### UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

### FORM 8-K

#### CURRENT REPORT Pursuant to Section 13 or 15(d)

of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): January 13, 2025

### **NEUMORA THERAPEUTICS, INC.**

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation) 001-41802 (Commission File Number) 84-4367680 (IRS Employer Identification Number)

490 Arsenal Way, Suite 200 Watertown, Massachusetts 02472 (Address of principal executive offices) (Zip Code)

(857) 760-0900

(Registrant's telephone number, including area code)

N/A

(Former name or former address, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

□ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

D Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

D Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Securities registered pursuant to Section 12(b) of the Act:

	Trading	Name of each exchange
Title of each class	Symbol(s)	on which registered
Common Stock, \$0.0001 par value per share	NMRA	The Nasdaq Global Select Market

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

Emerging growth company  $\Box$ 

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 13(a) of the Exchange Act.

#### Item 7.01 Regulation FD Disclosure.

On January 13, 2025, Neumora Therapeutics, Inc. (the "Company") made available a corporate presentation, which it plans to use for meetings with investors and analysts at the 43rd Annual J.P. Morgan Healthcare Conference. A copy of the presentation is being furnished hereto as Exhibit 99.1 and is incorporated herein by reference.

The information in this Item 7.01 of this Current Report on Form 8-K and Exhibit 99.1 attached hereto shall not be deemed to be "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to the liabilities of that Section 11 and 12(a)(2) of the Securities Act of 1933, as amended. The information contained herein and in the accompanying exhibit shall not be incorporated by reference into any filing with the Securities and Exchange Commission made by the Company, whether made before or after the date hereof, regardless of any general incorporation language in such filing.

#### Item 9.01 Financial Statements and Exhibits.

Exhibit No. Description

- 99.1 Corporate Presentation dated January 2025.
- 104 Cover Page Interactive Data File (embedded within the Inline XBRL document).

### SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, as amended, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

### NEUMORA THERAPEUTICS, INC.

Date: January 13, 2025

By: /s/ Joshua Pinto Joshua Pinto Chief Financial Officer



Redefining Neuroscience Drug Development January 2025

### Important Disclosures

This presentation contains forward-looking statements about Neumora Therapeutics, Inc. (the "Company," "we," "us," or "our") within the meaning of the federal securities laws, including statements related to: Neumora's intention 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 timing, progress and plans for its therapeutic development programs, including the timing of initiation and data read outs for its programs and studies, program milestones and potential value-creating catalysts, as well as its clinical trial and development plans; future program guidance updates; timing and expectations related to regulatory filings and interactions; its potential to create significant value, probability of success with its proprietary approach and support for the development of its programs; the market opportunity and therapeutic potential of its pipeline; the strength, scope and timing of its intellectual property protection; the safety profiles, differentiation, rationales and suitability for evaluation of navacaprant and its other products candidates, and the probability of success of its study designs and execution; expectations and projections regarding future operating results and financial performance, including the sufficiency of its cash resources and timing of its cash runway; and other statements identified by words such as "could," "expects," "intends," "may," "plans," "potential," "should," "will," "would," or similar expressions and the negatives of those terms. Other than statements of historical facts, all statements contained in this presentation are forward-looking statements within the meaning of the "safe harbor" provisions of the Private Securities Litigation Reform Act of 1995. These statements are subject to risks and uncertainties that could cause the actual results to be materially different from the information expressed or implied by these forward-looking statements, including, among others: the risks related to the inherent uncertainty of clinical drug development and unpredictability and lengthy process for obtaining regulatory approvals; risks related to the timely initiation of, enrollment in and any changes to our clinical trials, including slowing enrollment following topline KOASTAL-1 results and anticipated changes to our KOASTAL-2 and/or -3 stuides; risks related to our reliance on third parties, including CROs; risks related to serious or undesirable side effects of our therapeutic candidates; risks related to our ability to utilize and protect our intellectual property rights; and other matters that could affect sufficiency of capital resources to fund operations. For a detailed discussion of the risks and uncertainties that could cause actual results to differ from those expressed in these forward-looking statements, as well as risks relating to Neumora's business in general, please refer to the risk factors identified in the Company's filings with the Securities and Exchange Commission (SEC), including but not limited to its Quarterly Report on Form 10-Q for the guarter ended September 30, 2024 that was filed with the SEC on November 12, 2024. Forward-looking statements speak only as of the date hereof, and, except as required by law, Neumora undertakes no obligation to update or revise these forward-looking statements.





