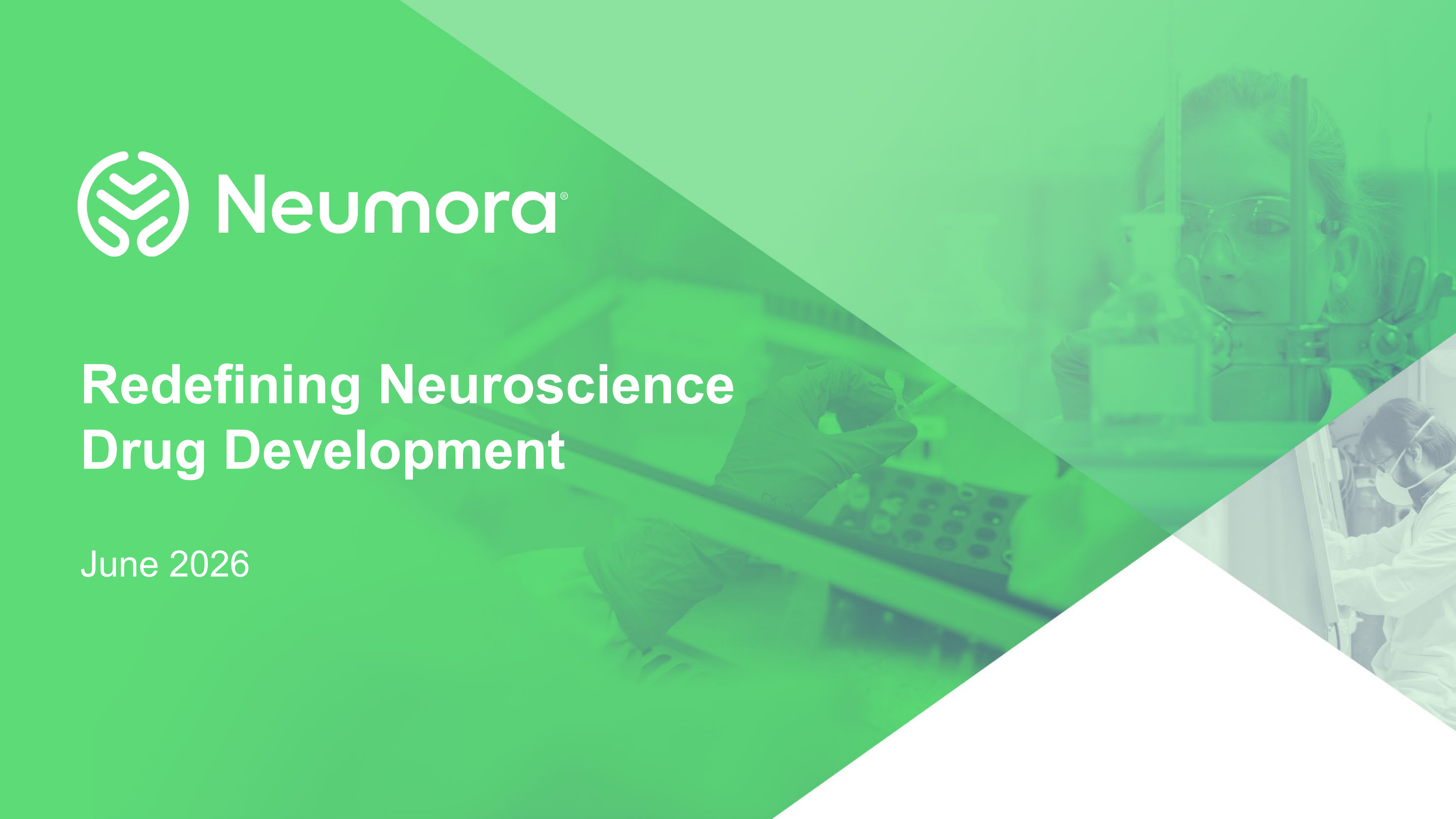




# Redefining Neuroscience Drug Development

June 2026



# 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; the timing, progress and plans for its therapeutic development programs, including the timing of clinical trial initiation and data readouts, including for the KOASTAL-2 and KOASTAL-3, NMRA-215, NMRA-511 and NMRA-898 studies; support for continued development, and upcoming milestones and catalysts; expectations and projections regarding future operating results and financial performance, including the sufficiency of its cash resources and expectation of the 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: comparisons to efficacy results from other sponsors should be interpreted with caution due to differences in compounds, study designs, subject characteristics, and other factors that may limit direct comparability; 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 and enrollment in our clinical trials; 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 quarter ended March 31, 2026 which was filed with the SEC on or about the date hereof. 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 results for the quarter ended March 31, 2026 are also not necessarily indicative of our operating results for any future periods.





## **Our Mission**

We are focused on bringing forward the next generation of novel therapies with brain-penetrant chemistry that offer improved treatment outcomes and quality of life for patients



# Led by experienced company builders and leading neuroscience drug developers

## Leadership



**Paul L. Berns**

Co-Founder, Chief Executive Officer & Chairman of Board of Directors



**Joshua Pinto, Ph.D.**

President



**Bill Aurora, Pharm.D.**

Chief Operating & Development Officer



**Jason Duncan**

Chief Legal & Administrative Officer



**Nick Brandon, Ph.D.**

Chief Scientific Officer



**Amy Sullivan**

Chief Human Resources Officer



**Michael Milligan**

Chief Financial Officer



**Pablo Gersberg**

Chief Information Officer



## Board of Directors

**Paul L. Berns**

Co-Founder, Chief Executive Officer, Chairman

**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**

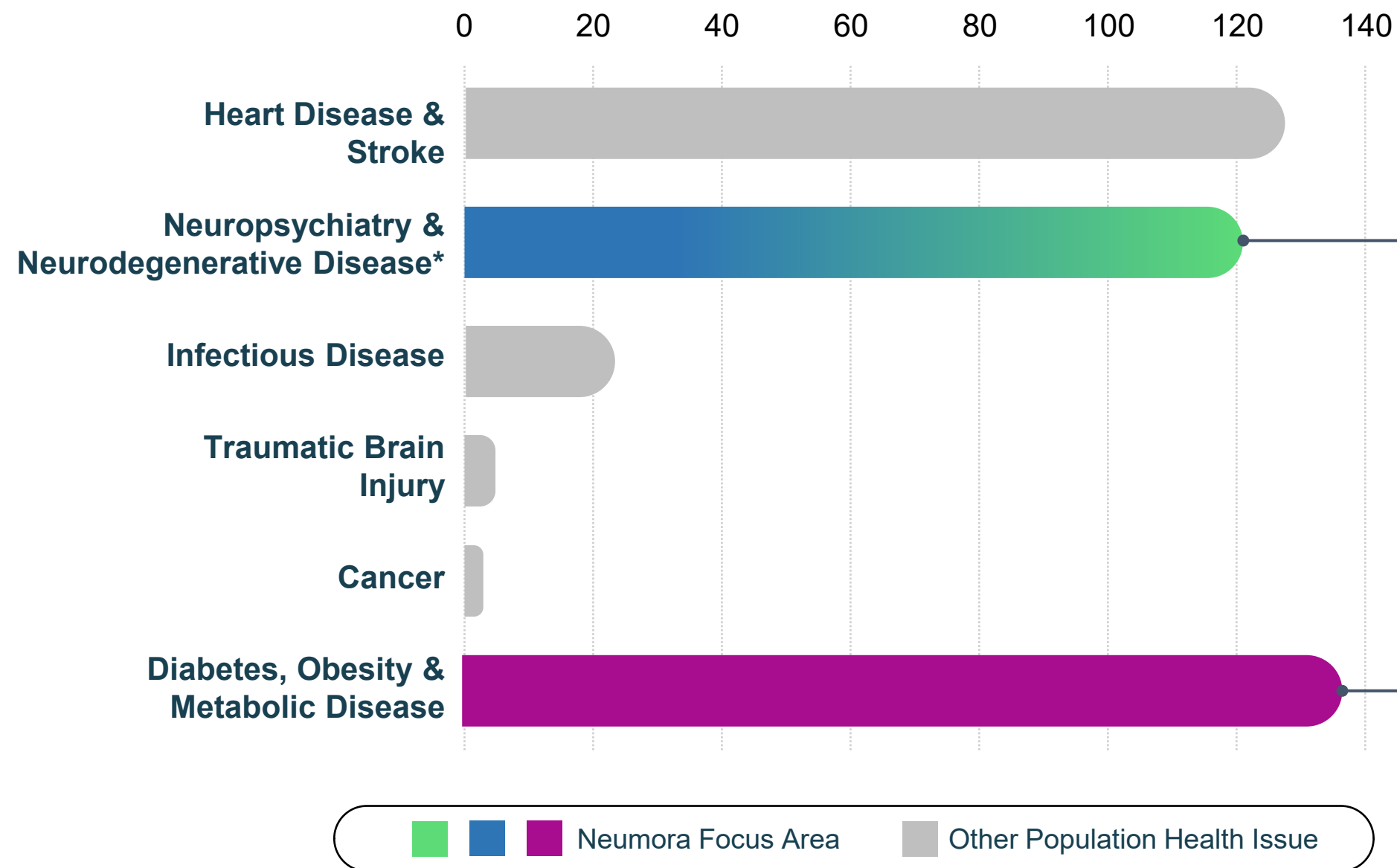
Biotechnology Advisor



# Goal to address unmet needs across large markets

## Biggest Health Disorders Facing U.S.<sup>1</sup>

Patients Impacted (M)



## Goal To Address Unmet Needs

### Neurodegenerative Disease

- Novel mechanisms with favorable benefit/risk profiles
- Easy-to-maintain treatments that reduce caregiver burden
- Improved tolerability and safety, particularly in elderly and high-risk populations

### Neuropsychiatric Disease

- Effective treatments with favorable tolerability profiles
- Novel mechanisms with the potential to treat multiple elements of disease

### Metabolic Disease

- Expanded oral treatment options
- Improved tolerability profile
- Novel mechanisms with potential for higher quality weight loss and maintenance

<sup>1</sup>Source: National Institutes of Health (NIH), "Our Biggest Health Challenges," last reviewed January 21, 2025; CDC/NCHS, NHANES 2021–2023; The Lancet Diabetes & Endocrinology Commission, 2025; NIMH, 2025.

\*Includes: major depressive disorder, bipolar depression, schizophrenia, generalized anxiety disorder, post traumatic stress disorder, substance use disorder, Alzheimer's disease, Parkinson's disease, attention-deficit hyperactivity disorder

# Advancing three franchises each anchored by a potential best-in-class program

<b>PROGRAM</b> <i>Target/Mechanism</i>	<b>INDICATION</b> <i>U.S. Prevalence</i>	Preclinical	Phase 1	Phase 2	Phase 3	
<b>NEURODEGENERATIVE DISEASE</b>						
<b>NMRA-511</b> <i>V1aR Antagonist</i>	<b>Agitation in Alzheimer's Disease</b> 7M	[Progress bar: Preclinical to Phase 2]				
<b>NMRA-GCASE</b> <i>GCase Activator</i>	<b>Parkinson's Disease</b> 1M	[Progress bar: Preclinical]				
<b>NMRA-CK1δ</b> <i>CK1δ Inhibitor</i>	<b>ALS/Parkinson's Disease</b> 25K/1M	[Progress bar: Preclinical]				
<b>NEUROPSYCHIATRIC DISEASE</b>						
<b>NMRA-898</b> <i>M4 Modulator</i>	<b>Schizophrenia</b> 3M	[Progress bar: Preclinical to Phase 1]				
<b>METABOLIC DISEASE</b>						
<b>NMRA-215</b> <i>NLRP3 Inhibitor</i>	<b>Obesity</b> 103M	[Progress bar: Preclinical]				
<b>Undisclosed</b>	<b>Obesity</b> 103M	[Progress bar: Preclinical]				



# Multiple catalysts expected in 2026 across three core franchises

## ANTICIPATED KEY MILESTONES

### Neurodegenerative Disease

NMRA-511 MAD data

2H 2026

Initiate NMRA-511 Phase 2 study

1Q 2027

### Neuropsychiatric Disease

NMRA-898 Phase 1 data

2H 2026

### Metabolic Disease

Initiate NMRA-215 clinical program

1Q 2027

**Well capitalized with a cash runway to support operations into 3Q 2027**

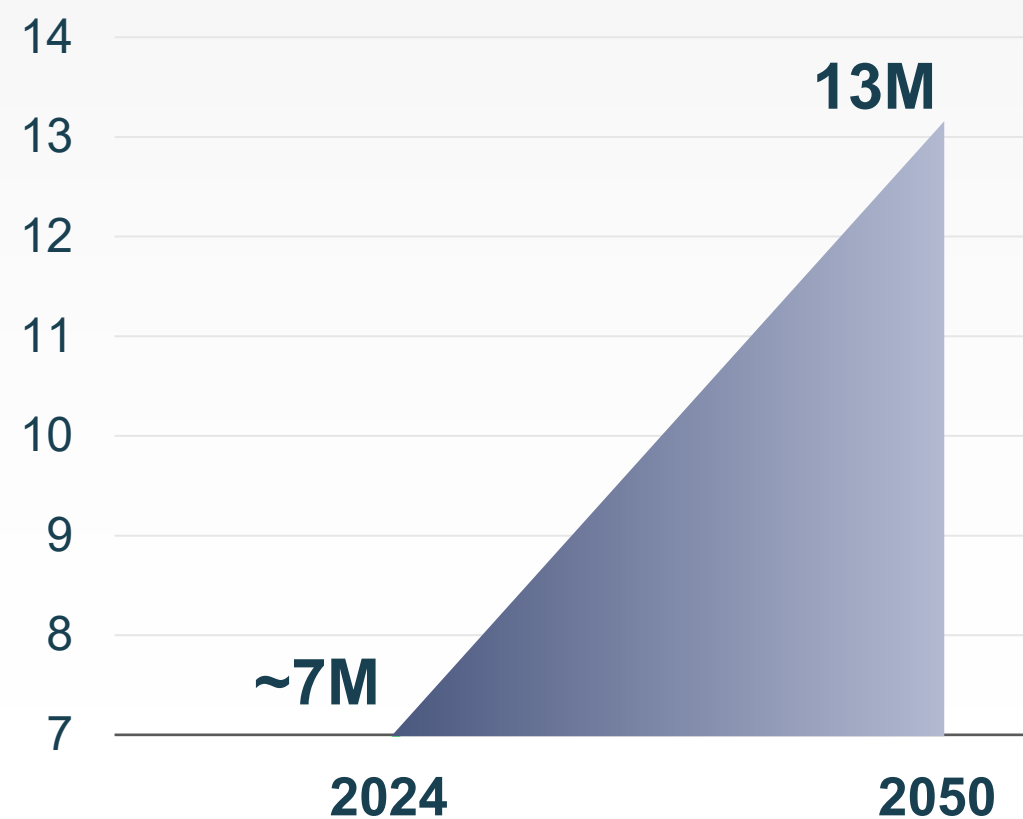


# Alzheimer's disease agitation represents large market opportunity with significant unmet need

## Alzheimer's disease agitation is a large and growing health burden

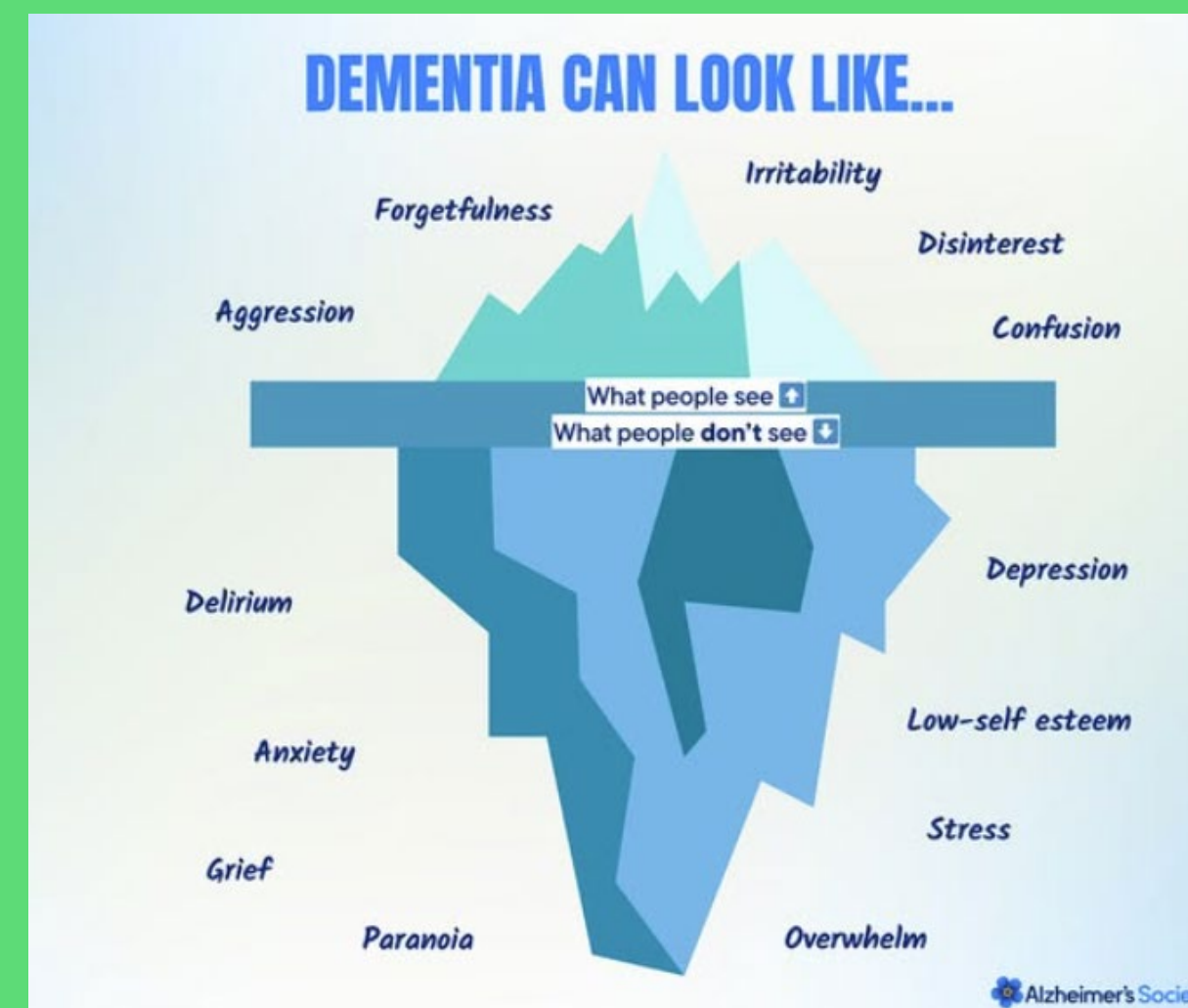
Millions currently living with AD; prevalence expected to increase as the population ages<sup>1</sup>

