. In addition, certain open source licenses require that source code for software programs that interact with such open source software be made available to the public at no cost and that any modifications or derivative works to such open source software continue to be licensed under the same terms as the open source software license. The terms of various open source licenses to which we are subject have not been interpreted by courts in the relevant jurisdictions, and there is a risk that such licenses could be construed in a manner that imposes unanticipated conditions or restrictions on our ability to market or provide our software and data. By the terms of certain open source licenses, we could be required to release the source code of our proprietary software, and to make our proprietary software available under open source licenses, if we combine our proprietary software with open source software in a certain manner. In the event that portions of our proprietary software are determined to be subject to an open source license, we could be required to publicly release the affected portions of our source code, re-engineer all or a portion of our precision neuroscience tools, or otherwise be limited in the licensing of our precision neuroscience tools, each of which could reduce or eliminate the value of our precision neuroscience tools. Disclosing our proprietary source code could allow our competitors to create similar products with lower development effort and time and ultimately could result in a loss of sales. Furthermore, any such re-engineering or other remedial efforts could require significant additional research and development resources, and we may not be able to successfully complete any such re-engineering or other remedial efforts. Any of these events could create liability for us and damage our reputation, which could have a material adverse effect on our revenue, business, results of operations, and financial condition and the market price of our shares.

Risks Related to the Development and Clinical Testing of Our Product Candidates

Clinical and preclinical drug development is a lengthy and expensive process, with an uncertain outcome. Our clinical and preclinical programs have experienced delays and may experience additional delays or may never advance, which would adversely affect our ability to obtain regulatory approvals or commercialize our product candidates on a timely basis or at all, which could have an adverse effect on our business.

In order to obtain FDA approval to market our product candidates, we must demonstrate the safety and efficacy of our product candidates in humans to the satisfaction of the FDA. To meet these requirements, we will have to conduct adequate and well-controlled clinical trials. Clinical testing is expensive, time-consuming and subject to uncertainty. Conducting preclinical testing and clinical trials represents a lengthy, time-consuming and expensive process. The length of time may vary substantially according to the type, complexity and novelty of the program, and often can be several years or more per program. Delays associated with programs for which we are directly conducting preclinical studies may cause us to incur additional operating expenses. The commencement and rate of completion of preclinical studies and clinical trials for a product candidate may be delayed by many factors, including, but not limited to:

- inability to generate sufficient preclinical or other *in vivo* or *in vitro* data to support the initiation of clinical studies;
- establishing the approvals needed to conduct preclinical studies in animals (e.g., Institutional Animal Care and Use Committee approval);
- timely completion of preclinical laboratory tests, animal studies and formulation studies in accordance with FDA's Good Laboratory Practice (GLP) requirements and other applicable regulations;
- approval by an independent Institutional Review Board (IRB) ethics committee at each clinical site before each trial may be initiated;
- delays in reaching a consensus with regulatory agencies on study design and obtaining regulatory authorization to commence clinical trials; delays in reaching agreement on acceptable terms with prospective CROs, and clinical trial sites, the terms of which can be subject to extensive negotiation and may vary significantly among different CROs and clinical trial sites;
- delays in identifying, recruiting and training suitable clinical investigators;
- delays in recruiting suitable patients to participate in our clinical trials;
- delays in manufacturing, testing, releasing, validating or importing/exporting sufficient stable quantities of our product candidates for use in clinical trials or the inability to do any of the foregoing;
- insufficient or inadequate supply or quality of product candidates or other materials necessary for use in clinical trials, or delays in sufficiently developing, characterizing or controlling a manufacturing process suitable for clinical trials;
- imposition of a temporary or permanent clinical hold by regulatory authorities;
- developments on trials conducted by competitors for related technology that raises FDA or foreign regulatory authority concerns about risk to patients of the technology broadly, or if the FDA or a foreign regulatory authority finds that the investigational protocol or plan is clearly deficient to meet its stated objectives;
- delays in recruiting, screening and enrolling patients and delays caused by patients withdrawing from clinical trials or failing to return for post-treatment follow-up;
- difficulty collaborating with patient groups and investigators;
- failure by our CROs, other third parties or us to adhere to clinical trial protocols; failure to perform in accordance with the FDA's or any other regulatory authority's good clinical practice (GCP) requirements, or applicable regulatory guidelines in other countries;

- occurrence of adverse events associated with the product candidate that are viewed to outweigh its potential benefits, or occurrence of adverse events in trial of the same class of agents conducted by other companies;
- changes to the clinical trial protocols;
- clinical sites deviating from trial protocol or dropping out of a trial;
- changes in regulatory requirements and guidance that require amending or submitting new clinical protocols;
- changes in the standard of care on which a clinical development plan was based, which may require new or additional trials;
- selection of clinical endpoints that require prolonged periods of observation or analyses of resulting data;
- the cost of clinical trials of our product candidates being greater than we anticipate;
- clinical trials of our product candidates producing negative or inconclusive results, which may result in our deciding, or regulators requiring us, to conduct additional clinical trials or abandon development of such product candidates;
- transfer of manufacturing processes to larger-scale facilities operated by a contract manufacturing organization (CMO) and delays or failure by our CMOs or us to make any necessary changes to such manufacturing process; and
- third parties being unwilling or unable to satisfy their contractual obligations to us.

In addition, disruptions caused by the COVID-19 pandemic may increase the likelihood that we encounter such difficulties or delays in initiating, enrolling, conducting or completing our planned and ongoing preclinical studies and clinical trials. In particular, as a result of the COVID-19 pandemic, we have experienced difficulty in accessing animal models, specifically non-human primate models, for the preclinical evaluation of our product candidates. Delays caused by the inability to access these models may cause our development timeline to be extended beyond what we anticipate.

Clinical trials must be conducted in accordance with the FDA and other applicable regulatory authorities' legal requirements, regulations or guidelines, and are subject to oversight by these governmental agencies and Ethics Committees or IRBs at the medical institutions where the clinical trials are conducted. We could also encounter delays if a clinical trial is suspended or terminated by us, by the IRBs of the institutions in which such trials are being conducted, by a Data Safety Monitoring Board for such trial or by the FDA or comparable foreign regulatory authorities. Such authorities may impose such a suspension or termination due to a number of factors, including failure to conduct the clinical trial in accordance with regulatory requirements or our clinical protocols, inspection of the clinical trial operations or trial site by the FDA or comparable foreign regulatory authorities a drug, changes in governmental regulations or administrative actions or lack of adequate funding to continue the clinical trial. For example, nonclinical safety pharmacology studies of NMRA-511 indicate that the dose limiting toxicities were CNS observations including tremor and convulsions, which led to a partial clinical hold on our IND that was removed when we amended the protocol to include tremors as a stopping criterion. More recently, in response to a pre-IND submission for a preclinical program focused on OSA, feedback from the FDA related to the target indication led us to cease that program. In addition, changes in regulatory requirements and policies may occur, and we may need to amend clinical trial protocols to comply with these changes. Amendments may require us to resubmit our clinical trial protocols to IRBs for reexamination, which may impact the costs, timing or successful completion of a clinical trial.

Further, conducting clinical trials in foreign countries, as we may do for our product candidates, presents additional risks that may delay completion of our clinical trials. These risks include the failure of enrolled patients in foreign countries to adhere to clinical protocol as a result of differences in healthcare services or

cultural customs, managing additional administrative burdens associated with foreign regulatory schemes, as well as political and economic risks relevant to such foreign countries.

Moreover, principal investigators for our clinical trials may serve as scientific advisors or consultants to us from time to time and receive compensation in connection with such services. Under certain circumstances, we may be required to report some of these relationships to the FDA or comparable foreign regulatory authorities. The FDA or comparable foreign regulatory authority may conclude that a financial relationship between us and a principal investigator has created a conflict of interest or otherwise affected interpretation of the study. The FDA or comparable foreign regulatory authority may therefore question the integrity of the data generated at the applicable clinical trial site and the utility of the clinical trial itself may be jeopardized. This could result in a delay in approval, or rejection, of our marketing applications by the FDA or comparable foreign regulatory authority, as the case may be, and may ultimately lead to the denial of marketing approval of one or more of our product candidates.

Delays in the completion of any preclinical studies or clinical trials of our product candidates will increase our costs, slow down our product candidate development and approval process and delay or potentially jeopardize our ability to commence product sales and generate product revenue. In addition, many of the factors that cause, or lead to, a delay in the commencement or completion of clinical trials may also ultimately lead to the denial of regulatory approval of our product candidates. Any delays to our preclinical studies or clinical trials that occur as a result could shorten any period during which we may have the exclusive right to commercialize our product candidates and our competitors may be able to bring products to market before we do, and the commercial viability of our product candidates could be significantly reduced. Any of these occurrences may harm our business, financial condition and prospects significantly.

Results of preclinical studies or clinical trials of any product candidates may not be predictive of the results of future preclinical studies or clinical trials.

To obtain the requisite regulatory approvals to market and sell any of our product candidates, we or any collaborator for such product candidate must demonstrate through extensive preclinical studies and clinical trials that the product candidate is safe and effective in humans. Before an IND can be submitted to the FDA and become effective, which is a prerequisite for conducting clinical trials on human subjects, a product candidate must successfully progress through extensive preclinical studies, which include preclinical laboratory testing, animal studies, and formulation studies in accordance with GLP. We cannot be certain of the timely completion or outcome of any preclinical studies. We also cannot predict if the FDA or comparable regulatory authorities will allow our proposed clinical programs to proceed or if the outcome of our preclinical studies will ultimately support further development of our programs. Additionally, we cannot be sure that we will be able to submit INDs or similar applications with respect to our product candidates on the timelines we expect, if at all, and we cannot be sure that submission of IND or similar applications will result in the FDA or other regulatory authorities allowing clinical trials to begin.

Moreover, success in preclinical studies or early clinical trials does not ensure that later preclinical studies or clinical trials will be successful. A number of companies in the biotechnology and biopharmaceutical industries have suffered significant setbacks in clinical trials, even after positive results in earlier preclinical studies. These setbacks have been caused by, among other things, preclinical findings made while clinical trials were underway and safety or efficacy observations made in clinical trials, including previously unreported adverse events. The design of a clinical trial can determine whether its results will support approval of a product, and flaws in the design of a clinical trial may not become apparent until the clinical trial is well advanced. In addition, clinical and preclinical data are often susceptible to varying interpretations and analyses. Notwithstanding any potential promising results in earlier studies, we cannot be certain that we will not face similar setbacks. In addition, the results of our preclinical animal studies, including our non-human primate studies, may not be predictive of the results of outcomes in subsequent clinical trials on human subjects. Product candidates in clinical trials may fail to show the desired pharmacological properties or safety and efficacy traits despite having progressed through preclinical studies.

If we fail to receive positive results in preclinical studies or clinical trials of any product candidate, the development timeline and regulatory approval and commercialization prospects for that product candidate, and, correspondingly, our business and financial prospects, would be negatively impacted.

Our product candidates may have serious adverse, undesirable, or unacceptable side effects or other properties that may delay or prevent marketing approval. If such side effects are identified following approval, if any, the commercial profile of any approved label may be limited, or we may be subject to other significant negative consequences following marketing approval, if any.

Results of our clinical trials could reveal a high and unacceptable severity and prevalence of side effects or unexpected characteristics. Undesirable side effects that may be caused by our product candidates could cause us or regulatory authorities to interrupt, delay, or halt clinical trials and could result in a more restrictive label or the delay or denial of regulatory approval by the FDA or comparable foreign authorities. The drug-related side effects could affect patient recruitment or the ability of enrolled patients to complete the trial or result in potential product liability claims. Any of these occurrences may harm our business, financial condition and prospects significantly.

Moreover, if our product candidates are associated with undesirable side effects in clinical trials or have characteristics that are unexpected, we may elect to abandon their development or limit their development to more narrow uses or subpopulations in which the undesirable side effects or other characteristics are less prevalent, less severe or more acceptable from a risk-benefit perspective, which may limit the commercial expectations for the product candidate if approved. We may also be required to modify our study plans based on findings in our ongoing preclinical studies or clinical trials. For example, in a rat study, at its highest dose (100 mg/kg/day) NMRA-140 was observed to have skin-related phototoxicity of erythema, edema and flaking additionally ocular phototoxicity (corneal edema). While no phototoxicity has been observed in our Phase 1 clinical trials, we monitored visual acuity and corneal integrity in our Phase 2 clinical trial to confirm there was no phototoxicity in humans. Though we did not observe any phototoxicity effects in our Phase 2 clinical trial, if phototoxicity is experienced in our later-stage clinical trials, the labeling implications of such safety warnings may limit any future product sales, if NMRA-140 is approved.

Further, clinical trials by their nature utilize a sample of the potential patient population. With a limited number of patients and limited duration of exposure, rare and severe side effects of our product candidates may only be uncovered with a significantly larger number of patients exposed to the product candidate. It is possible that as we test our product candidates in larger, longer and more extensive clinical trials, including with different dosing regimens, or as the use of these product candidates becomes more widespread if they receive regulatory approval, illnesses, injuries, discomforts and other adverse events that were observed in earlier trials, as well as conditions that did not occur or went undetected in previous trials, may be reported by subjects. If such side effects become known later in development or upon approval, if any, such findings may harm our business, financial condition and prospects significantly.

In the event that any of our product candidates receives marketing approval and we or others later identify undesirable or unacceptable side effects caused by such products, a number of potentially significant negative consequences could result, including:

- regulatory authorities may withdraw or limit approvals of such products and require us to take our approved product off the market;
- regulatory authorities may require the addition of labeling statements, specific warnings, a contraindication or field alerts to physicians and pharmacies, or issue other communications containing warnings or other safety information about the product;
- regulatory authorities may require a medication guide outlining the risks of such side effects for distribution to patients, or that we implement a risk evaluation and mitigation strategy (REMS), plan to ensure that the benefits of the product outweigh its risks;

- we may be required to change the dose or the way the product is administered, conduct additional clinical trials, or change the labeling of the product;
- we may be subject to limitations on how we may promote or manufacture the product;
- sales of the product may decrease significantly;
- we may be subject to litigation or product liability claims; and
- our reputation may suffer.

Any of these events could prevent us or our potential future partners from achieving or maintaining market acceptance of the affected product or could substantially increase commercialization costs and expenses, which in turn could delay or prevent us from generating significant revenue from the sale of any products.

Interim, topline, or preliminary data from our clinical trials that we announce or publish from time to time may change as more patient data becomes available or as we make changes to our manufacturing processes and are subject to audit and verification procedures that could result in material changes in the final data.

From time to time, we may publicly disclose preliminary or topline data from our preclinical studies and clinical trials, which is based on a preliminary analysis of then-available data, and the results and related findings and conclusions are subject to change following a more comprehensive review of the data related to the particular study or trial. We also make assumptions, estimations, calculations and conclusions as part of our analyses of data, and we may not have received or had the opportunity to fully and carefully evaluate all data. As a result, the topline or preliminary results that we report may differ from future results of the same studies, or different conclusions or considerations may qualify such results, once additional data have been received and fully evaluated. Topline and preliminary data also remain subject to audit and verification procedures that may result in the final data being materially different from the topline or preliminary data we previously published. As a result, topline and preliminary data should be viewed with caution until the final data are available.

From time to time, we may also disclose interim data from our preclinical studies and clinical trials. Interim data from clinical trials that we may complete are subject to the risk that one or more of the clinical outcomes may materially change as patient enrollment continues and more patient data become available. Adverse differences between interim data and final data could significantly harm our business prospects. Further, disclosure of interim data by us or by our competitors could result in volatility in the price of our common stock.

Further, others, including regulatory agencies, may not accept or agree with our assumptions, estimates, calculations, conclusions or analyses or may interpret or weigh the importance of data differently, which could impact the value of the particular program, the approvability or commercialization of the particular product candidate or product and our company in general. In addition, the information we choose to publicly disclose regarding a particular study or clinical trial is based on what is typically extensive information, and you or others may not agree with what we determine is material or otherwise appropriate information to include in our disclosure. If the interim, topline, or preliminary data that we report differ from actual results, or if others, including regulatory authorities, disagree with the conclusions reached, our ability to obtain approval for, and commercialize, our vaccine candidates may be harmed, which could harm our business, prospects, financial condition or results of operations.

We will depend on enrollment and retention of patients in our clinical trials for our product candidates. If we experience delays or difficulties enrolling or retaining patients in our clinical trials, our research and development efforts and business, financial condition and results of operations could be materially adversely affected.

Successful and timely completion of clinical trials will require that we enroll and retain a sufficient number of patient candidates. Any clinical trials we conduct may be subject to delays for a variety of reasons, including

as a result of patient enrollment taking longer than anticipated, patient withdrawal or adverse events. These types of developments could cause us to delay the trial or halt further development.

Our clinical trials will compete with other clinical trials that are in the same therapeutic areas as our product candidates, and this competition reduces the number and types of patients available to us, as some patients who might have opted to enroll in our trials may instead opt to enroll in a trial being conducted by one of our competitors.

Because the number of qualified clinical investigators and clinical trial sites is limited, we expect to conduct some of our clinical trials at the same clinical trial sites that some of our competitors use, which will reduce the number of patients who are available for our clinical trials at such clinical trial sites. The eligibility criteria of our clinical studies, and in particular, any eligibility criteria we may establish using our precision neuroscience approach, may limit the pool of available study participants as we will require that patients have specific characteristics that we can measure or to assure their disease is either severe enough or not too advanced to include them in a study.

Patient enrollment depends on many factors, including:

- the size and nature of the patient population;
- the severity of the disease under investigation;
- eligibility criteria for the trial;
- the proximity of patients to clinical sites;
- the design of the clinical protocol;
- the ability to obtain and maintain patient consents;
- the ability to recruit clinical trial investigators with the appropriate competencies and experience;
- the risk that patients enrolled in clinical trials will drop out of the trials before the administration of our product candidates or trial completion;
- the availability of competing clinical trials;
- the availability of new drugs approved for the indication the clinical trial is investigating; and
- clinicians' and patients' perceptions as to the potential advantages of the drug being studied in relation to other available therapies.

These factors may make it difficult for us to enroll enough patients to complete our clinical trials in a timely and cost-effective manner. Delays in the completion of any clinical trial of our product candidates will increase our costs, slow down our product candidate development and approval process, and delay or potentially jeopardize our ability to commence product sales and generate revenue. In addition, some of the factors that cause, or lead to, a delay in the commencement or completion of clinical trials may also ultimately lead to the denial of regulatory approval of our product candidates.

The estimates of market opportunity and forecasts of market growth included in this prospectus may prove to be smaller than we believe, and even if the markets in which we compete achieve the forecasted growth, our business may not grow at similar rates, or at all.

We intend to initially focus our product candidate development on treatments for various neuropsychiatric disorders and neurodegenerative diseases. Our projections of addressable patient populations within any particular disease state that may benefit from treatment with our product candidates are based on our estimates. Market opportunity estimates and growth forecasts included in this prospectus are subject to significant

uncertainty and are based on assumptions and estimates. These estimates, which have been derived from a variety of sources, including scientific literature, surveys of clinics, patient foundations, and market research, may prove to be incorrect. Further, new studies may change the estimated incidence or prevalence of these diseases. Additionally, the potentially addressable patient population for our product candidates may not ultimately be amenable to treatment with our product candidates. Our market opportunity may also be limited by future competitor treatments that enter the market. If any of our estimates prove to be inaccurate, the market opportunity for any product candidate that we or our strategic partners develop could be significantly diminished and have an adverse material impact on our business.

Even if approved, our products may not gain market acceptance, in which case we may not be able to generate product revenues, which will materially adversely affect our business, financial condition, and results of operations.

Even if the FDA or any comparable foreign regulatory authority approves the marketing of any product candidates that we develop, physicians, healthcare providers, patients, or the medical community may not accept or use them. Additionally, the product candidates that we are developing are based on our proprietary approach, which are new technologies. If these products do not achieve an adequate level of acceptance, we may not generate significant product revenues or any profits from operations. The degree of market acceptance of any of our product candidates will depend on a variety of factors, including:

- the timing of market introduction of the product candidate as well as competitive products;
- the clinical indications for which a product candidate is approved;
- the terms of any approvals and the countries in which approvals are obtained;
- the number and clinical profile of competing products;
- the potential and perceived advantages of our product candidates over alternative treatments;
- our ability to provide acceptable evidence of safety and efficacy;
- the prevalence and severity of any side effects;
- the availability of an approved product candidate for use as a combination therapy;
- relative convenience and ease of administration;
- cost-effectiveness;
- patient diagnostics and screening infrastructure in each market;
- the effectiveness of sales and marketing efforts;
- approval of other new therapies for the same indications;
- marketing and distribution support;
- adverse publicity about our product candidates;
- availability of coverage, adequate reimbursement and sufficient payment from health maintenance organizations and other insurers, both public and private, for our product candidates, or the procedures utilizing our product candidates, if approved;
- the willingness of patients to pay out-of-pocket in the absence of coverage by third-party payors and government authorities; and
- other potential advantages over alternative treatment methods.

If our product candidates fail to gain market acceptance, this will have a material adverse impact on our ability to generate revenues to provide a satisfactory, or any, return on our investments. Even if some products achieve market acceptance, the market may prove not to be large enough to allow us to generate significant revenues.

We currently have no marketing, sales, or distribution infrastructure and we intend to either establish a sales and marketing infrastructure or outsource this function to a third party. Either of these commercialization strategies carries substantial risks to us.

Given our stage of development, we currently have no marketing, sale, and distribution capabilities. If any of our product candidates complete clinical development and are approved, we intend to either establish a sales and marketing organization with technical expertise and supporting distribution capabilities to commercialize our product candidates in a legally compliant manner, or to outsource this function to a third party. There are risks involved if we decide to establish our own sales and marketing capabilities or enter into arrangements with third parties to perform these services. To the extent that we enter into collaboration agreements with respect to marketing, sales or distribution, our product revenue may be lower than if we directly marketed or sold any approved products. Such collaborative arrangements with partners may place the commercialization of our products outside of our control and would make us subject to a number of risks including that we may not be able to control the amount or timing of resources that our collaborative partner devotes to our products or that our collaborator's willingness or ability to complete its obligations, and our obligations under our arrangements may be adversely affected by business combinations or significant changes in our collaborator's business strategy.

If we are unable to enter into these arrangements on acceptable terms or at all, we may not be able to successfully commercialize any approved products. If we are not successful in commercializing any approved products, either on our own or through collaborations with one or more third parties, our future product revenue will suffer and we may incur significant additional losses, which would have a material adverse effect on our business, financial condition, and results of operations.

We may become exposed to costly and damaging liability claims, either when testing our product candidates in the clinic or at the commercial stage, and our product liability insurance may not cover all damages from such claims.

We are exposed to potential product liability and professional indemnity risks that are inherent in the research, development, manufacturing, marketing, and use of biopharmaceutical products. While we currently have no products that have been approved for commercial sale, the future use of product candidates by us in clinical trials, and the sale of any approved products in the future, may expose us to liability claims. These claims might be made by patients that use the product, healthcare providers, pharmaceutical companies, or others selling such products. Any claims against us, regardless of their merit, could be difficult and costly to defend and could materially adversely affect the market for our product candidates or any prospects for commercialization of our product candidates.

Although the clinical trial process is designed to identify and assess potential side effects, it is always possible that a drug, even after regulatory approval, may exhibit unforeseen side effects. If any of our product candidates were to cause adverse side effects during clinical trials or after approval of the product candidate, we may be exposed to substantial liabilities. Physicians and patients may not comply with any warnings that identify known potential adverse effects and patients who should not use our product candidates.

Even successful defense against product liability claims would require significant financial and management resources. Regardless of the merits or eventual outcome, liability claims may result in: decreased demand for our product candidates; injury to our reputation; withdrawal of clinical trial participants; initiation of investigations by regulators; costs to defend the related litigation; a diversion of management's time and our resources; substantial monetary awards to trial participants or patients; product recalls, withdrawals or labeling, marketing or promotional restrictions; loss of revenue; exhaustion of any available insurance and our capital resources; the inability to commercialize any product candidate; and a decline in our share price.

Although we maintain adequate product liability insurance for our product candidates, it is possible that our liabilities could exceed our insurance coverage. We intend to expand our insurance coverage to include the sale of commercial products if we obtain marketing approval for any of our product candidates. However, we may be unable to maintain insurance coverage at a reasonable cost or obtain insurance coverage that will be adequate to

satisfy any liability that may arise. If a successful product liability claim or series of claims is brought against us for uninsured liabilities or in excess of insured liabilities, our assets may not be sufficient to cover such claims, and our business operations could be impaired.

Risks Related to Our Regulatory Environment

The development and commercialization of drug products is subject to extensive regulation, and the regulatory approval processes of the FDA and comparable foreign authorities are lengthy, time-consuming, and inherently unpredictable. If we are ultimately unable to obtain regulatory approval for our product candidates on a timely basis if at all, our business will be substantially harmed.

The clinical development, manufacturing, labeling, packaging, storage, recordkeeping, advertising, promotion, export, import, marketing, distribution, adverse event reporting, including the submission of safety and other post-marketing information and reports, and other possible activities relating to our product candidates are subject to extensive regulation. In the United States, obtaining marketing approval for a new drug requires the submission of a New Drug Application (NDA) to the FDA, and we are not permitted to market any product candidate in the United States until we obtain approval from the FDA of the NDA for that product candidate. An NDA must be supported by extensive clinical and preclinical data, as well as extensive information regarding pharmacology, chemistry, manufacturing, and controls. Outside the United States, many comparable foreign regulatory authorities employ similar approval processes.

We have not previously submitted an NDA to the FDA or similar marketing application to comparable foreign authorities, for any product candidate, and we cannot be certain that any of our product candidates will receive regulatory approval. Obtaining approval of an NDA can be a lengthy, expensive, and uncertain process, and as a company we have no experience with the preparation of an NDA submission or any other marketing application. In addition, the FDA has the authority to require a REMS as part of an NDA or after approval, which may impose further requirements or restrictions on the distribution or use of an approved drug, such as limiting prescribing to certain physicians or medical centers that have undergone specialized training, limiting treatment to patients who meet certain safe-use criteria and requiring treated patients to enroll in a registry.

Our product candidates could fail to receive regulatory approval for many reasons, including the following:

- the FDA or comparable foreign regulatory authorities may disagree with the design or implementation of our clinical trials;
- we may be unable to demonstrate to the satisfaction of the FDA or comparable foreign regulatory authorities that a product candidate is safe and effective for its proposed indication;
- the results of clinical trials may not meet the level of statistical significance required by the FDA or comparable foreign regulatory authorities for approval;
- we may be unable to demonstrate that a product candidate's clinical and other benefits outweigh its safety risks;
- the FDA or comparable foreign regulatory authorities may disagree with our interpretation of data from preclinical studies or clinical trials;
- the data collected from clinical trials of our product candidates may not be sufficient to support the submission of an NDA or other submission or to obtain regulatory approval in the United States or elsewhere, or regulatory authorities may not accept a submission due to, among other reasons, the content or formatting of the submission;
- the FDA or comparable foreign regulatory authorities may fail to approve our manufacturing processes or facilities or those of third-party manufacturers with which we contract for clinical and commercial supplies; and

the approval policies or regulations of the FDA or comparable foreign regulatory authorities may significantly change in a manner rendering our clinical data insufficient for approval.

This lengthy approval process, as well as the unpredictability of future clinical trial results, may result in our failing to obtain regulatory approval to market any of our product candidates, which would significantly harm our business, results of operations, and prospects. The FDA and comparable foreign regulatory authorities have substantial discretion in the approval process, and determining when or whether regulatory approval will be obtained for any of our product candidates. For example, regulatory authorities in various jurisdictions have in the past had, and may in the future have, differing requirements for, interpretations of and opinions on our clinical and preclinical data. As a result, we may be required to conduct additional preclinical studies, alter our proposed clinical trial designs, or conduct additional clinical trials to satisfy the regulatory authorities in each of the jurisdictions in which we hope to conduct clinical trials and develop and market our products, if approved. Further, even if we believe the data collected from clinical trials of our product candidates are promising, such data may not be sufficient to support approval by the FDA or any comparable foreign regulatory authority.

In addition, even if we were to obtain approval, regulatory authorities may approve any of our product candidates for fewer or more limited indications than we request, may not approve the price we intend to charge for our products, may grant approval contingent on the performance of costly post-marketing clinical trials, or may approve a product candidate with a label that does not include the labeling claims necessary or desirable for the successful commercialization of that product candidate. Any of the foregoing scenarios could materially harm the commercial prospects for our product candidates.

Even if our product candidates obtain regulatory approval, we will be subject to ongoing obligations and continued regulatory review, which may result in significant additional expense. Additionally, our product candidates, if approved, could be subject to labeling and other restrictions and market withdrawal and we may be subject to penalties if we fail to comply with regulatory requirements or experience unanticipated problems with our products.

If the FDA or a comparable foreign regulatory authority approves any of our product candidates, the manufacturing processes, testing, safety, efficacy, labeling, packaging, distribution, import, export, adverse event reporting, storage, advertising, promotion, and recordkeeping for the product will be subject to extensive and ongoing regulatory requirements. These requirements include submissions of safety and other post-marketing information and reports, registration, as well as continued compliance with current good manufacture practices (cGMPs) and good clinical practices (GCPs) for any clinical trials that we conduct post-approval, all of which may result in significant expense and limit our ability to commercialize such products. In addition, any regulatory approvals that we receive for our product candidates may also be subject to limitations on the approved indicated uses for which the product may be marketed or to the conditions of approval, or contain requirements for potentially costly post-marketing testing, including Phase 4 clinical trials, and surveillance to monitor the safety and efficacy of the product candidate.

Manufacturers and manufacturers' facilities are required to comply with extensive FDA and comparable foreign regulatory authority requirements, including ensuring that quality control and manufacturing procedures conform to cGMP regulations. As such, we and our contract manufacturers will be subject to continual review and inspections to assess compliance with cGMP and adherence to commitments made in any approved marketing application. Accordingly, we and others with whom we work must continue to expend time, money, and effort in all areas of regulatory compliance, including manufacturing, quality control, and distribution.

If a regulatory agency discovers previously unknown problems with a product, such as adverse events of unanticipated severity or frequency, or problems with the facility where the product is manufactured, or disagrees with the promotion, marketing or labeling of a product, such regulatory agency may impose restrictions on that product or us, including requiring withdrawal of the product from the market. If we fail to comply with applicable regulatory requirements, a regulatory agency or enforcement authority may, among other things:

issue warning letters or untitled letters;

- issue, or require us to issue, safety-related communications, such as safety alerts, field alerts, "Dear Doctor" letters to healthcare professionals, or import alerts;
- impose civil or criminal penalties;
- suspend, limit, or withdraw regulatory approval;
- suspend any of our preclinical studies and clinical trials;
- refuse to approve pending applications or supplements to approved applications;
- impose restrictions on our operations, including closing our and our contract manufacturers' facilities; or
- seize or detain products, refuse to permit the import or export of products, or require us to conduct a product recall.

Any government investigation of alleged violations of law could require us to expend significant time and resources in response and could generate adverse publicity. Any failure to comply with ongoing regulatory requirements may significantly and adversely affect our ability to commercialize and generate revenue from our products, if approved. If regulatory sanctions are applied or if regulatory approval is withdrawn, the value of our company and our operating results will be adversely affected.

Moreover, the policies of the FDA and of comparable foreign regulatory authorities may change and additional government regulations may be enacted that could prevent, limit, or delay regulatory approval of our product candidates. We cannot predict the likelihood, nature, or extent of government regulation that may arise from future legislation or administrative or executive action, either in the United States or abroad. If we are slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if we are not able to maintain regulatory compliance, we may be subject to enforcement action and we may not achieve or sustain profitability.

The FDA and other regulatory agencies actively enforce the laws and regulations prohibiting the promotion of off-label uses. If we are found or alleged to have improperly promoted off-label uses, we may become subject to significant liability.

The FDA and other regulatory agencies strictly regulate the promotional claims that may be made about drug products. These regulations include standards and restrictions for direct-to-consumer advertising, industry-sponsored scientific and educational activities, promotional activities involving the internet and off-label promotion. For example, any regulatory approval that the FDA grants is limited to those indications and patient populations for which a drug is deemed to be safe and effective by the FDA.

While physicians in the United States may choose, and are generally permitted, to prescribe products in their independent medical judgment for uses that are not described in the product's labeling and for uses that differ from those tested in clinical trials and approved by the regulatory authorities, our ability to promote any of our products candidates, if approved, will be narrowly limited to those indications and populations that are specifically approved by the FDA or such other regulatory agencies, and if we are found to have promoted such off-label uses, we may become subject to significant liability. For example, the federal government has levied large civil and criminal fines against companies for alleged improper promotion and has enjoined several companies from engaging in off-label promotion. The government has also required companies to enter into consent decrees or imposed permanent injunctions under which specified promotional conduct is changed or curtailed. If we cannot successfully manage the promotion of our product candidates, if approved, we could become subject to significant liability, which would materially adversely affect our business and financial condition.

Disruptions at the FDA and other government agencies caused by funding shortages or global health concerns could hinder their ability to hire, retain, or deploy key leadership and other personnel, or otherwise prevent new or modified products from being developed, approved, or commercialized in a timely manner or at all, which could negatively impact our business.

The ability of the FDA to review and approve new products can be affected by a variety of factors, including government budget and funding levels, statutory, regulatory, and policy changes, the FDA's ability to hire and retain key personnel and accept the payment of user fees, and other events that may otherwise affect the FDA's ability to perform routine functions. Average review times at the FDA have fluctuated in recent years as a result. In addition, government funding of other government agencies that fund research and development activities is subject to the political process, which is inherently fluid and unpredictable. Disruptions at the FDA and other agencies may also slow the time necessary for new drugs or modifications to approved drugs to be reviewed and/or approved by necessary government agencies, which would adversely affect our business. For example, over the last several years, including for 35 days beginning on December 22, 2018, the U.S. government has shut down several times and certain regulatory agencies, such as the FDA, have had to furlough critical FDA employees and stop critical activities.

Separately, in response to the COVID-19 pandemic, the FDA postponed most inspections of domestic and foreign manufacturing facilities at various points. Even though the FDA has since resumed standard inspection operations of domestic facilities where feasible, the FDA has continued to monitor and implement changes to its inspectional activities to ensure the safety of its employees and those of the firms it regulates as it adapts to the evolving COVID-19 pandemic, and any resurgence of the virus or emergence of new variants may lead to further inspectional delays. Regulatory authorities outside the United States may adopt similar restrictions or other policy measures in response to the COVID-19 pandemic. If a prolonged government shutdown occurs, or if global health concerns continue to prevent the FDA or comparable foreign regulatory authorities from conducting their regular inspections, reviews, or other regulatory activities, it could significantly impact the ability of the FDA or comparable foreign regulatory authorities to timely review and process our regulatory submissions, which could have a material adverse effect on our business.

We are subject to U.S. and certain foreign export and import controls, sanctions, embargoes, anti-corruption laws, and anti-money laundering laws and regulations. Compliance with these legal standards could impair our ability to compete in domestic and international markets. We can face criminal liability and other serious consequences for violations, which can harm our business.

We are subject to export control and import laws and regulations, including the U.S. Export Administration Regulations, U.S. Customs regulations, various economic and trade sanctions regulations administered by the U.S. Treasury Department's Office of Foreign Assets Controls, the U.S. Foreign Corrupt Practices Act of 1977, as amended (FCPA), the U.S. domestic bribery statute contained in 18 U.S.C. § 201, the U.S. Travel Act, the USA PATRIOT Act, and other state and national anti-bribery and anti-money laundering laws in the countries in which we conduct activities. Anti-corruption laws are interpreted broadly and prohibit companies and their employees, agents, contractors, and other collaborators from authorizing, promising, offering, or providing, directly or indirectly, improper payments or anything else of value to recipients in the public or private sector. We may engage third parties to sell our products outside the United States, to conduct clinical trials, and/or to obtain necessary permits, licenses, patent registrations, and other regulatory approvals. We have direct or indirect interactions with officials and employees of government agencies or government-affiliated hospitals, universities, and other organizations. We can be held liable for the corrupt or other illegal activities of our employees, agents, contractors, and other collaborators, even if we do not explicitly authorize or have actual knowledge of such activities. Any violations of the laws and regulations described above may result in substantial civil and criminal fines and penalties, imprisonment, the loss of export or import privileges, debarment, tax reassessments, breach of contract and fraud litigation, reputational harm, and other consequences.

Our research and development activities could be affected or delayed as a result of possible restrictions on animal testing.

Certain laws and regulations require us to test our product candidates on animals before initiating clinical trials involving humans. Animal testing activities have been the subject of controversy and adverse publicity. Animal rights groups and other organizations and individuals have attempted to stop animal testing activities by pressing for legislation and regulation in these areas and by disrupting these activities through protests and other means. To the extent the activities of these groups are successful, our research and development activities may be interrupted, delayed, or become more expensive.

Our business operations and current and future relationships with healthcare professionals, principal investigators, consultants, vendors, customers, and third-party payors in the United States and elsewhere are subject to applicable anti-kickback, fraud and abuse, false claims, physician payment transparency, and other healthcare laws and regulations, which could expose us to substantial penalties, contractual damages, reputation harm, administrative burdens, and diminished profits.

Healthcare providers, healthcare facilities and institutions and third-party payors in the United States and elsewhere will play a primary role in the recommendation and prescription of any product candidates for which we obtain marketing approval. Our current and future arrangements with healthcare professionals, healthcare facilities and institutions, principal investigators, consultants, customers, and third-party payors may expose us to broadly applicable fraud and abuse and other healthcare laws, including, without limitation, the federal Anti-Kickback Statute and the federal False Claims Act, that may constrain the business or financial arrangements and relationships through which we research, sell, market, and distribute any product candidates for which we obtain marketing approval. In addition, we may be subject to physician payment transparency laws and regulation by the federal government and by the states and foreign jurisdictions in which we conduct our business. The applicable federal, state, and foreign healthcare laws that affect our ability to operate include, but are not limited to, the following:

- the federal Anti-Kickback Statute, which prohibits, among other things, persons or entities from knowingly and willfully soliciting, offering, receiving, or providing any remuneration (including any kickback, bribe, or certain rebate), directly or indirectly, overtly or covertly, in cash or in kind, to induce or reward, or in return for, either the referral of an individual for, or the purchase, lease, order or recommendation of, any good, facility, item or service, for which payment may be made, in whole or in part, under any U.S. federal healthcare program, such as Medicare and Medicaid. A person or entity does not need to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation;
- the U.S. federal civil and criminal false claims laws, including the civil False Claims Act, which prohibit, among other things, including through civil whistleblower or qui tam actions, individuals or entities from knowingly presenting, or causing to be presented, to the U.S. federal government, claims for payment or approval that are false or fraudulent, knowingly making, using, or causing to be made or used, a false record or statement material to a false or fraudulent claim, or from knowingly making a false statement to avoid, decrease, or conceal an obligation to pay money to the U.S. federal government. Pharmaceutical manufacturers can cause false claims to be presented to the U.S. federal government by, among other things, engaging in impermissible marketing practices, such as the off-label promotion of a product for an indication for which it has not received FDA approval. In addition, the government may assert that a claim including items and services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the civil False Claims Act;
- the federal Health Insurance Portability and Accountability Act of 1996 (HIPAA), which imposes criminal and civil liability for, among other things, knowingly and willfully executing, or attempting to execute, a scheme to defraud any healthcare benefit program, or knowingly and willfully falsifying, concealing, or covering up a material fact or making any materially false statement, in connection with the delivery of, or payment for, healthcare benefits, items, or services. Similar to the federal Anti-

Kickback Statute, a person or entity does not need to have actual knowledge of the healthcare fraud statute implemented under HIPAA or specific intent to violate it in order to have committed a violation;

- the U.S. Physician Payments Sunshine Act and its implementing regulations, which requires, among other things, certain manufacturers of drugs and devices that are reimbursable under Medicare, Medicaid, or the Children's Health Insurance Program, with specific exceptions, to report annually to the Centers for Medicare and Medicaid Services, or CMS, information related to certain payments and other transfers of value to physicians (defined to include doctors, dentists, optometrists, podiatrists and chiropractors), other healthcare professionals (such as physician assistants and nurse practitioners), and teaching hospitals, as well as ownership and investment interests held by such physicians and their immediate family members;
- analogous U.S. state laws and regulations, including: state anti-kickback and false claims laws, which may apply to our business practices, including but not limited to, research, distribution, sales and marketing arrangements, and claims involving healthcare items or services reimbursed by any third-party payor, including private insurers; state laws that require pharmaceutical companies to comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the U.S. federal government, or otherwise restrict payments that may be made to healthcare providers and other potential referral sources; state laws and regulations that require drug manufacturers to file reports relating to pricing and marketing information, which requires tracking gifts and other remuneration and items of value provided to healthcare professionals and entities; and state and local laws requiring the registration of pharmaceutical sales representatives; and
- similar healthcare laws and regulations in foreign jurisdictions, including reporting requirements detailing interactions with and payments to healthcare providers.

Ensuring that our internal operations and future business arrangements with third parties comply with applicable healthcare laws and regulations will involve substantial costs. It is not always possible to identify and deter employee misconduct or business noncompliance, and the precautions we take to detect and prevent inappropriate conduct may not be effective in controlling unknown or unmanaged risks or losses or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to be in compliance with such laws or regulations. Efforts to ensure that our business arrangements will comply with applicable healthcare laws may involve substantial costs. We have entered into consulting and scientific advisory board arrangements with physicians and other healthcare providers, including some who could influence the use of our product candidates, if approved. Compensation under some of these arrangements includes the provision of stock or stock options in addition to cash consideration. Because of the complex and far-reaching nature of these laws, it is possible that governmental authorities could conclude that our payments to physicians may not be fair market value for bona fide services or that our business practices do not comply with current or future statutes, regulations, agency guidance or case law involving applicable fraud and abuse or other healthcare laws and regulations. If our operations are found to be in violation of any of the laws described above or any other governmental laws and regulations that may apply to us, we may be subject to significant penalties, including civil, criminal, and administrative penalties, damages, fines, exclusion from government-funded healthcare programs, such as Medicare and Medicaid, or similar programs in other countries or jurisdictions, integrity oversight and reporting obligations to resolve allegations of noncompliance, disgorgement, individual imprisonment, contractual damages, reputational harm, diminished profits, and the curtailment or restructuring of our operations. If any of the physicians or other providers or entities with whom we expect to do business are found to not be in compliance with applicable laws, they may be subject to criminal, civil or administrative sanctions, including exclusions from government funded healthcare programs and imprisonment, which could affect our ability to operate our business. Further, defending against any such actions can be costly, time-consuming and may require significant personnel resources. Therefore, even if we are successful in defending against any such actions that may be brought against us, our business may be impaired.

Our employees, independent contractors, principal investigators, consultants, commercial partners and vendors may engage in misconduct or other improper activities, including noncompliance with regulatory standards and requirements.

We are exposed to the risk of employee fraud or other misconduct. We cannot ensure that our compliance controls, policies, and procedures will in every instance protect us from acts committed by our employees, agents, contractors, or collaborators that would violate the laws or regulations of the jurisdictions in which we operate, including, without limitation, employment, foreign corrupt practices, trade restrictions and sanctions, environmental, competition, and patient privacy and other privacy laws and regulations. Misconduct by employees could include failures to comply with FDA regulations, provide accurate information to the FDA, comply with manufacturing standards we may establish, comply with federal and state healthcare fraud and abuse laws and regulations, report financial information or data accurately, or disclose unauthorized activities to us. In particular, sales, marketing, and business arrangements in the healthcare industry are subject to extensive laws and regulations intended to prevent fraud, kickbacks, self-dealing, and other abusive practices. These laws and regulations may restrict or prohibit a wide range of pricing, discounting, labeling, marketing and promotion, sales commission, customer incentive programs, and other business arrangements. Employee misconduct could also involve the improper use of information obtained in the course of clinical trials, which could result in regulatory sanctions and serious harm to our reputation. It is not always possible to identify and deter employee misconduct, and the precautions we take to detect and prevent this activity may not be effective in controlling unknown or unmanaged risks or losses or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to be in compliance with such laws or regulations.

If any such actions are instituted against us, and we are not successful in defending ourselves or asserting our rights, those actions could have a material and adverse effect on our business, financial condition, results of operations and prospects, including the imposition of significant civil, criminal and administrative penalties, damages, monetary fines, individual imprisonment, disgorgement of profits, possible exclusion from participation in Medicare, Medicaid and other federal healthcare programs, contractual damages, reputational harm, diminished profits and future earnings, additional reporting or oversight obligations if we become subject to a corporate integrity agreement or other agreement to resolve allegations of noncompliance with the law, and curtailment or restructuring of our operations, any of which could adversely affect our ability to operate our business and pursue our strategy.

Current and future legislation may increase the difficulty and cost for us and any future collaborators to obtain marketing approval of and commercialize our product candidates and affect the prices we, or they, may obtain.

In the United States and other jurisdictions, there have been, and we expect there will continue to be, a number of legislative and regulatory changes and proposed changes to the healthcare system that could affect our future results of operations. In particular, there have been and continue to be a number of initiatives at the U.S. federal and state levels that seek to reduce healthcare costs and improve the quality of healthcare. For example, in March 2010, the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act (collectively, the ACA), was enacted, which substantially changed the way healthcare is financed by both governmental and private payors. Among the provisions of the ACA of importance to the biopharmaceutical and biotechnology industries are the following:

- manufacturers and importers of certain branded prescription drugs are required to pay an annual, nondeductible fee according to their market share of all such sales;
- an increase in the statutory minimum rebates a manufacturer must pay under the Medicaid Drug Rebate Program, to 23.1% of the average manufacturer price for most branded drugs, and to 13.0% for generic drug;
- a new methodology by which rebates owed by manufacturers under the Medicaid Drug Rebate Program are calculated for certain drugs, including our product candidates, that are inhaled, infused, instilled, implanted, or injected;

- extension of manufacturers' Medicaid rebate liability to covered outpatient drugs dispensed to individuals who are enrolled in Medicaid managed care organizations;
- expansion of eligibility criteria for Medicaid programs by, among other things, allowing states to offer Medicaid coverage to additional individuals and by adding new mandatory eligibility categories for individuals with income at or below 133% of the federal poverty level, thereby potentially increasing manufacturers' Medicaid rebate liability;
- expansion of the entities eligible for discounts under the 340B drug pricing program;
- a new Patient-Centered Outcomes Research Institute to oversee, identify priorities in, and conduct comparative clinical effectiveness research, along with funding for such research; and
- establishment of a Center for Medicare and Medicaid Innovation at CMS to test innovative payment and service delivery models to lower Medicare and Medicaid spending, potentially including prescription drug spending.

Since its enactment, there have been judicial and Congressional challenges to certain aspects of the ACA. On June 17, 2021, the U.S. Supreme Court dismissed the most recent judicial challenge to the ACA brought by several states without specifically ruling on the constitutionality of the ACA. Thus, the ACA remains in effect in its current form. Prior to the Supreme Court's decision, President Biden issued an Executive Order to initiate a special enrollment period from February 15, 2021 through August 15, 2021 for purposes of obtaining health insurance coverage through the ACA marketplace. The Executive Order also instructed certain governmental agencies to review and reconsider their existing policies and rules that limit access to healthcare, including among others, reexamining Medicaid demonstration projects and waiver programs that include work requirements, and policies that create unnecessary barriers to obtaining access to health insurance coverage through Medicaid or the ACA. On August 16, 2022, President Biden signed the Inflation Reduction Act of 2022 (the IRA) into law, which, among other things, extends enhanced subsidies for individuals purchasing health insurance coverage in ACA marketplaces through plan year 2025. It is unclear how other healthcare reform measures of the Biden administration or other efforts, if any, to challenge, repeal or replace the ACA, will impact our business.

In addition, other legislative changes have been proposed and adopted in the United States since the ACA was enacted. For example, on March 11, 2021, President Biden signed the American Rescue Plan Act of 2021 into law, which eliminates the statutory Medicaid drug rebate cap, currently set at 100% of a drug's average manufacturer price, beginning January 1, 2024. Further, in August 2011, the Budget Control Act of 2011, among other things, included aggregate reductions of Medicare payments to providers. These reductions went into effect in April 2013 and, due to subsequent legislative amendments to the statute, will remain in effect until 2032, with the exception of a temporary suspension from May 1, 2020 through March 31, 2022, unless additional action is taken by Congress.

Moreover, heightened governmental scrutiny is likely to continue over the manner in which manufacturers set prices for their marketed products, which already has resulted in several Congressional inquiries, proposed and enacted legislation and executive orders issued by the President designed to, among other things, bring more transparency to product pricing, review the relationship between pricing and manufacturer patient programs, and reform government program reimbursement methodologies for drug products. Most recently, the IRA marks the most significant action by Congress with respect to the biopharmaceutical industry since adoption of the ACA in 2010. Among other things, the IRA requires manufacturers of certain drugs to engage in price negotiations with Medicare (beginning in 2026), imposes rebates under Medicare Part B and Medicare Part D to penalize price increases that outpace inflation (first due in 2023), and replaces the Part D coverage gap discount program with a new discounting program (beginning in 2025). Manufacturers that fail to comply with the IRA may be subject to various penalties, including civil monetary penalties. The IRA permits the Secretary of the Department of Health and Human Services (HHS) to implement many of these provisions through guidance, as opposed to regulation, for the initial years. For that and other reasons, it is currently unclear how the IRA will be effectuated, and while the impact of the IRA on the biopharmaceutical industry cannot yet be fully determined, it is likely to be significant.

Additionally, individual states in the United States have passed legislation and implemented regulations designed to control biopharmaceutical product pricing and costs. Similar developments have occurred outside of the United States, including in the European Union where healthcare budgetary constraints have resulted in restrictions on the pricing and reimbursement of medicines by relevant health service providers. To obtain reimbursement or pricing approval in some European Union member states, we may be required to conduct studies that compare the cost-effectiveness of our product candidates to other therapies that are considered the local standard of care.

We cannot predict the likelihood, nature, or extent of government regulation that may arise from the IRA or future legislation or administrative action in the United States or any other jurisdiction. If we or any third parties we may engage are slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if we or such third parties are not able to maintain regulatory compliance, our product candidates may lose any regulatory approval that may have been obtained and we may not achieve or sustain profitability.

Even if we are able to commercialize any product candidate, coverage and adequate reimbursement may not be available or such product candidate may become subject to unfavorable pricing regulations or third-party coverage and reimbursement policies, which would harm our business.

The regulations that govern regulatory approvals, pricing, and reimbursement for drug products vary widely from country to country. Some countries require approval of the sale price of a drug product before it can be marketed. In many countries, the pricing review period begins after marketing approval is granted. In some foreign markets, prescription drug product pricing remains subject to continuing governmental control even after initial approval is granted. As a result, we might obtain regulatory approval for a product in a particular country, but then be subject to price regulations that delay our commercial launch of the product, possibly for lengthy time periods, and negatively impact the revenues we are able to generate from the sale of the product in that country. Adverse pricing limitations may hinder our ability to recoup our investment in one or more product candidates, even if our product candidates obtain regulatory approval.

Our ability to commercialize any products successfully also will depend in part on the extent to which coverage and adequate reimbursement for these products and related treatments will be available from third-party payors, such as government authorities, private health insurers, and other organizations. Even if we succeed in bringing one or more products to the market, these products may not be considered cost-effective, and the amount reimbursed for any products may be insufficient to allow us to sell our products on a competitive basis. Because our programs are in the relatively early stages of development, we are unable at this time to determine their cost effectiveness or the likely level or method of coverage and reimbursement. Increasingly, the third-party payors who reimburse patients or healthcare providers are requiring that drug companies provide them with predetermined discounts from list prices, and are seeking to reduce the prices charged or the amounts reimbursed for drug products. If the price we are able to charge for any products we develop, or the coverage and reimbursement provided for such products, is inadequate in light of our development and other costs, our return on investment could be affected adversely.

There may be significant delays in obtaining reimbursement for newly-approved drug products, and coverage may be more limited than the purposes for which the drug product is approved by the FDA or comparable foreign regulatory authorities. Moreover, eligibility for reimbursement does not imply that any drugs product will be reimbursed in all cases or at a rate that covers our costs, including research, development, manufacture, sale, and distribution.

Interim reimbursement levels for new drug products, if applicable, may also be insufficient to cover our costs and may not be made permanent. Reimbursement rates may be based on payments allowed for lower cost drug products that are already reimbursed, may be incorporated into existing payments for other services and may reflect budgetary constraints or imperfections in Medicare data. Net prices for drug products may be reduced by mandatory discounts or rebates required by third-party payors and by any future relaxation of laws that presently restrict imports of drug products from countries where they may be sold at lower prices than in the

United States. Obtaining coverage and adequate reimbursement for our product candidates may be particularly difficult because of the higher prices often associated with drugs administered under the supervision of a physician.

Further, no uniform policy for coverage and reimbursement exists in the United States, and coverage and reimbursement can differ significantly from payor to payor. Third-party payors often follow Medicare coverage policy and payment limitations in setting their own reimbursement rates, but also have their own methods and approval process apart from Medicare determinations. As a result, the coverage determination process is often a time-consuming and costly process that will require us to provide scientific and clinical support for the use of our product candidates to each payor separately, with no assurance that coverage and adequate reimbursement will be applied consistently or obtained in the first instance. Decisions regarding the extent of coverage and amount of reimbursement to be provided for any product candidates that we develop will be made on a payor-by-payor basis. One payor's determination to provide coverage for a drug does not assure that other payors will also provide coverage and adequate reimbursement for the drug. Additionally, a third-party payor's decision to provide coverage for a therapy does not imply that an adequate reimbursement rate will be approved.

There have been, and likely will continue to be, legislative and regulatory proposals at the foreign, federal, and state levels directed at broadening the availability of healthcare and containing or lowering the cost of healthcare. The continuing efforts of the government, insurance companies, managed care organizations, and other payors of healthcare services to contain or reduce costs of healthcare and/or impose price controls may adversely affect:

- the demand for our product candidates, if we obtain regulatory approval;
- our ability to set a price that we believe is fair for our products;
- our ability to obtain coverage and reimbursement approval for a product;
- our ability to generate revenue and achieve or maintain profitability;
- the level of taxes that we are required to pay; and
- the availability of capital.

Our inability to promptly obtain coverage and adequate reimbursement from both third-party payors for the product candidates that we may develop and for which we obtain regulatory approval could have a material and adverse effect on our business, financial condition, results of operations, and prospects.

We face potential liability related to the privacy of health information we utilize in the development of product candidates, as well as information we obtain from clinical trials sponsored by us from research institutions and directly from individuals.

The global data protection landscape is rapidly evolving and we and our partners and vendors are, or may become, subject to various federal, state, and foreign data protection laws and regulations (i.e., laws and regulations that address personal information, data privacy and security). Implementation standards and enforcement practices are likely to remain uncertain for the foreseeable future, and we cannot yet determine the impact future laws, regulations, standards, or perception of their requirements may have on our business. This evolution may create uncertainty in our business, affect our ability to operate in certain jurisdictions or to collect, store, transfer use and share personal information, necessitate the acceptance of more onerous obligations in our contracts, result in liability or impose additional costs on us. The cost of compliance with these laws, regulations and standards is high and is likely to increase in the future. If we fail to comply with these laws and regulations, we may be subject to litigation, regulatory investigations, enforcement actions, fines, and criminal or civil penalties, as well as adverse publicity and a potential loss of business.

In the United States, numerous federal and state laws and regulations, including state data breach notification laws, state health information privacy laws, and federal and state consumer protection laws and

regulations that govern the collection, use, disclosure, and protection of health-related and other personal information could apply to our operations or the operations of our partners. For example, most healthcare providers, including research institutions from which we obtain patient health information, are subject to privacy and security regulations promulgated under HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act of 2009. HIPAA imposes obligations on "covered entities," including certain healthcare providers, health plans and healthcare clearinghouses, as well as their respective "business associates" that create, receive, maintain or transmit individually identifiable health information for or on behalf of a covered entity, with respect to safeguarding the privacy, security and transmission of individually identifiable health information. We could potentially face substantial criminal or civil penalties if we violate HIPAA. For example, we could be subject to significant penalties if we knowingly receive individually identifiable health information from a HIPAA-covered healthcare provider or research institution that has not satisfied HIPAA's requirements for disclosure of individually identifiable health information, or otherwise violate applicable HIPAA requirements related to the protection of such information. Even when HIPAA does not apply, according to the Federal Trade Commission (FTC) violating consumers' privacy rights or failing to take appropriate steps to keep consumers' personal information secure may constitute a violation of the FTC Act. The FTC expects a company's data security measures to be reasonable and appropriate in light of the sensitivity and volume of consumer information it holds, the size and complexity of its business, and the cost of available tools to improve security and reduce vulnerabilities.

For our clinical trials, we may maintain sensitive personal information, including health information, that we receive throughout the clinical trial process, in the course of our research collaborations, and directly from individuals (or their healthcare providers) who enroll in our patient assistance programs. As such, we may be subject to state laws and regulations governing the privacy and security of personal information or requiring notification of affected individuals and state regulators in the event of a breach of personal information. Such laws and regulations will be subject to interpretation by various courts and other governmental authorities, thus creating potentially complex compliance issues for us and our future customers and strategic partners. For example, the California Consumer Privacy Act (CCPA) went into effect on January 1, 2020, which establishes additional data privacy rights for residents of the State of California. The CCPA gives California residents expanded rights to access and delete their personal information, opt out of certain personal information sharing, and receive detailed information about how their personal information is used. The CCPA provides for civil penalties for violations, as well as a private right of action for data breaches that has increased the likelihood of, and risks associated with, data breach litigation. Although there are limited exemptions for health-related information, including clinical trial data, the CCPA may increase our compliance costs and potential liability. Further, the California Privacy Rights Act (CPRA) generally went into effect on January 1, 2023, and significantly amends the CCPA. The CPRA imposes additional data protection obligations on covered businesses, including additional consumer rights processes, limitations on data uses, new audit requirements for higher risk data, and opt outs for certain uses of sensitive data. It also creates a new California data protection agency authorized to issue substantive regulations and could result in increased privacy and information security enforcement. Additional compliance investment and potential business process changes may also be required. New legislation proposed or enacted in various other states will continue to shape the data privacy environment nationally. For example, similar laws have passed in Virginia, Colorado, Connecticut and Utah.

Complying with U.S. federal and state data privacy and security laws, regulations, amendments to or re-interpretations of existing data privacy and security laws and regulations and contractual or other obligations relating to privacy, data protection, data transfers, data localization or information security may require us to make changes to our processes, incur substantial operational costs, modify our data practices and policies and restrict our business operations. Any actual or perceived failure by us to comply with these laws, regulations or other obligations may lead to significant fines, penalties, regulatory investigations, lawsuits, significant costs for remediation, damage to our reputation or other liabilities.

We are also or may become subject to rapidly evolving data protection laws, rules and regulations in foreign jurisdictions. Any clinical trial programs and research collaborations that we engage in outside the United States may implicate international data protection laws, including, in the European Economic Area (EEA), the General

Data Protection Regulation (GDPR), which became effective in 2018. The GDPR imposes stringent operational requirements for processors and controllers of the personal data of individuals within the EEA. Among other things, the GDPR requires detailed notices for clinical trial subjects and investigators, as well as requirements regarding the security of personal data and notification of data processing obligations or security incidents to appropriate data protection authorities or data subjects. If our privacy or data security measures fail to comply with the GDPR requirements, we may be subject to litigation, regulatory investigations, enforcement notices, and/or enforcement actions requiring us to change the way we use personal data and/or fines. In addition to statutory enforcement, a personal data breach can lead to adverse publicity and a potential loss of business. Further, from January 1, 2021, companies have had to comply with both the GDPR and the United Kingdom GDPR (UK GDPR), which, together with the amended UK Data Protection Act 2018, imposes separate but similar obligations to those under the GDPR. The UK GDPR mirrors the fines under the GDPR, imposing fines up to the greater of €20 million (£17.5 million) or 4% of global turnover.

Among other requirements, the GDPR regulates transfers of personal data subject to the GDPR to third countries that have not been found to provide adequate protection to such personal data, including the United States. Following the Schrems II case judgment on July 16, 2020, in which the Court of Justice of the European Union (CJEU) invalidated the EU-US Privacy Shield Framework, the European Commission has published revised standard contractual clauses (SCCs) for data transfers from the EEA and guidance on how to assess whether transfers can be legally made using them. There is some uncertainty around whether the revised clauses can be used for all types of data transfers, particularly whether they can be relied on for data transfers to non-EEA entities subject to the GDPR, and the UK has not yet approved their use. In March 2022, the US and EU announced a new regulatory regime intended to replace the invalidated regulations; however, this new EU-US Data Privacy Framework has not been implemented beyond an executive order signed by President Biden on October 7, 2022 on Enhancing Safeguards for United States Signals Intelligence Activities. European court and regulatory decisions subsequent to the CJEU decision of July 2020 have taken a restrictive approach to international data transfers. As government authorities issue further guidance on personal data export mechanisms, including where the SCCs cannot be used, and/or start taking enforcement action, we could suffer additional costs, complaints, and/or regulatory investigations or fines, and/or if we are otherwise unable to transfer personal data between and among countries and regions in which we operate, it could affect the manner in which we provide our services, the geographical location or segregation of our relevant systems and operations, and could adversely affect our financial results. These laws and regulations may apply, not only to us, but also to vendors that store or otherwise process data on our behalf, such as information technology vendors. If such a vendor misuses data we have provided to it, or fails to safeguard such data, we may be subject to litigation, regulatory investigations, enforcement notices, and/or enforcement actions, as well as adverse publicity and a potential loss of business.

We are likely to be required to expend significant capital and other resources to ensure ongoing compliance with applicable privacy and data security laws. Claims that we have violated individuals' privacy rights or breached our contractual obligations, even if we are not found liable, could be expensive and time-consuming to defend, and could result in adverse publicity that could harm our business. Moreover, even if we take all necessary action to comply with regulatory requirements, we could be subject to a hack or data breach, which could subject us to fines and penalties, as well as reputational damage.

Although we work to comply with applicable laws, regulations and standards, our contractual obligations and other legal obligations, these requirements are evolving and may be modified, interpreted and applied in an inconsistent manner from one jurisdiction to another, and may conflict with one another or other legal obligations with which we must comply. If we fail to comply with applicable federal, state, local, or foreign regulatory requirements, we could be subject to a range of regulatory actions, including penalties and fines, that may also impact our compliance with contracts entered into with our partners, and that could affect our or any collaborators' ability to seek to commercialize our clinical candidates. Any threatened or actual government enforcement action could also generate adverse publicity and require that we devote substantial resources that could otherwise be used in other aspects of our business.

Risks Related to Our Dependence on Third Parties

We contract with third parties for the manufacture of our product candidates. This reliance on third parties increases the risk that we will not have sufficient quantities of our product candidates or drugs or such quantities at an acceptable cost, which could delay, prevent or impair our development or commercialization efforts.

We do not currently have the infrastructure or internal capability to manufacture supplies of our product candidates for use in development and commercialization. We rely, and expect to continue to rely, on third-party manufacturers for the production of our product candidates for preclinical studies and clinical trials under the guidance of members of our organization. We do not have long-term supply agreements. Furthermore, while the raw materials for our product candidates are sourced from multiple suppliers, in some cases, the drug product is sourced from a single-source supplier. If we were to experience an unexpected loss of supply of any of our product candidates or any of our future product candidates for any reason, whether as a result of manufacturing, supply or storage issues or otherwise, we could experience delays, disruptions, suspensions or terminations of, or be required to restart or repeat, any pending or ongoing clinical trials.

We expect to continue to rely on third-party manufacturers for the commercial supply of any of our product candidates for which we obtain marketing approval. We may be unable to maintain or establish required agreements with third-party manufacturers or to do so on acceptable terms. Even if we are able to establish agreements with third-party manufacturers, reliance on third-party manufacturers entails additional risks, including:

- the failure of the third party to manufacture our product candidates according to our schedule, or at all, including if our third-party contractors give greater priority to the supply of other products over our product candidates or otherwise do not satisfactorily perform according to the terms of the agreements between us and them;
- the reduction or termination of production or deliveries by suppliers, or the raising of prices or renegotiation of terms;
- the termination or nonrenewal of arrangements or agreements by our third-party contractors at a time that is costly or inconvenient for us;
- the breach by the third-party contractors of our agreements with them;
- the failure of third-party contractors to comply with applicable regulatory requirements;
- the failure of the third party to manufacture our product candidates according to our specifications;
- the mislabeling of clinical supplies, potentially resulting in the wrong dose amounts being supplied or study drug or placebo not being properly identified;
- clinical supplies not being delivered to clinical sites on time, leading to clinical trial interruptions, or of drug supplies not being distributed to commercial vendors in a timely manner, resulting in lost sales; and
- the misappropriation of our proprietary information, including our trade secrets and know-how.

We do not have complete control over all aspects of the manufacturing process of, and are dependent on, our contract manufacturing partners for compliance with cGMP regulations for manufacturing both active drug substances and finished drug products. Third-party manufacturers may not be able to comply with cGMP regulations or similar regulatory requirements outside of the United States. If our contract manufacturers cannot successfully manufacture material that conforms to our specifications and the strict regulatory requirements of the FDA or a comparable foreign regulatory authority, they will not be able to secure and/or maintain marketing approval for their manufacturing facilities. In addition, we do not have control over the ability of our contract

manufacturers to maintain adequate quality control, quality assurance and qualified personnel. If the FDA or a comparable foreign regulatory authority does not approve these facilities for the manufacture of our product candidates or if it withdraws any such approval in the future, we may need to find alternative manufacturing facilities, which would significantly impact our ability to develop, obtain marketing approval for or market our product candidates, if approved. Our failure, or the failure of our third-party manufacturers, to comply with applicable regulations could result in sanctions being imposed on us, including fines, injunctions, civil penalties, delays, suspension or withdrawal of approvals, license revocation, seizures or recalls of product candidates or drugs, operating restrictions and criminal prosecutions, any of which could significantly and adversely affect supplies of our product candidates or drugs and harm our business and results of operations.

Our current and anticipated future dependence upon others for the manufacture of our product candidates or drugs may adversely affect our future profit margins and our ability to commercialize any product candidates that receive marketing approval on a timely and competitive basis.

Supply sources could be interrupted from time to time and, if interrupted, there is no guarantee that supplies could be resumed within a reasonable time frame and at an acceptable cost or at all.

We rely on our manufacturers to purchase from third-party suppliers the materials necessary to produce our product candidates for our preclinical studies and intend to continue to rely on these third parties for any clinical trials that we undertake. There are a limited number of suppliers for raw materials that we use to manufacture our drugs and there may be a need to assess alternate suppliers to prevent a possible disruption of the manufacture of the materials necessary to produce our product candidates for our preclinical studies, clinical trials, and if approved, ultimately for commercial sale. We do not have any control over the process or timing of the acquisition of these raw materials by our manufacturers. Moreover, we currently do not have any agreements for the commercial production of these raw materials. We cannot be sure that these suppliers will remain in business, or that they will not be purchased by one of our competitors or another company that is not interested in continuing to produce these materials for our intended purpose. In addition, the lead time needed to establish a relationship with a new supplier can be lengthy, and we may experience delays in meeting demand in the event a new supplier must be used. The time and effort to qualify a new supplier could result in additional costs, diversion of reduced manufacturing yields, any of which would negatively impact our operating results. Although we generally do not begin a clinical trial unless we believe we have a sufficient supply of a product candidate to complete the clinical trial, any significant delay in the supply of a product candidate to complete the clinical trial, any significant delay in the supply of a product candidate, or the raw materials after regulatory approval has been obtained for our product candidates. If our manufacturers or we are unable to purchase these raw materials after regulatory approval has been obtained for our product candidates, the commercial launch of our product candidates would be delayed or there

We rely, and expect to continue to rely, on third parties, including independent clinical investigators and CROs, to conduct our preclinical studies and clinical trials. If these third parties do not successfully carry out their contractual duties, comply with applicable regulatory requirements, or meet expected deadlines, we may not be able to obtain regulatory approval for or commercialize our product candidates and our business could be substantially harmed.

We do not currently have the ability to independently conduct any clinical trials. We have relied upon and plan to continue to rely upon third parties, including independent clinical investigators and third-party CROs, to conduct our preclinical studies and clinical trials and to monitor and manage data for our clinical and preclinical programs. We rely on these parties for execution of our preclinical studies and clinical trials, and control only certain aspects of their activities. Nevertheless, we are responsible for ensuring that each of our studies and trials is conducted in accordance with the applicable protocol, legal, regulatory, and scientific standards, and our reliance on these third parties does not relieve us of our regulatory responsibilities. We and our third-party

contractors and CROs are required to comply with GCP requirements, which are regulations and guidelines enforced by the FDA and comparable foreign regulatory authorities for all of our products candidates in clinical development. Regulatory authorities enforce these GCPs through periodic inspections of trial sponsors, principal investigators, and trial sites. If we or any of our CROs fail to comply with applicable GCPs, the clinical data generated in our clinical trials may be deemed unreliable and the FDA or comparable foreign regulatory authorities may require us to perform additional clinical trials before approving our marketing applications. We cannot assure you that upon inspection by a given regulatory authority, such regulatory authority will determine that any of our clinical trials comply with GCP regulations. In addition, our clinical trials must be conducted with product produced under cGMP regulations. Our failure to comply with these regulations may require us to repeat clinical trials, which would delay the regulatory approval process.

Further, these investigators and CROs are not our employees and we will not be able to control, other than by contract, the amount of resources, including time, that they devote to our product candidates and clinical trials. If independent investigators or CROs fail to devote sufficient resources to the development of our product candidates, or if their performance is substandard, it may delay or compromise the prospects for approval and commercialization of any product candidates that we develop. In addition, the use of third-party service providers may require us to disclose our proprietary information to these parties, which could increase the risk that this information will be misappropriated. Additionally, disruptions caused by the COVID-19 pandemic may increase the likelihood that our CROs encounter difficulties or delays in initiating, enrolling, conducting, or completing our planned clinical trials. In particular, as a result of the pandemic, we have experienced difficulty in accessing animal models, specifically non-human primate models, for the preclinical evaluation of our product candidates. Delays caused by the inability to access these models may cause our development timeline to be extended beyond what we anticipate.

Our CROs have the right to terminate their agreements with us in the event of an uncured material breach. In addition, some of our CROs have an ability to terminate their respective agreements with us if it can be reasonably demonstrated that the safety of the subjects participating in our clinical trials warrants such termination, if we make a general assignment for the benefit of our creditors, or if we are liquidated. Further, some of these agreements may also be terminated by such third parties on short notice, or under certain circumstances, including our insolvency.

There is a limited number of third-party service providers that specialize or have the expertise required to achieve our business objectives. Many of the third parties with whom we contract may also have relationships with other commercial entities, including our competitors, for whom they may also be conducting clinical trials or other drug development activities that could harm our competitive position. If any of our relationships with these third-party laboratories, CROs or clinical investigators terminate, we may not be able to enter into arrangements with alternative laboratories, CROs, or investigators or to do so in a timely manner or on commercially reasonable terms. If laboratories, CROs, or clinical investigators do not successfully carry out their contractual duties or obligations or meet expected deadlines, if they need to be replaced or if the quality or accuracy of the clinical data they obtain is compromised due to the failure to adhere to our preclinical or clinical protocols, regulatory requirements or for other reasons, our preclinical or clinical incessfully carry out their contractual duties. As a result, our results of operations and the commercial prospects for our product candidates would be harmed, our costs could increase, and our ability to generate revenues could be delayed. Switching or additional laboratories or CROs (or investigators) involves additional cost and requires management time and focus. In addition, there is a natural transition period when a new laboratory or CRO commences work. As a result, delays occur, which can materially impact our ability to support our needs. Though we carefully manage our relationships with our contracted laboratories and CROs, there can be no assurance that we will not encounter similar challenges or delays in the future or that these delays or challenges will not have a material adverse impact on our business, financial condition, and prospects.

We may not realize the benefits of any collaborative or licensing arrangement, and if we fail to enter into new strategic relationships our business, financial condition, commercialization prospects, and results of operations may be materially adversely affected.

Our product development programs and the potential commercialization of our product candidates will require substantial additional cash to fund expenses. Therefore, for some of our product candidates, we have entered into, and in the future may decide to enter into, collaborations with pharmaceutical or biopharmaceutical companies for the development and potential commercialization of those product candidates.

We face significant competition in seeking appropriate collaborators. Collaborations are complex and time-consuming to negotiate and document. We may also be restricted under existing and future collaboration agreements from entering into agreements on certain terms with other potential collaborators. We may not be able to negotiate collaborations on acceptable terms, or at all. If our strategic collaborations do not result in the successful development and commercialization of product candidates, or if one of our collaborators terminates its agreement with us, we may not receive any future research funding or milestone or royalty payments under the collaboration. Moreover, our estimates of the potential revenue we are eligible to receive under any strategic collaborations we may enter into may include potential payments related to therapeutic programs for which our collaborators may discontinue development in the future. If that were to occur, we may have to curtail the development of a particular product candidate, reduce or delay its development program or one or more of our other development programs, delay its potential commercialization or reduce the scope of our sales or marketing activities, or increase our expenditures and undertake development or commercialization activities at our own expense. If we elect to increase our expenditures to fund development or commercialization activities on our own, we may need to obtain additional capital, which may not be available to us on acceptable terms or at all. If we do not have sufficient funds, we will not be able to bring our product candidates to market and generate product revenue.

In instances where we do enter into collaborations, we could be subject to the following risks, each of which may materially harm our business, commercialization prospects, and financial condition:

- we may not be able to control the amount and timing of resources that is required of us to complete our development obligations or that the collaboration partner devotes to the product development or marketing programs;
- the collaboration partner may experience financial difficulties;
- collaborators may delay clinical trials, provide insufficient funding for a clinical trial program, stop a clinical trial or abandon a product candidate, repeat or conduct new clinical trials, or require a new formulation of a product candidate for clinical testing;
- we may be required to relinquish important rights such as marketing, distribution, and intellectual property rights;
- collaborators may infringe the intellectual property rights of third parties, which may expose us to litigation and potential liability;
- a collaborator could move forward with a competing product developed either independently or in collaboration with third parties, including our competitors;
- we and our collaboration partner may disagree regarding the development plan for research and development projects or product candidates on which we are collaborating (for example, we may disagree with a collaboration partner regarding target indications or inclusion or exclusion criteria for a clinical trial); or
- business combinations or significant changes in a collaborator's business strategy may adversely affect our willingness to complete our obligations under any arrangement.

If we license products or businesses, we may not be able to realize the benefit of such transactions if we are unable to successfully integrate them with our existing operations and company culture. We cannot be certain that, following a strategic transaction or license, we will achieve the results, revenue, or specific net income that justifies such transaction.

Risks Related to Intellectual Property

We depend on intellectual property licensed from third parties and we are currently party to in-license agreements under which we acquired rights to use, develop, manufacture and/or commercialize certain of our proprietary technologies and product candidates. If we breach our obligations under these agreements or if any of these agreements is terminated, or otherwise experience disruptions to our business relationships with our licensors, we may be required to pay damages, lose our rights to such intellectual property and technology, or both, which would harm our business.

We are dependent on patents, know-how, and proprietary technology, both our own and licensed from others. We are a party to intellectual property license agreements and in the future, we may enter into additional license agreements. For example, with respect to developing our product candidates, we have licensed certain intellectual property from Amgen, TSRI and Vanderbilt. These license agreements impose, and we expect that future license and acquisition agreements will impose, various diligence, milestone payment, royalty and other obligations on us. If we fail to comply with our obligations under these agreements, we may be required to pay damages and the licensor may have the right to terminate the license. Any termination of these licenses could result in the loss of significant rights and could harm our ability to develop, manufacture and/or commercialize our product candidates. See the section titled "Business—Intellectual Property—In-Licensing and Collaboration Agreements" for additional information regarding these key agreements.

In addition, the agreements under which we license intellectual property or technology to or from third parties are complex, and certain provisions in such agreements may be susceptible to multiple interpretations. The resolution of any contract interpretation disagreement that may arise could narrow what we believe to be the scope of our rights to the relevant intellectual property or technology or increase what we believe to be our financial or other obligations under the relevant agreement, either of which could have a material adverse effect on our business, financial condition, results of operations and prospects. Moreover, if disputes over intellectual property that we have licensed prevent or impair our ability to maintain our current licensing arrangements on commercially acceptable terms, we may be unable to successfully develop and commercialize the affected product candidates. Our business also would suffer if any current or future licensors fail to abide by the terms of the license, if the licensors fail to enforce licensed patents against infringing third parties, if the licensed patents or other rights are found to be invalid or unenforceable, or if we are unable to enter into necessary licenses on acceptable terms. Moreover, our licensors may own or control intellectual property that has not been licensed to us and, as a result, we may be subject to claims, regardless of their merit, that we are infringing or otherwise violating the licensor's rights.

In addition, while we cannot currently determine the amount of the royalty obligations we would be required to pay on sales of future products, if any, the amounts may be significant. The amount of our future royalty obligations will depend on the technology and intellectual property we use in products that we successfully develop and commercialize, if any. Therefore, even if we successfully develop and commercialize products, we may be unable to achieve or maintain profitability.

If we are unable to successfully obtain rights to required third-party intellectual property rights or maintain the existing intellectual property rights we have, we may have to abandon development of the relevant research programs or product candidates and our business, financial condition, results of operations and prospects could suffer.

Licensing of intellectual property is of critical importance to our business and involves complex legal, business and scientific issues and is complicated by the rapid pace of scientific discovery in our industry.

Disputes may also arise between us and our current and future licensors regarding intellectual property subject to a license or collaboration agreement, including those relating to:

- the scope of rights granted under the license or collaboration agreement and other interpretation-related issues;
- whether and the extent to which our technology and processes infringe on intellectual property of the licensor that is not subject to the license agreement;
- our right to sublicense patent and other rights to third parties under collaborative development relationships;
- whether we are complying with our diligence obligations with respect to the use of the licensed technology in relation to our development and commercialization of our product candidates, and what activities satisfy those diligence obligations;
- the priority of invention of patented technology;
- rights upon termination of the license agreements;
- the scope and duration of exclusivity obligations of each party to the license agreements;
- the amount and timing of payments owed under license agreements; and
- the allocation of ownership of inventions and know-how resulting from the joint creation or use of intellectual property by our licensors or collaborators and by us and our partners.

The resolution of any contractual interpretation dispute that may arise, if unfavorable to us, could have a material adverse effect on our business, financial condition, results of operations and prospects. Such resolution could narrow what we believe to be the scope of our rights to the relevant intellectual property or technology, increase what we believe to be our financial or other obligations under the relevant agreement. Furthermore, if disputes over intellectual property that we have licensed prevent or impair our ability to maintain our current licensing arrangements on acceptable terms, we may be unable to successfully develop and commercialize the affected product candidates. We are generally also subject to all of the same risks with respect to protection of intellectual property that we license as we are for intellectual property that we own, which are described below. If we or our licensors fail to adequately protect this intellectual property, our ability to commercialize our products could suffer.

We depend, in part, on our licensors to file, prosecute, maintain, defend, and enforce certain patents and patent applications that are material to our business.

Certain patents and patent applications relating to our product candidates are owned or controlled by certain of our licensors. In some circumstances, we may not have the right to control the preparation, filing, prosecution, maintenance, and defense of patent applications or patents covering technology that we license from third parties. In such circumstances, our licensors generally have rights to file, prosecute, maintain, and defend the licensed patents in their name, generally with our right to comment on such filing, prosecution, maintenance, and defense, with some obligation for the licensor to consider or incorporate our comments. We generally have the first right to enforce our exclusively licensed patent rights against third parties, although our ability to settle such claims often requires the consent of the licensor. If our licensors or any future licensees having rights to file, prosecute, maintain, and defend our patent rights fail to conduct these activities for patents or patent applications covering any of our product candidates, our ability to develop and commercialize those product candidates may be adversely affected and we may not be able to prevent competitors from making, using, or selling competing products. We cannot be certain that such activities by our licensors have been or will be conducted in compliance with applicable laws and regulations or will result in valid and enforceable patents or other intellectual property rights. Pursuant to the terms of the license agreements with some of our licensors, the licensors may have the right to control enforcement of our licensed patents or defense of any claims asserting the invalidity of these patents and, even in the circumstances

where we have the right to pursue such enforcement or defense, we cannot ensure the cooperation of our licensors. We cannot be certain that our licensors will allocate sufficient resources or prioritize their or our enforcement of such patents or defense of such claims to protect our interests in the licensed patents. Even if we are not a party to these legal actions, an adverse outcome could harm our business because it might prevent us from continuing to license intellectual property that we may need to operate our business. In addition, even when we have the right to control patent prosecution of licensed patents and patent applications, enforcement of licensed patents, or defense of claims asserting the invalidity of those patents, we may still be adversely affected or prejudiced by actions or inactions of our licensors and their counsel that took place prior to or after our assuming control. This could cause us to lose rights in any applicable intellectual property that we in-license, and as a result our ability to develop and commercialize product candidates may be adversely affected and we may be unable to prevent competitors from making, using and selling competing products.

Given the breadth of the application of our precision neuroscience approach, in order to increase our ability to exploit our technologies, we may enter into collaborations and/or strategic partnerships in the future, and we may not realize the anticipated benefits of such collaborations or partnerships. We may not be able to do so or to realize the potential benefits of such transactions, which may cause us to alter or delay our development and commercialization plans.

Research and development collaborations and strategic partnerships are prevalent in the biopharmaceutical industry. The breadth of the application of our precision neuroscience approach is an attractive technology for potential collaborations and/or strategic partnerships. These transactions are subject to numerous risks, which may include the following:

- collaborators have significant discretion in determining the efforts and resources that they will apply to a collaboration, and may not commit sufficient efforts and resources, or may misapply those efforts and resources;
- collaborators may not pursue development and commercialization of collaboration product candidates or may elect not to continue or renew development or commercialization programs based on clinical trial results or changes in their strategic focus;
- collaborators may delay, provide insufficient resources to, or modify or stop clinical trials for collaboration product candidates;
- collaborators could develop or acquire products outside of the collaboration that compete directly or indirectly with our products or product candidates;
- collaborators may not properly maintain or defend our intellectual property rights or may use our intellectual property or proprietary information in a way that gives rise to actual or threatened litigation that could jeopardize or invalidate our intellectual property or proprietary information or expose us to potential liability;
- disputes may arise between us and a collaborator that cause the delay or termination of the research, development or commercialization of our product candidates, or that result in costly litigation or arbitration that diverts management attention and resources;
- collaborations may be terminated and, if terminated, may result in a need for additional capital and personnel to pursue further development or commercialization of the applicable product candidates; and
- collaborators may own or co-own intellectual property covering our products that results from our collaborating with them, and in such cases, we may not have the exclusive right to commercialize such intellectual property.

The development and potential commercialization of our product candidates will require substantial additional capital to fund expenses. We may form or seek further strategic alliances, create joint ventures or

collaborations, or enter into additional licensing arrangements with third parties that we believe will complement or augment our development and commercialization efforts with respect to our product candidates and any future product candidates that we may develop, including in territories outside the United States or for certain indications. These transactions can entail numerous operational and financial risks, including exposure to unknown liabilities, disruption of our business and diversion of our management's time and attention in order to manage a collaboration or develop acquired products, product candidates or technologies, incurrence of substantial debt or dilutive issuances of equity securities to pay transaction consideration or costs, higher than expected collaboration, acquisition or integration costs, write-downs of assets or goodwill or impairment charges, increased amortization expenses, difficulty and cost in facilitating the collaboration or combining the operations and personnel of any acquired business, impairment of relationships with key suppliers, manufacturers or customers of any acquired business due to changes in management and ownership and the inability to retain key employees of any acquired business. As a result, if we enter into acquisition or in-license agreements or strategic partnerships, we may not be able to realize the benefit of such transactions if we are unable to successfully integrate them with our existing operations and company culture, which could delay our timelines or otherwise adversely affect our business. We also cannot be certain that, following a strategic transaction or license, we will achieve the revenue or specific net income that justifies such transaction or such other benefits that led us to enter into the arrangement.

In addition, we face significant competition in seeking appropriate strategic partners and the negotiation process is time-consuming and complex. We may not be successful in our efforts to establish a strategic partnership or other alternative arrangements for our product candidates because they may be deemed to be at too early of a stage of development for collaborative effort and third parties may not view our product candidates as having the requisite potential to demonstrate safety and efficacy. If and when we collaborate with a third party for development and commercialization of a product candidate, we can expect to relinquish some or all of the control over the future success of that product candidate to the third party. Our ability to reach a definitive agreement for a collaboration will depend, among other things, upon our assessment of the collaborator's resources and expertise, the terms and conditions of the proposed collaboration and the proposed collaborator's evaluation of our technologies, product candidates and market opportunities. The collaborator may also consider alternative product candidates or technologies for similar indications that may be available to collaborate on and whether such a collaboration could be more attractive than the one with us for our product candidate. We may also be restricted under any license agreements from entering into agreements on certain terms or at all with potential collaborators.

As a result of these risks, we may not be able to realize the benefit of our existing collaboration or any future collaborations or licensing agreements we may enter into. In addition, there have been a significant number of recent business combinations among large pharmaceutical companies that have resulted in a reduced number of potential future collaborators and changes to the strategies of the combined company. As a result, we may not be able to negotiate collaborations on a timely basis, on acceptable terms, or at all. If we are unable to do so, we may have to curtail the development of such product candidate, reduce or delay one or more of our other development programs, delay the potential commercialization or reduce the scope of any planned sales or marketing activities for such product candidate, or increase our expenditures and undertake development, manufacturing or commercialization activities at our own expense. If we elect to increase our expenditures to fund development, manufacturing or commercialization activities on our own, we may need to obtain additional capital, which may not be available to us on acceptable terms or at all. If we do not have sufficient funds, we may not be able to further develop our product candidates or bring them to market and generate product revenue.

Our product candidates may also require specific components to work effectively and efficiently, and rights to those components may be held by others. We may be unable to in-license any compositions, methods of use, processes or other third-party intellectual property rights from third parties that we identify. We may fail to obtain any of these licenses at a reasonable cost or on reasonable terms, which would harm our business. In that event, we may be required to expend significant time and resources to develop or license replacement technology. Even if we are able to obtain a license, it may be non-exclusive, thereby giving our competitors access to the same technologies licensed to us. Any delays in entering into new collaborations or strategic

partnership agreements related to our product candidates could delay the development and commercialization of our product candidates in certain geographies, which could harm our business prospects, financial condition and results of operations.

Moreover, some of our owned and in-licensed patents or patent applications or future patents are or may be co-owned with third parties. If we are unable to obtain an exclusive license to any such third-party co-owners' interest in such patents or patent applications, such co-owners may be able to license their rights to other third parties, including our competitors, and our competitors could market competing products and technology. In addition, we may need the cooperation of any such co-owners of our patents in order to enforce such patents against third parties, and such cooperation may not be provided to us. Furthermore, our owned and in-licensed patents may be subject to a reservation of rights by one or more third parties. Any of the foregoing could have a material adverse effect on our competitive position, business, financial condition, results of operations and prospects.

We may not be successful in obtaining or maintaining necessary rights for our product pipeline which may cause us to operate our business in a more costly or otherwise adverse manner that was not anticipated.

We own or license from third parties certain intellectual property rights necessary to develop our product candidates. The growth of our business will likely depend in part on our ability to acquire or in-license additional proprietary rights, including to expand our product pipeline. In that event, we may be required to expend considerable time and resources to develop or license replacement technology. For example, our programs may involve additional technologies or product candidates that may require the use of additional proprietary rights held by third parties. Furthermore, other pharmaceutical companies and academic institutions may also have filed or are planning to file patent applications potentially relevant to our business. Our product candidates may also require specific formulations or other technology to work effectively and efficiently. These formulations or technology may be covered by intellectual property rights held by others. From time to time, in order to avoid infringing these third-party rights, we may be required to license technology from additional third parties to further develop or commercialize our product candidates. We may be unable to acquire or in-license any relevant third-party intellectual property rights, including any such intellectual property rights required to manufacture, use or sell our product candidates, that we identify as necessary or important to our business operations. We may fail to obtain any of these licenses at a reasonable cost or on reasonable terms, if at all, and as a result we may be unable to develop or commercialize the affected product candidates, which would harm our business. We may need to cease use of the compositions or methods covered by such third-party intellectual property rights, and may need to seek to develop alternative approaches that do not infringe on such intellectual property rights which may entail additional costs and development delays, even if we are able to obtain a license under such intellectual property rights, any such lice

Additionally, we sometimes collaborate with academic institutions to accelerate our preclinical research or development under written agreements with these institutions. Typically, these institutions provide us with an option to negotiate a license to any of the institution's rights in technology resulting from the collaboration. Regardless of such option, we may be unable to negotiate a license within the specified timeframe or under terms that are acceptable to us. If we are unable to do so, the institution may offer the intellectual property rights to other parties, potentially blocking our ability to pursue our program. If we are unable to successfully obtain rights to required third-party intellectual property or to maintain the existing intellectual property rights we have, we may have to abandon development of such program and our business and financial condition could suffer.

The licensing and acquisition of third-party intellectual property rights is a competitive practice, and companies that may be more established, or have greater resources than we do, may also be pursuing strategies to license or acquire third-party intellectual property rights that we may consider necessary or attractive in order to commercialize our product candidates. More established companies may have a competitive advantage over us due to their larger size and cash resources or greater clinical development and commercialization capabilities.

There can be no assurance that we will be able to successfully complete such negotiations and ultimately acquire the rights to the intellectual property surrounding the additional product candidates that we may seek to acquire.

We may be dependent on intellectual property licensed or sublicensed to us from, or for which development was funded or otherwise assisted by, the U.S. government and/or government agencies, such as the National Institutes of Health, for development of our technology and product candidates. Failure to meet our own obligations to our licensors or upstream licensors, including such government agencies, may result in the loss of our rights to such intellectual property, which could harm our business.

The U.S. government and/or government agencies have provided, and in the future may provide, funding, facilities, personnel or other assistance in connection with the development of the intellectual property rights owned by or licensed to us. The U.S. government and/or government agencies may have retained rights in such intellectual property, including the right to grant or require us to grant mandatory licenses or sublicenses to such intellectual property to third parties under certain specified circumstances, including if it is necessary to meet health and safety needs that we are not reasonably satisfying or if it is necessary to meet requirements for public use specified by federal regulations, or to manufacture products in the United States. Any exercise of such rights, including with respect to any such required sublicense of these licenses, could result in the loss of significant rights and could harm our ability to commercialize licensed products. For example, the research resulting in certain of our in-licensed patent rights and technology was funded in part by the U.S. government. As a result, the government may have certain rights, or march-in rights, to such patent rights and technology. These rights may permit the government to disclose our confidential information to third parties and to exercise march-in rights to use or allow third parties to use our licensed technology.

If we are unable to obtain and maintain sufficient intellectual property protection for our product candidates and approach, or if the scope of the intellectual property protection is not sufficiently broad, our competitors could develop and commercialize products similar or identical to ours, and our ability to successfully commercialize our products may be adversely affected. We cannot ensure that patent rights relating to inventions described and claimed in our pending patent applications will issue or that patents based on our patent applications will not be challenged and rendered invalid and/or unenforceable.

We or our licensors have filed, and we anticipate that in the future we will file additional patent applications both in the United States and in other countries, as appropriate. However, we cannot predict:

- if and when any patents will issue;
- the degree and range of protection any issued patents will afford us against competitors, including whether third parties will find ways to invalidate or otherwise circumvent our patents;
- whether others will apply for or obtain patents claiming aspects similar to those covered by our patents and patent applications;
- whether we will need to initiate litigation or administrative proceedings to defend our patent rights, which may be costly whether we win or lose; or
- whether the patent applications that we own or in-license will result in issued patents with claims that cover our product candidates or uses thereof in the United States or in other foreign countries.

Our success depends in large part on our ability to obtain and maintain patent protection in the United States and other countries with respect to our product candidates and approach. We seek to protect our proprietary position by filing patent applications in the United States and abroad related to our novel discoveries and technologies that are important to our business.

Obtaining and enforcing patents is expensive and time-consuming, and we may not be able to file and prosecute all necessary or desirable patent applications or maintain and/or enforce patents that may issue based

on our patent applications, at a reasonable cost or in a timely manner. It is also possible that we will fail to identify patentable aspects of our research and development results before it is too late to obtain patent protection. Although we enter into non-disclosure and confidentiality agreements with parties who have access to patentable aspects of our research and development output, such as our employees, corporate collaborators, outside scientific collaborators, contract research organizations, contract manufacturers, consultants, advisors and other third parties, any of these parties may breach these agreements and disclose such results before a patent application is filed, thereby jeopardizing our ability to seek patent protection.

Our ability to enforce patent rights also depends on our ability to detect infringement. It may be difficult to detect infringers who do not advertise the components or methods that are used in connection with their products and services. Such proceedings could also provoke third parties to assert claims against us, including that some or all of the claims in one or more of our patents are invalid or otherwise unenforceable. Moreover, it may be difficult or impossible to obtain evidence of infringement in a competitor's or potential competitor's product or service. We may not prevail in any lawsuits that we initiate and the damages or other remedies awarded if we were to prevail may not be commercially meaningful. If we initiate lawsuits to protect or enforce our patents, or litigate against third-party claims, such proceedings would be expensive and would divert the attention of our management and technical personnel.

Composition of matter patents for biopharmaceutical products often provide a strong form of intellectual property protection for those types of products, as such patents provide protection without regard to any method of use. We cannot be certain, however, that the claims in our pending patent applications covering the composition of matter of our product candidates will be considered patentable by the United States Patent and Trademark Office (USPTO), or by patent offices in foreign countries, or that the claims in any of our issued patents will be considered valid and enforceable by courts in the United States or foreign countries. Method of use patents protect the use of a product for the specified method. This type of patent does not prevent a competitor from making and marketing a product that is identical to our product for an indication that is outside the scope of the patented method. Moreover, even if competitors do not actively promote their product for our targeted indications, physicians may prescribe these products "off-label" for those uses that are covered by our method of use patents. Although off-label prescriptions may infringe or contribute to the infringement of method of use patents, the practice is common and such infringement can be difficult to prevent or prosecute.

The strength of patents in the biotechnology, biopharmaceutical and data science fields can be uncertain, and evaluating the scope of such patents involves complex legal, factual and scientific analyses and has in recent years been the subject of much litigation, resulting in court decisions, including Supreme Court decisions, which have increased uncertainties as to the ability to enforce patent rights in the future. The patent applications that we own or in-license may fail to result in issued patents with claims that cover our product candidates or uses thereof in the United States or in other foreign countries. Even if the patents do successfully issue, third parties may challenge the validity, enforceability, or scope thereof, which may result in such patents being narrowed, invalidated, or held unenforceable. In the event of litigation or administrative proceedings, we cannot be certain that the claims in any of our issued patents will be considered valid by courts in the United States or foreign countries. Furthermore, even if they are unchallenged, our patents and patent applications may not adequately protect our intellectual property or prevent others from designing their products to avoid being covered by our claims. If the breadth or strength of protection provided by the patent applications we hold with respect to our product candidates is threatened, this could dissuade companies from collaborating with us to develop, and could threaten our ability to commercialize, our product candidates. In addition, the laws of foreign countries may not protect our rights to the same extent as the laws of the United States, or vice versa. Further, if we encounter delays in our clinical trials, the period of time during which we could market our product candidates under patent protection would be reduced.

We may not identify relevant third-party patents or may incorrectly interpret the relevance, scope or expiration of a third-party patent, which might adversely affect our ability to develop and market our products.

We cannot guarantee that any of our patent searches or analyses, including the identification of relevant patents, the scope of patent claims or the expiration of relevant patents, are complete or thorough, nor can we be certain that we have identified each and every third-party patent and pending application in the United States and abroad that is relevant to or necessary for the commercialization of our product candidates in any jurisdiction. The scope of a patent claim is determined by an interpretation of the law, the written disclosure in a patent and the patent's prosecution history. Our interpretation of the relevance or the scope of a patent or a pending application may be incorrect, which may negatively impact our ability to market our products. We may incorrectly determine that our products are not covered by a third-party patent or may incorrectly predict whether a third party's pending application will issue with claims of relevant scope. Our failure to identify and correctly interpret relevant patents may negatively impact our ability to develop and market our products.

One aspect of the determination of patentability of our inventions depends on the scope and content of the "prior art," information that was or is deemed available to a person of skill in the relevant art prior to the priority date of the claimed invention. There may be prior art of which we are not aware that may affect the patentability of our patent claims or, if issued, affect the validity or enforceability of a patent claim. Further, we may not be aware of all third-party intellectual property rights potentially relating to our product candidates or their intended uses, and as a result the impact of such third-party intellectual property rights upon the patentability of our own patents and patent applications, as well as the impact of such third-party intellectual property rights upon the patentability or may not be published at all, we cannot be certain that we were the first to file any patent application related to our product candidates. As a result, the issuance, scope, validity, enforceability and commercial value of our patent rights are highly uncertain. Furthermore, for U.S. applications in which all claims are entitled to a priority date before March 16, 2013, an interference proceeding can be provoked by a third party or instituted by the USPTO to determine who was the first to invent any of the subject matter covered by the patent claims of our applications. For U.S. applications containing a claim not entitled to priority before March 16, 2013, there is a greater level of uncertainty in the patent law in view of the passage of the America Invents Act, which brought into effect significant changes to the U.S. patent laws, including new procedures for challenging pending patent applications and issued patents.

Our patents or pending patent applications may be challenged in the courts or patent offices in the United States and abroad. For example, we may be subject to a third-party pre-issuance submission of prior art to the USPTO or become involved in post-grant review procedures, oppositions, derivations, reexaminations, or *inter partes* review proceedings, in the United States or elsewhere, challenging our patent rights or the patent rights of others. An adverse determination in any such challenges may result in loss of exclusivity or in patent claims being narrowed, invalidated, or held unenforceable, in whole or in part, which could limit our ability to stop others from using or commercializing similar or identical technology and products, or limit the duration of the patent protection of our technology and products. In addition, given the amount of time required for the development, testing and regulatory review of new product candidates, patents protecting such candidates might expire before or shortly after such candidates are commercialized. Any failure to obtain or maintain patent protection with respect to our product candidates could have a material adverse effect on our business, financial condition, results of operations and prospects.

Intellectual property rights do not necessarily address all potential threats to our competitive advantage.

The degree of future protection afforded by our intellectual property rights is uncertain because intellectual property rights have limitations and may not adequately protect our business or permit us to maintain our competitive advantage. For example:

others may be able to make product candidates that are similar to ours but that are not covered by the claims of the patents that we own or have exclusively licensed;

- we or our licensors or future collaborators might not have been the first to make the inventions covered by the issued patent or pending patent application that we own or have exclusively licensed;
- we or our licensors or future collaborators might not have been the first to file patent applications covering certain of our inventions;
- others may independently develop similar or alternative technologies or duplicate any of our technologies without infringing our intellectual property rights;
- it is possible that our pending patent applications will not lead to issued patents;
- issued patents that we own or have exclusively licensed may be held invalid or unenforceable, as a result of legal challenges by our competitors;
- our competitors might conduct research and development activities in countries where we do not have patent rights and then use the information learned from such activities to develop competitive products for sale in our major commercial markets;
- we may not develop additional proprietary technologies that are patentable;
- we cannot predict the scope of protection of any patent issuing based on our patent applications, including whether the patent applications that we own or in-license will result in issued patents with claims that cover our product candidates or uses thereof in the United States or in other foreign countries;
- the claims of any patent issuing based on our patent applications may not provide protection against competitors or any competitive advantages, or may be challenged by third parties;
- if enforced, a court may not hold that our patents are valid, enforceable and infringed;
- we may need to initiate litigation or administrative proceedings to enforce and/or defend our patent rights which will be costly whether we win or lose;
- we may choose not to file a patent in order to maintain certain trade secrets or know-how, and a third party may subsequently file a patent covering such intellectual property;
- we may fail to adequately protect and police our trademarks and trade secrets; and
- the patents of others may have an adverse effect on our business, including if others obtain patents claiming subject matter similar to or improving that covered by our patents and patent applications.

Should any of these events occur, they could significantly harm our business, results of operations and prospects.

Confidentiality agreements with employees and third parties may not prevent unauthorized disclosure of trade secrets and other proprietary information. If we are unable to protect the confidentiality of our trade secrets, our business and competitive position would be harmed.

In addition to the protection afforded by patents, we rely on trade secret protection and confidentiality agreements to protect proprietary know-how that is not patentable or that we elect not to patent, processes for which patents are difficult to enforce, and any other elements of our product candidates, technology and product discovery and development processes that involve proprietary know-how, information, or technology that is not covered by patents. Any disclosure, either intentional or unintentional, by our employees, the employees of third parties with whom we share our facilities or third-party consultants and vendors that we engage to perform research, clinical trials or manufacturing activities, or misappropriation by third parties (such as through a cybersecurity breach) of our trade secrets or proprietary information could enable competitors to duplicate or surpass our technological achievements, thus eroding our competitive position in our market. Because we expect to rely on third parties in the development and manufacture of our product candidates, we must, at times, share trade secrets with them. Our reliance on third parties requires us to share our trade secrets, which increases the possibility that a competitor will discover them or that our trade secrets will be misappropriated or disclosed.

Trade secrets and confidential information, however, may be difficult to protect. We seek to protect our trade secrets, know-how and confidential information, including our proprietary processes, in part, by entering into confidentiality agreements with our employees, consultants, outside scientific advisors, contractors, and collaborators. We require our employees to enter into written employment agreements containing provisions of confidentiality and obligations to assign to us any inventions generated in the course of their employment. With our consultants, contractors, and outside scientific collaborators, these agreements typically include invention assignment obligations. We cannot guarantee that we have entered into such agreements with each party that may have or has had access to our trade secrets or proprietary technology and processes. Although we use reasonable efforts to protect our trade secrets, our employees, consultants, outside scientific advisors, contractors, and collaborators might intentionally or inadvertently disclose our trade secret information to competitors. In addition, competitors may otherwise gain access to our trade secrets or independently develop substantially equivalent information and techniques. Despite these efforts, any of these parties may breach the agreements and disclose our proprietary information, including our trade secrets, and we may not be able to obtain adequate remedies for such breaches. Enforcing a claim that a party illegally disclosed or misappropriated a trade secret is difficult, expensive and time-consuming, and the outcome is unpredictable. If any of our trade secrets were to be lawfully obtained or independently developed by a competitor or other third party, we would have no right to prevent them from using that technology or information to compete with us. Furthermore, the laws of some foreign countries do not protect proprietary rights to the same extent or in the same manner as the laws of the United States. As a result, we may encounter significant problems in protecting and defending our intellectual property both in the United States and abroad. If we are unable to prevent unauthorized material disclosure of our intellectual property to third parties, or misappropriation of our intellectual property by third parties, we will not be able to establish or maintain a competitive advantage in our market, which could materially adversely affect our business, operating results, and financial condition.

Third-party claims of intellectual property infringement against us or our collaborators may prevent or delay our product discovery and development efforts.

Our commercial success depends in part on our avoiding infringement of the patents and proprietary rights of third parties. There is a substantial amount of litigation involving patents and other intellectual property rights in the biotechnology and biopharmaceutical industries, as well as administrative proceedings for challenging patents, including interference, derivation, *inter partes* review, post-grant review and reexamination proceedings before the USPTO or oppositions and other comparable proceedings in foreign jurisdictions. Furthermore, patent reform and changes to patent laws add uncertainty to the possibility of challenge to our patents in the future. We cannot assure you that our product candidates and other proprietary technologies we may develop will not infringe existing or future patents owned by third parties. Litigation or other legal proceedings relating to intellectual property claims, with or without merit, is unpredictable and generally expensive and time consuming and, even if resolved in our favor, is likely to divert significant resources from our core business, including distracting our technical and management personnel from their normal responsibilities. Such litigation or proceedings could substantially increase our operating losses and reduce the resources to adequately conduct such litigation or proceedings. Some of our competitors may be able to sustain the costs of such litigation or proceedings more effectively than we can because of their greater financial resources and more mature and developed intellectual property portfolios. Uncertainties resulting from the initiation and continuation of patent litigation or other proceedings could have a material adverse effect on our ability to compete in the marketplace.

Numerous U.S. and foreign issued patents and pending patent applications owned by third parties exist in the fields in which we are developing our product candidates. We cannot provide any assurances that third-party patents do not exist which might be enforced against our current product candidates or future products, resulting in either an injunction prohibiting our sales, or, with respect to our sales, an obligation on our part to pay royalties and/or other forms of compensation to third parties. As the biotechnology and biopharmaceutical industries expand and more patents are issued, the risk increases that our product candidates may give rise to

claims of infringement of the patent rights of others. Third parties may assert that we infringe their patents or other intellectual property, or that we are otherwise employing their proprietary technology without authorization, and may sue us. There may be third-party patents of which we are currently unaware with claims to compositions, formulations, methods of manufacture, or methods of use or treatment that cover our product candidates. It is also possible that patents owned by third parties of which we are aware, but which we do not believe are relevant to our product candidates and other proprietary technologies we may develop, could be found to be infringed by our product candidate. Because patent applications can take many years to issue, there may be currently pending patent applications that may later result in issued patents that our product candidates may infringe. In addition, third parties, our competitors in both the United States and abroad, many of which have substantially greater resources and have made substantial investments in patent portfolios and competing technologies, may obtain patents in the future that may prevent, limit or otherwise interfere with our ability to make, use and sell our product candidates, and may claim that use of our technologies or the manufacture, use, or sale of our product candidates infringes upon these patents. If any such third-party patents were held by a court of competent jurisdiction to cover our technologies or product candidates, or if we are found to otherwise infringe a third party's intellectual property rights, the holders of any such patents may be able to block, including by court order, our ability to develop, manufacture or commercialize the applicable product candidate unless we obtain a license under the applicable patents or other intellectual property, or until such patents expire or are finally determined to be held invalid or unenforceable. Such a license may not be available on commercially reasonable terms or at all. Even if we were able to obtain a license, it could be non-exclusive, thereby giving our competitors access to the same technologies licensed to us. If we are unable to obtain a necessary license to a third-party patent on commercially reasonable terms, our ability to commercialize our product candidates may be impaired or delayed, which could in turn significantly harm our business.

The biopharmaceutical and biotechnology industries have produced a considerable number of patents, and it may not always be clear to industry participants, including us, which patents cover various types of products or methods of use. The coverage of patents is subject to interpretation by the courts, and the interpretation is not always uniform. If we were sued for patent infringement, we would need to demonstrate that our product candidates, products or methods either do not infringe the patent claims of the relevant patent or that the patent claims are invalid or unenforceable, and we may not be able to do this. Proving invalidity may be difficult. For example, in the United States, proving invalidity in court requires a showing of clear and convincing evidence to overcome the presumption of validity enjoyed by issued patents, and there is no assurance that a court of competent jurisdiction would invalidate the claims of any such U.S. patent. Even if we are successful in these proceedings, we may incur substantial costs and the time and attention of our management and scientific personnel could be diverted in pursuing these proceedings, which could have a material adverse effect on our business and operations. In addition, we may not have sufficient resources to bring these actions to a successful conclusion.

Third parties asserting their patent or other intellectual property rights against us may seek and obtain injunctive or other equitable relief, which could effectively block our ability to further develop and commercialize our product candidates or force us to cease some of our business operations. Defense of these claims, regardless of their merit, would involve substantial litigation expense and would be a substantial diversion of management and other employee resources from our business, cause development delays, and may impact our reputation. In the event of a successful claim of infringement against us, we may have to pay substantial damages, including treble damages and attorneys' fees for willful infringement, obtain one or more licenses from third parties, pay royalties, or redesign our infringing products, which may be impossible on a cost-effective basis or require substantial time and monetary expenditure. In that event, we would be unable to further develop and commercialize our product candidates, which could harm our business significantly. Claims that we have misappropriated the confidential information or trade secrets of third parties could have a similar negative impact on our business.

We may not be able to protect our intellectual property rights throughout the world.

Patents are of national or regional effect, and filing, prosecuting, maintaining and defending patents on product candidates in all countries throughout the world would be prohibitively expensive, and our intellectual

property rights in some countries outside the United States can have a different scope and strength than do those in the United States. In addition, the laws of some foreign countries, particularly certain developing countries, do not protect intellectual property rights to the same extent as federal and state laws in the United States. Consequently, we may not be able to prevent third parties from practicing our inventions in all countries outside the United States, or from selling or importing products made using our inventions in and into the United States or other jurisdictions. Competitors may use our technologies in jurisdictions where we have not obtained patent protection to develop their own products and further, may export otherwise infringing products to territories where we have patent protection, but enforcement rights are not as strong as those in the United States. These products may compete with our products and our patents or other intellectual property rights may not be effective or adequate to prevent them from competing.

Many companies have encountered significant problems in protecting and defending intellectual property rights in foreign jurisdictions. The legal systems of certain countries, particularly certain developing countries, do not favor the enforcement of patents, trade secrets and other intellectual property, particularly those relating to biopharmaceutical products, which could make it difficult in those jurisdictions for us to stop the infringement or misappropriation of our patents or other intellectual property rights, or the marketing of competing products in violation of our proprietary rights. Proceedings to enforce our patent and other intellectual property rights in foreign jurisdictions could result in substantial costs and divert our efforts and attention from other aspects of our business. Furthermore, such proceedings could put our patents at risk of being invalidated, held unenforceable, or interpreted narrowly, could put our patent applications at risk of not issuing, and could provoke third parties to assert claims of infringement or misappropriation against us. We may not prevail in any lawsuits that we initiate and the damages or other remedies awarded, if any, may not be commercially meaningful. Similarly, if our trade secrets are disclosed in a foreign jurisdiction, competitors worldwide could have access to our proprietary information and we may be without satisfactory recourse. Such disclosure could have a material adverse effect on our business. Moreover, our ability to protect and enforce our intellectual property rights may be adversely affected by unforeseen changes in foreign intellectual property laws. In addition, certain developing countries, including China and India, have compulsory licensing laws under which a patent owner may be compelled to grant licenses to third parties. In those countries, we and our licensors may have limited remedies if patents are infringed or if we or our licensors are compelled to grant a license to a third party, which could materially diminish the value of those patents. In addition, many countries limit the enforceability of patents against government agencies or government contractors. This could limit our potential revenue opportunities. Accordingly, our efforts to enforce our intellectual property rights around the world may be inadequate to obtain a significant commercial advantage from the intellectual property that we develop or license.

In addition, geo-political actions in the United States and in foreign countries could increase the uncertainties and costs surrounding the prosecution or maintenance of our patent applications or those of any current or future licensors and the maintenance, enforcement or defense of our issued patents or those of any current or future licensors. For example, the United States and foreign government actions related to Russia's conflict in Ukraine may limit or prevent filing, prosecution, and maintenance of patent applications in Russia. Government actions may also prevent maintenance of issued patents in Russia. These actions could result in abandonment or lapse of our patent applications, resulting in partial or complete loss of patent rights in Russia. If such an event were to occur, it could have a material adverse effect on our business. In addition, a decree was adopted by the Russian government in March 2022, allowing Russian companies and individuals to exploit inventions owned by patentees from the United States without consent or compensation. Consequently, we would not be able to prevent third parties from practicing our inventions in Russia or from selling or importing products made using our inventions in and into Russia. Accordingly, our competitive position may be impaired, and our business, financial condition, results of operations and prospects may be adversely affected.

Finally, Europe's planned Unified Patent Court may, in particular, present uncertainties for our ability to protect and enforce our patent rights against competitors in Europe. In 2012, the European Patent Package, or the EU Patent Package, regulations were passed with the goal of providing a single pan-European Unitary Patent system and a new European Unified Patent Court, or the UPC, for litigation involving European patents.

Implementation of the EU Patent Package is expected to occur on June 1, 2023. Under the UPC, all European patents, including those issued prior to ratification of the European Patent Package, will by default automatically fall under the jurisdiction of the UPC. The UPC will provide our competitors with a new forum to centrally revoke our European patents, and allow for the possibility of a competitor to obtain pan-European injunctions. It will be several years before we will understand the scope of patent rights that will be recognized and the strength of patent remedies that will be provided by the UPC. Under the EU Patent Package as currently proposed, we will have the right to opt our patents out of the UPC over the first seven years of the court's existence, but doing so may preclude us from realizing the benefits of the new unified court.

Because of the expense and uncertainty of litigation, we may conclude that even if a third party is infringing our issued patents, any patents that may be issued as a result of our pending or future patent applications or other intellectual property rights, the risk-adjusted cost of bringing and enforcing such a claim or action, which typically last for years before they are concluded, may be too high or not in the best interest of our company or our stockholders, or it may be otherwise impractical or undesirable to enforce our intellectual property against some third parties. Our competitors or other third parties may be able to sustain the costs of complex patent litigation or proceedings more effectively than we can because of their greater financial resources and more mature and developed intellectual property portfolios. In such cases, we may decide that the monetary cost of such litigation and the diversion of the attention of our management and scientific personnel could outweigh any benefit we receive as a result of the proceedings and that the more prudent course of action is to simply monitor the situation or initiate or seek some other non-litigious action or solution. In addition, the uncertainties associated with litigation could compromise our ability to raise the funds necessary to continue our clinical trials, continue our internal research programs, in-license needed technology or other product candidates, or enter into development partnerships that would help us bring our product candidates to market.

We may be involved in lawsuits to protect or enforce our patents or other intellectual property or the intellectual property of our licensors, which could be expensive, time-consuming, and unsuccessful.

Competitors may infringe our patents or other intellectual property or the intellectual property of our licensors. To cease such infringement or unauthorized use, we may be required to file patent infringement claims, which can be expensive and time-consuming and divert the time and attention of our management and scientific personnel. Our pending patent applications cannot be enforced against third parties practicing the technology claimed in such applications unless and until a patent issues from such applications. In addition, in an infringement proceeding or a declaratory judgment action, a court may decide that one or more of our patents is not valid or is unenforceable, or may refuse to stop the other party from using the technology at issue on the grounds that our patents do not cover the technology in question. An adverse result in any litigation or defense proceeding could put one or more of our patents at risk of being invalidated, held unenforceable, or interpreted narrowly and could put our patent applications at risk of not issuing. Defense of these claims, regardless of their merit, would involve substantial litigation expense and would be a substantial diversion of employee resources from our business.

Interference or derivation proceedings provoked by third parties or brought by the USPTO may be necessary to determine the priority of inventions with respect to, or the correct inventorship of, our patents or patent applications or those of our licensors. An unfavorable outcome could result in a loss of our current patent rights and could require us to cease using the related technology or to attempt to license rights to it from the prevailing party. Our business could be harmed if the prevailing party does not offer us a license on commercially reasonable terms. Litigation, interference, derivation or other proceedings may result in a decision adverse to our interests and, even if we are successful, may result in substantial costs and distract our management and other employees.

Even if we establish infringement, the court may decide not to grant an injunction against further infringing activity and instead award only monetary damages, which may or may not be an adequate remedy. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there

is a risk that some of our confidential information could be compromised by disclosure during this type of litigation. In addition, there could be public announcements of the results of hearings, motions or other interim proceedings or developments. If securities analysts or investors perceive these results to be negative, it could have a substantial adverse effect on the price of our common stock.

Issued patents covering our product candidates could be found invalid or unenforceable if challenged in court or before the USPTO or comparable foreign authority.

If we or one of our licensing partners initiate legal proceedings against a third party to enforce a patent covering one of our product candidates, the defendant could counterclaim we infringe their patents or that the patent covering our product candidate is invalid or unenforceable, or both. In patent litigation in the United States, defendant counterclaims alleging invalidity or unenforceability are commonplace, and there are numerous grounds upon which a third party can assert invalidity or unenforceability of a patent, including lack of novelty, obviousness, non-enablement or insufficient written description or that someone connected with prosecution of the patent withheld relevant information from the USPTO or made a misleading statement during prosecution. Third parties may also raise similar claims before administrative bodies in the United States or abroad, even outside the context of litigation. Such mechanisms include re-examination, inter partes review, post-grant review, and equivalent proceedings in foreign jurisdictions, such as opposition or derivation proceedings. Such proceedings could result in revocation or amendment to our patents in such a way that they no longer cover and protect our product candidates. The outcome following legal assertions of invalidity and unenforceability is unpredictable. In any patent infringement proceeding, there is a risk that a court will decide that a patent of ours is invalid or unenforceable, in whole or in part, and that we do not have the right to stop the other party from using the invention at issue. There is also a risk that, even if the validity of such patents is upheld, the court will construe the patent's claims narrowly or decide that we do not have the right to stop the other party from using the invention at issue on the grounds that our patent claims do not cover the invention, or decide that the other party's use of our patented technology falls under the safe harbor to patent infringement under 35 U.S.C. § 271I(1). With respect to the validity of our patents, for example, we cannot be certain that there is no invalidating prior art of which we, our patent counsel, and the patent examiner were unaware during prosecution. If a defendant were to prevail on a legal assertion of invalidity and/or unenforceability, we would lose at least part, and perhaps all, of the patent protection on our product candidates and such an outcome may limit our ability to assert our patents against those parties or other competitors and may curtail or preclude our ability to exclude third parties from making and selling similar or competitive products. Such a loss of patent protection could have a material adverse impact on our business. Similarly, if we assert trademark infringement claims, a court may determine that the marks we have asserted are invalid or unenforceable, or that the party against whom we have asserted trademark infringement has superior rights to the marks in question. In this case, we could ultimately be forced to cease use of such trademarks.

Changes in U.S. patent law could diminish the value of patents in general, thereby impairing our ability to protect our products.

As is the case with other biopharmaceutical companies, our success is heavily dependent on intellectual property, particularly patents. Obtaining and enforcing patents in the biopharmaceutical industry involves both technological and legal complexity, and is therefore costly, time-consuming, and inherently uncertain. Changes in either the patent laws or interpretation of the patent laws in the United States could increase the uncertainties and costs, and may diminish our ability to protect our inventions, obtain, maintain, and enforce our intellectual property rights and, more generally, could affect the value of our intellectual property or narrow the scope of our owned and licensed patents. Recent patent reform legislation in the United States and other countries, including the Leahy-Smith America Invents Act, or the Leahy-Smith Act, signed into law on September 16, 2011, could increase those uncertainties and costs surrounding the prosecution of our patent applications and the enforcement or defense of our issued patents. The Leahy-Smith Act includes a number of significant changes to U.S. patent law. These include provisions that affect the way patent applications are prosecuted, redefine prior art and provide more efficient and cost-effective avenues for competitors to challenge the validity of patents. These

include allowing third-party submission of prior art to the USPTO during patent prosecution and additional procedures to attack the validity of a patent by USPTO administered post-grant proceedings, including post-grant review, *inter partes* review, and derivation proceedings. After March 2013, under the Leahy-Smith Act, the United States transitioned to a first inventor to file system in which, assuming that the other statutory requirements are met, the first inventor to file a patent application will be entitled to the patent on an invention regardless of whether a third party was the first to invent the claimed invention. A third party that files a patent application in the USPTO after March 2013, but before we file an application covering the same invention, could therefore be awarded a patent covering an invention of ours even if we had made the invention before it was made by such third party. This will require us to be cognizant going forward of the time from invention to filing of a patent application. Since patent applications in the United States and most other countries are confidential for a period of time after filing or until issuance, we cannot be certain that we or our licensors were the first to either (1) file any patent application related to our product candidates and other proprietary technologies we may develop or (2) invent any of the inventions claimed in our or our licensor's patents or patent applications. Even where we have a valid and enforceable patent, we may not be able to exclude others from practicing the claimed invention where the other party can show that they used the invention in commerce before our filing date or the other party benefits from a compulsory license. However, the Leahy-Smith Act and its implementation could increase the uncertainties and costs surrounding the prosecution of our patent applications and the enforcement or defense of our issued patents, all of which could have a material adverse effect on our business, financial condition, results of operations

Recent U.S. Supreme Court rulings have narrowed the scope of patent protection available in certain circumstances and weakened the rights of patent owners in certain situations. In addition to increasing uncertainty with regard to our ability to obtain patents in the future, this combination of events has created uncertainty with respect to the value of patents once obtained. Depending on decisions by Congress, the federal courts, the USPTO and the relevant law-making bodies in other countries, the laws and regulations governing patents could change in unpredictable ways that would weaken our ability to obtain new patents or to enforce our existing patents and patents that we might obtain in the future. For example, in a series of cases, the U.S. Supreme Court held that certain claims do not present patentable subject matter (*Mayo Collaborative Services v. Prometheus Laboratories, Inc.* (2012); *Assoc. for Molecular Pathology v. Myriad Genetics, Inc.* (2013); *Alice Corp. v. CLS Bank International* (2014)). Although we do not believe that any of the patents owned or licensed by us will be found invalid based on these decisions, we cannot predict how future decisions by Congress, the federal courts or the USPTO may impact the value of our patents.

Obtaining and maintaining our patent protection depends on compliance with various procedural, document submission, fee payment, and other requirements imposed by governmental patent agencies, and our patent protection could be reduced or eliminated for non-compliance with these requirements.

Periodic maintenance fees on any issued patent are due to be paid to the USPTO and foreign patent agencies in several stages over the lifetime of the patent. The USPTO and various foreign governmental patent agencies require compliance with a number of procedural, documentary, fee payment, and other similar provisions during the patent application process. Although an inadvertent lapse, including due to the effect of the COVID-19 pandemic on us or our patent maintenance vendors, can in many cases be cured by payment of a late fee or by other means in accordance with the applicable rules, there are situations in which noncompliance can result in abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. Noncompliance events that could result in abandonment or lapse of a patent or patent application include failure to respond to official actions within prescribed time limits, non-payment of fees, and failure to properly legalize and submit formal documents. In any such event, our competitors might be able to enter the market, which would have a material adverse effect on our business.

The lives of our patents may not be sufficient to effectively protect our products and business.

Patents have a limited lifespan. In the United States, if all maintenance fees are paid timely, the natural expiration of a patent is generally 20 years after its first effective filing date. Although various extensions may be

available, the life of a patent, and the protection it affords, is limited. Given the amount of time required for the development, testing and regulatory review of new product candidates, patents protecting such candidates might expire before or shortly after such product candidates are commercialized. Even if patents covering our product candidates are obtained, once the patent life has expired for a product, we may be open to competition from biosimilar or generic medications. The launch of a generic version of one of our products in particular would be likely to result in an immediate and substantial reduction in the demand for that product, which could have a material adverse effect on our business, financial condition, results of operations and prospects. As a result, our patent portfolio may not provide us with sufficient rights to exclude others from commercializing product candidates similar or identical to ours. In addition, although upon issuance in the United States a patent's life can be increased based on certain delays caused by the USPTO, this increase can be reduced or eliminated based on certain delays caused by the patent applicant during patent prosecution. A patent term extension based on regulatory delay may be available in the United States. However, only a single patent can be extended for each marketing approval, and any patent can be extended only once, for a single product. Moreover, the scope of protection during the period of the patent term extension does not extend to the full scope of the claim, but instead only to the scope of the product as approved. Laws governing analogous patent term extensions in foreign jurisdictions vary widely, as do laws governing the ability to obtain multiple patents from a single patent family. Additionally, we may not receive an extension if we fail to exercise due diligence during the testing phase or regulatory review process, apply within applicable deadlines, fail to apply prior to expiration of relevant patents or otherwise fail to satisfy applicable requirements. If we are unable to obtain patent term extension or restoration, or the term of any such extension is less than we request, the period during which we will have the right to exclusively market our product will be shortened and our competitors may obtain approval of competing products following our patent expiration and may take advantage of our investment in development and clinical trials by referencing our clinical and preclinical data to launch their product earlier than might otherwise be the case, and our revenue could be reduced, possibly materially. If we do not have sufficient patent life to protect our products, our business and results of operations will be adversely affected.

We may be subject to claims challenging the inventorship or ownership of our patents and other intellectual property.

We may be subject to claims that former employees, collaborators, or other third parties have an interest in our patents or other intellectual property as an inventor or co-inventor. The failure to name the proper inventors on a patent application can result in the patents issuing thereon being unenforceable. Inventorship disputes may arise from conflicting views regarding the contributions of different individuals named as inventors, the effects of foreign laws where foreign nationals are involved in the development of the subject matter of the patent, conflicting obligations of third parties involved in developing our product candidates or as a result of questions regarding co-ownership of potential joint inventions. For example, we may have inventorship disputes arise from conflicting obligations of consultants or others who are involved in developing our product candidates. Alternatively, or additionally, we may enter into agreements to clarify the scope of our rights in such intellectual property. Litigation may be necessary to defend against these and other claims challenging inventorship. If we fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights, such as exclusive ownership of, or right to use, valuable intellectual property. Such an outcome could have a material adverse effect on our business. Even if we are successful in defending against such claims, litigation could result in substantial costs and be a distraction to management and other employees.

We or our licensors may have relied on third-party consultants or collaborators or on funds from third parties, such as the U.S. government, such that we or our licensors are not the sole and exclusive owners of the patents we in-licensed. If other third parties have ownership rights or other rights to our patents, including in-licensed patents, they may be able to license such patents to our competitors, and our competitors could market competing products and technology. This could have a material adverse effect on our competitive position, business, financial conditions, results of operations, and prospects.

In addition, while it is our policy to require our employees and contractors who may be involved in the conception or development of intellectual property to execute agreements assigning such intellectual property to

us, we may be unsuccessful in executing such an agreement with each party who, in fact, conceives or develops intellectual property that we regard as our own. The assignment of intellectual property rights may not be self-executing, or the assignment agreements may be breached, and we may be forced to bring claims against third parties, or defend claims that they may bring against us, to determine the ownership of what we regard as our intellectual property. Such claims could have a material adverse effect on our business, financial condition, results of operations, and prospects.

If our trademarks and trade names are not adequately protected, then we may not be able to build name recognition in our markets of interest and our business may be adversely affected.

Our current or future trademarks or trade names may be challenged, infringed, circumvented or declared generic or descriptive, or determined to be infringing on other marks. We may not be able to protect our rights to these trademarks and trade names or may be forced to stop using these names, which we need for name recognition by potential partners or customers in our markets of interest. During trademark registration proceedings, we may receive rejections of our applications by the USPTO or in other foreign jurisdictions. Although we would be given an opportunity to respond to those rejections, we may be unable to overcome such rejections. In addition, in the USPTO and in comparable agencies in many foreign jurisdictions, third parties are given an opportunity to oppose pending trademark applications and to seek to cancel registered trademarks. Opposition or cancellation proceedings may be filed against our trademarks, and our trademarks may not survive such proceedings. If we are unable to establish name recognition based on our trademarks and trade names, we may not be able to compete effectively and our business may be adversely affected. We may license our trademarks and trade names to third parties, such as distributors. Though these license agreements may provide guidelines for how our trademarks and trade names may be used, a breach of these agreements or misuse of our trademarks and tradenames by our licensees may jeopardize our rights in or diminish the goodwill associated with our trademarks and trade names.

Moreover, any name we have proposed to use with our product candidate in the United States must be approved by the FDA, regardless of whether we have registered it, or applied to register it, as a trademark. Similar requirements exist in Europe. The FDA typically conducts a review of proposed product names, including an evaluation of potential for confusion with other product names. If the FDA (or an equivalent administrative body in a foreign jurisdiction) objects to any of our proposed proprietary product names, it may be required to expend significant additional resources in an effort to identify a suitable substitute name that would qualify under applicable trademark laws, not infringe the existing rights of third parties and be acceptable to the FDA. Furthermore, in many countries, owning and maintaining a trademark registration may not provide an adequate defense against a subsequent infringement claim asserted by the owner of a senior trademark. At times, competitors or other third parties may adopt trade names or trademarks similar to ours, thereby impeding our ability to build brand identity and possibly leading to market confusion. In addition, there could be potential trade name or trademark infringement claims brought by owners of other registered trademarks or trademarks that incorporate variations of our registered or unregistered trademarks or trade names. If we assert trademark infringement claims, a court may determine that the marks we have asserted are invalid or unenforceable, or that the party against whom we have asserted trademark infringement has superior rights to the marks in question. In this case, we could ultimately be forced to cease use of such trademarks.

Risks Related to this Offering and Ownership of Our Common Stock

Our stock price may be volatile or may decline regardless of our operating performance, resulting in substantial losses for investors.

The market price of our common stock may be highly volatile and may fluctuate substantially as a result of a variety of factors, some of which are related in complex ways. The market price of our common stock may fluctuate significantly in response to numerous factors, many of which are beyond our control, including the factors listed below and other factors described in this "Risk Factors" section:

• the commencement, enrollment, or results of current and future preclinical studies and clinical trials we may conduct, or changes in the development status of our product candidates;

- adverse results or delays in clinical trials;
- unanticipated serious safety concerns related to the use of our product candidates;
- any delay in our regulatory filings for our product candidates and any adverse development or perceived adverse development with respect to the applicable regulatory authority's review of such filings, including, without limitation, the issuance by the FDA of a "refusal to file" letter or a request for additional information;
- changes in laws or regulations, including, but not limited to, preclinical study or clinical trial requirements for approvals;
- negative clinical outcomes or other adverse events related to product candidates being developed by others in the CNS field;
- publication of research reports about us or our industry, or CNS programs in particular, or positive or negative recommendations or withdrawal of research coverage by securities analysts;
- any adverse changes to our relationship with manufacturers or suppliers;
- manufacturing, supply or distribution shortages;
- our failure to commercialize our product candidates;
- general political conditions, including but not limited to, disruptions in U.S. government operations and funding, geopolitical conflicts such as the war between Russia and the Ukraine and any sanctions or other repercussions that may result therefrom;
- general economic conditions, including but not limited to, rising inflation, recession risk, low consumer confidence and increasing interest rates;
- additions or departures of key scientific or management personnel;
- disputes or other developments relating to proprietary rights, including patents, litigation matters, and our ability to obtain patent protection for our technologies;
- variations in our results of operations;
- our cash position;
- our failure to meet the estimates and projections of the investment community or that we may otherwise provide to the public;
- announcements made by us or our competitors of new product and service offerings, acquisitions, strategic relationships, joint ventures, or capital commitments;
- our inability to establish collaborations, if needed;
- our ability to effectively manage our growth;
- changes in the market valuations of similar companies;
- press reports, whether or not true, about our business;
- sales or perceived potential sales of our common stock by us or our stockholders in the future;
- overall fluctuations in the equity markets;
- ineffectiveness of our internal controls;
- changes or developments in the global regulatory environment;
- litigation involving us, our industry or both, or investigations by regulators into our operations or those of our competitors;

- impact from the COVID-19 pandemic on us or third parties with which we engage; and
- other events or factors, many of which are beyond our control.

In addition, the stock market in general and biotechnology and biopharmaceutical companies in particular, have experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of these companies. Broad market and industry factors may negatively affect the market price of our common stock, regardless of our actual operating performance. If the market price of our common stock after this offering does not exceed the initial public offering price, you may not realize any return on, and may lose some or all of, your investment.

Our quarterly operating results may fluctuate significantly or may fall below the expectations of investors or securities analysts, each of which may cause our stock price to fluctuate or decline.

We expect our operating results to be subject to quarterly fluctuations. Our net loss and other operating results will be affected by numerous factors, including:

- timing and variations in the level of expense related to the current or future development of our programs;
- our ability to enroll patients in clinical trials and timing and status of enrollment for our clinical trials;
- results of clinical trials, or the addition or termination of clinical trials or funding support by us or potential future partners;
- the need to conduct unanticipated clinical trials or trials that are larger or more complex than anticipated;
- competition from products that compete with our product candidates, and changes in the competitive landscape of our industry, including consolidation among our competitors or partners;
- any delays in regulatory review or approval of our product candidates;
- stock-based compensation estimates;
- changes in general political conditions, including but not limited to, disruptions in U.S. government operations and funding, geopolitical conflicts such as the war between Russia and the Ukraine and any sanctions or other repercussions that may result therefrom;
- changes in general economic conditions, including but not limited to, rising inflation, recession risk, low consumer confidence and increasing interest rates;
- our execution of any collaboration, licensing or similar arrangements, and the timing of payments we may make or receive under potential future arrangements or the termination or modification of any such potential future arrangements;
- any intellectual property infringement, misappropriation or violation lawsuit or opposition, interference or cancellation proceeding in which we may become involved;
- additions and departures of key personnel;
- strategic decisions by us or our competitors, such as acquisitions, divestitures, spin-offs, joint ventures, strategic investments or changes in business strategy;
- if any product candidate we may develop receive regulatory approval, the timing and terms of such approval and market acceptance and demand for such product candidates;
- the timing and cost to establish a sales, marketing and distribution infrastructure to commercialize any products for which we may obtain marketing approval and intend to commercialize on our own or jointly with current or future collaborators;

- the risk/benefit profile, cost and reimbursement policies with respect to our product candidates, if approved, and existing and potential future products that compete with any of our product candidates;
- our ability to commercialize our product candidates, if approved, inside and outside of the United States, either independently or working with third parties;
- our ability to establish and maintain collaborations, licensing or other arrangements;
- our ability to adequately support future growth;
- potential unforeseen business disruptions that increase our costs or expenses;
- regulatory developments affecting current or future product candidates or those of our competitors; and
- impact from the COVID-19 pandemic, or any future pandemic, on us or third parties with which we engage.

If our quarterly operating results fall below the expectations of investors or securities analysts, the price of our common stock could decline substantially. Furthermore, any quarterly fluctuations in our operating results may, in turn, cause the price of our stock to fluctuate substantially. We believe that quarterly comparisons of our financial results are not necessarily meaningful and should not be relied upon as an indication of our future performance.

Our principal stockholders and management own a significant percentage of our stock and will be able to exert significant control over matters subject to stockholder approval.

Prior to this offering, as of March 31, 2023, our executive officers, directors, holders of 5% or more of our capital stock and their respective affiliates owned approximately % of our outstanding voting stock and, upon the closing of this offering, that same group will own approximately % of our outstanding voting stock (assuming no exercise of the underwriters' option to purchase additional shares). Therefore, even after this offering these stockholders will have the ability to influence us through this ownership position. These stockholders may be able to determine all matters requiring stockholder approval. For example, these stockholders may be able to control elections of directors, amendments of our organizational documents, or approval of any merger, sale of assets, or other major corporate transaction. In addition, certain of our principal stockholders, including Amgen, ARCH Venture Partners, F-Prime Capital Partners and Mubadala Capital, have designated certain of our directors for election to the Board. This may prevent or discourage unsolicited acquisition proposals or offers for our common stock that you may feel are in your best interest as one of our stockholders.

Future sales of our common stock in the public market could cause our common stock price to fall.

Our common stock price could decline as a result of sales of a large number of shares of common stock after this offering or the perception that these sales could occur. These sales, or the possibility that these sales may occur, might also make it more difficult for us to sell equity securities in the future at a time and price that we deem appropriate.

Upon the completion of this offering, shares of common stock will be outstanding (or shares if the underwriters exercise their option to purchase additional shares from us in full), based on the number of shares outstanding as of March 31, 2023.

All shares of common stock expected to be sold in this offering will be freely tradable without restriction or further registration under the Securities Act unless held by our "affiliates" as defined in Rule 144 under the Securities Act. The resale of the remaining shares, or % of our outstanding shares of common stock following this offering, is currently prohibited or otherwise restricted, subject to certain limited exceptions, as a result of securities law provisions, market standoff agreements entered into by certain of our stockholders with us

or lock-up agreements entered into by our stockholders with the underwriters in connection with this offering. However, subject to applicable securities law restrictions, these shares will be able to be sold in the public market beginning on the 181st day after the date of this prospectus. Shares issued upon the exercise of stock options outstanding under our equity incentive plans or pursuant to future awards granted under those plans will become available for sale in the public market to the extent permitted by the provisions of applicable vesting schedules, market stand-off agreements and/or lock-up agreements, as well as Rules 144 and 701 under the Securities Act. For more information, see the section titled "Shares Eligible for Future Sale."

Upon the completion of this offering, the holders of approximately shares, or % of our outstanding shares following this offering, of our common stock will have rights, subject to some conditions, to require us to file registration statements covering the sale of their shares or to include their shares in registration statements that we may file for ourselves or our other stockholders. We also intend to register the offer and sale of all shares of common stock that we may issue under our equity compensation plans. Once we register the offer and sale of shares for the holders of registration rights and shares that may be issued under our equity incentive plans, these shares will be able to be sold in the public market upon issuance, subject to the lock-up agreements described under "Underwriting."

In addition, in the future, we may issue additional shares of common stock, or other equity or debt securities convertible into common stock, in connection with a financing, acquisition, employee arrangement, or otherwise. Any such issuance could result in substantial dilution to our existing stockholders and could cause the price of our common stock to decline.

Our management team has broad discretion to use the net proceeds from this offering and its investment of these proceeds may not yield a favorable return. They may invest the net proceeds from this offering in ways with which investors disagree.

Our management will have broad discretion over the use of net proceeds from this offering, and could spend the net proceeds in ways our stockholders may not agree with or that do not yield a favorable return, if at all. If we do not invest or apply the net proceeds from this offering in ways that improve our operating results, we may fail to achieve expected financial results, which could cause our stock price to decline. For additional details see the section titled "Use of Proceeds."

If you purchase shares of our common stock in our initial public offering, you will experience substantial and immediate dilution.

The assumed initial public offering price of \$ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, is substantially higher than the net tangible book value per share of our outstanding common stock immediately following the completion of this offering. If you purchase shares of common stock in this offering, you will experience substantial and immediate dilution in the pro forma net tangible book value per share of the common stock that you acquire. This dilution is due in large part to the fact that our earlier investors paid substantially less than the assumed initial public offering price when they purchased their shares of our capital stock. You will experience additional dilution when those holding stock options exercise their right to purchase common stock under our equity incentive plans or when we otherwise issue additional shares of common stock. For additional details see the section titled "Dilution."

We do not currently intend to pay dividends on our common stock and, consequently, our stockholders' ability to achieve a return on their investment will depend on appreciation of the value of our common stock.

We have never declared or paid cash dividends on our common stock. We currently intend to retain all available funds and any future earnings to support operations and to finance the growth and development of our

business. We do not intend to declare or pay any cash dividends on our capital stock in the foreseeable future. As a result, any investment return on our common stock will depend upon increases in the value for our common stock, which is not certain.

Provisions in our amended and restated certificate of incorporation and our amended and restated bylaws and Delaware law might discourage, delay or prevent a change in control of our company or changes in our management and, therefore, depress the market price of our common stock.

Our amended and restated certificate of incorporation and amended and restated bylaws, each to be in effect immediately prior to the completion of this offering, will contain provisions that could depress the market price of our common stock by acting to discourage, delay, or prevent a change in control of our company or changes in our management that the stockholders of our company may deem advantageous. These provisions, among other things:

- establish a staggered Board divided into three classes serving staggered three-year terms, such that not all members of the Board will be elected at one time;
- authorize our Board to issue new series of preferred stock without stockholder approval and create, subject to applicable law, a series of preferred stock with preferential rights to dividends or our assets upon liquidation, or with superior voting rights to our existing common stock;
- eliminate the ability of our stockholders to call special meetings of stockholders;
- eliminate the ability of our stockholders to fill vacancies on our Board;
- establish advance notice requirements for nominations for election to our Board or for proposing matters that can be acted upon by stockholders at our annual stockholder meetings;
- permit our Board to establish the number of directors;
- provide that our Board is expressly authorized to make, alter or repeal our amended and restated bylaws;
- provide that stockholders can remove directors only for cause and only upon the approval of not less than 66-2/3% of all outstanding shares of our voting stock;
- require the approval of not less than 66-2/3% of all outstanding shares of our voting stock to amend our amended and restated bylaws and specific provisions of our certificate of incorporation; and
- the jurisdictions in which certain stockholder litigation may be brought.

As a Delaware corporation, we will be subject to the anti-takeover provisions of Section 203 of the Delaware General Corporation Law, which prohibits a Delaware corporation from engaging in a business combination specified in the statute with an interested stockholder (as defined in the statute) for a period of three years after the date of the transaction in which the person first becomes an interested stockholder, unless the business combination is approved in advance by a majority of the independent directors or by the holders of at least two-thirds of the outstanding disinterested shares. The application of Section 203 of the Delaware General Corporation Law could also have the effect of delaying or preventing a change of control of our company.

Our amended and restated certificate of incorporation will provide that the Court of Chancery of the State of Delaware will be the exclusive forum for substantially all disputes between us and our stockholders, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers or employees.

