PREVENTING THE PROGRESSION OF CNS DISORDERS

Nasdaq: CGTX • April 2024

COGNITION™ Therapeutics

Forward-looking Statements

FORWARD-LOOKING STATEMENTS

This presentation contains forward-looking statements within the meaning of The Private Securities Litigation Reform Act of 1995. All statements contained in this presentation, other than statements of historical facts or statements that relate to present facts or current conditions, including but not limited to, statements regarding our cash, financial resources and product candidates, including CT1812, and any expected or implied benefits or results, including that initial clinical results observed with respect to CT1812 will be replicated in later trials, and our clinical development plans, including statements regarding our clinical studies of CT1812 in animal models and any analyses of the results therefrom, are forward-looking statements. These statements, including statements related to the timing and expected results of our clinical trials, involve known and unknown risks, uncertainties and other important factors that may cause our actual results, performance, or achievements to be materially different from any future results, performance, or achievements expressed or implied by the forward-looking statements. In some cases, you can identify forward-looking statements by terms such as "may," "might," "will," "should," "expect," "plan," "aim," "seek," "anticipate," "could," "intend," "target," "project," "contemplate," "believe," "estimate," "predict," "forecast," "potential" or "continue" or the negative of these terms or other similar expressions. We have based these forward-looking statements largely on our current expectations and projections about future events and financial trends that we believe may affect our business, financial condition, and results of operations. These forward-looking statements speak only as of the date of this presentation and are subject to a number of risks, uncertainties and assumptions, some of which cannot be predicted or quantified and some of which are beyond our control. Factors that may cause actual results to differ materially from current expectations include, but are not limited to: competition, our ability to secure new (and retain existing) grant funding, our ability to grow and manage growth, maintain relationships with suppliers and retain our management and key employees; our ability to successfully advance our current and future product candidates through development activities, preclinical studies and clinical trials and costs related thereto; uncertainties inherent in the results of preliminary data, preclinical studies and earlier-stage clinical trials being predictive of the results of early or later-stage clinical trials; the timing, scope and likelihood of regulatory filings and approvals, including regulatory approval of our product candidates; changes in applicable laws or regulations; the possibility that the we may be adversely affected by other economic, business or competitive factors, including ongoing economic uncertainty; our estimates of expenses and profitability; the evolution of the markets in which we compete; our ability to implement our strategic initiatives and continue to innovate our existing products; our ability to defend our intellectual property; the impact of the COVID-19 pandemic on our business, supply chain and labor force; and the risks and uncertainties described more fully in the "Risk Factors" section of our annual and quarterly reports filed with the Securities & Exchange Commission that are available on www.sec.gov. These risks are not exhaustive, and we face both known and unknown risks. You should not rely on these forward-looking statements as predictions of future events. The events and circumstances reflected in our forward-looking statements may not be achieved or occur, and actual results could differ materially from those projected in the forward-looking statements. Moreover, we operate in a dynamic industry and economy. New risk factors and uncertainties may emerge from time to time, and it is not possible for management to predict all risk factors and uncertainties that we may face. Except as required by applicable law, we do not plan to publicly update or revise any forward-looking statements contained herein, whether as a result of any new information, future events, changed circumstances or otherwise.