### **Our Mission**

We are focused on redefining 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

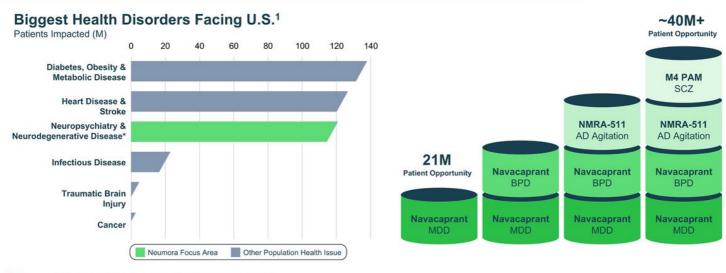


## **Redefining Neuroscience Drug Development**



## Neumora is Tackling One of the Largest Population Health Challenges

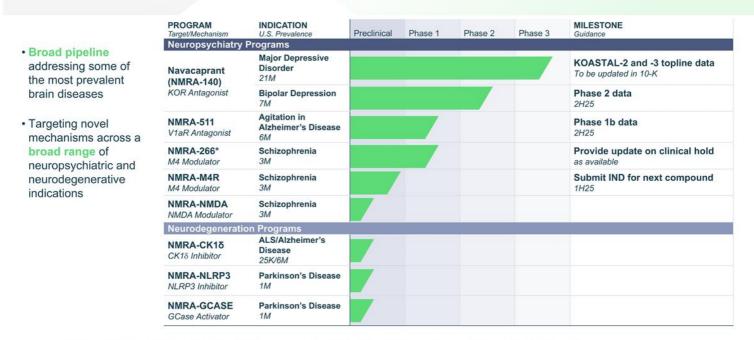
Neumora's clinical-stage pipeline has potential to reach up to ~40M+ patients with a robust IP runway into 2041+



 $\otimes$ 

National Institutes of Health. Our Biggest Health Challenges. Accessed December 2023. Note: Figure not intended as launch guidance or order. BPD = Bipelar Depression; MDD = m Includes: MDD, BPD, Schüczphrenia, Generalized Anxiety Disorder, Post Traumatic Stress [ or depress Deficit Hype

### Advancing a Leading Neuroscience Pipeline



ALS = Amyotrophic lateral scierosis; CK1 & = Casein Kinase I Isoform delta; GCase = Glucocerebrosidase; IP = Intellectual Property; KOR = kappa opioid receptor; NLRP3 = Nucleotide-binding Domain, Leucine-rich-containing Family, Pyrin Domain-containing-3; NMDA = N-methyl-D-aspartate; V1aR = Vasopressin 1a Receptor \*Neumora announced on 4/15/24 that NMRA-286 is currently on clinical hold \*\*\*/al dates are approximate / estimates / projections only

## **MDD Represents a Major Population Health Challenge**

MDD is the leading cause of disability worldwide<sup>1</sup> 280M people worldwide have MDD<sup>1</sup> 21M

adults in the U.S. have MDD<sup>2</sup>; the median onset is ~32.5 years of age

## 30 years

since a novel mechanism of action was approved for MDD

Many people have inadequate response to medication and experience tolerability issues

85%

of patients either don't receive pharmacological treatment or fail to achieve remission with first-line treatment  $^{3-7}$ 

>70%

of people with MDD experience anhedonia<sup>8</sup> 60-85%

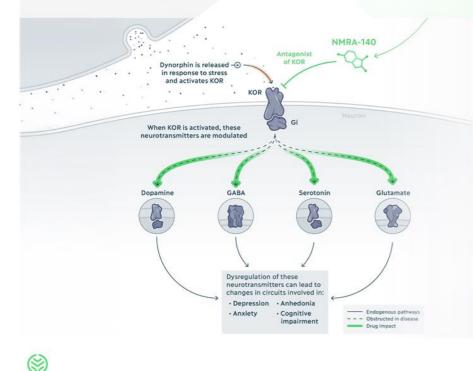
of patients treated with monotherapy<sup>9</sup>

7



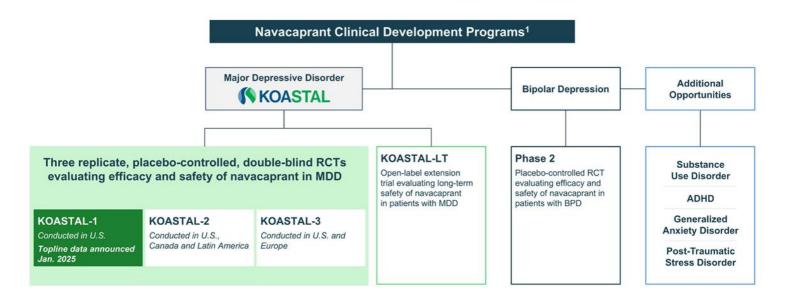
NOTIVENE Operation Depression Encire (pression), National March 31, 2023, Accessed June 3, 2023, Statuset June 3,

## The Role of Kappa Opioid Receptor Antagonism in MDD



- The kappa opioid receptor (KOR) / dynorphin system is a wellcharacterized pathway, and results from preclinical studies support its potential to modulate depression, anhedonia, and anxiety
- KOR system overactivation in response to stress and mediation of depressive-like symptoms including anhedonia
- KOR antagonism may allow DA and 5HT release to return to adaptive levels during reward processing