Our amended and restated certificate of incorporation to be in effect upon the completion of this offering will provide that, unless we consent in writing to the selection of an alternative forum, the sole and exclusive forum, to the fullest extent permitted by law, for (1) any derivative action or proceeding brought on our behalf, (2) any action asserting a breach of a fiduciary duty owed by any director, officer or other employee to us or our

stockholders, (3) any action asserting a claim against us or any director, officer, or other employee arising pursuant to the Delaware General Corporation Law, (4) any action to interpret, apply, enforce, or determine the validity of our second amended and restated certificate of incorporation or amended and restated bylaws or (5) any other action asserting a claim that is governed by the internal affairs doctrine, shall be the Court of Chancery of the State of Delaware (or another state court or the federal court located within the State of Delaware if the Court of Chancery does not have or declines to accept jurisdiction), in all cases subject to the court's having jurisdiction over indispensable parties named as defendants. In addition, our amended and restated certificate of incorporation will provide that the federal district courts of the United States will be the exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act but that the forum selection provision will not apply to claims brought to enforce a duty or liability created by the Exchange Act.

Although we believe these provisions benefit us by providing increased consistency in the application of Delaware law for the specified types of actions and proceedings, the provisions may result in increased costs to stockholders to bring a claim for any such dispute and may have the effect of discouraging lawsuits against us or our directors and officers. Alternatively, if a court were to find the choice of forum provision contained in our amended and restated certificate of incorporation to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving such action in other jurisdictions, which could harm our business, financial condition, and operating results. For example, under the Securities Act, federal courts have concurrent jurisdiction over all suits brought to enforce any duty or liability created by the Securities Act, and investors cannot waive compliance with the federal securities laws and the rules and regulations thereunder. Any person or entity purchasing or otherwise acquiring any interest in our shares of capital stock shall be deemed to have notice of and consented to this exclusive forum provision, but will not be deemed to have waived our compliance with the federal securities laws and the rules and regulations thereunder.

Our ability to use our net operating loss carryforwards and other tax attributes may be limited.

Under Sections 382 and 383 of the Internal Revenue Code of 1986, as amended (the Code), if a corporation undergoes an "ownership change," generally defined as a greater than 50 percentage point change (by value) in its equity ownership by certain stockholders over a three-year period, the corporation's ability to use its pre-change net operating loss carryforwards (NOLs) and other pre-change tax attributes (such as research and development tax credits) to offset its post-change income or taxes may be limited. We may have experienced ownership changes in the past and may experience ownership changes as a result of our acquisitions of assets and as a result of this offering and/or subsequent shifts in our stock ownership (some of which are outside our control). As a result, our ability to use our pre-change NOLs and tax credits to offset future taxable income, if any, could be subject to limitations. Similar provisions of state tax law may also apply. As a result, even if we attain profitability, we may be unable to use a material portion of our NOLs and tax credits.

Participation in this offering by our existing stockholders and/or their affiliated entities may reduce the public float for our common stock.

To the extent certain of our existing stockholders and their affiliated entities participate in this offering, such purchases would reduce the non-affiliate public float of our shares, meaning the number of shares of our common stock that are not held by officers, directors and controlling stockholders. A reduction in the public float could reduce the number of shares that are available to be traded at any given time, thereby adversely impacting the liquidity of our common stock and depressing the price at which you may be able to sell shares of common stock purchased in this offering.

General Risk Factors

If securities or industry analysts either do not publish research about us or publish inaccurate or unfavorable research about us, our business or our market, or if they change their recommendations regarding our common stock adversely, the trading price or trading volume of our common stock could decline.

The trading market for our common stock will be influenced in part by the research and reports that securities or industry analysts may publish about us, our business, our market, or our competitors. If one or more of these analysts initiate research with an unfavorable rating or downgrade our common stock, provide a more favorable recommendation about our competitors or publish inaccurate or unfavorable research about our business, our common stock price would likely decline. If any analyst who may cover us were to cease coverage of us or fail to regularly publish reports on us, we could lose visibility in the financial markets, which in turn could cause the trading price or trading volume of our common stock to decline.

Unstable market and economic conditions may have serious adverse consequences on our business, financial condition and stock price.

As widely reported, global credit and financial markets have experienced extreme volatility and disruptions over the past several months, including concerns about declines in consumer confidence, declines in economic growth, increases in the rate of inflation, increases in borrowing rates and changes in liquidity and credit availability, and uncertainty about economic stability, including most recently in connection with actions undertaken by the U.S. Federal Reserve Board to address inflation, the failure of banks, the military conflict in Ukraine, the continuing effects of the COVID-19 pandemic and supply chain disruptions. There can be no assurance that future deterioration in global credit and financial markets and confidence in economic conditions will not occur. Our general business strategy may be adversely affected by any such economic downturn, volatile business environment or continued unpredictable and unstable market conditions. If the current equity and credit markets deteriorate, it may make any necessary debt or equity financing more difficult, more costly and more dilutive, if at all possible. Failure to secure any necessary financing in a timely manner and on favorable terms could have a material adverse effect on our growth strategy, financial performance and stock price and could require us to delay or abandon clinical development plans. In addition, there is a risk that one or more of our current service providers, manufacturers and other partners may not survive an economic downturn, which could directly affect our ability to attain our operating goals on schedule and on budget.

There has been no prior public market for our common stock, and an active trading market may not develop or be sustained.

There has been no public market for our common stock prior to this offering. The initial public offering price for our common stock was determined through negotiations among the underwriters and us and may vary from the market price of our common stock following this offering. An active or liquid market in our common stock may not develop upon closing of this offering or, if it does develop, it may not be sustainable. The lack of an active market may impair the value of your shares, your ability to sell your shares at the time you wish to sell them and the prices that you may obtain for your shares. An inactive market may also impair our ability to raise capital by selling our common stock and our ability to acquire other companies, products, or technologies by using our common stock as consideration.

The continuing impact of "Brexit" may have a negative effect on our business.

Following a national referendum and subsequent legislation, the United Kingdom formally withdrew from the European Union, commonly referred to as "Brexit," and ratified a trade and cooperation agreement governing its future relationship with the European Union. Among other things, the agreement, which became effective in 2021, addresses trade, economic arrangements, law enforcement, judicial cooperation and governance. Because the agreement merely sets forth a framework in many respects that requires complex additional bilateral negotiations

between the United Kingdom and the European Union, significant uncertainty remains about how the precise terms of the relationship between the parties will differ from the terms before withdrawal.

We cannot yet predict the full implications of Brexit, including whether it will increase our operational costs or otherwise have a negative effect on our business, financial condition or results of operations, which could reduce the price of our common stock.

We are an emerging growth company, and any decision on our part to comply only with certain reduced reporting and disclosure requirements applicable to emerging growth companies could make our common stock less attractive to investors.

We are an "emerging growth company" as defined in the JOBS Act and, for as long as we continue to be an emerging growth company, we may choose to take advantage of exemptions from various reporting requirements applicable to other public companies but not to emerging growth companies, including:

- not being required to have our independent registered public accounting firm audit our internal control over financial reporting under Section 404 of the Sarbanes-Oxley Act;
- reduced disclosure obligations regarding executive compensation in our periodic reports and annual report on Form 10-K; and
- exemptions from the requirements of holding non-binding advisory votes on executive compensation and stockholder approval of any golden parachute payments not previously approved.

We could be an emerging growth company for up to five years following the completion of our initial public offering. Our status as an emerging growth company will end as soon as any of the following takes place:

- the last day of the fiscal year in which we have more than \$1.235 billion in annual revenue;
- the date we qualify as a "large accelerated filer," with at least \$700.0 million of equity securities held by non-affiliates;
- the date on which we have issued, in any three-year period, more than \$1.0 billion in non-convertible debt securities; or
- the last day of the fiscal year ending after the fifth anniversary of the completion of our initial public offering.

We cannot predict if investors will find our common stock less attractive if we choose to rely on any of the exemptions afforded to emerging growth companies. If some investors find our common stock less attractive because we rely on any of these exemptions, there may be a less active trading market for our common stock and the market price of our common stock may be more volatile.

Under the JOBS Act, emerging growth companies can also delay adopting new or revised accounting standards until such time as those standards apply to private companies. We have elected to use this extended transition period for any new or revised accounting standards during the period in which we remain an emerging growth company; however, we may adopt certain new or revised accounting standards early. As a result, these financial statements may not be comparable to companies that comply with the new or revised accounting pronouncements as of public company effective dates.

The requirements of being a public company may strain our resources, result in more litigation, and divert management's attention.

As a public company, we will be subject to the reporting requirements of the Exchange Act, the Sarbanes-Oxley Act, the Dodd-Frank Wall Street Reform and Consumer Protection Act, or the Dodd-Frank Act, the listing requirements of Nasdaq, and other applicable securities rules and regulations. Complying with these rules and

regulations has increased and will increase our legal and financial compliance costs, make some activities more difficult, time consuming or costly and increase demand on our systems and resources. The Exchange Act requires, among other things, that we file annual, quarterly, and current reports with respect to our business and operating results. The Sarbanes-Oxley Act requires, among other things, that we maintain effective disclosure controls and procedures and internal control over financial reporting. We are required to disclose changes made in our internal control and procedures on a quarterly basis. In order to maintain and, if required, improve our disclosure controls and procedures and internal control over financial reporting to meet this standard, significant resources and management oversight may be required. As a result, management's attention may be diverted from other business concerns, which could adversely affect our business and operating results. We may also need to hire additional employees or engage outside consultants to comply with these requirements, which will increase our costs and expenses.

In addition, changing laws, regulations, and standards relating to corporate governance and public disclosure are creating uncertainty for public companies, increasing legal and financial compliance costs, and making some activities more time consuming. These laws, regulations, and standards are subject to varying interpretations, in many cases due to their lack of specificity and, as a result, their application in practice may evolve over time as new guidance is provided by regulatory and governing bodies. This could result in continuing uncertainty regarding compliance matters and higher costs necessitated by ongoing revisions to disclosure and governance practices. We intend to invest resources to comply with evolving laws, regulations, and standards, and this investment may result in increased general and administrative expenses and a diversion of management's time and attention from revenue-generating activities to compliance activities. If our efforts to comply with new laws, regulations, and standards differ from the activities intended by regulatory or governing bodies due to ambiguities related to their application and practice, regulatory authorities may initiate legal proceedings against us and our business may be adversely affected.

These new rules and regulations may make it more expensive for us to obtain director and officer liability insurance and, in the future, we may be required to accept reduced coverage or incur substantially higher costs to obtain coverage. These factors could also make it more difficult for us to attract and retain qualified members of our Board, particularly to serve on our audit committee and compensation committee, and qualified executive officers.

By disclosing information in this prospectus and in future filings required of a public company, our business and financial condition will become more visible, which we believe may result in threatened or actual litigation, including by competitors and other third parties. If those claims are successful, our business could be seriously harmed. Even if the claims do not result in litigation or are resolved in our favor, the time and resources needed to resolve them could divert our management's resources and seriously harm our business.

Business disruptions could seriously harm our future revenue and financial condition and increase our costs and expenses.

Our operations could be subject to earthquakes, power shortages, telecommunications failures, water shortages, floods, hurricanes, typhoons, fires, extreme weather conditions, medical epidemics and other natural or manmade disasters or business interruptions, for which we are predominantly self-insured. We rely on third-party manufacturers to produce our product candidates. Our ability to obtain clinical supplies of our product candidates could be disrupted if the operations of these suppliers were affected by a man-made or natural disaster or other business interruption. The occurrence of any of these business disruptions could seriously harm our operations and financial condition and increase our costs and expenses.

If we fail to maintain proper and effective internal controls over financial reporting our ability to produce accurate and timely financial statements could be impaired.

Pursuant to Section 404 of the Sarbanes-Oxley Act, our management will be required to report upon the effectiveness of our internal control over financial reporting when we lose our status as an "emerging growth

company" and become an "accelerated filer" or a "large accelerated filer." At that point, we will be required to have an independent registered public accounting firm attest to the effectiveness of our internal control over financial reporting. The rules governing the standards that must be met for management to assess our internal control over financial reporting are complex, judgmental and require significant documentation, testing and possible remediation. To comply with the requirements of being a reporting company under the Exchange Act, we will need to implement additional financial and management controls, reporting systems and procedures and hire additional accounting and finance staff.

We cannot assure you that there will not be material weaknesses or significant deficiencies in our internal control over financial reporting in the future. Any failure to maintain internal control over financial reporting could severely inhibit our ability to accurately report our financial condition, results of operations, or cash flows. If we are unable to conclude that our internal control over financial reporting is effective, or if we and/or our independent registered public accounting firm determines we have a material weakness or significant deficiency in our internal control over financial reporting, investors may lose confidence in the accuracy and completeness of our consolidated financial statements, the market price of our common stock could decline, and we could be subject to sanctions or investigations by Nasdaq, the SEC, or other regulatory authorities. Failure to remedy any material weakness in our internal control over financial reporting, or to implement or maintain other effective control systems required of public companies, could also restrict our future access to the capital markets.

Our disclosure controls and procedures may not prevent or detect all errors or acts of fraud.

Upon the completion of this offering, we will become subject to the periodic reporting requirements of the Exchange Act. We must design our disclosure controls and procedures to reasonably assure that information we must disclose in reports we file or submit under the Exchange Act is accumulated and communicated to management, and recorded, processed, summarized, and reported within the time periods specified in the rules and forms of the SEC. We believe that any disclosure controls and procedures or internal controls and procedures, no matter how well-conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of simple error or mistake. For example, our directors or executive officers could inadvertently fail to disclose a new relationship or arrangement causing us to fail to make a required related party transaction disclosure. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people or by an unauthorized override of the controls. Accordingly, because of the inherent limitations in our control system, misstatements due to error or fraud may occur and not be detected.

If our estimates or judgments relating to our critical accounting policies prove to be incorrect or financial reporting standards or interpretations change, our results of operations could be adversely affected.

The preparation of financial statements in conformity with generally accepted accounting principles in the United States (U.S. GAAP), requires management to make estimates and assumptions that affect the amounts reported in the consolidated financial statements and accompanying notes. We base our estimates on historical experience, known trends and events, and various other factors that we believe to be reasonable under the circumstances, as provided in "Management's Discussion and Analysis of Financial Condition and Results of Operations—Critical Accounting Policies and Estimates." The results of these estimates form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Significant assumptions and estimates used in preparing our consolidated financial statements include but are not limited to stock-based compensation and evaluation of acquisitions of assets and other similar transactions as well as clinical trial accruals. Our results of operations may be adversely affected if our assumptions change or if actual circumstances differ from those in our assumptions, which could cause our results of operations to fall below the expectations of securities analysts and investors, resulting in a decline in the trading price of our common stock.

Additionally, we regularly monitor our compliance with applicable financial reporting standards and review new pronouncements and drafts thereof that are relevant to us. As a result of new standards, changes to existing

standards and changes in their interpretation, we might be required to change our accounting policies, alter our operational policies, and implement new or enhance existing systems so that they reflect new or amended financial reporting standards, or we may be required to restate our audited consolidated financial statements, unaudited condensed consolidated financial statements and related notes. Such changes to existing standards or changes in their interpretation may also have an adverse effect on our reputation, business, financial position, and profit.

Our information technology systems, or those used by our third-party research institution collaborators, CROs, CDMOs, or other contractors or consultants, may fail or suffer cyberattacks or security breaches.

We are increasingly dependent upon information technology systems, infrastructure and data to operate our business. In the ordinary course of business, we collect, store and transmit confidential information (including but not limited to intellectual property, proprietary business information and personal information of our customers, employees, and contractors). It is critical that we do so in a secure manner to maintain the confidentiality and integrity of such confidential information. We also have outsourced elements of our operations to third parties, and as a result we manage a number of third-party contractors who have access to our confidential information.

Despite the implementation of security measures, our information technology systems and those of our future CROs and CDMOs, and other contractors and consultants are vulnerable to attack, damage, or interruption from hacking, cyberattacks, "phishing" attacks and other social engineering schemes, computer viruses and malware (e.g., ransomware), malicious code, denial or degradation of service attacks, sophisticated nation-state and nation-state supported actors, unauthorized access or use by persons within our organization, natural disasters, terrorism, war and telecommunication and electrical failures, employee theft or misuse, human error, and fraud. Attacks upon information technology systems are increasing in their frequency, levels of persistence, sophistication and intensity, and are being conducted by sophisticated and organized groups and individuals with a wide range of motives and expertise. As a result of the COVID-19 pandemic, and continued hybrid working environment, we may also face increased cybersecurity risks due to our reliance on internet technology and the number of our employees who are working remotely, which may create additional opportunities for cybercriminals to exploit vulnerabilities.

We and certain of our service providers are from time to time subject to cyberattacks and security incidents, including social engineering and phishing attacks. Furthermore, because the techniques used to obtain unauthorized access to, or to sabotage, systems change frequently and often are not recognized until launched against a target, we may be unable to anticipate these techniques or implement adequate preventative measures. We may also experience security breaches that may remain undetected for an extended period. Even if identified, we may be unable to adequately investigate or remediate incidents or breaches due to attackers increasingly using tools and techniques that are designed to circumvent controls, to avoid detection, and to remove or obfuscate forensic evidence. Although to our knowledge we have not experienced any such material system failure, accident, or security breach to date, if such an event were to occur and negatively affect, our operations, it could result in a material disruption of our development programs and our business operations. For example, the loss of clinical trial data from completed or future clinical trials could result in delays in our regulatory approval efforts and significantly increase our costs to recover or reproduce the data. Further, we cannot assure that our data protection efforts and our investment in information technology will prevent significant breakdowns, data leakages, breaches in our systems or other cyber incidents that could have a material adverse effect upon our reputation, business, operations or financial condition.

Likewise, we rely on our third-party research institution collaborators for research and development of our product candidates and other third parties for the manufacture of our product candidates and to conduct clinical trials, and similar events relating to their information technology systems could also have a material adverse effect on our business. To the extent that any disruption or security incident were to result in an actual or perceived loss of, or damage to, our data or applications, or inappropriate disclosure of confidential or proprietary information or patient information, we could incur liability and the further development and commercialization of our product candidates could be delayed. Furthermore, significant disruptions of our

internal information technology systems or security breaches could result in the loss, misappropriation, and/or unauthorized access, use, or disclosure of, or the prevention of access to, confidential information (including trade secrets or other intellectual property, proprietary business information, and personal information), which could result in financial, legal, business, and reputational harm to us. For example, any such event that leads to unauthorized access, use, or disclosure of personal information, including personal information regarding our clinical trial subjects or employees, could harm our reputation directly, compel us to comply with federal and/or state breach notification laws and foreign law equivalents, subject us to mandatory corrective action, and otherwise subject us to liability under laws and regulations that protect the privacy and security of personal information, which could result in significant legal and financial exposure and reputational damages that could potentially have an adverse effect on our business. Further, our insurance coverage may not be sufficient to cover the financial, legal, business or reputational losses that may result from an interruption or breach of our systems.

We have and will enter into collaboration, license, contract research and/or manufacturing relationships with organizations that operate in certain countries that are at heightened risk of theft of technology, data and intellectual property through direct intrusion by private parties or foreign actors, including those affiliated with or controlled by state actors. Accordingly, our efforts to protect and enforce our intellectual property rights around the world may be inadequate to obtain a significant commercial advantage from the intellectual property that we develop or license, and we may be at heightened risk of losing our proprietary intellectual property rights around the world, including outside of such countries, to the extent such theft or intrusion destroy the proprietary nature of our intellectual property.

We may be subject to claims that our employees, consultants, or independent contractors have wrongfully used or disclosed confidential information of third parties.

We have received confidential and proprietary information from third parties. In addition, we employ individuals who were previously employed at other biotechnology or biopharmaceutical companies. Although we try to ensure that individuals working for or collaborating with us do not use the proprietary information or know-how of others in their work for us, we may be subject to claims that we or our employees, consultants, or independent contractors have inadvertently or otherwise used or disclosed confidential information proprietary to these third parties or our employees' former employers, or that we caused an employee to breach the terms of his or her non-competition or non-solicitation agreement. We may be subject to claims that patents and applications we have filed to protect inventions of our employees, consultants, advisors or other third parties, even those related to one or more of our product candidates, are rightfully owned by their former or concurrent employer. Litigation may be necessary to defend against these claims. Even if we are successful in defending against these claims, litigation could result in substantial cost and be a distraction to our management and employees. If our defenses to these claims fail, in addition to requiring us to pay monetary damages, a court could prohibit us from using technologies or features that are essential to our product candidates, if such technologies or features are found to incorporate or be derived from the trade secrets or other proprietary information of the former employers. Moreover, any such litigation or the threat thereof may adversely affect our reputation, our ability to form strategic alliances or sublicense our rights to collaborators, engage with scientific advisors or hire employees or consultants, each of which would have an adverse effect on our business, results of operations and financial condition. Even if we are successful in defending against such claims, litigation could result in substantial costs and be a distraction to management

We could be subject to securities class action litigation.

In the past, securities class action litigation has often been instituted against companies following periods of volatility in the market price of a company's securities. This type of litigation, if instituted, could result in substantial costs and a diversion of management's attention and resources, which would harm our business, operating results, or financial condition. Additionally, the dramatic increase in the cost of directors' and officers' liability insurance may cause us to opt for lower overall policy limits or to forgo insurance that we may otherwise rely on to cover significant defense costs, settlements, and damages awarded to plaintiffs.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains forward-looking statements, particularly in the sections titled "Prospectus Summary," "Risk Factors," "Management's Discussion and Analysis of Financial Condition and Results of Operations" and "Business." In some cases, you can identify these statements by forward-looking words such as "aim," "anticipate," "believe," "continue," "could," "estimate," "expect," "intend," "may," "might," "plan," "potential," "predict," "should," "would" or "will," the negative of these terms and other comparable terminology. These forward-looking statements, which are subject to risks, include, but are not limited to, statements about:

- our expectations regarding the potential market size and size of the potential patient populations for our product candidates and any future product candidates, if approved for commercial use;
- our clinical and regulatory development plans;
- the ability of our clinical trials to demonstrate safety and efficacy of our product candidates, and other positive results;
- our expectations with regard to the results of our clinical studies, preclinical studies and research and development programs, including the timing and availability of data from such studies;
- our estimates of the number of patients that we will enroll in our clinical trials and the timing of their enrollment;
- the timing of commencement of future preclinical studies and clinical trials and research and development programs;
- our ability to acquire, discover, develop and advance product candidates into, and successfully complete, clinical trials;
- our ability to reduce the time or increase the likelihood of success of our research and development relative to the traditional drug discovery paradigm using our precision neuroscience approach;
- our ability to improve, and the rate of improvement in, our precision neuroscience approach, or to realize benefits from such improvements;
- our expectations related to our precision neuroscience approach, including but not limited to whether it will have the same impact as datadriven precision medicine has had on the oncology field;
- our ability to achieve our mission to redefine neuroscience drug development by bringing forward the next generation of novel therapies that offer improved treatment outcomes and quality of life for patients suffering from brain diseases;
- our ability to scale our company;
- our intentions and our ability to establish collaborations and/or partnerships, and whether such collaborations and/or partnerships are successful;
- the timing or likelihood of regulatory filings and approvals for our product candidates;
- our commercialization, marketing and manufacturing, including any capabilities and expectations related thereto;
- our ability to keep pace with new technological developments;
- impact from future regulatory, judicial, and legislative changes or developments in the United States and foreign countries;
- our intentions with respect to the commercialization of our product candidates, if approved;
- the pricing and reimbursement of our product candidates, if approved;

- the implementation of our business model and strategic plans for our business and product candidates, including additional indications for which we may pursue;
- our ability to maintain our technical operations infrastructure to avoid errors, delays, or cybersecurity breaches;
- our ability to effectively manage our growth, including our ability to retain and recruit personnel, and maintain our culture;
- the scope of protection we are able to establish and maintain for intellectual property rights covering our product candidates, including the projected terms of patent protection;
- estimates of our expenses, future revenue, capital requirements, our needs for additional financing and our ability to obtain additional capital;
- our expected use of proceeds from this offering and our existing cash, cash equivalents and marketable securities;
- the period over which we estimate our existing cash, cash equivalents, and marketable securities will be sufficient to fund our future operating expenses and capital expenditure requirements;
- the performance of our third-party suppliers and manufacturers;
- our expectations regarding the time during which we will be an emerging growth company under the JOBS Act;
- the impact to our business from general political conditions, including but not limited to, disruptions in U.S. government operations and funding, geopolitical conflicts such as the war between Russia and Ukraine and any sanctions or other repercussions that may result therefrom;
- the impact to our business from general economic conditions, including but not limited to, rising inflation, recession risk, low consumer confidence and increasing interest rates;
- the potential effects of the COVID-19 pandemic, or other public health crises, on our clinical and preclinical programs and business;
- developments and projections relating to our competitors and our industry, including competing products; and
- other risks and uncertainties, including those listed under the caption "Risk Factors" in this prospectus.

We have based these forward-looking statements largely on our current expectations, estimates, forecasts and projections about future events and financial trends that we believe may affect our financial condition, results of operations, business strategy and financial needs. In light of the significant uncertainties in these forward-looking statements, you should not rely upon forward-looking statements as predictions of future events. Although we believe that we have a reasonable basis for each forward-looking statement contained in this prospectus, we cannot guarantee that the future results, levels of activity, performance or events and circumstances reflected in the forward-looking statements will be achieved or occur at all. You should refer to the section titled "Risk Factors" for a discussion of important factors that may cause our actual results to differ materially from those expressed or implied by our forward-looking statements. Furthermore, if our forward-looking statements prove to be inaccurate, the inaccuracy may be material. Except as required by law, we undertake no obligation to publicly update any forward-looking statements, whether as a result of new information, future events or otherwise. The Private Securities Litigation Reform Act of 1995 and Section 27A of the Securities Act do not protect any forward-looking statements that we make in connection with this offering.

You should read this prospectus and the documents that we reference in this prospectus and have filed as exhibits to the registration statement, of which this prospectus is a part, completely and with the understanding that our actual future results may be materially different from what we expect. We qualify all of the forward-looking statements in this prospectus by these cautionary statements.

INDUSTRY AND MARKET DATA

Unless otherwise indicated, information contained in this prospectus concerning our industry and the markets in which we operate, including our general expectations and market position, market opportunity and market size, is based on information from various sources on assumptions that we have made that are based on such information and other, similar sources and on our knowledge of, and expectations about, the markets for our products. In some cases, we do not expressly refer to the sources from which this data is derived. This information involves a number of assumptions and limitations, and you are cautioned not to give undue weight to such estimates. Projections, assumptions and estimates of our future performance and the future performance of the industry in which we operate are necessarily subject to a high degree of uncertainty and risk due to a variety of factors, including but not limited to those described in the section titled "Risk Factors" and elsewhere in this prospectus. These and other factors could cause results to differ materially from those expressed in the estimates made by independent third parties and by us.

USE OF PROCEEDS

We estimate that the net proceeds from this offering will be approximately \$ million (or approximately \$ million if the underwriters exercise their option to purchase additional shares in full), assuming an initial public offering price of \$ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

Each \$1.00 increase or decrease in the initial public offering price per share would increase or decrease, as applicable, our net proceeds, after deducting estimated underwriting discounts and commissions, by \$ million (assuming no exercise of the underwriters' option to purchase additional shares). Each increase or decrease of 1.0 million shares in the number of shares offered by us would increase or decrease, as applicable, our net proceeds by \$ million, assuming an initial public offering price of \$ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

The principal purposes of this offering are to obtain additional capital to fund our operations, create a public market for our common stock, facilitate our future access to the public equity markets, and increase awareness of our company among potential partners.

We currently intend to use the net proceeds from this offering, together with our existing cash, cash equivalents and marketable securities, as follows:

- approximately \$ million to fund the clinical and preclinical development of our current programs;
- approximately \$ million to fund research and development activities for additional programs; and
- the remainder for working capital and other general corporate purposes.

We may also use a portion of the net proceeds to in-license, acquire, or invest in, complementary technologies, assets, or intellectual property. We regularly evaluate strategic opportunities; however, we have no current commitments to enter into any such license arrangements or acquisition agreements or to make any such investments.

Based on our current operating plan, we believe that our existing cash, cash equivalents and marketable securities, together with the net proceeds from this offering, will be sufficient to meet our working capital and capital expenditure needs for at least the next months. Our expected use of net proceeds from this offering represents our current intentions based upon present plans and business conditions.

The net proceeds from this offering, together with our existing cash, cash equivalents and marketable securities, will not be sufficient to fund any of our product candidates through regulatory approval, and we anticipate needing to raise additional capital to complete the development of and commercialize our product candidates. As of the date of this prospectus, we cannot predict with certainty all of the particular uses for the net proceeds to be received upon the completion of this offering, or the amounts that we will actually spend on the uses set forth above. The amounts and timing of any expenditures will vary depending on numerous factors, including the progress of our planned clinical studies, the amount of cash used by our operations, the amount and timing of any milestone payments we may be required to make, competitive, scientific and data science developments, the rate of growth, if any, of our business, and other factors described in the section titled "Risk Factors." Accordingly, our management will have significant discretion and flexibility in applying the net proceeds from this offering, and investors will be relying on the judgment of our management regarding the application of these net proceeds. Due to the many inherent uncertainties in the development of our product candidates, the amounts and timing of our actual expenditures may vary significantly depending on

numerous factors, including the progress of our research and development, our ability to obtain additional financing, the cost and results of our preclinical activities, the timing of clinical studies we may commence in the future, the timing of regulatory submissions, any collaborations that we may enter into with third parties for our product candidates or strategic opportunities that become available to us, and any unforeseen cash needs.

Pending the uses described above, we intend to invest the net proceeds from this offering in interest-bearing obligations, investment-grade instruments, certificates of deposit, or direct or guaranteed obligations of the U.S. government.

DIVIDEND POLICY

We have never declared or paid any cash dividends on our capital stock and do not anticipate paying any cash dividends in the foreseeable future. We currently anticipate that we will retain all available funds for use in the operation and expansion of our business. Any future determination as to the declaration or payment of dividends on our common stock will be made at the discretion of our board of directors and will depend upon, among other factors, our financial condition, results from operations, current and anticipated cash needs, plans for expansion and other factors that our board of directors may deem relevant.

CAPITALIZATION

The following table sets forth our cash, cash equivalents and marketable securities and total capitalization as of March 31, 2023:

- on an actual basis;
- on a pro forma basis to reflect the following immediately prior to the completion of this offering: (i) the conversion of all of our outstanding convertible preferred stock into an aggregate of shares of our common stock, (ii) the related reclassification of our convertible preferred stock aggregate carrying value to permanent equity, and (iii) the filing and effectiveness of our amended and restated certificate of incorporation, which will be effective immediately prior to the completion of this offering; and
- on a pro forma as adjusted basis to reflect: (i) the pro forma adjustments set forth above, and (ii) the issuance and sale of shares of common stock by us in this offering at the assumed initial public offering price of \$ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

The pro forma as adjusted information discussed below is illustrative only and will be adjusted based on the actual initial public offering price and other terms of this offering determined at pricing. This table should be read in conjunction with the section titled "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our unaudited condensed consolidated financial statements and related notes included elsewhere in this prospectus.

	Actual	Pro Forma	Pro Forma as Adjusted(1)
		(unaudited) (in thousands, except share amounts)	
Cash, cash equivalents and marketable securities	\$ 363,832	\$	\$
Convertible preferred stock, \$0.0001 par value per share; 820,349 shares authorized, 819,291 shares issued and outstanding, actual; no shares authorized, issued or outstanding, pro forma and pro forma as			
adjusted	\$ 843,687	\$	\$
Stockholders' (deficit) equity:			
Preferred stock, \$0.0001 par value per share; no shares authorized, issued or outstanding, actual;			
shares authorized, no shares issued or outstanding, pro forma and pro forma as adjusted	—		
Common stock, \$0.0001 par value per share; 1,210,000 shares authorized, 256,639 shares issued and			
outstanding, actual; shares authorized and shares issued and outstanding, pro			
forma; shares authorized and shares issued and outstanding, pro forma as			
adjusted	16		
Additional paid-in capital	25,496		
Accumulated other comprehensive loss	(298)		
Accumulated deficit	(503,134)		
Total stockholders' (deficit) equity	(477,920)		
Total capitalization	\$ 365,767	\$	\$

(1) The pro forma as adjusted information discussed above is illustrative only and will depend on the actual initial offering price and other terms of this offering determined at pricing. Each \$1.00 increase or decrease in the assumed initial public offering price of \$ per share, which is the midpoint of the price range set forth on the cover page of this prospectus,

would increase or decrease, as applicable, each of pro forma as adjusted cash, cash equivalents and marketable securities, additional paid-in capital, total stockholders' equity and total capitalization by approximately \$ million, assuming that the number of shares of common stock offered by us, as set forth on the cover page of this prospectus, remains the same, and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. Similarly, each increase or decrease of 1.0 million shares of common stock offered by us would increase or decrease, as applicable, each of pro forma as adjusted cash, cash equivalents and marketable securities, additional paid-in capital, total stockholders' equity and total capitalization by approximately million, assuming that the assumed initial public offering price of \$ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, remains the same, and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

If the underwriters exercise their option to purchase additional shares of our common stock in full, pro forma as adjusted cash, cash equivalents and marketable securities, additional paid-in capital, total stockholders' equity, total capitalization and shares of common stock outstanding as of March 31, 2023 would be \$ million, \$ million, \$ million, \$ million, and shares, respectively.

The number of shares of our common stock to be outstanding after this offering on a pro forma and pro forma as adjusted basis is based on shares of common stock outstanding as of March 31, 2023 (after giving effect to the conversion of all of our shares of convertible preferred stock outstanding as of March 31, 2023 into an aggregate of shares of our common stock immediately prior to the completion of this offering) and excludes:

- shares of our common stock issuable upon the exercise of stock options outstanding as of March 31, 2023, with a weighted-average exercise price of \$ per share;
- shares of our common stock issuable upon the exercise of stock options outstanding as of March 31, 2023, subject to market and performance vesting conditions, with a weighted-average exercise price of \$ per share;
- shares of our common stock issuable upon the exercise of stock options granted subsequent to March 31, 2023, with a weightedaverage exercise price of \$ per share;
- shares of our common stock reserved for future issuance under our 2020 Plan as of March 31, 2023;
- shares of our common stock reserved for future issuance under our 2023 Plan, which will become effective on the date immediately
 prior to the date our registration statement relating to this offering becomes effective, as well as any future increases in the number of
 shares of common stock reserved for issuance under the 2023 Plan; and
- shares of our common stock reserved for future issuance under our ESPP, which will become effective on the date immediately prior to the date our registration statement relating to this offering becomes effective, as well as any future increases in the number of shares of common stock reserved for issuance under the ESPP.

DILUTION

If you purchase shares of our common stock in this offering, your ownership interest will be diluted to the extent of the difference between the initial public offering price per share of our common stock in this offering and the pro forma as adjusted net tangible book value per share of our common stock immediately after this offering.

As of March 31, 2023, we had a historical net tangible book value (deficit) of \$ million, or \$ per share of common stock. Our historical net tangible book value (deficit) represents our total tangible assets excluding deferred offering costs, less our total liabilities and convertible preferred stock, which is not included within stockholders' equity (deficit), divided by the total number of shares of our common stock outstanding as of March 31, 2023.

Our pro forma net tangible book value as of March 31, 2023, was \$ million, or \$ per share. Pro forma net tangible book value represents our total tangible assets excluding deferred offering costs, less our total liabilities, after giving effect to the automatic conversion of all outstanding shares of our convertible preferred stock as of March 31, 2023 into an aggregate of shares of our common stock as if such conversion had occurred on March 31, 2023. Pro forma net tangible book value per share represents pro forma net tangible book value divided by the total number of shares of common stock outstanding as of March 31, 2023, after giving effect to the conversion of our convertible preferred stock.

After giving further effect to the issuance and sale by us of the shares of our common stock in this offering at the assumed initial public offering price of \$ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us, our pro forma as adjusted net tangible book value as of March 31, 2023 would be \$ million, or \$ per share. This represents an immediate increase in pro forma net tangible book value to our existing per share and an immediate dilution to new investors of \$ per share. Dilution per share to new investors represents the difference between the price per share to be paid by new investors for the shares of common stock sold in this offering and the pro forma as adjusted net tangible book value per share immediately after this offering.

The following table illustrates this dilution on a per share basis:

Assumed initial public offering price per share	\$
Historical net tangible book value (deficit) per share as of March 31, 2023	\$
Pro forma increase in historical net tangible book value (deficit) per share as of March 31, 2023	
attributable to the pro forma transactions described above	
Pro forma net tangible book value per share as of March 31, 2023	
Increase in pro forma net tangible book value per share attributable to new investors participating in	
this offering	
Pro forma as adjusted net tangible book value per share after this offering	
Dilution in pro forma as adjusted net tangible book value per share to new investors participating in this	
offering	\$
	\$

The dilution information discussed above is illustrative only and will change based on the actual initial public offering price and other terms of this offering determined at pricing. Each \$1.00 increase or decrease in the assumed initial public offering price of \$ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, would increase or decrease, as applicable, pro forma as adjusted net tangible book value per share to new investors by \$, and would increase or decrease, as applicable, dilution per

share to new investors in this offering by \$, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same, and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. Similarly, each increase or decrease of 1.0 million shares in the number of shares offered by us would increase or decrease, as applicable, our pro forma as adjusted net tangible book value by approximately \$ per share and increase or decrease, as applicable, the dilution to new investors by \$ per share, assuming the assumed initial public offering price remains the same, and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

If the underwriters' option to purchase additional shares is exercised in full, the pro forma as adjusted net tangible book value per share of our common stock would be \$ per share, and the dilution in pro forma net tangible book value per share to new investors in this offering would be \$ per share, in each case assuming an initial public offering price of \$ per share, which is the midpoint of the price range set forth on the cover page of this prospectus.

The following table summarizes, as of March 31, 2023, on a pro forma as adjusted basis, the number of shares of common stock purchased from us, the total consideration paid, or to be paid, and the average price per share paid, or to be paid, by existing stockholders and by the new investors, at the assumed initial public offering price of \$ per share, the midpoint of the price range set forth on the cover page of this prospectus, before deducting estimated underwriting discounts and commissions and offering expenses payable by us:

	Shares Purchased		Total Consideration		res Purchased Total Consideration A		Weighted- Average Price	
	Number	Percent	Amount	Percent	Per Share			
	(in thousands, except share, per share and percent d				data)			
Existing stockholders		%	\$	- %	\$			
New investors					\$			
Total		100.0%	\$	100.0%				

Each \$1.00 increase or decrease in the assumed initial public offering price of \$ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, would increase or decrease, as applicable, the total consideration paid by new investors and total consideration paid by all stockholders by approximately \$ million, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same, and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

The above table assumes no exercise of the underwriters' option to purchase additional shares. If the underwriters' option to purchase additional shares were exercised in full, our existing stockholders would own % and our new investors would own % of the total number of shares of our common stock outstanding upon completion of this offering.

To the extent that stock options are exercised, new stock options are issued under our equity incentive plan or we issue additional shares of common stock in the future, there will be further dilution to investors participating in this offering. In addition, we may choose to raise additional capital because of market conditions or strategic considerations, even if we believe that we have sufficient funds for our current or future operating plans. If we raise additional capital through the sale of equity or convertible debt securities, the issuance of these securities could result in further dilution to our stockholders.

The foregoing tables and calculations (other than historical net tangible book value) are based on outstanding as of March 31, 2023 (after giving effect to the conversion of all of our shares of convertible preferred stock outstanding as of March 31, 2023 into an aggregate of shares of our common stock immediately prior to the completion of this offering) and excludes:

shares of our common stock issuable upon the exercise of stock options outstanding as of March 31, 2023, with a weighted-average exercise price of \$ per share;

shares of our common stock issuable upon the exercise of stock options outstanding as of March 31, 2023, subject to market and performance vesting conditions, with a weighted-average exercise price of \$ per share;

- shares of our common stock issuable upon the exercise of stock options granted subsequent to March 31, 2023, with a weightedaverage exercise price of \$ per share;
 - shares of our common stock reserved for future issuance under our 2020 Plan as of March 31, 2023;
- shares of our common stock reserved for future issuance under our 2023 Plan, which will become effective on the date immediately prior to the date our registration statement relating to this offering becomes effective, as well as any future increases in the number of shares of common stock reserved for issuance under the 2023 Plan; and
- shares of our common stock reserved for future issuance under our ESPP, which will become effective on the date immediately prior to the date our registration statement relating to this offering becomes effective, as well as any future increases in the number of shares of common stock reserved for issuance under the ESPP.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion and analysis of our financial condition and results of operations should be read together with the section titled "Summary Consolidated Financial Data," and our audited consolidated financial statements, unaudited condensed consolidated financial statements and related notes included elsewhere in this prospectus. This discussion and analysis and other parts of this prospectus contain forward-looking statements based upon current beliefs, plans and expectations related to future events and our future financial performance that involve risks, uncertainties, and assumptions, such as statements regarding our intentions, plans, objectives, and expectations for our business. Our actual results and the timing of selected events could differ materially from those discussed in the forward-looking statements as a result of several factors including those set forth in the section titled "Risk Factors." See also the section titled "Special Note Regarding Forward-Looking Statements."

Overview

We are a clinical-stage biopharmaceutical company founded to confront the global brain disease crisis by taking a fundamentally different approach to the way treatments for brain diseases are developed. We have rapidly scaled our therapeutic pipeline, which currently consists of seven clinical and preclinical neuroscience programs that target novel mechanisms of action for a broad range of underserved neuropsychiatric disorders and neurodegenerative diseases. Our most advanced product candidate, NMRA-140, is a novel once-daily oral kappa opioid receptor (KOR) antagonist that is being developed for the treatment of major depressive disorder (MDD), which we believe has the potential to provide significant advantages relative to the standard of care, if approved. We are initiating a Phase 3 program for NMRA-140 monotherapy in patients with moderate to severe MDD in

We have rapidly scaled our therapeutic pipeline through both business development activities and internal discovery capabilities. Our therapeutic pipeline is comprised of programs for neuropsychiatric disorders and neurodegenerative diseases, each targeting a novel mechanism of action that, where beneficial, can leverage our precision neuroscience approach.

As shown in the table below, our current pipeline comprises seven programs, two of which are in clinical development and five of which are in preclinical development. We expect to continue to rapidly progress the development of our pipeline with the planned initiation of up to clinical trials across our programs over the next 12 to 18 months.

PROGRAM Target/Mechanism	INDICATION US Prevalence	Preclinical	Phase 1	Phase 2	Phase 3
Neuropsychiatry P	rograms				
		Study 301 (Mon	otherapy, U.S.)		
NMRA-140 KOR Antagonist	Major Depressive Disorder 21M	Study 302 & 303	l (Monotherapy, 2 Gi	obal Studies)	
		Study 501 (Oper	n-Label Extension)		
NMRA-511 V1aR Antagonist	Neuropsychiatric Disorders NA				
NMRA-M4R M4R Modulator	Schizophrenia 3M				
NMRA-NMDA NMDA Modulator	Schizophrenia 3M				
Neurodegeneration	Programs				
NMRA-CK18 CK18 Inhibitor	ALS 25K				
NMRA-NLRP3 NLRP3 Inhibitor	Parkinson's Disease				
NMRA-GCASE GCASE Activator	Parkinson's Disease				

Figure 2: Neumora pipeline

We were incorporated in November 2019 and commenced operations thereafter. To date, we have focused primarily on building our organization, acquiring technologies and companies, developing our precision neuroscience approach, identifying and developing potential product candidates, executing clinical and preclinical studies, organizing and staffing our company, business planning, establishing our intellectual property portfolio, raising capital and providing general and administrative support for these operations. We do not have any products approved for sale, we have not generated any revenue from the sale of products, and we do not expect to generate revenue from the sale of our product candidates until we complete clinical development, submit regulatory filings, and receive approvals from the applicable regulatory bodies for such product candidates, if ever.

Since our inception, we have incurred significant net losses, which are primarily attributable to acquired intangible in-process research and development intangible asset (IPR&D) costs pursuant to our acquisitions of BlackThorn Therapeutics, Inc. (BlackThorn), Syllable Life Sciences, Inc. (Syllable), Propellex Bio, Inc. (Propellex) and Alairion, Inc. (Alairion), each of which occurred in 2020 and has been accounted for as an acquisition of assets. We expect to continue to incur significant losses for the foreseeable future as we continue to advance the development of our precision neuroscience product candidates and approach, and as we transition to operating as a public company. Our net losses were \$237.3 million and \$130.9 million for the years ended December 31, 2021 and 2022, respectively, and \$35.6 million for the three months ended March 31, 2023. As of December 31, 2022 and March 31, 2023, we had accumulated deficit of \$467.5 million and \$503.1 million, respectively. Our primary use of our capital resources is to fund our operating expenses, which consist primarily of expenditures related to identifying, acquiring, developing, and in-licensing our precision neuroscience approach and product candidates, and conducting preclinical studies and clinical trials, and to a lesser extent, general and administrative expenditures.

We expect to continue to incur net operating losses for the foreseeable future. In particular, we expect our expenses and losses to increase substantially as we continue our research and development efforts, advance our product candidates through clinical and preclinical development, enhance our precision neuroscience approach and programs, expand our product pipeline, seek regulatory approval, prepare for commercialization, as well as hire additional personnel, protect our intellectual property, and incur additional costs associated with being a public company. We also expect to increase the size of our administrative function to support the growth of our business. Our net losses may fluctuate significantly from period to period, depending on the timing of our clinical trials and our expenditures on research and development activities.

We have primarily funded our operations to date primarily from the sale and issuance of our convertible preferred stock and convertible promissory notes. From our inception through March 31, 2023, we have raised aggregate gross cash proceeds of over \$600 million, including from the sale of convertible preferred stock and cash acquired in our acquisitions of assets. As of March 31, 2023, we had \$363.8 million in cash, cash equivalents and marketable securities. Based upon our current operating plan, we believe that the net proceeds from this offering, together with our existing cash, cash equivalents and marketable securities, will enable us to fund our operating expenses and capital expenditure requirements through at least the next months from the date of this offering.

We will need substantial additional funding in addition to the net proceeds of this offering to support our continuing operations and pursue our long-term business plan, including to complete the development and commercialization of our product candidates, if approved. Until such time as we can generate significant revenue from sales of our product candidates, if ever, we expect to finance our operations through public or private equity offerings or debt financings or other capital sources, which may include strategic collaborations or other arrangements with third parties, or other sources of financing. We may not be able to raise additional capital on terms acceptable to us or at all. If we are unable to raise additional capital on acceptable terms when needed, our business, results of operations, and financial condition would be adversely affected. The amount and timing of our future funding requirements will depend on many factors including the successful advancement of our precision neuroscience approach, programs, and product candidates. Our ability to raise additional funds may also be adversely impacted by potential worsening global economic conditions and disruptions to, and volatility in, the credit and financial markets in the United States and worldwide, such as those resulting from the ongoing COVID-19 pandemic.

Recent Acquisitions of Assets

BlackThorn Therapeutics, Inc.

In September 2020, we acquired all of the outstanding equity of BlackThorn Therapeutics, Inc. (BlackThorn), a privately held company that was utilizing novel technology-based approaches integrated with data and translational science to link behavioral deficits with brain physiology to discover and develop targeted treatments for neurobehavioral disorders. In connection with our acquisition of BlackThorn, we primarily acquired a group of similar IPR&D assets, comprising two clinical-stage research and development programs involving a Kappa Opioid Receptor Antagonist (Kappa or NMRA-140) and a Vasopressin Receptor Antagonist (V1a or NMRA-511), as well as a cloud-based computational psychiatry and data platform being developed to support drug target identification, patient stratification and objective clinical trial endpoints (collectively, the BlackThorn IPR&D).

The transaction was accounted for as an acquisition of assets. The total upfront consideration transferred to stockholders of BlackThorn consisted of (i) an aggregate of 45,178,495 shares of our Series A-1 convertible preferred stock, with an acquisition date fair value of \$36.6 million, (ii) warrants to purchase 2,292,672 shares of our Series A-1 convertible preferred stock, with an acquisition date fair value of \$0.7 million, plus (iii) cash of \$0.1 million. We also agreed to settle \$11.0 million in principal and accrued interest due from BlackThorn related to promissory notes that were issued between April and August 2020. As part of the acquisition, we incurred transaction costs of \$1.6 million.

The consideration transferred was allocated between the acquired BlackThorn IPR&D in the amount of \$48.3 million, which was included in acquired in-process research and development expenses in our consolidated

statement of operations and comprehensive loss for the year ended December 31, 2020, and other net assets of \$1.7 million.

The former BlackThorn stockholders are entitled to contingent consideration in the form of development, regulatory approval and sales-based milestones of up to an aggregate amount of (i) with respect to NMRA-140, in the form of development and regulatory approval milestones of up to an aggregate amount of \$365.0 million, which includes a milestone payment of \$90.0 million that will become due upon dosing the first patient in the Phase 3 clinical trial for NMRA-140, and sales-based milestones of up to an aggregate amount of \$450.0 million and (ii) with respect to NMRA-511, in the form of development and regulatory approval milestones of up to an aggregate amount of \$100.0 million and sales-based milestones of up to an aggregate amount of \$100.0 million (BlackThorn Milestones). With the exception of one development milestone in the amount of \$10.0 million that is required to be settled in cash, the remaining BlackThorn Milestone payments may be settled in cash or shares of our equity, or a combination of both, at our sole discretion. None of the BlackThorn Milestones had been achieved as of March 31, 2023, and no amounts were recognized relating to the BlackThorn contingent consideration during the years ended December 31, 2021, 2022 or the three months ended March 31, 2023.

We also established a carveout plan, pursuant to which each former holder of BlackThorn stock options as of immediately prior to the BlackThorn acquisition closing date was allocated a certain number of units (the BlackThorn Carveout Units) each of which represents a right to receive a portion of the BlackThorn Milestones upon the later of (i) the achievement of a BlackThorn Milestone and (ii) the vesting of the unit. As of March 31, 2023, none of the BlackThorn Milestones had been achieved or were probable of being achieved, and therefore no related expenses had been recognized.

Syllable Life Sciences, Inc.

In September 2020, we acquired all of the outstanding equity of Syllable, a privately held company focused on the development of advanced machine learning and computer vision technologies to automatically decipher body language in humans and laboratory animals. We primarily acquired proprietary rights and IPR&D of a behavior analysis machine learning and computer vision software tool, which was being developed to identify and quantify behavior as an indicator of neurological conditions (the Syllable IPR&D).

The Syllable transaction was accounted for as an acquisition of assets. The total upfront consideration transferred to the former stockholders of Syllable consisted of 4,894,847 shares of our Series A-2 convertible preferred stock, with an estimated acquisition date fair value of \$4.9 million. As part of the acquisition, we also incurred transaction costs of \$0.4 million.

The consideration transferred was allocated between the acquired Syllable IPR&D in the amount of \$5.9 million, which was included in acquired in-process research and development expenses in our consolidated statement of operations and comprehensive loss for the year ended December 31, 2020, and net liabilities we assumed of \$0.7 million.

The former Syllable stockholders are entitled to contingent consideration in the form of future milestone payments of up to \$5.0 million upon the achievement of specified development milestones (the Syllable Milestones). At our sole discretion, the payment of such contingent consideration may be settled in cash or in shares of our equity, or a combination of both. None of the Syllable Milestones had been achieved as of March 31, 2023, and no related amounts were recognized relating to the Syllable contingent consideration during the years ended December 31, 2021, 2022 or the three months ended March 31, 2023.

Alairion, Inc.

In November 2020, we acquired all of the outstanding equity of Alairion, a privately held company focused on the treatment of sleep disorders. We primarily acquired a group of similar IPR&D assets comprised of two

preclinical research and development programs involving a H1 receptor antagonist (H1) and a GABA receptor positive allosteric modulator (GABA), as well as a drug discovery and optimization technology platform (collectively, the Alairion IPR&D).

The Alairion transaction was accounted for as an acquisition of assets. The total upfront consideration transferred to the former stockholders of Alairion consisted of the settlement of a senior secured promissory note of \$1.8 million due from Alairion related to a promissory note that was issued in September 2020. As part of the acquisition, we incurred transaction costs of \$0.3 million.

The consideration transferred was allocated to the acquired Alairion IPR&D in the amount of \$4.3 million, which was included in acquired in-process research and development expenses in our consolidated statement of operations and comprehensive loss for the year ended December 31, 2020, and net liabilities we assumed of \$2.1 million.

The former Alairion stockholders are entitled to contingent consideration in the form of future milestone payments of up to \$33.5 million upon the achievement of specified development events related to the Alairion IPR&D and \$135.0 million upon the achievement of specified commercialization events related to the Alairion Milestones). At our sole discretion, the payment of such contingent consideration may be settled in cash or shares of our equity, or a combination of both. None of the Alairion Milestones had been achieved as of March 31, 2023, and no related amounts were recognized relating to the Alairion contingent consideration during the years ended December 31, 2021, 2022 or the three months ended March 31, 2023. We have ceased the development of our NMRA-094 product candidate for the treatment of OSA, that we acquired from Alairion based on pre-IND feedback we received from the FDA.

For additional details regarding our acquisitions of assets, see Note 7 to our audited consolidated financial statements and Note 6 to our unaudited condensed consolidated financial statements included elsewhere in this prospectus.

Strategic License and Research and Collaboration Agreements

We have assumed license arrangements with certain third parties as a result of our acquisitions, and have entered into several additional agreements with Amgen. Our significant agreements are summarized below. For additional details, see Note 10 to our audited consolidated financial statements and Note 8 to our unaudited condensed consolidated financial statements included elsewhere in this prospectus.

2015 TSRI License Agreement

In connection with the acquisition of BlackThorn in September 2020, we gained rights under a license agreement between BlackThorn and The Scripps Research Institute (TSRI) originally entered into in November 2015, as amended in November 2017 and April 2019 (the 2015 TSRI License Agreement). Pursuant to the 2015 TSRI License Agreement, TSRI granted BlackThorn a worldwide, exclusive license under certain patent rights and a worldwide, non-exclusive license under certain know-how relating to TSRI's Kappa Opioid Receptor (KOR or NMRA-140) program, vasopressin 1a receptor (V1aR or NMRA-511) Antagonist program and oxytocin receptors (OTR) positive allosteric modulator program (collectively, the TSRI Programs). In each case, the license agreement grants rights to use, manufacture and commercialize products (i) that are covered by the relevant licensed patents, (ii) that involve the use or incorporation of the licensed know-how or (iii) that are KOR, V1aR or OTR modulators discovered by BlackThorn within two years of the effective date of the 2015 TSRI License Agreement, for diagnostic, prophylactic and/or therapeutic treatment of humans and animals. The license is sublicensable under certain conditions. The technology licensed under the 2015 TSRI License Agreement is used in our NMRA-140 and NMRA-511 research and development programs.

In exchange for the exclusive rights above, we are obligated, among other things, to pay TSRI (i) a nominal annual license fee due and payable on the first day of each calendar year and after the fourth anniversary

creditable against any royalties due for such calendar year, (ii) development and regulatory milestone payments of up to \$1.5 million in aggregate for the first product from each TSRI Program, which are contingent upon achieving specific development and regulatory milestone events and (iii) commercial milestone payments of up to \$3.5 million in aggregate for each occurrence, which are contingent upon achieving specified commercialization milestone events. We are also obligated to pay tiered low-single digit royalties on future net sales of each royalty-bearing product and a percentage ranging from the mid-single digits to sub teen double digits of any sublicensing revenues we receive. The royalties are payable on a product-by-product and country-by-country basis until the later of expiration of the last to expire valid claim in the licensed patents production in the world and ten years after the first commercial sale of such product in such country. We also paid a change of control success fee to TSRI in shares of our Series A-1 convertible preferred stock with a fair value of \$0.3 million. As of March 31, 2023, we had not recorded any milestone or royalty payments under the 2015 TSRI License Agreement.

Harvard License Agreement

In connection with the acquisition of Syllable, we gained rights to a license agreement between Syllable and Harvard (the Harvard License Agreement) entered into in June 2020. Pursuant to the Harvard License Agreement, Syllable obtained an exclusive, worldwide, royalty-bearing, sublicensable license under certain patent rights and copyrights covering certain behavior imagining and behavioral tracking software, to develop and commercialize products and services based thereon.

Under the Harvard License Agreement, Syllable was required to pay Harvard a change of control payment, which we agreed to pay on Syllable's behalf as part of the acquisition and which was part of the net liabilities we assumed in the transaction. In addition, we are obligated, among other things, to pay Harvard (i) nominal specified annual license maintenance fees that are creditable against any royalty amounts payable for licensed products sold in the same year, (ii) mid-single digit royalties on future net sales of each royalty-bearing product and (iii) a percentage, ranging from the high-teens to low-double-digits, of any sublicensing revenues we receive. The royalties are payable on a product-by-product and country-by-country basis until the later of expiration of the last to expire valid claim in the licensed patents covering such product and the fifteenth anniversary of the first commercial sale of such product in such country.

In March 2021, we entered into an amendment to the Harvard License Agreement to, among other things, extend the timeline for us to meet our development and commercial milestones. Under the Harvard License Agreement, as amended, we are obligated to meet certain development and commercial milestones between December 2021 and January 2024. Failure to meet such milestones would constitute a material breach of contract and would provide Harvard with the right to terminate the agreement subject to the notification and cure periods. As of March 31, 2023, we had not met any of the development milestones. We and Harvard agreed to terminate the agreement, effective as of March 31, 2023.

Amgen Licenses and Research and Collaboration Agreement

In September 2021, we entered into two license agreements with Amgen (the Amgen Licenses) pursuant to which we obtained exclusive, worldwide licenses under specified patents and know-how to develop, manufacture, use, commercialize and distribute products containing compounds that are directed to, in one case, CK1d (the CK1d License), and in the other case, GCase (the GCase License), both for the treatment of neurodegenerative diseases and related know-how and clinical material (collectively, the Amgen IPR&D Assets). The acquisition of the Amgen IPR&D Assets became effective on September 30, 2021, the date the Amgen Licenses were executed.

The Amgen Licenses were accounted for as acquisitions of assets. The total upfront consideration transferred to Amgen of 157.0 million shares of our Series A-2 convertible preferred stock, with an estimated acquisition date

fair value of \$157.0 million, was allocated to the Amgen IPR&D Assets. The consideration transferred for the Amgen IPR&D Assets was included in acquired in-process research and development expenses in our consolidated statement of operations and comprehensive loss for the year ended December 31, 2021.

Under the Amgen Licenses, we agreed to pay Amgen contingent consideration payable in cash up to an aggregate of \$360.0 million in commercial milestone payments upon the achievement of certain sales thresholds per licensed product under the CK1d License and up to an aggregate \$360.0 million in commercial milestone payments upon the achievement of certain sales thresholds per licensed product under the GCase License. We also agreed to pay tiered royalties at percentages ranging from the low to high-single-digits on annual worldwide net sales of licensed products under the GCase License, payable on a licensed product-by-licensed product and country-by-country basis until the later of the expiration of the last to expire licensed patent or Neumora patent claiming the composition of matter of such licensed product and the tenth anniversary of the first commercial sale of such license agreement prior to the second anniversary of the effective date of the Amgen Licenses, then we are also obligated to pay Amgen a low-double-digit percentage of sublicenses income we receive for the CK1d and/or GCase programs. As of March 31, 2023, none of the milestones pursuant to the Amgen Licenses have been achieved, and no amounts were recognized related to the contingent consideration milestones.

In addition, until a specified period of time following the achievement of the first successful Phase 2 clinical trial for any licensed product, if we choose to sell, transfer, sublicense or divest rights to a licensed product in certain major markets, Amgen has a time-limited, exclusive right of first negotiation to enter into an agreement with us for such rights.

Concurrently with the Amgen Licenses, we entered into a research collaboration agreement with Amgen (the Amgen Collaboration Agreement) to collectively discover drug targets, biomarkers, and other insights associated with central nervous system (CNS) diseases utilizing Amgen's deCODE genetics and human data research capabilities. Under the Amgen Collaboration Agreement, Amgen grants us an exclusive license under intellectual property generated in the collaboration to exploit therapeutic compounds and diagnostics for use with therapeutics in the CNS field and we grant Amgen an exclusive license under intellectual property generated in the collaboration to exploit therapeutic compounds and diagnostics for use with therapeutics outside of the CNS field.

In return for Amgen performing research activities under the agreement, we are committed to making non-refundable, non-creditable quarterly payments to Amgen over the first two years totaling \$50.0 million and for the third year between \$12.5 million and \$25.0 million depending on whether certain progress milestones are achieved. The term of the Amgen Collaboration Agreement is up to five years, although it will terminate after three years if we and Amgen do not mutually agree upon a compensation structure for years four and five. If we and Amgen do not reach such agreement at least 30 days prior to the end of year three, the Amgen Collaboration Agreement will automatically terminate upon its third anniversary. Further, either we or Amgen can terminate the Amgen Collaboration Agreement upon a material uncured breach or bankruptcy declaration by the other party, in which case all amounts that have become due through the date of termination will be non-refundable.

Amgen also has an exclusive option to negotiate, and the right of first negotiation, to obtain exclusive, worldwide licenses to research, develop, commercialize and otherwise exploit up to two therapeutic compounds directed to CK1d and GCase, or any pharmaceutical product containing such therapeutic compound arising from the collaboration. That right exists with respect to each compound for up to 60 days following positive Phase 2 results for the compound.

Upon execution of the Amgen Collaboration Agreement, we were obligated to start paying Amgen non-refundable quarterly payments of \$6.3 million. The seventh non-refundable quarterly payment of \$6.3 million

became due as of March 31, 2023 and has been recorded within accrued liabilities, with related amounts recorded within prepaid expenses and other current assets on our condensed consolidated balance sheet as of March 31, 2023.

Additionally, Amgen purchased 100.0 million shares of our Series A-2 preferred stock at a purchase price of \$1.00 per share, for total consideration of \$100.0 million. Subject to certain conditions, Amgen is also obligated to provide us additional financing of up to \$100.0 million.

Vanderbilt License Agreement and Sponsored Research Agreement

We and Vanderbilt University (Vanderbilt) entered into a license agreement in February 2022 (Vanderbilt License Agreement). Pursuant to the Vanderbilt License Agreement, we obtained an exclusive, worldwide, royalty-bearing, sublicensable (subject to certain restrictions) license under certain patent rights and a non- exclusive, worldwide, royalty-bearing, sublicensable (subject to certain restrictions) license under certain know-how covering small molecule positive allosteric modulators (PAMs) predominantly of the muscarinic acetylcholine receptor subtype 4 (M4), to develop, manufacture and commercialize products, processes, and services covered by such patent rights or that incorporate or use such know-how, for any and all uses. We also have an exclusive option, exercisable for a specified period of time, to obtain an exclusive license to certain patent rights conceived or developed by Vanderbilt in the course of carrying out the sponsored research pursuant to a sponsored research agreement between Neumora and Vanderbilt. The last patent expiration date for the licensed patents that are issued or expected to issue, from currently pending or provisional applications, pursuant to the Vanderbilt License Agreement is 2043, excluding any patent term adjustment or patent term extension. The licensed patent rights are subject to Vanderbilt's right to use the patent rights for research, internal non-commercial use and educational purposes.

We have agreed to use commercially reasonable efforts to develop and commercialize licensed products, and to achieve certain development milestones, the first within a specified period following the effective date and the other on or before June 2024. Failure to meet our obligations in accordance with the Vanderbilt License Agreement to achieve such milestones may constitute a material breach of contract that entitles Vanderbilt to terminate the Vanderbilt License Agreement.

Under the Vanderbilt License Agreement, we paid an upfront fee of \$13.0 million. We are also obligated to pay Vanderbilt tiered royalties at midsingle-digit percentages on net sales of royalty-bearing products, which are payable on a country-by-country and product-by-product basis until the later of expiration of the last to expire valid claim covering composition of matter in the licensed patents and the tenth anniversary of the first commercial sale of such product in such country. Under the Vanderbilt License Agreement, the royalty payments are subject to reductions on a country-by-country basis for the lack of patent coverage, generic entry and payment obligations for third-party licenses. In addition, we are obligated to pay Vanderbilt a low-double-digit percentage of sublicense income we receive for sublicenses entered into before the achievement of a specified event. We also agreed to pay Vanderbilt payments of up to \$42.0 million upon achievement of specified development milestone events and up to \$380.0 million upon achievement of specified commercial milestone events. As of March 31, 2023, no contingent consideration related to the milestones, royalty or other payment (other than the upfront payment described above) has become payable to Vanderbilt pursuant to the Vanderbilt License Agreement.

The Vanderbilt License Agreement will remain in force, on a country-by-country basis, until the expiration of all royalty payment obligations to Vanderbilt in such country. If we bring a patent challenge against any licensed patents, in addition to paying certain costs associated with the proceeding, Vanderbilt may convert the exclusive licenses to non-exclusive licenses or terminate the Vanderbilt License Agreement. If the licensed patents survive the patent challenge, all payments under the agreement will be increased by a specified amount. We have the right to terminate the Vanderbilt License Agreement at any time by providing Vanderbilt with 90 days' prior notice. Vanderbilt has the right to terminate the Vanderbilt License Agreement if we file for bankruptcy. The Vanderbilt License Agreement will automatically terminate if our insurance coverage lapses and

is not cured within 90 days. Vanderbilt also has the right to terminate if we fail to make payments, breach our diligence obligations or breach any other material term upon 60 days' prior notice.

COVID-19 Impact

While we continue to monitor the impact of the COVID-19 pandemic on our business, the extent of the impact of the pandemic on our business, operations, and clinical development timelines and plans remains uncertain. The COVID-19 pandemic delayed patient enrollment in our Phase 2 clinical trial of NMRA-140, caused difficulties in accessing animal model for our preclinical evaluation of our product candidates and has posed challenges to the reliability of preclinical studies and manufacturing services provided to us by third- party vendors located in China. The ongoing pandemic may further delay our initiation of preclinical studies and clinical trials, interrupt our supply chain, disrupt regulatory activities or have other adverse effects on our business and operations. The extent of the impact of the COVID-19 pandemic on our preclinical studies or clinical trials will depend on future developments, which are uncertain and cannot be predicted with confidence.

In response to the COVID-19 pandemic, we have implemented measures intended to help minimize our risk of exposure to the virus for our employees, including policies that allow our employees to work remotely. Certain third-party service providers have also experienced shutdowns or other business disruptions. The extent to which the COVID-19 pandemic may continue to affect our business, operations and development timelines and plans, including the resulting impact on expenditures and capital needs, remains uncertain.

The COVID-19 pandemic has also caused significant volatility in public equity markets and disruptions globally that could adversely affect the economies and financial markets, resulting in an economic downturn that could affect our financing prospects.

For additional details regarding the COVID-19 pandemic's impact on our business, operations and prospects, see the section titled "Risk Factors."

Components of Operating Results

Operating Expenses

Research and Development

Research and development expenses consist of external and internal expenses, and primarily relate to our discovery efforts and development of our precision neuroscience approach, programs, and product candidates. We account for acquired in-process research and development expenses from our strategic acquisitions, which accounts for a significant portion of our operating expenses, separately from research and development expenses.

External research and development expenses include, among others, amounts incurred with contract research organizations (CROs), contract manufacturing organizations (CMOs), preclinical testing organizations and other vendors that conduct research and development activities on our behalf. Internal research and development expenses include, among others, personnel-related costs, including salaries, benefits and stock-based compensation for employees engaged in research and development functions, laboratory supplies and other non-capital equipment utilized for in-house research, software development costs and allocated expenses including facilities costs and depreciation and amortization.

Because we are working on multiple research and development programs at any one time, we track our external expenses by the stage of program, clinical or preclinical. However, our internal expenses, including unallocated costs, employees and infrastructure are not directly tied to any one program and are deployed across multiple programs. As such, we do not track internal expenses on a specific program basis.

We expense research and development costs as incurred. Amounts recorded for external goods or services incurred for research and development activities that have not yet been invoiced are included in accrued liabilities in our consolidated balance sheets and often represent estimates. We estimate accrued expenses and the related research and development expense based on the level of services performed but not yet invoiced pursuant to agreements established with our service providers, according to the progress of preclinical studies, clinical trials or related activities, and discussions with applicable personnel and service providers as to the progress or state of consummation of goods and service. Payments for these activities are based on the terms of the individual agreements, which may differ from the pattern of costs incurred, and are reflected in our consolidated financial statements as prepaid expenses or other current assets or accrued liabilities. Nonrefundable advance payments that we make for goods or services to be received in the future for use in research and development activities are recorded as prepaid expenses. Such amounts are recognized as an expense as the goods are delivered or the related services are performed, or until it is no longer expected that the goods will be delivered, or the services rendered.

We expect our research and development expenses to increase substantially for the foreseeable future as we incur costs to further develop our precision neuroscience approach and advance our programs and product candidates through clinical development and pursue regulatory approval of our product candidates. The process of conducting the necessary clinical and preclinical research to obtain regulatory approval is costly and time-consuming, and the successful development of our product candidates is highly uncertain. As a result of the uncertainties discussed below, we are unable to determine the duration and completion costs of our research and development projects or when and to what extent we will generate revenue from the commercialization and sale of our product candidates.

Our research and development expenses may vary significantly based on factors such as:

- per patient trial costs;
- the number of trials required for approval;
- the number of sites included in the trials;
- the countries in which the trials are conducted;
- the length of time required to enroll eligible patients;
- the number of patients that participate in the trials;
- the drop-out or discontinuation rates of patients;
- potential additional safety monitoring requested by regulatory agencies;
- the duration of patient participation in the trials and follow-up;
- the cost and timing of manufacturing our product candidates;
- the phase of development of our product candidates;
- the efficacy and safety profile of our product candidates;
- the number and scope of preclinical and IND-enabling studies;
- the effectiveness of our precision neuroscience approach at identifying target patient populations and utilizing the approach to enrich our patient population in our clinical trials;
- employee-related costs for personnel engaged in the design, development, testing and enhancement of our precision neuroscience related technology;
- the extent to which we establish additional collaboration or license agreements;
- whether we choose to partner any of our product candidates and the terms of such partnership; and
- the impact of general economic conditions, such as rising inflation and increasing interest rates.

A change in the outcome of any of these variables with respect to the development of any of our product candidates could significantly change the costs and timing associated with the development of that product candidate. We may never succeed in obtaining regulatory approval for any of our product candidates. We may obtain unexpected results from our preclinical studies and future clinical trials.

Acquired In-Process Research and Development

Acquired in-process research and development expenses consist of existing research and development projects at the time of the acquisition. Projects that qualify as IPR&D assets represent those that have not yet reached technological feasibility and have no alternative future use. Our acquisitions of assets have all included IPR&D assets that had not yet reached technological feasibility and had no alternative future use, which resulted in a write-off of these IPR&D assets to acquired in-process research and development expenses in our consolidated statement of operations and comprehensive loss.

General and Administrative

General and administrative expenses include, among others, personnel-related costs, including salaries, benefits, and stock-based compensation for our employees in executive, finance, and other administrative functions, legal fees, professional fees incurred for accounting, audit, and tax services, recruiting costs, and other allocated expenses, including facilities costs and depreciation and amortization not included in research and development expenses. Legal fees are included within general and administrative expenses and are related to corporate and intellectual property related matters.

We expect our general and administrative expenses to increase substantially in the foreseeable future as we continue to support our research and development activities, grow our business and, if any of our product candidates receive marketing approval, commence commercialization activities. We also anticipate incurring additional expenses associated with operating as a public company, including increased expenses related to audit, legal, regulatory, and tax-related services associated with maintaining compliance with the rules and regulations of the SEC and standards applicable to companies listed on a national securities exchange, additional insurance expenses, investor relations activities and other administrative and professional services.

Other Income (Expense)

Interest Income

Interest income consists of interest earned on our cash equivalents and marketable securities.

Other Income (Expense), Net

Other income (expense), net consists primarily of changes in the fair value of our convertible preferred stock warrant liability prior to settlement in 2022.

Results of Operations

For the Three Months Ended March 31, 2022 and 2023

The following table summarizes our result of operations for the periods presented:

		nths Ended <u>ch 31,</u> 2023 (in thousands)	Change
Operating expenses:			
Research and development	\$ 22,149	\$ 29,485	\$ 7,336
Acquired in-process research and development	13,000		(13,000)
General and administrative	8,087	9,683	1,596
Total operating expenses	43,236	39,168	(4,068)
Loss from operations	(43,236)	(39,168)	4,068
Other income (expense):			
Interest income	86	3,569	3,483
Other income (expense), net	108	(26)	(134)
Total other income	194	3,543	3,349
Net loss	\$(43,042)	\$(35,625)	\$ 7,417

Research and Development Expenses

The following table summarizes our research and development expenses by program for the periods presented:

	Marc 2022	Three Months Ended March 31, 2022 2023 (in thousands)		
Direct external program expenses:				
NMRA-140 program	\$ 3,145	\$ 2,494	\$ (651)	
NMRA-511 program	22	1,734	1,712	
Preclinical programs	4,083	5,478	1,395	
Internal and unallocated expenses:				
Personnel-related costs	6,333	8,300	1,967	
Other costs	8,566	11,479	2,913	
Total research and development expenses	\$22,149	\$29,485	\$7,336	

Research and development expenses increased by \$7.3 million, or 33%, from \$22.1 million for the three months ended March 31, 2022 to \$29.5 million for three months ended March 31, 2023 as we ramped up our clinical and preclinical programs. Direct external program expenses increased by \$2.5 million, of which \$1.7 million was attributable to NMRA-511 primarily due to increased contract manufacturing activities in preparation for our Phase 1b clinical trial and \$1.4 million was attributable to increased research and development activities related to our NMRA-M4R preclinical program, which were partially offset by \$0.7 million lower costs related to NMRA-140 mainly as a result of our Phase 2 clinical trial coming to an end in late 2022. Internal and unallocated expenses increased by \$4.9 million, of which \$2.0 million was attributable to personnel-related costs as we grew our headcount. The remaining increase was mainly driven by a \$1.8 million increase in contracted research and consulting activities, mainly due to higher activities under the research and collaboration agreements with Amgen, a \$0.7 million increase in facilities-related costs mainly due to the sublease of additional premises in August 2022 and a \$0.3 million increase in software and technology related expenses.

Acquired In-Process Research and Development Expenses

Acquired in-process research and development expenses were \$13.0 million for three months ended March 31, 2022, which consisted of costs to acquire rights to IPR&D assets upon the execution of our in-license from Vanderbilt in 2022, as these assets had not yet reached technological feasibility and had no alternative future use. There were no similar expenses for the three months ended March 31, 2023.

General and Administrative Expenses

General and administrative expenses increased by \$1.6 million, or 20%, from \$8.1 million for the three months ended March 31, 2022 to \$9.7 million for the three months ended March 31, 2023 as we continued to expand our administrative functions to support our business. The increase was primarily attributable to higher legal and other professional services of \$1.0 million, an increase of \$0.1 million in personnel-related costs and an increase of \$0.3 million in other expenses that were individually immaterial.

Interest Income

Interest income increased by \$3.5 million from \$0.1 million for the three months ended March 31, 2022 to \$3.6 million for the three months ended March 31, 2023, which was attributable to interest earned on our cash equivalents and marketable securities.

Other Income (Expense), Net

Other income (expense), net was \$0.1 million income for the three months ended March 31, 2022, which was primarily attributable to the change in fair value of our convertible preferred stock warrant liability. Other income (expense), net was not material for the three months ended March 31, 2023.

For the Years Ended December 31, 2021 and 2022

The following table summarizes our result of operations for the periods presented:

	Year Decem		
	2021	2022	Change
		(in thousands)	
Operating expenses:			
Research and development	\$ 55,776	\$ 91,749	\$ 35,973
Acquired in-process research and development	157,000	13,000	(144,000)
General and administrative	24,547	31,121	6,574
Total operating expenses	237,323	135,870	(101,453)
Loss from operations	(237,323)	(135,870)	101,453
Other income (expense):			
Interest income	—	4,561	4,561
Other income (expense), net	11	405	394
Total other income	11	4,966	4,955
Net loss	\$(237,312)	\$(130,904)	\$ 106,408

Research and Development Expenses

The following table summarizes our research and development expenses by program for the periods presented:

		Year Ended December 31, 2021 2022 (in thousands)		
Direct external program expenses:		(
NMRA-140 program	\$13,583	\$ 9,685	\$ (3,898)	
NMRA-511 program	1,894	860	(1,034)	
Preclinical programs	13,100	16,198	3,098	
Internal and unallocated expenses:				
Personnel-related costs	19,452	27,445	7,993	
Other costs	7,747	37,561	29,814	
Total research and development expenses	\$55,776	\$91,749	\$35,973	

Research and development expenses increased by \$36.0 million, or 64%, from \$55.8 million for the year ended December 31, 2021 to \$91.7 million for the year ended December 31, 2022 as we ramped up our preclinical programs and discovery activities. Direct external program expenses decreased by \$1.8 million which was attributable to lower CRO costs of \$3.3 million mainly due to the completion of our Phase 2 trial of NMRA-140 in June 2022, partially offset by an increase in other external research and development costs of \$1.5 million. Internal and unallocated expenses increased by \$37.8 million, of which \$8.0 million was attributable to personnel-related costs as we grew our headcount and \$29.8 million attributable to other costs, which was driven by a \$26.1 million increase in contracted research and consulting activities, mainly due to higher activities under the research and collaboration agreements with Amgen and Vanderbilt, a \$1.9 million increase in facilities-related costs mainly due to the sublease of additional premises in 2022, a \$0.8 million increase in professional services and a \$0.4 million increase in laboratory supplies.

Acquired In-Process Research and Development Expenses

Acquired in-process research and development expenses were \$157.0 million and \$13.0 million for the years ended December 31, 2021 and 2022, respectively, which consisted of costs to acquire rights to IPR&D assets upon the execution of our in-licenses from Amgen in 2021 and our in-license from Vanderbilt in 2022, as these assets had not yet reached technological feasibility and had no alternative future use.

General and Administrative Expenses

General and administrative expenses increased by \$6.6 million, or 27%, from \$24.5 million for the year ended December 31, 2021 to \$31.1 million for the year ended December 31, 2022 as we continued to expand our administrative functions to support our business. The increase was primarily attributable to an increase of \$6.6 million in personnel-related costs, including an increase of \$2.2 million in stock-based compensation, as we grew our headcount.

Interest Income

Interest income was \$4.6 million for the year ended December 31, 2022, which was attributable to interest earned on our cash equivalents and marketable securities.

Other Income (Expense), Net

Other income (expense), net was \$11 thousand and \$0.4 million for the year ended December 31, 2021 and 2022, respectively, which was primarily attributable to fluctuations in the fair value of our convertible preferred

stock warrant liability resulting from changes to the underlying assumptions with respect to expected term and volatility.

Unaudited Pro Forma Net Loss Per Share Information

Immediately prior to the completion of this offering, all outstanding shares of our convertible preferred stock will convert into shares of our common stock. The unaudited pro forma basic and diluted net loss per common share for the year ended December 31, 2022 and three months ended March 31, 2023 was computed using the weighted-average number of shares of common stock outstanding, including the pro forma effect of the conversion of all outstanding shares of convertible preferred stock into shares of common stock, as if such conversion had occurred at January 1, 2022 and 2023, respectively, irrespective of when the convertible preferred stock was issued. Pro forma net loss per share does not include the shares expected to be sold in this offering.

The following table provides the computation of unaudited pro forma basic and diluted net loss per share for the period presented:

	Year Ended December 31, 2022 (in thousands except		Ma	Months Ended rch 31, 2023 re amounts)
Numerator:				·
Net loss	\$	(130,904)	\$	(35,625)
Denominator:				
Weighted-average shares outstanding				
Pro forma weighted-average shares outstanding, basic and diluted				
Pro forma net loss per share basic and diluted	\$			

Liquidity and Capital Resources

Sources of Liquidity

As of March 31, 2023, we had \$363.8 million of cash, cash equivalents and marketable securities. We have primarily funded our operations with the net proceeds from the sale and issuance of our convertible preferred stock and convertible promissory notes. From inception through March 31, 2023, we have raised aggregate cash proceeds of over \$600 million, including from the sale of convertible preferred stock and borrowings pursuant to convertible promissory notes and cash acquired in our acquisitions of assets.

During the year ended December 31, 2021, we issued and sold 191,250,000 shares of our Series A-2 convertible preferred stock in additional closings, resulting in aggregate cash proceeds of \$191.3 million. We also issued and sold 100,000,000 shares of our Series A-2 convertible preferred stock in connection with the collaboration and license agreements with Amgen, resulting in cash proceeds of \$100.0 million.

During the year ended December 31, 2022, we issued and sold 74,930,001 shares of our Series B convertible preferred stock, resulting in aggregate cash proceeds of \$112.4 million.

Since our inception, we have not generated any revenue from the sale of products and we have incurred significant net losses and negative cash flows from operations. Our primary use of our capital resources is to fund our operating expenses, which consist primarily of expenditures related to identifying, acquiring, developing, and in-licensing our precision neuroscience approach, programs, and product candidates, and conducting preclinical studies and clinical trials, and to a lesser extent, general and administrative expenditures. We have not yet commercialized any products and we do not expect to generate revenue from sales of any product candidates for a number of years, if ever. We had accumulated deficits of \$467.5 million and \$503.1 million as of December 31, 2022 and March 31, 2023, respectively.

Future Funding Requirements

We expect our expenses and operating losses will increase substantially over the foreseeable future as we continue our research and development efforts, advance our product candidates through clinical and preclinical development, enhance our precision neuroscience approach and programs, expand our product pipeline, seek regulatory approval, prepare for commercialization, as well as hire additional personnel, protect our intellectual property and incur additional costs associated with being a public company. We also expect to increase the size of our administrative function to support the growth of our business. Our net losses may fluctuate significantly from period to period, depending on the factors described below. We are subject to the risks typically related to the development of new products, and we may encounter unforeseen expenses, difficulties, complications, delays, and other unknown factors that may adversely affect our business. The expected increase in expenses will be driven in large part by our ongoing activities, and our future capital requirements will depend on many factors, including:

- the scope, timing, progress, costs and results of discovery, preclinical development and clinical trials for our current or future product candidates;
- the number of clinical trials required for regulatory approval of our current or future product candidates;
- the costs, timing and outcome of regulatory review of any of our current or future product candidates;
- the costs associated with acquiring or licensing additional product candidates, technologies or assets, including the timing and amount of any milestones, royalties or other payments due in connection with our acquisitions and licenses;
- the cost of manufacturing clinical and commercial supplies of our current or future product candidates;
- the costs and timing of preparing, filing and prosecuting patent applications, maintaining and enforcing our intellectual property rights and defending any intellectual property-related claims, including any claims by third parties that we are infringing upon their intellectual property rights;
- the effectiveness of our precision neuroscience approach at identifying target patient populations and utilizing our approach to enrich our patient population in our clinical trials;
- our ability to maintain existing, and establish new, strategic collaborations or other arrangements and the financial terms of any such agreements, including the timing and amount of any future milestone, royalty or other payments due under any such agreement;
- our ability to access additional multimodal patient datasets;
- the costs and timing of future commercialization activities, including manufacturing, marketing, sales and distribution, for any of our product candidates for which we receive marketing approval;
- the revenue, if any, received from commercial sales of our product candidates for which we receive marketing approval;
- expenses to attract, hire and retain skilled personnel;
- the costs of operating as a public company;
- our ability to establish a commercially viable pricing structure and obtain approval for coverage and adequate reimbursement from thirdparty and government payers;
- the effect of macroeconomic trends including inflation and rising interest rates;
- addressing any potential supply chain interruptions or delays, including those related to the COVID-19 pandemic;
- the effect of competing technological and market developments; and
- the extent to which we acquire or invest in business, products and technologies.

Based upon our current operating plan, we believe that our existing cash, cash equivalents and marketable securities will enable us to fund our operating expenses and capital expenditure requirements through at least the

next 12 months from the date of this offering. In addition, based upon our current operating plan, we believe that the net proceeds from this offering together with our existing cash, cash equivalents and marketable securities, will enable us to fund our operating expenses and capital expenditure requirements through at least the next months from the date of this offering. However, we anticipate that we will need to raise additional financing in the future to fund our operations, including the commercialization of any approved product candidates. We have based this estimate on assumptions that may prove to be wrong, and we could utilize our available capital resources sooner than we expect. We may also raise additional financing on an opportunistic basis in the future. We expect to continue to expend significant resources for the foreseeable future.

To complete the development and commercialization of our product candidates, if approved, we will require substantial additional funding. Until such time as we can generate significant revenue from sales of our product candidates, if ever, we expect to finance our operations through public or private equity offerings or debt financings or other capital sources, which may include strategic collaborations or other arrangements with third parties, or other sources of financing. We may not be able to raise additional capital on terms acceptable to us or at all. To the extent that we raise additional capital through the sale of equity or convertible debt securities, the ownership interest of our stockholders will be or could be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect the rights of our common stockholders. Debt financing and preferred equity financing, if available, may involve agreements that include covenants limiting or restricting our ability to take specific actions, including restricting our operations and limiting our ability to incur liens, issue additional debt, pay dividends, repurchase our common stock, make certain investments or engage in merger, consolidation, licensing, or asset sale transactions. If we raise funds through strategic collaborations, partnerships, and other similar arrangements with third parties, we may be required to grant rights to develop and market product candidates that we would otherwise prefer to develop and market ourselves. If we are unable to raise additional capital on acceptable terms when needed, our business, results of operations, and financial condition would be adversely affected.

Our ability to raise additional funds may be adversely impacted by potential worsening global economic conditions and the recent disruptions to, and volatility in, the credit and financial markets in the United States and worldwide resulting from the ongoing COVID-19 pandemic. If we fail to obtain necessary capital when needed on acceptable terms, or at all, it could force us to delay, limit, reduce or terminate our product development programs, future commercialization efforts or other operations. Because of the numerous risks and uncertainties associated with research, product development and commercialization of product candidates, we are unable to predict the timing or amount of our working capital requirements or when or if we will be able to achieve or maintain profitability.

Cash Flows

The following table summarizes our cash flows for the periods presented:

	Three Mor Marc	nths Ended h 31,
	2022	2023
	(in tho	isands)
Net cash (used in) provided by:		
Operating activities	\$ (32,186)	\$ (33,041)
Investing activities	(85,606)	2,817
Financing activities	(351)	101
Net change in cash and cash equivalents and restricted cash	\$ (118,143)	\$ (30,123)

Operating Activities

Net cash used in operating activities for the three months ended March 31, 2022 was \$32.2 million, which consisted of a net loss of \$43.0 million and a change in net operating assets and liabilities of \$4.1 million, which

was partially offset by \$14.9 million in non-cash charges. The change in our net operating assets and liabilities primarily resulted from a decrease of \$10.7 million in accounts payable and accrued liabilities due to the payment of annual bonuses and timing of our accounts payable and a decrease of \$0.2 million in operating lease liabilities, partially offset by a decrease of \$6.9 million in prepaid expenses and other current assets and other assets related to our collaboration with Amgen. The non-cash charges primarily consisted of \$13.0 million of IPR&D assets acquired from Vanderbilt that were expensed to acquired in-process research and development upon acquisition as the assets had not yet reached technological feasibility and had no alternative future use, \$1.7 million of stock-based compensation, \$0.2 million of noncash operating lease expense and \$0.1 million of depreciation and amortization, partially offset by \$0.1 million of change in fair value of convertible preferred stock warrants.

Net cash used in operating activities for the three months ended March 31, 2023 was \$33.0 million, which consisted of a net loss of \$35.6 million, which was partially offset by \$2.3 million in noncash charges and a change in our net operating assets and liabilities of \$0.3 million. The noncash charges primarily consisted of \$2.2 million of stock-based compensation, \$0.8 million of noncash operating lease expense and \$0.2 million of depreciation and amortization, partially offset by \$0.9 million of net accretion of discounts on marketable securities. The change in our net operating assets and liabilities primarily resulted from a decrease of \$7.9 million in prepaid expenses and other current assets related to our collaboration with Amgen, partially offset by a decrease of \$6.7 million in accounts payable and accrued liabilities due to the timing of our accounts payable and a decrease of \$0.8 million in operating lease liabilities.

Investing Activities

Net cash used in investing activities for the three months ended March 31, 2022 was \$85.6 million, which consisted of \$72.4 million of purchases of marketable securities, \$13.0 million of cash used to acquire IPR&D assets from Vanderbilt and \$0.2 million of purchases of property and equipment primarily to support our research and development activities.

Net cash provided by investing activities for the three months ended March 31, 2023 was \$2.8 million, which primarily consisted of \$44.3 million of proceeds from sales and maturities of marketable securities, partially offset by \$41.5 million of purchases of marketable securities.

Financing Activities

Net cash used in financing activities for the three months ended March 31, 2022 was \$0.4 million, which consisted of \$0.5 million of payments for deferred offering costs, partially offset by proceeds of \$0.2 million from exercise of stock options.

Net cash provided by financing activities for the three months ended March 31, 2023 was \$0.1 million, which primarily consisted of \$0.6 million of proceeds from exercise of stock options, partially offset by \$0.5 million of repurchase of unvested early exercised stock options.

The following table summarizes our cash flows for the periods presented:

	 Year Decem		
	 2021		2022
	(in tho	usand	ls)
Net cash (used in) provided by:			
Operating activities	\$ (75,420)	\$	(114,896)
Investing activities	(817)		(168,013)
Financing activities	293,507		115,743
Net change in cash and cash equivalents and restricted cash	\$ 217,270	\$	(167,166)

Operating Activities

Net cash used in operating activities for the year ended December 31, 2021 was \$75.4 million, which consisted of a net loss of \$237.3 million and a change in our net operating assets and liabilities of \$1.0 million, partially offset by \$162.9 million in noncash charges. Changes in our net operating assets and liabilities primarily resulted from an increase of \$3.7 million in other assets and an increase of \$2.3 million in prepaid expense and other current assets related to our quarterly collaboration payment to Amgen and a decrease \$0.8 million in operating lease liabilities, partially offset by an increase of \$5.8 million in accounts payable and accrued liabilities as we grew our operations. The noncash charges primarily consisted of \$157.0 million IPR&D assets acquired from Amgen that were expensed to acquired in-process research and development upon acquisition because the assets had not yet reached technological feasibility and had no alternative future use, \$4.3 million of stock-based compensation, \$1.0 million of noncash operating lease expense and \$0.5 million of depreciation and amortization.

Net cash used in operating activities for the year ended December 31, 2022 was \$114.9 million, which consisted of a net loss of \$130.9 million and a change in our net operating assets and liabilities of \$6.9 million, partially offset by \$10.0 million in noncash charges and \$13.0 million IPR&D assets acquired from Vanderbilt that were expensed to acquired in-process research and development upon acquisition because the assets had not yet reached technological feasibility and had no alternative future use. Our net operating assets and liabilities primarily resulted from a decrease of \$2.9 million in accounts payable and accrued liabilities due to the timing of our accounts payable, an increase of \$2.3 million in prepaid expenses and other current assets and other assets primarily related to our collaboration with Amgen and a decrease of \$1.8 million in operating lease liabilities. The noncash charges primarily consisted of \$8.3 million of stock-based compensation, \$2.1 million of noncash operating lease expense and \$0.6 million of depreciation and amortization, partially offset by \$0.7 million of net accretion of discounts on marketable securities and \$0.6 million in change in fair value of convertible preferred stock warrants.

Investing Activities

Net cash used in investing activities for the year ended December 31, 2021 was \$0.8 million, which consisted of purchases of property and equipment primarily to support our research and development activities.

Net cash used in investing activities for the year ended December 31, 2022 was \$168.0 million, which consisted of \$226.4 million of purchases of marketable securities, \$13.0 million of cash used to acquire IPR&D assets from Vanderbilt and \$0.5 million of purchases of property and equipment primarily to support our research and development activities, partially offset by \$71.9 million in proceeds from maturities of marketable securities.

Financing Activities

Net cash provided by financing activities for the year ended December 31, 2021 was \$293.5 million, which consisted of \$291.2 million of net proceeds from the issuance and sale of shares of our Series A-2 convertible preferred stock, \$2.5 million of proceeds from exercise of stock options and \$1.0 million of proceeds from the issuance and sale of shares of our common stock, partially offset by \$1.1 million of payments for deferred offering costs.

Net cash provided by financing activities for the year ended December 31, 2022 was \$115.7 million, which consisted of \$112.2 million of net proceeds from the issuance and sale of shares of our Series B convertible preferred stock, \$2.7 million of proceeds from exercise of stock options and \$1.6 million of proceeds from exercise of warrants, partially offset by \$0.7 million of payments for deferred offering costs.

Contractual Obligations and Other Commitments

The following table summarizes our contractual obligations and other commitments as of December 31, 2022:

		Payments Due by Period			
	Less than 1 Year	1 to 3 Years	3 to 5 Years	More than 5 Years	Total
			(in thousands)		
Operating lease obligations	\$ 4,030	\$ 5,440	\$ —	\$ —	\$ 9,470
Amgen research and collaboration obligations	25,000	—	—	—	25,000
Total contractual obligations	\$ 29,030	\$ 5,440	\$ —	\$ —	\$ 34,470

Our operating lease obligations relate to our office and laboratory facilities located in Massachusetts and California with noncancelable lease terms expiring between 2023 and 2025.

The table includes amounts due to Amgen under our September 2021 research and collaboration arrangement over the next year totaling \$25.0 million. Such amount will increase to \$37.5 million in the aggregate if certain progress milestones are achieved before the end of next year.

We have entered in a number of acquisitions of assets that are summarized in the subsection titled "Recent Acquisitions of Assets" above. As part of these acquisitions of assets, we are obligated to pay cash and/or stock for future contingent payments that are dependent upon future events, and in some cases, vesting by the recipient of the contingent payment, such as our achievement of certain development, regulatory, and commercial milestones. We have also assumed license arrangements with various third parties, primarily as a result of our acquisitions, and have entered into additional agreements that are summarized in the subsection titled "Strategic License and Research and Collaboration Agreements" above. In accordance with these agreements, we are obligated to pay, among other items, future contingent payments that are dependent upon future events such as our achievement of certain development, regulatory, and commercial milestones royalties, and sublicensing revenue in the future, as applicable. As of March 31, 2023, the timing and likelihood of achieving the milestones and generating future product sales are uncertain and therefore, any related payments are not included in the table above.

In addition, we enter into agreements in the normal course of business with CROs, CMOs and other vendors for research and development services. Such agreements generally provide for termination upon limited written notice. These payments are therefore not included in our contractual obligations table above.

Off-Balance Sheet Arrangements

Since our inception, we did not have, and we do not currently have, any off-balance sheet arrangements as defined in the rules and regulations of the SEC.

Critical Accounting Estimates

Our management's discussion and analysis of the financial condition and results of operations is based on our consolidated financial statements, which have been prepared in accordance with the U.S. generally accepted accounting principles, or GAAP. The preparation of our consolidated financial statements requires us to make estimates and assumptions that affect the reported amounts of assets, liabilities, expenses, and related disclosures. Our estimates are based on historical experience and on various other factors that are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

While our significant accounting policies are described in Note 2 to our audited consolidated financial statements and our unaudited condensed consolidated financial statements included elsewhere in this prospectus, we

believe that the following accounting policies are critical to understanding our historical and future performance, as these policies relate to the more significant areas involving management's judgments and estimates.

Acquisitions

We evaluate mergers, acquisitions and other similar transactions to assess whether the transaction should be accounted for as a business combination or an acquisition of assets. We first identify who is the acquiring entity by determining if the target is a legal entity or a group of assets or liabilities. If control over a legal entity is being evaluated, we also evaluate if the target is a variable interest or voting interest entity. For acquisitions of voting interest entities, we apply a screen test to determine if substantially all of the fair value of the gross assets acquired is concentrated in a single identifiable asset or group of similar identifiable assets. If the screen is met, the transaction is accounted for as an acquisition of assets. If the screen is not met, further determination is required as to whether we have acquired inputs and processes that have the ability to create outputs which would meet the definition of a business. Significant judgment is required in the application of the screen test to determine whether an acquisition is a business combination or an acquisition of assets.

For an acquisition of assets, a cost accumulation model is used to determine the cost of the acquisition. Common stock and convertible preferred stock issued as consideration in an acquisition of assets are generally measured based on the acquisition date fair value of the equity interests issued. We also determine if any components of a transaction should be accounted for as a part of an acquisition of assets and which should be accounted for separately. Direct transaction costs are recognized as part of the cost of an acquisition of assets. We also evaluate which elements of a transaction should be accounted for separately.

The cost of an acquisition of assets, including transaction costs, are allocated to identifiable assets acquired and liabilities assumed based on a relative fair value basis. Goodwill is not recognized in an acquisition of assets. Any difference between the cost of an acquisition of assets and the fair value of the net assets acquired is allocated to the non-monetary identifiable assets based on their relative fair values. Assets acquired as part of an acquisition of assets that are considered to be IPR&D are immediately expensed unless there is an alternative future use in other research and development projects.

In addition to upfront consideration, our acquisition of assets may also include contingent consideration payments to be made for future milestone events or royalties on net sales of future products. We assess whether such contingent consideration is subject to liability classification and fair value measurement or meets the definition of a derivative. Contingent consideration payments in an acquisition of assets not required to be classified as a liability, or are accounted for as derivatives that qualify for a scope exception from derivative accounting, are recognized when the contingency is resolved, and the consideration is paid or becomes payable. Contingent consideration payments required to be classified as a liability, or accounted for as scope exception from derivative accounting, are recorded at fair value on the date of the acquisition and are subsequently remeasured to fair value at each reporting date. At the time a contingent consideration payment is made, we will determine whether the payment should be expensed or capitalized as an intangible asset based on the status of the IPR&D project. Further, any future payments that are contingent upon continued services to us are treated as compensation and are recognized beginning when it is probable such amounts will become payable through the date that the contingency is met.

We classify cash payments related to purchased intangibles in an acquisition of assets, including IPR&D assets, as a cash outflow from investing activities because we expect to generate future income and cash flows from these assets if they can be developed into commercially successful products.

If the target legal entity is determined to be a variable interest entity and not a business, all tangible and intangible assets acquired, including any IPR&D assets but excluding goodwill, and liabilities assumed, including contingent consideration, are recorded at their fair values. If the acquisition is determined to be a business combination, all tangible and intangible assets acquired, including any IPR&D asset, and liabilities assumed, including contingent consideration, are recorded at their fair values. Goodwill is recognized for any

difference between the consideration transferred and our fair value determination. In addition, direct transaction costs in connection with business combinations are expensed as incurred, rather than capitalized.

To date, we have obtained control over, and are considered the accounting acquiror of, all of the entities we have acquired. None of the legal entities we acquired were considered to be variable interest entities, had ever generated revenue, have significant continuing physical facilities or an employee base that will not be integrated into working to support our combined operations, nor did they have any market distribution system, sales force, customers base, long term operating rights or material production techniques or trade names of significance.

Research and Development Expenses and Related Accrued Expenses

We record research and development expenses to operations as incurred. Research and development expenses represent costs incurred by us for the discovery and development of our product candidates and the development of our precision neuroscience technology and include: internal research and development expense, including personnel-related expenses (such as salaries, benefits and noncash stock-based compensation) and other expenses, including laboratory supplies and other non-capital equipment utilized for in-house research, research and consulting expenses, software development costs, license fees and allocated expenses, including facilities costs and depreciation and amortization; external research and development expenses incurred under arrangements with vendors conducting research and development services on our behalf, such as CROs, preclinical testing organizations, or CMOs. Costs to develop our technologies are recorded as research and development expense unless the criteria to be capitalized as internal-use software costs is met.

We have entered into various agreements with CROs and other vendors for clinical, non-clinical and manufacturing services. Payments made prior to the receipt of goods or services to be used in research and development are capitalized and recognized as expense in the period in which the related goods are received or services are realized or consumed. If the costs have been prepaid, this expense reduces the prepaid expenses in the consolidated balance sheets, and if not yet invoiced, the costs are included in accrued liabilities in the consolidated balance sheets. These costs are a significant component of our research and development expenses. We record amortization of prepaid expenses for these costs based on the estimated amount of work completed and in accordance with agreements established with these third parties. Such payments are evaluated for current or noncurrent classification based on when they will be realized. We estimate and record accrued research and development expenses based on the level of services performed but not yet invoiced pursuant to agreements established with our service providers, according to the progress of preclinical studies, clinical trials or related activities, and discussions with applicable personnel and service providers as to the progress or state of consummation of goods and services.

During the course of a clinical trial, the rate of expense recognition is adjusted if actual results differ from our estimates. We make judgments and estimates of accrued expenses as of each balance sheet date in our consolidated financial statements based on the facts and circumstances known at that time. The clinical trial accrual is dependent in part upon the timely and accurate reporting of CROs, CMOs and other third-party vendors. Although we do not expect our estimates to be materially different from amounts actually incurred, our estimates may vary from the actual results. To date, we have not experienced material differences between our accrued expenses and actual expenses.

We have and may continue to enter into license agreements to access and utilize certain technology. We evaluate if the license agreement is an acquisition of an asset or a business. To date, none of our license agreements have been considered to be an acquisition of a business. For acquisitions of assets, the upfront payments to acquire such licenses, as well as any future milestone payments made before product approval, are immediately recognized as acquired in-process research and development expense when due, provided there is no alternative future use of the rights in other research and development projects. These license agreements may also include contingent consideration in the form of cash. We assess whether such contingent consideration is subject to liability classification and fair value measurement or meets the definition of a derivative.

Stock-Based Compensation

We measure and record expense related to all equity awards granted to employees and non-employees, including stock options and restricted stock awards, based on estimated fair values as of their grant dates. For stock-based awards with service conditions only, we recognize expense on a straightline basis over the requisite service period, which is generally the vesting period of the respective award. For awards with performance conditions, we evaluate the probability of achieving the performance conditions at each reporting date. We recognize expense using an accelerated attribution method when it is deemed probable that the performance condition will be met. For awards with both market and service vesting conditions, we recognize expenses using the accelerated attribution method over the derived requisite service period. Stock-based compensation is classified in our consolidated statements of operations and comprehensive loss based on the function to which the related services are provided and is recognized for the portion of awards that have vested. Forfeitures are accounted for as they occur.

The fair value of restricted stock awards is determined on the date of grant based on the estimated fair value of our common stock on that date. The fair value of stock options with service vesting conditions is determined using the Black-Scholes option pricing model, which requires inputs based on certain subjective assumptions. These assumptions include:

- Fair Value of Common Stock— See the subsection titled "-Common Stock Valuations" below.
- *Expected Volatility*—As there is no trading history for our common stock, we have determined expected volatility based on the average historical stock price volatility of comparable publicly traded companies and expect to continue to do so until such time as we have adequate historical data regarding the volatility of our own traded stock price. The comparable companies are chosen based on their similar size, stage in the life cycle or area of therapeutic focus. The historical volatility is calculated based on a period of time commensurate with the expected term assumption.
- *Expected Term*—The expected term of our stock options is estimated using the simplified method for awards that qualify as plain-vanilla stock options. The simplified method calculates the expected term as the average of the time-to-vesting and the contractual life of the stock options.
- *Risk-Free Interest Rate*—We base the risk-free interest rate on the U.S. Treasury yield curve in effect at the time of grant of the award for time periods approximately equal to the expected term of the award.
- *Expected Dividend Yield*—The expected dividend yield is assumed to be zero as we have never paid and have no plans to pay dividends on our common stock in the foreseeable future.

The fair value of stock options with service and market conditions is determined using the Monte Carlo simulation model, which requires inputs based on certain subjective assumptions that determine the probability of satisfying the market condition stipulated in the award to estimate the fair value on the grant date. These assumptions include:

- Fair Value of Common Stock—See the subsection titled "Common Stock Valuations" below.
- *Expected Volatility*—As there is no trading history for our common stock, we have determined expected volatility based on the average historical stock price of comparable publicly traded companies chosen based on their similar size, stage in the life cycle or area of therapeutic focus for a period of time commensurate with the expected term assumption.
- *Derived service periods*—The derived service periods were estimated based on duration of the median path from the grant date to the first time each market condition is expected to be met together with the stated 24- or 36-month vesting period.
- *Risk-free rate*—The risk-free interest rate was based on the U.S. Treasury yield curve in effect at the time of grant for time periods approximately equal to the expected term of the relevant award.

See Note 13 to our audited consolidated financial statements and Note 11 to our unaudited condensed consolidated financial statements included elsewhere in this prospectus for information concerning certain of the

specific assumptions we used in applying the Black-Scholes option pricing model to determine the estimated fair value of our stock options granted in the periods presented. Such assumptions involve inherent uncertainties and the application of significant judgment. As a result, if factors or expected outcomes change and we use significantly different assumptions or estimates, our stock-based compensation expense could be materially different.

The intrinsic value of all outstanding options as of March 31, 2023 was \$ million, based on the assumed initial public offering price of per share, which is the midpoint of the price range set forth on the cover page of this prospectus, of which \$ million is related to vested options and \$ million is related to unvested options.

Common Stock Valuations

As there has been no public market for our common stock to date, the estimated fair value of the common stock underlying our stock options was determined by our board of directors, with input from management, considering our most recently available third-party valuations of common stock and our board of directors' assessment of additional objective and subjective factors that it believed were relevant, and factors that may have changed from the date of the most recent valuation through the date of the grant, which intended all options granted to be exercisable at a price per share not less than the per share fair value of our common stock underlying those options on the date of grant. We believe that our board of directors has the relevant experience and expertise to determine the fair value of our common stock. Prior to our initial public offering, given the absence of a public trading market for our common stock, the valuations of our common stock were determined in accordance with the guidelines outlined in the American Institute of Certified Public Accountants Practice Aid, *Valuation of Privately-Held-Company Equity Securities Issued as Compensation* (Practice Aid). The Practice Aid identifies various available methods for allocating enterprise value across classes and series of capital stock to determine the estimated fair value of common stock at each valuation date. In accordance with the Practice Aid, our board of directors considered the following methods:

- *Current value method* (CVM). Under the CVM, enterprise value is determined based on the balance sheet. This value is then first allocated based on the liquidation preference associated with preferred stock issued as of the valuation date, and then any residual value is assigned to the common stock.
- Option-pricing method (OPM). Under the OPM, shares are valued by creating a series of call options with exercise prices based on the liquidation preferences and conversion terms of each equity class. The estimated fair values of the preferred and common stock are inferred by analyzing these options.
- *Probability-weighted expected return method* (PWERM). The PWERM is a scenario-based analysis that estimates value per share based on the probability-weighted present value of expected future investment returns, considering each of the possible outcomes available to us, as well as the economic and control rights of each share class.

The assumptions we use in the valuation model are based on future expectations combined with management judgment. In the absence of a public trading market, our board of directors with input from management exercised significant judgment and considered numerous objective and subjective factors to determine the fair value of our common stock as of the date of each option grant, including the following factors:

- contemporaneous independent valuations performed by an independent third-party valuation firm;
- the prices of shares of our convertible preferred stock sold to investors in arm's length transactions, and the rights, preferences, and privileges of our convertible preferred stock relative to our common stock;
- our stage of development and material risks related to our business;
- our results of operations and financial position, including our levels of available capital resources;
- progress of our research and development activities;
- progress of our precision neuroscience approach;

- the lack of marketability of our common stock as a private company;
- the status of strategic transactions;
- the hiring of key personnel and the experience of management;
- the likelihood of achieving a liquidity event, such as an initial public offering or a sale of our company, given prevailing market conditions;
- the market performance of comparable publicly traded companies;
- trends and developments in our industry; and
- external market conditions affecting the life sciences and biopharmaceutical industry sectors.

The assumptions underlying these valuations represented our board of directors and management develop best estimates based on application of these approaches and the assumptions underlying these valuations, giving careful consideration to the advice from our third-party valuation expert. Such estimates involve inherent uncertainties and the application of significant judgment. As a result, if factors or expected outcomes change and we use significantly different assumptions or estimates, our equity-based compensation could be materially different.

Following the closing of our initial public offering, our board of directors will determine the fair market value of our common stock based on the closing price as reported on the date of grant on the primary stock exchange on which our common stock is traded.

For our valuations performed prior to August 2021, we determined the OPM method was the most appropriate method for determining the fair value of our common stock based on our stage of development and other relevant factors. For our valuations performed in August 2021 and subsequently, we determined a hybrid method that probability-weighted the OPM and an IPO scenario was the most appropriate method for determining the fair value of our common stock based on our stage of development and other relevant factors.

JOBS Act Accounting Smaller Reporting Company Elections

We are an "emerging growth company," as defined in the JOBS Act. Under the JOBS Act, emerging growth companies can delay adopting new or revised accounting standards issued subsequent to the enactment of the JOBS Act until those standards apply to private companies.

We have elected to use this extended transition period for complying with certain new or revised accounting standards that have different effective dates for public and private companies until the earlier of the date we (i) are no longer an emerging growth company or (ii) affirmatively and irrevocably opt out of the extended transition period provided in the JOBS Act. As a result, our consolidated financial statements may or may not be comparable to companies that comply with new or revised accounting pronouncements as of public companies' effective dates.

We are also a "smaller reporting company," as defined in the Exchange Act. We may continue to be a smaller reporting company even after we are no longer an emerging growth company.

We have elected to take advantage of certain of the scaled disclosures available to smaller reporting companies, and will be able to take advantage of these scaled disclosures for so long as the market value of our voting and non-voting common stock held by non-affiliates is less than \$250.0 million measured on the last business day of our second fiscal quarter, or our annual revenue is less than \$100.0 million during the most recently completed fiscal year and the market value of our voting and non-voting common stock held by non-affiliates is less than \$700.0 million measured on the last business day of our second fiscal quarter.

Quantitative and Qualitative Disclosures About Market Risk

We are exposed to market risks in the ordinary course of our business. These risks primarily include interest rate sensitivities.

Interest Rate Risk

We had cash and cash equivalents of \$210.9 million as of March 31, 2023 that primarily consisted of bank deposits and money market funds deposited with several financial institutions that may exceed the Federal Deposit Insurance Corporation's insurance limits. We also held marketable securities of \$153.0 million as of March 31, 2023. Historical fluctuations in interest rates have not been significant for us and because our investments are primarily short-term in duration we do not believe that a hypothetical 1% change in market interest rates during any of the periods presented would have had a material effect on our consolidated financial statements included elsewhere in this prospectus. We had no outstanding debt as of December 31, 2022 and March 31, 2023.

Recent Accounting Pronouncements

See Note 2 to our audited consolidated financial statements and our unaudited condensed consolidated financial statements included elsewhere in this prospectus for more information about recent accounting pronouncements, the timing of their adoption, and our assessment, to the extent we have made one yet, of their potential impact on our consolidated financial condition or results of operation.

BUSINESS

Our Mission

We are in the midst of a global brain disease crisis that is having a profound and enduring impact on patients, their families and society, and represents one of the greatest medical challenges of our generation. Neuropsychiatric disorders and neurodegenerative diseases affect approximately 1.5 billion individuals globally, are typically chronic and progressive in nature and are a leading cause of disability worldwide, resulting in significant disability and reduced quality of life. It is estimated that since 2019 over \$110 billion has been spent on neuroscience research and development in the United States alone, representing approximately 33% of all disease-specific spending. However, only approximately 12% of all new therapies approved during this time period have been for the treatment of brain diseases. We believe the relative lack of progress and innovation within the broader central nervous system (CNS) landscape is due in large part to the field not advancing novel therapies targeting new mechanisms of action and due to therapeutic development that is focused on broad, heterogeneous patient populations classified by subjective clinical symptoms. The time has come to take a fundamentally different approach to the way treatments for brain diseases are developed and bring forward the next generation of therapies that offer improved treatment outcomes and quality of life for patients.

We founded Neumora to redefine neuroscience drug development by (1) building a diversified neuroscience company at scale with a broad therapeutic pipeline and significant capital resources; (2) focusing on therapeutic candidates with novel mechanisms of action; and (3) leveraging a precision neuroscience approach with the goal of improving our programs' probabilities of success. Our mission is to redefine neuroscience drug development by bringing forward the next generation of novel therapies that offer improved treatment outcomes and quality of life for patients suffering from brain diseases.

Overview

We are a clinical-stage biopharmaceutical company founded to confront the global brain disease crisis by taking a fundamentally different approach to the way treatments for brain diseases are developed. We have rapidly scaled our therapeutic pipeline, which currently consists of seven clinical and preclinical neuroscience programs that target novel mechanisms of action for a broad range of underserved neuropsychiatric disorders and neurodegenerative diseases. Our most advanced product candidate, NMRA-140, is a novel once-daily oral kappa opioid receptor (KOR) antagonist that is being developed for the treatment of major depressive disorder (MDD), which we believe has the potential to provide significant advantages relative to the standard of care, if approved. We are initiating a Phase 3 program for NMRA-140 monotherapy in patients with moderate to severe MDD in

Brain diseases collectively represent one of the largest areas of unmet medical need globally, affecting upwards of 1.5 billion patients. Despite the commercial success of historically approved drugs, the markets for many of the most prevalent brain disorders have been dominated by a single class of drugs, such as serotonin-targeting antidepressants for MDD, leaving patients with a high degree of unmet medical need given the lack of diverse treatment options and mechanisms of action. For example, there are currently over 21 million adults in the United States diagnosed with MDD, 85% of whom either do not receive treatment with a pharmacological agent or fail to achieve remission with first-line selective serotonin reuptake inhibitors (SSRI)/serotonin and norepinephrine reuptake inhibitors (SNRI) and thus progress onto second-line treatment with another SSRI/SNRI. In addition, patients with common neuropsychiatric disorders and neurodegenerative diseases are heterogeneous, presenting diverse symptoms and multiple underlying disease drivers. Despite the inherent heterogeneity of these disorders, patients are generally diagnosed based on broad disease classifications defined by subjective clinical symptoms rather than by specific underlying genetic and biological mechanisms. As a result, clinical development in neuroscience to date has taken a "one-size-fits-all" approach, in contrast to other areas that have employed more of a targeted patient selection approach. From 2011 to 2020, clinical development success rates for new drug candidates that employed patient selection biomarkers were approximately 16% compared to approximately 8% for those without patient selection biomarkers according to BIO; however, clinical success depends on a number of factors and employing a patient selection biomarker approach does not

guarantee that our product candidates will be approved and commercialized. We believe the relative lack of progress and innovation within the broader CNS therapeutic landscape is due in large part to an insufficient degree of focus on novel, potentially more therapeutically relevant targets implicated in CNS diseases and clinical development strategies that often yield inconclusive results due to the inherent heterogeneity known to occur in patient populations classified by broad symptomatic domains.

We founded Neumora to confront these challenges by taking a fundamentally different approach to the way treatments for brain diseases are developed. We are redefining neuroscience drug development by:

- Building a diversified neuroscience company at scale with a broad therapeutic pipeline and significant capital resources: We have
 raised over \$600 million in funding and purpose-built an industry-leading team of company builders and neuroscience drug developers. As
 a result, we have quickly scaled a broad therapeutic pipeline consisting of seven clinical and preclinical programs, which we aim to
 develop to meet unmet medical need across brain health disorders.
- *Focusing on therapeutic candidates with novel mechanisms of action*: We believe one of the key drivers in the lack of progress and innovation within the broader CNS landscape is the failure to advance sufficient novel therapies targeting new mechanisms of action. We have built a pipeline of seven clinical and preclinical programs that target novel mechanisms of action with the potential to provide new treatment options to patients that alleviate unmet medical need.
- *Leveraging a precision neuroscience approach with the goal of improving our programs' probability of success*: To better understand the biological drivers of heterogeneous brain diseases and to identify targeted patient populations of interest, we have built our Precision Toolbox, which integrates a suite of translational and clinical tools with proprietary machine learning algorithms and methods, and incorporates insights from analyzing longitudinal, multimodal patient data. We have onboarded a vast library of approximately 1 petabyte of longitudinal, multimodal patient data consisting of genetic, imaging, electroencephalogram (EEG), digital and clinical data across a range of neuropsychiatric disorders and neurodegenerative diseases. We believe our Precision Toolbox will enable us to execute potential strategies to help identify biomarkers, enroll the right patients in our clinical studies, optimize clinical trial designs and expand life cycle management opportunities; ultimately, supporting our goal of increasing the likelihood of matching the right drug for the right patient.

Our Pipeline

We have rapidly scaled our therapeutic pipeline through both business development activities and internal discovery capabilities. Our therapeutic pipeline is comprised of programs for neuropsychiatric disorders and neurodegenerative diseases, each targeting a novel mechanism of action that, where beneficial, can leverage our precision neuroscience approach.

As shown in the table below, our current pipeline comprises seven programs, two of which are in clinical development and five of which are in preclinical development. We expect to continue to rapidly progress the development of our pipeline with the planned initiation of up to clinical trials across our programs over the next 12 to 18 months.

PROGRAM Target/Mechanism	INDICATION US Prevalence	Preclinical	Phase 1	Phase 2	Phase 3
Neuropsychiatry P	rograms				
		Study 301 (Mon	otherapy, U.S.)		
NMRA-140 KOR Antagonist	Major Depressive Disorder 21M	Study 302 & 303	3 (Monotherapy, 2 Gio	obal Studies)	
		Study 501 (Ope	n-Label Extension)		
NMRA-511 V1aR Antagonist	Neuropsychiatric Disorders NA				
NMRA-M4R M4R Modulator	Schizophrenia 3M				
NMRA-NMDA NMDA Modulator	Schizophrenia 3M				
Neurodegeneration	n Programs				
NMRA-CK18 CK18 Inhibitor	ALS 25K				
NMRA-NLRP3 NLRP3 Inhibitor	Parkinson's Disease				
NMRA-GCASE GCASE Activator	Parkinson's Disease				

Figure 3: Neumora pipeline

NMRA-140 is a novel, oral once-daily, selective KOR antagonist in development for the monotherapy treatment of MDD, which is a chronic neuropsychiatric disorder with significant unmet medical need. There are currently over 21 million adults in the United States diagnosed with MDD, 85% of whom either do not receive treatment with a pharmacological agent or fail to achieve remission with first-line SSRI/SNRI. We are developing NMRA-140 as a once-daily oral medication designed to modulate the dopamine and reward processing pathways that play an important role in the regulation of mood, cognition, reward and behavior. The KOR/dynorphin system is well-characterized and known to modulate depression, anhedonia and anxiety, and represents a novel approach to treating MDD and other major neuropsychiatric disorders. Following the completion of an End-of-Phase 2 meeting with the U.S. Food & Drug Administration (FDA) in June 2023, we are initiating a Phase 3 program for NMRA-140 monotherapy in patients with moderate to severe MDD in In addition, we intend to explore and evaluate the potential of NMRA-140 as treatment for other neuropsychiatric populations beyond MDD, such as schizophrenia, post-traumatic stress disorder, generalized anxiety disorder, bipolar disorder and others.

NMRA-511 is an investigational antagonist of the vasopressin 1a receptor (V1aR). Vasopressin plays a role in the regulation of aggression, affiliation, stress and anxiety response. Based on our preclinical findings in non-human primates as well as preclinical and clinical results from third parties, we believe V1aR has the potential to be a promising novel target for multiple neuropsychiatric disorders and neurodegenerative diseases across the spectrum of anxiety, aggression and stress. We had previously completed a Phase 1 single ascending dose (SAD)/multiple ascending dose (MAD) clinical trial of NMRA-511 at doses up to 10 mg, and we are conducting an additional Phase 1 MAD clinical trial of NMRA-511 at higher doses up to 20 mg. We plan to use

the Phase 1 MAD clinical trial to guide dose selection for future development. We plan to advance clinical development for the treatment of agitation associated with dementia due to Alzheimer's disease.

NMRA-M4R is a positive allosteric modulator of the M4 muscarinic receptor (M4R) for the treatment of schizophrenia and other neuropsychiatric disorders. Our M4R-positive allosteric modulator program is designed to be highly selective for the M4 receptor subtype of the muscarinic receptor family. Muscarinic receptor-targeting compounds have demonstrated clinical validation in third-party trials as an approach to treating schizophrenia, with the potential to treat other neuropsychiatric disorders such as dementia-related psychosis and cognitive disorders, where innovation has been stagnant for decades. Selective M4R-positive allosteric modulators have the potential to deliver the antipsychotic efficacy associated with targeting this receptor subtype, while minimizing the side effects associated with current antipsychotics and other non-selective muscarinic agonists. Our NMRA-M4R program is in preclinical development. We exclusively licensed certain intellectual property rights related to NMRA-M4R from Vanderbilt University.

NMRA-NMDA is an NMDA positive allosteric modulator program designed to target the NMDA receptor that we intend to develop for the treatment of schizophrenia. Recent breakthroughs in third-party psychiatric genetic studies have provided genetic evidence in support of the role of NMDA receptors in schizophrenia. Further, human studies suggest NMDA receptor antagonists (such as ketamine) lead to a schizophrenia-like syndrome, which provides compelling evidence for this target. Our NMRA-NMDA program was internally discovered and is in preclinical development.

*NMRA-CK1*d is a CK1d inhibitor program that we intend to develop for ALS. CK1d is a kinase that has been identified as a proximal upstream regulator of TDP-43 phosphorylation, a key driver of TDP-43-driven pathology in approximately 95% of sporadic ALS cases. There is also genetic evidence supporting the role of TDP-43 in ALS. Our NMRA-CK1d program is in preclinical development. We exclusively licensed certain intellectual property rights related to NMRA-CK1d from Amgen.

NMRA-NLRP3 is an inhibitor program focused on targeting the NLRP3 inflammasome for the treatment of certain neurodegenerative conditions. The inflammasome is a critical part of the innate immune system that responds to pathogens and cellular damage and is implicated in brain disorders, such as PD, as well as immune disorders. The NLRP3 inflammasome can be activated in brain microglia, a type of cell in the brain, and other cell types by a range of proteins linked to neurodegeneration, including alpha-synuclein (a neuronal protein that regulates synaptic vesicle trafficking), which suggests the inflammasome may have a mechanistic role in PD. Our NMRA-NLRP3 program was internally discovered and is in preclinical development.

NMRA-GCase is an activator program focused on elevating the activity of the enzyme glucocerebrocidase (GCase) that we are developing for the treatment of PD. Mutations in the GBA gene, which codes for the enzyme GCase, are the single largest genetic risk factor for PD. GCase deficiencies lead to storage disorders of the lysosome, which plays an important role in maintaining cellular balance, and a group of patients with PD has lysosomal dysfunction. Our NMRA-GCase program is in preclinical development. We exclusively licensed certain intellectual property rights related to NMRA-GCase from Amgen.

Our Team

Our people are the backbone of the company and our most important asset. We have assembled a diverse team of experienced company builders and leading neuroscience drug developers, complemented by world-class scientific and technical advisors and an experienced board of directors and syndicate of investors. This group shares a long-term commitment to execute our mission to redefine neuroscience drug development by bringing forward the next generation of novel therapies that offer improved treatment outcomes and quality of life for patients suffering from brain diseases.

• *Experienced Company Builders*. We have multiple individuals with experience building disruptive biopharmaceutical companies. Our Co-Founder, Chief Executive Officer and Chairman of our board of

directors, Paul Berns has over 30 years of drug development and commercialization experience and was previously the President, Chief Executive Officer and Chairman of the Board of Anacor Pharmaceuticals before it was acquired by Pfizer in 2016. Carol Suh, our Co-Founder and Chief Operating Officer, has co-founded and built multiple biotechnology companies in her role as a Partner of ARCH Venture Partners. Dr. Joshua Pinto, our Chief Financial Officer, spent a decade advising leading biotechnology companies across their life cycles from his career as an investment banker after completing his Ph.D. in neuroscience and working in research.

- Leading Neuroscience Drug Developers. Our scientific leadership team includes world-class physicians and scientists with extensive neuroscience drug development experience. Dr. Michael Gold, our Chief Medical Officer, previously served as Vice President of Neuroscience Development at AbbVie where he was involved in the successful approval of CNS therapies including the recent approval of VRAYLAR as an adjunctive treatment for MDD. Dr. Bill Aurora, our Chief Development Officer, previously served as Chief Scientific Affairs Officer of Dermira, Inc. and held medical and scientific affairs leadership roles at Neurocrine Biosciences, Merck Research Laboratories and Amgen. Dr. Nick Brandon, our Chief Scientific Officer, previously served as Chief Scientist of AstraZeneca's Neuroscience Innovative Medicines and Early Development Division, as well as Head of Psychiatry and Behavioral Disorders for a period that bridged the Wyeth and Pfizer Neuroscience organizations.
- *Scientific and Technical Advisory Boards*. We have built a scientific advisory board with research and drug development expertise spanning molecular genetics, neurobiology, molecular cell biology, neural circuitry, medicinal chemistry, translational medicine and the development of statistical methodologies across a broad spectrum of neuropsychiatric disorders and neurodegenerative diseases. We have also established a technical advisory board with expertise that includes computational and cognitive neuroscience, brain-behavior mapping, the identification of biomarkers and treatment response, and the application of data science, AI/ML and digital tools to the development and delivery of therapeutics.
- **Board of Directors and Investors with Shared Long-Term Vision**. Our board of directors is comprised of renowned company builders, operators, leaders, scientists and drug developers with experience across a diverse array of companies. Together with our investors, who have supported us with over \$600 million in funding, we share a long-term vision to confront the global brain disease crisis at scale.

Our Strategy

We founded our company to confront the global brain disease crisis by taking a fundamentally different approach to the way treatments for brain diseases are developed across neuropsychiatric disorders and neurodegenerative diseases. Our mission is to redefine neuroscience drug development by bringing forward the next generation of novel therapies that offer improved treatment outcomes and quality of life for patients suffering from brain diseases. The key components of our business strategy to deliver on our mission are to:

- Build a broad industry-leading pipeline of novel neuroscience therapeutics. We have rapidly scaled our therapeutic pipeline that includes seven programs across late-stage clinical and preclinical development though business development efforts and our internal discovery capabilities. Our most advanced program, NMRA-140 is a novel once-daily oral KOR antagonist that is being developed for the treatment of MDD, which we believe has the potential to provide significant advantages relative to the standard of care, if approved. We are initiating the Phase 3 program for NMRA-140 monotherapy in patients with moderate to severe MDD in . Beyond NMRA-140, we are currently advancing a pipeline of seven clinical and preclinical therapeutic candidates for neuropsychiatric disorders and neurodegenerative diseases, each targeting a novel mechanism of action.
 - *Advance NMRA-140 towards commercialization*. Based on the results from the Phase 2 clinical trial, we believe NMRA-140 has the potential to provide significant advantages relative to the standard of care, if approved. We are initiating the Phase 3 program for NMRA-140 monotherapy in patients with moderate to severe MDD in and, if the trials are successful, to be prepared to commercialize

NMRA-140. There are currently over 21 million adults in the United States diagnosed with MDD, 85% of whom either do not receive treatment with a pharmacological agent or fail to achieve remission with first-line SSRI/SNRI. In addition, given the novel mechanism of action in the well-characterized KOR/dynorphin system we intend to explore and evaluate the potential of NMRA-140 for the treatment of other neuropsychiatric populations such as schizophrenia, post-traumatic stress disorder, generalized anxiety disorder, bipolar disorder and others.

- *Strategically allocate capital across our pipeline to achieve our mission*. Our therapeutic pipeline is supported by significant capital resources enabling us to build a broad range of novel targets to potentially bring forward the next generation of therapies. We will look to efficiently establish proof-of-concept for our programs by leveraging our precision neuroscience approach and clinical strategies which we believe will inform late-stage development and have the potential to ultimately increase the probability of
- Leverage our Precision Toolbox enhance our development efforts. To better understand the biological drivers of heterogeneous brain diseases and to identify targeted patient populations of interest, we have integrated a suite of proprietary data science and translational neuroscience tools to enhance our development efforts. We believe the insights into patient populations derived from our precision neuroscience tools provide us the potential to identify patient populations most responsive to our novel mechanisms of action to inform our preclinical and clinical development strategy. We believe that insights from our Precision Toolbox will enable us to execute potential strategies to help identify biomarkers that can be used to optimize clinical trial designs and expand life cycle management opportunities; ultimately, supporting our goal of increasing the likelihood of matching the right drug for the right patient.
 - *Capitalize upon our IP position to realize the full value of our programs that target novel mechanisms of action*. Our strategy to focus on developing programs that target novel mechanisms of action is supported by long-dated composition of matter patents for each of our programs, a differentiating factor from other late-stage clinical programs. For example, our most advanced program candidate NMRA-140 has composition of matter protection through 2038 and we expect to have base patent term extension exclusivity until 2041. Additionally, we believe our intellectual property estate for each program provides sufficient IP runway to enable clinical trials in multiple indications. We believe our strategy of pursuing novel targeted mechanisms of action will enable us to maintain and pursue composition of matter protection providing us a strategic advantage to support the full value crystallization of our product candidates.

Industry Background and Historical Challenges

The market for therapeutics for brain diseases is large, with over 1.5 billion people suffering globally from neurological conditions accounting for more than \$80 billion in worldwide revenue in 2020. Prior generations of approved treatments for neuropsychiatric disorders have experienced substantial commercial success, achieving multi-billion annual sales, including products such as ABILIFY, LATUDA, RISPERDAL, SEROQUEL, and ZYPREXA.

Despite the large market and commercial success of historically approved drugs, the markets for many of the most prevalent brain disorders have been dominated by single classes of drugs, such as serotonin-targeting antidepressants for MDD, dopamine and serotonin-targeting atypical antipsychotics for schizophrenia (SCZ), dopamine-targeting medicines for PD, and medicines targeting beta-amyloid for Alzheimer's disease. This paucity of innovation in therapeutic targets has led to a lack of diversity in treatment options, leading to underserved patient populations due to the poor efficacy and side-effect profiles of existing therapeutics. In addition, patients with common neuropsychiatric disorders and neurodegenerative diseases are heterogeneous, presenting diverse symptoms and multiple underlying disease drivers. Despite the inherent heterogeneity of these disorders, patients are generally diagnosed based on broad disease classifications defined by subjective clinical symptoms rather than by specific underlying genetic and biological mechanisms. As a result, clinical development in neuroscience to date has taken a "one-size-fits-all" approach, in contrast to other areas that have

employed more of a targeted patient selection approach. For example, depression is an underserved neuropsychiatric disorder that is estimated to affect 5% of the global adult population, approximately 85% of whom either do not receive treatment with a pharmacological agent or fail to achieve remission with first-line SSRI/SNRI. As another example, PD is the world's most common neurodegenerative movement disorder and fastest growing neurological disorder, yet current treatments do not target the underlying cause of the disease and only address a subset of symptoms, such as motor impairment, dementia or psychosis.

The CNS field has faced challenges in terms of new drug approvals, with only 12% of all new therapies approved since 2019 being for the treatment of brain diseases despite significant investment. It is estimated that since 2019 over \$110 billion has been spent on neuroscience research and development during this period in the United States alone, representing approximately 33% of all disease-specific spending. Additionally, from 2011 to 2020, clinical development success rates for new drug candidates that employed patient selection biomarkers were approximately 16% compared to approximately 8% for those without patient selection biomarkers according to BIO; however, employing a patient selection biomarker approach does not guarantee that our product candidates will be approved and commercialized. The time has come to take a differentiated approach to the way treatments for brain diseases are developed and bring forward the next generation of therapies that offer improved treatment outcomes and quality of life for patients.

Neumora's Approach

We founded Neumora with the goal of building the leading global brain health company to confront the global brain disease crisis by taking a fundamentally different approach to the way treatments for brain diseases are developed. To achieve this, our mission is to redefine neuroscience drug development by bringing forward the next generation of novel therapies that offer improved treatment outcomes and quality of life for patients with brain diseases by:

Building a Diversified Neuroscience Company At Scale with a Broad Therapeutic Pipeline and Significant Capital Resources

We have raised over \$600 million in funding and are supported by a set of leading investors that share our long-term vision to confront the global brain disease crisis at scale. We have leveraged our significant capital resources to quickly scale a broad therapeutic pipeline consisting of seven clinical and preclinical programs and assemble a team of leading company builders and neuroscience drug developers. We believe our scale is a strategic advantage that enables us to think beyond a single program and envision how we can treat the billions of patients suffering from brain disease globally.

Focusing on Therapeutic Candidates with Novel Mechanisms of Action

We believe one of the key drivers in the lack of progress and innovation within the broader CNS landscape is the failure to advance sufficient new therapies targeting novel mechanisms of action. Targeting novel mechanisms of action beyond currently approved agents has the potential to provide differentiated efficacy and safety profile, which could provide physicians with new treatment options and patients with better outcomes. All seven of our clinical and preclinical programs target novel mechanisms of action that are differentiated relative to currently approved therapies.

Leveraging a Precision Neuroscience Approach With the Goal of Improving our Programs' Probability of Success

Precision neuroscience involves the development of therapies that leverage the biological basis of disease to match the right patients to the right therapeutics with the goal of improving patient outcomes. To better understand the biological drivers of heterogeneous brain diseases and to identify targeted patient populations of interest, our precision neuroscience approach is powered by our Precision Toolbox, which integrates a suite of

translational and clinical tools with proprietary machine learning algorithms and methods, as well as longitudinal, multimodal patient data. We have onboarded a vast library of approximately 1 petabyte of longitudinal, multimodal patient data consisting of genetic, imaging, EEG, digital and clinical data across a range of neuropsychiatric disorders and neurodegenerative diseases, in order to identify targeted patient populations of interest. We believe our Precision Toolbox will enable us to execute potential strategies to help identify biomarkers that can be used to optimize clinical trial designs and expand life cycle management opportunities; ultimately, supporting our goal of increasing the likelihood of matching the right drug for the right patient.

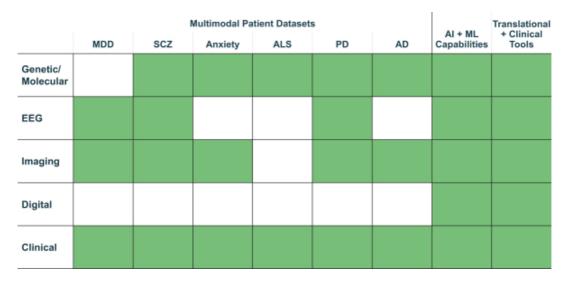


Figure 4: Precision Toolbox



Our Pipeline

We have rapidly scaled our pipeline through both internal discovery capabilities and business development activities. Our therapeutic pipeline is comprised of programs for neuropsychiatric disorders and neurodegenerative diseases, each targeting a novel mechanism of action that, where beneficial, can leverage our precision neuroscience approach. As shown in the table below, our current pipeline comprises seven programs, two of which are in clinical development and five of which are in preclinical development. We expect to continue to rapidly progress the development of our pipeline with the planned initiation of up to clinical trials across our programs over the next 12 to 18 months.

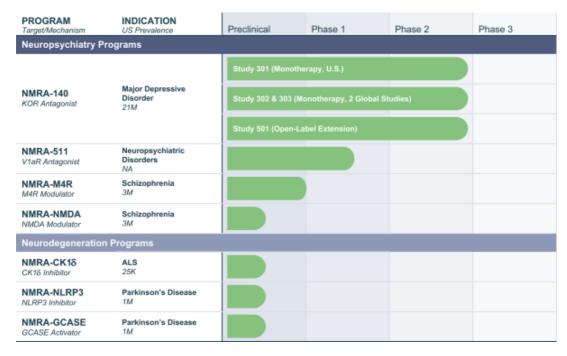


Figure 5: Neumora pipeline

NMRA-140 (KOR)

NMRA-140 is a novel, oral once-daily, selective KOR antagonist in development for the monotherapy treatment of MDD. There are currently over 21 million adults in the United States diagnosed with MDD, 85% of whom either do not receive treatment with a pharmacological agent or fail to achieve remission with first-line SSRI/SNRI. We are developing NMRA-140 as a once-daily oral medication designed to modulate the dopamine and reward processing pathways that play an important role in the regulation of mood, cognition, reward and behavior. The KOR/dynorphin system is well-characterized, known to modulate depression, anhedonia and anxiety, and represents a novel approach to treating MDD and other major neuropsychiatric disorders. Following the completion of an End-of-Phase 2 meeting with the U.S. Food & Drug Administration (FDA) in June 2023, we are initiating a Phase 3 program for NMRA-140 monotherapy in patients with moderate to severe MDD in _______. In addition, we intend to explore and evaluate the potential of NMRA-140 as treatment for other neuropsychiatric populations beyond MDD, such as schizophrenia, post-traumatic stress disorder, generalized anxiety disorder, bipolar disorder and others.

Indication Overview

Major depressive disorder is one of the leading causes of disability, morbidity and mortality around the world with approximately 264 million people worldwide. MDD is characterized by symptoms such as prolonged



sadness, anxiety, and suicidal thoughts. MDD is estimated to impact over 21 million adults in the United States with approximately 11 million receiving pharmacological treatment. A three-fold increase in the prevalence of depressive symptoms has been estimated since the COVID-19 pandemic, exacerbating the significant burden of mental health across America.

Despite numerous approved treatments, there remains a significant unmet medical need in the treatment of MDD. Although MDD is hypothesized to involve multiple, diverse pathways as reflected in the variability of clinical presentation of major depressive episodes and response to treatment, most antidepressant medications act primarily through the monoamine pathway. Approved therapeutics include selective serotonin reuptake inhibitors (SSRIs), serotonin and norepinephrine reuptake inhibitors (SNRIs) and atypical antipsychotics. However, approximately 85% of MDD patients either do not receive treatment with a pharmacological agent or fail to achieve remission with first-line SSRI/SNRI. Further, patients treated for MDD often experience pronounced side effects, such as weight gain, sexual dysfunction, gastrointestinal issues and emotional blunting that contribute to treatment nonadherence. Side effects are a leading contributor to patients' unwillingness to take pharmacological treatment or treatment discontinuation.

In addition, current antidepressants do not adequately treat anhedonia, a core symptom of MDD. Defined in the DSM-5 as "markedly diminished interest or pleasure in all, or almost all, activities most of the day", anhedonia is a key feature of MDD and occurs in up to 70% of individuals with MDD. Anhedonia has been associated with greater severity of depressive symptoms, poor prognosis, as well as higher rates of suicidality. First-line MDD pharmacotherapies often fail to reduce anhedonia severity despite improvement or remission of other depressive symptoms and can induce or worsen anhedonia-like symptoms known as emotional blunting. Current antidepressants do not adequately address symptoms of anhedonia suggesting that their mechanisms of action do not effectively target the hedonic or reward processing pathways. Given the significant and increasing unmet medical need to effectively treat the core symptoms of MDD, a novel treatment for MDD that targets mood and hedonic pathways is warranted.

Target Rationale

NMRA-140 is an investigational, small molecule antagonist of the KOR, which is a potentially novel approach to the treatment of MDD that has the potential to be the first new mechanism of action approved in decades. The KOR and endogenous agonist dynorphin, are expressed in brain regions that regulate the effects of stress on mood and cognition. The KOR/dynorphin system is an important mediator of stress-induced alterations in reward processing and a mood state known as dysphoria, which is a state of dissatisfaction, unease and unhappiness. Activation of KOR modulates neuronal circuits associated with many neuropsychiatric disorders, including depression, anhedonia, anxiety, schizophrenia, bipolar disorder and obsessivecompulsive disorder.

Multiple lines of evidence establish the KOR system in mediating the effects of stress and reward in preclinical species and humans. In preclinical models of stress (such as forced swim and immobilization) or withdrawal from repeated exposure to drugs of abuse, stimulation of the dynorphin/KOR system can elicit anhedonia- and anxiety-like behaviors. In humans, KOR agonists have been reported to trigger symptoms of dysphoria, anxiety, and depression, while KOR antagonism has led to improvement of depressive symptoms. KOR antagonism blocks the biochemical and behavioral response to stress resulting in antidepressant- and anxiolytic-like behavioral effects.

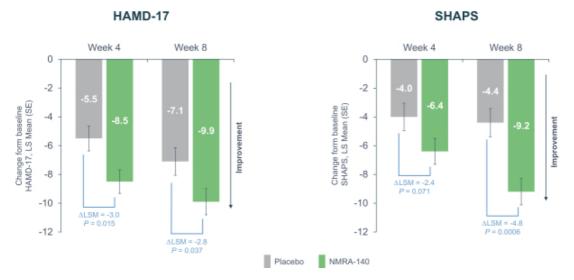
NMRA-140 is a potent and selective antagonist for KOR and, in preclinical studies, has shown more than 300-fold selectivity over the Mu opioid receptor (MOR). Selectivity for KOR over MOR may be an important factor to avoid the potential negative side effects associated with MOR activity. Comparatively, other clinical-stage KOR antagonists, including Aticaprant and CVL-354, have approximately 30-fold selectivity over MOR. We believe the selectivity profile of NMRA-140 has the potential to enable optimal receptor occupancy that supports a beneficial efficacy and tolerability profile. None of our preclinical studies are powered for significance given the purpose of such studies.