### U.S. Adults with Alzheimer's Disease (M)<sup>1</sup>



**>70%**  
of people with AD experience agitation at some point in their disease<sup>2</sup>

## Anxiety is a key underlying driver of aggression and irritability in dementia<sup>3</sup>

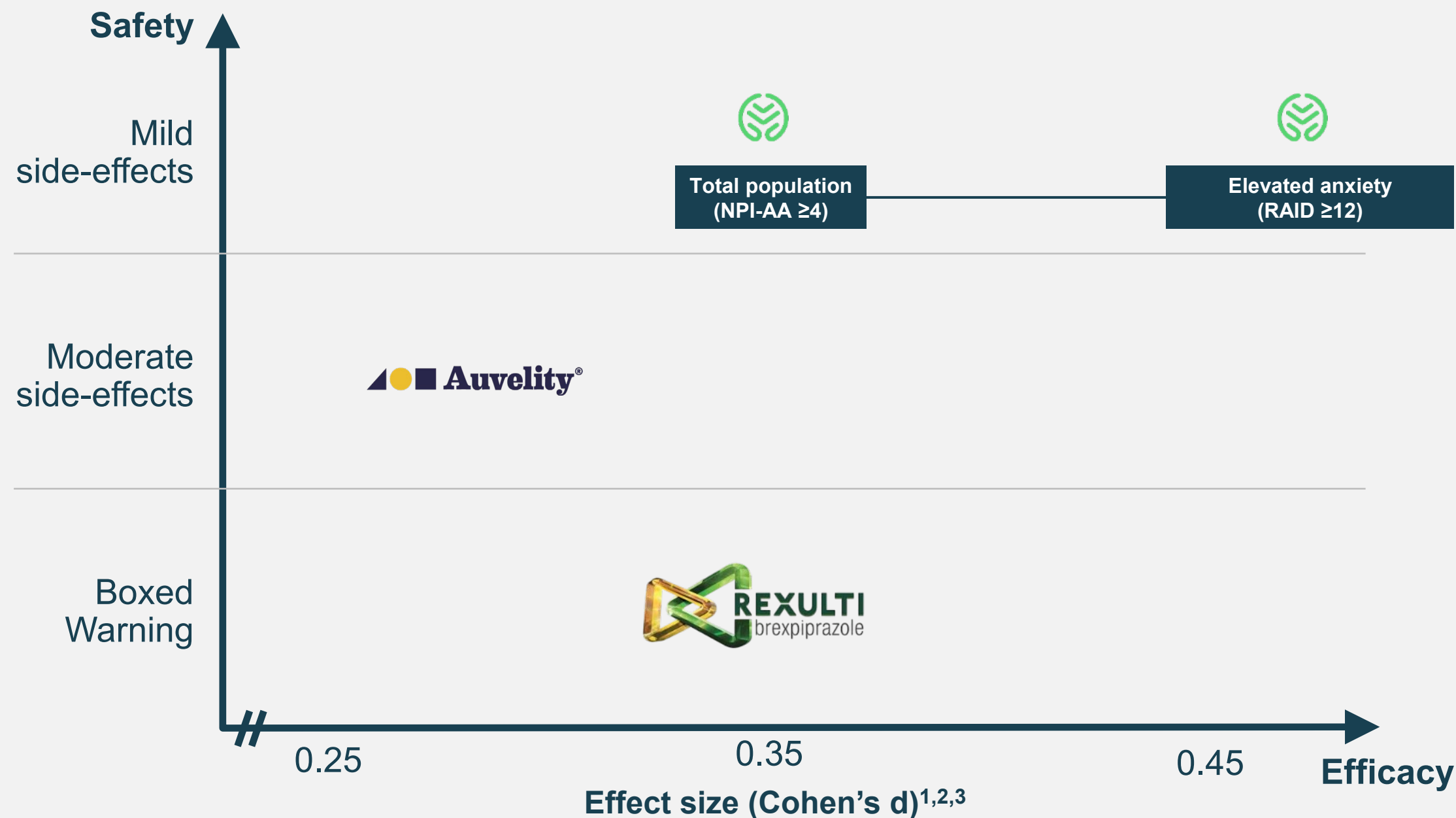


<sup>1</sup>Alzheimer's Association. 2025 Alzheimer's Disease Facts and Figures. Alzheimer's Dementia 2025;21(5). <sup>2</sup>Van der Mussele S, et al. Aging Ment Health 2015;19(3):247-257. <sup>3</sup>Image from Alzheimer's Society



# NMRA-511 has potential as a treatment for AD agitation

## Simplified market segmentation and opportunities



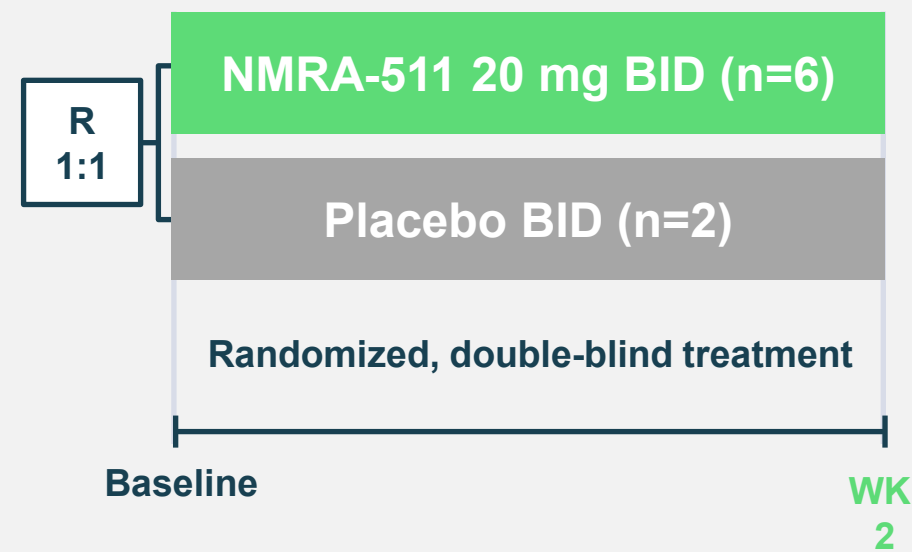
## NMRA-511 Phase 1b key takeaways

- Well tolerated, with potential for higher dosing
- CMAI effect size similar to Auvelity in total population
- Unsurpassed CMAI effect size in patients with elevated anxiety

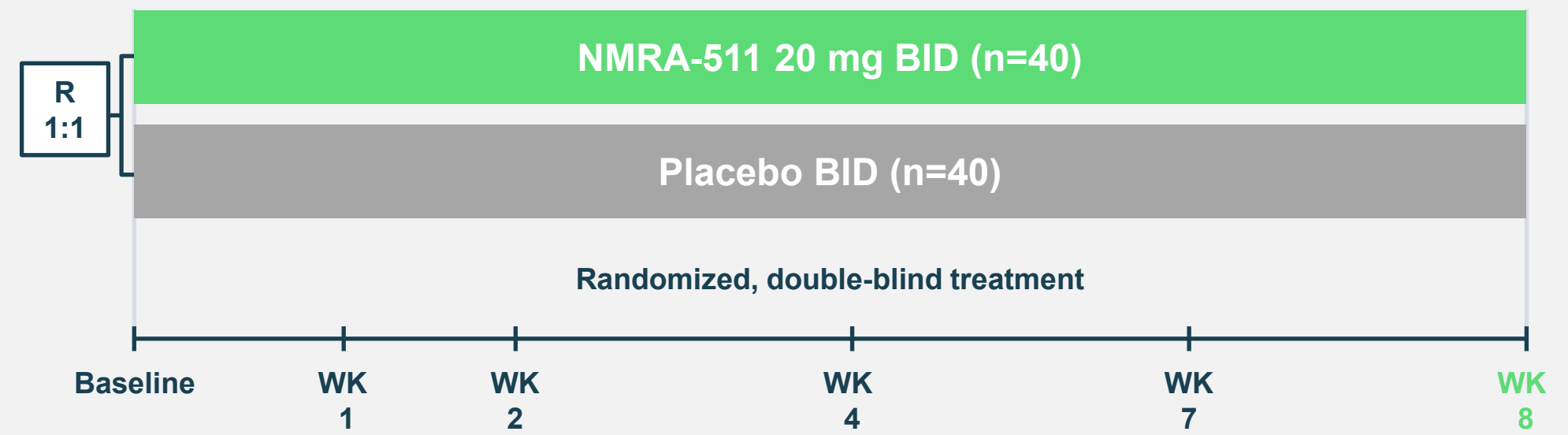
For illustrative purposes only. NMRA-511 has not been studied in head-to-head trials against Auvelity or Rexulti, and there are differences in compounds, trial designs and other factors which must be considered. <sup>1</sup>Calculated from data: Addressing Dementia Via Agitation-Centered Evaluation (ADVANCE). <https://clinicaltrials.gov/study/NCT03226522?intr=AXS-05&page=1&rank=9&tab=results>. <sup>2</sup>Lee D, Slomkowski M, Hefting N, et al. Brexpiprazole for the Treatment of Agitation in Alzheimer Dementia: A Randomized Clinical Trial. JAMA Neurol. 2023;80(12):1307–1316. doi:10.1001/jamaneurol.2023.3810. <sup>3</sup>NMRA data on file. CMAI = Cohen-Mansfield Agitation Inventory. Confidential

# Study to evaluate the effects of NMRA-511 among healthy elderly and adults with agitation associated with dementia due to Alzheimer's disease

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



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



### NMRA-511 Phase 1b Study

- Part A Inclusion Criteria:**
  - Healthy elderly adult participants aged 65-80 years
- Part B Inclusion Criteria:**
  - Adults aged 55-90 years with mild-severe dementia (MMSE score of 5-24) and clinically significant agitation (CMAI total score 45-100)
- Part B Primary Endpoint:**
  - $\Delta$  from baseline to Week 8 in CMAI total score
- Part B Other Endpoints Include\*:**
  - $\Delta$  from baseline to Week 8 in:
    - CGI-S
    - NPI total score
- Prespecified Sub-Populations:**
  - Elevated anxiety (RAID)
- Statistics:**
  - **Study not powered to demonstrate statistical significance**
  - Designed as a signal-seeking study; effect size will inform the potential future development of NMRA-511 in ADA

\*Safety Assessments include adverse events, clinical laboratory, vital signs, physical examination, 12-lead electrocardiogram (ECG), Columbia-Suicide Severity Rating Scale (C-SSRS).  $\Delta$  = Change; BID = twice daily; CMAI = Cohen-Mansfield Agitation Inventory; MMSE = Mini-Mental State Examinations; CGI = Clinical Global Impression of Severity; NPI = Neuropsychiatric Inventory.

# Demographics and baseline characteristics

	Total Population		Pre-specified elevated anxiety population <sup>3</sup>	
	NMRA-511 n=40	Placebo n=40	NMRA-511 n=16	Placebo n=21
Mean age	71.8	72.7	66.8	71.6
Sex, n (%)				
Male	18 (45.0%)	15 (37.5%)	7 (43.8%)	9 (42.9%)
Female	22 (55.0%)	25 (62.5%)	9 (56.3%)	12 (57.1%)
Race, n (%)				
White	27 (67.5%)	30 (75.0%)	11 (68.8%)	14 (66.7%)
Black	10 (25.0%)	9 (22.5%)	3 (18.8%)	6 (28.6%)
Asian	2 (5.0%)	0	1 (6.3%)	0
Other	1 (2.5%)	1 (2.5%)	1 (6.3%)	1 (4.8%)
CMAI Total Score Mean (SD)	68.2 (14.7)	68 (14.3)	69.3 (15.6)	67.7 (14.9)
CGI-S (Agitation) Mean (SD)	4.3 (0.7)	4.2 (0.6)	4.4 (0.8)	4.3 (0.6)
NPI-AA Mean (SD)	5.1 (2.5)	5.9 (2.6)	4.8 (2.7)	5.8 (2.8)
MMSE Mean (SD)	19.0 (3.2)	19.5 (2.8)	19.2 (2.9)	19.4 (2.9)
Baseline anxiety as measured by RAID score (SD)	11.8 (6.4)	14.3 (8.6)	18.3 (4.2)	18.7 (6.5)
Protocol-Defined Medication Non-Adherence <sup>1</sup>	7 (17.5%)	0	N/A	
Modified Analysis Set (n) <sup>2</sup>	33	38		

<sup>1</sup>70% medication compliance required per protocol

<sup>2</sup>2 placebo patients excluded based on rater change driving outlier data (>3 standard deviations from the mean) and protocol-defined medication non-adherent patients

<sup>3</sup>Defined as Rating Anxiety In Dementia (RAID) score ≥12

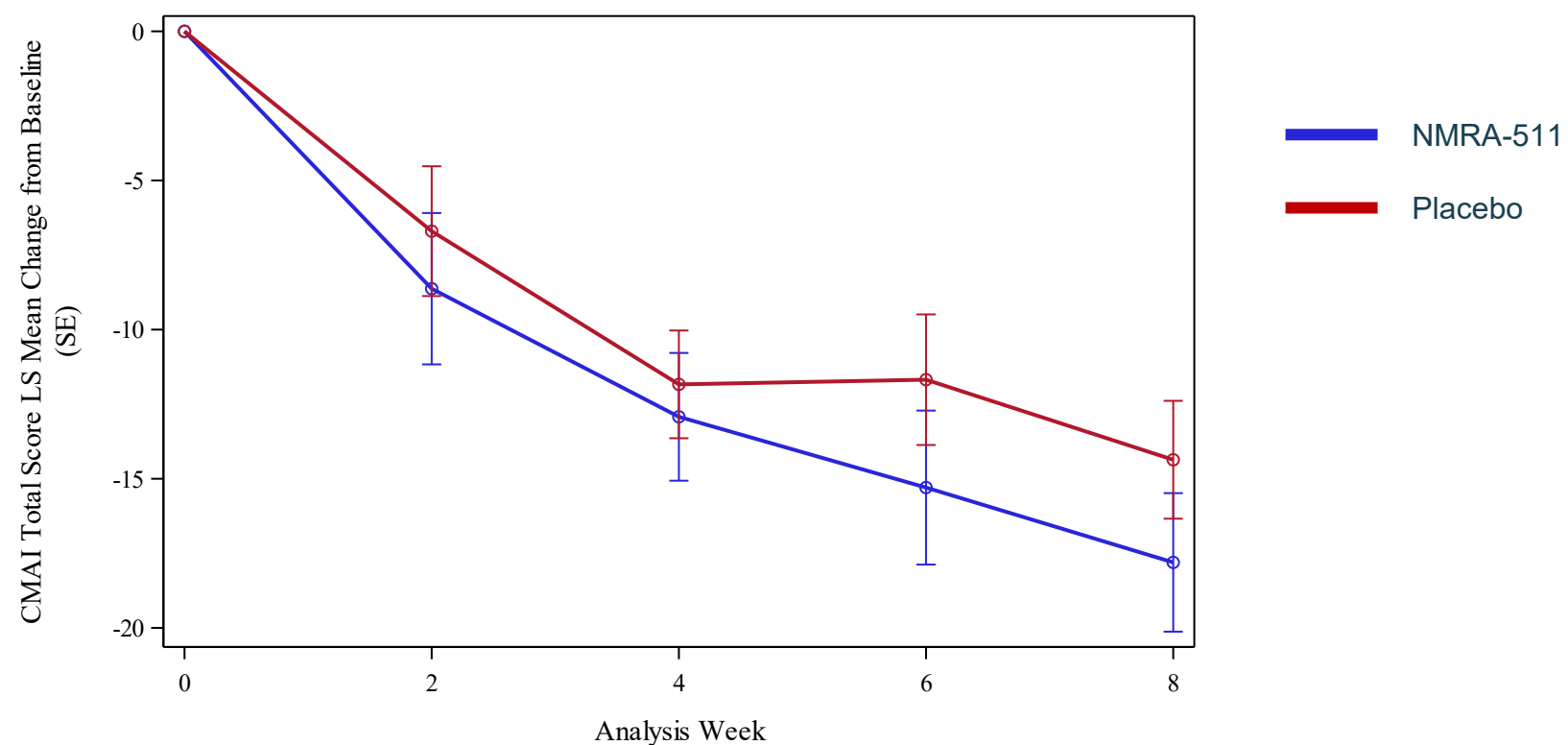


# Data were consistent in the NPI-AA $\geq 4$ population (matching other sponsors enrollment) showing an unsurpassed clinical effect size

NPI-AA  $\geq 4$

## CMAI Total Score

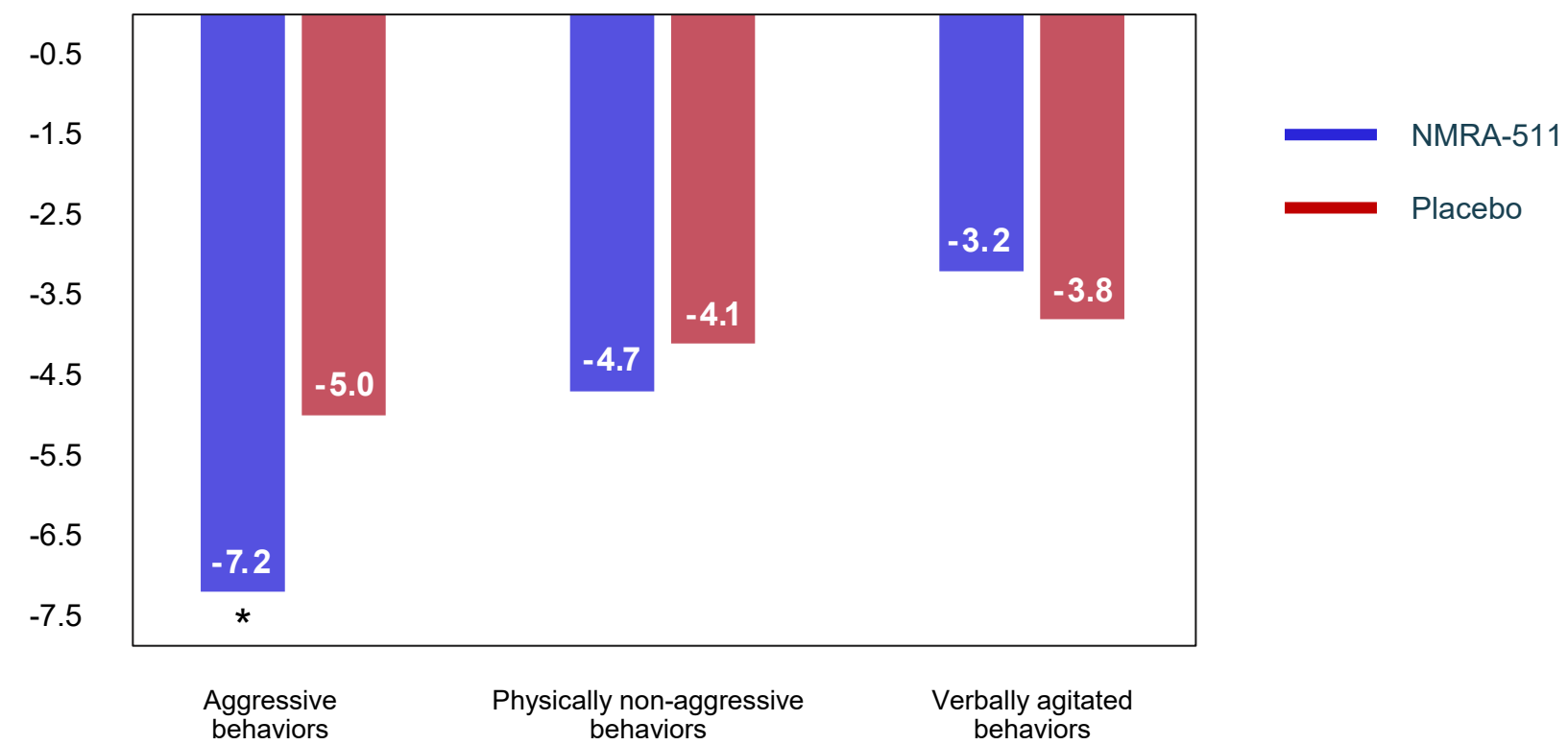
Change from Baseline  
(modified analysis set, NPI-AA  $\geq 4$ )



	Week 6	Week 8
LSMD (SE)	-3.6 (3.4)	-3.4 (3.1)
Effect size (Cohen's d)	0.32	0.34

## CMAI Factor Scores

Mean Change at Week 8  
(modified analysis set, NPI-AA  $\geq 4$ )



	Aggressive behaviors	Physically non-aggressive behaviors	Verbally agitated behaviors
Effect size (Cohen's d)	0.51	0.25	N/A

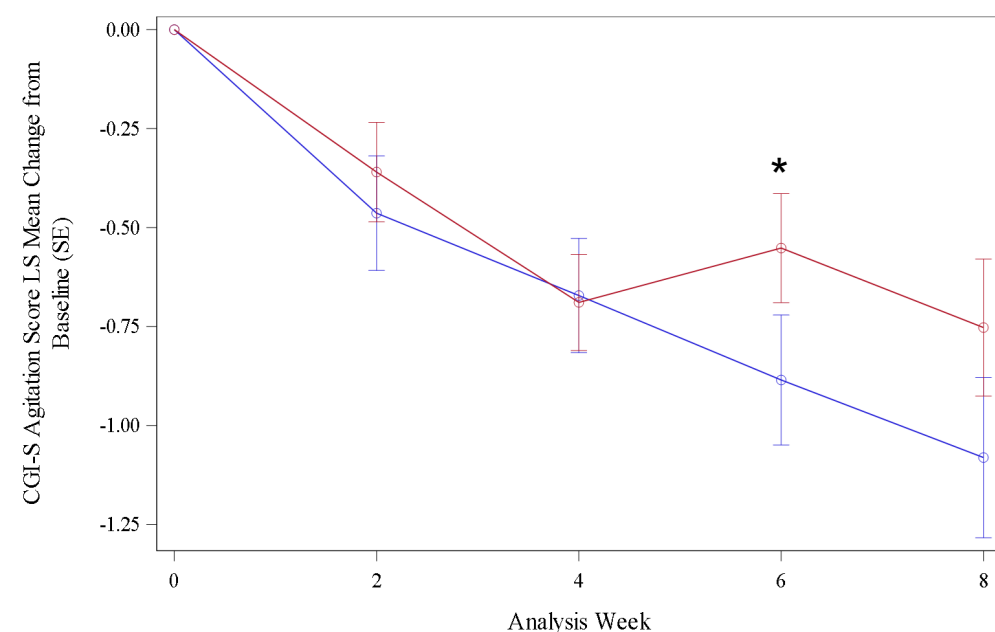


# With results in the NPI-AA $\geq 4$ population supported by multiple endpoints

NPI-AA  $\geq 4$

## CGI-S Agitation

Change from Baseline  
(modified analysis set, NPI-AA  $\geq 4$ )