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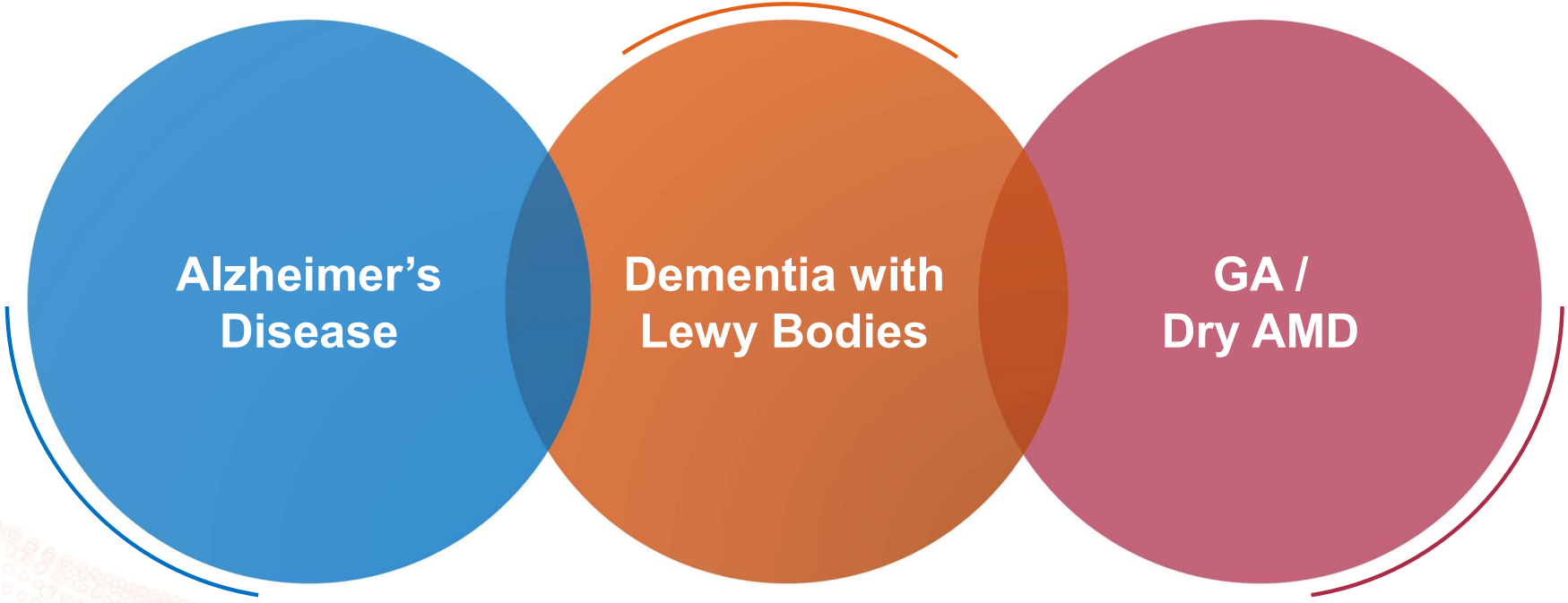
Projections, estimates, industry data and information contained in this presentation, including the size of and growth in key end markets, are based on information from third-party sources and management estimates. Although we believe that these third party-sources are reliable, we cannot guarantee the accuracy or completeness of these sources. Our management's estimates are derived from third-party sources, publicly available information, our knowledge of our industry and assumptions based on such information and knowledge. Our management's estimates have not been verified by any independent source. All of the projections, estimates, market data and industry information used in this presentation involve a number of assumptions and limitations, and you are cautioned not to give undue weight to such information. In addition, projections, estimates and assumptions relating to us and our industry's future performance are necessarily subject to a high degree of uncertainty and risk due to a variety of factors, including, but not limited to, those described above, that could cause future performance to differ materially from our expressed projections, estimates and assumptions or those provided by third parties.

Our Value Proposition

First-in-Class Lead Asset	CT1812 is designed to restore impaired cellular damage response functions
Late-Stage Pipeline	Advancing mid-to-late-stage clinical trials in multiple indications in mild-to-moderate Alzheimer's disease and DLB
Multi-billion Dollar Opportunities	Targeting multi-billion dollar diseases; under-served markets; potential first-to-market in mild-to-moderate dementia with Lewy bodies
Financially Disciplined	Major trials supported by $171 million non-dilutive grants from NIH and others. Cash runway through May 2025
Experienced Leadership Team	Executive team with big pharma leadership experience; R&D staff with depth of neuroscience drug development expertise

CT1812, is an orally delivered, first-in-class, highly brain penetrant, small molecule designed to restore key cellular functions that are impaired in diseases including:



CT1812: First-in-class, orally dosed, highly brain-penetrant small molecule

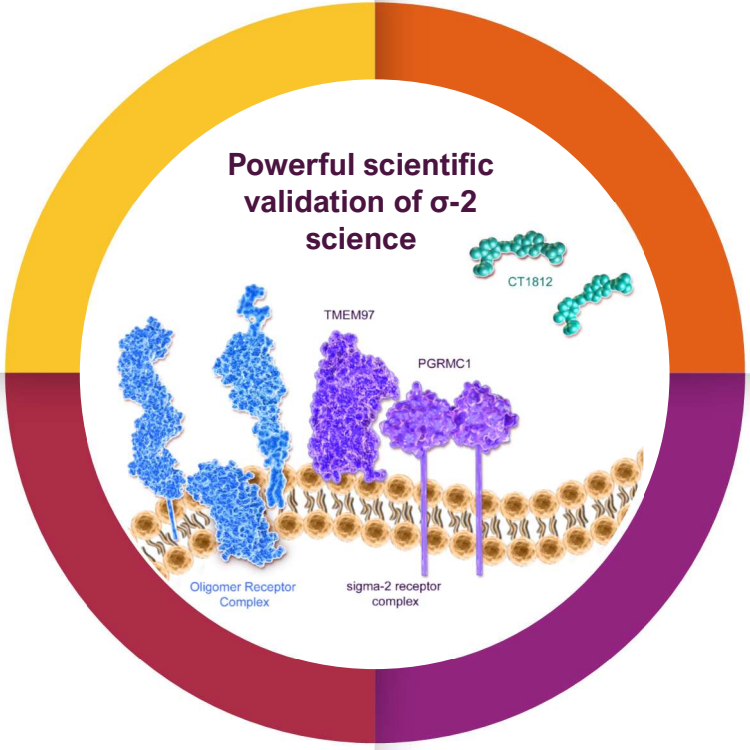
Oral, Once-daily Pill

Oral, small molecule ligand of σ-2 receptor

High degree of CNS penetration for therapeutic target engagement

The *Right* Target

Targeting toxic stressors: Aβ and α-synuclein oligomers and ROS in neurodegenerative diseases



Neuroprotective

Protects neurons; restores cellular "housekeeping" processes

Demonstrates disease-modifying impact

Manufacturing & IP

Scalable manufacturing from easily sourced materials

Extensive intellectual property estate

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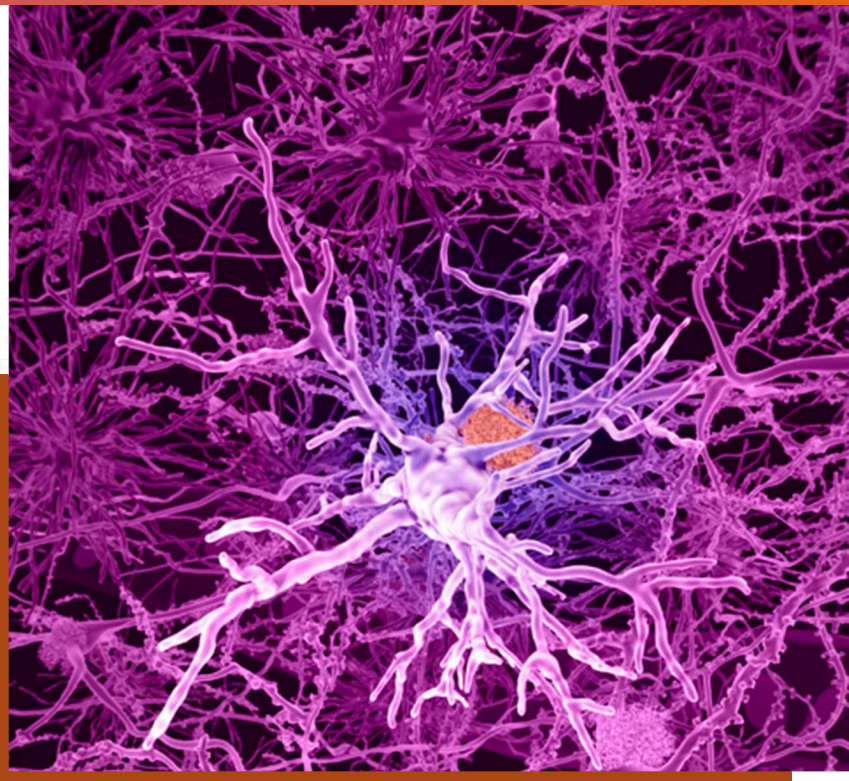
ALZHEIMER'S DISEASE



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AD – Breakthroughs & Realities of Constraints

Mismatch between demographics, economics, access

Two approved mAbs (lecanemab, aducanumab), one additional drug filed for approval

- Annual cost for therapy = $26K - $28K/ patient
- ~$5B cost to Medicare
- More monoclonals being studied

Constrained delivery systems for infused medications

- 3,600 Infusion centers in the US
- 11,900 MRI systems in the US
- 2,500 PET scanners in the US performing 2M scans/year