Clinical Data

We completed a Phase 2 clinical trial evaluating NMRA-140 as a monotherapy treatment for patients with MDD. The Phase 2 clinical trial was initiated by BlackThorn Therapeutics prior to our acquisition of BlackThorn. The Phase 2 trial was a double-blind, placebo-controlled, randomized, multi-center trial of NMRA-140 monotherapy compared to placebo in MDD patients in the United States. Patients were randomized 1:1 to receive either an 80 mg dose of NMRA-140 or placebo once daily for eight weeks. The primary endpoint was a change from baseline in the HAMD-17 total score, a scale for measuring depressive symptom severity, of NMRA-140 compared to placebo at Week 8. Key secondary measures included change in anhedonia symptoms from baseline, as assessed by the Snaith–Hamilton Pleasure Scale (SHAPS) total score, and change in anxiety symptoms from baseline, as assessed by the 204 patients randomized, 171 patients were included in the final efficacy population (patients with a baseline HAMD-17 total score that received at least one dose of study drug and had at least one post-baseline HAMD-17 assessment), and baseline demographics were balanced between the NMRA-140 and placebo arms.

The original trial design, when initiated by BlackThorn, specified enrolling solely mild to moderate MDD patients (baseline HAMD-17 total score ranging from 14-22). Following our acquisition of BlackThorn, we amended the trial inclusion criteria to include patients with moderate to severe MDD (baseline HAMD-17 total score \geq 22), which is the patient population we intend to evaluate in our Phase 3 program and more typically studied in MDD clinical trials. We also added a prespecified analysis to the Phase 2 statistical analysis plan focused on the moderate to severe MDD population.

The final efficacy population for the pre-specified analysis of moderate to severe MDD (baseline HAMD-17 total score \geq 22) included 100 adult subjects. In this moderate to severe MDD patient population, once daily dosing with 80 mg NMRA-140 resulted in statistically significant (meaning that the results of the study are unlikely to have occurred by chance) and clinically meaningful treatment differences compared to placebo in depression, as measured by the HAMD-17 total score, and anhedonia, as measured by the SHAPS, each as demonstrated below.



Note: Graphs depict prespecified statistical sensitivity analysis for patients with moderate to severe MDD (n = 100; baseline HAMD-17 \geq 22) using Last Observation Carried Forward (LOCF) method

Figure 6: NMRA-140: Established Proof-of-Concept for the Treatment of Depression and Anhedonia in Patients with Moderate to Severe MDD

In addition, NMRA-140 demonstrated statistically significant treatment differences compared to placebo on a range of other key secondary and exploratory measures of depression (HAMD-17 response and remission rates, HAMD-6, CGI-I and CGI-S), anxiety (HAM-A) and function (SDS) in the moderate to severe MDD population, each as demonstrated below.

	Week 4 Difference (p-value)	Week 8 Difference (p-value)
Depressive Symptom Improvement		
HAMD-17 Total Score	-3.0	-2.8
Change from Baseline	(0.015)	(0.037)
HAMD-17 Response Rate	21.4%	25.9%
% ≥50% Reduction in HAMD-17 from Baseline	(0.010)	(0.007)
Remission	14.9%	20.3%
HAMD-17 Score ≤7	(0.014)	(0.005)
HAMD-6 Score (Core Symptoms)	-2.4	-1.9
Change from Baseline in HAMD-6	(<0.001)	(0.013)
CGI-I	12.4%	19.0%
% of Patients with Very Much / Much Improvement	(0.178)	(0.056)
CGI-S Change from Baseline	NA	-0.5 (0.041)
Anhedonia Symptom Improvement		
SHAPS Total Score	-2.4	-4.8
Change from Baseline	(0.071)	(<0.001)
Anxiety Symptom Improvement		
HAM-A Total Score	-2.4	-1.6
Change from Baseline	(0.035)	(0.197)
Functional Improvement		
SDS Total Score	-2.5	-4.0
Change from Baseline	(0.146)	(0.013)

Note: Prespecified statistical sensitivity analysis for moderate to severe patients (HAMD-17 ≥ 22) using Last Observation Carried Forward (LOCF) method.

Figure 7: Demonstrated Improvements Across a Range of Secondary and Exploratory Endpoints in Patients with Moderate to Severe MDD

In the total population (n = 171), which included milder MDD patients (baseline HAMD-17 total score as low as 14), NMRA-140 demonstrated statistically significant improvements in depression and anhedonia at Week 4. At Week 8, NMRA-140 continued to demonstrate improvement in depression, but did not achieve statistical significance compared to placebo as measured by the HAMD-17 total score, which was the primary endpoint of the trial as initiated by BlackThorn; however, NMRA-140 did demonstrate statistically significant improvements in anhedonia at Week 8. This result was consistent with both our intention to focus on the moderate to severe population of MDD and our trial protocol amendment to include the patient population more typically studied in MDD clinical trials.

NMRA-140 was well tolerated with no severe adverse events. The overall discontinuation rates were higher on placebo compared to NMRA-140 (37% for placebo and 28% for NMRA-140), and discontinuation rates related to treatment emergent adverse events (TEAEs) were higher on placebo compared to NMRA-140 (12% for placebo and 1% for NMRA-140). The incidence of TEAEs in the NMRA-140 group was 35.3% vs the placebo group at 44.1%. There were no TEAEs for NMRA-140 with greater than 5% incidence, which was consistent

with placebo. The majority of the TEAEs were mild to moderate, with no severe TEAEs reported in the NMRA-140 group, and 4.9% severe TEAEs reported in the placebo group. NMRA-140 was not associated with weight gain or sexual dysfunction. No evidence of increased suicidal ideation or behavior was identified as assessed by the Columbia Suicide Severity Rating Scale. We believe the tolerability profile of NMRA-140 observed to date will be viewed favorably by patients and physicians relative to other approved agents in use today.

	Placebo n=102	NMRA-140 n=102		
Preferred Terms	n (%)	n (%)		
Headache	5 (4.9)	5 (4.9)		
COVID-19	3 (2.9)	4 (3.9)		
Nausea	1 (1.0)	5 (4.9)		
Diarrhea	3 (2.9)	2 (2.0)		
Upper respiratory tract infection	1 (1.0)	3 (2.9)		

TEAEs Incidence (>2% in either treatment group)

Development Plan

We have completed an End-of-Phase 2 meeting with the FDA to guide our Phase 3 program focusing on patients with moderate to severe MDD. The Phase 3 program for NMRA-140 in monotherapy consists of three randomized, placebo-controlled trials. Study 301 will be the first Phase 3 trial we initiate and will be conducted solely in the United States. Study 302 and Study 303 will be identical in design to Study 301, but will be conducted globally. Study 501 will be a long-term safety extension study. All three efficacy studies are designed to demonstrate that once-daily 80 mg NMRA-140 monotherapy improves symptoms of depression in patients with moderate to severe MDD following 6 weeks of double-blind treatment.

The primary endpoint in Studies 301, 302 and 303 will be change from baseline on the Montgomery-Åsberg Depression Rating Scale (MADRS) at Week 6. Secondary endpoints will include measures of anhedonia as captured by SHAPS and measures of anxiety as captured by HAM-A, among other secondary endpoints. The primary endpoint in Study 501 will evaluate the safety and tolerability profile of NMRA-140 as measured by assessments.

Additional Opportunities for NMRA-140

In addition, we intend to explore and evaluate the potential of NMRA-140 as treatment for other neuropsychiatric populations beyond MDD, such as bipolar disorder (affecting approximately 7 million adults in the United States), schizophrenia (affecting approximately 2.8 million adults in the United States), post-traumatic stress disorder (affecting approximately 12 million adults in the United States), generalized anxiety disorder (affecting approximately 6.8 million adults in the United States), ADHD (affecting approximately 10 million adults in the United States) and substance use disorder (affecting approximately 20 million adults in the United States).

Intellectual Property

We expect patent exclusivity for NMRA-140 through 2041, based on composition of matter protection and estimated patent term extension.

Figure 8: NMRA-140 was well tolerated with no serious adverse events observed in the Phase 2 clinical trial

NMRA-511

NMRA-511 is an investigational antagonist of the vasopressin 1a receptor (V1aR). Vasopressin plays a role in the regulation of aggression, affiliation, stress and anxiety response. Based on our encouraging preclinical findings in non-human primates, as well as preclinical and clinical results from third parties, we believe V1aR has the potential to be a promising novel target for multiple neuropsychiatric disorders and neurodegenerative diseases across the spectrum of anxiety, aggression and stress. We had previously completed a Phase 1 SAD/MAD clinical trial of NMRA-511 at doses up to 10 mg, and we are conducting an additional Phase 1 MAD clinical trial of NMRA-511 at higher doses up to 20 mg. We plan to use the Phase 1 MAD clinical trial to guide dose selection for future development. We plan to advance clinical development for the treatment of agitation associated with dementia due to Alzheimer's disease.

Target Rationale

NMRA-511 is an investigational small molecule antagonist of V1aR, which we believe represents a novel approach to the treatment of neuropsychiatric disorders. V1aR is a receptor for arginine vasopressin (AVP), a neuropeptide implicated in a range of physiological processes, including mood and stress.

Preclinical studies support the involvement of the vasopressin system in mediating behaviors across multiple relevant symptoms, including physiological stress responses, aggression, avoidance, fear and anxiety. In rodents, unpleasant stimuli increased vasopressin levels in brain regions implicated in anxiety pathophysiology, as demonstrated through functional neuroimaging and increased V1a receptor binding in hypothalamic regions important in mediating stress responses. Direct administration of vasopressin into the brain of rodents can increase fear and anxiety-like behavior, while systemic administration of V1a receptor antagonists and deletion of the V1aR gene resulted in decreased anxiety-like behaviors. Moreover, evidence that the V1a receptor is important in mediating aggression has been demonstrated using the selective V1a receptor antagonist, SRX251, which reduced aggressive behaviors and suppressed activity in key brain regions involved in aggression. Recently, a small study with SRX246, a V1a receptor antagonist, in human subjects demonstrated reduced anxiety induced by unpredictable threats.

Indication Overview

Alzheimer's disease is the most common cause of dementia, resulting in changes in memory, thinking and behavior. An estimated 6.7 million people in the United States currently live with Alzheimer's disease, and as the population ages, that number is expected to grow to more than 12 million by 2050. Behavioral symptoms including agitation and anxiety represent one of the most challenging aspects of managing Alzheimer's dementia. Researchers estimate that approximately 76% of patients with Alzheimer's dementia experience agitation, which results in significant disability, contributes to institutionalization, and diminishes quality of life for both patients and their caregivers. Despite the substantial unmet medical need associated with agitation in Alzheimer's disease, only one medicine (an atypical antipsychotic) has been approved as a treatment in the United States. However, this medication carries a black box warning for increased mortality in elderly patients. As a result of this black box warning, we believe that an unmet medical need for a safe treatment to address agitation in Alzheimer's disease remains.

Preclinical Data

NMRA-511 is a potent and selective antagonist for V1aR. In preclinical studies, NMRA-511 exhibited greater than 3,000-fold selectivity over the V1b and V2 receptors and approximately 300-fold selectivity over the oxytocin receptor. We conducted three preclinical studies in 24 marmosets using an animal model of anxiety known as the human threat test. In these studies, NMRA-511 reduced measures of anxiety. In one of the studies, changes in brain waves were also measured by means of EEG, which revealed changes at three different frequencies in the marmoset cohort that received the dose level associated with anxiety reduction, which we believe reflects target engagement. We believe these preclinical data suggest that NMRA-511 has the potential to address anxiety disorders. None of our preclinical studies are powered for significance given the purpose of such studies.

We also conducted a Phase 1 SAD/MAD clinical trial with 55 healthy volunteers at doses up to 10 mg. In the SAD portion of the trial, 12 subjects received a single dose of NMRA-511 and four subjects received placebo. In the MAD portion of the trial, 18 subjects received multiple doses of NMRA-511 and six subjects received the same number of doses of placebo. Another cohort of 12 subjects received doses of NMRA-511 under one of two treatment sequences of being fed versus fasting to assess the effect of food on the rate and extent of absorption of NMRA-511. NMRA-511 was well tolerated in the Phase 1 SAD/MAD clinical trial. This Phase 1 clinical trial was not powered for significance given the purpose of the clinical trial, which was to help determine the dose of the study drug that can be safely administered to human subjects. Given that the primary purpose of the study was to assess safety and tolerability, the study did not contain formal efficacy endpoints. However, safety and pharmacokinetic endpoints, and exploratory measures of cardiodynamic effects and EEG parameters were assessed.

Development Plan

We are conducting an additional Phase 1 MAD clinical trial of NMRA-511 at higher doses up to 20 mg. We plan to use the Phase 1 MAD clinical trial to guide dose selection for future development. We plan to advance clinical development for the treatment of agitation associated with dementia due to Alzheimer's disease.

NMRA-M4R

NMRA-M4R is a positive allosteric modulator program of the M4 muscarinic receptor (M4R) for the treatment of schizophrenia. Our NMRA-M4R program is designed to be selective for the M4 receptor subtype of the muscarinic receptor family. Muscarinic receptor-targeting compounds have achieved clinical validation as an approach to treating schizophrenia, with the potential to treat other neuropsychiatric disorders such as dementia- related psychosis and cognitive disorders, where innovation has been stagnant for decades. We believe selective M4R-positive allosteric modulators have the potential to deliver the antipsychotic efficacy associated with targeting this receptor subtype, while minimizing the side effects associated with current antipsychotics and other non-selective muscarinic agonists. We exclusively licensed certain intellectual property rights related to NMRA-M4R from Vanderbilt University.

Target Rationale

NMRA-M4R program is an investigational positive allosteric modulator of the M4 muscarinic receptor. While current antipsychotics approved for schizophrenia work primarily by antagonizing D2 dopamine receptors, growing evidence supports the approach of targeting the M4 muscarinic receptor to produce antipsychotic effects. M4 muscarinic receptor-targeting compounds have achieved clinical validation as an approach to treating schizophrenia in multiple, placebo-controlled clinical trials.

In a Phase 2 randomized, double-blind, placebo-controlled clinical trial (Emergent-1) of 182 schizophrenia patients conducted by Karuna Therapeutics, Inc., an M1/M4-preferring muscarinic agonist combined with a peripheral muscarinic antagonist, KarXT (xanomeline- trospium), demonstrated a statistically significant improvement in the total Positive and Negative Syndrome Scale (PANSS) score, the most widely used measure of symptom severity in schizophrenia. These results were then confirmed by subsequent Phase 3 trials with statistically significant changes in PANSS score seen in both Emergent-2 and Emergent-3 trials. These results were further supported by a positive Phase 1b randomized, double-blind, placebocontrolled clinical trial conducted by Cerevel Therapeutics, Inc. of emraclidine (CVL-231), an M4 receptor positive allosteric modulator demonstrating robust improvements in PANSS scores. These clinical data in schizophrenia patients are further supported by a robust body of preclinical and clinical evidence that shows that the muscarinic acetylcholine receptor system plays an important role in regulating cognition, movement, learning and memory, suggesting its importance as a potential drug target for the treatment of several brain disorders. These studies also suggest compounds that elevate M4 receptor activity have the potential to treat other neuropsychiatric disorders, in addition to schizophrenia.

Indication Overview

Schizophrenia is a debilitating neuropsychiatric disorder characterized by positive symptoms (such as delusions and hallucinations), negative symptoms (such as diminished emotional expression) and cognitive symptoms (such as deficits in types of memory). The disease is also associated with a 10-to-25-year reduction in life expectancy overall. It is estimated that approximately three million people in the United States have schizophrenia.

No therapies with a novel mechanism of action have been recently approved for schizophrenia, with all currently approved antipsychotics based on mechanisms originally based on chlorpromazine, which was developed in the 1950s. Currently approved therapies focus on treating the positive symptoms of schizophrenia and have little impact on the negative or cognitive symptoms. They also have potentially serious side effects, including movement and metabolic effects, which historically have resulted in poor compliance.

Preclinical Data

We have identified a series of M4R-positive allosteric modulators that are designed to be potent, selective and orally bioavailable. The lead molecule has demonstrated robust activity in preclinical efficacy models, as well as high selectivity for the M4R subtype, the potential for an improved safety profile over current antipsychotics and non-selective agonist approaches, and an oral once-daily dosing profile.

Development Plan

Our NMRA-M4R program has molecules in preclinical development ranging from pre-candidate selection to IND-enabling studies. We are currently progressing multiple candidates for our NMRA-M4R program and plan to file an IND in

NMRA-NMDA

NMRA-NMDA is an NMDA positive allosteric modulator program that we intend to develop for the treatment of schizophrenia. Recent breakthroughs in third-party psychiatric genetic studies have provided genetic evidence in support of the role of NMDA in schizophrenia. Furthermore, human studies suggest NMDA receptor antagonists, such as ketamine, lead to a schizophrenia-like syndrome, which provides compelling evidence for this target. Our NMRA-NMDA program is in the preclincal phase of development.

Target Rationale

NMRA-NMDA is an investigational allosteric modulator of GRIN2A/GluN2A-containing NMDA glutamate receptors. Glutamate is the major excitatory neurotransmitter in the brain, and dysregulation of glutamate levels and downstream pathways has long been hypothesized to be a key molecular driver of schizophrenia. Recently large studies of the genetic basis of schizophrenia have identified the GRIN2A gene, which produces the GluN2A subunit of the NMDA receptor, as a critical genetic risk factor for the disease. Human pharmacology experiments have indicated that decreases in NMDA receptor activity can lead to schizophrenia-like symptoms in healthy volunteers. These studies suggest compounds which elevate NMDA receptor activity have the potential to treat the disease.

Indication Overview

Similar to NMRA-M4R, we are evaluating NMRA-NMDA in subsets of patients with schizophrenia.

Preclinical Data

We have identified a series of investigational NMDA positive allosteric modulators that are designed to be potent and orally bioavailable. The lead molecules have been identified through experiments in whole cells,

known as cell-based assays, to evaluate potency and selectivity and also identify mechanism of action. These molecules have also demonstrated target engagement and pharmacodynamic activity in animal models.

Development Plan

Our NMRA-NMDA program is in the preclinical stage of development.

NMRA-CK1d

NMRA-CK1d is a CK1d inhibitor program that we intend to develop for ALS. CK1d is a kinase that has been identified as a proximal upstream regulator of TDP-43 phosphorylation, a key driver of TDP-43-driven pathology in approximately 95% of sporadic ALS cases. There is also genetic evidence supporting the role of TDP-43 in ALS. Our NMRA-CK1d program is in preclinical development. We exclusively licensed certain intellectual property rights related to NMRA-CK1d from Amgen.

Indication Overview

ALS is a rapidly progressing neurodegenerative disease that affects motor neurons in the brain and spinal cord. As motor neurons die, the brain loses the ability to initiate and control muscle movement, and patients may lose the ability to speak, eat, move and breathe. Approximately 5,000 people in the United States are diagnosed with ALS each year, and approximately 16,000 patients live with ALS in the United States at a given time. ALS usually affects patients between the ages of 40 and 70.

Existing therapeutics have modest effects on survival and physical functioning with no effect on mortality and patients have an average life expectancy of two to five years from diagnosis, emphasizing the high unmet medical need.

Target Rationale

CK1d is a key proximal kinase phosphorylating TDP-43, a protein implicated in the pathology of both sporadic and familial ALS. Protein aggregates containing phosphorylated TDP-43 are present in degenerating motor neurons of ALS patients. It is hypothesized that reduction of TDP-43 phosphorylation with a CK1d inhibitor will reduce TDP-43 driven pathology and slow disease progression. Published data have demonstrated that CK1d inhibitors reverse aberrant TDP-43 related phenotypes in both *in vitro* and *in vivo* studies.

Preclinical Data

NMRA-CK1d inhibitors have nanomolar potency, are selective over a number of other kinases and exhibit cell-based activity. Compounds have properties consistent with favorable CNS penetration and we are conducting experiments in both *in vitro* cell models and *in vivo* models of ALS.

NMRA-NRLP3

NMRA-NLRP3 is an inhibitor program focused on targeting the NLRP3 inflammasome for the treatment of certain neurodegenerative conditions. The inflammasome is a critical part of the innate immune system that responds to pathogens and cellular damage and is implicated in brain disorders, such as PD, as well as immune disorders. The NLRP3 inflammasome can be activated in brain microglia, a type of cell in the brain, and other cell types by a range of proteins linked to neurodegeneration, including alpha-synuclein (a neuronal protein that regulates synaptic vesicle trafficking), which suggests the inflammasome may have a mechanistic role in PD. Our NMRA-NLRP3 program is in the preclinical phase of development.

Target Rationale

The NLRP3 inflammasome is a central component of the innate immune system and is chronically activated in neurodegenerative and inflammatory diseases. It is essential for triggering innate immunity and protecting the host from a variety of pathogens and cellular stressors. Pathological proteins associated with PD, ALS, and AD have also been shown to activate the NLRP3 inflammasome, including (i) alpha-synuclein, a protein that plays multiple roles in brain cell function including regulating communications between nerve cells, (ii) TDP-43, a protein involved in regulating the processing of molecules known as messenger RNAs (mRNAs) which are the intermediates between DNA and proteins in a cell, (iii) beta-amyloid, a protein whose function is poorly understood but which is over-produced in Alzheimer's disease, and (iv) tau, a protein that provides structural support to cells. A growing body of work in PD model systems has shown that inhibition of the NLRP3 inflammasome can impact various disease phenotypes in a therapeutically relevant manner.

Indication Overview

PD is a neurodegenerative disorder resulting in progressive and debilitating motor symptoms, such as hypokinesia, or decreased body movement, and bradykinesia, or rigidity, tremor, and postural instability. PD patients lose dopamine-producing neurons in the substantia nigra, the region of the brain responsible for motor control. Approximately one million people in the United States have PD.

Current therapeutics for PD focus on increasing levels of dopamine to manage disease symptoms. For example, levodopa/l-dopa is converted into dopamine in the brain while mono-amine oxidase-B and catechol-O-methyl transferase inhibitors reduce the breakdown of dopamine. Each therapeutic class has meaningful limitations in efficacy and side-effects.

Preclinical Data

We have identified multiple series of NLRP3 inhibitors that showed potency and selectivity in a range of cellular assays in different immortalized cell lines and primary immune cells. These molecules have also demonstrated target engagement and pharmacodynamic activity in animal models.

Development Plan

Our NMRA-NLRP3 program is in the preclinical phase of development.

NMRA-GCase

NMRA-GCase is an activator program focused on elevating the activity of the enzyme glucocerebrocidase (GCase) that we are developing for the treatment of PD. Mutations in the GBA gene, which codes for the enzyme GCase, are the single largest genetic risk factor for PD. GCase deficiencies lead to storage disorders of the lysosome, which plays an important role in maintaining cellular balance, and a group of patients with PD have lysosomal dysfunction. Our NMRA-GCase program is in the preclinical phase of development. We exclusively licensed certain intellectual property rights related to NMRA-GCase from Amgen.

Target Rationale

The enzyme GCase belongs to a family of proteins known as "lysosomal glycoside hydrolases" that are located within the lysosome compartments of cells and cause the cleavage of complex molecules containing sugar. The GBA gene encodes GCase and homozygous or compound heterozygous mutation carriers in GBA are associated with Gaucher's disease, a lysosomal storage disorder. Mutations in the GBA gene are associated with PD (approximately 10% of PD patients). Functional GCase is crucial for the recycling and disposal of proteins and lipids in the lysosome. Numerous scientific studies have demonstrated that GCase mutations trigger lysosomal dysfunction, cell toxicity, inflammation and the accumulation of alpha-synuclein (a hallmark of PD), which is toxic to neurons.

Indication Overview

PD is a neurodegenerative disorder resulting in progressive and debilitating motor symptoms, such as hypokinesia, or decreased body movement, and bradykinesia, or rigidity, tremor, and postural instability. PD patients lose dopamine-producing neurons in the substantia nigra, the region of the brain responsible for motor control. Approximately one million people in the United States have PD.

Preclinical Data

We have validated multiple chemical hits from a high-throughput screen as GCase activators. We are characterizing these compounds to identify a lead series.

Development Plan

Our NMRA-GCase program is in the preclinical stage of development.

Intellectual Property

Our success depends in large part upon our ability to obtain and maintain proprietary protection for our products and technologies and to operate without infringing the proprietary rights of others. Our policy is to protect our proprietary position by, among other methods, filing U.S. and foreign patent applications that relate to our proprietary technologies, inventions and improvements that are important to the development and implementation of our business. We also rely on trademarks, trade secrets, know-how and continuing technological innovation.

Our patent portfolio includes three primary types of patents and patent applications: (i) molecule patents that cover composition of matter and methods of treatment; (ii) patents directed to our precision neuroscience approach that covers key artificial intelligence algorithms and machine learning-based processes for identifying and monitoring targeted patient populations; and (iii) biomarker patents that cover methods of diagnosing and treating patients, with our molecules. As of March 31, 2023, we own, co-own, or have an exclusive license to over 260 patents and pending applications in the United States and foreign jurisdictions. These include 27 issued U.S. patents and 83 issued foreign patents.

The term of any individual issued patent depends upon the legal term of the patent in the country in which it is obtained. In most countries that we file, the patent term is 20 years from the earliest date of filing a nonprovisional patent application related to the issued patent. However, the actual protection afforded by an issued patent varies on a product-by-product basis, from country to country, and depends upon many factors, including the type of patent, the scope of its coverage, the availability of regulatory-related extensions, the availability of legal remedies in a particular country, and the validity and enforceability of the patent. A U.S. patent also may be accorded patent term adjustment, or PTA, under certain circumstances to compensate for delays in obtaining the patent from the USPTO. In some instances, such a PTA may result in a U.S. patent term extending beyond 20 years from the earliest date of filing a non-provisional patent application related to the U.S. patent. In addition, in the United States, the term of a U.S. patent that covers an FDA-approved drug may also be eligible for patent term extension, which permits patent term restoration as compensation for the patent term lost during the FDA regulatory review process.

Molecule Patent Portfolio

Our molecule patents include over 224 owned and exclusively licensed patents and patent applications, of which 22 are issued U.S. patents and 79 are issued foreign patents. A further breakdown of our material molecule patents and applications as of March 31, 2023 is below:

- **NMRA-140:** We own, co-own or exclusively license two patent families that include four issued U.S. patents, 18 issued foreign patents and additional pending U.S. and foreign patent applications related to NMRA-140. These patents and applications cover composition of matter. We have an exclusive license from TSRI to one of the patent families, which includes two issued U.S. patents that are expected to expire in 2033 excluding any patent term adjustment or patent term extension. We co-own the other patent family with The Scripps Research Institute (TSRI). This family has two patents granted in the United States, and additional patents granted in Mexico, Singapore, India, Israel, Japan, Eurasia, and South Africa. Additional patent applications in this family are pending in Europe, China, Hong Kong, Canada, Australia, Brazil, and Korea. The last issued patent from these families licensed to us from TSRI is expected to expire in 2038 excluding any patent term extension.
- **NMRA-511:** We own two issued U.S. patents and 17 additional pending U.S. and foreign patent applications related to NMRA-511. These patents and applications cover composition of matter. This family has two patents granted in the United States, and additional patents granted in Singapore, Mexico and China. Additional patent applications in this family are pending in Europe, Japan, Hong Kong, Canada, Australia, Israel, India, Korea, New Zealand, and South Africa. The issued U.S. patents and future patents that issue are expected to expire in 2038 excluding any patent term adjustment or patent term extension.
- **NMRA-M4R:** We exclusively license several patent families that include 15 issued U.S. patents, 45 issued foreign patents and additional pending U.S. and foreign patent applications related to our M4R program from Vanderbilt. This patent and these applications cover composition of matter. The last patent expiration date for the issued patents and patents expected to issue that are exclusively licensed from Vanderbilt is 2043 excluding any patent term adjustment or patent term extension.

Precision Toolbox Patent Portfolio

Our Precision Toolbox is covered by process patents and patent applications relating to multimodal methods of identifying and monitoring targeted patient populations. The process patents and patent applications are directed to (i) the use of tools to detect and capture data from patients using specific modalities, unimodal processing and/or diagnostic techniques for specific modality types; and (ii) multimodal machine learning and AI-based processes for combining different types of data to identify and monitor targeted patient populations. Our Precision Toolbox patent portfolio includes several patent families, comprising five issued U.S. patents, four issued foreign patents and additional pending U.S. and foreign patent applications. The issued U.S. and foreign patent that issue from these families are expected to expire between 2038 and 2042, excluding any patent term adjustment.

The Precision Toolbox patent portfolio also includes coverage for multimodal processes that span various modalities including genetic, transcriptomic, proteomic, in vitro cell, MRI, EEG, voice, facial, behavioral, clinical and others. The toolbox patents include five issued U.S. patents, and additional patents and patent applications pending in the United States, Europe, Canada, Japan and China.

Biomarker Patent Portfolio

Our Precision Toolbox is also covered by biomarker patents and applications directed to unimodal and multimodal biomarkers that identify patients that respond to specific drugs. These biomarker patents are process patents for identifying and diagnosing patients with selected biomarkers, and methods of treating patients with those biomarkers with neural drugs. We own four pending patent applications relating to biomarkers that are

pending in the United States, Europe, Japan and China. Generally speaking, those selected biomarkers include genetic, proteomic, task-based, clinical assessment-based, and others.

Trade Secrets

In addition to our reliance on patent protection for our inventions, product candidates and precision neuroscience approach, we also rely on trade secrets, know-how, confidentiality agreements and continuing technological innovation to develop and maintain our competitive position. For example, some elements of manufacturing processes, proprietary assays, analytics techniques and processes, knowledge gained through clinical experience such as approaches to dosing and administration and management of patients, as well as related processes and software, are based on unpatented trade secrets and know-how that are not publicly disclosed. It is our policy to require our employees, consultants, outside scientific collaborators, sponsored researchers and other advisors to execute confidentiality agreements upon the commencement of employment or consulting relationships with us. These agreements provide that all confidential information concerning our business or financial affairs developed or made known to the individual or entity during the course of the party's relationship with us is to be kept confidential and not disclosed to third parties except in specific circumstances. In the case of employees, the agreements provide that all inventions conceived of by the individual during the course of employment, and which relate to or are reasonably capable of being used in our current or planned business or research and development are our exclusive property. In addition, we take other appropriate precautions, such as physical and technological security measures, to guard against misappropriation of our proprietary technologies by third parties.

Trademarks

We also protect our brands through the procurement of trademark rights and have a portfolio of registered and pending trademark applications in the United States and abroad. As of March 31, 2023, the portfolio includes trademark applications for the mark NEUMORA, that are pending in the United States, Europe, United Kingdom, Canada, China, Mexico, Israel, Australia, India, Brazil and International Applications filed under the Madrid Protocol. Trademark applications for NEUMORA have registered in Australia, Europe, India, United Kingdom, and China. Trademark applications for DATA BIOPSY have registered in Australia, Europe, Japan, and Mexico. Trademark applications for PRECISION PHENOTYPE have registered in Brazil, Europe, and Mexico.

In-Licensing and Collaboration Agreements

Exclusive License Agreements with Amgen for CK1d and GCase

In September 2021, we entered into two exclusive license agreements with Amgen (the Amgen Licenses) with one of the agreements covering development of products directed to casein kinase 1 delta (the CK1d License) and the other covering development of products directed to ß-Glucocerebrosidase (the GCase License).

Under each Amgen License, Amgen granted to us a worldwide, exclusive, sublicensable license under certain of its patents and know-how to research, develop, manufacture, use and commercialize specified products containing compounds that, with respect to the CK1d License, are directed to CK1d, including compounds developed by us prior to the effective date of the CK1d License, and with respect to the GCase License, are directed to GCase, collectively referred to as the licensed products, for any and all uses. We have filed one patent application directed to Ck1d. The license grants are subject to Amgen's right to use the licensed patents and know-how solely for internal research use. Until a specified period of time following the achievement of the first successful Phase 2 clinical trial for any licensed product, if we choose to sell, transfer, sublicense or divest rights to a licensed product in certain major markets, Amgen has a time-limited, exclusive right of first negotiation to enter into an agreement with us for such rights. Amgen also agreed to transfer to us certain licensed materials and licensed know-how relating to the licensed products.

Under each Amgen License, we are solely responsible for the research, development, manufacturing and commercialization of the licensed products. We are obligated to use commercially reasonable efforts to develop, manufacture, obtain regulatory approval, and commercialize at least one licensed product under each Amgen License. Under each Amgen License, we also agreed, until a specified period of time following the first commercial sale of the first licensed products, that are directed to CK1d or GCase, unless we treat them as licensed products that are subject to diligence, milestone and royalty obligations under the Amgen Licenses. If we choose not to treat such compounds or products obtained through a transaction with a third party as a licensed product, then we are obligated to divest or terminate the program for such compounds or products.

Under the Amgen Licenses, we agreed to pay Amgen contingent consideration payable in cash up to an aggregate of \$360.0 million in commercial milestone payments upon the achievement of certain sales thresholds per licensed product under the CK1d License and up to an aggregate \$360.0 million in commercial milestone payments upon the achievement of certain sales thresholds per licensed product under the GCase License. We also agreed to pay tiered royalties at percentages ranging from the low to high-single-digits on annual worldwide net sales of licensed products under the GCase License, payable on a licensed product-by-licensed product and country-by-country basis until the later of the expiration of the last to expire licensed patent or Neumora patent claiming the composition of matter of such licensed product and the tenth anniversary of the first commercial sale of such license agreement prior to the second anniversary of the effective date of the Amgen Licenses, then we are also obligated to pay Amgen a low-double-digit percentage of sublicense income we receive for the CK1d and/or GCase programs. As of March 31, 2023, none of the milestones pursuant to the Amgen Licenses have been achieved and no amounts were recognized related to the contingent consideration milestones.

Each of the Amgen Licenses continues in force until the expiration of all royalty payment obligations to Amgen. We may terminate either Amgen License at-will with 30 days' prior written notice to Amgen at any time prior to the initiation of clinical development for any licensed product or 120 days' prior written notice to Amgen at any time thereafter. Either party may terminate either Amgen License upon written notice for the other party's material breach that remains uncured for ninety days or upon the other party's bankruptcy or insolvency. Amgen may also terminate either Amgen License upon written notice if we breach our obligations to not clinically develop, commercialize or manufacture compounds or products directed to CK1d or GCase, other than licensed products, unless we treat them as licensed products or divest or terminate the program(s) for such compounds or products.

Upon termination of either of the Amgen Licenses, all rights and licenses granted by Amgen to us under that license will terminate, except that, under the CK1d License, we will retain rights to the compounds directed to CK1d that were developed by us prior to the effective date of the CK1d License. In addition, with respect to all other licensed products, at Amgen's election and in return for tiered royalties at percentages ranging from the low to mid-single-digits on annual worldwide net sales under the CK1d License, and royalties at a low-single-digit percentage on annual worldwide net sales under the GCase License, we will grant to Amgen an automatic, worldwide, perpetual, sublicensable, irrevocable and exclusive license to exploit such licensed products, under all patent rights and know-how controlled by us that cover such licensed products and are necessary to exploit any such licensed product as it exists as of the termination date.

Research Collaboration Agreement with Amgen

In September 2021, we entered into a research collaboration and license agreement with Amgen to discover drug targets, biomarkers and other insights associated with CNS diseases that are generated by Amgen's

deCODE genetics and human data research capabilities. The term of the Amgen Collaboration Agreement is five years. In return for Amgen performing research and development activities under the Amgen Collaboration Agreement, we are committed to making non-refundable, non-creditable quarterly payments to Amgen over the first two years totaling \$50.0 million and for the third year between \$12.5 million and \$25.0 million depending on whether certain progress milestones are achieved. These payments are due on a quarterly basis. We have made six quarterly payments to Amgen in an amount of \$6.3 million each as of March 31, 2023. The seventh quarterly payment of \$6.3 million became due as of March 31, 2023. We will mutually agree on the compensation structure for the fourth and fifth years of the Amgen Collaboration Agreement. The Amgen Collaboration Agreement did not require the payment of upfront fees.

The collaboration is governed by a joint research committee comprised of an equal number of representatives from us and from Amgen. Under the Amgen Collaboration Agreement, each party will solely own the patents and know-how it solely generates in the performance of the collaboration activities and the parties will jointly own all patents and know-how they jointly generate in the performance of the collaboration activities. Amgen has granted to us an exclusive, worldwide, sublicensable, fully paid-up, royalty-free license under Amgen's rights in and to the patents and know-how generated in the performance of the collaboration activities that are controlled by Amgen, to exploit therapeutic compounds and diagnostics for use with therapeutics to treat, ameliorate or prevent diseases with effects that manifest primarily in the CNS (the CNS Field). We have granted to Amgen an exclusive, worldwide, sublicensable, fully paid-up, royalty-free license under our rights in and to the patents and know-how generated in the performance of the collaboration activities that are controlled by us, to exploit therapeutic compounds and diagnostics for use with therapeutics outside of the collaboration activities that are controlled by us, to exploit therapeutic compounds and diagnostics for use with therapeutics outside of the CNS Field.

We also granted to Amgen an exclusive option to negotiate, and the right of first negotiation, to obtain exclusive, worldwide licenses to research, develop, commercialize and otherwise exploit up to two therapeutic products, related to our CK1d and GCase compounds, arising from the collaboration, which is exercisable on a product-by-product basis until a specified period of time following the achievement of the first successful Phase 2 clinical trial for such product. That right exists with respect to each compound for up to 60 days following positive Phase 2 results for the compound.

Either party may terminate the Amgen Collaboration Agreement upon material breach of the other party that is not cured within 90 days after written notice is given or for the other party's insolvency or bankruptcy. In addition, the Amgen Collaboration Agreement terminates automatically on the third anniversary of the effective date if the parties are unable to agree on the compensation structure for the fourth and fifth years of the agreement.

As part of the agreements, we issued to Amgen 157.0 million shares of our Series A-2 Preferred Stock. Additionally, Amgen purchased 100.0 million shares of our Series A-2 Preferred Stock at a purchase price of \$1.00 per share, for total consideration of \$100.0 million. Subject to certain conditions, Amgen is also obligated to provide us additional financing of up to \$100.0 million.

2015 TSRI License Agreement

In connection with the acquisition of BlackThorn in September 2020, we gained rights to a license agreement between BlackThorn and TSRI entered into in November 2015, as amended in November 2017 and April 2019 (2015 TSRI License Agreement). Pursuant to the 2015 TSRI License Agreement, TSRI granted us a worldwide, exclusive license under certain patent rights and a worldwide, non-exclusive license under certain know-how relating to TSRI's Kappa Opioid Receptor (KOR or NMRA-140), V1aR Receptor (V1aR or NMRA-511) Antagonist and oxytocin receptors (OTR) positive allosteric modulator programs (collectively, the TSRI Programs), in each case that is sublicensable under certain conditions, to use, manufacture and commercialize products (i) that are covered by the relevant licensed patents, (ii) that involve the use or incorporation of the licensed know-how or (iii) that are KOR, V1aR or OTR modulators discovered by

BlackThorn within two years of the effective date of the 2015 TSRI License Agreement for the diagnostic, prophylactic and/or therapeutic treatment of humans and animals. The last patent expiration date for the patents licensed pursuant to the TSRI 2015 License Agreement is 2038, excluding any patent term adjustment or patent term extension. The licensed patent rights are subject to TSRI's right to use the licensed patents for internal research and educational purposes and to grant non-exclusive licenses to other non-profit or academic institutions to use the licensed patent rights for internal research and educational purposes.

We are subject to certain research and development milestone timeline obligations and have agreed to use commercially reasonable efforts to obtain regulatory approvals and to commercialize the licensed products.

Under the 2015 TSRI License Agreement, BlackThorn issued TSRI shares of its capital stock representing one percent of all outstanding shares of its capital stock calculated on a fully diluted basis. We paid a change of control success fee to TSRI in shares of our Series A-1 convertible preferred stock with a fair value of \$0.3 million. Beyond the payment of this change in control success fee, as of March 31, 2023, no contingent consideration related to the milestones, royalty or other payments have been made to TSRI pursuant to the TSRI 2015 License Agreement.

We are obligated to pay TSRI a specified nominal annual license fee that is creditable against any royalties due for that calendar year. Upon achieving specified development and regulatory milestone events, we are obligated to pay TSRI milestone payments in the aggregate of up to \$1.5 million for each TSRI Program and upon achieving specified commercial milestone events, we are obligated to pay TSRI milestone payments in the aggregate of up to \$3.5 million for each occurrence. We are also obligated to pay TSRI a percentage ranging from the mid-single digits to sub-teen double digits of any sublicensing revenues we receive from a sublicensee. We also agreed to pay TSRI, on a product-by-product and country-by-country basis, royalties in the low-single digit percentages on worldwide net sales of products, which are either tiered or not tiered depending on the category of product, until the later of the expiration of the last to expire licensed patent in the world and the tenth anniversary of the first commercial sale of such licensed product in such country, subject to certain reductions for generic entry, lack of patent coverage and payment obligations for third-party licenses.

The 2015 TSRI License Agreement continues in force until the expiration of all royalty payment obligations to TSRI. We may terminate the 2015 TSRI License Agreement for any reason upon 90 days' prior written notice to TSRI. TSRI may immediately terminate the 2015 TSRI License Agreement if we fail to make a payment and do not cure within 20 days after written notice from TSRI, default on our indemnification or insurance obligations, become insolvent or bankrupt, are convicted of a felony relating to the development, manufacture, or commercialization of the licensed products, underpay by a certain percentage within any specified period of time, or default in the performance of any of our other obligations and fail to remedy the default within 60 days after written notice from TSRI. In the event we do not use commercially reasonable efforts to achieve the research and development milestones within the agreed upon time period and do not either meet the milestone or make substantial progress towards achieving the goals of the applicable research and development plan for such Program, in each case, within a specified cure period, TSRI has the right, based on the decision of an arbitrator, to either terminate the 2015 TSRI License Agreement with respect to a particular Program or terminate the 2015 TSRI License Agreement in its entirety. Upon any termination, all rights and licenses granted by TSRI to us will terminate. We also agreed to grant to TSRI, in return for royalties at a low-single-digit percentage of TSRI's net sales of licensed products, an irrevocable, exclusive, worldwide, perpetual, sublicensable license to data, information, or other materials exclusively controlled by us that directly relate to the licensed products, to research, develop, manufacture and commercialize the licensed products for the diagnostic, prophylactic and/or therapeutic treatment of humans and animals.

Vanderbilt License Agreement and Sponsored Research Agreement

Pursuant to the Vanderbilt License Agreement, we obtained an exclusive, worldwide, royalty-bearing, sublicensable (subject to certain restrictions) license under certain patent rights and a non-exclusive, worldwide,

royalty-bearing, sub-licensable (subject to certain restrictions) license under certain know-how covering small molecule positive allosteric modulators (PAMs) predominantly of the muscarinic acetylcholine receptor subtype 4 (M4), to develop, manufacture and commercialize products, processes, and services covered by such patent rights or that incorporate or use such know-how, for any and all uses. We also have an exclusive option, exercisable for a specified period of time, to obtain an exclusive license to certain patent rights conceived or developed by Vanderbilt in the course of carrying out the sponsored research pursuant to a sponsored research agreement between us and Vanderbilt. The last patent expiration date for the licensed patents that are issued or expected to issue, from currently pending or provisional applications, pursuant to the Vanderbilt License Agreement is 2043, excluding any patent term adjustment or patent term extension. The licensed patent rights are subject to Vanderbilt's right to use the patent rights for research, internal non-commercial use and educational purposes.

We have agreed to use commercially reasonable efforts to develop and commercialize licensed products, and to achieve certain development milestones, the first within a specified period following the effective date and the other on or before June 2024. Failure to meet our obligations in accordance with the Vanderbilt License Agreement to achieve such milestones may constitute a material breach of contract that entitles Vanderbilt to terminate the Vanderbilt License Agreement.

Under the Vanderbilt License Agreement, we paid an upfront fee of \$13.0 million. We are also obligated to pay Vanderbilt tiered royalties at mid-single-digit percentages on net sales of royalty-bearing products, which are payable on a country-by-country and product-by-product basis until the later of expiration of the last to expire valid claim covering composition of matter in the licensed patents and the tenth anniversary of the first commercial sale of such product in such country. Under the Vanderbilt License Agreement, the royalty payments are subject to reductions on a country-by-country basis for the lack of patent coverage, generic entry and payment obligations for third-party licenses. In addition, we are obligated to pay Vanderbilt a low-double- digit percentage of sublicense income we receive for sublicenses entered into before the achievement of a specified event. We also agreed to pay Vanderbilt payments of up to \$42.0 million upon achievement of specified development milestone events and up to \$380.0 million upon achievement of specified commercial milestone events. As of March 31, 2023, no milestone, royalty or other payment (other than the upfront payment described above) has become payable to Vanderbilt pursuant to the Vanderbilt License Agreement.

The Vanderbilt License Agreement will remain in force, on a country-by-country basis, until the expiration of all royalty payment obligations to Vanderbilt in such country. If we bring a patent challenge against any licensed patents, in addition to paying certain costs associated with the proceeding, Vanderbilt may convert the exclusive licenses to non-exclusive licenses or terminate the Vanderbilt License Agreement. If the licensed patents survive the patent challenge, all payments under the agreement will be increased by a specified amount. We have the right to terminate the Vanderbilt License Agreement at any time by providing Vanderbilt with 90 days' prior notice. Vanderbilt has the right to terminate the Vanderbilt License Agreement if we file for bankruptcy. The Vanderbilt License Agreement will automatically terminate if our insurance coverage lapses and is not cured within 90 days. Vanderbilt also has the right to terminate if we fail to make payments, breach our diligence obligations or breach any other material term upon 60 days prior notice.

Government Regulation

Government authorities in the United States, at the federal, state and local level, and other countries extensively regulate, among other things, the research, development, testing, manufacture, quality control, approval, labeling, packaging, storage, record-keeping, promotion, advertising, distribution, marketing and export and import of drug products. We, along with any third-party contractors, will be required to navigate the various preclinical, clinical and commercial approval requirements of the governing regulatory agencies of the countries in which we wish to conduct studies or seek approval of our products and product candidates. The process of obtaining regulatory approvals and the subsequent compliance with applicable federal, state, local and foreign statutes and regulations require the expenditure of substantial time and financial resources.

U.S. Drug Development Process

In the United States, the FDA regulates drugs under the federal Food, Drug, and Cosmetic Act (FDCA) and its implementing regulations. A new drug must be approved by the FDA through the New Drug Application (NDA) process before it may be legally marketed in the United States. The process of obtaining regulatory approvals and the subsequent compliance with appropriate federal, state, local and foreign statutes and regulations require the expenditure of substantial time and financial resources. The process required by the FDA before a drug may be marketed in the United States generally involves the following:

- completion of preclinical laboratory tests, animal studies and formulation studies in accordance with FDA's Good Laboratory Practice (GLP) requirements and other applicable regulations;
- submission to the FDA of an IND, which must become effective before human clinical trials may begin;
- approval by an independent Institutional Review Board (IRB) or ethics committee at each clinical site before each trial may be initiated;
- performance of adequate and well-controlled human clinical trials in accordance with good clinical practices (GCPs) to establish the safety and efficacy of the proposed drug for its intended use;
- preparation of and submission to the FDA of an NDA after completion of all pivotal trials;
- a determination by the FDA within 60 days of its receipt of an NDA to file the application for review;
- satisfactory completion of an FDA advisory committee review, if applicable;
- satisfactory completion of an FDA inspection of the manufacturing facility or facilities at which the drug is produced to assess compliance with current Good Manufacturing Practice (cGMP) requirements to assure that the facilities, methods and controls are adequate to preserve the drug's identity, strength, quality and purity, and a potential inspection of selected clinical investigation sites to assess compliance with GCPs; and
- FDA review and approval of the NDA to permit commercial marketing of the product for particular indications for use in the United States.

Once a product candidate is identified for development, it enters the preclinical development stage. The preclinical developmental stage generally involves laboratory evaluations of chemistry, formulation and stability, as well as studies to evaluate the product candidate's toxicity in animals, in an effort to support subsequent clinical testing. The conduct of preclinical studies is subject to federal regulations and requirements, including GLP regulations for certain studies.

Prior to beginning the first clinical trial with a product candidate in the United States, the trial sponsor must submit the results of preclinical testing, together with manufacturing information and analytical data, to the FDA as part of, an IND. An IND is a request for authorization from the FDA to administer an investigational drug product to humans. The central focus of an IND submission is on the general investigational plan and the protocol(s) for clinical studies. The IND also includes results of animal and *in vitro* studies assessing the toxicology, pharmacokinetics, pharmacology and pharmacodynamic characteristics of the product candidate, chemistry, manufacturing and controls information, and any available human data or literature to support the use of the product candidate. An IND must become effective before human clinical trials may begin. The IND automatically becomes effective 30 days after receipt by the FDA, unless the FDA, within the 30-day time period, places the IND on clinical hold. In such case, the IND sponsor and the FDA must resolve any outstanding concerns or questions before the clinical trial can begin. Submission of an IND therefore may or may not result in FDA authorization to begin a clinical trial.

Clinical trials involve the administration of the investigational product to human subjects under the supervision of qualified investigators, generally physicians not employed by or under the trial sponsor's control,

in accordance with GCPs, which include the requirement that all research subjects provide their informed consent in writing for their participation in any clinical trial. Clinical trials must be conducted under protocols detailing, among other things, the objectives of the trial, dosing procedures, subject selection and exclusion criteria and the safety and effectiveness criteria to be evaluated. Each protocol must be submitted to the FDA as part of the IND, and a separate submission to the existing IND must be made for each successive clinical trial conducted during product development and for any subsequent protocol amendments. While the IND is active, progress reports summarizing the results of the clinical trials and nonclinical studies performed since the last progress report, among other information, must be submitted at least annually to the FDA, and written IND safety reports must be submitted to the FDA and investigators for serious and unexpected suspected adverse events, findings from other studies suggesting a significant risk to humans, and any clinically important increased incidence of a serious suspected adverse reaction compared to that listed in the protocol or investigator brochure.

Furthermore, an independent IRB at each institution participating in the clinical trial must review and approve review and approve each protocol before a clinical trial commences at that institution and must also approve the information regarding the trial and the consent form that must be provided to each trial subject or his or her legal representative, monitor the study until completed and otherwise comply with IRB regulations. Regulatory authorities, the IRB or the sponsor may suspend a clinical trial at any time on various grounds, including a finding that the subjects are being exposed to an unacceptable health risk or that the trial is unlikely to meet its stated objectives. In addition, some studies also include oversight by an independent group of qualified experts organized by the clinical trial sponsor, known as a data safety monitoring board or committee. Depending on its charter, this group may determine whether a trial may move forward at designated check points based on access to certain data from the trial. There are also requirements governing the reporting of ongoing clinical studies and clinical trial results to public registries, including clinicaltrials.gov.

Human clinical trials are typically conducted in three sequential phases that may overlap or be combined:

- Phase 1: The product candidate is initially introduced into healthy human subjects or patients with the target disease or condition. These studies are designed to test the safety, dosage tolerance, absorption, metabolism, excretion, and distribution of the investigational product in humans, the side effects associated with increasing doses, and, if possible, to gain early evidence on its effectiveness.
- Phase 2: The product candidate is administered to a limited patient population with a specified disease or condition identify possible adverse side effects and safety risks, to preliminarily evaluate the efficacy of the product candidate for specific targeted diseases and to determine dosage tolerance and appropriate dosage.
- Phase 3: The product candidate is administered to an expanded patient population to further evaluate dosage, to provide substantial evidence of efficacy and to further test for safety, generally at multiple geographically dispersed clinical trial sites. These clinical trials are intended to establish the overall risk-benefit ratio of the product candidate and provide an adequate basis for product labeling.

In some cases, the FDA may require, or sponsors may voluntarily pursue, additional clinical trials after a product is approved to gain more information about the product. These clinical trials, sometimes referred to as Phase 4, studies may be conducted after initial marketing approval, and may be used to gain additional experience from the treatment of patients in the intended therapeutic indication. In certain instances, the FDA may mandate the performance of Phase 4 clinical trials as a condition of approval of an NDA.

During the development of a new drug, sponsors are given opportunities to meet with the FDA at certain points. These points may be prior to submission of an IND, at the end of Phase 2, and before an NDA is submitted. Meetings at other times may be requested. These meetings can provide an opportunity for the sponsor to share information about the data gathered to date, for the FDA to provide advice, and for the sponsor and the FDA to reach alignment on the next phase of development.

Concurrent with clinical trials, companies usually complete additional animal studies and must also develop additional information about the chemistry and physical characteristics of the drug and finalize a process for manufacturing the product in commercial quantities in accordance with cGMP requirements. The manufacturing process must be capable of consistently producing quality batches of the product candidate and, among other things, the manufacturer must develop methods for testing the identity, strength, quality and purity of the final drug. In addition, appropriate packaging must be selected and tested, and stability studies must be conducted to demonstrate that the product candidate does not undergo unacceptable deterioration over its shelf life.

U.S. Review and Approval Process

The results of product development, preclinical and other non-clinical studies and clinical trials, along with descriptions of the manufacturing process, analytical tests conducted on the chemistry of the drug, proposed labeling and other relevant information are submitted to the FDA as part of an NDA requesting approval to market the product. The submission of an NDA is subject to the payment of substantial user fees, unless a waiver or exemption applies.

The FDA conducts a preliminary review of all NDAs within the first 60 days after submission, before accepting them for filing, to determine whether they are sufficiently complete to permit substantive review The FDA may request additional information rather than accept an NDA for filing. In this event, the NDA must be resubmitted with the additional information. The resubmitted application also is subject to review before the FDA accepts it for filing. Once filed, reviews an NDA to determine, among other things, whether a product is safe and effective for its intended use and whether its manufacturing is cGMP-compliant to assure and preserve the product's identity, strength, quality and purity. Under the Prescription Drug User Fee Act (PDUFA) guidelines that are currently in effect, the FDA has a goal of ten months from the filing date to complete a standard review of an NDA for a drug that is a new molecular entity. This review typically takes twelve months from the date the NDA is submitted to FDA because the FDA has approximately two months to make a "filing" decision after it the application is submitted.

The FDA may refer an application for a novel drug to an advisory committee. An advisory committee is a panel of independent experts, including clinicians and other scientific experts, that reviews, evaluates and provides a recommendation as to whether the application should be approved and under what conditions. The FDA is not bound by the recommendations of an advisory committee, but it considers such recommendations carefully when making decisions.

Before approving an NDA, the FDA will typically inspect the facility or facilities where the product is manufactured. Additionally, before approving an NDA, the FDA may inspect one or more clinical trial sites to assure compliance with GCPs.

After the FDA evaluates an NDA and conducts inspections of manufacturing facilities where the investigational product and/or its drug substance will be produced, the FDA may issue an approval letter or a Complete Response Letter (CRL). An approval letter authorizes commercial marketing of the drug with prescribing information for specific indications. A CRL indicates that the review cycle of the application is complete, and the application will not be approved in its present form. A CRL usually describes the specific deficiencies in the NDA identified by the FDA and may require additional clinical data, such as an additional clinical trial or other significant and time-consuming requirements related to clinical trials, nonclinical studies or manufacturing. If a CRL is issued, the sponsor must resubmit the NDA or, addressing all of the deficiencies that the FDA has identified in the letter, or withdraw the application. Even if such data and information are submitted, the FDA may decide that the NDA does not satisfy the criteria for approval.

If a product receives regulatory approval, the approval may be significantly limited to specific diseases and dosages or the indications for use may otherwise be limited, which could restrict the commercial value of the product. In addition, the FDA may require a sponsor to conduct Phase 4 testing, which involves clinical trials

designed to further assess a drug's safety and effectiveness after NDA approval, and may require testing and surveillance programs to monitor the safety of approved products which have been commercialized. The FDA may also place other conditions on approval including the requirement for a risk evaluation and mitigation strategy (REMS), to assure the safe use of the drug. If the FDA concludes a REMS is needed, the sponsor of the NDA must submit a proposed REMS. The FDA will not approve the NDA without an approved REMS, if required. A REMS could include medication guides, physician communication plans, or elements to assure safe use, such as restricted distribution methods, patient registries and other risk minimization tools. Any of these limitations on approval or marketing could restrict the commercial promotion, distribution, prescription or dispensing of products.

In addition, the Pediatric Research Equity Act (PREA) requires a sponsor to conduct pediatric clinical trials for most drugs, for a new active ingredient, new indication, new dosage form, new dosing regimen or new route of administration. Under PREA, original NDAs and supplements must contain a pediatric assessment unless the sponsor has received a deferral or waiver. The required assessment must evaluate the safety and effectiveness of the product for the claimed indications in all relevant pediatric subpopulations and support dosing and administration for each pediatric subpopulation for which the product is safe and effective. The sponsor or FDA may request a deferral of pediatric clinical trials for some or all of the pediatric subpopulations. A deferral may be granted for several reasons, including a finding that the drug is ready for approval for use in adults before pediatric clinical trials are complete or that additional safety or effectiveness data needs to be collected before the pediatric clinical trials begin. The FDA must send a non-compliance letter to any sponsor that fails to submit the required assessment, keep a deferral current or fails to submit a request for approval of a pediatric formulation.

Expedited Development and Review Programs

The FDA offers a number of programs intended to expedite the development or review of a marketing application for a drug product. For example, the Fast Track program is intended to expedite or facilitate the process for developing and reviewing product candidates that are intended to treat a serious or life-threatening disease or condition and demonstrate the potential to address unmet medical needs for the disease or condition. Fast Track designation applies to the combination of the product and the specific indication for which it is being studied. The sponsor of a Fast Track product candidate has opportunities for more frequent interactions with the applicable FDA review team during development and, once an NDA is submitted, the product candidate may be eligible for priority review. An NDA for a Fast Track product candidate may also be eligible for rolling review, where the FDA may consider for review sections of the NDA on a rolling basis before the complete application is submitted, if the sponsor provides a schedule for the submission of the sections of the NDA, the FDA agrees to accept sections of the NDA and determines that the schedule is acceptable, and the sponsor pays any required user fees upon submission of the first section of the NDA.

A product candidate intended to treat a serious or life-threatening disease or condition may also be eligible for Breakthrough Therapy designation to expedite its development and review. A product candidate can receive Breakthrough Therapy designation if preliminary clinical evidence indicates that the product candidate, alone or in combination with one or more other drugs, may demonstrate substantial improvement over existing therapies on one or more clinically significant endpoints, such as substantial treatment effects observed early in clinical development. The designation includes all of the Fast Track program features, as well as more intensive FDA interaction and guidance beginning as early as Phase 1 and an organizational commitment to expedite the development and review of the product candidate, including involvement of senior managers.

Any marketing application for a drug submitted to the FDA for approval, including a product candidate with a Fast Track designation and/or Breakthrough Therapy designation, may be eligible for other types of FDA programs intended to expedite the development and review processes, such as priority review and accelerated approval. An NDA is eligible for priority review if the product candidate is designed to treat a serious condition, and if approved, would provide a significant improvement in safety or effectiveness compared to available alternatives for such disease or condition. For new-molecular-entity NDAs, priority review designation means

the FDA's goal is to take action on the marketing application within six months of the 60-day filing date, as compared to ten months for review of new-molecular-entity NDAs under its current PDUFA review goals.

Additionally, product candidates studied for their safety and effectiveness in treating serious or life-threatening diseases or conditions may be eligible for accelerated approval upon a determination that the product candidate has an effect on a surrogate endpoint that is reasonably likely to predict clinical benefit, or on a clinical endpoint that can be measured earlier than irreversible morbidity or mortality, that is reasonably likely to predict an effect on irreversible morbidity or mortality or other clinical benefits, taking into account the severity, rarity, or prevalence of the condition and the availability or lack of alternative treatments. As a condition of continued approval, the FDA will generally require the sponsor to perform adequate and well-controlled confirmatory clinical studies to verify and describe the anticipated effect on irreversible morbidity or mortality or other clinical benefits. Products receiving accelerated approval may be subject to expedited withdrawal procedures if the sponsor fails to conduct the required confirmatory studies in a timely manner or if such studies fail to verify the predicted clinical benefit. In addition, the FDA currently requires as a condition for accelerated approval pre-approval of promotional materials, which could adversely impact the timing of the commercial launch of the product.

Fast Track designation, Breakthrough Therapy designation, priority review, and accelerated approval do not change the standards for approval, but may expedite the development or approval process. Even if a product candidate qualifies for one or more of these programs, the FDA may later decide that the product no longer meets the conditions for qualification or decide that the time period for FDA review or approval will not be shortened.

Orphan Drug Designation and Exclusivity

Under the Orphan Drug Act, the FDA may grant orphan designation to a drug intended to treat a rare disease or condition, defined as a disease or condition with a patient population of fewer than 200,000 individuals in the United States, or a patient population greater than 200,000 individuals in the United States and when there is no reasonable expectation that the cost of developing and making available the drug in the United States will be recovered from sales in the United States for that drug. Orphan drug designation must be requested before submitting an NDA. After the FDA grants orphan drug designation, the generic identity of the therapeutic agent and its potential orphan use are disclosed publicly by the FDA. Orphan designation does not convey any advantage in or shorten the duration of the regulatory review and approval process.

If a product that has orphan drug designation subsequently receives the first FDA approval for a particular active ingredient for the disease or condition for which it has such designation, the product is entitled to orphan product exclusivity, which means that the FDA may not approve any other applications, including a full NDA, to market the same drug for the same disease or condition for seven years, except in limited circumstances, such as a showing of clinical superiority to the product with orphan drug exclusivity or if the FDA finds that the holder of the orphan drug exclusivity has not shown that it can assure the availability of sufficient quantities of the orphan drug to meet the needs of patients with the disease or condition, or the drug was designated. Orphan drug exclusivity does not prevent the FDA from approving a different drug for the same disease or condition, or the same drug for a different disease or condition. Among the other benefits of orphan drug designation are tax credits for certain research and a waiver of the NDA application user fee.

A designated orphan drug may not receive orphan drug exclusivity if it is approved for a use that is broader than the disease or condition for which it received orphan designation. In addition, orphan drug exclusive marketing rights in the United States may be lost if the FDA later determines that the request for designation was materially defective or, as noted above, if a second applicant demonstrates that its product is clinically superior to the approved product with orphan exclusivity or the manufacturer of the approved product is unable to assure sufficient quantities of the product to meet the needs of patients with the rare disease or condition.

Post-approval Requirements

Any products manufactured or distributed pursuant to FDA approvals are subject to pervasive and continuing regulation by the FDA, including, among other things, requirements relating to record-keeping, reporting of adverse experiences, periodic reporting, product sampling and distribution, and advertising and promotion of the product. After approval, most changes to the approved product, such as adding new indications, certain manufacturing changes and additional labeling claims, are subject to further FDA review and approval. There also are continuing, annual program fees for any marketed products. Drug manufacturers and their subcontractors are required to register their establishments with the FDA and certain state agencies, and are subject to periodic unannounced inspections by the FDA and certain state agencies for compliance with cGMPs and other laws and regulations. Changes to the manufacturing process are strictly regulated, and, depending on the significance of the change, may require prior FDA approval before being implemented. FDA regulations also require investigation and correction of any deviations from cGMP and impose reporting requirements. Accordingly, manufacturers must continue to expend time, money and effort in the area of production and quality control to maintain compliance with cGMP and other aspects of regulatory compliance.

The FDA may withdraw approval if compliance with regulatory requirements and standards is not maintained or if problems occur after the product reaches the market. Later discovery of previously unknown problems with a product, including adverse events of unanticipated severity or frequency, or with manufacturing processes, or failure to comply with regulatory requirements, may result in revisions to the approved labeling to add new safety information; imposition of requirements for post-market studies or clinical studies to assess new safety risks; or imposition of distribution restrictions or other restrictions under a REMS program. Other potential consequences include, among other things:

- restrictions on the marketing or manufacturing of the product, complete withdrawal of the product from the market or product recalls;
- fines, warning letters, or untitled letters;
- clinical holds on clinical studies;
- refusal of the FDA to approve pending applications or supplements to approved applications, or suspension or revocation of product approvals;
- product seizure or detention, or refusal to permit the import or export of products;
- consent decrees, corporate integrity agreements, debarment or exclusion from federal healthcare programs;
- mandated modification of promotional materials and labeling and the issuance of corrective information;
- the issuance of safety alerts, Dear Healthcare Provider letters, press releases and other communications containing warnings or other safety information about the product; or
- injunctions or the imposition of civil or criminal penalties.

The FDA closely regulates the marketing, labeling, advertising and promotion of drug products. A company can make only those claims relating to safety and efficacy that are approved by the FDA and in accordance with the provisions of the approved label. The FDA and other agencies actively enforce the laws and regulations prohibiting the promotion of off-label uses. Failure to comply with these requirements can result in, among other things, adverse publicity, warning letters, corrective advertising and potential civil and criminal penalties. Physicians may prescribe, in their independent professional medical judgment, legally available products for uses that are not described in the product's labeling and that differ from those tested and approved by the FDA. Physicians may believe that such off-label uses are the best treatment for many patients in varied circumstances. The FDA does not regulate the behavior of physicians in their choice of treatments. The FDA does, however, restrict manufacturer's communications on the subject of off-label use of their products. However, companies

may share truthful and not misleading information that is otherwise consistent with a product's FDA-approved labeling.

Marketing Exclusivity

Market exclusivity provisions under the FDCA can delay the submission or the approval of certain marketing applications. The FDCA provides a five-year period of non-patent data exclusivity within the United States to the first applicant to obtain approval of an NDA for a new chemical entity. A drug is a new chemical entity if the FDA has not previously approved any other new drug containing the same active moiety, which is the molecule or ion responsible for the action of the drug substance. During the exclusivity period, the FDA may not approve or even accept for review an abbreviated new drug application (ANDA) or an NDA submitted under Section 505(b)(2) (505(b)(2) NDA) submitted by another company for another drug based on the same active moiety, regardless of whether the drug is intended for the same indication as the original innovative drug or for another indication, where the applicant does not own or have a legal right of reference to all the data required for approval. However, an application may be submitted after four years if it contains a certification of patent invalidity or non-infringement to one of the patents listed with the FDA by the innovator NDA holder.

The FDCA alternatively provides three years of marketing exclusivity for an NDA, or supplement to an existing NDA if new clinical investigations, other than bioavailability studies, that were conducted or sponsored by the applicant are deemed by the FDA to be essential to the approval of the application, for example new indications, dosages or strengths of an existing drug. This three-year exclusivity covers only the modification for which the drug received approval on the basis of the new clinical investigations and does not prohibit the FDA from approving ANDAs or 505(b)(2) NDAs for drugs containing the active agent for the original indication or condition of use. Five-year and three-year exclusivity will not delay the submission or approval of a full NDA. However, an applicant submitting a full NDA would be required to conduct or obtain a right of reference to all of the preclinical studies and adequate and well-controlled clinical trials necessary to demonstrate safety and effectiveness.

Pediatric exclusivity is another type of marketing exclusivity available in the United States. Pediatric exclusivity provides for an additional six months of marketing exclusivity attached to another period of exclusivity if a sponsor conducts clinical trials in children in response to a written request from the FDA. The issuance of a written request does not require the sponsor to undertake the described clinical trials.

Other U.S. Regulatory Requirements

In addition to FDA regulation of pharmaceutical products, pharmaceutical companies are also subject to additional healthcare regulation and enforcement by the federal government and by authorities in the states and foreign jurisdictions in which they conduct their business and may constrain the financial arrangements and relationships through which we research, as well as sell, market and distribute any products for which we obtain marketing authorization. Such laws include, without limitation, state and federal anti-kickback, fraud and abuse, false claims, and transparency laws and regulations related to drug pricing and payments and other transfers of value made to physicians and other healthcare providers. If their operations are found to be in violation of any of such laws or any other governmental regulations that apply, they may be subject to penalties, including, without limitation, administrative, civil and criminal penalties, damages, fines, disgorgement, the curtailment or restructuring of operations, integrity oversight and reporting obligations, exclusion from participation in federal and state healthcare programs and imprisonment.

Coverage and Reimbursement

Sales of any product depend, in part, on the extent to which such product will be covered by third-party payors, such as federal, state and foreign government healthcare programs, commercial insurance and managed healthcare organizations, and the level of reimbursement for such product by third-party payors. Decisions

regarding the extent of coverage and amount of reimbursement to be provided are made on a plan-by-plan basis. These third-party payors are increasingly reducing reimbursements for medical products, drugs and services. In addition, the U.S. government, state legislatures and foreign governments have continued implementing cost- containment programs, including price controls, restrictions on coverage and reimbursement and requirements for substitution of generic products. Adoption of price controls and cost-containment measures, and adoption of more restrictive policies in jurisdictions with existing controls and measures, could further limit sales of any product.

Decreases in third-party reimbursement for any product or a decision by a third-party payor not to cover a product could reduce physician usage and patient demand for the product and also have a material adverse effect on sales.

Healthcare Reform

In the United States, there have been, and continue to be, legislative and regulatory changes and proposed changes regarding the healthcare system that could prevent or delay marketing approval of product candidates, restrict or regulate post-approval activities, and affect the profitable sale of product candidates, and similar healthcare laws and regulations exist in the EU and other jurisdictions. Among policy makers and payors in the United States, there is significant interest in promoting changes in healthcare systems with the stated goals of containing healthcare costs, improving quality and/or expanding access. In the United States, the pharmaceutical industry has been a particular focus of these efforts and has been significantly affected by major legislative initiatives.

By way of example, in March 2010, the Patient Protection and Affordable Care Act (the ACA) was passed, which substantially changed the way healthcare is financed by both governmental and private insurers, and significantly affected the pharmaceutical industry. The ACA, among other things, increased the minimum level of Medicaid rebates payable by manufacturers of brand name drugs from 15.1% to 23.1% of the average manufacturer price; required collection of rebates for drugs paid by Medicaid managed care organizations; imposed a non-deductible annual fee on pharmaceutical manufacturers or importers who sell certain "branded prescription drugs" to specified federal government programs; implemented a new methodology by which rebates owed by manufacturers under the Medicaid Drug Rebate Program are calculated for certain drugs that are inhaled, infused, instilled, implanted, or injected; expanded eligibility criteria for Medicaid programs; created a new Patient-Centered Outcomes Research Institute to oversee, identify priorities in, and conduct comparative clinical effectiveness research, along with funding for such research; and established a Center for Medicare and Medicaid Innovation at the CMS to test innovative payment and service delivery models to lower Medicare and Medicaid spending, potentially including prescription drug spending.

Since its enactment, there have been judicial, executive and political challenges to certain aspects of the ACA. On June 17, 2021, the U.S. Supreme Court dismissed the most recent judicial challenge to the ACA brought by several states without specifically ruling on the constitutionality of the ACA. Prior to the Supreme Court's decision, President Biden issued an Executive Order to initiate a special enrollment period from February 15, 2021, through August 15, 2021, for purposes of obtaining health insurance coverage through the ACA marketplace. The Executive Order also instructed certain governmental agencies to review and reconsider their existing policies and rules that limit access to healthcare, including among others, reexamining Medicaid demonstration projects and waiver programs that include work requirements, and policies that create unnecessary barriers to obtaining access to health insurance coverage through Medicaid or the ACA. On August 16, 2022, President Biden signed the Inflation Reduction Act of 2022 (the IRA) into law, which, among other things, extends enhanced subsidies for individuals purchasing health insurance coverage in ACA marketplaces through plan year 2025. It is unclear how other healthcare reform measures, if any, will impact our business.

In addition, other legislative changes have been proposed and adopted since the ACA was enacted. For example, on March 11, 2021, President Biden signed the American Rescue Plan Act of 2021 into law, which

eliminates the statutory Medicaid drug rebate cap, currently set at 100% of a drug's average manufacturer price, beginning January 1, 2024. Further, in August 2011, the Budget Control Act of 2011, among other things, included aggregate reductions to Medicare payments to providers, which went into effect on April 1, 2013 and, due to subsequent legislative amendments to the statute, will remain in effect until 2032, with the exception of a temporary suspension from May 1, 2020 through March 31, 2022, unless additional Congressional action is taken. On January 2, 2013, the American Taxpayer Relief Act of 2012 was signed into law, which, among other things, reduced Medicare payments to several providers, including hospitals, and increased the statute of limitations period for the government to recover overpayments to providers from three to five years.

Moreover, heightened governmental scrutiny is likely to continue over the manner in which manufacturers set prices for their marketed products, which already has resulted in several Congressional inquiries and proposed and enacted federal and state legislation designed to, among other things, bring more transparency to product pricing, review the relationship between pricing and manufacturer patient programs, and reform government program reimbursement methodologies for pharmaceutical products. Most recently, the IRA marks the most significant action by Congress with respect to the pharmaceutical industry since the adoption of the ACA in 2010. Among other things, the IRA requires manufacturers of certain drugs to engage in price negotiations with Medicare (beginning in 2026), imposes rebates under Medicare Part B and Medicare Part D to penalize price increases that outpace inflation (first due in 2023), and replaces the Part D coverage gap discount program with a new discounting program (beginning in 2025). Manufacturers that fail to comply with the IRA may be subject to various penalties, including civil monetary penalties. The IRA permits the Secretary of the Department of Health and Human Services (HHS) to implement many of these provisions through guidance, as opposed to regulation, for the initial years. For that and other reasons, it is currently unclear how the IRA will be effectuated, and while the impact of the IRA on the pharmaceutical industry cannot yet be fully determined, it is likely to be significant.

Individual states in the United States have also become increasingly active in implementing regulations designed to control pharmaceutical product pricing, including price or patient reimbursement constraints, discounts, restrictions on certain product access and marketing cost disclosure and transparency measures, and, in some cases, designed to encourage importation from other countries and bulk purchasing. In addition, regional healthcare authorities and individual hospitals are increasingly using bidding procedures to determine which drugs and suppliers will be included in their healthcare programs Furthermore, there has been increased interest by third-party payors and governmental authorities in reference pricing systems and publication of discounts and list prices.

We expect that additional state and federal healthcare reform measures will be adopted in the future, any of which could limit the amounts that federal and state governments will pay for healthcare products and services, which could result in reduced demand for our products once approved or additional pricing pressures. The implementation of cost containment measures or other healthcare reforms may prevent us from being able to generate revenue, attain profitability or commercialize our product candidates.

Data Privacy and Security

Numerous state, federal and foreign laws, regulations and standards govern the collection, use, access to, confidentiality and security of healthrelated and other personal information, including clinical trial data, and could apply now or in the future to our operations or the operations of our partners. In the United States, numerous federal and state laws and regulations, including data breach notification laws, health information privacy and security laws and consumer protection laws and regulations govern the collection, use, disclosure and protection of health-related and other personal information. Further, to the extent we collect personal data from individuals outside of the United States, through clinical trials or otherwise, we could be subject to foreign laws, such as the GDPR, which govern the privacy and security of personal data, including health-related data. Our use of AI/ML may also be subject to evolving laws and regulations, controlling for data bias and anti-discrimination. Privacy and security laws, regulations and other obligations are constantly evolving, may conflict with each other to complicate compliance efforts, and can result in investigations, proceedings, or actions that lead to significant civil and/or criminal penalties and restrictions on data processing.

Research and Development

Total research and development expenses were \$55.8 million and \$91.7 million for the years ended December 31, 2021 and 2022, respectively and \$22.1 million and \$29.5 million for the three months ended March 31, 2022 and 2023, respectively.

Commercialization

We intend to retain significant development and commercial rights to our product candidates and, if marketing approval is obtained, we may commercialize our product candidates on our own, or potentially with a partner, in the United States and other geographies. We currently have no sales, marketing or commercial product distribution capabilities. We may build the necessary infrastructure and capabilities over time for the United States, and potentially other regions, though like all things we do, we would seek to leverage technology to build these capabilities over time to be significantly more efficient than the industry average. Decisions to create this infrastructure and capability will be made following further advancement of our product candidates and based on our assessment of our ability to build said capabilities and infrastructure with competitive advantage. Clinical data, the size of the addressable patient population, the size of the commercial infrastructure, manufacturing needs and major trends as to how value is accrued in the industry may all influence or alter our commercialization plans.

Manufacturing

We do not own or operate any manufacturing facilities. We currently depend on and expect to continue to depend on third-party CMOs for all of our requirements of raw materials, drug substance and drug product for our preclinical research and clinical trials of our product candidates. Certain of these CMOs, including the drug substance supplier for our NMRA-140 program (Almac) and the drug product suppliers for our NMRA-140 (Almac) and NMRA-511 (Aptuit) programs, are single-source suppliers. None of these single-source suppliers have the ability to terminate these agreements for convenience and there are no minimum purchase commitments. If not extended by us and the counter parties thereto, these supplier agreements terminate in the following years: Almac in October 2023, Aptuit in May 2023 and Piramal in August 2026. We intend to continue to rely on CMOs for later-stage development and commercialization of our product candidates, including any additional product candidates that we may identify. Although we rely on CMOs, we have personnel and third-party consultants with extensive manufacturing experience to oversee the relationships with our contract manufacturers.

Competition

Neumora is a clinical-stage biopharmaceutical company founded to confront the global brain disease crisis by taking a fundamentally different approach to the way treatments for brain diseases are developed. Our efforts to date have resulted in a pipeline of seven clinical and preclinical precision neuroscience programs targeting a broad range of underserved neuropsychiatric disorders and neurodegenerative diseases. The foundation of our approach is an integration between our portfolio of therapeutic candidates with novel mechanisms of action and our precision neuroscience approach, supported by our Precision Toolbox of translational neuroscience tools, methods, and data science capabilities. As such, we compete with multiple biopharmaceutical and biotechnology companies that are similarly working to develop therapeutics targeting neuropsychiatric disorders and neurodegenerative diseases. While we believe we have the competitive advantages referred to above, we face competition from major biopharmaceutical and biotechnology companies, academic institutions, governmental agencies, consortiums and public and private research institutions, among others, many of whom have significantly greater resources than us. Notable competitors include traditional biopharmaceutical and biotechnology companies targeting brain diseases such as Cerevel Therapeutics, Sage Therapeutics, Karuna Therapeutics, Prothena, ACADIA Pharmaceuticals, Axsome Therapeutics, Neurocrine Biosciences and Intra-Cellular Therapies.

Facilities

Our corporate headquarters are located in Watertown, Massachusetts, where we sublease approximately 30,000 square feet of office and laboratory space pursuant to a sublease agreement which was executed in May 2022 and expires in June 2025.

In March 2021, we entered into a new lease agreement for an office facility in South San Francisco, California. The term of the lease commenced in April 2021 and ends in December 2023.

We believe that our existing facilities are sufficient for our near-term needs but expect to need additional space as we grow. We believe that suitable additional alternative spaces will be available in the future on commercially reasonable terms, if required.

Employees and Human Capital Resources

As of March 31, 2023, we had 108 full-time employees, 71 of whom were primarily engaged in research and development activities. A total of 74 employees has an advanced degree. None of our employees are represented by a labor union or party to a collective bargaining agreement. We consider our relationship with our employees to be good.

Our human capital resources objectives include, as applicable, identifying, recruiting, retaining, incentivizing and integrating our existing and additional employees. The principal purposes of our equity incentive plans are to attract, retain and motivate selected employees, consultants and directors through the granting of stock-based compensation awards and cash-based performance bonus awards.

Legal Proceedings

We are not currently a party to any material legal proceedings. From time to time, we may, however, in the ordinary course of business face various claims brought by third parties, and we may, from time to time, make claims or take legal actions to assert our rights, including intellectual property rights as well as claims relating to employment matters and the safety or efficacy of our products. Any of these claims could subject us to costly litigation, and, while we generally believe that we have adequate insurance to cover many different types of liabilities, our insurance carriers may deny coverage, may be inadequately capitalized to pay on valid claims, or our policy limits may be inadequate to fully satisfy any damage awards or settlements. If this were to happen, the payment of any such awards could have a material adverse effect on our operations, cash flows and financial position. Additionally, any such claims, whether or not successful, could damage our reputation and business.

MANAGEMENT

Executive Officers, Key Employees and Directors

The following table sets forth information regarding our executive officers, key employees and directors as of June 30, 2023:

Executive Officers and Employee Director	Age	Position
Paul Berns	56	Chief Executive Officer and Chairman
Daljit (Bill) Singh Aurora, Pharm.D.	55	Chief Development Officer
Michael Gold, M.D.	62	Chief Medical Officer
Joshua Pinto, Ph.D.	39	Chief Financial Officer
Carol Suh	34	Chief Operating Officer
Key Employees		
Nicholas (Nick) Brandon, Ph.D.	49	Chief Scientific Officer
Maryjo Chamberlain-Tharp, Ph.D.	47	Chief Business Officer
Lori Houle	56	Chief Quality Officer
Non-Employee Directors		
Kristina M. Burow	49	Director
Matthew Fust	58	Director
Alaa Halawa	41	Director
Maykin Ho, Ph.D.	70	Director
Robert Nelsen	59	Director
Kári Stefánsson, M.D.	74	Director
Stacie Weninger, Ph.D. ⁽⁴⁾	50	Director

(1) Member of the audit committee.

(2) Member of the compensation committee.

(3) Member of the nominating and corporate governance committee.

(4) Dr. Weninger has indicated her intention to resign as a director prior to the effectiveness of the registration statement for which this prospectus is a part.

Executive Officers and Employee Director

Paul Berns has served as our Chief Executive Officer since November 2019 and as Chairman of our board of directors since January 2020. Mr. Berns has been a member of ARCH Venture Partners since August 2018 and became a Managing Director in 2021. Mr. Berns was a consultant to the biopharmaceutical industry from July 2016 to August 2018, as well as from 2012 to 2014 and from 2005 to 2006. From 2014 to 2016, Mr. Berns served as President Chief Executive Officer and Chairman of the board of directors at Anacor Pharmaceuticals, a biopharmaceutical company, which was acquired by Pfizer in 2016. Previously, Mr. Berns served as President and Chief Executive Officer of Allos Therapeutics, a biopharmaceutical company, from 2006 to 2012, when it was acquired by Spectrum Pharmaceuticals. Mr. Berns was President and Chief Executive Officer of Bone Care International, a specialty pharmaceutical company, from 2002 to 2005, when it was acquired by Genzyme Corporation. Prior to that, Mr. Berns was Vice President and General Manager of the Immunology, Oncology and Pain Therapeutics business unit of Abbott Laboratories from 2001 to 2002, and from 2000 to 2001, he served as Vice President, Marketing of BASF Pharmaceuticals/Knoll, when it was acquired by Abbott Laboratories in 2001. Earlier in his career, Mr. Berns held various positions, including senior management roles, at Bristol Myers Squibb (BMS) from 1990 to 2000. Mr. Berns has served as a board member of the publicly held companies UNITY Biotechnology since March 2018 and EQRx since January 2020. Mr. Berns has also served as a board member of the privately held companies Epirium Bio and HI-Bio since July 2019 and August 2021, respectively. Mr. Berns has served as the chairman of the board of directors of the privately held company Happy AI since

July 2019. Mr. Berns previously served on the boards of Jazz Pharmaceuticals, PLC (from 2010 to July 2021), MC2 Therapeutics (from May 2017 to January 2020), Menlo Therapeutics (from November 2017 to March 2020), Anacor Pharmaceuticals (from 2012 to 2016), XenoPort (from 2005 to 2016), Allos Therapeutics (from March 2006 to September 2012) and Bone Care International (from 2002 to 2005). Mr. Berns holds a B.S. in Economics from the University of Wisconsin. We believe Mr. Berns is qualified to serve on our board of directors because of his extensive management and leadership experience with biopharmaceutical and life sciences companies.

Bill Aurora, Pharm.D., serves as our Chief Development Officer and from August 2021 through December 2022, served as our Chief Corporate Affairs Officer. From July 2016 to June 2021, Dr. Aurora was at Dermira, Inc., which was acquired by Eli Lilly in 2020, where he served as Senior Vice President, Medical Affairs and Compliance from 2016 to November 2019 and as Chief Scientific Affairs Officer from November 2019 to June 2021. Previously, he held vice president roles in medical affairs at Neurocrine Biosciences from 2015 to 2016 as well as global scientific affairs at Merck Research Laboratories from 2014 to 2015 and various roles at Amgen from 2002 to 2014, most recently serving as Vice President, Global Scientific Affairs, Global Development from 2007 to 2014 and Vice President, Worldwide Compliance and Business Ethics from 2013 to 2014. Dr. Aurora holds a B.S. in Pharmacy from the University of Texas at Austin and a Pharm.D. from the University of Texas Health Science Center, San Antonio, and obtained board certification in psychiatric pharmacy practice.

Michael Gold, M.D., has served as our Chief Medical Officer since January 2023. From May 2017 to January 2023, Dr. Gold served as Vice President, Therapeutic Head CNS Development at AbbVie, where he was responsible for AbbVie's CNS pipeline and was involved in the successful approval of CNS therapies including VRAYLAR as an adjunctive treatment for major depressive disorder. Prior to that, Dr. Gold held leadership roles at a number of biopharmaceutical companies, including as vice president at PPD from July 2015 to May 2017 and as vice president at UCB from January 2013 to June 2015. He also held a faculty position in the Department of Neurology at the University of South Florida, where he also served as the Medical Director for the Memory Disorder Clinic. Dr. Gold holds a B.S. in Chemistry, an M.S. in Mathematics and Computer Science and an M.D. from the University of Miami. He completed a Neurology residency at the Albert Einstein College of Medicine and a fellowship in Behavioral Neurology at the University of Florida College of Medicine.

Joshua Pinto, Ph.D., has served as our Chief Financial Officer since June 2021. Prior to Neumora, Dr. Pinto held roles of increasing responsibility at Credit Suisse from April 2015 to June 2021, most recently serving as director of healthcare investment banking from January 2019 to June 2021, where he focused on the life sciences sector and was responsible for advising biotech companies on mergers, acquisitions, restructurings, activism and financing. Dr. Pinto worked for Piper Jaffray as an associate in healthcare banking from 2014 to 2015. Before that, he worked in global external R&D at Eli Lilly and Company from 2013 to 2014. Dr. Pinto holds a B.S. in Business Administration and Biochemistry from Centenary College of Louisiana, an M.B.A. in Finance from McMaster University and a Ph.D. in Neuroscience from McMaster University.

Carol Suh is one of our co-founders and has served as our Chief Operating Officer since January 2023. From January 2022 through January 2023, she served as our Senior Vice President, Strategy and from January 2020 through December 2021 served as our Vice President of Business Development. Ms. Suh has been a member of ARCH Venture Partners since August 2018 and became a Partner in July 2021. While at ARCH, she has been involved in company creation and helped build multiple companies such as Sana Biotechnology, Autobahn Therapeutics and Boundless Bio across the fields of cell and gene therapy, neuroscience, oncology and immunology. Ms. Suh is a co-founder of Orbital Therapeutics since March 2022 and has served on its board of directors since August 2022. She has served on the board of directors of HI-Bio since August 2021 and the Metrodora Foundation since October 2021. Prior to ARCH, Ms. Suh helped launch Magenta Therapeutics, a biotechnology company, in 2016 and served as Business Development and Corporate Strategy Associate from June 2017 to September 2017. Previously, she was a consultant at Trinity Partners from 2015 to 2016. Ms. Suh began her career in R&D strategy with GlaxoSmithKline's Regenerative Medicine group in 2014. Ms. Suh holds an A.B. in Molecular and Cellular Biology from Harvard University, where she trained under Dr. David Scadden

at the Harvard Stem Cell Institute, an M.Phil. from Yale University, where she was awarded the National Science Foundation Graduate Research Fellowship for her work in stem cell biology, and an M.B.A. from Stanford Graduate School of Business.

Key Employees

Nicholas Brandon, Ph.D., has served as our Chief Scientific Officer since January 2022 and from April 2020 to December 2021 served as our Chief Research Officer. From April 2019 to April 2020, Dr. Brandon served as senior vice president and head of biology at Jnana Therapeutics. Previously, Dr. Brandon worked at AstraZeneca from 2012 to April 2019, where he held multiple positions including chief scientist and head of neuroscience discovery. Dr. Brandon has also served as an adjunct professor of neuroscience at Tufts School of Medicine since 2016 and as an honorary professor at University of Glasgow since 2010. Previously, Dr. Brandon was head of psychiatry and behavioral disorders for a period that bridged the Wyeth and Pfizer Neuroscience organizations between 2006 and 2012. Dr. Brandon holds an undergraduate degree in Genetics from Pembroke College, Cambridge University and a Ph.D. from University College London.

Maryjo Chamberlain-Tharp, Ph.D., has served as our Chief Business Officer since January 2022 and from August 2021 to December 2021 served as our Senior Vice President of Business Development. From September 2014 to August 2021, Dr. Chamberlain-Tharp held multiple positions including Global Head of Academic Outreach and Senior Director of Strategic Alliance Management at AbbVie. In 2014, Dr. Chamberlain-Tharp was President and CEO at Z&D Biopharma Consulting PLLC. Prior to that, from 1997 to 2014, Dr. Chamberlain-Tharp held multiple positions including Head of Neuroscience and East Coast Operations/Global External R&D at Eli Lilly. Dr. Chamberlain-Tharp holds a B.S. in Genetic Biology from Purdue University, an M.B.A. from Indiana University Bloomington and a Ph.D. in Clinical Psychiatric Epidemiology from Walden University.

Lori Houle serves as our Chief Quality Officer and from April 2021 through December 2022 served as our Senior Vice President of Quality. From October 2017 to April 2021, Ms. Houle acted as the Vice President of Global Quality at Vir Biotechnology. Prior to Vir, Ms. Houle served as Head of Quality at Dermira from 2014 to October 2017, and held leadership roles at Sarepta Therapeutics from 2011 to 2014 and EraGen Biosciences from to 2010 to 2011, Anteco Pharma 2007 to 2011, PPD from 2004 to 2010 and Wyeth (SPL) from 1998 to 2004. Ms. Houle holds a Bachelor's degree in Bacteriology and Medical Microbiology from the University of Wisconsin–Madison and an M.B.A. from DeVry University.

Non-Employee Directors

Kristina M. Burow has served as a member of our board of directors since January 2020. Ms. Burow has served as Managing Director of ARCH Venture Partners since November 2011 and previously held various roles at ARCH from 2002 to 2011. Ms. Burow is a co-founder of Orbital Therapeutics and has served on its board of directors since April 2022. She currently serves on the boards of directors of several biopharmaceutical and biotechnology companies, including Boundless Bio since February 2018, Autobahn Therapeutics since February 2018, Gossamer Bio since January 2018, Beam Therapeutics since June 2017, and Scholar Rock since 2014. She previously was a co-founder and member of the board of directors of Receptos, acquired by Celgene, and a co-founder and member of the board of directors of Sapphire Energy. Ms. Burow previously served on the board of directors of UNITY Biotechnology, Inc. from 2013 to March 2022, Sienna Biopharmaceuticals, Inc. from 2015 to December 2019, Vividion Therapeutics, Inc. from January 2017 to October 2021, VIR Biotechnology from January 2017 to September 2020, AgBiome, LLC from 2012 to October 2021, BlackThorn from 2013 to September 2020 and Lycera Corp. from 2009 to 2020. Prior to joining ARCH, Ms. Burow was an Associate with the Novartis BioVenture Fund and an early employee at the Genomics Institute of the Novartis Research Foundation. Ms. Burow holds a B.S. in Chemistry from the University of California, Berkeley, an M.A. in Chemistry from Columbia University and an M.B.A. from the University of Chicago Booth School of Business. We believe Ms. Burow is qualified to serve on our board of directors because of her extensive experience investing in biopharmaceutical and biotechnology companies and her experience on boards of directors in the medical industry.

Matthew Fust has served as a member of our board of directors since December 2020. Mr. Fust is an advisor to life science companies and previously served as Chief Financial Officer of Onyx Pharmaceuticals from 2009 to October 2013 until it was acquired by Amgen in 2013. From October 2013 to January 2014 Mr. Fust served as Executive Vice President, Finance after Onyx Pharmaceuticals was acquired by Amgen. Prior to that, Mr. Fust held the position of Chief Financial Officer of Jazz Pharmaceuticals from 2003 to 2008, and Chief Financial Officer of Perlegen Sciences from 2002 to 2003. Mr. Fust previously served as Senior Vice President and Chief Financial Officer of ALZA Corporation, where he was an executive from 1996 to 2002. Mr. Fust has served on the boards of directors of Ultragenyx Pharmaceutical since 2014; Atara Biotherapeutics since 2014; and Crinetics Pharmaceuticals since February 2018. Mr. Fust previously served on the boards of Dermira, from 2014 to February 2020, MacroGenics, from 2014 to May 2020 and BlackThorn from August 2017 until June 2020. Mr. Fust also currently serves as an advisor to OncoMyx, Juvena Therapeutics, as well as other publicly-traded and privately-held companies. Mr. Fust holds a B.A. from the University of Minnesota and an M.B.A. from Stanford University Graduate School of Business. We believe Mr. Fust is qualified to serve on our board of directors because of his deep experience running and serving on the boards of biopharmaceutical companies.

Alaa Halawa has served as a member of our board of directors since September 2022. Mr. Halawa has served as executive director of Mubadala Capital, a venture capital firm, since March 2017. From February 2015 to March 2017, Mr. Halawa served as director at Synaptics. Prior to that, Mr. Hawala served as director at GlobalFoundries from January 2014 to February 2015. Mr. Halawa currently serves on the boards of directors of several life sciences and healthcare companies, including Alloy Therapeutics since September 2022, Innovaccer since December 2021, Xilis since July 2021 and Pretzel Therapeutics since April 2021. Mr. Halawa holds a B.A. in Electrical Engineering from University of Jordan and an M.B.A. from Cornell University. We believe Mr. Halawa is qualified to serve on our board of directors because of his experience as a venture capitalist and serving on boards of emerging companies that are at the intersection of life sciences and technology.

Maykin Ho, Ph.D., has served as a member of our board of directors since April 2021. Dr. Ho has more than 30 years of experience in the healthcare and finance industries, and has served as a venture partner of Qiming Venture Partners since 2015, and as a member of the Biotech Advisory Panel of the Stock Exchange of Hong Kong. Dr. Ho is a retired partner of the Goldman Sachs Group, where she served in several roles from 1992 to 2015, including as senior biotechnology analyst, co-head of healthcare for global investment research and advisory director for healthcare investment banking. Prior to Goldman Sachs, she held various managerial positions in licensing, strategic planning, marketing and research at DuPont-Merck Pharmaceuticals and DuPont de Nemours & Company from 1982 to 1992. Dr. Ho has served on the board of directors for Agios Pharmaceuticals since 2015, BioMarin Pharmaceutical since February 2021, Fibrogen since December 2018, Parexel International from 2015 to September 2017 and from March 2018 to present, the Aaron Diamond AIDS Research Center since 2005 and the Institute for Protein Innovation since 2016. Dr. Ho previously served on the board of directors for GRAIL from May 2019 to August 2021, when it was acquired. Dr. Ho holds a B.S. in Medical Technology and a Ph.D. in Microbiology and Immunology from the State University of New York, Downstate Medical Center. She was a postdoctoral fellow at Harvard Medical School and a graduate of the Advanced Management Program at The Fuqua School of Business at Duke University. We believe Dr. Ho is qualified to serve on our board of directors due to her extensive experience in healthcare investment research and banking.

Robert Nelsen has served as a member of our board of directors since September 2020. Since 1986, Mr. Nelsen has served as co-founder and Managing Director of ARCH Venture Partners, a venture capital firm focused on early stage technology companies. Mr. Nelsen currently serves as a member of the board of directors of Brii Biosciences, Hua Medicine (Shanghai), Lyell Immunopharma, Prime Medicine, Inc., Sana Biotechnology and Vir Biotechnology, all of which are publicly-traded companies. He also serves as a member of the board of directors of several privately-held biotechnology and biopharmaceutical companies. Mr. Nelsen previously served on the board of directors of various publicly-traded biopharmaceutical companies including Denali Therapeutics, Revolution Healthcare Acquisition Corp., Agios Pharmaceuticals, Karuna Therapeutics, Illumina, Juno Therapeutics (acquired by Celgene (now part of BMS) in January 2018), Sage Therapeutics, Syros

Pharmaceuticals and UNITY Biotechnology. He also previously served as Trustee of the Fred Hutchinson Cancer Research Center and as a director of the National Venture Capital Association. Mr. Nelsen hold a B.S. with majors in Economics and Biology from the University of Puget Sound and an M.B.A. from the University of Chicago Booth School of Business. We believe Mr. Nelsen is qualified to serve on our board of directors because of his experience as a venture capitalist, building and serving boards of many public and private emerging companies, including multiple life sciences, biotechnology and pharmaceutical companies.

Kári Stefánsson, M.D., Dr. Med., has served as a member of our board of directors since September 2021. Dr. Stefánsson founded deCODE genetics in August 1996 and currently serves as its Chief Executive Officer. deCODE genetics became a wholly owned subsidiary of Amgen in 2012, and in addition to serving as Chief Executive Officer of deCODE genetics, Dr. Stefánsson also serves as Vice President in Research and Development at Amgen. He has shaped deCODE's scientific approach and been actively engaged in leading its gene discovery work, serving as senior author on most of the company's publications in major scientific journals. Dr. Stefánsson was previously a professor of Neurology, Neuropathology and Neuroscience at Harvard University from 1993 to 1997 and Director of Neuropathology at Beth Israel Hospital in Boston, Massachusetts from 1993 to 1997. From 1983 to 1993, he held faculty positions in Neurology, Neuropathology and Neurosciences at the University of Chicago. Dr. Stefansson is recognized as a leading figure in human genetics. Dr. Stefánsson holds an M.D. and Dr. Med. from the University of Iceland and is board-certified in Neurology and Neuropathology in the United States. We believe Mr. Stefánsson is qualified to serve on our board of directors because his expertise and leadership in the fields of genetics and neuroscience.

Stacie Weninger, Ph.D., has served as a member of our board of directors since September 2020. Dr. Weninger has indicated her intention to resign as a director prior to the effectiveness of the registration statement for which this prospectus is a part.

Family Relationships

There are no family relationships among any of our executive officers or directors.

Board Structure and Composition

Director Independence

Our board of directors currently consists of eight members. Our board of directors has determined that all of our directors, other than Mr. Berns, qualify as independent directors in accordance with the Nasdaq Stock Market LLC (Nasdaq) Marketplace Rules (the Nasdaq Listing Rules). Mr. Berns is not considered independent by virtue of his position as an executive officer of the company. Under the Nasdaq Listing Rules, the definition of independence includes a series of objective tests, such as that the director is not, and has not been for at least three years, one of our employees and that neither the director nor any of his or her family members has engaged in various types of business dealings with us. In addition, as required by the Nasdaq Listing Rules, our board of directors has made a subjective determination as to each independent director that no relationship exists that, in the opinion of our board of directors reviewed and discussed information provided by the directors and us with regard to each director's relationships as they may relate to us and our management.

Classified Board of Directors

In accordance with our amended and restated certificate of incorporation, which will be effective immediately prior to the completion of this offering, our board of directors will be divided into three classes with staggered three-year terms. At each annual general meeting of stockholders, the successors to directors whose

terms then expire will be elected to serve from the time of election and qualification until the third annual meeting following election. Our directors will be divided among the three classes as follows:

•	The Class I directors will be held in 2024;	,	and	, and their terms will expire at the annual meeting of stockholders to be
•	The Class II directors will be held in 2025; and	,	and	, and their terms will expire at the annual meeting of stockholders to be
•	The Class III directors will be		and	, and their terms will expire at the annual meeting of stockholders to be

We expect that any additional directorships resulting from an increase in the number of directors will be distributed among the three classes so that, as nearly as possible, each class will consist of one-third of the directors. The division of our board of directors into three classes with staggered three-year terms may delay or prevent a change of our management or a change in control.

Voting Arrangements

held in 2026.

The election of the members of our board of directors is currently governed by the voting agreement that we entered into with certain holders of our common stock and convertible preferred stock and the related provisions of our amended and restated certificate of incorporation. Pursuant to our voting agreement and amended and restated certificate of incorporation, our current directors were elected as follows:

- Dr. Stefánsson was elected as the designee of Amgen;
- Ms. Burow and Mr. Nelsen were elected as the designees of ARCH Venture Partners;
- Dr. Weninger was elected as the designee of F-Prime Capital Partners;
- Mr. Halawa was elected as the designee of Mubadala Capital;
- Mr. Berns was elected and designated as our then serving and current Chief Executive Officer; and
- Dr. Ho and Mr. Fust were elected and designated by the holders of a majority of our common stock and convertible preferred stock.

Our voting agreement will terminate and the provisions of our current amended and restated certificate of incorporation by which our directors were elected will be amended and restated in connection with this offering. After this offering, the number of directors will be fixed by our board of directors, subject to the terms of our amended and restated certificate of incorporation and amended and restated bylaws that will become effective immediately prior to the completion of this offering. Each of our current directors will continue to serve as a director until the election and qualification of his or her successor, or until his or her earlier death, resignation or removal.

Leadership Structure of the Board

Our amended and restated bylaws and corporate governance guidelines provide our board of directors with flexibility to combine or separate the positions of Chairman of the board of directors and Chief Executive Officer. Mr. Berns currently serves as the Chairman of the Board.

Our board of directors has concluded that our current leadership structure is appropriate at this time. However, our board of directors will continue to periodically review our leadership structure and may make such changes in the future as it deems appropriate.

Role of Board in Risk Oversight Process

Risk assessment and oversight are an integral part of our governance and management processes. Our board of directors encourages management to promote a culture that incorporates risk management into our corporate



strategy and day-to-day business operations. Management discusses strategic and operational risks at regular management meetings, and conducts specific strategic planning and review sessions during the year that include a focused discussion and analysis of the risks facing us. Throughout the year, senior management reviews these risks with the board of directors at regular board meetings as part of management presentations that focus on particular business functions, operations or strategies, and presents the steps taken by management to mitigate or eliminate such risks.

Our board of directors does not have a standing risk management committee, but rather administers this oversight function directly through our board of directors as a whole, as well as through various standing committees of our board of directors that address risks inherent in their respective areas of oversight. While our board of directors is responsible for monitoring and assessing strategic risk exposure, our audit committee is responsible for overseeing our major financial risk exposures and the steps our management has taken to monitor and control these exposures. The audit committee also approves or disapproves any related person transactions. Our nominating and corporate governance committee monitors the effectiveness of our corporate governance guidelines. Our compensation committee assesses and monitors whether any of our compensation policies and programs has the potential to encourage excessive risk-taking.

Board Committees

Our board of directors has three standing committees: the audit committee; the compensation committee; and the nominating and governance committee. Each committee is governed by a charter that will be available on our website following completion of this offering.

Audit Committee

Effective as of the date the registration statement of which this prospectus forms a part is declared effective by the SEC, the members of our audit committee will consist of _______, and _______ will be the chairperson of our audit committee. The composition of our audit committee meets the requirements for independence under the current Nasdaq Listing Rules and Rule 10A-3 of the Exchange Act. Each member of our audit committee is financially literate. In addition, our board of directors has determined that _______ is an "audit committee financial expert" within the meaning of the SEC rules. This designation does not impose on such directors any duties, obligations, or liabilities that are greater than are generally imposed on members of our audit committee and our board of directors. Our audit committee is directly responsible for, among other things:

- appointing, retaining, compensating and overseeing the work of our independent registered public accounting firm;
- assessing the independence and performance of the independent registered public accounting firm;
- monitoring the rotation of partners of our independent registered public accounting firm on our engagement team as required by law;
- reviewing with our independent registered public accounting firm the scope and results of the firm's annual audit of our consolidated financial statements;
- overseeing the financial reporting process and discussing with management and our independent registered public accounting firm the consolidated financial statements that we will file with the SEC;
- pre-approving all audit and permissible non-audit services to be performed by our independent registered public accounting firm;
- reviewing policies and practices related to risk assessment and management;
- reviewing our accounting and financial reporting policies and practices and accounting controls, as well as compliance with legal and regulatory requirements;
- reviewing, overseeing, approving, or disapproving any related-person and related party transactions;

- reviewing with our management the scope and results of management's evaluation of our disclosure controls and procedures and
 management's assessment of our internal control over financial reporting, including the related certifications to be included in the periodic
 reports we will file with the SEC; and
- establishing procedures for the confidential anonymous submission of concerns regarding questionable accounting, internal controls, or auditing matters, or other ethics or compliance issues.

Compensation Committee

Effective as of the date the registration statement of which this prospectus forms a part is declared effective by the SEC, the members of our compensation committee will consist of , , , and , will be the chairperson of our compensation committee. Each of , , and is a non-employee director, as defined by Rule 16b-3 promulgated under the Exchange Act and meets the requirements for independence under the current Nasdaq Listing Rules. Our compensation committee is responsible for, among other things:

- reviewing and approving the compensation of our executive officers, including reviewing and approving corporate goals and objectives with respect to compensation;
- authority to act as an administrator of our equity incentive plans;
- reviewing and approving, or making recommendations to our board of directors with respect to, incentive compensation and equity plans;
- reviewing and recommending that our board of directors approve the compensation for our non-employee board members; and
- establishing and reviewing general policies relating to compensation and benefits of our employees.

Nominating and Governance Committee

Effective as of the date the registration statement of which this prospectus forms a part is declared effective by the SEC, the members of our nominating and governance committee will consist of , , , and . will be the chairperson of our nominating and governance committee is responsible for, among other things:

- identifying and recommending candidates for membership on our board of directors, including the consideration of nominees submitted by stockholders, and on each of the board's committees;
- reviewing and recommending our corporate governance guidelines and policies;
- reviewing proposed waivers of the code of business conduct and ethics for directors and executive officers;
- overseeing the process of evaluating the performance of our board of directors; and
- assisting our board of directors on corporate governance matters.

Science Committee

Effective as of the date the registration statement of which this prospectus forms a part is declared effective by the SEC, the members of our science committee will consist of , , and . will be the chairperson of our science committee. Our science committee is responsible for, among other things:

• reviewing, evaluating and advising our board of directors regarding the long-term strategic goals and objectives and the quality and direction of the company's research and development initiatives; and

•

assisting our board of directors in ensuring that our research and development organization is optimized to support our strategic goals.

Code of Business Conduct and Ethics

In connection with this offering, our board of directors will adopt a code of business conduct and ethics that applies to all of our employees, officers and directors, including our Chief Executive Officer, Chief Financial Officer and other executive and senior financial officers. Upon completion of this offering, the full text of our code of business conduct and ethics will be posted on the investor relations section of our website. We intend to disclose future amendments to our code of business conduct and ethics, or any waivers of such code, on our website or in public filings.

Compensation Committee Interlocks and Insider Participation

None of our executive officers has served as a member of a compensation committee (or if no committee performs that function, the board of directors) of any other entity that has an executive officer serving as a member of our board of directors.

DIRECTOR COMPENSATION

For the year ended December 31, 2022, we did not have a formalized non-employee director compensation program.

During 2022, only Mr. Fust and Dr. Ho received cash compensation for their service on our board of directors. Each of Mr. Fust and Dr. Ho received \$10,000 per quarter of service on our board of directors. In July 2022, we also granted an option to purchase 750,000 shares of our common stock to Dr. Weninger having an exercise price per share of \$0.59 that vests and becomes exercisable as to 1/36th of the shares on each monthly anniversary of July 5, 2022, subject to Dr. Weninger's continued service through the applicable vesting date. In addition, we reimburse our non-employee directors for travel and other necessary business expenses incurred in the performance of their services for us.

We intend to approve and implement a compensation policy for our non-employee directors to be effective on the consummation of this offering.

The following table sets forth information concerning the compensation earned by our non-employee directors during the year ended December 31, 2022.

2022 Director Compensation Table

Name	Fees Earned or Paid in Cash (\$)	Option Awards (\$) ⁽¹⁾	Total (\$)
Kristina Burow			
Matthew Fust	40,000	—	40,000
Alaa Halawa	—	—	—
Maykin Ho, Ph.D.	40,000	—	40,000
Robert Nelsen	—	—	—
Kári Stefánsson	—		
Stacie Weninger ⁽²⁾	—	405,981	—

(1) For the option awards column, amount shown represents the grant date fair value of the option granted during 2022 as calculated in accordance with ASC Topic 718. See Financial Accounting Standards Board, Accounting Standards Codification Topic 718, *Compensation—Stock Compensation* (FASB ASC Topic 718). Assumptions used in the calculation of these amounts are described in Note 13 to our audited consolidated financial statements and Note 11 to our unaudited condensed consolidated financial statements appearing elsewhere in this prospectus. As of December 31, 2022, each of Drs. Ho and Weninger and Mr. Fust held an option to purchase 750,000 shares of our common stock, and no other stock options or stock awards were held by any of our non-employee directors as of December 31, 2022.

(2) Dr. Weninger has indicated her intention to resign as a director prior to the effectiveness of the registration statement for which this prospectus is a part.

EXECUTIVE COMPENSATION

The following is a discussion and analysis of compensation arrangements of our named executive officers, or NEOs. This discussion contains forward looking statements that are based on our current plans, considerations, expectations and determinations regarding future compensation programs. Actual compensation programs that we adopt may differ materially from currently planned programs as summarized in this discussion. As an "emerging growth company" as defined in the JOBS Act, we are not required to include a Compensation Discussion and Analysis section and have elected to comply with the scaled disclosure requirements applicable to emerging growth companies.

We seek to ensure that the total compensation paid to our executive officers is reasonable and competitive. Compensation of our executives is structured around the achievement of individual performance and near-term corporate targets as well as long-term business objectives.

Our NEOs for 2022 were as follows:

- Paul Berns, our Chief Executive Officer;
- Joshua Pinto, Ph.D., our Chief Financial Officer; and
- John Dunlop, Ph.D., our former Head of Research and Development.

2022 Summary Compensation Table

The following table sets forth total compensation paid to our named executive officers for the year ending on December 31, 2022.

Name and Principal Position	Year	Salary (\$)	Bonus (\$)	Option Awards (\$) ⁽²⁾	Non-Equity Incentive Plan Compensation (\$) ⁽³⁾	All Other Compensation (\$) ⁽⁴⁾	Total (\$)
Paul Berns	2022	570,000		1,755,346	308,798	780	2,634,924
Chief Executive Officer	2021	520,000	13,000		247,000		780,000
Joshua Pinto, Ph.D.	2022	465,800		2,945,778	188,882	221,954	3,822,414
Chief Financial Officer	2021	262,500	510,000	2,388,353	177,800	98,653	3,437,306
John Dunlop, Ph.D.	2022	450,000		715,918	166,725	780	1,333,423

Former Head of Research and Development

(1) Dr. Dunlop terminated his employment with us in May 2023.

(2) The amounts reported represent the aggregate grant date fair value and incremental fair value of the stock options granted or modified in 2022, calculated in accordance with ASC Topic 718. The assumptions used in calculating the grant date fair value and incremental fair value of the options reported in this column will be included in the financial statements for the year ended December 31, 2022 that will be included in an amendment to this registration statement.
 (3) Annual cash incentive amounts for all NEOs were determined in January 2023, under our 2022 Bonus Plan, as described in the section below titled "2022 Bonuses."

(4) \$780 of the amount reported for each NEO constitutes a technology allowance. \$215,000 and \$6,174 of the amount reported for Dr. Pinto constitutes a relocation allowance and employer matching contributions under our 401(k) plan, respectively.

Narrative to Summary Compensation Table

2022 Salaries

Our NEOs each receive a base salary to compensate them for services rendered to our company. The base salary payable to each named executive officer is intended to provide a fixed component of compensation reflecting the executive's skill set, experience, role and responsibilities.

For 2022, Mr. Berns, Dr. Pinto and Dr. Dunlop had an annual base salary of \$570,000, \$465,800 and \$450,000 respectively.

In January 2023, Mr. Berns' and Dr. Pinto's annual base salary was increased to \$625,000 and \$484,432, respectively.

Our board of directors and compensation committee may adjust base salaries from time to time in their discretion.

2022 Bonuses

We maintain an annual performance-based cash bonus program in which each of our NEOs participated in 2022. Each NEO's target bonus is expressed as a percentage of their annual base salary which can be achieved by meeting company and individual goals at target level. The 2022 annual bonuses for Mr. Berns, Dr. Pinto and Dr. Dunlop were targeted at 55%, 40% and 40% of their respective base salaries. Our board of directors has historically reviewed these target percentages to ensure they are adequate, but does not follow a formula. Instead, our board of directors set these rates based on each NEO's experience in their role with us and the level of responsibility held by the NEO, which we believe directly correlates to their ability to influence corporate results.

For determining performance bonus amounts, our board of directors set certain corporate performance goals after receiving input from our Chief Executive Officer. Mr. Berns' bonus is based 100% on the achievement of our corporate goals and Dr. Pinto's and Dr. Dunlop's bonus is based 75% on the achievement of our corporate goals and 25% on individual performance. In January 2023, our board of directors, upon recommendation of the compensation committee, determined corporate goal achievement at 98.5% and assessed Dr. Pinto's and Dr. Dunlop's individual performance. The actual amounts paid to our named executive officers are set forth in the Summary Compensation Table above under the column "Non-Equity Incentive Plan Compensation."

Our NEOs' target bonus opportunities remain unchanged for 2023.

Equity-Based Compensation

In January 2022, our board of directors modified the performance goals applicable to the performance-based portion of the option granted to Dr. Pinto on June 7, 2021 in connection with his commencement of employment with us. The modified portion of the option, which covers 3,500,000 shares of our common stock, provides for vesting in three tranches. The first tranche commences vesting upon completion of this offering, with 50% of the shares underlying the tranche vesting in 12 equal monthly installments and 50% of the shares underlying the tranche vesting in 24 equal monthly installments. The remaining two tranches commence vesting upon the achievement of two stock price goals, with the portion earned based on achievement vesting in equal monthly installments over the two years subsequent to achievement. In June 2023, the option vesting terms were further modified to remove the stock price goals applicable to the second and third tranches and, in lieu, a 36 month monthly time based vesting commencing on June 30, 2023 was implemented.

In January 2022, our board of directors granted each of Mr. Berns, Dr. Pinto and Dr. Dunlop an option to purchase 3,900,000, 5,650,000 and 1,600,000 shares of our common stock, respectively, with an exercise price per share of \$0.59, that vests as to 25% of the shares underlying the option on February 1, 2023 and as to 1/48th of the original number of shares underlying the option each month thereafter, subject to continued service to us through the vesting date.

In connection with this offering, we intend to adopt a 2023 Incentive Award Plan, referred to below as the 2023 Plan, in order to facilitate the grant of cash and equity incentives to directors, employees (including our NEOs) and consultants of our company and certain of its affiliates and to enable us to obtain and retain services of these individuals, which is essential to our long-term success. We expect that the 2023 Plan will be effective on the day prior to the first public trading date of our common stock, subject to approval of such plan by our stockholders. For additional information about the 2023 Plan, please see the section titled "Shares Eligible for Future Sale—Equity Incentive Plans."

Other Elements of Compensation

Retirement Savings and Health and Welfare Benefits

We currently maintain a 401(k) retirement savings plan for our employees, including our named executive officers, who satisfy certain eligibility requirements. Our named executive officers are eligible to participate in the 401(k) plan on the same terms as other full-time employees. During 2022, we matched 50% of up to 6% of employee, including NEO, compensation that is contributed to our 401(k) plan, up to plan limits.

All of our full-time employees, including our NEOs, are eligible to participate in our health and welfare plans, including medical, dental and vision benefits; medical and dependent care flexible spending accounts; short-term and long-term disability insurance; and life and AD&D insurance. Our NEOs are eligible for certain enhanced benefits under our executive-level medical insurance, life insurance and short-term and long-term disability insurance.

Perquisites and Other Personal Benefits

We did not provide any perquisites to our named executive officers during 2022, other than a \$215,000 relocation allowance paid to Dr. Pinto in order to incentivize him to relocate his principal residence to the general vicinity of our offices. Our compensation committee may from time to time approve perquisites in the future when our compensation committee determines that they are necessary or advisable to fairly compensate or incentivize our employees.

Outstanding Equity Awards at 2022 Year End

The following table lists all outstanding equity awards held by our NEOs as of December 31, 2022.

		Option Awards					Stock Awards		
Name	Vesting Commencement Date ⁽¹⁾	Number of Securities Underlying Unexercised Options Exercisable (#)	Number of Securities Underlying Unexercised Options Unexercisable (#)	Equity Incentive Plan Awards: Number of Securities Underlying Unexercised, Unearned Options (#)	Option Exercise Price (\$)	Option Expiration Date	Equity Incentive Plan Awards: Number of Unearned Shares, Units, or Other Rights That Have Not Vested (#)	Equity Incentive Plan Awards: Market or Payout Value of Unearned Shares, Units, or Other Rights That Have Not Vested (\$) (2)	
Paul Berns	2/1/2022 1/17/2020 11/1/2018	696,026	3,900,000		0.59 0.0001 1.38	1/26/2032 9/7/2030	13,541,667(3)	11,238,229	
Joshua Pinto, Ph.D.	2/1/2022 6/1/2021 ⁽⁴⁾	500,000	5,650,000 2,500,000	2,625,000	0.59 0.32	1/26/2032 6/6/2031	875,000	370,387	
John Dunlop, Ph.D.	2/1/2022 9/4/2020 1/17/2020	281,250	1,600,000 218,750		0.59 0.32 0.0001	1/26/2032 9/2/2030	1,083,334(3)	899,059	

(1) Except as otherwise noted, each Option vests and becomes exercisable as to 25% of the underlying shares on the first anniversary of the vesting commencement date and as to 1/48th of the underlying shares on each monthly anniversary of the vesting commencement date thereafter, in each case, subject to continued service to us.

of the underlying shares on each monthly anniversary of the vesting commencement date thereafter, in each case, subject to continued service to us.
 Market value based on \$0.83 per share, the fair market value of our common stock as of December 31, 2022, as determined by our board of directors, less the repurchase price payable by us.

(3) Constitutes restricted shares of our common stock acquired upon exercise of a stock purchase right that remain subject to repurchase by us at their original purchase price of \$0.0001 per share. The restricted shares vest and our repurchase right lapses in substantially equal monthly installments through the fourth anniversary of the vesting commencement date, subject to continued service to us.

(4) 3,000,000 shares that remain subject to the option were subject to service-based vesting and 3,500,000 shares underlying the option were subject to performance-based vesting. The unvested portion of the service-based portion of the option vests in substantially equal monthly installments through the fourth anniversary of the vesting commencement date, subject to continued service to us. The

performance-based portion of the option is split into three tranches. The first tranche will become eligible to vest upon the closing of this offering, with 50% of the shares in the first tranche vesting in 24 equal monthly installments, in each case, commencing on the closing of this offering. The remaining two tranches will become eligible to vest upon achieving certain stock price goals and vest in 24 equal monthly installments commencing on the date of achievement. The option was exercised in respect of 1,875,000 shares prior to vesting, of which 875,000 shares remain subject to a repurchase right in favor of us for \$0.32 per share in the event the NEO terminates employment prior to vesting. Exercised shares vest prior to shares that remain subject to the option.

Executive Compensation Arrangements

We have entered into offer letters and proprietary information and invention assignment agreements with each of our NEOs. Each offer letter sets forth the title, base salary, target bonus opportunity and initial equity award for the executive. The offer letters entered into with Mr. Berns and Dr. Pinto provide the executive with four months' base salary and up to four months of continued healthcare coverage or COBRA reimbursements in the event the executive's employment is terminated by us without cause or by the executive for good reason. In addition, Dr. Pinto's offer letter provided for a sign-on bonus and included a provision entitling Dr. Pinto to any better employment terms negotiated by any other executive directly reporting to our Chief Executive Officer.

In April 2022, we entered into new employment agreements with Mr. Berns, Dr. Pinto and Dr. Dunlop that superseded their prior offer letters. In addition to setting forth the title, base salary and target bonus opportunity for each executive, the employment agreements provide for the executive to receive severance in the event the executive's employment with us is terminated by us without cause or by the executive for good reason, each as defined in the applicable employment agreement. In the event the qualifying termination occurs more than 3 months prior to or more than 18 months after a change in control, as defined in each employment agreement, Mr. Berns is entitled to receive 12 months continued base salary and up to 12 months of continued health-care coverage or COBRA reimbursements and each of Dr. Pinto and Dr. Dunlop is entitled to receive 9 months continued base salary and up to 9 months of continued healthcare coverage or COBRA reimbursements. In the event the qualifying termination occurs within the period beginning 3 months prior to and ending 18 months after a change in control, Mr. Berns is entitled to a lump sum payment of 12 months base salary and his target bonus opportunity, continued healthcare coverage or COBRA reimbursements for up to 18 months and full vesting acceleration of all equity awards, and each of Dr. Pinto and Dr. Dunlop is entitled to a lump sum payment of 12 months base salary and his target bonus opportunity, continued healthcare coverage or COBRA reimbursements for up to 18 months and full vesting acceleration of all equity awards, and each of Dr. Pinto and Dr. Dunlop is entitled to a lump sum payment of 12 months base salary and his target bonus opportunity, continued healthcare coverage or COBRA reimbursements for up to 18 months. Each executive must provide a general release of claims in order to receive severance benefits. Dr. Dunlop terminated his employment with us in May 2023.

Equity Compensation Plans

The following summarizes the material terms of the long-term incentive compensation plan in which our named executive officers will be eligible to participate following the consummation of this offering and our 2020 Equity Incentive Plan (the 2020 Plan) and the Blackthorn Therapeutics, Inc. 2015 Equity Incentive Plan that we assumed in a transaction in 2020 (the 2015 Plan, and together with the 2020 Plan, the Prior Plans), under which we have previously made periodic grants of equity and equity-based awards to our named executive officers and other key employees.

2023 Incentive Award Plan

We intend to adopt the 2023 Plan, which will be effective on the day prior to the first public trading date of our common stock. The principal purpose of the 2023 Plan is to attract, retain and motivate selected employees, consultants and directors through the granting of stock-based compensation awards and cash-based performance bonus awards. The material terms of the 2023 Plan, as it is currently contemplated, are summarized below.

Share Reserve. Under the 2023 Plan, shares of our common stock will be initially reserved for issuance pursuant to a variety of stock-based compensation awards, including stock options, stock appreciation

rights, or SARs, restricted stock awards, restricted stock unit awards and other stock-based awards. The number of shares initially reserved for issuance or transfer pursuant to awards under the 2023 Plan will be increased by (i) the number of shares represented by awards outstanding under our Prior Plans, or Prior Plan Awards, that become available for issuance under the counting provisions described below following the effective date and (ii) an annual increase on each January 1 beginning in 2024 and ending in 2032, equal to the lesser of (A) % of the shares of our common stock outstanding (on an as converted basis) on the immediately preceding December 31 and (B) such smaller number of shares of stock as determined by our board of directors; provided, however, that no more than shares of stock may be issued upon the exercise of incentive stock options.

The following counting provisions will be in effect for the share reserve under the 2023 Plan:

- to the extent that an award (including a Prior Plan Award) terminates, expires or lapses for any reason or an award is settled in cash without the delivery of shares, any shares subject to the award at such time will be available for future grants under the 2023 Plan;
- to the extent shares are tendered or withheld to satisfy the grant, exercise price or tax withholding obligation with respect to any award under the 2023 Plan or Prior Plan Award, such tendered or withheld shares will be available for future grants under the 2023 Plan;
- to the extent shares subject to stock appreciation rights are not issued in connection with the stock settlement of stock appreciation rights on exercise thereof, such shares will be available for future grants under the 2023 Plan;
- to the extent that shares of our common stock are repurchased by us prior to vesting so that shares are returned to us, such shares will be available for future grants under the 2023 Plan;
- the payment of dividend equivalents in cash in conjunction with any outstanding awards or Prior Plan Awards will not be counted against the shares available for issuance under the 2023 Plan; and
- to the extent permitted by applicable law or any exchange rule, shares issued in assumption of, or in substitution for, any outstanding awards of any entity acquired in any form of combination by us or any of our subsidiaries will not be counted against the shares available for issuance under the 2023 Plan.

In addition, the sum of the grant date fair value of all equity-based awards and the maximum that may become payable pursuant to all cash-based awards to any individual for services as a non-employee director during any calendar year may not exceed \$

Administration. The compensation committee of our board of directors is expected to administer the 2023 Plan unless our board of directors assumes authority for administration. The compensation committee must consist of at least three members of our board of directors, each of whom is intended to qualify as a "non-employee director" for purposes of Rule 16b-3 under the Exchange Act and an "independent director" within the meaning of the rules of the applicable stock exchange, or other principal securities market on which shares of our common stock are traded. The 2023 Plan provides that the board or compensation committee may delegate its authority to grant awards to employees other than executive officers and certain senior executives of the company to a committee consisting of one or more members of our board of directors or one or more of our officers, other than awards made to our non-employee directors, which must be approved by our full board of directors.

Subject to the terms and conditions of the 2023 Plan, the administrator has the authority to select the persons to whom awards are to be made, to determine the number of shares to be subject to awards and the terms and conditions of awards, and to make all other determinations and to take all other actions necessary or advisable for the administration of the 2023 Plan. The administrator is also authorized to adopt, amend or rescind rules relating to administration of the 2023 Plan. Our board of directors may at any time remove the compensation committee as the administrator and revest in itself the authority to administer the 2023 Plan. The full board of directors will administer the 2023 Plan with respect to awards to non-employee directors.

Eligibility. Options, SARs, restricted stock and all other stock-based and cash-based awards under the 2022 Plan may be granted to individuals who are then our officers, employees or consultants or are the officers, employees or consultants of certain of our subsidiaries. Such awards also may be granted to our directors. Only employees of our company or certain of our subsidiaries may be granted incentive stock options, or ISOs.

Awards. The 2023 Plan provides that the administrator may grant or issue stock options, SARs, restricted stock, restricted stock units, other stockor cash-based awards and dividend equivalents, or any combination thereof. Each award will be set forth in a separate agreement with the person receiving the award and will indicate the type, terms and conditions of the award.

- Nonstatutory Stock Options, or NSOs, will provide for the right to purchase shares of our common stock at a specified price which may not be less than fair market value on the date of grant, and usually will become exercisable (at the discretion of the administrator) in one or more installments after the grant date, subject to the participant's continued employment or service with us and/or subject to the satisfaction of corporate performance targets and individual performance targets established by the administrator. NSOs may be granted for any term specified by the administrator that does not exceed ten years.
- Incentive Stock Options, or ISOs, will be designed in a manner intended to comply with the provisions of Section 422 of the Code, and will be subject to specified restrictions contained in the Code. Among such restrictions, ISOs must have an exercise price of not less than the fair market value of a share of common stock on the date of grant, may only be granted to employees, and must not be exercisable after a period of ten years measured from the date of grant. In the case of an ISO granted to an individual who owns (or is deemed to own) at least 10% of the total combined voting power of all classes of our capital stock, the 2023 Plan provides that the exercise price must be at least 110% of the fair market value of a share of common stock on the date of grant and the ISO must not be exercisable after a period of five years measured from the date of grant.
- *Restricted Stock* may be granted to any eligible individual and made subject to such restrictions as may be determined by the administrator. Restricted stock, typically, may be forfeited for no consideration or repurchased by us at the original purchase price if the conditions or restrictions on vesting are not met. In general, restricted stock may not be sold or otherwise transferred until restrictions are removed or expire. Purchasers of restricted stock, unlike recipients of options, will have voting rights and will have the right to receive dividends, if any, prior to the time when the restrictions lapse, however, extraordinary dividends will generally be placed in escrow, and will not be released until restrictions are removed or expire.
- *Restricted Stock Units* may be awarded to any eligible individual, typically without payment of consideration, but subject to vesting conditions based on continued employment or service or on performance criteria established by the administrator. Like restricted stock, restricted stock units may not be sold, or otherwise transferred or hypothecated, until vesting conditions are removed or expire. Unlike restricted stock, stock underlying restricted stock units will not be issued until the restricted stock units have vested, and recipients of restricted stock units generally will have no voting or dividend rights prior to the time when vesting conditions are satisfied.
 - *Stock Appreciation Rights*, or SARs, may be granted in connection with stock options or other awards, or separately. SARs granted in connection with stock options or other awards typically will provide for payments to the holder based upon increases in the price of our common stock over a set exercise price. The exercise price of any SAR granted under the 2023 Plan must be at least 100% of the fair market value of a share of our common stock on the date of grant. SARs under the 2023 Plan will be settled in cash or shares of our common stock, or in a combination of both, at the election of the administrator.
 - Other Stock or Cash Based Awards are awards of cash, fully vested shares of our common stock and other awards valued wholly or partially by referring to, or otherwise based on, shares of our common stock. Other stock or cash based awards may be granted to participants and may also be available as a

payment form in the settlement of other awards, as standalone payments and as payment in lieu of base salary, bonus, fees or other cash compensation otherwise payable to any individual who is eligible to receive awards. The plan administrator will determine the terms and conditions of other stock or cash based awards, which may include vesting conditions based on continued service, performance and/or other conditions.

Dividend Equivalents represent the right to receive the equivalent value of dividends paid on shares of our common stock and may be granted alone or in tandem with awards other than stock options or SARs. Dividend equivalents are credited as of dividend payments dates during the period between a specified date and the date such award terminates or expires, as determined by the plan administrator. In addition, dividend equivalents with respect to shares covered by a performance award will only be paid to the participant at the same time or times and to the same extent that the vesting conditions, if any, are subsequently satisfied and the performance award vests with respect to such shares.

Any award may be granted as a performance award, meaning that the award will be subject to vesting and/or payment based on the attainment of specified performance goals.

Change in Control. In the event of a change in control, unless the plan administrator elects to terminate an award in exchange for cash, rights or other property, or cause an award to accelerate in full prior to the change in control, such award will continue in effect or be assumed or substituted by the acquirer, provided that any performance-based portion of the award will be subject to the terms and conditions of the applicable award agreement. The administrator may also make appropriate adjustments to awards under the 2023 Plan and is authorized to provide for the acceleration, cash-out, termination, assumption, substitution or conversion of such awards in the event of a change in control or certain other unusual or nonrecurring events or transactions.

Adjustments of Awards. In the event of any stock dividend or other distribution, stock split, reverse stock split, reorganization, combination or exchange of shares, merger, consolidation, split-up, spin-off, recapitalization, repurchase or any other corporate event affecting the number of outstanding shares of our common stock or the share price of our common stock that would require adjustments to the 2023 Plan or any awards under the 2023 Plan in order to prevent the dilution or enlargement of the potential benefits intended to be made available thereunder, the administrator will make appropriate, proportionate adjustments to: (i) the aggregate number and type of shares subject to the 2023 Plan; (ii) the number and kind of shares subject to outstanding awards and terms and conditions of outstanding awards (including, without limitation, any applicable performance targets or criteria with respect to such awards); and (iii) the grant or exercise price per share of any outstanding awards under the 2023 Plan.

Amendment and Termination. The administrator may terminate, amend or modify the 2023 Plan at any time and from time to time. However, we must generally obtain stockholder approval to the extent required by applicable law, rule or regulation (including any applicable stock exchange rule). Notwithstanding the foregoing, an option may be amended to reduce the per share exercise price below the per share exercise price of such option on the grant date and options may be granted in exchange for, or in connection with, the cancellation or surrender of options having a higher per share exercise price without receiving additional stockholder approval.

No incentive stock options may be granted pursuant to the 2023 Plan after the tenth anniversary of the effective date of the 2023 Plan, and no additional annual share increases to the 2023 Plan's aggregate share limit will occur from and after such anniversary. Any award that is outstanding on the termination date of the 2022 Plan will remain in force according to the terms of the 2023 Plan and the applicable award agreement.

2020 Equity Incentive Plan

We currently maintain the 2020 Plan, which was adopted by our board of directors in January 2020. We have previously granted stock options to our NEOs under the 2020 Plan, as described in more detail above. The principal purpose of the 2020 Plan is to is to enhance our ability to attract, retain and motivate persons who make (or are expected to make) important contributions to us by providing them with equity ownership opportunities.

Following the completion of this offering, we will not make any further grants under the 2020 Plan. However, the 2020 Plan will continue to govern the terms and conditions of the outstanding awards granted under the 2020 Plan which, as of the date of this prospectus, constitute outstanding stock options and restricted stock awards.

Eligibility. The 2020 Plan provides for the grant of non-qualified options, restricted stock, restricted stock units or other stock-based awards to employees, non-employee members of the board of directors and consultants. The 2020 Plan provides for the grant of ISOs to employees.

Share Reserve. We have reserved an aggregate of shares of our common stock for issuance under the 2020 Plan. As of December 31, 2022, options to purchase a total of shares of our common stock were issued and outstanding, a total of shares of common stock had been issued upon the exercise of options or pursuant to other awards granted under the 2020 Plan and were outstanding, and shares remained available for future grants.

Administration. Our board of directors or a committee appointed by our board of directors administers the 2020 Plan. The administrator has the authority to select the service providers to whom equity awards will be granted under the 2020 Plan, the number of shares to be subject to those awards under the 2020 Plan, and the terms and conditions of the awards granted. In addition, the administrator has the authority to construe and interpret the 2020 Plan and to adopt rules for the administration, interpretation and application of the 2020 Plan that are consistent with the terms of the 2020 Plan.

Awards. The 2020 Plan provides that the administrator may grant or issue stock options, restricted stock, restricted stock units or stock awards, or any combination thereof. Each award will be set forth in a separate agreement with the person receiving the award and will indicate the type, terms and conditions of the award.

- NSOs will provide for the right to purchase shares of our common stock at a specified price which shall be not less than fair market value on the date of grant, and usually will become exercisable (at the discretion of the administrator) in one or more installments after the grant date, subject to the participant's continued employment or service with us. NSOs may be granted for any term specified by the administrator, but in no event more than 10 years after they are granted.
- ISOs will be designed in a manner intended to comply with the provisions of Section 422 of the Code, and will be subject to specified restrictions contained in the Code. Among such restrictions, ISOs must have an exercise price of not less than the fair market value of a share of common stock on the date of grant (or 110% for an individual who owns (or is deemed to own) more than 10% of the total combined voting power of all classes of our capital stock), may only be granted to employees, and must not be exercisable after a period of ten years measured from the date of grant (or five years for an individual who owns (or is deemed to own) more than 10% of the total combined voting power of all classes of our capital stock).
 - Restricted Stock may be granted to any eligible individual and made subject to such restrictions as may be determined by the administrator, including whether there is any purchase price. Restricted stock, typically, may be forfeited for no consideration or repurchased by us at the original purchase price if the conditions or restrictions on vesting are not met. In general, restricted stock may not be sold or otherwise transferred until restrictions are removed or expire. Recipients of restricted stock awards will generally have rights equivalent to those of a stockholder with respect to such shares upon grant without regard to vesting.
 - Restricted stock units are units representing an amount equal to the fair market value of one share of our common stock. The administrator determines the terms and conditions of restricted stock units including the vesting criteria, which may include accomplishing specified performance criteria or continued service to us, and the form and timing of payment. Notwithstanding the foregoing, the administrator, in its sole discretion may accelerate the time at which any restrictions will lapse or be removed.

Stock Awards are awards of shares of our common stock and other awards valued wholly or partially by referring to, or otherwise based on, shares of our common stock. Stock awards may be granted to participants as standalone payments and as payment in lieu of base salary, bonus, fees or other cash compensation otherwise payable to any individual who is eligible to receive awards. The plan administrator will determine the terms and conditions of stock awards.

Transfer. A participant may not transfer stock awards under our 2020 Plan other than by will, the laws of descent and distribution, or as otherwise provided under our 2020 Plan.

Certain Events. In the event of any dividend or other distribution, reorganization, merger, consolidation, combination, repurchase, recapitalization, liquidation, dissolution, or sale, transfer, exchange or other disposition of all or substantially all of the assets of the Company, or sale of exchange of our common stock or other securities, issuance of warrants or other rights to purchase common stock, or any other corporate transaction or event affecting the common stock that would require adjustments to the 2020 Plan or any awards under the 2020 Plan in order to prevent the dilution or enlargement of the potential benefits intended to be made available thereunder, the administrator will make appropriate, proportionate adjustments to: (i) the aggregate number and kind of shares with respect to which awards may be granted or awarded under the 2020 Plan; (ii) the number and kind of shares subject to outstanding awards (including, without limitation, any applicable performance targets or criteria with respect to such awards); and (iii) the grant or exercise price per share of any outstanding awards under the 2020 Plan.

In the event of any transaction or event described above (including any change in control), the administrator may make appropriate adjustments to awards under the 2020 Plan and is authorized to provide for the acceleration, cash-out, termination, assumption, substitution or conversion of such awards in the event of a change in control or certain other unusual or nonrecurring events or transactions or to comply with changes in applicable laws or accounting principles.

Amendment; Termination. Our board of directors may amend or terminate the 2020 Plan or any portion thereof at any time; an amendment of the 2020 Plan shall be subject to the approval of our stockholders only to the extent required by applicable laws. As described above, the 2020 Plan will terminate when the 2023 Plan is effective. No awards may be granted under our 2020 Plan after it is terminated.

Blackthorn Therapeutics, Inc. 2015 Equity Incentive Plan

We previously had assumed the 2015 Plan as part of a transaction involving the acquisition of BlackThorn Therapeutics, Inc. in 2020. We have previously granted stock options to Mr. Berns under the 2015 Plan, as described in more detail below. The principal purpose of the 2015 Plan is to enhance our ability to attract, retain and motivate persons who make (or are expected to make) important contributions to us by providing them with equity ownership opportunities.

The 2015 Plan was suspended in connection with the closing of the acquisition of BlackThorn in September 2020, and we will not make any further grants under the 2015 Plan. However, the 2015 Plan will continue to govern the terms and conditions of the outstanding awards granted under the 2015 Plan which, as of the date of this prospectus, constitute outstanding stock options and restricted stock awards.

Eligibility. The 2015 Plan provides for the grant of non-qualified options, restricted stock, restricted stock units or other stock-based awards to employees, non-employee members of the board of directors and consultants. The 2015 Plan provides for the grant of ISOs to employees.

Share Reserve. We have reserved an aggregate of shares of our common stock for issuance under the 2015 Plan. As of December 31, 2022, options to purchase a total of 2,330,374 shares of our common stock were issued and outstanding, a total of 148,488 shares of common stock had been issued upon the exercise of options

or pursuant to other awards granted under the 2015 Plan. As described above, the 2015 Plan was suspended in connection with the closing of the acquisition of BlackThorn in September 2020, and we will not make any further grants under the 2015 Plan.

Administration. Our board of directors or a committee appointed by our board of directors administers the 2015 Plan. The administrator has the authority to select the service providers to whom equity awards will be granted under the 2015 Plan, the number of shares to be subject to those awards under the 2015 Plan, and the terms and conditions of the awards granted. In addition, the administrator has the authority to construe and interpret the 2015 Plan and to adopt rules for the administration, interpretation and application of the 2015 Plan that are consistent with the terms of the 2015 Plan.

Awards. The 2015 Plan provides that the administrator may grant or issue stock options, restricted stock, restricted stock units or stock awards, or any combination thereof. Each award will be set forth in a separate agreement with the person receiving the award and will indicate the type, terms and conditions of the award.

- NSOs will provide for the right to purchase shares of our common stock at a specified price which shall be not less than fair market value on the date of grant, and usually will become exercisable (at the discretion of the administrator) in one or more installments after the grant date, subject to the participant's continued employment or service with us. NSOs may be granted for any term specified by the administrator, but in no event more than 10 years after they are granted.
- ISOs will be designed in a manner intended to comply with the provisions of Section 422 of the Code, and will be subject to specified restrictions contained in the Code. Among such restrictions, ISOs must have an exercise price of not less than the fair market value of a share of common stock on the date of grant (or 110% for an individual who owns (or is deemed to own) more than 10% of the total combined voting power of all classes of our capital stock), may only be granted to employees, and must not be exercisable after a period of ten years measured from the date of grant (or five years for an individual who owns (or is deemed to own) more than 10% of the total combined voting power of all classes of our capital stock).
- Restricted Stock may be granted to any eligible individual and made subject to such restrictions as may be determined by the administrator, including whether there is any purchase price. Restricted stock, typically, may be forfeited for no consideration or repurchased by us at the original purchase price if the conditions or restrictions on vesting are not met. In general, restricted stock may not be sold or otherwise transferred until restrictions are removed or expire. Recipients of restricted stock awards will generally have rights equivalent to those of a stockholder with respect to such shares upon grant without regard to vesting.
- Restricted stock units are units representing an amount equal to the fair market value of one share of our common stock. The administrator determines the terms and conditions of restricted stock units including the vesting criteria, which may include accomplishing specified performance criteria or continued service to us, and the form and timing of payment. Notwithstanding the foregoing, the administrator, in its sole discretion may accelerate the time at which any restrictions will lapse or be removed.
- Stock Awards are awards of shares of our common stock and other awards valued wholly or partially by referring to, or otherwise based on, shares of our common stock. Stock awards may be granted to participants as standalone payments and as payment in lieu of base salary, bonus, fees or other cash compensation otherwise payable to any individual who is eligible to receive awards. The plan administrator will determine the terms and conditions of stock awards.

Transfer. A participant may not transfer stock awards under our 2015 Plan other than by will, the laws of descent and distribution, or as otherwise provided under our 2015 Plan.