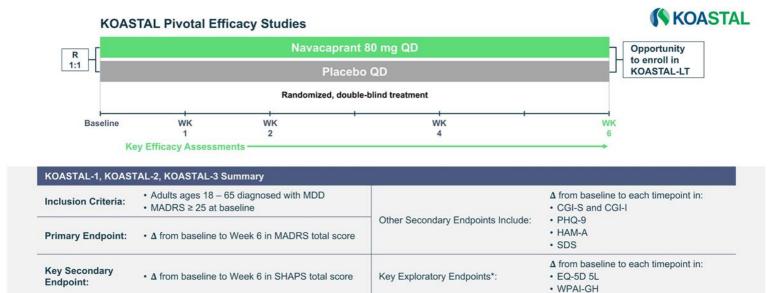
## Near-term Clinical Development Plan Focused on MDD and Bipolar Depression with Opportunity for Further Expansion



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MDD = Major Depressive Disorder; RCT = Randomized Controlled Trial; BPD = Bipolar Depression 1. Fourth pivotal study for navacaprant not included in current cash runway.

## **KOASTAL Pivotal Study Design**



\*Safety Assessments include Change in Sexual Functioning Questionnaire (CSFQ-14) Δ = Change; CG1-1 = Clinical Global Impression-Improvement scale; CG1-4 = Clinical Global Impression-Severity scale; EQ-5D 5L = EuroQo1-5D 5L; HAM-A = Hamilton Anxiety Rating Scale; MADRS = Montgomery-Asberg Depression Rating Scale; MDD = Major Depressive Disorder, PHO-2 = Patient Health Questionnaire - Q De once daily, SDS = Sheehan Disability Scale; SHAPS = Snaith-Hamilton Pleasure Scale; wk = week; WPAI-CH = Work Productivity and Activity Impairment Questionnaire - General Health.

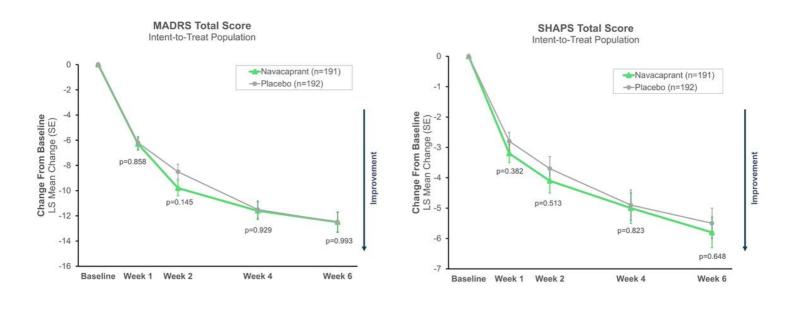
## KOASTAL-1 Topline Data: Demographics and Baseline Characteristics

ntent-to-Treat Population	Navacaprant n = 191	Placebo N = 192	
Age, mean (SD)	40.7 (14.0)	41.1 (13.2)	
Sex, n (%)			
Male	86 (45.0%)	86 (44.8%)	
Female	105 (55.0%)	106 (55.2%)	
Race, n (%)			
White	112 (58.6%)	127 (66.1%)	
Black or African American	38 (19.9%)	31 (16.1%)	
Asian	25 (13.1%)	19 (9.9%)	
Other	10 (5.2%)	10 (5.2%)	
Missing/Unknown	6 (3.1%)	5 (2.6%)	
Baseline MADRS total score, mean (SD)	32.2 (4.2)	32.8 (4.7)	
Baseline SHAPS total score, mean (SD)	36.2 (6.2)	36.5 (6.7)	

MADRS = Montgomery-Asberg Depression Rating Scale SHAPS = Snaith-Hamilton Pleasure Scale

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## KOASTAL-1 Topline Data: Primary & Key Secondary Endpoint



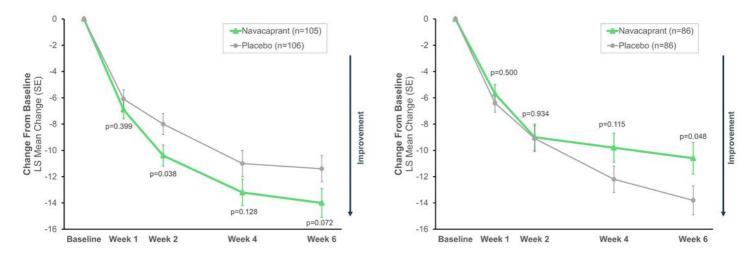
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MADRS = Montgomery-Asberg Depression Rating Scale SHAPS = Snaith-Hamilton Pleasure Scale