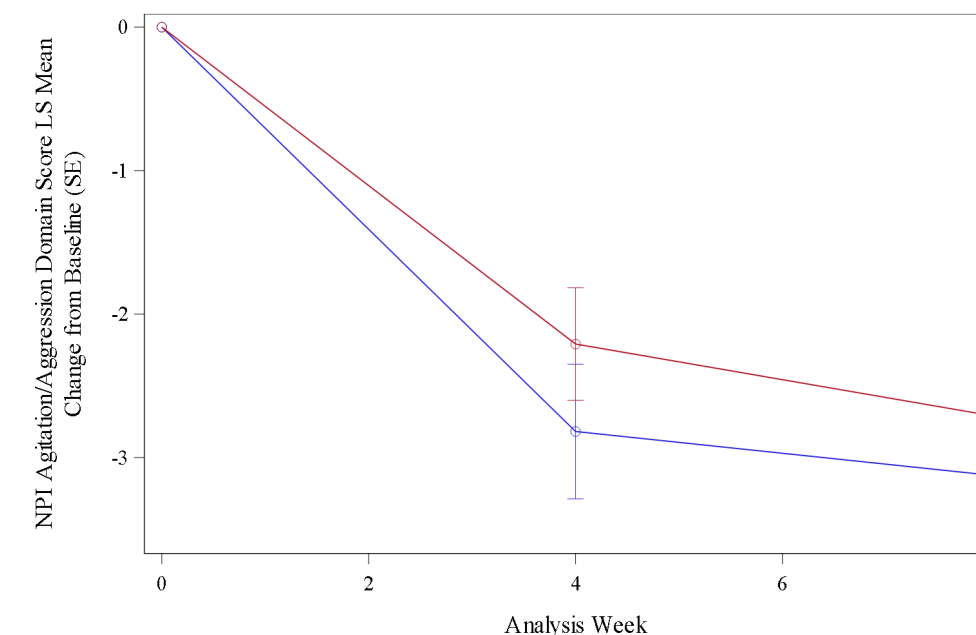


— NMRA-511 — Placebo

	Week 6	Week 8
LSMD (SE)	-0.3 (0.2)	-0.3 (0.3)
Effect size (Cohen's d)	0.46	0.36

## NPI Agitation/Aggression Domain

Change from Baseline  
(modified analysis set, NPI-AA  $\geq 4$ )



— NMRA-511 — Placebo

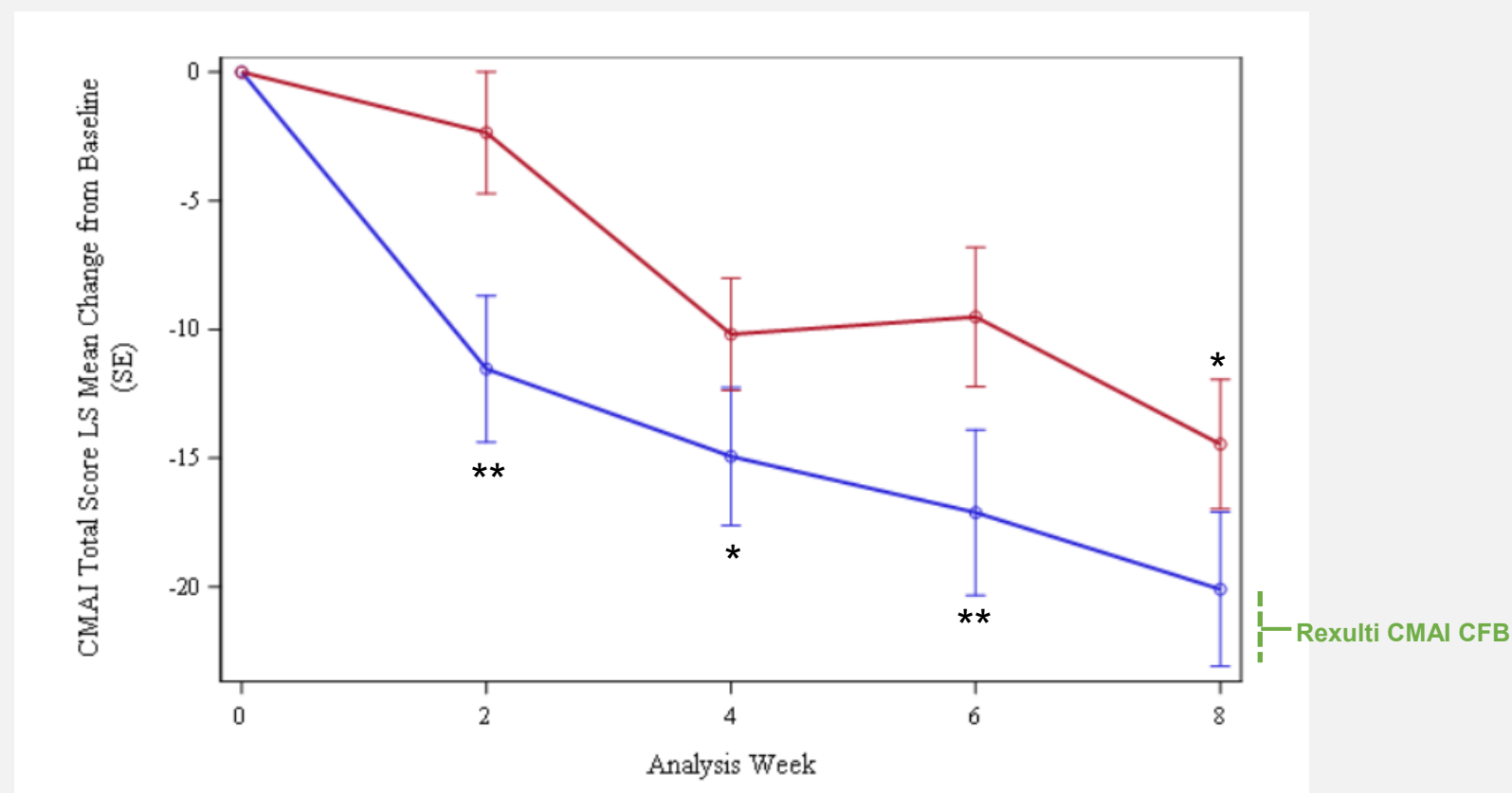
	Week 4	Week 8
LSMD (SE)	-0.6 (0.6)	-0.4 (0.6)
Effect size (Cohen's d)	0.29	0.21



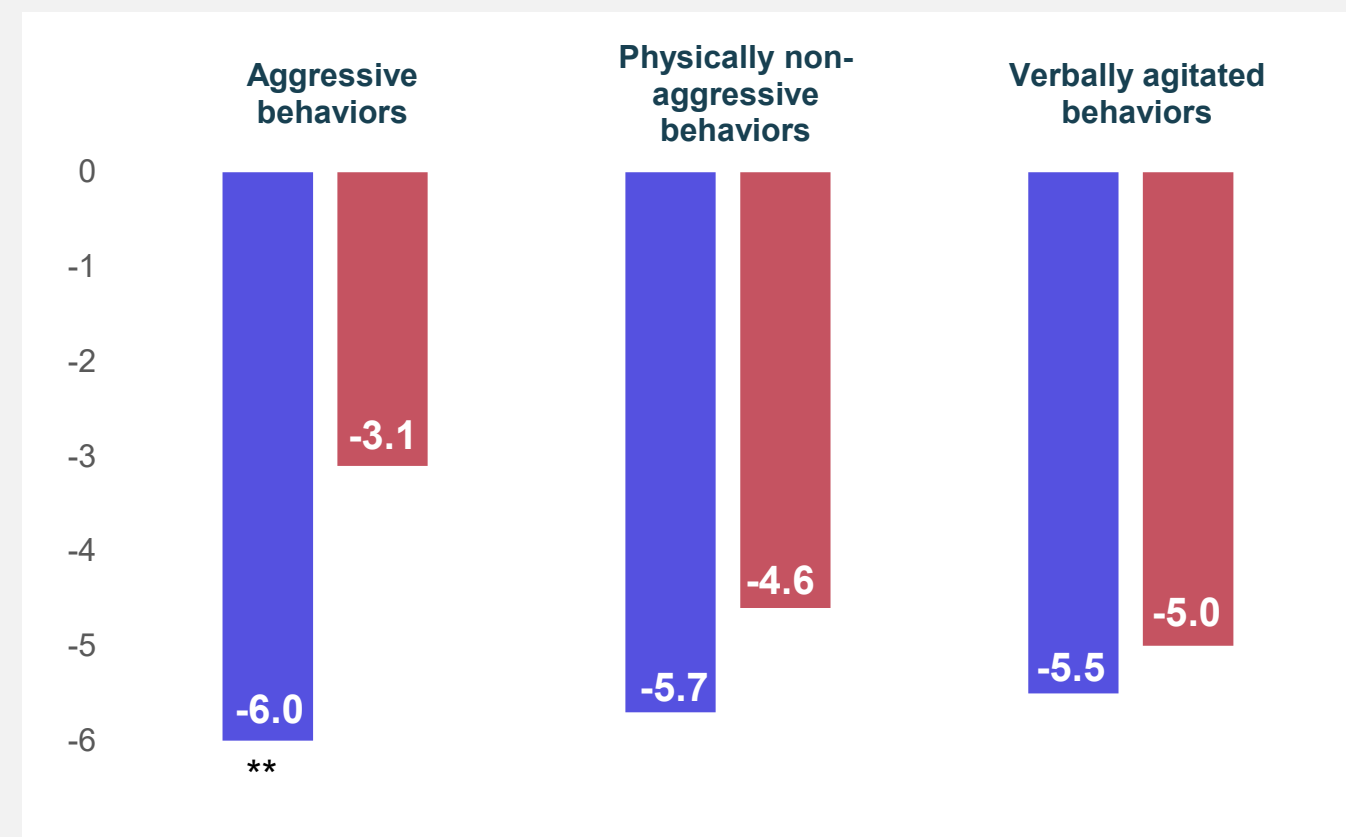
# NMRA-511 demonstrated an unsurpassed clinical effect size in patients with elevated anxiety

RAID ≥ 12

**CMAI Total Score Change from Baseline**  
(pre-specified elevated anxiety sub-population)



**Mean Change in CMAI Factor Scores at Week 8**  
(pre-specified elevated anxiety sub-population)



— NMRA-511 — Placebo

	Week 6	Week 8
LSMD (SE)	-7.6 (4.1)	-5.6 (3.8)
Effect size range (Cohen's d)	0.64	0.51

	Aggressive behaviors	Physically non-aggressive behaviors	Verbally agitated behaviors
Effect size (Cohen's d)	0.82	0.37	0.12

Data presented for prespecified elevating anxiety population (RAID ≥12)

NMRA-511 n=16, placebo n=21

Nominal p-values: \*\*p<0.05, \*p<0.1

Cohen's d effect size range for patients with RAID ≥11: 0.45 – 0.54



# Unsurpassed clinical effect size in patients with elevated anxiety demonstrated across endpoints

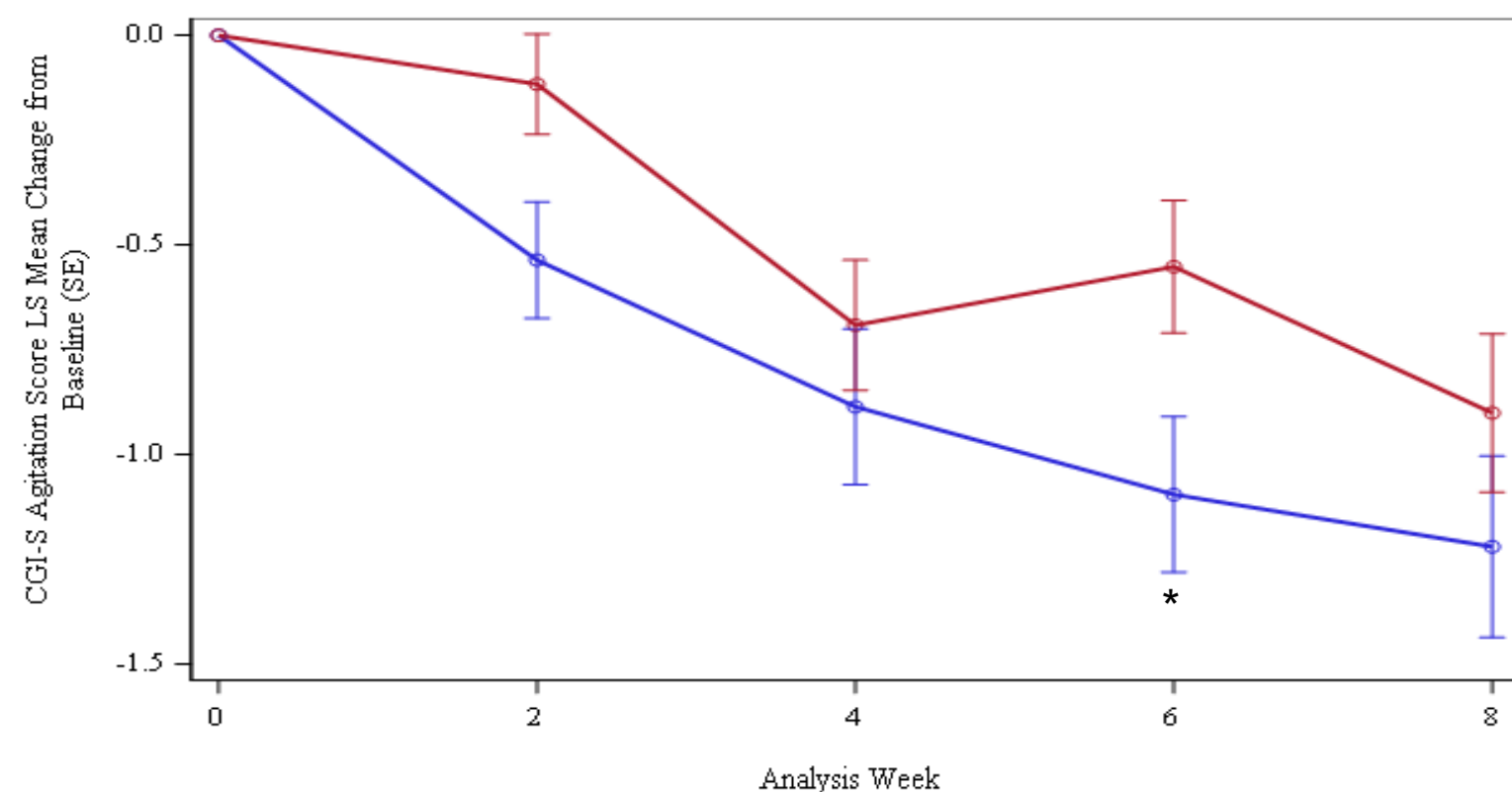
RAID ≥ 12

## CGI-S Agitation

### Change from Baseline

(pre-specified elevated anxiety sub-population)

— NMRA-511 — Placebo



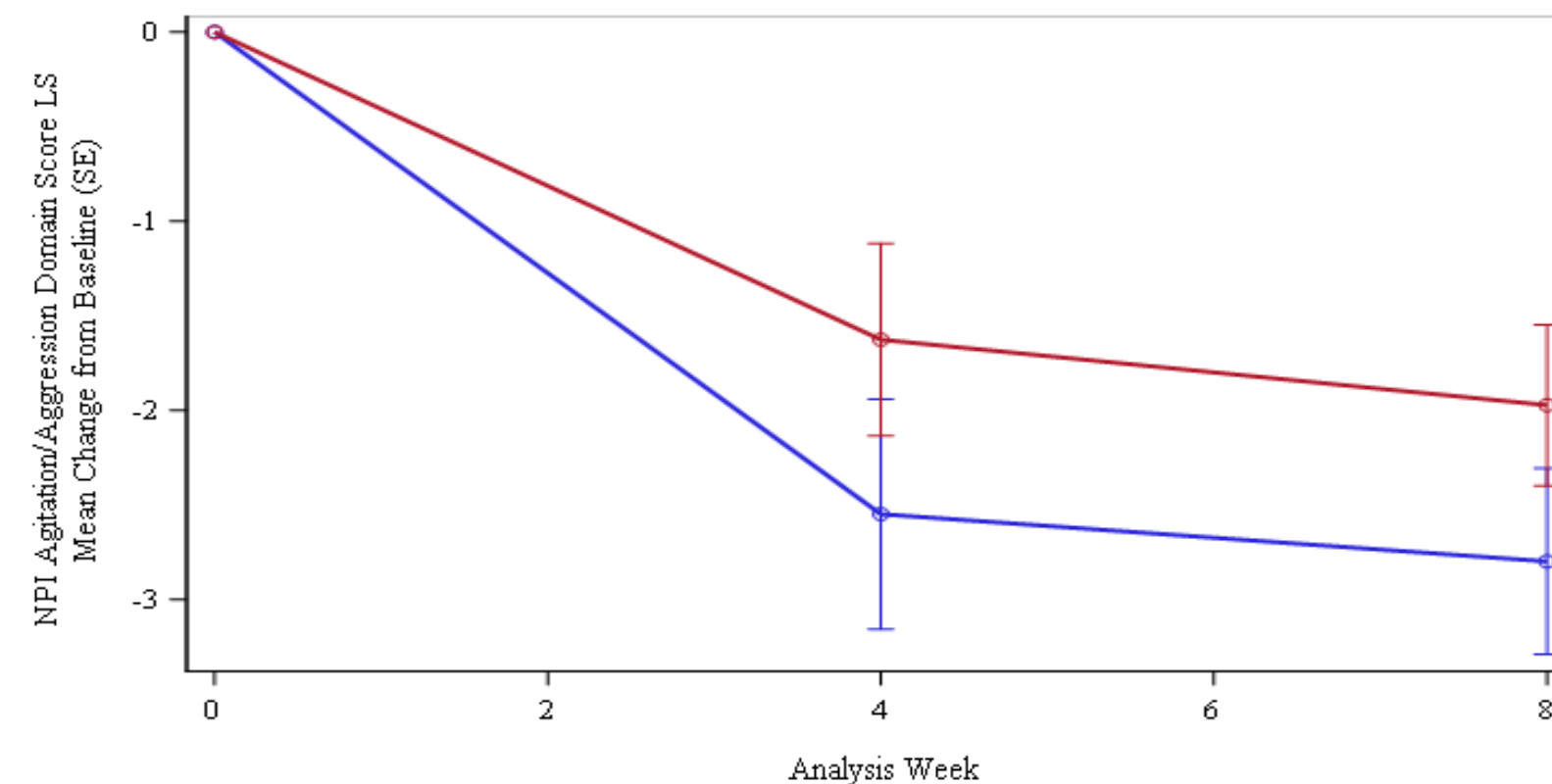
	Week 6	Week 8
LSMD (SE)	-0.5 (0.2)	-0.3 (0.3)
Effect size (Cohen's d)	0.78	0.38

## NPI Agitation/Aggression (NPI-AA)

### Change from Baseline

(pre-specified elevated anxiety sub-population)

— NMRA-511 — Placebo



	Week 4	Week 8
LSMD (SE)	-0.9 (0.8)	-0.8 (0.6)
Effect size (Cohen's d)	0.42	0.46



Data presented for prespecified elevated anxiety population (RAID ≥12)

NMRA-511 n=16, placebo n=21

Nominal p-values: \*\*p<0.05, \*p<0.1

# Favorable tolerability and safety profile of NMRA-511

## NMRA-511 was safe and generally well tolerated



TEAEs Incidence (≥5% in either treatment group)	Placebo n=40	NMRA-511 n=40
Preferred Terms	n (%)	n (%)
Nasopharyngitis	3 (7.5%)	4 (10.0%)
Urinary tract infection	1 (2.5%)	4 (10.0%)
Anemia	1 (2.5%)	2 (5.0%)
Arthralgia	0	2 (5.0%)
Diarrhea	4 (10.0%)	2 (5.0%)
Dizziness	2 (5.0%)	2 (5.0%)
Headache	5 (12.5%)	2 (5.0%)
Hyponatremia	0	2 (5.0%)
Myalgia	1 (2.5%)	2 (5.0%)
Nausea	1 (2.5%)	2 (5.0%)
Vomiting	1 (2.5%)	2 (5.0%)
Abdominal pain	2 (5.0%)	1 (2.5%)

- TEAEs were typically mild to moderate in severity
- Low treatment discontinuations due to TEAEs (2.5%)
- Opportunity to evaluate higher doses of NMRA-511 based on tolerability



One serious adverse event of asthenia (general weakness) reported; resolved by time of discharge from an overnight hospitalization and resolution was maintained at study follow up after treatment discontinuation

# NMRA-511 demonstrated consistent unsurpassed efficacy across measures and populations

	CMAI Total Score	CMAI Aggressive Behaviors Score	CGI-S Agitation	NPI
<b>NMRA-511</b> elevated anxiety population	0.51 – 0.64	0.82 – 1.1	0.38 – 0.78	0.42 – 0.46*
<b>NMRA-511</b> total population (NPI-AA $\geq$ 4)	0.32 – 0.34	0.50 – 0.51	0.46 – 0.36	0.29 – 0.21*
 <b>REXULTI</b> brexpiprazole	0.35	0.33	0.31	0.39 <sup>^</sup>
 <b>Auvelity</b> <sup>®</sup>	0.3	Not Reported	Not Reported	Not Reported

**NMRA-511 in AD agitation**

- Well tolerated safety-profile, with potential for higher dosing
- Unsurpassed and consistent treatment effect across a range of measures
- Opportunity for convenient dosing with XR formulation
- Opportunity to enrich future studies for elevated anxiety (Phase 1b not enriched)

**For illustrative purposes only. NMRA-511 has not been studied in head-to-head trials against Auvelity or Rexulti, and there are differences in compounds, trial designs and other factors which must be considered.**

Data presented as Cohen's d effect size; elevated anxiety = RAID  $\geq$ 12. \*NPI-AA <sup>^</sup>NPI-nursing home  
 Neumora data on file.; Lee D, Slomkowski M, Hefting N, et al. Brexpiprazole for the Treatment of Agitation in Alzheimer Dementia: A Randomized Clinical Trial. JAMA Neurol. 2023;80(12):1307–1316. doi:10.1001/jamaneurol.2023.3810.; Axsome Therapeutics corporate materials.