Certain Events. In the event of any dividend or other distribution, reorganization, merger, consolidation, combination, repurchase, recapitalization, liquidation, dissolution, or sale, transfer, exchange or other disposition of all or substantially all of the assets of the Company, or sale of exchange of our common stock or other securities, issuance of warrants or other rights to purchase common stock, or any other corporate transaction or event affecting the common stock that would require adjustments to the 2015 Plan or any awards under the 2015 Plan in order to prevent the dilution or enlargement of the potential benefits intended to be made available thereunder, the administrator will make appropriate, proportionate adjustments to: (i) the aggregate number and kind of shares with respect to which awards may be granted or awarded under the 2015 Plan; (ii) the number and kind of shares subject to outstanding awards (including, without limitation, any applicable performance targets or criteria with respect to such awards); and (iii) the grant or exercise price per share of any outstanding awards under the 2015 Plan.

In the event of any transaction or event described above (including any change in control), the administrator may make appropriate adjustments to awards under the 2015 Plan and is authorized to provide for the acceleration, cash-out, termination, assumption, substitution or conversion of such awards in the event of a change in control or certain other unusual or nonrecurring events or transactions or to comply with changes in applicable laws or accounting principles. In the event a change in control occurs and the successor corporation refuses to assume or substitute for outstanding awards under the 2015 Plan, then the vesting of such awards (if held by a current service provider) will be fully accelerated immediately prior to the closing of such change in control, and such awards will terminate upon expiration of such period in exchange for a cash payment similar to holders of common stock in the transaction determined by reference to the number of shares subject to such awards and net of any applicable exercise price.

Amendment; Termination. Our board of directors has the authority to amend, suspend or terminate our 2015 Plan, provided that such action is approved by our stockholders to the extent stockholder approval is necessary. As described above, our 2015 Plan was suspended in connection with the closing of the acquisition of BlackThorn in September 2020.

2023 Employee Stock Purchase Plan

We intend to adopt and ask our stockholders to approve the 2023 Employee Stock Purchase Plan, which we refer to as our ESPP, which will be effective upon the day prior to the first public trading date of our common stock. The ESPP is designed to allow our eligible employees to purchase shares of our common stock, at semi-annual intervals, with their accumulated payroll deductions. The ESPP is intended to qualify under Section 423 of the Code. The material terms of the ESPP, as it is currently contemplated, are summarized below.

Components. The ESPP is comprised of two distinct components in order to provide increased flexibility to grant options to purchase shares under the ESPP to U.S. and to non-U.S. employees. Specifically, the ESPP authorizes (1) the grant of options to U.S. employees that are intended to qualify for favorable U.S. federal tax treatment under Section 423 of the Code, (the Section 423 Component), and (2) the grant of options that are not intended to be tax-qualified under Section 423 of the Code to facilitate participation for employees located outside of the United States who do not benefit from favorable U.S. tax treatment and to provide flexibility to comply with non-U.S. law and other considerations (the Non-Section 423 Component). Where possible under local law and custom, we expect that the Non-Section 423 Component generally will be operated and administered on terms and conditions similar to the Section 423 Component.

Administration. Subject to the terms and conditions of the ESPP, our compensation committee will administer the ESPP. Our compensation committee can delegate administrative tasks under the ESPP to the services of an agent and/or employees to assist in the administration of the ESPP. The administrator will have the discretionary authority to administer and interpret the ESPP. Interpretations and constructions of the administrator of any provision of the ESPP or of any rights thereunder will be conclusive and binding on all persons. We will bear all expenses and liabilities incurred by the ESPP administrator.

Share Reserve. The maximum number of shares of our common stock which will be authorized for sale under the ESPP is equal to the sum of (a) shares of common stock and (b) an annual increase on each January 1 beginning in 2024 and ending in 2033, equal to the lesser of (i) % of the shares of our common stock outstanding (on an as converted basis) on the immediately preceding December 31 and (ii) such number of shares of common stock as determined by our board of directors; provided, however, that no more than shares of our common stock may be issued under the ESPP. The shares reserved for issuance under the ESPP may be authorized but unissued shares or reacquired shares.

Eligibility. Employees eligible to participate in the ESPP for a given offering period generally include employees who are employed by us or one of our subsidiaries on the first day of the offering period, or the enrollment date. Our employees (and, if applicable, any employees of our subsidiaries) who customarily work less than five months in a calendar year or are customarily scheduled to work less than 20 hours per week will not be eligible to participate in the ESPP. Finally, an employee who owns (or is deemed to own through attribution) 5% or more of the combined voting power or value of all our classes of stock or of one of our subsidiaries will not be allowed to participate in the ESPP.

Participation. Employees will enroll under the ESPP by completing a payroll deduction form permitting the deduction from their compensation of at least 1% of their compensation but not more than 15% of their compensation. Such payroll deductions shall be expressed as a whole number percentage, and the accumulated deductions will be applied to the purchase of shares on each purchase date. However, a participant may not purchase more than shares in each offering period and may not subscribe for more than \$25,000 in fair market value of shares of our common stock (determined at the time the option is granted) during any calendar year. The ESPP administrator has the authority to change these limitations for any subsequent offering period.

Offering. Under the ESPP, participants are offered the option to purchase shares of our common stock at a discount during a series of successive offering periods, the duration and timing of which will be determined by the ESPP administrator. However, in no event may an offering period be longer than 27 months in length.

The option purchase price will be the lower of 85% of the closing trading price per share of our common stock on the first trading date of an offering period in which a participant is enrolled or 85% of the closing trading price per share on the purchase date, which will occur on the last trading day of each offering period.

Unless a participant has previously canceled his or her participation in the ESPP before the purchase date, the participant will be deemed to have exercised his or her option in full as of each purchase date. Upon exercise, the participant will purchase the number of whole shares that his or her accumulated payroll deductions will buy at the option purchase price, subject to the participation limitations listed above.

A participant may cancel his or her payroll deduction authorization at any time prior to the end of the offering period. Upon cancellation, the participant will have the option to either (i) receive a refund of the participant's account balance in cash without interest or (ii) exercise the participant's option for the current offering period for the maximum number of shares of common stock on the applicable purchase date, with the remaining account balance refunded in cash without interest. Following at least one payroll deduction, a participant may also decrease (but not increase) his or her payroll deduction authorization once during any offering period. If a participant wants to increase or decrease the rate of payroll withholding, he or she may do so effective for the next offering period by submitting a new form before the offering period for which such change is to be effective.

A participant may not assign, transfer, pledge or otherwise dispose of (other than by will or the laws of descent and distribution) payroll deductions credited to a participant's account or any rights to exercise an option or to receive shares of our common stock under the ESPP, and during a participant's lifetime, options in the ESPP shall be exercisable only by such participant. Any such attempt at assignment, transfer, pledge or other disposition will not be given effect.

Adjustments upon Changes in Recapitalization, Dissolution, Liquidation, Merger or Asset Sale. In the event of any increase or decrease in the number of issued shares of our common stock resulting from a stock split, reverse stock split, stock dividend, combination or reclassification of the common stock, or any other increase or decrease in the number of shares of common stock effected without receipt of consideration by us, we will proportionately adjust the aggregate number of shares of our common stock offered under the ESPP, the number and price of shares which any participant has elected to purchase under the ESPP and the maximum number of shares which a participant may elect to purchase in any single offering period. If there is a proposal to dissolve or liquidate us, then the ESPP will terminate immediately prior to the consummation of such proposed dissolution or liquidation. We will notify each participant of such change in writing at least ten business days prior to the new exercise date. If we undergo a merger with or into another corporation or substituted by the successor corporation or the parent or subsidiary of the successor corporation. If the successor corporation refuses to assume the outstanding options or substitute equivalent options, then any offering period then in progress will be shortened by setting a new purchase date to take place before the date to take place before the date of our assets, each outstanding option will be assumed or an equivalent option substituted by the successor corporation or the parent or subsidiary of the successor corporation. If the successor corporation refuses to assume the outstanding options or substitute equivalent options, then any offering period then in progress will be shortened by setting a new purchase date to take place before the date of our proposed sale or merger. We will notify each participant of such change in writing at least ten business days prior to the new exercise date.

Amendment and Termination. Our board of directors may amend, suspend or terminate the ESPP at any time. However, the board of directors may not amend the ESPP without obtaining stockholder approval within 12 months before or after such amendment to the extent required by applicable laws.

CERTAIN RELATIONSHIPS AND RELATED-PARTY TRANSACTIONS

The following includes a summary of transactions since January 1, 2020 and any currently proposed transactions, to which we were or are to be a participant, in which (i) the amount involved exceeded or will exceed \$120,000; and (ii) any of our directors, executive officers or holders of more than 5% of our capital stock, or any affiliate or member of the immediate family of the foregoing persons, had or will have a direct or indirect material interest, other than compensation and other arrangements that are described under the sections titled "Director Compensation" and "Executive Compensation."

We believe the terms obtained or consideration that we paid or received, as applicable, in connection with the transactions described below were comparable to terms available or the amounts that we would pay or receive, as applicable, in arm's-length transactions.

Acquisitions

BlackThorn Therapeutics, Inc.

In connection with our acquisition of BlackThorn in September 2020, we issued (i) an aggregate of 45,178,495 shares of our Series A-1 convertible preferred stock (the Series A-1 Preferred), with an acquisition date fair value of \$36.6 million and (ii) warrants to purchase 2,292,672 shares of the Series A-1 Preferred, with an acquisition date fair value of \$0.7 million (the Preferred Stock Warrants). The Preferred Stock Warrants expire on the earlier of (i) December 31, 2021, (ii) immediately prior to the consummation of this offering and (iii) upon the closing of a deemed liquidation event. Certain of BlackThorn's investors, funds affiliated with ARCH Venture Partners, and one of its board members, Kristina Burow, at the time of the acquisition are related parties of the Company. In addition, our Chief Executive Officer and Chairman, Paul Berns, served as Executive Chairman of BlackThorn at the time of the acquisition.

In December 2021, we amended the expiration date of the Preferred Stock Warrants to the earlier of: (i) December 31, 2022, (ii) immediately prior to the consummation of an IPO of our common stock, and (iii) upon the closing of a deemed liquidation event.

The Preferred Stock Warrants expired on December 31, 2022. In December 2022, prior to their expiration, an entity affiliated with ARCH Venture Partners exercised the Preferred Stock Warrants for a total of 820,434 shares of Series A-1 Preferred.

Alairion, Inc.

In connection with our acquisition of Alairion in November 2020, Biomatics Capital Partners II L.P., an existing stockholder of both us and Alairion, purchased a total of \$12.0 million of Alairion convertible notes immediately prior to the closing date that were settled with 12,000,000 shares of our Series A-2 convertible preferred stock upon closing.

Common Stock Issuance

In January 2020, we entered into a stock subscription agreement pursuant to which we issued 50,000,000 shares of our common stock at a price of \$0.0001 per share to each of ARCH Venture Fund X, L.P. (ARCH X) and ARCH Venture Fund X Overage, L.P. (ARCH X Overage), for an aggregate of 100,000,000 shares of common stock issued. In August 2020, we repurchased 8,333,333 shares of common stock at a price of \$0.0001 per share from each of ARCH X overage, for an aggregate of 16,666,667 shares of common stock repurchased. The repurchased shares of common stock were cancelled and retired. Kristina Burow and Robert Nelsen, members of our board of directors, were designated to our board by ARCH Venture Partners, a holder of more than 5% of our capital stock. For further details, see the information provided in footnote (2) to the table in the section titled "Principal Stockholders."

Convertible Note and Convertible Preferred Stock Financings

Convertible Note Purchase Agreement

Between February and September 2020, we issued \$55.9 million in convertible promissory notes (the 2020 Bridge Notes), \$30 million of which notes were issued to ARCH X and ARCH X Overage. In September 2020, the 2020 Bridge Notes were settled with shares of our Series A-2 convertible preferred stock.

Series A-2 Convertible Preferred Stock Financing

In September 2020, we entered into a Series A-2 convertible preferred stock purchase agreement (Series A-2 Purchase Agreement), with various investors, pursuant to which we issued an aggregate of 123,620,000 shares of our Series A-2 convertible preferred stock (the Series A-2 Preferred) at \$1.00 per share for aggregate proceeds of \$123.6 million in the initial closing. Upon the initial closing, the right of forfeiture for 44,008,327 shares of our common stock issued with the 2020 Bridge Notes lapsed.

In accordance with the terms of the Series A-2 Purchase Agreement, we also committed to selling 40,000,000 additional shares of Series A-2 Preferred to ARCH X, ARCH X Overage and their affiliates at a fixed price of \$1.00 per share in one or more subsequent closings on or before March 8, 2021.

Further, pursuant to the Series A-2 Purchase Agreement, a forfeiture provision was added to the terms of 33,333,333 shares of our common stock previously issued in January 2020 to ARCH X, ARCH X Overage and their affiliates, of which 13,333,333 remain subject to a forfeiture provision as of December 31, 2020.

Between March and July 2021, we and certain investors entered into a series of amendments to the Series A-2 Purchase Agreement to extend the deadline to complete subsequent closings of our Series A-2 Preferred financing from March 2021 to September 2021. In August 2021, pursuant to the Series A-2 Purchase Agreement, as amended, we issued 40,000,000 shares of Series A-2 Preferred to ARCH X and ARCH X Overage and 10,000,000 shares of Series A-2 Preferred to F-Prime Capital Partners Life Sciences Fund VII LP, an entity affiliated with F-Prime Capital Partners, at \$1.00 per share for aggregate proceeds from these parties of \$50.0 million.

The table below sets forth the number of shares of our common stock, Series A-1 Preferred and Series A-2 Preferred purchased by our executive officers, directors, holders of more than 5% of our capital stock and their affiliated entities or immediate family members or issued to such parties as consideration in connection with various acquisitions of assets. Each share of Series A-1 Preferred and Series A-2 Preferred in the table below will convert into one share of our common stock upon the completion of this offering.

Name	Common Stock (#)	Series A-1 Convertible Preferred Stock (#)	Series A-2 Convertible Preferred Stock (#)	Aggregate Purchase Price (\$)
Amgen Inc. ⁽¹⁾			257,000,000	257,000,000
Entities affiliated with ARCH Venture Partners ⁽²⁾	83,333,334	14,351,995 ⁽³⁾	105,700,828	119,232,389
Entities affiliated with Biomatics Capital Partners	10,000,000	4,186,536 ⁽⁴⁾	44,500,000	48,664,035
Entities affiliated with F-Prime Capital Partners ⁽⁵⁾	15,000,000		28,463,722	28,463,722
SVF II AIV (DE) LLC.	—		60,000,000	60,000,000
Kristina M. Burow.	_	106,873		106,873

(1) Kári Stefánsson, a member of our board of directors, was designated to our board by Amgen Inc. For further details, see the information provided in footnote (1) to the table in the section titled "Principal Stockholders."

(2) Kristina Burow and Robert Nelsen, members of our board of directors, were designated to our board by ARCH Venture Partners. In addition, our Chief Executive Officer and Chairman, Paul Berns, is a Managing Director of ARCH Venture Partners. For further details, see the information provided in footnote (2) to the table in the section titled "Principal Stockholders."

(3) Includes 820,434 shares of Series A-1 Preferred issued upon the exercise of warrants in December 2022.

(4) Includes 22,501 shares of Series A-1 Preferred issued upon the exercise of warrants in December 2022.

(5) Stacie Weninger, Ph.D., a member of our board of directors, was designated to our board by F-Prime Capital Partners. Dr. Weninger has indicated her intention to resign as a director prior to the effectiveness of the registration statement for which this prospectus is a part.

Series B Convertible Preferred Stock Financing

In September 2022, we entered into a Series B convertible preferred stock purchase agreement (Series B Purchase Agreement) with various investors, pursuant to which we issued an aggregate of 58,263,334 shares of our Series B convertible preferred stock (the Series B Preferred) at \$1.50 per share for aggregate proceeds of \$87.4 million in the initial closing.

In accordance with the terms of the Series B Purchase Agreement, we issued an additional 16,666,667 shares of Series B Preferred to Sapphire Direct Holdings RSC Ltd. at a fixed price of \$1.50 per share for aggregate proceeds of \$25.0 million in a subsequent closing in October 2022.

The table below sets forth the number of shares of our Series B Preferred purchased by our executive officers, directors, holders of more than 5% of our capital stock and their affiliated entities or immediate family members or issued to such parties as consideration in connection with various acquisitions of assets. Each share of Series B Preferred in the table below will convert into one share of our common stock upon the completion of this offering.

Name	Series B Convertible Preferred Stock (#)	Aggregate Purchase Price (\$)
Amgen Inc.	6,666,667	\$ 10,000,000.50
Entities affiliated with ARCH Venture Partners ⁽¹⁾	16,666,667	\$ 25,000,000.50
Entities affiliated with F-Prime Capital Partners ⁽²⁾	666,667	\$ 1,000,000.50

(1) Kristina Burow and Robert Nelsen, members of our board of directors, were designated to our board by ARCH Venture Partners. In addition, our Chief Executive Officer and Chairman, Paul Berns, is a Managing Director of ARCH Venture Partners. For further details, see the information provided in footnote (2) to the table in the section titled "Principal Stockholders."

(2) Stacie Weninger, Ph.D., a member of our board of directors, was designated to our board by F-Prime Capital Partners. Dr. Weninger has indicated her intention to resign as a director prior to the effectiveness of the registration statement for which this prospectus is a part.

Investors' Rights Agreement

We are party to an investors' rights agreement with the purchasers of our outstanding convertible preferred stock, including entities with which certain of our directors are affiliated. Following the consummation of this offering, the holders of approximately shares of our common stock, including the shares of common stock issuable upon the conversion of our convertible preferred stock, are entitled to rights with respect to the registration of their shares under the Securities Act. For a more detailed description of these registration rights, see the section titled "Description of Capital Stock—Registration Rights." The investors' rights agreement also provides for a right of first offer in favor of certain holders of convertible preferred stock with regard to certain issuances of our capital stock. The rights of first offer will not apply to, and will terminate upon the consummation of, this offering.

Voting Agreement

We are party to a voting agreement with certain holders of our common stock and convertible preferred stock. Upon the conversion of all outstanding shares of convertible preferred stock into common stock in

connection with the consummation of this offering, the voting agreement will terminate. For a description of the voting agreement, see the section titled "Management—Board Structure and Composition—Voting Arrangements."

Right of First Refusal and Co-Sale Agreement

We are party an amended and restated right of first refusal and co-sale agreement with certain holders of our common stock and convertible preferred stock. This agreement provides for rights of first refusal and co-sale relating to the shares of our common stock held by the parties to the agreement. Upon the consummation of this offering, the amended and restated right of first refusal and co-sale agreement will terminate.

Other Transactions

We have entered into offer letter agreements with our executive officers that, among other things, provide for certain compensatory and change in control benefits, as well as severance benefits. For a description of these agreements with our named executive officers, see the subsection titled "Executive Compensation—Executive Compensation Arrangements."

As of March 31, 2023, we have made six quarterly payments to Amgen in an amount of \$6.3 million each under the Amgen Collaboration Agreement. The seventh non-refundable quarterly payment of \$6.3 million became due as of March 31, 2023. Further, subject to certain conditions, Amgen is also obligated to provide us additional financing of up to \$100.0 million. See the section titled "Business—In-Licensing and Collaboration Agreements—Research Collaboration Agreement with Amgen" for additional information.

We have also granted stock options and restricted stock to our executive officers and certain of our directors. For a description of these equity awards, see the sections titled "Executive Compensation" and "Director Compensation."

Director and Officer Indemnification

We have entered into indemnification agreements with certain of our current executive officers and directors, and intend to enter into new indemnification agreements with each of our current executive officers and directors before the completion of this offering.

Our amended and restated certificate of incorporation also provides that, to the fullest extent permitted by law, we will indemnify any officer or director of our company against all damages, claims, and liabilities arising out of the fact that the person is or was our officer or director, or served any other enterprise at our request as an officer or director. Amending this provision will not reduce our indemnification obligations relating to actions taken before an amendment.

Related Person Transaction Policy

We have a written related-person transaction policy, to be effective upon the closing of this offering, that applies to our executive officers, directors, director nominees, holders of more than five percent of any class of our voting securities and any member of the immediate family of, and any entity affiliated with, any of the foregoing persons. Such persons will not be permitted to enter into a related person transaction with us without the prior consent of our audit committee, or other independent members of our board of directors in the event it is inappropriate for our audit committee to review such transaction due to a conflict of interest. Any request for us to enter into a transaction with an executive officer, director, director nominee, principal stockholder, or any of their immediate family members or affiliates, in which the amount involved exceeds \$120,000 must first be presented to our audit committee for review, consideration, and approval. In approving or rejecting any such proposal, our audit committee will consider the relevant facts and circumstances available and deemed relevant to our audit committee, including, but not limited to, the commercial reasonableness of the terms of the transaction and the materiality and character of the related person's direct or indirect interest in the transaction. All of the transactions described in this section occurred prior to the adoption of this policy.

PRINCIPAL STOCKHOLDERS

The following table sets forth information regarding beneficial ownership of our common stock as of by:

each person whom we know to beneficially own more than 5% of our common stock;

- each of our directors;
- each of our named executive officers; and
- all directors and executive officers as a group.

In accordance with the rules of the SEC, beneficial ownership includes voting or investment power with respect to securities and includes the shares issuable pursuant to stock options that are exercisable within 60 days of . Shares issuable pursuant to stock options are deemed outstanding for computing the percentage of the person holding such options but are not outstanding for computing the percentage of any other person.

We have based our calculation of the percentage of beneficial ownership prior to this offering on and held of record by approximately stockholders as of incorporation; and (ii) the conversion of shares of all outstanding convertible preferred stock into shares of our common stock, as if such filing and effectiveness and conversion had taken place as of shares of our common stock outstanding as of which reflects the adjustments described in the prior sentence and further reflects the issuance

of shares of common stock in this offering, assuming that the underwriters will not exercise their option to purchase up to an additional shares of our common stock.

Unless otherwise indicated, the address for each listed stockholder is: c/o Neumora Therapeutics, Inc., 490 Arsenal Way, Suite 200, Watertown, Massachusetts 02472. To our knowledge, except as indicated in the footnotes to this table and pursuant to applicable community property laws, the persons named in the table have sole voting and investment power with respect to all shares of common stock.

	Number of Shares	Percentage of Shares		
Name	Snares Beneficially owned (#)	Before Offering (%)	After Offering (%)	
5% or Greater Beneficial Owners:				
Amgen Inc. ⁽¹⁾				
Entities affiliated with ARCH Venture Partners ⁽²⁾				
Entities affiliated with Biomatics Capital Partners ⁽³⁾				
Entities affiliated with SoftBank ⁽⁴⁾				
Named Executive Officers and Directors:				
Paul Berns ⁽⁵⁾				
Joshua Pinto, Ph.D. ⁽⁶⁾				
John Dunlop, Ph.D. ⁽⁷⁾				
Kristina M. Burow ⁽⁸⁾				
Matthew Fust ⁽⁹⁾				
Alaa Halawa				
Maykin Ho, Ph.D. ⁽¹⁰⁾				
Robert Nelsen				
Kári Stefánsson, M.D.				
Stacie Weninger, Ph.D. ⁽¹¹⁾				
All executive officers and directors as a group (13 persons) ⁽¹²⁾				

* less than 1.0%.

(1) Consists of (i) shares of common stock issuable upon the conversion of Series A-2 convertible preferred stock and (ii) shares of common stock issuable upon the conversion of Series B convertible preferred stock. Investment and voting decisions for Amgen Inc. are made by an investment committee comprised of three or more individuals, and therefore no individual is the beneficial owner of the shares held by Amgen Inc. The address of Amgen Inc. is One Amgen Center Drive, Thousand Oaks, California 91320.

(2) Consists of (i) shares of common stock held by ARCH Venture Fund X, L.P. (ARCH X), (ii) shares of common stock issuable upon the conversion of Series A-2 convertible preferred stock held by ARCH Venture Fund X, L.P. (ARCH X), (ii) shares of common stock issuable upon the conversion of Series A-2 convertible preferred stock held by ARCH Venture Partners X, L.P. (AVP X LP), (vi) shares of common stock issuable upon the conversion of Series A-2 convertible preferred stock held by ARCH Venture Partners X, L.P. (AVP X LP), (vi) shares of common stock issuable upon the conversion of Series A-2 convertible preferred stock held by ARCH Venture Partners X, Overage L.P. (AVP X Overage LP), (vii) shares of common stock issuable upon the conversion of Series A-1 convertible preferred stock held by ARCH Venture Fund VII, L.P. (ARCH VII), and (viii) of common stock issuable upon the conversion of Series A-2 convertible preferred stock held by ARCH Venture Fund VIII Overage, L.P. (ARCH VIII Overage) and (ix)

shares of common stock issuable upon the conversion of Series B convertible preferred stock held by ARCH Venture Fund XII, L.P. (ARCH XII). AVP X LP is the sole general partner of ARCH X. AVP X Overage LP is the sole general partner of ARCH X Overage. ARCH Venture Partners XII, L.P. (AVP XII LP) is the general partner of ARCH XII. ARCH Venture Partners X, LLC (AVP X LLC) is the sole general partner of each of AVP X LP and AVP X Overage LP. ARCH Venture Partners VII, L.P. (AVP VII LP), is the sole general partner of ARCH VII and ARCH Venture Partners VII, LLC (AVP VII LLC), is the sole general partner of AVP VII LP. ARCH Venture Partners VIII, LLC (AVP VIII LLC), is the general partner of ARCH VIII Overage. ARCH Venture Partners XII, LLC (AVP XII LLC) is the general partner of AVP XII LP. Keith Crandell, Kristina Burow, Steven Gillis and Robert Nelsen comprise the investment committee of AVP X LLC (the AVP X Committee Members). AVP X LLC may be deemed to beneficially own the shares held by ARCH X and ARCH X Overage. Clinton Bybee, Keith Crandell and Robert Nelsen comprise the investment committee of AVP VII LLC (AVP VII LLC Committee Members). AVP VII LLC may be deemed to beneficially own the shares held by ARCH X overage. Clinton Bybee, Keith Crandell and Robert Nelsen comprise the investment committee of AVP VII LLC (AVP VII LLC Committee Members). AVP VIII LLC may be deemed to beneficially own the shares held by ARCH VII, and each of the AVP VIII LLC Committee Members may be deemed to share the power to direct the disposition and vote of the shares held by ARCH VII. Clinton Bybee, Keith Crandell and Robert Nelsen comprise the investment committee of AVP VIII LLC (the AVP VIII LLC Committee Members). AVP VIII LLC may be deemed to beneficially own the shares held by ARCH VIII Overage, and each of the AVP VIII LLC Committee Members may be deemed to share the power to direct the disposition and vote of the shares held by ARCH VIII Clinton Bybee, Kei

VIII Overage. Keith Crandell, Kristina Burow, Steven Gillis and Robert Nelsen comprise the investment committee of AVP XII LLC (the AVP XII LLC Committee Members). AVP XII LLC may be deemed to beneficially own the shares held by ARCH XII, and each of the AVP XII LLC Committee Members may be deemed to share the power to direct the disposition and vote of the shares held by ARCH XII. AVP X Committee Members, AVP VII LLC Committee Members, and AVP VIII LLC Committee Members and AVP XII LLC Committee Members each disclaim beneficial ownership except to the extent of their pecuniary interest therein, if any. Further, Paul Berns does not have dispositive control over any of the shares held beneficially by AVP X LLC, ARCH VII LLC, and ARCH VIII LLC and AVP XII LLC. The address of ARCH Venture Partners is 1700 Owens Street, Suite 535, San Francisco, California 94158.

- (3) Consists of (i) shares of common stock held by Biomatics Capital Partners, L.P. (Biomatics), (ii) shares of common stock issuable upon the conversion of Series A-1 convertible preferred stock held by Biomatics, (iii) shares of common stock issuable upon the conversion of Series A-2 convertible preferred stock held by Biomatics, (iv) shares of common stock held by Biomatics Capital Partners II L.P. (Biomatics II, and together with Biomatics, Biomatics Capital Partners) and (v) shares of common stock issuable upon the conversion of Series A-2 convertible preferred stock held by Biomatics LLC. (Biomatics LLC) is the managing partner of Biomatics and Biomatics II. Julie Sunderland and Boris Nikolic are the general managers of Biomatics LLC (the Biomatics LLC Committee Members). Biomatics LLC may be deemed to beneficially own the shares held Biomatics and Biomatics II, and each of the Biomatics LLC Committee Members may be deemed to share the power to direct the disposition and vote of the shares held by Biomatics and Biomatics II. The Biomatics LLC Committee Members each disclaim beneficial ownership except to the extent of their pecuniary interest therein, if any. The address of Biomatics Capital Partners is 188 E. Blaine Street, Suite 126, Seattle, Washington 98102.
- (4) Consists of shares of common stock issuable upon the conversion of Series A-2 convertible preferred stock. SoftBank Vision Fund II-2 L.P. is the managing member of SVF II Holdings (DE) LLC, which is the sole member of SVF. SB Global Advisers Limited (SBGA) has been appointed as manager and is responsible for making all decisions related to the acquisition, structuring, financing and disposal of SoftBank Vision Fund II-2 L.P.'s investments, including as held by SVF. Spencer Collins, Rajeev Misra, and Neil Hadley are the directors of SBGA. As a result of these relationships, each of these entities and individuals may be deemed to share beneficial ownership of the securities held of record by SVF. Each of them disclaims any such beneficial ownership. The registered address for each of SVF and SVF II Holdings (DE) LLC is c/o Corporation Service Company, 251 Little Falls Drive, Wilmington, DE 19808. The registered address of SoftBank Vision Fund II-2 L.P. is c/o Crestbridge Limited, 47 Esplanade, St. Helier, Jersey, JE1 0BD. The business address of SB Global Advisers Limited is 69 Grosvenor Street, London W1K 3JP, England, United Kingdom.
- (5) Consists of (i) shares of common stock held directly by Mr. Berns and (ii) shares issuable pursuant to stock options exercisable within 60 days of March 31, 2023.
 (6) Consists of (i) shares of common stock held directly by Dr. Pinto and (ii) shares issuable pursuant to stock options exercisable within 60 days of Shares issuable pursuant to stock options exercisable within 60 days of Shares issuable pursuant to stock options exercisable within 60 days of Shares issuable pursuant to stock options exercisable within 60 days of Shares issuable pursuant to stock options exercisable within 60 days of Shares issuable pursuant to stock options exercisable within 60 days of Shares issuable pursuant to stock options exercisable within 60 days of Shares issuable pursuant to stock options exercisable within 60 days of Shares issuable pursuant to stock options exercisable within 60 days of Shares issuable pursuant to stock options exercisable within 60 days of Shares issuable pursuant to stock options exercisable within 60 days of Shares issuable pursuant to stock options exercisable within 60 days of Shares issuable pursuant to stock options exercisable within 60 days of Shares issuable pursuant to stock options exercisable within 60 days of Shares issuable pursuant to stock options exercisable within 60 days of Shares issuable pursuant to stock options exercisable within 60 days of Shares issuable pursuant to stock options exercisable within 60 days of Shares issuable pursuant to stock options exercisable within 60 days of Shares issuable pursuant to stock options exercisable within 60 days of Shares issuable pursuant to stock options exercisable within 60 days of Shares issuable pursuant to stock options exercisable within 60 days of Shares issuable pursuant to stock options exercisable within 60 days of Shares issuable pursuant to stock options exercisable within 60 days of Shares issuable pursuant to stock options exercisable within 60 days of Shares issuable pursuant to stock options exer
- (6) Consists of (i) shares of common stock held directly by Dr. Pinto and (ii) March 31, 2023.
 (7) Consists of (i) shares of common stock held directly by Dr. Dunlop and (ii)
- shares issuable pursuant to stock options exercisable within 60 days of
- (7) Consists of (i) shares of common stock held directly by Dr. Dunlop and (ii) March 31, 2023.
- (8) See Footnote (2) above.

(9) Consists of shares issuable pursuant to stock options exercisable within 60 days of March 31, 2023.

(10) Consists of shares issuable pursuant to stock options exercisable within 60 days of March 31, 2023.

- (11) Dr. Weninger has indicated her intention to resign as a director prior to the effectiveness of the registration statement for which this prospectus is a part.
- (12) Consists of (i) shares of common stock issuable upon the conversion of Series A-1 convertible preferred stock, (ii) shares of common stock issuable upon the conversion of Series B convertible preferred stock, (iii) shares of common stock and (iv) shares issuable pursuant to stock options exercisable within 60 days of March 31, 2023.

DESCRIPTION OF CAPITAL STOCK

The following summary describes our capital stock and the material provisions of our amended and restated certificate of incorporation and our amended and restated bylaws, which will become effective immediately prior to the completion of this offering, the investors' rights agreement to which we and certain of our stockholders are parties and of the Delaware General Corporation Law. Because the following is only a summary, it does not contain all of the information that may be important to you. For a complete description, you should refer to our amended and restated certificate of incorporation, amended and restated bylaws and investors' rights agreement, copies of which have been filed as exhibits to the registration statement of which this prospectus is part.

General

Upon the completion of this offering and the filing of our amended and restated certificate of incorporation, our authorized capital stock will consist of shares of common stock, par value \$0.0001 per share, and shares of preferred stock, par value \$0.0001 per share.

Common Stock

Outstanding Shares

As of March 31, 2023, we had shares of common stock outstanding, held of record by stockholders, assuming the conversion of all of our outstanding shares of convertible preferred stock into shares of common stock immediately prior to the completion of this offering.

Voting Rights

Each holder of common stock is entitled to one vote for each share on all matters submitted to a vote of the stockholders, including the election of directors. Our stockholders do not have cumulative voting rights in the election of directors. Accordingly, holders of a majority of the voting shares are able to elect all of the directors. In addition, the affirmative vote of holders of 66-2/3% of the voting power of all of the then outstanding voting stock will be required to take certain actions, including amending certain provisions of our amended and restated certificate of incorporation, including the provisions relating to amending our amended and restated bylaws, the classified board and director liability.

Dividends

Subject to preferences that may be applicable to any then outstanding preferred stock, holders of our common stock are entitled to receive dividends as may be declared from time to time by our board of directors out of legally available funds.

Liquidation

In the event of our liquidation, dissolution or winding up, holders of our common stock will be entitled to share ratably in the net assets legally available for distribution to stockholders after the payment of all of our debts and other liabilities, subject to the satisfaction of any liquidation preference granted to the holders of any then outstanding shares of preferred stock.

Rights, Preferences and Privileges

Holders of our common stock have no preemptive, conversion or subscription rights, and there are no redemption or sinking fund provisions applicable to our common stock. The rights, preferences and privileges of the holders of our common stock are subject to, and may be adversely affected by, the rights of the holders of shares of any series of our preferred stock that we may designate and issue in the future.

Fully Paid and Nonassessable

All of our outstanding shares of common stock are, and the shares of common stock to be issued in this offering will be, fully paid and nonassessable.

Preferred Stock

Upon the completion of this offering, all of our currently outstanding shares of convertible preferred stock will convert into common stock and we will not have any shares of preferred stock outstanding. Immediately prior to the completion of this offering, our amended and restated certificate of incorporation will be amended and restated to delete all references to such shares of convertible preferred stock. From and after the consummation of this offering, our board of directors will have the authority, without further action by our stockholders, to issue up to shares of preferred stock in one or more series and to fix the rights, preferences, privileges and restrictions thereof. These rights, preferences and privileges could include dividend rights, conversion rights, voting rights, terms of redemption, liquidation preferences, sinking fund terms and the number of shares constituting, or the designation of, such series, any or all of which may be greater than the rights of our common stock. The issuance of our preferred stock could adversely affect the voting power of holders of common stock and the likelihood that such holders will receive dividend payments and payments upon our liquidation. In addition, the issuance of preferred stock could have the effect of delaying, deferring or preventing a change in control of our company or other corporate action. Immediately after consummation of this offering, no shares of preferred stock will be outstanding, and we have no present plan to issue any shares of preferred stock.

Stock Options

As of March 31, 2023, we had outstanding options to purchase an aggregate of shares of our common stock, with a weighted-average exercise price of \$ per share. For additional information regarding terms of our equity incentive plans, see the section titled "Executive Compensation—Equity Compensation Plans."

Registration Rights

Upon the completion of this offering and subject to the lock-up agreements entered into in connection with this offering and federal securities laws, certain holders of shares of our common stock, including those shares of our common stock that will be issued upon the conversion of our convertible preferred stock in connection with this offering, will initially be entitled to certain rights with respect to registration of such shares under the Securities Act. These shares are referred to as registrable securities. The holders of these registrable securities possess registration rights pursuant to the terms of our investors' rights agreement and are described in additional detail below. The registration of shares of our common stock pursuant to the exercise of the registration rights described below would enable the holders to trade these shares without restriction under the Securities Act when the applicable registration statement is declared effective. We will pay the registration expenses, other than underwriting discounts, selling commissions and stock transfer taxes, of the shares registered pursuant to the demand, piggyback and Form S-3 registrations described below.

Generally, in an underwritten offering, the managing underwriter, if any, has the right, subject to specified conditions and limitations, to limit the number of shares the holders may include. The demand, piggyback and Form S-3 registration rights described below will terminate upon the earliest of (i) with respect to each stockholder, such date, on or after the closing of this offering, on which all registrable shares held by such stockholder may immediately be sold during any 90-day period pursuant to Rule 144 of the Securities Act, or Rule 144 and (ii) the occurrence of a deemed liquidation event, as defined in our amended and restated certificate of incorporation, as currently in effect.

Demand Registration Rights

Upon the completion of this offering, holders of approximately shares of our common stock issuable upon conversion of outstanding convertible preferred stock will be entitled to certain demand registration rights. Beginning 180 days following the effectiveness of the registration statement of which this prospectus is a part, certain major investors holding, collectively, holding at least 40% of registrable securities may, on not more than two occasions, request that we register all or a portion of their shares, subject to certain specified exceptions. If any of these holders exercises its demand registration rights, then holders of approximately shares of our common stock issuable upon the shares of our convertible preferred stock in connection with this offering will be entitled to register their shares, subject to specified conditions and limitations in the corresponding offering.

Piggyback Registration Rights

In connection with this offering, holders of approximately shares of our common stock issuable upon conversion of outstanding convertible preferred stock are entitled to their rights to notice of this offering and to include their shares of registrable securities in this offering. The requisite percentage of these stockholders are expected to waive all such stockholders' rights to notice of this offering and to include their shares of registrable securities in this offering. In the event that we propose to register any of our securities under the Securities Act in another offering, either for our own account or for the account of other security holders, the holders of registrable securities will be entitled to certain "piggyback" registration rights allowing them to include their shares in such registration, subject to specified conditions and limitations.

S-3 Registration Rights

Upon the completion of this offering, the holders of approximately shares of our common stock issuable upon conversion of outstanding convertible preferred stock will initially be entitled to certain Form S-3 registration rights. Certain major investors holding at least 20% of registrable securities may, on not more than two registrations on Form S-3 within any 12-month period, request that we register all or a portion of their shares on Form S-3 if we are qualified to file a registration statement on Form S-3, subject to specified exceptions. Such request for registration on Form S-3 must cover securities with an aggregate offering price which equals or exceeds \$5.0 million, net of selling expenses. The right to have such shares registered on Form S-3 is further subject to other specified conditions and limitations.

Election and Removal of Directors; Vacancies

The exact number of directors will be fixed from time to time by resolution of the board. Directors will be elected by a plurality of the votes of the shares of our capital stock present in person or represented by proxy at the meeting and entitled to vote on the election of directors.

No director may be removed except for cause, and directors may be removed for cause only by an affirmative vote of shares representing not less than a majority of the shares then entitled to vote at an election of directors.

Any vacancy occurring on the board of directors and any newly created directorship may be filled only by a majority of the remaining directors in office.

Staggered Board

Upon the closing of this offering, our board of directors will be divided into three classes serving staggered three-year terms. Class I, Class II, and Class III directors will serve until our annual meetings of stockholders in 2024, 2025 and 2026, respectively. At each annual meeting of stockholders, directors will be elected to succeed the class of directors whose terms have expired. This classification of our board of directors could have the effect of increasing the length of time necessary to change the composition of a majority of the board of directors. In general, at least two annual meetings of stockholders to effect a change in a majority of the members of the board of directors.

Limitation on Action by Written Consent

Our amended and restated certificate of incorporation and our amended and restated bylaws provide that holders of our common stock will not be able to act by written consent without a meeting.

Stockholder Meetings

Our amended and restated certificate of incorporation and our amended and restated bylaws provide that special meetings of our stockholders may be called only by the chairman of the board, our chief executive officer (or president, in the absence of a chief executive officer) or a majority of the directors. Our amended and restated certificate of incorporation and our amended and restated bylaws specifically deny any power of any other person to call a special meeting.

Amendment of Certificate of Incorporation

The provisions of our amended and restated certificate of incorporation described under the subsections titled "—Election and Removal of Directors; Vacancies," "—Stockholder Meetings," "—Limitation on Action by Written Consent," "—Limitation of Liability of Directors and Officers," "—Common Stock—Voting Rights" and "—Forum Selection" and provisions relating to amendments to our amended and restated certificate of incorporation may be amended only by the affirmative vote of holders of at least 66-2/3% of the voting power of our outstanding shares of voting stock. The affirmative vote of holders of at least a majority of the voting power of our outstanding shares of stock will generally be required to amend other provisions of our amended and restated certificate of incorporation.

Amendment of Bylaws

Certain provisions of our amended and restated bylaws may generally be altered, amended, or repealed, and new bylaws may be adopted, with the affirmative vote of a majority of directors present at any regular or special meeting of the board of directors called for that purpose, provided that any alteration, amendment, or repeal of, or adoption of any bylaw inconsistent with specified provisions of the bylaws, including those related to special and annual meetings of stockholders, action of stockholders by written consent, nomination of directors, transfers of capital stock and dividends requires the affirmative vote of at least 66-2/3% of all directors in office at a meeting called for that purpose.

All other provisions of our amended and restated bylaws may generally be altered, amended, or repealed, and new bylaws may be adopted, with the affirmative vote of holders of 66-2/3 % of the voting power of our outstanding shares of voting stock.

Other Limitations on Stockholder Actions

Our amended and restated bylaws impose some procedural requirements on stockholders who wish to:

- make nominations in the election of directors;
- propose that a director be removed;
- propose any repeal or change in our amended and restated bylaws; or
- propose any other business to be brought before an annual or special meeting of stockholders.

Under these procedural requirements, in order to bring a proposal before a meeting of stockholders, a stockholder must deliver timely notice of a proposal pertaining to a proper subject for presentation at the meeting to our corporate secretary along with the following:

a description of the business or nomination to be brought before the meeting and the reasons for conducting such business at the meeting;

- the stockholder's name and address;
- any material interest of the stockholder in the proposal;
- the number of shares beneficially owned by the stockholder and evidence of such ownership; and
- the names and addresses of all persons with whom the stockholder is acting in concert and a description of all arrangements and understandings with those persons, and the number of shares such persons beneficially own.

To be timely, a stockholder must generally deliver notice:

- in connection with an annual meeting of stockholders, not less than 120 nor more than 150 days prior to the date on which the annual meeting of stockholders was held in the immediately preceding year, but in the event that the date of the annual meeting is more than 30 days before or more than 70 days after the anniversary date of the preceding annual meeting of stockholders, a stockholder notice will be timely if received by us not later than the close of business on the later of (i) not less than 70 nor more than 120 days prior to the date of the annual meeting and (ii) the 10th day following the day on which we first publicly announce the date of the annual meeting; or
- in connection with the election of a director at a special meeting of stockholders, during the period not less than 120 nor more than 150 days prior to the date of the special meeting, or the 10th day following the day on which a notice of the date of the special meeting was mailed to the stockholders or the public disclosure of that date was made.

In order to submit a nomination for our board of directors, a stockholder must also submit all information with respect to the nominee that would be required to be included in a proxy statement, as well as other information. If a stockholder fails to follow the required procedures, the stockholder's proposal or nominee will be ineligible and will not be voted on by our stockholders.

Limitation of Liability of Directors and Officers

Our amended and restated certificate of incorporation provides that no director will be personally liable to us or our stockholders for monetary damages for breach of fiduciary duty as a director, except as required by applicable law, as in effect from time to time. Section 102(b)(7) of the Delaware General Corporation Law permits a corporation to provide in its certificate of incorporation that a director of the corporation shall not be personally liable to the corporation or its stockholders for monetary damages for breach of fiduciary duty as a director, except for liability for:

- any breach of the director's duty of loyalty to our company or our stockholders;
- any act or omission not in good faith or which involved intentional misconduct or a knowing violation of law;
- unlawful payments of dividends or unlawful stock repurchases or redemptions as provided in Section 174 of the Delaware General Corporation Law; and
- any transaction from which the director derived an improper personal benefit.

As a result, neither we nor our stockholders have the right, through stockholders' derivative suits on our behalf, to recover monetary damages against a director for breach of fiduciary duty as a director, including breaches resulting from grossly negligent behavior, except in the situations described above.

Our amended and restated certificate of incorporation also provides that, to the fullest extent permitted by law, we will indemnify any officer or director of our company against all damages, claims, and liabilities arising out of the fact that the person is or was our director or officer, or served any other enterprise at our request as a director or officer. Amending this provision will not reduce our indemnification obligations relating to actions taken before an amendment.

Forum Selection

Our amended and restated certificate of incorporation provides that the Court of Chancery of the State of Delaware will be the sole and exclusive forum for the following types of actions or proceedings under Delaware statutory or common law: (i) any derivative action or proceeding brought on behalf of us; (ii) any action asserting a claim of breach of fiduciary duty owed by any director, officer, or other employee of our company to us or our stockholders; (iii) any action asserting a claim arising pursuant to any provision of the Delaware General Corporation Law or our amended and restated certificate of incorporation and our amended and restated bylaws; or (iv) any action asserting a claim governed by the internal affairs doctrine. This provision would not apply to claims brought to enforce a duty or liability created by the Securities Exchange Act of 1934, as amended, or any other claim for which the federal courts have exclusive jurisdiction.

Furthermore, our amended and restated certificate of incorporation will also provide that unless we consent in writing to the selection of an alternative forum, the federal district courts of the United States shall be the exclusive forum for the resolution of any complaint asserting a cause of action arising under the Securities Act of 1933, as amended. Any person or entity purchasing or otherwise acquiring any interest in our shares of capital stock shall be deemed to have notice of and consented to the foregoing forum selection provisions.

Our exclusive forum provision will not relieve us of our duties to comply with the federal securities laws and the rules and regulations thereunder, and our stockholders will not be deemed to have waived our compliance with these laws, rules and regulations.

The enforceability of similar federal court choice of forum provisions in other companies' certificates of incorporation has been challenged in legal proceedings, and it is possible that a court could find this type of provision to be inapplicable or unenforceable. If a court were to find either of the choice of forum provisions contained in our amended and restated certificate of incorporation or amended and restated bylaws to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving such action in other jurisdictions.

The choice of forum provisions may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with the company or our directors, officers or other employees, which may discourage such lawsuits against the company and our directors, officers and other employees and result in increased costs for investors to bring a claim.

Delaware Business Combination Statute

We have elected to be subject to Section 203 of the Delaware General Corporation Law. Section 203 prevents an "interested stockholder," which is defined generally as a person owning 15% or more of a corporation's voting stock, or any affiliate or associate of that person, from engaging in a broad range of "business combinations" with the corporation for three years after becoming an interested stockholder unless:

- the board of directors of the corporation had previously approved either the business combination or the transaction that resulted in the stockholder becoming an interested stockholder;
- upon completion of the transaction that resulted in the stockholder becoming an interested stockholder, that person owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, other than statutorily excluded shares; or
- following the transaction in which that person became an interested stockholder, the business combination is approved by the board of directors of the corporation and holders of at least two-thirds of the outstanding voting stock not owned by the interested stockholder.

Under Section 203, the restrictions described above also do not apply to specific business combinations proposed by an interested stockholder following the announcement or notification of designated extraordinary transactions involving the corporation and a person who had not been an interested stockholder during the

previous three years or who became an interested stockholder with the approval of a majority of the corporation's directors, if such extraordinary transaction is approved or not opposed by a majority of the directors who were directors prior to any person becoming an interested stockholder during the previous three years or were recommended for election or elected to succeed such directors by a majority of such directors.

Section 203 may make it more difficult for a person who would be an interested stockholder to effect various business combinations with a corporation for a three-year period. Section 203 also may have the effect of preventing changes in our management and could make it more difficult to accomplish transactions that our stockholders may otherwise deem to be in their best interests.

Anti-Takeover Effects of Some Provisions

Certain provisions of our amended and restated certificate of incorporation and amended and restated bylaws could make the following more difficult:

- acquisition of control of us by means of a proxy contest, tender offer, or otherwise; or
- removal of our incumbent officers and directors.

These provisions, as well as our ability to issue preferred stock, are designed to discourage coercive takeover practices and inadequate takeover bids. These provisions are also designed to encourage persons seeking to acquire control of us to first negotiate with our board of directors. We believe that the benefits of increased protection give us the potential ability to negotiate with the proponent of an unfriendly or unsolicited proposal to acquire or restructure us, and that the benefits of this increased protection outweigh the disadvantages of discouraging those proposals, because negotiation of those proposals could result in an improvement of their terms.

Listing

We intend to apply to list our common stock on the Nasdaq Global Market under the symbol "NMRA," and this offering is contingent upon obtaining such approval.

Transfer Agent and Registrar

The transfer agent and registrar for the common stock will be

. The transfer agent and registrar's address is

MATERIAL U.S. FEDERAL INCOME TAX CONSEQUENCES TO NON-U.S. HOLDERS

The following discussion is a summary of the material U.S. federal income tax consequences to Non-U.S. Holders (as defined below) of the purchase, ownership and disposition of our common stock issued pursuant to this offering, but does not purport to be a complete analysis of all potential tax effects. The effects of other U.S. federal tax laws, such as estate and gift tax laws, and any applicable state, local or non-U.S. tax laws are not discussed. This discussion is based on the Code, Treasury Regulations promulgated thereunder, judicial decisions, and published rulings and administrative pronouncements of the U.S. Internal Revenue Service (the IRS), in each case in effect as of the date hereof.

These authorities may change or be subject to differing interpretations. Any such change or differing interpretation may be applied retroactively in a manner that could adversely affect a Non-U.S. Holder. We have not sought and will not seek any rulings from the IRS regarding the matters discussed below. There can be no assurance the IRS or a court will not take a contrary position to that discussed below regarding the tax consequences of the purchase, ownership and disposition of our common stock.

This discussion is limited to Non-U.S. Holders that hold our common stock as a "capital asset" within the meaning of Section 1221 of the Code (generally, property held for investment). This discussion does not address all U.S. federal income tax consequences relevant to a Non-U.S. Holder's particular circumstances, including the impact of the Medicare contribution tax on net investment income and the alternative minimum tax. In addition, it does not address consequences relevant to Non-U.S. Holders subject to special rules, including, without limitation:

- U.S. expatriates and former citizens or long-term residents of the United States;
- persons holding our common stock as part of a hedge, straddle or other risk reduction strategy or as part of a conversion transaction or other integrated investment;
- banks, insurance companies and other financial institutions;
- brokers, dealers or traders in securities;
- "controlled foreign corporations," "passive foreign investment companies" and corporations that accumulate earnings to avoid U.S. federal income tax;
- partnerships or other entities or arrangements treated as partnerships for U.S. federal income tax purposes (and investors therein);
- tax-exempt organizations or governmental organizations;
- persons deemed to sell our common stock under the constructive sale provisions of the Code;
- persons who hold or receive our common stock pursuant to the exercise of any employee stock option or otherwise as compensation;
- tax-qualified retirement plans; and
- "qualified foreign pension funds" as defined in Section 897(1)(2) of the Code and entities all of the interests of which are held by qualified foreign pension funds.

If an entity treated as a partnership for U.S. federal income tax purposes holds our common stock, the tax treatment of a partner in the partnership will depend on the status of the partner, the activities of the partnership and certain determinations made at the partner level. Accordingly, partnerships holding our common stock and the partners in such partnerships should consult their tax advisors regarding the U.S. federal income tax consequences to them.

THIS DISCUSSION IS FOR INFORMATIONAL PURPOSES ONLY AND IS NOT TAX ADVICE. INVESTORS SHOULD CONSULT THEIR TAX ADVISORS WITH RESPECT TO THE APPLICATION OF THE U.S. FEDERAL INCOME TAX LAWS TO THEIR PARTICULAR SITUATIONS AS WELL AS ANY TAX CONSEQUENCES OF THE PURCHASE, OWNERSHIP AND DISPOSITION OF OUR COMMON STOCK ARISING UNDER THE U.S. FEDERAL ESTATE OR GIFT TAX LAWS OR UNDER THE LAWS OF ANY STATE, LOCAL OR NON-U.S. TAXING JURISDICTION OR UNDER ANY APPLICABLE INCOME TAX TREATY.

Definition of a Non-U.S. Holder

For purposes of this discussion, a "Non-U.S. Holder" is any beneficial owner of our common stock that is neither a "U.S. person" nor an entity treated as a partnership for U.S. federal income tax purposes. A U.S. person is any person that, for U.S. federal income tax purposes, is or is treated as any of the following:

- an individual who is a citizen or resident of the United States;
- a corporation created or organized under the laws of the United States, any state thereof or the District of Columbia;
- an estate, the income of which is subject to U.S. federal income tax regardless of its source; or
- a trust that (i) is subject to the primary supervision of a U.S. court and all substantial decisions of which are subject to the control of one or more "United States persons" (within the meaning of Section 7701(a)(30) of the Code) or (ii) has a valid election in effect to be treated as a United States person for U.S. federal income tax purposes.

Distributions

As described in the section titled "Dividend Policy," we do not anticipate paying any cash dividends in the foreseeable future. However, if we do make distributions of cash or property on our common stock, such distributions will constitute dividends for U.S. federal income tax purposes to the extent paid from our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. Amounts not treated as dividends for U.S. federal income tax purposes will constitute a return of capital and first be applied against and reduce a Non-U.S. Holder's adjusted tax basis in its common stock, but not below zero. Any excess will be treated as capital gain and will be treated as described below under the subsection titled "—Sale or Other Taxable Disposition."

Subject to the discussion below regarding effectively connected income, dividends paid to a Non-U.S. Holder will be subject to U.S. federal withholding tax at a rate of 30% of the gross amount of the dividends (or such lower rate specified by an applicable income tax treaty, provided the Non-U.S. Holder furnishes a valid IRS Form W-8BEN or W-8BEN-E (or other applicable documentation) certifying qualification for the lower treaty rate). A Non-U.S. Holder that does not timely furnish the required documentation, but that qualifies for a reduced treaty rate, may obtain a refund of any excess amounts withheld by timely filing an appropriate claim for refund with the IRS. Non-U.S. Holders should consult their tax advisors regarding their entitlement to benefits under any applicable tax treaties.

If dividends paid to a Non-U.S. Holder are effectively connected with the Non-U.S. Holder's conduct of a trade or business within the United States (and, if required by an applicable income tax treaty, the Non-U.S. Holder maintains a permanent establishment in the United States to which such dividends are attributable), the Non-U.S. Holder will be exempt from the U.S. federal withholding tax described above. To claim the exemption, the Non-U.S. Holder must furnish to the applicable withholding agent a valid IRS Form W-8ECI, certifying that the dividends are effectively connected with the Non-U.S. Holder's conduct of a trade or business within the United States. Any such effectively connected dividends will be subject to U.S. federal income tax on a net income basis at the regular rates applicable to U.S. persons. A Non-U.S. Holder that is a corporation also may be

subject to a branch profits tax at a rate of 30% (or such lower rate specified by an applicable income tax treaty) on such effectively connected dividends, as adjusted for certain items. Non-U.S. Holders should consult their tax advisors regarding any applicable tax treaties that may provide for different rules.

Sale or Other Taxable Disposition

A Non-U.S. Holder will not be subject to U.S. federal income tax on any gain realized upon the sale or other taxable disposition of our common stock unless:

- the gain is effectively connected with the Non-U.S. Holder's conduct of a trade or business within the United States (and, if required by an applicable income tax treaty, the Non-U.S. Holder maintains a permanent establishment in the United States to which such gain is attributable);
- the Non-U.S. Holder is a nonresident alien individual present in the United States for 183 days or more during the taxable year of the disposition and certain other requirements are met; or
- our common stock constitutes a U.S. real property interest (USRPI), by reason of our status as a U.S. real property holding corporation (USRPHC), for U.S. federal income tax purposes.

Gain described in the first bullet point above generally will be subject to U.S. federal income tax on a net income basis at the regular rates applicable to U.S. persons. A Non-U.S. Holder that is a corporation also may be subject to a branch profits tax at a rate of 30% (or such lower rate specified by an applicable income tax treaty) on such effectively connected gain, as adjusted for certain items.

A Non-U.S. Holder described in the second bullet point above will be subject to U.S. federal income tax at a rate of 30% (or such lower rate specified by an applicable income tax treaty) on gain realized upon the sale or other taxable disposition of our common stock, which may be offset by certain U.S.-source capital losses of the Non-U.S. Holder (even though the individual is not considered a resident of the United States), provided the Non-U.S. Holder has timely filed U.S. federal income tax returns with respect to such losses.

With respect to the third bullet point above, we believe we currently are not, and do not anticipate becoming, a USRPHC. Because the determination of whether we are a USRPHC depends, however, on the fair market value of our USRPIs relative to the fair market value of our non-U.S. real property interests and our other business assets, there can be no assurance that we currently are not a USRPHC or will not become one in the future. Even if we are or were to become a USRPHC, gain arising from the sale or other taxable disposition of our common stock by a Non-U.S. Holder will not be subject to U.S. federal income tax if our common stock is "regularly traded," as defined by applicable Treasury Regulations, on an established securities market, and such Non-U.S. Holder owned, actually and constructively, 5% or less of our common stock throughout the shorter of the five-year period ending on the date of the sale or other taxable disposition or the Non-U.S. Holder's holding period.

Non-U.S. Holders should consult their tax advisors regarding any applicable tax treaties that may provide for different rules.

Information Reporting and Backup Withholding

Payments of dividends on our common stock will not be subject to backup withholding, provided the Non-U.S. Holder certifies its non-U.S. status, such as by furnishing a valid IRS Form W-8BEN, W-8BEN-E or W-8ECI, or otherwise establishes an exemption. However, information returns are required to be filed with the IRS in connection with any distributions on our common stock paid to the Non-U.S. Holder, regardless of whether such distributions constitute dividends or whether any tax was actually withheld. In addition, proceeds of the sale or other taxable disposition of our common stock within the United States or conducted through certain U.S.-related brokers generally will not be subject to backup withholding or information reporting if the

applicable withholding agent receives the certification described above or the Non-U.S. Holder otherwise establishes an exemption. Proceeds of a disposition of our common stock conducted through a non-U.S. office of a non-U.S. broker that does not have certain enumerated relationships with the United States generally will not be subject to backup withholding or information reporting.

Copies of information returns that are filed with the IRS may also be made available under the provisions of an applicable treaty or agreement to the tax authorities of the country in which the Non-U.S. Holder resides or is established.

Backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules may be allowed as a refund or a credit against a Non-U.S. Holder's U.S. federal income tax liability, provided the required information is timely furnished to the IRS.

Additional Withholding Tax on Payments Made to Foreign Accounts

Withholding taxes may be imposed under Sections 1471 to 1474 of the Code (such Sections commonly referred to as the Foreign Account Tax Compliance Act (FATCA)) on certain types of payments made to non-U.S. financial institutions and certain other non-U.S. entities. Specifically, a 30% withholding tax may be imposed on dividends on, or (subject to the proposed Treasury Regulations discussed below) gross proceeds from the sale or other disposition of, our common stock paid to a "foreign financial institution" or a "non-financial foreign entity" (each as defined in the Code), unless (i) the foreign financial institution undertakes certain diligence and reporting obligations, (ii) the non-financial foreign entity either certifies it does not have any "substantial United States owners" (as defined in the Code) or furnishes identifying information regarding each substantial United States owner or (iii) the foreign financial institution or non-financial foreign entity otherwise qualifies for an exemption from these rules. If the payee is a foreign financial institution and is subject to the diligence and reporting requirements in (i) above, it must enter into an agreement with the U.S. Department of the Treasury requiring, among other things, that it undertake to identify accounts held by certain "specified United States persons" or "United States owned foreign entities" (each as defined in the Code), annually report certain information about such accounts, and withhold 30% on certain payments to non-compliant foreign financial institutions and certain other account holders. Foreign financial institutions located in jurisdictions that have an intergovernmental agreement with the United States governing FATCA may be subject to different rules.

Under applicable Treasury Regulations and administrative guidance, withholding under FATCA generally applies to payments of dividends on our common stock. While withholding under FATCA would have applied also to payments of gross proceeds from the sale or other disposition of our common stock beginning on January 1, 2019, proposed Treasury Regulations eliminate FATCA withholding on payments of gross proceeds entirely. Taxpayers generally may rely on these proposed Treasury Regulations until final Treasury Regulations are issued.

Prospective investors should consult their tax advisors regarding the potential application of withholding under FATCA to their investment in our common stock.

SHARES ELIGIBLE FOR FUTURE SALE

Prior to this offering, there has been no public market for our common stock. Future sales of substantial amounts of our common stock in the public market could adversely affect market prices prevailing from time to time. Furthermore, because only a limited number of shares will be available for sale shortly after this offering due to existing contractual and legal restrictions on resale as described below, there may be sales of substantial amounts of our common stock in the public market after the restrictions lapse. This may adversely affect the prevailing market price and our ability to raise equity capital in the future.

Based on the number of shares of our common stock outstanding as of March 31, 2023, upon completion of this offering, we will have shares of common stock outstanding, assuming (i) the conversion of all shares of our outstanding preferred stock as of March 31, 2023 into shares of common stock, (ii) no exercise of the underwriters' option to purchase additional shares and (iii) no exercise of any options after March 31, 2023. Of these shares, (or shares of our common stock if the underwriters exercise their option to purchase additional shares in full), sold in this offering will be freely transferable without restriction or registration under the Securities Act, except for any shares purchased by one of our existing "affiliates," as that term is defined in Rule 144 under the Securities Act. The remaining shares of common stock outstanding will bear "restricted shares" as defined in Rule 144. Restricted shares and the shares of common stock into which such securities are convertible may be sold in the public market only if registered or if they qualify for an exemption from registration under Rules 144 or 701 of the Securities Act, which rules are summarized below. As a result of the contractual lock-up period ending 180 days after the date of this prospectus described below and the provisions of Rules 144 and 701, these shares will be available for sale in the public market as follows:

Number of Shares

Date After 180 days from the date of this prospectus (subject, in some cases, to volume limitations)

Rule 144

In general, a person who has beneficially owned restricted shares of our common stock for at least six months would be entitled to sell such securities, provided that (i) such person is not deemed to have been one of our affiliates at the time of, or at any time during the 90 days preceding, a sale; and (ii) we are subject to the Exchange Act periodic reporting requirements for at least 90 days before the sale. Persons who have beneficially owned restricted shares of our common stock for at least six months but who are our affiliates at the time of, or any time during the 90 days preceding, a sale, would be subject to additional restrictions, by which such person would be entitled to sell within any three-month period only a number of securities that does not exceed the greater of either of the following:

- 1% of the number of shares of our common stock then outstanding, which will equal approximately shares immediately after this offering, assuming no exercise of the underwriters' option to purchase additional shares; or
- the average weekly trading volume of shares of our common stock on the Nasdaq Global Market during the four calendar weeks preceding the filing of a notice on Form 144 with respect to the sale;

provided, in each case, that we are subject to the Exchange Act periodic reporting requirements for at least 90 days before the sale. Such sales both by affiliates and by non-affiliates must also comply with the manner of sale, current public information, and notice provisions of Rule 144 to the extent applicable.

Rule 701

In general, under Rule 701 as currently in effect, any of our employees, directors, officers, consultants or advisors who acquired common stock from us in connection with a written compensatory stock or option plan or other written agreement in compliance with Rule 701 before the effective date of the registration statement of

which this prospectus is a part (to the extent such common stock is not subject to a lock-up agreement) and who are not our "affiliates" as defined in Rule 144 during the immediately preceding 90 days, is entitled to rely on Rule 701 to resell such shares beginning 90 days after the date of this prospectus in reliance on Rule 144, but without complying with the notice, manner of sale, public information requirements or volume limitation provisions of Rule 144. Persons who are our "affiliates" may resell those shares beginning 90 days after the date of this prospectus without compliance with minimum holding period requirements under Rule 144 (subject to the terms of the lock-up agreement referred to below, if applicable).

Lock-Up Agreements

In connection with this offering, we, our directors, our executive officers and holders of substantially all of our other outstanding shares of common stock or securities convertible into or exchangeable for shares of our common stock outstanding upon the completion of this offering, have entered into or will enter into lock-up agreements with the underwriters, subject to certain exceptions more fully described under the section titled "Underwriting," not to, among other things and subject to certain exceptions, dispose of or hedge any of their common stock or securities convertible into or exchangeable for shares of common stock during the period from the date of this prospectus continuing through the date 180 days after the date of this prospectus, except with the prior consent of J.P. Morgan Securities LLC and BofA Securities, Inc. See the section titled "Underwriting" for additional information.

Registration Rights

Upon the completion of this offering, the holders of approximately shares of our common stock will be entitled to rights with respect to the registration of their shares under the Securities Act, subject to the lock-up agreements described under "—Lock-Up Agreements" above. Registration of these shares under the Securities Act would result in the shares becoming freely tradable without restriction under the Securities Act, except for shares purchased by affiliates, immediately upon the effectiveness of the registration statement of which this prospectus is a part. Any sales of securities by these stockholders could have a material adverse effect on the trading price of our common stock. The requisite percentage of these stockholders will waive all such stockholders' rights to notice of this offering and to include their shares of registrable securities in this offering. See the section titled "Description of Capital Stock—Registration Rights."

Equity Incentive Plans

We intend to file with the SEC a registration statement on Form S-8 under the Securities Act covering the shares of common stock underlying outstanding equity awards and shares of common stock reserved for issuance under the 2015 Plan, the 2020 Plan, the 2023 Plan and the ESPP. Such registration statement is expected to be filed and become effective as soon as practicable after the completion of this offering. Accordingly, shares registered under such registration statement will be available for sale in the open market following its effective date, subject to Rule 144 volume limitations and the lock-up agreements described above, if applicable.

UNDERWRITING

We are offering the shares of common stock described in this prospectus through a number of underwriters. J.P. Morgan Securities LLC, BofA Securities, Inc. and Citigroup Global Markets Inc. are acting as representatives of the underwriters. We have entered into an underwriting agreement with the underwriters. Subject to the terms and conditions of the underwriting agreement, we have agreed to sell to the underwriters, and each underwriter has severally agreed to purchase, at the public offering price less the underwriting discounts and commissions set forth on the cover page of this prospectus, the number of shares of common stock listed next to its name in the following table:

Name	Number of Shares
J.P. Morgan Securities LLC	
BofA Securities, Inc.	
Citigroup Global Markets Inc.	
Stifel, Nicolaus & Company, Incorporated	
Guggenheim Securities, LLC	
RBC Capital Markets, LLC	
Total	

The underwriters are committed to purchase all the shares of common stock offered by us if they purchase any shares. The underwriting agreement also provides that if an underwriter defaults, the purchase commitments of non-defaulting underwriters may also be increased or the offering may be terminated.

The underwriters propose to offer the common stock directly to the public at the initial public offering price set forth on the cover page of this prospectus and to certain dealers at that price less a concession not in excess of \$ per share. After the initial offering of the shares to the public, if all of the shares of common stock are not sold at the initial public offering price, the underwriters may change the offering price and the other selling terms. Sales of any shares made outside of the United States may be made by affiliates of the underwriters.

The underwriters have an option to buy up to additional shares of common stock from us to cover sales of shares by the underwriters which exceed the number of shares specified in the table above. The underwriters have 30 days from the date of this prospectus to exercise this option to purchase additional shares. If any shares are purchased with this option to purchase additional shares, the underwriters will purchase shares in approximately the same proportion as shown in the table above. If any additional shares of common stock are purchased, the underwriters will offer the additional shares on the same terms as those on which the shares are being offered.

The underwriting fee is equal to the public offering price per share of common stock less the amount paid by the underwriters to us per share of common stock. The underwriting fee is \$ per share. The following table shows the per share and total underwriting discounts and commissions to be paid to the underwriters assuming both no exercise and full exercise of the underwriters' option to purchase additional shares.

	Without Option to Purchase Additional Shares Exercise	to Purchase Additional
Per Share	\$	\$
Total	\$	\$

We estimate that the total expenses of this offering, including registration, filing and listing fees, printing fees and legal and accounting expenses, but excluding the underwriting discounts and commissions, will be approximately \$. We have agreed to reimburse the underwriters for expenses relating to the clearance of this offering with the Financial Industry Regulatory Authority, Inc. in an amount up to \$.

A prospectus in electronic format may be made available on the web sites maintained by one or more underwriters, or selling group members, if any, participating in the offering. The underwriters may agree to allocate a number of shares to underwriters and selling group members for sale to their online brokerage account holders. Internet distributions will be allocated by the representatives to underwriters and selling group members that may make Internet distributions on the same basis as other allocations.

We have agreed that we will not, subject to certain exceptions, (i) offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, hedge, lend, or otherwise transfer or dispose of, directly or indirectly, or submit to, or file with, the Securities and Exchange Commission a registration statement under the Securities Act relating to, any shares of our common stock or any securities convertible into or exercisable or exchangeable for any shares of our common stock, or publicly disclose the intention to undertake any of the foregoing, or (ii) enter into any swap, hedging, or other agreement that transfers, in whole or in part, any of the economic consequences of ownership of any shares of common stock or any such other securities, (regardless of whether any of these transactions are to be settled by the delivery of shares of common stock or such other securities, in cash or otherwise), in each case without the prior written consent of J.P. Morgan Securities LLC, BofA Securities, Inc. and Citigroup Global Markets Inc. for a period of 180 days after the date of this prospectus, other than the shares of our common stock to be sold in this offering.

The restrictions on our actions, as described above, do not apply to certain transactions, including (i) the issuance of shares of common stock or securities convertible into or exercisable for shares of our common stock pursuant to the conversion or exchange of convertible or exchangeable securities or the exercise of warrants or options (including net exercise) or the settlement of RSUs (including net settlement), in each case outstanding on the date of the underwriting agreement and described in this prospectus; (ii) grants of stock options, stock awards, restricted stock, RSUs, or other equity awards and the issuance of shares of common stock or securities convertible into or exercisable or exchangeable for shares of our common stock (whether upon the exercise of stock options or otherwise) to our employees, officers, directors, advisors, or consultants pursuant to the terms of an equity compensation plan in effect as of the closing date of this offering and described in this prospectus, provided that such recipients enter into a lock-up agreement with the underwriters; (iii) the issuance of up to 10% of the outstanding shares of common stock, or securities convertible into, exercisable for, or which are otherwise exchangeable for, common stock, immediately following the closing date of this offering, in acquisitions or other similar strategic transactions, provided that such recipients enter into a lock-up agreement with the underwriters; or (iv) the filing of any registration statement on Form S-8 relating to securities granted or to be granted pursuant to any plan in effect on the date of the underwriting agreement and described in this prospectus or any assumed benefit plan pursuant to an acquisition or similar strategic transaction.

Our directors and executive officers, and substantially all of our securityholders (such persons, the lock-up parties) have entered into lock-up agreements with the underwriters prior to the commencement of this offering pursuant to which each lock-up party, with limited exceptions, for a period of 180 days after the date of this prospectus (such period, the restricted period), may not and may not cause any of their direct or indirect affiliates to, without the prior written consent of J.P. Morgan Securities LLC, BofA Securities, Inc., and Citigroup Global Markets Inc. (i) offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, lend, or otherwise transfer or dispose of, directly or indirectly, any shares of our common stock or any securities convertible into or exercisable or exchangeable for our common stock (including without limitation, our common stock or such other securities which may be deemed to be beneficially owned by the lock-up party in accordance with the rules and regulations of the Securities and Exchange Commission and securities which may be issued upon exercise of a stock option or warrant) (collectively with the common stock, the lock-up securities), (ii) enter into any hedging, swap or other agreement or transaction that transfers, in whole or in part, any of the economic consequences of ownership of the lock-up securities, whether any such transaction described in clause (i) or (ii) above is to be settled by delivery of the lock-up securities, in cash or otherwise, (iii) make any demand for or exercise any right with respect to the registration of any the lock up securities, or (iv) publicly disclose the intention to do any of the foregoing.

Such persons or entities have further acknowledged that these undertakings preclude them from engaging from engaging in any hedging or other transactions or arrangements (including, without limitation, any short sale or the purchase or sale of, or entry into, any put or call option, or combination thereof, forward, swap or any other derivative transaction or instrument, however described or defined) designed or intended, or which could reasonably be expected to lead to or result in, a sale or disposition or transfer (whether by the lock-up party or any other person) of any economic consequences of ownership, in whole or in part, directly or indirectly, of any lock-up securities, whether any such transaction or arrangement (or instrument provided for thereunder) would be settled by delivery of lock-up securities, in cash or otherwise. Such persons or entities further confirm that they have furnished the representatives with the details of any transaction such persons or entities, or any of their respective affiliates, is a party to as of the date hereof, which transaction would have been restricted by the lock-up agreements if it had been entered into by such persons or entities during the restricted period.

The restrictions described in the immediately preceding paragraph and contained in the lock-up agreements between the underwriters and the lock-up parties do not apply, subject in certain cases to various conditions, to certain transactions, including (a) transfers, distribution, disposition or surrender of lock-up securities: (i) as bona fide gifts, or for bona fide estate planning purposes, (ii) by will, testamentary document or intestacy, (iii) to any trust for the direct or indirect benefit of the lock-up party or any immediate family member, (iv) to a corporation, partnership, limited liability company or other entity of which the lock-up party and its immediate family members are the legal and beneficial owner of all of the outstanding equity securities or similar interests, (v) to a nominee or custodian of a person or entity to whom a disposition or transfer would be permissible under clauses (i) through (iv), (vi) in the case of a corporation, partnership, limited liability company, trust or other business entity, (A) to another corporation. partnership, limited liability company, trust or other business entity that is an affiliate of the lock-up party, or to any investment fund or other entity controlling, controlled by, managing or managed by or under common control with the lock-up party or its affiliates or (B) as part of a distribution to partners, members or stockholders of the lock-up party; (vii) by operation of law, (viii) to us from an employee upon death, disability or termination of employment of such employee, (ix) as part of a sale of lock-up securities acquired in this offering or in open market transactions after the completion of this offering, (x) to us in connection with the vesting, settlement or exercise of restricted stock units, options, warrants or other rights to purchase shares of our common stock (including "net" or "cashless" exercise), including for the payment of exercise price and tax and remittance payments, or (xi) pursuant to a bona fide third-party tender offer, merger, consolidation or other similar transaction approved by our board of directors and made to all shareholders involving a change in control, provided that if such transaction is not completed, all such lock-up securities would remain subject to the restrictions in the immediately preceding paragraph; (b) exercise of the options, settlement of RSUs or other equity awards, or the exercise of warrants granted pursuant to plans described in in this prospectus, provided that any lock-up securities received upon such exercise, vesting or settlement would be subject to restrictions similar to those in the immediately preceding paragraph; (c) the conversion of outstanding convertible preferred stock, warrants to acquire preferred stock, or convertible securities into shares of our common stock or warrants to acquire shares of our common stock, provided that any common stock or warrant received upon such conversion would be subject to restrictions similar to those in the immediately preceding paragraph; and (d) the establishment by lock-up parties of trading plans under Rule 10b5-1 under Section 16 of the Exchange Act, provided that such plan does not provide for the transfer of lock-up securities during the restricted period.

J.P. Morgan Securities LLC, BofA Securities, Inc. and Citigroup Global Markets Inc. in their sole discretion, may release the securities subject to any of the lock-up agreements with the underwriters described above, in whole or in part at any time.

We have agreed to indemnify the underwriters against certain liabilities, including liabilities under the Securities Act.

We intend to apply to list our common stock on the Nasdaq Global Market under the symbol "NMRA," and this offering is contingent upon obtaining such approval.

In connection with this offering, the underwriters may engage in stabilizing transactions, which involves making bids for, purchasing and selling shares of common stock in the open market for the purpose of preventing or retarding a decline in the market price of the common stock while this offering is in progress. These stabilizing transactions may include making short sales of common stock, which involves the sale by the underwriters of a greater number of shares of common stock than they are required to purchase in this offering, and purchasing shares of common stock on the open market to cover positions created by short sales. Short sales may be "covered" shorts, which are short positions in an amount not greater than the underwriters' option to purchase additional shares referred to above, or may be "naked" shorts, which are short positions in excess of that amount.

The underwriters may close out any covered short position either by exercising their option to purchase additional shares, in whole or in part, or by purchasing shares in the open market. In making this determination, the underwriters will consider, among other things, the price of shares available for purchase in the open market compared to the price at which the underwriters may purchase shares through the option to purchase additional shares. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of the common stock in the open market that could adversely affect investors who purchase in this offering. To the extent that the underwriters create a naked short position, they will purchase shares in the open market to cover the position.

The underwriters have advised us that, pursuant to Regulation M of the Securities Act, they may also engage in other activities that stabilize, maintain or otherwise affect the price of the common stock, including the imposition of penalty bids. This means that if the representatives of the underwriters purchase common stock in the open market in stabilizing transactions or to cover short sales, the representatives can require the underwriters that sold those shares as part of this offering to repay the underwriting discount received by them.

These activities may have the effect of raising or maintaining the market price of the common stock or preventing or retarding a decline in the market price of the common stock, and, as a result, the price of the common stock may be higher than the price that otherwise might exist in the open market. If the underwriters commence these activities, they may discontinue them at any time. The underwriters may carry out these transactions on the Nasdaq Global Market, in the over-the-counter market or otherwise.

Prior to this offering, there has been no public market for our common stock. The initial public offering price will be determined by negotiations between us and the representatives of the underwriters. In determining the initial public offering price, we and the representatives of the underwriters expect to consider a number of factors including:

- the information set forth in this prospectus and otherwise available to the representatives;
- our prospects and the history and prospects for the industry in which we compete;
- an assessment of our management;
- our prospects for future earnings;
- the general condition of the securities markets at the time of this offering;
- the recent market prices of, and demand for, publicly traded common stock of generally comparable companies; and
- other factors deemed relevant by the underwriters and us.

Neither we nor the underwriters can assure investors that an active trading market will develop for shares of our common stock, or that the shares will trade in the public market at or above the initial public offering price.

Other Relationships

Certain of the underwriters and their affiliates have provided in the past to us and our affiliates and may provide from time to time in the future certain commercial banking, financial advisory, investment banking and

other services for us and such affiliates in the ordinary course of their business, for which they have received and may continue to receive customary fees and commissions. In addition, from time to time, certain of the underwriters and their affiliates may effect transactions for their own account or the account of customers, and hold on behalf of themselves or their customers, long or short positions in our debt or equity securities or loans, and may do so in the future.

Selling Restrictions

Other than in the United States, no action has been taken by us or the underwriters that would permit a public offering of the securities offered by this prospectus in any jurisdiction where action for that purpose is required. The securities offered by this prospectus may not be offered or sold, directly or indirectly, nor may this prospectus or any other offering material or advertisements in connection with the offer and sale of any such securities be distributed or published in any jurisdiction, except under circumstances that will result in compliance with the applicable rules and regulations of that jurisdiction. Persons into whose possession this prospectus comes are advised to inform themselves about and to observe any restrictions relating to the offering and the distribution of this prospectus. This prospectus does not constitute an offer to sell or a solicitation of an offer to buy any securities offered by this prospectus in any jurisdiction in which such an offer or a solicitation is unlawful.

Notice to Prospective Investors in the European Economic Area

In relation to each Member State of the European Economic Area (each a Relevant State), no shares have been offered or will be offered pursuant to the offering to the public in that Relevant State prior to the publication of a prospectus in relation to the shares which has been approved by the competent authority in that Relevant State or, where appropriate, approved in another Relevant State and notified to the competent authority in that Relevant State, all in accordance with the Prospectus Regulation, except that the shares may be offered to the public in that Relevant State at any time:

- (i) to any legal entity which is a qualified investor as defined under Article 2 of the Prospectus Regulation;
- (ii) to fewer than 150 natural or legal persons (other than qualified investors as defined under Article 2 of the Prospectus Regulation), subject to obtaining the prior consent of the representatives for any such offer; or
- (iii) in any other circumstances falling within Article 1(4) of the Prospectus Regulation,

provided that no such offer of shares shall require us or any of the representatives to publish a prospectus pursuant to Article 3 of the Prospectus Regulation or supplement a prospectus pursuant to Article 23 of the Prospectus Regulation.

For the purposes of this provision, the expression an "offer to the public" in relation to shares in any Relevant State means the communication in any form and by any means of sufficient information on the terms of the offer and any shares to be offered so as to enable an investor to decide to purchase or subscribe for any shares, and the expression "Prospectus Regulation" means Regulation (EU) 2017/1129.

Notice to Prospective Investors in the United Kingdom

No shares have been offered or will be offered pursuant to the offering to the public in the United Kingdom prior to the publication of a prospectus in relation to the shares which has been approved by the Financial Conduct Authority, except that the shares may be offered to the public in the United Kingdom at any time:

(i) to any legal entity which is a qualified investor as defined under Article 2 of the UK Prospectus Regulation;

- to fewer than 150 natural or legal persons (other than qualified investors as defined under Article 2 of the UK Prospectus Regulation), subject to obtaining the prior consent of the representatives for any such offer; or
- (iii) in any other circumstances falling within Section 86 of the FSMA, provided that no such offer of the shares shall require the Issuer or any Manager to publish a prospectus pursuant to Section 85 of the FSMA or supplement a prospectus pursuant to Article 23 of the UK Prospectus Regulation. For the purposes of this provision, the expression an "offer to the public" in relation to the shares in the United Kingdom means the communication in any form and by any means of sufficient information on the terms of the offer and any shares to be offered so as to enable an investor to decide to purchase or subscribe for any shares and the expression "UK Prospectus Regulation" means Regulation (EU) 2017/1129 as it forms part of domestic law by virtue of the European Union (Withdrawal) Act 2018.

Notice to Prospective Investors in Canada

The shares may be sold only to purchasers purchasing, or deemed to be purchasing, as principal that are accredited investors, as defined in National Instrument 45-106 Prospectus Exemptions or subsection 73.3(1) of the Securities Act (Ontario), and are permitted clients, as defined in National Instrument 31-103 Registration Requirements, Exemptions and Ongoing Registrant Obligations. Any resale of the shares must be made in accordance with an exemption from, or in a transaction not subject to, the prospectus requirements of applicable securities laws.

Securities legislation in certain provinces or territories of Canada may provide a purchaser with remedies for rescission or damages if this prospectus (including any amendment thereto) contains a misrepresentation, provided that the remedies for rescission or damages are exercised by the purchaser within the time limit prescribed by the securities legislation of the purchaser's province or territory. The purchaser should refer to any applicable provisions of the securities legislation of the purchaser's province or territory for particulars of these rights or consult with a legal advisor.

Pursuant to section 3A.3 of National Instrument 33-105 Underwriting Conflicts (NI 33-105), the underwriters are not required to comply with the disclosure requirements of NI 33-105 regarding underwriter conflicts of interest in connection with this offering.

Notice to Prospective Investors in Switzerland

The shares may not be publicly offered in Switzerland and will not be listed on the SIX Swiss Exchange (SIX) or on any other stock exchange or regulated trading facility in Switzerland. This document does not constitute a prospectus within the meaning of, and has been prepared without regard to the disclosure standards for issuance prospectuses under art. 652a or art. 1156 of the Swiss Code of Obligations or the disclosure standards for listing prospectuses under art. 27 ff. of the SIX Listing Rules or the listing rules of any other stock exchange or regulated trading facility in Switzerland. Neither this document nor any other offering or marketing material relating to the shares or the offering may be publicly distributed or otherwise made publicly available in Switzerland.

Neither this document nor any other offering or marketing material relating to the offering, us or the shares have been or will be filed with or approved by any Swiss regulatory authority. In particular, this document will not be filed with, and the offer of shares will not be supervised by, the Swiss Financial Market Supervisory Authority FINMA (FINMA), and the offer of shares has not been and will not be authorized under the Swiss Federal Act on Collective Investment Schemes (CISA). The investor protection afforded to acquirers of interests in collective investment schemes under the CISA does not extend to acquirers of shares.

Notice to Prospective Investors in the Dubai International Financial Centre

This document relates to an Exempt Offer in accordance with the Markets Rules 2012 of the Dubai Financial Services Authority (DFSA). This document is intended for distribution only to persons of a type specified in the Markets Rules 2012 of the DFSA. It must not be delivered to, or relied on by, any other person. The DFSA has no responsibility for reviewing or verifying any documents in connection with Exempt Offers. The DFSA has not approved this prospectus supplement nor taken steps to verify the information set forth herein and has no responsibility for this document. The securities to which this document relates may be illiquid and/or subject to restrictions on their resale. Prospective purchasers of the securities offered should conduct their own due diligence on the securities. If you do not understand the contents of this document you should consult an authorized financial advisor.

In relation to its use in the DIFC, this document is strictly private and confidential and is being distributed to a limited number of investors and must not be provided to any person other than the original recipient, and may not be reproduced or used for any other purpose. The interests in the securities may not be offered or sold directly or indirectly to the public in the DIFC.

Notice to Prospective Investors in the United Arab Emirates

The shares have not been, and are not being, publicly offered, sold, promoted or advertised in the United Arab Emirates (including the Dubai International Financial Centre) other than in compliance with the laws of the United Arab Emirates (and the Dubai International Financial Centre) governing the issue, offering and sale of securities. Further, this prospectus does not constitute a public offer of securities in the United Arab Emirates (including the Dubai International Financial Centre) and is not intended to be a public offer. This prospectus has not been approved by or filed with the Central Bank of the United Arab Emirates, the Securities and Commodities Authority or the Dubai Financial Services Authority.

Notice to Prospective Investors in Australia

This prospectus:

- does not constitute a disclosure document or a prospectus under Chapter 6D.2 of the Corporations Act 2001 (Cth) (the Corporations Act);
- has not been, and will not be, lodged with the Australian Securities and Investments Commission (ASIC), as a disclosure document for the
 purposes of the Corporations Act and does not purport to include the information required of a disclosure document for the purposes of the
 Corporations Act; and
- may only be provided in Australia to select investors who are able to demonstrate that they fall within one or more of the categories of investors, available under section 708 of the Corporations Act (Exempt Investors).

The shares may not be directly or indirectly offered for subscription or purchased or sold, and no invitations to subscribe for or buy the shares may be issued, and no draft or definitive offering memorandum, advertisement or other offering material relating to any shares may be distributed in Australia, except where disclosure to investors is not required under Chapter 6D of the Corporations Act or is otherwise in compliance with all applicable Australian laws and regulations. By submitting an application for the shares, you represent and warrant to us that you are an Exempt Investor.

As any offer of shares under this document will be made without disclosure in Australia under Chapter 6D.2 of the Corporations Act, the offer of those securities for resale in Australia within 12 months may, under section 707 of the Corporations Act, require disclosure to investors under Chapter 6D.2 if none of the exemptions in section 708 applies to that resale. By applying for the shares you undertake to us that you will not, for a period of

12 months from the date of issue of the shares, offer, transfer, assign or otherwise alienate those shares to investors in Australia except in circumstances where disclosure to investors is not required under Chapter 6D.2 of the Corporations Act or where a compliant disclosure document is prepared and lodged with ASIC.

Notice to Prospective Investors in Japan

The shares have not been and will not be registered pursuant to Article 4, Paragraph 1 of the Financial Instruments and Exchange Act. Accordingly, none of the shares nor any interest therein may be offered or sold, directly or indirectly, in Japan or to, or for the benefit of, any "resident" of Japan (which term as used herein means any person resident in Japan, including any corporation or other entity organized under the laws of Japan), or to others for re-offering or resale, directly or indirectly, in Japan or to or for the benefit of a resident of Japan, except pursuant to an exemption from the registration requirements of, and otherwise in compliance with, the Financial Instruments and Exchange Act and any other applicable laws, regulations and ministerial guidelines of Japan in effect at the relevant time.

Notice to Prospective Investors in Hong Kong

The shares have not been offered or sold and will not be offered or sold in Hong Kong, by means of any document, other than (i) to "professional investors" as defined in the Securities and Futures Ordinance (Cap. 571 of the Laws of Hong Kong) (the SFO) of Hong Kong and any rules made thereunder; or (ii) in other circumstances which do not result in the document being a "prospectus" as defined in the Companies (Winding Up and Miscellaneous Provisions) Ordinance (Cap. 32) of Hong Kong (the CO), or which do not constitute an offer to the public within the meaning of the CO. No advertisement, invitation or document relating to the shares has been or may be issued or has been or may be in the possession of any person for the purposes of issue, whether in Hong Kong or elsewhere, which is directed at, or the contents of which are likely to be accessed or read by, the public of Hong Kong (except if permitted to do so under the securities laws of Hong Kong) other than with respect to shares which are or are intended to be disposed of only to persons outside Hong Kong or only to "professional investors" as defined in the SFO and any rules made thereunder.

Notice to Prospective Investors in Singapore

Each representative has acknowledged that this prospectus has not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, each representative has represented and agreed that it has not offered or sold any shares or caused the shares to be made the subject of an invitation for subscription or purchase and will not offer or sell any shares or cause the shares to be made the subject of an invitation for subscription or purchase, and has not circulated or distributed, nor will it circulate or distribute, this prospectus or any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the shares, whether directly or indirectly, to any person in Singapore other than:

- (i) to an institutional investor (as defined in Section 4A of the Securities and Futures Act (Chapter 289) of Singapore (as modified or amended from time to time, the SFA) pursuant to Section 274 of the SFA;
- (ii) to a relevant person (as defined in Section 275(2) of the SFA) pursuant to Section 275(1) of the SFA, or any person pursuant to Section 275(1A) of the SFA, and in accordance with the conditions specified in Section 275 of the SFA; or
- (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

Where the shares are subscribed or purchased under Section 275 of the SFA by a relevant person which is:

(i) a corporation (which is not an accredited investor (as defined in Section 4A of the SFA)) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or

(ii) a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary of the trust is an individual who is an accredited investor,

securities or securities-based derivatives contracts (each term as defined in Section 2(1) of the SFA) of that corporation or the beneficiaries' rights and interest (howsoever described) in that trust shall not be transferred within six months after that corporation or that trust has acquired the shares pursuant to an offer made under Section 275 of the SFA except:

- to an institutional investor or to a relevant person, or to any person arising from an offer referred to in Section 275(1A) or Section 276(4)(i) (B) of the SFA;
- (2) where no consideration is or will be given for the transfer;
- (3) where the transfer is by operation of law;
- (4) as specified in Section 276(7) of the SFA; or
- (5) as specified in Regulation 37A of the Securities and Futures (Offers of Investments) (Securities and Securities-based Derivatives Contracts) Regulations 2018.

Singapore SFA Product Classification—In connection with Section 309B of the SFA and the CMP Regulations 2018, unless otherwise specified before an offer of the shares, we have determined, and hereby notify all relevant persons (as defined in Section 309A(1) of the SFA), that the shares are "prescribed capital markets products" (as defined in the CMP Regulations 2018) and Excluded Investment Products (as defined in MAS Notice SFA 04-N12: Notice on the Sale of Investment Products and MAS Notice FAA-N16: Notice on Recommendations on Investment Products).

Notice to Prospective Investors in Bermuda

Shares may be offered or sold in Bermuda only in compliance with the provisions of the Investment Business Act of 2003 of Bermuda which regulates the sale of securities in Bermuda. Additionally, non-Bermudian persons (including companies) may not carry on or engage in any trade or business in Bermuda unless such persons are permitted to do so under applicable Bermuda legislation.

Notice to Prospective Investors in Saudi Arabia

This document may not be distributed in the Kingdom of Saudi Arabia except to such persons as are permitted under the Offers of Securities Regulations as issued by the board of the Saudi Arabian Capital Market Authority, or CMA, pursuant to resolution number 2-11-2004 dated 4 October 2004 as amended by resolution number 1-28-2008, as amended. The CMA does not make any representation as to the accuracy or completeness of this document and expressly disclaims any liability whatsoever for any loss arising from, or incurred in reliance upon, any part of this document. Prospective purchasers of the securities offered hereby should conduct their own due diligence on the accuracy of the information relating to the securities. If you do not understand the contents of this document, you should consult an authorized financial adviser.

Notice to Prospective Investors in the British Virgin Islands

The shares are not being, and may not be offered to the public or to any person in the British Virgin Islands for purchase or subscription by us or on our behalf. The shares may be offered to companies incorporated under the BVI Business Companies Act, 2004 (British Virgin Islands), or BVI Companies, but only where the offer will be made to, and received by, the relevant BVI Company entirely outside of the British Virgin Islands.

Notice to Prospective Investors in China

This prospectus will not be circulated or distributed in the PRC and the shares will not be offered or sold, and will not be offered or sold to any person for re-offering or resale directly or indirectly to any residents of the

PRC except pursuant to any applicable laws and regulations of the PRC. Neither this prospectus nor any advertisement or other offering material may be distributed or published in the PRC, except under circumstances that will result in compliance with applicable laws and regulations.

Notice to Prospective Investors in Korea

The shares have not been and will not be registered under the Financial Investments Services and Capital Markets Act of Korea and the decrees and regulations thereunder (the FSCMA), and the shares have been and will be offered in Korea as a private placement under the FSCMA. None of the shares may be offered, sold or delivered directly or indirectly, or offered or sold to any person for re-offering or resale, directly or indirectly, in Korea or to any resident of Korea except pursuant to the applicable laws and regulations of Korea, including the FSCMA and the Foreign Exchange Transaction Law of Korea and the decrees and regulations thereunder (the FETL). The shares have not been listed on any of the securities exchanges in the world including, without limitation, the Korea Exchange in Korea. Furthermore, the purchaser of the shares shall comply with all applicable regulatory requirements (including but not limited to requirements under the FETL) in connection with the purchase of the shares. By the purchase of the shares, the relevant holder thereof will be deemed to represent and warrant that if it is in Korea or is a resident of Korea, it purchased the shares pursuant to the applicable laws and regulations of Korea.

Notice to Prospective Investors in Malaysia

No prospectus or other offering material or document in connection with the offer and sale of the shares has been or will be registered with the Securities Commission of Malaysia (the Commission), for the Commission's approval pursuant to the Capital Markets and Services Act 2007. Accordingly, this prospectus and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the shares may not be circulated or distributed, nor may the shares be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Malaysia other than (i) a closed end fund approved by the Commission; (ii) a holder of a Capital Markets Services License; (iii) a person who acquires the shares, as principal, if the offer is on terms that the shares may only be acquired at a consideration of not less than RM250,000 (or its equivalent in foreign currencies) for each transaction; (iv) an individual whose total net personal assets or total net joint assets with his or her spouse exceeds RM3 million (or its equivalent in foreign currencies), excluding the value of the primary residence of the individual; (v) an individual who has a gross annual income exceeding RM300,000 (or its equivalent in foreign currencies) per annum in the preceding twelve months; (vi) an individual who, jointly with his or her spouse, has a gross annual income of RM400,000 (or its equivalent in foreign currencies), per annum in the preceding twelve months; (vii) a corporation with total net assets exceeding RM10 million (or its equivalent in a foreign currencies) based on the last audited accounts; (viii) a partnership with total net assets exceeding RM10 million (or its equivalent in foreign currencies); (ix) a bank licensee or insurance licensee as defined in the Labuan Financial Services and Securities Act 2010; (x) an Islamic bank licensee or takaful licensee as defined in the Labuan Financial Services and Securities Act 2010; and (xi) any other person as may be specified by the Commission; provided that, in the each of the preceding categories (i) to (xi), the distribution of the shares is made by a holder of a Capital Markets Services License who carries on the business of dealing in securities. The distribution in Malaysia of this prospectus is subject to Malaysian laws. This prospectus does not constitute and may not be used for the purpose of public offering or an issue, offer for subscription or purchase, invitation to subscribe for or purchase any securities requiring the registration of a prospectus with the Commission under the Capital Markets and Services Act 2007.

Notice to Prospective Investors in Taiwan

The shares have not been and will not be registered with the Financial Supervisory Commission of Taiwan pursuant to relevant securities laws and regulations and may not be sold, issued or offered within Taiwan through a public offering or in circumstances which constitutes an offer within the meaning of the Securities and Exchange Act of Taiwan that requires a registration or approval of the Financial Supervisory Commission of

Taiwan. No person or entity in Taiwan has been authorized to offer, sell, give advice regarding or otherwise intermediate the offering and sale of the shares in Taiwan.

Notice to Prospective Investors in South Africa

Due to restrictions under the securities laws of South Africa, no "offer to the public" (as such term is defined in the South African Companies Act, No. 71 of 2008 (as amended or re-enacted, the South African Companies Act)) is being made in connection with the issue of the shares in South Africa. Accordingly, this document does not, nor is it intended to, constitute a "registered prospectus" (as that term is defined in the South African Companies Act) prepared and registered under the South African Companies Act and has not been approved by, and/or filed with, the South African Companies and Intellectual Property Commission or any other regulatory authority in South Africa. The shares are not offered, and the offer shall not be transferred, sold, renounced or delivered, in South Africa or to a person with an address in South Africa, unless one or other of the following exemptions stipulated in section 96 (1) applies:

Section 96 (1)(a) the offer, transfer, sale, renunciation or delivery is to:

- (i) persons whose ordinary business, or part of whose ordinary business, is to deal in securities, as principal or agent;
- (ii) the South African Public Investment Corporation;
- (iii) persons or entities regulated by the Reserve Bank of South Africa;
- (iv) authorized financial service providers under South African law;
- (v) financial institutions recognized as such under South African law;
- (vi) a wholly-owned subsidiary of any person or entity contemplated in (c), (d) or (e), acting as agent in the capacity of an authorized portfolio manager for a pension fund, or as manager for a collective investment scheme (in each case duly registered as such under South African law); or
- (vii) any combination of the person in (i) to (vi); or
- Section 96 (1)(b) the total contemplated acquisition cost of the securities, for any single addressee acting as principal is equal to or greater than ZAR1,000,000 or such higher amount as may be promulgated by notice in the Government Gazette of South Africa pursuant to section 96(2)(a) of the South African Companies Act.

Information made available in this prospectus should not be considered as "advice" as defined in the South African Financial Advisory and Intermediary Services Act, 2002.

LEGAL MATTERS

The validity of the issuance of the shares of common stock offered hereby will be passed upon for Neumora Therapeutics, Inc. by Latham & Watkins LLP, San Francisco, California. Cooley LLP, San Diego, California, is representing the underwriters.

EXPERTS

Ernst & Young LLP, independent registered public accounting firm, has audited our consolidated financial statements as of December 31, 2021 and 2022, and for each of the two years in the period ended December 31, 2022, as set forth in their report. We have included our consolidated financial statements in the prospectus and elsewhere in the registration statement in reliance on Ernst & Young LLP's report, given on their authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form S-1 under the Securities Act with respect to the common stock offered hereby. This prospectus does not contain all of the information set forth in the registration statement and the exhibits and schedules thereto. For further information with respect to the company and our common stock, reference is made to the registration statement and the exhibits and any schedules filed therewith. Statements contained in this prospectus as to the contents of any contract or other document referred to are not necessarily complete and in each instance, if such contract or document is filed as an exhibit, reference is made to the copy of such contract or other document filed as an exhibit to the registration statement, each statement being qualified in all respects by such reference. The SEC maintains a website at www.sec.gov, from which interested persons can electronically access the registration statement, including the exhibits and any schedules thereto.

As a result of the offering, we will be required to file periodic reports and other information with the SEC. We also maintain a website at www.neumoratx.com, at which, following this offering, you may access these materials free of charge as soon as reasonably practicable after they are electronically filed with or furnished to the SEC. Our website and the information contained therein or connected thereto shall not be deemed to be incorporated into this prospectus or the registration statement of which it forms a part. We have included our website address as an inactive textual reference only.

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Report of Independent Registered Public Accounting Firm

To the Stockholders and the Board of Directors of Neumora Therapeutics, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Neumora Therapeutics, Inc. (the Company) as of December 31, 2021 and 2022, the related consolidated statements of operations and comprehensive loss, convertible preferred stock and stockholders' deficit and cash flows for the years then ended, and the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2021, and 2022, and the results of its operations and its cash flows for the years then ended, in conformity with U.S. generally accepted accounting principles.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB and in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ Ernst & Young LLP

We have served as the Company's auditor since 2020.

San Jose, California May 2, 2023

Consolidated Balance Sheets (in thousands, except par values)

	Dec	ember 31, 2021	De	cember 31, 2022
Assets				
Current assets:				
Cash and cash equivalents	\$	409,247	\$	240,943
Short-term marketable securities		—		130,941
Restricted cash		125		50
Prepaid expenses and other current assets		6,231		16,021
Total current assets		415,603		387,955
Long-term marketable securities		—		23,511
Property and equipment, net		2,170		2,411
Operating lease right-of-use assets		1,871		8,231
Restricted cash		—		1,213
Other assets		9,653		2,913
Total assets	\$	429,297	\$	426,234
Liabilities, Convertible Preferred Stock, and Stockholders' Deficit				
Current liabilities:				
Accounts payable	\$	1,639	\$	7,147
Accrued liabilities		19,096		11,536
Early exercise liability, current portion		928		1,644
Operating lease liabilities, current portion		1,056		3,370
Convertible preferred stock warrant liability		559		_
Total current liabilities		23,278		23,697
Operating lease liabilities, net of current portion		996		5,072
Early exercise liability, net of current portion		386		628
Total liabilities		24,660		29,397
Commitments and contingencies (Note 9)				
Convertible preferred stock, \$0.0001 par value; 755,000 and 820,349 shares authorized as of December 31, 2021 and				
December 31, 2022, respectively; 743,126 and 819,291 shares issued and outstanding as of December 31, 2021		700 050		0.40 0.07
and December 31, 2022, respectively; aggregate liquidation preference of \$856,756 as of December 31, 2022		729,858		843,687
Stockholders' deficit:				
Common stock, \$0.0001 par value; 1,125,000 and 1,210,000 shares authorized as of December 31, 2021 and				
December 31, 2022, respectively; 250,962 and 255,883 shares issued and outstanding as of December 31, 2021				
and December 31, 2022, respectively		14		16
Additional paid-in capital		11,370		21,417
Accumulated other comprehensive loss		_		(774)
Accumulated deficit	((336,605)		(467,509)
Total stockholders' deficit	((325,221)		(446,850)
Total liabilities, convertible preferred stock, and stockholders' deficit	\$	429,297	\$	426,234
			_	

The accompanying notes are an integral part of these consolidated financial statements.

Consolidated Statements of Operations and Comprehensive Loss (in thousands, except per share amounts)

	Decem	
	2021	2022
Operating expenses:		
Research and development	\$ 55,776	\$ 91,749
Acquired in-process research and development	157,000	13,000
General and administrative	24,547	31,121
Total operating expenses	237,323	135,870
Loss from operations	(237,323)	(135,870)
Other income (expense):		
Interest income	—	4,561
Other income (expense), net	11	405
Total other income	11	4,966
Net loss	(237,312)	(130,904)
Other comprehensive loss:		
Unrealized loss on marketable securities	—	(774)
Comprehensive loss	\$ (237,312)	\$ (131,678)
Net loss per share, basic and diluted	\$ (1.38)	\$ (0.61)
Weighted-average shares outstanding, basic and diluted	171,815	213,477

The accompanying notes are an integral part of these consolidated financial statements.

Consolidated Statements of Convertible Preferred Stock and Stockholders' Deficit (in thousands)

		ertible ed Stock	Commo	n Stock	Additional Paid-In	Accumulated Other Comprehensive	Accumulated	Total Stockholders'
		Amount	Shares	Amount	Capital	Loss	Deficit	Deficit
Balance as of December 31, 2020	294,876	\$281,679	240,152	\$ 13	\$ 4,896	\$ —	\$ (99,293)	\$ (94,384)
Issuance of Series A-2 convertible preferred stock, net of issuance costs of \$71	291,250	291,179	_	_	_	_	_	_
Issuance of Series A-2 convertible preferred stock for an acquisition of assets	157,000	157,000						
Issuance of common stock	157,000	157,000	3,000		 960			960
	_	_	3,000	_	960	_	_	960
Issuance of common stock upon early exercise of stock options	_	_	4,415	_	_	_	_	_
Issuance of common stock upon exercise of			2.105	1	1 000			1 000
stock options	_	_	3,195	1	1,098	_	_	1,099
Issuance of common stock as noncash consideration for an acquisition of assets	_	_	200	_	43	_	_	43
Vesting of restricted common stock	_	_		_	99		_	99
Stock-based compensation		_			4,274		_	4,274
Net loss and comprehensive loss		_				_	(237,312)	(237,312)
Balance as of December 31, 2021	743 126	\$729,858	250,962	\$ 14	\$ 11,370	\$ _	\$ (336,605)	\$ (325,221)
Issuance of Series A-1 convertible preferred	/ 10,120	¢, <u>1</u> 0,000	200,002	Ψ 1.	\$ 11,070	Ψ	\$ (886,668)	¢ (010,111)
stock upon exercise of warrants	1,235	1,613		_			_	
Issuance of Series B convertible preferred	1,200	1,010						
stock, net of issuance costs of \$179	74,930	112,216		_	_	_	_	_
Issuance of common stock upon early exercise	,	,						
of stock options		_	3,468		_		_	_
Issuance of common stock upon exercise of			-,					
stock options	—	—	1,788	2	610	—	_	612
Issuance of common stock as noncash consideration related to an acquisition of								
assets	-	_	40	-	24	_	_	24
Forfeiture of restricted stock subject to								
repurchase	—	—	(375)	—	—		—	
Vesting of restricted common stock	—	_	—		1,115		—	1,115
Unrealized loss on marketable debt securities	—	—		—	—	(774)	—	(774)
Stock-based compensation	—	—		—	8,298		_	8,298
Net loss							(130,904)	(130,904)
Balance as of December 31, 2022	819,291	\$843,687	255,883	\$ 16	\$ 21,417	\$ (774)	\$ (467,509)	\$ (446,850)

The accompanying notes are an integral part of these consolidated financial statements.

Consolidated Statements of Cash Flows (in thousands)

	Year J Decem	ber 31,	
Operating activities:	2021	2022	
Net loss	\$(237,312)	\$(130,904)	
Adjustments to reconcile net loss to net cash used in operating activities:	\$(237,312)	\$(150,504)	
Acquired in-process research and development	157,000	13,000	
Stock-based compensation	4,274	8,298	
Noncash operating lease expense	1,013	2,103	
Depreciation and amortization	538	594	
Net (accretion) and amortization of investments in marketable securities		(708)	
Realized loss on investments	—	(18)	
Change in fair value of convertible preferred stock warrants	(53)	(559)	
Other	81	246	
Changes in operating assets and liabilities:			
Prepaid expenses and other current assets	(2,260)	(3,628)	
Other assets	(3,663)	1,373	
Accounts payable	(759)	(1,246)	
Accrued liabilities	6,562	(1,621)	
Operating lease liabilities	(841)	(1,826)	
Net cash used in operating activities	(75,420)	(114,896)	
Investing activities:		(,,	
Purchases of marketable securities		(226,369)	
Cash paid for an acquisition of assets	_	(13,000)	
Proceeds from maturities of marketable securities	_	71,867	
Purchases of property and equipment	(817)	(511)	
Net cash used in investing activities	(817)	(168,013)	
Financing activities:		()	
Proceeds from issuance of convertible preferred stock, net of issuance costs	291,179	112,216	
Proceeds from issuance of common stock	960		
Proceeds from exercise of stock options	2,509	2,658	
Proceeds from exercise of warrants		1,613	
Payments for deferred offering costs	(1,141)	(744)	
Net cash provided by financing activities	293,507	115,743	
Net change in cash and cash equivalents and restricted cash	217,270	(167,166)	
Cash and cash equivalents and restricted cash at beginning of year	192,102	409,372	
Cash and cash equivalents and restricted cash at end of year	\$ 409,372	\$ 242,206	
	\$ 405,372	\$ 242,200	
Components of cash and restricted cash:			
Cash and cash equivalents	\$ 409,247	\$ 240,943	
Restricted cash	125	1,263	
Total cash and cash equivalents and restricted cash	\$ 409,372	\$ 242,206	
Supplemental disclosure of noncash activities:			
Operating lease liabilities arising from obtaining right-of-use assets	\$ 1,039	\$ 8,865	
Supplemental disclosure of noncash investing and financing activities:			
Issuance of convertible preferred stock as noncash consideration for acquisition of assets	\$ 157,000	\$ —	
Purchases of property and equipment included in accounts payable	\$	\$ 505	
Deferred offering costs related to initial public offering included in accrued liabilities	\$ 688	\$ 340	

The accompanying notes are an integral part of these consolidated financial statements.

Notes to Consolidated Financial Statements

1. Organization and Liquidity

Description of Business

Neumora Therapeutics, Inc. (the Company), formerly known as RBNC Therapeutics, Inc., was originally incorporated in the State of Delaware in November 2019, and is headquartered in Watertown, Massachusetts and also has operations in South San Francisco, California.

The Company is a clinical-stage biopharmaceutical company founded to confront the global brain disease crisis by taking a different approach to the way treatments for brain diseases are developed. The Company's therapeutic pipeline currently consists of clinical and preclinical neuroscience programs that target novel mechanisms of action for a broad range of underserved neuropsychiatric disorders and neurodegenerative diseases.

As of December 31, 2022, the Company has devoted a significant portion of its financial resources and efforts to building its organization, acquiring technologies and companies, executing clinical and preclinical studies, conducting research and development, identifying and developing potential product candidates, building its precision neuroscience tools, organizing and staffing the Company, business planning, establishing, maintaining and protecting its intellectual property portfolio, raising capital and providing general and administrative support for these operations. The Company has not generated revenue from the sale of products.

Liquidity

The Company has incurred net losses and negative cash flows from operations since inception and as of December 31, 2022, had an accumulated deficit of \$467.5 million. The Company incurred a net loss of \$237.3 million and \$130.9 million during the year ended December 31, 2021 and 2022, respectively. As of December 31, 2022, the Company had cash, cash equivalents and marketable securities of \$395.4 million, which are available to fund future operations.

The Company expects to incur additional losses in the future as it continues its research and development efforts, advances its product candidates through clinical and preclinical development, enhances its precision neuroscience approach and programs, expands its product pipeline, seeks regulatory approval, prepares for commercialization, as well as hires additional personnel, protects its intellectual property and grows its business. The Company will need to raise additional capital to support its continuing operations and pursue its long-term business plan, including to complete the development and commercialization of its product candidates, if approved. Such activities are subject to significant risks and uncertainties, including clinical failure which can impact the Company's ability to secure additional funding. The Company has historically financed its operations primarily with the proceeds from the issuance of its convertible preferred stock, borrowings pursuant to convertible promissory notes and cash acquired in its acquisitions of assets. The Company may raise additional capital through public or private equity offerings or debt financings or other capital sources, which may include strategic collaborations or other arrangements with third parties, or other sources of financing. However, there is no guarantee that any of these financing or opportunities will be executed or realized on favorable terms, if at all, and some could be dilutive to existing stockholders. The Company's ability to raise additional capital through either the issuance of equity or debt is dependent on a number of factors including, but not limited to, Company prospects, which itself is subject to a number of development and business risks and uncertainties, as well as uncertainty about whether the Company would be able to raise such additional capital at a price or on terms that are favorable.

Notes to Consolidated Financial Statements

The Company believes that its existing cash, cash equivalents and marketable securities as of December 31, 2022 will be sufficient to support operations for at least the next 12 months from the date these consolidated financial statements were available to be issued.

2. Summary of Significant Accounting Policies and Basis of Presentation

Basis of Presentation and Consolidation

The accompanying consolidated financial statements have been prepared in accordance with U.S. generally accepted accounting principles (U.S. GAAP) and applicable rules and regulations of the Securities and Exchange Commission (SEC) regarding annual financial reporting. The consolidated financial statements include all accounts of the Company and its wholly-owned subsidiaries. All intercompany transactions and balances have been eliminated in consolidation.

Use of Estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts in the consolidated financial statements and accompanying notes. These estimates form the basis for judgments the Company makes about the carrying values of assets and liabilities that are not readily apparent from other sources. The Company bases its estimates and judgments on historical experience and on various other assumptions that the Company believes are reasonable under the circumstances. These estimates are based on management's knowledge about current events and expectations about actions the Company may undertake in the future. These judgments, estimates and assumptions are used for, but not limited to, accrued research and development expenses, accounting for acquisitions of assets, fair value of certain assets and liabilities, the fair value of the Company's convertible preferred stock, the fair value of the Company's convertible preferred stock, the fair value of the Company's convertible preferred stock, the fair value of right-of-use assets and lease liabilities and related incremental borrowing rate, and uncertain tax positions and the valuation allowance for net deferred tax assets. Actual results may differ from the Company's estimates.

Segment Reporting

Operating segments are identified as components of an enterprise about which separate discrete financial information is available for evaluation by the chief operating decision maker (CODM), or decision-making group, in making decisions on how to allocate resources and assess performance. The Company's Chief Executive Officer serves as the CODM. The Company views its operations and manages its business in one operating segment.

Risks and Uncertainties

The Company is subject to certain risks and uncertainties, including, but not limited to, changes in any of the following areas that the Company believes could have a material adverse effect on future financial position or results of operations: successfully develop, manufacture, and market any approved products; obtain regulatory approval from the U.S. Food and Drug Administration or foreign regulatory agencies prior to commercial sales; new technological innovations; dependence on key personnel, protection of intellectual property; compliance with governmental regulations; uncertainty of market acceptance of any approved products; product liability; and the need to obtain additional financing.

While the Company continues to monitor the impact of the ongoing COVID-19 pandemic on its business, the extent of the impact of the pandemic on the Company's business, operations, and clinical development timelines

Notes to Consolidated Financial Statements

and plans remains uncertain. The COVID-19 pandemic delayed patient enrollment in the Company's Phase 2 clinical trial of NMRA-140 and may further delay the Company's initiation of preclinical studies and clinical trials, interrupt its supply chain, disrupt regulatory activities, or have other adverse effects on its business and operations. Given the uncertainty regarding variants, the extent of the impact of the COVID-19 pandemic on the Company's preclinical studies or clinical trials will depend on future developments, which are uncertain. In response to the COVID-19 pandemic, the Company has implemented measures intended to help minimize its risk of exposure to the virus for its employees, including policies that allow its employees to work remotely. Certain third-party service providers have also experienced and may continue to experience shutdowns or other business disruptions. The Company cannot predict the specific extent, duration, or full impact that the COVID-19 pandemic will have on its consolidated financial condition and results of operations.

Cash and Cash Equivalents

All highly liquid investments, including money market funds, with original maturities of three months or less at the time of purchase are considered to be cash equivalents. All of the Company's cash equivalents have liquid markets and high credit ratings. The Company maintains its cash in bank deposits and other accounts.

Restricted Cash

Restricted cash primarily consists of credit card accounts and facility lease agreements collateralized by money market accounts or a letter of credit pursuant to certain banking and lease agreements. Restricted cash, which is unavailable for a period longer than one year from the consolidated balance sheet date, is classified as a noncurrent asset. Otherwise, restricted cash is included in other current assets in the consolidated balance sheets.

Concentrations of Credit Risk

Financial instruments that potentially subject the Company to significant concentrations of credit risk consist primarily of cash and cash equivalents deposited in accounts at several financial institutions that may exceed the Federal Deposit Insurance Corporation's insurance limit. The Company is exposed to credit risk in the event of a default by the financial institutions holding its cash and cash equivalents to the extent recorded in the consolidated balance sheets. The Company believes it is not exposed to significant credit risk due to the financial position of the financial institutions in which those deposits are held.

Marketable Securities

The Company invests its excess cash in marketable debt securities with high credit ratings including but not limited to money market funds, securities issued by the U.S. government and its agencies and commercial paper that are accounted for as available-for-sale and carried at fair value. Marketable securities are classified as short-term or long-term based on the maturity date and their availability to meet current operating requirements. The amortized cost of debt securities is adjusted for amortization of premiums and accretion of discounts to maturity, which is included in interest income in the consolidated statements of operations and comprehensive loss. Realized gains and losses on marketable securities, if any, are included in other income (expense), net. The cost of securities sold is determined based on the trade date using the specific identification method.

The Company periodically assesses its available-for-sale debt securities for impairment. For debt securities in an unrealized loss position, this assessment first considers the Company's intent to sell, or whether it is more likely than not that it will be required to sell the security before recovery of its amortized cost basis. If either of these criteria are met, the debt security's amortized cost basis is written down to fair value within other income

Notes to Consolidated Financial Statements

(expense), net. For debt securities in an unrealized loss position that do not meet the aforementioned criteria, the Company assesses whether the decline in fair value has resulted from credit losses or other factors. In making this assessment, the extent to which fair value is less than amortized cost, any changes to the rating of the security by a rating agency, and any adverse conditions specifically related to the security is considered, among other factors. If this assessment indicates that a credit loss may exist, the present value of cash flows expected to be collected from the security are compared to the amortized cost basis of the security. If the present value of cash flows expected to be collected is less than the amortized cost basis, a credit loss exists and an allowance for credit losses will be recorded in other income (expense), net, limited by the amount that the fair value is less than the amortized cost basis. Any additional impairment not recorded through an allowance for credit losses is recognized in other comprehensive loss. Changes in the allowance for credit losses are recorded as provision for (or reversal of) credit loss expense. Losses are charged against the allowance when management believes the un-collectability of an available-for-sale security is confirmed or when either of the criteria regarding intent or requirement to sell is met. These changes are recorded in other income (expense), net.

Fair Value of Financial Instruments

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants at the measurement date. The Company measures fair value by maximizing the use of observable inputs, where available, and minimizing the use of unobservable inputs when measuring fair value. Financial assets and liabilities recorded at fair value in the consolidated balance sheets are categorized in the fair value hierarchy based upon the lowest level of input that is significant to the fair value as follows:

Level 1—Observable inputs such as unadjusted, quoted prices in active markets for identical assets or liabilities at the measurement date.

Level 2—Inputs (other than quoted prices included in Level 1) are either directly or indirectly observable inputs for similar assets or liabilities. These include quoted prices for identical or similar assets or liabilities in active markets and quoted prices for identical or similar assets of liabilities in markets that are not active.

Level 3—Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

To the extent that the valuation is based on models or inputs that are less observable or unobservable in the market, the determination of fair value requires more judgment. Accordingly, the degree of judgment exercised by the Company in determining fair value is greatest for instruments categorized in Level 3 (see Note 4). A financial instrument's level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value of the instrument.

Property and Equipment, Net

Property and equipment, net is stated at cost less accumulated depreciation. Depreciation of property and equipment is computed using the straight-line method over the estimated useful lives of the assets, which is three to seven years. Leasehold improvements are amortized using the straight-line method over the lesser of the estimated useful lives of the assets or the remaining term of the lease. Construction in progress is stated at cost and not depreciated until the asset is placed into service. Upon sale or retirement of the assets, the cost and related accumulated depreciation are removed from the consolidated balance sheets and the resulting gain or loss is recognized in the consolidated statements of operations and comprehensive loss. Expenditures for maintenance and repairs are expensed as incurred.

Notes to Consolidated Financial Statements

Impairment of Long-Lived Assets

The Company reviews the carrying amount of its long-lived assets, including property and equipment and right-of-use assets, for impairment whenever events or changes in business circumstances indicate that the carrying amount of the assets may not be fully recoverable. If indicators of impairment exist, an impairment loss is recognized when the estimated undiscounted future cash flows expected to result from the use of the asset and its eventual disposition are less than its carrying amount. The impairment charge is determined based upon the excess of the carrying value of the asset over its estimated fair value, with estimated fair value determined based upon an estimate of discounted future cash flows or other appropriate measures of estimated fair value. Estimating discounted cash flows requires the Company to make significant judgements and assumptions. Actual results may vary from the Company's estimates as of the date of impairment testing and adjustments may occur in future periods. The Company believes that no impairment of long-lived assets is required as of and for the year ended December 31, 2021, and 2022.

Leases

The Company determines if an arrangement is or contains a lease at inception by assessing whether it conveys the right to control the use of an identified asset in exchange for consideration. If a lease is identified, classification is determined at lease commencement. To date, all of the Company's leases have been determined to be operating leases. Operating lease liabilities are recognized at the present value of the future lease payments at the lease commencement date. The Company's leases do not provide an implicit interest rate and therefore the Company estimates its incremental borrowing rate to discount lease payments. The incremental borrowing rate reflects the estimated interest rate that the Company would have to pay to borrow on a collateralized basis, an amount equal to the lease payments in a similar economic environment over a similar term. Operating lease right-of-use (ROU) assets are determined based on the corresponding lease liability adjusted for any lease payments made at or before commencement, initial direct costs, and lease incentives. The operating lease ROU asset also includes impairment charges if the Company determines the ROU asset is impaired. The Company considers a lease term to be the noncancelable period that it has the right to use the underlying asset, including any periods where it is reasonably assured the Company will exercise the option to extend the contract. Periods covered by an option to extend are included in the lease term if the lessor controls the exercise of that option. Operating lease expenses are recognized, and the ROU assets are amortized on a straight-line basis over the lease term. The Company has elected to not separate lease and non-lease components for its leased assets and accounts for all lease and non-lease components of its agreements as a single lease component. The Company has elected not to recognize on the consolidated balance sheets leases with terms of one year or less.

Acquisitions

The Company evaluates mergers, acquisitions, and other similar transactions to assess whether or not the transaction should be accounted for as a business combination or an acquisition of assets. The Company first identifies who is the acquiring entity by determining if the target is a legal entity or a group of assets or liabilities. If control over a legal entity is being evaluated, the Company also evaluates if the target is a variable interest or voting interest entity. For acquisitions of voting interest entities, the Company applies a screen test to determine if substantially all of the fair value of the gross assets acquired is concentrated in a single identifiable asset or group of similar identifiable assets. If the screen test is met, the transaction is accounted for as an acquisition of assets. If the screen is not met, further determination is required as to whether or not the Company has acquired inputs and processes that have the ability to create outputs which would meet the definition of a business. Significant judgment is required in the application of the screen test to determine whether an acquisition is a business combination or an acquisition of assets.

Notes to Consolidated Financial Statements

For an acquisition of assets, a cost accumulation model is used to determine the cost of the acquisition. Common stock and convertible preferred stock issued as consideration in an acquisition of assets are generally measured based on the acquisition date fair value of the equity interests issued. Direct transaction costs are recognized as part of the cost of an acquisition of assets. The Company also evaluates which elements of a transaction should be accounted for as a part of an acquisition of assets and which should be accounted for separately.

The cost of an acquisition of assets, including transaction costs, are allocated to identifiable assets acquired and liabilities assumed based on a relative fair value basis. Goodwill is not recognized in an acquisition of assets. Any difference between the cost of an acquisition of assets and the fair value of the net assets acquired is allocated to the non-monetary identifiable assets based on their relative fair values. Assets acquired as part of an acquisition of assets that are considered to be in-process research and development intangible assets (IPR&D) are immediately expensed and recorded as a component of acquired in-process research and development expense in the consolidated statements of operations and comprehensive loss unless there is an alternative future use in other research and development projects.

In addition to upfront consideration, the Company's acquisitions of assets may also include contingent consideration payments to be made for future milestone events or royalties on net sales of future products. The Company assesses whether such contingent consideration is subject to liability classification and fair value measurement or meets the definition of a derivative. Contingent consideration payments in an acquisition of assets not required to be classified as a liability at fair value, or are accounted for as derivatives that qualify for a scope exception from derivative accounting, are recognized when the contingency is resolved, and the consideration is paid or becomes payable Contingent consideration payments required to be classified as a liability, or are accounted for as derivatives and do not qualify for a scope exception from derivative accounting, are recorded at fair value on the date of the acquisition and are subsequently remeasured to fair value at each reporting date. Contingent consideration payments made prior to regulatory approval are expensed as incurred. Any future payments that are contingent upon continued services to the Company are treated as compensation and recognized when it is probable such amounts will become payable.

If the target legal entity is determined to be a variable interest entity (VIE) and not a business, all tangible and intangible assets acquired, including any IPR&D assets but excluding goodwill, and liabilities assumed, including contingent consideration, are recorded at their fair values. If the acquisition is determined to be a business combination, all tangible and intangible assets acquired, including any IPR&D assets, and liabilities assumed, including contingent consideration, are recorded at their fair values. Goodwill is recognized for any difference between the consideration transferred and fair value determination. In addition, direct transaction costs in connection with business combinations are expensed as incurred, rather than capitalized.

The tax basis of assets acquired in either a business combination or acquisition of assets are compared to the book basis of such assets resulting in the recognition of deferred tax assets and liabilities.

Deferred Offering Costs

Deferred offering costs, which consist of direct incremental legal, consulting, banking, and accounting fees primarily relating to the Company's contemplated initial public offering (IPO) are capitalized and will be offset against proceeds upon the consummation of the offering within stockholders' deficit. In the event an anticipated offering is terminated, deferred IPO offering costs will be expensed. As of December 31, 2021 and 2022, deferred offering costs included in other assets in the consolidated balance sheets were \$1.8 million and \$2.9 million, respectively.

Notes to Consolidated Financial Statements

Convertible Preferred Stock Warrant Liability

Warrants to purchase shares of the Company's convertible preferred stock, or the preferred stock warrants, are freestanding financial instruments classified as a liability in the Company's consolidated balance sheets as the underlying securities are contingently redeemable upon the occurrence of events that are outside of the control of the Company, which precludes equity classification. The preferred stock warrants are recorded at their estimated fair value upon issuance and are subject to remeasurement at the end of each reporting period, with changes in estimated fair value recognized as a component of other income (expense) in the consolidated statements of operations and comprehensive loss, until the exercise or expiration of such warrants. The Company estimates the fair value of preferred stock warrants at each reporting period using the Black-Scholes option pricing model, which requires inputs based on certain subjective assumptions, including the expected stock price, volatility, the expected term of the option, the risk-free interest rate for a period that approximates the expected term of the option, and the expected dividend yield. Actual results may differ from the Company's estimates. As of December 31, 2022, the Company's preferred stock warrants had either been exercised or had expired.

Convertible Preferred Stock

The Company has classified convertible preferred stock, which is contingently redeemable, as temporary equity in the consolidated balance sheets due to terms that allow for the effective redemption of such shares in cash at the option of the holders upon certain liquidation events that are not solely within the Company's control.

The carrying values of the convertible preferred stock are adjusted to their liquidation preferences if and when it becomes probable that such a liquidation event will occur. The Company did not accrete the value of the convertible preferred stock to its redemption value since a liquidation event was not considered probable as of December 31, 2021 and 2022. Subsequent adjustments to the carrying values of the convertible preferred stock will be made only when it becomes probable that such liquidation events will occur, causing the shares to become redeemable.

The Company also evaluates the features of its convertible preferred stock to determine if the features require bifurcation from the underlying shares by evaluating whether they are clearly and closely related to the underlying shares and whether they meet the definition of a derivative.

In determining if an extinguishment or modification of changes to mezzanine equity-classified preferred stock has occurred, the Company has elected a policy to evaluate if changes add, delete, or significantly change a substantive contractual term (e.g., one that is at least reasonably possible of being exercised), or fundamentally change the nature of the convertible preferred stock. This evaluation includes the consideration of both the expected economics as well as the business purpose for the amendment.

Research and Development Expenses and Related Prepaid Assets and Accrued Liabilities

Research and development costs are expensed as incurred. Research and development expenses primarily consist of internal research and development expense, including personnel-related expenses (such as salaries, benefits and noncash stock-based compensation) and other expenses, including laboratory supplies and other non-capital equipment utilized for in-house research, research and consulting expenses, software development costs, license fees and allocated expenses, including facilities costs and depreciation and amortization; external research and development expenses incurred under arrangements with vendors conducting research and development services on its behalf, such as contract research organizations (CROs), preclinical testing organizations and contract manufacturing organizations (CMOs). Costs to develop the Company's platform information technologies are

Notes to Consolidated Financial Statements

recorded as research and development expense unless the criteria to be capitalized as internal-use software costs is met. Payments made prior to the receipt of goods or services to be used in research and development are capitalized, evaluated for current or long-term classification, and included in prepaid expenses and other current assets or other assets in the consolidated balance sheets based on when the goods are received or the services are expected to be received or consumed, and recognized in research and development expenses when they are realized.

The Company is required to estimate expenses resulting from its obligations under contracts with vendors, service providers and clinical site agreements in connection with conducting clinical trials. The financial terms of these contracts are subject to negotiations which vary from contract to contract and may result in cash flows that do not match the periods over which materials or services are provided. The Company estimates and records accrued expenses for the related research and development activities based on the level of services performed but not yet invoiced pursuant to agreements established with its service providers, according to the progress of preclinical studies, clinical trials or related activities, and discussions with applicable personnel and service providers as to the progress or state of consummation of goods and services.

During the course of a clinical trial, the rate of expense recognition is adjusted if actual results differ from the Company's estimates. The Company estimates accrued expenses as of each balance sheet date in its consolidated financial statements based on the facts and circumstances known at that time. The clinical trial accrual is dependent in part upon the timely and accurate reporting of CROs, CMOs and other third-party vendors. Although the Company does not expect its estimates to be materially different from amounts actually incurred, its estimate may vary from the actual results. To date, the Company has not experienced material differences between its accrued expenses and actual expenses.

Stock-Based Compensation

The Company maintains equity incentive plans (the Plans) as a long-term incentive for employees, directors, and non-employee service providers. The Company accounts for all stock-based awards based on their fair value on the date of the grant. For stock-based awards with service only vesting conditions, the Company recognizes expense on a straight-line basis over the requisite service period, which is generally the vesting period of the respective award. For awards with performance vesting conditions, the Company evaluates the probability of achieving the performance vesting condition at each reporting date. The Company begins to recognize expense for awards with performance- based vesting conditions using an accelerated attribution method when it is deemed probable that the performance condition will be met. For awards with both market and service vesting conditions, the Company recognizes expense using the accelerated attribution method over the derived requisite service period. Stock-based compensation is classified in the consolidated statements of operations and comprehensive loss based on the function to which the related services are provided. Forfeitures are accounted for as they occur.

The fair value of stock option awards with only service conditions and/or performance-based vesting conditions are estimated on the date of grant using the Black-Scholes option pricing model, which requires inputs based on certain subjective assumptions, including the expected stock price volatility, the expected term of the option, the risk-free interest rate for a period that approximates the expected term of the option, and the expected dividend yield. The fair value of stock options awards with market-based vesting conditions is estimated on the grant date using the Monte Carlo simulation model, which utilizes subjective assumptions, including volatility and the derived service periods, that determine the probability of satisfying the market condition stipulated in the award to estimate the fair value of the award. The fair value of restricted stock awards is based on the estimated fair value of the Company's common stock on the date of grant.

Notes to Consolidated Financial Statements

The fair value of the Company's common stock is determined by the Company's board of directors with the assistance of management. The fair value of common stock is determined using valuation methodologies which utilize certain assumptions. including probability weighting of events, volatility, time to an exit event, a risk-free interest rate and an assumption for a discount for lack of marketability. In determining the fair value of common stock, the methodologies used to estimate the enterprise value of the Company were performed using methodologies, approaches, and assumptions consistent with the American Institute of Certified Public Accountants' Accounting and Valuation Guide, *Valuation of Privately-Held-Company Equity Securities Issued as Compensation*.

Income Taxes

The Company accounts for income taxes under the asset and liability method. Under this method, deferred tax assets and liabilities are recognized for the expected future tax consequences of events that have been included in the Company's consolidated financial statements and tax returns. Deferred tax assets and liabilities are determined based upon the differences between the financial statement carrying amounts and the tax bases of existing assets and liabilities and for loss and credit carryforwards, using enacted tax rates expected to be in effect in the year in which the differences are expected to reverse. Deferred tax assets are reduced by a valuation allowance if it is more likely-than-not that these assets may not be realized. The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income during the periods in which the temporary differences representing net future deductible amounts become deductible.

The Company recognizes and measures uncertain tax positions using a two-step approach. The Company determines whether it is more likely than not that a tax position will be sustained upon examination. If it is not more likely-than-not that a position will be sustained, none of the benefit attributable to the position is recognized. The tax benefit to be recognized for any tax position that meets the more-likely-than-not recognition threshold is calculated as the largest amount that is more than 50% likely of being realized upon resolution of the contingency. Judgment is required to evaluate uncertain tax positions. The Company evaluates uncertain tax positions on a regular basis. The evaluations are based on a number of factors, including changes in facts and circumstances, changes in tax law, correspondence with tax authorities during the course of the audit, and effective settlement of audit issues.

The Company's policy is to include penalties and interest expense related to income taxes as a component of its provision for income taxes. The Company has not reported any interest or penalties associated with income tax for any period presented.

Net Loss Per Share

Basic net loss per share is calculated by dividing net loss by the weighted-average number of shares of common stock outstanding during the period, without consideration for common stock equivalents. Diluted net loss per share is the same as basic net loss per share, since the effects of potentially dilutive securities are antidilutive given the net loss for each period presented.

Comprehensive Loss

Comprehensive loss includes net loss and certain changes in stockholders' deficit that are excluded from net loss, such as unrealized losses on the Company's available-for-sale marketable securities.

Notes to Consolidated Financial Statements

Emerging Growth Company Status

The Company is an emerging growth company, as defined in the Jumpstart Our Business Startups Act of 2012 (the JOBS Act). Under the JOBS Act, emerging growth companies can delay adopting new or revised accounting standards issued subsequent to the enactment of the JOBS Act, until such time as those standards apply to private companies. The Company has elected to use this extended transition period for complying with new or revised accounting standards that have different effective dates for public and private companies until the earlier of the date that it (i) is no longer an emerging growth company or (ii) affirmatively and irrevocably opts out of the extended transition period provided in the JOBS Act. As a result, these consolidated financial statements may not be comparable to companies that comply with the new or revised accounting pronouncements as of public company effective dates.

Recently Adopted Accounting Pronouncements

In May 2021, the FASB issued ASU 2021-04, *Issuer's Accounting for Certain Modifications or Exchanges of Freestanding Equity-Classified Written Call Options* (ASU 2021-04), which requires issuers to account for a modification or exchange of freestanding equity-classified written call options that remain equity classified after the modification or exchange based on the economic substance of the modification or exchange. The Company adopted ASU 2021-04 as of January 1, 2022. The adoption did not have a material impact on its consolidated financial statements and related disclosures.

Recent Accounting Pronouncements Not Yet Adopted

The Company continues to monitor new accounting pronouncements issued by the FASB and does not believe any accounting pronouncements issued through the date of this report will have a material impact on the Company's consolidated financial statements.

Notes to Consolidated Financial Statements

3. Cash Equivalents and Marketable Securities

The following table summarizes the amortized cost and fair value of the Company's cash equivalents and marketable securities by major investment category:

		December	r 31, 2021	
	Amortized Cost	Gross Unrealized Gain (in they	Gross Unrealized Loss	Estimated Fair Value
Cash equivalents:		(in thou	isanus)	
Money market funds	\$330,216	\$ —	\$ —	\$330,216
Total cash equivalents	\$330,216	\$	\$	\$330,216
		December	31, 2022	
	Amortized Cost	Gross Unrealized Gain	Gross Unrealized Loss	Estimated Fair Value
Cash equivalents:		(in thou	isands)	
Money market funds	\$183,353	\$ —	s —	\$183,353
Total cash equivalents	\$183,353	<u>\$</u>	<u>-</u>	\$183,353
Marketable securities:	φ100,000	<u>Ф</u>	¥	<i>\</i>
U.S. government and agency debt securities	\$ 57,534	\$ —	\$ (272)	\$ 57,262
Corporate debt securities	42,267	1	(266)	42,002
•	,		()	
Commercial paper	55,425	—	(237)	55,188
Total marketable securities	<u>55,425</u> \$155,226	<u> </u>	(237) \$ (775)	\$154,452
		<u>-</u> <u>\$ 1</u> \$ 1		

The following table summarizes the Company's marketable securities by contractual maturity (in thousands):

	December 31, 2022
Within one year	\$130,941
After one year through two years	23,511
Total marketable securities	\$ 154,452

As of December 31, 2022, the Company has not realized any material gains or losses on its marketable securities, including any impairment charges on its securities related to expected credit losses. As of December 31, 2022, the aggregate difference between the amortized cost and fair value of each security in an unrealized loss position was de minimis. Since any provision for expected credit losses for a security held is limited to the amount the fair value is less than its amortized cost, no allowance for expected credit loss was deemed necessary at December 31, 2022. See Note 4 for further information regarding the fair value of the Company's financial instruments.

Notes to Consolidated Financial Statements

4. Fair Value Measurements

The carrying amounts of the Company's financial instruments, including prepaid expenses and other current assets, accounts payable, accrued liabilities and the current portion of operating lease liabilities approximate fair value due to the short-term nature of those instruments.

The following tables summarize the Company's assets and liabilities measured at fair value on a recurring basis by level within the valuation hierarchy:

	Level 1	December 31, 2021 1 Level 2 Level 3 To			Total
	Level 1		housands		10(d)
Assets:					
Cash equivalents:					
Money market funds	\$ 330,216	\$ —	\$	—	\$330,216
Total assets measured at fair value	\$ 330,216	\$ —	\$		\$330,216
Liabilities:					
Convertible preferred stock warrant liability	\$ —	\$ —	\$	559	\$ 559
Total liabilities measured at fair value	\$ —	\$ —	\$	559	\$ 559
			ber 31, 20		
	Level 1	Level 2	I	Level 3	Total
Assets:	Level 1	Level 2		Level 3	Total
Assets: Cash equivalents:	Level 1	Level 2	I	Level 3	Total
	Level 1 \$ 183,353	Level 2	I	Level 3	<u>Total</u> \$ 183,353
Cash equivalents:		Level 2 (in th	<u>I</u> ousands	Level 3	
Cash equivalents: Money market funds		Level 2 (in th	<u>I</u> ousands	Level 3	
Cash equivalents: Money market funds Marketable securities:	\$ 183,353	<u>Level 2</u> (in th \$ —	<u>I</u> ousands	Level 3	\$ 183,353
Cash equivalents: Money market funds Marketable securities: U.S. government and agency debt securities	\$ 183,353	<u>Level 2</u> (in th \$ — 12,485	<u>I</u> uousands	Level 3	\$ 183,353 57,262

Money market funds are highly liquid and actively traded marketable securities that generally transact at a stable \$1.00 net asset value representing its estimated fair value. The Company estimates the fair value of its commercial paper, corporate debt securities and U.S. government and agency debt securities by taking into consideration valuations obtained from third-party pricing services. The pricing services utilize industry standard valuation models, including both income and market-based approaches, for which all significant inputs are observable, either directly or indirectly, to estimate fair value. These inputs include reported trades of and broker/dealer quotes on the same or similar securities, issuer credit spreads, benchmark securities, prepayment/default projections based on historical data, and other observable inputs.

Convertible Preferred Stock Warrant Liability

In September 2020, the Company issued convertible preferred stock warrants to purchase shares of its Series A-1 convertible preferred stock, which did not meet the criteria for equity classification. The estimated fair value of

Notes to Consolidated Financial Statements

the convertible preferred stock warrant liability, prior to exercise or expiration as of December 31, 2022, was determined based on significant inputs not observable in the market, which represents a Level 3 measurement within the fair value hierarchy.

