



## ASX ANNOUNCEMENT

### Actinogen CEO presentation for meetings at BIO Investor Forum in San Francisco, USA

**Sydney, 18 October 2023.** Actinogen Medical ASX: ACW (“ACW” or “the Company”) is pleased to announce that its CEO, Dr Steven Gourlay, will conduct meetings at the BIO Investor Forum in San Francisco today and tomorrow.

Dr Gourlay will refer to the attached presentation, titled *Xanamem<sup>®</sup> Suppression of CNS cortisol; First-in-class / best-in-class Phase 2 oral drug candidate for Alzheimer’s Disease & Depression*, in meetings with investors and other stakeholders at the forum.

The presentation provides an overview of the Xanamem therapeutic rationale and the positive results of three prior placebo-controlled trials, including the biomarker trial, that together validate the design of the Company’s ongoing Phase 2 clinical program.

The XanaCIDD Phase 2a trial in cognitive impairment associated with depression is expected to report results in Q2 of CY 2024 and initial results for the XanaMIA Phase 2b trial in mild-to-moderate Alzheimer’s disease are expected in the first half of CY 2025.

**ENDS**

#### Investors

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***Announcement authorised by the Board of Directors of Actinogen Medical***

#### About Actinogen Medical

Actinogen Medical (ACW) is an ASX-listed, biotechnology company developing a novel therapy for neurological and neuropsychiatric diseases associated with dysregulated brain cortisol. There is a strong association between cortisol and detrimental changes in the brain, affecting cognitive function, harm to brain cells and long-term cognitive health.

Cognitive function means how a person understands, remembers and thinks clearly. Cognitive functions include memory, attention, reasoning, awareness and decision-making.

© Xanamem is a registered trademark of Actinogen Medical Limited

Actinogen is currently developing its lead compound, Xanamem, as a promising new therapy for Alzheimer's Disease and Depression and hopes to study Fragile X Syndrome and other neurological and psychiatric diseases in the future. Reducing cortisol inside brain cells could have a positive impact in these and many other diseases. The cognitive dysfunction, behavioural abnormalities, and neuropsychological burden associated with these conditions is debilitating for patients, and there is a substantial unmet medical need for new and improved treatments.

### Current and Upcoming Clinical Trials

The **XanaCIDD Phase 2a depression trial** is a double-blind, six-week proof-of-concept, placebo-controlled, parallel group design trial in 160 patients. Patients are evenly randomized to receive Xanamem 10 mg once daily or placebo, in some cases in addition to their existing antidepressant therapy, and effects on cognition and depression are assessed.

The **XanaMIA Phase 2b Alzheimer's disease trial** is a double-blind, 36-week treatment, placebo-controlled, parallel group design trial in 220 patients with mild to moderate AD and progressive disease, determined by clinical criteria and confirmed by an elevated level of the pTau181 protein biomarker in blood. Patients receive Xanamem 10 mg or placebo, once daily, and effects on cognition, function and progression of Alzheimer's disease are assessed. Thus, Xanamem is being assessed in this trial for its potential effects as both a cognitive enhancer and a disease course modifier.

### About Xanamem

Xanamem's novel mechanism of action is to block the production of cortisol inside cells through the inhibition of the 11 $\beta$ -HSD1 enzyme in the brain. Xanamem is designed to get into the brain after it is absorbed in the intestines upon swallowing.

Chronically elevated cortisol is associated with cognitive decline in Alzheimer's Disease and excess cortisol is known to be toxic to brain cells. Cognitive impairment is also a feature in Depression and many other diseases. Cortisol itself is also associated with depressive symptoms and when targeted via other mechanisms has shown some promise in prior clinical trials.

The Company has studied 11 $\beta$ -HSD1 inhibition by Xanamem in more than 300 volunteers and patients, so far finding a statistically significant improvement in working memory and attention, compared with placebo, in healthy, older volunteers in two consecutive trials and clinically significant improvements in functional and cognitive ability in patients with biomarker-positive mild AD. Previously, high levels of target engagement in the brain with doses as low as 5 mg daily have been demonstrated in a human PET imaging study. A series of Phase 2 studies in multiple diseases is being conducted to further confirm and characterize Xanamem's therapeutic potential.

Xanamem is an investigational product and is not approved for use outside of a clinical trial by the FDA or by any global regulatory authority. Xanamem® is a trademark of Actinogen Medical.

### Disclaimer

This announcement and attachments may contain certain "forward-looking statements" that are not historical facts; are based on subjective estimates, assumptions and qualifications; and relate to circumstances and events that have not taken place and may not take place. Such forward looking statements should be considered "at-risk statements" - not to be relied upon as they are subject to known and unknown risks, uncertainties and other factors (such as significant business, economic and competitive uncertainties / contingencies and regulatory and clinical development risks, future outcomes and uncertainties) that may lead to actual results being materially different from any forward looking statement or the performance expressed or implied by such forward looking statements. You are cautioned not to place undue reliance on these forward-looking statements that speak only as of the date hereof. Actinogen Medical does not undertake any obligation to revise such statements to reflect events or any change in circumstances arising after the date hereof, or to reflect the occurrence of or non-occurrence of any future events. Past performance is not a reliable indicator of future performance. Actinogen Medical does not make any guarantee, representation or warranty as to the likelihood of achievement or reasonableness of any forward-looking statements and there can be no assurance or guarantee that any forward-looking statements will be realised.

**ACTINOGEN MEDICAL ENCOURAGES ALL CURRENT INVESTORS TO GO PAPERLESS BY REGISTERING THEIR DETAILS WITH THE DESIGNATED REGISTRY SERVICE PROVIDER, AUTOMIC GROUP.**



# **Xanamem: Suppression of CNS cortisol**

## **First-in-class/best-in-class Phase 2 oral drug candidate for Alzheimer's Disease & Depression**

Four trials validate Xanamem® as a novel, differentiated, safe and efficacious candidate

**Corporate Presentation October 2023**

**Non-confidential**

# Disclaimer



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# Actinogen summary

Actinogen Medical (ASX:ACW) is conducting Phase 2 trials of oral Xanamem in patients with cognitive impairment associated with depression and Alzheimer's disease. Results due in 2024 and 2025.