Rexulti and Auvelity studies were enriched with an NPI-AA domain cutoff  $\geq$ 4 at baseline. NMRA-511 Phase 1b study included no enrichment. Baseline NPI-AA scores; NMRA-511: 5.1; Rexulti: 7.7 (Study 2); Auvelity: 7.2 (Advance-1)



# M4 PAM franchise: differentiated M4R PAMs for schizophrenia

## M4 Franchise Target Profile

### Pharmacology

Neumora has multiple series of chemically distinct, highly selective M4 muscarinic receptor PAMs designed for antipsychotic-like efficacy with the potential for improved tolerability profile; NMRA-898 is the lead molecule in the franchise

### Indication

Schizophrenia

### Target Administration

Oral, once-daily

### IP

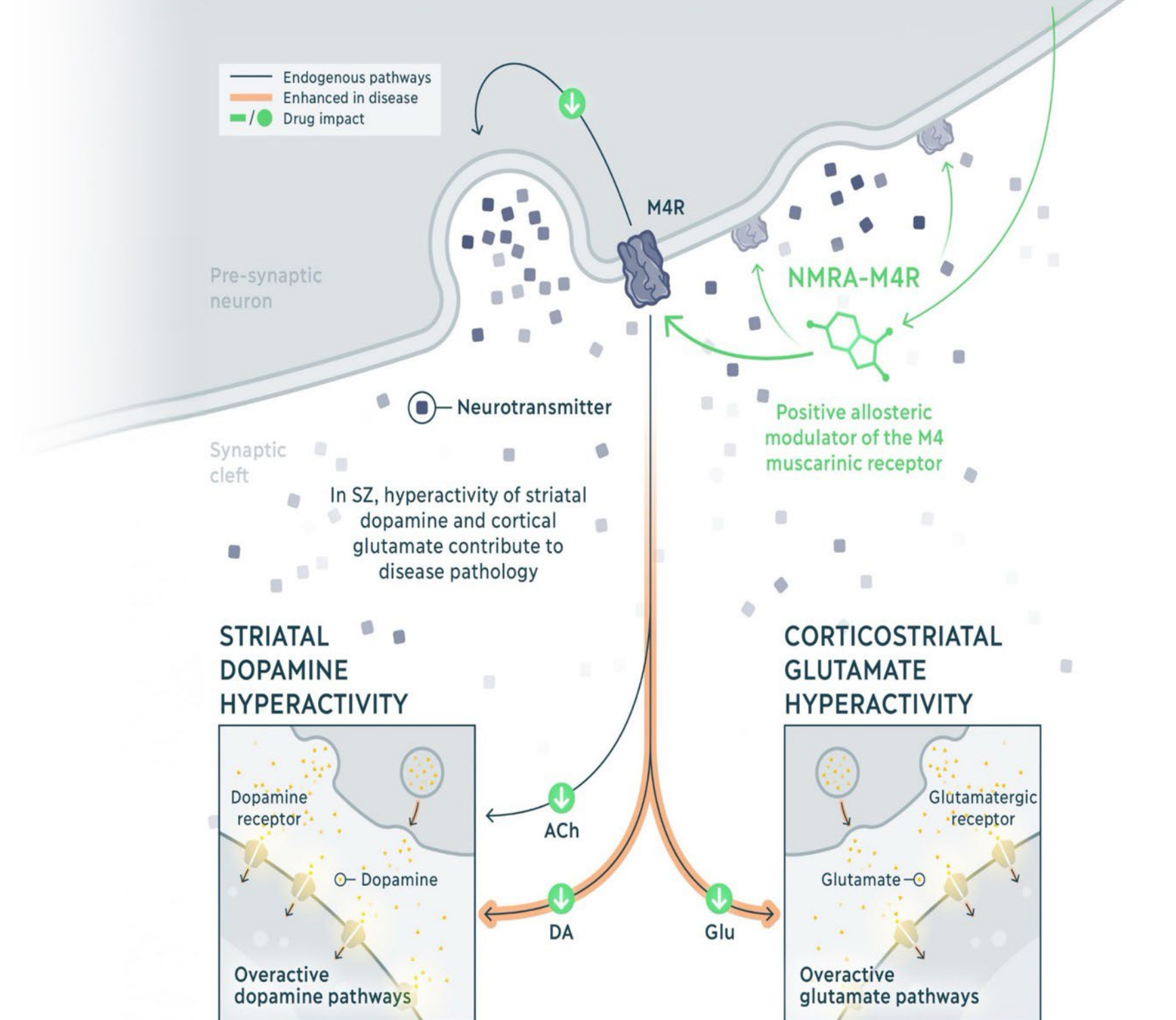
Composition of matter patent extending to 2044+\*

### Epidemiology

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

### Expected Milestones

Report data from ongoing Phase 1 study with NMRA-898 in 2H 2026



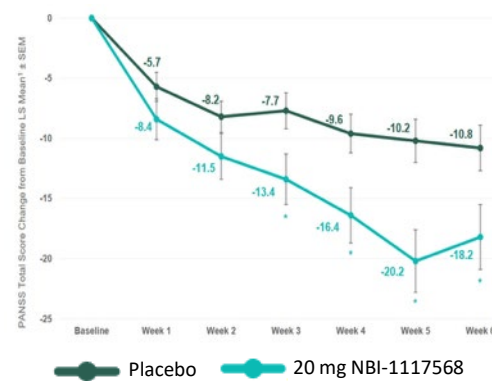
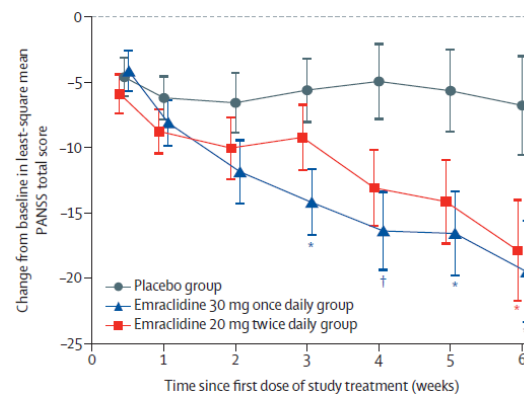
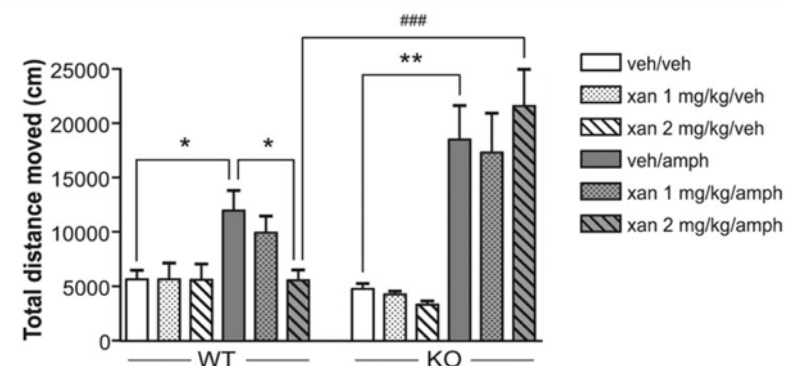
<sup>1</sup>Wander, C. *Am J Manag Care*. 2020;26:S62-S68.

\*Excluding any patent term adjustment or extension  
PAM = positive allosteric modulator

# An optimized muscarinic drug profile would include selectivity and potency in the CNS

## Preclinical data and clinical data in acute schizophrenia supports M4 as a driver of antipsychotic activity

Activity of xanomeline (active component of Cobenfy™) is dependent on M4R in mice



## Non-selective muscarinic agents are associated with a range of peripheral AEs

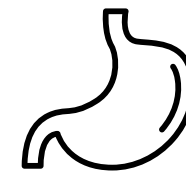
M4



Cardiovascular

Transient increased BP & heart rate

M1, M2, M3



GI Tract

Increased gastric secretion & gastric motility

M1, M2, M3



Cardiovascular

Direct effect on cardiac function – increased BP & heart rate

M1, M3



Glands

Increased salivation  
Increased lacrimation  
Increased sweating

## PAMs offer the benefits of greater selectivity

- Targeting the allosteric site specifically allows for greater selectivity for M4 over other muscarinic sub-types than if targeting the orthosteric site due to binding site conservation
- To date the pharmacology of agonists targeting the orthosteric site are often thought to display 'partial' agonism which could contribute to variable clinical responses
- PAMs allow for more precise potentiation of M4, maintaining the spatial and temporal signaling dynamics of ACh

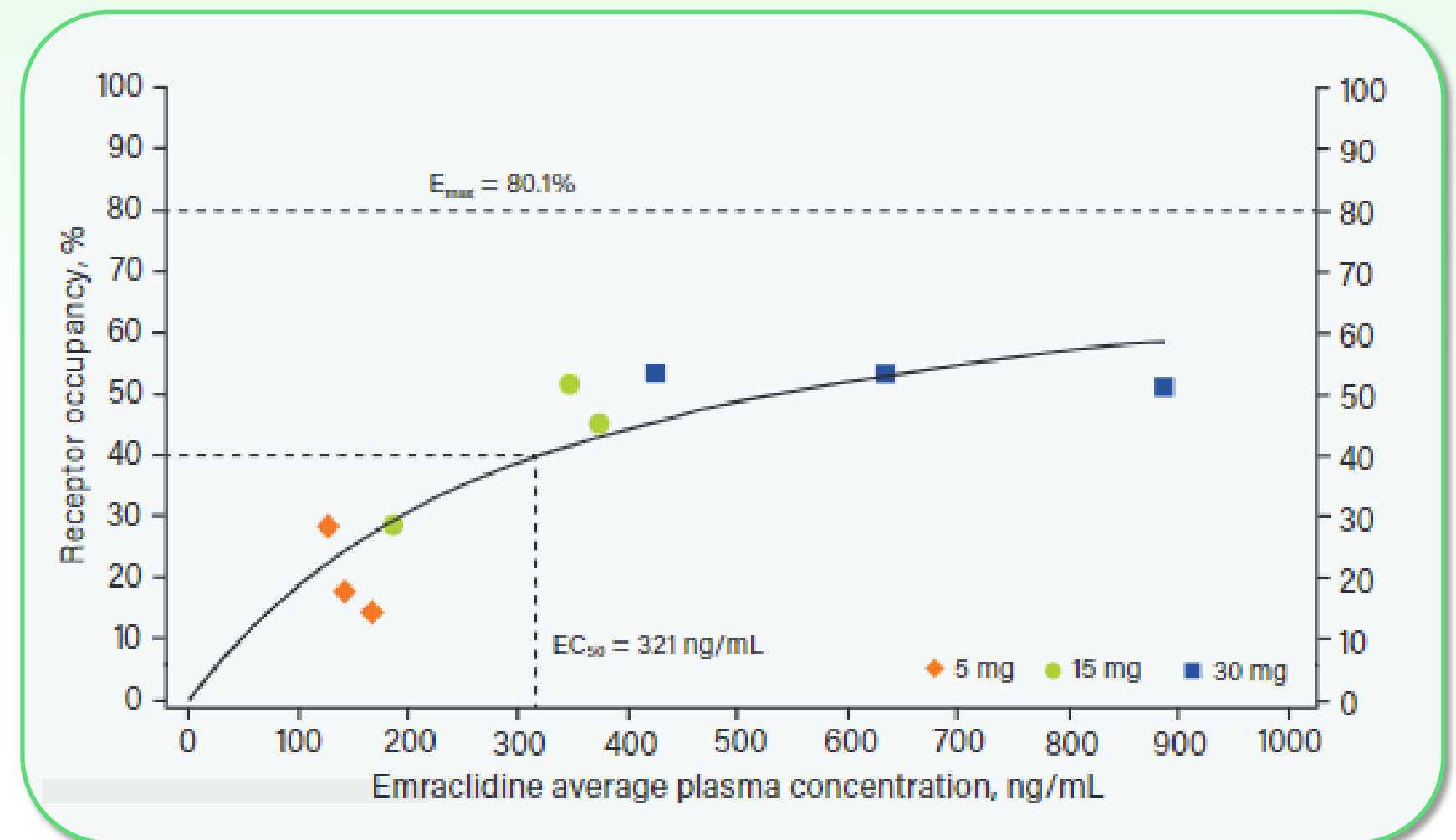


# Emraclidine receptor occupancy disconnected from plasma exposures

## Receptor Occupancy for Emraclidine in Humans Suggests the Compound has Limited Brain Exposure

- In a human PET study, peripheral concentration of emraclidine shows dose linear response
- However, CNS receptor occupancy unchanged when dose doubled from 15 to 30 mg
- Data suggests emraclidine may have limitations in engaging the M4 receptor in the brain

**Low CNS exposure could limit efficacy**



CNS = central nervous system; PET = positron emission tomography

Duvvuri S, et al. *Evaluation of M4 Muscarinic Receptor Occupancy by Emraclidine Using [<sup>11</sup>C]MK-6884 PET in Healthy Volunteers*. Poster M206. Presented at the 62<sup>nd</sup> Annual Meeting of the American College of Neuropsychopharmacology, Tampa, FL: December 3 – 6, 2023.

# NMRA-898 has potential best-in-class potency and optimized brain penetration

		NMRA-898 <sup>1</sup>	Emraclidine
<b>NMRA-898 is potentially more potent than emraclidine across multiple assays</b>	<b>M4 EC<sub>50</sub></b> (human; cAMP) <sup>1</sup>	13 nM	26 nM
	<b>M4 EC<sub>50</sub></b> (human; Ca <sup>2+</sup> ) <sup>1</sup>	8 nM	180 nM
<b>NMRA-898 is selective for M4 over other muscarinic receptor subtypes</b>	<b>Selectivity at other muscarinic receptor subtypes</b> (EC <sub>50</sub> ) <sup>1</sup>	M1, M2, M3, M5 > 10 μM	M1, M3, M5 > 10 μM, M2 5.7 μM
<b>NMRA-898 is optimized for high CNS exposure</b>	<b>Brain exposure</b> MDCK permeability (target >10) P-gp efflux ratio (target <2) <sup>1,2</sup>	High 36.7 0.93	Moderate 9.5 3, 6.02 <sup>1,2</sup>
<b>NMRA-898 is optimized for once daily dosing</b>	<b>Human half-life</b> <sup>3</sup>	80 – 100 hr	9 – 12 hr
<b>NMRA-898 is well tolerated at exposures projected to achieve meaningful M4 potentiation</b>	<b>Estimated Free Brain C<sub>max</sub></b> <sup>^</sup> (Fold cAMP EC <sub>50</sub> )	2 x Low PK variability	N/A High PK variability

Note: Data on this slide is presented for illustrative purposes only. These molecules have not been studied in head-to-head clinical trials. ^NMRA-898 data based on ongoing Phase 1 (SAD/MAD) study.

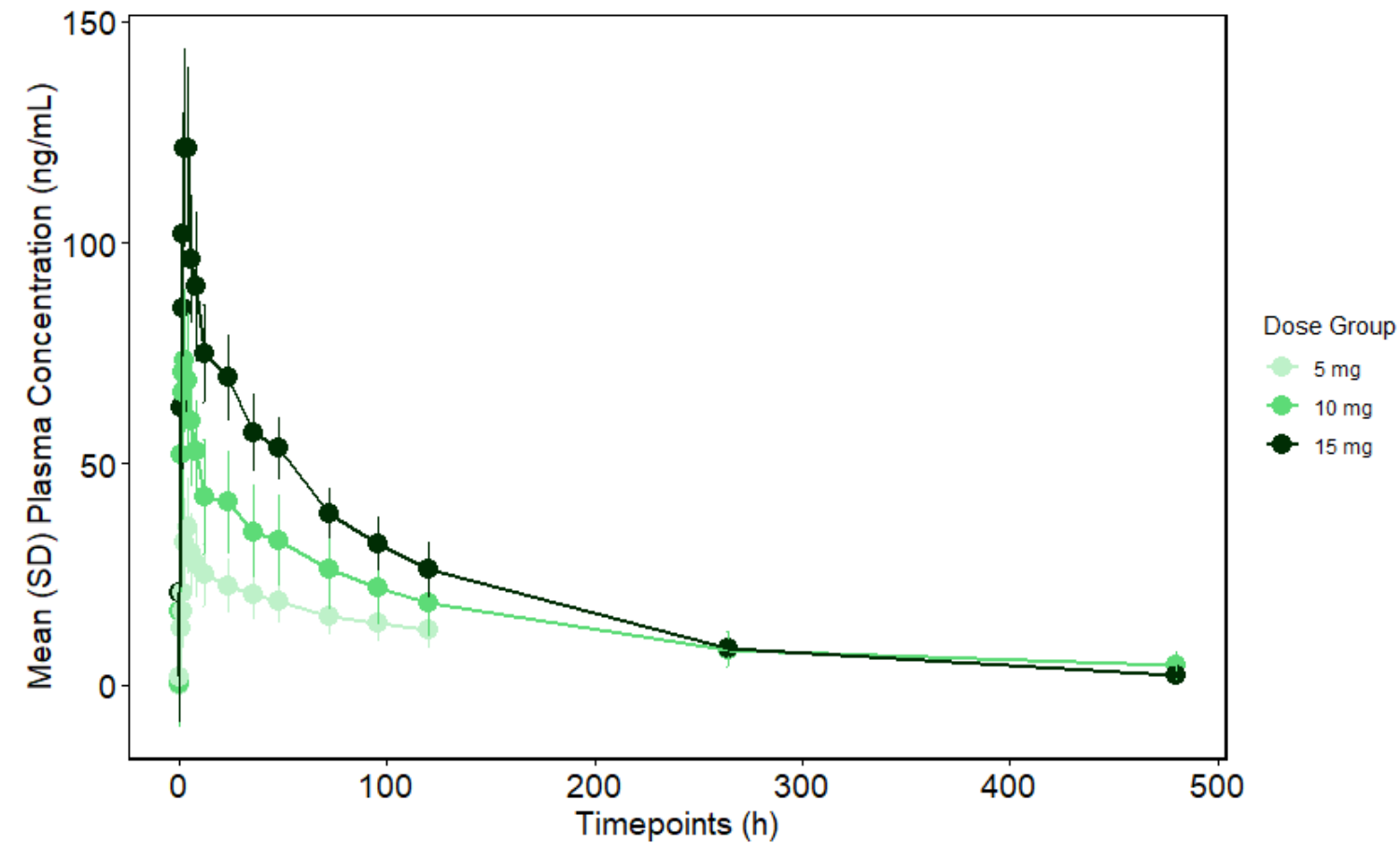
cAMP = cyclic adenosine monophosphate; CNS = central nervous system; PAM = positive allosteric modulator

1. Data generated by The Warren Center for Neuroscience Drug Discovery at Vanderbilt University on behalf of Neumora across NMRA-861, NMRA-898 and emraclidine. 2. Butler CR, et al. *J Med Chem.* 2024 Jul 11;67(13):10831-47. 3. Krystal JH, et al. *Lancet.* 2022 Dec 17;400(10369):2210-20.