The following table summarizes the significant unobservable inputs used in the fair value measurement of the convertible preferred stock warrant liability during the year ended December 31, 2021, and 2022:

Ye	ar Ended December 31, 2021	
Valuation Technique	Unobservable Input	Input Range
Black-Scholes Option	Fair value of Series A-1 convertible	\$0.81 - \$0.83
Pricing Model	preferred stock (per share)	
C	Expected volatility	112.8% - 123.4%
	Expected term (years)	0.3 - 1.0
	Expected dividend yield	0.0% - 0.0%
Ye	ar Ended December 31, 2022	
Valuation Technique	Unobservable Input	Input Range
Black-Scholes Option	Fair value of Series A-1 convertible	\$0.83 - \$1.13
Pricing Model	preferred stock (per share)	
-	Expected volatility	104.8% -112.8%
	Expected term (years)	0.0 - 0.8
	Expected dividend yield	0.0% - 0.0%
	Valuation Technique Black-Scholes Option Pricing Model Yes Valuation Technique Black-Scholes Option	Black-Scholes Option Fair value of Series A-1 convertible Pricing Model preferred stock (per share) Expected volatility Expected volatility Expected term (years) Expected dividend yield Year Ended December 31, 2022 Valuation Technique Unobservable Input Black-Scholes Option Fair value of Series A-1 convertible Pricing Model preferred stock (per share) Expected volatility Expected volatility Expected stock (per share) Expected volatility Expected term (years) Expected volatility

The following table provides a summary of the changes in the fair value of the Company's liabilities measured using Level 3 inputs:

		Year Ended December 31,		
	2	2021	2	022
		(in the	ousands)	
Balance at beginning of period	\$	612	\$	559
Remeasurement in fair value of convertible preferred stock warrant				
liability prior to settlement		(53)		(403)
Remeasurement in fair value of preferred stock warrant liability				
prior to expiration		—		(156)
Balance at end of period	\$	559	\$	_

Notes to Consolidated Financial Statements

5. Property and Equipment, Net

Property and equipment, net, consisted of the following:

	Decer	nber 31,
	2021	2022
	(in the	ousands)
Laboratory equipment	\$ 1,925	\$ 2,384
Computer and software	220	420
Furniture and fixtures	151	136
Leasehold improvements	257	17
Total property and equipment	2,553	2,957
Less: accumulated depreciation and amortization	(598)	(1,060)
Construction in progress	215	514
Total property and equipment, net	\$ 2,170	\$ 2,411

Depreciation and amortization expense was \$0.5 million and \$0.6 million for the year ended December 31, 2021 and 2022, respectively. As of December 31, 2022, all of the Company's property and equipment was located in the United States.

6. Balance Sheet Components

Prepaid Expenses and Other Current Assets

Prepaid expenses and other current assets consisted of the following:

	December 31,	
	2021	2022
	(in the	ousands)
Prepaid research and development costs (\$4.4 million and \$11.9 million from related		
party in 2021 and 2022, respectively)	\$ 4,836	\$ 13,484
Prepaid other	1,195	1,618
Other receivables	200	919
Total prepaid expenses and other current assets	\$ 6,231	\$ 16,021

Other Assets

Other assets consisted of the following:

	Decem	ber 31,
	2021	2022
	(in tho	usands)
Noncurrent prepaid research and development costs from related party	\$ 7,623	\$ —
Deferred offering costs	1,829	2,912
Other assets	201	1
Total other assets	\$ 9,653	\$ 2,913

Notes to Consolidated Financial Statements

Accrued Liabilities

Accrued liabilities consisted of the following:

	 December 31,		
	2021		2022
	(in the	ousands)	
Compensation and benefits	\$ 6,646	\$	8,400
Accrued research and development services (\$6.3 million and nil due to			
related party in 2021 and 2022, respectively)	6,250		889
Accrued clinical trial and preclinical costs	2,920		652
Professional services	2,523		1,187
Other	757		408
Total accrued liabilities	\$ 19,096	\$	11,536

7. Acquisitions of Assets

BlackThorn Therapeutics, Inc.

In June 2020, the Company entered into an agreement and plan of merger (BlackThorn Merger Agreement) to acquire all of the equity interests of BlackThorn Therapeutics, Inc. (BlackThorn), which became effective in September 2020. The Company acquired BlackThorn for its in-process research and development programs, including an antagonist of the Kappa Opioid Receptor (NMRA-140) for the treatment of major depressive disorders and an antagonist of the Vasopressin 1a Receptor (NMRA-511) for the treatment of anxiety disorders. The Company also gained access to a cloud-based computational psychiatry and data platform that was being developed to support drug target identification, patient stratification and objective clinical trial endpoints. Both NMRA-140 and NMRA-511 were exclusively licensed to BlackThorn by The Scripps Research Institute (TSRI). The acquisition was accounted for as an acquisition of assets.

The BlackThorn Merger Agreement requires the Company to pay the former stockholders of BlackThorn contingent consideration (i) with respect to NMRA-140, in the form of development and regulatory approval milestones of up to an aggregate amount of \$365.0 million, which includes a milestone payment of \$90.0 million that will become due upon dosing the first patient in the Phase 3 clinical trial for NMRA-140, and sales-based milestones of up to an aggregate amount of \$100.0 million, and sales-based milestones of up to an aggregate amount of \$100.0 million, and sales-based milestones of up to an aggregate amount of \$100.0 million, and sales-based milestones of up to an aggregate amount of \$100.0 million (BlackThorn Milestones). At the Company's sole discretion, the BlackThorn Milestone payments may be settled in cash or shares of the Company, or a combination of both, subject to the provisions of the BlackThorn Milestones were subject to liability classification and/or derivative accounting and any such contingent consideration will be recognized when the contingency is resolved, and the consideration becomes payable. For the year ended December 31, 2021, and 2022, no such amounts were deemed due or payable.

BlackThorn Carveout Plan

The BlackThorn Merger Agreement required that the Company establish a carveout plan (the BlackThorn Carveout Plan), pursuant to which each BlackThorn stock option holder as of immediately prior to the closing

Notes to Consolidated Financial Statements

date was allocated a certain number of units (the BlackThorn Carveout Units) based on the number of shares underlying the outstanding options held by each participant at that time. Each BlackThorn Carveout Unit represents a right to receive a portion of the BlackThorn Milestone payment (the BlackThorn Carveout Payments) upon the later of (i) the achievement of a BlackThorn Milestone and (ii) the vesting of the BlackThorn Carveout Unit.

The BlackThorn Carveout Units vest based on time-based schedules that mirror the vesting schedules for the original option awards held by each participant. As of the closing date in September 2020, a portion of the BlackThorn Carveout Units corresponding to the pre-acquisition service periods were fully vested (Vested Carveout Units). The remainder of the BlackThorn Carveout Units vest subject to the continued service of the participants.

The Vested Carveout Units represent contingent consideration for the acquisition as they are attributable to pre-acquisition services rendered by the participants and continuing service is not required for the participants to receive future payments upon a BlackThorn Milestone being achieved. The Company will recognize the contingent consideration obligation for the Vested Carveout Units when the contingency is resolved, and the consideration becomes payable. The BlackThorn Carveout Units that were unvested as of the Closing Date are dependent on the continued service of participants and were deemed to be a compensation arrangement. The Company will recognize the compensation starting from the time payment becomes probable over each participant's service period. As of December 31, 2022, none of the BlackThorn Milestones had been achieved or were probable of being achieved, and no contingent consideration obligation or compensation related to the BlackThorn Carveout Plan had been recorded.

Syllable Life Sciences, Inc.

In September 2020, the Company entered into an agreement and plan of merger (Syllable Merger Agreement) to acquire all of the outstanding equity of Syllable Life Sciences, Inc. (Syllable). The Company acquired Syllable to gain access the rights granted to Syllable under an exclusive license agreement (as amended, the Harvard License Agreement) with President and Fellows of Harvard College (Harvard) and an associated behavior analysis machine learning and computer vision software tool which Syllable was developing to identify and quantify behavior as an indicator of neurological conditions. The transaction was accounted for as an acquisition of assets.

The former stockholders of Syllable are entitled to contingent consideration in the form of development milestones of up to an aggregate of \$5.0 million (Syllable Milestones). At the Company's sole discretion, the Syllable Milestone payments may be settled, in cash or shares equity of the Company, or a combination of both, subject to the provisions of the Syllable Merger Agreement and were not subject to liability classification and/or derivative accounting. Any such contingent consideration will be recognized when the contingency is resolved, and the consideration becomes payable. For the year ended December 31, 2021 and 2022, no such amounts were deemed due or payable.

Alairion, Inc.

In November 2020, the Company entered into an agreement and plan of merger (Alairion Merger Agreement) to acquire all of the outstanding equity of Alairion, Inc. (Alairion). The acquisition of Alairion allowed the Company to expand its program pipeline by gaining rights to two preclinical stage research and development programs focused on the treatment of sleep disorders, an H1 receptor antagonist program (the H1 Program) and a GABA receptor positive allosteric modulator program (the GABA Program). The acquisition also provided the Company with access to a license for software that records sleep and related drug discovery and optimization technology platform. The transaction was accounted for as acquisition of assets.

Notes to Consolidated Financial Statements

The holders of Alairion common stock outstanding as of immediately prior to the closing date received non-transferable rights to future milestone payments of up to \$33.5 million upon the achievement of specified development events and \$135.0 million upon the achievement of specified commercialization events related to the H1 Program and the GABA Program (the Alairion Milestones).

The Alairion Milestone payments may be settled, at the Company's sole discretion, in cash or shares of the Company, or a combination of both, subject to the provisions of the Alairion Merger Agreement. None of the Alairion Milestones were subject to liability classification and/or derivative accounting and any such contingent consideration will be recognized when the contingency is resolved, and the consideration becomes payable. For the year ended December 31, 2021 and 2022, no such amounts were deemed due or payable. In March 2022, the Company paused the active program acquired from Alairion while it assesses pre-IND feedback received from the FDA and considers alternative options for that program.

Alairion Carveout Plan

The Alairion Merger Agreement also required the Company to establish a carveout plan (the Alairion Carveout Plan) pursuant to which a portion of the payments under the Alairion Milestones, up to \$3.0 million (the Alairion Carveout Payments), are reserved for participants under the Alairion Carveout Plan. Participants in the Alairion Carveout Plan are comprised of former Alairion employees, several of whom were retained as employees or consultants of the Company post-acquisition. Under the Alairion Carveout Plan, the Company granted the participants retention units, each representing a right to receive future payments upon the completion of Phase 2 clinical studies with respect to either the H1 Program or the GABA Program and achievement of the related Alairion Milestone, subject to the continued service of the participant until such time and were deemed to be a compensation arrangement. The retention units are forfeited if a participant's service is terminated prior to the receipt of results from the Phase 2 clinical studies associated with the H1 Program and GABA Program. The Company will recognize such compensation starting from the time payment becomes probable over each participant's service period. As of December 31, 2022, it was not probable that Phase 2 clinical studies would be achieved, and no compensation related to the Alairion Carveout Plan had been recorded.

Amgen Inc. Licenses

In September 2021, the Company entered into two license agreements with Amgen Inc. (Amgen) pursuant to which it obtained exclusive, worldwide licenses to develop, manufacture, use, commercialize and distribute products containing compounds that are directed to, in one case, CK1d, and in the other case, glucocerebrocidase (GCase), both for the treatment of neurodegenerative diseases (the Amgen License Agreements) and related know-how and clinical material (collectively, the Amgen IPR&D Assets). Concurrently, the Company also executed a research collaboration agreement (see Note 10) as well as a stock purchase agreement (see Note 11) with Amgen. Both of these agreements were deemed to be separate transactions and not accounted for as part of the acquisition of assets. The Company accounted for these transactions as acquisitions of assets.

The total upfront consideration transferred to Amgen of 157.0 million shares of the Company's Series A-2 convertible preferred stock, with an acquisition date fair value of \$157.0 million, was allocated to the Amgen IPR&D Assets as the fair value of the equity given was more readily determinable than the fair value of the assets received. The fair value of the Company's Series A-2 preferred stock of \$1.00 was established using the price per share paid by third-party investors in the concurrent September 2021 closing of the Series A-2 preferred stock financing.

Under these two license agreements, Amgen is eligible to receive contingent consideration up to an aggregate of \$360.0 million in commercial milestone payments per product payable in cash with a compound directed to

Notes to Consolidated Financial Statements

CK1d and up to an aggregate of \$360.0 million in commercial milestone payments per product payable in cash with a compound directed to GCase, in each case, upon the achievement of certain sales thresholds and single digit royalties on potential future net sales, related to CK1d or GCase. Such contingent consideration was not subject to liability classification and/or derivative accounting and will be recognized when the contingency is resolved, and the consideration becomes payable. For the year ended December 31, 2022, no such amounts were deemed due or payable.

In addition, until a specified period of time following the achievement of the first successful Phase 2 clinical trial for any licensed product, if the Company chooses to sell, transfer, sublicense or divest rights to a licensed product in certain major markets, Amgen has a 90-day exclusive right of first negotiation to enter into an agreement with the Company for such rights. The Company determined that these rights of first negotiation were not freestanding instruments from the Amgen License Agreements and did not meet the definition of a derivative.

Vanderbilt License

In February 2022, the Company and Vanderbilt University (Vanderbilt) entered into a license agreement (Vanderbilt License Agreement). Pursuant to the Vanderbilt License Agreement, the Company obtained an exclusive, worldwide, royalty-bearing, sublicensable (subject to certain restrictions) license under certain patent rights and a non-exclusive, worldwide, royalty-bearing, sublicensable (subject to certain restrictions) license under certain know-how covering small molecule positive allosteric modulators (PAMs) predominantly of the muscarinic acetylcholine receptor subtype 4 (M4) to develop, manufacture, and commercialize products, processes and services covered by such patent rights or that incorporate or use such know-how, for any and uses (the Vanderbilt IPR&D Assets). Concurrently, the Company also executed a sponsored research agreement (see Note 10) with Vanderbilt. The sponsored research agreement was deemed to be separate transactions and not accounted for as part of the acquisition of assets. The acquisition of the Vanderbilt IPR&D Assets became effective in February 2022.

The licensed patent rights are subject to Vanderbilt's right to use the patent rights for research, internal non-commercial use, and educational purposes. The Company intends to develop the PAMs for the treatment of schizophrenia and other neuropsychiatric disorders. The Company has agreed to use commercially reasonable efforts to develop and commercial licensed products, and to achieve certain development milestones.

The Company paid Vanderbilt a non-refundable, non-creditable upfront cash payment of \$13.0 million for the Vanderbilt IPR&D Assets, which was immediately recognized as acquired in-process research and development expense in the consolidated statement of operations and comprehensive loss as it was determined to have no alternative future use as of the acquisition date. Under the Vanderbilt License Agreement, Vanderbilt is eligible to receive contingent consideration payable in cash up to an aggregate of \$42.0 million upon the achievement of specified development milestones and up to an aggregate of \$380.0 million upon the achievement of commercial milestone events as well as and tiered royalties at mid-single digit percentages on potential future net sales, subject to specified reductions for the lack of patent coverage, generic entry and payment obligations for third-party licenses. In addition, the Company is obligated to pay Vanderbilt low-double-digit percentage of sublicense income it receives for sublicenses entered into before the achievement of a specified event. Such contingent consideration was not subject to liability classification and/or derivative accounting and will be recognized when the contingency is resolved, and the consideration becomes payable. For the year ended December 31, 2022, no such amounts were deemed due or payable.

In addition, the Company also has an exclusive option, exercisable for a specified period of time, to negotiate an exclusive license to certain patent rights conceived or developed by Vanderbilt in the course of carrying out the

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sponsored research pursuant to a sponsored research agreement the between the Company and Vanderbilt, which was entered into at the same time as the Vanderbilt License Agreement. The Company determined that the right to negotiate was not a freestanding instrument from the Vanderbilt License Agreement and did not meet the definition of a derivative.

8. Convertible Promissory Notes

Concurrent with the issuance of the convertible promissory notes in 2020 that were settled in September 2020 with shares of the Company's Series A-2 convertible preferred stock, the Company also issued shares of its common stock to certain of the holders in return for commitments to participate in the Company's Series A-2 convertible preferred stock financing. Such shares of common stock were subject to the investors' right of forfeiture that lapsed upon fulfillment of their respective commitments to the Company in one or more subsequent closings of the Company's Series A-2 convertible preferred stock financing. The funding commitments, together with the embedded shares of common stock, were determined to be freestanding instruments apart from the convertible promissory notes (the funding commitment asset or FCA). The Company determined that the FCA (i) did not meet the criteria to be classified as a liability on its consolidated balance sheets, (ii) qualified for a scope exception from derivative accounting, and (iii) was not required to be measured at fair valued at inception (or subsequently). Accordingly, the proceeds received from the convertible promissory notes were allocated to the FCA on a residual basis, and such residual value was determined to be insignificant at inception.

In August 2021, the FCA held by one investor to purchase 10,000,000 shares of the Company's Series A-2 convertible preferred stock was met and the related right of forfeiture lapsed as to the 7,500,000 shares of common stock held by such investor (see Note 11).

9. Commitments and Contingencies

Operating Leases

Lease Agreement

The Company has operating lease arrangements for office and laboratory spaces located in Massachusetts and California with noncancelable lease terms expiring between 2023 and 2025. These leases require monthly lease payments that may be subject to annual increases throughout the lease term.

In March 2021, the Company entered into a lease agreement for a 14,688 square feet office facility in South San Francisco, California (SSF Lease). The SSF Lease commenced in April 2021 and expires in December 2023.

In May 2022, the Company executed a sublease agreement for a 30,067 square feet office and laboratory facility in Watertown, Massachusetts. The term of the sublease commenced in June 2022 with respect to the office space and commenced in August 2022 with respect to the laboratory space. The term of the sublease expires in June 2025. A letter of credit was executed in connection with this sublease agreement that resulted in an increase in restricted cash on the consolidated balance sheet as of December 31, 2022.

Under the lease agreements, the Company is generally required to pay certain operating costs, in addition to rent, such as common area maintenance, taxes, utilities and insurance. Such additional charges are considered variable lease costs and are recognized in the period in which they are incurred. Rent expense for the year ended December 31, 2021 was \$2.0 million, including \$0.9 million related to short term lease expense, and variable costs were \$0.2 million. Rent expense for the year ended December 31, 2022 was \$3.5 million, including \$1.1 million related to short term lease expense, and variable costs were \$0.1 million.

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The Company's operating leases include various covenants, indemnities, defaults, termination rights, security deposits and other provisions customary for lease transactions of this nature.

The maturity of the Company's operating lease liabilities as of December 31, 2022 were as follows (in thousands):

Undiscounted lease payments	
2023	\$ 4,030
2024	3,606
2025	1,834
Total undiscounted lease payments	9,470
Less: Imputed interest	(1,028)
Operating lease liabilities	8,442
Less: Operating lease liabilities, current portion	3,370
Operating lease liabilities, net of current portion	\$ 5,072

Supplemental information on the Company's operating leases was as follows:

	Year Ended Dee	Year Ended December 31,		
	2021	2022		
Cash paid for operating lease agreements (in thousands)	\$ 1,115	\$ 2,486		
Weighted average remaining lease term (in years)	1.8	2.4		
Weighted-average discount rate	10.0%	10.0%		

In August 2022, the Company and a lessor mutually terminated a lease agreement for office and laboratory space in Watertown, Massachusetts. As a result, the Company derecognized an operating lease liability and right-of-use asset of \$0.7 million and \$0.6 million, respectively, and recognized an immaterial gain on termination of the lease.

Indemnification

In the ordinary course of business, the Company enters into agreements that may include indemnification provisions. Pursuant to such agreements, the Company may indemnify, hold harmless and defend an indemnified party for losses suffered or incurred by the indemnified party. Some of the provisions will limit losses to those arising from third-party actions. In some cases, the indemnification will continue after the termination of the agreement. The maximum potential amount of future payments the Company could be required to make under these provisions is not determinable. The Company has not incurred material costs to defend lawsuits or settle claims related to these indemnification provisions. The Company has also entered into indemnification agreements with its directors and officers that may require the Company to indemnify its directors and officers against liabilities that may arise by reason of their status or service as directors or officers to the fullest extent permitted by Delaware corporate law. The Company currently has directors' and officers' insurance.

Other Commitments

The Company has various manufacturing, clinical, research and other contracts with vendors in the conduct of the normal course of its business. Such contracts are generally terminable with advanced written notice and

Notes to Consolidated Financial Statements

payment for any products or services received by the Company through the effective time of termination and any non-cancelable and non-refundable obligations incurred by the vendor at the effective time of the termination. In the case of terminating a clinical trial agreement at a particular site, the Company would also be obligated to provide continued support for appropriate medical procedures at that site until completion or termination.

10. Strategic License and Research and Collaboration Agreements

2015 TSRI License Agreement

In connection with the acquisition of BlackThorn (see Note 7), the Company gained certain exclusive rights to intellectual property related to Kappa Opioid Receptor and V1aR Receptor Antagonist programs as well as an oxytocin receptors positive allosteric modulator program (collectively, the TSRI Programs) under a license agreement between BlackThorn and TSRI originally entered into in November 2015 (as amended, the 2015 TSRI License Agreement). The technology licensed under the 2015 TSRI License Agreement is used in the Company's NMRA-140 and NMRA-511 research and development programs.

Pursuant to the 2015 TSRI License Agreement, the Company is obligated, among other things, to pay TSRI (i) a nominal annual license fee due and payable on the first day of each calendar year and after the fourth anniversary creditable against any royalties due for such calendar year, (ii) development and regulatory milestone payments of up to \$1.5 million in aggregate for the first product from each TSRI Program, which are contingent upon achieving specific development and regulatory milestone events, (iii) commercial milestone payments of up to \$3.5 million in aggregate for each occurrence, which are contingent upon achieving specified commercialization milestone events, (iv) tiered low-single digit royalties on future net sales of each royalty-bearing product and (v) a percentage ranging from the mid-single digits to sub teen double digits of any sublicensing revenues the Company receives. As of December 31, 2022, none of the milestones had been achieved and no royalties were due under the 2015 TSRI License Agreement.

Harvard License Agreement

In connection with the acquisition of Syllable (see Note 7), the Company gained exclusive rights covering certain behavior imagining and behavioral tracking software under a license agreement between Syllable and Harvard originally entered into in June 2020. The Company uses the technology licensed under the Harvard License Agreement to advance its precision neuroscience approach.

Under the Harvard License Agreement, the Company is obligated, among other things, to pay Harvard (i) nominal annual license maintenance fees that are creditable against any royalty amounts payable for licensed products sold in the same year, (ii) mid-single digit royalties on future net sales of each royalty-bearing product that utilizes the licensed technology, and (iii) a portion of any sub licensing revenues the Company receives ranging from the high teens to low-double digits. As of December 31, 2022, none of the milestones had been achieved and no royalties were due under the Harvard License Agreement.

In addition, the Harvard License Agreement, as amended in March 2021, provided for certain development milestones that the Company is required to meet between December 2021 and January 2024. Failure to meet such milestones constitutes a material breach of contract and would provide Harvard with the right to terminate the agreement subject to the notification and cure periods. As of December 31, 2022, the Company had not met the December 2021, January 2022, or July 2022 milestones. As of the date these consolidated financial statements were available for issuance, Harvard and the Company had agreed to terminate the agreement, effective as of March 31, 2023.

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Research and Collaboration Agreement with Amgen

In September 2021, and concurrently with the Amgen License Agreements (see Note 7), the Company entered into a research collaboration agreement with Amgen (Amgen Collaboration Agreement) to collectively discover drug targets, biomarkers, and other insights associated with central nervous system (CNS) diseases utilizing Amgen's deCODE genetics and human data research capabilities. The Company received exclusive rights under intellectual property generated in the collaboration to exploit therapeutic compounds and diagnostics for use with therapeutics in the CNS field and Amgen received exclusive rights to exploit therapeutic compounds and diagnostics for use with therapeutics outside of the CNS field. The agreement is governed by the Joint Research Committee (JRC), which is made up of two representatives from each of the Company and Amgen to manage the progress and direction of research and development activities. All decisions made by the JRC shall be by consensus with each party having one vote, and if the JRC cannot reach a consensus, the dispute shall be referred to each company's executive officers. If the executive officers fail to reach a consensus, the Company will have final decision-making authority provided that the matter does not relate to the approval of, or any material change to, a project, decisions to acquire rights from a third party, decisions or activities that are in conflict with Amgen's database usage or data access rights, or the approval of external costs and expenses relating to certain new data generation activities or certain new dataset acquisitions, as such matters require mutual agreement.

In return for Amgen performing research and development activities under the agreement, the Company is committed to making non-refundable, non-creditable quarterly payments over the first two years totaling \$50.0 million and for the third year between \$12.5 million and \$25.0 million depending on whether certain progress milestones are achieved.

Additionally, the Company will reimburse Amgen for certain direct, out-of-pocket external costs and expenses that are incurred in the performance of the activities under the Amgen Collaboration Agreement.

The term of the agreement is up to five years, although it will terminate after three years if the Company and Amgen do not mutually agree upon a compensation structure for years four and five. If the parties do not reach an agreement at least 30 days prior to the end of year three, the Amgen Collaboration Agreement will automatically terminate upon its third anniversary. Further, either party can terminate the Amgen Collaboration Agreement upon material uncured breach or bankruptcy by the other party, in which case all amounts that have become due through the date of termination are non-refundable.

Amgen also has an exclusive option to negotiate, and the right of first negotiation, to obtain exclusive, worldwide licenses to research, develop, commercialize, and otherwise exploit up to two therapeutic compounds or any pharmaceutical product containing such therapeutic compound arising from the collaboration. That right exists with respect to each compound for up to 60 days following positive Phase 2 results for that compound. The Company determined that these rights were not freestanding instruments from the Amgen Collaboration Agreement and did not meet the definition of a derivative. Upon execution of the Amgen Collaboration Agreement in September 2021, the Company was obligated to start paying Amgen non-refundable quarterly payments of \$6.3 million. As of December 31, 2022, the sixth non-refundable quarterly payment of \$6.3 million became due and has been recorded within accounts payable. As of December 31, 2021, the related prepaid research and development costs included in the consolidated balance sheet were \$4.4 million within prepaid expenses and other current assets and \$7.6 million within other assets. As of December 31, 2022, the related prepaid research and development costs included in the consolidated balance sheet were \$4.4 million within prepaid expenses and other current assets were \$11.9 million within prepaid expenses and other current assets. The Company recorded \$0.5 million and \$25.1 million of related research and development expenses during the year ended December 31, 2021 and 2022, respectively.

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Sponsored Research Agreement with Vanderbilt

In February 2022, and concurrently with the Vanderbilt License Agreement (see Note 7), the Company entered into a sponsored research agreement with Vanderbilt (Vanderbilt Research Agreement), pursuant to which Vanderbilt agreed to provide the Company research services to develop a M4 PAM back-up program.

The agreement is governed by the Joint Steering Committee (JSC) which is made up of three representatives from each of the Company and Vanderbilt to manage the progress and direction of research and development activities. All decisions made by the JSC shall be by consensus with each party having one vote, and if the JSC cannot reach a consensus, then (i) each party shall make the final decision on non-strategic, day to day, operational matters related to the implementation of research program activities conducted, managed, controlled or directed by such party, and (ii) the Company will have final decision-making authority with respect to material operation and strategic decisions.

In return for Vanderbilt performing research and development activities under the agreement, the Company agreed to make quarterly payments for research up to a total of \$1.7 million. The term of the agreement is one year. Either party may terminate the agreement upon 60 days' written notice, subject to the Company paying reasonable costs incurred by Vanderbilt to wind-down the program and all costs incurred and non-cancellable commitments made prior to the termination date.

In addition, the Company also has an exclusive option to negotiate an exclusive license to certain patent rights conceived or developed by Vanderbilt in the course of carrying out the sponsored research (see Note 7).

11. Convertible Preferred Stock and Stockholders' Deficit

Convertible Preferred Stock

In September 2020, the Company executed a preferred stock purchase agreement (the Series A SPA) and issued 123,620,000 shares of its Series A-2 convertible preferred stock at \$1.00 per share for aggregate proceeds of \$123.6 million in the initial closing of its Series A-2 convertible preferred stock financing. Concurrent with the initial closing, the Company acquired a legal entity through the issuance of 40,000,000 shares of its Series A-2 convertible preferred stock and 10,000,000 shares of its common stock. The entity did not meet the definition of a business and its sole asset was cash. As a result, the shares of the Company's Series A-2 convertible preferred stock and common stock were recognized at their relative fair values for \$39.5 million of cash obtained in the transaction. The Company also issued 59,180,294 shares of its Series A-2 convertible preferred stock upon settlement of convertible promissory notes (see Note 8).

In addition, in September 2020, the Company issued an aggregate of 45,178,495 and 14,897,480 shares of its Series A-1 convertible preferred stock and Series A-2 convertible preferred stock, respectively, as consideration for various acquisitions of assets (see Note 7).

In accordance with the terms of the Series A SPA, the Company was also committed to selling 40,000,000 additional shares of its Series A-2 convertible preferred stock to one investor who is a related party at a fixed price of \$1.00 per share in one or more subsequent closings on or before March 8, 2021. The Company determined that its obligation to issue additional shares of Series A-2 convertible preferred stock in subsequent closings was a freestanding financial instrument that should be classified as a liability (the convertible preferred stock tranche liability) in the consolidated balance sheets and remeasured to fair value during the reporting period with any changes in fair value being recognized in the consolidated statements of operations and comprehensive loss. The fair value of convertible preferred stock tranche liability was determined to be de minimis on issuance

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in September 2020 and through the date of settlement in September 2021 because of (i) the original expected short-term nature of the obligation and (ii) the absence of significant business activities or events during the period from issuance to settlement that could have significantly impacted the value of the Company. Furthermore, additional third-party investors participated in the closing of the Company's subsequent Series A-2 convertible preferred stock financing completed in September 2021, which indicated a fair value of \$1.00 per share.

Pursuant to the Series A SPA, a forfeiture provision was added to the terms of 33,333,333 shares of the Company's common stock previously issued in January 2020 to the same investor and related party that the Company committed to selling 40,000,000 additional shares of Series A-2 convertible preferred stock, of which the forfeiture provision for 20,000,000 shares lapsed upon execution of the Series A SPA in September 2020 and 13,333,333 shares remained subject to the forfeiture provision until the occurrence of one or more subsequent closings. The Company determined there was no accounting impact because it did not result in a transfer of value from the Company's common stockholders to its preferred stockholders.

In connection with the acquisition of Alairion in November 2020 (see Note 7), an existing stockholder of both Alairion and the Company purchased a total of \$12.0 million of Alairion convertible notes immediately prior to the closing date that were settled with 12,000,000 shares of the Company's Series A-2 convertible preferred stock upon closing.

Between March and July 2021, the Company and certain of its investors entered into a series of amendments to the Series A SPA to extend the deadline to complete subsequent closings of its Series A-2 convertible preferred stock from March 2021 to September 2021. The Company determined that such amendments to the Series A-2 convertible preferred stock represented modifications and no incremental expense would be recorded as the difference between the fair values of the Series A-2 convertible preferred stock immediately before and after the amendments were insignificant. Concurrently, the lapse of right of forfeiture with respect to 13,333,333 shares of the Company's common stock held by a related party investor was extended to September 2021.

Between August and September 2021, pursuant to the Series A SPA, as amended, the Company issued 191,250,000 shares of its Series A-2 convertible preferred stock, including 141,250,000 shares to new investors and 50,000,000 shares to two existing investors, one of whom was a related party, at a price of \$1.00 per share for aggregate proceeds of \$191.3 million (the Series A Final Closing). Upon the Series A Final Closing, the right of forfeiture for 13,333,333 shares of the Company's common stock held by one related party investor lapsed and the convertible preferred stock tranche liability was settled. Immediately prior to settlement, the convertible preferred stock tranche liability was remeasured to fair value and was determined to be de minimis because the fixed price of \$1.00 per share at which the Company was obligated to issue additional shares of its Series A-2 convertible preferred stock represented fair value as it was the same price per share paid by third-party investors who participated in the Series A Final Closing.

Concurrent with the Series A Final Closing, the Company entered into side letter agreements with three new investors, whereby the Company, amongst other things, granted such investors rights to access certain information and notices, concurrently with and in the same manner as the members of the board of directors or a major investor.

In September 2021, Amgen purchased 100.0 million shares of the Company's Series A-2 convertible preferred stock at a purchase price of \$1.00 per share, for aggregate proceeds of \$100.0 million. Concurrent with the sale of the shares, Amgen and the Company entered into an agreement that limits Amgen's right to vote as it relates to all matters presented to the Company's stockholders under its Amended and Restated Certificate of

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Incorporation, By-Laws, Series A SPA and related agreements governing investors' rights, except for matters pertaining to the amendment, waiver, and termination of such agreements (the Amgen Voting Rights Letter Agreement). Such voting limitations apply when Amgen's ownership interest in the Company's outstanding voting securities exceeds 19.9% of the Company's total outstanding voting securities or voting power of outstanding single classes or series of the Company's stock (the Voting Threshold) and remain in effect until an the first to occur of an IPO, the Company becomes subject to period reporting under the Securities Exchange Act, a deemed liquidation event, or a transaction with a special purpose acquisition company (SPAC).

Subject to certain conditions, (a) upon the Company's commencement of a Phase 2 clinical study of a Company controlled molecule or the in-licensing or acquisition of a Phase 2 ready or later-stage molecule (the Future Financing Milestone), Amgen is also obligated to provide the Company additional financing of up to \$100.0 million by participating in up to two future financings of the Company, in each case by purchasing up \$50.0 million in equity (or equity-linked) securities on the same terms and conditions of at least a matching dollar equivalent by one or more third party, and (b) in the event that, prior to the achievement of any Future Financing Milestone, the Company consummates an IPO or a SPAC transaction, Amgen shall (i) purchase up to \$30.0 million of shares in an IPO of the Company, in no case greater than 20% of the total gross proceeds of the IPO, or (ii) purchase up to \$30.0 million of shares in a SPAC of the Company, in no case greater than 20% of the shares of capital stock of the SPAC (collectively, the Future Financing). The Future Financing is a freestanding financial instrument and is not subject to liability classification and/or derivative accounting. The value of the Future Financing was determined to be de minimis at issuance and as of December 31, 2021 and 2022, as it would be settled based on the same terms and conditions other third parties will receive.

In September 2022, the Company executed a preferred stock purchase agreement (the Series B SPA) and issued 58,263,334 shares of its Series B convertible preferred stock, including 10,000,000 shares to a new investor and 48,263,334 shares to existing investors, two of whom were related parties, at \$1.50 per share for aggregate proceeds of \$87.4 million in the initial closing of its Series B convertible preferred stock financing (the Series B Initial Closing). The Series B SPA provides that within 90 days of the Series B Initial Closing, the Company may issue and sell on the same terms and conditions, additional shares of its Series B convertible preferred stock to one or more purchasers (Series B Subsequent Closing). The Series B Subsequent Closing is at the option of the Company and therefore was not determined to be a commitment by the Company that is subject to liability classification and/or derivative accounting.

In October 2022, the Series B Subsequent Closing occurred, and the Company issued an additional 16,666,667 shares of its Series B convertible preferred stock to a new investor at \$1.50 per share for aggregate proceeds of \$25.0 million.

In connection with the Series B SPA, the Company entered into side letter agreements with four investors, whereby the Company, amongst other things, granted or clarified such investors rights to access certain information and notices, concurrently with and in the same manner as a major investor.

As of December 31, 2021, the Company's convertible preferred stock consisted of the following:

	Shares Authorized	Shares Issued and <u>Outstanding</u> (in tho	Carrying Value ousands)	Liquidation Preference
Series A-1	48,000	45,178	\$ 36,595	\$ 45,178
Series A-2	707,000	697,948	693,263	697,948
Total convertible preferred stock	755,000	743,126	\$ 729,858	\$ 743,126

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As of December 31, 2022, the Company's convertible preferred stock consisted of the following:

	Shares <u>Authorized</u>	Shares Issued and Outstanding	Carrying Value	Liquidation Preference
		(in the	ousands)	
Series A-1	47,471	46,413	\$ 38,208	\$ 46,413
Series A-2	697,948	697,948	693,263	697,948
Series B	74,930	74,930	112,216	112,395
Total convertible preferred stock	820,349	819,291	\$ 843,687	\$ 856,756

The holders of the Company's convertible preferred stock have the following rights, preferences, and privileges:

Dividends

The holders of each series of convertible preferred stock are entitled to non-cumulative dividends at an annual rate of 6.0% of the original issue price when and if declared by the Company's board of directors. The dividend rate is subject to adjustment if the Company undertakes any stock splits, stock dividends, combinations, subdivisions, or recapitalization events. Holders of Series B convertible preferred stock and Series A-2 convertible preferred stock are entitled to dividends prior and in preference to any declaration or payment of any dividend to holders of Series A-1 convertible preferred stock and common stock. Holders of the Series A-1 convertible preferred stock are entitled to dividend to holders of common stock. No dividends have been declared or paid as of December 31, 2022.

Liquidation Distributions

In the event of any liquidation, dissolution, or winding up of the Company, either voluntary or involuntary, the holders of the then outstanding Series B convertible preferred stock and Series A-2 convertible preferred stock shall be entitled to receive, prior and in preference to any distribution of any of the assets of the Company to the holders of the Series A-1 convertible preferred stock and common stock, a liquidation preference in an amount per share equal to the original issue price (as adjusted for stock splits, stock dividends, and recapitalizations) plus all declared but unpaid dividends on such shares. The holders of the then outstanding Series A-1 convertible preferred stock shall be entitled to receive, prior and in preference to any distribution of any of the assets of the Company to the holders of the common stock, a liquidation preference in an amount per share equal to the original issue price (as adjusted for stock splits, stock dividends, and recapitalizations) plus all declared but unpaid dividends on such shares. Thereafter, any remaining assets of the Company will be distributed, on a pari passu basis, among the holders of the common stock. If the assets and funds available to be distributed to the stockholders shall be insufficient to permit the payment, in full, of any of the liquidation preferences, then the entire assets and funds legally available for distribution to the convertible preferred stock shall be distributed ratably among the holders of convertible preferred stock based on the total number of shares held by each holder.

Voting Rights

The holder of each share of convertible preferred stock is entitled to one vote for each share of common stock into which it would convert. Except as provided by law or other provisions in the Company's Amended and Restated Certificate of Incorporation, the holders of the convertible preferred stock shall vote

Notes to Consolidated Financial Statements

together with the holders of the common stock as a single class on an as-converted basis. So long as 10,000,000, 16,000,000 and 50,000,000 shares of Series B convertible preferred stock, Series A-2 convertible preferred stock, and common stock, respectively, remain outstanding, then (i) the holders of such Series B convertible preferred stock, exclusively, are entitled to elect one director of the Company, (ii) the holders of such Series A-2 convertible preferred stock, exclusively, are entitled to elect three directors of the Company, (iii) the holders of the Company's common stock, exclusively, are entitled to elect or of the Company, and (iv) the holders of the Series B convertible preferred stock, series A-2 convertible preferred stock and common stock, voting together as a single class on an as-converted basis, are entitled to elect four directors of the Company. The holders of the Series A-1 convertible preferred stock are not entitled to elect directors of the Company.

Conversion Rights

The shares of convertible preferred stock are convertible into shares of common stock at the option of the holder, at any time after the date of issuance of such shares, determined by dividing the original issue price per share by the conversion price in effect at the time of conversion. As of December 31, 2022, the applicable conversion price was \$1.50 per share for Series B convertible preferred stock, \$1.00 per share for Series A-2 convertible preferred stock and \$1.00 per share for Series A-1 convertible preferred stock. The conversion price shall be subject to adjustments for stock splits, stock dividends, combinations, subdivisions, or recapitalization events. In addition, if the Company should issue convertible preferred stock or common stock without consideration or for a consideration per share less than the conversion price for the convertible preferred stock, the conversion price for each series shall automatically be adjusted in accordance with anti-dilution provisions contained in the Company's Amended and Restated Certificate of Incorporation. Each share of convertible preferred stock shall automatically convert into common stock immediately upon (i) the closing of the sale of common stock in a firm-commitment underwritten public offering pursuant to an effective registration statement under the Securities Act of 1933, as amended, resulting in at least \$30.0 million of gross proceeds to the Company (a Qualified IPO), or (ii) the occurrence of an event, specified by vote or written consent of the holders of a majority of the then-outstanding shares of Series B convertible preferred stock.

Redemption Rights

Each share of Series B convertible preferred stock, Series A-2 convertible preferred stock and A-1 convertible preferred stock is not mandatorily redeemable.

Registration Rights

Under the Company's investors' rights agreement, certain holders of the Company's convertible preferred stock and common stock have the right to demand that the Company file a registration statement or request that their shares be covered by a registration statement that the Company is otherwise filing. Holders of the Company's convertible preferred stock have the right to request the Company to file certain registration statements with the SEC for the registration of shares related to the convertible preferred stock. The obligations of the Company regarding such registration rights include, but are not limited to, commercially reasonable efforts to cause such registration statement to become effective, keep such registration statement effective for up to 120 days, prepare and file amendments and supplements to such registration statement and the prospectus used in connection with such registration statement, and furnish to the selling holders copies of the prospectus and any other documents as they may reasonably request. The terms of the registration rights provide for the payment of certain expenses related to the registration of the shares,

Notes to Consolidated Financial Statements

including a capped reimbursement of legal fees of a single special counsel for the holders of the shares, but do not impose any obligations for the Company to pay additional consideration to the holders in case a registration statement is subsequently withdrawn at the request of the holders.

Common Stock

In October 2022, the Company's board of directors approved a certificate of amendment to the Company's amended and restated certificate of incorporation which, among other things, (i) increased the authorized number of shares of the Company's common stock to 1,210,000,000 shares and (ii) increased the authorized number of shares of the Company's convertible preferred stock to 820,348,942 shares.

The holders of the Company's common stock are entitled to one vote per share on all matters to be voted on by the stockholders of the Company and are entitled to dividends, if and when declared by the Company's board of directors, subject to the prior rights of the preferred stockholders. Common stock outstanding in the consolidated balance sheet and consolidated statement of convertible preferred stock and stockholders' deficit as of December 31, 2022 includes 24,463,063 shares of restricted stock that vest based on service conditions and are subject to the Company's right of repurchase upon termination of services and 7,000,000 shares of restricted stock that vest based on performance conditions (see Note 13). Common stock reserved for future issuance as of the period indicated consisted of the following:

	December 31, 2022
Shares reserved for conversion of outstanding convertible preferred stock	819,291
Shares reserved for options to purchase common stock under the Plans	73,590
Shares reserved for issuance under the Plans	49,774
Total	942,655

In addition, the Company may be required to issue additional shares of its capital stock if certain milestone conditions are met pursuant to the contingent consideration and compensation arrangements associated with the Company's acquisitions of assets (see Note 7). As of December 31, 2022, the milestone conditions are not probable of being met and no shares have been reserved for potential future issuances.

In March 2021, the Company sold 3,000,000 shares of its common stock to a co-founder for the benefit of an existing investor in the Company at a purchase price of \$0.32 per share, or \$1.0 million in the aggregate.

12. Preferred Stock Warrants

In September 2020, in connection with the BlackThorn acquisition, the Company issued preferred stock warrants to purchase up to 2,292,672 shares of Series A-1 convertible preferred stock with an exercise price of \$1.35 per share. In December 2022, 1,651,527 preferred stock warrants were exercised and the remaining 641,145 preferred stock warrants expired as of December 31, 2022. The Company issued 1,234,817 shares of Series A-1 convertible preferred stock, including 820,434 to a related party, upon the exercise and net exercise of preferred stock warrants.

13. Stock-Based Compensation

2020 Equity Incentive Plan

In January 2020, the Company adopted the 2020 Equity Incentive Plan (the 2020 Plan) that provides for the grant of incentive stock options, non-statutory stock options, restricted stock awards, restricted stock unit, and other

Notes to Consolidated Financial Statements

stock-based awards to employees, directors, and non-employee service providers of the Company. Under the 2020 Plan, the exercise price of stock options granted shall not be less than 100% of the estimated fair market value of the Company's common stock on the date of grant. The contractual term of stock options granted under the 2020 Plan shall not exceed ten years. Additionally, the exercise price of any stock options granted to a 10% stockholder shall not be less than 110% of the fair market value of the common stock on the date of grant, and the term of such option grant shall not exceed five years. Subject to approval by the Company's board of directors at the grant date, stock options may include an early exercise feature whereby such option shall be exercisable at any time, subject to the Company's right to repurchase any unvested portion at the original exercise price upon termination of employment of an option holder. Options and other equity awards become vested and, if applicable, exercisable based on terms determined by the Company's board of directors or other plan administrator on the date of grant. The Company also has the right of first refusal to purchase any proposed disposition of shares issued under the 2020 Plan. Any shares issued pursuant to unvested stock options are restricted and subject to repurchase by the Company are reported as a liability and reclassed to stockholders' deficit once those shares vest.

As of December 31, 2022, 137,899,025 shares of the Company's common stock were authorized for issuance under the 2020 Plan, of which 49,175,716 shares remained available for future grants.

2015 Equity Incentive Plan

Upon the closing of the BlackThorn acquisition in September 2020, the Company assumed BlackThorn's 2015 Equity Incentive Plan (the 2015 Plan, and collectively with the 2020 Plan, the Plans), pursuant to which outstanding stock options previously granted under the 2015 Plan converted into stock options to purchase common stock of the Company, which remain subject to the terms and conditions of the 2015 Plan. As of December 31, 2022, 2,330,374 shares of the Company's common stock were authorized for issuance under the 2015 Plan. The 2015 Plan was suspended in connection with the closing of the acquisition of BlackThorn in September 2020.

Stock Option Activity

The following table summarizes stock option activity under the Plans:

	Outstanding <u>Stock Options</u> (in thous;	Av Ex Pri	ighted- /erage kercise ice Per Share cept per shai	Weighted- Average Remaining Contractual <u>Term (years)</u> re amounts and yea	I	ggregate ntrinsic Value
Outstanding as of December 31, 2021	46,909	\$	0.38	9.1	\$	10,614
Granted	36,816		0.58			
Exercised	(9,399)		0.42			
Canceled and forfeited	(6,924)		0.35			
Expired	(162)		0.51			
Outstanding as of December 31, 2022	67,240	\$	0.48	8.2	\$	24,085
Vested as of December 31, 2022	16,202	\$	0.43	8.0	\$	7,076
Exercisable as of December 31, 2022	18,327	\$	0.42	8.1	\$	7,681

Notes to Consolidated Financial Statements

The aggregate intrinsic value of stock options outstanding, exercisable, vested and exercisable is calculated as the difference between the exercise price of the underlying stock options, and the fair value of the Company's common stock, as determined by the Company's board of directors.

The weighted-average grant-date fair value per share of stock options granted during the year ended December 31, 2021 and 2022 was \$0.37 and \$0.48 per share, respectively. The total grant-date fair value of options that vested during the year ended December 31, 2021 and 2022 was \$2.3 million and \$5.2 million, respectively.

The stock option activity table above excludes options to purchase 2,850,000 shares of the Company's common stock issued to the Company's scientific advisors which vest based on the achievement of certain performance conditions to be separately defined and approved by the Company's board of directors. As the performance conditions had not been determined as of December 31, 2022, the criteria for establishing a grant date, and accordingly a measurement date, were not met as of that date.

The stock option activity table above also excludes options granted to purchase 3,500,000 shares of common stock that have market and performance conditions granted to one of the Company's executives (and discussed below).

Fair Value of Stock Options

The fair value of stock options granted for employee and non-employee awards was estimated at the grant date using the Black-Scholes option pricing model based on the following assumptions:

	Year Ended December 31,		
	2021	2022	
Expected volatility	90.6% - 96.5%	87.2% - 91.1%	
Expected term (years)	5.0 - 7.1	4.5 - 6.5	
Risk-free interest rate	0.7% - 1.4%	1.7% - 4.2%	
Expected dividend yield	— %	— %	

Expected volatility—As there is no trading history for the Company's common stock, the Company has determined expected volatility based on the average historical stock price volatility of comparable publicly-traded companies and expects to continue to do so until such time as it has adequate historical data regarding the volatility of its own traded stock price. The comparable companies are chosen based on their similar size, stage in the life cycle or area of therapeutic focus. The historical volatility is calculated based on a period of time commensurate with the expected term assumption.

Expected term—The expected term of the Company's stock options has been estimated using the simplified method for awards that qualify as plain-vanilla stock options. The simplified method calculates the expected term as the average of the time-to-vesting and the contractual life of the stock options.

Risk-free interest rate—The risk-free interest rate assumption was based on the U.S. Treasury yield curve in effect at the time of grant of the award for time periods approximately equal to the expected term of the award.

Expected dividend yield—The expected dividend yield assumption is zero as the Company has never paid and has no plans to pay dividends on its common stock in the foreseeable future.

Notes to Consolidated Financial Statements

Early Exercise of Employee Stock Options

The Company's 2020 Plan allows certain employees to exercise their stock options prior to vesting into shares of restricted common stock. The proceeds from early exercised stock options are recorded as liabilities in the consolidated balance sheets at the time of exercise and reclassified to common stock and additional paid-in capital as the underlying stock options vest and the Company's repurchase right lapses. During the year ended December 31, 2021, the Company issued 4,415,000 shares of restricted common stock upon the early exercise of unvested stock options subject to service based vesting conditions for total cash proceeds received of \$1.4 million at a weighted-average exercise price of \$0.32 per share. During the year ended December 31, 2022, the Company issued 3,467,500 shares of restricted common stock upon the early exercise of unvested stock options subject to service based vesting conditions for total cash proceeds received of \$2.1 million at a weighted-average exercise price of \$0.59 per share. As of December 31, 2022, 4,174,167 shares of restricted common stock remained outstanding and unvested.

Restricted Stock Awards

The Company's 2020 Plan allows for the grant of restricted common stock to certain employees, executives, non-employee scientific advisors, and third-party service providers. The restrictions lapse over time primarily according to service-based vesting conditions of each award. In the event of a voluntary or involuntary termination of the holder's continuous provision of services to the Company, any unvested portion of the restricted stock award are automatically forfeited.

The following table summarizes the Company's restricted stock activity:

	Shares	Aver Date	eighted- age Grant Fair Value er Share
	(in thousands, e amo	except pe unts)	r share
Outstanding and unvested as of December 31, 2021	39,222	\$	0.03
Granted	3,000		0.83
Vested	(19,083)		0.05
Forfeited	(375)		0.35
Outstanding and unvested as of December 31, 2022	22,764	\$	0.11

The restricted stock activity table above excludes 4,000,000 shares of restricted common stock issued to certain of the Company's scientific advisors which vest based on the achievement of certain performance conditions to be separately defined and approved by the Company's board of directors. As the performance conditions had not been determined as of December 31, 2022, the criteria for establishing a grant date, and accordingly a measurement date, were not met as of that date.

Award with Market Conditions

In June 2021, the Company granted stock options to purchase 3,500,000 shares of its common stock to one of its executive officers with an exercise price of \$0.32 per share that contain both market and service conditions (the Market Award). Subject to the holder's continued service, the Market Award provided for vesting in four equal tranches once the Company's stock price exceeded certain thresholds. The original grant-date fair value of the Market Award of \$0.9 million was determined using a Monte Carlo simulation model using an expected volatility of 100.0% and risk-free rate of 1.6%.

Notes to Consolidated Financial Statements

In January 2022, the Company amended the terms of the Market Award such that the award will vest in three modified tranches. One tranche of 1,750,000 stock options is based on a performance condition and two tranches of 875,000 stock options each are based on revised Company stock price thresholds and/or vesting schedules, subject to the holder's continued service. The modification resulting in a performance-based tranche was determined to be a probable-to-improbable modification and the modification resulting in two revised market-based tranches were determined to be probable-to-probable modifications. The fair value of the performance-based tranche was estimated using the Black-Scholes Model using an expected volatility of 100.0%, a risk-free rate of 1.8% and an expected term of 9.4 years. The fair value of the market-based tranches was determined using a Monte Carlo simulation model using an expected volatility of 100.0% and risk-free rate of 1.8%. The modification resulted in \$0.3 million in total incremental expense.

The unrecognized original grant-date fair value, together with any incremental expense, is recognized as compensation using the accelerated attribution method for each tranche over the requisite service period. For the year ended December 31, 2021 and 2022, the Company recognized \$0.1 million and \$0.4 million of stock-based compensation related to the market-based tranches, respectively, based on an estimated requisite period of up to 6.0 years. As of December 31, 2022, none of the market conditions for the market-based tranches have been met. For the year ended December 31, 2022, no expense was recognized for the performance-based tranche as the performance conditions were not probable of being met.

Awards with Performance Conditions

In 2020, the Company approved 5,500,000 stock options and 7,000,000 restricted common stock to certain of the Company's scientific advisors, which vest based on the achievement of performance conditions to be determined and continued service to the Company. During the year ended December 31, 2022, the Company's board of directors established performance conditions, consisting of certain development milestones, for 2,650,000 stock options and 3,000,000 restricted common stock such that the criteria for establishing a grant date, and accordingly a measurement date, were met for these performance stock options and performance restricted common. As of December 31, 2022, it was probable that the milestones would be met for certain of the performance stock options and performance restricted stock that were granted in 2022 and for which expense was recognized using the accelerated attribution method. For the year ended December 31, 2022, the Company recognized expense of \$0.8 million related to these awards with performance conditions that were probable of being met.

Stock-based Compensation

The following table summarizes total stock-based compensation included in the Company's consolidated statements of operations and comprehensive loss:

	Year En	Year Ended December 31,		
	2021	2022		
	(ii	n thousands)		
Research and development	\$ 2,408	\$ 4,252		
General and administrative	1,866	4,046		
Total stock-based compensation	\$ 4,274	\$ 8,298		

As of December 31, 2022, there was \$20.1 million and \$2.6 million of unrecognized stock-based compensation related to stock options and restricted stock awards outstanding, respectively, including stock options and stock awards for which achievement of milestones was not probable, which were expected to be recognized over weighted-average remaining service periods of 2.3 years and 1.3 years, respectively.

Notes to Consolidated Financial Statements

Services Agreement

In May 2020, the Company entered into a services agreement with a vendor for assistance in evaluating assets and technologies in the field of neurodegeneration. As consideration, the Company issued 1,000,000 shares of its restricted common stock with a grant-date fair value of \$0.4 million, subject to a right of forfeiture that lapsed as to 50% of the shares in May 2021 and lapses as to the remaining 50% of the shares in May 2022. In May 2021, the right of forfeiture lapsed as to 50% of the shares. In April 2022, the services agreement was amended and the right of forfeiture for 12.5% of the shares was modified to allow for vesting with an immaterial incremental amount of stock-based compensation recognized, and the remaining 37.5% of the shares were forfeited. In addition, in return for services provided, the Company agreed to issue the vendor additional shares of its common stock representing a value of \$1.0 million upon the achievement of certain milestones tied to the successful in-license or acquisition of assets (the Milestone Shares). The Company concluded the Milestone Shares are stock settled debt that are required to be classified as a liability and recognized at such time the milestones are probable of being met. As of December 31, 2022, the milestones were not probable of being met.

14. Income Taxes

The Company had no income tax expense for the year ended December 31, 2021 and 2022 due to its history of operating losses.

A reconciliation of the Company's federal income tax rate and effective income tax rate is summarized as follows:

	Year Ended December 31,	
	2021	2022
Federal income taxes	21.0%	21.0%
State income taxes, net of federal benefit	3.9	3.7
Permanent differences	(0.2)	(0.5)
Research and development tax credits	0.9	2.1
State Rate Adjustment	—	2.2
Uncertain tax positions	(0.1)	(0.3)
Valuation allowance	(25.5)	(28.2)
Effective income tax rate	%	%

Notes to Consolidated Financial Statements

Deferred tax assets and liabilities reflect the net tax effects of net operating loss and tax credit carryforwards and temporary differences between the carrying amount of assets and liabilities for financial reporting and the amounts used for tax purposes. Significant components of the Company's deferred tax assets and liabilities are summarized as follows:

	December 31,		
	2021	2022	
	(in thou	sands)	
Deferred tax assets:			
Net operating losses	\$ 53,019	\$ 63,937	
Capitalized license agreements	36,057	39,113	
Capitalized research and development expense	7,183	26,132	
Research and development credits	6,018	8,425	
Compensation related	1,854	3,496	
Operating lease liabilities	471	2,080	
Other	317	467	
Total deferred tax assets	104,919	143,650	
Less: valuation allowance	(104,446)	(141,557)	
Total deferred tax assets less valuation allowance	473	2,093	
Deferred tax liabilities:			
Operating lease right-of-use assets	(429)	(2,028)	
Fixed assets	(44)	(65)	
Total deferred tax liabilities	(473)	(2,093)	
Net deferred tax assets	\$ —	\$ —	

The Company determines its valuation allowance on deferred tax assets by considering both positive and negative evidence in order to ascertain whether it is more likely than not that deferred tax assets will be realized. Realization of deferred tax assets is dependent upon the generation of future taxable income, if any, the timing, and amount of which are uncertain. Due to the Company's recent history of operating losses, the Company believes that recognition of the deferred tax assets arising from the above-mentioned future tax benefits is currently not likely to be realized and, accordingly, has provided a valuation allowance on its deferred tax assets. The valuation allowance increased by \$60.4 million and \$37.1 million for the year ended December 31, 2021 and 2022, respectively, primarily due to the increase in the Company's net operating losses (NOL) during the periods and deferred tax assets related to capitalized research and development expenses.

NOLs and tax credit carryforwards as of December 31, 2022, were as follows (in thousands):

	Amount	Expiration Years
NOLs, federal (post-December 31, 2017)	\$ 214,226	Indefinite ⁽¹⁾
NOLs, federal (pre-January 1, 2018)	40,370	2034 through 2036
NOLs, state	207,398	2034 through 2042
Research and development tax credits, federal	8,303	2034 through 2042
Research and development tax credits, California	3,500	Indefinite
Research and development tax credits, state	501	2034 through 2037

(1) NOL carryforward generated after 2017 which can be carried forward indefinitely and can generally be used to offset up to 80% of future taxable income.

Notes to Consolidated Financial Statements

Utilization of the NOL carryforwards and research and development tax credit carryforwards may be subject to a substantial annual limitation under Section 382 of the Internal Revenue Code of 1986, as amended (Section 382) due to ownership changes that have occurred previously or that could occur in the future. These ownership changes may limit the amount of carryforwards that can be utilized annually to offset future taxable income. In general, an ownership change, as defined by Section 382, results from transactions increasing the ownership of certain stockholders or public groups in the stock of a corporation by more than 50% over a three-year period. The Company has not conducted a study to assess whether a change of control has occurred, including changes of control associated with the acquisitions of assets. Any limitation may result in expiration of a portion of the NOL carryforwards or research and development tax credit carryforwards before utilization; however, such limitation, if any, would not have an impact on the Company's financial statement due to the full valuation.

Uncertain Tax Positions

A reconciliation of the beginning and ending balance of total gross unrecognized tax benefits is as follows:

	Decen	ıber 31,
	2021	2022
	(in tho	usands)
Beginning balance of unrecognized tax benefits	\$ 7,440	\$ 7,821
Gross increases based on tax positions related to current year	319	355
Gross increases based on tax positions related to prior years	62	
Gross increases based on tax positions related to acquired entities	—	—
Ending balance of unrecognized tax benefits	\$ 7,821	\$ 8,176

The unrecognized tax benefits, if recognized, would not have an impact on the Company's effective tax rate assuming the Company continues to maintain a full valuation allowance position. As of December 31, 2022, no significant increases or decreases are expected to the Company's uncertain tax positions within the next twelve months.

The Company files income tax returns in the United States, and the states of California and Massachusetts. Due to net operating loss carryforwards, all years effectively remain open for income tax examination by tax authorities in the United States and states in which the Company files tax returns.

15. Net Loss Per Share

The following table summarizes the computation of basic and diluted net loss per share:

	Year	Ended December 31,
	2021	2022
	(in thousand	ls, except per share amounts)
Numerator:		
Net loss	\$ (237,31	2) \$ (130,904)
Denominator:		
Weighted-average common shares outstanding, basic, and diluted	171,81	5 213,477
Net loss per share, basic and diluted	\$ (1.3	8) \$ (0.61)

Notes to Consolidated Financial Statements

The following outstanding potentially dilutive common stock equivalents were excluded from the computation of diluted net loss per share for the periods presented because including them would have been antidilutive:

	Decemb	oer 31,
	2021	2022
	(in thou	sands)
Convertible preferred stock	743,126	819,291
Preferred stock warrants	2,293	—
Common stock options	46,265	70,740
Performance stock options (with performance conditions to be established)	5,500	2,850
Early exercised stock options subject to future vesting	4,144	4,174
Unvested restricted stock awards	39,222	22,764
Performance restricted stock (with performance conditions to be established)	7,000	4,000
Total	847,550	923,819

16. Related Party Transactions

In August 2021, the Company issued 40,000,000 shares of its Series A-2 convertible preferred stock for total cash proceeds of \$40.0 million to a significant stockholder that has designated members on the Company's board of directors and who is considered to be a related party.

In September 2022, the Company issued 23,333,334 shares of its Series B convertible preferred stock for total cash proceeds of \$35.0 million to two significant stockholders that have designated members on the Company's board of directors and each of whom is considered to be a related party.

In December 2022, 820,434 preferred stock warrants held by a related party were exercised at \$1.35 per share (see Note 12).

As of December 31, 2021 and 2022, the Company was obligated to pay Amgen \$6.3 million under the Amgen Collaboration Agreement, which was recorded within current liabilities on the consolidated balance sheets. As of December 31, 2021 and 2022, \$12.0 million and \$11.9 million related to amounts prepayable to Amgen were recorded as prepaid expenses and other current assets and/or other assets, respectively, on the consolidated balance sheets. During the year ended December 31, 2021 and 2022, the Company recorded \$0.5 million and \$25.1 million of research and development expenses with Amgen, respectively (see Note 10). Subject to certain conditions, Amgen is also obligated to provide the Company additional financing of up to \$100.0 million (see Note 11).

17. Defined Contribution Plan

The Company sponsors a 401(k) Plan whereby eligible employees can elect to contribute to the 401(k) Plan, subject to certain limitations, on a pretax basis. Effective from January 1, 2022, the Company commenced matching employee contributions at a rate of 50%, with a maximum matching employer contribution of up to 3% of employee contributions.

18. Subsequent Events

The Company evaluated subsequent events through May 2, 2023, the date these consolidated financial statements were available to be issued.

Condensed Consolidated Balance Sheets (in thousands, except par values)

	December 31, 2022	March 31, 2023 (unaudited)
Assets		. ,
Current assets:		
Cash and cash equivalents	\$240,943	\$ 210,870
Short-term marketable securities	130,941	134,676
Restricted cash	50	—
Prepaid expenses and other current assets	16,021	14,413
Total current assets	387,955	359,959
Long-term marketable securities	23,511	18,286
Property and equipment, net	2,411	2,276
Operating lease right-of-use assets	8,231	7,431
Restricted cash	1,213	1,213
Other assets	2,913	2,928
Total assets	\$ 426,234	\$ 392,093
Liabilities, Convertible Preferred Stock, and Stockholders' Deficit		
Current liabilities:		*
Accounts payable	\$ 7,147	\$ 1,135
Accrued liabilities	11,536	17,050
Early exercise liability, current portion	1,644	247
Operating lease liabilities, current portion	3,370	3,346
Total current liabilities	23,697	21,778
Operating lease liabilities, net of current portion	5,072	4,294
Early exercise liability, net of current portion	628	254
Total liabilities	29,397	26,326
Commitments and contingencies (Note 7)		
Convertible preferred stock, \$0.0001 par value; 820,349 shares authorized as of December 31, 2022 and March 31, 2023; 819,291 shares issued and outstanding as of December 31, 2022 and March 31, 2023; aggregate liquidation preference of \$856,756 as of March 31, 2023	843,687	843,687
Stockholders' deficit:		
Common stock, \$0.0001 par value; 1,210,000 shares authorized as of December 31, 2022 and March 31, 2023;		
255,883 and 256,639 shares issued and outstanding as of December 31, 2022 and March 31, 2023, respectively	16	16
Additional paid-in capital	21,417	25,496
Accumulated other comprehensive loss	(774)	(298)
Accumulated deficit	(467,509)	(503,134)
Total stockholders' deficit	(446,850)	(477,920)
Total liabilities, convertible preferred stock, and stockholders' deficit	\$ 426,234	\$ 392,093

The accompanying notes are an integral part of these condensed consolidated financial statements.

Condensed Consolidated Statements of Operations and Comprehensive Loss (unaudited, in thousands, except per share amounts)

	Three Mor Marc	
	2022	2023
Operating expenses:		
Research and development	\$ 22,149	\$ 29,485
Acquired in-process research and development	13,000	—
General and administrative	8,087	9,683
Total operating expenses	43,236	39,168
Loss from operations	(43,236)	(39,168)
Other income (expense):		
Interest income	86	3,569
Other income (expense), net	108	(26)
Total other income	194	3,543
Net loss	(43,042)	(35,625)
Other comprehensive income (loss):		
Unrealized gain (loss) on marketable securities	(178)	476
Comprehensive loss	\$ (43,220)	\$ (35,149)
Net loss per share, basic and diluted	\$ (0.21)	\$ (0.16)
Weighted-average shares outstanding, basic and diluted	204,122	229,715

The accompanying notes are an integral part of these condensed consolidated financial statements.

Condensed Consolidated Statements of Convertible Preferred Stock and Stockholders' Deficit (unaudited, in thousands)

		ertible ed Stock	Commo	n Stock	Additional Paid-In	Accumulated Other Comprehensive	Accumulated	Total Stockholders'
	Shares	Amount	Shares	Amount	Capital	Loss	Deficit	Deficit
Balance as of December 31, 2021	743,126	\$729,858	250,962	\$ 14	\$ 11,370	\$	\$ (336,605)	\$ (325,221)
Issuance of common stock upon exercise of stock options		_	513	1	163	_	—	164
Vesting of restricted common stock	_	_	_	_	606	_	_	606
Unrealized loss on marketable debt securities	_	—	_		_	(178)	_	(178)
Stock-based compensation	_	_	_	_	1,654	·	_	1,654
Net loss and comprehensive loss							(43,042)	(43,042)
Balance as of March 31, 2022	743,126	\$729,858	251,475	\$ 15	\$ 13,793	\$ (178)	\$ (379,647)	\$ (366,017)

		vertible red Stock Amount	Common Shares	<u>n Stock</u> Amount	Additional Paid-In Capital	Accumu Othe Compreh (Loss) (er ensive	Accumulated Deficit	Total Stockholders' Deficit
Balance as of December 31, 2022	819,291	\$843.687	255.883	\$ 16	\$ 21.417	<u>(L033)</u> ((774)	\$ (467,509)	\$ (446,850)
Issuance of common stock upon exercise of stock options			1,721	φ 10 —	602	Ψ	(// -)	\$ (407,505) 	602
Repurchase of unvested early exercised stock options		_	(965)	_	_			_	
Vesting of restricted common stock	_	_	<u>`</u> _`	_	1,282		—	_	1,282
Unrealized gain on marketable debt securities	_	_	_	_			476	_	476
Stock-based compensation		_	_	_	2,195			_	2,195
Net loss	_	—	_				—	(35,625)	(35,625)
Balance as of March 31, 2023	819,291	\$843,687	256,639	\$ 16	\$ 25,496	\$	(298)	\$ (503,134)	\$ (477,920)

The accompanying notes are an integral part of these condensed consolidated financial statements.

Condensed Consolidated Statements of Cash Flows (unaudited, in thousands)

	Three Mon Marcl	
	2022	2023
Operating activities:	¢ (42.0.42)	
Net loss	\$ (43,042)	\$ (35,625)
Adjustments to reconcile net loss to net cash used in operating activities:	12.000	
Acquired in-process research and development	13,000	
Stock-based compensation	1,654	2,195
Noncash operating lease expense Depreciation and amortization	222 147	799
Net (accretion) and amortization of investments in marketable securities	2	158 (892)
Change in fair value of convertible preferred stock warrants		
Other	(111) (2)	 15
Changes in operating assets and liabilities:	(2)	15
Prepaid expenses and other current assets	(769)	7,858
Other assets	7,672	/,050
Accounts payable	(13)	(6,012)
Accrued liabilities	(10,703)	(736)
Operating lease liabilities	(243)	(801)
Net cash used in operating activities	(32,186)	(33,041)
Investing activities:	(32,100)	(35,041)
Purchases of marketable securities	(72,430)	(41,483)
Cash paid for an acquisition of assets	(13,000)	(+1,+05)
Proceeds from sales and maturities of marketable securities	(13,000)	44,336
Purchases of property and equipment	(176)	(36)
Net cash (used in) provided by investing activities	(85,606)	2,817
Financing activities:	(00,000)	2,017
Proceeds from exercise of stock options	164	602
Repurchase of unvested early exercised stock options		(491)
Payments for deferred offering costs	(515)	(10)
Net cash (used in) provided by financing activities	(351)	101
Net change in cash and cash equivalents and restricted cash	(118,143)	(30,123)
Cash and cash equivalents and restricted cash at beginning of year	409,372	242,206
	\$ 291,229	\$212,083
Cash and cash equivalents and restricted cash at end of year	\$ 291,229	\$212,065
Components of cash and restricted cash:	¢ 201 1 7 2	#040.0 7 0
Cash and cash equivalents	\$ 291,179	\$210,870
Restricted cash	50	1,213
Total cash and cash equivalents and restricted cash	\$ 291,229	\$212,083
Supplemental disclosure of noncash investing and financing activities:		
Deferred offering costs related to initial public offering included in accrued liabilities	<u>\$ (193</u>)	<u>\$5</u>

The accompanying notes are an integral part of these condensed consolidated financial statements.

Notes to Unaudited Condensed Consolidated Financial Statements

1. Organization and Liquidity

Description of Business

Neumora Therapeutics, Inc. (the Company), formerly known as RBNC Therapeutics, Inc., was originally incorporated in the State of Delaware in November 2019, and is headquartered in Watertown, Massachusetts and also has operations in South San Francisco, California.

The Company is a clinical-stage biopharmaceutical company founded to confront the global brain disease crisis by taking a fundamentally different approach to the way treatments for brain diseases are developed. The Company's therapeutic pipeline currently consists of clinical and preclinical neuroscience programs that target novel mechanisms of action for a broad range of underserved neuropsychiatric disorders and neurodegenerative diseases.

As of March 31, 2023, the Company has devoted a significant portion of its financial resources and efforts to building its organization, acquiring technologies and companies, executing clinical and preclinical studies, conducting research and development, identifying and developing potential product candidates, building its precision neuroscience tools, organizing and staffing the Company, business planning, establishing, maintaining and protecting its intellectual property portfolio, raising capital and providing general and administrative support for these operations. The Company has not generated revenue from the sale of products.

Liquidity

The Company has incurred net losses and negative cash flows from operations since inception and as of March 31, 2023, had an accumulated deficit of \$503.1 million. The Company incurred a net loss of \$43.0 million and \$35.6 million during the three months ended March 31, 2022 and 2023, respectively. As of March 31, 2023, the Company had cash, cash equivalents and marketable securities of \$363.8 million, which are available to fund future operations.

The Company expects to incur additional losses in the future as it continues its research and development efforts, advances its product candidates through preclinical and clinical development, enhances its precision neuroscience approach and programs, expands its product pipeline, seeks regulatory approval, prepares for commercialization, as well as hires additional personnel, protects its intellectual property and grows its business. The Company will need to raise additional capital to support its continuing operations and pursue its long-term business plan, including to complete the development and commercialization of its product candidates, if approved. Such activities are subject to significant risks and uncertainties, including clinical failure which can impact the Company's ability to secure additional funding. The Company has historically financed its operations primarily with the proceeds from the issuance of its convertible preferred stock, borrowings pursuant to convertible promissory notes and cash acquired in its acquisitions of assets. The Company may raise additional capital through public or private equity offerings or debt financings or other capital sources, which may include strategic collaborations or other arrangements with third parties, or other sources of financing. However, there is no guarantee that any of these financing or opportunities will be executed or realized on favorable terms, if at all, and some could be dilutive to existing stockholders. The Company's ability to raise additional capital through either the issuance of equity or debt is dependent on a number of factors including, but not limited to, Company prospects, which itself is subject to a number of development and business risks and uncertainties, as well as uncertainty about whether the Company would be able to raise such additional capital at a price or on terms that are favorable.

Notes to Unaudited Condensed Consolidated Financial Statements

The Company believes that its existing cash, cash equivalents and marketable securities as of March 31, 2023 will be sufficient to support operations for at least the next 12 months from the date these condensed consolidated financial statements were available to be issued.

2. Summary of Significant Accounting Policies and Basis of Presentation

Basis of Presentation and Consolidation

The accompanying condensed consolidated financial statements have been prepared in accordance with U.S. generally accepted accounting principles (U.S. GAAP) and applicable rules and regulations of the Securities and Exchange Commission (SEC) regarding annual financial reporting. The condensed consolidated financial statements include all accounts of the Company and its wholly-owned subsidiaries. All intercompany transactions and balances have been eliminated in consolidation.

Unaudited Interim Condensed Consolidated Financial Statements

The condensed consolidated balance sheet as of March 31, 2023, condensed consolidated statements of operations and comprehensive loss, statements of convertible preferred stock and stockholders' deficit and cash flows for the three months ended March 31, 2022 and 2023 and related notes to condensed consolidated financial statements are unaudited. These unaudited interim condensed consolidated financial statements have been prepared on the same basis as the Company's annual consolidated financial statements and, in the opinion of management, reflect all adjustments (consisting only of normal recurring adjustments) that are necessary for the fair statement of the Company's consolidated financial position, results of operations and cash flows for the periods presented. The condensed consolidated results of operations for the three months ended March 31, 2023 are not necessarily indicative of the results to be expected for the full year or for any other future annual or interim period. The condensed consolidated balance sheet as of December 31, 2022 included herein was derived from the audited consolidated financial statements as of that date. These interim condensed consolidated financial statements should be read in conjunction with the Company's audited consolidated financial statements included elsewhere in this prospectus.

Use of Estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts in the condensed consolidated financial statements and accompanying notes. These estimates form the basis for judgments the Company makes about the carrying values of assets and liabilities that are not readily apparent from other sources. The Company bases its estimates and judgments on historical experience and on various other assumptions that the Company believes are reasonable under the circumstances. These estimates are based on management's knowledge about current events and expectations about actions the Company may undertake in the future. These judgments, estimates and assumptions are used for, but not limited to, accrued research and development expenses, accounting for acquisitions of assets, fair value of certain assets and liabilities, the fair value of the Company's convertible preferred stock, the fair value of the Company's convertible preferred stock, the fair value of the Company's convertible preferred stock, the fair value of the Company's convertible and related incremental borrowing rate, and uncertain tax positions and the valuation allowance for net deferred tax assets. Actual results may differ from the Company's estimates.

Risks and Uncertainties

The Company is subject to certain risks and uncertainties, including, but not limited to, changes in any of the following areas that the Company believes could have a material adverse effect on future financial position or

Notes to Unaudited Condensed Consolidated Financial Statements

results of operations: successfully develop, manufacture, and market any approved products; obtain regulatory approval from the U.S. Food and Drug Administration or foreign regulatory agencies prior to commercial sales; new technological innovations; dependence on key personnel, protection of intellectual property; compliance with governmental regulations; uncertainty of market acceptance of any approved products; product liability; and the need to obtain additional financing.

While the Company continues to monitor the impact of the ongoing COVID-19 pandemic on its business, the extent of the impact of the pandemic on the Company's business, operations, and clinical development timelines and plans remains uncertain. The COVID-19 pandemic delayed patient enrollment in the Company's Phase 2 clinical trial of NMRA-140 (see Note 6) and may further delay the Company's initiation of preclinical studies and clinical trials, interrupt its supply chain, disrupt regulatory activities, or have other adverse effects on its business and operations. The extent of the impact of the COVID-19 pandemic on the Company's preclinical studies or clinical trials will depend on future developments, which are uncertain. In response to the COVID-19 pandemic, the Company has implemented measures intended to help minimize its risk of exposure to the virus for its employees, including policies that allow its employees to work remotely. Certain third-party service providers have also experienced and may continue to experience shutdowns or other business disruptions. The Company cannot predict the specific extent, duration, or full impact that the COVID-19 pandemic will have on its condensed consolidated financial condition and results of operations.

Marketable Securities

The Company invests its excess cash in marketable debt securities with high credit ratings including but not limited to money market funds, securities issued by the U.S. government and its agencies and commercial paper that are accounted for as available-for-sale and carried at fair value. Marketable securities are classified as short-term or long-term based on the maturity date and their availability to meet current operating requirements. The amortized cost of debt securities is adjusted for amortization of premiums and accretion of discounts to maturity, which is included in interest income in the condensed consolidated statements of operations and comprehensive loss. Realized gains and losses on marketable securities, if any, are included in other income (expense), net. The cost of securities sold is determined based on the trade date using the specific identification method.

The Company periodically assesses its available-for-sale debt securities for impairment. For debt securities in an unrealized loss position, this assessment first considers the Company's intent to sell, or whether it is more likely than not that it will be required to sell the security before recovery of its amortized cost basis. If either of these criteria are met, the debt security's amortized cost basis is written down to fair value within other income (expense), net. For debt securities in an unrealized loss position that do not meet the aforementioned criteria, the Company assesses whether the decline in fair value has resulted from credit losses or other factors. In making this assessment, the extent to which fair value is less than amortized cost, any changes to the rating of the security by a rating agency, and any adverse conditions specifically related to the security is considered, among other factors. If this assessment indicates that a credit loss may exist, the present value of cash flows expected to be collected from the security are compared to the amortized cost basis of the security. If the present value of cash flows expected to be collected is less than the amortized cost basis, a credit loss exists and an allowance for credit losses will be recorded in other income (expense), net, limited by the amount that the fair value is less than the amortized cost basis. Any additional impairment not recorded through an allowance for credit losses are recorded as provision for (or reversal of) credit loss expense. Losses are charged against the allowance when management believes the un-collectability of an available-for-sale security is confirmed or when either of the criteria regarding intent or requirement to sell is met. These changes are recorded in other income (expense), net.

Notes to Unaudited Condensed Consolidated Financial Statements

Fair Value of Financial Instruments

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants at the measurement date. The Company measures fair value by maximizing the use of observable inputs, where available, and minimizing the use of unobservable inputs when measuring fair value. Financial assets and liabilities recorded at fair value in the condensed consolidated balance sheets are categorized in the fair value hierarchy based upon the lowest level of input that is significant to the fair value as follows:

Level 1—Observable inputs such as unadjusted, quoted prices in active markets for identical assets or liabilities at the measurement date.

Level 2—Inputs (other than quoted prices included in Level 1) are either directly or indirectly observable inputs for similar assets or liabilities. These include quoted prices for identical or similar assets or liabilities in active markets and quoted prices for identical or similar assets of liabilities in markets that are not active.

Level 3—Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

To the extent that the valuation is based on models or inputs that are less observable or unobservable in the market, the determination of fair value requires more judgment. Accordingly, the degree of judgment exercised by the Company in determining fair value is greatest for instruments categorized in Level 3. A financial instrument's level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value of the instrument.

Acquisitions

The Company evaluates mergers, acquisitions, and other similar transactions to assess whether or not the transaction should be accounted for as a business combination or an acquisition of assets. The Company first identifies who is the acquiring entity by determining if the target is a legal entity or a group of assets or liabilities. If control over a legal entity is being evaluated, the Company also evaluates if the target is a variable interest or voting interest entities, the Company applies a screen test to determine if substantially all of the fair value of the gross assets acquired is concentrated in a single identifiable asset or group of similar identifiable assets. If the screen test is met, the transaction is accounted for as an acquisition of assets. If the screen is not met, further determination is required as to whether or not the Company has acquired inputs and processes that have the ability to create outputs which would meet the definition of a business. Significant judgment is required in the application of the screen test to determine whether an acquisition is a business combination or an acquisition of assets.

For an acquisition of assets, a cost accumulation model is used to determine the cost of the acquisition. Common stock and convertible preferred stock issued as consideration in an acquisition of assets are generally measured based on the acquisition date fair value of the equity interests issued. Direct transaction costs are recognized as part of the cost of an acquisition of assets. The Company also evaluates which elements of a transaction should be accounted for as a part of an acquisition of assets and which should be accounted for separately.

The cost of an acquisition of assets, including transaction costs, are allocated to identifiable assets acquired and liabilities assumed based on a relative fair value basis. Goodwill is not recognized in an acquisition of assets. Any difference between the cost of an acquisition of assets and the fair value of the net assets acquired is allocated to the non-monetary identifiable assets based on their relative fair values. Assets acquired as part of an acquisition of assets that are considered to be in-process research and development intangible assets (IPR&D) are

Notes to Unaudited Condensed Consolidated Financial Statements

immediately expensed and recorded as a component of acquired in-process research and development expense in the condensed consolidated statements of operations and comprehensive loss unless there is an alternative future use in other research and development projects.

In addition to upfront consideration, the Company's acquisitions of assets may also include contingent consideration payments to be made for future milestone events or royalties on net sales of future products. The Company assesses whether such contingent consideration is subject to liability classification and fair value measurement or meets the definition of a derivative. Contingent consideration payments in an acquisition of assets not required to be classified as a liability at fair value, or are accounted for as derivatives that qualify for a scope exception from derivative accounting, are recognized when the contingency is resolved, and the consideration is paid or becomes payable Contingent consideration payments required to be classified as a liability, or are accounted for as derivatives and do not qualify for a scope exception from derivative accounting, are recorded at fair value on the date of the acquisition and are subsequently remeasured to fair value at each reporting date. Contingent consideration payments made prior to regulatory approval are expensed as incurred. Any future payments that are contingent upon continued services to the Company are treated as compensation and recognized when it is probable such amounts will become payable.

If the target legal entity is determined to be a variable interest entity (VIE) and not a business, all tangible and intangible assets acquired, including any IPR&D assets but excluding goodwill, and liabilities assumed, including contingent consideration, are recorded at their fair values. If the acquisition is determined to be a business combination, all tangible and intangible assets acquired, including any IPR&D assets, and liabilities assumed, including contingent consideration, are recorded at their fair values. Goodwill is recognized for any difference between the consideration transferred and fair value determination. In addition, direct transaction costs in connection with business combinations are expensed as incurred, rather than capitalized.

The tax basis of assets acquired in either a business combination or acquisition of assets are compared to the book basis of such assets resulting in the recognition of deferred tax assets and liabilities.

Deferred Offering Costs

Deferred offering costs, which consist of direct incremental legal, consulting, banking, and accounting fees primarily relating to the Company's contemplated initial public offering (IPO) are capitalized and will be offset against proceeds upon the consummation of the offering within stockholders' deficit. In the event an anticipated offering is terminated, deferred IPO offering costs will be expensed. As of December 31, 2022 and March 31, 2023, deferred offering costs included in other assets in the condensed consolidated balance sheets were \$2.9 million.

Convertible Preferred Stock

The Company has classified convertible preferred stock, which is contingently redeemable, as temporary equity in the condensed consolidated balance sheets due to terms that allow for the effective redemption of such shares in cash at the option of the holders upon certain liquidation events that are not solely within the Company's control.

The carrying values of the convertible preferred stock are adjusted to their liquidation preferences if and when it becomes probable that such a liquidation event will occur. The Company did not accrete the value of the convertible preferred stock to its redemption value since a liquidation event was not considered probable as of December 31, 2022 and March 31, 2023.

Notes to Unaudited Condensed Consolidated Financial Statements

The Company also evaluates the features of its convertible preferred stock to determine if the features require bifurcation from the underlying shares by evaluating whether they are clearly and closely related to the underlying shares and whether they meet the definition of a derivative.

Research and Development Expenses and Related Prepaid Assets and Accrued Liabilities

Research and development costs are expensed as incurred. Research and development expenses primarily consist of internal research and development expense, including personnel-related expenses (such as salaries, benefits and noncash stock-based compensation) and other expenses, including laboratory supplies and other non-capital equipment utilized for in-house research, research and consulting expenses, software development costs, license fees and allocated expenses, including facilities costs and depreciation and amortization; external research and development expenses incurred under arrangements with vendors conducting research and development services on its behalf, such as contract research organizations (CROs), preclinical testing organizations and contract manufacturing organizations (CMOs). Costs to develop the Company's platform information technologies are recorded as research and development expense unless the criteria to be capitalized as internal-use software costs is met. Payments made prior to the receipt of goods or services to be used in research and development are capitalized, evaluated for current or long-term classification, and included in prepaid expenses and other current assets or other assets in the condensed consolidated balance sheets based on when the goods are received or the services are expected to be received or consumed, and recognized in research and development expenses when they are realized.

The Company is required to estimate expenses resulting from its obligations under contracts with vendors, service providers and clinical site agreements in connection with conducting clinical trials. The financial terms of these contracts are subject to negotiations which vary from contract to contract and may result in cash flows that do not match the periods over which materials or services are provided. The Company estimates and records accrued expenses for the related research and development activities based on the level of services performed but not yet invoiced pursuant to agreements established with its service providers, according to the progress of preclinical studies, clinical trials or related activities, and discussions with applicable personnel and service providers as to the progress or state of consummation of goods and services.

During the course of a clinical trial, the rate of expense recognition is adjusted if actual results differ from the Company's estimates. The Company estimates accrued expenses as of each balance sheet date in its condensed consolidated financial statements based on the facts and circumstances known at that time. The clinical trial accrual is dependent in part upon the timely and accurate reporting of CROs, CMOs and other third-party vendors. Although the Company does not expect its estimates to be materially different from amounts actually incurred, its estimate may vary from the actual results. To date, the Company has not experienced material differences between its accrued expenses and actual expenses.

Stock-Based Compensation

The Company maintains equity incentive plans (the Plans) as a long-term incentive for employees, directors, and non-employee service providers. The Company accounts for all stock-based awards based on their fair value on the date of the grant. For stock-based awards with service only vesting conditions, the Company recognizes expense on a straight-line basis over the requisite service period, which is generally the vesting period of the respective award. For awards with performance vesting conditions, the Company evaluates the probability of achieving the performance vesting condition at each reporting date. The Company begins to recognize expense for awards with performance-based vesting conditions using an accelerated attribution method when it is deemed probable that the performance condition will be met. For awards with both market and service vesting conditions,

Notes to Unaudited Condensed Consolidated Financial Statements

the Company recognizes expense using the accelerated attribution method over the derived requisite service period. Stock-based compensation is classified in the condensed consolidated statements of operations and comprehensive loss based on the function to which the related services are provided. Forfeitures are accounted for as they occur.

The fair value of stock option awards with only service conditions and/or performance-based vesting conditions are estimated on the date of grant using the Black-Scholes option pricing model, which requires inputs based on certain subjective assumptions, including the expected stock price volatility, the expected term of the option, the risk-free interest rate for a period that approximates the expected term of the option, and the expected dividend yield. The fair value of stock options awards with market-based vesting conditions is estimated on the grant date using the Monte Carlo simulation model, which utilizes subjective assumptions, including volatility and the derived service periods, that determine the probability of satisfying the market condition stipulated in the award to estimate the fair value of the award. The fair value of restricted stock awards is based on the estimated fair value of the Company's common stock on the date of grant.

The fair value of the Company's common stock is determined by the Company's board of directors with the assistance of management. The fair value of common stock is determined using valuation methodologies which utilize certain assumptions, including probability weighting of events, volatility, time to an exit event, a risk-free interest rate and an assumption for a discount for lack of marketability. In determining the fair value of common stock, the methodologies used to estimate the enterprise value of the Company were performed using methodologies, approaches, and assumptions consistent with the American Institute of Certified Public Accountants' Accounting and Valuation Guide, *Valuation of Privately-Held-Company Equity Securities Issued as Compensation*.

Comprehensive Loss

Comprehensive loss includes net loss and certain changes in stockholders' deficit that are excluded from net loss, such as unrealized losses on the Company's available-for-sale marketable securities.

Emerging Growth Company Status

The Company is an emerging growth company, as defined in the Jumpstart Our Business Startups Act of 2012 (the JOBS Act). Under the JOBS Act, emerging growth companies can delay adopting new or revised accounting standards issued subsequent to the enactment of the JOBS Act, until such time as those standards apply to private companies. The Company has elected to use this extended transition period for complying with new or revised accounting standards that have different effective dates for public and private companies until the earlier of the date that it (i) is no longer an emerging growth company or (ii) affirmatively and irrevocably opts out of the extended transition period provided in the JOBS Act. As a result, these condensed consolidated financial statements may not be comparable to companies that comply with the new or revised accounting pronouncements as of public company effective dates.

Recent Accounting Pronouncements Not Yet Adopted

The Company continues to monitor new accounting pronouncements issued by the FASB and does not believe any accounting pronouncements issued through the date of this report, which have not yet been adopted, will have a material impact on the Company's condensed consolidated financial statements.

Notes to Unaudited Condensed Consolidated Financial Statements

3. Cash Equivalents and Marketable Securities

The following table summarizes the amortized cost and fair value of the Company's cash equivalents and marketable securities by major investment category for the period indicated:

	December 31, 2022													
	Amortized Unrealized Unre Cost Gain L		Amortized Unrealized Un Cost Gain		Amortized Unrealized Unrealized Cost Gain Loss		Amortized Un		Unrealized Gain		Amortized Unrealized Unrealized		realized Loss	Estimated Fair Value
Cash equivalents:			((, uounu	<i>.</i>)									
Money market funds	\$ 183,353	\$		\$		\$ 183,353								
Total cash equivalents	\$ 183,353	\$	_	\$	_	\$ 183,353								
Marketable securities:														
U.S. government and agency debt securities	\$ 57,534	\$		\$	(272)	\$ 57,262								
Corporate debt securities	42,267		1		(266)	42,002								
Commercial paper	55,425				(237)	55,188								
Total marketable securities	\$ 155,226	\$	1	\$	(775)	\$ 154,452								
Total cash equivalents and marketable securities	\$ 338,579	\$	1	\$	(775)	\$ 337,805								

The Company's marketable securities by contractual maturity were (in thousands):

	December 31, 2022
Within one year	\$ 130,941
After one year through two years	23,511
Total marketable securities	\$ 154,452

Notes to Unaudited Condensed Consolidated Financial Statements

The following table summarizes the amortized cost and fair value of the Company's cash equivalents and marketable securities by major investment category for the period indicated:

	March 31, 2023					
	Amortized Cost	Gross Unrealized Gain (in tho		zed Unrealiz		Estimated Fair Value
Cash equivalents:			(in the	, uounuo,	,	
Money market funds	\$187,017	\$	—	\$	_	\$187,017
Commercial paper	1,992		_		—	1,992
Total cash equivalents	\$189,009	\$	_	\$		\$189,009
Marketable securities:						
U.S. government and agency debt securities	\$ 46,755	\$	44	\$	(63)	\$ 46,736
Corporate debt securities	22,269		1		(114)	22,156
Commercial paper	84,236		6		(172)	84,070
Total marketable securities	\$153,260	\$	51	\$	(349)	\$152,962
Total cash equivalents and marketable securities	\$342,269	\$	51	\$	(349)	\$341,971

The Company's marketable securities by contractual maturity (in thousands):

	March 31, 2023
Within one year	\$134,676
After one year through two years	18,286
Total marketable securities	\$ 152,962

As of March 31, 2023, the Company has not realized any material gains or losses on its marketable securities, including any impairment charges on its securities related to expected credit losses. As of March 31, 2023, the aggregate difference between the amortized cost and fair value of each security in an unrealized loss position was de minimis. Since any provision for expected credit losses for a security held is limited to the amount the fair value is less than its amortized cost, no allowance for expected credit loss was deemed necessary at March 31, 2023. See Note 4 for further information regarding the fair value of the Company's financial instruments.

4. Fair Value Measurements

The carrying amounts of the Company's financial instruments, including prepaid expenses and other current assets, accounts payable, accrued liabilities and the current portion of operating lease liabilities approximate fair value due to the short-term nature of those instruments.

Notes to Unaudited Condensed Consolidated Financial Statements

The following tables summarize the Company's assets and liabilities measured at fair value on a recurring basis by level within the valuation hierarchy:

		December 31, 2022						
	Level 1	Level 2						
		(in thousands)						
ssets:								
Cash equivalents:								
Money market funds	\$ 183,353	\$ —	\$ —	\$ 183,353				
Marketable securities:								
U.S. government and agency debt securities	44,777	12,485		57,262				
Corporate debt securities	_	42,002	_	42,002				
Commercial paper	_	55,188	_	55,188				
Total assets measured at fair value	\$ 228,130	\$ 109,675	\$	\$ 337,805				
			31, 2023					
	Level 1	Level 2 (in tho	Level 3 usands)	Total				
ssets:								
Cash equivalents:								
Money market funds	\$ 187,017	\$ —	\$ —	\$ 187,017				
	\$ 187,017 —	\$	\$					
Money market funds Commercial paper Marketable securities:	\$ 187,017 —	•	\$					
Commercial paper Marketable securities:	\$ 187,017 — 29,229	•	\$	\$ 187,017 1,992 46,736				
Commercial paper Marketable securities: U.S. government and agency debt securities		1,992 17,507	\$	1,992 46,736				
Commercial paper Marketable securities:		1,992	\$	1,992				

Money market funds are highly liquid and actively traded marketable securities that generally transact at a stable \$1.00 net asset value representing its estimated fair value. The Company estimates the fair value of its commercial paper, corporate debt securities and U.S. government and agency debt securities by taking into consideration valuations obtained from third-party pricing services. The pricing services utilize industry standard valuation models, including both income and market-based approaches, for which all significant inputs are observable, either directly or indirectly, to estimate fair value. These inputs include reported trades of and broker/dealer quotes on the same or similar securities, issuer credit spreads, benchmark securities, prepayment/default projections based on historical data, and other observable inputs.

Convertible Preferred Stock Warrant Liability

The Company issued convertible preferred stock warrants to purchase shares of its Series A-1 convertible preferred stock in September 2020, which did not meet the criteria for equity classification. The estimated fair value of the convertible preferred stock warrant liability, prior to exercise or expiration, was determined based on significant inputs not observable in the market, which represents a Level 3 measurement within the fair value hierarchy. All of the convertible preferred stock warrants were exercised or had expired on or before December 31, 2022. There were no outstanding convertible preferred stock warrants as of December 31, 2022 or March 31, 2023.

Notes to Unaudited Condensed Consolidated Financial Statements

5. Balance Sheet Components

Prepaid Expenses and Other Current Assets

Prepaid expenses and other current assets consisted of the following:

	Dec	ember 31, 2022 (in the	N ousands)	Iarch 31, 2023
Prepaid research and development costs (\$11.9 million and \$10.0 million	(in tiousands)			
from related party in 2022 and 2023, respectively)	\$	13,484	\$	12,361
Prepaid other		1,618		1,265
Other receivables		919		787
Total prepaid expenses and other current assets	\$	16,021	\$	14,413

Accrued Liabilities

Accrued liabilities consisted of the following:

	December 31, 2022		Μ	arch 31, 2023
Accrued research and development services (nil and \$6.3 million due to				
related party in 2022 and 2023, respectively)	\$	889	\$	7,606
Compensation and benefits		8,400		4,734
Accrued clinical trial and preclinical costs		652		2,440
Professional services		1,187		1,523
Other		408		747
Total accrued liabilities	\$	11,536	\$	17,050

6. Acquisitions of Assets

BlackThorn Therapeutics, Inc.

In June 2020, the Company entered into an agreement and plan of merger (BlackThorn Merger Agreement) to acquire all of the equity interests of BlackThorn Therapeutics, Inc. (BlackThorn), which became effective in September 2020. The Company acquired BlackThorn for its in-process research and development programs, including an antagonist of the Kappa Opioid Receptor (NMRA-140) for the treatment of major depressive disorders and an tagonist of the Vasopressin 1a Receptor (NMRA-511) for the treatment of anxiety disorders. The Company also gained access to a cloud-based computational psychiatry and data platform that was being developed to support drug target identification, patient stratification and objective clinical trial endpoints. Both NMRA-140 and NMRA-511 were exclusively licensed to BlackThorn by The Scripps Research Institute (TSRI). The acquisition was accounted for as an acquisition of assets.

The BlackThorn Merger Agreement requires the Company to pay the former stockholders of BlackThorn contingent consideration (i) with respect to NMRA-140, in the form of development and regulatory approval milestones of up to an aggregate amount of \$365.0 million, which includes a milestone payment of \$90.0 million

Notes to Unaudited Condensed Consolidated Financial Statements

that will become due upon dosing the first patient in the Phase 3 clinical trial for NMRA-140, and sales-based milestones of up to an aggregate amount of \$450.0 million and (ii) with respect to NMRA-511, in the form of development and regulatory approval milestones of up to an aggregate amount of \$100.0 million, and sales-based milestones of up to an aggregate amount of \$100.0 million (BlackThorn Milestones). At the Company's sole discretion, the BlackThorn Milestone payments may be settled in cash or shares of the Company, or a combination of both, subject to the provisions of the BlackThorn Milestones were subject to liability classification and/or derivative accounting and any such contingent consideration will be recognized when the contingency is resolved, and the consideration becomes payable. As of March 31, 2023, none of the milestones had been achieved and no such amounts were deemed due or payable.

BlackThorn Carveout Plan

The BlackThorn Merger Agreement required that the Company establish a carveout plan (the BlackThorn Carveout Plan), pursuant to which each BlackThorn stock option holder as of immediately prior to the closing date was allocated a certain number of units (the BlackThorn Carveout Units) based on the number of shares underlying the outstanding options held by each participant at that time. Each BlackThorn Carveout Unit represents a right to receive a portion of the BlackThorn Milestone payment (the BlackThorn Carveout Payments) upon the later of (i) the achievement of a BlackThorn Milestone and (ii) the vesting of the BlackThorn Carveout Unit.

The BlackThorn Carveout Units vest based on time-based schedules that mirror the vesting schedules for the original option awards held by each participant. As of the closing date in September 2020, a portion of the BlackThorn Carveout Units corresponding to the pre-acquisition service periods were fully vested (Vested Carveout Units). The remainder of the BlackThorn Carveout Units vest subject to the continued service of the participants.

The Vested Carveout Units represent contingent consideration for the acquisition as they are attributable to pre-acquisition services rendered by the participants and continuing service is not required for the participants to receive future payments upon a BlackThorn Milestone being achieved. The Company will recognize the contingent consideration obligation for the Vested Carveout Units when the contingency is resolved, and the consideration becomes payable. The BlackThorn Carveout Units that were unvested as of the closing date are dependent on the continued service of participants and were deemed to be a compensation arrangement. The Company will recognize the compensation starting from the time payment becomes probable over each participant's service period. As of March 31, 2023, none of the BlackThorn Milestones had been achieved or were probable of being achieved, and no contingent consideration obligation related to the BlackThorn Carveout Plan had been recorded.

Syllable Life Sciences, Inc.

In September 2020, the Company entered into an agreement and plan of merger (Syllable Merger Agreement) to acquire all of the outstanding equity of Syllable Life Sciences, Inc. (Syllable). The Company acquired Syllable to gain access the rights granted to Syllable under an exclusive license agreement (as amended, the Harvard License Agreement) with President and Fellows of Harvard College (Harvard) and an associated behavior analysis machine learning and computer vision software tool which Syllable was developing to identify and quantify behavior as an indicator of neurological conditions. The transaction was accounted for as an acquisition of assets.

The former stockholders of Syllable are entitled to contingent consideration in the form of development milestones of up to an aggregate of \$5.0 million (Syllable Milestones). At the Company's sole discretion, the

Notes to Unaudited Condensed Consolidated Financial Statements

Syllable Milestone payments may be settled, in cash or shares equity of the Company, or a combination of both, subject to the provisions of the Syllable Merger Agreement and were not subject to liability classification and/or derivative accounting. Any such contingent consideration will be recognized when the contingency is resolved, and the consideration becomes payable. As of March 31, 2023, none of the milestones had been achieved and no such amounts were deemed due or payable.

Alairion, Inc.

In November 2020, the Company entered into an agreement and plan of merger (Alairion Merger Agreement) to acquire all of the outstanding equity of Alairion, Inc. (Alairion). The acquisition of Alairion allowed the Company to expand its program pipeline by gaining rights to two preclinical stage research and development programs focused on the treatment of sleep disorders, an H1 receptor antagonist program (the H1 Program) and a GABA receptor positive allosteric modulator program (the GABA Program). The acquisition also provided the Company with access to a license for software that records sleep and related drug discovery and optimization technology platform. The transaction was accounted for as an acquisition of assets.

The holders of Alairion common stock outstanding as of immediately prior to the closing date received non-transferable rights to future milestone payments of up to \$33.5 million upon the achievement of specified development events and \$135.0 million upon the achievement of specified commercialization events related to the H1 Program and the GABA Program (the Alairion Milestones).

The Alairion Milestone payments may be settled, at the Company's sole discretion, in cash or shares of the Company, or a combination of both, subject to the provisions of the Alairion Merger Agreement. None of the Alairion Milestones were subject to liability classification and/or derivative accounting and any such contingent consideration will be recognized when the contingency is resolved, and the consideration becomes payable. None of the Alairion Milestones have been recognized to date. The Company has ceased the active program acquired from Alairion.

Alairion Carveout Plan

The Alairion Merger Agreement also required the Company to establish a carveout plan (the Alairion Carveout Plan) pursuant to which a portion of the payments under the Alairion Milestones, up to \$3.0 million (the Alairion Carveout Payments), are reserved for participants under the Alairion Carveout Plan. Participants in the Alairion Carveout Plan are comprised of former Alairion employees, several of whom were retained as employees or consultants of the Company post-acquisition. Under the Alairion Carveout Plan, the Company granted the participants retention units, each representing a right to receive future payments upon the completion of Phase 2 clinical studies with respect to either the H1 Program or the GABA Program and achievement of the related Alairion Milestone, subject to the continued service of the participant until such time and were deemed to be a compensation arrangement. The retention units are forfeited if a participant's service is terminated prior to the receipt of results from the Phase 2 clinical studies associated with the H1 Program and GABA Program. The Company will recognize such compensation starting from the time payment becomes probable over each participant's service period. As of March 31, 2023, it was not probable that Phase 2 clinical studies would be achieved, and no compensation related to the Alairion Carveout Plan had been recorded.

Amgen Inc. Licenses

In September 2021, the Company entered into two license agreements with Amgen Inc. (Amgen) pursuant to which it obtained exclusive, worldwide licenses to develop, manufacture, use, commercialize and distribute

Notes to Unaudited Condensed Consolidated Financial Statements

products containing compounds that are directed to, in one case, CK1d, and in the other case, glucocerebrocidase (GCase), both for the treatment of neurodegenerative diseases (the Amgen License Agreements) and related know-how and clinical material (collectively, the Amgen IPR&D Assets). Concurrently, the Company also executed a research collaboration agreement as well as a stock purchase agreement with Amgen. Both agreements were deemed to be separate transactions and not accounted for as part of the acquisition of assets. The Company accounted for these transactions as acquisitions of assets.

The total upfront consideration transferred to Amgen of 157.0 million shares of the Company's Series A-2 convertible preferred stock, with an acquisition date fair value of \$157.0 million was allocated to the Amgen IPR&D Assets.

Under these two license agreements, Amgen is eligible to receive contingent consideration up to an aggregate of \$360.0 million in commercial milestone payments per product payable in cash with a compound directed to CK1d and up to an aggregate of \$360.0 million in commercial milestone payments per product payable in cash with a compound directed to GCase, in each case, upon the achievement of certain sales thresholds and single digit royalties on potential future net sales, related to CK1d or GCase. Such contingent consideration was not subject to liability classification and/or derivative accounting and will be recognized when the contingency is resolved, and the consideration becomes payable. As of March 31, 2023, none of the milestones had been achieved and no such amounts were deemed due or payable.

In addition, until a specified period of time following the achievement of the first successful Phase 2 clinical trial for any licensed product, if the Company chooses to sell, transfer, sublicense or divest rights to a licensed product in certain major markets, Amgen has a 90-day exclusive right of first negotiation to enter into an agreement with the Company for such rights. The Company determined that these rights of first negotiation were not freestanding instruments from the Amgen License Agreements and did not meet the definition of a derivative.

Vanderbilt License

In February 2022, the Company and Vanderbilt University (Vanderbilt) entered into a license agreement (Vanderbilt License Agreement). Pursuant to the Vanderbilt License Agreement, the Company obtained an exclusive, worldwide royalty-bearing, sublicensable (subject to certain restrictions) license under certain patent rights and a non-exclusive, worldwide, royalty-bearing, sublicensable (subject to certain restrictions) license under certain know-how covering small molecule positive allosteric modulators (PAMs) predominantly of the muscarinic acetylcholine receptor subtype 4 (M4) to develop, manufacture, and commercialize products, processes and services covered by such patent rights or that incorporate or use such know-how, for any and uses (the Vanderbilt IPR&D Assets). Concurrently, the Company also executed a sponsored research agreement (see Note 8) with Vanderbilt. The sponsored research agreement was deemed to be separate transactions and not accounted for as part of the acquisition of assets. The acquisition of Vanderbilt IPR&D Assets became effective in February 2022.

The licensed patent rights are subject to Vanderbilt's right to use the patent rights for research, internal non-commercial use, and educational purposes. The Company intends to develop the PAMs for the treatment of schizophrenia and other neuropsychiatric disorders. The Company has agreed to use commercially reasonable efforts to develop and commercialize licensed products, and to achieve certain development milestones.

The Company paid Vanderbilt a non-refundable, non-creditable upfront cash payment of \$13.0 million for the Vanderbilt IPR&D Assets, which was immediately recognized as acquired in-process research and development

Notes to Unaudited Condensed Consolidated Financial Statements

expense in the condensed consolidated statement of operations and comprehensive loss as it was determined to have no alternative future use as of the acquisition date. Under the Vanderbilt License Agreement, Vanderbilt is eligible to receive contingent consideration payable in cash up to an aggregate of \$42.0 million upon the achievement of specified development milestones and up to an aggregate of \$380.0 million upon the achievement of commercial milestone events as well as and tiered royalties at mid-single digit percentages on potential future net sales, subject to specified reductions for the lack of patent coverage, generic entry and payment obligations for third-party licenses. In addition, the Company is obligated to pay Vanderbilt low-double-digit percentage of sublicense income it receives for sublicenses entered into before the achievement of a specified event. Such contingent consideration was not subject to liability classification and/or derivative accounting and will be recognized when the contingency is resolved, and the consideration becomes payable. As of March 31, 2023, none of the milestones had been achieved and no such amounts were deemed due or payable.

In addition, the Company also has an exclusive option, exercisable for a specified period of time, to negotiate an exclusive license to certain patent rights conceived or developed by Vanderbilt in the course of carrying out the sponsored research pursuant to a sponsored research agreement the between the Company and Vanderbilt, which was entered into at the same time as the Vanderbilt License Agreement. The Company determined that the right to negotiate was not a freestanding instrument from the Vanderbilt License Agreement and did not meet the definition of a derivative.

7. Commitments and Contingencies

Indemnification

In the ordinary course of business, the Company enters into agreements that may include indemnification provisions. Pursuant to such agreements, the Company may indemnify, hold harmless and defend an indemnified party for losses suffered or incurred by the indemnified party. Some of the provisions will limit losses to those arising from third-party actions. In some cases, the indemnification will continue after the termination of the agreement. The maximum potential amount of future payments the Company could be required to make under these provisions is not determinable. The Company has not incurred material costs to defend lawsuits or settle claims related to these indemnification provisions. The Company has also entered into indemnification agreements with its directors and officers that may require the Company to indemnify its directors and officers against liabilities that may arise by reason of their status or service as directors or officers to the fullest extent permitted by Delaware corporate law. The Company currently has directors' and officers' insurance.

Other Commitments

The Company has various manufacturing, clinical, research and other contracts with vendors in the conduct of the normal course of its business. Such contracts are generally terminable with advanced written notice and payment for any products or services received by the Company through the effective time of termination and any non-cancelable and non-refundable obligations incurred by the vendor at the effective time of the termination. In the case of terminating a clinical trial agreement at a particular site, the Company would also be obligated to provide continued support for appropriate medical procedures at that site until completion or termination.

8. Strategic License and Research and Collaboration Agreements

2015 TSRI License Agreement

In connection with the acquisition of BlackThorn (see Note 6), the Company gained certain exclusive rights to intellectual property related to Kappa Opioid Receptor and V1aR Receptor Antagonist programs as well as an

Notes to Unaudited Condensed Consolidated Financial Statements

oxytocin receptors positive allosteric modulator program (collectively, the TSRI Programs) under a license agreement between BlackThorn and TSRI originally entered into in November 2015 (as amended, the 2015 TSRI License Agreement). The technology licensed under the 2015 TSRI License Agreement is used in the Company's NMRA-140 and NMRA-511 research and development programs.

Pursuant to the 2015 TSRI License Agreement, the Company is obligated, among other things, to pay TSRI (i) a nominal annual license fee due and payable on the first day of each calendar year and after the fourth anniversary creditable against any royalties due for such calendar year, (ii) development and regulatory milestone payments of up to \$1.5 million in aggregate for the first product from each TSRI Program, which are contingent upon achieving specific development and regulatory milestone events, (iii) commercial milestone payments of up to \$3.5 million in aggregate for each occurrence, which are contingent upon achieving specified commercialization milestone events, (iv) tiered low-single digit royalties on future net sales of each royalty-bearing product and (v) a percentage ranging from the mid-single digits to sub teen double digits of any sublicensing revenues the Company receives. As of March 31, 2023, none of the milestones had been achieved and no royalties were due under the 2015 TSRI License Agreement.

Harvard License Agreement

In connection with the acquisition of Syllable (see Note 6), the Company gained exclusive rights covering certain behavior imagining and behavioral tracking software under a license agreement between Syllable and Harvard originally entered into in June 2020. The Company uses the technology licensed under the Harvard License Agreement to advance its precision neuroscience approach.

Under the Harvard License Agreement, the Company is obligated, among other things, to pay Harvard (i) nominal annual license maintenance fees that are creditable against any royalty amounts payable for licensed products sold in the same year, (ii) mid-single digit royalties on future net sales of each royalty-bearing product that utilizes the licensed technology, and (iii) a portion of any sub licensing revenues the Company receives ranging from the high teens to low-double digits. As of March 31, 2023, none of the milestones had been achieved and no royalties were due under the Harvard License Agreement.

In addition, the Harvard License Agreement, as amended in March 2021, provided for certain development milestones that the Company is required to meet between December 2021 and January 2024. Failure to meet such milestones constitutes a material breach of contract and would provide Harvard with the right to terminate the agreement subject to the notification and cure periods. As of March 31, 2023, the Company had not met any of the development milestones and Harvard and the Company agreed to terminate the agreement, effective as of March 31, 2023.

Research and Collaboration Agreement with Amgen

In September 2021, and concurrently with the Amgen License Agreements (see Note 6), the Company entered into a research collaboration agreement with Amgen (Amgen Collaboration Agreement) to collectively discover drug targets, biomarkers, and other insights associated with central nervous system (CNS) diseases utilizing Amgen's deCODE genetics and human data research capabilities. The Company received exclusive rights under intellectual property generated in the collaboration to exploit therapeutic compounds and diagnostics for use with therapeutics in the CNS field and Amgen received exclusive rights to exploit therapeutic compounds and diagnostics for use with therapeutics outside of the CNS field. The agreement is governed by the Joint Research Committee (JRC), which is made up of two representatives from each of the Company and Amgen to manage the progress and direction of research and development activities. All decisions made by the JRC shall be by

Notes to Unaudited Condensed Consolidated Financial Statements

consensus with each party having one vote, and if the JRC cannot reach a consensus, the dispute shall be referred to each company's executive officers. If the executive officers fail to reach a consensus, the Company will have final decision-making authority provided that the matter does not relate to the approval of, or any material change to, a project, decisions to acquire rights from a third party, decisions or activities that are in conflict with Amgen's database usage or data access rights, or the approval of external costs and expenses relating to certain new data generation activities or certain new dataset acquisitions, as such matters require mutual agreement.

In return for Amgen performing research and development activities under the agreement, the Company is committed to making non-refundable, non-creditable quarterly payments over the first two years totaling \$50.0 million and for the third year between \$12.5 million and \$25.0 million depending on whether certain progress milestones are achieved. Additionally, the Company will reimburse Amgen for certain direct, out-of-pocket external costs and expenses that are incurred in the performance of the activities under the Amgen Collaboration Agreement.

The term of the agreement is up to five years, although it will terminate after three years if the Company and Amgen do not mutually agree upon a compensation structure for years four and five. If the parties do not reach an agreement at least 30 days prior to the end of year three, the Amgen Collaboration Agreement will automatically terminate upon its third anniversary. Further, either party can terminate the Amgen Collaboration Agreement upon material uncured breach or bankruptcy by the other party, in which case all amounts that have become due through the date of termination are non-refundable.

Amgen also has an exclusive option to negotiate, and the right of first negotiation, to obtain exclusive, worldwide licenses to research, develop, commercialize, and otherwise exploit up to two therapeutic compounds or any pharmaceutical product containing such therapeutic compound arising from the collaboration. That right exists with respect to each compound for up to 60 days following positive Phase 2 results for that compound. The Company determined that these rights were not freestanding instruments from the Amgen Collaboration Agreement and did not meet the definition of a derivative. Upon execution of the Amgen Collaboration Agreement in September 2021, the Company was obligated to start paying Amgen non-refundable quarterly payments of \$6.3 million. As of March 31, 2023, the seventh non-refundable quarterly payment of \$6.3 million became due and has been recorded within accrued liabilities. As of December 31, 2022 and March 31, 2023, the related prepaid research and development costs included in the condensed consolidated balance sheet were \$11.9 million and \$10.0 million, respectively, within prepaid expenses and other current assets. The Company recorded \$6.6 million and \$8.1 million of related research and development expenses during the three months ended March 31, 2022 and 2023, respectively.

Sponsored Research Agreement with Vanderbilt

In February 2022, and concurrently with the Vanderbilt License Agreement (see Note 6), the Company entered into a sponsored research agreement with Vanderbilt (Vanderbilt Research Agreement), pursuant to which Vanderbilt agreed to provide the Company research services to develop a M4 PAM back-up program.

The agreement is governed by the Joint Steering Committee (JSC) which is made up of three representatives from each of the Company and Vanderbilt to manage the progress and direction of research and development activities. All decisions made by the JSC shall be by consensus with each party having one vote, and if the JSC cannot reach a consensus, then (i) each party shall make the final decision on non-strategic, day to day, operational matters related to the implementation of research program activities conducted, managed, controlled or directed by such party, and (ii) the Company will have final decision-making authority with respect to material operation and strategic decisions.

Notes to Unaudited Condensed Consolidated Financial Statements

In return for Vanderbilt performing research and development activities under the agreement, the Company agreed to make quarterly payments for research up to a total of \$1.7 million on an annual basis. The term of the agreement was extended from February 2023 to June 2023. Vanderbilt may terminate the agreement upon 60 days' written notice. The Company may terminate the agreement upon 30 days' written notice, subject to the Company paying reasonable costs incurred by Vanderbilt to wind-down the program and all costs incurred and non-cancellable commitments made prior to the termination date.

In addition, the Company also has an exclusive option to negotiate an exclusive license to certain patent rights conceived or developed by Vanderbilt in the course of carrying out the sponsored research (see Note 6).

9. Convertible Preferred Stock and Stockholders' Deficit

Convertible Preferred Stock

In September 2022, the Company executed a preferred stock purchase agreement (the Series B SPA) and issued 58,263,334 shares of its Series B convertible preferred stock, including 10,000,000 shares to a new investor and 48,263,334 shares to existing investors, two of whom were related parties, at \$1.50 per share for aggregate proceeds of \$87.4 million in the initial closing of its Series B convertible preferred stock financing (the Series B Initial Closing). The Series B SPA provides that within 90 days of the Series B Initial Closing, the Company may issue and sell on the same terms and conditions, additional shares of its Series B convertible preferred stock to one or more purchasers (Series B Subsequent Closing). The Series B Subsequent Closing is at the option of the Company and therefore was not determined to be a commitment by the Company that is subject to liability classification and/or derivative accounting.

In October 2022, the Series B Subsequent Closing occurred, and the Company issued an additional 16,666,667 shares of its Series B convertible preferred stock to a new investor at \$1.50 per share for aggregate proceeds of \$25.0 million.

As of December 31, 2022 and March 31, 2023, the Company's convertible preferred stock consisted of the following:

	Shares Authorized	Shares Issued and Outstanding	Carrying Value	Liquidation Preference
		(in tho	usands)	
Series A-1	47,471	46,413	\$ 38,208	\$ 46,413
Series A-2	697,948	697,948	693,263	697,948
Series B	74,930	74,930	112,216	112,395
Total convertible preferred stock	820,349	819,291	\$ 843,687	\$ 856,756

Amgen Future Financing

Subject to certain conditions, Amgen is obligated to provide the Company additional financing of up to \$100.0 million in equity securities. This future financing is a freestanding financial instrument and is not subject to liability classification and/or derivative accounting. The value of this future financing was determined to be de minimis at issuance and as of December 31, 2022 and March 31, 2023, as it would be settled based on the same terms and conditions other third parties will receive.

Common Stock

In October 2022, the Company's board of directors approved a certificate of amendment to the Company's amended and restated certificate of incorporation which, among other things, (i) increased the authorized number



Notes to Unaudited Condensed Consolidated Financial Statements

of shares of the Company's common stock to 1,210,000,000 shares and (ii) increased the authorized number of shares of the Company's convertible preferred stock to 820,348,942 shares.

The holders of the Company's common stock are entitled to one vote per share on all matters to be voted on by the stockholders of the Company and are entitled to dividends, if and when declared by the Company's board of directors, subject to the prior rights of the preferred stockholders. Common stock outstanding in the condensed consolidated balance sheet and condensed consolidated statement of convertible preferred stock and stockholders' deficit as of March 31, 2023 includes 16,588,064 shares of restricted stock that vest based on service conditions and are subject to the Company's right of repurchase upon termination of services and 7,000,000 shares of restricted stock that vest based on performance conditions (see Note 11). Common stock reserved for future issuance consisted of the following:

	March 31, 2023
Shares reserved for conversion of outstanding convertible preferred stock	819,291
Shares reserved for options to purchase common stock under the Plans	79,060
Shares reserved for issuance under the Plans	43,547
Total	941,898

In addition, the Company may be required to issue additional shares of its capital stock if certain milestone conditions are met pursuant to the contingent consideration and compensation arrangements associated with the Company's acquisitions of assets (see Note 6). As of March 31, 2023, the milestone conditions were not probable of being met and no shares have been reserved for potential future issuances.

10. Preferred Stock Warrants

In connection with the BlackThorn acquisition in September 2020, the Company issued preferred stock warrants to purchase up to 2,292,672 shares of Series A-1 convertible preferred stock with an exercise price of \$1.35 per share. In December 2022, 1,651,527 preferred stock warrants were exercised and the remaining 641,145 preferred stock warrants expired as of December 31, 2022. The Company issued 1,234,817 shares of Series A-1 convertible preferred stock, including 820,434 to a related party, upon the exercise and net exercise of preferred stock warrants.

11. Stock-Based Compensation

2020 Equity Incentive Plan

In January 2020, the Company adopted the 2020 Equity Incentive Plan (the 2020 Plan) that provides for the grant of incentive stock options, non-statutory stock options, restricted stock awards, restricted stock unit, and other stock-based awards to employees, directors, and non-employee service providers of the Company.

2015 Equity Incentive Plan

Upon the closing of the BlackThorn acquisition in September 2020, the Company assumed BlackThorn's 2015 Equity Incentive Plan (the 2015 Plan, and collectively with the 2020 Plan, the Plans), pursuant to which outstanding stock options previously granted under the 2015 Plan converted into stock options to purchase common stock of the Company, which remain subject to the terms and conditions of the 2015 Plan. The 2015 Plan was suspended in connection with the closing of the acquisition of BlackThorn in September 2020.

Notes to Unaudited Condensed Consolidated Financial Statements

Stock Option Activity

The following table summarizes stock option activity under the Plans:

	Outstanding Stock Options	Weighted- Average Exercise Price Per Share	Weighted- Average Remaining Contractual Term (years) nare amounts and years)	Aggregate Intrinsic Value
Outstanding as of December 31, 2022	67.240	\$ 0.48		\$ 24,085
0	- , -	4	0.2	\$ 24,005
Granted	12,642	0.81		
Exercised	(1,721)	0.35		
Canceled and forfeited	(4,951)	0.46		
Expired	—	—		
Outstanding as of March 31, 2023	73,210	\$ 0.54	8.3	\$ 21,684
Vested as of March 31, 2023	22,372	\$ 0.48	7.3	\$ 8,613
Exercisable as of March 31, 2023	24,497	\$ 0.46	7.4	\$ 9,697

The stock option activity table above excludes options to purchase 2,350,000 shares of the Company's common stock issued to the Company's scientific advisors which vest based on the achievement of certain performance conditions to be separately defined and approved by the Company's board of directors. As the performance conditions had not been determined as of March 31, 2023, the criteria for establishing a grant date, and accordingly a measurement date, were not met as of that date.

The stock option activity table above also excludes options granted to purchase 3,500,000 shares of common stock that have market and performance conditions granted to one of the Company's executives.

Fair Value of Stock Options

The fair value of stock options granted for employee and non-employee awards was estimated at the grant date using the Black-Scholes option pricing model based on the following assumptions:

	Three Months Ended March 31,		
	2022	2023	
Expected volatility	87.2% - 90.7%	89.5% - 89.7%	
Expected term (years)	5.4 - 6.5	4.5 - 6.1	
Risk-free interest rate	1.7% - 2.5%	3.5% - 4.0%	
Expected dividend yield	— %	— %	

Early Exercise of Employee Stock Options

The Company's 2020 Plan allows certain employees to exercise their stock options prior to vesting into shares of restricted common stock. The proceeds from early exercised stock options are recorded as liabilities in the condensed consolidated balance sheets at the time of exercise and reclassified to common stock and additional paid-in capital as the underlying stock options vest and the Company's repurchase right lapses. As of March 31, 2023, the Company had issued 7,882,500 shares of restricted common stock upon the early exercise of unvested stock options, of which 6,009,999 shares had vested and 965,000 unvested shares had been repurchased, such that 907,501 shares or restricted stock remained outstanding and unvested.

Notes to Unaudited Condensed Consolidated Financial Statements

Restricted Stock Awards

The Company's 2020 Plan allows for the grant of restricted common stock to certain employees, executives, non-employee scientific advisors, and third-party service providers. The restrictions lapse over time primarily according to service-based vesting conditions of each award. In the event of a voluntary or involuntary termination of the holder's continuous provision of services to the Company, any unvested portion of the restricted stock award are automatically forfeited.

The following table summarizes the Company's restricted stock activity:

	Shares	Avera Date l	righted- age Grant Fair Value r Share	
		(in thousands, except per share amounts)		
Outstanding and unvested as of December 31, 2022	22,764	\$	0.11	
Vested	(4,608)		0.02	
Outstanding and unvested as of March 31, 2023	18,156	\$	0.14	

The restricted stock activity table above excludes 4,000,000 shares of restricted common stock issued to certain of the Company's scientific advisors which vest based on the achievement of certain performance conditions to be separately defined and approved by the Company's board of directors. As the performance conditions had not been determined as of March 31, 2023, the criteria for establishing a grant date, and accordingly a measurement date, were not met as of that date.

Award with Market and Performance Conditions

In June 2021, the Company granted stock options to purchase 3,500,000 shares of its common stock to one of its executive officers with an exercise price of \$0.32 per share that contain both market and service conditions (the Market Award). Subject to the holder's continued service, the Market Award provided for vesting in four equal tranches once the Company's stock price exceeded certain thresholds. The original grant-date fair value of the Market Award of \$0.9 million was determined using a Monte Carlo simulation model using an expected volatility of 100.0% and risk-free rate of 1.6%.

In January 2022, the Company amended the terms of the Market Award such that the award will vest in three modified tranches. One tranche of 1,750,000 stock options is based on a performance condition and two tranches of 875,000 stock options each are based on revised Company stock price thresholds and/or vesting schedules, subject to the holder's continued service. The modification resulting in a performance-based tranche was determined to be a probable-to-improbable modification and the modification resulting in two revised market-based tranches were determined to be probable-to-probable modifications. The fair value of the performance-based tranche was estimated using the Black-Scholes Model using an expected volatility of 100.0%, a risk-free rate of 1.8% and an expected term of 9.4 years. The fair value of the market-based tranches was determined using a Monte Carlo simulation model using an expected volatility of 100.0% and risk-free rate of 1.8%. The modification resulted in \$0.3 million in total incremental expense.

The unrecognized original grant-date fair value, together with any incremental expense, is recognized as compensation using the accelerated attribution method for each tranche over the requisite service period. For the three months ended March 31, 2022 and 2023, stock-based compensation related to the market-based tranches

Notes to Unaudited Condensed Consolidated Financial Statements

was not material. As of March 31, 2023, none of the market conditions for the market-based tranches have been met. For the three months ended March 31, 2022 and 2023, no expense was recognized for the performance-based tranche as the performance conditions were not probable of being met.

Awards with Performance Conditions

In 2020, the Company approved 5,500,000 stock options and 7,000,000 restricted common stock to certain of the Company's scientific advisors, which vest based on the achievement of performance conditions to be determined and continued service to the Company. In December 2022, the Company's board of directors established performance conditions, consisting of certain development milestones, for 2,650,000 stock options and 3,000,000 restricted common stock such that the criteria for establishing a grant date, and accordingly a measurement date, were met for these performance stock options and performance restricted common. During the three months ended March 31, 2023, the performance conditions (and therefore the grant date) for an additional 500,000 stock options were established. As of March 31, 2023, it was probable that the milestones would be met for certain of the performance stock options and performance restricted stock that were granted and for which expense was recognized using the accelerated attribution method. For the three months ended March 31, 2023, the Company recognized expense of \$0.2 million related to these awards with performance conditions that were probable of being met.

Stock-based Compensation

The following table summarizes total stock-based compensation included in the Company's condensed consolidated statements of operations and comprehensive loss:

	Three Months Ended March 31,		
	2022		
	(in thousands)		
Research and development	\$ 780	\$	1,403
General and administrative	 874		792
Total stock-based compensation	\$ 1,654	\$	2,195

As of March 31, 2023, there was \$23.6 million and \$2.4 million of unrecognized stock-based compensation related to stock options and restricted stock awards outstanding, respectively, including stock options and restricted common stock for which achievement of milestones was not probable, which were expected to be recognized over a weighted-average remaining service period of 2.4 years and 1.2 years, respectively.

Services Agreement

In May 2020, the Company entered into a services agreement with a vendor for assistance in evaluating assets and technologies in the field of neurodegeneration. In return for services provided, the Company agreed to issue the vendor shares of its common stock representing a value of \$1.0 million upon the achievement of certain milestones tied to the successful in-license or acquisition of assets (the Milestone Shares). The Company concluded the Milestone Shares are stock settled debt that are required to be classified as a liability and recognized at such time the milestones are probable of being met. As of March 31, 2023, the milestones were not probable of being met.

Notes to Unaudited Condensed Consolidated Financial Statements

12. Net Loss Per Share

The following table summarizes the computation of basic and diluted net loss per share:

	Three Mon Marc	
	2022 (in thousands share ar	
Numerator:		· · · ·
Net loss	\$ (43,042)	\$ (35,625)
Denominator:		
Weighted-average common shares outstanding, basic, and diluted	204,122	229,715
Net loss per share, basic and diluted	\$ (0.21)	\$ (0.16)

The following outstanding potentially dilutive common stock equivalents were excluded from the computation of diluted net loss per share for the periods presented because including them would have been antidilutive:

	March 31,	
	2022	2023
	(in thou	sands)
Convertible preferred stock	743,126	819,291
Preferred stock warrants	2,293	
Common stock options	70,736	76,710
Performance stock options (with performance conditions to be established)	5,500	2,350
Early exercised stock options subject to future vesting	2,269	908
Unvested restricted stock awards	34,614	18,156
Performance restricted stock (with performance conditions to be established)	7,000	4,000
Total	865,538	921,415

13. Related Party Transactions

In September 2022, the Company issued 23,333,334 shares of its Series B convertible preferred stock for total cash proceeds of \$35.0 million to two significant stockholders that have designated members on the Company's board of directors and each of whom is considered to be a related party.

In December 2022, 820,434 preferred stock warrants held by a related party were exercised at \$1.35 per share (see Note 10).

As of December 31, 2022 and March 31, 2023, the Company was obligated to pay Amgen \$6.3 million under the Amgen Collaboration Agreement, which was recorded within current liabilities on the condensed consolidated balance sheets. As of December 31, 2022 and March 31, 2023, \$11.9 million and \$10.0 million related to amounts prepayable to Amgen were recorded as prepaid expenses and other current assets, respectively, on the condensed consolidated balance sheets. During the three months ended March 31, 2022 and 2023, the Company recorded \$6.6 million and \$8.1 million of research and development expenses with Amgen, respectively (see Note 8).

Notes to Unaudited Condensed Consolidated Financial Statements

Subject to certain conditions, Amgen is also obligated to provide the Company with additional financing of up to \$100.0 million (see Note 9).

14. Subsequent Events

The Company evaluated subsequent events through June 30, 2023, the date these condensed consolidated financial statements were available to be issued.



Common Stock

Prospectus

J.P. Morgan

BofA Securities

Citigroup Stifel

Guggenheim Securities

RBC Capital Markets

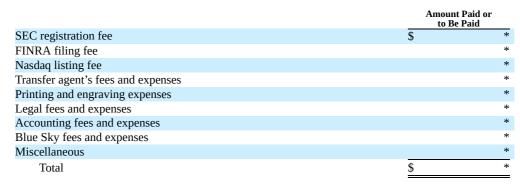
, 2023

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 13. Other Expenses of Issuance and Distribution

The following table sets forth the costs and expenses, other than underwriting discounts and commissions, payable by us in connection with the sale of the common stock being registered. All amounts are estimates except for the Securities and Exchange Commission (SEC) registration fee, the Financial Industry Regulatory Authority (FINRA) filing fee and the Nasdaq Global Market (Nasdaq) listing fee.



* To be completed by amendment.

Item 14. Indemnification of Directors and Officers

Section 145 of the Delaware General Corporation Law provides that a corporation may indemnify directors and officers as well as other employees and individuals against expenses (including attorneys' fees), judgments, fines, and amounts paid in settlement actually and reasonably incurred by such person in connection with any threatened, pending, or completed actions, suits, or proceedings in which such person is made a party by reason of such person being or having been a director, officer, employee, or agent to the registrant. The Delaware General Corporation Law provides that Section 145 is not exclusive of other rights to which those seeking indemnification may be entitled under any bylaw, agreement, vote of stockholders or disinterested directors or otherwise. Article 9 of the registrant's amended and restated certificate of incorporation provides for indemnification by the registrant of its directors, officers, and employees to the fullest extent permitted by the Delaware General Corporation Law. The registrant has entered into indemnification agreements with each of its current directors, executive officers, and certain other officers to provide these directors and officers additional contractual assurances regarding the scope of the indemnification set forth in the registrant's amended and restated certificate of incorporation and amended and restated bylaws and to provide additional procedural protections. There is no pending litigation or proceeding involving a director or executive officer of the registrant for which indemnification is sought.

Section 102(b)(7) of the Delaware General Corporation Law permits a corporation to provide in its certificate of incorporation that a director of the corporation shall not be personally liable to the corporation or its stockholders for monetary damages for breach of fiduciary duty as a director, except for liability (i) for any breach of the director's duty of loyalty to the corporation or its stockholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) for unlawful payments of dividends or unlawful stock repurchases, redemptions, or other distributions, or (iv) for any transaction from which the director derived an improper personal benefit. The registrant's amended and restated certificate of incorporation provides for such limitation of liability.

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The registrant maintains standard policies of insurance under which coverage is provided (a) to its directors and officers against loss rising from claims made by reason of breach of duty or other wrongful act, and (b) to the registrant with respect to payments that may be made by the registrant to such officers and directors pursuant to the above indemnification provision or otherwise as a matter of law.

The proposed form of underwriting agreement to be filed as Exhibit 1.1 to this registration statement provides for indemnification of directors and officers of the registrant by the underwriters against certain liabilities.

Item 15. Recent Sales of Unregistered Securities

Since its inception in November 2019, the registrant has sold the following securities without registration under the Securities Act of 1933:

- (a) From January 2020 to May 2022, the registrant issued 186,508,334 shares of its common stock for proceeds of approximately \$49,553.
- (b) From May 2020 to September 2020, the registrant issued 52,508,326 shares of its common stock in connection with its issuance and sale of its Series A-2 convertible preferred stock for no additional consideration.
- (c) In September 2020, the registrant issued 45,178,495 shares of its Series A-1 convertible preferred stock at \$1.00 per share for gross proceeds of approximately \$45.2 million, in connection with its acquisition of BlackThorn.
- (d) In September 2020, the registrant issued 2,292,672 shares of its Series A-1 convertible preferred stock upon exercise of warrants for proceeds of approximately \$3.1 million and in December 2022, warrants were exercised for 1,234,817 shares of Series A-1 convertible for gross proceeds of approximately \$1.6 million. The warrants expired on December 31, 2022.
- (e) In September 2020, the registrant issued 237,697,774 shares of its Series A-2 convertible preferred stock at \$1.00 per share for gross proceeds of approximately \$237.7 million, including conversion of the convertible promissory notes of an aggregate principal amount of approximately \$55.9 million issued from February 2020 to September 2020.
- (f) In November 2020, the registrant issued 12,000,000 shares of its Series A-2 convertible preferred stock at \$1.00 per share for gross proceeds of \$12.0 million, in connection with its acquisition of Alairion.
- (g) From August 2021 to September 2021, the registrant issued 191,250,000 shares of its Series A-2 convertible preferred stock at \$1.00 per share for gross proceeds of approximately \$191.3 million.
- (h) In September 2021, the registrant issued 100,000,000 shares of its Series A-2 convertible preferred stock at \$1.00 per share for gross proceeds of approximately \$100.0 million.
- (i) In September 2021, the registrant issued 157,000,000 shares of its Series A-2 convertible preferred stock in connection with the entry into an intellectual property license arrangement.
- (j) From September 2022 to October 2022, the registrant issued 74,930,001 shares of its Series B convertible preferred stock at \$1.50 per share for gross proceeds of approximately \$112.4 million.
- (k) the registrant has granted equity awards under the 2015 Plan to its directors, officers, employees, and consultants, which awards consisted of 2,330,374 options to purchase an aggregate of 2,330,374 shares of its common stock at exercise prices ranging from \$0.32 to \$1.38 per share.
- (l) the registrant has issued an aggregate of 205,950 shares of its common stock upon the exercise of options under our 2015 Plan for aggregate proceeds of approximately \$224,309.
- (m) the registrant has granted equity awards under the 2020 Plan its directors, officers, employees, and consultants, which awards consisted of 115,389,319 options to purchase an aggregate of 115,389,319 shares of its common stock at exercise prices ranging from \$0.32 to \$0.83 per share and 4,000,000 restricted stock awards issued at \$0.32 per share.

(n) the registrant has issued an aggregate of 13,975,759 shares of its common stock upon the exercise of options under our 2020 Plan for aggregate proceeds of approximately \$5.4 million.

The offers, sales and issuances of the securities described in Item 15(a) through 15(j) were exempt from registration under the Securities Act in reliance upon Section 4(a)(2) of the Securities Act or Regulation D promulgated thereunder as transactions by an issuer not involving any public offering. The recipients of the securities in each of these transactions represented their intentions to acquire the securities for investment only and not with a view to or for sale in connection with any distribution thereof, and appropriate legends were placed upon the stock certificates issued in these transactions. All recipients had adequate access, through their relationships with us, to information about our company.

The offers, sales, and issuances of the securities described in Item 15(k) through 15(n) were exempt from registration under the Securities Act under either Rule 701, in that the transaction were under compensatory benefit plans and contracts relating to compensation, or under Section 4(a)(2) of the Securities Act in that the transactions were between an issuer and members of its senior executive management and did not involve any public offering within the meaning of Section 4(a)(2). The recipients of such securities were our employees, directors or consultants. Appropriate legends were affixed to the securities issued in these transactions.

Item 16. Exhibits and Financial Statement Schedules

See the Exhibit Index attached to this registration statement, which Exhibit Index is incorporated herein by reference.

Schedules not listed above have been omitted because the information required to be set forth therein is not applicable or is shown in the financial statements or notes thereto.

Item 17. Undertakings

- (a) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer, or controlling person of the registrant in the successful defense of any action, suit, or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered hereunder, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question of whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.
- (b) The undersigned registrant hereby undertakes that:
 - (1) For purposes of determining any liability under the Securities Act, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.
 - (2) For the purpose of determining any liability under the Securities Act, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

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EXHIBIT INDEX

Exhibit		Incorp	orated by Refer	ence	Filed
Number	Exhibit Description	Form	Date	Number	Herewith
1.1*	Form of Underwriting Agreement				
2.1*†	Agreement and Plan of Merger, dated June 1, 2020, by and among the Registrant, Berries Merger Sub, Inc, BlackThorn Therapeutics, Inc. and Fortis Advisors LLC				
2.2*†	Agreement and Plan of Merger, dated November 24, 2020, by and among the Registrant, Alairion Merger Sub I, Inc, Alairion Merger Sub II, LLC, Alairion, Inc. and John F. Lee				
3.1	Amended and Restated Certificate of Incorporation, as amended, currently in effect				
3.2*	Form of Amended and Restated Certificate of Incorporation, to be in effect immediately prior to the completion of this offering				
3.3	Bylaws, currently in effect				
3.4*	Form of Amended and Restated Bylaws, to be in effect immediately prior to the completion of this offering				
4.1*	Reference is made to Exhibits 3.1 through 3.4				
4.2*	Form of Common Stock Certificate				
5.1*	Opinion of Latham & Watkins LLP				
10.1	Investors' Rights Agreement, dated September 22, 2022, by and among the Registrant and the investors listed therein				
10.2†**	Research Collaboration and License Agreement, dated September 10, 2021, by and between the Registrant and Amgen Inc.				
10.3†**	Exclusive License Agreement for CK1d, dated September 10, 2021, by and between the Registrant and Amgen Inc.				
10.4(a)†**	Exclusive License Agreement for GCASE, dated September 10, 2021, by and between the Registrant and Amgen Inc.				
10.4(b)†*	First Amendment to Exclusive License Agreement, dated June 14, 2022, by and between the Registrant and Amgen, Inc.				
10.5(a)†**	License Agreement, dated November 23, 2015, by and between BlackThorn Therapeutics, Inc. and Scripps Research Institute				
10.5(b)†**	First Amendment to License Agreement, dated November 13, 2017, by and between BlackThorn Therapeutics, Inc. and Scripps Research Institute				
10.5(c)†**	Second Amendment to License Agreement, dated April 9, 2019, by and between BlackThorn Therapeutics, Inc. and Scripps Research Institute				
10.6*	Sublease Agreement, dated as of May 25, 2022, by and between the Registrant and C4 Therapeutics, Inc.				

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Exhibit			rporated by Refe		Filed
Number	Exhibit Description	Form	Date	Number	Herewith
10.7(a)#	2020 Equity Incentive Plan				
10.7(b)#	Form of Stock Option Agreement under the 2020 Equity Incentive Plan				
10.7(c)#	Form of Restricted Stock Purchase Agreement under the 2020 Equity Incentive Plan				
10.8(a)*#	2023 Incentive Award Plan				
10.8(b)*#	Form of Stock Option Grant Notice and Stock Option Agreement under the 2023 Incentive Award Plan				
10.8(c)*#	Form of Restricted Stock Award Grant Notice and Restricted Stock Award Agreement under the 2023 Incentive Award Plan				
10.8(d)*#	Form of Restricted Stock Unit Award Grant Notice and Restricted Stock Unit Award Agreement under the 2023 Incentive Award Plan				
10.9*#	Employee Stock Purchase Plan				
10.10#	Employment Agreement by and between the Registrant and Paul Berns				
10.11#	Employment Agreement by and between the Registrant and John Dunlop, Ph.D.				
10.12#	Employment Agreement by and between the Registrant and Joshua Pinto, Ph.D.				
10.13*#	Non-Employee Director Compensation Program				
10.14*	Form of Indemnification and Advancement Agreement for directors and officers				
10.15*†	License Agreement, dated February 10, 2022, by and between the Registrant and Vanderbilt University				
10.16(a)*†	Sponsored Research Agreement, dated February 10, 2022, by and between the Registrant and Vanderbilt University				
10.16(b)*†	First Amendment to Sponsored Research Agreement, dated October 18, 2022, by and between the Registrant and Vanderbilt University				
10.17**#	Form of Executive Employment Agreement				
10.18**#	Form of Executive Employment Agreement for Chief Executive Officer				
10.19*#	Separation Agreement by and between the Registrant and John Dunlop, Ph.D.				
10.20*#	Consulting Agreement, dated as of May 20, 2023, by and between the Registrant and John Dunlop, Ph.D.				
21.1*	List of subsidiaries				
<u></u>	Concert of Indones don't Destination of Dublic Accounting Firm				

23.1* Consent of Independent Registered Public Accounting Firm

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Exhibit		Incorporated by Reference		Filed	
Number	Exhibit Description	Form	Date	Number	Herewith
23.2*	Consent of Latham & Watkins LLP (included in Exhibit 5.1)				
24.1*	Power of Attorney (reference is made to the signature page to the Registration Statement)				
107*	Filing Fee Table				
* To be	e filed by amendment.				

** Previously filed.

Indicates management contract or compensatory plan.

† Certain portions of this document that constitute confidential information have been redacted in accordance with Regulation S-K, Item 601(b)(10).

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Watertown, State of Massachusetts, on the day of , 2023.

NEUMORA THERAPEUTICS, INC.