**Attractive disease indications and rationale**

- ✓ **Strong cortisol rationale for treatment of multiple diseases:** Alzheimer's disease & other dementias, depression & related cognitive impairment; cognitive impairment in schizophrenia; many others



**Favourable pharmaceutical properties**

- ✓ Demonstrated target engagement in brain and HPA axis<sup>1</sup> in human trials
- ✓ **Low dose and cost of goods, ≤10mg**
- ✓ **Low drug-drug interaction potential** suitable for combination therapy



**Substantial clinical data**

- ✓ **>300 subjects or patients safely treated**
- ✓ Cognitive enhancement **activity in three placebo-controlled trials**
- ✓ **Clinical benefit** in biomarker-positive AD patients (Phase 2a data)



**Protected and funded**

- ✓ Molecule in-licensed from U Edinburgh in 2014 to ASX-listed shell company
- ✓ Key patents in place<sup>2</sup> ~A\$110m funding for Xanamem program to date
- ✓ **Cash ~A\$13.1M & mkt cap. ~A\$45m (30 Sept 2023)**



**High functioning semi-virtual company model**

- ✓ Core team of 15 highly skilled employees based in Australia & US
- ✓ Leveraging senior consultants in various fields in Australia, Asia, UK and USA
- ✓ **Australian-based projects gain 48% as R&D cash rebate**

1. Hypothalamic-Pituitary-Adrenal axis (body's system to regulate blood levels of cortisol)

2. Composition of matter to 2031 plus 5-year extension in most countries, new patents published and in process including use and manufacturing

# Actinogen (ACW.AX) Trials Underway

**Phase 2a proof-of-concept trial in Depression/Cognitive Impairment**

**n=160, results Q2 2024**

**Phase 2b confirmatory trial in mild-moderate AD**

**n=220, initial results H1 2025**



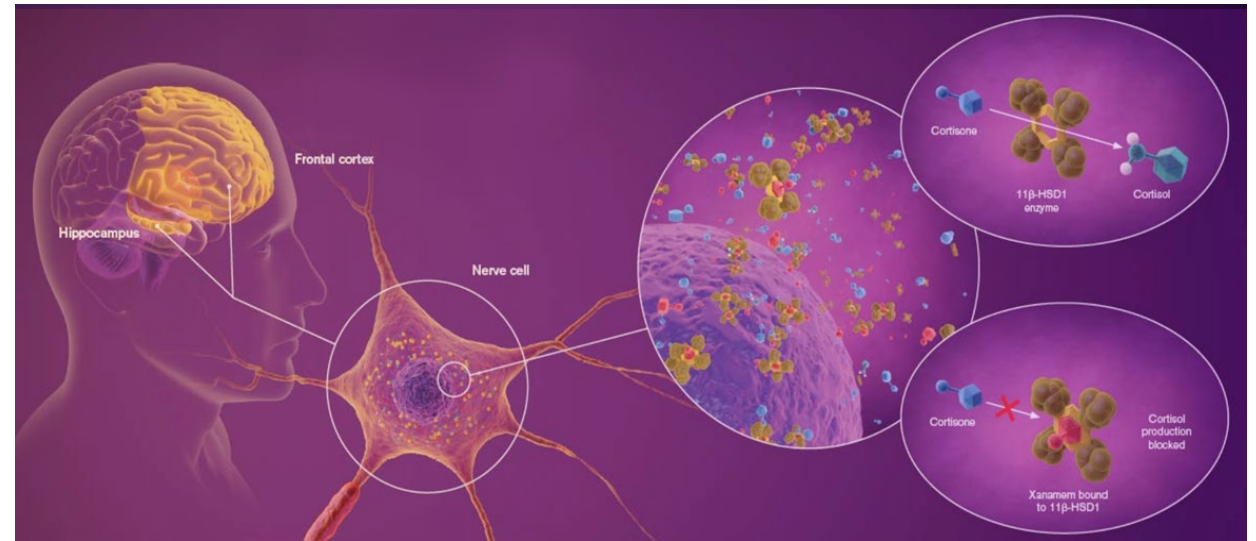
# Xanamem: oral, low-dose, once-a-day treatment with a unique, non-amyloid/tau mechanism

Mouse experimental studies & clinical trials validate cortisol target for treatment of AD<sup>1-4</sup>

**Brain penetrant** 11 $\beta$ -HSD1 small molecule enzyme inhibitor **reduces cortisol inside brain cells**<sup>3,4</sup> - modulating signalling pathways and underlying disease processes

Potential to be:

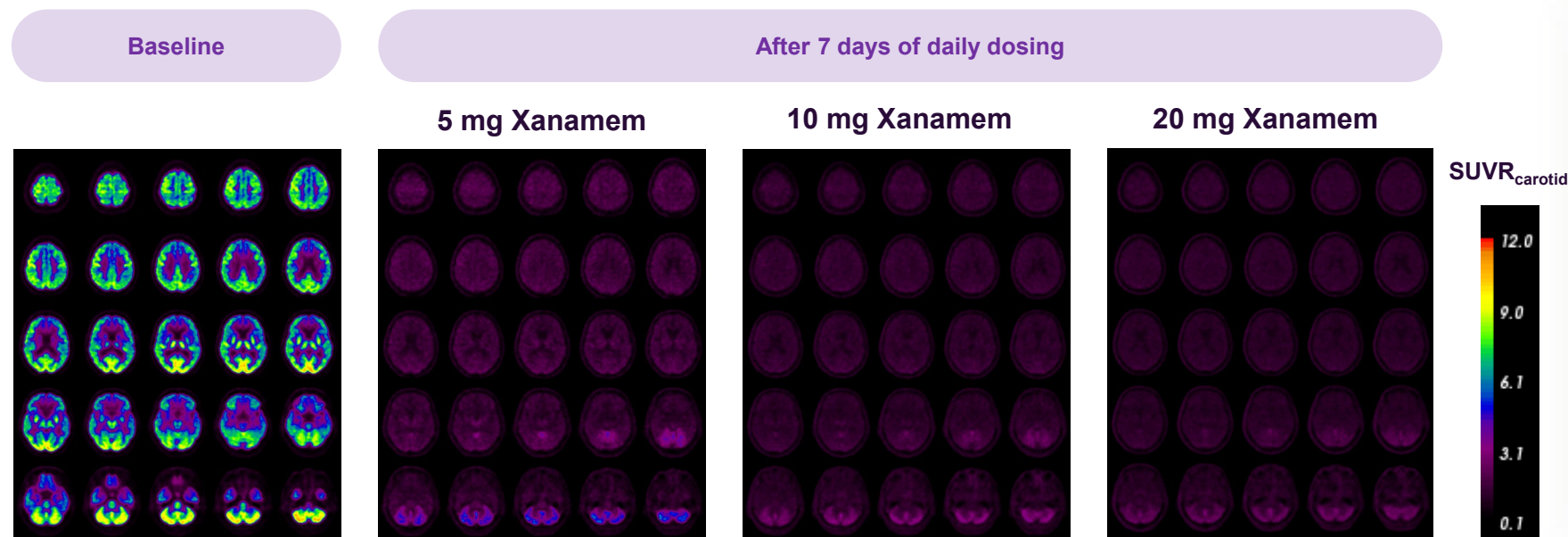
- Rapidly **cognitive enhancing**
- **Disease-modifying** (slow or halt progression) in AD<sup>1,3</sup>
- **Anti-depressant**



1. Sooy et al. 2015 showing effects on amyloid plaque reduction in an aged mouse model after 28 days associated with increases in insulin degrading enzyme – at 13 month cognitive protection was independent of continued amyloid deposition; 2. Popoli et al. 2011 microglial cell modulation in rats, effects on glutamate, cannabinoid and other signalling pathways; 3. Hilt, D. Oral symposium AD/PD International Conference 2023; Actinogen website: [Actinogen – News](#); 4. based on human PET scan evidence (data on file), Webster et al. 2017 Selection and early clinical evaluation of the brain-penetrant 11 $\beta$ -hydroxysteroid dehydrogenase type 1 (11 $\beta$ -HSD1) inhibitor UE2343 (Xanamem™)

# PET data shows full target engagement in the brain at low doses

Previous enzyme inhibitors<sup>1</sup> have not achieved adequate brain concentrations



PET data<sup>2</sup> demonstrates that Xanamem extensively binds to the 11 $\beta$ -HSD1 enzyme throughout the brain, with high post-treatment effects (absence of colour) after 7 days at all doses, slightly less at a 5 mg dose.