# Promising Phase 1 clinical results single ascending dose study

## Exposures support program advancement

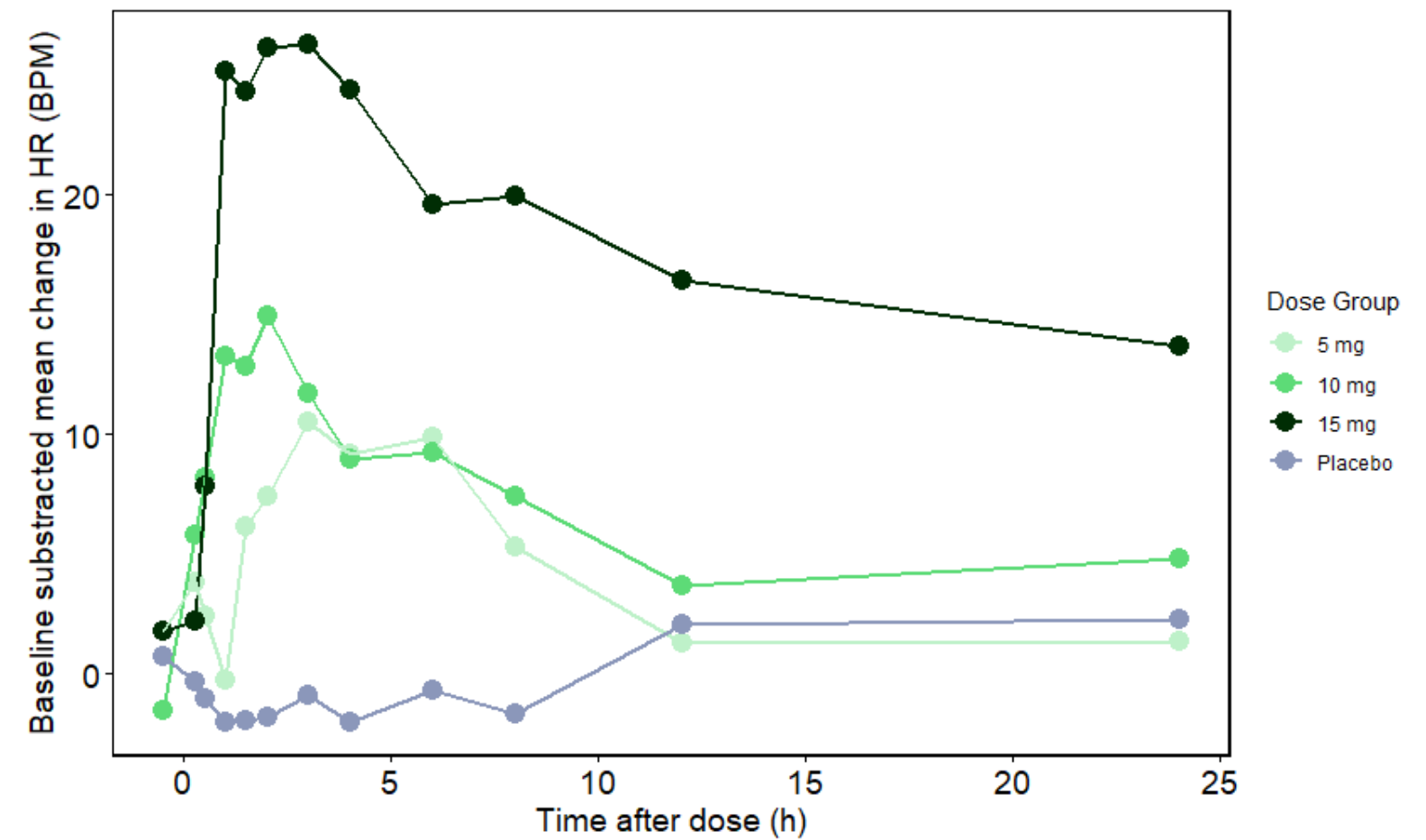
Phase 1 SAD PK Profile  
(healthy adults)



Exposures were dose proportional with low variability and predicted free exposures in the brain above in vitro M4 EC50 levels

## On-target changes in heart rate measures

Phase 1 SAD Heart Rate Changes  
(healthy adults)



Exposure-dependent increases in heart rate, of similar magnitude to those demonstrated by Cobenfy (KarXT), providing pharmacodynamic evidence of target engagement



# MAD study evaluating NMRA-898 in healthy adults and people with stable schizophrenia

## Study Objectives

- Evaluate tolerable doses in people with stable schizophrenia
- Establish CNS penetration – based on CSF exposure

### MAD – Part 2 CSP

	Dose	Participants	Randomization
Cohort 1	Dose to be determined	Healthy adults	6:2 active:placebo
Cohort 2	Dose to be determined	Healthy adults	
Cohort 3	Dose to be determined	Healthy adults OR with stable schizophrenia	
Cohort 4	Dose to be determined	Healthy adults OR with stable schizophrenia	
Cohort 5	Dose to be determined	Adults with stable schizophrenia	

■ Healthy adults    ■ Adults with stable schizophrenia



# NMRA-215: differentiated NLRP3 inhibitor for obesity and related metabolic diseases

## NMRA-215 Target Profile

### Rationale/Pharmacology

NLRP3-related inflammatory response via release of IL-1 $\beta$ , IL-18 and IL-6 cytokines is associated with obesity<sup>1,2</sup>

### Indication

Obesity, Parkinson's Disease

### Target Administration

Oral, once-daily

### IP

Composition of matter patent extending to 2043+\*

### Epidemiology

~1.13 billion patients in the world with obesity by 2030<sup>3</sup>

### Expected Milestones

Complete repeat 13-week rat toxicology study and bring NMRA-215 into the clinic in the first quarter of 2027

## Multiple factors drive NLRP3-mediated inflammation resulting in disease

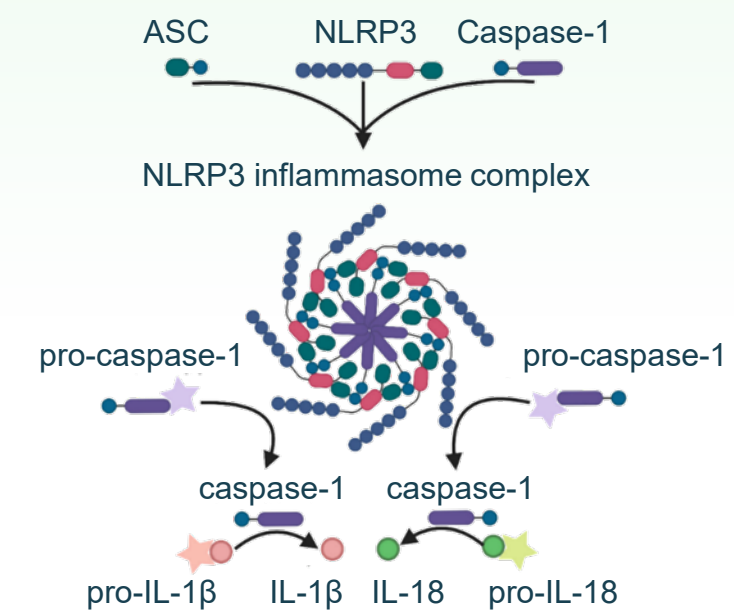


### DRIVERS



- Diet (e.g., lipids)
- Environment
- Genetics
- Aging

### NLRP3 Activation



### DISEASES



- Neurodegeneration (Parkinson's)
- Cardio-metabolic (obesity)
- Monogenic / autoimmune (CAPS)

\*Excluding any patent term adjustment or extension

1. O'Brian et al. *J Neuroinflammation*. 2020;17(1):104. 2. Wani K et al. *Int J Environ Res Public Health*. 2021;18(2):511. 3. World Obesity Federation. World Obesity Atlas 2024. London: World Obesity Federation, 2024. <https://data.worldobesity.org/publications/?cat=22>.

Figure: AdipoGen Life Sciences. <https://adipogen.com/inflammasomes/rce>



# Obesity represents one of the greatest public health challenges



By 2030,

**1.13 BILLION**

people worldwide will be living with obesity<sup>1</sup>



Driving a significant market for obesity treatments

**\$130 - \$170 BILLION**

estimated obesity market size in 2030



And yet,

**Significant opportunity remains**

Approved incretin therapies offer weight loss, but come with challenges:

- Significant AEs, such as nausea, vomiting, constipation and diarrhea
- High discontinuation rates
- Weight regain following discontinuation
- Cold chain storage required

Emerging oral treatments produce less weight loss and are burdened by the same intolerable side effects



NLRP3 inhibition

**May address unmet needs**

NLRP3 inhibition may offer benefit across monotherapy, combination therapy and maintenance paradigms:

- Incretin-like weight loss
- Increased response rates
- Better tolerability
- Convenience with no cold chain storage
- Lower COGS with oral small molecule

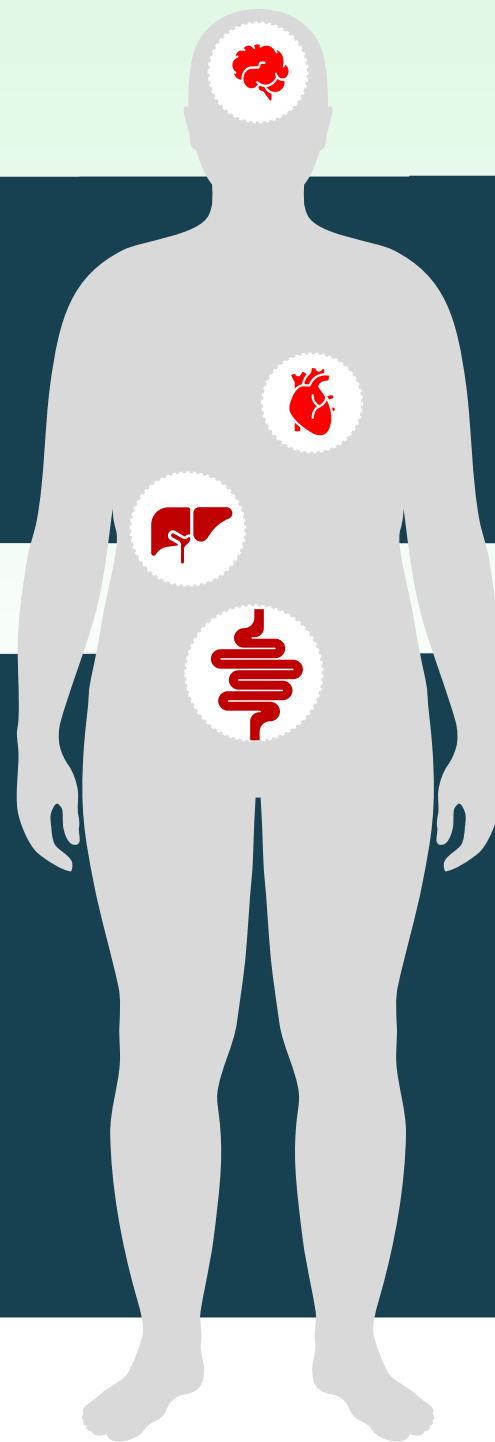


# CNS penetrant NLRP3 inhibition provides broad benefit

System

CNS

Periphery



Drug Impact

Reduce neuroinflammation in the brain

Protect organ and vascular system from inflammation-related damage

Outcome

Reduced appetite and drive body weight loss

Reduce the risk of comorbidities.

- Reduces heart disease: improved CV outcomes
- Improves type II diabetes: reduced insulin resistance in mice

Potential treatment benefits driven by both CNS and peripheral inhibition of NLRP3



# NMRA-215 has an optimized pharmacological profile including CNS exposure

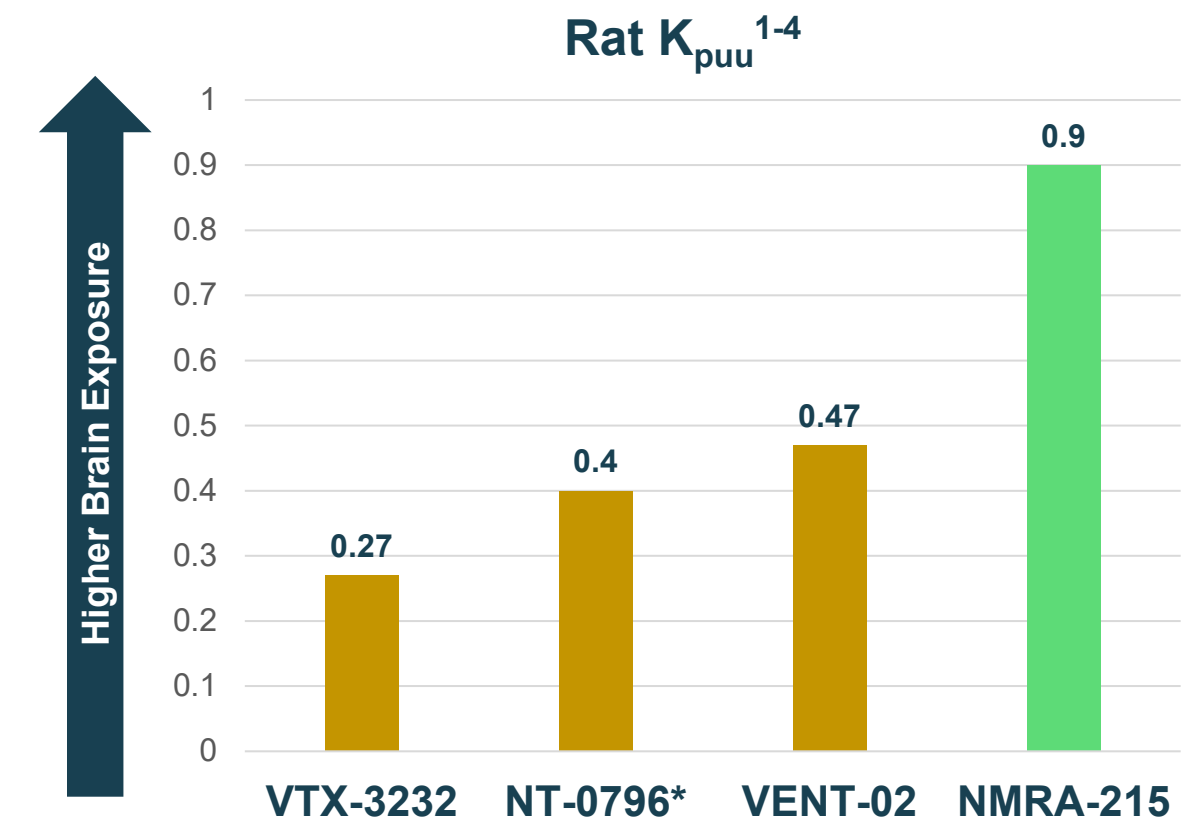
NMRA-215 is highly potent with low nM potency across a range of assays

NMRA-215 is highly selective for NLRP3

NMRA-215 is extensively characterized and optimized for brain exposure

NMRA-215 Assay Format	IC <sub>50</sub>
THP-1 (IL-1β)	3 nM
Target engagement (Nanobret)	5 nM
iMicroglia (IL-1β)	8 nM
Human whole blood (IL-1β)	16 nM

- NMRA-215 is highly selective for NLRP3 versus other inflammasomes (NLRP1, NLRC4, AIM2)
- >250-fold selective for NLRP3 versus a broad panel of targets (Eurofins SafetyScreen87)
- Clean profile in cardiac ion channel and kinase screening panels



MDCK permeability:	Unknown	14.0
P-gp efflux ratio:	Unknown	1.1

\*NT0796 = mouse K<sub>puu</sub>

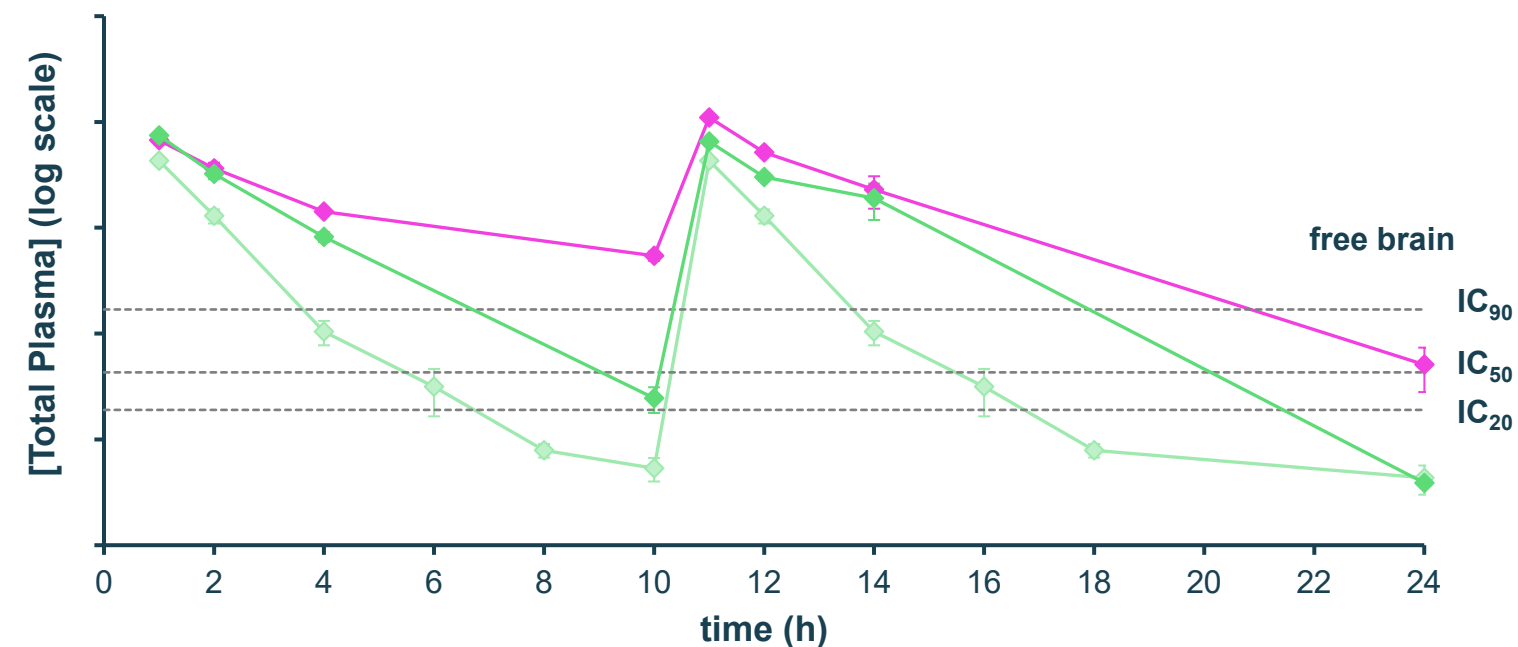
<sup>1</sup>Neumora data on file. <sup>2</sup>Thornton P, et al. *JPET*. 2024 Feb 15;388(3):813-826. <sup>3</sup>Ventus Data Presented at 5<sup>th</sup> Annual Inflammasome Summit. November 28 – 30, 2023. Boston, MA. <sup>4</sup>Ventyx R&D Day Presentation. Published Jan 2023.