By:

Name: Paul Berns Title: Chief Executive Officer

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Paul Berns and Joshua Pinto, Ph.D. and each of them, his or her true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for him or her and in his or her name, place, and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this registration statement and any and all additional registration statements pursuant to Rule 462(b) of the Securities Act of 1933, and to file the same, with all exhibits thereto, and all other documents in connection therewith, with the Securities and Exchange Commission, granting unto each said attorney-in-fact and agents full power and authority to do and perform each and every act in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or either of them or their or his or her substitute or substitutes may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
Paul Berns	Chief Executive Officer and Chairman (principal executive officer)	, 2023
Joshua Pinto, Ph.D.	Chief Financial Officer (principal financial officer)	, 2023
Michael Milligan	Principal Accounting Officer	, 2023
Kristina M. Burow	Director	, 2023
Matthew Fust	Director	, 2023
Alaa Halawa	Director	, 2023
Maykin Ho, Ph.D.	Director	, 2023
Robert Nelsen	Director	, 2023
Kári Stefánsson, M.D.	Director	, 2023
	Director	, 2023
Stacie Weninger, Ph.D.		

AMENDED AND RESTATED CERTIFICATE OF INCORPORATION OF NEUMORA THERAPEUTICS, INC.

(Pursuant to Sections 242 and 245 of the General Corporation Law of the State of Delaware)

Neumora Therapeutics, Inc., a corporation organized and existing under and by virtue of the provisions of the General Corporation Law of the State of Delaware (the "General Corporation Law"),

DOES HEREBY CERTIFY:

1. That the name of this corporation is Neumora Therapeutics, Inc., and that this corporation was originally incorporated pursuant to the General Corporation Law on November 22, 2019 under the name RBNC Therapeutics, Inc.

2. That the Board of Directors duly adopted resolutions proposing to amend and restate the Amended and Restated Certificate of Incorporation of this corporation, declaring said amendment and restatement to be advisable and in the best interests of this corporation and its stockholders, and authorizing the appropriate officers of this corporation to solicit the consent of the stockholders therefor, which resolution setting forth the proposed amendment and restatement is as follows:

RESOLVED, that the Amended and Restated Certificate of Incorporation of this corporation be further amended and restated in its entirety to read as follows:

FIRST: The name of this corporation is Neumora Therapeutics, Inc. (the "Corporation").

SECOND: The address of the registered office of the Corporation in the State of Delaware is 1209 Orange Street, in the City of Wilmington 19801, County of New Castle. The name of its registered agent at such address is The Corporation Trust Company.

THIRD: The nature of the business or purposes to be conducted or promoted is to engage in any lawful act or activity for which corporations may be organized under the General Corporation Law.

FOURTH: The total number of shares of all classes of stock which the Corporation shall have authority to issue is (i) 1,200,000,000 shares of Common Stock, \$0.0001 par value per share ("**Common Stock**") and (ii) 812,085,608 shares of Preferred Stock, \$0.0001 par value per share ("**Preferred Stock**").

The following is a statement of the designations and the powers, privileges and rights, and the qualifications, limitations or restrictions thereof in respect of each class of capital stock of the Corporation.

A. COMMON STOCK

1. <u>General</u>. The voting, dividend and liquidation rights of the holders of the Common Stock are subject to and qualified by the rights, powers and preferences of the holders of the Preferred Stock set forth herein.

2. <u>Voting</u>. The holders of the Common Stock are entitled to one vote for each share of Common Stock held at all meetings of stockholders (and written actions in lieu of meetings); <u>provided</u>, <u>however</u>, that, except as otherwise required by law, holders of Common Stock, as such, shall not be entitled to vote on any amendment to the Certificate of Incorporation that relates solely to the terms of one or more outstanding series of Preferred Stock if the holders of such affected series are entitled, either separately or together with the holders of one or more other such series, to vote thereon pursuant to the Certificate of Incorporation Law. There shall be no cumulative voting. The number of authorized shares of Common Stock may be increased or decreased (but not below the number of shares thereof then outstanding) by (in addition to any vote of the holders of one or more series of Preferred Stock that may be required by the terms of the Certificate of Incorporation tepresenting a majority of the votes represented by all outstanding shares of capital stock of the Corporation entitled to vote, irrespective of the provisions of Section 242(b)(2) of the General Corporation Law.

B. PREFERRED STOCK

47,471,167 shares of the authorized Preferred Stock of the Corporation are hereby designated "Series A-1 Preferred Stock." 697,947,774 shares of the authorized Preferred Stock of the Corporation are hereby designated "Series A-2 Preferred Stock" (together with the Series A-1 Preferred Stock, the "Series A Preferred Stock"). 66,666,667 shares of the authorized Preferred Stock of the Corporation are hereby designated "Series B Preferred Stock." The rights, preferences, powers, privileges and restrictions, qualifications and limitations of the Preferred Stock are as follows. Unless otherwise indicated, references to "sections" or "Sections" in this Part B of this Article Fourth refer to sections and Sections of Part B of this Article Fourth. As used herein, "Series Preferred" means, collectively, the Series B Preferred Stock and Series A-2 Preferred Stock.

1. Dividends.

1.1 <u>Treatment of Series Preferred</u>. From and after the Series B Original Issue Date, the holders of shares of Series Preferred shall be entitled to receive, on a *pari passu* basis, dividends equal to 6% of the applicable Original Issue Price (as defined below) per share per annum, payable in cash or in kind at the election of the Corporation's Board of Directors (the "**Board of Directors**"), out of any funds and assets at the time legally available therefor, when, as and if declared by the Board of Directors, prior and in preference to the Series A-1 Preferred Stock and Common Stock. The Corporation shall not declare, pay or set aside any dividends on shares of any other class or series of capital stock of the Corporation (other than dividends on shares of Common Stock) unless (in addition to the obtaining of any consents required elsewhere in the Certificate of Incorporation) the holders of the Series Preferred then outstanding shall first receive, or simultaneously receive, a dividend on each outstanding share of Series Preferred in an amount at least equal to (A) in the case of a dividend on Common

Stock or any class or series that is convertible into Common Stock, that dividend per share of Series Preferred as would equal the product of (1) the dividend payable on each share of such class or series determined, if applicable, as if all shares of such class or series had been converted into Common Stock and (2) the number of shares of Common Stock issuable upon conversion of a share of Series Preferred, in each case calculated on the record date for determination of holders entitled to receive such dividend or (B) in the case of a dividend on any class or series that is not convertible into Common Stock, at a rate per share of Series Preferred, determined by (1) dividing the amount of the dividend payable on each share of such class or series of capital stock by the original issuance price of such class or series of capital stock (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to such class or series) and (2) multiplying such fraction by an amount equal to the applicable Original Issue Price; provided that, if the Corporation declares, pays or sets aside, on the same date, a dividend on shares of more than one class or series of capital stock of the Corporation, the dividend payable to the holders of Series Preferred pursuant to this Section 1 shall be calculated based upon the dividend on the class or series of capital stock that would result in the highest dividend for the Series Preferred. The Board of Directors is under no obligation to declare dividends, no rights shall accrue to the holders of Series Preferred if dividends are not declared, and any dividends on the Series Preferred shall be noncumulative. The "Original Issue Price" means, (i) with respect to the Series A-1 Preferred Stock, \$1.00 per share (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series A-1 Preferred Stock occurring after the effective time of this Amended and Restated Certificate of Incorporation, such time, the "Effective Time")), (ii) with respect to the Series A-2 Preferred Stock, \$1.00 per share (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series A-2 Preferred Stock occurring after the Effective Time), and (iii) with respect to the Series B Preferred Stock, \$1.50 per share (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series B Preferred Stock occurring after the Effective Time).

1.2 Treatment of Series A-1 Preferred Stock. From and after the Series A Original Issue Date, the holders of shares of Series A-1 Preferred Stock shall be entitled to receive, on a *pari passu* basis, dividends equal to 6% of the Original Issue Price of the Series A-1 Preferred Stock per share per annum, payable in cash or in kind at the election of the Board of Directors, out of any funds and assets at the time legally available therefor, when, as and if declared by the Board of Directors, prior and in preference to the Common Stock. The Corporation shall not declare, pay or set aside any dividends on shares of any other class or series of capital stock of the Corporation (other than dividends on shares of Series Preferred as set forth in Section 1.1, or dividends on shares of Common Stock payable in shares of Common Stock) unless (in addition to the obtaining of any consents required elsewhere in the Certificate of Incorporation) the holders of the Series A-1 Preferred Stock then outstanding shall first receive, or simultaneously receive, a dividend on each outstanding share of Series A-1 Preferred Stock in an amount at least equal to (A) in the case of a dividend on Common Stock or any class or series that is convertible into Common Stock, that dividend per share of Series A-1 Preferred Stock, as would equal the product of (1) the dividend payable on each share of such class or series determined, if applicable, as if all shares of such class or series had been converted into Common Stock and (2) the number of shares of Common Stock issuable upon conversion of a share of Series A-1 Preferred Stock, in each case calculated on the record date for determination of holders entitled to receive such dividend or (B) in the case of a dividend on any class or series that is not convertible into Common Stock, at a rate per share of Series A-1 Preferred Stock, determined by (1) dividing the amount of the dividend payable on each share of such class or series of capital stock by the original issuance price of such class or series of capital stock (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to such class or series) and (2) multiplying such fraction by an amount equal to the Original Issue Price for the Series A-1 Preferred Stock; provided that, if the Corporation declares, pays or sets aside, on the same date, a dividend on shares of more than one class or series of capital stock of the Corporation, the dividend payable to the holders of Series A-1 Preferred Stock pursuant to this <u>Section 1</u> shall be calculated based upon the dividend on the class or series of capital stock. The Board of Directors is under no obligation to declare dividends, no rights shall accrue to the holders of Series A-1 Preferred Stock if dividends on the Series A-1 Preferred Stock shall be noncumulative.

1.3 <u>Treatment of Common Stock</u>. If, after dividends in the full preferential amounts specified in <u>Sections 1.1 and 1.2</u> for the Series Preferred and the Series A-1 Preferred Stock have been paid or declared and set apart in any calendar year of the Corporation, the Board of Directors shall declare additional dividends out of funds legally available therefor in that calendar year, then such additional dividends shall be declared pro rata on the Common Stock and the Series Preferred and Series A-1 Preferred Stock on a *pari passu* basis according to the number of shares of Common Stock held by such holders, where each holder of shares of Series Preferred and Series A-1 Preferred Stock is to be treated for this purpose as holding the greatest whole number of shares of Common Stock then issuable upon conversion of all shares of Series Preferred and Series A-1 Preferred Stock held by such holder pursuant to Sections 4 and 5 hereof. The Corporation shall make no Distribution (as defined below) to the holders of shares of Common Stock except in accordance with (i) Section 1.1, Section 1.2 and this Section 1.3 or (ii) Section 2.

1.4 <u>Distribution</u>. "**Distribution**" means the transfer of cash, property or securities without consideration, whether by way of dividend or otherwise, or the purchase of shares of the Corporation (other than in connection with (i) the repurchase of shares of Common Stock issued to or held by employees, consultants, officers or directors at a price not greater than the amount paid by such persons for such shares upon termination of their employment or services pursuant to agreements providing for the right of said repurchase or (ii) upon exercise of a right of first refusal approved by the Board of Directors) for cash or property.

2. Liquidation, Dissolution or Winding Up; Certain Mergers, Consolidations and Asset Sales.

2.1 <u>Preferential Payments to Holders of Series Preferred</u>. In the event of any voluntary or involuntary liquidation, dissolution or winding up of the Corporation, the holders of shares of Series Preferred then outstanding, on a *pari passu* basis, shall be entitled to be paid out of the assets of the Corporation available for distribution to its stockholders, and in the event of a Deemed Liquidation Event (as defined below), the holders of shares of Series Preferred then outstanding, on a *pari passu* basis, shall be entitled to be paid out of the consideration payable to stockholders in such Deemed Liquidation Event or out of the Available Proceeds (as defined below) available for distribution to its stockholders, as applicable, before any payment shall be made to the holders of Series A-1 Preferred Stock and Common Stock by reason of their ownership thereof, an amount per share equal to the greater of (i) the applicable Original Issue Price for such

series, plus any dividends declared but unpaid thereon, or (ii) such amount per share as would have been payable had all shares of such series of Series Preferred been converted into Common Stock pursuant to <u>Section 4</u> immediately prior to such liquidation, dissolution, winding up or Deemed Liquidation Event (the amounts payable pursuant to this sentence is hereinafter referred to as the "**Series Preferred Liquidation Amounts**"). If upon any such liquidation, dissolution or winding up of the Corporation or Deemed Liquidation Event, the assets of the Corporation or proceeds of the Deemed Liquidation Event (as applicable) available for distribution to its stockholders shall be insufficient to pay the holders of shares of Series Preferred the full amount to which they shall be entitled under this <u>Section 2.1</u>, the holders of shares of Series Preferred shall share ratably in any distribution of the assets or proceeds, as applicable, available for distribution in proportion to the respective amounts which would otherwise be payable in respect of the shares held by them upon such distribution if all amounts payable on or with respect to such shares were paid in full.

2.2 Preferential Payments to Holders of Series A-1 Preferred Stock. In the event of any voluntary or involuntary liquidation, dissolution or winding up of the Corporation, after the payment of all Series Preferred Liquidation Amounts required to be paid to the holders of shares of Series Preferred, the holders of shares of Series A-1 Preferred Stock then outstanding, on a pari passu basis, shall be entitled to be paid out of the assets of the Corporation available for distribution to its stockholders, and in the event of a Deemed Liquidation Event, after the payment of all Series Preferred Liquidation Amounts required to be paid to the holders of shares of Series Preferred, the holders of shares of Series A-1 Preferred Stock then outstanding, on a pari passu basis, shall be entitled to be paid out of the consideration payable to stockholders in such Deemed Liquidation Event or out of the Available Proceeds available for distribution to its stockholders, as applicable, before any payment shall be made to the holders of Common Stock by reason of their ownership thereof, an amount per share equal to the greater of (i) the Original Issue Price for such series, plus any dividends declared but unpaid thereon, or (ii) such amount per share as would have been payable had all shares of Series A-1 Preferred Stock been converted into Common Stock pursuant to Section 4 immediately prior to such liquidation, dissolution, winding up or Deemed Liquidation Event (the amount payable pursuant to this sentence is hereinafter referred to as the "Series A-1 Liquidation Amount" and together with the Series Preferred Liquidation Amounts, the "Liquidation Amounts"). If upon any such liquidation, dissolution or winding up of the Corporation or Deemed Liquidation Event, the assets of the Corporation or proceeds of the Deemed Liquidation Event (as applicable) available for distribution to its stockholders shall be insufficient to pay the holders of Shares of Series A-1 Preferred Stock the full amount to which they shall be entitled under this Section 2.2, the holders of shares of Series A-1 Preferred Stock shall share ratably in any distribution of the assets or proceeds, as applicable, available for distribution in proportion to the respective amounts which would otherwise be payable in respect of the shares held by them upon such distribution if all amounts payable on or with respect to such shares were paid in full.

2.3 <u>Payments to Holders of Common Stock</u>. In the event of any voluntary or involuntary liquidation, dissolution or winding up of the Corporation or Deemed Liquidation Event, after the payment of all Liquidation Amounts required to be paid to the holders of shares of Preferred Stock, the remaining assets of the Corporation available for distribution to its stockholders, shall be distributed among the holders of shares of Common Stock, pro rata based on the number of shares held by each such holder.

2.4 Deemed Liquidation Events.

2.4.1 <u>Definition</u>. Each of the following events shall be considered a "**Deemed Liquidation Event**" unless the holders of a majority of the then-outstanding shares of the Series Preferred, voting together as a single class on an as-converted basis (the "**Requisite Holders**") elect otherwise by written notice sent to the Corporation at least 15 days prior to the effective date of any such event:

consolidation in which:

(a) a merger, acquisition, sale of voting control, or sale of all or substantially all of the assets of the Corporation, or a

- (i) the Corporation is a constituent party or
- (ii) a subsidiary of the Corporation is a constituent party and the Corporation issues shares of its capital stock pursuant to such merger or consolidation,

except any such merger, sale or consolidation involving the Corporation or a subsidiary in which the shares of capital stock of the Corporation outstanding immediately prior to such merger or consolidation continue to represent, or are converted into or exchanged for shares of capital stock that represent, immediately following such merger or consolidation, at least a majority, by voting power, of the capital stock of (1) the surviving or resulting corporation; or (2) if the surviving or resulting corporation is a wholly owned subsidiary of another corporation immediately following such merger or consolidation, the parent corporation of such surviving or resulting corporation; or

(b) (1) the sale, lease, transfer, exclusive license or other disposition, in a single transaction or series of related transactions, by the Corporation or any subsidiary of the Corporation of all or substantially all the assets or intellectual property of the Corporation and its subsidiaries taken as a whole (excluding any exclusive license in a field of use not central to the Corporation's business plan as determined and approved by the Board of Directors) or the sale or disposition (whether by merger, consolidation or otherwise, and whether in a single transaction or a series of related transactions) of one or more subsidiaries of the Corporation if substantially all of the assets of the Corporation and its subsidiaries taken as a whole are held by such subsidiary or subsidiaries, except where such sale, lease, transfer, exclusive license or other disposition is to a wholly owned subsidiary of the Corporation.

2.4.2 Effecting a Deemed Liquidation Event.

(a) The Corporation shall not have the power to effect a Deemed Liquidation Event referred to in <u>Section 2.4.1(a)(i)</u> unless the agreement or plan of merger or consolidation for such transaction (the "**Merger Agreement**") provides that the consideration payable to the stockholders of the Corporation shall be allocated among the holders of capital stock of the Corporation in accordance with <u>Sections 2.1, 2.2</u> and <u>2.3</u>.

(b) In the event of a Deemed Liquidation Event referred to in Section 2.4.1(a)(ii) or 2.4.1(b), if the Corporation does not effect a dissolution of the Corporation under the General Corporation Law within 90 days after such Deemed Liquidation Event, then (i) the Corporation shall send a written notice to each holder of Preferred Stock (the "**Redemption Notice**") no later than the 90th day after the Deemed Liquidation Event advising such holders of their right (and the requirements to be met to secure such right) pursuant to the terms of the following clause; (ii) to require the redemption of such shares of Preferred Stock, and (iii) if the Requisite Holders so request in a written instrument delivered to the Corporation not later than 120 days after such Deemed Liquidation Event, the Corporation shall use the consideration received by the Corporation for such Deemed Liquidation Event (net of any retained liabilities associated with the assets sold or technology licensed, as determined in good faith by the Board of Directors), together with any other assets of the Corporation available for distribution to its stockholders, all to the extent permitted by Delaware law governing distributions to stockholders (the "**Available Proceeds**"), on the 150th day after such Deemed Liquidation Event, to redeem all outstanding shares of Preferred Stock at a price per share equal to the applicable Liquidation Amount. Notwithstanding the foregoing, in the event of a redemption pursuant to the preceding sentence, if the Available Proceeds are not sufficient to redeem all outstanding shares of Preferred Stock, the Corporation shall ratably redeem a pro rata portion of each holder's shares of Preferred Stock to the fullest extent of such Available Proceeds, based on the respective amounts which would otherwise be payable in respect of the shares to be redeemed if the Available Proceeds were sufficient to redeem all such shares, and shall redeem the remaining shares as soon as it may lawfully do so under Delaware law governing dist

(i) Each Redemption Notice shall state: (1) the number of shares of Preferred Stock held by the holder that the Corporation shall redeem; (2) the date of redemption (the "**Redemption Date**") and the amount to be paid to such holder; and (3) for holders of shares in certificated form, that the holder is to surrender to the Corporation, in the manner and at the place designated, his, her or its certificate or certificates representing the shares of Preferred Stock to be redeemed.

(ii) On or before the Redemption Date, each holder of shares of Preferred Stock to be redeemed shall surrender the certificate or certificates representing such shares (or, if such registered holder alleges that such certificate has been lost, stolen or destroyed, a lost certificate affidavit and agreement reasonably acceptable to the Corporation to indemnify the Corporation against any claim that may be made against the Corporation on account of the alleged loss, theft or destruction of such certificate) to the Corporation, in the manner and at the place designated in the Redemption Notice, and thereupon the Available Proceeds for such shares shall be payable to the order of the person whose name appears on such certificate or certificates as the owner thereof.

Prior to the distribution or redemption provided for in this <u>Section 2.4.2(b)</u>, the Corporation shall not expend or dissipate the consideration received for such Deemed Liquidation Event, except to discharge expenses incurred in connection with such Deemed Liquidation Event or in the ordinary course of business.

2.4.3 <u>Amount Deemed Paid or Distributed</u>. The amount deemed paid or distributed to the holders of capital stock of the Corporation upon any such merger, consolidation, sale, transfer, exclusive license, other disposition or redemption shall be the cash or the value of the property, rights or securities to be paid or distributed to such holders pursuant to such Deemed Liquidation Event. The value of such property, rights or securities shall be determined in good faith by the Board of Directors, including at least one of the then-serving Preferred Directors, if any.

2.4.4 <u>Allocation of Escrow and Contingent Consideration</u>. In the event of a Deemed Liquidation Event pursuant to <u>Section 2.4.1(a)(i)</u>, if any portion of the consideration payable to the stockholders of the Corporation is payable only upon satisfaction of contingencies (the "**Additional Consideration**"), the Merger Agreement shall provide that (a) the portion of such consideration that is not Additional Consideration (such portion, the "**Initial Consideration**") shall be allocated among the holders of capital stock of the Corporation in accordance with <u>Sections 2.1, 2.2</u> and <u>2.3</u> as if the Initial Consideration were the only consideration payable in connection with such Deemed Liquidation Event; and (b) at each time Additional Consideration becomes payable to the stockholders of the Corporation in accordance with <u>Sections 2.1, 2.2</u> and <u>2.3</u> after taking into account the previous payment(s) of the Initial Consideration and each other payment of Additional Consideration, if applicable, as part of the same transaction. For the purposes of this <u>Section 2.4.4</u>, consideration placed into escrow or retained as holdback to be available for satisfaction of indemnification or similar obligations in connection with such Deemed Liquidation Event shall be deemed to be Additional Consideration.

3. <u>Voting</u>.

3.1 <u>General</u>. On any matter presented to the stockholders of the Corporation for their action or consideration at any meeting of stockholders of the Corporation (or by written consent of stockholders in lieu of meeting), each holder of outstanding shares of Preferred Stock shall be entitled to cast the number of votes equal to the number of whole shares of Common Stock into which the shares of Preferred Stock held by such holder are convertible as of the record date for determining stockholders entitled to vote on such matter. Except as provided by law or by the other provisions of the Certificate of Incorporation, holders of Preferred Stock shall vote together with the holders of Common Stock as a single class and on an as-converted to Common Stock basis.

3.2 <u>Election of Directors</u>. The holders of record of the shares of Series B Preferred, exclusively and as a separate class, shall be entitled to elect one director of the Corporation (the "**Series B Director**"), the holders of record of the shares of Series A-2 Preferred, exclusively and as a separate class, shall be entitled to elect three directors of the Corporation (the "**Series A Directors**," and, together with the Series B Director, the "**Preferred Directors**"), the holders of record of the shares of Common Stock, exclusively and as a separate class, shall be entitled to elect one director of the Corporation, and the holders of record of the shares of Series Preferred and Common Stock, voting together as a single class and on as as-converted basis, shall be entitled to elect four directors of the Corporation. Any director elected as provided in the preceding sentence may be removed without cause by, and only by, the affirmative vote of the holders of the shares of the class or series of capital stock entitled to elect such director or directors, given either at a special meeting of such stockholders duly called for that purpose or pursuant to a written consent of stockholders. If the holders of Series Preferred or Common Stock, as the case may be, fail to elect a sufficient number of directors to fill all directorships for which they are entitled to elect directors, voting exclusively and as a separate class, pursuant to the first sentence of this <u>Section 3.2</u>, then any directorship not so filled shall remain vacant until such time

as the holders of the Series Preferred or Common Stock, as the case may be, elect a person to fill such directorship by vote or written consent in lieu of a meeting; and no such directorship may be filled by stockholders of the Corporation other than by the stockholders of the Corporation that are entitled to elect a person to fill such directorship, voting exclusively and as a separate class. The holders of record of the shares of Common Stock and of any other class or series of voting stock (including the Preferred Stock), exclusively and voting together as a single class and on an as-converted basis, shall be entitled to elect the balance of the total number of directors of the Corporation. At any meeting held for the purpose of electing a director, the presence in person or by proxy of the holders of a majority of the outstanding shares of the class or series entitled to elect such director shall constitute a quorum for the purpose of electing such director. Except as otherwise provided in this Section 3.2, a vacancy in any directorship filled by the holders of any class or series shall be filled only by vote or written consent in lieu of a meeting of the holders of such class or series or by any remaining director or directors elected by the holders of such class or series pursuant to this Section 3.2. The rights of the holders of the Series B Preferred, the rights of the holders of the Series A-2 Preferred and the rights of the holders of the Common Stock under the first sentence of this Section 3.2 shall terminate on the first date following the Series B Original Issue Date (as defined below) on which there are, in respect of the Series B Preferred, less than 10,000,000 shares of Series B Preferred (subject to appropriate adjustment in the event of any stock dividend, stock split, combination, or other similar recapitalization with respect to the Series B Preferred occurring after the Effective Time) issued and outstanding, in respect of the Series A-2 Preferred, less than 16,000,000 shares of Series A-2 Preferred (subject to appropriate adjustment in the event of any stock dividend, stock split, combination, or other similar recapitalization with respect to the Series A-2 Preferred occurring after the Effective Time) issued and outstanding, and, in respect of the Common Stock, less than 50,000,000 shares of Common Stock (subject to appropriate adjustment in the event of any stock dividend, stock split, combination, or other similar recapitalization with respect to the Common Stock occurring after the Effective Time) issued and outstanding.

3.3 Series Preferred Protective Provisions. At any time when shares of Series Preferred are outstanding, the Corporation shall not, either directly or indirectly by amendment, merger, consolidation or otherwise, do any of the following without (in addition to any other vote required by law or the Certificate of Incorporation) the written consent or affirmative vote of the Requisite Holders given in writing or by vote at a meeting, consenting or voting (as the case may be) separately as a class, and any such act or transaction entered into without such consent or vote shall be null and void *ab initio*, and of no force or effect:

3.3.1 liquidate, dissolve or wind-up the business and affairs of the Corporation, effect any merger or consolidation or any other Deemed Liquidation Event, or consent to any of the foregoing;

3.3.2 amend, waive, alter or repeal any provision of the Certificate of Incorporation or Bylaws of the Corporation in a manner that adversely alters the rights, preferences or privileges of the Series Preferred, including by way of merger or consolidation or any other such event;

3.3.3 create, or authorize the creation of (by reclassification or otherwise), or issue or obligate itself to issue shares of, any additional class or series of capital stock unless the same ranks junior to the Series Preferred with respect to the distribution of assets on the liquidation, dissolution or winding up of the Corporation, the payment of dividends and rights of redemption, or increase the authorized number of shares of Preferred Stock (or any series thereof) or increase the authorized number of shares of any additional class or series of capital stock of the Corporation unless the same ranks junior to the Series Preferred with respect to the distribution or winding up of the Corporation, the payment of dividends and rights of redemption, dissolution or winding up of the Corporation, the payment of dividends and rights of redemption;

3.3.4 (i) reclassify, alter or amend any existing security of the Corporation that is *pari passu* with the Series Preferred in respect of the distribution of assets on the liquidation, dissolution or winding up of the Corporation, the payment of dividends or rights of redemption, if such reclassification, alteration or amendment would render such other security senior to the Series Preferred in respect of any such right, preference, or privilege or (ii) reclassify, alter or amend any existing security of the Corporation that is junior to the Series Preferred in respect of the distribution of assets on the liquidation, dissolution or winding up of the Corporation, the payment of dividends or rights of redemption, if such reclassification, alteration or amendment would render such other security senior to or *pari passu* with the Series Preferred in respect of any such right, preference or privilege;

3.3.5 purchase or redeem (or permit any subsidiary to purchase or redeem) any shares of capital stock of the Corporation other than repurchases of stock from employees, officers, directors, consultants or other persons who perform or performed services for the Corporation or any subsidiary, which repurchases are approved by the Board of Directors;

3.3.6 pay or declare any dividend or make any distribution on, any shares of Common Stock, Series A-1 Preferred stock, or any series of Preferred Stock of the Corporation ranking junior to or on parity with the Series Preferred, other than dividends or other distributions payable on the Common Stock solely in the form of additional shares of Common Stock;

3.3.7 increase the number of shares of capital stock authorized for issuance under the Corporation's existing stock plans, equity incentive plans, restricted stock plans or other similar arrangements (collectively, "<u>Stock Plans</u>") or approve any new Stock Plan, unless such increase is approved by the Board of Directors, including the approval of at least one of the then-serving Preferred Directors, if any;

3.3.8 enter into or be a party to any transaction with any director, officer, or employee of the Corporation or any "associate" (as defined in Rule 12b-2 promulgated under the Exchange Act) of any such Person, including without limitation any "management bonus" or similar plan providing payments to employees in connection with a Deemed Liquidation Event, except for transactions that are approved by the Board of Directors, including the approval of at least one of the then-serving Preferred Directors, if any; or

3.3.9 create, or hold capital stock in, any subsidiary that is not wholly owned (either directly or through one or more other subsidiaries) by the Corporation, or permit any subsidiary to create, or authorize the creation of, or issue or obligate itself to issue, any shares of any class or series of capital stock, or sell, transfer or otherwise dispose of any capital stock of any direct or indirect subsidiary to sell, lease, transfer, exclusively license or otherwise dispose (in a single transaction or series of related transactions) of all or substantially all of the assets of such subsidiary; or

3.3.10 enter into an agreement to do any of the foregoing.

4. Optional Conversion. The holders of the Preferred Stock shall have conversion rights as follows (the "Conversion Rights"):

4.1 Right to Convert.

4.1.1 <u>Conversion Ratio</u>. Each share of any series of Preferred Stock shall be convertible, at the option of the holder thereof, at any time and from time to time, and without the payment of additional consideration by the holder thereof, into such number of fully paid and non-assessable shares of Common Stock as is determined by dividing the applicable Original Issue Price for such series of Preferred Stock by the applicable Conversion Price (as defined below) for such series in effect at the time of conversion. As of the Effective Time, the "**Conversion Price**" shall be equal to (i) with respect to the Series A-1 Preferred Stock, \$1.00 per share, (ii) with respect to the Series A-2 Preferred Stock, \$1.00 per share, and (iii) with respect to the Series B Preferred Stock, \$1.50 per share. Following the Effective Time, the Conversion Price for each series of Preferred Stock, and the rate at which shares of such series of Preferred Stock may be converted into shares of Common Stock, shall be subject to adjustment as provided below.

4.1.2 <u>Termination of Conversion Rights</u>. In the event of a liquidation, dissolution or winding up of the Corporation or a Deemed Liquidation Event, the Conversion Rights shall terminate at the close of business on the last full day preceding the date fixed for the payment of any such amounts distributable on such event to the holders of Preferred Stock.

4.2 <u>Fractional Shares</u>. No fractional shares of Common Stock shall be issued upon conversion of the Preferred Stock. In lieu of any fractional shares to which the holder would otherwise be entitled, the Corporation shall pay cash equal to such fraction multiplied by the fair market value of a share of Common Stock as determined in good faith by the Board of Directors. Whether or not fractional shares would be issuable upon such conversion shall be determined on the basis of the total number of shares of Preferred Stock the holder is at the time converting into Common Stock and the aggregate number of shares of Common Stock issuable upon such conversion.

4.3 Mechanics of Conversion.

4.3.1 <u>Notice of Conversion</u>. In order for a holder of Preferred Stock to voluntarily convert shares of Preferred Stock into shares of Common Stock, such holder shall (a) provide written notice to the Corporation's transfer agent at the office of the transfer agent for the Preferred Stock (or at the principal office of the Corporation if the Corporation serves as its own transfer agent) that such holder elects to convert all or any number of such holder's shares of Preferred Stock and, if applicable, any event on which such conversion is contingent and (b), if such holder's shares are certificated, surrender the certificate or certificates for such shares of Preferred Stock (or, if such registered holder alleges that such certificate has been lost, stolen or destroyed, a lost certificate affidavit and agreement reasonably acceptable to the Corporation to

indemnify the Corporation against any claim that may be made against the Corporation on account of the alleged loss, theft or destruction of such certificate), at the office of the transfer agent for the Preferred Stock (or at the principal office of the Corporation if the Corporation serves as its own transfer agent). Such notice shall state such holder's name or the names of the nominees in which such holder wishes the shares of Common Stock to be issued. If required by the Corporation, any certificates surrendered for conversion shall be endorsed or accompanied by a written instrument or instruments of transfer, in form satisfactory to the Corporation, duly executed by the registered holder or his, her or its attorney duly authorized in writing. The close of business on the date of receipt by the transfer agent (or by the Corporation if the Corporation serves as its own transfer agent) of such notice and, if applicable, certificates (or lost certificate affidavit and agreement) shall be the time of conversion (the "**Conversion Time**"), and the shares of Common Stock issuable upon conversion of the specified shares shall be deemed to be outstanding of record as of such date. The Corporation shall, as soon as practicable after the Conversion Time (i) issue and deliver to such holder of Preferred Stock, or to his, her or its nominees, a certificate for the number of full shares of Common Stock issuable upon such conversion in accordance with the provisions hereof and a certificate for the number (if any) of the shares of Preferred Stock represented by the surrendered certificate that were not converted into Common Stock, (ii) pay in cash such amount as provided in <u>Section 4.2</u> in lieu of any fraction of a share of Common Stock otherwise issuable upon such conversion and (iii) pay all declared but unpaid dividends on the shares of Preferred Stock converted.

4.3.2 <u>Reservation of Shares</u>. The Corporation shall at all times when the Preferred Stock shall be outstanding, reserve and keep available out of its authorized but unissued capital stock, for the purpose of effecting the conversion of the Preferred Stock, such number of its duly authorized shares of Common Stock as shall from time to time be sufficient to effect the conversion of all outstanding Preferred Stock; and if at any time the number of authorized but unissued shares of Common Stock shall not be sufficient to effect the conversion of all then outstanding shares of the Preferred Stock, the Corporation shall take such corporate action as may be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purposes, including, without limitation, engaging in best efforts to obtain the requisite stockholder approval of any necessary amendment to the Certificate of Incorporation. Before taking any action which would cause an adjustment reducing the applicable Conversion Price for any series of Preferred Stock below the then par value of the shares of Common Stock issuable upon conversion of such series of Preferred Stock, the Corporation will take any corporate action which may, in the opinion of its counsel, be necessary in order that the Corporation may validly and legally issue fully paid and non-assessable shares of Common Stock at such adjusted Conversion Price.

4.3.3 <u>Effect of Conversion</u>. All shares of Preferred Stock which shall have been surrendered for conversion as herein provided shall no longer be deemed to be outstanding and all rights with respect to such shares shall immediately cease and terminate at the Conversion Time, except only the right of the holders thereof to receive shares of Common Stock in exchange therefor, to receive payment in lieu of any fraction of

Time, except only the right of the holders thereof to receive shares of Common Stock in exchange therefor, to receive payment in lieu of any fraction of a share otherwise issuable upon such conversion as provided in <u>Section 4.2</u> and to receive payment of any dividends declared but unpaid thereon. Any shares of Preferred Stock so converted shall be retired and cancelled and may not be reissued as shares of such series, and the Corporation may thereafter take such appropriate action (without the need for stockholder action) as may be necessary to reduce the authorized number of shares of Preferred Stock accordingly.

4.3.4 <u>No Further Adjustment</u>. Upon any such conversion, no adjustment to the applicable Conversion Price shall be made for any declared but unpaid dividends on the Preferred Stock surrendered for conversion or on the Common Stock delivered upon conversion.

4.3.5 Taxes. The Corporation shall pay any and all issue and other similar taxes that may be payable in respect of any issuance or delivery of shares of Common Stock upon conversion of shares of Preferred Stock pursuant to this <u>Section 4</u>. The Corporation shall not, however, be required to pay any tax which may be payable in respect of any transfer involved in the issuance and delivery of shares of Common Stock in a name other than that in which the shares of Preferred Stock so converted were registered, and no such issuance or delivery shall be made unless and until the person or entity requesting such issuance has paid to the Corporation the amount of any such tax or has established, to the satisfaction of the Corporation, that such tax has been paid.

4.4 Adjustments to Conversion Price for Diluting Issues.

4.4.1 Special Definitions. For purposes of this Article Fourth, the following definitions shall apply:

(a) "Option" means rights, options or warrants to subscribe for, purchase or otherwise acquire Common Stock or

Convertible Securities.

(b) "Series A Original Issue Date" means the date on which the first share of Series A Preferred Stock was issued.

(c) "Series B Original Issue Date" means the date on which the first share of Series B Preferred Stock was issued.

(d) "**Convertible Securities**" means any evidences of indebtedness, shares or other securities directly or indirectly convertible into or exchangeable for Common Stock, but excluding Options.

(e) "**Additional Shares of Common Stock**" means all shares of Common Stock issued (or, pursuant to <u>Section 4.4.3</u> below, deemed to be issued) by the Corporation after the Series B Original Issue Date, other than (1) the following shares of Common Stock and (2) shares of Common Stock deemed issued pursuant to the following Options and Convertible Securities (clauses (1) and (2), collectively, "**Exempted Securities**"):

Stock;

(i) shares of Common Stock, Options or Convertible Securities issued as a dividend or distribution on Preferred

(ii) shares of Common Stock, Options or Convertible Securities issued by reason of a dividend, stock split, split-up or other distribution on shares of Common Stock for which an adjustment to any Conversion Price is made pursuant to <u>Section 4.5</u>, <u>4.6</u>, <u>4.7</u> or <u>4.8</u>;

(iii) shares of Common Stock or Options issued to employees or directors of, or consultants or advisors to, the Corporation or any of its subsidiaries pursuant to a plan, agreement or arrangement approved by the Board of Directors, including the approval of at least one of the then-serving Preferred Directors, if any; (iv) shares of Common Stock or Convertible Securities actually issued upon the exercise of Options or shares of Common Stock actually issued upon the conversion or exchange of Convertible Securities, in each case provided such issuance is pursuant to the terms of such Option or Convertible Security;

(v) shares of Common Stock, Options or Convertible Securities issued to banks, equipment lessors or other financial institutions, or to real property lessors, pursuant to a debt financing, equipment leasing or real property leasing transaction approved by the Board of Directors, including the approval of at least one of the then-serving Preferred Directors, if any;

(vi) shares of Common Stock, Options or Convertible Securities issued pursuant to the acquisition of another corporation by the Corporation by merger, purchase of substantially all of the assets or other reorganization or to a joint venture agreement, <u>provided</u> that such issuances are approved by the Board of Directors, including the approval of at least one of the then-serving Preferred Directors, if any;

(vii) shares of Common Stock, Options or Convertible Securities issued in connection with sponsored research, collaboration, technology license, development, marketing or other similar agreements or strategic partnerships approved by the Board of Directors, including the approval of at least one of the then-serving Preferred Directors, if any;

(viii) shares of Common Stock issued in a public offering of the Corporation's Common Stock pursuant to a registration statement under the Securities Act of 1933, as amended; or

(ix) shares of Common Stock or Series A-1 Preferred Stock issued pursuant to the Merger Agreements (as defined in the Series A Preferred Stock Purchase Agreement of the Corporation dated on or about the Series A Original Issue Date).

4.4.2 <u>No Adjustment of Preferred Stock Conversion Price</u>. No adjustment in the Conversion Price of the Series A-1 Preferred Stock shall be made as the result of the issuance or deemed issuance of Additional Shares of Common Stock if the Corporation receives written notice from the holders of a majority of the then-outstanding shares of Series A-1 Preferred Stock agreeing that no such adjustment shall be made as the result of the issuance or deemed issuance of such Additional Shares of Common Stock. No adjustment in the Conversion Price of the Series A-2 Preferred Stock shall be made as the result of the issuance or deemed issuance of Additional Shares of Common Stock if the Corporation receives written notice from the holders of a majority of the then-outstanding shares of Series A-2 Preferred Stock agreeing that no such adjustment shall be made as the result of the issuance or deemed issuance of such Additional Shares of Common Stock. No adjustment in the Conversion Price of the Series B Preferred Stock shall be made as the result of the issuance or deemed issuance of Additional Shares of Common Stock if the Corporation receives written notice shall be made as the result of the issuance or deemed issuance of Additional Shares of Common Stock if the Corporation receives written notice from the holders of a majority of the then-outstanding shares of Series B Preferred Stock agreeing that no such adjustment shall be made as the result of the issuance or deemed issuance of series B Preferred Stock agreeing that no such adjustment shall be made as the result of the issuance or deemed issuance of such Additional Shares of Common Stock.

4.4.3 Deemed Issue of Additional Shares of Common Stock.

(a) If the Corporation at any time or from time to time after the Series B Original Issue Date shall issue any Options or Convertible Securities (excluding Options or Convertible Securities which are themselves Exempted Securities) or shall fix a record date for the determination of holders of any class of securities entitled to receive any such Options or Convertible Securities, then the maximum number of shares of Common Stock (as set forth in the instrument relating thereto, assuming the satisfaction of any conditions to exercisability, convertibility or exchangeability but without regard to any provision contained therein for a subsequent adjustment of such number) issuable upon the exercise of such Options or, in the case of Convertible Securities and Options therefor, the conversion or exchange of such Convertible Securities, shall be deemed to be Additional Shares of Common Stock issued as of the time of such issue or, in case such a record date shall have been fixed, as of the close of business on such record date.

(b) If the terms of any Option or Convertible Security, the issuance of which resulted in an adjustment to the

Conversion Price of any series of Preferred Stock pursuant to the terms of <u>Section 4.4.4</u>, are revised as a result of an amendment to such terms or any other adjustment pursuant to the provisions of such Option or Convertible Security (but excluding automatic adjustments to such terms pursuant to antidilution or similar provisions of such Option or Convertible Security) to provide for either (1) any increase or decrease in the number of shares of Common Stock issuable upon the exercise, conversion and/or exchange of any such Option or Convertible Security or (2) any increase or decrease in the consideration payable to the Corporation upon such exercise, conversion and/or exchange, then, effective upon such increase or decrease becoming effective, the applicable Conversion Price computed upon the original issue of such Option or Convertible Security (or upon the occurrence of a record date with respect thereto) shall be readjusted to such Conversion Price as would have obtained had such revised terms been in effect upon the original date of issuance of such Option or Convertible Security. Notwithstanding the foregoing, no readjustment pursuant to this clause (b) shall have the effect of increasing the applicable Conversion Price to an amount which exceeds the lower of (i) the applicable Conversion Price in effect immediately prior to the original adjustment made as a result of the issuance of such Option or Convertible Security, or (ii) the applicable Conversion Price that would have resulted from any issuances of Additional Shares of Common Stock (other than deemed issuances of Additional Shares of Common Stock as a result of the issuance of such Option or Convertible Security) between the original adjustment date and such readjustment date.

(c) If the terms of any Option or Convertible Security (excluding Options or Convertible Securities which are

themselves Exempted Securities), the issuance of which did not result in an adjustment to the Conversion Price of any series of Preferred Stock pursuant to the terms of <u>Section 4.4.4</u> (either because the consideration per share (determined pursuant to <u>Section 4.4.5</u>) of the Additional Shares of Common Stock subject thereto was equal to or greater than the applicable Conversion Price then in effect, or because such Option or Convertible Security was issued before the Series B Original Issue Date), are revised after the Series B Original Issue Date as a result of an amendment to such terms or any other adjustment pursuant to the provisions of such Option or Convertible Security (but excluding automatic adjustments to such terms pursuant to anti-dilution or similar provisions of such Option or Convertible Security) to provide for either (1) any increase in the number of shares of Common Stock issuable upon the exercise, conversion or exchange of any such Option or Convertible Security or (2) any decrease in the consideration payable to the Corporation upon such exercise, conversion or exchange, then such Option or Convertible Security, as so amended or adjusted, and the Additional Shares of Common Stock subject thereto (determined in the manner provided in <u>Section 4.4.3(a)</u> shall be deemed to have been issued effective upon such increase or decrease becoming effective.

(d) Upon the expiration or termination of any unexercised Option or unconverted or unexchanged Convertible Security (or portion thereof) which resulted (either upon its original issuance or upon a revision of its terms) in an adjustment to the Conversion Price of any series of Preferred Stock pursuant to the terms of <u>Section 4.4.4</u>, the applicable Conversion Price shall be readjusted to such Conversion Price as would have obtained had such Option or Convertible Security (or portion thereof) never been issued.

(e) If the number of shares of Common Stock issuable upon the exercise, conversion and/or exchange of any Option or Convertible Security, or the consideration payable to the Corporation upon such exercise, conversion and/or exchange, is calculable at the time such Option or Convertible Security is issued or amended but is subject to adjustment based upon subsequent events, any adjustment to the Conversion Price for any series of Preferred Stock provided for in this <u>Section 4.4.3</u> shall be effected at the time of such issuance or amendment based on such number of shares or amount of consideration without regard to any provisions for subsequent adjustments (and any subsequent adjustments shall be treated as provided in clauses (b) and (c) of this <u>Section 4.4.3</u>). If the number of shares of Common Stock issuable upon the exercise, conversion and/or exchange of any Option or Convertible Security, or the consideration payable to the Corporation upon such exercise, conversion and/or exchange, cannot be calculated at all at the time such Option or Convertible Security is issued or amended, any adjustment to the Conversion Price of any series of Preferred Stock that would result under the terms of this <u>Section 4.4.3</u> at the time of such issuance or amendment shall instead be effected at the time such number of shares and/or amount of consideration is first calculable (even if subject to subsequent adjustments), assuming for purposes of calculating such adjustment to such Conversion Price that such issuance or amendment took place at the time such calculation can first be made.

4.4.4 Adjustment of Conversion Price Upon Issuance of Additional Shares of Common Stock. In the event the Corporation shall at any time after the Series B Original Issue Date issue Additional Shares of Common Stock (including Additional Shares of Common Stock deemed to be issued pursuant to <u>Section 4.4.3</u>), without consideration or for a consideration per share less than the Conversion Price of any series of Preferred Stock in effect immediately prior to such issuance or deemed issuance, then the Conversion Price for such series of Preferred Stock shall be reduced, concurrently with such issue, to a price (calculated to the nearest one-hundredth of a cent) determined in accordance with the following formula:

$$CP_2 = CP_1^* (A + B) \div (A + C).$$

For purposes of the foregoing formula, the following definitions shall apply:

(a) "CP₂" means the applicable Conversion Price in effect immediately after such issuance or deemed issuance of Additional Shares of Common Stock

(b) "CP₁" means the applicable Conversion Price in effect immediately prior to such issuance or deemed issuance of Additional Shares of Common Stock;

(c) "A" means the number of shares of Common Stock outstanding immediately prior to such issuance or deemed issuance of Additional Shares of Common Stock (treating for this purpose as outstanding all shares of Common Stock issuable upon exercise of Options outstanding immediately prior to such issuance or deemed issuance or upon conversion or exchange of Convertible Securities (including the Preferred Stock) outstanding (assuming exercise of any outstanding Options therefor) immediately prior to such issue);

(d) "B" means the number of shares of Common Stock that would have been issued if such Additional Shares of Common Stock had been issued or deemed issued at a price per share equal to CP_1 (determined by dividing the aggregate consideration received by the Corporation in respect of such issue by CP_1); and

(e) "C" means the number of such Additional Shares of Common Stock issued in such transaction.

4.4.5 <u>Determination of Consideration</u>. For purposes of this <u>Section 4.4</u>, the consideration received by the Corporation for the issuance or deemed issuance of any Additional Shares of Common Stock shall be computed as follows:

(a) Cash and Property: Such consideration shall:

(i) insofar as it consists of cash, be computed at the aggregate amount of cash received by the Corporation, excluding amounts paid or payable for accrued interest;

(ii) insofar as it consists of property other than cash, be computed at the fair market value thereof at the time of such issue, as determined in good faith by the Board of Directors, including the approval of at least one of the then-serving Preferred Directors, if any; and

(iii) in the event Additional Shares of Common Stock are issued together with other shares or securities or other assets of the Corporation for consideration which covers both, be the proportion of such consideration so received, computed as provided in clauses (i) and (ii) above, as determined in good faith by the Board of Directors, including the approval of at least one of the then-serving Preferred Directors, if any.

(b) <u>Options and Convertible Securities</u>. The consideration per share received by the Corporation for Additional Shares of Common Stock deemed to have been issued pursuant to <u>Section 4.4.3</u>, relating to Options and Convertible Securities, shall be determined by dividing:

(i) The total amount, if any, received or receivable by the Corporation as consideration for the issue of such Options or Convertible Securities, plus the minimum aggregate amount of additional consideration (as set forth in the instruments relating thereto, without regard to any provision contained therein for a subsequent adjustment of such consideration) payable to the Corporation upon the exercise of such Options or the conversion or exchange of such Convertible Securities, or in the case of Options for Convertible Securities, the exercise of such Options for Convertible Securities and the conversion or exchange of such Convertible Securities, by

(ii) the maximum number of shares of Common Stock (as set forth in the instruments relating thereto, without regard to any provision contained therein for a subsequent adjustment of such number) issuable upon the exercise of such Options or the conversion or exchange of such Convertible Securities, or in the case of Options for Convertible Securities, the exercise of such Options for Convertible Securities and the conversion or exchange of such Convertible Securities.

4.4.6 <u>Multiple Closing Dates</u>. In the event the Corporation shall issue on more than one date Additional Shares of Common Stock that are a part of one transaction or a series of related transactions and that would result in an adjustment to the Conversion Price of any series of Preferred Stock pursuant to the terms of <u>Section 4.4.4</u>, and such issuance dates occur within a period of no more than 90 days from the first such issuance to the final such issuance, then, upon the final such issuance, such Conversion Price shall be readjusted to give effect to all such issuances as if they occurred on the date of the first such issuance (and without giving effect to any additional adjustments as a result of any such subsequent issuances within such period).

4.5 Adjustment for Stock Splits and Combinations. If the Corporation shall at any time or from time to time after the Series B Original Issue Date effect a subdivision of the outstanding Common Stock, the applicable Conversion Price in effect immediately before that subdivision shall be proportionately decreased so that the number of shares of Common Stock issuable on conversion of each share of such series shall be increased in proportion to such increase in the aggregate number of shares of Common Stock outstanding. If the Corporation shall at any time or from time to time after the Series B Original Issue Date combine the outstanding shares of Common Stock, the applicable Conversion Price in effect immediately before the combination shall be proportionately increased so that the number of shares of Common Stock issuable on conversion of each share of such series shall be decreased in proportion to such decrease in the aggregate number of shares of Common Stock outstanding. Any adjustment under this Section shall become effective at the close of business on the date the subdivision or combination becomes effective.

4.6 <u>Adjustment for Certain Dividends and Distributions</u>. In the event the Corporation at any time or from time to time after the Series B Original Issue Date shall make or issue, or fix a record date for the determination of holders of Common Stock entitled to receive, a dividend or other distribution payable on the Common Stock in additional shares of Common Stock, then and in each such event the applicable Conversion Price in effect immediately before such event shall be decreased as of the time of such issuance or, in the event such a record date shall have been fixed, as of the close of business on such record date, by multiplying the applicable Conversion Price then in effect by a fraction: (1) the numerator of which shall be the total number of shares of Common Stock issued and outstanding immediately prior to the time of such issuance or the close of business on such record date, and

(2) the denominator of which shall be the total number of shares of Common Stock issued and outstanding immediately prior to the time of such issuance or the close of business on such record date plus the number of shares of Common Stock issuable in payment of such dividend or distribution.

Notwithstanding the foregoing (a) if such record date shall have been fixed and such dividend is not fully paid or if such distribution is not fully made on the date fixed therefor, the applicable Conversion Price shall be recomputed accordingly as of the close of business on such record date and thereafter the applicable Conversion Price shall be adjusted pursuant to this Section as of the time of actual payment of such dividends or distributions; and (b) that no such adjustment shall be made if the holders of Preferred Stock simultaneously receive a dividend or other distribution of shares of Common Stock in a number equal to the number of shares of Common Stock as they would have received if all outstanding shares of Preferred Stock had been converted into Common Stock on the date of such event.

4.7 <u>Adjustments for Other Dividends and Distributions</u>. In the event the Corporation at any time or from time to time after the Series B Original Issue Date shall make or issue, or fix a record date for the determination of holders of Common Stock entitled to receive, a dividend or other distribution payable in securities of the Corporation (other than a distribution of shares of Common Stock in respect of outstanding shares of Common Stock) or in other property and the provisions of <u>Section 1</u> do not apply to such dividend or distribution, then and in each such event the holders of Preferred Stock shall receive, simultaneously with the distribution to the holders of Common Stock, a dividend or other distribution of such securities or other property in an amount equal to the amount of such securities or other property as they would have received if all outstanding shares of Preferred Stock had been converted into Common Stock on the date of such event.

4.8 Adjustment for Merger or Reorganization, etc. Subject to the provisions of Section 2.4, if there shall occur any reorganization, recapitalization, reclassification, consolidation or merger involving the Corporation in which the Common Stock (but not the Preferred Stock) is converted into or exchanged for securities, cash or other property (other than a transaction covered by Sections 4.4, 4.6 or 4.7), then, following any such reorganization, recapitalization, reclassification, consolidation or merger, each share of Preferred Stock shall thereafter be convertible in lieu of the Common Stock into which it was convertible prior to such event into the kind and amount of securities, cash or other property which a holder of the number of shares of Common Stock of the Corporation issuable upon conversion of one share of Preferred Stock immediately prior to such reorganization, recapitalization, reclassification, consolidation or merger would have been entitled to receive pursuant to such transaction; and, in such case, appropriate adjustment (as determined in good faith by the Board of Directors, including the approval of at least one of the then-serving Preferred Directors, if any) shall be made in the application of the provisions in this Section 4 (including provisions with respect to changes in and other adjustments of the Conversion Price) shall thereafter be applicable, as nearly as reasonably may be, in relation to any securities or other property thereafter deliverable upon the conversion of the Preferred Stock.

4.9 <u>Certificate as to Adjustments</u>. Upon the occurrence of each adjustment or readjustment of the Conversion Price pursuant to this <u>Section 4</u>, the Corporation at its expense shall, as promptly as reasonably practicable but in any event not later than ten (10) days thereafter, compute such adjustment or readjustment in accordance with the terms hereof and furnish to each holder of Preferred Stock a certificate setting forth such adjustment or readjustment (including the kind and amount of securities, cash or other property into which the Preferred Stock is convertible) and showing in detail the facts upon which such adjustment or readjustment is based. The Corporation shall, as promptly as reasonably practicable after the written request at any time of any holder of Preferred Stock (but in any event not later than ten (10) days thereafter), furnish or cause to be furnished to such holder a certificate setting forth (i) the Conversion Price for such series of Preferred Stock then in effect, and (ii) the number of shares of Common Stock and the amount, if any, of other securities, cash or property which then would be received upon the conversion of such series of Preferred Stock.

4.10 Notice of Record Date. In the event:

(a) the Corporation shall take a record of the holders of its Common Stock (or other capital stock or securities at the time issuable upon conversion of the Preferred Stock) for the purpose of entitling or enabling them to receive any dividend or other distribution, or to receive any right to subscribe for or purchase any shares of capital stock of any class or any other securities, or to receive any other security; or

(b) of any capital reorganization of the Corporation, any reclassification of the Common Stock of the Corporation, or any Deemed Liquidation Event; or

(c) of the voluntary or involuntary dissolution, liquidation or winding-up of the Corporation,

then, and in each such case, the Corporation will send or cause to be sent to the holders of the Preferred Stock a notice specifying, as the case may be, (i) the record date for such dividend, distribution or right, and the amount and character of such dividend, distribution or right, or (ii) the effective date on which such reorganization, reclassification, consolidation, merger, transfer, dissolution, liquidation or winding-up is proposed to take place, and the time, if any is to be fixed, as of which the holders of record of Common Stock (or such other capital stock or securities at the time issuable upon the conversion of the Preferred Stock) shall be entitled to exchange their shares of Common Stock (or such other capital stock or securities) for securities or other property deliverable upon such reorganization, reclassification, consolidation, merger, transfer, dissolution, liquidation or winding-up, and the amount per share and character of such exchange applicable to the Preferred Stock and the Common Stock. Such notice shall be sent at least ten (10) days prior to the record date or effective date for the event specified in such notice.

5. Mandatory Conversion.

5.1 <u>Trigger Events</u>. Upon either (a) the point in time immediately prior to the closing of the sale of shares of Common Stock in a firm-commitment underwritten public offering pursuant to an effective registration statement under the Securities Act of 1933, as amended, resulting in at least \$30,000,000 of gross proceeds to the Corporation (a "**Qualified IPO**") or (b) the date and time, or the occurrence of an event, specified by vote or written consent of the Requisite Holders (the time of such closing or the date and time specified or the time of the event specified in such vote or written consent is referred to herein as the "**Mandatory Conversion Time**"), then (i) all outstanding shares of Preferred Stock shall automatically be converted into shares of Common Stock, at the then effective conversion rate as calculated pursuant to Section 4.1.1, and (ii) such shares may not be reissued by the Corporation.

5.2 Procedural Requirements. All holders of record of shares of Preferred Stock shall be sent written notice of the Mandatory Conversion Time and the place designated for mandatory conversion of all such shares of Preferred Stock pursuant to this Section 5. Such notice need not be sent in advance of the occurrence of the Mandatory Conversion Time. Upon receipt of such notice, each holder of shares of Preferred Stock in certificated form shall surrender his, her or its certificate or certificates for all such shares (or, if such holder alleges that such certificate has been lost, stolen or destroyed, a lost certificate affidavit and agreement reasonably acceptable to the Corporation to indemnify the Corporation against any claim that may be made against the Corporation on account of the alleged loss, theft or destruction of such certificate) to the Corporation at the place designated in such notice. If so required by the Corporation, any certificates surrendered for conversion shall be endorsed or accompanied by written instrument or instruments of transfer, in form satisfactory to the Corporation, duly executed by the registered holder or by his, her or its attorney duly authorized in writing. All rights with respect to the Preferred Stock converted pursuant to Section 5.1, including the rights, if any, to receive notices and vote (other than as a holder of Common Stock), will terminate at the Mandatory Conversion Time (notwithstanding the failure of the holder or holders thereof to surrender any certificates at or prior to such time), except only the rights of the holders thereof, upon surrender of any certificate or certificates of such holders (or lost certificate affidavit and agreement) therefor, to receive the items provided for in the next sentence of this Section 5.2. As soon as practicable after the Mandatory Conversion Time and, if applicable, the surrender of any certificate or certificates (or lost certificate affidavit and agreement) for Preferred Stock, the Corporation shall (a) issue and deliver to such holder, or to his, her or its nominees, a certificate or certificates for the number of full shares of Common Stock issuable on such conversion in accordance with the provisions hereof and (b)pay cash as provided in Section 4.2 in lieu of any fraction of a share of Common Stock otherwise issuable upon such conversion and the payment of any declared but unpaid dividends on the shares of Preferred Stock converted. Such converted Preferred Stock shall be retired and cancelled and may not be reissued as shares of such series, and the Corporation may thereafter take such appropriate action (without the need for stockholder action) as may be necessary to reduce the authorized number of shares of Preferred Stock accordingly.

6. <u>Redemption</u>. The Preferred Stock is not redeemable upon demand by the holders of the Preferred Stock except in accordance with <u>Section 2.4.2(b)</u>.

7. <u>Redeemed or Otherwise Acquired Shares</u>. Any shares of Preferred Stock that are redeemed or otherwise acquired by the Corporation or any of its subsidiaries shall be automatically and immediately cancelled and retired and shall not be reissued, sold or transferred. Neither the Corporation nor any of its subsidiaries may exercise any voting or other rights granted to the holders of Preferred Stock following redemption.

8. <u>Waiver</u>. Any of the rights, powers, preferences and other terms of the Preferred Stock set forth herein may be waived on behalf of all holders of Preferred Stock by the affirmative written consent or vote of the Requisite Holders.

9. <u>Notices</u>. Any notice required or permitted by the provisions of this Article Fourth to be given to a holder of shares of Preferred Stock shall be mailed, postage prepaid, to the post office address last shown on the records of the Corporation, or given by electronic communication in compliance with the provisions of the General Corporation Law, and shall be deemed sent upon such mailing or electronic transmission.

FIFTH: Subject to any additional vote required by the Certificate of Incorporation or Bylaws, in furtherance and not in limitation of the powers conferred by statute, the Board of Directors is expressly authorized to make, repeal, alter, amend and rescind any or all of the Bylaws of the Corporation.

SIXTH: Subject to any additional vote required by the Certificate of Incorporation, the number of directors of the Corporation shall be determined in the manner set forth in the Bylaws of the Corporation. Each director shall be entitled to one vote on each matter presented to the Board of Directors.

SEVENTH: Elections of directors need not be by written ballot unless the Bylaws of the Corporation shall so provide.

EIGHTH: Meetings of stockholders may be held within or without the State of Delaware, as the Bylaws of the Corporation may provide. The books of the Corporation may be kept outside the State of Delaware at such place or places as may be designated from time to time by the Board of Directors or in the Bylaws of the Corporation.

NINTH: To the fullest extent permitted by law, a director or an executive officer of the Corporation shall not be personally liable to the Corporation or its stockholders for monetary damages for breach of fiduciary duty as a director or an executive officer. If the General Corporation Law or any other law of the State of Delaware is amended after approval by the stockholders of this Article Ninth to authorize corporate action further eliminating or limiting the personal liability of directors or executive officers, then the liability of a director of the Corporation shall be eliminated or limited to the fullest extent permitted by the General Corporation Law as so amended.

Any repeal or modification of the foregoing provisions of this Article Ninth by the stockholders of the Corporation shall not adversely affect any right or protection of a director of the Corporation existing at the time of, or increase the liability of any director of the Corporation with respect to any acts or omissions of such director occurring prior to, such repeal or modification.

TENTH: To the fullest extent permitted by applicable law, the Corporation is authorized to provide indemnification of (and advancement of expenses to) directors, officers and agents of the Corporation (and any other persons to which General Corporation Law permits the Corporation to provide indemnification) through Bylaw provisions, agreements with such agents or other persons, vote of stockholders or disinterested directors or otherwise, in excess of the indemnification and advancement otherwise permitted by Section 145 of the General Corporation Law.

Any amendment, repeal or modification of the foregoing provisions of this Article Tenth shall not (a) adversely affect any right or protection of any director, officer or other agent of the Corporation existing at the time of such amendment, repeal or modification or (b) increase the liability of any director of the Corporation with respect to any acts or omissions of such director, officer or agent occurring prior to, such amendment, repeal or modification.

ELEVENTH: The Corporation renounces, to the fullest extent permitted by law, any interest or expectancy of the Corporation in, or in being offered an opportunity to participate in, any Excluded Opportunity. An "**Excluded Opportunity**" is any matter, transaction or interest that is presented to, or acquired, created or developed by, or which otherwise comes into the possession of (i) any director of the Corporation who is not an employee of the Corporation or any of its subsidiaries, or (ii) any holder of Preferred Stock or any partner, member, director, stockholder, employee, affiliate or agent of any such holder, other than someone who is an employee of the Corporation or any of its subsidiaries (collectively, the persons referred to in clauses (i) and (ii) are "**Covered Persons**"), unless such matter, transaction or interest is presented to, or acquired, created or developed by, or otherwise comes into the possession of, a Covered Person expressly and solely in such Covered Person's capacity as a director of the Corporation while such Covered Person is performing services in such capacity. Any repeal or modification of this Article Eleventh will only be prospective and will not affect the rights under this Article Eleventh in effect at the time of the occurrence of any actions or omissions to act giving rise to liability. Notwithstanding anything to the contrary contained elsewhere in this Amended and Restated Certificate of Incorporation, the affirmative vote of the Requisite Holders will be required to amend or repeal, or to adopt any provisions inconsistent with this Article Eleventh.

TWELFTH: Unless the Corporation consents in writing to the selection of an alternative forum, (a) the Court of Chancery in the State of Delaware shall be the sole and exclusive forum for any stockholder (including a beneficial owner) to bring (i) any derivative action or proceeding brought on behalf of the Corporation, (ii) any action asserting a claim of breach of fiduciary duty owed by any director, officer or other employee of the Corporation to the Corporation or the Corporation's stockholders, (iii) any action asserting a claim against the Corporation, its directors, officers or employees arising pursuant to any provision of the Delaware General Corporation Law or the Corporation's certificate of incorporation or bylaws or (iv) any action asserting a claim against the Corporation, its directors, officers or employees governed by the internal affairs doctrine, except for, as to each of (i) through (iv) above, any claim as to which the Court of Chancery determines that there is an indispensable party not subject to the jurisdiction of the Court of Chancery (and the indispensable party does not consent to the personal jurisdiction of the Court of Chancery within ten days following such determination), which is vested in the exclusive jurisdiction of a court or forum other than the Court of Chancery, or for which the Court of Chancery does not have subject matter jurisdiction and (b) subject to the preceding provisions of this Article Twelfth, the federal district courts of the United States of America shall be the exclusive forum for the resolution of any complaint asserting a cause of action arising under the Securities Act of 1933, as amended. If any action the subject matter of which is within the scope of clause (a) of the immediately preceding sentence is filed in a court other than the courts in the State of Delaware (a "Foreign Action") in the name of any stockholder, such stockholder shall be deemed to have consented to (x) the personal jurisdiction of the state and federal courts in the State of Delaware in connection with any action brought in any such court to enforce the provisions of clause (a) of the immediately preceding sentence and (y) having service of process made upon such stockholder in any such action by service upon such stockholder's counsel in the Foreign Action as agent for such stockholder.

Any person or entity purchasing or otherwise acquiring any interest in any security of the Corporation shall be deemed to have notice of and consented to this Article Twelfth. Notwithstanding the foregoing, the provisions of this Article Twelfth shall not apply to suits brought to enforce any liability or duty created by the Securities Exchange Act of 1934, as amended, or any other claim for which the federal courts of the United States have exclusive jurisdiction.

If any provision or provisions of this Article Twelfth shall be held to be invalid, illegal or unenforceable as applied to any person or entity or circumstance for any reason whatsoever, then, to the fullest extent permitted by law, the validity, legality and enforceability of such provisions in any other circumstance and of the remaining provisions of this Article Twelfth (including, without limitation, each portion of any sentence of this Article Twelfth containing any such provision held to be invalid, illegal or unenforceable that is not itself held to be invalid, illegal or unenforceable) and the application of such provision to other persons or entities and circumstances shall not in any way be affected or impaired thereby.

THIRTEENTH: For purposes of Section 500 of the California Corporations Code (to the extent applicable), in connection with any repurchase of shares of Common Stock permitted under the Certificate of Incorporation from employees, officers, directors or consultants of the Corporation in connection with a termination of employment or services pursuant to agreements or arrangements approved by the Board of Directors (in addition to any other consent required under this Amended and Restated Certificate of Incorporation), such repurchase may be made without regard to any "preferential dividends arrears amount" or "preferential rights amount" (as those terms are defined in Section 500 of the California Corporations Code). Accordingly, for purposes of making any calculation under California Corporations Code Section 500 in connection with such repurchase, the amount of any "preferential dividends arrears amount" or "preferential rights amount" (as those terms are defined therein) shall be deemed to be zero.

* * *

3. That the foregoing amendment and restatement was approved by the holders of the requisite number of shares of this corporation in accordance with Section 228 of the General Corporation Law.

4. That this Amended and Restated Certificate of Incorporation, which restates and integrates and further amends the provisions of this Corporation's Certificate of Incorporation, has been duly adopted in accordance with Sections 242 and 245 of the General Corporation Law.

IN WITNESS WHEREOF, this Amended and Restated Certificate of Incorporation has been executed by a duly authorized officer of this corporation on this 22nd day of September, 2022.

By: <u>/s/ Paul Berns</u> Name: Paul Berns Title: President and Chief Executive Officer

CERTIFICATE OF AMENDMENT TO THE AMENDED AND RESTATED CERTIFICATE OF INCORPORATION OF NEUMORA THERAPEUTICS, INC.

Neumora Therapeutics, Inc. (the "**Company**"), a corporation organized and existing under and by virtue of the Delaware General Corporation Law, hereby certifies as follows:

- 1. The name of the Company is Neumora Therapeutics, Inc., and that this corporation was originally incorporated pursuant to the Delaware General Corporation Law on November 22, 2019 under the name RBNC Therapeutics, Inc. An Amended and Restated Certificate of Incorporation of the Company was filed with the Secretary of State of Delaware on September 3, 2020, a Certificate of Amendment was filed with the Secretary of State of Delaware on August 31, 2021, a Certificate of Amendment was filed with the Secretary of State of Delaware on October 7, 2021, and an Amended and Restated Certificate of Incorporation of the Company was filed with the Secretary of State of Delaware of September 22, 2022.
- 2. This Certificate of Amendment to the Company's Amended and Restated Certificate of Incorporation has been duly adopted and approved by the Board of Directors of the Company, acting in accordance with the provisions of Sections 141 and 242 of the Delaware General Corporation Law, and the Company's stockholders have given their written consent in accordance with Section 228 of the Delaware General Corporation Law.
- 3. The first paragraph of Article FOURTH of the Amended and Restated Certificate of Incorporation is hereby amended to read in its entirety as follows:

"**FOURTH**: The total number of shares of all classes of stock which the Corporation shall have authority to issue is (i) 1,210,000,000 shares of Common Stock, \$0.0001 par value per share (the "**Common Stock**") and (ii) 820,348,942 shares of Preferred Stock, \$0.0001 par value per share (the "**Preferred Stock**")."

4. The first paragraph of Article FOURTH Part B of the Amended and Restated Certificate of Incorporation is hereby amended to read in its entirety as follows:

"47,471,167 shares of the authorized Preferred Stock of the Corporation are hereby designated "**Series A-1 Preferred Stock**." 697,947,774 shares of the authorized Preferred Stock of the Corporation are hereby designated "**Series A-2 Preferred Stock**" (together with the Series A-1 Preferred Stock, the "**Series A Preferred Stock**"). 74,930,001 shares of the authorized Preferred Stock of the Corporation are hereby designated "**Series B Preferred Stock**." The rights, preferences, powers, privileges and restrictions, qualifications and limitations of the Preferred Stock are as follows. Unless otherwise indicated, references to "sections" or "Sections" in this Part B of this Article Fourth refer to sections and Sections of Part B of this Article Fourth. As used herein, "**Series Preferred**" means, collectively, the Series B Preferred Stock and Series A-2 Preferred Stock."

5. All other provisions of the Amended and Restated Certificate of Incorporation shall remain in full force and effect.

[Signature page follows]

IN WITNESS WHEREOF, this Certificate of Amendment to the Amended and Restated Certificate of Incorporation has been signed this 7th day of October, 2022.

NEUMORA THERAPEUTICS, INC.

By: <u>/s/ Paul Berns</u> Name: Paul Berns Title: Chief Executive Officer

BYLAWS

OF

RBNC THERAPEUTICS, INC. (a Delaware corporation)

Adopted as of January 16, 2020

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ARTICLE I. IDENTIFICATION; OFFICES

SECTION 1. NAME. The name of the corporation is RBNC Therapeutics, Inc. (the "Corporation").

SECTION 2. PRINCIPAL AND BUSINESS OFFICES. The Corporation may have such principal and other business offices, either within or outside of the state of Delaware, as the Board of Directors may designate or as the Corporation's business may require from time to time.

SECTION 3. REGISTERED AGENT AND OFFICE. The Corporation's registered agent may be changed from time to time by or under the authority of the Board of Directors. The address of the Corporation's registered agent may change from time to time by or under the authority of the Board of Directors, or the registered agent. The business office of the Corporation's registered agent shall be identical to the registered office. The Corporation's registered office may be but need not be identical with the Corporation's principal office in the state of Delaware. The Corporation's initial registered office shall be in the City of Wilmington, County of New Castle, State of Delaware.

SECTION 4. CORPORATE RECORDS. Any records and documents required by law to be kept by the Corporation permanently or administered by the Corporation in the regular course of business may be kept on, or by means of, or be in the form of, any information storage device, method, or one more electronic networks or databases, provided that the records so kept can be converted into clearly legible paper form within a reasonable time and, with respect to the stock ledger, the records so kept comply with Section 224 of the Delaware General Corporation Law. The Corporation shall so convert any records so kept upon the request of any person entitled to inspect such records pursuant to applicable law.

ARTICLE II. STOCKHOLDERS

SECTION 1. ANNUAL MEETING. An annual meeting of the stockholders shall be held on such date as may be designated by the Board of Directors, the Chairman of the Board, the Chief Executive Officer or the President. At each annual meeting, the stockholders shall elect directors to hold office for the term provided in Section 2 of Article III of these Bylaws and transact such other business as may properly be brought before the meeting.

SECTION 2. SPECIAL MEETING. A special meeting of the stockholders for any purpose or purposes may be called at any time only by the President, the Board of Directors, the Chairman of the Board, the Chief Executive Officer or any other person designated by the Board of Directors. The Board of Directors may postpone or reschedule any previously scheduled special meeting of stockholders. Business transacted at any special meeting of stockholders shall be limited to matters relating to the purpose or purposes stated in the notice of meeting.

SECTION 3. PLACE OF STOCKHOLDER MEETINGS. The Board of Directors, the Chairman of the Board, the Chief Executive Officer or the President may designate any place, either within or without the State of Delaware, as the place of meeting for any annual meeting or for any special meeting. If no such place is designated by the Board of Directors, the place of meeting will be the principal business office of the Corporation or the Board of Directors may, in its sole discretion, determine that the meeting shall not be held at any place, but will instead be held solely by means of remote communication as provided under Section 211 of the Delaware General Corporation Law.

SECTION 4. NOTICE OF MEETINGS. Except as otherwise provided by law or waived as herein provided, whenever stockholders are required or permitted to take any action at a meeting, whether annual or special, notice of the meeting shall be given stating the place, if any, date and hour of the meeting, the means of remote communications, if any, by which stockholders may be deemed to be present in person and vote at such meeting and, in the case of a special meeting, the purpose or purposes for which the meeting is called. Such notice shall be given unless otherwise required by law not less than 10 days nor more than 60 days before the date of the meeting to each stockholder entitled to vote at the meeting.

When a meeting is adjourned to reconvene at the same or another place, if any, or by means of remote communications, if any, in accordance with <u>Section 6</u> of Article II of these Bylaws, notice need not be given of the adjourned meeting if the time and place thereof are announced at the meeting at which the adjournment is taken.

SECTION 5. QUORUM. Unless otherwise provided by law, the Corporation's Certificate of Incorporation or these Bylaws, the holders of a majority in voting power of the shares of the capital stock of the Corporation issued and outstanding and entitled to vote at the meeting, present in person, present by means of remote communication in a manner, if any, authorized by the Board of Directors in its sole discretion, or represented by proxy, shall constitute a quorum for the transaction of business; provided, however, that where a separate vote by a class or classes or series of capital stock is required by law or the Certificate of Incorporation, the holders of a majority in voting power of the shares of such class or classes or series of the capital stock of the Corporation issued and outstanding and entitled to vote on such matter, present in person, present by means of remote communication in a manner, if any, authorized by the Board of Directors in its sole discretion, or represented by means of remote communication in a manner, if a quorum is present in person or represented by proxy at such meeting, such stockholders may continue to transact business until adjournment, notwithstanding the withdrawal of such number of stockholders as may leave less than a quorum.

SECTION 6. ADJOURNED MEETINGS. Any meeting of stockholders may be adjourned from time to time to any other time and to any other place (or by means of remote communications, if any) at which a meeting of stockholders may be held under these Bylaws by the chairman of the meeting or by a majority of the stockholders present or represented at the meeting and entitled to vote, although less than a quorum. It shall not be necessary to notify any stockholder of any adjournment of less than 30 days if the time and place, if any, of the adjourned meeting, and the means of remote communication, if any, by which stockholders and proxyholders may be deemed to be present in person and vote at such adjourned meeting, are announced at the meeting at which adjournment is taken, unless after the adjournment a new record date is fixed for the adjourned meeting. At the adjourned meeting, the Corporation may transact any business which might have been transacted at the original meeting.

SECTION 7. FIXING OF RECORD DATE.

(a) The Board of Directors may fix in advance a date as a record date for the determination of the stockholders entitled to notice of or to vote at any meeting of stockholders or any adjournment thereof. Such record date shall not precede the date upon which the resolution fixing the record date is adopted by the Board of Directors, and which record date shall not be more than 60 days nor less than 10 days before the date of such meeting. If no record date is fixed by the Board of Directors, the record date for determining stockholders entitled to notice of or to vote at a meeting of stockholders shall be at the close of business on the day next preceding the day on which notice is given, or, if notice is waived, at the close of business on the day next preceding the day on which the meeting is held. A determination of stockholders of record entitled to notice of or to vote at a meeting of stockholders shall apply to any adjournment of the meeting; provided, however, that the Board of Directors may fix a new record date for the adjourned meeting.

(b) For the purpose of determining stockholders entitled to consent to corporate action in writing without a meeting, the Board of Directors may fix a record date, which record date shall not precede the date upon which the resolution fixing the record date is established by the Board of Directors, and which date shall not be more than 10 days after the date on which the resolution fixing the record date is adopted by the Board of Directors. If no record date has been fixed by the Board of Directors, the record date for determining stockholders entitled to consent to corporate action in writing without a meeting, when no prior action by the Board of Directors is required by law, shall be the first date on which a signed written consent setting forth the action taken or proposed to be taken is delivered to the Corporation by delivery to its registered office in the State of Delaware, its principal office, or an officer or agent of the Corporation having custody of the book in which the proceedings of meetings of stockholders are recorded. Delivery to the Corporation's registered office shall be by hand or by certified or registered mail, return receipt requested. If no record date has been fixed by the Board of Directors is required by law, the record date for determining stockholders' consent to corporate action in writing without a meeting shall be the close of business on the day on which the Board of Directors adopts the resolution taking such prior action.

(c) For the purpose of determining the stockholders entitled to receive payment of any dividend or other distribution or allotment of any rights or the stockholders entitled to exercise any rights in respect to any change, conversion or exchange of stock, or for the purpose of any other lawful action, the Board of Directors may fix the record date, which record date shall not precede the date upon which the resolution fixing the record date is adopted, and which record date shall be not more than 60 days prior to such action. If no record date is fixed, the record date for determining the stockholders for any such purpose shall be the close of business on the day on which the Board of Directors adopts the resolution relating thereto.

SECTION 8. VOTING LIST. The officer who has charge of the stock ledger of the Corporation shall prepare and make, at least 10 days before every meeting of stockholders, a complete list of stockholders entitled to vote at the meeting, arranged in alphabetical order, and showing the address of each stockholder and the number of shares registered in the name of each stockholder. Such list shall be open to the examination of any stockholder, for any purpose

germane to the meeting, for a period of at least 10 days prior to the meeting, (i) by a reasonably accessible electronic network, provided that the information required to gain access to such list is provided with the notice of the meeting, or (ii) during ordinary business hours, at the principal place of business of the Corporation. In the event that the Corporation determines to make the list available on an electronic network, the Corporation may take reasonable steps to ensure that such information is available only to the stockholders of the Corporation. If the meeting is to be held at a place, then the list shall be produced and kept at the time and place of the meeting during the whole time thereof and may be inspected by any stockholder who is present. If the meeting is to be held solely by means of remote communication, then the list shall also be open to the examination of any stockholder during the whole time of the meeting. Except as otherwise provided by law, such list shall be the only evidence as to the identity of stockholders entitled to examine the list of stockholders required by this <u>Section 8</u> or to vote in person or by proxy at any meeting of the stockholders. The Corporation shall not be required to include electronic mail addresses or other electronic contact information on such list.

SECTION 9. VOTING. Unless otherwise provided by the Certificate of Incorporation, each stockholder shall be entitled to one vote for each share of capital stock held by each stockholder. When a quorum is present at any meeting, in all matters other than the election of directors, the affirmative vote of the majority of shares present in person or represented by proxy at the meeting and entitled to vote on the subject matter shall be the act of the stockholders, except when a different vote is required by law, the Certificate of Incorporation or these Bylaws. When a quorum is present at any meeting, directors shall be elected by plurality of the votes of the shares present in person or represented by a proxy at the meeting entitled to vote on the election of directors.

SECTION 10. PROXIES. Each stockholder entitled to vote at a meeting of stockholders or to express consent or dissent to corporate action in writing without a meeting (including by means of remote communications, if any, by which stockholders may be deemed to be present in person and vote at such meeting) may authorize another person or persons to act for him by proxy (executed or transmitted in a manner permitted by the Delaware General Corporation Law), but no such proxy shall be voted or acted upon after three years from its date, unless the proxy provides for a longer period. A duly executed proxy shall be irrevocable if it states that it is irrevocable and if, and only as long as, it is coupled with an interest sufficient in law to support an irrevocable power. A proxy may remain irrevocable regardless of whether the interest with which it is coupled is an interest in the stock itself or an interest in the Corporation generally.

SECTION 11. RATIFICATION OF ACTS OF DIRECTORS AND OFFICERS. Except as otherwise provided by law or by the Certificate of Incorporation of the Corporation, any transaction or contract or act of the Corporation or of the directors or the officers of the Corporation may be ratified by the affirmative vote of the holders of the number of shares which would have been necessary to approve such transaction, contract or act at a meeting of stockholders, or by the written consent of stockholders in lieu of a meeting.

SECTION 12. CONDUCT OF MEETINGS.

(a) <u>Chairman of Meeting</u>. Meetings of stockholders shall be presided over by the Chairman of the Board, if any, or in the Chairman's absence by the Vice Chairman of the Board, if any, or in the Vice Chairman's absence by the Chief Executive Officer, or in the Chief Executive Officer's absence, by the President, or in the President's absence by a Vice President, or in the absence of all of the foregoing persons by a chairman designated by the Board of Directors, or in the absence of such designation by a chairman chosen by vote of the stockholders at the meeting. The Secretary shall act as secretary of the meeting, but in the Secretary's absence the chairman of the meeting may appoint any person to act as secretary of the meeting.

(b) <u>Rules, Regulations and Procedures</u>. The Board of Directors may adopt by resolution such rules, regulations and procedures for the conduct of any meeting of stockholders of the Corporation as it shall deem appropriate including, without limitation, such guidelines and procedures as it may deem appropriate regarding the participation by means of remote communication of stockholders and proxyholders not physically present at a meeting. Except to the extent inconsistent with such rules, regulations and procedures as adopted by the Board of Directors, the chairman of any meeting of stockholders shall have the right and authority to prescribe such rules, regulations or procedures, whether adopted by the Board of Directors or prescribed by the chairman of the meeting, may include, without limitation, the following: (i) the establishment of an agenda or order of business for the meeting; (ii) rules and procedures for maintaining order at the meeting and the safety of those present; (iii) limitations on attendance at or participation in the meeting to stockholders of record of the Corporation, their duly authorized and constituted proxies or such other persons as shall be determined; (iv) restrictions on entry to the meeting after the time fixed for the commencement thereof; and (v) limitations on the time allotted to questions or comments by participants. Unless and to the extent determined by the Board of Directors or the chairman of the meeting, meetings of stockholders shall not be required to be held in accordance with the rules of parliamentary procedure.

SECTION 13. ACTION WITHOUT MEETING.

(a) Any action required or permitted to be taken at any annual or special meeting of stockholders of the Corporation, may be taken without a meeting, without prior notice and without a vote, if a consent or consents in writing, setting forth the action so taken, shall be delivered to the Corporation signed by the holders of outstanding stock having not less than the minimum number of votes that would be necessary to authorize or take such action at a meeting at which all shares entitled to vote thereon were present and voted.

(b) Prompt notice of the taking of the corporate action without a meeting by less than unanimous consent shall be given to those stockholders who have not consented in writing and who, if the action had been taken at a meeting, would have been entitled to notice of the meeting if the record date for such meeting had been the date that written consents signed by a sufficient number of holders to take the action were delivered to the Corporation.

(c) An electronic transmission consenting to an action to be taken and transmitted by a stockholder or proxy holder, or by a person or persons authorized to act for a stockholder or proxy holder, shall be deemed to be written, signed and dated for the purposes of this section, provided that any such electronic transmission sets forth or is delivered with information from which the Corporation can determine (i) that the electronic transmission was transmitted by the stockholder or proxy holder or by a person or persons authorized to act for the stockholder or proxy holder and (ii) the date on which such stockholder or proxy holder or authorized person or persons transmitted such electronic transmission. A consent given by electronic transmission is delivered to the Corporation upon the earliest of: (i) when the consent enters an information processing system, if any, designated by the Corporation for receiving consents, so long as the electronic transmission is in a form capable of being processed by that system and the Corporation is able to retrieve that electronic transmission; (ii) when a paper reproduction of the consent is delivered to the Corporation having custody of the book in which proceedings of meetings of stockholders or members are recorded; (iii) when a paper reproduction of the consent is delivered in such other manner, if any, provided by resolution of the Board of Directors or governing body of the Corporation. Any copy, facsimile or other reliable reproduction of a consent in writing may be substituted or used in lieu of the original writing for any and all purposes for which the original writing could be used, provided that such copy, facsimile or other reproduction shall be a complete reproduction of the entire original writing.

ARTICLE III. DIRECTORS

SECTION 1. GENERAL POWERS. The business and affairs of the Corporation shall be managed by or under the direction of a Board of Directors, who may exercise all of the powers of the Corporation except as otherwise provided by law or the Certificate of Incorporation.

SECTION 2. NUMBER AND TENURE OF DIRECTORS. Subject to the rights of holders of any class or series of capital stock of the Corporation to elect directors, the number of directors of the Corporation shall be determined from time to time by the stockholders or the Board of Directors in a resolution adopted by the Board of Directors. Each director shall hold office until the next annual meeting of stockholders and until such director's successor is elected and qualified or until such director's earlier death, resignation or removal.

SECTION 3. ELECTION OF DIRECTORS. Except as otherwise provided in these Bylaws, directors shall be elected at the annual meeting of stockholders by such stockholders as have the right to vote on such election. Directors need not be residents of the State of Delaware. Directors need not be stockholders of the Corporation. Elections of directors need not be by written ballot.

SECTION 4. CHAIRMAN OF THE BOARD; VICE CHAIRMAN OF THE BOARD. The Board of Directors may appoint from its members a Chairman of the Board and a Vice Chairman of the Board, neither of whom need be an employee or officer of the Corporation. If the Board of Directors appoints a Chairman of the Board, such Chairman shall perform such duties and possess such powers as are assigned by the Board of Directors. If the Board of

Directors appoints a Vice Chairman of the Board, such Vice Chairman shall perform such duties and possess such powers as are assigned by the Board of Directors. Unless otherwise provided by the Board of Directors, the Chairman of the Board or, in the Chairman's absence, the Vice Chairman of the Board, if any, shall preside at all meetings of the Board of Directors.

SECTION 5. QUORUM. The greater of (a) a majority of the directors at any time in office and (b) one-third of the number of directors fixed pursuant to <u>Section 2</u> of Article III of these Bylaws shall constitute a quorum of the Board of Directors. If less than a quorum are present at a meeting of the Board of Directors, a majority of the directors present may adjourn the meeting from time to time without further notice other than announcement at the meeting, until such quorum shall be present.

SECTION 6. VOTING. The vote of the majority of the directors present at a meeting at which a quorum is present shall be the act of the Board of Directors, unless the Delaware General Corporation Law or the Certificate of Incorporation requires a vote of a greater number.

SECTION 7. VACANCIES. Subject to the rights of holders of any series of Preferred Stock to elect directors, unless and until filled by the stockholders, any vacancy or newly-created directorship on the Board of Directors, however occurring, may be filled by vote of a majority of the directors then in office, although less than a quorum, or by a sole remaining director. A director elected to fill a vacancy shall be elected for the unexpired term of such director's predecessor in office, and a director chosen to fill a position resulting from a newly-created directorship shall hold office until the next annual meeting of stockholders and until a successor is elected and qualified, or until such director's earlier death, resignation or removal.

SECTION 8. REMOVAL OF DIRECTORS. Except as otherwise provided by the General Corporation Law of the State of Delaware, a director, or the entire Board of Directors, may be removed, with or without cause, by the holders of a majority of the shares then entitled to vote at an election of directors, except that the directors elected by the holders of a particular class or series of stock may be removed without cause only by vote of the holders of a majority of the outstanding shares of such class or series.

SECTION 9. RESIGNATION. Any director may resign by delivering a resignation in writing or by electronic transmission to the Corporation at its principal office or to the Chairman of the Board, the Chief Executive Officer, the President or the Secretary. Such resignation shall be effective upon delivery unless it is specified to be effective at some later time or upon the happening of some later event.

SECTION 10. REGULAR MEETINGS. Regular meetings of the Board of Directors may be held without notice at such time, place and manner as shall be determined from time to time by the Board of Directors; provided that any director who is absent when such a determination is made shall be given notice of the determination. A regular meeting of the Board of Directors may be held without notice immediately after and at the same place as the annual meeting of stockholders.

SECTION 11. SPECIAL MEETINGS. Special meetings of the Board of Directors may be called by or at the request of the Chairman of the Board, the Chief Executive Officer, the President, two or more directors or by one director in the event that there is only a single director in office. The person or persons authorized to call special meetings of the Board of Directors may fix any time, date or place, either within or without the State of Delaware, for holding any special meeting of the Board of Directors called by them.

SECTION 12. NOTICE OF SPECIAL MEETINGS OF THE BOARD OF DIRECTORS. Notice of the date, place, if any, and time of any special meeting of the Board of Directors shall be given to each director by the Secretary or by the officer or one of the directors calling the meeting. Notice shall be duly given to each director (a) in person, by telephone, fax or by electronic transmission at least 24 hours in advance of the meeting, (b) by sending written notice by reputable overnight courier or delivering written notice by hand, to such director's last known business, home or facsimile address at least 48 hours in advance of the meeting, or (c) by sending written notice by first-class mail to such director's last known business or home address at least 72 hours in advance of the meeting. A notice or waiver of notice of a meeting of the Board of Directors need not specify the purposes of the meeting.

SECTION 13. WRITTEN ACTION BY DIRECTORS. Unless otherwise restricted by the Certificate of Incorporation or these Bylaws, any action required or permitted to be taken at any meeting of the Board of Directors, or of any committee thereof, may be taken without a meeting if all members of the Board of Directors or committee, as the case may be, consent thereto in writing, or by electronic transmission. Without limiting the manner by which consent may be given, members of the Board of Directors may consent by delivery of an electronic transmission when such transmission is directed to a facsimile number or electronic mail address at which the Corporation has consented to receive such electronic transmissions, and copies of the electronic transmissions are filed with the minutes of proceedings of the Board of Directors, or the committee thereof, in the same paper or electronic form as the minutes are maintained.

SECTION 14. PARTICIPATION BY CONFERENCE TELEPHONE. Members of the Board of Directors, or any committee designated by such board, may participate in a meeting of the Board of Directors, or committee thereof, by means of conference telephone or similar communications equipment as long as all persons participating in the meeting can speak with and hear each other, and participation by a director pursuant to this section shall constitute presence in person at such meeting.

SECTION 15. COMMITTEES. The Board of Directors may designate one or more committees, each committee to consist of one or more of the directors of the Corporation with such lawfully delegable powers and duties as the Board of Directors thereby confers, to serve at the pleasure of the Board of Directors. The Board may designate one or more directors as alternate members of any committee, who may replace any absent or disqualified member at any meeting of the committee. In the absence or disqualification of a member at any meeting of a committee, the member or members thereof present at any meeting and not disqualified from voting, whether or not such member or members constitute a quorum, may unanimously appoint another member of the Board of Directors to act at the meeting in the place of any such absent or disqualified member. Any such committee, to the extent provided in the resolution of the Board of Directors, shall have and may exercise all the powers and authority of the Board of Directors

in the management of the business and affairs of the Corporation, and may authorize the seal of the Corporation to be affixed to all papers which may require it, but no such committee shall have the power or authority in reference to the following matters: (i) approving or adopting, or recommending to the stockholders, any action or matter (other than the election or removal of directors) expressly required by law to be submitted to stockholders for approval or (ii) adopting, amending or repealing any bylaw of the Corporation. Each such committee shall keep minutes and make such reports as the Board of Directors may from time to time request. Except as the Board of Directors may otherwise determine, any committee may make rules for the conduct of its business, but unless otherwise provided by the directors or in such rules, its business shall be conducted as nearly as possible in the same manner as is provided in these Bylaws for the Board of Directors. Except as otherwise provided in the Certificate of Incorporation, these Bylaws, or the resolution of the Board of Directors designating the committee, a committee may create one or more subcommittees, each subcommittee to consist of one or more members of the committee, and delegate to a subcommittee any or all of the powers and authority of the committee.

SECTION 16. COMPENSATION OF DIRECTORS. Unless otherwise restricted by the Certificate of Incorporation or these Bylaws, the Board of Directors shall have the authority to fix the compensation of directors. The directors may be paid their expenses, if any, of attendance at each meeting of the Board of Directors and may be paid a fixed sum for attendance at each meeting of the Board of Directors or a stated salary as director. No such payment shall preclude any director from serving the Corporation in any other capacity and receiving compensation therefore. Members of special or standing committees may be allowed like compensation for attending committee meetings.

ARTICLE IV. OFFICERS

SECTION 1. GENERAL PROVISIONS. The officers of the Corporation shall consist of a Chief Executive Officer, a President, a Secretary, a Treasurer and such other officers with such other titles as the Board of Directors shall determine, including one or more Vice Presidents, Assistant Treasurers and Assistant Secretaries. The Board of Directors may appoint such other officers as it may deem appropriate. No officer need be a stockholder. Any two or more offices may be held by the same person. The officers elected by the Board of Directors shall have such duties as are hereafter described and such additional duties as the Board of Directors may from time to time prescribe.

SECTION 2. ELECTION AND TERM OF OFFICE. The Chief Executive Officer, President, Treasurer and Secretary shall be elected annually by the Board of Directors at the regular meeting of the Board of Directors held after each annual meeting of the stockholders. If the election of officers is not held at such meeting, such election shall be held as soon thereafter as may be convenient. Other officers may be appointed at any time, at a meeting or by the written consent of the Board of Directors. Except as otherwise provided by law, by the Certificate of Incorporation or by these Bylaws, each officer shall hold office until his successor has been duly elected and qualified, unless a different term is specified in the resolution electing or appointing such officer, or until his earlier death, resignation or removal. Election or appointment of an officer or agent shall not of itself create contract rights.

SECTION 3. RESIGNATION AND REMOVAL OF OFFICERS. Any officer may resign by delivering a written resignation to the Corporation at its principal office or to the Chief Executive Officer, the President or the Secretary. Such resignation shall be effective upon receipt unless it is specified to be effective at some later time or upon the happening of some later event. Any officer may be removed at any time, with or without cause, by vote of a majority of the directors then in office. Except as the Board of Directors may otherwise determine, no officer who resigns or is removed shall have any right to any compensation as an officer for any period following such officer's resignation or removal, or any right to damages on account of such removal, whether such officer's compensation be by the month or by the year or otherwise, unless such compensation is expressly provided for in a duly authorized written agreement with the Corporation.

SECTION 4. VACANCIES. The Board of Directors may fill any vacancy occurring in any office for any reason and may, in its discretion, leave unfilled for such period as it may determine any offices other than those of Chief Executive Officer, President, Treasurer and Secretary. Each such successor shall hold office for the unexpired term of such officer's predecessor and until a successor is elected and qualified, or until such officer's earlier death, resignation or removal.

SECTION 5. THE CHIEF EXECUTIVE OFFICER. Unless the Board of Directors has designated another person as the Corporation's Chief Executive Officer, the President shall be the Chief Executive Officer of the Corporation. The Chief Executive Officer shall have general charge and supervision of the business and affairs of the Corporation subject to the direction of the Board of Directors, and shall perform all duties and have all powers that are commonly incident to the office of chief executive or that are delegated to such officer by the Board of Directors. The Chief Executive Officer shall meetings of the Board of Directors and shall see that orders and resolutions of the Board of Directors are carried into effect. The Chief Executive Officer may sign bonds, mortgages, certificates for shares and all other contracts and documents whether or not under the seal of the Corporation except in cases where the signing and execution thereof shall be expressly delegated by law, by the Board of Directors or by these Bylaws to some other officer or agent of the Corporation. The Chief Executive Officer shall have general powers of supervision and shall be the final arbiter of all differences between officers of the Corporation and his decision as to any matter affecting the Corporation shall be final and binding as between the officers of the Corporation subject only to the Board of Directors.

SECTION 6. THE PRESIDENT. In the absence of the Chief Executive Officer or in the event of his inability or refusal to act, the President shall perform the duties of the Chief Executive Officer, and when so acting, shall have all the powers of and be subject to all the restrictions upon the Chief Executive Officer. At all other times the President shall have the active management of the business of the Corporation under the general supervision of the Chief Executive Officer or the Board of Directors. The President shall have concurrent power with the Chief Executive Officer to sign bonds, mortgages, certificates for shares and other contracts and documents, whether or not under the seal of the Corporation except in cases where the signing and execution thereof shall be expressly delegated by law, by the Board of Directors, or by these Bylaws to some other officer or agent of the Corporation. In general, the President shall perform all duties incident to the office of president and such other duties as the Chief Executive Officer (if the President is not the Chief Executive Officer) or the Board of Directors may from time to time prescribe.

SECTION 7. THE VICE PRESIDENT. In the absence of the President or in the event of his inability or refusal to act, the Vice President (or in the event there be more than one Vice President, the Executive Vice President and then the other Vice President or Vice Presidents in the order designated, or in the absence of any designation, then in the order of their election) shall perform the duties of the President, and when so acting, shall have all the powers of and be subject to all the restrictions upon the President. The Vice Presidents shall perform such other duties and have such other powers as the Chief Executive Officer or the Board of Directors may from time to time prescribe.

SECTION 8. THE SECRETARY. The Secretary shall perform such duties and shall have such powers as the Board of Directors or the Chief Executive Officer may from time to time prescribe. The Secretary shall perform such duties and have such powers as are incident to the office of the secretary, including without limitation the duty and power to attend all meetings of the Board of Directors and all meetings of the stockholders and record all the proceedings in a book to be kept for that purpose and shall perform like duties for the standing committees when required and to maintain a stock ledger and prepare lists of stockholders and their addresses as required. The Secretary shall give, or cause to be given, notice of all meetings of the stockholders and special meetings of the Board of Directors, and shall perform such other duties as may be prescribed by the Board of Directors or the Chief Executive Officer, under whose supervision he shall be. The Secretary shall have custody of the corporate records and the corporate seal of the Corporation and the Secretary, or an Assistant Secretary, shall have authority to affix the same to any instrument requiring it and when so affixed, it may be attested by his signature or by the signature of such Assistant Secretary. The Board of Directors may give general authority to any other officer to affix the seal of the Corporation and to attest the affixing by his signature.

SECTION 9. THE ASSISTANT SECRETARY. The Assistant Secretary, or if there be more than one, the Assistant Secretaries in the order determined by the Board of Directors (or if there be no such determination, then in the order of their election), shall, in the absence of the Secretary or in the event of his inability or refusal to act, perform the duties and exercise the powers of the Secretary and shall perform such other duties and have such other powers as the Chief Executive Officer, the Board of Directors or the Secretary may from time to time prescribe. In the absence of the Secretary or any Assistant Secretary at any meeting of stockholders or directors, the chairman of the meeting shall designate a temporary secretary to keep a record of the meeting.

SECTION 10. THE TREASURER. The Treasurer shall perform such duties and shall have such powers as may from time to time be assigned by the Board of Directors or the Chief Executive Officer. In addition, the Treasurer shall perform such duties and have such powers as are incident to the office of treasurer, including without limitation, the duty and power to have the custody of the corporate funds and securities and to keep full and accurate accounts of receipts and disbursements in books belonging to the Corporation and deposit all moneys and other valuable effects in the name and to the credit of the Corporation in such depositories as may be designated by the Board of Directors. The Treasurer shall disburse the funds of the

Corporation as may be ordered by the Board of Directors, taking proper vouchers for such disbursements, and shall render to the President and the Board of Directors, as required by the Board of Directors, an account of all his transactions as Treasurer and of the financial condition of the Corporation. If required by the Board of Directors, the Treasurer shall give the Corporation a bond (which shall be renewed every six years) in such sum and with such surety or sureties as shall be satisfactory to the Board of Directors for the faithful performance of the duties of his office and for the restoration to the Corporation, in case of his death, resignation, retirement or removal from office, of all books, papers, vouchers, money and other property of whatever kind in his possession or under his control belonging to the Corporation.

SECTION 11. THE ASSISTANT TREASURER. The Assistant Treasurer, or if there shall be more than one, the Assistant Treasurers in the order determined by the Board of Directors (or if there be no such determination, then in the order of their election), shall, in the absence of the Treasurer or in the event of his inability or refusal to act, perform the duties and exercise the powers of the Treasurer and shall perform such other duties and have such other powers as the Chief Executive Officer, the Board of Directors or the Treasurer may from time to time prescribe.

SECTION 12. OTHER OFFICERS, ASSISTANT OFFICERS AND AGENTS. Officers, Assistant Officers and Agents, if any, other than those whose duties are provided for in these Bylaws, shall have such authority and perform such duties as may from time to time be prescribed by resolution of the Board of Directors.

SECTION 13. ABSENCE OF OFFICERS, DELEGATION OF AUTHORITY. In the absence of any officer of the Corporation, or for any other reason the Board of Directors may deem sufficient, the Board of Directors may from time to time delegate the powers or duties, or any of such powers or duties, of any officers or officer to any other officer or to any director.

SECTION 14. COMPENSATION. The Board of Directors shall have the authority to establish reasonable salaries, compensation or reimbursement of all officers for services to the Corporation.

ARTICLE V. CAPITAL STOCK

SECTION 1. ISSUANCE OF STOCK. Subject to the provisions of the Certificate of Incorporation, the whole or any part of any unissued balance of the authorized capital stock of the Corporation or the whole or any part of any shares of the authorized capital stock of the Corporation held in the Corporation's treasury may be issued, sold, transferred or otherwise disposed of by vote of the Board of Directors in such manner, for such lawful consideration and on such terms as the Board of Directors may determine.

SECTION 2. CERTIFICATES OF SHARES; UNCERTIFICATED SHARES.

(a) The shares of the Corporation shall be represented by certificates, provided that the Board of Directors of the Corporation may provide by resolution or resolutions that some or all of any or all classes or series of its stock shall be uncertificated shares. Any such resolution shall not apply to shares represented by a certificate until such certificate is surrendered to the Corporation. Every holder of stock represented by certificates shall be entitled to have a certificate, in such form as may be prescribed by law and by the Board of Directors, signed in a manner that complies with Section 158 of the Delaware General Corporation Law, representing the number of shares held by such holder registered in certificate form. Any or all the signatures on the certificate may be a facsimile or pdf.

(b) Each certificate for shares of stock which are subject to any restriction on transfer pursuant to the Certificate of Incorporation, these Bylaws, applicable securities laws or any agreement among any number of stockholders or among such holders and the Corporation shall have conspicuously noted on the face or back of the certificate either the full text of the restriction or a statement of the existence of such restriction.

(c) If the Corporation shall be authorized to issue more than one class of stock or more than one series of any class, the powers, designations, preferences and relative, participating, optional or other special rights of each class of stock or series thereof and the qualifications, limitations or restrictions of such preferences and/or rights shall be set forth in full or summarized on the face or back of each certificate representing shares of such class or series of stock, provided that in lieu of the foregoing requirements there may be set forth on the face or back of each certificate representing shares of such class or series of stock a statement that the Corporation will furnish without charge to each stockholder who so requests a copy of the full text of the powers, designations, preferences and relative, participating, optional or other special rights of each class of stock or series thereof and the qualifications, limitations or restrictions of such preferences and/or rights.

(d) Within a reasonable time after the issuance or transfer of uncertificated shares, the Corporation shall send to the registered owner thereof a written notice containing the information required to be set forth or stated on certificates pursuant to Sections 151, 156, 202(a) or 218(a) of the General Corporation Law of the State of Delaware or, with respect to Section 151 of the General Corporation Law of the State of Delaware, a statement that the Corporation will furnish without charge to each stockholder who so requests the powers, designations, preferences and relative participating, optional or other special rights of each class of stock or series thereof and the qualifications, limitations or restrictions of such preferences and/or rights.

SECTION 3. SIGNATURES OF FORMER OFFICER, TRANSFER AGENT OR REGISTRAR. In case any officer, transfer agent, or registrar who has signed or whose facsimile signature has been placed upon a certificate shall have ceased to be such officer, transfer agent or registrar before such certificate is issued, it may be issued by the Corporation with the same effect as if such person or entity were such officer, transfer agent or registrar at the date of issue.

SECTION 4. TRANSFER OF SHARES. Transfers of shares of the Corporation shall be made only on the books of the Corporation, or by transfer agents designated to transfer shares of the Corporation. Subject to applicable law, shares of stock represented by certificates shall be transferred only on the books of the Corporation by the surrender to the Corporation or its transfer agent of the certificate representing such shares properly endorsed or accompanied by a written assignment or power of attorney properly executed, and with such proof of authority or the authenticity of signature as the Corporation or its transfer agent may reasonably require. Except as may be otherwise required by law, by the Certificate of Incorporation or by these

Bylaws, the Corporation shall be entitled to treat the record holder of stock as shown on its books as the owner of such stock for all purposes, including the payment of dividends and the right to vote with respect to such stock, regardless of any transfer, pledge or other disposition of such stock until the shares have been transferred on the books of the Corporation in accordance with the requirements of these Bylaws.

SECTION 5. LOST, DESTROYED OR STOLEN CERTIFICATES. Whenever a certificate representing shares of the Corporation has been lost, destroyed or stolen, the holder thereof may file in the office of the Corporation an affidavit setting forth, to the best of his knowledge and belief, the time, place, and circumstance of such loss, destruction or theft together with a statement of indemnity and posting of such bond sufficient in the opinion of the Board of Directors to indemnify the Corporation against any claim that may be made against it on account of the alleged loss of any such certificate. Thereupon the Board may cause to be issued to such person or such person's legal representative a new certificate or a duplicate of the certificate alleged to have been lost, destroyed or stolen. In the exercise of its discretion, the Board of Directors may waive the indemnification and bond requirements provided herein.

SECTION 6. REGULATIONS. The issue, transfer, conversion and registration of shares of stock of the Corporation shall be governed by such other regulations as the Board of Directors may establish.

ARTICLE VI. RESTRICTIONS ON TRANSFER AND RIGHT OF FIRST REFUSAL.

SECTION 1. TRANSFERS. If a holder of any shares of Common Stock of the Corporation (a "<u>Holder</u>") proposes to, directly or indirectly, sell, assign, transfer, pledge, hypothecate or otherwise dispose of, by operation of law or otherwise (collectively "<u>Transfer</u>") any such shares, or any right or interest therein (including, without limitation, the entering into of any swap or other arrangement that Transfers to another, in whole or in part, any of the economic consequences of ownership of the common stock of the Corporation, whether any such transaction described above is to be settled by delivery of common stock of the Corporation or other securities, in cash or otherwise), pursuant to a bona fide offer acceptable to such Holder, then Holder shall first give written notice of the proposed Transfer (the "<u>Transfer Notice</u>") to the Corporation. The Transfer Notice shall state the name of the proposed transferee, the number of shares Holder proposes to Transfer (the "<u>Offered Shares</u>"), whether the Offered Shares are vested or unvested shares, the price per share and all other material terms and conditions of the Transfer, including any available exemption set forth in Section 4 below from the restrictions set forth in Sections 2 and 3 below and shall include a confirmation from the Holder that the proposed transferee is an accredited investor as defined in Rule 501(a) of Regulation D promulgated under the Securities Act of 1933, as amended (the "<u>Securities Act</u>").

SECTION 2. CONSENT TO TRANSFER. Following receipt of the Transfer Notice, the prior written consent of the Corporation (upon duly authorized action of its Board of Directors) shall be required (and such consent may be withheld) if such Transfer (a) would be to an individual, company or any other form of entity identified by the Corporation as a competitor or potential competitor; (b) increases the risk of the Corporation having a class of equity security (other than an exempted security) held of record by either (i) 2,000 or more persons, provided,

however, that such restriction shall only apply after the Corporation has a class of equity security (other than an exempted security) held of record by more than 1,000 persons or (ii) 500 or more persons who are not accredited investors, as described in Section 12(g) of the Securities and Exchange Act of 1934 (the "1934 Act"), and Rule 12g5-1 promulgated thereunder, or otherwise requiring the Corporation to register any class of securities under the 1934 Act; (c) would result in the loss of any federal or state securities law exemption relied upon by the Corporation in connection with the initial issuance of such shares or the issuance of any other securities; (d) is facilitated in any manner by any public posting, message board, trading portal, internet site or similar method of communication, including without limitation any trading portal or internet site intended to facilitate secondary Transfers of securities; (e) is to be effected in a brokered transaction; (f) represents a Transfer of less than all of the shares then held by the stockholder and its affiliates or is to be made to more than a single transferee or (g) is determined by the Corporation's Board of Directors to require such consent for any legitimate corporate purpose. The provisions of subsections (f) and (g) of this Section 2 shall not apply to any Transfer of Preferred Stock of the Corporation or the shares of Common Stock issued upon conversion thereof. The Corporation shall notify Holder within 30 days of receipt of the Transfer Notice indicating whether the proposed Transfer requires such consent and if so, whether such consent has been provided (a "Transfer Approval") or withheld (a "Transfer Denial" and together with "Transfer Approval", the "Transfer Determination"). For purposes of clarity, (i) if the Corporation determines no consent is required for the proposed Transfer, then this determination shall constitute a Transfer Approval and (ii) a Holder shall not be entitled to Transfer any shares if such proposed Transfer results in a Transfer Denial. Any Transfer made following a Transfer Determination that results in a Transfer Approval shall be effected pursuant to a transfer agreement in a form reasonably acceptable to the Corporation (which form shall include, without limitation, a release in favor of the Corporation and representations from the Holder and transferee that the Corporation is not a party to the transaction and has made no representations to the transferee).

SECTION 3. RIGHT OF FIRST REFUSAL.

(a) Subject to the exceptions set forth in Section 3(e) below, for 30 days following a Transfer Determination that results in a Transfer Approval, the Corporation or its assigns shall have the option to purchase all or part of the Offered Shares at the price and upon the terms set forth in the Transfer Notice (the "<u>Right of First Refusal</u>"). In the event the Corporation or its assigns, as applicable, elects to purchase all or part of the Offered Shares, it shall give written notice of such election to the Holder within such 30 day period. Within 10 days after Holder's receipt of such notice, Holder shall tender to the Corporation at its principal offices the certificate or certificates representing the Offered Shares to be purchased by the Corporation, duly endorsed in blank by Holder or with duly endorsed stock powers attached thereto, all in a form suitable for Transfer of the Offered Shares to the Corporation. Promptly following receipt of such certificate or certificates, the Corporation or its assigns, as applicable, shall deliver or mail to Holder a check in payment of the purchase price for such Offered Shares; <u>provided that</u> if the terms of payment set forth in the Transfer Notice were other than cash against delivery, the Corporation or its assigns, as applicable, may pay for the Offered Shares on the same terms and conditions as were set forth in the Transfer Notice.

(b) If the Corporation or its assigns, as applicable, does not elect to acquire any of the Offered Shares, Holder may, within the 30-day period following the expiration of the option granted to the Corporation under Section 3(a) above, Transfer the Offered Shares that the Corporation has not elected to acquire to the proposed transferee, <u>provided that</u> such Transfer shall not be on terms and conditions more favorable to the transferee than those contained in the Transfer Notice, such Transfer shall be only to a prospective transferee that is an accredited investor as defined in Rule 501(a) of Regulation D promulgated under the Securities Act and such Transfer shall comply with the Securities Act. Notwithstanding any of the above, all Offered Shares transferred pursuant to this Section 3 shall remain subject to these Bylaws and any equity grant agreement such Offered Shares were subject to and such transfere shall, as a condition to such Transfer, deliver to the Corporation a written instrument confirming that such transferee shall be bound by all of the terms and conditions of these Bylaws and any applicable equity grant agreement.

(c) After the time at which the Offered Shares are required to be delivered to the Corporation for Transfer to the Corporation pursuant to subsection 3(a) above, the Corporation shall not pay any dividend to Holder on account of such Offered Shares or permit Holder to exercise any of the privileges or rights of a stockholder with respect to such Offered Shares, but shall, insofar as permitted by law, treat the Corporation as the owner of such Offered Shares.

(d) The Corporation may assign its Right of First Refusal in any particular transaction under this Section 3 to one or more persons or

entities.

(e) The provisions of this Section 3 shall not apply to any Transfer of Preferred Stock of the Corporation or the shares of Common Stock issued upon conversion thereof.

(f) To the extent the Corporation has entered into any written agreement with the stockholder attempting to Transfer shares that grants the Corporation a right of first refusal with respect thereto ("Separate ROFR Terms"), then such Separate ROFR Terms shall supersede this Section 3 of Article VI and shall control such stockholder's proposed Transfer of shares following a Transfer Determination that results in a Transfer Approval.

SECTION 4. EXCEPTIONS.

(a) The provisions of this Article VI may be waived with respect to any Transfer upon duly authorized action of its Board of Directors.

(b) The following transactions shall be exempt from the restrictions set forth in Article VI, Section 3:

(A) any Transfer to or for the benefit of (i) any spouse, children, parents, uncles, aunts, siblings or grandchildren of the Holder or any other relatives of the Holder that have been approved by the Board of Directors (collectively, "<u>Approved Relatives</u>"), (ii) a trust established solely for the benefit of the Holder and/or Approved Relatives or (iii) where the Holder is a trust, (x) a trust established solely for the benefit of one or more beneficiaries of the Holder trust and/or Approved Relatives of any such beneficiaries or (y) one or more beneficiaries of the Holder trust and/or Approved Relatives;

(B) any Transfer made as part of the sale of all or substantially all of the shares of capital stock of the Corporation (including pursuant to a merger or consolidation);

(C) any Transfer pursuant to an effective registration statement filed by the Corporation under the Securities Act;

(D) a stockholder's bona fide pledge or mortgage of any Common Stock with a commercial lending institution;

(E) a corporate stockholder's Transfer of any or all of its shares pursuant to and in accordance with the terms of any merger, consolidation, reclassification of common stock or capital reorganization of the corporate stockholder, or pursuant to a sale of all or substantially all of the stock or assets of a corporate stockholder;

(F) a corporate stockholder's Transfer of any or all of its shares to any or all of its stockholders; and

(G) a Transfer of any or all of the shares held by a stockholder which is a limited or general partnership to any or all of its partners.

(c) In the case of a Transfer pursuant to Sections 4(b)(A) and (D)-(G) above, such shares shall remain subject to these Bylaws and any existing equity grant agreement and such transferee shall, as a condition to such Transfer, deliver to the Corporation a written instrument confirming that such transferee shall be bound by all of the terms and conditions of these Bylaws and any applicable equity grant agreement and there shall be no further Transfer of such shares except in accordance with these Bylaws.

SECTION 5. TERMINATION. The provisions of Article VI shall terminate upon the closing of the sale of shares of common stock in an underwritten public offering pursuant to an effective registration statement filed by the Corporation under the Securities Act.

SECTION 6. VOID TRANSFERS. The Corporation shall not be required (a) to Transfer on its books any shares which shall have been sold or otherwise transferred in violation of any of the provisions of this Article VI or (b) to treat as owner of such shares or to accord the right to vote or pay dividends to any purchaser or other transferee to whom any such shares shall have been so sold or transferred.

SECTION 7. LEGENDS. The books and records of the Corporation and any certificates representing shares of stock of the Corporation shall contain or bear the following legend so long as the foregoing Transfer restrictions are in effect:

THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO (i) TRANSFER RESTRICTIONS AND (ii) A RIGHT OF FIRST REFUSAL OPTION IN FAVOR OF THE CORPORATION AND/OR ITS ASSIGNEE(S), EACH AS PROVIDED IN THE BYLAWS OF THE CORPORATION.

ARTICLE VII. INDEMNIFICATION

SECTION 1. RIGHT TO INDEMNIFICATION OF DIRECTORS AND OFFICERS. The Corporation shall indemnify and hold harmless, to the fullest extent permitted by applicable law as it presently exists or may hereafter be amended, any person (an "<u>Indemnified Person</u>") who was or is made or is threatened to be made a party or is otherwise involved in any action, suit or proceeding, whether civil, criminal, administrative or investigative (a "<u>Proceeding</u>"), by reason of the fact that such person, or a person for whom such person is the legal representative, is or was a director or officer of the Corporation or, while a director or officer of the Corporation, is or was serving at the request of the Corporation as a director, officer, employee or agent of another corporation or of a partnership, joint venture, limited liability company, trust, enterprise or nonprofit entity, including service with respect to employee benefit plans, against all liability and loss suffered and expenses (including attorneys' fees) reasonably incurred by such Indemnified Person in such Proceeding. Notwithstanding the preceding sentence, except as otherwise provided in Section 3 of this Article VII, the Corporation shall be required to indemnified Person in connection with a Proceeding (or part thereof) commenced by such Indemnified Person only if the commencement of such Proceeding (or part thereof) by the Indemnified Person was authorized in advance by the Board of Directors.

SECTION 2. PREPAYMENT OF EXPENSES OF DIRECTORS AND OFFICERS. The Corporation shall pay the expenses (including attorneys' fees) incurred by an Indemnified Person in defending any Proceeding in advance of its final disposition, <u>provided</u>, <u>however</u>, that, to the extent required by law, such payment of expenses in advance of the final disposition of the Proceeding shall be made only upon receipt of an undertaking by the Indemnified Person to repay all amounts advanced if it should be ultimately determined that the Indemnified Person is not entitled to be indemnified under this Article VII or otherwise.

SECTION 3. CLAIMS BY DIRECTORS AND OFFICERS. If a claim for indemnification or advancement of expenses under this Article VII is not paid in full within 30 days after a written claim therefor by the Indemnified Person has been received by the Corporation, the Indemnified Person may file suit to recover the unpaid amount of such claim and, if successful in whole or in part, shall be entitled to be paid the expense of prosecuting such claim. In any such action the Corporation shall have the burden of proving that the Indemnified Person is not entitled to the requested indemnification or advancement of expenses under applicable law.

SECTION 4. INDEMNIFICATION OF EMPLOYEES AND AGENTS. The Corporation may indemnify and advance expenses to any person who was or is made or is threatened to be made or is otherwise involved in any Proceeding by reason of the fact that such person, or a person for whom such person is the legal representative, is or was an employee or agent of the Corporation or, while an employee or agent of the Corporation, is or was serving at the request of the Corporation as a director, officer, employee or agent of another corporation or of a partnership, joint venture, limited liability company, trust, enterprise or nonprofit entity, including service with respect to employee benefit plans, against all liability and loss suffered

and expenses (including attorneys' fees) reasonably incurred by such person in connection with such Proceeding. The ultimate determination of entitlement to indemnification of persons who are non-director or officer employees or agents shall be made in such manner as is determined by the Board of Directors in its sole discretion. Notwithstanding the foregoing sentence, the Corporation shall not be required to indemnify a person in connection with a Proceeding initiated by such person if the Proceeding was not authorized in advance by the Board of Directors.

SECTION 5. ADVANCEMENT OF EXPENSES OF EMPLOYEES AND AGENTS. The Corporation may pay the expenses (including attorneys' fees) incurred by an employee or agent in defending any Proceeding in advance of its final disposition on such terms and conditions as may be determined by the Board of Directors.

SECTION 6. NON-EXCLUSIVITY OF RIGHTS. The rights conferred on any person by this Article VII shall not be exclusive of any other rights which such person may have or hereafter acquire under any statute, provision of the Certificate of Incorporation, these bylaws, agreement, vote of stockholders or disinterested directors or otherwise.

SECTION 7. OTHER INDEMNIFICATION. The Corporation's obligation, if any, to indemnify any person who was or is serving at its request as a director, officer or employee of another corporation, partnership, limited liability company, joint venture, trust, organization or other enterprise shall be reduced by any amount such person may collect as indemnification from such other corporation, partnership, limited liability company, joint venture, trust, organization or other enterprise, trust, organization or other enterprise.

SECTION 8. INSURANCE. The Board of Directors may, to the full extent permitted by applicable law as it presently exists, or may hereafter be amended from time to time, authorize an appropriate officer or officers to purchase and maintain at the Corporation's expense insurance: (a) to indemnify the Corporation for any obligation which it incurs as a result of the indemnification of directors, officers and employees under the provisions of this Article VII; and (b) to indemnify or insure directors, officers and employees against liability in instances in which they may not otherwise be indemnified by the Corporation under the provisions of this Article VII.

SECTION 9. AMENDMENT OR REPEAL. Any repeal or modification of the foregoing provisions of this Article VII shall not adversely affect any right or protection hereunder of any person in respect of any act or omission occurring prior to the time of such repeal or modification. The rights provided hereunder shall inure to the benefit of any Indemnified Person and such person's heirs, executors and administrators.

ARTICLE VIII. DIVIDENDS

SECTION 1. DECLARATIONS OF DIVIDENDS. Dividends upon the capital stock of the Corporation, subject to the provisions of the Certificate of Incorporation, if any, may be declared by the Board of Directors at any regular or special meeting, pursuant to law. Dividends may be paid in cash, in property, or in shares of the capital stock, subject to the provisions of the Certificate of Incorporation.

SECTION 2. SPECIAL PURPOSES RESERVES. The Board of Directors may set apart out of any of the funds of the Corporation available for dividends a reserve or reserves for any proper purpose and may abolish any such reserve.

ARTICLE IX. NOTICE BY ELECTRONIC TRANSMISSION

SECTION 1. NOTICE BY ELECTRONIC TRANSMISSION. Without limiting the manner by which notice otherwise may be given effectively to stockholders, any notice to stockholders given by the Corporation under the Delaware General Corporation Law, the Certificate of Incorporation, or these Bylaws may be given in writing directed to the stockholder's mailing address (or by electronic transmission directed to the stockholder's electronic mail address, as applicable) as it appears on the records of the Corporation and shall be given (1) if mailed, when the notice is deposited in the U.S. mail, postage prepaid, (2) if delivered by courier service, the earlier of when the notice is received or left at such stockholder's address or (3) if given by electronic mail, when directed to such stockholder's electronic mail address unless the stockholder has notified the Corporation in writing or by electronic transmission of an objection to receiving notice by electronic mail or such notice is prohibited by Section 3 of this Article. A notice by electronic mail must include a prominent legend that the communication is an important notice regarding the Corporation.

Without limiting the manner by which notice otherwise may be given effectively to stockholders, but subject to Section 3 of this Article, any notice to stockholders given by the Corporation under any provision of the Delaware General Corporation Law, the Certificate of Incorporation or these Bylaws shall be effective if given by a form of electronic transmission consented to by the stockholder to whom the notice is given. Any such consent shall be revocable by the stockholder by written notice or electronic transmission to the Corporation.

Any notice given pursuant to the preceding paragraph shall be deemed given:

(a) if by facsimile telecommunication, when directed to a number at which the stockholder has consented to receive notice;

(b) if by a posting on an electronic network together with separate notice to the stockholder of such specific posting, upon the later of (A) such posting and (B) the giving of such separate notice; and

(c) if by any other form of electronic transmission, when directed to the stockholder.

Notwithstanding the foregoing, a notice may not be given by an electronic transmission from and after the time that (1) the Corporation is unable to deliver by such electronic transmission 2 consecutive notices given by the Corporation and (2) such inability becomes known to the secretary or an assistant secretary of the Corporation or to the transfer agent, or other person responsible for the giving of notice, provided, however, the inadvertent failure to discover such inability shall not invalidate any meeting or other action.

An affidavit of the secretary or an assistant secretary or of the transfer agent or other agent of the Corporation that the notice has been given shall, in the absence of fraud, be *prima facie* evidence of the facts stated therein.

SECTION 2. DEFINITION OF ELECTRONIC TRANSMISSION; ELECTRONIC MAIL; ELECTRONIC MAIL ADDRESS. An "electronic transmission" means any form of communication, not directly involving the physical transmission of paper, that creates a record that may be retained, retrieved, and reviewed by a recipient thereof, and that may be directly reproduced in paper form by such a recipient through an automated process. An "electronic mail" means an electronic transmission directed to a unique electronic mail address (which electronic mail shall be deemed to include any files attached thereto and any information hyperlinked to a website if such electronic mail includes the contact information of an officer or agent of the Corporation who is available to assist with accessing such files and information). An "electronic mail address" means a destination, commonly expressed as a string of characters, consisting of a unique user name or mailbox (commonly referred to as the "local part" of the address) and a reference to an internet domain (commonly referred to as the "domain part" of the address), whether or not displayed, to which electronic mail can be sent or delivered.

SECTION 3. INAPPLICABILITY. Notice by a form of electronic transmission shall not apply to Sections 164, 296, 311, 312 or 324 of the Delaware General Corporation Law.

ARTICLE X. GENERAL PROVISIONS

SECTION 1. FISCAL YEAR. The fiscal year of the Corporation shall be fixed by resolution of the Board of Directors.

SECTION 2. SEAL. The corporate seal shall have inscribed thereon the name of the Corporation, the year of its organization and the words "Corporate Seal, Delaware" or such other form as shall be approved by the Board of Directors. Said seal may be used by causing it or a facsimile thereof to be impressed or affixed or reproduced or otherwise.

SECTION 3. WRITTEN WAIVER OF NOTICE. A written waiver of any notice required to be given by law, the Certificate of Incorporation or by these Bylaws, signed by or electronically transmitted by the person entitled to notice, whether before, at or after the time of the event for which notice is to be given, shall be deemed equivalent to notice required to be given to such person. Neither the business to be transacted at, nor the purpose of, any regular or special meeting of stockholders, directors or members of a committee of directors need be specified in any written waiver of notice.

SECTION 4. ATTENDANCE AS WAIVER OF NOTICE. Attendance of a person at a meeting shall constitute a waiver of notice of such meeting, except when the person attends a meeting for the express purpose of objecting at the beginning of the meeting, and objects, to the transaction of any business because the meeting is not lawfully called or convened.

SECTION 5. WAIVER OF SECTION 1501. To the fullest extent provided by the law, the Corporation shall not be required to cause annual reports to be delivered to its stockholders under Section 1501 of the California General Corporation Law.

SECTION 6. CONTRACTS. The Board of Directors may authorize any officer or officers, agent or agents, to enter into any contract or execute and deliver any instrument in the name of and on behalf of the Corporation, and such authority may be general or confined to specific instances.

SECTION 7. LOANS. No loans shall be contracted on behalf of the Corporation and no evidences of indebtedness shall be issued in its name unless authorized by a resolution of the Board of Directors. Such authority may be general or confined to specific instances.

SECTION 8. CHECKS, DRAFTS, ETC. All checks, drafts or other orders for the payment of money, notes or other evidences of indebtedness issued in the name of the Corporation shall be signed by one or more officers or agents of the Corporation and in such manner as shall from time to time be determined by resolution of the Board of Directors.

SECTION 9. DEPOSITS. The funds of the Corporation may be deposited or invested in such bank account, in such investments or with such other depositaries as determined by the Board of Directors.

SECTION 10. ANNUAL STATEMENT. The Board of Directors shall present at each annual meeting, and at any special meeting of the stockholders when called for by vote of the stockholders, a full and clear statement of the business and condition of the Corporation.

SECTION 11. VOTING OF SECURITIES. Except as the Board of Directors may otherwise designate, the Chief Executive Officer, the President or the Treasurer may waive notice of, vote, or appoint any person or persons to vote, on behalf of the Corporation at, and act as, or appoint any person or persons to act as, proxy or attorney-in-fact for this Corporation (with or without power of substitution) at, any meeting of stockholders or securityholders of any other entity, the securities of which may be held by this Corporation.

SECTION 12. EVIDENCE OF AUTHORITY. A certificate by the Secretary, or an Assistant Secretary, or a temporary Secretary, as to any action taken by the stockholders, directors, a committee or any officer or representative of the Corporation shall as to all persons who rely on the certificate in good faith be conclusive evidence of such action.

SECTION 13. CERTIFICATE OF INCORPORATION. All references in these Bylaws to the Certificate of Incorporation shall be deemed to refer to the Certificate of Incorporation of the Corporation, as amended and in effect from time to time.

SECTION 14. SEVERABILITY. Any determination that any provision of these Bylaws is for any reason inapplicable, illegal or ineffective shall not affect or invalidate any other provision of these Bylaws.

SECTION 15. PRONOUNS. All pronouns used in these Bylaws shall be deemed to refer to the masculine, feminine or neuter, singular or plural, as the identity of the person or persons may require.

ARTICLE XI. AMENDMENTS

SECTION 1. BY THE BOARD OF DIRECTORS. These Bylaws may be altered, amended or repealed, in whole or in part, or new Bylaws may be adopted by the Board of Directors, when such power is conferred upon the Board of Directors by the Certificate of Incorporation.

SECTION 2. BY THE STOCKHOLDERS. These Bylaws may be altered, amended or repealed, in whole or in part, or new Bylaws may be adopted, by the affirmative vote of the holders of a majority of the shares of the capital stock of the Corporation issued and outstanding and entitled to vote at any annual meeting of stockholders, or at any special meeting of stockholders, provided notice of such alteration, amendment, repeal or adoption of new Bylaws shall have been stated in the notice of such special meeting. If the power to adopt, amend or repeal Bylaws is conferred upon the Board of Directors by the Certificate of Incorporation it shall not divest or limit the power of the stockholders to adopt, amend or repeal Bylaws.

AMENDED AND RESTATED

INVESTORS' RIGHTS AGREEMENT

NEUMORA THERAPEUTICS, INC.

September 22, 2022

AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

THIS AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT (this "**Agreement**"), is made as of September 22, 2022, by and among Neumora Therapeutics, Inc., a Delaware corporation (the "**Company**"), and each of the investors in the Company's Series B Preferred Stock (the "**Series B Investors**"), the investors in the Company's Series A-2 Preferred Stock (the "**Series A-2 Investors**"), and the investors in the Company's Series A-1 Preferred Stock (the "**Series A Investors**," together with the Series A-2 Investors, the "**Series A Investors**," and together with the Series B Investors, the "**Investors**") listed on <u>Schedule A</u> hereto, each of which is referred to in this Agreement as an "**Investor**."

RECITALS

WHEREAS, the Company and the Series A Investors are party to the Investors' Righst Agreement, dated September 8, 2020 (the "**Prior Rights Agreement**").

WHEREAS, the Series A-2 Investors are holders of shares of Series A-2 Preferred Stock, par value \$0.0001 per share (the "Series A-2 Preferred Stock") purchased pursuant to that certain Series A-2 Preferred Stock Purchase Agreement, dated September 8, 2020 (the "Series A Purchase Agreement");

WHEREAS, the Company and the Series B Investors are parties to that certain Series B Preferred Stock Purchase Agreement of even date herewith (as may be amended from time to time, the "Series B Purchase Agreement") for the purchase of shares of Series B Preferred Stock (the "Series B Preferred Stock," and, together with the Series A-1 Preferred Stock and the Series A-2 Preferred Stock, the "Preferred Stock"); and

WHEREAS, in order to induce the Company to enter into the Series B Purchase Agreement and to induce the Series B Investors to invest funds in the Company pursuant to the Series B Purchase Agreement, the Investors and the Company hereby agree that this Agreement shall amend and restated the Prior Rights Agreement, and that this Agreement shall govern the rights of the Investors to cause the Company to register shares of Common Stock issuable to the Investors, to receive certain information from the Company, and to participate in future equity offerings by the Company, and shall govern certain other matters as set forth in this Agreement; and

WHEREAS, the consent of the holders of a majority of the outstanding Series Preferred (as such term is defined in the Prior Rights Agreement) is required to amend or modify the Prior Rights Agreement (such holders, the "**Prior Requisite Parties**").

NOW, THEREFORE, the Prior Requisite Parties hereby agree that the Prior Rights Agreement is hereby amended and restated in its entirety, and the parties to this Agreement hereby agree as follows:

1. Definitions. For purposes of this Agreement:

1.1 "Affiliate" means, with respect to any specified Person, any other Person who, directly or indirectly, controls, is controlled by, or is under common control with such Person, including, without limitation, any general partner, limited partner, manager, member, managing member, officer, director, employee or trustee of such Person or any trust for the benefit of any of the foregoing or any Affiliate of the foregoing, or any venture capital fund or registered investment company now or hereafter existing that is controlled by one or more general partners, managing members or investment advisers of, or directly or indirectly shares the same (or an affiliate of the same) management company or investment adviser with, such Person. For purposes of this definition of "Affiliate," the term "control" when used with respect to any Person shall mean the power to direct the management or policies of such Person, directly or indirectly, whether through ownership of voting securities, by contract or otherwise, and the terms "controlling" and "controlled" shall have meanings correlative to the foregoing. For the avoidance of doubt, and without limiting the foregoing, LS Polaris Innovation Fund, L.P., Polaris Healthcare Technology Opportunities Fund, L.P. Polaris Growth Fund I, L.P., and their respective Affiliates shall each be deemed to be an Affiliate of Polaris Partners IX, L.P. For the avoidance of doubt, and without limiting the foregoing, any fund or account that is directly or indirectly managed or advised by Hillhouse Capital Management Ltd. shall each be deemed to be an Affiliate of HH SUM XXXI Holdings Limited ("SUM XXXI").

1.2 "ARCH" means ARCH Venture Fund X, L.P., ARCH Venture Fund X Overage, L.P. and their respective Affiliates.

1.3 "**Common Stock**" means shares of the Company's common stock, par value \$0.0001 per share.

1.4 "**Damages**" means any loss, damage, claim or liability (joint or several) to which a party hereto may become subject under the Securities Act, the Exchange Act, or other federal or state law, insofar as such loss, damage, claim or liability (or any action in respect thereof) arises out of or is based upon: (i) any untrue statement or alleged untrue statement of a material fact contained in any registration statement of the Company, including any preliminary prospectus or final prospectus contained therein or any amendments or supplements thereto; (ii) an omission or alleged omission to state therein a material fact required to be stated therein, or necessary to make the statements therein not misleading; or (iii) any violation or alleged violation by the indemnifying party (or any of its agents or Affiliates) of the Securities Act, the Exchange Act, any state securities law, or any rule or regulation promulgated under the Securities Act, the Exchange Act, or any state securities law.

1.5 "**Derivative Securities**" means any securities or rights convertible into, or exercisable or exchangeable for (in each case, directly or indirectly), Common Stock, including options and warrants.

1.6 "DPA" means Section 721 of the Defense Production Act, as amended, including all implementing regulations thereof.

1.7 "**DPA Triggering Rights**" means (i) "control" (as defined in the DPA); (ii) access to any "material non-public technical information" (as defined in the DPA) in the possession of the Company; (iii) membership or observer rights on the Board of Directors or equivalent governing body of the Company; (iv) any involvement, other than through the voting of shares, in substantive decision-making of the Company regarding (x) the use, development, acquisition or release of any Company "critical technology" (as defined in the DPA); (y) the use, development, acquisition, safekeeping, or release of "sensitive personal data" (as defined in the DPA) of U.S. citizens maintained or collected by the Company, or (z) the management, operation, manufacture, or supply of "covered investment critical infrastructure" (as defined in the DPA).

1.8 "Equity Plan" means any stock purchase, stock option, equity incentive or other similar plan of the Company.

1.9 "Exchange Act" means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

1.10 "**Excluded Registration**" means: (i) a registration relating to the sale or grant of securities to employees of the Company or a subsidiary pursuant to an Equity Plan; (ii) a registration relating to an SEC Rule 145 transaction; (iii) a registration on any form that does not include substantially the same information as would be required to be included in a registration statement covering the sale of the Registrable Securities; or (iv) a registration in which the only Common Stock being registered is Common Stock issuable upon conversion of debt securities that are also being registered.

1.11 **"Foreign Person**" means either (i) a Person or government that is a "foreign person" within the meaning of the DPA or (ii) a Person through whose investment a "foreign person" within the meaning of the DPA would obtain any DPA Triggering Rights.

1.12 "**Form S-1**" means such form under the Securities Act as in effect on the date hereof or any successor registration form under the Securities Act subsequently adopted by the SEC.

1.13 **"Form S-3"** means such form under the Securities Act as in effect on the date hereof or any registration form under the Securities Act subsequently adopted by the SEC that permits incorporation of substantial information by reference to other documents filed by the Company with the SEC.

1.14 "GAAP" means generally accepted accounting principles in the United States.

1.15 "Holder" means any holder of Registrable Securities who is a party to this Agreement.

1.16 "**Immediate Family Member**" means a child, stepchild, grandchild, parent, stepparent, grandparent, spouse, sibling, mother-in-law, father-in-law, son-in-law, daughter-in-law, brother-in-law, or sister-in-law, including, adoptive relationships, of a natural person referred to herein.

1.17 "Initiating Holders" means, collectively, Holders who properly initiate a registration request under this Agreement.

1.18 "IPO" means the Company's first underwritten public offering of its Common Stock under the Securities Act.

1.19 "**Key Employee**" means any executive-level employee (including, division director and vice president-level positions) as well as any employee who, either alone or in concert with others, develops, invents, programs, or designs any Company Intellectual Property (as defined in the Series B Purchase Agreement).

1.20 "**Major Investor**" means any Investor that, individually or together with such Investor's Affiliates, holds at least 15,000,000 shares of Common Stock issued or issuable upon conversion of the Series B Preferred Stock or the Series A-2 Preferred Stock (as adjusted for any stock split, stock dividend, combination, or other recapitalization or reclassification effected after the date hereof).

1.21 "**New Securities**" means, collectively, equity securities of the Company, whether or not currently authorized, as well as rights, options, or warrants to purchase such equity securities, or securities of any type whatsoever that are, or may become, convertible or exchangeable into or exercisable for such equity securities.

1.22 "Person" means any individual, corporation, partnership, trust, limited liability company, association or other entity.

1.23 "**Preferred Director**" means any director of the Company that the holders of record of the Series Preferred are entitled to elect, exclusively and as a separate class, pursuant to the Restated Certificate.

1.24 "**Registrable Securities**" means: (i) the Common Stock issuable or issued upon conversion of the Preferred Stock; (ii) any Common Stock, or any Common Stock issued or issuable (directly or indirectly) upon conversion and/or exercise of any other securities of the Company, acquired by the Investors after the date hereof; (iii) any outstanding shares of Common Stock issued to certain of the Investors in connection with the issuance of the Notes (as defined in the Series A Purchase Agreement); and (iii) any Common Stock issued as (or issuable upon the conversion or exercise of any warrant, right, or other security that is issued as) a dividend or other distribution with respect to, or in exchange for or in replacement of, the shares referenced in clauses (<u>i)</u> and (<u>ii)</u> above; excluding in all cases, however, any Registrable Securities sold by a Person in a transaction in which the applicable rights under this Agreement are not assigned pursuant to Section 6.1, and excluding for purposes of Section 2 any shares for which registration rights have terminated pursuant to <u>Section 2.13</u> of this Agreement.

1.25 "**Registrable Securities then outstanding**" means the number of shares determined by adding the number of shares of outstanding Common Stock that are Registrable Securities and the number of shares of Common Stock issuable (directly or indirectly) pursuant to then exercisable and/or convertible securities that are Registrable Securities.

1.26 "**Requisite Holders**" means the holders of a majority of the then outstanding Series Preferred, voting together as a single class, on an as-converted to Common Stock basis.

1.27 "**Restated Certificate**" means the Company's Amended and Restated Certificate of Incorporation, as amended and/or restated from time to time.

1.28 "Restricted Securities" means the securities of the Company required to be notated with the legend set forth in Section 2.12(b)

hereof.

- 1.29 "SEC" means the Securities and Exchange Commission.
- 1.30 "SEC Rule 144" means Rule 144 promulgated by the SEC under the Securities Act.
- 1.31 "SEC Rule 145" means Rule 145 promulgated by the SEC under the Securities Act.
- 1.32 "Securities Act" means the Securities Act of 1933, as amended, and the rules and regulations promulgated thereunder.

1.33 "**Selling Expenses**" means all underwriting discounts, selling commissions, and stock transfer taxes applicable to the sale of Registrable Securities, and fees and disbursements of counsel for any Holder, except for the fees and disbursements of the Selling Holder Counsel borne and paid by the Company as provided in <u>Section 2.6</u>.

1.34 "Series A Preferred Stock" means, collectively, shares of the Company's Series A-1 Preferred Stock, par value \$0.0001 per share, and Series A-2 Preferred Stock.

1.35 "Series Preferred" means, collectively, the Series B Preferred Stock and the Series A-2 Preferred Stock.