* https://hitconsultant.net/2022/12/14/report-the-state-of-cancer-centers-2022/

CT1812: A Novel Approach to Address Amyloid Toxicity

LEQEMBI™ (lecanemab-irmb) 100 mg/mL

Aduhelm® (aducanumab-avwa) 100 mg/mL injection, for intravenous use

Donanemab

Aβ monomer | Anti-oligomer mAB | Anti-protofibril mAB | Anti-plaque mAB

Aβ oligomer

CT1812: Protects Synapses

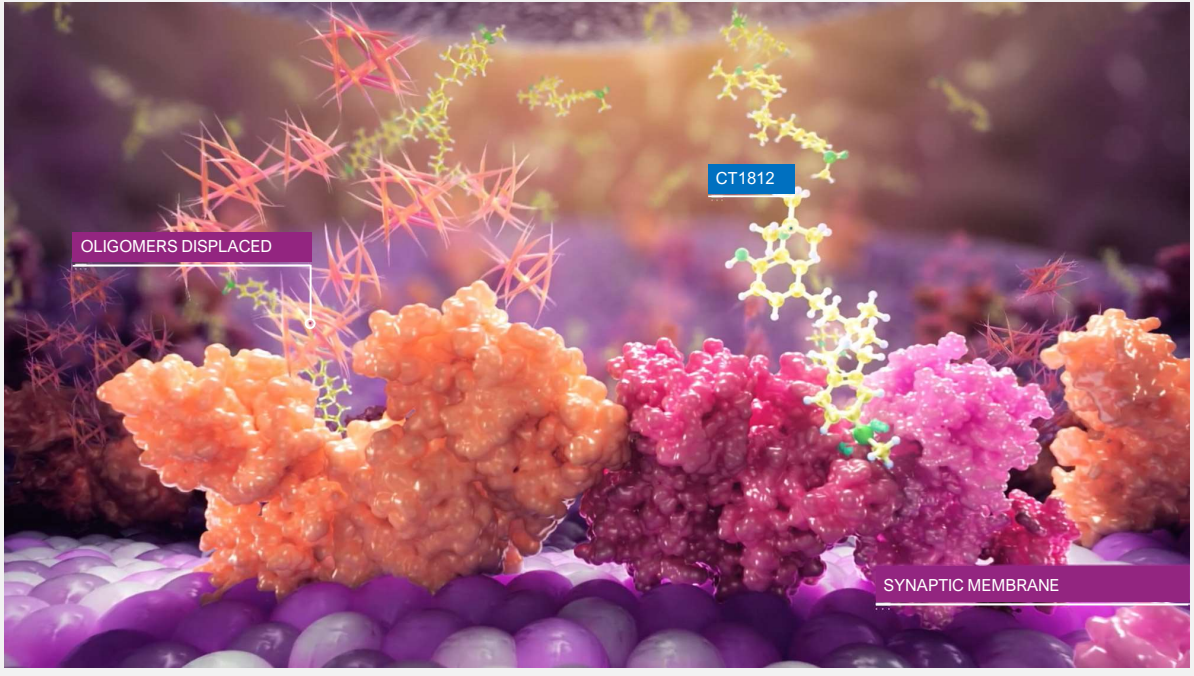
Small molecule ligand to the sigma-2 receptor
Displaces Aβ oligomers and prevents their binding to synapses

mABs: Lower Aβ plaque

Monoclonal antibodies bind to Aβ proteins
Immunotherapeutic vaccines generate immune response to Aβ proteins

CT1812 – Unique Mechanism of Action for Treating AD

Age-related build-up of stressors including Aβ oligomers drive Alzheimer's disease



Aβ oligomers bind to synapses and interfere with cellular functions such as autophagy, leading to neuronal loss

CT1812 binds at σ-2, resulting in displacement of oligomers

Click to play

Visit https://vimeo.com/800999561 to play MoA video

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What We Have Learned From Clinical Trials to Date

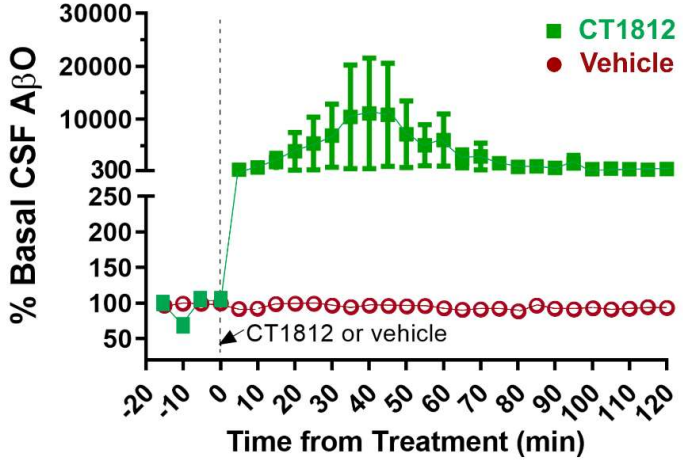
Endpoint of Interest:		Result:
Target engagement	SNAP[2]	Demonstrated displacement of amyloid oligomers from synapses
Preliminary cognitive improvement	SHINE-A[1]	Demonstrated 3+ point difference in cognition vs placebo measured by ADAS-COG at Day 185
Anatomical effect	SPARC[3]	Demonstrated effect on slowing brain atrophy
Neurophysiology	SEQUEL[4]	Brain wave patterns normalized across multiple measures