# Doses selected for DIO mouse studies to determine target coverage necessary for weight loss

## NMRA-215 dose selection

Goal: Sustained  $IC_{90}$  target coverage for 24 hours

Dose (BID)	IC
Target Dose	90
Mid-Dose	50
Low Dose	20



◆ NMRA-215 Low Dose    ◆ NMRA-215 Mid Dose    ◆ NMRA-215 Target Dose

Target dose drives  $IC_{90}$  in CNS and periphery over 24 hours based on human whole blood assay

## Semaglutide dose selection

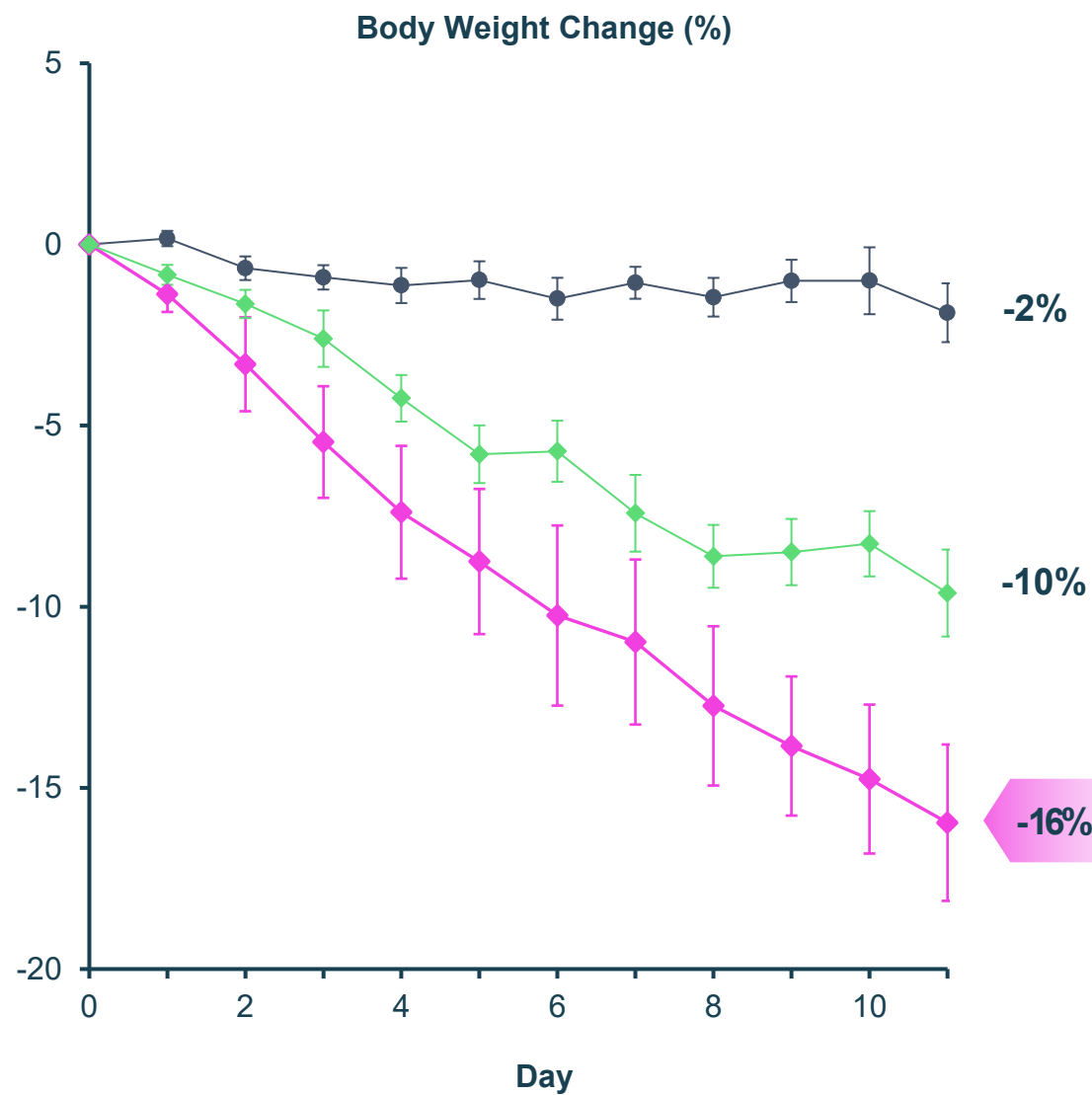
Goal: Select two doses that allow for evaluation of different treatment paradigms

- Ability to evaluate combination and dose sparing effects of NMRA-215
  - Therapeutic dose: **3 nmol/kg**
  - Sub-therapeutic dose (incretin-sparing): **1 nmol/kg**
- Similar dosing paradigm used by other sponsors allows for comparison across studies

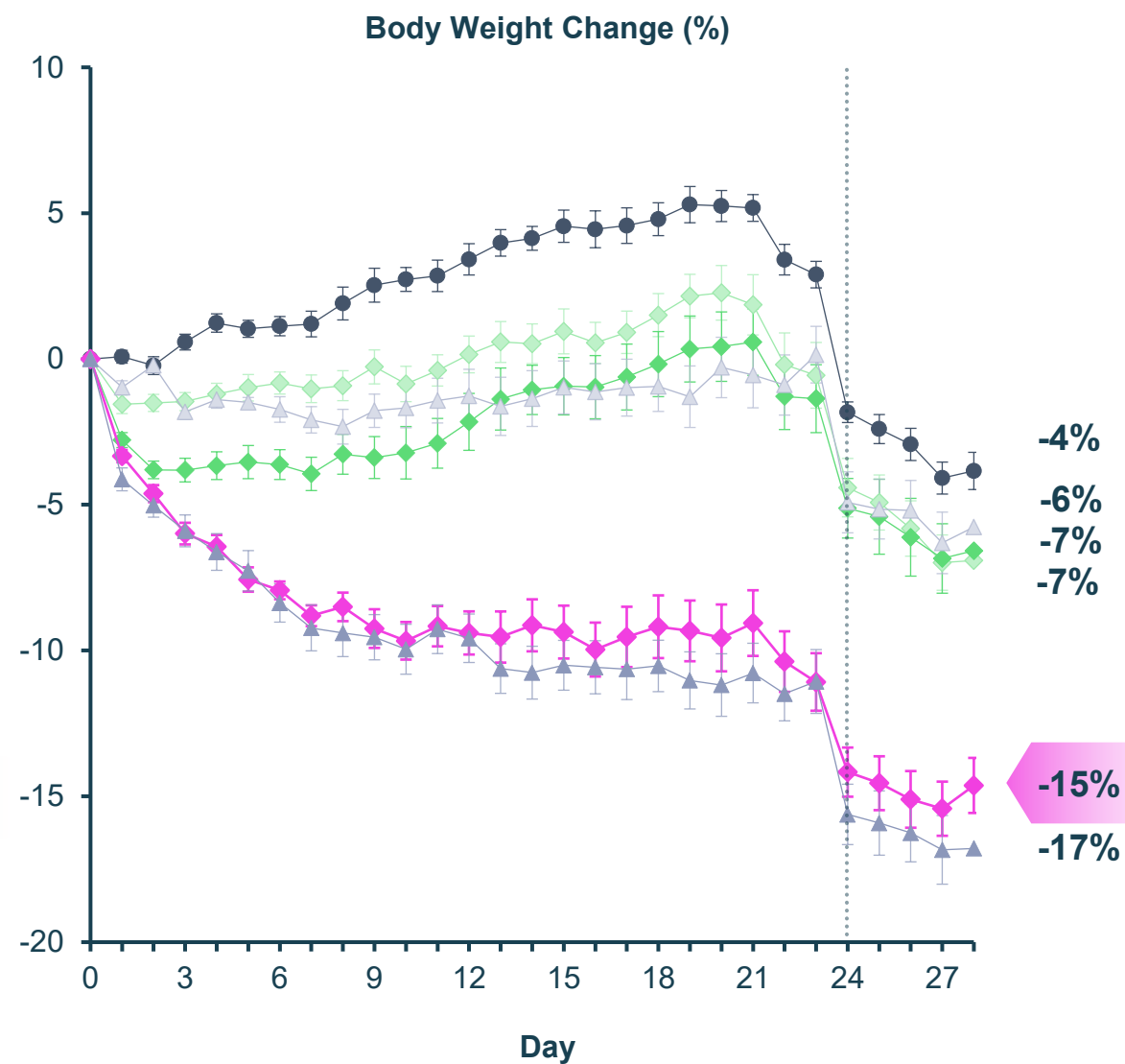


# Monotherapy: Up to 19% weight loss with NMRA-215 with incretin-like induction

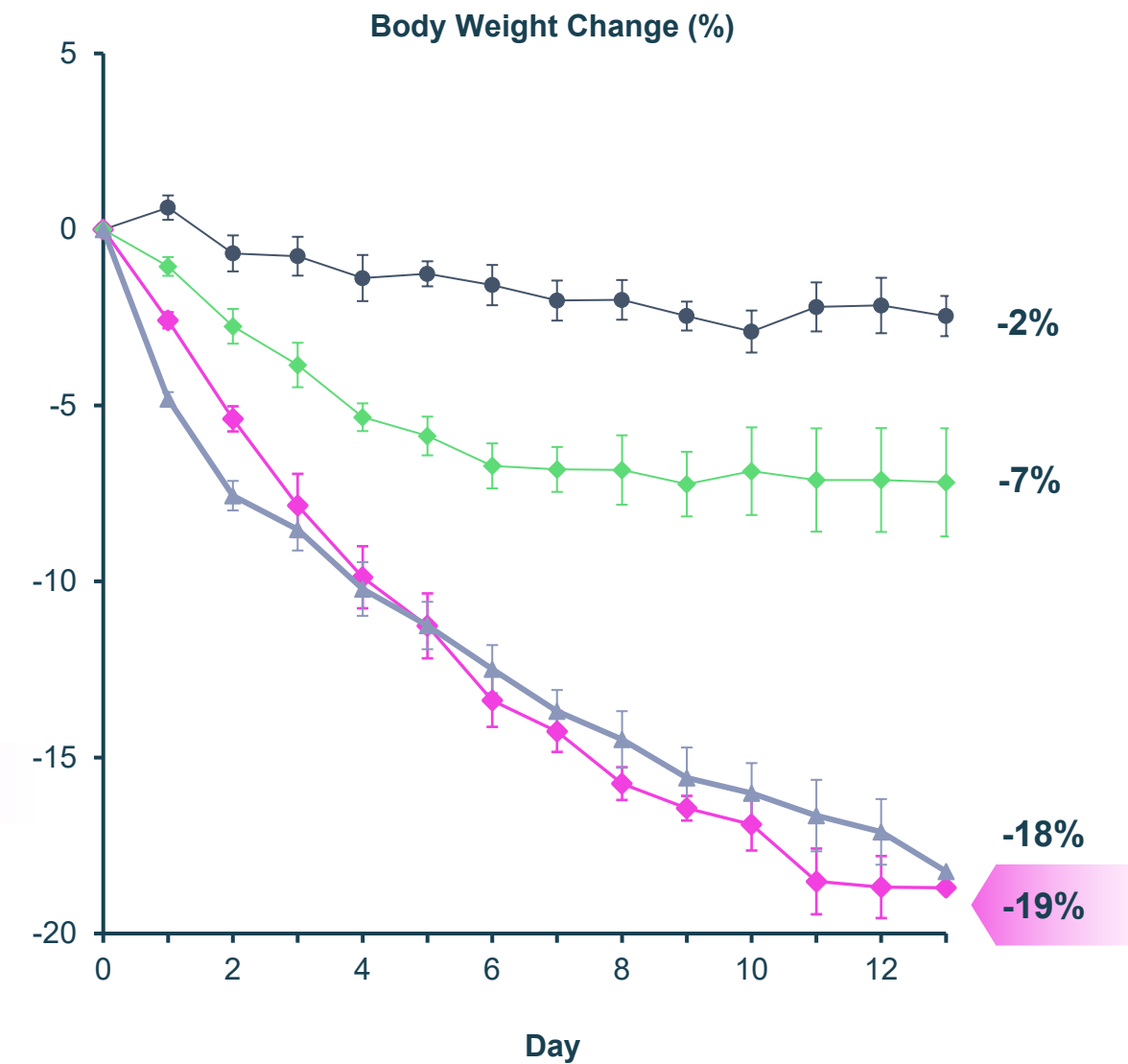
## STUDY 1 Pilot Study



## STUDY 2 Full DIO Study



## STUDY 3 Induction Confirming Study\*

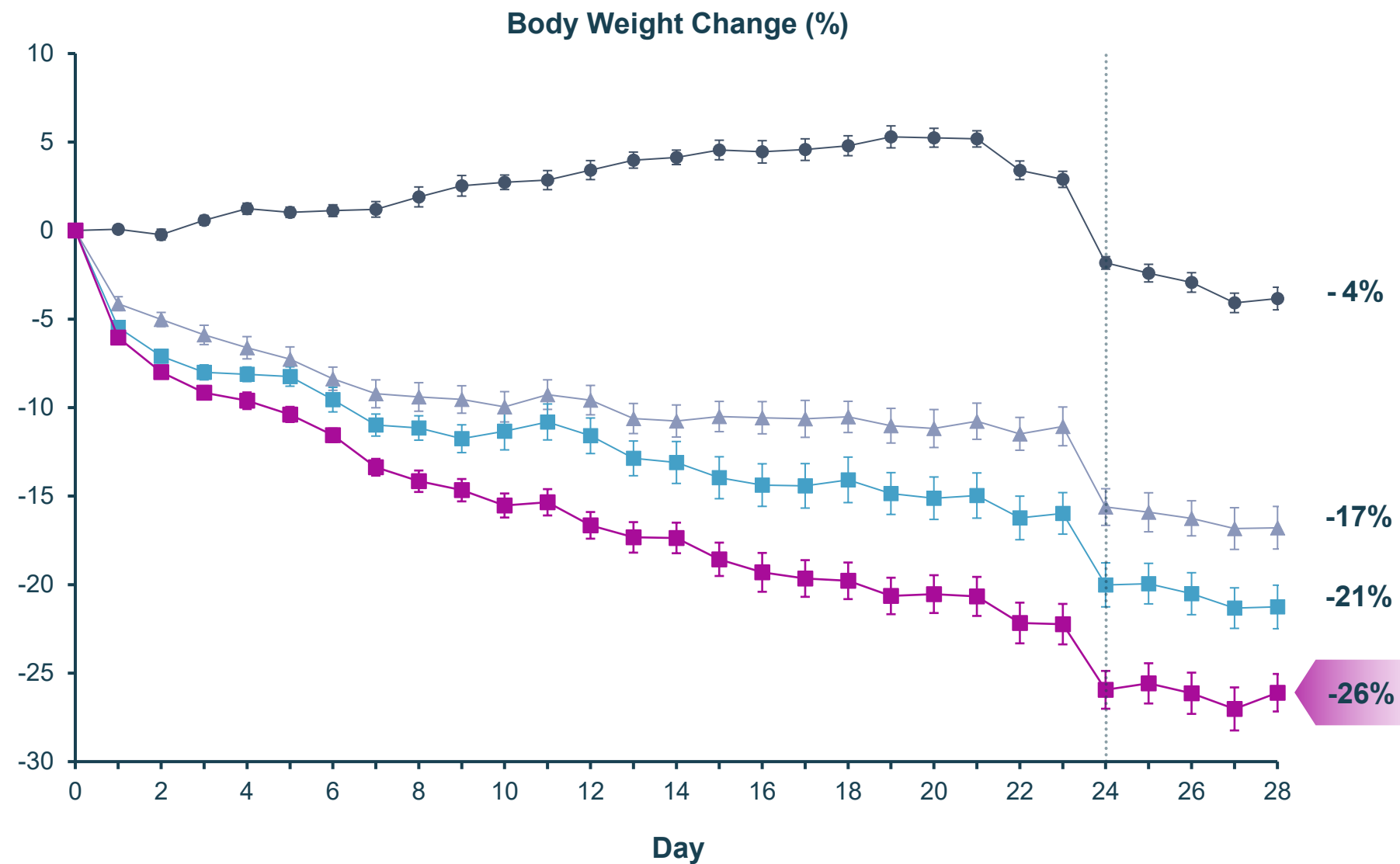


● Vehicle
◆ NMRA-215 Low Dose
◆ NMRA-215 Mid Dose
◆ NMRA-215 Target Dose
▲ semaglutide 1 nmol/kg
▲ semaglutide 3 nmol/kg

NMRA-215 administered subcutaneously in Studies 1 and 3 and administered orally in Study 2. Semaglutide administered subcutaneously in all studies. In Study 2 beginning on Day 22, mice underwent daily endpoint collections, including behavioral testing, MRI, and fasting on day 24 to support blood collection Days 25-27. \*Study designed to run up to 28 days. Following achievement of study objective confirming incretin-like induction at Day 13, study was stopped due to injection site irritation, which will not be present in the clinical setting, as NMRA-215 is being developed as an oral therapy.

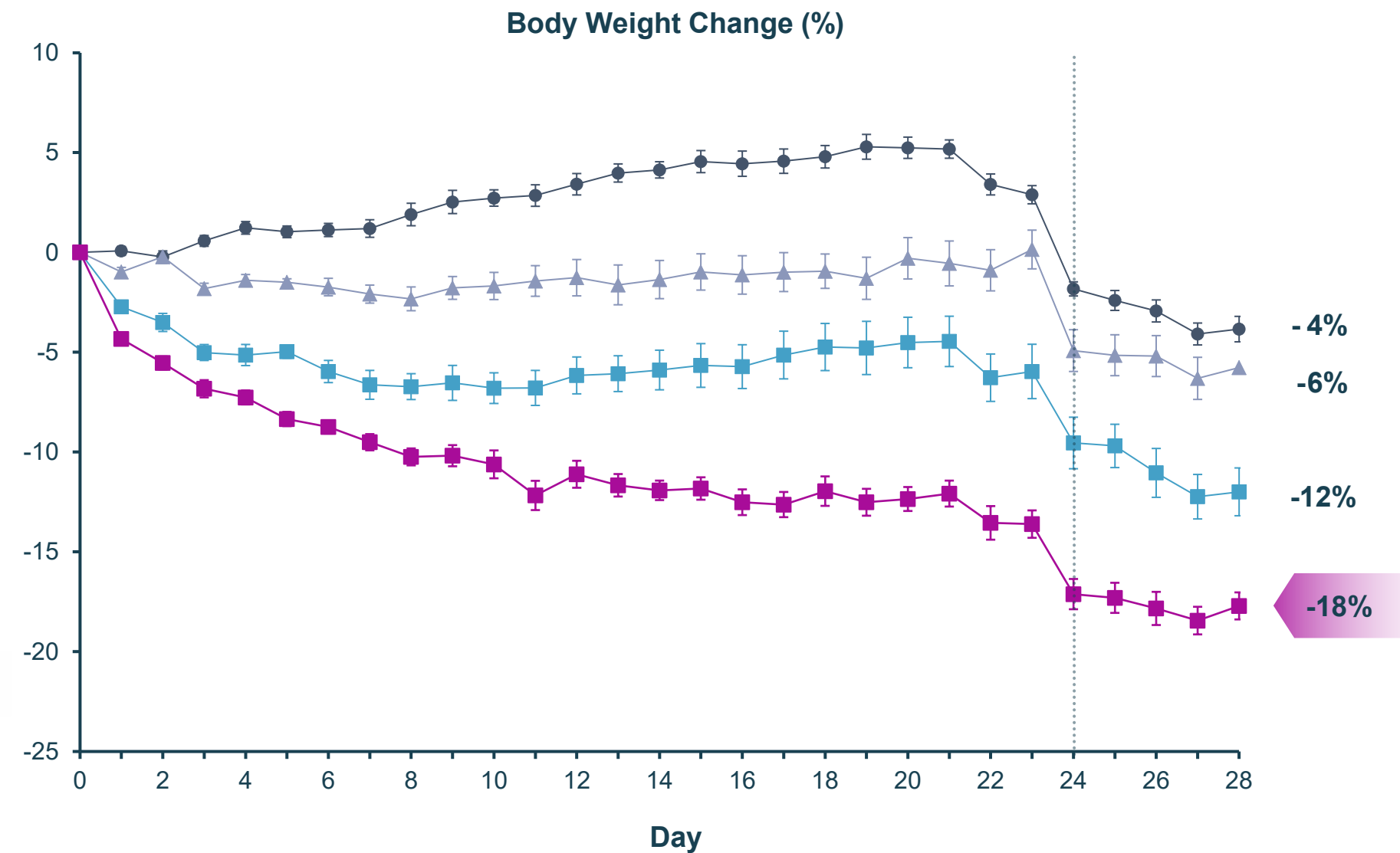
# Combination therapy: Up to 26% weight loss with NMRA-215 + semaglutide