This is consistent with full hormonal pharmacodynamic activity seen with 10 mg in clinical trials. 5 and 10 mg show excellent clinical tolerability and safety.

1. ABT-384 was claimed to have brain penetrant ability based on likely hepatic effects on deuterated cortisol (Katz et al. 2013), negative 12-week AD trial (Marek et al. 2014)

2. Study population consisted of ~50% healthy older subjects who were cognitively normal and ~50% with Alzheimer's disease. Subjects dosed for seven days.

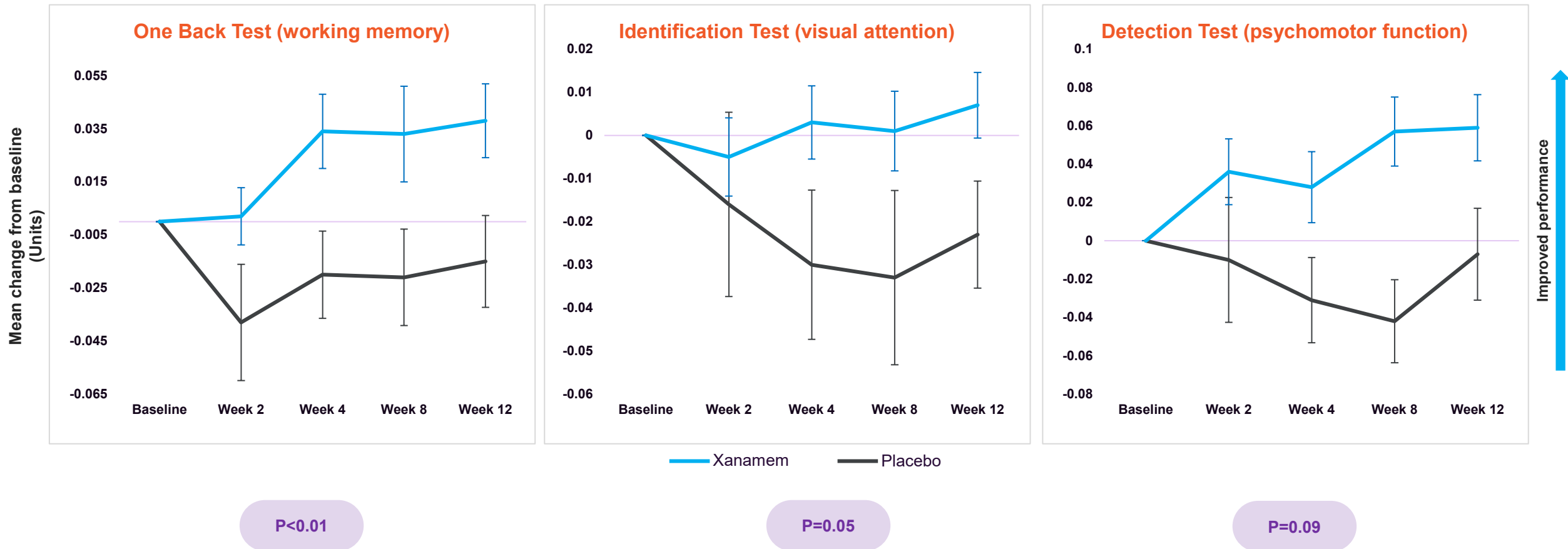
Baseline: Mean of baseline scans of patients in that dose group; After dose: Mean of post-dosing (7 days) scans in that dose group.



# Attention/Working Memory improved by 4 weeks\*

Cogstate computerized testing in cognitively normal older, 20 mg daily vs. placebo

Similar pattern of improvement for 5 mg and 10 mg vs. placebo (data not shown)



\* XanaHES trial, n = 30 Xanmem 20mg vs n = 12 Placebo; no treatment effects on three other tests of episodic memory;  
XanaMIA Part A trial, n=36 Xanmem 5 mg, n=34 10 mg, n=37 placebo (Actinogen data on file)

# Well-demonstrated, excellent safety profile



No emerging safety signals

TEAE term ACW0002*	Xanamem (n=91)	Placebo (n=94)	Total (n=185)
Headache	5 (5.5%)	2 (2.1%)	7 (3.8%)
Dizziness	4 (4.4%)	3 (3.2%)	7 (3.8%)
Diarrhea	1 (1.1%)	4 (4.3%)	5 (2.7%)
Fatigue	3 (3.3%)	1 (1.1%)	4 (2.2%)
Nerve conduction abnormal	1 (1.1%)	3 (3.2%)	4 (2.2%)
Somnolence	1 (1.1%)	3 (3.2%)	4 (2.2%)
Decreased appetite	2 (2.2%)	0 (0.0%)	2 (1.1%)

\* TEAEs reported by more than one patient in any group in the largest clinical study to date

✓ No treatment-related Serious Adverse Events in clinical program

# Modifying cortisol in depression: strong rationale from clinical data

- ✓ 80-90% report neurocognitive symptoms<sup>1</sup>
- ✓ Cognitive symptoms often persist during remission<sup>1</sup>
- ✓ Elevated cortisol associated with severe, melancholic depression<sup>2</sup>
- ✓ Cortisol levels associated with treatment outcomes, relapse, & cognition<sup>3</sup>
- ✓ Positive effects with GR receptor antagonism with mifepristone<sup>4</sup>
- ✓ Meta-analysis of clinical cortisol approaches<sup>5</sup>
- ✓ **Xanamem has improved human cognition in a number of trials<sup>6</sup>**

1. 3-year prospective study and review, Conradi et al. 2011

2. Quantitative summary of four decades of research, Stetler & Miller 2011

3. Depression literature review, Malhi & Mann 2018; HPA axis in major depression, Keller et al. 2016

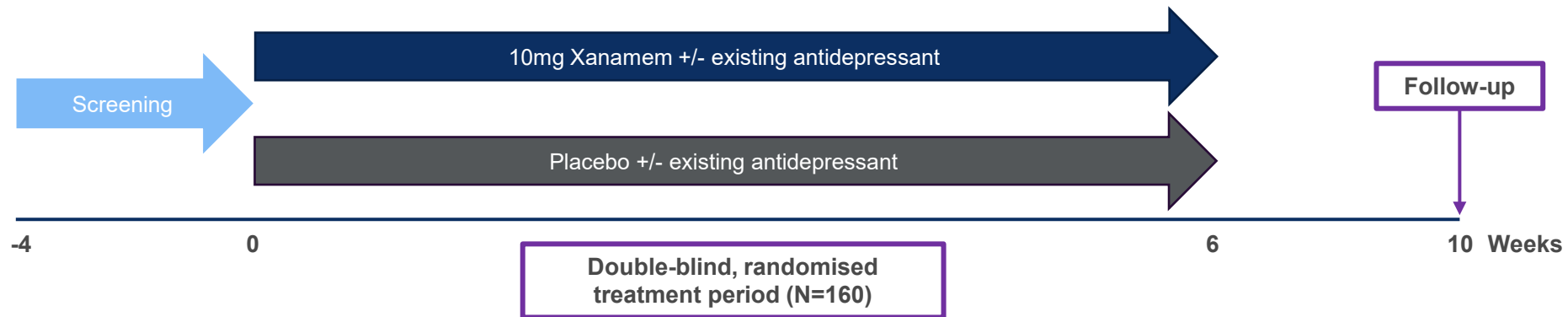
4. GR, **glucocorticoid receptor**; Combined analysis of mifepristone for psychotic depression, Block et al. 2018; mifepristone effects on depression in bipolar disorder, Young et al. 2004; Evidence from clinical studies with CRH<sub>1</sub> receptor antagonists, Holsboer & Ising 2008