## KOASTAL-1 Topline Data MADRS: Efficacy Differences Observed Between Female and Male Participants

MADRS Total Score - ITT Female

MADRS Total Score - ITT Male



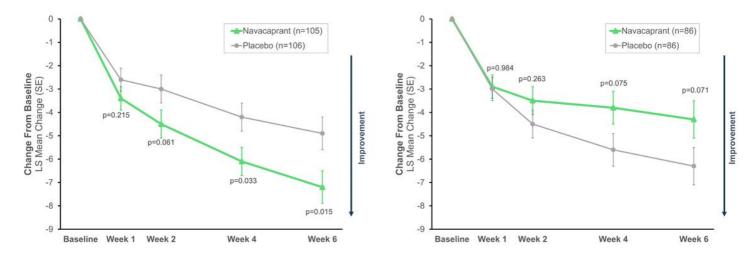
ITT = Intent-to-Treat Population MADRS = Montgomery-Asberg Depression Rating Scale SHAPS = Snaith-Hamilton Pleasure Scale

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## KOASTAL-1 Topline Data SHAPS: Efficacy Differences Observed Between Female and Male Participants

SHAPS Total Score - ITT Female

SHAPS Total Score - ITT Male



ITT = Intent-to-Treat Population MADRS = Montgomery-Asberg Depression Rating Scale SHAPS = Snalth-Hamilton Pleasure Scale

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## **KOASTAL-1** Topline Data: Favorable Safety Profile Demonstrated

### Navacaprant was safe and generally well tolerated, with no serious adverse events reported

TEAEs Incidence (>2% in either treatment group)	Placebo n=192	Navacaprant n=191
Preferred Terms	n (%)	n (%)
Headache	14 (7.3%)	13 (6.8%)
Diarrhea	4 (2.1%)	10 (5.2%)
Nasopharyngitis	8 (4.2%)	7 (3.7%)
Pruritus	4 (2.1%)	7 (3.7%)
Nausea	6 (3.1%)	6 (3.1%)
Constipation	6 (3.1%)	5 (2.6%)
Insomnia	4 (2.1%)	3 (1.6%)
Fatigue	9 (4.7%)	2 (1.0%)
Upper respiratory tract infection	6 (3.1%)	2 (1.0%)
Dizziness	5 (2.6%)	2 (1.0%)
Dry mouth	4 (2.1%)	2 (1.0%)
Somnolence	4 (2.1%)	2 (1.0%)
Urinary tract infection	4 (2.1%)	2 (1.0%)
Back pain	5 (2.6%)	0

No signal for increased suicidal ideation or suicidal behavior<sup>1</sup>

- Low discontinuation rate due to TEAEs (navacaprant 2.1%; placebo 3.1%)
- 83.3% of navacapranttreated patients who completed
   6 weeks' treatment elected to enroll in KOASTAL-LT



1. As measured by Columbia Suicide Severity Rating Scale (C-SSRS)

## **Navacaprant Development Program Key Learnings & Next Steps**

### KOASTAL-1 key learnings based on comprehensive analytics with topline data

- · Higher placebo response rate than expected
- Males demonstrated especially high placebo response (14 points) and lower drug responses
- Encouraging trends in depressed mood and anhedonia in females
- Higher proportion of males in study (45%) relative to recent comparable MDD studies (~30%)
- Navacaprant was well-tolerated with notable AEs (pruritus) observed
- Full dataset, including PK data, forthcoming for analysis

## Potential adjustments to navacaprant development program

- Analyzing integrated data from Phase 2 and KOASTAL-1 (~600 patients) to inform predictors of placebo response, drug/placebo difference and potential female/male differences for near-term adjustments to KOASTAL-2 and -3
  - Optimize site selection
  - Enhance medical monitoring to identify optimal patients
- · Assessing significance of sex-based differences
  - To date, KOASTAL-2 and -3 have enrolled more females than KOASTAL-1
  - Regulatory path for female-only development if warranted based on additional data
  - ~70% of MDD prescriptions are written for females according to IQVIA

Neumora plans to provide additional information and update program guidance in 10-K

### Navacaprant Well-Suited for Evaluation in Bipolar Depression

Signal-Seeking Study Designed to Efficiently Generate Data to Inform Development Path

## Strong Rationale for Efficacy in Bipolar Depression

- Depressed mood and anhedonia are highly prevalent and clinically relevant symptoms in BPD<sup>1</sup>
- Navacaprant has demonstrated efficacy in treating depressed mood and anhedonia in MDD in Phase 2
- Results from this proof-of-concept study will inform further development of navacaprant in bipolar disorder
  - Potential to develop in broader bipolar disorder populations