- 2. <u>Registration Rights</u>. The Company covenants and agrees as follows:
 - 2.1 Demand Registration.

(a) <u>Form S-1 Demand</u>. If at any time after the earlier of (i) five years after the date of this Agreement or (ii) 180 days after the effective date of the registration statement for the IPO, the Company receives a request from Major Investors holding at least 40% of the Registrable Securities then held by all Major Investors that the Company file a Form S-1 registration statement with respect to at least 40% of the Registrable Securities then held by all Major Investors (or a lesser percent if the anticipated aggregate offering price, net of Selling Expenses, would exceed \$20 million), then the Company shall (x) within ten days after the date such request is given, give notice thereof (the "**Demand Notice**") to all Holders other than the Initiating Holders; and (y) as soon as practicable, and in any event within 60 days after the date such request is given by the Initiating Holders, file a Form S-1 registration statement under the Securities Act covering all Registrable Securities that the Initiating Holders requested to be registered and any additional Registrable Securities requested to be included in such registration by any other Holders, as specified by notice given by each such Holder to the Company within twenty (20) days of the date the Demand Notice is given, and in each case, subject to the limitations of <u>Sections 2.1(c)</u> and <u>2.3</u>; *provided, however*, that this right to request the filing of a Form S-1 registration statement shall in no event be made available to any Holder that is a Foreign Person.

(b) Form S-3 Demand. If at any time when it is eligible to use a Form S-3 registration statement, the Company receives a request from Major Investors representing at least 20% of the Registrable Securities held by all Major Investors that the Company file a Form S-3 registration statement with respect to outstanding Registrable Securities of such Holders having an anticipated aggregate offering price, net of Selling Expenses, of at least \$5 million then the Company shall (i) within ten days after the date such request is given, give a Demand Notice to all Holders other than the Initiating Holders; and (ii) as soon as practicable, and in any event within 45 days after the date such request is given by the Initiating Holders, file a Form S-3 registration statement under the Securities Act covering all Registrable Securities that the Initiating Holders requested to be registered and any additional Registrable Securities requested to be included in such registration by any other Holders, as specified by notice given by each such Holder to the Company within 20 days of the date the Demand Notice is given, and in each case, subject to the limitations of <u>Sections 2.1(c)</u> and <u>2.3</u>.

(c) Notwithstanding the foregoing obligations, if the Company furnishes to such Holders requesting a registration pursuant to this <u>Section 2.1</u> a certificate signed by the Company's chief executive officer stating that in the good faith judgment of the Company's Board of Directors (the "**Board of Directors**") it would be materially detrimental to the Company and its stockholders for such registration statement to either become effective or remain effective for as long as such registration statement otherwise would be required to remain effective, because such action would (i) materially interfere with a significant acquisition, corporate reorganization, or other similar transaction involving the Company; (ii) require premature disclosure of material information that the Company has a bona fide business purpose for preserving as confidential; or (iii) render the Company unable to comply with requirements under the Securities Act or Exchange Act, then the Company shall have the right to defer taking action with respect to such filing, and any time periods with respect to filing or effectiveness thereof shall be tolled correspondingly, for a period of not more than ninety (90) days after the request of the Initiating Holders is given; <u>provided, however</u>, that the Company may not invoke this right more than once in any 12 month period; and <u>provided further</u> that the Company shall not register any securities for its own account or that of any other stockholder during such 90 day period other than an Excluded Registration.

(d) The Company shall not be obligated to effect, or to take any action to effect, any registration pursuant to <u>Section 2.1(a) (i)</u> during the period that is 60 days before the Company's good faith estimate of the date of filing of, and ending on a date that is 180 days after the effective date of, a Company-initiated registration, <u>provided</u> that the Company is actively employing in good faith commercially reasonable efforts to cause such registration statement to become effective; (ii) after the Company has effected two registrations pursuant to <u>Section 2.1(a)</u>; or (iii) if the Initiating Holders propose to dispose of shares of Registrable Securities that may be immediately registered on Form S-3 pursuant to a request made pursuant to <u>Section 2.1(b)</u>. The Company shall not be obligated to effect, or to take any action to effect, any registration pursuant to <u>Section 2.1(b)</u> (i) during the period that is thirty (30) days before the Company's good faith estimate of the date of filing of, and ending on a date that is ninety (90) days after the effective

date of, a Company-initiated registration, <u>provided</u> that the Company is actively employing in good faith commercially reasonable efforts to cause such registration statement to become effective; or (ii) if the Company has effected two registrations pursuant to <u>Section 2.1(b)</u> within the 12 month period immediately preceding the date of such request. A registration shall not be counted as "effected" for purposes of this <u>Section 2.1(d)</u> until such time as the applicable registration statement has been declared effective by the SEC, unless the Initiating Holders withdraw their request for such registration, elect not to pay the registration expenses therefor, and forfeit their right to one demand registration statement pursuant to <u>Section 2.6</u>, in which case such withdrawn registration statement shall be counted as "effected" for purposes of this Section <u>2.1(d)</u>; <u>provided</u>, that if such withdrawal is during a period the Company has deferred taking action pursuant to <u>Section 2.1(c)</u>, then the Initiating Holders may withdraw their request for registration and such registration will not be counted as "effected" for purposes of this <u>Section 2.1(d)</u>.

2.2 <u>Company Registration</u>. If the Company proposes to register (including, for this purpose, a registration effected by the Company for stockholders other than the Holders) any of its Common Stock under the Securities Act in connection with the public offering of such securities solely for cash (other than in an Excluded Registration), the Company shall, at such time, promptly give each Holder notice of such registration. Upon the request of each Holder given within twenty (20) days after such notice is given by the Company, the Company shall, subject to the provisions of Section 2.3</u>, cause to be registered all of the Registrable Securities that each such Holder has requested to be included in such registration. The Company shall have the right to terminate or withdraw any registration initiated by it under this Section 2.2 before the effective date of such registration, whether or not any Holder has elected to include Registrable Securities in such registration. The expenses (other than Selling Expenses) of such withdrawn registration shall be borne by the Company in accordance with Section 2.6.

2.3 Underwriting Requirements.

(a) If, pursuant to <u>Section 2.1</u>, the Initiating Holders intend to distribute the Registrable Securities covered by their request by means of an underwriting, they shall so advise the Company as a part of their request made pursuant to <u>Section 2.1</u>, and the Company shall include such information in the Demand Notice. The underwriter(s) will be selected by the Board of Directors and shall be reasonably acceptable to a majority of the voting power of the Initiating Holders. In such event, the right of any Holder to include such Holder's Registrable Securities in such registration shall be conditioned upon such Holder's participation in such underwriting and the inclusion of such Holder's Registrable Securities in the underwriting to the extent provided herein. All Holders proposing to distribute their securities through such underwriting shall (together with the Company as provided in <u>Section 2.3</u>, if the managing underwriter(s) advise(s) the Initiating Holders in writing that marketing factors require a limitation on the number of shares to be underwritten, then the Initiating Holders shall so advise all Holders of Registrable Securities that otherwise would be underwritten pursuant hereto, and the number of Registrable Securities that may be included in the underwriting shall be allocated among such Holders of Registrable Securities, including the Initiating Holders, in proportion (as nearly as practicable) to the number of Registrable Securities owned by each Holder or in such other proportion as shall mutually be agreed to by all such selling Holders; provided, however, that the number of Registrable Securities held by the Holders to be included in such underwriting shall not be reduced unless all other securities are first entirely excluded from the underwriting. To facilitate the allocation of shares in accordance with the above provisions, the Company or the underwriters may round the number of shares allocated to any Holder to the nearest one hundred (100) shares.

(b) In connection with any offering involving an underwriting of shares of the Company's capital stock pursuant to Section 2.2, the Company shall not be required to include any of the Holders' Registrable Securities in such underwriting unless the Holders accept the terms of the underwriting as agreed upon between the Company and its underwriters, and then only in such quantity as the underwriters in their sole discretion determine will not jeopardize the success of the offering by the Company. If the total number of securities, including Registrable Securities, requested by stockholders to be included in such offering exceeds the number of securities to be sold (other than by the Company) that the underwriters in their reasonable discretion determine is compatible with the success of the offering, then the Company shall be required to include in the offering only that number of such securities, including Registrable Securities, which the underwriters and the Company in their sole discretion determine will not jeopardize the success of the offering. If the underwriters determine that less than all of the Registrable Securities requested to be registered can be included in such offering, then the Registrable Securities that are included in such offering shall be allocated among the selling Holders in proportion (as nearly as practicable to) the number of Registrable Securities owned by each selling Holder or in such other proportions as shall mutually be agreed to by all such selling Holders. To facilitate the allocation of shares in accordance with the above provisions, the Company or the underwriters may round the number of shares allocated to any Holder to the nearest one hundred (100) shares. Notwithstanding the foregoing, in no event shall (i) the number of Registrable Securities included in the offering be reduced unless all other securities (other than securities to be sold by the Company) are first entirely excluded from the offering, or (ii) the number of Registrable Securities included in the offering be reduced below 30% of the total number of securities included in such offering, unless such offering is the IPO, in which case the selling Holders may be excluded further if the underwriters make the determination described above and no other stockholder's securities are included in such offering. For purposes of the provision in this Section 2.3(b) concerning apportionment, for any selling Holder that is a partnership, limited liability company, or corporation, the partners, members, retired partners, retired members, stockholders, and Affiliates of such Holder, or the estates and Immediate Family Members of any such partners, retired partners, members, and retired members and any trusts for the benefit of any of the foregoing Persons, shall be deemed to be a single "selling Holder," and any pro rata reduction with respect to such "selling Holder" shall be based upon the aggregate number of Registrable Securities owned by all Persons included in such "selling Holder," as defined in this sentence.

(c) For purposes of <u>Section 2.1</u>, a registration shall not be counted as "effected" if, as a result of an exercise of the underwriter's cutback provisions in <u>Section 2.3(a)</u>, fewer than 50% of the total number of Registrable Securities that Holders have requested to be included in such registration statement are actually included.

2.4 <u>Obligations of the Company</u>. Whenever required under this <u>Section 2</u> to effect the registration of any Registrable Securities, the Company shall, as expeditiously as reasonably possible:

(a) prepare and file with the SEC a registration statement with respect to such Registrable Securities and use its commercially reasonable efforts to cause such registration statement to become effective and, upon the request of the Holders of a majority of the Registrable Securities registered thereunder, keep such registration statement effective for a period of up to 120 days or, if earlier, until the distribution contemplated in the registration statement has been completed; provided, however, that (i) such 120 day period shall be extended for a period of time equal to the period the Holder refrains, at the request of an underwriter of Common Stock (or other securities) of the Company, from selling any securities included in such registration, and (ii) in the case of any registration of Registrable Securities on Form S-3 that are intended to be offered on a continuous or delayed basis, subject to compliance with applicable SEC rules, such 120 day period shall be extended for up to ninety (90) days, if necessary, to keep the registration statement effective until all such Registrable Securities are sold;

(b) prepare and file with the SEC such amendments and supplements to such registration statement, and the prospectus used in connection with such registration statement, as may be necessary to comply with the Securities Act in order to enable the disposition of all securities covered by such registration statement;

(c) furnish to the selling Holders such numbers of copies of a prospectus, including a preliminary prospectus, as required by the Securities Act, and such other documents as the Holders may reasonably request in order to facilitate their disposition of their Registrable Securities;

(d) use its commercially reasonable efforts to register and qualify the securities covered by such registration statement under such other securities or blue-sky laws of such jurisdictions as shall be reasonably requested by the selling Holders; <u>provided</u> that the Company shall not be required to qualify to do business or to file a general consent to service of process in any such states or jurisdictions, unless the Company is already subject to service in such jurisdiction and except as may be required by the Securities Act;

(e) in the event of any underwritten public offering, enter into and perform its obligations under an underwriting agreement, in usual and customary form, with the underwriter(s) of such offering;

(f) use its commercially reasonable efforts to cause all such Registrable Securities covered by such registration statement to be listed on a national securities exchange or trading system and each securities exchange and trading system (if any) on which similar securities issued by the Company are then listed;

(g) provide a transfer agent and registrar for all Registrable Securities registered pursuant to this Agreement and provide a CUSIP number for all such Registrable Securities, in each case not later than the effective date of such registration;

(h) promptly make available for inspection by the selling Holders, any managing underwriter(s) participating in any disposition pursuant to such registration statement, and any attorney or accountant or other agent retained by any such underwriter or selected by the selling Holders, all financial and other records, pertinent corporate documents, and properties of the Company, and cause the Company's officers, directors, employees, and independent accountants to supply all information reasonably requested by any such seller, underwriter, attorney, accountant, or agent, in each case, as necessary or advisable to verify the accuracy of the information in such registration statement and to conduct appropriate due diligence in connection therewith;

(i) notify each selling Holder, promptly after the Company receives notice thereof, of the time when such registration statement has been declared effective or a supplement to any prospectus forming a part of such registration statement has been filed; and

(j) after such registration statement becomes effective, notify each selling Holder of any request by the SEC that the Company amend or supplement such registration statement or prospectus.

In addition, the Company shall ensure that, at all times after any registration statement covering a public offering of securities of the Company under the Securities Act shall have become effective, its insider trading policy shall provide that the Company's directors may implement a trading program under Rule 10b5-1 of the Exchange Act.

2.5 <u>Furnish Information</u>. It shall be a condition precedent to the obligations of the Company to take any action pursuant to this <u>Section 2</u> with respect to the Registrable Securities of any selling Holder that such Holder shall furnish to the Company such information regarding itself, the Registrable Securities held by it, and the intended method of disposition of such securities as is reasonably required to effect the registration of such Holder's Registrable Securities.

2.6 Expenses of Registration. All expenses (other than Selling Expenses) incurred in connection with registrations, filings, or qualifications pursuant to Section 2, including all registration, filing, and qualification fees; printers' and accounting fees; fees and disbursements of counsel for the Company; and the reasonable fees and disbursements, not to exceed \$75,000, of one counsel for the selling Holders ("**Selling Holder Counsel**"), shall be borne and paid by the Company; provided, however, that the Company shall not be required to pay for any expenses of any registration proceeding begun pursuant to <u>Section 2.1</u> if the registration request is subsequently withdrawn at the request of the Holders of a majority of the Registrable Securities to be registered (in which case all selling Holders shall bear such expenses pro rata based upon the number of Registrable Securities that were to be included in the withdrawn registration), unless the Holders of a majority of the Registrable Securities agree to forfeit their right to one registration pursuant to <u>Sections 2.1(a)</u> or <u>2.1(b)</u>, as the case may be; provided further that if, at the time of such withdrawal, the Holders shall have learned of a material adverse change in the condition, business, or prospects of the Company from that known to the Holders at the time of their request and have withdrawn the request with reasonable promptness after learning of such information then the Holders shall not be required to pay any of such expenses and shall not forfeit their right to one registration pursuant to <u>Section 2</u> shall be borne and paid by the Holders pro rata on the basis of the number of Registrable Securities registered on their behalf.

2.7 <u>Delay of Registration</u>. No Holder shall have any right to obtain or seek an injunction restraining or otherwise delaying any registration pursuant to this Agreement as the result of any controversy that might arise with respect to the interpretation or implementation of this <u>Section 2</u>.

2.8 Indemnification. If any Registrable Securities are included in a registration statement under this Section 2:

(a) To the extent permitted by law, the Company will indemnify and hold harmless each selling Holder, and the partners, members, officers, directors, and stockholders of each such Holder; legal counsel and accountants for each such Holder; any underwriter (as defined in the Securities Act) for each such Holder; and each Person, if any, who controls such Holder or underwriter within the meaning of the Securities Act or the Exchange Act, against any Damages, and the Company will pay to each such Holder, underwriter, controlling Person, or other aforementioned Person any legal or other expenses reasonably incurred thereby in connection with investigating or defending any claim or proceeding from which Damages may result, as such expenses are incurred; provided, however, that the indemnity agreement contained in this Section 2.8(a) shall not apply to amounts paid in settlement of any such claim or proceeding if such settlement is effected without the consent of the Company, which consent shall not be unreasonably withheld, nor shall the Company be liable for any Damages to the extent that they arise out of or are based upon actions or omissions made in reliance upon and in conformity with written information furnished by or on behalf of any such Holder, underwriter, controlling Person, or other aforementioned Person expressly for use in connection with such registration.

(b) To the extent permitted by law, each selling Holder, severally and not jointly, will indemnify and hold harmless the Company, and each of its directors, each of its officers who has signed the registration statement, each Person (if any), who controls the Company within the meaning of the Securities Act, legal counsel and accountants for the Company, any underwriter (as defined in the Securities Act), any other Holder selling securities in such registration statement, and any controlling Person of any such underwriter or other Holder, against any Damages, in each case only to the extent that such Damages arise out of or are based upon actions or omissions made in reliance upon and in conformity with written information furnished by or on behalf of such selling Holder expressly for use in connection with such registration; and each such selling Holder will pay to the Company and each other aforementioned Person any legal or other expenses reasonably incurred thereby in connection with investigating or defending any claim or proceeding from which Damages may result, as such expenses are incurred; provided, however, that the indemnity agreement contained in this Section 2.8(b) shall not apply to amounts paid in settlement of any such claim or proceeding if such settlement is effected without the consent of the Holder, which consent shall not be unreasonably withheld; and provided further that in no event shall the aggregate amounts payable by any Holder by way of indemnity or contribution under <u>Sections 2.8(b)</u> and <u>2.8(d)</u> exceed the proceeds from the offering received by such Holder (net of any Selling Expenses paid by such Holder), except in the case of fraud or willful misconduct by such Holder.

(c) Promptly after receipt by an indemnified party under this Section 2.8 of notice of the commencement of any action (including any governmental action) for which a party may be entitled to indemnification hereunder, such indemnified party will, if a claim in respect thereof is to be made against any indemnifying party under this Section 2.8, give the indemnifying party notice of the commencement thereof. The indemnifying party shall have the right to participate in such action and, to the extent the indemnifying party so desires, participate jointly with any other indemnifying party to which notice has been given, and to assume the defense thereof with counsel mutually satisfactory to the parties; provided, however, that an indemnified party (together with all other indemnified parties that may be represented without conflict by one counsel) shall have the right to retain one separate counsel, with the fees and expenses to be paid by the indemnifying party, if representation of such indemnified party and any other party represented by such counsel in such action. The failure to give notice to the indemnifying party within a reasonable time of the commencement of any such action shall relieve such indemnifying party of any liability to the indemnified party under this Section 2.8, to the extent that such failure materially prejudices the indemnifying party shall under this Section 2.8.

(d) To provide for just and equitable contribution to joint liability under the Securities Act in any case in which either: (i) any party otherwise entitled to indemnification hereunder makes a claim for indemnification pursuant to this Section 2.8 but it is judicially determined (by the entry of a final judgment or decree by a court of competent jurisdiction and the expiration of time to appeal or the denial of the last right of appeal) that such indemnification may not be enforced in such case, notwithstanding the fact that this Section 2.8 provides for indemnification in such case, or (ii) contribution under the Securities Act may be required on the part of any party hereto for which indemnification is provided under this Section 2.8, then, and in each such case, such parties will contribute to the aggregate losses, claims, damages, liabilities, or expenses to which they may be subject (after contribution from others) in such proportion as is appropriate to reflect the relative fault of each of the indemnifying party and the indemnified party in connection with the statements, omissions, or other actions that resulted in such loss, claim, damage, liability, or expense, as well as to reflect any other relevant equitable considerations. The relative fault of the indemnifying party and of the indemnified party shall be determined by reference to, among other things, whether the untrue or allegedly untrue statement of a material fact, or the omission or alleged omission of a material fact, relates to information supplied by the indemnifying party or by the indemnified party and the parties' relative intent, knowledge, access to information, and opportunity to correct or prevent such statement or omission; provided, however, that, in any such case (x) no Holder will be required to contribute any amount in excess of the public offering price of all such Registrable Securities offered and sold by such Holder pursuant to such registration statement, and (y) no Person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) will be entitled to contribution from any Person who was not guilty of such fraudulent misrepresentation; and provided further that in no event shall a Holder's liability pursuant to this Section 2.8(d), when combined with the amounts paid or payable by such Holder pursuant to Section 2.8(b), exceed the proceeds from the offering received by such Holder (net of any Selling Expenses paid by such Holder), except in the case of willful misconduct or fraud by such Holder.

(e) Notwithstanding the foregoing, to the extent that the provisions on indemnification and contribution contained in the underwriting agreement entered into in connection with the underwritten public offering are in conflict with the foregoing provisions, the provisions in the underwriting agreement shall control.

(f) Unless otherwise superseded by an underwriting agreement entered into in connection with the underwritten public offering, the obligations of the Company and Holders under this <u>Section 2.8</u> shall survive the completion of any offering of Registrable Securities in a registration under this <u>Section 2</u>, and otherwise shall survive the termination of this Agreement.

2.9 <u>Reports Under Exchange Act</u>. With a view to making available to the Holders the benefits of SEC Rule 144 and any other rule or regulation of the SEC that may at any time permit a Holder to sell securities of the Company to the public without registration or pursuant to a registration on Form S-3, the Company shall:

(a) make and keep available adequate current public information, as those terms are understood and defined in SEC Rule 144, at all times after the effective date of the registration statement filed by the Company for the IPO;

(b) use commercially reasonable efforts to file with the SEC in a timely manner all reports and other documents required of the Company under the Securities Act and the Exchange Act (at any time after the Company has become subject to such reporting requirements); and

(c) furnish to any Holder, so long as the Holder owns any Registrable Securities, forthwith upon request (i) to the extent accurate, a written statement by the Company that it has complied with the reporting requirements of SEC Rule 144 (at any time after ninety (90) days after the effective date of the registration statement filed by the Company for the IPO), the Securities Act, and the Exchange Act (at any time after the Company has become subject to such reporting requirements), or that it qualifies as a registrant whose securities may be resold pursuant to Form S-3 (at any time after the Company so qualifies); and (ii) such other information as may be reasonably requested in availing any Holder of any rule or regulation of the SEC that permits the selling of any such securities without registration (at any time after the Company has become subject to the reporting requirements under the Exchange Act) or pursuant to Form S-3 (at any time after the Company so qualifies to use such form).

2.10 Limitations on Subsequent Registration Rights. From and after the date of this Agreement, the Company shall not, without the prior written consent of the Requisite Holders, enter into any agreement with any holder or prospective holder of any securities of the Company that would (i) provide to such holder or prospective holder the right to include securities in any registration on other than either a pro rata basis with respect to the Registrable Securities or on a subordinate basis after all Holders have had the opportunity to include in the registration and offering all shares of Registrable Securities that they wish to so include; or (ii) allow such holder or prospective holder to initiate a demand for registration of any securities held by such holder or prospective holder; provided that this limitation shall not apply to Registrable Securities acquired by any additional Investor that becomes a party to this Agreement in accordance with Section 6.9.

2.11 "Market Stand-off" Agreement. Each Holder hereby agrees that it will not, without the prior written consent of the managing underwriter, during the period commencing on the date of the final prospectus relating to the registration by the Company of shares of its Common Stock or any other equity securities under the Securities Act for its IPO and ending on the date specified by the Company and the managing underwriter (such period not to exceed 180 days), or such longer period as may be required to accommodate applicable regulatory restrictions on (1) the publication or other distribution of research reports, and (2) analyst recommendations and opinions, including, but not limited to, the restrictions contained in FINRA Rule 2241, or any successor provisions or amendments thereto), (i) lend; offer; pledge; sell; contract to sell; sell any option or contract to purchase; purchase any option or contract to sell; grant any option, right, or warrant to purchase; or otherwise transfer or dispose of, directly or indirectly, any shares of Common Stock or any securities convertible into or exercisable or exchangeable (directly or indirectly) for Common Stock held immediately before the effective date of the registration statement for such offering or (ii) enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of such securities, whether any such transaction described in clause (i) or (ii) above is to be settled by delivery of Common Stock or other securities, in cash, or otherwise. The foregoing provisions of this Section 2.11 shall apply only to the IPO, shall not apply to the sale of any shares acquired in the IPO or open market following the IPO or to an underwriter pursuant to an underwriting agreement, or the transfer of any shares owned by a Holder in the Company to its Affiliate, provided that the Affiliate of such Holder agrees to be bound in writing by the restrictions set forth herein, or the transfer of any shares to any trust for the direct or indirect benefit of the Holder or the immediate family of the Holder, provided that the trustee of the trust agrees to be bound in writing by the restrictions set forth herein, and provided further that any such transfer shall not involve a disposition for value, and shall be applicable to the Holders only if all officers and directors and stockholders individually owning more than 1.0% of the Company's outstanding Common Stock (after giving effect to conversion into Common Stock of all outstanding Preferred Stock) are subject to similar restrictions. The underwriters in connection with such registration are intended third-party beneficiaries of this Section 2.11 and shall have the right, power and authority to enforce the provisions hereof as though they were a party hereto. Each Holder further agrees to execute such agreements as may be reasonably requested by the underwriters in connection with such registration that are substantially consistent with this Section 2.11 or that are necessary to give further effect thereto. Any discretionary waiver or termination of the restrictions of any or all of such agreements by the Company or the underwriters shall apply pro rata to all Major Investors that are subject to such agreements, based on the number of shares subject to such agreements, subject to customary shareholding thresholds and other customary exceptions.

2.12 Restrictions on Transfer.

(a) The Preferred Stock and the Registrable Securities shall not be sold, pledged, or otherwise transferred, and the Company shall not recognize and shall issue stop-transfer instructions to its transfer agent with respect to any such sale, pledge, or transfer, except upon the conditions specified in this Agreement, which conditions are intended to ensure compliance with the provisions of the Securities Act. A transferring Holder will cause any proposed purchaser, pledgee, or transfere of the Preferred Stock and the Registrable Securities held by such Holder to agree to take and hold such securities subject to the provisions and upon the conditions specified in this Agreement.

(b) Each certificate, instrument or book entry representing (i) the Preferred Stock, (ii) the Registrable Securities, and (iii) any other securities issued in respect of the securities referenced in clauses (i) and (ii), upon any stock split, stock dividend, recapitalization, merger, consolidation, or similar event, shall (unless otherwise permitted by the provisions of <u>Section 2.12(c)</u>) be notated with a legend substantially in the following form:

THE SECURITIES REPRESENTED HEREBY HAVE BEEN ACQUIRED FOR INVESTMENT AND HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933. SUCH SHARES MAY NOT BE SOLD, PLEDGED, OR TRANSFERRED IN THE ABSENCE OF SUCH REGISTRATION OR A VALID EXEMPTION FROM THE REGISTRATION AND PROSPECTUS DELIVERY REQUIREMENTS OF SAID ACT.

THE SECURITIES REPRESENTED HEREBY MAY BE TRANSFERRED ONLY IN ACCORDANCE WITH THE TERMS OF AN AGREEMENT BETWEEN THE COMPANY AND THE STOCKHOLDER, A COPY OF WHICH IS ON FILE WITH THE SECRETARY OF THE COMPANY.

The Holders consent to the Company making a notation in its records and giving instructions to any transfer agent of the Restricted Securities in order to implement the restrictions on transfer set forth in this <u>Section 2.12</u>.

(c) The holder of such Restricted Securities, by acceptance of ownership thereof, agrees to comply in all respects with the provisions of this Section 2. Before any proposed sale, pledge, or transfer of any Restricted Securities, unless there is in effect a registration statement under the Securities Act covering the proposed transaction, the Holder thereof shall give notice to the Company of such Holder's intention to effect such sale, pledge, or transfer. Each such notice shall describe the manner and circumstances of the proposed sale, pledge, or transfer in sufficient detail and, if reasonably requested by the Company, shall be accompanied at such Holder's expense by either (i) a written opinion of legal counsel who shall, and whose legal opinion shall, be reasonably satisfactory to the Company, addressed to the Company, to the effect that the proposed transaction may be effected without registration under the Securities Act; (ii) a "no action" letter from the SEC to the effect that the proposed sale, pledge, or transfer of such Restricted Securities without registration will not result in a recommendation by the staff of the SEC that action be taken with respect thereto; or (iii) any other evidence reasonably satisfactory to counsel to the Company to the effect that the proposed sale, pledge, or transfer of the Restricted Securities may be effected without registration under the Securities Act, whereupon the Holder of such Restricted Securities shall be entitled to sell, pledge, or transfer such Restricted Securities in accordance with the terms of the notice given by the Holder to the Company. The Company will not require such a notice, legal opinion or "no action" letter (x) in any transaction in compliance with SEC Rule 144; or (y) in any transaction in which such Holder distributes Restricted Securities to an Affiliate of such Holder; provided that each transferee agrees in writing to be subject to the terms of this Section 2.12. Each certificate, instrument, or book entry representing the Restricted Securities transferred as above provided shall be notated with, except if such transfer is made pursuant to SEC Rule 144, the appropriate restrictive legend set forth in Section 2.12(b), except that such certificate instrument, or book entry shall not be notated with such restrictive legend if, in the opinion of counsel for such Holder and the Company, such legend

is not required in order to establish compliance with any provisions of the Securities Act. Each Holder agrees not to make any sale, assignment, transfer, pledge or other disposition of any securities of the Company, or any beneficial interest therein, to any person other than the Company unless and until the proposed transferee confirms to the reasonable satisfaction of the Company that neither the proposed transferee nor any of such transferee's directors, executive officers, general partners or managing members is subject to any Bad Actor Disqualification (as defined below), except as set forth in Rule 506(d)(2)(ii) or (iii) or (d)(3) under the Securities Act and disclosed to the Company in advance of the transfer in writing and in reasonable detail; <u>provided</u> that the foregoing shall not be required where the Holder distributes securities of the Company to an Affiliate of such Holder otherwise in accordance with the terms of this Agreement.

2.13 <u>Termination of Registration Rights</u>. The right of any Holder to request registration or inclusion of Registrable Securities in any registration pursuant to <u>Sections 2.1</u> or <u>2.2</u> shall terminate upon the earliest to occur of:

(a) the closing of a Deemed Liquidation Event, as such term is defined in the Restated Certificate;

(b) such time after the IPO, as Rule 144 or another similar exemption under the Securities Act is available for the sale of all of such Holder's shares without limitation during a three-month period without registration; and

(c) the fifth anniversary of the IPO.

3. Information Rights.

3.1 <u>Delivery of Financial Statements</u>. The Company shall deliver to each Major Investor, <u>provided</u> that the Board of Directors has not reasonably determined that such Major Investor is a competitor of the Company:

(a) as soon as practicable, but in any event within 120 days after the end of each fiscal year of the Company, (i) a balance sheet as of the end of such year, (ii) statements of income and of cash flows for such year, and a comparison between (x) the actual amounts as of and for such fiscal year and (y) the comparable amounts for the prior year and as included in the Budget (as defined below) for such year, with an explanation of any material differences between such amounts and a schedule as to the sources and applications of funds for such year, and (iii) a statement of stockholders' equity as of the end of such year, all such financial statements audited and certified by independent public accountants of nationally recognized standing selected by the Company.

(b) as soon as practicable, but in any event within thirty (30) days after the end of each quarter of each fiscal year of the Company, unaudited statements of income and cash flows for such fiscal quarter, including comparison of actuals against the Budget (as defined below), and an unaudited balance sheet and a statement of stockholders' equity as of the end of such quarter, all prepared in accordance with GAAP (except that such financial statements may (i) be subject to normal year-end audit adjustments; and (ii) not contain all notes thereto that may be required in accordance with GAAP);

(c) as soon as practicable, but in any event within thirty (30) days after the end of each quarter of each fiscal year of the Company, a statement showing the number of shares of each class and series of capital stock and securities convertible into or exercisable for shares of capital stock outstanding at the end of the period, the Common Stock issuable upon conversion or exercise of any outstanding securities convertible or exercisable for Common Stock and the exchange ratio or exercise price applicable thereto, and the number of shares of issued stock options and stock options not yet issued but reserved for issuance, if any, all in sufficient detail as to permit the Major Investors to calculate their respective percentage equity ownership in the Company;

(d) as soon as practicable, but in any event within thirty (30) days after approval thereof by the Board of Directors, a budget and business plan for the next fiscal year (collectively, the "**Budget**"), prepared on a monthly basis, including balance sheets, income statements, and statements of cash flow for such months and, promptly after prepared, any other budgets or revised budgets prepared by the Company; and

(e) such other information relating to the financial condition, capitalization, business, prospects, or corporate affairs of the Company as any Major Investor may from time to time reasonably request; <u>provided</u>, <u>however</u>, that the Company shall not be obligated under this <u>Section 3.1</u> to provide information (i) that the Company reasonably determines in good faith to be a trade secret or confidential information (unless covered by an enforceable confidentiality agreement (other than this Agreement), in a form acceptable to the Company); or (ii) the disclosure of which would adversely affect the attorney-client privilege between the Company and its counsel.

If, for any period, the Company has any subsidiary whose accounts are consolidated with those of the Company, then in respect of such period the financial statements delivered pursuant to the foregoing sections shall be the consolidated and consolidating financial statements of the Company and all such consolidated subsidiaries.

Notwithstanding anything else in this <u>Section 3.1</u> to the contrary, the Company may cease providing the information set forth in this <u>Section 3.1</u> during the period starting with the date 60 days before the Company's good-faith estimate of the date of filing of a registration statement if it reasonably concludes it must do so to comply with the SEC rules applicable to such registration statement and related offering; <u>provided</u> that the Company's covenants under this <u>Section 3.1</u> shall be reinstated at such time as the Company is no longer actively employing its commercially reasonable efforts to cause such registration statement to become effective.

Except as set forth in <u>Section 3.3</u>, the information rights set forth in this <u>Section 3.1</u> shall not be terminated with respect to any Major Investor without such Major Investor's prior written consent.

3.2 <u>Inspection</u>. The Company shall permit each Major Investor (<u>provided</u> that the Board of Directors has not reasonably determined that such Major Investor is a competitor of the Company), at such Major Investor's expense, to visit and inspect the Company's properties; examine its books of account and records; and discuss the Company's affairs, finances, and accounts with its officers, during normal business hours of the Company as may be reasonably

requested by the Major Investor; <u>provided</u>, <u>however</u>, that the Company shall not be obligated pursuant to this <u>Section 3.2</u> to provide access to any information that it reasonably and in good faith considers to be a trade secret or confidential information (unless covered by an enforceable confidentiality agreement (other than this Agreement), in a form acceptable to the Company) or the disclosure of which would adversely affect the attorney-client privilege between the Company and its counsel.

3.3 <u>Termination of Information Rights</u>. The covenants set forth in <u>Section 3.1</u> and <u>Section 3.2</u> shall terminate and be of no further force or effect (i) immediately before the consummation of the IPO, (ii) when the Company first becomes subject to the periodic reporting requirements of Section 12(g) or 15(d) of the Exchange Act, or (iii) upon a Deemed Liquidation Event, as such term is defined in the Restated Certificate, whichever event occurs first.

3.4 <u>Confidentiality</u>. Each Investor agrees that such Investor will keep confidential and will not disclose, divulge, or use for any purpose (other than to monitor its investment in the Company) any confidential information obtained from the Company pursuant to the terms of this Agreement (including notice of the Company's intention to file a registration statement), unless such confidential information (a) is known or becomes known to the public in general (other than as a result of a breach of this <u>Section 3.4</u> by such Investor), (b) is or has been independently developed or conceived by the Investor without use of the Company's confidential information, or (c) is or has been made known or disclosed to the Investor by a third party without a breach of any obligation of confidentiality such third party may have to the Company; <u>provided</u>, <u>however</u>, that an Investor may disclose confidential information (i) to its attorneys, accountants, consultants, and other professionals to the extent necessary to obtain their services in connection with monitoring its investment in the Company; (ii) to any prospective purchaser of any Registrable Securities from such Investor, if such prospective purchaser agrees to be bound by the provisions of this <u>Section 3.4</u>; (iii) to any existing or prospective Affiliate, partner, member, stockholder, or wholly owned subsidiary of such Investor in the ordinary course of business, <u>provided</u> that such Investor informs such Person that such information is confidential and directs such Person to maintain the confidentiality of such information; or (iv) as may otherwise be required by law or legal order, <u>provided</u> that the Investor, to the extent legally permissible, promptly notifies the Company of such disclosure and takes reasonable steps in accordance with applicable law (as determined by Investor's counsel) to minimize the extent of any such required disclosure.

3.5 <u>Limitation on Foreign Person Investors</u>. Notwithstanding the covenants set forth in <u>Section 3.1</u> and <u>Section 3.2</u>, the Company shall not provide any Investor that is a Foreign Person access to any "material non-public technical information" within the meaning of the DPA.

4. Rights to Future Stock Issuances.

4.1 <u>Right of First Offer</u>. Subject to the terms and conditions of this <u>Section 4.1</u> and applicable securities laws, if the Company proposes to offer or sell any New Securities the Company shall first offer such New Securities to each Major Investor. A Major Investor shall be entitled to apportion the right of first offer hereby granted to it, in such proportions as it deems appropriate, among (i) itself, (ii) its Affiliates and (iii) its beneficial interest holders, such as limited partners, members or any other Person having "beneficial ownership," as such term is defined in

Rule 13d-3 promulgated under the Exchange Act, of such Major Investor, <u>provided</u> that each such Affiliate or beneficial interest holder, as applicable, agrees to enter into this Agreement and each of the Voting Agreement and the Right of First Refusal and Co-Sale Agreement of even date herewith among the Company, the Investors and the other parties named therein, as an "**Investor**" under each such agreement.

(a) The Company shall give notice (the "**Offer Notice**") to each Major Investor, stating (i) its bona fide intention to offer such New Securities, (ii) the number of such New Securities to be offered, and (iii) the price and terms, if any, upon which it proposes to offer such New Securities.

(b) By notification to the Company within twenty (20) days after the Offer Notice is given, each Major Investor may elect to purchase or otherwise acquire, at the price and on the terms specified in the Offer Notice, up to that portion of such New Securities which equals the proportion that the Common Stock then held by such Major Investor (including all shares of Common Stock issuable or issued upon conversion of shares of Series Preferred then held by such Major Investor but excluding (i) any other Derivative Securities then held by such Major Investor and (ii) shares reserved for future award under any Equity Plan) bears to the total Common Stock of the Company then outstanding immediately prior to the issuance of such New Securities (including all shares of Common Stock issuable or issued upon conversion of the Series Preferred but excluding (x) any other Derivative Securities and (y) shares reserved for future award under any Equity Plan). At the expiration of such 20 day period, the Company shall promptly notify each Major Investor that elects to purchase or acquire all the shares available to it (each, a "Fully Exercising Investor") of any other Major Investor's failure to do likewise. During the ten day period commencing after the Company has given such notice, each Fully Exercising Investor may, by giving notice to the Company, elect to purchase or acquire, in addition to the number of shares specified above, up to that portion of the New Securities for which Major Investors were entitled to subscribe but that were not subscribed for by the Major Investors which is equal to the proportion that the Common Stock then held by such Fully Exercising Investor (including all shares of Common Stock issued or issuable upon conversion of shares of Series Preferred then held by such Fully Exercising Investor but excluding (i) any other Derivative Securities then held by such Fully Exercising Investor and (ii) shares reserved for future award under any Equity Plan) bears to the total Common Stock of the Company (including all shares of Common Stock issuable or issued upon conversion of the Series Preferred but excluding (x) any other Derivative Securities and (y) shares reserved for future award under any Equity Plan) then held by all Fully Exercising Investors who wish to purchase such unsubscribed shares. The closing of any sale pursuant to this Section 4.1(b) shall occur within the later of 120 days of the date that the Offer Notice is given and the date of initial sale of New Securities pursuant to Section 4.1(c).

(c) If all New Securities referred to in the Offer Notice are not elected to be purchased or acquired as provided in <u>Section 4.1(b)</u>, the Company may, during the ninety (90) day period following the expiration of the periods provided in <u>Section 4.1(b)</u>, offer and sell the remaining unsubscribed portion of such New Securities to any Person or Persons at a price not less than, and upon terms no more favorable to the offeree than, those specified in the Offer Notice. If the Company does not enter into an agreement for the sale of the New Securities within such period, or if such agreement is not consummated within thirty (30) days of the execution thereof, the right provided hereunder shall be deemed to be revived and such New Securities shall not be offered unless first reoffered to the Major Investors in accordance with this <u>Section 4.1</u>.

(d) The right of first offer in this <u>Section 4.1</u> shall not be applicable to (i) Exempted Securities (as defined in the Restated Certificate); (ii) shares of Common Stock issued in the IPO; and (iii) the issuance of shares of Series B Preferred Stock pursuant to the Series B Purchase Agreement.

(e) Notwithstanding the foregoing, the right of first offer in this <u>Section 4.1</u> shall not be applicable with respect to any Major Investor and any subsequent issuance of securities if, (i) at the time of such subsequent issuance of securities, such Major Investor is not an accredited investor as defined in Rule 501(a) of Regulation D promulgated under the Securities Act; and (ii) such subsequent issuance of securities is otherwise being offered only to accredited investors as defined in Rule 501(a) of Regulation D promulgated under the Securities Act. In addition, a Major Investor will not have a right of first offer pursuant to this <u>Section 4.1</u> if, and for so long as, such Major Investor is subject to any "bad actor" disqualification described in Rule 506(d)(1)(i) through (viii) under the Securities Act (a "**Bad Actor Disqualification**"), except as set forth in Rule 506(d)(2)(ii) or (iii) or (d)(3) under the Securities Act.

4.2 <u>Termination</u>. The covenants set forth in <u>Section 4.1</u> shall terminate and be of no further force or effect (i) immediately before the consummation of the IPO, (ii) when the Company first becomes subject to the periodic reporting requirements of Section 12(g) or 15(d) of the Exchange Act, or (iii) upon a Deemed Liquidation Event, as such term is defined in the Restated Certificate, whichever event occurs first.

4.3 <u>Limitation on Foreign Person Investors</u>. Notwithstanding the covenants set forth in <u>Section 4.1</u>, no Investor that is a Foreign Person shall be permitted to obtain greater than 9.9% of the outstanding voting shares of the Company.

5. Additional Covenants.

5.1 <u>Insurance</u>. The Company shall obtain (if not already in place), within ninety (90) days of the date hereof, from financially sound and reputable insurers Directors and Officers liability insurance in an amount and on terms and conditions satisfactory to the Board of Directors, and will use commercially reasonable efforts to cause such insurance policy to be maintained until such time as the Board of Directors determines that such insurance should be discontinued. The policy shall not be cancelable by the Company without prior approval by the Board of Directors, including a majority of the then-serving Preferred Directors, if any. Notwithstanding any other provision of this <u>Section 5.1</u> to the contrary, for so long as any Preferred Director is serving on the Board of Directors, unless otherwise approved by a majority of the then-serving Preferred Directors, if any, the Company shall not cease to maintain a Directors and Officers liability insurance policy in an amount of at least \$3 million in coverage.

5.2 <u>Employee Agreements</u>. The Company will cause each person now or hereafter employed by it or by any subsidiary (or engaged by the Company or any subsidiary as a consultant/independent contractor) with access to confidential information and/or trade secrets to enter into a nondisclosure and proprietary rights assignment agreement, and containing a non-

solicitation agreement, in substantially the form approved by the Board of Directors. In addition, the Company shall not amend, modify, terminate, waive, or otherwise alter in any material respect, in whole or in part, any of the above-referenced agreements or any restricted stock agreement between the Company and any employee or consultant/independent contractor, without the consent of the Board of Directors, including at least one of the thenserving Preferred Directors, if any.

5.3 Employee Stock. Unless otherwise approved by the Board of Directors, including at least one of the then-serving Preferred Directors, if any, all future employees and consultants of the Company who purchase, receive options to purchase, or receive awards of shares of the Company's capital stock after the date hereof shall be required to execute restricted stock or option agreements, as applicable, providing for (i) the vesting of shares over a four year period, with the first 25% of such shares vesting following 12 months of continued employment or service, and the remaining shares vesting in equal monthly installments over the following 36 months, and (ii) a market stand-off provision substantially similar to that in Section 2.11. Without the prior approval by the Board of Directors, including at least one of the then-serving Preferred Directors, if any, the Company shall not amend, modify, terminate, waive or otherwise alter, in whole or in part, any stock purchase, stock restriction or option agreement with any existing employee or service provider if such amendment would cause it to be materially inconsistent with this Section 5.3. In addition, unless otherwise approved by the Board of Directors, the Company shall retain (and not waive) a "right of first refusal" on employee transfers (subject to customary exempt transfers) until the Company's IPO and shall have the right to repurchase unvested shares at cost upon termination of employment of a holder of restricted stock.

5.4 <u>Certain Board of Directors Matters</u>. Unless otherwise determined by the vote of a majority of the directors then in office, including the approval of at least one of the then-serving Preferred Directors, if any, the Board of Directors shall meet at least quarterly in accordance with an agreed-upon schedule. Each of the then-serving Preferred Directors, if any, shall be entitled to membership on any committee of the Board of Directors so long as such committee was not formed, in whole or in part, to address a conflict of interest or potential conflict of interest involving any Investor designated by such Preferred Director(s). The Company further agrees that it shall (i) provide full disclosure to the Board of Directors of any discussions relating to the potential sale of the Company, and/or the sale or licensing of any material assets, intellectual property or marketing rights of the Company, and of any adverse developments, and (ii) reimburse the nonemployee directors for all reasonable out-of-pocket travel expenses incurred (consistent with the Company's travel policy) in connection with attending meetings of the Board of Directors.

5.5 <u>Successor Indemnification</u>. If the Company or any of its successors or assignees consolidates with or merges into any other Person and is not the continuing or surviving corporation or entity of such consolidation or merger, then to the extent necessary, proper provision shall be made so that the successors and assignees of the Company assume the obligations of the Company with respect to indemnification of members of the Board of Directors as in effect immediately before such transaction, whether such obligations are contained in the Company's Bylaws, Restated Certificate, or elsewhere, as the case may be.

5.6 Expenses of Counsel. In the event of a transaction which is a Sale of the Company (as defined in the Voting Agreement of even date herewith among the Investors, the Company and the other parties named therein), the reasonable fees and disbursements of one counsel for the Major Investors ("Investor Counsel"), in their capacities as stockholders, shall be borne and paid by the Company. At the outset of considering a transaction which, if consummated would constitute a Sale of the Company, the Company shall obtain the ability to share with the Investor Counsel (and such counsel's clients) and shall share the confidential information (including, without limitation, the initial and all subsequent drafts of memoranda of understanding, letters of intent and other transaction documents and related noncompete, employment, consulting and other compensation agreements and plans) pertaining to and memorializing any of the transactions which, individually or when aggregated with others would constitute the Sale of the Company. The Company shall be obligated to share (and cause the Company's counsel and investment bankers to share) such materials when distributed to the Company's executives and/or any one or more of the other parties to such transaction(s). In the event that Investor Counsel deems it appropriate, in its reasonable discretion, to enter into a joint defense agreement or other arrangement to enhance the ability of the parties to protect their communications and other reviewed materials under the attorney client privilege, the Company shall, and shall direct its counsel to, execute and deliver to Investor Counsel and its clients such an agreement in form and substance reasonably acceptable to Investor Counsel. In the event that one or more of the other party or parties to such transactions require the clients of Investor Counsel to enter into a confidentiality agreement and/or joint defense agreement in order to receive such information, then the Company shall share whatever information can be shared without entry into such agreement and shall, at the same time, in good faith work expeditiously to enable Investor Counsel and its clients to negotiate and enter into the appropriate agreement(s) without undue burden to the clients of Investor Counsel.

5.7 <u>Right to Conduct Activities</u>. The Company hereby acknowledges that certain of the Investors (including but not limited to ARCH and its Affiliates, SUM XXXI and its Affiliates, F-Prime Capital Partners Life Sciences Fund VII LP and its Affiliates, ICQ Opportunities RB, LP and its Affiliates, Polaris Partners IX, L.P. and its Affiliates, Alexandria Venture Investments, LLC and its Affiliates, Invus Public Entities, L.P. and its Affiliates, and Exor N.V. and its Affiliates) are investment funds or venture arms of their Affiliates or are the venture capital division or affiliate of an operating company, and as such invest in numerous portfolio companies and have affiliates, some of which may be deemed competitive with the Company's business. Neither such Investors (each, a "**Fund**") nor any of their respective partners, employees, Affiliates, advisors or affiliated investment funds shall be liable to the Company for any claim arising out of, or based upon, (i) the investment by such Fund or any affiliated investment fund in any entity, or activities of such Affiliates, that may be competitive to the Company or (ii) actions taken by any partner, officer, advisor or other representative of such Fund or its Affiliate, as well as The Wellcome Trust Limited, as Trustee of the Wellcome Trust is not currently and in the future shall not be deemed to be a "competitor" of the Company for the purposes of <u>Section 3.1</u> or <u>Section 3.2</u>; provided, however, the nothing herein shell relieve any Fund, its Affiliate or any other party from liability associated with misuse of the Company's confidential information as set forth herein.

5.8 Indemnification Matters. The Company hereby acknowledges that one (1) or more of the directors nominated to serve on the Board of Directors by the Investors (each an "Investor Director") may have certain rights to indemnification, advancement of expenses and/or insurance provided by one or more of the Investors and certain of their Affiliates (collectively, the "Investor Indemnitors"). The Company hereby agrees (a) that it is the indemnitor of first resort (*i.e.*, its obligations to any such Investor Director are primary and any obligation of the Investor Indemnitors to advance expenses or to provide indemnification for the same expenses or liabilities incurred by such Investor Director are secondary), (b) that it shall be required to advance the full amount of expenses incurred by such Investor Director and shall be liable for the full amount of all expenses, judgments, penalties, fines and amounts paid in settlement by or on behalf of any such Investor Director to the extent legally permitted and as required by the Company's Restated Certificate or Bylaws of the Company (or any agreement between the Company and such Investor Director), without regard to any rights such Investor Director may have against the Investor Indemnitors, and, (c) that it irrevocably waives, relinquishes and releases the Investor Indemnitors from any and all claims against the Investor Indemnitors for contribution, subrogation or any other recovery of any kind in respect thereof. The Company further agrees that no advancement or payment by the Investor Indemnitors shall have a right of contribution and/or be subrogated to the extent of such advancement or payment to all of the rights of recovery of such Investor Director against the Company shall affect the foregoing and the Investor Indemnitors shall have the right, power and any other recovery of such Investor Director against the Company shall affect the foregoing and the Investor Indemnitors and the right, power and any other sectors of this <u>Section 5.8</u> as though they were a

5.9 <u>Tax Reporting</u>. The Company will comply with any obligation imposed on the Company to make any filing (including all filings on Internal Revenue Service Form 5471) as a result of any interest that the Company holds in a non-U.S. corporation and shall include in such filing any information necessary to obviate (to the extent possible) any similar obligation to which any stockholders would otherwise be subject with respect to such interest or such activity. The Company shall promptly provide each Investor with a copy of any such filing.

5.10 <u>FCPA</u>. The Company represents that it shall not (and shall not permit any of its subsidiaries or affiliates or any of its or their respective directors, officers, managers, employees, independent contractors, representatives or agents to) promise, authorize or make any payment to, or otherwise contribute any item of value to, directly or indirectly, to any third party, including any Non U.S. Official (as such term is defined in the U.S. Foreign Corrupt Practices Act of 1977, as amended (the "**FCPA**")), in each case, in violation of the FCPA, the U.K. Bribery Act, or any other applicable anti-bribery or anti-corruption law. The Company further represents that it shall (and shall cause each of its subsidiaries and affiliates to) cease all of its or their respective activities, as well as remediate any actions taken by the Company, its subsidiaries or affiliates, or any of their respective directors, officers, managers, employees, independent contractors, representatives or agents in violation of the FCPA, the U.K. Bribery Act, or any other applicable anti-bribery or anti-corruption law. Upon request, the Company agrees to provide responsive information and/or certifications concerning its compliance with applicable anti-corruption laws. The Company shall promptly notify each Investor if the Company becomes aware of any Enforcement Action (as defined in the Series B Purchase Agreement). The Company shall, and shall cause any direct or indirect subsidiary or entity controlled by it, whether now in existence or formed in the future, to comply with the FCPA. The Company shall use its best efforts to cause any direct or indirect subsidiary, whether now in existence or formed in the future, to comply in all material respects with all applicable laws.

5.11 <u>Reserved.</u>

5.12 <u>Cybersecurity</u>. The Company shall, within 180 days following the Closing (as defined in the Series B Purchase Agreement), (a) identify its sensitive data and information, and restrict access (through physical and electronic controls) to those individuals who have a need to access it and (b) implement cybersecurity solution(s) ("**Cybersecurity Solutions**") designed to protect its technology and systems (including servers, laptops, desktops, cloud, containers, virtual environments and data centers) and all data contained in such systems. The Company shall use commercially reasonable efforts to ensure that the Cybersecurity Solutions (x) are up-to-date and include industry-standard protections (e.g., antivirus, endpoint detection and response and threat hunting), (y) to the extent determined necessary by the Company or its Board of Directors, are backed by a breach prevention warranty from the vendor certifying the effectiveness of such solutions, and (z) require the vendors to notify the Company of any security incidents posing a risk to the Company's information (regardless of whether information was actually compromised). The Company shall evaluate on a regular basis whether the Cybersecurity Solutions should be updated to ensure continued effectiveness and industry-standard protections. The Company shall also educate its employees about the proper use and storage of sensitive information, including regular training as determined reasonably necessary by the Company or its Board of Directors.

5.13 CFIUS and Foreign Person Limitations.

(a) Unless otherwise approved by the Board of Directors, the Company will not provide to any Foreign Person any DPA Triggering Rights. No Investor who is a Foreign Person shall be permitted to obtain any DPA Triggering Rights or a voting equity interest in the Company that exceeds 9.9% of the Company's total voting securities pursuant to the Series B Purchase Agreement, <u>Section 4</u> of this Agreement, or otherwise, including by way of any secondary transaction(s), without the approval of the Board of Directors.

(b) Each Investor covenants that it will notify the Company in advance of permitting any Foreign Person affiliated with Investor, whether affiliated as a limited partner or otherwise, to obtain through Investor any DPA Triggering Rights.

5.14 <u>Termination of Covenants</u>. The covenants set forth in this <u>Section 5</u>, except for <u>Sections 5.5</u>, 5.6, 5.7, <u>5.8</u> and <u>5.10</u>, shall terminate and be of no further force or effect upon the earliest to occur of (i) immediately before the consummation of the IPO, (ii) when the Company first becomes subject to the periodic reporting requirements of Section 12(g) or 15(d) of the Exchange Act, or (iii) a Deemed Liquidation Event, as such term is defined in the Restated Certificate.

6. Miscellaneous.

6.1 <u>Successors and Assigns</u>. The rights under this Agreement may be assigned (but only with all related obligations) by a Holder to a transferee of Registrable Securities that (i) is an Affiliate of a Holder; (ii) is a Holder's Immediate Family Member or trust for the benefit of an individual Holder or one or more of such Holder's Immediate Family Members or (iii) after such transfer, holds at least 10,000,000 shares of Registrable Securities (subject to appropriate adjustment for stock splits, stock dividends, combinations, and other recapitalizations); provided,

however, that (x) the Company is, within a reasonable time after such transfer, furnished with written notice of the name and address of such transferee and the Registrable Securities with respect to which such rights are being transferred; and (y) such transferee agrees in a written instrument delivered to the Company to be bound by and subject to the terms and conditions of this Agreement, including the provisions of <u>Section 2.11</u>. For the purposes of determining the number of shares of Registrable Securities held by a transferee, the holdings of a transferee (1) that is an Affiliate or stockholder of a Holder; (2) who is a Holder's Immediate Family Member; or (3) that is a trust for the benefit of an individual Holder or such Holder's Immediate Family Member shall be aggregated together and with those of the transferring Holder; <u>provided further</u> that all transferees who would not qualify individually for assignment of rights shall have a single attorney-in-fact for the purpose of exercising any rights, receiving notices, or taking any action under this Agreement. The terms and conditions of this Agreement inure to the benefit of and are binding upon the respective successors and permitted assignees of the parties. Nothing in this Agreement, express or implied, is intended to confer upon any party other than the parties hereto or their respective successors and permitted assignees any rights, remedies, obligations or liabilities under or by reason of this Agreement, except as expressly provided herein.

6.2 <u>Governing Law</u>. This Agreement shall be governed by the internal law of the State of California, without regard to conflict of law principles that would result in the application of any law other than the law of the State of California, except that this Agreement shall be governed by and construed in accordance with the General Corporation Law of the State of Delaware as to matters exclusively within the scope thereof.

6.3 <u>Counterparts</u>. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Counterparts may be delivered via facsimile, electronic mail (including pdf or any electronic signature complying with the U.S. federal ESIGN Act of 2000, *e.g.*, www.docusign.com) or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes.

6.4 <u>Titles and Subtitles</u>. The titles and subtitles used in this Agreement are for convenience only and are not to be considered in construing or interpreting this Agreement.

6.5 Notices.

(a) All notices and other communications given or made pursuant to this Agreement shall be in writing and shall be deemed effectively given upon the earlier of actual receipt or (i) personal delivery to the party to be notified; (ii) when sent, if sent by electronic mail or facsimile during the recipient's normal business hours, and if not sent during normal business hours, then on the recipient's next business day; (iii) five (5) days after having been sent by registered or certified mail, return receipt requested, postage prepaid; or (iv) one (1) business day after the business day of deposit with a nationally recognized overnight courier, freight prepaid, specifying next-day delivery, with written verification of receipt. All communications shall be sent to the respective parties at their addresses as set forth on <u>Schedule A</u> hereto, or to the principal office of the Company and to the attention of the Chief Executive Officer, in the case of the Company, or to such email address, facsimile number, or address as subsequently modified by written notice given in accordance with this <u>Section 6.5</u>. If notice is given to the Company, a copy shall also be sent Brian J. Cuneo, Esq., Latham & Watkins LLP, 140 Scott Drive, Menlo Park, CA 94025, fax: (650) 463-2600, email: brian.cuneo@lw.com.

(b) <u>Consent to Electronic Notice</u>. Each Investor and Key Holder consents to the delivery of any stockholder notice pursuant to the Delaware General Corporation Law (the "**DGCL**"), as amended or superseded from time to time, by electronic transmission pursuant to Section 232 of the DGCL (or any successor thereto) at the electronic mail address or the facsimile number set forth below such Investor's or Key Holder's name on the Schedules hereto, as updated from time to time by notice to the Company, or as on the books of the Company. To the extent that any notice given by means of electronic transmission is returned or undeliverable for any reason, the foregoing consent shall be deemed to have been revoked until a new or corrected electronic mail address has been provided, and such attempted Electronic Notice shall be ineffective and deemed to not have been given. Each Investor and Key Holder agrees to promptly notify the Company of any change in such stockholder's electronic mail address, and that failure to do so shall not affect the foregoing.

6.6 <u>Amendments and Waivers</u>. This Agreement may be amended or terminated, and the observance of any term of this Agreement may be waived (either generally or in a particular instance, and either retroactively or prospectively), only with the written consent of (i) the Company and (ii) the Requisite Holders; provided that the Company may in its sole discretion waive compliance with Section 2.12(c) (and the Company's failure to object promptly in writing after notification of a proposed assignment allegedly in violation of <u>Section 2.12(c)</u> shall be deemed to be a waiver); and provided further that any provision hereof may be waived by any waiving party on such party's own behalf, without the consent of any other party. Notwithstanding the foregoing, (i) this Agreement may not be amended or terminated and the observance of any term hereof may not be waived if such amendment, termination or waiver would materially and adversely affect any Investor disproportionately compared to its effect on any other Investor (it being agreed that a waiver of the provisions of Section 4 with respect to a particular transaction shall not be deemed to disproportionately affect any Investor if such waiver applies in the same manner by its terms, notwithstanding the fact that certain Investors may nonetheless, by agreement with the Company, purchase securities in such transaction) without the written consent of such disproportionately affected Investor; (ii) Sections 3.1 and 3.2 and Section 4, and any other section of this Agreement applicable to the Major Investors (including this clause (ii)) shall may not be amended, terminated or waived without the written consent of the holders of a majority of the Registrable Securities then held by the Major Investors; (iii) Section 5.8 may not be amended or terminated and the observance of any term thereof may not be waived with respect to ARCH without the written consent of ARCH. The Company shall give prompt notice of any amendment or termination hereof or waiver hereunder to any party hereto that did not consent in writing to such amendment. termination, or waiver. Any amendment, termination, or waiver effected in accordance with this Section 6.6 shall be binding on all parties hereto, regardless of whether any such party has consented thereto. No waivers of or exceptions to any term, condition, or provision of this Agreement, in any one or more instances, shall be deemed to be or construed as a further or continuing waiver of any such term, condition, or provision.

6.7 <u>Severability</u>. In case any one or more of the provisions contained in this Agreement is for any reason held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality, or unenforceability shall not affect any other provision of this Agreement, and such invalid, illegal, or unenforceable provision shall be reformed and construed so that it will be valid, legal, and enforceable to the maximum extent permitted by law.

6.8 <u>Aggregation of Stock</u>. All shares of Registrable Securities held or acquired by Affiliates shall be aggregated together for the purpose of determining the availability of any rights under this Agreement and such Affiliated persons may apportion such rights as among themselves in any manner they deem appropriate.

6.9 <u>Additional Investors</u>. Notwithstanding anything to the contrary contained herein, if the Company issues additional shares of the Company's Series B Preferred Stock after the date hereof, whether pursuant to the Series B Purchase Agreement or otherwise, any purchaser of such shares of Series B Preferred Stock may become a party to this Agreement by executing and delivering an additional counterpart signature page to this Agreement, and thereafter shall be deemed an "Investor" for all purposes hereunder. No action or consent by the Investors shall be required for such joinder to this Agreement by such additional Investor, so long as such additional Investor has agreed in writing to be bound by all of the obligations as an "Investor" hereunder.

6.10 <u>Entire Agreement</u>. This Agreement (including any Schedules and Exhibits hereto) constitutes the full and entire understanding and agreement among the parties with respect to the subject matter hereof, and any other written or oral agreement relating to the subject matter hereof existing between the parties is expressly canceled. This Agreement shall supersede and replace the Prior Rights Agreement.

6.11 <u>Dispute Resolution</u>. Any unresolved controversy or claim arising out of or relating to this Agreement, except as (i) otherwise provided in this Agreement, or (ii) any such controversies or claims arising out of either party's intellectual property rights for which a provisional remedy or equitable relief is sought, shall be submitted to arbitration by one arbitrator mutually agreed upon by the parties, and if no agreement can be reached within thirty (30) days after names of potential arbitrators have been proposed by the American Arbitration Association (the "AAA"), then by one arbitrator having reasonable experience in corporate finance transactions of the type provided for in this Agreement and who is chosen by the AAA. The arbitration shall take place in San Francisco, California, in accordance with the AAA rules then in effect, and judgment upon any award rendered in such arbitration will be binding and may be entered in any court having jurisdiction thereof. There shall be limited discovery prior to the arbitration hearing as follows: (a) exchange of witness lists and copies of documentary evidence and documents relating to or arising out of the issues to be arbitrated, (b) depositions of all party witnesses, and (c) such other depositions as may be allowed by the arbitrators upon a showing of good cause. Depositions shall be conducted in accordance with the Delaware Code of Civil Procedure, the arbitrator shall be required to provide in writing to the parties the basis for the award or order of such arbitrator, and a court reporter shall record all hearings, with such record constituting the official transcript of such proceedings.

WAIVER OF JURY TRIAL: EACH PARTY HEREBY WAIVES ITS RIGHTS TO A JURY TRIAL OF ANY CLAIM OR CAUSE OF ACTION BASED UPON OR ARISING OUT OF THIS AGREEMENT, THE OTHER TRANSACTION DOCUMENTS, THE SECURITIES OR THE SUBJECT MATTER HEREOF OR THEREOF. THE SCOPE OF THIS WAIVER IS INTENDED TO BE ALL-ENCOMPASSING OF ANY AND ALL DISPUTES THAT MAY BE FILED IN

ANY COURT AND THAT RELATE TO THE SUBJECT MATTER OF THIS TRANSACTION, INCLUDING, WITHOUT LIMITATION, CONTRACT CLAIMS, TORT CLAIMS (INCLUDING NEGLIGENCE), BREACH OF DUTY CLAIMS, AND ALL OTHER COMMON LAW AND STATUTORY CLAIMS. THIS SECTION HAS BEEN FULLY DISCUSSED BY EACH OF THE PARTIES HERETO AND THESE PROVISIONS WILL NOT BE SUBJECT TO ANY EXCEPTIONS. EACH PARTY HERETO HEREBY FURTHER WARRANTS AND REPRESENTS THAT SUCH PARTY HAS REVIEWED THIS WAIVER WITH ITS LEGAL COUNSEL, AND THAT SUCH PARTY KNOWINGLY AND VOLUNTARILY WAIVES ITS JURY TRIAL RIGHTS FOLLOWING CONSULTATION WITH LEGAL COUNSEL.

6.12 <u>Delays or Omissions</u>. No delay or omission to exercise any right, power, or remedy accruing to any party under this Agreement, upon any breach or default of any other party under this Agreement, shall impair any such right, power, or remedy of such nonbreaching or nondefaulting party, nor shall it be construed to be a waiver of or acquiescence to any such breach or default, or to any similar breach or default thereafter occurring, nor shall any waiver of any single breach or default be deemed a waiver of any other breach or default theretofore or thereafter occurring. All remedies, whether under this Agreement or by law or otherwise afforded to any party, shall be cumulative and not alternative.

6.13 <u>Acknowledgment</u>. The Company acknowledges that the Investors are in the business of venture capital investing and therefore review the business plans and related proprietary information of many enterprises, including enterprises which may have products or services which compete directly or indirectly with those of the Company. Nothing in this Agreement shall preclude or in any way restrict the Investors from investing or participating in any particular enterprise whether or not such enterprise has products or services which compete with those of the Company.

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COMPANY:

NEUMORA THERAPEUTICS, INC.

By: /s/ Paul Berns Name: Paul Berns Title: Chief Executive Officer

INVESTORS:

ARCH VENTURE FUND XII, L.P.

By: ARCH Venture Partners XII, L.P., its General Partner

By: ARCH Venture Partners XII, LLC, its General Partner

By:/s/ Mark McDonnellName:Mark McDonnellTitle:Managing Director

Addresses for notices: [***]

INVESTORS:

EXOR N.V.

 By:
 /s/ Enrico Vellano

 Name:
 Enrico Vellano

 Title:
 CFO

Addresses for notices: [***]

INVESTORS:

MC VENTURES US II, LP, acting by its general partner, MC VENTURES US II, GP, LP, In turn acting by its general partner, MC VENTURES US II, GP, LLC

By:/s/ Rodney CannonName:Rodney CannonTitle:Authorised Signatory

Address for notices: [***]

INVESTORS:

Platinum Falcon B 2018 RSC Limited

 By:
 /s/ Ahmed AlNeyadi

 Name:
 Ahmed AlNeyadi

 Title:
 Director

 By:
 /s/ Rawdha Alrumaithi

Name: Rawdha Alrumaithi Title: Director

Addresses for notices: [***]

INVESTORS:

AMGEN INC.

By:/s/ Justin G. ClaeysName:Justin G. ClaeysTitle:Vice President Finance & Treasurer

Addresses for notices: [***]

SIGNATURE PAGE TO AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT OF NEUMORA THERAPEUTICS, INC.

INVESTORS:

THE WELLCOME TRUST LIMITED AS TRUSTEE OF THE WELLCOME TRUST

By: /s/ Robert Coke

Name: Robert Coke Title: Principal

Addresses for notices: [***]

INVESTORS:

NEWPATH PARTNERS II, LP

By: Newpath Partners GP II, LP, its general partner

By: Newpath Partners GP II, LLC, its general partner

By:/s/ Thomas CahillName:Thomas CahillTitle:Managing Partner

Addresses for notices: [***]

INVESTORS:

INVUS PUBLIC EQUITIES, L.P.

By:/s/ Raymond DebbaneName:Raymond DebbaneTitle:President of its General Partner

Addresses for notices: [***]

INVESTORS:

POLARIS FOUNDERS CAPITAL FUND I, LP

By: Polaris Founders Capital Management Co. I, L.L.C., its General Partner

By:/s/ Gregg RubinName:Gregg RubinTitle:General Partner

Addresses for notices: [***]

INVESTORS:

POLARIS PARTNERS IX, L.P.

By: Polaris Partners GP IX, L.L.C., Its: General Partner

By: /s/ Lauren Crockett

Name: Lauren Crockett Title: General Counsel

POLARIS PARTNERS VIII, L.P.

By: Polaris Partners GP VIII, L.L.C., Its: General Partner

By:/s/ Lauren CrockettName:Lauren CrockettTitle:Attorney-in-Fact

POLARIS ENTREPRENEURS' FUND VIII, L.P.

By: Polaris Partners GP VIII, L.L.C., Its: General Partner

By: /s/ Lauren Crockett

Name:Lauren CrockettTitle:Attorney-in-Fact

Addresses for notices: [***]

INVESTORS:

ALTITUDE LIFE SCIENCE VENTURES FUND III, L.P.

By: Altitude Life Science Ventures III, LLC, its General Partner

By: /s/ David Maki

Name: David Maki Title: Manager

Addresses for notices: [***]

INVESTORS:

F-PRIME CAPITAL PARTNERS LIFE SCIENCES FUND VII LP

By: F-Prime Capital Partners Life Sciences Advisors Fund VII LP, its general partner

By: Impresa Holdings LLC, its general partner

By: Impresa Management LLC, its managing member

By:/s/ Mary Bevelock PendergastName:Mary Bevelock PendergastTitle:Vice President

Addresses for notices: [***]

INVESTORS:

SOROS CAPITAL LP

By:/s/ Gitanjali WorkmanName:Gitanjali WorkmanTitle:Attorney-in-Fact

Addresses for notices: [***]

INVESTORS:

Sapphire Direct Holdings RSC Ltd

By:/s/ Khalifa Sultan AlsuwaidiName:Khalifa Sultan AlsuwaidiTitle:Authorized Signatory

Addresses for notices: [***]

SCHEDULE A

INVESTORS

ARCH VENTURE FUND X, L.P. ARCH VENTURE FUND X OVERAGE, L.P. ARCH VENTURE FUND XII, L.P. [***] AMGEN INC. [***] EXOR N.V. [***] MC VENTURES US II, LP [***] NEWPATH PARTNERS II, LP [***] F-PRIME CAPITAL PARTNERS LIFE SCIENCES FUND VII LP [***] HH SUM XXXI HOLDINGS LIMITED [***] ALTITUDE LIFE SCIENCE VENTURES FUND III, L.P. [***] ALEXANDRIA EQUITIES NO. 7, LLC. [***] POLARIS PARTNERS IX, L.P. POLARIS PARTNERS VIII, L.P. POLARIS ENTREPRENEURS' FUND VIII, L.P. [***] **INVUS PUBLIC EQUITIES, LP** [***] 113011 INVESTMENT HOLDINGS LLC

63019 HOLDINGS, LLC

[***]

91313 INVESTMENT HOLDINGS LLC

PLATINUM FALCON B 2018 RSC LIMITED [***] POLARIS FOUNDERS CAPITAL FUND I, LP [***] SOROS CAPITAL LP [***] THE WELLCOME TRUST LIMITED, AS TRUSTEE OF THE WELLCOME TRUST [***] SAPPHIRE DIRECT HOLDINGS RSC LTD [***] PARAGON HOLDINGS I LLC [***] PEP TRUST OF 2017 [***] YINGZHE ZHAO [***] WO SELECT INVESTMENTS, LLC [***] HODGE LAKE LLC [***] **BRIAN CUNEO** [***] THE LENDEN FAMILY TRUST [***] **ENZO FAMILY TRUST OF 2015** [***] SANDEEP ROBERT DATTA [***] **BERNARDO SABATINI** [***]

F-PRIME INC. [***]

FBRI LLC [***]

BIOMATICS CAPITAL PARTNERS L.P. [***]

BIOMATICS CAPITAL PARTNERS II L.P. [***]

ROBERT MAY [***]

ALEXANDER B. WILTSCHKO [***]

MATTHEW JAMES JOHNSON [***]

JOHN CHAN [***]

RICHARD WHITCOMB [***]

VLADIMIR V. KRAVCHENKO, PH.D. [***]

PRESIDENT AND FELLOWS OF HARVARD COLLEGE [***]

LAWRENCE C. FRITZ, PH.D. [***]

STEVEN REED, PH.D. [***]

SUSANNA EKHOLM-REED, PH.D. [***] JOHN JEFFERSON PIERS PERRY, PH.D. [***]

ANTON CHELSTOV, PH.D. [***]

PHILIP LOGRASSO, PH.D. [***]

RICHARD ULEVITCH, PH.D. [***]

THE SCRIPPS RESEARCH INSTITUTE [***]

ARCH VENTURE FUND VIII OVERAGE, L.P. [***]

ARCH VENTURE FUND VIII, L.P. [***]

JOHNSON JOHNSON INNOVATION - JJDC, INC. 611 [***]

BIOMATICS CAPITAL PARTNERS, L.P. [***]

VERTEX GLOBAL HC FUND II PTE LTD. [***]

MERCURY FUND VENTURES III, L.P. [***]

ALEXANDRIA VENTURE INVESTMENTS LLC [***]

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ALTITUDE LIFE SCIENCE VENTURES SIDE FUND II, L.P.
[***]
WILLIAM MARTIN
[***]
PREMIER GLOBAL INNOVATION FUND 1
[***]
GV 2016, L.P.
[***]
GV 2017, L.P.
[***]
GV 2019, L.P.
[***]
CORMORANT PRIVATE HEALTHCARE FUND I, LP
[***]
CORMORANT GLOBAL HEALTHCARE MASTER FUND, LP
[***]
CRMA SPV, L.P.
[***]
ALEX TKACHENKO
[***]
ED ROBERTS
[***]
GREG VONTZ
[***]
HUGH ROSEN
[***]
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KRISTINA BUROW [***]