5. Meta-analysis of prior trials aimed at reducing cortisol, Ding et. al 2021

6. Xanamem placebo-controlled trial working memory & attention (Actinogen data on file)



# XanaCIDD proof-of-concept Phase 2a trial in Depression



Key inclusion/exclusion criteria	Primary Endpoints	Key Secondary Endpoints	Key Implementation Features
<ul style="list-style-type: none"> <li>Primary diagnosis of <b>MDD</b></li> <li><b>Persistent depressive symptoms despite existing therapy or no therapy</b></li> <li><b>Cognitive impairment</b> relative to demographic norms</li> </ul>	<ul style="list-style-type: none"> <li><b>Cogstate Cognitive Test Battery Attentional Composite</b> (attention and working memory)*</li> </ul>	<ul style="list-style-type: none"> <li>Montgomery-Åsberg Depression Rating Scale (<b>MADRS</b>)</li> <li>Executive Function Cognitive Composite</li> <li>Memory Function Cognitive Composite</li> </ul>	<ul style="list-style-type: none"> <li><b>Australia, UK &amp; US</b> trial sites</li> <li><b>Actinogen “hands-on” operational model</b></li> <li><b>~40% enrolled</b> at Oct 16, 2023</li> <li><b>Final Results Q2 CY24</b></li> </ul>

\* Same attention and working memory tests shown to demonstrate Xanmem effect in the XanaHES and XanaMIA Part A trials (see Slide 7)



**The answers to Alzheimer's Disease are starting to emerge in the clinic....**

**Amyloid is just part of the story...**

**Tissue cortisol is likely a "bad actor" ...**



# Newer amyloid antibodies and oral Xanamem have multiple, positive cognitive trials data<sup>1</sup>

## Actinogen Oral Xanamem

- Safely targets **brain tissue cortisol**
- 2 trials: improved attention & working memory
- 1 trial: trends to reduce AD progression, improve cognition
- Low drug interaction potential – good combination candidate

## Eisai-Biogen i.v. infusion of lecanemab every 2 weeks

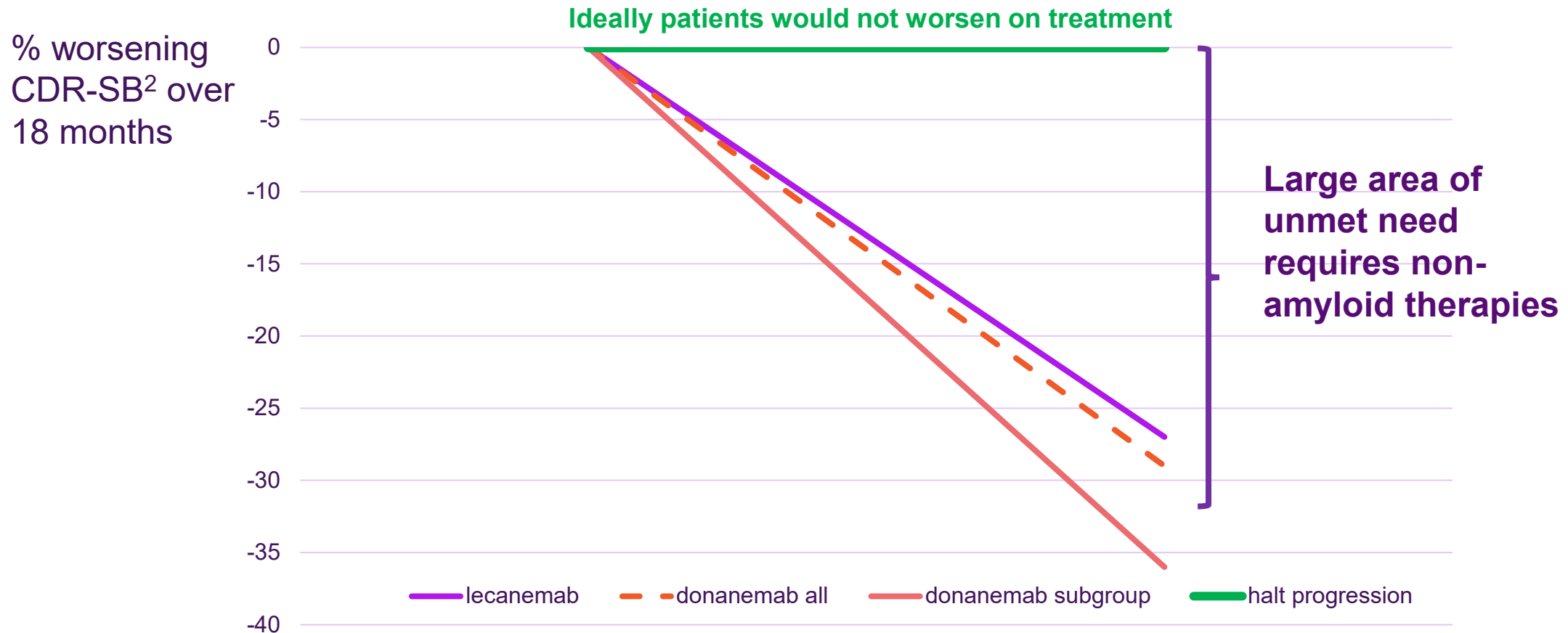
- Approved on ability to reduce **brain amyloid**
- Potential to cause brain swelling and bleeding called “ARIA”
- 2 trials reduced progression modestly
- Will need to be combined with other therapies

## Lilly i.v. infusion of donanemab every 4 weeks until amyloid cleared

- Full approval expected ~8 months, reduces **brain amyloid**
- Higher rates of ARIA, 3 deaths reported
- 2 trials reduced progression modestly
- Will need to be combined with other therapies

<sup>1</sup> Companies claiming efficacy based on uncontrolled data, biomarkers or imaging not included in this comparison