### **Bipolar II Depression Signal-Seeking Study**

				_
R		Navacaprant 8	0 mg QD (n = 30)	
:1		Placebo	QD (n = 30)	
		Randomized, doub	ble-blind treatment	
Baseline	WК 1	WК 2	WK 4	W
nclusion Criteria:		s ages 18 – 65 experiencing a RS ≥ 25 at baseline	In MDE associated with bipolar II depression	
SIPOLAR II DEP	RESSION S	IGNAL-SEEKING STUDY		
Primary Endpoint:	Δ from	baseline to Week 6 in MADRS	S total score	
Other Endpoints	- SHAF	baseline to Week 6 in: PS total score -Anhedonia total score		
		BP-S total score		
Statistics:	Desig	r not powered to demonstrate gned as a signal-seeking study caprant in bipolar depression	statistical significance /; effect size will inform the potential future developmer	t of

\*Safety Assessments include Columbia-Suicide Sevenity Rating Scale (C-SSRS), Young Mania Rating Scale (YMRS), Change in Sexual Functioning Questionnaire (CSFQ-14) # = Change: QD = once daily: MADRS = Montgomery-Asberg Depression Rating Scale; SHAPS = Snaith-Hamilton Pleasure Scale; DARS = Dimensional Anhedonia Rating Scale; PGIS-Anhedonia = Patient Global Impression of Sevenity – Anhedonia; CGI-BP-S = Clinical Global Impressions Scale for Use in Bipoint Imbers – Sevenity (Whitton AE, et al. 2023, Krystal, AD, et al. 2020,

### NMRA-511 is a Best-in-Class Vasopressin 1a Receptor Antagonist with Broad Potential Across Neuropsychiatric Disorders

### Rationale

Vasopressin plays a role in the regulation of aggression, affiliation, stress and anxiety response

### Indication

Agitation in Alzheimer's disease

### Status

Phase 1b study underway with data anticipated in 2H25

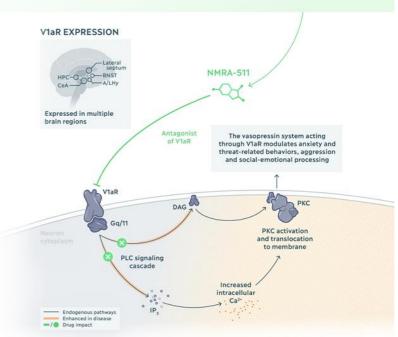
### **Drug Profile**

Oral, BID dosing

### **Strong IP Protection**

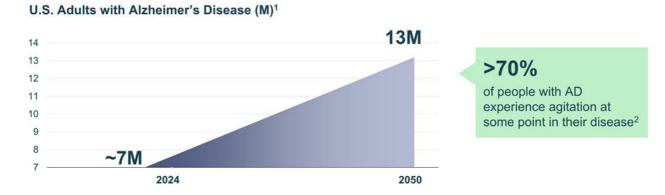
Expect exclusivity through 2042+, based on composition of matter protection and estimated patent term extension





# Alzheimer's Disease Agitation Represents in Large Market Opportunity with Significant Unmet Need







### Significant unmet medical need exists in this population<sup>3</sup>

Agitation is among the most disruptive symptoms of AD. It is associated with greater caregiver stress, increased morbidity and mortality and earlier placement in long-term care facilities. The only currently approved product carries a black-box warning for mortality in elderly people.

3

er's Association, Alzheimer's Disease Facts and Figures. May 2024. 2 ljaopo et al., 2017., Translational Psychiatry.; <sup>6</sup>Koenig et al., 2016, Current Psychiatry.

### Several Lines of Evidence Indicate that V1a Receptor Antagonists Have Therapeutic Potential for Reducing Symptoms of Agitation



## The vasopressin system modulates social-emotional, anxiety and threat-related behaviors across species

- V1aR expression patterns critically affect social behavior<sup>1-5</sup>
  Rodent selection lines bred for aggression or anxiety show
- dysregulated vasopressin release and HPA axis functioning<sup>6</sup>
- Vasopressin-deficient rodents display impaired responses to threat stimuli, reduced anxiety and depressive-like behaviors, and impaired aggression toward intruders<sup>7-9</sup>

## In healthy volunteers, vasopressin enhances reactivity to threatening stimuli and disrupts emotional control^{1.2}

- Exogenously administered vasopressin increases autonomic responsiveness to threat stimuli and increases anxiety<sup>2</sup>
- V1a antagonist administration suppresses anxiety induced by unpredictable threats<sup>10</sup>

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Positive association between vasopressin and aggression in people with personality disorders<sup>11</sup>

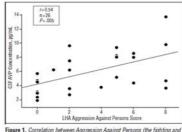


Figure 1. Correlation between Aggression Against Persons (the fighting and assault terms) scores on the Life History of Aggression (LHA) assessment and cerebrospinal fluid (CSF) arginine vasopression (AVP) concentrations in 26 individuals who met the DSM-IV criteria for personality disorder.