NMRA-215 + Combined with 3 nmol/kg semaglutide



Additive weight loss with therapeutically active incretin dose

NMRA-215 + Combined with 1 nmol/kg semaglutide



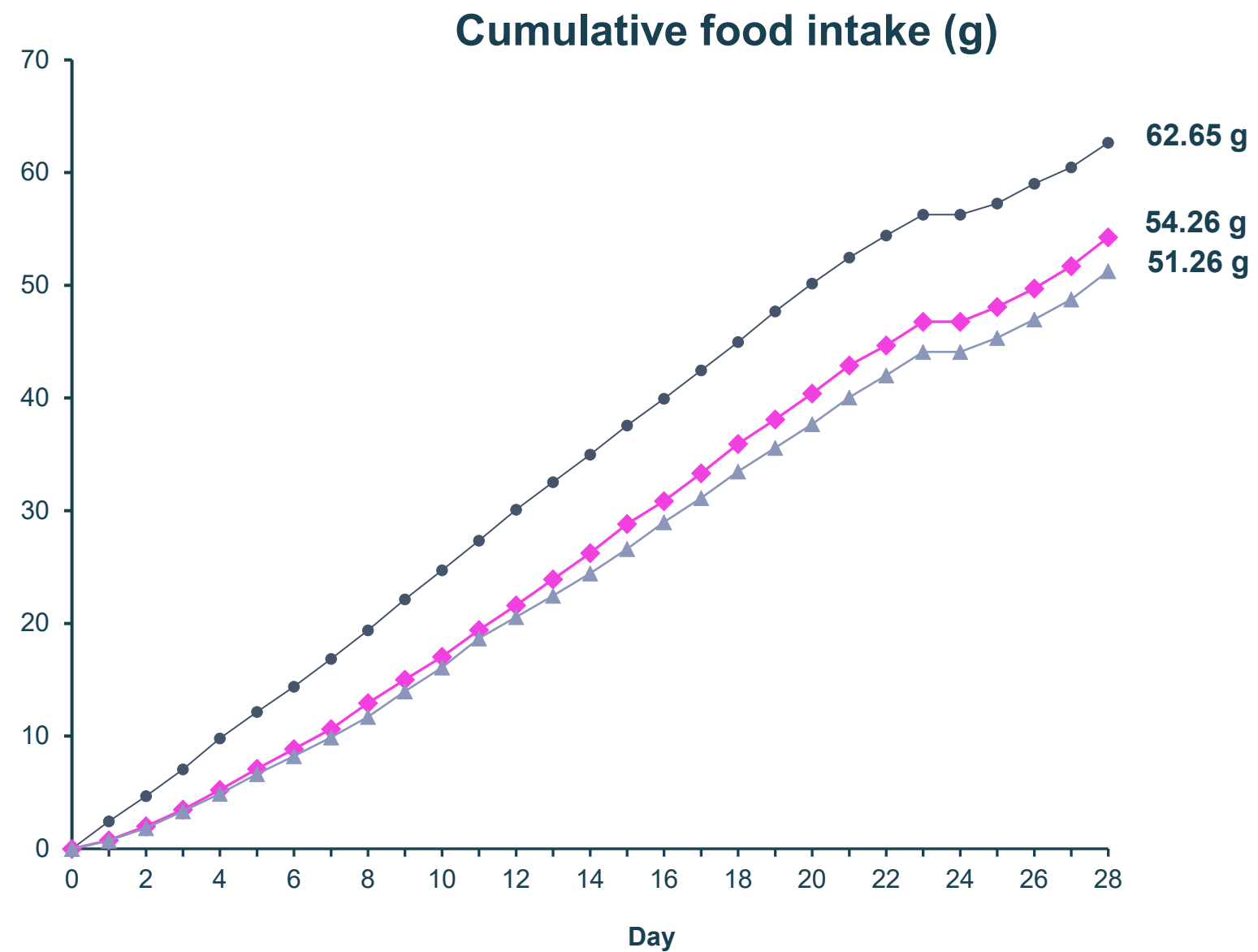
Potential for incretin-sparing combination with better tolerability

● Vehicle    ▲ semaglutide    ■ Combination with NMRA-215 Mid Dose    ■ Combination with NMRA-215 Target Dose



# NMRA-215 matches semaglutide weight loss with higher-quality outcomes

## Reduced food intake equivalent to semaglutide

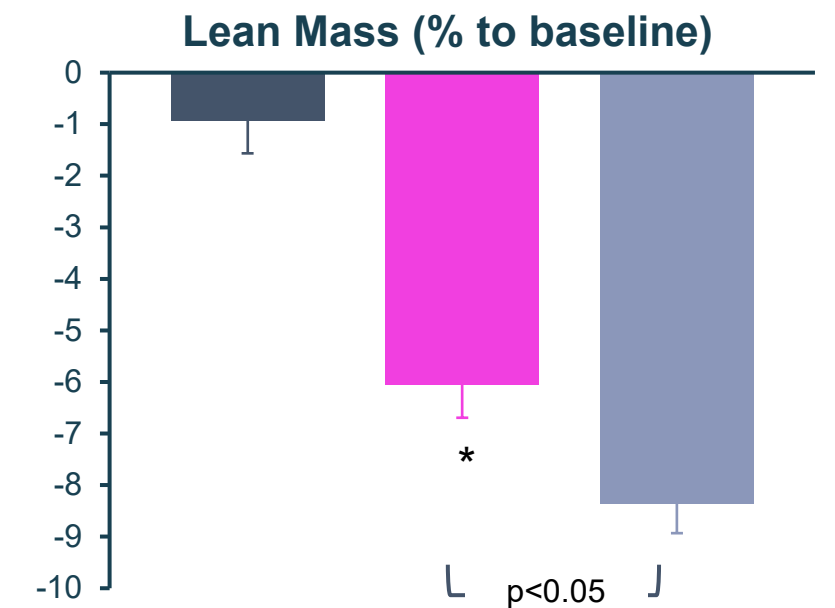
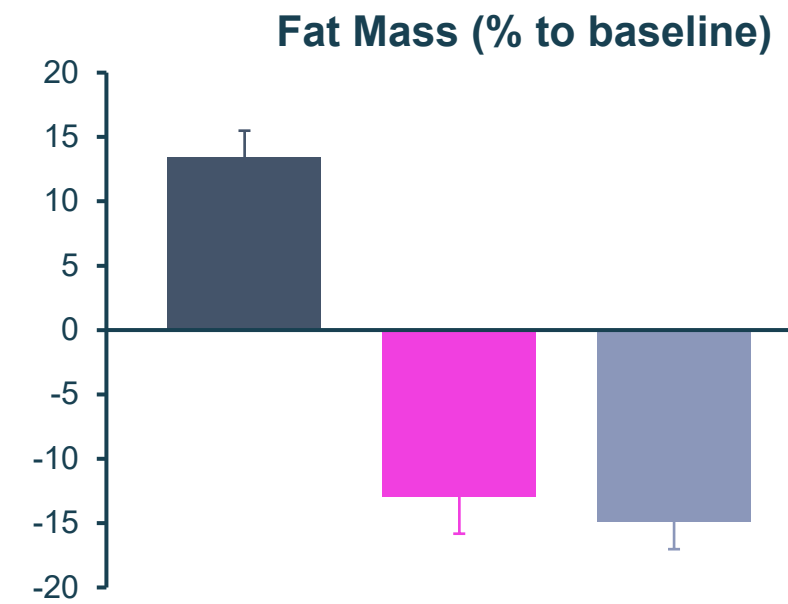


● Vehicle

◆ NMRA-215 Target Dose

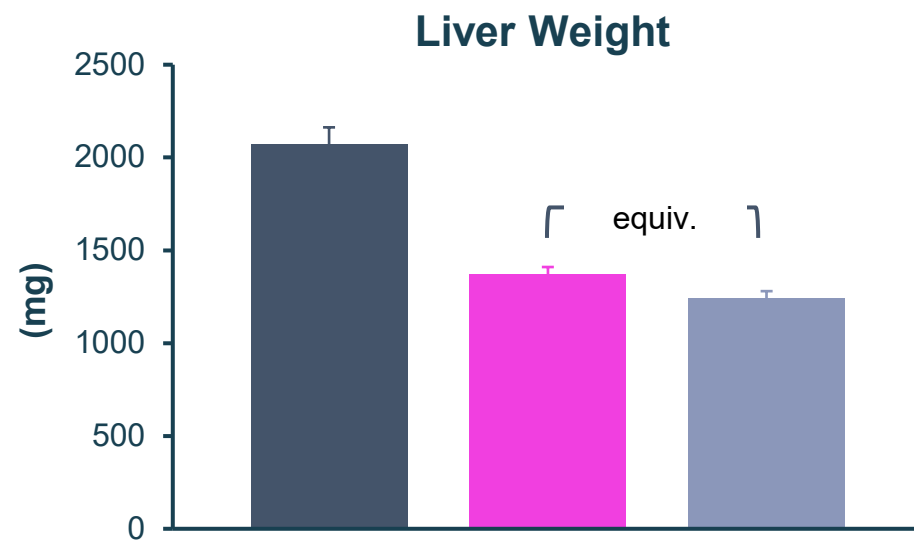
▲ semaglutide 3 nmol/kg

## Matches semaglutide weight loss, while preserving lean mass

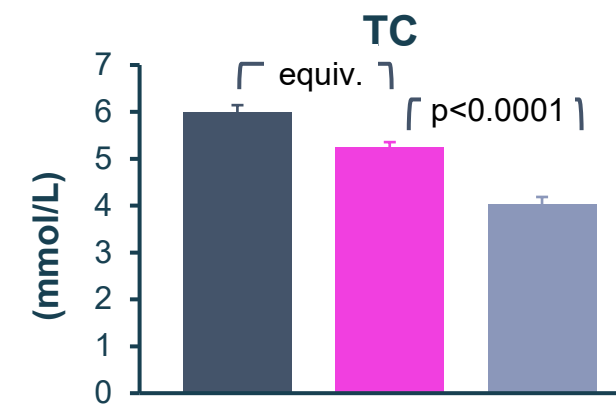
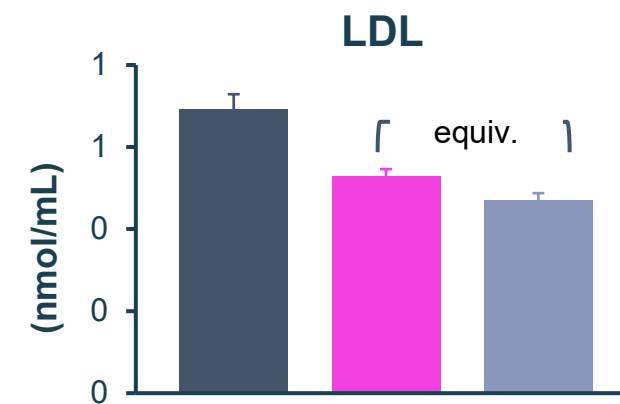
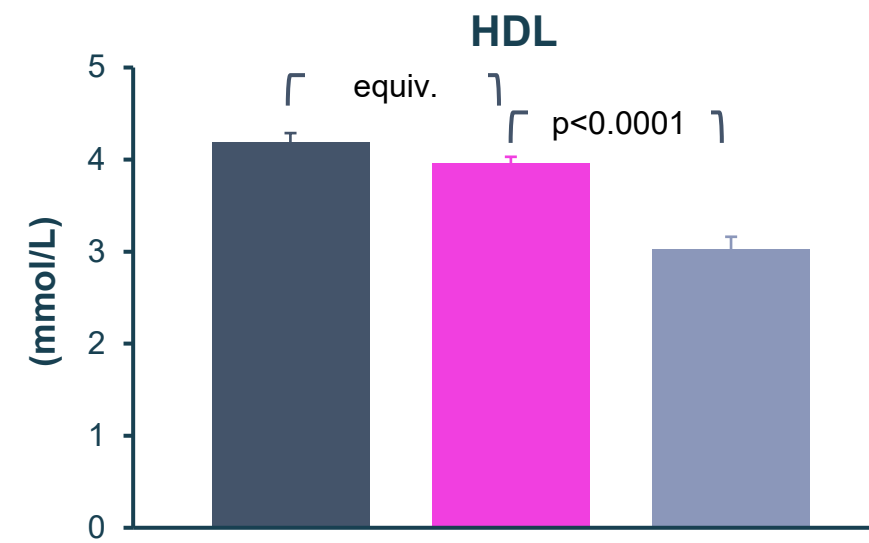


# NMRA-215 drove positive results across key biomarkers

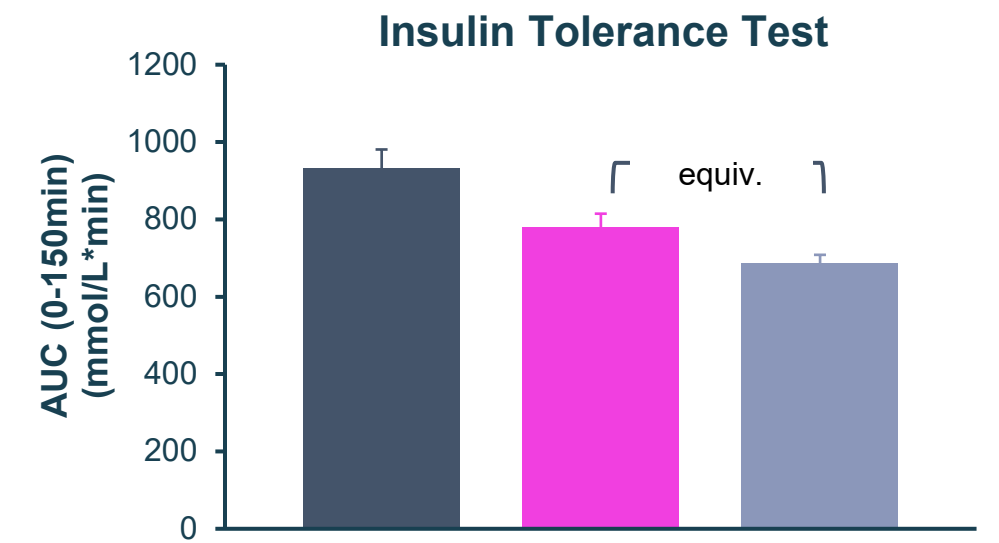
## Improved liver health similar to semaglutide



## Improved cardiovascular/lipid profile relative to semaglutide










## Improved insulin sensitivity





● Vehicle      ◆ NMRA-215 Target Dose      ▲ semaglutide 3 nmol/kg



# Class-leading weight loss demonstrated with NMRA-215

		 Neumora®	 ventyx BIOSCIENCES	 Ventus THERAPEUTICS	BIOAGE	 nodthera
		NMRA-215	VTX3232	VENT-02	BGE-102	NT-0796
<b>NMRA-215 monotherapy demonstrates class-leading weight loss</b> 	<b>NLRP3i</b> (end of study)	<b>15%–19%</b>	2%	11%	6%	17%
	<b>semaglutide</b> (end of study)	<b>17%–19%</b>	12%	21%^	5%	21%
<b>NMRA-215 monotherapy matches semaglutide induction</b> 	<b>NLRP3i</b> (Day 7)	<b>9% / 14%</b> <small>(Study 2) (Study 3)</small>	3%	8%	6%	7%
	<b>semaglutide</b> (Day 7)	<b>9% / 14%</b> <small>(Study 2) (Study 3)</small>	9%	15%^	11%	11%
<b>Combination demonstrates additive effects of NMRA-215</b> 	<b>NLRP3i + semaglutide</b> (Day 28)	<b>26%</b>	19%	29%^	21%	24%#

  
*Studies in humanized transgenic obese mice are not directly comparable to other DIO studies*

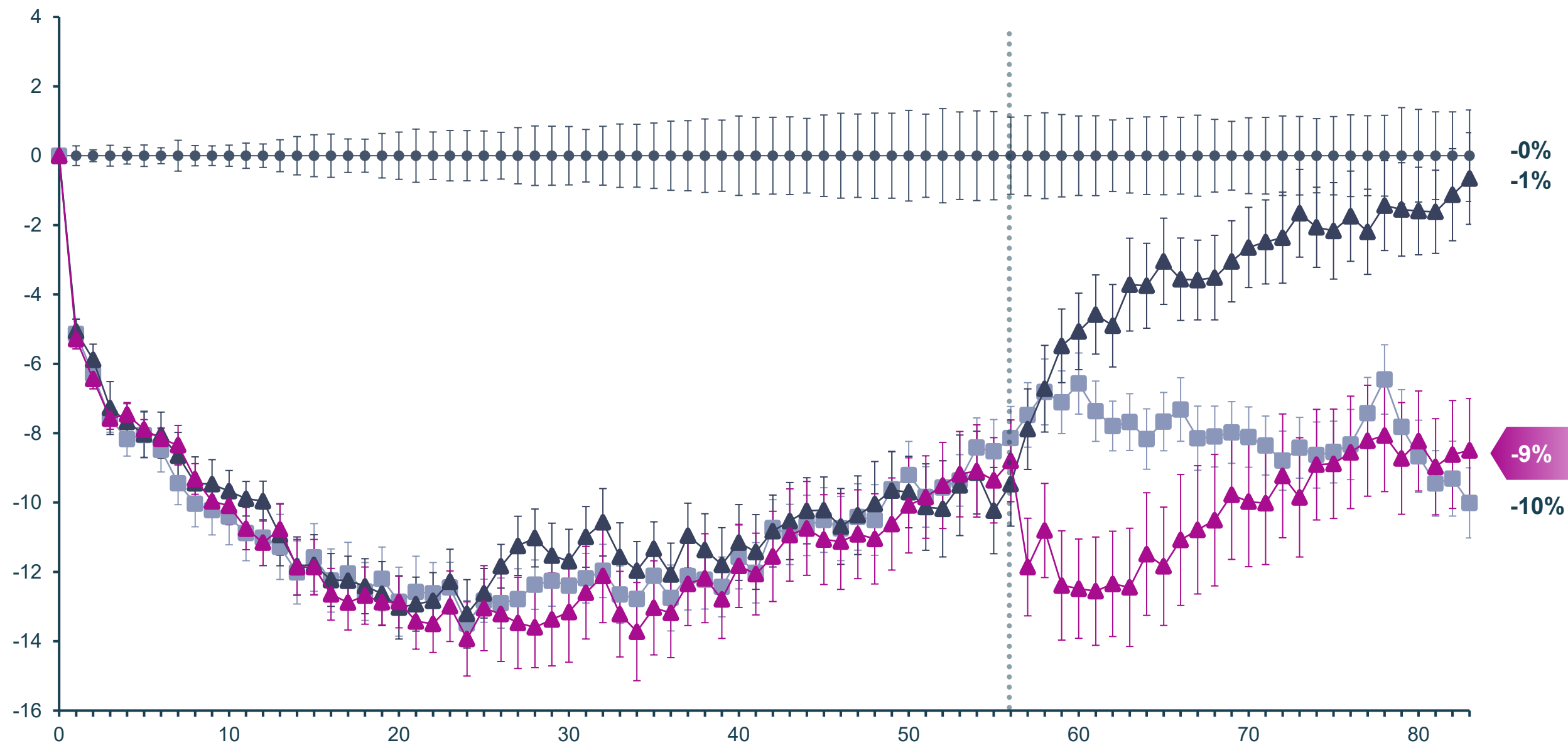
 ^Ventus semaglutide dose = 10 nmol/kg. #Nodthera combination study semaglutide dose = 5 µg/kg. Other market participant data obtained through company, scientific and Wall Street research publications  
 Note: Data on this slide presented for illustrative purposes only. These molecules have not been studied in head-to-head clinical trials and there are differences in compounds, trial design and other factors, which must be considered.