# Newer anti-amyloid antibodies shown to slow but not halt progression of AD<sup>1</sup>



**Drugs targeting other mechanisms like Xanemem are needed**

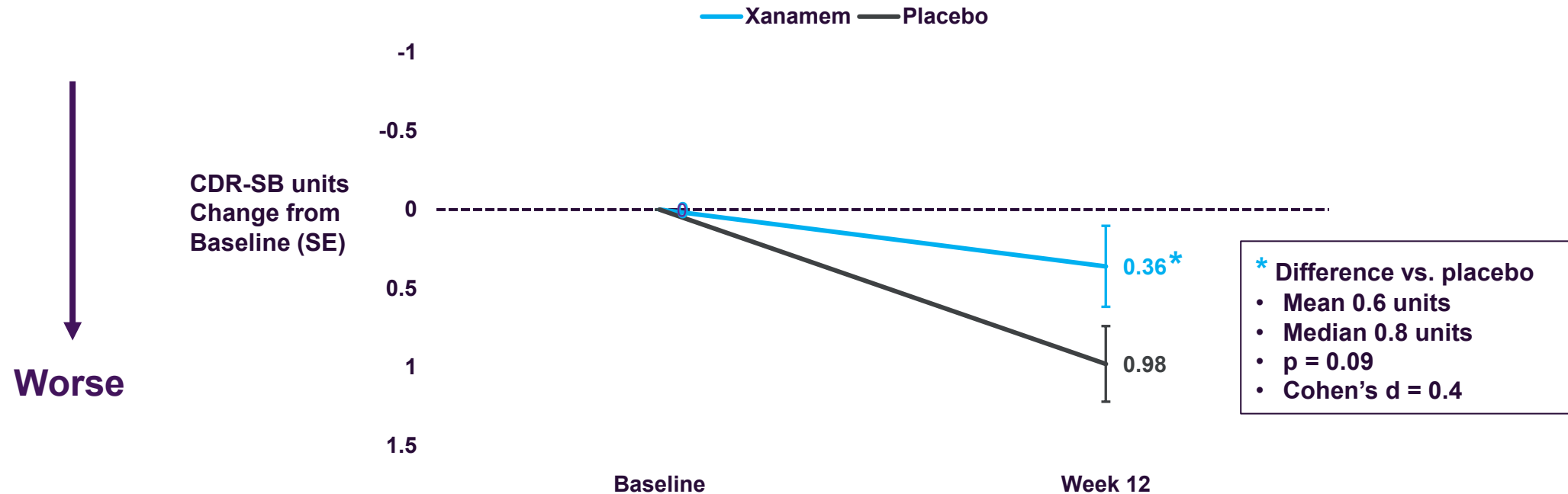
1. Lecanemab and donanemab are anti-amyloid antibodies given as an intravenous infusion every 2 or 4 weeks (van Dyck et al. 2022; DOI: 10.1056/NEJMoa2212948 n=1795 and Sims JR et al. *JAMA*. Published online July 17, 2023. doi:10.1001/jama.2023.13239

2. CDR-SB is an 18-point scale measuring functional status and was the primary endpoint for lecanemab and a secondary endpoint for donanemab

# Xanamem dramatically slows the rate of functional decline (CDR-SB) in patients with mild AD\*



Patients with elevated plasma pTau181 indicating progressive, amyloid-positive disease (n=34)

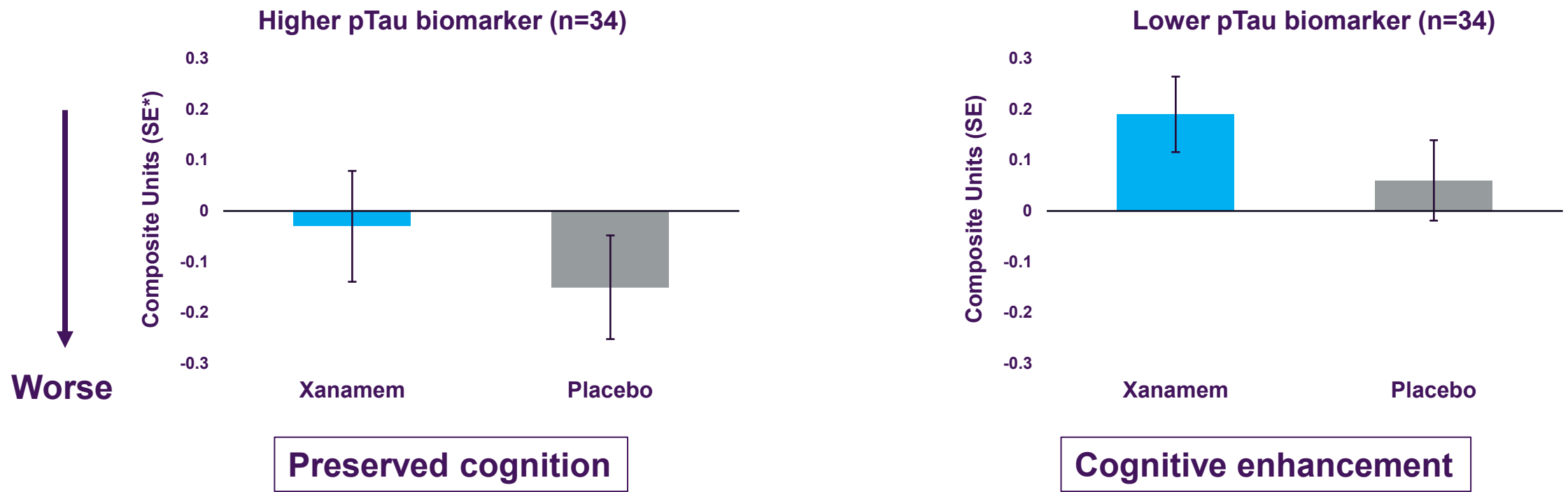


Extrapolated to 18 months effect size would be very large

# Cognitive scores suggest potential clinical benefit across dementia patient sub-types\*



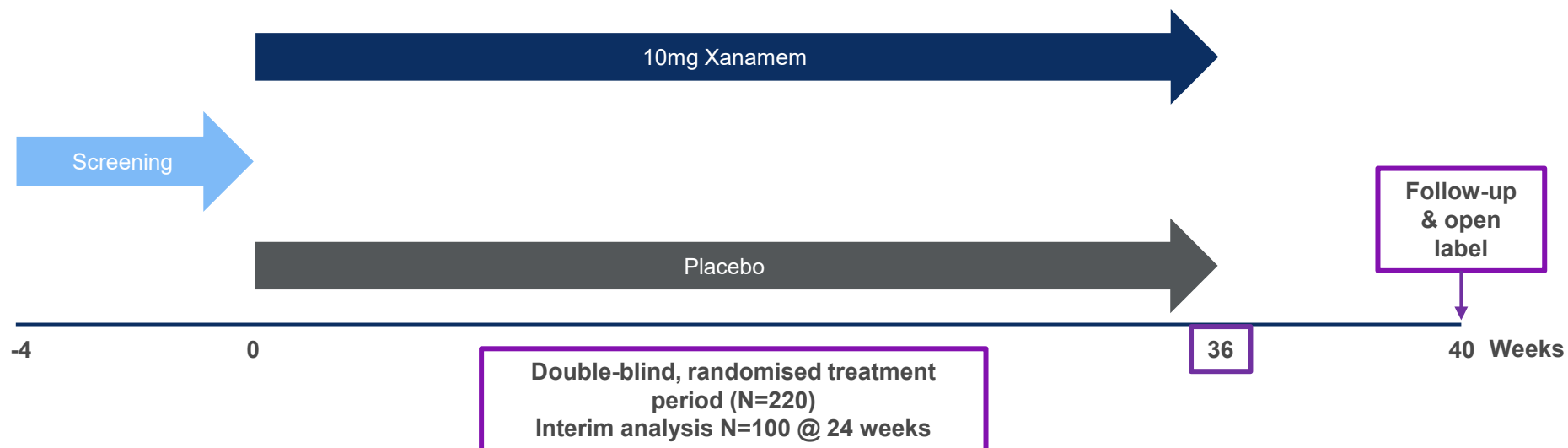
Positive trends in both high and low plasma pTau biomarker groups