In HD irritability, an investigational V1a receptor antagonist reduced an exploratory endpoint measuring aggression<sup>12</sup>

## Together, these data support the development of a V1a receptor antagonist for the treatment of symptoms of agitation, aggression, and anxiety

<sup>1</sup>Ebstein et al., 2009, New York Academy of Sciences; "Thompson et al., 2006, PNAS; "Insel et al., 2010, Neuron Review, PNAS; "Carter et al., 1995, Neuroscience Biobehavioral Review; "Wang et al., 1994, PNAS; "Veenema and Neumann, 2007, Brain behavior; evolution; "Zelena et al., 2009, Journal of Endocrinology; <sup>1</sup>Miynarik et al., 2007, Hormones and Behavior; <sup>1</sup>Fodor et al., 2014, Psychoneuroendocrine; <sup>1</sup>Lago et al., 2021, Psychopharmacology; <sup>1</sup>Miynarik et al., 2007, Hormones and Behavior; <sup>1</sup>Fodor et al., 2014, Psychoneuroendocrine; <sup>1</sup>Lago et al., 2021, Psychopharmacology; <sup>1</sup>Coccaro et al., 1998, JAMA Psychiatry; <sup>12</sup>Malbach et al., 2022, Personalized Medicine. PMPA = hypothalmic-pluitary-adrenal

## NMRA-511 Profile Supports Advancement into Alzheimer's Disease Agitation



### Best-in-Class Pharmacology<sup>1</sup>

- · Highly potent at V1a
- High selectivity over V1b, V2, and oxytocin receptors
- Excellent brain penetration



### Strong Pre-Clinical Data Translates to Humans<sup>2</sup>

- Robust pharmacodynamic (PD)
   effect in rodents
- Robust activity in a marmoset 'human threat test' model of stress/anxiety



### PK and Safety Data from Phase 1 Support Advancement<sup>1</sup>

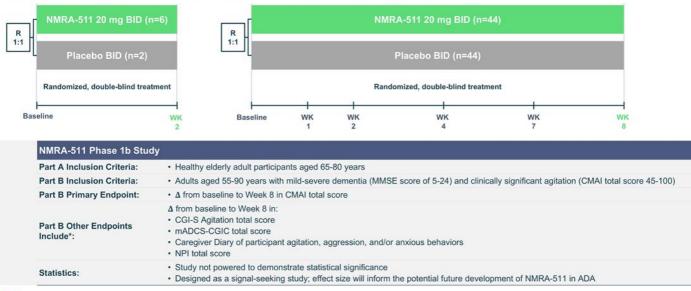
- NMRA-511 was safe and very well-tolerated in Phase 1 SAD/MAD study
- NMRA-511 was safe and welltolerated in healthy elderly volunteers

INMRA Data on File. Wallace et al., 2022., Presented at the American College of Neuropsychopharmacology 2022 Annual Congress

### NMRA-511 Signal Seeking Study in Alzheimer's Disease Agitation

### Part A: 2-Week Evaluation Period Enrolling Healthy Elderly Participants

Part B: 8-Week Evaluation Period Enrolling People with Alzheimer's Disease Agitation (ADA)



\*Safety Assessments include adverse events, clinical laboratory, vital signs, physical examination, 12-lead electocardiogram (ECG), Columbia-Suicide Sevently Rating Scale (C-SSRS)  $\Delta = \text{Change}$ ; RID = twice daily; CMAI = Cohen-Mansfield Aglation Inventory; MMSE = Mini-Mental State Examinations; CGI = Clinical Global Impression of Change for Aglation; mADCS-GGIC = mADCS-GGIC Aglation modified Athelimer's Disease Cooperative Study – Difficult Global Impression of Change for Aglation; MI = Neuropsychiatric Inventory.

### M4 PAM Franchise: Potentially Differentiated M4R PAMs for Schizophrenia

### **M4 Franchise Target Profile**

### Pharmacology

Neumora has multiple series of chemically distinct, highly selective M4 muscarinic receptor PAMs for antipsychotic-like efficacy with the potential for improved safety profile

### Indication

Schizophrenia

### Epidemiology

Estimated 3 million patients in the U.S. with schizophrenia<sup>1</sup>

#### **Target Drug Profile**

Oral, once-daily



Wander, C. Am J Manag Care. 2020;26:562-568. PINIRA data on file; <sup>3</sup>CERE Company data Note; Data on this slide is presented for illustrative purposes only and the data for emraclidine PAM = positive allosteric modulator

Franchise

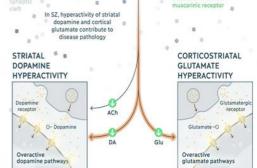
term extension

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**Expected Milestones** 

compound in 1H25

Endogenous pathwa Enhanced in disease -/0 Drug impact Strong IP Protection Across . Expect exclusivity through 2042+, based on composition of matter protection and estimated patent B- Neurotrans Submit IND for a NMRA-M4R In SZ, hyperactivity of striatal .