1. *SHINE-A cognitive and proteomic results: AD/PD 2022*
2. *LaBarbera, et al. Transl Neurodegener 2023*
3. *SPARC results published in Alz Res Therapy*
4. *CTAD 2023 SEQUEL imaging results presented*

Evidence of Target Engagement

Phase 1b SNAP mirrored preclinical

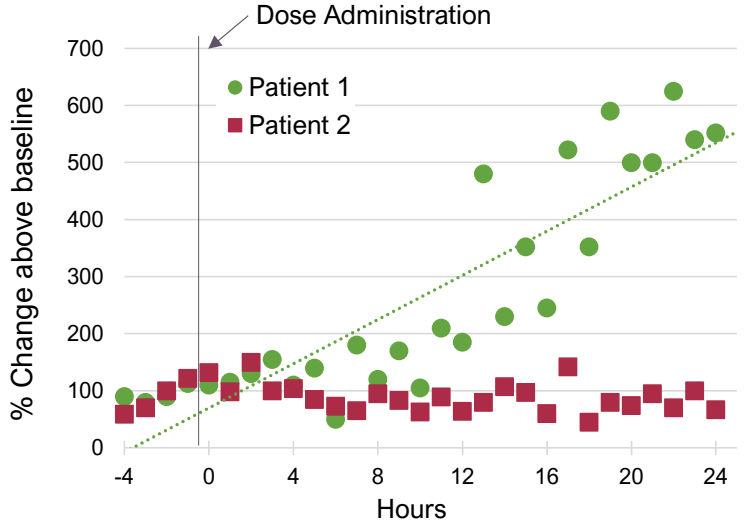
MIE Measurement: *in vivo*



Oligomer Displacement in Mice

Replicates in Alzheimer's Patients

MIE Measurement: SNAP



NOTE: Microimmunoelectrodes coated with oligomer-specific antibody detect soluble Aβ in transgenic hAPP/PS1 mice

Izzo et al. Preclinical and clinical biomarker studies of CT1812: A novel approach to Alzheimer's disease modification. Alzheimer's Dement. 2021 Aug; 17(8):1365-1382.

LaBarbera et al. A Phase 1b randomized clinical trial of CT1812 to measure Aβ oligomer displacement in Alzheimer's disease using an indwelling CSF catheter. Transl Neurodegener 2023, 12(24).