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MERCURY FUND III AFFILIATES, L.P.
[***]
DANIEL L. ROSEN IRREVOCABLE TRUST DATED 21 NOVEMBER 2018
[***]
JEREMY D. ROSEN IRREVOCABLE TRUST DATED 21 NOVEMBER 2018
[***]
MONIQUE R. LEVY
[***]
JOHN MACPHEE
[***]
MARK CORRIGAN
[***]
ALAN ANTICEVIC
[***]
LORI JEAN VAN ORDEN
[***]
JULIANNE AVERILL
[***]
LAURA HANSEN
[***]
SCOTT FORREST
[***]
JOHN MURRAY
[***]
ROB JONES
[***]
DAN SMITH
[***]
```

DAVID MAKI [***]

JEFF JONAS [***]

WHITNEY MICHIELS [***]

DIEGO PIZZAGALLI [***]

KERENSA SALJOOQI [***]

FRANK PORRECA [***]

GREGA REPOVS [***]

MONIKA S. MELLEM [***]

MICHAEL GIBBONS
[***]

JOHN KRYSTAL

[***]

MATT STATE [***]

SAIRA RAMASASTRY [***]

LINDA B. PETERSON
[***]

DOROTHY LOU BAILEY
[***]

TANYA L. WALLACE [***]

ALEX J. SANCHEZ [***] TOD STEINFELD [***]

MARIANGELA URBANO [***]

GARY E. L. BRANDT [***]

TIMOTHY KANE [***]

MATTHEW E. KOLLADA [***]

TASHEANNA BARROW [***]

FILOMENE G. MORRISON
[***]

TATHAGATA BANERJEE [***]

JASON LEO [***]

MARTINE MEYER
[***]

LESLIE TONG [***]

NORA SLATER [***]

GLORIA MARIANA VAZQUEZ- TAPIA [***]

ALEX HONG [***]

ICQ OPPORTUNITIES RB, LP [***]

MUBADALA CAPITAL – VENTURES [***]

CITADEL MULTI-STRATEGY EQUITIES MASTER FUND LTD. [***]

CATALIO NEXUS FUND II, LP [***]

WAYCROSS VENTURES, LLC BEGGRUEN

HOLDINGS LIMITED LOGOS

OPPORTUNITIES FUND III, LP [***]

APEIRON SICAV LIMITED – RE.MIND CAPITAL FUND ONE [***]

LUMA BIO-IT SPV, L.P. LUMA BIO-IT SPV-A, L.P. [***]

RBNC THERAPEUTICS, INC.

2020 EQUITY INCENTIVE PLAN

1. Purpose.

The purpose of the Plan is to advance the interests of the Company's stockholders by enhancing the Company's ability to attract, retain and motivate persons who make (or are expected to make) important contributions to the Company by providing such persons with equity ownership opportunities and thereby better aligning the interests of such persons with those of the Company's stockholders. Capitalized terms used in the Plan are defined in Section 11 below.

2. Eligibility.

Service Providers are eligible to be granted Awards under the Plan, subject to the limitations described herein.

3. Administration and Delegation.

3.1 <u>Administration</u>. The Plan will be administered by the Administrator. The Administrator shall have authority to determine which Service Providers will receive Awards, to grant Awards and to set all terms and conditions of Awards (including, but not limited to, vesting, exercise and forfeiture provisions). In addition, the Administrator shall have the authority to take all actions and make all determinations contemplated by the Plan and to adopt, amend and repeal such administrative rules, guidelines and practices relating to the Plan as it shall deem advisable. The Administrator may correct any defect or ambiguity, supply any omission or reconcile any inconsistency in the Plan or any Award in the manner and to the extent it shall deem necessary or appropriate to carry the Plan and any Awards into effect, as determined by the Administrator. The Administrator shall make all determinations under the Plan in the Administrator's sole discretion and all such determinations shall be final and binding on all persons having or claiming any interest in the Plan or in any Award.

3.2 <u>Appointment of Committees</u>. To the extent permitted by Applicable Laws, the Board may delegate any or all of its powers under the Plan to one or more Committees. The Board may abolish any Committee at any time and re-vest in itself any previously delegated authority.

4. Stock Available for Awards.

4.1 <u>Number of Shares</u>. Subject to adjustment under Section 8 hereof, Awards may be made under the Plan covering up to 64,093,550 shares of Common Stock. If any Award expires or lapses or is terminated, surrendered or canceled without having been fully exercised or is forfeited in whole or in part (including as the result of shares of Common Stock subject to such Award being repurchased by the Company at or below the original issuance price), in any case in a manner that results in any shares of Common Stock covered by such Award not being issued or being so reacquired by the Company, the unused Common Stock covered by such Award shall again be available for the grant of Awards under the Plan. Further, shares of Common Stock delivered (either by actual delivery or attestation) to the Company by a Participant to satisfy the applicable exercise or purchase price of an Award and/or to satisfy any applicable tax withholding obligation (including shares of Common Stock available for the grant of Awards being exercised or purchased and/or creating the tax obligation) shall be added to the number of shares of Common Stock available for the grant of Awards under the Plan. However, in the case of Incentive Stock Options (as hereinafter defined), the foregoing provisions shall be subject to any limitations under the Code. Shares of Common Stock issued under the Plan may consist in whole or in part of authorized but unissued shares, shares purchased on the open market or treasury shares.

4.2 <u>Substitute Awards</u>. In connection with a merger or consolidation of an entity with the Company or the acquisition by the Company of property or stock of an entity, the Administrator may grant Awards in substitution for any options or other stock or stock-based awards granted prior to such merger or consolidation by such entity or an affiliate thereof. Substitute Awards may be granted on such terms as the Administrator deems appropriate in the circumstances, notwithstanding any limitations on Awards contained in the Plan. Substitute Awards shall not count against the overall share limit set forth in Section 4.1 hereof, except as may be required by reason of Section 422 of the Code.

5. Stock Options.

5.1 <u>General</u>. The Administrator may grant Options to any Service Provider, subject to the limitations on Incentive Stock Options described below. The Administrator shall determine the number of shares of Common Stock to be covered by each Option, the exercise price of each Option and the conditions and limitations applicable to the exercise of each Option, including conditions relating to Applicable Laws, as it considers necessary or advisable.

5.2 Incentive Stock Options. The Administrator may grant Options intended to qualify as Incentive Stock Options only to employees of the Company, any of the Company's present or future "parent corporations" or "subsidiary corporations" as defined in Sections 424(e) or (f) of the Code, respectively, and any other entities the employees of which are eligible to receive Incentive Stock Options under the Code. All Options intended to qualify as Incentive Stock Options shall be subject to and shall be construed consistently with the requirements of Section 422 of the Code. Neither the Company nor the Administrator shall have any liability to a Participant, or any other party, (i) if an Option (or any part thereof) which is intended to qualify as an Incentive Stock Option fails to qualify as an Incentive Stock Option or (ii) for any action or omission by the Administrator that causes an Option not to qualify as an Incentive Stock Option, including without limitation, the conversion of an Incentive Stock Option to a Non-Qualified Stock Option or the grant of an Option intended as an Incentive Stock Option that fails to satisfy the requirements under the Code applicable to an Incentive Stock Option. Any Option that is intended to qualify as an Incentive Stock Option, but fails to so qualify for any reason, including without limitation, the portion of any Option becoming exercisable in excess of the \$100,000 limitation described in Treasury Regulation Section 1.422-4, shall be treated as a Non-Qualified Stock Option for all purposes.

5.3 <u>Exercise Price</u>. The Administrator shall establish the exercise price of each Option and specify the exercise price in the applicable Award Agreement. The exercise price shall be not less than 100% of the Fair Market Value on the date the Option is granted. In the case of an Incentive Stock Option granted to an employee who, at the time of grant of the Option, owns (or is treated as owning under Section 424 of the Code) stock representing more than 10% of the voting power of all classes of stock of the Company (or a "parent corporation" or "subsidiary corporation" thereof within the meaning of Sections 424(e) or 424(f) of the Code, respectively), the per share exercise price shall be no less than 110% of the Fair Market Value on the date the Option is granted.

5.4 <u>Duration of Options</u>. Each Option shall be exercisable at such times and subject to such terms and conditions as the Administrator may specify in the applicable Award Agreement, <u>provided that</u> the term of any Option shall not exceed ten years. In the case of an Incentive Stock Option granted to an employee who, at the time of grant of the Option, owns (or is treated as owning under Section 424 of the Code) stock representing more than 10% of the voting power of all classes of stock of the Company (or a "parent corporation" or "subsidiary corporation" thereof within the meaning of Sections 424(e) or 424(f) of the Code, respectively), the term of the Option shall not exceed five years.

5.5 Exercise of Option; Notification of Disposition. Options may be exercised by delivery to the Company of a written notice of exercise, in a form approved by the Administrator (which may be an electronic form), signed by the person authorized to exercise the Option, together with payment in full (i) as specified in Section 5.6 hereof for the number of shares for which the Option is exercised and (ii) as specified in Section 9.5 hereof for any applicable withholding taxes. Unless otherwise determined by the Administrator, an Option may not be exercised for a fraction of a share of Common Stock. If an Option is designated as an Incentive Stock Option, the Participant shall give prompt notice to the Company of any disposition or other transfer of any shares of Common Stock acquired from the Option if such disposition or transfer is made (i) within two years from the grant date with respect to such Option or (ii) within one year after the transfer of such shares to the Participant (other than any such disposition made in connection with a Change in Control). Such notice shall specify the date of such disposition or other transfer and the amount realized, in cash, other property, assumption of indebtedness or other consideration, by the Participant in such disposition or other transfer.

5.6 <u>Payment Upon Exercise</u>. Common Stock purchased upon the exercise of an Option granted under the Plan shall be paid for in cash or by check, payable to the order of the Company, or, to the extent permitted by the Administrator, by:

(a) (A) delivery of an irrevocable and unconditional undertaking by a broker acceptable to the Company to deliver promptly to the Company sufficient funds to pay the exercise price and any required tax withholding, or (B) delivery by the Participant to the Company of a copy of irrevocable and unconditional instructions to a broker acceptable to the Company to deliver promptly to the Company cash or a check sufficient to pay the exercise price and any required tax withholding;

(b) delivery (either by actual delivery or attestation) of shares of Common Stock owned by the Participant valued at their Fair Market Value, provided (A) such method of payment is then permitted under Applicable Laws, (B) such Common Stock, if acquired directly from the Company, was owned by the Participant for such minimum period of time, if any, as may be established by the Company at any time, and (C) such Common Stock is not subject to any repurchase, forfeiture, unfulfilled vesting or other similar requirements;

exercise;

(d) delivery of a promissory note of the Participant to the Company on terms determined by the Administrator;

(e) delivery of property of any other kind which constitutes good and valuable consideration as determined by the Administrator; or

(c) surrendering shares of Common Stock then issuable upon exercise of the Option valued at their Fair Market Value on the date of

(f) any combination of the above permitted forms of payment (including cash or check).

5.7 <u>Early Exercise of Options</u>. The Administrator may provide in the terms of an Award Agreement that the Service Provider may exercise an Option in whole or in part prior to the full vesting of the Option in exchange for unvested shares of Restricted Stock with respect to any unvested portion of the Option so exercised. Shares of Restricted Stock acquired upon the exercise of any unvested portion of an Option shall be subject to such terms and conditions as the Administrator shall determine.

6. Restricted Stock; Restricted Stock Units.

6.1 <u>General</u>. The Administrator may grant Restricted Stock, or the right to purchase Restricted Stock, to any Service Provider, subject to the right of the Company to repurchase all or part of such shares at their issue price or other stated or formula price from the Participant (or to require forfeiture of such shares if issued at no cost) in the event that conditions specified by the Administrator in the applicable Award Agreement are not satisfied prior to the end of the applicable restriction period or periods established by the Administrator for such Award. In addition, the Administrator may grant to Service Providers Restricted Stock Units, which may be subject to vesting and forfeiture conditions during applicable restriction period or periods, as set forth in an applicable Award Agreement.

6.2 <u>Terms and Conditions for All Restricted Stock and Restricted Stock Unit Awards</u>. The Administrator shall determine and set forth in the applicable Award Agreement the terms and conditions applicable to each Restricted Stock and Restricted Stock Unit Award, including the conditions for vesting and repurchase (or forfeiture) and the issue price, in each case, if any.

6.3 Additional Provisions Relating to Restricted Stock.

(a) *Dividends*. Participants holding shares of Restricted Stock will be entitled to all ordinary cash dividends paid with respect to such shares to the extent such dividends have a record date that is on or after the date on which the Participant to whom such Restricted Shares are granted becomes the record holder of such Restricted Shares, unless otherwise provided by the Administrator in the applicable Award Agreement. In addition, unless otherwise provided by the Administrator, if any dividends or distributions are paid in shares, or consist of a dividend or distribution to holders of Common Stock of property other than an ordinary cash dividend, the shares or other property will be subject to the same restrictions on transferability and forfeitability as the shares of Restricted Stock with respect to which they were paid. Each dividend payment will be made as provided in the applicable Award Agreement, but in no event later than the end of the calendar year in which the dividends are paid to stockholders of that class of stock or, if later, the 15th day of the third month following the later of (A) the date the dividends are paid to stockholders of that class of stock, and (B) the date the dividends are no longer subject to forfeiture.

(b) *Stock Certificates.* The Company may require that any stock certificates issued in respect of shares of Restricted Stock be deposited in escrow by the Participant, together with a stock power endorsed in blank, with the Company (or its designee).

6.4 Additional Provisions Relating to Restricted Stock Units.

(a) *Settlement*. Upon the vesting of a Restricted Stock Unit, the Participant shall be entitled to receive from the Company one share of Common Stock or an amount of cash or other property equal to the Fair Market Value of one share of Common Stock on the settlement date, as the Administrator shall determine and as provided in the applicable Award Agreement. The Administrator may provide that settlement of Restricted Stock Units shall occur upon or as soon as reasonably practicable after the vesting of the Restricted Stock Units or shall instead be deferred, on a mandatory basis or at the election of the Participant, in a manner that complies with Section 409A.

(b) *Voting Rights*. A Participant shall have no voting rights with respect to any Restricted Stock Units unless and until shares are delivered in settlement thereof.

(c) *Dividend Equivalents*. To the extent provided by the Administrator, a grant of Restricted Stock Units may provide a Participant with the right to receive Dividend Equivalents. Dividend Equivalents may be paid currently or credited to an account for the Participant, may be settled in cash and/or shares of Common Stock and may be subject to the same restrictions on transfer and forfeitability as the Restricted Stock Units with respect to which the Dividend Equivalents are paid, as determined by the Administrator, subject, in each case, to such terms and conditions as the Administrator shall establish and set forth in the applicable Award Agreement.

7. Other Stock-Based Awards.

Other Stock-Based Awards may be granted hereunder to Participants, including, without limitation, Awards entitling Participants to receive shares of Common Stock to be delivered in the future. Such Other Stock-Based Awards shall also be available as a form of payment in the settlement of other Awards granted under the Plan, as stand-alone payments and/or as payment in lieu of compensation to which a Participant is otherwise entitled. Other Stock-Based Awards may be paid in shares of Common Stock, cash or other property, as the Administrator shall determine. Subject to the provisions of the Plan, the Administrator shall determine the terms and conditions of each Other Stock-Based Award, including any purchase price, transfer restrictions, vesting conditions and other terms and conditions applicable thereto, which shall be set forth in the applicable Award Agreement.

8. Adjustments for Changes in Common Stock and Certain Other Events.

8.1 In the event that the Administrator determines that any dividend or other distribution (whether in the form of cash, Common Stock, other securities, or other property), reorganization, merger, consolidation, combination, repurchase, recapitalization, liquidation, dissolution, or sale, transfer, exchange or other disposition of all or substantially all of the assets of the Company, or sale or exchange of Common Stock or other securities of the Company, issuance of warrants or other rights to purchase Common Stock or other securities of the Company, or other similar corporate transaction or event, as determined by the Administrator, affects the Common Stock such that an adjustment is determined by the Administrator to be appropriate in order to prevent dilution or enlargement of the benefits or potential benefits intended by the Company to be made available under the Plan or with respect to any Award, then the Administrator may, in such manner as it may deem equitable, adjust any or all of:

(a) the number and kind of shares of Common Stock (or other securities or property) with respect to which Awards may be granted or awarded (including, but not limited to, adjustments of the limitations in Section 4 hereof on the maximum number and kind of shares which may be issued);

(b) the number and kind of shares of Common Stock (or other securities or property) subject to outstanding Awards;

(c) the grant or exercise price with respect to any Award; and

(d) the terms and conditions of any Awards (including, without limitation, any applicable financial or other performance "targets" specified in an Award Agreement).

8.2 In the event of any transaction or event described in Section 8.1 hereof (including without limitation any Change in Control) or any unusual or nonrecurring transaction or event affecting the Company or the financial statements of the Company, or any change in any Applicable Laws or accounting principles, the Administrator, on such terms and conditions as it deems appropriate, either by the terms of the Award or by action taken prior to the occurrence of such transaction or event and either automatically or upon the Participant's request, is hereby authorized to take any one or more of the following actions whenever the Administrator determines that such action is appropriate in order to (x) prevent dilution or enlargement of the benefits or potential benefits intended by the Company to be made available under the Plan or with respect to any Award granted or issued under the Plan, (y) to facilitate such transaction or event or (z) give effect to such changes in Applicable Laws or accounting principles:

(a) To provide for the cancellation of any such Award in exchange for either an amount of cash or other property with a value equal to the amount that could have been obtained upon the exercise or settlement of the vested portion of such Award or realization of the Participant's rights under the vested portion of such Award, as applicable; <u>provided that</u>, if the amount that could have been obtained upon the exercise or settlement of the vested portion of such Award or realization of the Participant's rights, in any case, is equal to or less than zero, then the vested portion of such Award may be terminated without payment;

(b) To provide that such Award shall vest and, to the extent applicable, be exercisable as to all shares covered thereby, notwithstanding anything to the contrary in the Plan or the provisions of such Award;

(c) To provide that such Award be assumed by the successor or survivor corporation, or a parent or subsidiary thereof, or shall be substituted for by awards covering the stock of the successor or survivor corporation, or a parent or subsidiary thereof, with appropriate adjustments as to the number and kind of shares and applicable exercise or purchase price, in all cases, as determined by the Administrator;

(d) To make adjustments in the number and type of shares of Common Stock (or other securities or property) subject to outstanding Awards, and/or in the terms and conditions of (including the grant or exercise price), and the criteria included in, outstanding Awards which may be granted in the future;

(e) To replace such Award with other rights or property selected by the Administrator; and/or

(f) To provide that the Award will terminate and cannot vest, be exercised or become payable after the applicable event.

8.3 In connection with the occurrence of any Equity Restructuring, and notwithstanding anything to the contrary in this Section 8, the Administrator will equitably adjust each outstanding Award, which adjustments may include adjustments to the number and type of securities subject to each outstanding Award and/or the exercise price or grant price thereof, if applicable, the grant of new Awards to Participants, and/or the making of a cash payment to Participants, as the Administrator deems appropriate to reflect such Equity Restructuring. The adjustments provided under this Section 8.3 shall be nondiscretionary and shall be final and binding on the affected Participant and the Company; <u>provided that</u> whether an adjustment is equitable shall be determined by the Administrator.

8.4 In the event of any pending stock dividend, stock split, combination or exchange of shares, merger, consolidation or other distribution (other than normal cash dividends) of Company assets to stockholders, or any other change affecting the shares of Common Stock or the share price of the Common Stock, including any Equity Restructuring, for reasons of administrative convenience the Administrator may refuse to permit the exercise of any Award during a period of up to 30 days prior to the consummation of any such transaction.

8.5 Except as expressly provided in the Plan or pursuant to action of the Administrator under the Plan, no Participant shall have any rights by reason of any subdivision or consolidation of shares of stock of any class, the payment of any dividend, any increase or decrease in the number of shares of stock of any class or any dissolution, liquidation, merger, or consolidation of the Company or any other corporation. Except as expressly provided in the Plan or pursuant to action of the Administrator under the Plan, no issuance by the Company of shares of stock of any class, or securities convertible into shares of stock of any class, shall affect, and no adjustment by reason thereof shall be made with respect to, the number of shares of Common Stock subject to an Award or the grant or exercise price of any Award. The existence of the Plan, any Award Agreements and the Awards granted hereunder shall not affect or restrict in any way the right or power of the Company to make or authorize (i) any adjustment, recapitalization, reorganization or other change in the Company's capital structure or its business, (ii) any merger, consolidation dissolution or liquidation of the Company or sale of Company assets or (iii) any sale or issuance of securities, including without limitation, securities with rights superior to those of the Common Stock or which are convertible into or exchangeable for Common Stock. The Administrator may treat Participants and Awards (or portions thereof) differently under this Section 8.

9. General Provisions Applicable to Awards.

9.1 <u>Transferability</u>. Except as the Administrator may otherwise determine or provide in an Award Agreement or otherwise, in any case in accordance with Applicable Laws, Awards shall not be sold, assigned, transferred, pledged or otherwise encumbered by the person to whom they are granted, either voluntarily or by operation of law, except by will or the laws of descent and distribution, and, during the life of the Participant, shall be exercisable only by the Participant. References to a Participant, to the extent relevant in the context, shall include references to authorized transferees.

9.2 <u>Documentation</u>. Each Award shall be evidenced in an Award Agreement, which may be in such form (written, electronic or otherwise) as the Administrator shall determine. Each Award may contain terms and conditions in addition to those set forth in the Plan.

9.3 <u>Discretion</u>. Except as otherwise provided by the Plan, each Award may be made alone or in addition or in relation to any other Award. The terms of each Award to a Participant need not be identical, and the Administrator need not treat Participants or Awards (or portions thereof) uniformly.

9.4 <u>Termination of Status</u>. The Administrator shall determine the effect on an Award of the disability, death, retirement, authorized leave of absence or any other change or purported change in a Participant's Service Provider status and the extent to which, and the period during which, the Participant, the Participant's legal representative, conservator, guardian or Designated Beneficiary may exercise rights under the Award, if applicable.

9.5 <u>Withholding</u>. Each Participant shall pay to the Company, or make provision satisfactory to the Administrator for payment of, any taxes required by law to be withheld in connection with Awards to such Participant no later than the date of the event creating the tax liability. Except as the Administrator may otherwise determine, all such payments shall be made in cash or by certified check. Notwithstanding the foregoing, to the extent permitted by the Administrator, Participants may satisfy such tax obligations in whole or in part by delivery of shares of Common Stock, including shares retained from the Award creating the tax obligation, valued at their Fair Market Value. The Company may, to the extent permitted by Applicable Laws, deduct any such tax obligations from any payment of any kind otherwise due to a Participant.

9.6 <u>Amendment of Award</u>. The Administrator may amend, modify or terminate any outstanding Award, including but not limited to, substituting therefor another Award of the same or a different type, changing the date of exercise or settlement, and converting an Incentive Stock Option to a Non-Qualified Stock Option. The Participant's consent to such action shall be required unless (i) the Administrator determines that the action, taking into account any related action, would not materially and adversely affect the Participant, or (ii) the change is permitted under Section 8 and 10.6 hereof.

9.7 <u>Conditions on Delivery of Stock</u>. The Company will not be obligated to deliver any shares of Common Stock pursuant to the Plan or to remove restrictions from shares previously delivered under the Plan until (i) all conditions of the Award have been met or removed to the satisfaction of the Company, (ii) in the opinion of the Company's counsel, all other legal matters in connection with the issuance and delivery of such shares have been satisfied, including any applicable securities laws and any applicable stock exchange or stock market rules and regulations, and (iii) the Participant has executed and delivered to the Company such representations or agreements as the Administrator deems necessary or appropriate to satisfy the requirements of any Applicable Laws. The inability of the Company to obtain authority from any regulatory body having jurisdiction, which authority is determined by the Administrator to be necessary to the lawful issuance and sale of any securities hereunder, shall relieve the Company of any liability in respect of the failure to issue or sell such shares as to which such requisite authority shall not have been obtained.

9.8 <u>Acceleration</u>. The Administrator may at any time provide that any Award shall become immediately vested and/or exercisable in full or in part, free of some or all restrictions or conditions, or otherwise realizable in full or in part, as the case may be.

10. Miscellaneous.

10.1 <u>No Right To Employment or Other Status</u>. No person shall have any claim or right to be granted an Award, and the grant of an Award shall not be construed as giving a Participant the right to continued employment or any other relationship with the Company. The Company expressly reserves the right at any time to dismiss or otherwise terminate its relationship with a Participant free from any liability or claim under the Plan or any Award, except as expressly provided in an applicable Award Agreement.

10.2 <u>No Rights As Stockholder; Certificates</u>. Subject to the provisions of the applicable Award Agreement, no Participant or Designated Beneficiary shall have any rights as a stockholder with respect to any shares of Common Stock to be distributed with respect to an Award until becoming the record holder of such shares. Notwithstanding any other provision of the Plan, unless otherwise determined by the Administrator or required by any Applicable Laws, the Company shall not be required to deliver to any Participant certificates evidencing shares of Common Stock issued in connection with any Award and instead such shares of Common Stock may be recorded in the books of the Company (or, as applicable, its transfer agent or stock plan administrator). The Company may place legends on any stock certificates issued under the Plan deemed necessary or appropriate by the Administrator in order to comply with Applicable Laws.

10.3 <u>Effective Date and Term of Plan</u>. The Plan shall become effective on the date on which it is adopted by the Board. No Awards shall be granted under the Plan after the completion of ten years from the earlier of (i) the date on which the Plan was adopted by the Board or (ii) the date the Plan was approved by the Company's stockholders, but Awards previously granted may extend beyond that date in accordance with the terms of the Plan.

10.4 <u>Amendment of Plan</u>. The Administrator may amend, suspend or terminate the Plan or any portion thereof at any time; <u>provided that</u> no amendment of the Plan shall materially and adversely affect any Award outstanding at the time of such amendment without the consent of the affected Participant. Awards outstanding under the Plan at the time of any suspension or termination of the Plan shall continue to be governed in accordance with the terms of the Plan and the applicable Award Agreement, as in effect prior to such suspension or termination. The Board shall obtain stockholder approval of any Plan amendment to the extent necessary to comply with Applicable Laws.

10.5 <u>Provisions for Foreign Participants</u>. The Administrator may modify Awards granted to Participants who are foreign nationals or employed outside the United States or establish subplans or procedures under the Plan to address differences in laws, rules, regulations or customs of such foreign jurisdictions with respect to tax, securities, currency, employee benefit or other matters.

10.6 Section 409A.

(a) *General*. The Company intends that all Awards be structured in compliance with, or to satisfy an exemption from, Section 409A, such that no adverse tax consequences, interest, or penalties under Section 409A apply in connection with any Awards. Notwithstanding anything herein or in any Award Agreement to the contrary, the Administrator may, without a Participant's prior consent, amend this Plan and/or Awards, adopt policies and procedures, or take any other actions (including amendments, policies, procedures and actions with retroactive effect) as are necessary or appropriate to preserve the intended tax treatment of Awards under the Plan, including without limitation, any such actions intended to (A) exempt this Plan and/or any Award from the application of Section 409A, and/or (B) comply with the requirements of Section 409A, including without limitation any such regulations, guidance, compliance programs and other interpretative authority that may be issued after the date of grant of any Award. The Company makes no representations or warranties as to the tax treatment of any Award under Section 409A or otherwise. The Company shall have no obligation under this Section 10.6 or otherwise to take any action (whether or not described herein) to avoid the imposition of taxes, penalties or interest under Section 409A with respect to any Award and shall have no liability to any Participant or any other person if any Award, compensation or other benefits under the Plan are determined to constitute non-compliant, "nonqualified deferred compensation" subject to the imposition of taxes, penalties and/or interest under Section 409A.

(b) *Separation from Service*. With respect to any Award that constitutes "nonqualified deferred compensation" under Section 409A, any payment or settlement of such Award that is to be made upon a termination of a Participant's Service Provider relationship shall, to the extent necessary to avoid the imposition of taxes under Section 409A, be made only upon the Participant's "separation from service" (within the meaning of Section 409A), whether such "separation from service" occurs upon or subsequent to the termination of the Participant's Service Provider relationship. For purposes of any such provision of this Plan or any Award Agreement relating to any such payments or benefits, references to a "termination," "termination of employment" or like terms shall mean "separation from service."

(c) *Payments to Specified Employees*. Notwithstanding any contrary provision in *the* Plan or any Award Agreement, any payment(s) of "nonqualified deferred compensation" that are otherwise required to be made under an Award to a "specified employee" (as defined under Section 409A and determined by the Administrator) as a result of his or her "separation from service" shall, to the extent necessary to avoid the imposition of taxes under Code Section 409A(a)(2)(B)(i), be delayed until the expiration of the six-month period immediately following such "separation from service" (or, if earlier, until the date of death of the specified employee) and shall instead be paid (in a manner set forth in the Award agreement) on the day that immediately follows the end of such six-month period or as soon as administratively practicable thereafter (without interest). Any payments of "nonqualified deferred compensation" under such Award that are, by their terms, payable more than six months following the Participant's "separation from service" shall be paid at the time or times such payments are otherwise scheduled to be made.

10.7 Limitations on Liability. Notwithstanding any other provisions of the Plan, no individual acting as a director, officer, other employee or agent of the Company will be liable to any Participant, former Participant, spouse, beneficiary, or any other person for any claim, loss, liability, or expense incurred in connection with the Plan or any Award, nor will such individual be personally liable with respect to the Plan because of any contract or other instrument he or she executes in his or her capacity as an Administrator, director, officer, other employee or agent of the Company. The Company will indemnify and hold harmless each director, officer, other employee and agent of the Company to whom any duty or power relating to the administration or interpretation of the Plan has been or will be granted or delegated, against any cost or expense (including attorneys' fees) or liability (including any sum paid in settlement of a claim with the Administrator's approval) arising out of any act or omission to act concerning this Plan unless arising out of such person's own fraud or bad faith.

10.8 Lock-Up Period. Participants shall not offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, lend, or otherwise transfer or dispose of, directly or indirectly, any Common Stock (or other securities) of the Company or enter into any swap, hedging or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of any Common Stock (or other securities) of the Company held by Participant (other than those included in the registration) for a period specified by the representative of the underwriters of Common Stock (or other securities) of the Company not to exceed 180 days following the effective date of any registration statement of the Company filed under the Securities Act (or such other period as may be requested by the Company or the underwriters to accommodate regulatory restrictions on (i) the publication or other distribution of research reports and (ii) analyst recommendations and opinions, including, but not limited to, the restrictions contained in FINRA Rule 2241, or any successor provisions or amendments thereto). Participants shall execute and deliver such other agreements as may be reasonably requested by the Company or the underwriter which are consistent with the foregoing or which are necessary to give further effect thereto. The obligations described in this Section 10.8 shall not apply to a registration relating solely to employee benefit plans on Form S-1 or Form S-8 or similar forms that may be promulgated in the future, or a registration relating solely to a Securities and Exchange Commission Rule 145 transaction on Form S-4 or similar forms that may be promulgated in the future. The Company may impose stop-transfer instructions with respect to the shares of Common Stock (or other securities) subject to the foregoing restriction until the end of said 180 day (or other) period.

10.9 Limitations on Transfer. A Participant shall not sell, assign, transfer, pledge, hypothecate or otherwise dispose of, by operation of law or otherwise (collectively "Transfer") any interest in any shares of Common Stock held by Participant except in compliance with the provisions herein, in the Company's Bylaws and applicable securities laws. Furthermore, the shares of Common Stock shall be subject to a right of first refusal in favor of the Company or its assignees as set forth in the Company's Bylaws. Notwithstanding the foregoing, Participant may, subject to compliance with the transfer restrictions set forth in the Company's Bylaws, transfer shares of Common Stock to or for the benefit of any spouse, children, parents, uncles, aunts, siblings, grandchildren and any other relatives approved by the Board of Directors (collectively, "Approved Relatives") or to a trust established solely for the benefit of the Participant and/or Approved Relatives, provided that such shares of Common Stock shall remain subject to the provisions of this Plan and any other applicable agreements, and such permitted transferee shall, as a condition to such transfer, deliver to the Company a written instrument confirming that such transfere on its books any of the shares of Common Stock that have been sold or otherwise transferred in violation of any of the provisions of this Plan, any other applicable agreement or the provisions of the Company's Bylaws or (b) to treat as owner of such shares of Common Stock or to accord the right to vote or pay dividends to any purchaser or other transferee to whom any such shares of Common Stock shall have been so sold or transferred.

10.10 Data Privacy. As a condition of receipt of any Award, each Participant explicitly and unambiguously consents to the collection, use and transfer, in electronic or other form, of personal data as described in this paragraph by and among, as applicable, the Company and its subsidiaries and affiliates for the exclusive purpose of implementing, administering and managing the Participant's participation in the Plan. The Company and its subsidiaries and affiliates may hold certain personal information about a Participant, including but not limited to, the Participant's name, home address and telephone number, date of birth, social security or insurance number or other identification number, salary, nationality, job title(s), any shares of stock held in the Company or any of its subsidiaries and affiliates, details of all Awards, in each case, for the purpose of implementing, managing and administering the Plan and Awards (the "Data"). The Company and its subsidiaries and affiliates may transfer the Data amongst themselves as necessary for the purpose of implementation, administration and management of a Participant's participation in the Plan, and the Company and its subsidiaries and affiliates may each further transfer the Data to any third parties assisting the Company in the implementation, administration and management of the Plan. These recipients may be located in the Participant's country, or elsewhere, and the Participant's country may have different data privacy laws and protections than the recipients' country. Through acceptance of an Award, each Participant authorizes such recipients to receive, possess, use, retain and transfer the Data, in electronic or other form, for the purposes of implementing, administering and managing the Participant's participation in the Plan, including any requisite transfer of such Data as may be required to a broker or other third party with whom the Company or the Participant may elect to deposit any shares of Common Stock. The Data related to a Participant will be held only as long as is necessary to implement, administer, and manage the Participant's participation in the Plan. A Participant may, at any time, view the Data held by the Company with respect to such Participant, request additional information about the storage and processing of the Data with respect to such Participant, recommend any necessary corrections to the Data with respect to the Participant or refuse or withdraw the consents herein in writing, in any case without cost, by contacting his or her local human resources representative. The Company may cancel Participant's ability to participate in the Plan and, in the Administrator's discretion, the Participant may forfeit any outstanding Awards if the Participant refuses or withdraws his or her consents as described herein. For more information on the consequences of refusal to consent or withdrawal of consent, Participants may contact their local human resources representative.

10.11 <u>Severability</u>. In the event any portion of the Plan or any action taken pursuant thereto shall be held illegal or invalid for any reason, the illegality or invalidity shall not affect the remaining parts of the Plan, and the Plan shall be construed and enforced as if the illegal or invalid provisions had not been included, and the illegal or invalid action shall be null and void.

10.12 <u>Governing Documents</u>. In the event of any contradiction between the Plan and any Award Agreement or any other written agreement between a Participant and the Company or any Subsidiary of the Company that has been approved by the Administrator, the terms of the Plan shall govern, unless it is expressly specified in such Award Agreement or other written document that a specific provision of the Plan shall not apply.

10.13 <u>Submission to Jurisdiction; Waiver of Jury Trial</u>. By accepting an Award, each Participant irrevocably and unconditionally consents to submit to the exclusive jurisdiction of the courts of the State of California and of the United States of America, in each case located in the State of California, for any action arising out of or relating to the Plan (and agrees not to commence any litigation relating thereto except in such courts), and further agrees that service of any process, summons, notice or document by U.S. registered mail to the address contained in the records of the Company shall be effective service of process for any litigation brought against it in any such court. By accepting an Award, each Participant irrevocably and unconditionally waives any objection to the laying of venue of any litigation arising out of Plan or Award hereunder in the courts of the State of California or the United States of America, in each case located in the State of California, and further irrevocably and unconditionally waives and agrees not to plead or claim in any such court that any such litigation brought in any such court has been brought in an inconvenient forum. By accepting an Award, each Participant irrevocably and unconditionally waives, to the fullest extent permitted by applicable law, any and all rights to trial by jury in connection with any litigation arising out of or relating to the Plan or any Award hereunder.

10.14 <u>Governing Law</u>. The provisions of the Plan and all Awards made hereunder shall be governed by and interpreted in accordance with the laws of the State of Delaware, disregarding choice-of-law principles of the law of any state that would require the application of the laws of a jurisdiction other than such state.

10.15 <u>Restrictions on Shares; Claw-back Provisions</u>. Shares of Common Stock acquired in respect of Awards shall be subject to such terms and conditions as the Administrator shall determine, including, without limitation, restrictions on the transferability of shares of Common Stock, the right of the Company to repurchase shares of Common Stock, the right of the Company to require that shares of Common Stock be transferred in the event of certain transactions, tag-along rights, bring-along rights, redemption and co-sale rights and voting requirements. Such terms and conditions may be additional to those contained in the Plan and may, as determined by the Administrator, be contained in the applicable Award Agreement or in an exercise notice, stockholders' agreement or in such other agreement as the Administrator shall determine, in each case in a form determined by the Administrator. The issuance of such shares of Common Stock shall be conditioned on the Participant's consent to such terms and conditions and the Participant's entering into such agreement or agreements. All Awards (including any proceeds, gains or other economic benefit actually or constructively received by Participant upon any receipt or exercise of any Award or upon the receipt or resale of any shares of Common Stock underlying the Award) shall be subject to the provisions of any claw-back policy implemented by the Company, including, without limitation, any claw-back policy adopted to comply with the requirements of the Dodd-Frank Wall Street Reform and Consumer Protection Act and any rules or regulations promulgated thereunder, to the extent set forth in such claw-back policy and/or in the applicable Award Agreement.

10.16 <u>Titles and Headings</u>. The titles and headings of the Sections in the Plan are for convenience of reference only and, in the event of any conflict, the text of the Plan, rather than such titles or headings, shall control.

10.17 <u>Conformity to Securities Laws</u>. Participant acknowledges that the Plan is intended to conform to the extent necessary with all provisions of the Securities Act and the Exchange Act and any and all regulations and rules promulgated by the Securities and Exchange Commission thereunder, and state securities laws and regulations. Notwithstanding anything herein to the contrary, the Plan and all Awards granted hereunder shall be administered only in such a manner as to conform to such laws, rules and regulations. To the extent permitted by Applicable Laws, the Plan and all Award Agreements shall be deemed amended to the extent necessary to conform to such laws, rules and regulations.

11. Definitions. As used in the Plan, the following words and phrases shall have the following meanings:

11.1 "<u>Administrator</u>" means the Board or a Committee to the extent that the Board's powers or authority under the Plan have been delegated to such Committee.

11.2 "<u>Applicable Laws</u>" means the requirements relating to the administration of equity incentive plans under U.S. federal and state securities, tax and other applicable laws, rules and regulations, the applicable rules of any stock exchange or quotation system on which the Common Stock is listed or quoted and the applicable laws and rules of any foreign country or other jurisdiction where Awards are granted or issued under the Plan.

11.3 "<u>Award</u>" means, individually or collectively, a grant under the Plan of Options, Restricted Stock, Restricted Stock Units or Other Stock-Based Awards.

11.4 "<u>Award Agreement</u>" means a written agreement evidencing an Award, which agreements may be in electronic medium and shall contain such terms and conditions with respect to an Award as the Administrator shall determine, consistent with and subject to the terms and conditions of the Plan.

11.5 "Board" means the Board of Directors of the Company.

11.6 "Change in Control" means (i) a merger or consolidation of the Company with or into any other corporation or other entity or person, (ii) a sale, lease, exchange or other transfer in one transaction or a series of related transactions of all or substantially all of the Company's assets, or (iii) any other transaction, including the sale by the Company of new shares of its capital stock or a transfer of existing shares of capital stock of the Company, the result of which is that a third party that is not an affiliate of the Company or its stockholders (or a group of third parties not affiliated with the Company or its stockholders) immediately prior to such transaction acquires or holds capital stock of the Company representing a majority of the Company's outstanding voting power immediately following such transaction; provided that the following events shall not constitute a "Change in Control": (A) a transaction (other than a sale of all or substantially all of the Company's assets) in which the holders of the voting securities of the Company immediately prior to the merger or consolidation hold, directly or indirectly, at least a majority of the voting securities in the successor corporation or its parent immediately after the merger or consolidation; (B) a sale, lease, exchange or other transaction in one transaction or a series of related transactions of all or substantially all of the Company's assets to an affiliate of the Company; (C) an initial public offering of any of the Company's securities; (D) a reincorporation of the Company solely to change its jurisdiction; or (E) a transaction undertaken for the primary purpose of creating a holding company that will be owned in substantially the same proportion by the persons who held the Company's securities immediately before such transaction. Notwithstanding the foregoing, if a Change in Control would give rise to a payment or settlement event with respect to any Award that constitutes "nonqualified deferred compensation," the transaction or event constituting the Change in Control must also constitute a "change in control event" (as defined in Treasury Regulation §1.409A-3(i)(5)) in order to give rise to the payment or settlement event for such Award, to the extent required by Section 409A.

11.7 "Code" means the Internal Revenue Code of 1986, as amended, and the regulations issued thereunder.

11.8 "<u>Committee</u>" means one or more committees or subcommittees of the Board, which may be comprised of one or more directors and/or executive officers of the Company, in either case, to the extent permitted in accordance with Applicable Laws.

11.9 "Common Stock" means the common stock of the Company.

11.10 "<u>Company</u>" means RBNC Therapeutics, Inc., a Delaware corporation, or any successor thereto. Except where the context otherwise requires, the term "Company" includes any of the Company's present or future parent or subsidiary corporations as defined in Sections 424(e) or (f) of the Code and any other business venture (including, without limitation, joint venture or limited liability company) in which the Company has a significant interest, as determined by the Administrator.

11.11 "<u>Consultant</u>" means any person, including any advisor, engaged by the Company or a parent or subsidiary of the Company to render services to such entity if: (i) the consultant or adviser renders *bona fide* services to the Company; (ii) the services rendered by the consultant or advisor are not in connection with the offer or sale of securities in a capital-raising transaction and do not directly or indirectly promote or maintain a market for the Company's securities; and (iii) the consultant or advisor is a natural person, or such other advisor or consultant as is approved by the Administrator.

11.12 "<u>Designated Beneficiary</u>" means the beneficiary or beneficiaries designated, in a manner determined by the Administrator, by a Participant to receive amounts due or exercise rights of the Participant in the event of the Participant's death or incapacity In the absence of an effective designation by a Participant, "Designated Beneficiary" shall mean the Participant's estate.

11.13 "Director" means a member of the Board.

11.14 "Disability" means a permanent and total disability within the meaning of Section 22(e)(3) of the Code, as it may be amended from time to time.

11.15 "<u>Dividend Equivalents</u>" means a right granted to a Participant pursuant to Section 6.4(c) hereof to receive the equivalent value (in cash or shares of Common Stock) of dividends paid on shares of Common Stock.

11.16 "<u>Employee</u>" means any person, including officers and Directors, employed by the Company (within the meaning of Section 3401(c) of the Code) or any parent or subsidiary of the Company.

11.17 "<u>Equity Restructuring</u>" means, as determined by the Administrator, a non-reciprocal transaction between the Company and its stockholders, such as a stock dividend, stock split, spin-off or recapitalization through a large, nonrecurring cash dividend, that affects the shares of Common Stock (or other securities of the Company) or the share price of Common Stock (or other securities of the Company) and causes a change in the per share value of the Common Stock underlying outstanding Awards.

11.18 "Exchange Act" means the Securities Exchange Act of 1934, as amended.

11.19 "Fair Market Value" means, as of any date, the value of Stock determined as follows: (i) if the Common Stock is listed on any established stock exchange, its Fair Market Value shall be the closing sales price for such Common Stock as quoted on such exchange for such date, or if no sale occurred on such date, the first market trading day immediately prior to such date during which a sale occurred, as reported in *The Wall Street Journal* or such other source as the Administrator deems reliable; (ii) if the Common Stock is not traded on a stock exchange but is quoted on a national market or other quotation system, the last sales price on such date, or if no sales occurred on such date, then on the date immediately prior to such date on which sales prices are reported, as reported in *The Wall Street Journal* or such other source as the Administrator deems reliable; or (iii) in the absence of an established market for the Common Stock, the Fair Market Value thereof shall be determined by the Administrator in its sole discretion.

11.20 "Incentive Stock Option" means an "incentive stock option" as defined in Section 422 of the Code.

11.21 "Non-Qualified Stock Option" means an Option that is not intended to be or otherwise does not qualify as an Incentive Stock

Option.

11.22 "Option" means an option to purchase Common Stock.

11.23 "<u>Other Stock-Based Awards</u>" means other Awards of shares of Common Stock, and other Awards that are valued in whole or in part by reference to, or are otherwise based on, shares of Common Stock or other property.

11.24 "Participant" means a Service Provider who has been granted an Award under the Plan.

11.25 "Plan" means this 2020 Equity Incentive Plan.

11.26 "<u>Publicly Listed Company</u>" means that the Company or its successor (i) is required to file periodic reports pursuant to Section 12 of the Exchange Act and (ii) the Common Stock is listed on one or more National Securities Exchanges (within the meaning of the Exchange Act) or is quoted on NASDAQ or a successor quotation system.

11.27 "<u>Restricted Stock</u>" means Common Stock awarded to a Participant pursuant to Section 6 hereof that is subject to certain vesting conditions and other restrictions.

11.28 "<u>Restricted Stock Unit</u>" means an unfunded, unsecured right to receive, on the applicable settlement date, one share of Common Stock or an amount in cash or other consideration determined by the Administrator equal to the value thereof as of such payment date, which right may be subject to certain vesting conditions and other restrictions.

11.29 "Section 409A" means Section 409A of the Code and all regulations, guidance, compliance programs and other interpretative authority thereunder.

11.30 "Securities Act" means the Securities Act of 1933, as amended from time to time.

11.31 "Service Provider" means an Employee, Consultant or Director.

11.32 "Termination of Service" means the date the Participant ceases to be a Service Provider.

* * * * *

RBNC THERAPEUTICS, INC.

2020 EQUITY INCENTIVE PLAN

CALIFORNIA SUPPLEMENT

This supplement is intended to satisfy the requirements of Section 25102(o) of the California Corporations Code and the regulations issued thereunder ("Section 25102(o)"). Notwithstanding anything to the contrary contained in the Plan and except as otherwise determined by the Administrator, the provisions set forth in this supplement shall apply to all Awards granted under the Plan to a Participant who is a resident of the State of California on the date of grant (a "California Participant") and which are intended to be exempt from registration in California pursuant to Section 25102(o), and otherwise to the extent required to comply with applicable law (but only to such extent). Definitions in the Plan are applicable to this supplement.

1. <u>Limitation On Securities Issuable Under Plan</u>. The amount of securities issued pursuant to the Plan shall not exceed the amounts permitted under Section 260.140.45 of the California code of regulations to the extent applicable.

2. <u>Additional Limitations For Grants</u>. The terms of all Awards shall comply, to the extent applicable, with Sections 260.140.41 and 260.140.42 of the California Code of Regulations.

3. <u>Additional Requirement To Provide Information To California Participants</u>. The Company shall provide to each California Participant, not less frequently than annually, copies of annual financial statements (which need not be audited). The Company shall not be required to provide such statements to key persons whose duties in connection with the Company assure their access to equivalent information. In addition, this information requirement shall not apply to any plan or agreement that complies with all conditions of Rule 701 of the Securities Act ("<u>Rule 701</u>"); provided that for purposes of determining such compliance, any registered domestic partner shall be considered a "family member" as that term is defined in Rule 701.

* * * * *

CS-1

RBNC THERAPEUTICS, INC.

2020 EQUITY INCENTIVE PLAN

STOCK OPTION AGREEMENT

Pursuant to the option grant summary tab ("<u>Grant Notice</u>") on the website to which this Stock Option Agreement (this "<u>Agreement</u>") is associated, RBNC Therapeutics, Inc. (the "<u>Company</u>") has granted to the option holder set forth in the Grant Notice ("<u>Participant</u>") an option (the "<u>Option</u>") under the Company's 2020 Equity Incentive Plan (the "<u>Plan</u>") to purchase the number of shares (the "Shares") indicated in the Grant Notice. By his or her electronic acceptance of this Option on the Grant Notice, Participant agrees to be bound by the terms and conditions of the Plan, this Agreement and the Grant Notice. Participant has reviewed this Agreement, the Plan and the Grant Notice in their entirety, has had an opportunity to obtain the advice of counsel prior to accepting the Option and fully understands all provisions of the Grant Notice, this Agreement and the Plan. Participant hereby agrees to accept as binding, conclusive and final all decisions or interpretations of the Administrator of the Plan upon any questions arising under the Plan or the Option.

1. General.

1.1 Defined Terms. Capitalized terms not specifically defined herein shall have the meanings specified in the Plan.

1.2 <u>Incorporation of Terms</u>. The Option is subject to the terms and conditions of the Plan and the Grant Notice, each of which are incorporated herein by reference. In the event of a conflict between the terms of the Agreement or the Grant Notice and the Plan, the terms of the Plan shall control.

1.3 <u>Grant of Option</u>. In consideration of Participant's past and/or continued employment with or service to the Company or a parent or subsidiary and for other good and valuable consideration, effective as of the grant/issued date set forth in the Grant Notice (the "<u>Grant Date</u>"), the Company irrevocably grants to Participant an Option to purchase any part or all of an aggregate of the number of Shares set forth in the Grant Notice, upon the terms and conditions set forth in the Plan and this Agreement. Unless designated as a "NSO" or Non-Qualified Stock Option in the Grant Notice, the Option shall be an Incentive Stock Option to the maximum extent permitted by law.

2. Period of Exercisability.

2.1 Vesting; Commencement of Exercisability.

(a) Subject to Sections 2.1(b) and 2.3 below, the Option shall become vested and exercisable in such amounts and at such times as are set forth in the vesting schedule in the Grant Notice, subject to Participant not experiencing a Termination of Service on or prior to each date (the "<u>Vesting Schedule</u>").

(b) Unless otherwise determined by the Administrator, any portion of the Option that has not become vested and exercisable on or prior to the date of Participant's Termination of Service shall be forfeited on the date of Participant's Termination of Service and shall not thereafter become vested or exercisable.

2.2 <u>Duration of Exercisability</u>. The installments provided for in the Vesting Schedule are cumulative. Each such installment which becomes vested and exercisable pursuant to the Vesting Schedule shall remain vested and exercisable until it becomes unexercisable under Section 2.3 below or pursuant to the terms of the Plan. Once the Option becomes unexercisable, it shall be forfeited immediately.

2.3 Expiration of Option. The Option may not be exercised to any extent by anyone after the first to occur of the following events:

(a) The date for the expiration of the Option (the "Expiration Date") set forth in the Grant Notice;

(b) The expiration of three months following the date of Participant's Termination of Service, unless such Termination of Service occurs by reason of Participant's death, Disability or Cause;

(c) The expiration of one year following the date of Participant's Termination of Service by reason of Participant's death or Disability; or

(d) The date of Participant's Termination of Service for Cause.

Participant acknowledges that an Incentive Stock Option exercised more than three (3) months after Participant's Termination of Service as an Employee, other than by reason of death or Disability, will be taxed as a Non-Qualified Stock Option.

For purposes of this Agreement, if Participant is party to an employment or severance agreement with the Company that contains a definition of "cause" for termination of employment, "Cause" shall have the meaning ascribed to such term in such agreement. Otherwise, "Cause" shall mean willful misconduct by Participant or willful failure by Participant to perform his or her responsibilities to the Company (including, without limitation, breach by Participant of any provision of any employment, consulting, advisory, nondisclosure, non-competition or other similar agreement between Participant and the Company), as determined by the Company, which determination shall be conclusive.

2.4 <u>Special Tax Consequences</u>. Participant acknowledges that, to the extent that the aggregate Fair Market Value (determined as of the time the Option is granted) of all Shares with respect to which Incentive Stock Options, including the Option, are first exercisable for the first time by Participant in any calendar year exceeds \$100,000 (or such other limitation as imposed by Section 422(d) of the Code), the Option and such other options shall be treated as not qualifying under Section 422 of the Code but rather shall be considered Non-Qualified Stock Options. Participant further acknowledges that the rule set forth in the preceding sentence shall be applied by taking Options and other "incentive stock options" into account in the order in which they were granted.

3. Exercise of Option.

3.1 <u>Person Eligible to Exercise</u>. Except as may be otherwise provided by the Administrator, during the lifetime of Participant, only Participant may exercise the Option or any portion thereof. After the death of Participant, any exercisable portion of the Option may, prior to the time when the Option becomes unexercisable under Section 2.3, be exercised by Participant's personal representative or by any person empowered to do so under the deceased Participant's will or under the then applicable laws of descent and distribution.

3.2 <u>Partial Exercise</u>. Any exercisable portion of the Option or the entire Option, if then wholly exercisable, may be exercised in whole or in part at any time prior to the time when the Option or portion thereof becomes unexercisable under Section 2.3.

3.3 <u>Manner of Exercise</u>. The Option, or any exercisable portion thereof, may be exercised solely by delivery to the Secretary of the Company or the Secretary's office, or such other place as may be determined by the Administrator, of all of the following prior to the time when the Option or such portion thereof becomes unexercisable under Section 2.3 above:

(a) An exercise notice in substantially in the form attached as <u>Exhibit A</u> hereto (or such other form as is prescribed by the Administrator) (the "<u>Exercise Notice</u>") in writing signed by Participant or any other person then entitled to exercise the Option or portion thereof, stating that the Option or portion thereof is thereby exercised, such notice complying with all Applicable Laws established by the Administrator;

(b) Subject to Section 5.6 of the Plan:

(i) Full payment (in cash or by check) for the Shares with respect to which the Option or portion thereof is exercised; or

(ii) With the consent of the Administrator, by delivery of Shares then issuable upon exercise of the Option having a Fair Market Value on the date of delivery equal to the aggregate exercise price of the Option or exercised portion thereof; or

(iii) On and after the date the Company becomes a Publicly Listed Company, through the (A) delivery by Participant to the Company of an irrevocable and unconditional undertaking by a broker acceptable to the Company to deliver promptly to the Company sufficient funds to pay the exercise price or (B) delivery by Participant to the Company of a copy of irrevocable and unconditional instructions to a broker acceptable to the Company to deliver promptly to the Company cash or a check sufficient to pay the exercise price; provided that payment is then made to the Company at such time as may be required by the Administrator; or

(iv) With the consent of the Administrator, any other method of payment permitted under the terms of the Plan; or

(v) Subject to any Applicable Laws, any combination of the consideration allowed under the foregoing paragraphs;

(c) The receipt by the Company of full payment for any applicable withholding tax in cash or by check or in the form of consideration permitted by the Administrator, which, following the date the Company becomes a Publicly Listed Company shall include the method provided for in Section 5.6(a) of the Plan;

(d) If the Company is a not a Publicly Listed Company, the Investment Representation Statement in the form attached as <u>Exhibit A-1</u> to the Exercise Notice executed by Participant; and

(e) In the event the Option or portion thereof shall be exercised pursuant to Section 3.1 above by any person or persons other than Participant, appropriate proof of the right of such person or persons to exercise the Option.

4. Other Provisions.

4.1 Restrictive Legends and Stop-Transfer Orders.

(a) Participant agrees that, in order to ensure compliance with the restrictions referred to herein, the Company may issue appropriate "stop transfer" instructions to its transfer agent, if any, and that, if the Company transfers its own securities, it may make appropriate notations to the same effect in its own records.

(b) The Company shall not be required: (i) to transfer on its books any Shares that have been sold or otherwise transferred in violation of any of the provisions of this Agreement, or (ii) to treat as owner of such Shares or to accord the right to vote or pay dividends to any purchaser or other transferee to whom such shares shall have been so transferred.

4.2 <u>Notices</u>. Any notice, demand or request required or permitted to be given by either the Company or Participant pursuant to the terms of this Agreement shall be in writing and shall be deemed given when delivered personally or deposited in the U.S. mail, as certified or registered mail, with postage prepaid, to the address of Participant shown on the records of the Company, and to the Company at its principal executive office or such other address as a party may request by notifying the other in writing or when delivered by facsimile telecommunication or electronic mail to the facsimile number or electronic mail address set forth in the Grant Notice or such other facsimile number or electronic mail address as a party may request by notifying the other in writing. Any notice which is required to be given to Participant shall, if Participant is then deceased, be given to the person entitled to exercise his or her Option by written notice under this Section 4.2. Subject to the limitations set forth in Section 232(e) of the General Corporation Law of the State of Delaware (the "<u>DGCL</u>"), Participant consents to the delivery of any notice to Participant given by the Company under the DGCL or the Company's certificate of incorporation or bylaws by (i) facsimile telecommunication to the facsimile number set forth in the Grant Notice (or to any other facsimile number for Participant in the Company's records), (ii) electronic mail address set forth in the Grant Notice (or to any other electronic mail address for Participant in the Company's records), (iii) posting on an electronic network together with separate notice to Participant of such specific posting or (iv) any other form of electronic transmission (as defined in the DGCL) directed to Participant. This consent may be revoked by Participant by written notice to the Company and may be deemed revoked in the circumstances specified in Section 232 of the DGCL.

4.3 <u>Titles</u>. Titles are provided herein for convenience only and are not to serve as a basis for interpretation or construction of this Agreement.

4.4 Submission to Jurisdiction; Waiver of Jury Trial. By Participant's electronic acceptance of this Option on the Grant Notice, the Participant irrevocably and unconditionally consents to submit to the exclusive jurisdiction of the courts of the State of California and of the United States of America, in each case located in the State of California, for any action arising out of or relating to the Plan and this Option (and agrees not to commence any litigation relating thereto except in such courts), and further agrees that service of any process, summons, notice or document by U.S. registered mail to the address contained in the records of the Company shall be effective service of process for any litigation brought against it in any such court. By accepting this Option, the Participant irrevocably and unconditionally waives any objection to the laying of venue of any litigation arising out of Plan or the Option in the courts of the State of California or the United States of America, in each case located in the State of California, and further irrevocably and unconditionally waives and agrees not to plead or claim in any such court that any such litigation brought in any such court has been brought in an inconvenient forum. By accepting this Option, the Participant irrevocably and unconditionally waives, to the fullest extent permitted by applicable law, any and all rights to trial by jury in connection with any litigation arising out of or relating to the Plan or the Option.

4.5 <u>Governing Law; Severability</u>. This Agreement and the Exercise Notice shall be administered, interpreted and enforced under the laws of the State of Delaware, without regard to the conflicts of law principles thereof. Should any provision of this Agreement be determined by a court of law to be illegal or unenforceable, the other provisions shall nevertheless remain effective and shall remain enforceable.

4.6 <u>Conformity to Securities Laws</u>. Participant acknowledges that the Plan is intended to conform to the extent necessary with all provisions of the Securities Act and the Exchange Act and any and all regulations and rules promulgated by the Securities and Exchange Commission thereunder, and state securities laws and regulations. Notwithstanding anything herein to the contrary, the Plan shall be administered, and the Option is granted and may be exercised, only in such a manner as to conform to such laws, rules and regulations. To the extent permitted by Applicable Laws, the Plan and this Agreement shall be deemed amended to the extent necessary to conform to such laws, rules and regulations.

4.7 <u>Successors and Assigns</u>. The Company may assign any of its rights under this Agreement and the Exercise Notice to single or multiple assignees, and this Agreement shall inure to the benefit of the successors and assigns of the Company. Subject to the restrictions on transfer herein set forth, this Agreement shall be binding upon Participant and his or her heirs, executors, administrators, successors and assigns.

4.8 <u>Entire Agreement</u>. The Plan, the Grant Notice, this Agreement (including all Exhibits hereto) and any written employment agreement (including an offer letter) between Participant and the Company providing for acceleration of vesting of equity awards upon certain events constitute the entire agreement of the parties and supersede in their entirety all prior undertakings and agreements of the Company and Participant with respect to the subject matter hereof.

Exhibit A

TO STOCK OPTION AGREEMENT

FORM OF EXERCISE NOTICE

Effective as of today, ______, the undersigned ("<u>Participant</u>") hereby elects to exercise Participant's option (the "<u>Option</u>") to purchase Shares of RBNC Therapeutics, Inc. (the "<u>Company</u>") under and pursuant to the Company's 2020 Equity Incentive Plan (the "<u>Plan</u>"), the option grant summary website for the Option with a date of grant as set forth below (the "<u>Grant Notice</u>") and the Stock Option Agreement associated with the Grant Notice (the "<u>Option Agreement</u>"). Capitalized terms used herein without definition shall have the meanings given in the Option Agreement.

Grant Date:	
Number of Shares as to which Option is Exercised:	
Exercise Price per Share:	\$
Total Exercise Price:	\$
Certificate to be issued or book entry to be made in name of:	
Cash Payment delivered herewith:	\$ (Representing the full exercise price for the Shares, as well as any applicable withholding tax)

Type of Option: □ Incentive Stock Option □ Non-Qualified Stock Option

1. <u>Representations of Participant</u>. Participant acknowledges that Participant has received, read and understood the Plan, the Grant Notice and the Option Agreement. Participant agrees to abide by and be bound by their terms and conditions. To the extent the Shares are issued in uncertificated form, Participant also acknowledges and agrees that this Exercise Notice constitutes the notice required by Section 151(f) of the Delaware General Corporation Law.

2. <u>Tax Consultation</u>. Participant understands that Participant may suffer adverse tax consequences as a result of Participant's purchase or disposition of the Shares. Participant represents that Participant has consulted with any tax consultants Participant deems advisable in connection with the purchase or disposition of the Shares and that Participant is not relying on the Company for any tax advice. Participant is relying solely on such advisors and not on any statements or representations of the Company or any of its agents. Participant understands that Participant (and not the Company) shall be responsible for Participant's tax liability that may arise as a result of this investment or the transactions contemplated by this Agreement.

3. Restrictive Legends and Stop-Transfer Orders.

3.1 <u>Legends</u>. Participant understands and agrees that the Company shall cause any stock certificates issued (whether in electronic or other form) evidencing the Shares to have the legends set forth below or legends substantially equivalent thereto, together with any other legends that may be required by state or federal securities laws:

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THE SHARES REPRESENTED HEREBY HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED ("ACT"), NOR HAVE THEY BEEN REGISTERED OR QUALIFIED UNDER THE SECURITIES LAWS OF ANY STATE. NO TRANSFER OF SUCH SECURITIES WILL BE PERMITTED UNLESS A REGISTRATION STATEMENT UNDER THE ACT IS IN EFFECT AS TO SUCH TRANSFER, THE TRANSFER IS MADE IN ACCORDANCE WITH RULE 144 UNDER THE ACT, OR IN THE OPINION OF COUNSEL (WHICH MAY BE COUNSEL FOR THE COMPANY) REGISTRATION UNDER THE ACT IS UNNECESSARY IN ORDER FOR SUCH TRANSFER TO COMPLY WITH THE ACT AND WITH APPLICABLE STATE SECURITIES LAWS.

THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO CERTAIN RESTRICTIONS ON TRANSFER AND A RIGHT OF FIRST REFUSAL HELD BY THE ISSUER OR ITS ASSIGNEE(S) AS SET FORTH IN THE PLAN PURSUANT TO WHICH THESE SHARES WERE ISSUED, A COPY OF WHICH MAY BE OBTAINED AT THE PRINCIPAL OFFICE OF THE ISSUER. SUCH TRANSFER RESTRICTIONS AND RIGHT OF FIRST REFUSAL ARE BINDING ON TRANSFEREES OF THESE SHARES.

3.2 Participant agrees that, in order to ensure compliance with the restrictions referred to herein, the Company may issue appropriate "stop transfer" instructions to its transfer agent, if any, and that, if the Company transfers its own securities, it may make appropriate notations to the same effect in its own records.

3.3 The Company shall not be required (i) to transfer on its books any Shares that have been sold or otherwise transferred in violation of any of the provisions of this Agreement or (ii) to treat as owner of such Shares or to accord the right to vote or pay dividends to any purchaser or other transferee to whom such Shares shall have been so transferred.

3.4 To the extent the Shares are issued in uncertificated form, (i) this Section 3 provides the Participant with notice that the Shares are subject to the aforementioned restrictions in satisfaction of the notice requirement set forth in Section 151(f) of the Delaware General Corporation Law and (ii) the recording of the Shares in the books and records of the Company shall be accompanied by the legends included in Section 3.1.

4. <u>Notices</u>. Any notice required or permitted hereunder shall be given in accordance with the provisions set forth in Section 4.2 of the Option Agreement.

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5. Lock-Up Period. Participant shall not offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, lend, or otherwise transfer or dispose of, directly or indirectly, any Common Stock (or other securities) of the Company or enter into any swap, hedging or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of any Common Stock (or other securities) of the Company held by Participant (other than those included in the registration) for a period specified by the representative of the underwriters of Common Stock (or other securities) of the Company not to exceed 180 days following the effective date of any registration statement of the Company filed under the Securities Act (or such other period as may be requested by the Company or the underwriters to accommodate regulatory restrictions on (i) the publication or other distribution of research reports and (ii) analyst recommendations and opinions, including, but not limited to, the restrictions contained in FINRA Rule 2241, or any successor provisions or amendments thereto).

Participant agrees to execute and deliver such other agreements as may be reasonably requested by the Company or the underwriter which are consistent with the foregoing or which are necessary to give further effect thereto. In addition, if requested by the Company or the representative of the underwriters of Common Stock (or other securities) of the Company, Participant shall provide, within ten days of such request, such information as may be required by the Company or such representative in connection with the completion of any public offering of the Company's securities pursuant to a registration statement filed under the Securities Act. The obligations described in this Section 5 shall not apply to a registration relating solely to employee benefit plans on Form S-1 or Form S-8 or similar forms that may be promulgated in the future, or a registration relating solely to a Securities and Exchange Commission Rule 145 transaction on Form S-4 or similar forms that may be promulgated in the future. The Company may impose stop-transfer instructions with respect to the shares of Common Stock (or other securities) subject to the foregoing restriction until the end of said 180 day (or other) period. Participant agrees that any transfere of the Option or shares acquired pursuant to the Option shall be bound by this Section 5.

6. <u>Further Instruments</u>. Participant hereby agrees to execute such further instruments, including, without limitation, the Investment Representation Statement in the form attached hereto as <u>Exhibit A-1</u>, and to take such further action as the Company determines are reasonably necessary to carry out the purposes and intent of this Agreement.

7. Entire Agreement. The Plan, the Grant Notice, the Investment Representation Statement in the form attached hereto as Exhibit A-1, the Option Agreement and any written employment agreement (including an offer letter) between Participant and the Company providing for acceleration of vesting of equity awards upon certain events are incorporated herein by reference. This Agreement, the Plan, the Grant Notice, the Investment Representation Statement in the form attached hereto as Exhibit A-1, the Option Agreement and any written employment agreement (including an offer letter) between Participant and the Company providing for acceleration of vesting of equity awards upon certain events constitute the entire agreement of the parties and supersede in their entirety all prior undertakings and agreements of the Company and Participant with respect to the subject matter hereof.

[Signature Page Follows]

A-3

ACCEPTED BY: RBNC THERAPEUTICS, INC.

_

By: Print Name:

SUBMITTED BY PARTICIPANT:

By:		
Print Name:		
Address:		

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Exhibit A-1

TO EXERCISE NOTICE

INVESTMENT REPRESENTATION STATEMENT

PARTICIPANT	:	
COMPANY	:	RBNC Therapeutics, Inc.
SECURITY	:	COMMON STOCK
AMOUNT	:	
DATE	:	

In connection with the purchase of the above-listed shares of Common Stock (the "<u>Securities</u>") of RBNC Therapeutics, Inc. (the "<u>Company</u>"), the undersigned ("<u>Participant</u>") represents to the Company the following:

1. Participant is aware of the Company's business affairs and financial condition and has acquired sufficient information about the Company to reach an informed and knowledgeable decision to acquire the Securities. Participant is acquiring these Securities for investment for Participant's own account only and not with a view to, or for resale in connection with, any "distribution" thereof within the meaning of the United States Securities Act of 1933, as amended (the "Securities Act").

2. Participant acknowledges and understands that the Securities constitute "restricted securities" under the Securities Act and have not been registered under the Securities Act in reliance upon a specific exemption therefrom, which exemption depends upon, among other things, the bona fide nature of Participant's investment intent as expressed herein. In this connection, Participant understands that, in the view of the United States Securities and Exchange Commission, the statutory basis for such exemption may be unavailable if Participant's representation was predicated solely upon a present intention to hold these Securities for the minimum capital gains period specified under tax statutes, for a deferred sale, for or until an increase or decrease in the market price of the Securities, or for a period of one year or any other fixed period in the future. Participant further understands that the Securities must be held indefinitely unless they are subsequently registered under the Securities. Participant understands that any certificate evidencing the Securities will be imprinted with a legend which prohibits the transfer of the Securities unless they are registered or such registration is not required in the opinion of counsel satisfactory to the Company and any other legend required under applicable securities laws or agreements.

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3. Participant is familiar with the provisions of Rule 701 and Rule 144, each promulgated under the Securities Act, which, in substance, permit limited public resale of "restricted securities" acquired, directly or indirectly from the issuer thereof, in a non-public offering subject to the satisfaction of certain conditions. Rule 701 provides that if the issuer qualifies under Rule 701 at the time of the grant of the Option to Participant, the exercise will be exempt from registration under the Securities Act. In the event the Company becomes subject to the reporting requirements of Section 13 or 15(d) of the United States Securities Exchange Act of 1934, 90 days thereafter (or such longer period as any market stand-off agreement may require) the Securities exempt under Rule 701 may under present law be resold, subject to the satisfaction of certain of the conditions specified by Rule 144, including: (1) the resale being made through a broker in an unsolicited "broker's transaction" or in transactions directly with a market maker (as said term is defined under the United States Securities Exchange Act of 1934); and, in the case of an affiliate, (2) the availability of certain public information about the Company, (3) the amount of Securities being sold during any three (3) month period not exceeding the limitations specified in Rule 144(e), and (4) the timely filing of a Form 144, if applicable.

In the event that the Company does not qualify under Rule 701 at the time of grant of the Option, then the Securities may be resold in certain limited circumstances subject to the provisions of Rule 144, which, effective as of February 15, 2008, requires the resale to occur not less than six months, or, in the event the Company is not subject to the reporting requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, not less than one year, after the later of the date the Securities were sold by the Company or the date the Securities were sold by an affiliate of the Company, within the meaning of Rule 144; and, in the case of acquisition of the Securities by an affiliate, the satisfaction of the conditions set forth in sections (1), (2), (3) and (4) of the paragraph immediately above or, in the case of a non-affiliate who subsequently hold the Securities less than one year, the satisfaction of the conditions set forth in section (2) of the paragraph immediately above.

4. Participant further understands that in the event all of the applicable requirements of Rule 701 or 144 are not satisfied, registration under the Securities Act, compliance with Regulation A, or some other registration exemption will be required; and that, notwithstanding the fact that Rules 144 and 701 are not exclusive, the Staff of the United States Securities and Exchange Commission has expressed its opinion that persons proposing to sell private placement securities other than in a registered offering and otherwise than pursuant to Rules 144 or 701 will have a substantial burden of proof in establishing that an exemption from registration is available for such offers or sales, and that such persons and their respective brokers who participate in such transactions do so at their own risk. Participant understands that no assurances can be given that any such other registration exemption will be available in such event.

Signature of Participant:

Date:

A-1-2

RBNC THERAPEUTICS, INC.

2020 EQUITY INCENTIVE PLAN

RESTRICTED STOCK PURCHASE AGREEMENT

Pursuant to the award summary tab (the "<u>Grant Notice</u>") on the website to which this Restricted Stock Purchase Agreement (this "<u>Agreement</u>") is associated, RBNC Therapeutics, Inc., a Delaware corporation (the "<u>Company</u>"), has granted to the holder set forth in the Grant Notice (the "<u>Purchaser</u>") the right to purchase the number of shares of the Company's Common Stock set forth in the Grant Notice (the "<u>Shares</u>") at the purchase price set forth in the Grant Notice (the "<u>Stock Purchase Right</u>") under the Company's 2020 Equity Incentive Plan (the "<u>Plan</u>"). By his or her electronic acceptance of the Stock Purchase Right on the Grant Notice, Purchaser agrees to be bound by the terms and conditions of the Plan, this Agreement and the Grant Notice. Purchaser has reviewed this Agreement, the Plan and the Grant Notice in their entirety, has had an opportunity to obtain the advice of counsel prior to accepting the Stock Purchase Right and fully understands the provisions of the Grant Notice, this Agreement and the Plan. Purchaser hereby agrees to accept as binding, conclusive and final all decisions or interpretations of the Administrator of the Plan upon any questions arising under the Plan, the Grant Notice or this Agreement. To the extent the Shares are issued in uncertificated form, Purchaser also acknowledges and agrees that this Agreement constitutes the notice required by Section 151(f) of the General Corporation Law of the State of Delaware (the "<u>DGCL</u>"). If Purchaser is married or in a registered domestic partner has signed the Consent of Spouse or Domestic Partner attached to this Agreement as <u>Exhibit A</u>.

1. General.

1.1 <u>Termination Date</u>. This Stock Purchase Right shall terminate if not exercised prior to the 31st day following the Grant Date (as defined below) set forth in the Grant Notice (the <u>"Termination Date</u>").

1.2 Defined Terms. Capitalized terms not specifically defined herein shall have the meanings specified in the Plan.

1.3 <u>Incorporation of Terms of Plan</u>. The Shares are subject to the terms and conditions of the Plan and the Grant Notice, each of which is incorporated herein by reference.

2. Grant of Restricted Stock.

2.1 <u>Grant of Restricted Stock</u>. In consideration of Purchaser's agreement to remain in the employ of the Company or its subsidiaries, if Purchaser is an Employee, or to continue to provide services to the Company or its subsidiaries, if Purchaser is a Consultant, or to serve as a Director, if Purchaser is a Director, and for other good and valuable consideration, effective as of the grant/issued date set forth in the Grant Notice (the "<u>Grant</u> <u>Date</u>"), the Company irrevocably grants to Purchaser the right to purchase the Shares at any time prior to the Termination Date, upon the terms and conditions set forth in the Plan and this Agreement. 2.2 <u>Purchase Price</u>. The purchase price of the Shares shall be as set forth in the Grant Notice, without commission or other charge (the "<u>Purchase Price</u>"). Unless otherwise determined by the Administrator and in accordance with the terms of the Plan, the Purchase Price shall be paid by cash or check.

2.3 <u>Issuance of Shares</u>. The issuance of the Shares under this Agreement shall occur at the principal office of the Company simultaneously with the execution of this Agreement by the parties or on such other date as the Company and Purchaser shall agree (the "<u>Issuance Date</u>"). Subject to the provisions of Section 3 below, on the Issuance Date, the Company shall issue the Shares.

2.4 <u>Delivery of Certificates; Book Entry Form</u>. Upon receipt by the Company of the Purchase Price, the Company shall issue to the Purchaser one or more certificates (which may be issued by electronic or other means) in the name of the Purchaser for that number of Shares purchased by the Purchaser. The Purchaser agrees that the Shares shall be subject to the Repurchase Option provisions in Section 3 and the other restrictions set forth in this Agreement (collectively, the "<u>Restrictions</u>"). To the extent the Shares will be issued in uncertificated form, the Shares shall be recorded in the name of the Purchaser in the books and records of the Company's transfer agent with appropriate notations regarding the Restrictions.

2.5 <u>Conditions to Issuance of Shares</u>. The Shares, or any portion thereof, may be either previously authorized but unissued shares or issued shares which have then been reacquired by the Company. Such Shares shall be fully paid and nonassessable. The Company shall not be required to issue or deliver any Shares prior to fulfillment of all of the following conditions:

(a) The admission of such Shares to listing on all stock exchanges on which the Company's Common Stock is then listed; and

(b) The completion of any registration or other qualification of such shares under any state or federal law or under rulings or regulations of the Securities and Exchange Commission or of any other governmental regulatory body, which the Administrator shall, in its absolute discretion, deem necessary or advisable; and

(c) The obtaining of any approval or other clearance from any state or federal governmental agency which the Administrator shall, in its absolute discretion, determine to be necessary or advisable; and

(d) The receipt by the Company of full payment for such Shares, including payment of all amounts which, under federal, state or local tax law, the Company (or other employer corporation) is required to withhold upon issuance of such Shares; and

(e) The lapse of such reasonable period of time following the Issuance Date as the Administrator may from time to time establish for reasons of administrative convenience.

2.6 <u>Consideration to the Company</u>. In consideration of the issuance of the Shares by the Company, Purchaser agrees to render faithful and efficient services to the Company or any subsidiary. Nothing in the Plan or this Agreement shall confer upon Purchaser any right to (a) continue in the employ of the Company or any subsidiary or shall interfere with or restrict in any way the rights of the Company and its subsidiaries, which are hereby expressly reserved, to discharge Purchaser, if Purchaser is an Employee, or (b) continue to provide services to the Company or any subsidiary or shall interfere with or restrict in any way the rights of the Company or its subsidiaries, which are hereby expressly reserved, to terminate the services of Purchaser, if Purchaser is a Consultant, at any time for any reason whatsoever, with or without Cause (as defined below), except to the extent expressly provided otherwise in a written agreement between the Company and Purchaser. For purposes of this Agreement, if Purchaser is party to an employment or severance agreement with the Company that contains a definition of "cause" for termination of employment, "Cause" shall have the meaning ascribed to such term in such agreement. Otherwise, "Cause" shall mean willful misconduct by the Purchaser or willful failure by the Purchaser to perform his or her responsibilities to the Company (including, without limitation, breach by the Purchaser of any provision of any employment, consulting, advisory, nondisclosure, non-competition or other similar agreement between the Purchaser and the Company), as determined by the Company, which determination shall be conclusive.

3. Repurchase Option.

3.1 If Purchaser ceases to be a Service Provider for any reason, including for Cause, death and Disability, the Company or its assignee shall have the right and option to purchase from Purchaser, or Purchaser's personal representative, as the case may be, all of Purchaser's Unreleased Shares (as defined below) as of the date on which Purchaser ceases to be a Service Provider (the "<u>Repurchase Option</u>") at a price per share equal to the lesser of (i) the fair market value of the shares at the time the Repurchase Option is exercised, as determined by the Company's board of directors and (ii) the purchase price paid by Purchaser for such Shares in connection with the Stock Purchase Rights (the "<u>Repurchase Price</u>") for a period of 90 days after said termination (the "<u>Repurchase Period</u>"). **Purchaser hereby acknowledges that the Company has no obligation, either now or in the future, to repurchase any of the shares of Common Stock, whether vested or unvested, at any time. Further, Purchaser acknowledges and understands that, in the event that the Company repurchases shares, the repurchase price may be less than the price Purchaser originally paid and that Purchaser bears any risk associated with the potential loss in value**.

3.2 The Company shall be deemed to have exercised the Repurchase Option as of the last day of the Repurchase Period, unless an officer of the Company notifies the Purchaser during the Repurchase Period in writing (delivered or mailed as provided in Section 8) that the Company expressly declines to exercise its Repurchase Option for some or all of the Unreleased Shares. During the Repurchase Period, the Company shall pay to the Purchaser the Repurchase Option at the Company's option in cash or by offset against any indebtedness owing to the Company by Purchaser (including without limitation any Note given in payment for the Unreleased Shares), or by a combination of both. Upon exercise of the Repurchase Option, the Company shall become the legal and beneficial owner of the Unreleased Shares being repurchased and all rights and interests therein or related thereto, and all of the Purchasers rights with respect to such shares shall immediately cease and terminate, except only the right of the Purchaser to receive payment of the Repurchase Price for

the Unreleased Shares being repurchased, and the Company shall have the right to transfer to its own name the Unreleased Shares being repurchased by the Company, without further action by Purchaser. The Company shall make such notations as it determines necessary or appropriate in the books and records of the Company to reflect any repurchase under this Section 3.2.

3.3 If the Company declines in writing to exercise its Repurchase Option pursuant Section 3.2, the Repurchase Option shall terminate.

3.4 One hundred percent (100%) of the Shares shall initially be subject to the Repurchase Option. The Shares shall be released from the Repurchase Option in accordance with the vesting schedule set forth in the Grant Notice, subject to Purchaser not experiencing a Termination of Service on or prior to such date, (the "<u>Vesting Schedule</u>") until all Shares are released from the Repurchase Option. Fractional Shares shall be rounded to the nearest whole share.

3.5 Any Shares which from time to time have not yet been released from the Company's Repurchase Option pursuant to Section 3.4 above shall be referred to herein as "<u>Unreleased Shares</u>."

4. Transferability of the Shares; Escrow.

4.1 Purchaser hereby authorizes and directs the Secretary of the Company, or such other person designated by the Company from time to time as escrow agent, to transfer the Unreleased Shares as to which the Repurchase Option has been exercised from Purchaser's name to the Company's name on the books and records of the Company.

4.2 By executing this Agreement, Purchaser hereby appoints the Secretary, or any other person designated by the Company from time to time as escrow agent, as its attorney-in-fact to sell, assign and transfer unto the Company, such Unreleased Shares, if any, repurchased by the Company pursuant to the Repurchase Option. The Unreleased Shares shall be held by the Secretary, or such other person designated by the Company from time to time, in escrow, until the earlier of the date the Company exercises its Repurchase Option as provided in Section 3 above or the date such Unreleased Shares become vested. As a further condition to the Company's obligations under this Agreement, the spouse or registered domestic partner of Purchaser, if any, shall execute and deliver to the Company the Consent of Spouse or Domestic Partner attached hereto as <u>Exhibit A</u>.

4.3 The Company, or its designee, shall not be liable for any act it may do or omit to do with respect to holding the Shares in escrow and while acting in good faith and in the exercise of its judgment.

4.4 Transfer or sale of the Shares is subject to restrictions on transfer imposed by Section 5 of this Agreement and any applicable state and federal securities laws. Any transferee shall hold such Shares subject to all of the provisions hereof and shall acknowledge the same by written acceptance of a copy of this Agreement. Any transfer or attempted transfer of any of the Shares not in accordance with the terms of this Agreement shall be void and the Company may enforce the terms of this Agreement by stop transfer instructions or similar actions by the Company and its agents or designees.

5. Limitations on Transfer. In addition to any other limitation on transfer created by applicable securities laws, Purchaser shall not sell, assign, transfer, pledge, hypothecate or otherwise dispose of, by operation of law or otherwise (collectively "<u>Transfer</u>") any Unreleased Shares. After any Unreleased Shares have vested subject to the Vesting Schedule, Purchaser shall not Transfer any interest in such Shares except in compliance with the provisions herein, in the Company's Bylaws and applicable securities laws. Furthermore, the Shares shall be subject to a right of first refusal in favor of the Company or its assignees as set forth in the Company's Bylaws. Notwithstanding the foregoing, the Purchaser may, subject to compliance with the transfer restrictions set forth in the Company's Bylaws, transfer Unreleased Shares to or for the benefit of any spouse, children, parents, uncles, aunts, siblings, grandchildren and any other relatives approved by the Board of Directors (collectively, "<u>Approved Relatives</u>") or to a trust established solely for the benefit of the Purchaser and/or Approved Relatives, <u>provided</u> that such Shares shall remain subject to the Company a written instrument and any other applicable agreements, and such permitted transferee shall, as a condition to such transfer, deliver to the Company a written instrument confirming that such transfere on its books any of the Shares that have been sold or otherwise transferred in violation of any of the provisions of the provisions of the provisions of the Company's Bylaws or (b) to treat as owner of such Shares or to accord the right to vote or pay dividends to any purchaser or other transferee to whom any such Shares shall have been so sold or transferred.

6. <u>Ownership</u>, <u>Voting Rights</u>, <u>Duties</u>. This Agreement shall not affect in any way the ownership, voting rights or other rights or duties of Purchaser, except as specifically provided herein.

7. <u>Adjustment for Stock Split</u>. All references to the number of Shares and the purchase price of the Shares in this Agreement shall be appropriately adjusted to reflect any stock split, stock dividend or other change in the Shares which may be made by the Company after the date of this Agreement.

8. <u>Notices</u>. Any notice, demand or request required or permitted to be given by either the Company or Purchaser pursuant to the terms of this Agreement shall be in writing and shall be deemed given when delivered personally or deposited in the U.S. mail, as certified or registered mail, with postage prepaid, to the address of Purchaser shown on the records of the Company, and to the Company at its principal executive office or such other address as a party may request by notifying the other in writing or when delivered by facsimile telecommunication or electronic mail to the facsimile number or electronic mail address set forth in the Grant Notice or such other facsimile number or electronic mail address as a party may request by notifying the DGCL or the Company's certificate of incorporation or bylaws by (i) facsimile telecommunication to the facsimile number set forth in the Grant Notice (or to any other facsimile number for Purchaser in the Company's records), (ii) electronic mail to the electronic mail address set forth in the Grant Notice (or to any other electronic mail address for Purchaser in the Company's records), (iii) posting on an electronic network together with separate notice to Purchaser of such specific posting or (iv) any other form of electronic transmission (as defined in the DGCL) directed to Purchaser. This consent may be revoked by Purchaser by written notice to the Company and may be deemed revoked in the circumstances specified in Section 232 of the DGCL.

9. <u>Survival of Terms</u>. This Agreement shall apply to and bind Purchaser and the Company and their respective permitted assignees and transferees, heirs, legatees, executors, administrators and legal successors.

10. <u>Section 83(b) Election for Unreleased Shares</u>. Purchaser hereby acknowledges that he or she has been informed that, with respect to the purchase of Unreleased Shares, that unless an election is filed by Purchaser with the Internal Revenue Service and, if necessary, the proper state taxing authorities, <u>within 30 days</u> of the purchase of the Shares, electing pursuant to Section 83(b) of the Code (and similar state tax provisions if applicable) to be taxed currently on any difference between the purchase price of the Shares and their Fair Market Value on the date of purchase, there will be a recognition of taxable income to Purchaser, measured by the excess, if any, of the fair market value of the Shares, at the time the Company's Repurchase Option lapses over the purchase price for the Shares. Purchaser represents that Purchaser has consulted any tax consultant(s) Purchaser deems advisable in connection with the purchase of the Shares or the filing of the Election under Section 83(b) and similar tax provisions.

PURCHASER ACKNOWLEDGES THAT IT IS PURCHASER'S SOLE RESPONSIBILITY AND NOT THE COMPANY'S TO FILE TIMELY THE ELECTION UNDER SECTION 83(b), EVEN IF PURCHASER REQUESTS THE COMPANY OR ITS REPRESENTATIVE TO MAKE THIS FILING ON PURCHASER'S BEHALF.

11. <u>Representations</u>. Purchaser has reviewed with his or her own tax advisors the federal, state, local and foreign tax consequences of this investment and the transactions contemplated by this Agreement. Purchaser is relying solely on such advisors and not on any statements or representations of the Company or any of its agents. Purchaser understands that Purchaser (and not the Company) shall be responsible for his or her own tax liability that may arise as a result of this investment or the transactions contemplated by this Agreement.

12. Restrictive Legends and Stop-Transfer Orders.

12.1 Any stock certificate(s) (whether in electronic or other form) evidencing the Shares issued hereunder shall be endorsed with the following legends and any other legends that may be required by state or federal securities laws:

THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO A RIGHT OF REPURCHASE IN FAVOR OF RBNC THERAPEUTICS, INC. (THE "COMPANY") AND MAY BE TRANSFERRED ONLY IN ACCORDANCE WITH THE TERMS OF A RESTRICTED STOCK PURCHASE AGREEMENT BETWEEN THE COMPANY AND THE STOCKHOLDER, A COPY OF WHICH IS ON FILE WITH THE SECRETARY OF THE COMPANY.

THE SHARES REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"), AND THEY HAVE BEEN ACQUIRED FOR INVESTMENT AND NOT WITH A VIEW TO, OR IN CONNECTION WITH, THE SALE OR DISTRIBUTION THEREOF. NO SUCH SALE OR DISTRIBUTION MAY BE EFFECTED WITHOUT AN EFFECTIVE REGISTRATION STATEMENT RELATED THERETO OR AN OPINION OF COUNSEL IN A FORM SATISFACTORY TO THE COMPANY THAT SUCH REGISTRATION IS NOT REQUIRED UNDER THE SECURITIES ACT.

THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO A RIGHT OF FIRST REFUSAL IN FAVOR OF THE COMPANY AND/OR ITS ASSIGNEE(S) AND TRANSFER RESTRICTIONS AS PROVIDED IN THE BYLAWS OF THE COMPANY THAT PROVIDES FOR TRANSFER RESTRICTIONS AT THE DISCRETION OF THE COMPANY. SUCH RIGHT OF FIRST REFUSAL AND TRANSFER RESTRICTIONS ARE BINDING UPON TRANSFERES OF THESE SECURITIES. COPIES OF THE BYLAWS OF THE COMPANY MAY BE OBTAINED UPON WRITTEN REQUEST TO THE SECRETARY OF THE COMPANY.

The Company may be authorized from time to time pursuant to its certificate of incorporation to issue more than 1 class or series of stock. In such case and at any time or from time to time thereafter the Company will furnish without charge to you upon request the powers, designations, preferences and relative participating, optional or other special rights of each class of stock or series thereof and the qualifications, limitations or restrictions of such preferences and/or rights.

12.2 Purchaser agrees that, in order to ensure compliance with the restrictions referred to herein, the Company may issue appropriate "stop transfer" instructions to its transfer agent, if any, and that, if the Company transfers its own securities, it may make appropriate notations to the same effect in its own records.

12.3 The Company shall not be required: (i) to transfer on its books any Shares that have been sold or otherwise transferred in violation of any of the provisions of this Agreement, or (ii) to treat as owner of such Shares or to accord the right to vote or pay dividends to any purchaser or other transferee to whom such Shares shall have been so transferred.

12.4 To the extent the Shares are issued in uncertificated form, (i) this Section 12 provides the Purchaser with notice that the Shares are subject to the aforementioned restrictions in satisfaction of the notice requirement set forth in Section 151(f) of the DGCL and (ii) the recording of the Shares in the books and records of the Company shall be accompanied by the legends included in Section 12.1.

13. <u>Titles</u>. Titles are provided herein for convenience only and are not to serve as a basis for interpretation or construction of this Agreement.

14. <u>Conformity to Securities Laws</u>. Purchaser acknowledges that the Plan is intended to conform to the extent necessary with all provisions of the Securities Act and the Exchange Act and any and all regulations and rules promulgated by the Securities and Exchange Commission thereunder, and state securities laws and regulations. Notwithstanding anything herein to the contrary, the Plan shall be administered, and the Shares are to be issued, only in such a manner as to conform to such laws, rules and regulations. To the extent permitted by applicable law, the Plan and this Agreement shall be deemed amended to the extent necessary to conform to such laws, rules and regulations. Purchaser shall not transfer in any manner the Shares issued pursuant to this Agreement, without regard to whether such Shares are no longer subject to the Repurchase Option, unless (i) the transfer is pursuant to an effective registration statement under the Securities Act, or the rules and regulations in effect thereunder or (ii) counsel for the Company shall have reasonably concluded that no such registration is required because of the availability of an exemption from registration under the Securities Act.

15. Lock-Up Period. Purchaser shall not offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, lend, or otherwise transfer or dispose of, directly or indirectly, any Shares (or other securities) of the Company or enter into any swap, hedging or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of any Shares (or other securities) of the Company held by Purchaser (other than those included in the registration) for a period specified by the representative of the underwriters of Common Stock (or other securities) of the Company not to exceed 180 days following the effective date of any registration statement of the Company filed under the Securities Act (or such other period as may be requested by the Company or the underwriters to accommodate regulatory restrictions on (i) the publication or other distribution of research reports and (ii) analyst recommendations and opinions, including, but not limited to, the restrictions contained in FINRA Rule 2241, or any successor provisions or amendments thereto); provided, however, that nothing contained in this Section shall prevent the Company from exercising the Repurchase Option during the lock-up period.

Purchaser agrees to execute and deliver such other agreements as may be reasonably requested by the Company or the underwriter which are consistent with the foregoing or which are necessary to give further effect thereto. In addition, if requested by the Company or the representative of the underwriters of Common Stock (or other securities) of the Company, Purchaser shall provide, within ten days of such request, such information as may be required by the Company or such representative in connection with the completion of any public offering of the Company's securities pursuant to a registration statement filed under the Securities Act. The obligations described in this Section 15 shall not apply to a registration relating solely to employee benefit plans on Form S-1 or Form S-8 or similar forms that may be promulgated in the future, or a registration relating solely to a Securities and Exchange Commission Rule 145 transaction on Form S-4 or similar forms that may be promulgated in the future. The Company may impose stop-transfer instructions with respect to the shares of Common Stock (or other securities) subject to the foregoing restriction until the end of said 180 day (or other) period. Purchaser agrees that any transfere of the Shares shall be bound by this Section 15.

16. <u>Further Instruments</u>. Purchaser hereby agrees to execute such further instruments and to take such further action as may be reasonably necessary to carry out the purposes and intent of this Agreement including, without limitation, the Investment Representation Statement, in the form attached hereto as <u>Exhibit B</u>.

17. <u>Governing Law; Severability</u>. This Agreement shall be governed by and construed in accordance with the laws of the State of Delaware excluding that body of law pertaining to conflicts of law. Should any provision of this Agreement be determined by a court of law to be illegal or unenforceable, the other provisions shall nevertheless remain effective and shall remain enforceable.

18. Rules Particular To Specific Countries.

18.1 <u>Generally</u>. Purchaser shall, if required by the Administrator, enter into an election with the Company or a subsidiary (in a form approved by the Company) under which any liability to the Company's (or a subsidiary's) Tax Liability, including, but not limited to, National Insurance Contributions ("<u>NICs</u>") and Fringe Benefit Tax ("<u>FBT</u>"), is transferred to and met by Purchaser. For purposes of this Section 18, Tax Liability shall mean any and all liability under applicable non-U.S. laws, rules or regulations from any income tax, the Company's (or a subsidiary's) NICs, FBT or similar liability and Purchaser's NICs, FBT or similar liability under non-U.S. laws that are attributable to: (A) the grant of, or any other benefit derived by the Purchaser from the Shares; (B) the acquisition by Purchaser of the Shares; or (C) the disposal of any Shares acquired.

18.2 Tax Indemnity. Purchaser shall indemnify and keep indemnified the Company and any of its subsidiaries from and against any Tax Liability.

* * * * *

<u>Exhibit A</u>

CONSENT OF SPOUSE OR DOMESTIC PARTNER

I, ______, spouse or registered domestic partner of ______, have read and approve the Restricted Stock Purchase Agreement dated ______, ____, between my spouse or registered domestic partner and RBNC Therapeutics, Inc.. In consideration of granting of the right to my spouse or registered domestic partner to purchase shares of common stock of RBNC Therapeutics, Inc. set forth in the Restricted Stock Purchase Agreement, I hereby appoint my spouse or registered domestic partner as my attorney-in-fact in respect to the exercise of any rights under the Agreement and agree to be bound by the provisions of the Restricted Stock Purchase Agreement insofar as I may have any rights in said Restricted Stock Purchase Agreement or any shares issued pursuant thereto under the community property laws or similar laws relating to marital property in effect in the state of our residence as of the date of the signing of the foregoing Restricted Stock Purchase Agreement.

Dated: _____, ____

Signature of Spouse or Registered Domestic Partner

Exhibit B

INVESTMENT REPRESENTATION STATEMENT

PURCHASER	:	
COMPANY	:	RBNC Therapeutics, Inc.
SECURITY	:	Common Stock
AMOUNT	:	
DATE	:	

In connection with the purchase of the above-listed shares of Common Stock (the "<u>Securities</u>") of RBNC Therapeutics, Inc., a Delaware corporation (the "<u>Company</u>"), the undersigned ("<u>Purchaser</u>") represents to the Company the following:

1. Purchaser is aware of the Company's business affairs and financial condition and has acquired sufficient information about the Company to reach an informed and knowledgeable decision to acquire the Securities. Purchaser is acquiring these Securities for investment for Purchaser's own account only and not with a view to, or for resale in connection with, any "distribution" thereof within the meaning of the Securities Act of 1933, as amended (the "Securities Act").

2. Purchaser acknowledges and understands that the Securities constitute "restricted securities" under the Securities Act and have not been registered under the Securities Act in reliance upon a specific exemption therefrom, which exemption depends upon, among other things, the bona fide nature of Purchaser's investment intent as expressed herein. Purchaser understands that, in the view of the Securities and Exchange Commission, the statutory basis for such exemption may be unavailable if Purchaser's representation was predicated solely upon a present intention to hold these Securities for the minimum capital gains period specified under tax statutes, for a deferred sale, for or until an increase or decrease in the market price of the Securities, or for a period of one year or any other fixed period in the future. Purchaser further understands that the Securities must be held indefinitely unless they are subsequently registered under the Securities Act or an exemption from such registration is available. Purchaser further acknowledges and understands that the Company is under no obligation to register the Securities. Purchaser understands that any certificate or book entry evidencing the Securities will be imprinted with a legend or notation which prohibits the transfer of the Securities unless they are registered or such registration is not required in the opinion of counsel satisfactory to the Company and any other legend or notation required under applicable state securities laws or agreements.

3. Purchaser is familiar with the provisions of Rule 701 and Rule 144, each promulgated under the Securities Act, which, in substance, permit limited public resale of "restricted securities" acquired, directly or indirectly from the issuer thereof, in a non-public offering subject to the satisfaction of certain conditions. Rule 701 provides that if the issuer qualifies under Rule 701 at the time of the grant of the Stock Purchase Right to Purchaser, the exercise will be exempt from registration under the Securities Act. In the event the Company

becomes subject to the reporting requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, as amended (the "<u>Exchange Act</u>"), 90 days thereafter (or such longer period as any market stand-off agreement may require) the Securities exempt under Rule 701 may under present law be resold, subject to the satisfaction of certain of the conditions specified by Rule 144, including: (1) the resale being made through a broker in an unsolicited "broker's transaction" or in transactions directly with a market maker (as said term is defined under the Exchange Act); and, in the case of an affiliate, (2) the availability of certain public information about the Company, (3) the amount of Securities being sold during any three (3) month period not exceeding the limitations specified in Rule 144(e), and (4) the timely filing of a Form 144, if applicable.

In the event that the Company does not qualify under Rule 701 at the time of grant of the Stock Purchase Right, then the Securities may be resold in certain limited circumstances subject to the provisions of Rule 144, which requires the resale to occur not less than six months, or, in the event the Company is not subject to the reporting requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, not less than one year, after the later of the date the Securities were sold by the Company or the date the Securities were sold by an affiliate of the Company, within the meaning of Rule 144; and, in the case of acquisition of the Securities by an affiliate, the satisfaction of the conditions set forth in sections (1), (2), (3) and (4) of the paragraph immediately above or, in the case of a non-affiliate who subsequently holds the Securities less than one year, the satisfaction of the conditions set forth in section (2) of the paragraph immediately above..

4. Purchaser further understands that in the event all of the applicable requirements of Rule 701 or 144 are not satisfied, registration under the Securities Act, compliance with Regulation A, or some other registration exemption will be required; and that, notwithstanding the fact that Rules 144 and 701 are not exclusive, the Staff of the Securities and Exchange Commission has expressed its opinion that persons proposing to sell private placement securities other than in a registered offering and otherwise than pursuant to Rules 144 or 701 will have a substantial burden of proof in establishing that an exemption from registration is available for such offers or sales, and that such persons and their respective brokers who participate in such transactions do so at their own risk. Purchaser understands that no assurances can be given that any such other registration exemption will be available in such event.

Signature of Purchaser:

Print Name:

Date: _____, ____

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FORM OF 83(B) ELECTION AND INSTRUCTIONS

These instructions are provided to assist you if you choose to make an election under Section 83(b) of the Internal Revenue Code, as amended, with respect to the shares of common stock of RBNC Therapeutics, Inc. transferred to you. **Please consult with your personal tax advisor as to whether an election of this nature will be in your best interests in light of your personal tax situation.**

The executed original of the Section 83(b) election must be filed with the Internal Revenue Service not later than 30 days after the date the shares were transferred to you. PLEASE NOTE: There is no remedy for failure to file on time. The steps outlined below should be followed to ensure the election is mailed and filed correctly and in a timely manner. ALSO, PLEASE NOTE: If you make the Section 83(b) election, the election is irrevocable.

Complete Section 83(b) election form (attached as <u>Attachment 1</u>) and make three (3) copies of the signed election form.

Prepare the cover letter to the Internal Revenue Service (sample letter attached as <u>Attachment 2</u>).

Send the cover letter with the originally executed Section 83(b) election form and one (1) copy via certified mail, return receipt requested to the Internal Revenue Service at the address of the Internal Revenue Service where you file your personal tax returns. We suggest that you have the package date-stamped at the post office. The post office will provide you with a certified receipt that includes a dated postmark. Enclose a self-addressed, stamped envelope so that the Internal Revenue Service may return a date-stamped copy to you. However, your postmarked receipt is your proof of having timely filed the Section 83(b) election if you do not receive confirmation from the Internal Revenue Service.

One (1) copy must be sent to RBNC Therapeutics, Inc. for its records. Note that you do **not** need to attach a copy of your election with your federal income tax return for the applicable calendar year.

Retain the Internal Revenue Service file stamped copy (when returned) for your records.

Please consult your personal tax advisor for the address of the office of the Internal Revenue Service to which you should mail your election form.

ATTACHMENT 1

ELECTION UNDER INTERNAL REVENUE CODE SECTION 83(B)

The undersigned taxpayer hereby elects, pursuant to Section 83(b) of the Internal Revenue Code of 1986, as amended, to include in taxpayer's gross income for the current taxable year the amount of any compensation taxable to taxpayer in connection with taxpayer's receipt of shares (the "<u>Shares</u>") of Common Stock of RBNC Therapeutics, Inc., a Delaware corporation (the "<u>Company</u>").

The name, address and taxpayer identification number of the undersigned taxpayer are:

SSN:_____

Description of the property with respect to which the election is being made:

_____) Shares of the Company.

The date on which the property was transferred was ______. The taxable year to which this election relates is calendar year _____.

Nature of restrictions to which the property is subject:

The Shares are subject to repurchase by the Company or its assignee upon the occurrence of certain events. This repurchase right lapses based upon the continued performance of services by the taxpayer over time.

The fair market value at the time of transfer (determined without regard to any lapse restrictions, as defined in Treasury Regulation Section 1.83-3(i)) of the Shares was $_$ per Share x_____ Shares = $_$.

The amount paid by the taxpayer for Shares was \$_____ per Share x_____ Shares = \$_____.

The amount to include in gross income is \$_____

The undersigned taxpayer will file this election with the Internal Revenue Service office with which taxpayer files his or her annual income tax return not later than 30 days after the date of transfer of the property. A copy of this statement has been furnished to the Company. The undersigned is the person performing the services in connection with which the property was transferred.

The understands that the foregoing election may not be revoked except with the consent of the Commissioner.

Dated: _____, ____

Taxpayer Signature: _____

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ATTACHMENT 2

SAMPLE COVER LETTER TO INTERNAL REVENUE SERVICE

VIA CERTIFIED MAIL RETURN RECEIPT REQUESTED

Internal Revenue Service [Address where taxpayer files returns]

Re: Election under Section 83(b) of the Internal Revenue Code of 1986

Taxpayer: ______ Taxpayer's Social Security Number: _

Ladies and Gentlemen:

Enclosed please find an original and one copy of an Election under Section 83(b) of the Internal Revenue Code of 1986, as amended, being made by the taxpayer referenced above. Please acknowledge receipt of the enclosed materials by stamping the enclosed copy of the Election and returning it to me in the self-addressed stamped envelope provided herewith.

Very truly yours,

Enclosures

cc: RBNC Therapeutics, Inc.

NEUMORA THERAPEUTICS, INC.

EXECUTIVE EMPLOYMENT AGREEMENT

This Executive Employment Agreement (the "<u>Agreement</u>) is entered into between Neumora Therapeutics, Inc., a Delaware corporation f/k/a RBNC Therapeutics, Inc. (the "<u>Company</u>"), and Paul Berns ("<u>Executive</u>" and, together with the Company, the "<u>Parties</u>") effective as of April 11, 2022 (the "<u>Effective Date</u>"). This Agreement supersedes in its entirety that certain offer letter between Executive and the Company dated as of January 17, 2020 (the "<u>Prior Agreement</u>").

WHEREAS, the Company desires to assure itself of the continued services of Executive by engaging Executive to perform services as an employee of the Company under the terms hereof;

WHEREAS, Executive desires to provide continued services to the Company on the terms herein provided; and

WHEREAS, the Parties desire to execute this Agreement to supersede the Prior Agreement in its entirety effective as of the Effective Date.

NOW, THEREFORE, in consideration of the foregoing, and for other good and valuable consideration, including the respective covenants and agreements set forth below, the receipt and sufficiency of which are hereby acknowledged, the Parties hereto agree as follows:

1. Employment.

(a) General. The Company shall continue to employ Executive upon the terms and conditions provided herein effective as of the Effective

Date.

(b) Position and Duties. As of the Effective Date, Executive: (i) shall serve as the Company's Chief Executive Officer, with responsibilities, duties, and authority usual and customary for such position, subject to direction by Board of Directors of the Company (the "<u>Board</u>"); (ii) shall continue to report directly to the Board; and (iii) agrees promptly and faithfully to comply with all present and future policies, requirements, rules and regulations, and reasonable directions and requests, of the Company in connection with the Company's business. At the Company shall designate, provided that such additional capacities are consistent with Executive's position as the Company's Chief Executive Officer. In the event that Executive serves in any one or more of such additional capacities, Executive's compensation shall not automatically be increased on account of such additional service.

(c) <u>Performance of Executive's Duties</u>. During Executive's employment with the Company, and except for periods of illness, vacation, disability, or reasonable leaves of absence or as discussed in Section 1(e) below, Executive shall devote Executive's full time and attention to the business and affairs of the Company. The rights of Executive under this Agreement shall not be affected by any change in the title, duties, or capacity of Executive during Executive's employment with the Company.

(d) <u>Principal Office</u>. Executive shall continue to perform services for the Company from Executive's home office in Wisconsin, or, with the Company's consent, at any other place in connection with the fulfillment of Executive's role with the Company; provided, however, that the Company may from time to time require Executive to travel temporarily to other locations in connection with the Company's business.

(e) Exclusivity. Except with the prior written approval of the Board (which the Board may grant or withhold in the Board's discretion), Executive shall devote all of Executive's best efforts and full working time, attention, and energies to the business of the Company, except during any paid vacation or other excused absence periods. Notwithstanding the foregoing, Executive may, without violating this Section 1(e), (i) as a passive investment, own publicly traded securities in such form or manner as will not require any services by Executive in the operation of the entities in which such securities are owned; (ii) engage in charitable and civic activities; or (iii) engage in other personal passive investment activities, in each case, so long as such interests or activities do not materially interfere to the extent such activities do not, individually or in the aggregate, interfere with or otherwise prevent the performance of Executive's duties and responsibilities hereunder. Executive may also serve as a member of the board of directors or board of advisors of another organization provided (i) such organization is not a competitor of the Company; (ii) Executive's duties under this Agreement, violate the Company's standards of conduct then in effect, or raise a conflict under the Company's conflict of interest policies. For the avoidance of doubt, the Board has approved Executive's continued service with those organizations set forth in <u>Exhibit A</u>, such approval to continue until the earlier to occur of (a) the Board's revocation of such approval in the Board's discretion, or (b) such time as such service interferes with the performance of Executive's duties under this Agreement, violates the Company's standards of conflict or raises a conflict under the Company's conflict of interest policies.

2. <u>Term</u>. The period of Executive's employment under this Agreement shall commence on the Effective Date and shall continue until Executive's employment with the Company is terminated pursuant to Section 5 below. The phrase "<u>Term of Employment</u>" as used in this Agreement shall refer to the entire period of employment of Executive by the Company.

3. Compensation and Related Matters.

(a) <u>Annual Base Salary</u>. During the Term of Employment, Executive shall receive a base salary at the rate of \$570,000.00 per annum (as may be increased from time to time, the "<u>Annual Base Salary</u>"), subject to withholdings and deductions, which shall be paid to Executive in accordance with the customary payroll practices and procedures of the Company. Such Annual Base Salary shall be reviewed by the Board, and and/or the Compensation Committee of the Board, not less than annually.

(b) <u>Annual Bonus</u>. Executive shall be eligible to receive a discretionary annual bonus based on Executive's achievement of performance objectives established by the Board and its Compensation Committee, such bonus to be targeted at fifty-five percent (55%) of Executive's Annual Base Salary (the "<u>Annual Bonus</u>"). Any Annual Bonus approved by the Board and its Compensation Committee shall be paid at the same time annual bonuses are paid to other executives of the Company generally, subject to Executive's continuous employment through the date of applicable payment. Executive acknowledges and agrees that nothing contained herein confers upon Executive any right to the Annual Bonus in any year, and any Annual Bonus payment including the amount therein will be determined by the Company in its sole discretion.

(c) <u>Benefits</u>. Executive shall be entitled to participate in such employee and executive benefit plans and programs as the Company may from time to time offer to provide to its executives, subject to the terms and conditions of such plans. Notwithstanding the foregoing, nothing herein is intended, or shall be construed, to require the Company to institute or continue any, or any particular, plan or benefit.

(d) <u>Business Expenses</u>. The Company shall reimburse Executive for all reasonable, documented, out-of-pocket travel and other business expenses incurred by Executive in the performance of Executive's duties to the Company in accordance with the Company's applicable expense reimbursement policies and procedures as are in effect from time to time.

(e) <u>Vacation</u>. Executive will be entitled to paid vacation in accordance with the Company's vacation policy, as in effect from time to time.

4. Equity Awards.

(a) <u>Outstanding Equity Awards</u>. Executive's outstanding equity awards shall remain outstanding following the Effective Date in accordance with their terms, *provided*, that to the extent any term of this Agreement is more favorable to Executive, including in respect to accelerated vesting, the more favorable terms of this Agreement shall control.

(b) <u>Future Equity Awards</u>. Executive shall be eligible for such additional stock options and equity awards as may be determined by the Board and its Compensation Committee, in its sole discretion.

5. Termination.

(a) <u>At-Will Employment</u>. The Company and Executive acknowledge that Executive's employment is and shall continue to be at-will, as defined under applicable law. This means that it is not for any specified period of time and, subject to any ramifications under Section 6 of this Agreement, can be terminated by Executive or by the Company at any time, with or without advance notice, and for any or no particular reason or cause. It also means that Executive's job duties, title, and responsibility and reporting level, work schedule, compensation and benefits, as well as the Company's personnel policies and procedures, may be changed with prospective effect, with or without notice, at any time in the sole discretion of the Company (subject to any ramification such changes may have under Section 6 of this Agreement). This "at-will" nature of Executive's employment shall remain unchanged during Executive's tenure as an employee and may not be changed, except in an express writing signed by Executive and a duly authorized officer of the Company. If Executive's employment terminates for any lawful reason, Executive shall not be entitled to any payments, benefits, damages, award, or compensation other than as provided in this Agreement.

(b) <u>Notice of Termination</u>. During the Term of Employment, any termination of Executive's employment by the Company or by Executive (other than by reason of death) shall be communicated by written notice (a "<u>Notice of Termination</u>") from one Party hereto to the other Party hereto (i) indicating the specific termination provision in this Agreement relied upon, if any, (ii) setting forth in reasonable detail the facts and circumstances claimed to provide a basis for termination of Executive's employment under the provision so indicated, and (iii) specifying the Date of Termination (as defined below). The failure by the Company to set forth in the Notice of Termination all of the facts and circumstances which contribute to a showing of Cause (as defined below) shall not waive any right of the Company hereunder or preclude the Company from asserting such fact or circumstance in enforcing its rights hereunder.

(c) <u>Termination Date</u>. For purposes of this Agreement, "<u>Date of Termination</u>" shall mean the date of the termination of Executive's employment with the Company specified in a Notice of Termination.

(d) <u>Deemed Resignation</u>. Upon termination of Executive's employment for any reason, Executive shall be deemed to have resigned from all offices and board memberships, if any, then held with the Company or any of its affiliates, and, at the Company's request, Executive shall execute such documents as are necessary or desirable to effectuate such resignations.

6. Consequences of Termination.

(a) Payments of Accrued Obligations upon all Terminations of Employment. Upon a termination of Executive's employment for any reason, Executive (or Executive's estate or legal representative, as applicable) shall be entitled to receive, within thirty (30) days after Executive's Date of Termination (or such earlier date as may be required by applicable law): (i) any portion of Executive's Annual Base Salary earned through Executive's Date of Termination not theretofore paid, (ii) any expenses owed to Executive under Section 3(d) above, (iii) any accrued but unused paid time-off owed to Executive's participation in, or benefits under, any employee benefit plans, programs, or arrangements under Section 3(c) above, which amounts shall be payable in accordance with the terms and conditions of such employee benefit plans, programs, or arrangements. Except as otherwise set forth in Section 6(b) below, the payments and benefits described in this Section 6(a) shall be the only payments and benefits payable in the event of Executive's termination of employment for any reason.

(b) Severance Payments upon Termination Without Cause or For Good Reason.

(i) <u>Termination Outside a Change in Control Period</u>. If, during the Term of Employment but outside the period beginning three months prior to and ending 18 months following a Change in Control (such period, a "<u>Change in Control Period</u>"), Executive's employment is terminated by the Company without Cause or Executive resigns for Good Reason, then, in addition to the payments and benefits described in Section 6(a) above, subject to Executive's delivery to the Company of a waiver and release of claims agreement in a form approved by the Company that becomes effective and irrevocable in accordance with Section 11(d) hereof (a "<u>Release</u>"):

(A) During the twelve-month period commencing on the Date of Termination (the "<u>Severance Period</u>"), the Company shall continue to pay Executive the sum of the Executive's Annual Base Salary, such payment to be made in accordance with the Company's regular payroll procedures, with the first such installment to occur on the first payroll date following the date the Release becomes effective and irrevocable or as otherwise provided in Section 11(d) hereof and inclusive of any installments that would have been made had the Release been immediately effective and irrevocable.

(B) During the period commencing on the Date of Termination and ending on the last day of the Severance Period, or if earlier, the date on which Executive becomes eligible for comparable replacement coverage under a subsequent employer's group health plan (in any case, the "<u>Non-CIC COBRA Period</u>"), subject to Executive's valid election to continue healthcare coverage under Section 4980B of the Internal Revenue Code of 1986, as amended (the "<u>Code</u>") and the regulations thereunder, the Company shall, in its sole discretion, either (x) continue to provide to Executive and Executive's dependents, at the Company's sole expense, or (y) reimburse Executive and Executive's dependents for coverage under its group health plan (if any) at the same levels in effect on the Date of Termination; provided, however, that if (1) any plan pursuant to which such benefits are provided is not, or ceases prior to the expiration of the

continuation coverage period to be, exempt from the application of Section 409A under Treasury Regulation Section 1.409A-1(a)(5), (2) the Company is otherwise unable to continue to cover Executive or Executive's dependents under its group health plans, or (3) the Company cannot provide the benefit without violating applicable law (including, without limitation, Section 2716 of the Public Health Service Act), then, in any such case, an amount equal to each remaining Company subsidy shall thereafter be paid to Executive in substantially equal monthly installments over the Non-CIC COBRA Period (or remaining portion thereof).

(ii) <u>Termination During a Change in Control Period</u>. If, during the Term of Employment and during a Change in Control Period, Executive's employment is terminated by the Company without Cause or Executive resigns for Good Reason, then, in addition to the payments and benefits described in Section 6(a) above, subject to Executive's delivery to the Company of a Release that becomes effective and irrevocable in accordance with Section 11(d) hereof:

(A) The Company shall pay to Executive an amount equal to the sum of (i) one time (1x) Executive's Annual Base Salary and (ii) one time (1x) Executive's target Annual Bonus. Such amount will be subject to applicable withholdings and payable in a single lump sum cash payment on the first regular payroll date following the date the Release becomes effective and irrevocable or as otherwise provided in Section 11(d) hereof.

(B) During the period commencing on the Date of Termination and ending on the eighteenth month anniversary thereof or, if earlier, the date on which Executive becomes eligible for comparable replacement coverage under a subsequent employer's group health plan (in any case, the "<u>CIC COBRA Period</u>"), subject to Executive's valid election to continue healthcare coverage under Section 4980B of the Code and the regulations thereunder, the Company shall, in its sole discretion, either (x) continue to provide to Executive and Executive's dependents, at the Company's sole expense, or (y) reimburse Executive and Executive's dependents for coverage under its group health plan (if any) at the same levels in effect on the Date of Termination; *provided, however*, that if (1) any plan pursuant to which such benefits are provided is not, or ceases prior to the expiration of the continuation coverage period to be, exempt from the application of Section 409A under Treasury Regulation Section 1.409A-1(a)(5), (2) the Company is otherwise unable to continue to cover Executive or Executive's dependents under its group health plans, or (3) the Company cannot provide the benefit without violating applicable law (including, without limitation, Section 2716 of the Public Health Service Act), then, in any such case, an amount equal to each remaining Company subsidy shall thereafter be paid to Executive in substantially equal monthly installments over the CIC COBRA Period (or remaining portion thereof).

(C) The Company shall cause any unvested equity awards, including any stock options, restricted stock units and restricted stock awards, including any such awards subject to performance-based vesting, held by Executive as of the Date of Termination, to become fully vested and, if applicable, exercisable, and cause all restrictions and rights of repurchase on such awards to lapse with respect to all of the shares of the Company's Common Stock subject thereto.

(c) <u>No Other Severance</u>. The provisions of this Section 6 shall supersede in their entirety any severance payment provisions in any severance plan, policy, program, or other arrangement maintained by the Company except as otherwise approved by the Board.

(d) <u>No Requirement to Mitigate; Survival</u>. Executive shall not be required to mitigate the amount of any payment provided for under this Agreement by seeking other employment or in any other manner. Notwithstanding anything to the contrary in this Agreement, the termination of Executive's employment shall not impair the rights or obligations of any Party.

(e) <u>Definition of Cause</u>. For purposes hereof, "<u>Cause</u>" shall mean any one of the following: (i) Executive's violation of any applicable material law or regulation respecting the business of the Company; (ii) Executive's conviction of, or plea of *nolo contendere* to, a felony or other crime involving moral turpitude; (iii) any act of dishonesty, fraud, or misrepresentation in relation to Executive's duties to the Company which act is materially and demonstrably injurious to the Company; (iv) Executive's failure to perform in any material respect Executive's duties hereunder after fifteen (15) days' notice (other than on account of disability); (v) Executive's failure to attempt in good faith to implement a clear and reasonable directive from the Board or to comply with any of the Company's policies and procedures which failure is either material or occurs after written notice from the Board; (vi) any act of gross misconduct which is injurious to the Company; or (vii) Executive's breach of fiduciary duty owed to the Company.

(f) Definition of Change in Control. For purposes of this Agreement, "Change in Control" shall mean (i) the acquisition by any person or group of affiliated or associated persons of more than fifty percent (50%) of the outstanding capital stock of the Company or voting securities representing more than fifty percent (50%) of the total voting power of outstanding securities of the Company; (ii) the consummation of a sale of all or substantially all of the assets of the Company to a third party; (iii) the consummation of any merger involving the Company in which, immediately after giving effect to such merger, less than a majority of the total voting power of outstanding stock of the surviving or resulting entity is then "beneficially owned" (within the meaning of Rule 13d-3 under the Securities Exchange Act of 1934, as amended) in the aggregate by the stockholders of the Company, as applicable, immediately prior to such merger. For the avoidance of doubt and notwithstanding anything herein to the contrary, in no event shall a transaction constitute a "Change in Control" if: (w) its sole purpose is to change the state of the Company's incorporation; (x) its sole purpose is to create a holding company that will be owned in substantially the same proportions by the persons who held the Company's securities immediately before such transaction; (y) it is effected primarily for the purpose of financing the Company with cash (as determined by the Board without regard to whether such transaction is effectuated by a merger, equity financing, or otherwise); or (z) it constitutes, or includes sales of shares in connection with, the initial public offering of the Company's capital stock. Notwithstanding the foregoing, a "Change in Control" must also constitute a "change in control event," as defined in Treasury Regulation §1.409A-3(i)(5).

(g) Definition of Good Reason. For purposes hereof, "Good Reason" shall mean any one of the following: (i) the material reduction of Executive's base salary (other than a reduction that is applied substantially across executives), (ii) the assignment to Executive of any duties materially and negatively inconsistent in respect of Executive's position (including status, offices, titles and reporting requirements), authority, duties or responsibilities, or any other action by the Company which results in a material diminution in such position, authority, duties or responsibilities; or (iii) the Company's material breach of this Agreement, *provided*, that, in each case, Executive will not be deemed to have Good Reason unless (1) Executive first provides the Company with written notice of the condition giving rise to Good Reason within thirty (30) days of its initial occurrence, (2) the Company or the successor company fails to cure such condition within thirty (30) days after receiving such written notice (the "<u>Cure Period</u>"), and (3) Executive's resignation based on such Good Reason is effective within thirty (30) days after the expiration of the Cure Period.

7. <u>Assignment and Successors</u>. The Company shall assign its rights and obligations under this Agreement to any successor to all or substantially all of the business or the assets of the Company (by merger or otherwise). This Agreement shall be binding upon and inure to the benefit of the Company, Executive, and their respective successors, assigns, personnel, and legal representatives, executors, administrators, heirs, distributees, devisees, and legatees, as applicable. None of Executive's rights or obligations may be assigned or transferred by Executive, other than Executive's rights to payments hereunder, which may be transferred only by will, operation of law, or as otherwise provided herein.

8. Miscellaneous Provisions.

(a) <u>Confidentiality Agreement</u>. Executive shall continue to be obligated by the At-Will Employment and the Employee Proprietary Information and Inventions Assignment Agreement previously entered into with the Company (the "<u>Confidentiality Agreement</u>"). The Confidentiality Agreement shall survive the termination of this Agreement and Executive's employment with the Company for the applicable period(s) set forth therein.

(b) <u>Non-Solicitation of Employees</u>. For a period of one (1) year following Executive's Date of Termination, Executive shall not, either directly or indirectly (i) solicit for employment by any individual, corporation, firm, or other business, any employees, consultants, independent contractors, or other service providers of the Company or any of its affiliates, or (ii) solicit any employee or consultant of the Company or any of its affiliates to leave the employment or consulting of or cease providing services to the Company or any of its affiliates; *provided*, *however*, that the foregoing clauses (i) and (ii) shall not apply to a general advertisement or solicitation (or any hiring pursuant to such advertisement or solicitation) that is not specifically targeted to such employees or consultants.

(c) <u>Governing Law</u>. This Agreement shall be governed, construed, interpreted, and enforced in accordance with its express terms, and otherwise in accordance with the substantive laws of the state from which Executive works (which, if Executive works remotely, is the state in which Executive resides), without giving effect to any principles of conflicts of law.

(d) <u>Validity</u>. The invalidity or unenforceability of any provision or provisions of this Agreement shall not affect the validity or enforceability of any other provision of this Agreement, which shall remain in full force and effect.

(e) <u>Counterparts</u>. This Agreement may be executed in several counterparts, each of which shall be deemed to be an original, but all of which together will constitute one and the same Agreement. Signatures delivered by facsimile shall be deemed effective for all purposes.

(f) Entire Agreement. The terms of this Agreement, together with the Confidentiality Agreement, are intended by the Parties to be the final expression of their agreement with respect to the employment of Executive by the Company and supersede all prior understandings and agreements, whether written or oral, regarding Executive's service to the Company, including without limitation, the Prior Agreement. The Parties further intend that this Agreement, together with the Confidentiality Agreement, shall constitute the complete and exclusive statement of their terms and that no extrinsic evidence whatsoever may be introduced in any judicial, administrative, or other legal proceeding to vary the terms of this Agreement or the Confidentiality Agreement. Notwithstanding the foregoing, in the event of any conflict between the terms of the Confidentiality Agreement and the terms of this Agreement, the terms of this Agreement shall prevail.

(g) <u>Amendments; Waivers</u>. This Agreement may not be modified, amended, or terminated except by an instrument in writing signed by Executive and a duly authorized representative of the Company. By an instrument in writing similarly executed, Executive or a duly authorized officer of the Company, as applicable, may waive compliance by the other Party with any specifically identified provision of this Agreement that such other Party was or is obligated to comply with or perform; *provided, however*, that such waiver shall not operate as a waiver of, or estoppel with respect to, any other or subsequent failure. No failure to exercise and no delay in exercising any right, remedy, or power hereunder shall preclude any other or further exercise of any other right, remedy, or power provided herein or by law or in equity.

(h) <u>Dispute Resolution</u>. To ensure the timely and economical resolution of disputes that arise in connection with this Agreement, Executive and the Company agree that, except as excluded herein, any and all controversies, claims and disputes arising out of or relating to this Agreement, including without limitation any alleged violation of its terms or otherwise arising out of the Parties' relationship, shall be resolved solely and exclusively by final and binding arbitration held in the county and state in which Executive works (which, if Executive works remotely, is the state in which Executive resides) through JAMS in conformity with law of the state in which arbitration is held and the then-existing JAMS employment arbitration rules, which can be found at https://www.jamsadr.com/rules-employment-arbitration/. The Federal Arbitration Act, 9 U.S.C. §§ 1 et seq. shall govern the interpretation and enforcement of this arbitration clause. All remedies available from a court of competent jurisdiction shall be available in the arbitration; provided, however, in the event of a breach of Sections 8(a) or 8(b), the Company may request relief from a court of competent jurisdiction if such relief is not available or not available in a timely fashion through arbitration as determined by the Company. The arbitrator shall: (a) provide adequate discovery for the resolution of the dispute; and (b) issue a written arbitration decision, to include the arbitrator's essential findings and conclusions and a statement of the award. The arbitrator shall award the prevailing Party attorneys' fees and expert fees, if any. Notwithstanding the foregoing, it is acknowledged that it will be impossible to measure in money the damages that would be suffered if the Parties fail to comply with any of the obligations imposed on them under Sections 8(a) and 8(b), and that in the event of any such failure, an aggrieved person will be irreparably damaged and will not have an adequate remedy at law. Any such person shall, therefore, be entitled to seek injunctive relief, including specific performance, to enforce such obligations, and if any action shall be brought in equity to enforce any of the provisions of Sections 8(a) and 8(b), none of the Parties shall raise the defense, without a good faith basis for raising such defense, that there is an adequate remedy at law. Executive and the Company understand that by agreement to arbitrate any claim pursuant to this Section 8(h), they will not have the right to have any claim decided by a jury or a court, but shall instead have any claim decided through arbitration. Executive and the Company waive any constitutional or other right to bring claims covered by this Agreement other than in their individual capacities. Except as may be prohibited by applicable law, the foregoing waiver includes the ability to assert claims as a plaintiff or class member in any purported class or collective action or representative proceeding. Nothing herein shall limit Executive's ability to pursue claims for workers compensation or unemployment benefits or pursue other claims which by law cannot be subject to mandatory arbitration.

(i) <u>Enforcement</u>. If any provision of this Agreement is held to be illegal, invalid, or unenforceable under present or future laws, such provision shall be fully severable; this Agreement shall be construed and enforced as if such illegal, invalid, or unenforceable provision had never comprised a portion of this Agreement; and the remaining provisions of this Agreement shall remain in full force and effect and shall not be affected by the illegal, invalid, or unenforceable provision or by its severance from this Agreement. Furthermore, in lieu of such illegal, invalid, or unenforceable provision there shall be added automatically as part of this Agreement a provision as similar in terms to such illegal, invalid, or unenforceable provision as may be possible and be legal, valid, and enforceable.

(j) <u>Withholding</u>. The Company shall be entitled to withhold from any amounts payable under this Agreement any federal, state, local, or foreign withholding or other taxes or charges which the Company is required to withhold. The Company shall be entitled to rely on an opinion of counsel if any questions as to the amount or requirement of withholding shall arise.

(k) Whistleblower Protections and Trade Secrets. Notwithstanding anything to the contrary contained herein, nothing in this Agreement prohibits Executive from reporting possible violations of federal law or regulation to any United States governmental agency or entity in accordance with the provisions of and rules promulgated under Section 21F of the Securities Exchange Act of 1934 or Section 806 of the Sarbanes-Oxley Act of 2002, or any other whistleblower protection provisions of state or federal law or regulation (including the right to receive an award for information provided to any such government agencies). Furthermore, in accordance with 18 U.S.C. § 1833, notwithstanding anything to the contrary in this Agreement: (i) Executive shall not be in breach of this Agreement, and shall not be held criminally or civilly liable under any federal or state trade secret law (x) for the disclosure of a trade secret that is made in confidence to a federal, state, or local government official or to an attorney solely for the purpose of reporting or investigating a suspected violation of law, or (y) for the disclosure of a trade secret that is made in a complaint or other document filed in a lawsuit or other proceeding, if such filing is made under seal; and (ii) if Executive files a lawsuit for retaliation by the Company for reporting a suspected violation of law, Executive may disclose the trade secret to Executive's attorney, and may use the trade secret information in the court proceeding, if Executive files any document containing the trade secret under seal, and does not disclose the trade secret, except pursuant to court order.

9. <u>Prior Employment</u>. Executive represents and warrants that Executive's acceptance of employment with the Company has not breached, and the performance of Executive's duties hereunder will not breach, any duty owed by Executive to any prior employer or other person. Executive further represents and warrants to the Company that (a) the performance of Executive's obligations hereunder will not violate any agreement between Executive and any other person, firm, organization, or other entity; (b) Executive is not bound by the terms of any agreement with any previous employer or other party to refrain from competing, directly or indirectly, with the business of such previous employer or other party that would be violated by Executive entering into this Agreement and/or providing services to the Company pursuant to the terms of this Agreement; and (c) Executive's performance of Executive's duties under this Agreement will not require Executive to, and Executive shall not, rely on in the performance of Executive's duties or disclose to the Company or any other person or entity or induce the Company in any way to use or rely on any trade secret or other confidential or proprietary information or material belonging to any previous employer of Executive.

10. Golden Parachute Excise Tax.

(a) <u>Best Pay</u>. Any provision of this Agreement to the contrary notwithstanding, if any payment or benefit Executive would receive from the Company pursuant to this Agreement or otherwise ("<u>Payment</u>") would (i) constitute a "parachute payment" within the meaning of Section 280G of the Code and (ii) but for this sentence, be subject to the excise tax imposed by Section 4999 of the Code (the "<u>Excise Tax</u>"), then such Payment will be equal to the Reduced Amount (as defined below). The "<u>Reduced Amount</u>" will be either (A) the largest portion of the Payment that would result in no portion of the Payment (after reduction) being subject to the Excise Tax or (B) the entire Payment, whichever amount after taking into account all applicable federal, state, and local employment taxes, income taxes, and the Excise Tax (all computed at the highest applicable marginal rate, net of the maximum reduction in federal income taxes which could be obtained from a deduction of such state and local taxes), results in Executive' s receipt, on an after-tax basis, of the greater economic benefit notwithstanding that all or some portion of the Payment may be subject to the Excise Tax. If a reduction shall occur in the manner (the "<u>Reduction Method</u>") that results in the greatest economic benefit for Executive. If more than one method of reduction will result in the same economic benefit, the items so

reduced will be reduced pro rata (the "<u>Pro Rata Reduction Method</u>"). Notwithstanding the foregoing, if the Reduction Method or the Pro Rata Reduction Method would result in any portion of the Payment being subject to taxes pursuant to Section 409A (as defined below) that would not otherwise be subject to taxes pursuant to Section 409A, then the Reduction Method and/or the Pro Rata Reduction Method, as the case may be, shall be modified so as to avoid the imposition of taxes pursuant to Section 409A as follows: (1) as a first priority, the modification shall preserve to the greatest extent possible, the greatest economic benefit for Executive as determined on an after-tax basis; (2) as a second priority, Payments that are contingent on future events (*e.g.*, being terminated without cause), shall be reduced (or eliminated) before Payments that are not contingent on future events; and (3) as a third priority, Payments that are "deferred compensation" within the meaning of Section 409A shall be reduced (or eliminated) before Payments that are not deferred compensation within the meaning of Section 409A.

(b) Accounting Firm. The accounting firm engaged by the Company for general tax purposes as of the day prior to the Change in Control will perform the calculations set forth in Section 10(a) above. If the firm so engaged by the Company is serving as the accountant or auditor for the acquiring company, the Company will appoint a nationally recognized accounting firm to make the determinations required hereunder. The Company will bear all expenses with respect to the determinations by such firm required to be made hereunder. The accounting firm engaged to make the determinations hereunder will provide its calculations, together with detailed supporting documentation, to the Company within thirty (30) days before the consummation of a Change in Control (if requested at that time by the Company) or such other time as requested by the Company. If the accounting firm determines that no Excise Tax is payable with respect to a Payment, either before or after the application of the Reduced Amount, it will furnish the Company with documentation reasonably acceptable to the Company that no Excise Tax will be imposed with respect to such Payment. Any good faith determinations of the accounting firm made hereunder will be final, binding and conclusive upon the Company and Executive.

11. Section 409A.

(a) <u>General</u>. The intent of the Parties is that the payments and benefits under this Agreement comply with or be exempt from Section 409A of the Code and the Department of Treasury regulations and other interpretive guidance issued thereunder, including without limitation any such regulations or other guidance that may be issued after the Effective Date, ("<u>Section 409A</u>") and, accordingly, to the maximum extent permitted, this Agreement shall be interpreted to be in compliance therewith. If Executive notifies the Company that Executive has received advice of tax counsel of a national reputation with expertise in Section 409A that any provision of this Agreement would cause Executive to incur any additional tax or interest under Section 409A (with specificity as to the reason therefor) or the Company independently makes such determination, the Company and Executive shall take commercially reasonable efforts to reform such provision to try to comply with or be exempt from Section 409A through good faith modifications to the minimum extent reasonably appropriate to conform with Section 409A, *provided* that any such modifications shall not increase the cost or liability to the Company. To the extent that any provision hereof is modified in order to comply with or be exempt from Section 409A, such modification shall be made in good faith and shall, to the maximum extent reasonably possible, maintain the original intent and economic benefit to Executive and the Company of the applicable provision without violating the provisions of Section 409A.

(b) <u>Separation from Service</u>. Notwithstanding any provision to the contrary in this Agreement: (i) no amount that constitutes "deferred compensation" under Section 409A shall be payable pursuant to Section 6(b) above unless the termination of Executive's employment constitutes a "separation from service" within the meaning of Section 1.409A-1(h) of the Department of Treasury Regulations ("<u>Separation from Service</u>"); (ii) for purposes of Section 409A, Executive's right to receive installment payments shall be treated as a right to receive a series of separate and distinct payments; and (iii) to the

extent that any reimbursement of expenses or in-kind benefits constitutes "deferred compensation" under Section 409A, such reimbursement or benefit shall be provided no later than December 31st of the year following the year in which the expense was incurred. The amount of expenses reimbursed in one year shall not affect the amount eligible for reimbursement in any subsequent year. The amount of any in-kind benefits provided in one year shall not affect the amount of in-kind benefits provided in any other year.

(c) Specified Employee. Notwithstanding anything in this Agreement to the contrary, if Executive is deemed by the Company at the time of Executive's Separation from Service to be a "specified employee" for purposes of Section 409A, to the extent delayed commencement of any portion of the benefits to which Executive is entitled under this Agreement is required in order to avoid a prohibited distribution under Section 409A, such portion of Executive's benefits shall not be provided to Executive prior to the earlier of (i) the expiration of the six (6)-month period measured from the date of Executive's Separation from Service with the Company or (ii) the date of Executive's death. Upon the first business day following the expiration of the applicable Section 409A period, all payments deferred pursuant to the preceding sentence shall be paid in a lump sum to Executive (or Executive's estate or beneficiaries), and any remaining payments due to Executive under this Agreement shall be paid as otherwise provided herein.

(d) Release. Notwithstanding anything to the contrary in this Agreement, to the extent that any payments due under this Agreement as a result of Executive's termination of employment are subject to Executive's execution and delivery of a Release, (i) the Company shall deliver the Release to Executive within ten (10) business days following Executive's Date of Termination, and the Company's failure to deliver a Release prior to the expiration of such ten (10) business day period shall constitute a waiver of any requirement to execute a Release, (ii) if Executive fails to execute the Release on or prior to the Release Expiration Date (as defined below) or timely revokes Executive's acceptance of the Release thereafter, Executive shall not be entitled to any payments or benefits otherwise conditioned on the Release, and (iii) in any case where Executive's Date of Termination and the Release Expiration Date fall in two separate taxable years, any payments required to be made to Executive that are conditioned on the Release and are treated as nonqualified deferred compensation for purposes of Section 409A shall be made in the later taxable year. For purposes of this Section 11(d), "<u>Release Expiration Date</u>" shall mean the date that is twenty-one (21) days following the date upon which the Company timely delivers the Release to Executive, or, in the event that Executive's termination of employment is "in connection with an exit incentive or other employment termination program" (as such phrase is defined in the Age Discrimination in Employment Act of 1967), the date that is forty-five (45) days following such delivery date. To the executive so nonqualified deferred compensation (within the meaning of Section 409A) due under this Agreement as a result of Executive's termination of employment to this Section 11(d), such amounts shall be paid in a lump sum on the first payroll date following the date that Executive executes and does not revoke the Release (and the applicable revocation period has expired) or, in the ca

12. <u>Employee Acknowledgement</u>. Executive acknowledges that Executive has read and understands this Agreement, is fully aware of its legal effect, has not acted in reliance upon any representations or promises made by the Company other than those contained in writing herein, and has entered into this Agreement freely based on Executive's own judgment.

[Signature Page Follows]

IN WITNESS WHEREOF, the Parties have duly executed this Agreement as of the date and year first above written.

NEUMORA THERAPEUTICS, INC.

[***]

Address:

By:	/s/ Kristina Burow	
Name:	Kristina Burow	
Title:	Director	
EXECUTIVE		
By:	/s/ Paul Berns	
Name:	Paul Berns	

EXHIBIT A PERMITTED OUTSIDE ACTIVITIES

-

[to be listed – if any]

NEUMORA THERAPEUTICS, INC.

EXECUTIVE EMPLOYMENT AGREEMENT

This Executive Employment Agreement (the "<u>Agreement</u>) is entered into between Neumora Therapeutics, Inc., a Delaware corporation f/k/a RBNC Therapeutics, Inc. (the "<u>Company</u>"), and John Dunlop ("<u>Executive</u>" and, together with the Company, the "<u>Parties</u>") effective as of April 11, 2022 (the "<u>Effective Date</u>"). This Agreement supersedes in its entirety that certain offer letter between Executive and the Company dated as of January 17, 2020 (the "<u>Prior Agreement</u>").

WHEREAS, the Company desires to assure itself of the continued services of Executive by engaging Executive to perform services as an employee of the Company under the terms hereof;

WHEREAS, Executive desires to provide continued services to the Company on the terms herein provided; and

WHEREAS, the Parties desire to execute this Agreement to supersede the Prior Agreement in its entirety effective as of the Effective Date.

NOW, THEREFORE, in consideration of the foregoing, and for other good and valuable consideration, including the respective covenants and agreements set forth below, the receipt and sufficiency of which are hereby acknowledged, the Parties hereto agree as follows:

1. Employment.

(a) <u>General</u>. The Company shall continue to employ Executive upon the terms and conditions provided herein effective as of the Effective Date.

(b) Position and Duties. As of the Effective Date, Executive: (i) shall serve as the Company's Head of Research and Development, with responsibilities, duties, and authority usual and customary for such position, subject to direction by the Chief Executive Officer of the Company (the "<u>CEO</u>"); (ii) shall continue to report directly to the CEO; and (iii) agrees promptly and faithfully to comply with all present and future policies, requirements, rules and regulations, and reasonable directions and requests, of the Company in connection with the Company's business. At the Company's request, Executive shall serve the Company and/or its subsidiaries and affiliates in such other capacities in addition to the foregoing as the Company shall designate, provided that such additional capacities are consistent with Executive's position as the Company's Head of Research and Development. In the event that Executive serves in any one or more of such additional capacities, Executive's compensation shall not automatically be increased on account of such additional service.

(c) <u>Performance of Executive's Duties</u>. During Executive's employment with the Company, and except for periods of illness, vacation, disability, or reasonable leaves of absence or as discussed in Section 1(e) below, Executive shall devote Executive's full time and attention to the business and affairs of the Company. The rights of Executive under this Agreement shall not be affected by any change in the title, duties, or capacity of Executive during Executive's employment with the Company.

(d) <u>Principal Office</u>. Executive shall continue to perform services for the Company partially from the Company's offices and partially from Executive's home office, or, with the Company's consent, at any other place in connection with the fulfillment of Executive's role with the Company; provided, however, that the Company may from time to time require Executive to travel temporarily to other locations in connection with the Company's business.

(e) Exclusivity. Except with the prior written approval of the CEO (which the CEO may grant or withhold in the CEO's discretion), Executive shall devote all of Executive's best efforts and full working time, attention, and energies to the business of the Company, except during any paid vacation or other excused absence periods. Notwithstanding the foregoing, Executive may, without violating this Section 1(e), (i) as a passive investment, own publicly traded securities in such form or manner as will not require any services by Executive in the operation of the entities in which such securities are owned; (ii) engage in charitable and civic activities; or (iii) engage in other personal passive investment activities, in each case, so long as such interests or activities do not materially interfere to the extent such activities do not, individually or in the aggregate, interfere with or otherwise prevent the performance of Executive's duties and responsibilities hereunder. Executive may also serve as a member of the board of directors or board of advisors of another organization provided (i) such organization is not a competitor of the Company; (ii) Executive receives prior written approval from the CEO; and (iii) such activities do not individually or in the aggregate interfere with the performance of Executive's duties under this Agreement, violate the Company's standards of conduct then in effect, or raise a conflict under the Company's conflict of interest policies. For the avoidance of doubt, the CEO has approved Executive's continued service with those organizations set forth in <u>Exhibit A</u>, such approval to continue until the earlier to occur of (a) the CEO's revocation of such approval in the CEO's discretion, or (b) such time as such service interferes with the performance of Executive's duties under this Agreement, violates the Company's standards of conflict or raises a conflict under the Company's conflict of interest policies.

2. <u>Term</u>. The period of Executive's employment under this Agreement shall commence on the Effective Date and shall continue until Executive's employment with the Company is terminated pursuant to Section 5 below. The phrase "<u>Term of Employment</u>" as used in this Agreement shall refer to the entire period of employment of Executive by the Company.

3. Compensation and Related Matters.

(a) <u>Annual Base Salary</u>. During the Term of Employment, Executive shall receive a base salary at the rate of \$450,000.00 per annum (as may be increased from time to time, the "<u>Annual Base Salary</u>"), subject to withholdings and deductions, which shall be paid to Executive in accordance with the customary payroll practices and procedures of the Company. Such Annual Base Salary shall be reviewed by the CEO, and, as applicable, the Board and/or the Compensation Committee of the Board, not less than annually.

(b) <u>Annual Bonus</u>. Executive shall be eligible to receive a discretionary annual bonus based on Executive's achievement of performance objectives established by the Board and its Compensation Committee, such bonus to be targeted at forty percent (40%) of Executive's Annual Base Salary (the "<u>Annual Bonus</u>"). Any Annual Bonus approved by the Board and its Compensation Committee shall be paid at the same time annual bonuses are paid to other executives of the Company generally, subject to Executive's continuous employment through the date of applicable payment. Executive acknowledges and agrees that nothing contained herein confers upon Executive any right to the Annual Bonus in any year, and any Annual Bonus payment including the amount therein will be determined by the Company in its sole discretion.

(c) <u>Benefits</u>. Executive shall be entitled to participate in such employee and executive benefit plans and programs as the Company may from time to time offer to provide to its executives, subject to the terms and conditions of such plans. Notwithstanding the foregoing, nothing herein is intended, or shall be construed, to require the Company to institute or continue any, or any particular, plan or benefit.

(d) <u>Business Expenses</u>. The Company shall reimburse Executive for all reasonable, documented, out-of-pocket travel and other business expenses incurred by Executive in the performance of Executive's duties to the Company in accordance with the Company's applicable expense reimbursement policies and procedures as are in effect from time to time.

(e) <u>Vacation</u>. Executive will be entitled to paid vacation in accordance with the Company's vacation policy, as in effect from time to

time.

4. Equity Awards.

(a) <u>Outstanding Equity Awards</u>. Executive's outstanding equity awards shall remain outstanding following the Effective Date in accordance with their terms, *provided*, that to the extent any term of this Agreement is more favorable to Executive, including in respect to accelerated vesting, the more favorable terms of this Agreement shall control.

(b) <u>Future Equity Awards</u>. Executive shall be eligible for such additional stock options and equity awards as may be determined by the Board and its Compensation Committee, in its sole discretion.

5. <u>Termination</u>.

(a) <u>At-Will Employment</u>. The Company and Executive acknowledge that Executive's employment is and shall continue to be at-will, as defined under applicable law. This means that it is not for any specified period of time and, subject to any ramifications under Section 6 of this Agreement, can be terminated by Executive or by the Company at any time, with or without advance notice, and for any or no particular reason or cause. It also means that Executive's job duties, title, and responsibility and reporting level, work schedule, compensation and benefits, as well as the Company's personnel policies and procedures, may be changed with prospective effect, with or without notice, at any time in the sole discretion of the Company (subject to any ramification such changes may have under Section 6 of this Agreement). This "at-will" nature of Executive's employment shall remain unchanged during Executive's tenure as an employee and may not be changed, except in an express writing signed by Executive and a duly authorized officer of the Company. If Executive's employment terminates for any lawful reason, Executive shall not be entitled to any payments, benefits, damages, award, or compensation other than as provided in this Agreement.

(b) <u>Notice of Termination</u>. During the Term of Employment, any termination of Executive's employment by the Company or by Executive (other than by reason of death) shall be communicated by written notice (a "<u>Notice of Termination</u>") from one Party hereto to the other Party hereto (i) indicating the specific termination provision in this Agreement relied upon, if any, (ii) setting forth in reasonable detail the facts and circumstances claimed to provide a basis for termination of Executive's employment under the provision so indicated, and (iii) specifying the Date of Termination (as defined below). The failure by the Company to set forth in the Notice of Termination all of the facts and circumstances which contribute to a showing of Cause (as defined below) shall not waive any right of the Company hereunder or preclude the Company from asserting such fact or circumstance in enforcing its rights hereunder.

(c) <u>Termination Date</u>. For purposes of this Agreement, "<u>Date of Termination</u>" shall mean the date of the termination of Executive's employment with the Company specified in a Notice of Termination.

(d) <u>Deemed Resignation</u>. Upon termination of Executive's employment for any reason, Executive shall be deemed to have resigned from all offices and board memberships, if any, then held with the Company or any of its affiliates, and, at the Company's request, Executive shall execute such documents as are necessary or desirable to effectuate such resignations.

6. Consequences of Termination.

(a) <u>Payments of Accrued Obligations upon all Terminations of Employment</u>. Upon a termination of Executive's employment for any reason, Executive (or Executive's estate or legal representative, as applicable) shall be entitled to receive, within thirty (30) days after Executive's Date of Termination (or such earlier date as may be required by applicable law): (i) any portion of Executive's Annual Base Salary earned through Executive's Date of Termination not theretofore paid, (ii) any expenses owed to Executive under Section 3(d) above, (iii) any accrued but unused paid time-off owed to Executive, (iv) any Annual Bonus earned on or prior to the Date of Termination but unpaid as of the Date of Termination, and (v) any amount arising from Executive's participation in, or benefits under, any employee benefit plans, programs, or arrangements under Section 3(c) above, which amounts shall be payable in accordance with the terms and conditions of such employee benefit plans, programs, or arrangements. Except as otherwise set forth in Section 6(b) below, the payments and benefits described in this Section 6(a) shall be the only payments and benefits payable in the event of Executive's termination of employment for any reason.

(b) Severance Payments upon Termination Without Cause or For Good Reason.

(i) <u>Termination Outside a Change in Control Period</u>. If, during the Term of Employment but outside the period beginning three months prior to and ending 18 months following a Change in Control (such period, a "<u>Change in Control Period</u>"), Executive's employment is terminated by the Company without Cause or Executive resigns for Good Reason, then, in addition to the payments and benefits described in Section 6(a) above, subject to Executive's delivery to the Company of a waiver and release of claims agreement in a form approved by the Company that becomes effective and irrevocable in accordance with Section 11(d) hereof (a "<u>Release</u>"):

(A) During the nine-month period commencing on the Date of Termination (the "<u>Severance Period</u>"), the Company shall continue to pay Executive the sum of the Executive's Annual Base Salary, such payment to be made in accordance with the Company's regular payroll procedures, with the first such installment to occur on the first payroll date following the date the Release becomes effective and irrevocable or as otherwise provided in Section 11(d) hereof and inclusive of any installments that would have been made had the Release been immediately effective and irrevocable.

(B) During the period commencing on the Date of Termination and ending on the last day of the Severance Period, or if earlier, the date on which Executive becomes eligible for comparable replacement coverage under a subsequent employer's group health plan (in any case, the "<u>Non-CIC COBRA Period</u>"), subject to Executive's valid election to continue healthcare coverage under Section 4980B of the Internal Revenue Code of 1986, as amended (the "<u>Code</u>") and the regulations thereunder, the Company shall, in its sole discretion, either (x) continue to provide to Executive and Executive's dependents, at the Company's sole expense, or (y) reimburse Executive and Executive's dependents for coverage under its group health plan (if any) at the same levels in effect on the Date of Termination; provided, however, that if (1) any plan pursuant to which such benefits are provided is not, or ceases prior to the expiration of the

continuation coverage period to be, exempt from the application of Section 409A under Treasury Regulation Section 1.409A-1(a)(5), (2) the Company is otherwise unable to continue to cover Executive or Executive's dependents under its group health plans, or (3) the Company cannot provide the benefit without violating applicable law (including, without limitation, Section 2716 of the Public Health Service Act), then, in any such case, an amount equal to each remaining Company subsidy shall thereafter be paid to Executive in substantially equal monthly installments over the Non-CIC COBRA Period (or remaining portion thereof).

(ii) <u>Termination During a Change in Control Period</u>. If, during the Term of Employment and during a Change in Control Period, Executive's employment is terminated by the Company without Cause or Executive resigns for Good Reason, then, in addition to the payments and benefits described in Section 6(a) above, subject to Executive's delivery to the Company of a Release that becomes effective and irrevocable in accordance with Section 11(d) hereof:

(A) The Company shall pay to Executive an amount equal to the sum of (i) one time (1x) Executive's Annual Base Salary and (ii) one time (1x) Executive's target Annual Bonus. Such amount will be subject to applicable withholdings and payable in a single lump sum cash payment on the first regular payroll date following the date the Release becomes effective and irrevocable or as otherwise provided in Section 11(d) hereof.

(B) During the period commencing on the Date of Termination and ending on the twelve month anniversary thereof or, if earlier, the date on which Executive becomes eligible for comparable replacement coverage under a subsequent employer's group health plan (in any case, the "<u>CIC COBRA Period</u>"), subject to Executive's valid election to continue healthcare coverage under Section 4980B of the Code and the regulations thereunder, the Company shall, in its sole discretion, either (x) continue to provide to Executive and Executive's dependents, at the Company's sole expense, or (y) reimburse Executive and Executive's dependents for coverage under its group health plan (if any) at the same levels in effect on the Date of Termination; *provided, however*, that if (1) any plan pursuant to which such benefits are provided is not, or ceases prior to the expiration of the continuation coverage period to be, exempt from the application of Section 409A under Treasury Regulation Section 1.409A-1(a)(5), (2) the Company is otherwise unable to continue to cover Executive's dependents under its group health plans, or (3) the Company cannot provide the benefit without violating applicable law (including, without limitation, Section 2716 of the Public Health Service Act), then, in any such case, an amount equal to each remaining Company subsidy shall thereafter be paid to Executive in substantially equal monthly installments over the CIC COBRA Period (or remaining portion thereof).

(C) The Company shall cause any unvested equity awards, including any stock options, restricted stock units and restricted stock awards, including any such awards subject to performance-based vesting, held by Executive as of the Date of Termination, to become fully vested and, if applicable, exercisable, and cause all restrictions and rights of repurchase on such awards to lapse with respect to all of the shares of the Company's Common Stock subject thereto.

(c) <u>No Other Severance</u>. The provisions of this Section 6 shall supersede in their entirety any severance payment provisions in any severance plan, policy, program, or other arrangement maintained by the Company except as otherwise approved by the Board.

(d) <u>No Requirement to Mitigate; Survival</u>. Executive shall not be required to mitigate the amount of any payment provided for under this Agreement by seeking other employment or in any other manner. Notwithstanding anything to the contrary in this Agreement, the termination of Executive's employment shall not impair the rights or obligations of any Party.

(e) <u>Definition of Cause</u>. For purposes hereof, "<u>Cause</u>" shall mean any one of the following: (i) Executive's violation of any applicable material law or regulation respecting the business of the Company; (ii) Executive's conviction of, or plea of *nolo contendere* to, a felony or other crime involving moral turpitude; (iii) any act of dishonesty, fraud, or misrepresentation in relation to Executive's duties to the Company which act is materially and demonstrably injurious to the Company; (iv) Executive's failure to perform in any material respect Executive's duties hereunder after fifteen (15) days' notice (other than on account of disability); (v) Executive's failure to attempt in good faith to implement a clear and reasonable directive from the CEO or to comply with any of the Company's policies and procedures which failure is either material or occurs after written notice from the CEO; (vi) any act of gross misconduct which is injurious to the Company; or (vii) Executive's breach of fiduciary duty owed to the Company.

(f) Definition of Change in Control. For purposes of this Agreement, "<u>Change in Control</u>" shall mean (i) the acquisition by any person or group of affiliated or associated persons of more than fifty percent (50%) of the outstanding capital stock of the Company or voting securities representing more than fifty percent (50%) of the total voting power of outstanding securities of the Company; (ii) the consummation of a sale of all or substantially all of the assets of the Company to a third party; (iii) the consummation of any merger involving the Company in which, immediately after giving effect to such merger, less than a majority of the total voting power of outstanding stock of the surviving or resulting entity is then "beneficially owned" (within the meaning of Rule 13d-3 under the Securities Exchange Act of 1934, as amended) in the aggregate by the stockholders of the Company, as applicable, immediately prior to such merger. For the avoidance of doubt and notwithstanding anything herein to the contrary, in no event shall a transaction constitute a "Change in Control" if: (w) its sole purpose is to change the state of the Company's incorporation; (x) its sole purpose is to create a holding company that will be owned in substantially the same proportions by the persons who held the Company's securities immediately before such transaction; (y) it is effected primarily for the purpose of financing the Company with cash (as determined by the Board without regard to whether such transaction is effectuated by a merger, equity financing, or otherwise); or (z) it constitutes, or includes sales of shares in connection with, the initial public offering of the Company's capital stock. Notwithstanding the foregoing, a "<u>Change in Control</u>" must also constitute a "change in control event," as defined in Treasury Regulation §1.409A-3(i)(5).

(g) Definition of Good Reason. For purposes hereof, "Good Reason" shall mean any one of the following: (i) the material reduction of Executive's base salary (other than a reduction that is applied substantially across executives), (ii) the assignment to Executive of any duties materially and negatively inconsistent in respect of Executive's position (including status, offices, titles and reporting requirements), authority, duties or responsibilities, or any other action by the Company which results in a material diminution in such position, authority, duties or responsibilities; or (iii) the Company's material breach of this Agreement, *provided*, that, in each case, Executive will not be deemed to have Good Reason unless (1) Executive first provides the Company with written notice of the condition giving rise to Good Reason within thirty (30) days of its initial occurrence, (2) the Company or the successor company fails to cure such condition within thirty (30) days after receiving such written notice (the "<u>Cure Period</u>"), and (3) Executive's resignation based on such Good Reason is effective within thirty (30) days after the expiration of the Cure Period.

7. <u>Assignment and Successors</u>. The Company shall assign its rights and obligations under this Agreement to any successor to all or substantially all of the business or the assets of the Company (by merger or otherwise). This Agreement shall be binding upon and inure to the benefit of the Company, Executive, and their respective successors, assigns, personnel, and legal representatives, executors, administrators, heirs, distributees, devisees, and legatees, as applicable. None of Executive's rights or obligations may be assigned or transferred by Executive, other than Executive's rights to payments hereunder, which may be transferred only by will, operation of law, or as otherwise provided herein.

8. Miscellaneous Provisions.

(a) <u>Confidentiality Agreement</u>. Executive shall continue to be obligated by the At-Will Employment and the Employee Proprietary Information and Inventions Assignment Agreement previously entered into with the Company (the "<u>Confidentiality Agreement</u>"). The Confidentiality Agreement shall survive the termination of this Agreement and Executive's employment with the Company for the applicable period(s) set forth therein.

(b) <u>Non-Solicitation of Employees</u>. For a period of one (1) year following Executive's Date of Termination, Executive shall not, either directly or indirectly (i) solicit for employment by any individual, corporation, firm, or other business, any employees, consultants, independent contractors, or other service providers of the Company or any of its affiliates, or (ii) solicit any employee or consultant of the Company or any of its affiliates to leave the employment or consulting of or cease providing services to the Company or any of its affiliates; *provided*, *however*, that the foregoing clauses (i) and (ii) shall not apply to a general advertisement or solicitation (or any hiring pursuant to such advertisement or solicitation) that is not specifically targeted to such employees or consultants.

(c) <u>Governing Law</u>. This Agreement shall be governed, construed, interpreted, and enforced in accordance with its express terms, and otherwise in accordance with the substantive laws of the state in which Executive works (which, if Executive works remotely, is the state in which Executive resides), without giving effect to any principles of conflicts of law.

(d) <u>Validity</u>. The invalidity or unenforceability of any provision or provisions of this Agreement shall not affect the validity or enforceability of any other provision of this Agreement, which shall remain in full force and effect.

(e) <u>Counterparts</u>. This Agreement may be executed in several counterparts, each of which shall be deemed to be an original, but all of which together will constitute one and the same Agreement. Signatures delivered by facsimile shall be deemed effective for all purposes.

(f) Entire Agreement. The terms of this Agreement, together with the Confidentiality Agreement, are intended by the Parties to be the final expression of their agreement with respect to the employment of Executive by the Company and supersede all prior understandings and agreements, whether written or oral, regarding Executive's service to the Company, including without limitation, the Prior Agreement. The Parties further intend that this Agreement, together with the Confidentiality Agreement, shall constitute the complete and exclusive statement of their terms and that no extrinsic evidence whatsoever may be introduced in any judicial, administrative, or other legal proceeding to vary the terms of this Agreement and the terms of this Agreement. Notwithstanding the foregoing, in the event of any conflict between the terms of the Confidentiality Agreement and the terms of this Agreement, the terms of this Agreement shall prevail.

(g) <u>Amendments; Waivers</u>. This Agreement may not be modified, amended, or terminated except by an instrument in writing signed by Executive and a duly authorized representative of the Company. By an instrument in writing similarly executed, Executive or a duly authorized officer of the Company, as applicable, may waive compliance by the other Party with any specifically identified provision of this Agreement that such other Party was or is obligated to comply with or perform; *provided, however*, that such waiver shall not operate as a waiver of, or estoppel with respect to, any other or subsequent failure. No failure to exercise and no delay in exercising any right, remedy, or power hereunder shall preclude any other or further exercise of any other right, remedy, or power provided herein or by law or in equity.

(h) <u>Dispute Resolution</u>. To ensure the timely and economical resolution of disputes that arise in connection with this Agreement, Executive and the Company agree that, except as excluded herein, any and all controversies, claims and disputes arising out of or relating to this Agreement, including without limitation any alleged violation of its terms or otherwise arising out of the Parties' relationship, shall be resolved solely and exclusively by final and binding arbitration held in the county and state in which Executive works (which, if Executive works remotely, is the state in which Executive resides) through JAMS in conformity with law of the state in which arbitration is held and the then-existing JAMS employment arbitration rules, which can be found at https://www.jamsadr.com/rules-employment-arbitration/. The Federal Arbitration Act, 9 U.S.C. §§ 1 et seq. shall govern the interpretation and enforcement of this arbitration clause. All remedies available from a court of competent jurisdiction shall be available in the arbitration; provided, however, in the event of a breach of Sections 8(a) or 8(b), the Company may request relief from a court of competent jurisdiction if such relief is not available or not available in a timely fashion through arbitration as determined by the Company. The arbitrator shall: (a) provide adequate discovery for the resolution of the dispute; and (b) issue a written arbitration decision, to include the arbitrator's essential findings and conclusions and a statement of the award. The arbitrator shall award the prevailing Party attorneys' fees and expert fees, if any. Notwithstanding the foregoing, it is acknowledged that it will be impossible to measure in money the damages that would be suffered if the Parties fail to comply with any of the obligations imposed on them under Sections 8(a) and 8(b), and that in the event of any such failure, an aggrieved person will be irreparably damaged and will not have an adequate remedy at law. Any such person shall, therefore, be entitled to seek injunctive relief, including specific performance, to enforce such obligations, and if any action shall be brought in equity to enforce any of the provisions of Sections 8(a) and 8(b), none of the Parties shall raise the defense, without a good faith basis for raising such defense, that there is an adequate remedy at law. Executive and the Company understand that by agreement to arbitrate any claim pursuant to this Section 8(h), they will not have the right to have any claim decided by a jury or a court, but shall instead have any claim decided through arbitration. Executive and the Company waive any constitutional or other right to bring claims covered by this Agreement other than in their individual capacities. Except as may be prohibited by applicable law, the foregoing waiver includes the ability to assert claims as a plaintiff or class member in any purported class or collective action or representative proceeding. Nothing herein shall limit Executive's ability to pursue claims for workers compensation or unemployment benefits or pursue other claims which by law cannot be subject to mandatory arbitration.

(i) <u>Enforcement</u>. If any provision of this Agreement is held to be illegal, invalid, or unenforceable under present or future laws, such provision shall be fully severable; this Agreement shall be construed and enforced as if such illegal, invalid, or unenforceable provision had never comprised a portion of this Agreement; and the remaining provisions of this Agreement shall remain in full force and effect and shall not be affected by the illegal, invalid, or unenforceable provision or by its severance from this Agreement. Furthermore, in lieu of such illegal, invalid, or unenforceable provision there shall be added automatically as part of this Agreement a provision as similar in terms to such illegal, invalid, or unenforceable provision as may be possible and be legal, valid, and enforceable.

(j) <u>Withholding</u>. The Company shall be entitled to withhold from any amounts payable under this Agreement any federal, state, local, or foreign withholding or other taxes or charges which the Company is required to withhold. The Company shall be entitled to rely on an opinion of counsel if any questions as to the amount or requirement of withholding shall arise.

(k) Whistleblower Protections and Trade Secrets. Notwithstanding anything to the contrary contained herein, nothing in this Agreement prohibits Executive from reporting possible violations of federal law or regulation to any United States governmental agency or entity in accordance with the provisions of and rules promulgated under Section 21F of the Securities Exchange Act of 1934 or Section 806 of the Sarbanes-Oxley Act of 2002, or any other whistleblower protection provisions of state or federal law or regulation (including the right to receive an award for information provided to any such government agencies). Furthermore, in accordance with 18 U.S.C. § 1833, notwithstanding anything to the contrary in this Agreement: (i) Executive shall not be in breach of this Agreement, and shall not be held criminally or civilly liable under any federal or state trade secret law (x) for the disclosure of a trade secret that is made in confidence to a federal, state, or local government official or to an attorney solely for the purpose of reporting or investigating a suspected violation of law, or (y) for the disclosure of a trade secret that is made in a complaint or other document filed in a lawsuit or other proceeding, if such filing is made under seal; and (ii) if Executive files a lawsuit for retaliation by the Company for reporting a suspected violation of law, Executive may disclose the trade secret to Executive's attorney, and may use the trade secret information in the court proceeding, if Executive files any document containing the trade secret under seal, and does not disclose the trade secret, except pursuant to court order.

9. Prior Employment. Executive represents and warrants that Executive's acceptance of employment with the Company has not breached, and the performance of Executive's duties hereunder will not breach, any duty owed by Executive to any prior employer or other person. Executive further represents and warrants to the Company that (a) the performance of Executive's obligations hereunder will not violate any agreement between Executive and any other person, firm, organization, or other entity; (b) Executive is not bound by the terms of any agreement with any previous employer or other party to refrain from competing, directly or indirectly, with the business of such previous employer or other party that would be violated by Executive entering into this Agreement and/or providing services to the Company pursuant to the terms of this Agreement; and (c) Executive's performance of Executive's duties under this Agreement will not require Executive to, and Executive shall not, rely on in the performance of Executive's duties or disclose to the Company or any other person or entity or induce the Company in any way to use or rely on any trade secret or other confidential or proprietary information or material belonging to any previous employer of Executive.

10. Golden Parachute Excise Tax.

(a) <u>Best Pay</u>. Any provision of this Agreement to the contrary notwithstanding, if any payment or benefit Executive would receive from the Company pursuant to this Agreement or otherwise ("<u>Payment</u>") would (i) constitute a "parachute payment" within the meaning of Section 280G of the Code and (ii) but for this sentence, be subject to the excise tax imposed by Section 4999 of the Code (the "<u>Excise Tax</u>"), then such Payment will be equal to the Reduced Amount (as defined below). The "<u>Reduced Amount</u>" will be either (A) the largest portion of the Payment that would result in no portion of the Payment (after reduction) being subject to the Excise Tax or (B) the entire Payment, whichever amount after taking into account all applicable federal, state, and local employment taxes, income taxes, and the Excise Tax (all computed at the highest applicable marginal rate, net of the maximum reduction in federal income taxes which could be obtained from a deduction of such state and local taxes), results in Executive' s receipt, on an after-tax basis, of the greater economic benefit notwithstanding that all or some portion of the Payment may be subject to the Excise Tax. If a reduction in a Payment is required pursuant to the preceding sentence and the Reduced Amount is determined pursuant to clause (A) of the preceding sentence, the reduction shall occur in the manner (the "<u>Reduction Method</u>") that results in the greatest economic benefit for Executive. If more than one method of reduction will result in the same economic benefit, the items so

reduced will be reduced pro rata (the "<u>Pro Rata Reduction Method</u>"). Notwithstanding the foregoing, if the Reduction Method or the Pro Rata Reduction Method would result in any portion of the Payment being subject to taxes pursuant to Section 409A (as defined below) that would not otherwise be subject to taxes pursuant to Section 409A, then the Reduction Method and/or the Pro Rata Reduction Method, as the case may be, shall be modified so as to avoid the imposition of taxes pursuant to Section 409A as follows: (1) as a first priority, the modification shall preserve to the greatest extent possible, the greatest economic benefit for Executive as determined on an after-tax basis; (2) as a second priority, Payments that are contingent on future events (*e.g.*, being terminated without cause), shall be reduced (or eliminated) before Payments that are not contingent on future events; and (3) as a third priority, Payments that are "deferred compensation" within the meaning of Section 409A shall be reduced (or eliminated) before Payments that are not deferred compensation within the meaning of Section 409A.

(b) Accounting Firm. The accounting firm engaged by the Company for general tax purposes as of the day prior to the Change in Control will perform the calculations set forth in Section 10(a) above. If the firm so engaged by the Company is serving as the accountant or auditor for the acquiring company, the Company will appoint a nationally recognized accounting firm to make the determinations required hereunder. The Company will bear all expenses with respect to the determinations by such firm required to be made hereunder. The accounting firm engaged to make the determinations hereunder will provide its calculations, together with detailed supporting documentation, to the Company within thirty (30) days before the consummation of a Change in Control (if requested at that time by the Company) or such other time as requested by the Company. If the accounting firm determines that no Excise Tax is payable with respect to a Payment, either before or after the application of the Reduced Amount, it will furnish the Company with documentation reasonably acceptable to the Company that no Excise Tax will be imposed with respect to such Payment. Any good faith determinations of the accounting firm made hereunder will be final, binding and conclusive upon the Company and Executive.

11. Section 409A.

(a) <u>General</u>. The intent of the Parties is that the payments and benefits under this Agreement comply with or be exempt from Section 409A of the Code and the Department of Treasury regulations and other interpretive guidance issued thereunder, including without limitation any such regulations or other guidance that may be issued after the Effective Date, ("<u>Section 409A</u>") and, accordingly, to the maximum extent permitted, this Agreement shall be interpreted to be in compliance therewith. If Executive notifies the Company that Executive has received advice of tax counsel of a national reputation with expertise in Section 409A that any provision of this Agreement would cause Executive to incur any additional tax or interest under Section 409A (with specificity as to the reason therefor) or the Company independently makes such determination, the Company and Executive shall take commercially reasonable efforts to reform such provision to try to comply with or be exempt from Section 409A through good faith modifications to the minimum extent reasonably appropriate to conform with Section 409A, *provided* that any such modifications shall not increase the cost or liability to the Company. To the extent that any provision hereof is modified in order to comply with or be exempt from Section 409A, such modification shall be made in good faith and shall, to the maximum extent reasonably possible, maintain the original intent and economic benefit to Executive and the Company of the applicable provision without violating the provisions of Section 409A.

(b) <u>Separation from Service</u>. Notwithstanding any provision to the contrary in this Agreement: (i) no amount that constitutes "deferred compensation" under Section 409A shall be payable pursuant to Section 6(b) above unless the termination of Executive's employment constitutes a "separation from service" within the meaning of Section 1.409A-1(h) of the Department of Treasury Regulations ("<u>Separation from Service</u>"); (ii) for purposes of Section 409A, Executive's right to receive installment payments shall be treated as a right to receive a series of separate and distinct payments; and (iii) to the

extent that any reimbursement of expenses or in-kind benefits constitutes "deferred compensation" under Section 409A, such reimbursement or benefit shall be provided no later than December 31st of the year following the year in which the expense was incurred. The amount of expenses reimbursed in one year shall not affect the amount eligible for reimbursement in any subsequent year. The amount of any in-kind benefits provided in one year shall not affect the amount of in-kind benefits provided in any other year.

(c) <u>Specified Employee</u>. Notwithstanding anything in this Agreement to the contrary, if Executive is deemed by the Company at the time of Executive's Separation from Service to be a "specified employee" for purposes of Section 409A, to the extent delayed commencement of any portion of the benefits to which Executive is entitled under this Agreement is required in order to avoid a prohibited distribution under Section 409A, such portion of Executive's benefits shall not be provided to Executive prior to the earlier of (i) the expiration of the six (6)-month period measured from the date of Executive's Separation from Service with the Company or (ii) the date of Executive's death. Upon the first business day following the expiration of the applicable Section 409A period, all payments deferred pursuant to the preceding sentence shall be paid in a lump sum to Executive (or Executive's estate or beneficiaries), and any remaining payments due to Executive under this Agreement shall be paid as otherwise provided herein.

(d) Release. Notwithstanding anything to the contrary in this Agreement, to the extent that any payments due under this Agreement as a result of Executive's termination of employment are subject to Executive's execution and delivery of a Release, (i) the Company shall deliver the Release to Executive within ten (10) business days following Executive's Date of Termination, and the Company's failure to deliver a Release prior to the expiration of such ten (10) business day period shall constitute a waiver of any requirement to execute a Release, (ii) if Executive fails to execute the Release on or prior to the Release Expiration Date (as defined below) or timely revokes Executive's acceptance of the Release thereafter, Executive shall not be entitled to any payments or benefits otherwise conditioned on the Release, and (iii) in any case where Executive's Date of Termination and the Release Expiration Date fall in two separate taxable years, any payments required to be made to Executive that are conditioned on the Release and are treated as nonqualified deferred compensation for purposes of Section 409A shall be made in the later taxable year. For purposes of this Section 11(d), "Release Expiration Date" shall mean the date that is twenty-one (21) days following the date upon which the Company timely delivers the Release to Executive, or, in the event that Executive's termination of employment is "in connection with an exit incentive or other employment termination program" (as such phrase is defined in the Age Discrimination in Employment Act of 1967), the date that is forty-five (45) days following such delivery date. To the extent that any payments of nonqualified deferred compensation (within the meaning of Section 409A) due under this Agreement as a result of Executive's termination of employment to this Section 11(d), such amounts shall be paid in a lump sum on the first payroll date following the date that Executive executes and does not revoke the Release (and the applicable revocation period has expired)

12. <u>Employee Acknowledgement</u>. Executive acknowledges that Executive has read and understands this Agreement, is fully aware of its legal effect, has not acted in reliance upon any representations or promises made by the Company other than those contained in writing herein, and has entered into this Agreement freely based on Executive's own judgment.

[Signature Page Follows]

IN WITNESS WHEREOF, the Parties have duly executed this Agreement as of the date and year first above written.

NEUMORA THERAPEUTICS, INC.

By:	/s/ Paul Berns	
Name:	Paul Berns	
Title:	Chief Executive Officer	
EXECUTIVE		
By:	/s/ John Dunlop	
Name:	John Dunlop	

Address: [***]

EXHIBIT A

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PERMITTED OUTSIDE ACTIVITIES

[to be listed – if any]

NEUMORA THERAPEUTICS, INC.

EXECUTIVE EMPLOYMENT AGREEMENT

This Executive Employment Agreement (the "<u>Agreement</u>) is entered into between Neumora Therapeutics, Inc., a Delaware corporation f/k/a RBNC Therapeutics, Inc. (the "<u>Company</u>"), and Joshua Pinto ("<u>Executive</u>" and, together with the Company, the "<u>Parties</u>") effective as of April 11, 2022 (the "<u>Effective Date</u>"). This Agreement supersedes in its entirety that certain offer letter between Executive and the Company dated as of May 7, 2021 (the "<u>Prior Agreement</u>").

WHEREAS, the Company desires to assure itself of the continued services of Executive by engaging Executive to perform services as an employee of the Company under the terms hereof;

WHEREAS, Executive desires to provide continued services to the Company on the terms herein provided; and

WHEREAS, the Parties desire to execute this Agreement to supersede the Prior Agreement in its entirety effective as of the Effective Date.

NOW, THEREFORE, in consideration of the foregoing, and for other good and valuable consideration, including the respective covenants and agreements set forth below, the receipt and sufficiency of which are hereby acknowledged, the Parties hereto agree as follows:

1. Employment.

(a) <u>General</u>. The Company shall continue to employ Executive upon the terms and conditions provided herein effective as of the Effective Date.

(b) Position and Duties. As of the Effective Date, Executive: (i) shall serve as the Company's Chief Financial Officer, with responsibilities, duties, and authority usual and customary for such position, subject to direction by the Chief Executive Officer of the Company (the "<u>CEO</u>"); (ii) shall continue to report directly to the CEO; and (iii) agrees promptly and faithfully to comply with all present and future policies, requirements, rules and regulations, and reasonable directions and requests, of the Company in connection with the Company's business. At the Company's request, Executive shall serve the Company and/or its subsidiaries and affiliates in such other capacities in addition to the foregoing as the Company shall designate, provided that such additional capacities are consistent with Executive's position as the Company's Chief Financial Officer. In the event that Executive serves in any one or more of such additional capacities, Executive's compensation shall not automatically be increased on account of such additional service.

(c) <u>Performance of Executive's Duties</u>. During Executive's employment with the Company, and except for periods of illness, vacation, disability, or reasonable leaves of absence or as discussed in Section 1(e) below, Executive shall devote Executive's full time and attention to the business and affairs of the Company. The rights of Executive under this Agreement shall not be affected by any change in the title, duties, or capacity of Executive during Executive's employment with the Company.

(d) <u>Principal Office</u>. Executive shall continue to perform services for the Company partially from the Company's offices and partially from Executive's home office, or, with the Company's consent, at any other place in connection with the fulfillment of Executive's role with the Company; provided, however, that the Company may from time to time require Executive to travel temporarily to other locations in connection with the Company's business.

(e) Exclusivity. Except with the prior written approval of the CEO (which the CEO may grant or withhold in the CEO's discretion), Executive shall devote all of Executive's best efforts and full working time, attention, and energies to the business of the Company, except during any paid vacation or other excused absence periods. Notwithstanding the foregoing, Executive may, without violating this Section 1(e), (i) as a passive investment, own publicly traded securities in such form or manner as will not require any services by Executive in the operation of the entities in which such securities are owned; (ii) engage in charitable and civic activities; or (iii) engage in other personal passive investment activities, in each case, so long as such interests or activities do not materially interfere to the extent such activities do not, individually or in the aggregate, interfere with or otherwise prevent the performance of Executive's duties and responsibilities hereunder. Executive may also serve as a member of the board of directors or board of advisors of another organization provided (i) such organization is not a competitor of the Company; (ii) Executive receives prior written approval from the CEO; and (iii) such activities do not individually or in the aggregate interfere with the performance of Executive's duties under this Agreement, violate the Company's standards of conduct then in effect, or raise a conflict under the Company's conflict of interest policies. For the avoidance of doubt, the CEO has approved Executive's continued service with those organizations set forth in Exhibit A, such approval to continue until the earlier to occur of (a) the CEO's revocation of such approval in the CEO's discretion, or (b) such time as such service interferes with the performance of Executive's duties under this Agreement, violates the Company's standards of conflict or raises a conflict under the Company's conflict of interest policies.

2. <u>Term</u>. The period of Executive's employment under this Agreement shall commence on the Effective Date and shall continue until Executive's employment with the Company is terminated pursuant to Section 5 below. The phrase "<u>Term of Employment</u>" as used in this Agreement shall refer to the entire period of employment of Executive by the Company.

3. Compensation and Related Matters.

(a) <u>Annual Base Salary</u>. During the Term of Employment, Executive shall receive a base salary at the rate of \$465,800.00 per annum (as may be increased from time to time, the "<u>Annual Base Salary</u>"), subject to withholdings and deductions, which shall be paid to Executive in accordance with the customary payroll practices and procedures of the Company. Such Annual Base Salary shall be reviewed by the CEO, and, as applicable, the Board and/or the Compensation Committee of the Board, not less than annually.

(b) <u>Annual Bonus</u>. Executive shall be eligible to receive a discretionary annual bonus based on Executive's achievement of performance objectives established by the Board and its Compensation Committee, such bonus to be targeted at forty percent (40%) of Executive's Annual Base Salary (the "<u>Annual Bonus</u>"). Any Annual Bonus approved by the Board and its Compensation Committee shall be paid at the same time annual bonuses are paid to other executives of the Company generally, subject to Executive's continuous employment through the date of applicable payment. Executive acknowledges and agrees that nothing contained herein confers upon Executive any right to the Annual Bonus in any year, and any Annual Bonus payment including the amount therein will be determined by the Company in its sole discretion.

(c) <u>Benefits</u>. Executive shall be entitled to participate in such employee and executive benefit plans and programs as the Company may from time to time offer to provide to its executives, subject to the terms and conditions of such plans. Notwithstanding the foregoing, nothing herein is intended, or shall be construed, to require the Company to institute or continue any, or any particular, plan or benefit.

(d) <u>Business Expenses</u>. The Company shall reimburse Executive for all reasonable, documented, out-of-pocket travel and other business expenses incurred by Executive in the performance of Executive's duties to the Company in accordance with the Company's applicable expense reimbursement policies and procedures as are in effect from time to time.

(e) Vacation. Executive will be entitled to paid vacation in accordance with the Company's vacation policy, as in effect from time to time.

4. <u>Equity Awards</u>.

(a) <u>Outstanding Equity Awards</u>. Executive's outstanding equity awards shall remain outstanding following the Effective Date in accordance with their terms, *provided*, that to the extent any term of this Agreement is more favorable to Executive, including in respect to accelerated vesting, the more favorable terms of this Agreement shall control.

(b) <u>Future Equity Awards</u>. Executive shall be eligible for such additional stock options and equity awards as may be determined by the Board and its Compensation Committee, in its sole discretion.

5. Termination.

(a) <u>At-Will Employment</u>. The Company and Executive acknowledge that Executive's employment is and shall continue to be at-will, as defined under applicable law. This means that it is not for any specified period of time and, subject to any ramifications under Section 6 of this Agreement, can be terminated by Executive or by the Company at any time, with or without advance notice, and for any or no particular reason or cause. It also means that Executive's job duties, title, and responsibility and reporting level, work schedule, compensation and benefits, as well as the Company's personnel policies and procedures, may be changed with prospective effect, with or without notice, at any time in the sole discretion of the Company (subject to any ramification such changes may have under Section 6 of this Agreement). This "at-will" nature of Executive's employment shall remain unchanged during Executive's tenure as an employee and may not be changed, except in an express writing signed by Executive and a duly authorized officer of the Company. If Executive's employment terminates for any lawful reason, Executive shall not be entitled to any payments, benefits, damages, award, or compensation other than as provided in this Agreement.

(b) <u>Notice of Termination</u>. During the Term of Employment, any termination of Executive's employment by the Company or by Executive (other than by reason of death) shall be communicated by written notice (a "<u>Notice of Termination</u>") from one Party hereto to the other Party hereto (i) indicating the specific termination provision in this Agreement relied upon, if any, (ii) setting forth in reasonable detail the facts and circumstances claimed to provide a basis for termination of Executive's employment under the provision so indicated, and (iii) specifying the Date of Termination (as defined below). The failure by the Company to set forth in the Notice of Termination all of the facts and circumstances which contribute to a showing of Cause (as defined below) shall not waive any right of the Company hereunder or preclude the Company from asserting such fact or circumstance in enforcing its rights hereunder.

(c) <u>Termination Date</u>. For purposes of this Agreement, "<u>Date of Termination</u>" shall mean the date of the termination of Executive's employment with the Company specified in a Notice of Termination.

(d) <u>Deemed Resignation</u>. Upon termination of Executive's employment for any reason, Executive shall be deemed to have resigned from all offices and board memberships, if any, then held with the Company or any of its affiliates, and, at the Company's request, Executive shall execute such documents as are necessary or desirable to effectuate such resignations.

6. Consequences of Termination.

(a) Payments of Accrued Obligations upon all Terminations of Employment. Upon a termination of Executive's employment for any reason, Executive (or Executive's estate or legal representative, as applicable) shall be entitled to receive, within thirty (30) days after Executive's Date of Termination (or such earlier date as may be required by applicable law): (i) any portion of Executive's Annual Base Salary earned through Executive's Date of Termination not theretofore paid, (ii) any expenses owed to Executive under Section 3(d) above, (iii) any accrued but unused paid time-off owed to Executive, (iv) any Annual Bonus earned on or prior to the Date of Termination but unpaid as of the Date of Termination, and (v) any amount arising from Executive's participation in, or benefits under, any employee benefit plans, programs, or arrangements under Section 3(c) above, which amounts shall be payable in accordance with the terms and conditions of such employee benefit plans, programs, or arrangements. Except as otherwise set forth in Section 6(b) below, the payments and benefits described in this Section 6(a) shall be the only payments and benefits payable in the event of Executive's termination of employment for any reason.

(b) Severance Payments upon Termination Without Cause or For Good Reason.

(i) <u>Termination Outside a Change in Control Period</u>. If, during the Term of Employment but outside the period beginning three months prior to and ending 18 months following a Change in Control (such period, a "<u>Change in Control Period</u>"), Executive's employment is terminated by the Company without Cause or Executive resigns for Good Reason, then, in addition to the payments and benefits described in Section 6(a) above, subject to Executive's delivery to the Company of a waiver and release of claims agreement in a form approved by the Company that becomes effective and irrevocable in accordance with Section 11(d) hereof (a "<u>Release</u>"):

(A) During the nine-month period commencing on the Date of Termination (the "<u>Severance Period</u>"), the Company shall continue to pay Executive the sum of the Executive's Annual Base Salary, such payment to be made in accordance with the Company's regular payroll procedures, with the first such installment to occur on the first payroll date following the date the Release becomes effective and irrevocable or as otherwise provided in Section 11(d) hereof and inclusive of any installments that would have been made had the Release been immediately effective and irrevocable.

(B) During the period commencing on the Date of Termination and ending on the last day of the Severance Period, or if earlier, the date on which Executive becomes eligible for comparable replacement coverage under a subsequent employer's group health plan (in any case, the "<u>Non-CIC COBRA Period</u>"), subject to Executive's valid election to continue healthcare coverage under Section 4980B of the Internal Revenue Code of 1986, as amended (the "<u>Code</u>") and the regulations thereunder, the Company shall, in its sole discretion, either (x) continue to provide to Executive and Executive's dependents, at the Company's sole expense, or (y) reimburse Executive and Executive's dependents for coverage under its group health plan (if any) at the same levels in effect on the Date of Termination; provided, however, that if (1) any plan pursuant to which such benefits are provided is not, or ceases prior to the expiration of the

continuation coverage period to be, exempt from the application of Section 409A under Treasury Regulation Section 1.409A-1(a)(5), (2) the Company is otherwise unable to continue to cover Executive or Executive's dependents under its group health plans, or (3) the Company cannot provide the benefit without violating applicable law (including, without limitation, Section 2716 of the Public Health Service Act), then, in any such case, an amount equal to each remaining Company subsidy shall thereafter be paid to Executive in substantially equal monthly installments over the Non-CIC COBRA Period (or remaining portion thereof).

(ii) <u>Termination During a Change in Control Period</u>. If, during the Term of Employment and during a Change in Control Period, Executive's employment is terminated by the Company without Cause or Executive resigns for Good Reason, then, in addition to the payments and benefits described in Section 6(a) above, subject to Executive's delivery to the Company of a Release that becomes effective and irrevocable in accordance with Section 11(d) hereof:

(A) The Company shall pay to Executive an amount equal to the sum of (i) one time (1x) Executive's Annual Base Salary and (ii) one time (1x) Executive's target Annual Bonus. Such amount will be subject to applicable withholdings and payable in a single lump sum cash payment on the first regular payroll date following the date the Release becomes effective and irrevocable or as otherwise provided in Section 11(d) hereof.

(B) During the period commencing on the Date of Termination and ending on the twelve month anniversary thereof or, if earlier, the date on which Executive becomes eligible for comparable replacement coverage under a subsequent employer's group health plan (in any case, the "<u>CIC COBRA Period</u>"), subject to Executive's valid election to continue healthcare coverage under Section 4980B of the Code and the regulations thereunder, the Company shall, in its sole discretion, either (x) continue to provide to Executive and Executive's dependents, at the Company's sole expense, or (y) reimburse Executive and Executive's dependents for coverage under its group health plan (if any) at the same levels in effect on the Date of Termination; *provided, however*, that if (1) any plan pursuant to which such benefits are provided is not, or ceases prior to the expiration of the continuation coverage period to be, exempt from the application of Section 409A under Treasury Regulation Section 1.409A-1(a)(5), (2) the Company is otherwise unable to continue to cover Executive's dependents under its group health plans, or (3) the Company cannot provide the benefit without violating applicable law (including, without limitation, Section 2716 of the Public Health Service Act), then, in any such case, an amount equal to each remaining Company subsidy shall thereafter be paid to Executive in substantially equal monthly installments over the CIC COBRA Period (or remaining portion thereof).

(C) The Company shall cause any unvested equity awards, including any stock options, restricted stock units and restricted stock awards, including any such awards subject to performance-based vesting, held by Executive as of the Date of Termination, to become fully vested and, if applicable, exercisable, and cause all restrictions and rights of repurchase on such awards to lapse with respect to all of the shares of the Company's Common Stock subject thereto.

(c) <u>No Other Severance</u>. The provisions of this Section 6 shall supersede in their entirety any severance payment provisions in any severance plan, policy, program, or other arrangement maintained by the Company except as otherwise approved by the Board.

(d) <u>No Requirement to Mitigate; Survival</u>. Executive shall not be required to mitigate the amount of any payment provided for under this Agreement by seeking other employment or in any other manner. Notwithstanding anything to the contrary in this Agreement, the termination of Executive's employment shall not impair the rights or obligations of any Party.

(e) <u>Definition of Cause</u>. For purposes hereof, "<u>Cause</u>" shall mean any one of the following: (i) Executive's violation of any applicable material law or regulation respecting the business of the Company; (ii) Executive's conviction of, or plea of *nolo contendere* to, a felony or other crime involving moral turpitude; (iii) any act of dishonesty, fraud, or misrepresentation in relation to Executive's duties to the Company which act is materially and demonstrably injurious to the Company; (iv) Executive's duilet to perform in any material respect Executive's duties hereunder after fifteen (15) days' notice (other than on account of disability); (v) Executive's failure to attempt in good faith to implement a clear and reasonable directive from the CEO or to comply with any of the Company's policies and procedures which failure is either material or occurs after written notice from the CEO; (vi) any act of gross misconduct which is injurious to the Company; or (vii) Executive's breach of fiduciary duty owed to the Company.

(f) Definition of Change in Control. For purposes of this Agreement, "Change in Control" shall mean (i) the acquisition by any person or group of affiliated or associated persons of more than fifty percent (50%) of the outstanding capital stock of the Company or voting securities representing more than fifty percent (50%) of the total voting power of outstanding securities of the Company; (ii) the consummation of a sale of all or substantially all of the assets of the Company to a third party; (iii) the consummation of any merger involving the Company in which, immediately after giving effect to such merger, less than a majority of the total voting power of outstanding stock of the surviving or resulting entity is then "beneficially owned" (within the meaning of Rule 13d-3 under the Securities Exchange Act of 1934, as amended) in the aggregate by the stockholders of the Company, as applicable, immediately prior to such merger. For the avoidance of doubt and notwithstanding anything herein to the contrary, in no event shall a transaction constitute a "Change in Control" if: (w) its sole purpose is to change the state of the Company's incorporation; (x) its sole purpose is to create a holding company that will be owned in substantially the same proportions by the persons who held the Company's securities immediately before such transaction; (y) it is effected primarily for the purpose of financing the Company with cash (as determined by the Board without regard to whether such transaction is effectuated by a merger, equity financing, or otherwise); or (z) it constitutes, or includes sales of shares in connection with, the initial public offering of the Company's capital stock. Notwithstanding the foregoing, a "Change in Control" must also constitute a "change in control event," as defined in Treasury Regulation §1.409A-3(i)(5).

(g) Definition of Good Reason. For purposes hereof, "Good Reason" shall mean any one of the following: (i) the material reduction of Executive's base salary (other than a reduction that is applied substantially across executives), (ii) the assignment to Executive of any duties materially and negatively inconsistent in respect of Executive's position (including status, offices, titles and reporting requirements), authority, duties or responsibilities, or any other action by the Company which results in a material diminution in such position, authority, duties or responsibilities; or (iii) the Company's material breach of this Agreement, *provided*, that, in each case, Executive will not be deemed to have Good Reason unless (1) Executive first provides the Company with written notice of the condition giving rise to Good Reason within thirty (30) days of its initial occurrence, (2) the Company or the successor company fails to cure such condition within thirty (30) days after receiving such written notice (the "<u>Cure Period</u>"), and (3) Executive's resignation based on such Good Reason is effective within thirty (30) days after the expiration of the Cure Period.

7. <u>Assignment and Successors</u>. The Company shall assign its rights and obligations under this Agreement to any successor to all or substantially all of the business or the assets of the Company (by merger or otherwise). This Agreement shall be binding upon and inure to the benefit of the Company, Executive, and their respective successors, assigns, personnel, and legal representatives, executors, administrators, heirs, distributees, devisees, and legatees, as applicable. None of Executive's rights or obligations may be assigned or transferred by Executive, other than Executive's rights to payments hereunder, which may be transferred only by will, operation of law, or as otherwise provided herein.

8. Miscellaneous Provisions.

(a) <u>Confidentiality Agreement</u>. Executive shall continue to be obligated by the At-Will Employment and the Employee Proprietary Information and Inventions Assignment Agreement previously entered into with the Company (the "<u>Confidentiality Agreement</u>"). The Confidentiality Agreement shall survive the termination of this Agreement and Executive's employment with the Company for the applicable period(s) set forth therein.

(b) <u>Non-Solicitation of Employees</u>. For a period of one (1) year following Executive's Date of Termination, Executive shall not, either directly or indirectly (i) solicit for employment by any individual, corporation, firm, or other business, any employees, consultants, independent contractors, or other service providers of the Company or any of its affiliates, or (ii) solicit any employee or consultant of the Company or any of its affiliates to leave the employment or consulting of or cease providing services to the Company or any of its affiliates; *provided, however*, that the foregoing clauses (i) and (ii) shall not apply to a general advertisement or solicitation (or any hiring pursuant to such advertisement or solicitation) that is not specifically targeted to such employees or consultants.

(c) <u>Governing Law</u>. This Agreement shall be governed, construed, interpreted, and enforced in accordance with its express terms, and otherwise in accordance with the substantive laws of the state in which Executive works (which, if Executive works remotely, is the state in which Executive resides), without giving effect to any principles of conflicts of law.

(d) <u>Validity</u>. The invalidity or unenforceability of any provision or provisions of this Agreement shall not affect the validity or enforceability of any other provision of this Agreement, which shall remain in full force and effect.

(e) <u>Counterparts</u>. This Agreement may be executed in several counterparts, each of which shall be deemed to be an original, but all of which together will constitute one and the same Agreement. Signatures delivered by facsimile shall be deemed effective for all purposes.

(f) Entire Agreement. The terms of this Agreement, together with the Confidentiality Agreement, are intended by the Parties to be the final expression of their agreement with respect to the employment of Executive by the Company and supersede all prior understandings and agreements, whether written or oral, regarding Executive's service to the Company, including without limitation, the Prior Agreement. The Parties further intend that this Agreement, together with the Confidentiality Agreement, shall constitute the complete and exclusive statement of their terms and that no extrinsic evidence whatsoever may be introduced in any judicial, administrative, or other legal proceeding to vary the terms of this Agreement or the Confidentiality Agreement. Notwithstanding the foregoing, in the event of any conflict between the terms of the Confidentiality Agreement and the terms of this Agreement, the terms of this Agreement shall prevail.

(g) <u>Amendments; Waivers</u>. This Agreement may not be modified, amended, or terminated except by an instrument in writing signed by Executive and a duly authorized representative of the Company. By an instrument in writing similarly executed, Executive or a duly authorized officer of the Company, as applicable, may waive compliance by the other Party with any specifically identified provision of this Agreement that such other Party was or is obligated to comply with or perform; *provided, however*, that such waiver shall not operate as a waiver of, or estoppel with respect to, any other or subsequent failure. No failure to exercise and no delay in exercising any right, remedy, or power hereunder shall preclude any other or further exercise of any other right, remedy, or power provided herein or by law or in equity.

(h) Dispute Resolution. To ensure the timely and economical resolution of disputes that arise in connection with this Agreement, Executive and the Company agree that, except as excluded herein, any and all controversies, claims and disputes arising out of or relating to this Agreement, including without limitation any alleged violation of its terms or otherwise arising out of the Parties' relationship, shall be resolved solely and exclusively by final and binding arbitration held in the county and state in which Executive works (which, if Executive works remotely, is the state in which Executive resides) through JAMS in conformity with law of the state in which arbitration is held and the then-existing JAMS employment arbitration rules, which can be found at https://www.jamsadr.com/rules-employment-arbitration/. The Federal Arbitration Act, 9 U.S.C. §§ 1 et seq. shall govern the interpretation and enforcement of this arbitration clause. All remedies available from a court of competent jurisdiction shall be available in the arbitration; provided, however, in the event of a breach of Sections 8(a) or 8(b), the Company may request relief from a court of competent jurisdiction if such relief is not available or not available in a timely fashion through arbitration as determined by the Company. The arbitrator shall: (a) provide adequate discovery for the resolution of the dispute; and (b) issue a written arbitration decision, to include the arbitrator's essential findings and conclusions and a statement of the award. The arbitrator shall award the prevailing Party attorneys' fees and expert fees, if any. Notwithstanding the foregoing, it is acknowledged that it will be impossible to measure in money the damages that would be suffered if the Parties fail to comply with any of the obligations imposed on them under Sections 8(a) and 8(b), and that in the event of any such failure, an aggrieved person will be irreparably damaged and will not have an adequate remedy at law. Any such person shall, therefore, be entitled to seek injunctive relief, including specific performance, to enforce such obligations, and if any action shall be brought in equity to enforce any of the provisions of Sections 8(a) and 8(b), none of the Parties shall raise the defense, without a good faith basis for raising such defense, that there is an adequate remedy at law. Executive and the Company understand that by agreement to arbitrate any claim pursuant to this Section 8(h), they will not have the right to have any claim decided by a jury or a court, but shall instead have any claim decided through arbitration. Executive and the Company waive any constitutional or other right to bring claims covered by this Agreement other than in their individual capacities. Except as may be prohibited by applicable law, the foregoing waiver includes the ability to assert claims as a plaintiff or class member in any purported class or collective action or representative proceeding. Nothing herein shall limit Executive's ability to pursue claims for workers compensation or unemployment benefits or pursue other claims which by law cannot be subject to mandatory arbitration.

(i) <u>Enforcement</u>. If any provision of this Agreement is held to be illegal, invalid, or unenforceable under present or future laws, such provision shall be fully severable; this Agreement shall be construed and enforced as if such illegal, invalid, or unenforceable provision had never comprised a portion of this Agreement; and the remaining provisions of this Agreement shall remain in full force and effect and shall not be affected by the illegal, invalid, or unenforceable provision or by its severance from this Agreement. Furthermore, in lieu of such illegal, invalid, or unenforceable provision there shall be added automatically as part of this Agreement a provision as similar in terms to such illegal, invalid, or unenforceable provision as may be possible and be legal, valid, and enforceable.

(j) <u>Withholding</u>. The Company shall be entitled to withhold from any amounts payable under this Agreement any federal, state, local, or foreign withholding or other taxes or charges which the Company is required to withhold. The Company shall be entitled to rely on an opinion of counsel if any questions as to the amount or requirement of withholding shall arise.

(k) Whistleblower Protections and Trade Secrets. Notwithstanding anything to the contrary contained herein, nothing in this Agreement prohibits Executive from reporting possible violations of federal law or regulation to any United States governmental agency or entity in accordance with the provisions of and rules promulgated under Section 21F of the Securities Exchange Act of 1934 or Section 806 of the Sarbanes-Oxley Act of 2002, or any other whistleblower protection provisions of state or federal law or regulation (including the right to receive an award for information provided to any such government agencies). Furthermore, in accordance with 18 U.S.C. § 1833, notwithstanding anything to the contrary in this Agreement: (i) Executive shall not be in breach of this Agreement, and shall not be held criminally or civilly liable under any federal or state trade secret law (x) for the disclosure of a trade secret that is made in confidence to a federal, state, or local government official or to an attorney solely for the purpose of reporting or investigating a suspected violation of law, or (y) for the disclosure of a trade secret that is made in a complaint or other document filed in a lawsuit or other proceeding, if such filing is made under seal; and (ii) if Executive files a lawsuit for retaliation by the Company for reporting a suspected violation of law, Executive may disclose the trade secret to Executive's attorney, and may use the trade secret information in the court proceeding, if Executive files any document containing the trade secret under seal, and does not disclose the trade secret, except pursuant to court order.

9. <u>Prior Employment</u>. Executive represents and warrants that Executive's acceptance of employment with the Company has not breached, and the performance of Executive's duties hereunder will not breach, any duty owed by Executive to any prior employer or other person. Executive further represents and warrants to the Company that (a) the performance of Executive's obligations hereunder will not violate any agreement between Executive and any other person, firm, organization, or other entity; (b) Executive is not bound by the terms of any agreement with any previous employer or other party to refrain from competing, directly or indirectly, with the business of such previous employer or other party that would be violated by Executive entering into this Agreement and/or providing services to the Company pursuant to the terms of this Agreement; and (c) Executive's performance of Executive's duties under this Agreement will not require Executive to, and Executive shall not, rely on in the performance of Executive's duties or disclose to the Company or any other person or entity or induce the Company in any way to use or rely on any trade secret or other confidential or proprietary information or material belonging to any previous employer of Executive.

10. Golden Parachute Excise Tax.

(a) <u>Best Pay</u>. Any provision of this Agreement to the contrary notwithstanding, if any payment or benefit Executive would receive from the Company pursuant to this Agreement or otherwise ("<u>Payment</u>") would (i) constitute a "parachute payment" within the meaning of Section 280G of the Code and (ii) but for this sentence, be subject to the excise tax imposed by Section 4999 of the Code (the "<u>Excise Tax</u>"), then such Payment will be equal to the Reduced Amount (as defined below). The "<u>Reduced Amount</u>" will be either (A) the largest portion of the Payment that would result in no portion of the Payment (after reduction) being subject to the Excise Tax or (B) the entire Payment, whichever amount after taking into account all applicable federal, state, and local employment taxes, income taxes, and the Excise Tax (all computed at the highest applicable marginal rate, net of the maximum reduction in federal income taxes which could be obtained from a deduction of such state and local taxes), results in Executive' s receipt, on an after-tax basis, of the greater economic benefit notwithstanding that all or some portion of the Payment may be subject to the Excise Tax. If a reduction shall occur in the manner (the "<u>Reduction Method</u>") that results in the greatest economic benefit for Executive. If more than one method of reduction will result in the same economic benefit, the items so

reduced will be reduced pro rata (the "<u>Pro Rata Reduction Method</u>"). Notwithstanding the foregoing, if the Reduction Method or the Pro Rata Reduction Method would result in any portion of the Payment being subject to taxes pursuant to Section 409A (as defined below) that would not otherwise be subject to taxes pursuant to Section 409A, then the Reduction Method and/or the Pro Rata Reduction Method, as the case may be, shall be modified so as to avoid the imposition of taxes pursuant to Section 409A as follows: (1) as a first priority, the modification shall preserve to the greatest extent possible, the greatest economic benefit for Executive as determined on an after-tax basis; (2) as a second priority, Payments that are contingent on future events (*e.g.*, being terminated without cause), shall be reduced (or eliminated) before Payments that are not contingent on future events; and (3) as a third priority, Payments that are "deferred compensation" within the meaning of Section 409A shall be reduced (or eliminated) before Payments that are not deferred compensation within the meaning of Section 409A.

(b) Accounting Firm. The accounting firm engaged by the Company for general tax purposes as of the day prior to the Change in Control will perform the calculations set forth in Section 10(a) above. If the firm so engaged by the Company is serving as the accountant or auditor for the acquiring company, the Company will appoint a nationally recognized accounting firm to make the determinations required hereunder. The Company will bear all expenses with respect to the determinations by such firm required to be made hereunder. The accounting firm engaged to make the determinations hereunder will provide its calculations, together with detailed supporting documentation, to the Company within thirty (30) days before the consummation of a Change in Control (if requested at that time by the Company) or such other time as requested by the Company. If the accounting firm determines that no Excise Tax is payable with respect to a Payment, either before or after the application of the Reduced Amount, it will furnish the Company with documentation reasonably acceptable to the Company that no Excise Tax will be imposed with respect to such Payment. Any good faith determinations of the accounting firm made hereunder will be final, binding and conclusive upon the Company and Executive.

11. Section 409A.

(a) <u>General</u>. The intent of the Parties is that the payments and benefits under this Agreement comply with or be exempt from Section 409A of the Code and the Department of Treasury regulations and other interpretive guidance issued thereunder, including without limitation any such regulations or other guidance that may be issued after the Effective Date, ("<u>Section 409A</u>") and, accordingly, to the maximum extent permitted, this Agreement shall be interpreted to be in compliance therewith. If Executive notifies the Company that Executive has received advice of tax counsel of a national reputation with expertise in Section 409A that any provision of this Agreement would cause Executive to incur any additional tax or interest under Section 409A (with specificity as to the reason therefor) or the Company independently makes such determination, the Company and Executive shall take commercially reasonable efforts to reform such provision to try to comply with or be exempt from Section 409A through good faith modifications to the minimum extent reasonably appropriate to conform with Section 409A, *provided* that any such modifications shall not increase the cost or liability to the Company. To the extent that any provision hereof is modified in order to comply with or be exempt from Section 409A, such modification shall be made in good faith and shall, to the maximum extent reasonably possible, maintain the original intent and economic benefit to Executive and the Company of the applicable provision without violating the provisions of Section 409A.

(b) <u>Separation from Service</u>. Notwithstanding any provision to the contrary in this Agreement: (i) no amount that constitutes "deferred compensation" under Section 409A shall be payable pursuant to Section 6(b) above unless the termination of Executive's employment constitutes a "separation from service" within the meaning of Section 1.409A-1(h) of the Department of Treasury Regulations ("<u>Separation from Service</u>"); (ii) for purposes of Section 409A, Executive's right to receive installment payments shall be treated as a right to receive a series of separate and distinct payments; and (iii) to the

extent that any reimbursement of expenses or in-kind benefits constitutes "deferred compensation" under Section 409A, such reimbursement or benefit shall be provided no later than December 31st of the year following the year in which the expense was incurred. The amount of expenses reimbursed in one year shall not affect the amount eligible for reimbursement in any subsequent year. The amount of any in-kind benefits provided in one year shall not affect the amount of in-kind benefits provided in any other year.

(c) <u>Specified Employee</u>. Notwithstanding anything in this Agreement to the contrary, if Executive is deemed by the Company at the time of Executive's Separation from Service to be a "specified employee" for purposes of Section 409A, to the extent delayed commencement of any portion of the benefits to which Executive is entitled under this Agreement is required in order to avoid a prohibited distribution under Section 409A, such portion of Executive's benefits shall not be provided to Executive prior to the earlier of (i) the expiration of the six (6)-month period measured from the date of Executive's Separation from Service with the Company or (ii) the date of Executive's death. Upon the first business day following the expiration of the applicable Section 409A period, all payments deferred pursuant to the preceding sentence shall be paid in a lump sum to Executive (or Executive's estate or beneficiaries), and any remaining payments due to Executive under this Agreement shall be paid as otherwise provided herein.

(d) Release. Notwithstanding anything to the contrary in this Agreement, to the extent that any payments due under this Agreement as a result of Executive's termination of employment are subject to Executive's execution and delivery of a Release, (i) the Company shall deliver the Release to Executive within ten (10) business days following Executive's Date of Termination, and the Company's failure to deliver a Release prior to the expiration of such ten (10) business day period shall constitute a waiver of any requirement to execute a Release, (ii) if Executive fails to execute the Release on or prior to the Release Expiration Date (as defined below) or timely revokes Executive's acceptance of the Release thereafter, Executive shall not be entitled to any payments or benefits otherwise conditioned on the Release, and (iii) in any case where Executive's Date of Termination and the Release Expiration Date fall in two separate taxable years, any payments required to be made to Executive that are conditioned on the Release and are treated as nonqualified deferred compensation for purposes of Section 409A shall be made in the later taxable year. For purposes of this Section 11(d), "Release Expiration Date" shall mean the date that is twenty-one (21) days following the date upon which the Company timely delivers the Release to Executive, or, in the event that Executive's termination of employment is "in connection with an exit incentive or other employment termination program" (as such phrase is defined in the Age Discrimination in Employment Act of 1967), the date that is forty-five (45) days following such delivery date. To the extent that any payments of nonqualified deferred compensation (within the meaning of Section 409A) due under this Agreement as a result of Executive's termination of employment to this Section 11(d), such amounts shall be paid in a lump sum on the first payroll date following the date that Executive executes and does not revoke the Release (and the applicable revocation period has expired)

12. <u>Employee Acknowledgement</u>. Executive acknowledges that Executive has read and understands this Agreement, is fully aware of its legal effect, has not acted in reliance upon any representations or promises made by the Company other than those contained in writing herein, and has entered into this Agreement freely based on Executive's own judgment.

[Signature Page Follows]

IN WITNESS WHEREOF, the Parties have duly executed this Agreement as of the date and year first above written.

NEUMORA THERAPEUTICS, INC.

By: <u>/s/ Paul Berns</u> Name: Paul Berns Title: Chief Executive Officer

EXECUTIVE

By: <u>/s/ Joshua Pinto</u> Name: Joshua Pinto Address: [***]

EXHIBIT A

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PERMITTED OUTSIDE ACTIVITIES

[to be listed – if any]