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NMRA-M4R

## Pre-Clinical Pipeline of Four Novel Programs, Each with A Strong Biological Rationale

#### NMRA-CK18

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Focused on inhibiting the protein case in kinase-1 $\delta$  (CK1 $\delta$ ) to reduce levels of the pathological form of TDP-43 and slow disease progression in ALS

#### Potential Indications ALS, Alzheimer's disease

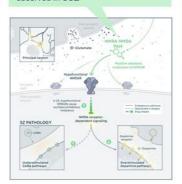
 $\mathsf{CK1}\delta$  phosphorylates TDP-43, a key driver of TDP-43-driven pathology in ALS Entropener



NMRA-NMDA NMDA receptor hypofunction is a leading hypothesis for the cause of schizophrenia.

#### **Potential Indications** SCZ

NMDA PAMs can selectively enhance physiological NMDAR function and decrease network hypersynchrony observed in SCZ



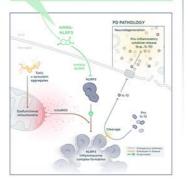
PAM = positive allosteric modulator; SCZ = schizophrenia; ALS = Amyot phic lateral sclerosis: CK1  $\delta$  = Casein Kinas

### NMRA-NLRP3

Focused on inhibiting the NLRP3 inflammasome to modulate the immune response in neurodegeneration

#### **Potential Indications** Parkinson's disease

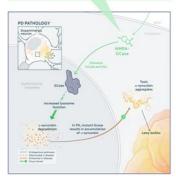
NLRP3 inflammasome is activated in microglia in response to disease linked proteins such as α-synuclein, leading to proinflammatory signaling



NMRA-GCASE Focused on elevating activity of the GCase enzyme, which is encoded by the GBA1 gene, and may help to degrade toxic a-synuclein aggregates

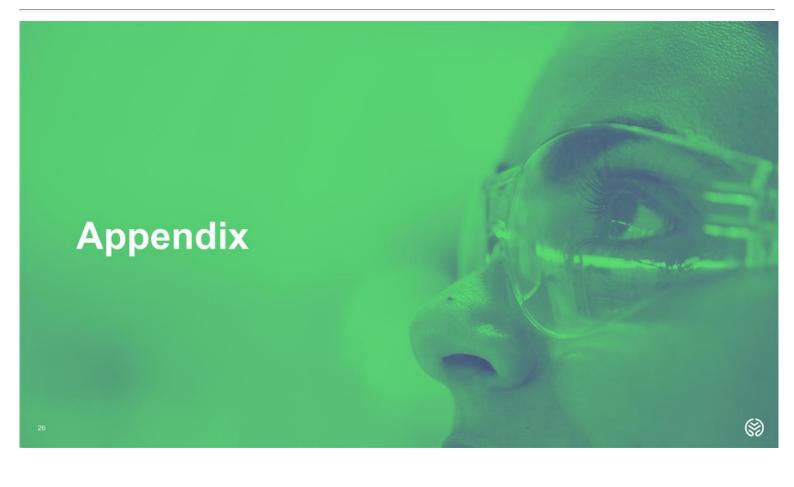
#### Potential Indications Parkinson's disease

GCase deficiencies lead to lysosomal dysfunction and the accumulation of alpha-synuclein, a hallmark of Parkinson's



## **Redefining Neuroscience Drug Development**





## Led by Experienced Company Builders and Leading Neuroscience Drug Developers

### Leadership



Paul L. Berns Co-Founder and Executive Chairman Anter Controlymentator D-BASE



Joshua Pinto, Ph.D. Chief Financial Officer PIPER SANDLER



Kaya Pai Panandiker 

din.