Consistent with Xanamem activity as a cognitive enhancer & disease-modifier

# XanaMIA Phase 2b trial in Alzheimer's Disease

## Matching patients and endpoints used in the positive Ph 2a analysis



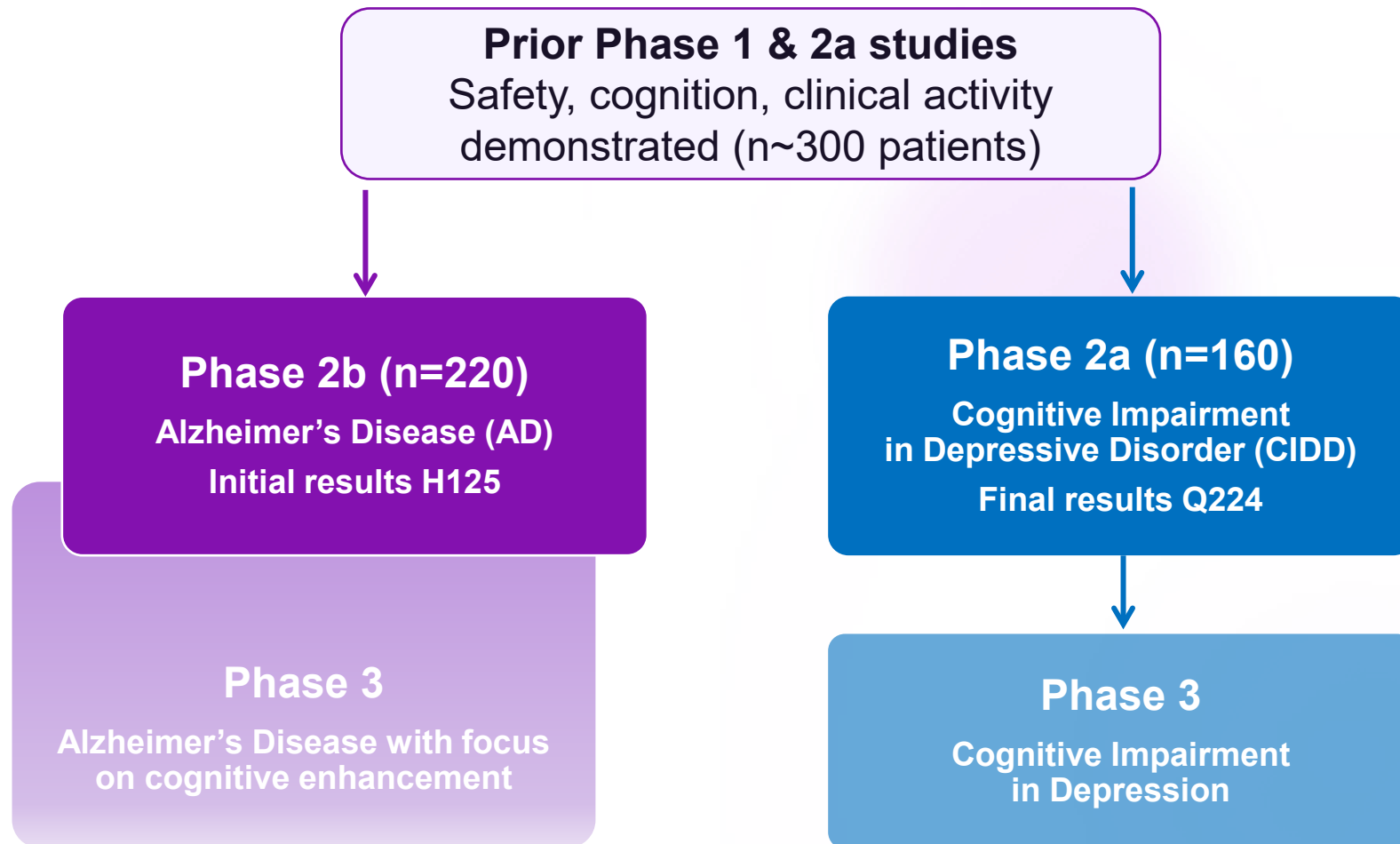
Key inclusion/exclusion criteria	Primary Endpoints	Key Secondary Endpoints	Key Implementation Features
<ul style="list-style-type: none"><li>Clinical diagnosis of <b>mild to moderate dementia</b> due to AD (NIA-AA, MMSE 18-26)</li><li>Blood <b>p-tau181</b> to confirm progressive AD diagnosis</li><li>Cognitive impairment test</li></ul>	<ul style="list-style-type: none"><li><b>Cognitive Test Battery (cognitive measures)</b></li></ul>	<ul style="list-style-type: none"><li><b>CDR-SB (functional measure)</b></li><li><b>Amsterdam Activity of Daily Living scale</b></li><li>Executive Function &amp; Episodic Memory Function Composites</li><li>Care Giver questionnaire / Patient Global Improvement</li></ul>	<ul style="list-style-type: none"><li><b>Initial 100 patients in Australia</b></li><li><b>Expand to global</b> trial sites including US, Asia, EU and other</li><li><b>Actinogen “hands-on” operational model</b></li><li><b>Administrative interim analysis H1CY25</b></li></ul>



# Xanamem AD & Depression programs



Building on three independent Phase 1 and 2 studies showing safety and procognitive activity



# Experienced Leadership and Management

## Extensive drug development and commercial experience



### Experienced Board of Directors...



**Dr. Geoff Brooke**

Chairman

MBBS; MBA



- 30+ years experience in the healthcare investment industry
- Founder and MD of Medvest Inc and GBS Ventures, Chairman of Cynata Therapeutics, Board Member of Acrux



**Dr. George Morstyn**

Non-Executive Director

MBBS; PhD; FRACP; MAICD



- 25+ years experience in biotech investment and drug development
- Board member of Cancer Therapeutics and Symbio



**Mr. Malcolm McComas**

Non-Executive Director

BEc, LLB; FAICD; SF Fin



- 25+ years experience in the financial services industry
- Chairman of Pharmaxis and Fitzroy River Corporation



**Dr. Nicki Vasquez**

Non-Executive Director

PhD



- 25+ years experience in biopharmaceutical discovery research and development
- Chief Portfolio Strategy & Alliance Officer at Sutro Biopharma



**Dr. Steven Gourlay**

CEO & MD

MBBS; FRACP; PhD; MBA



- 30+ years experience in development of novel therapeutics
- Former founding CMO at US-based Principia Biopharma Inc