# Sustained weight loss following switching from semaglutide to NMRA-215

12-Week DIO Data

Full MoA Switch

% Change in Body Weight (Vehicle Adjusted)



## Key Takeaway

NMRA-215 demonstrated sustained, semaglutide-like weight loss at 12 weeks following a switch from semaglutide monotherapy to NMRA-215 monotherapy at week 8

● Vehicle

■ semaglutide

▲ semaglutide → Vehicle

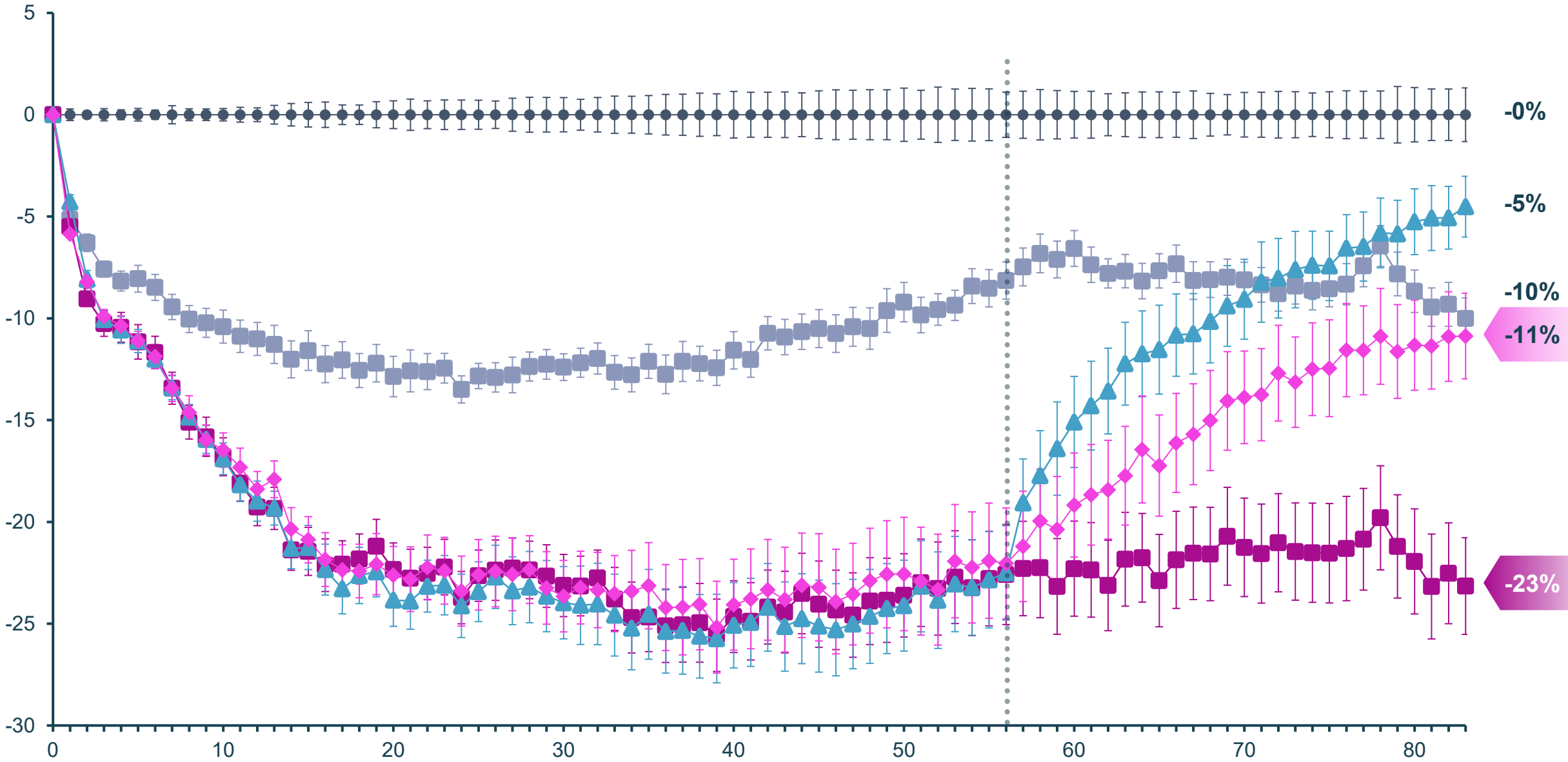
▲ semaglutide → NMRA-215 Target Dose

# NMRA-215 offers maintenance of weight loss

12-Week DIO Data

Combination → NLRP3 maintenance

% Change in Body Weight (Vehicle Adjusted)



**Key Takeaway**  
 Following switch from semaglutide and NMRA-215 combination to NMRA-215 monotherapy at week 8, DIO mice maintained weight loss similar to mice who received semaglutide monotherapy for the entire duration

- Vehicle
- semaglutide
- Combination with NMRA-215 Target Dose
- ▲ Combination → Vehicle Maintenance
- ◆ Combination → NMRA-215 Maintenance



# Data supports utility of NMRA-215 across multiple treatment paradigms

## 1 NMRA-215 as weight loss monotherapy



Up to 19% body weight loss with semaglutide-like induction



Dose-dependent body weight loss confirmed



Preserved lean mass and improved metabolic biomarkers

## 2 NMRA-215 as add-on to a GLP-1



Up to 26% body weight loss; additive to semaglutide alone



Potential for incretin-sparing combination with better tolerability

## 3 NMRA-215 as weight maintenance treatment



Sustained weight loss following switching from semaglutide to NMRA-215



Maintained monotherapy-like weight loss following switch from combination

### Next Step

- Complete repeat 13-week rat toxicology study, provide program update in 2H 2026
- Bring NMRA-215 into the clinic in the first quarter of 2027





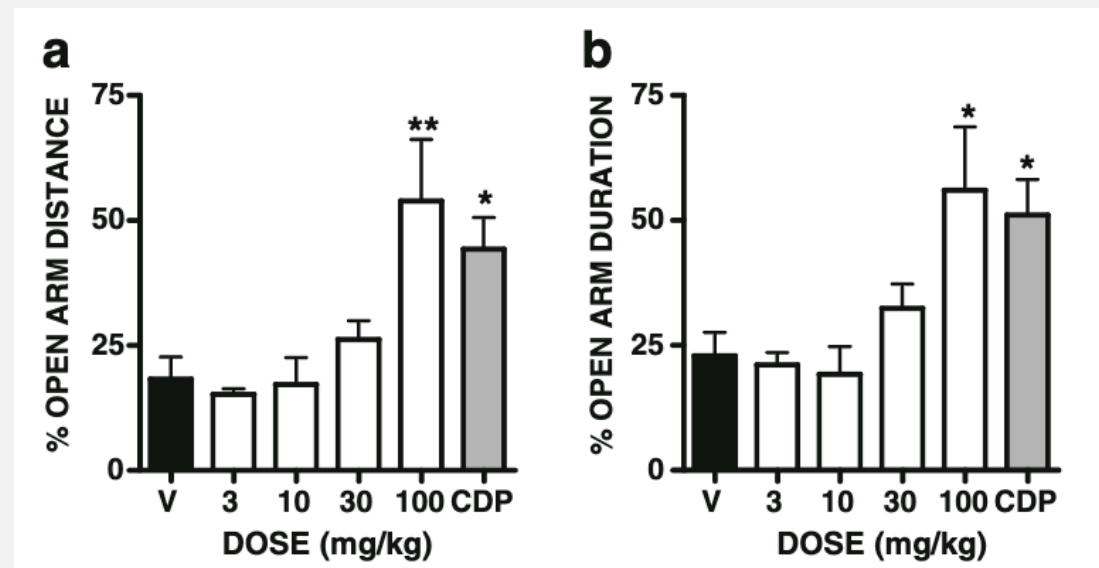
# Appendix

# Vasopressin/V1a receptor (V1aR) mediates anxiety-related behaviors

## Robust preclinical data supports V1aR inhibition for treating anxiety in rodents

- V1a knock-out<sup>1</sup> or reduction by siRNA<sup>2</sup> drives reduced anxiety behaviors
- V1aR antagonists reduce anxiety and aggressive behaviors across models<sup>3</sup>
- Lines bred for aggression or anxiety show dysregulated AVP release and HPA axis functioning<sup>4, 5, 6, 7</sup>

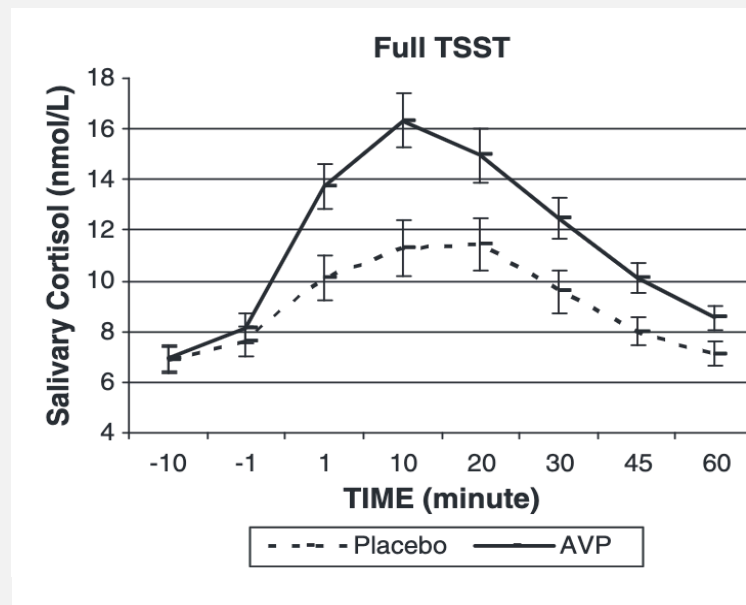
## V1a receptor antagonist (JNJ-17308616) reduces anxiety behavior in rat



## V1a antagonists and vasopressin modulate anxiety and stress related behaviors in humans

- Vasopressin administration exacerbates stress/anxiety behaviors in HVs<sup>1, 2, 3</sup>
- V1a receptor antagonist reduced experimentally-induced anxiety in humans and attenuated aggression in Huntington's disease

## AVP increases cortisol response to social stressors (TSST)<sup>1</sup>



Psychopharmacology  
<https://doi.org/10.1007/s00213-021-05861-4>

ORIGINAL INVESTIGATION

**The novel vasopressin receptor (V1aR) antagonist SRX246 reduces anxiety in an experimental model in humans: a randomized proof-of-concept study**

Tiffany R. Lago<sup>1,2,3</sup>, Michael J. Brownstein<sup>4</sup>, Emily Page<sup>1</sup>, Emily Beydler<sup>1</sup>, Adrienne Manbeck<sup>1</sup>, Alexis Beale<sup>1</sup>, Camille Roberts<sup>1</sup>, Nicholas Balderston<sup>1,5</sup>, Eve Damiano<sup>4</sup>, Suzanne L. Pineles<sup>3,6</sup>, Neal Simon<sup>4,7</sup>, Monique Ernst<sup>1</sup>, Christian Grillon<sup>1</sup>

Journal of Personalized Medicine

MDPI

Article

**The Vasopressin 1a Receptor Antagonist SRX246 Reduces Aggressive Behavior in Huntington's Disease**

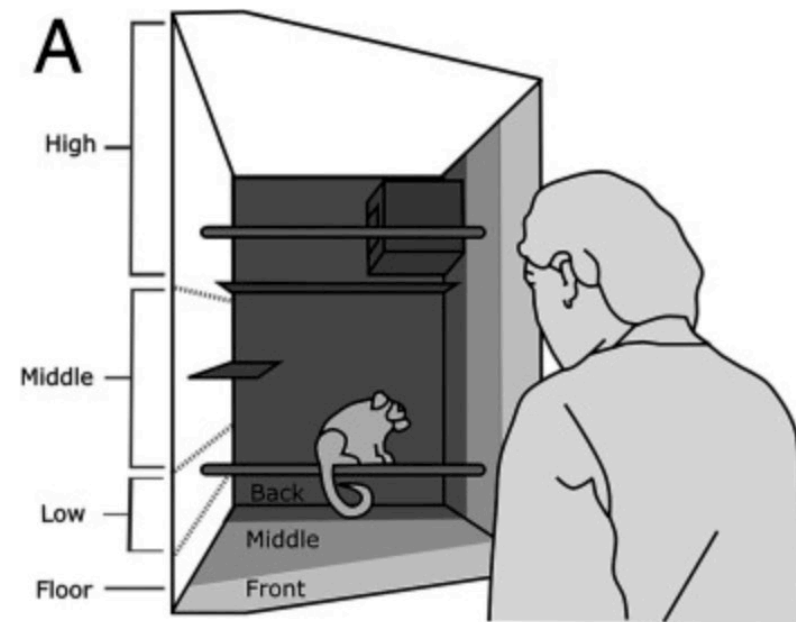
Hilda T. Maibach<sup>1,†</sup>, Michael J. Brownstein<sup>1,†</sup>, Steven M. Hersch<sup>2,3</sup>, Karen E. Anderson<sup>4</sup>, Debra E. Itzkowitz<sup>1</sup>, Eve M. Damiano<sup>1</sup> and Neal G. Simon<sup>1,5,\*</sup>

<sup>1</sup>Bielsky et al., 2004, NPP; <sup>2</sup>Barrett et al., 2013, *Horm. Behav.*; <sup>3</sup>Bleickardt et al., 2009, *Psychopharmacology*; <sup>4</sup>Veenema and Neumann, 2007, *Brain behavior, evolution*; <sup>5</sup>Zelena et al., 2009 *J. Endo*; <sup>6</sup>Mlynarik et al., 2007; <sup>7</sup>Fodor et al., 2014, *Psychoneuroendocrin.*

<sup>1</sup>Shalev et al., 2011, *Hormones and Behavior*; <sup>2</sup>Thompson et al., 2006, *PNAS*; <sup>3</sup>Kawada et al., 2019, *Sci. Reports*;

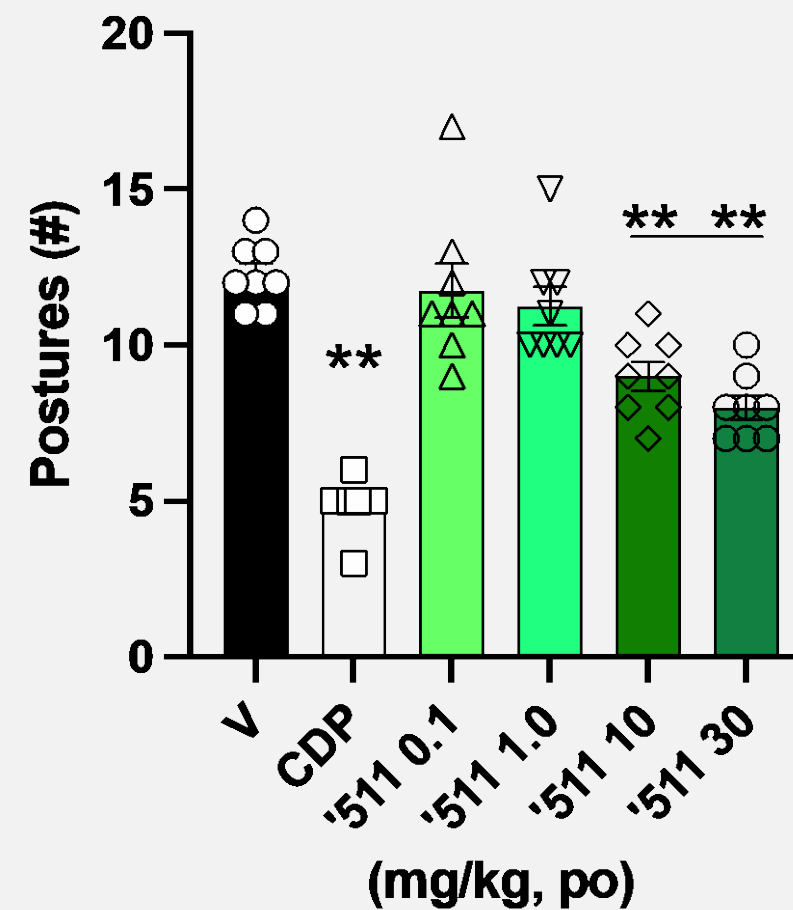
# NMRA-511 reduced anxiety-related behaviors in a preclinical human threat test

## Human threat test induces anxiety in marmosets<sup>1</sup>



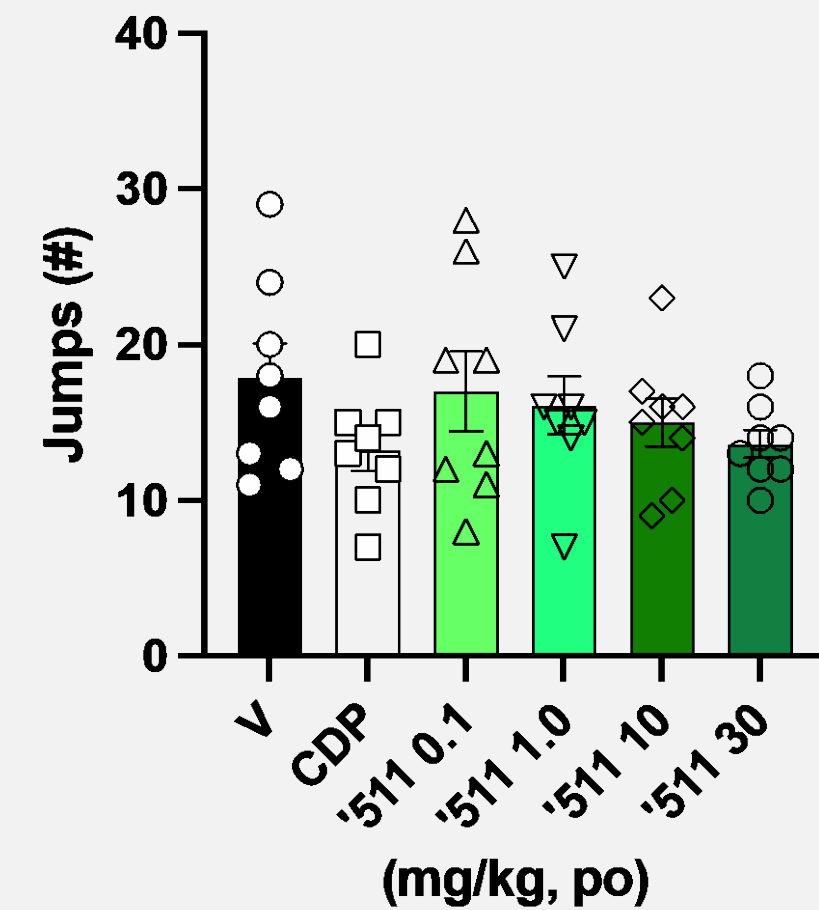
- Based on marmoset's behavioral response to situations of stress/uncertainty
- Set of characteristic postures are elicited
- Clinically effective anxiolytic drugs reduce the number of postures
- Locomotor activity is measured to control for sedative/stimulant effects of drugs

## NMRA-511 reduces behavioral response to threat<sup>2</sup>



Orally administered NMRA-511 (10 and 30 mg/kg) and chlordiazepoxide (CDP, 2 mg/kg, SC) significantly reduced anxiety-related behaviors in marmosets (n=8) as measured by a decrease in the number of threat-elicited postures observed in the HTT without affecting locomotor activity or causing sedation. Testing occurred 90 mins after treatment to coincide with NMRA-511 maximal concentrations. \*p<0.05 versus vehicle. Data plotted are mean± SE.

## NMRA-511 does not reduce locomotor activity<sup>2</sup>



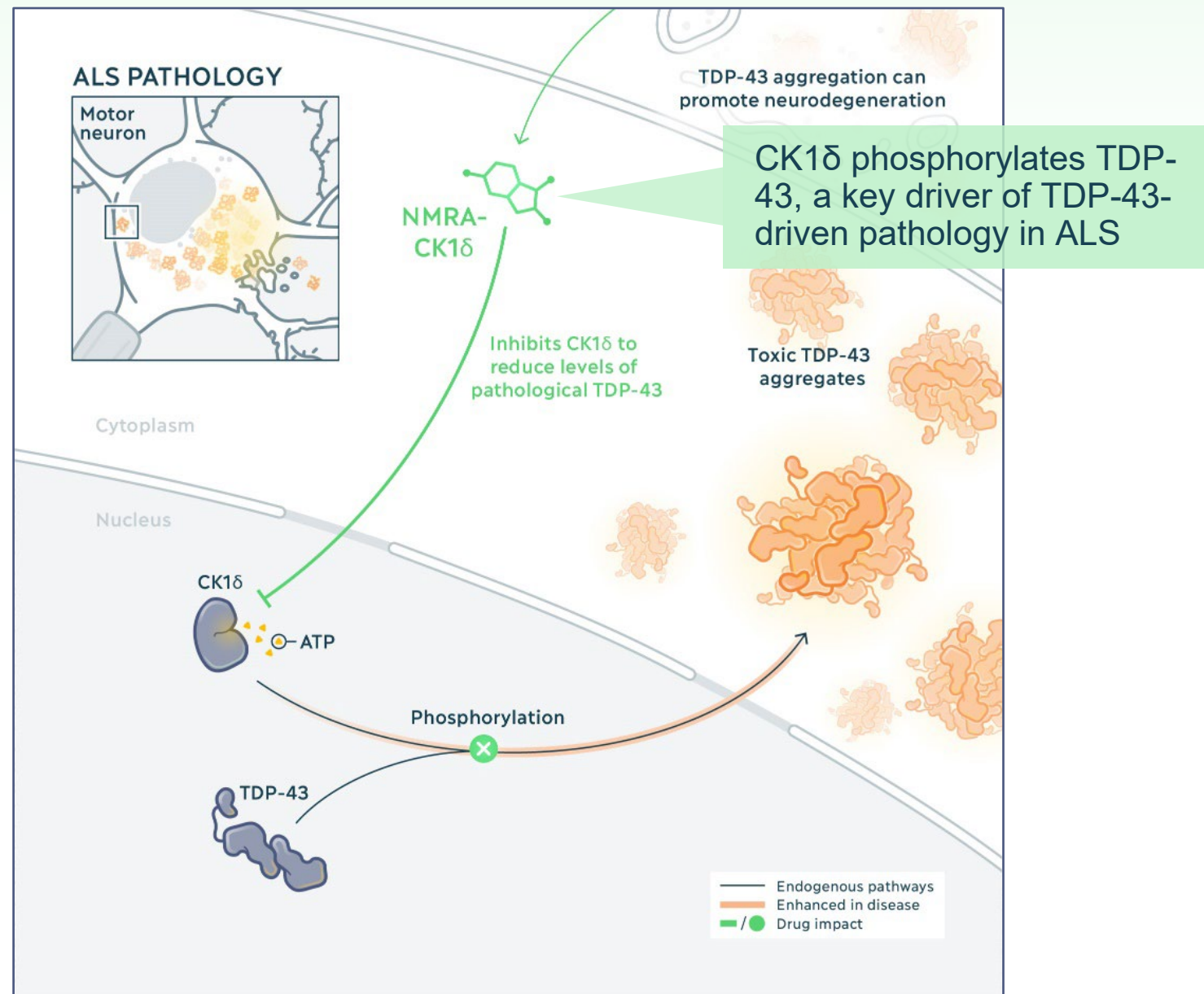
# Pre-clinical neurodegeneration programs each have a strong biological rationale

## NMRA-CK1δ

Focused on inhibiting the protein casein kinase-1δ (CK1δ) to reduce levels of the pathological form of TDP-43 and slow disease progression in ALS

### Potential Indications

ALS, Parkinson's disease



## NMRA-GCCase

Focused on elevating activity of the GCCase enzyme, which is encoded by the GBA1 gene, and may help to degrade toxic alpha-synuclein aggregates

### Potential Indications

Parkinson's disease