Jason Duncan Chief Legal Officer Albireo @sobi





rces Officer











Rob Lenz, MD, Ph.D. Head of Research & Develop

Mary Chamberlain-Tharp, Ph.D. Chief Business Officer obbvie Ley



### **Board of Directors**

Paul L. Berns Co-Founder, Executive Chair

Henry Gosebruch President & Chief Executive Officer

Kristina Burow Managing Director, ARCH Venture Partners

Matthew K. Fust Biotechnology Advisor

Alaa Halawa Executive Director, Mubadala Capital

Maykin Ho, Ph.D. Retired Partner, Goldman Sachs

David Piacquad Biotechnology Advisor



## Changes from Phase 2 to Phase 3 to Strengthen Navacaprant Probability of Success

	Phase 2	Phase 3 KOASTAL	Rationale	
Study Design				
Study Population	Included Mild to Moderate MDD	Moderate to Severe MDD	FDA guidance for drug development in MDD	
Primary Endpoint	CFB to Week 8 in HAMD-17	CFB to Week 6 in MADRS	MADRS better suited to navacaprant pharmacology	
Inclusion Criteria	Mild-to-severe depression (HAMD-17 ≥ 14)	Moderate-to-severe depression (MADRS ≥ 25)	FDA guidance for drug development in MDD	
Study Execution				
Assessment Schedule	Week 4 & 8	Week 1, 2, 4, & 6	Detect earlier onset of treatment effect	
Placebo-Control Reminder Script	N/A	Placebo-Control Reminder Script employed	Minimize placebo effect	
Raters	Decentralized	Centralized	Minimize rater bias and variability	
Rater Quality Surveillance	N/A	Study Insight Analytics	Near real-time monitoring of site performance & blinded	
Medical Monitoring	Adequate	Substantial	demographic and baseline scale data to ensure eligibility	
Data & Analytics Approach	N/A	Substantial	Near real-time oversight & quality control	
Site Selection	Adequate: 40 sites	Stringent: 55-70 sites per study	Careful selection of sites based on objective performance data	
Geography	US only	Global		

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CFE

ange from baseline; FDA = US Food & Drug Administration; HAMD-17 = Hamilton Depression Rating Scale – 17-Item; MADRS = Montgomery-Asberg Depression Rating Scale; MDD = major depressive disorder; N/A = not applicable

## **KOASTAL-1 Topline Study Summary Results**

	M	ADRS Total Sco		S	HAPS Total Scor	e
Outcome	Navacaprant 80 mg	Placebo	LSMD	Navacaprant 80 mg	Placebo	LSMD
ITT population CFB at Week 6 (Primary Endpoint)	-12.5 (n = 191)	-12.5 (n = 192)	0.0 (p = 0.993)	-5.8 (n = 191)	-5.5 (n = 192)	-0.3 (p = 0.648)
Female population CFB at Week 6	-14.0 (n = 105)	-11.4 (n = 106)	-2.7 (p = 0.072)	-7.2 (n = 105)	-4.9 (n = 106)	-2.3 (p = 0.015)
Male population CFB at Week 6	-10.6 (n = 86)	-13.8 (n = 86)	3.2	-4.3 (n = 86)	-6.3 (n = 86)	2.0

### The KOASTAL-1 study enrolled 383 adult patients with Major Depressive Disorder (MDD)

CFB = change from baseline; LSMD = difference in LS mean change from baseline between navacaprant and placebo groups generated from mixed-effects model for repeated measures. Subgroup analysis for male or female are pre-specified.

## Navacaprant Would Enter Large MDD Market with a Highly Differentiated Profile

### GROWTH IN ADDRESSABLE MDD MARKET EXPECTED IN-LINE WITH POPULATION GROWTH

U.S. MDD diagnosed, pharmacologically treated prevalent population (2018-41F) Millions of people



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### 60-80% of MDD patients across lines of therapy are treated with a monotherapy agent<sup>1</sup>

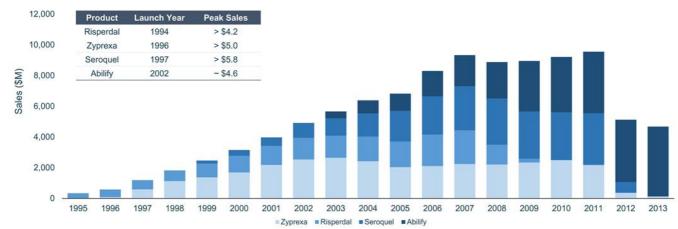
Monotherapy treatment rates across lines of therapy

Treatment Line	CCAE	MDCD	MDCR	Optum
1 <sup>st</sup>	79.6%	82.1%	84.6%	81.7%
2 <sup>nd</sup>	67.3%	67.8%	69.3%	66.1%
3rd	63.9%	64.9%	67.2%	62.1%
4 <sup>th</sup>	61.4%	61.4%	68.1%	60.0%

<sup>1</sup>Kern et al. Treatment patterns and sequences of pharmacotherapy for patients diagnosed with depression in the United States: 2014 through 2019. BMC Psychiatry. (2020) 20.4. U.S. Census Population Projections: DRG; Datamontor; National Survey of Drug Use and Health 2018, 2019, 2019, 2010, 2017, LOTE et al. (2021); L.E.K. research and analysis CCAE = IBM MarketScan Centromerical Database. MDCD = IBM MarketScan Multi-State Database. MDCR = IBM MarketScan Medicare Supplemental Database

## Schizophrenia Market Supports Multiple Treatment Options

Historically the schizophrenia market has supported multiple branded products with similar MOAs, with new entrants driving higher overall market sales volume



### Sales of Branded 5-HT2 to D2 Receptor Antagonists (1995 – 2013)

Sources: EvaluatePharma, L.E.K. interviews, research, and analysis; GK associates "The order of entry effect in prescription (Rx) and over the counter (OTC) pharmaceutical drugs", International Journal of Pharmaceutical and Healthcare, Marketing Vol. 2 No. 1, 2008 pp. 35 46, MOA = Mechanism of Action.