### ...with a talented management team in place



**Jeff Carter**

Chief Financial Officer

B. Fin Admin; M. App. Fin; CA



**Cheryl Townsend**

VP Clinical Operations

RN, M Health Law



**Dana Hilt**

Chief Medical Officer

MD



**Fujun Li**

Head of Manufacturing

PhD



**Michael Roberts**

Head of Investor Relations and Communications

B.Ec (Hons), CPA, F FIN

# International Cognition Clinical Advisory Board

Preeminent global thought-leaders in clinical trials for assessment of cognition



**Prof. John Harrison**

Metis Cognition Ltd

- Expert psychologist with a special interest in cognition
- Chartered psychologist with two PhDs and author/co-author of more than 80 books and scientific articles
- Principal Consultant at Metis Cognition, which advises on selection and integration of cognitive testing into therapeutic development programs



**Dr Dana C. Hilt (CMO)**



- 25+ years of drug development experience, primarily of Central Nervous System (CNS) drugs
- Deep experience in Phases 1 to 4 drug development
- CMO at Frequency Therapeutics and has held senior management positions as Chief Medical Officer at various pharmaceutical companies



**Dr Christina Kurre Olsen**

ORPHA Z YME

- 20+ years research expertise in neuroscience, neuropsychopharmacology, CNS therapeutics and monoclonal antibody immunotherapy
- Strong hands-on knowledge across drug development value chain and a passion for cognition
- Medical Director at Orphazyme A/S



**Prof. Paul Maruff**



- Chief Innovation Officer at Cogstate Ltd
- Professor in Neuroscience at the Florey Institute of Neuroscience and in Psychology Monash University, Melbourne Australia
- Senior management committee of the Australian Imaging, Biomarkers and Lifestyle (AIBL) study of Alzheimer's Disease
- Involved in the development and approval of 13 new drugs that affect cognition including most recently esketamine for treatment resistant depression



**A/Prof Christopher Chen**



- Senior Clinician-Scientist, Associate Professor at the Departments of Pharmacology and Psychological Medicine, Yong Loo Lin School of Medicine, National University of Singapore, and Director of the Memory Aging and Cognition Centre, National University Healthcare System.
- Major research and clinical interests are in neuroimaging, molecular biology and treatment of stroke and dementia.
- President of the Asian Society Against Dementia, Secretary-Treasurer of the Asian & Oceanian Association of Neurology.

# International Scientific Advisory Boards

Preeminent thought-leader academics involved in the development of Xanamem



## Alzheimer's Disease Clinical Advisory Board



**Prof. Craig Ritchie**  
Chair



- World-leading authority on dementia; senior investigator on 30+ drug trials
- Chair of the Scottish Dementia Research Consortium; Professor of the Psychiatry of Ageing' Director of the Centre for Dementia Prevention (University of Edinburgh)



**Prof. Colin Masters**  
AO



- 35+ years research on Alzheimer's Disease and other neurodegenerative diseases
- Laureate Professor of Dementia Research and Head, Neurodegeneration Division at The Florey Institute (UniMelb)



**Prof. Jeffrey Cummings**



- World-renowned Alzheimer's researcher and leader of clinical trials
- MD, ScD; Founding Director of the Cleveland Clinic Lou Ruvo Center for Brain Health
- Recognised for his work through various awards



**Prof. Jonathan Seckl**



- Undertaken extensive research in endocrinology
- Senior VP at the university of Edinburgh; Chaired Panels for MRC, Innovate UK and Wellcome Trust
- MBBS UCL, PhD (London)



**Prof. Brian Walker**



- 20+ years research in the area of disease
- Extensive experience advising for pharmaceutical R&D
- Pro Vice Chancellor for Research Strategy & Resources at Newcastle University, UK



**Prof. Scott Webster**



- Chair of Medicines at the Centre of Cardiovascular Science, University of Edinburgh
- Former positions across both biotech and academia
- Founder and Chief Scientific Officer at Kynos Therapeutics

# Appendix

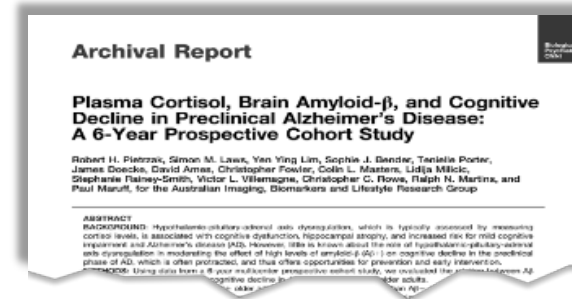




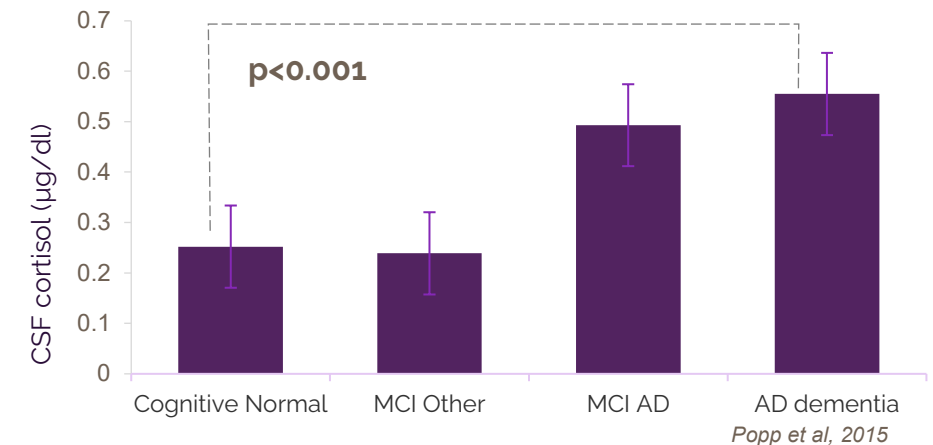
# Many studies support the association between elevated cortisol and AD development and progression<sup>1-9</sup>



- Higher cortisol levels in human aging are associated with hippocampal atrophy<sup>1,2</sup>
- Chronic corticosteroid medication is associated with hippocampal and amygdalar atrophy and cognitive impairment<sup>3</sup>
- Higher plasma cortisol leads to a much greater risk of developing AD<sup>4,5</sup> and accelerated effect of A $\beta$ + on decline in global cognition, episodic memory, and attention<sup>6,7</sup>
- Higher CSF cortisol levels in AD patients are associated with more rapid clinical worsening and cognitive impairment<sup>3</sup>
- Individuals at high risk of AD due to the APOE- $\epsilon$ 4 allele have higher CSF cortisol<sup>9</sup> and lecanemab showed no treatment effect in  $\epsilon$ 4/ $\epsilon$ 4 patients<sup>10</sup>