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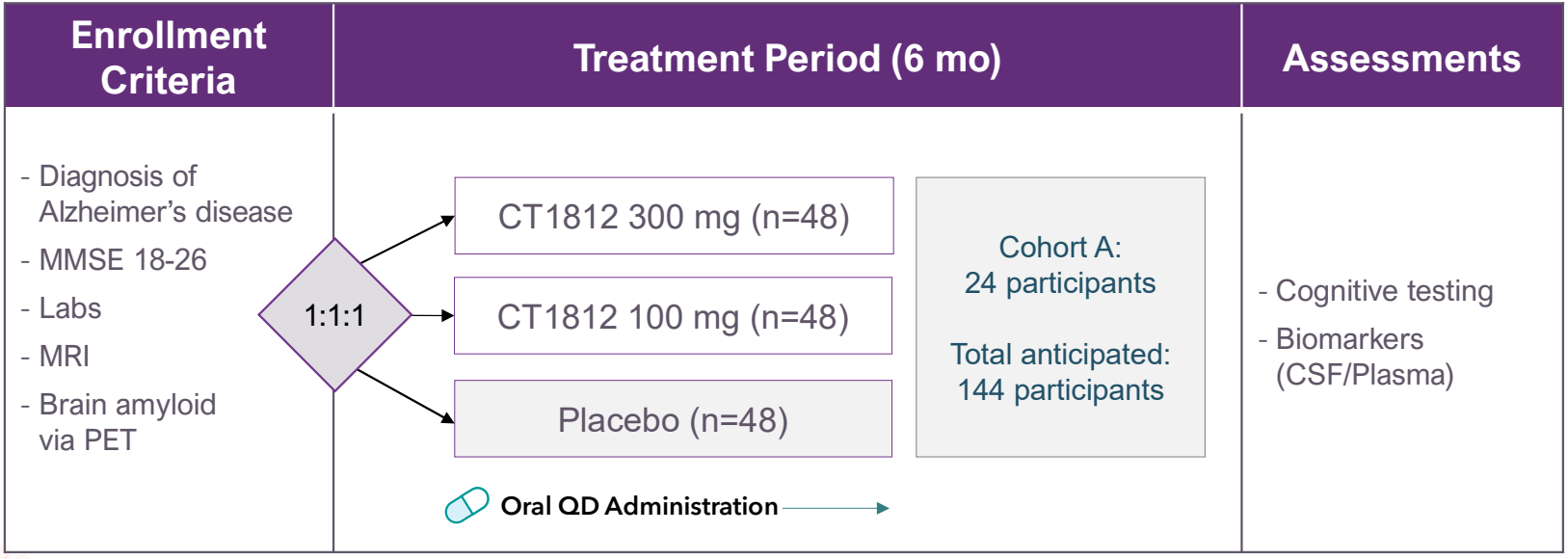
Phase 2 Safety and Efficacy Study in Adults with Mild-to-moderate Alzheimer's Disease

SHINE COG0201

Enrollment Complete (n=153) ; Topline Expected mid-2024



SHINE COG0201 study (NCT03507790) partially funded by $31M NIA grant R01AG058660

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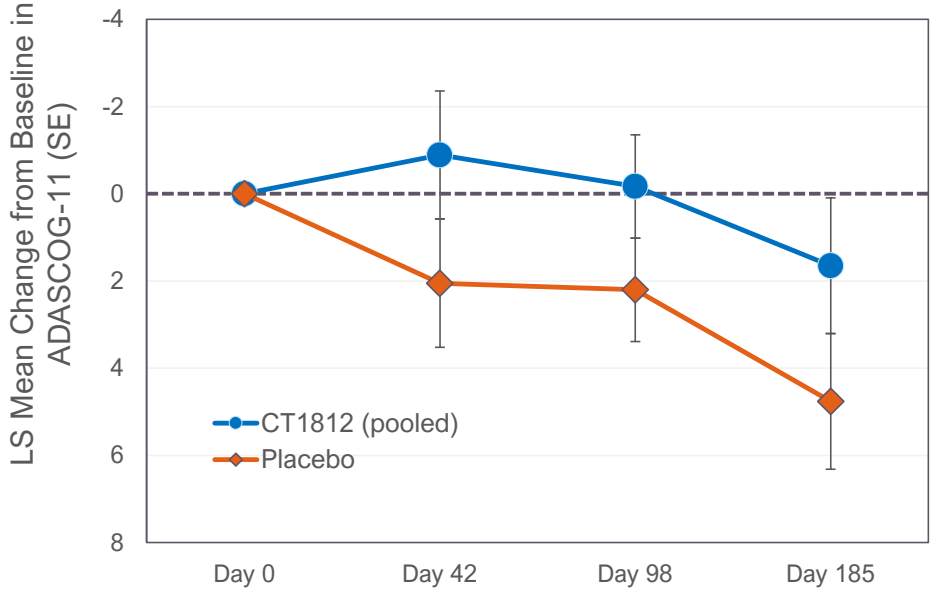
Preliminary Clinical Evidence of Cognitive Benefit

- 3-point difference (ADAS-COG 11) at Day 185 between treated and untreated participants
  - 100mg CT1812 n=8
  - 300mg CT1812 n=8
  - Placebo n=8
- Clinically meaningful magnitude of change
- Trend towards slower cognitive decline in CT1812-treated vs placebo-treated participants