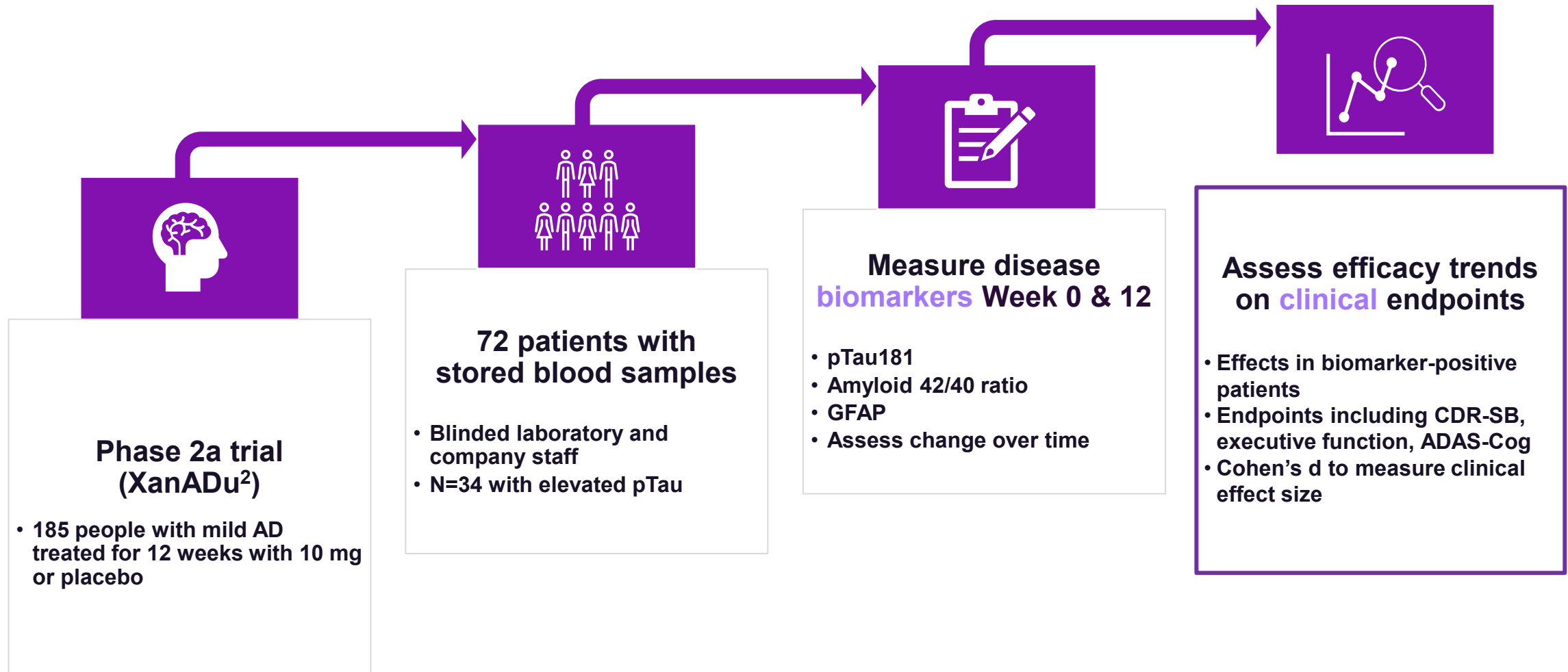


## MEAN CSF CORTISOL LEVELS



# Methods for double-blind, prospective assessment of biomarker-positive mild AD patients in Phase 2a<sup>1</sup>

A simulation of the Phase 2b XanaMIA trial



1. Used a pre-specified protocol and statistical analysis plan, blinded laboratory and company personnel  
2. Prior phase 2a trial completed in 2019 <https://clinicaltrials.gov/ct2/show/results/NCT02727699?term=actinogen&draw=2&rank=3>

# Timetable for trial results for oral AD therapies



Year	Drug or company	Target	Steve's <sup>1</sup> estimate of probability of success
2023	deferiprone	Iron	Low
	TauRx	Tau*	Low
	NE3107	ERK1/2	Low
	CT1812	Sigma-2*	Low
<b>Q12024</b>	<b>varoglutamstat</b>	<b>pglu-A<math>\beta</math>/QC*</b>	<b>Medium</b>
2024	Valiltramprostate	Amyloid formation*	Low-Medium
	LY337268	OGA*	Low
	simufilam	Filamen A*	Low-Medium
<b>2025</b>	<b>Xanamem</b>	<b>cortisol</b>	<b>Medium-High</b>
<b>2026</b>	<b>semaglutide</b>	<b>GLP-1</b>	<b>Medium</b>

\* Amyloid or tau protein-related mechanisms

**Xanamem is one of just a few credible oral drug candidates in development**

# Clinical Dementia Rating – Sum of Boxes (CDR-SB) functional endpoint to assess dementia in MCI/early-stage AD

Test domain	Impairment				
	None	Questionable	Mild	Moderate	Severe
	0	0.5	1	2	3
Memory					
Orientation					
Judgment & Problem Solving					
Community Affairs					
Home & Hobbies					
Personal Care					

Score is sum of each line i.e. score between 0 and 18 (0 = normal)

# Selected glossary 1



**11 $\beta$ -HSD1** 11 beta HydroxySteroid Dehydrogenase-1 enzyme

**A $\beta$**  Amyloid beta – a type of amyloid protein associated with Alzheimer’s Disease, 42 and 40 are different forms

**ACTH** Adrenocorticotrophic hormone that regulates blood levels of cortisol

**ADAS-Cog** Alzheimer’s Disease Assessment Score - Cognition

**ApoE4** Apoprotein genotype associated with genetic risk of Alzheimer’s Disease

**ATN** Amyloid, Tau, Neurodegeneration

**Clinical scales** Measure how a patient feels, performs and functions

**CDR-SB** Clinical Dementia Rating “Sum of Boxes” scale measuring cognition and function on an 18-point scale (high worse)

**CNS** Central nervous system

**CSF** Cerebrospinal fluid

**CTAD** Clinical Trials on Alzheimer’s Disease (conference)

**CTB** Cognitive Test Battery of computerized tests

**Double-blind** Investigators, participants and company do not know who has active vs placebo treatment during a trial

**EMA** European Medicines Agency

**FDA** US Food & Drug Administration

**Filamen A** a protein believed to relate to amyloid toxicity

**GFAP** Glial Fibrillary Acidic Protein – a marker of microglial cell activation in the brain

**IDSST** International Digit Symbol Substitution Test of cognition

# Selected glossary 2



**IQCODE** Informant Questionnaire on Cognitive Decline in the Elderly

**MCI** Mild Cognitive Impairment – memory, executive function deterioration with retained functional abilities

**MDD** Major Depressive Disorder

**MMSE** Mini Mental State Examination – a 30-point scale of simple questions to assess mental abilities

**NfL** Neurofilament Light – a nerve protein in the brain and rest of the body too

**NIA-AA** National Institutes of Aging and Alzheimer's Association

**NMDA** a type of receptor for glutamate in the brain

**NPI** Neuropsychiatric Inventory to assess psychiatric symptoms

**NTB** a Neurologic Test Battery, in this presentation one designed to measure executive function aspects of cognition

**PET** Positron Emission Tomography – a type of body scan

**Placebo controlled** Non-active treatment for double-blind design

**p-Tau181 or 217** AD biomarker of phosphorylated Tau protein

**QPCT** GlutaminyI-peptide cyclotransferase is an enzyme proposed to create toxic amyloid species

**RAVLT** Rey Auditory Visual Learning Test

**RBANS** Repeatable Battery for the Assessment of Neuropsychological Status (a test of mental abilities)

**ROC AUC** Receiver Operating Curve Area Under the Curve (1.0 ideal) – a type of statistical test to compared two methods of measurement

**Tau** – a brain protein

**Ttau** – total tau levels including both phosphorylated and non-phosphorylated tau