Phase 2 SHINE Interim Analysis

Cognitive Outcomes

Interim Analysis of 24 Participants



SHINE COG0201 Study (NCT03507790) funded by NIA grant R01AG058660

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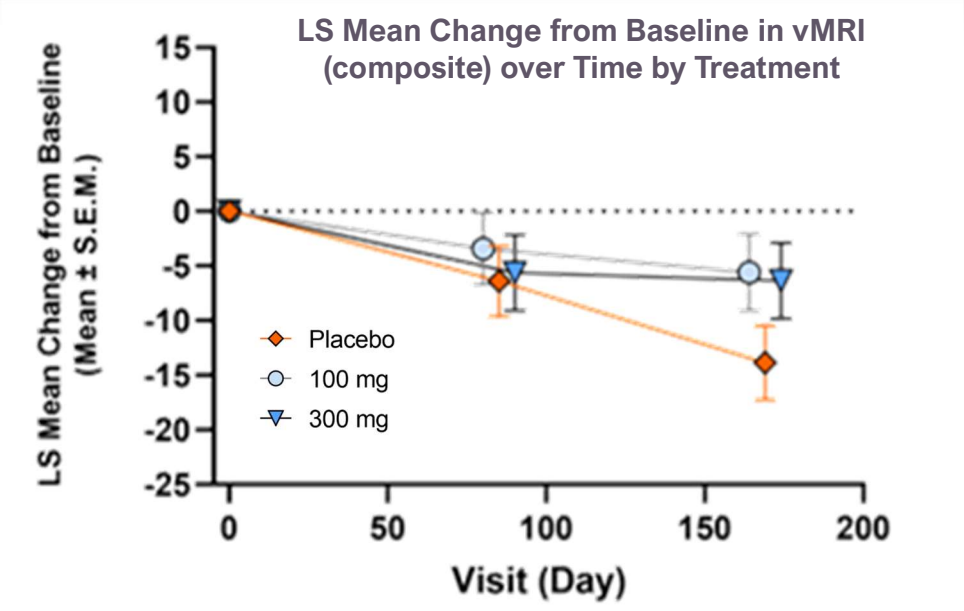
CT1812 Treatment Associated with Reduced Brain Atrophy

Phase 2 SPARC Results



MRI Brain Volume (cm^3) 6-mo change from baseline	CT1812 (Pooled)	Placebo	P-value vs placebo
Hippocampus	-0.09 (0.08)	-0.40 (0.11)	0.0412
Prefrontal Cortex	-0.41 (0.95)	-4.80 (1.37)	0.0125
Pericentral Cortex	0.07 (0.53)	-2.90 (0.77)	0.0032

Published in *Alzheimer's Research & Therapy:*
doi.org/10.1186/s13195-024-01382-2

PIs Christopher H. van Dyck, M.D. at the Yale Alzheimer's Disease Research Unit and Richard E. Carson, Ph.D. at the Yale PET Center

SPARC COG0105 study partially funded by NIA grant R01AG057553

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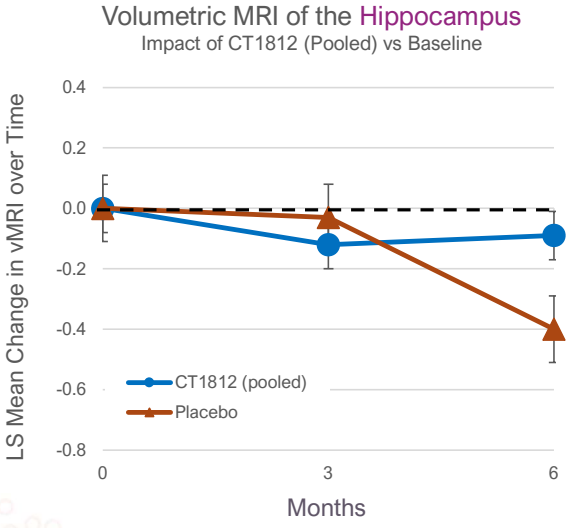
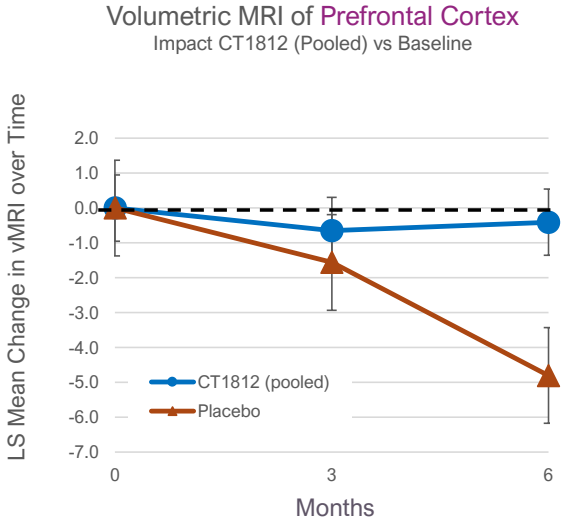
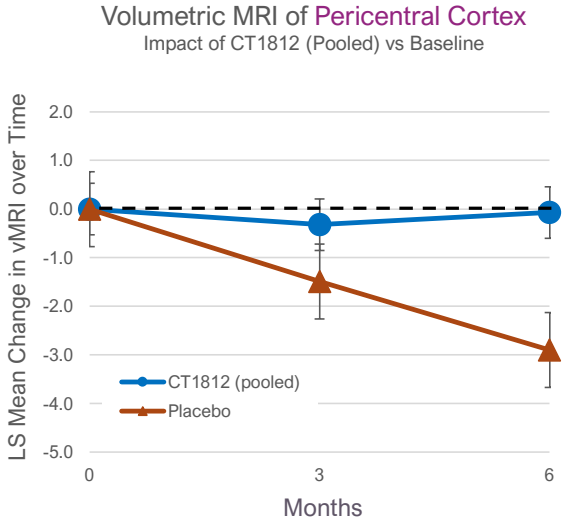
CT1812 Treatment Associated with Reduced Atrophy in Brain Regions

Phase 2 SPARC Results







PIs Christopher H. van Dyck, M.D. at the Yale Alzheimer's Disease Research Unit and Richard E. Carson, Ph.D. at the Yale PET Center

SPARC COG0105 study partially funded by NIA grant R01AG057553

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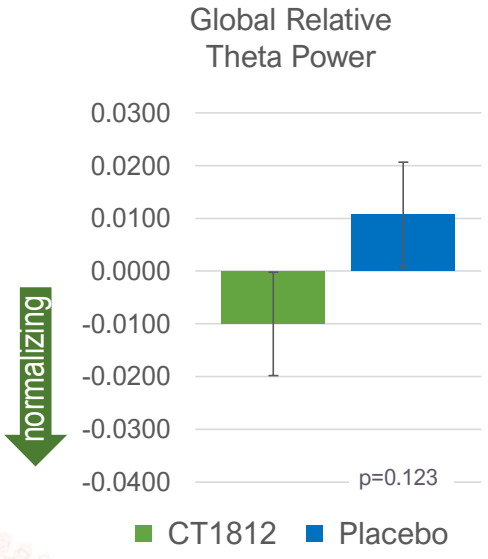
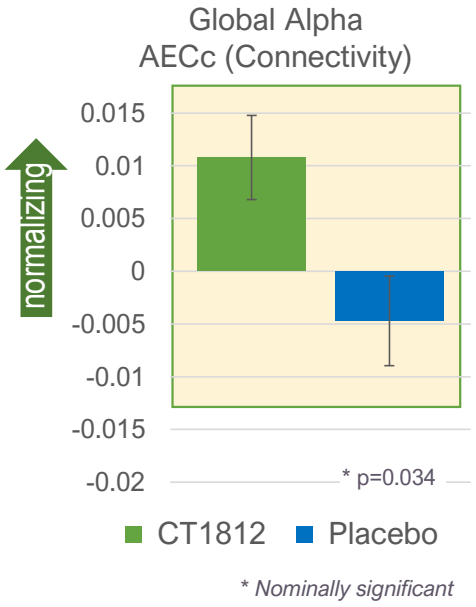
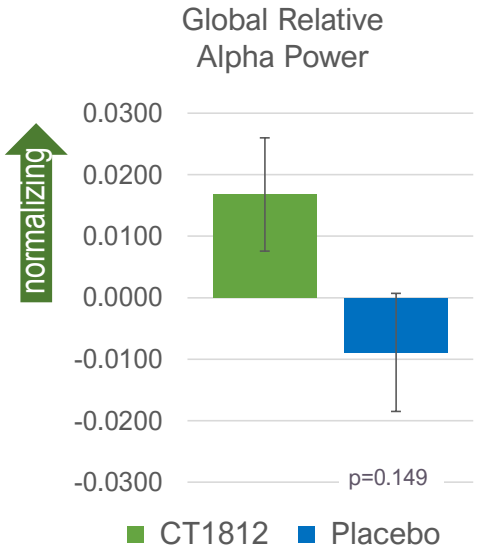
CT1812 Normalizes qEEG Synaptic Function & Connectivity

Positive trends in first three ranked outcomes measures

SEQUEL Results: CTAD 2023







** Nominally significant*

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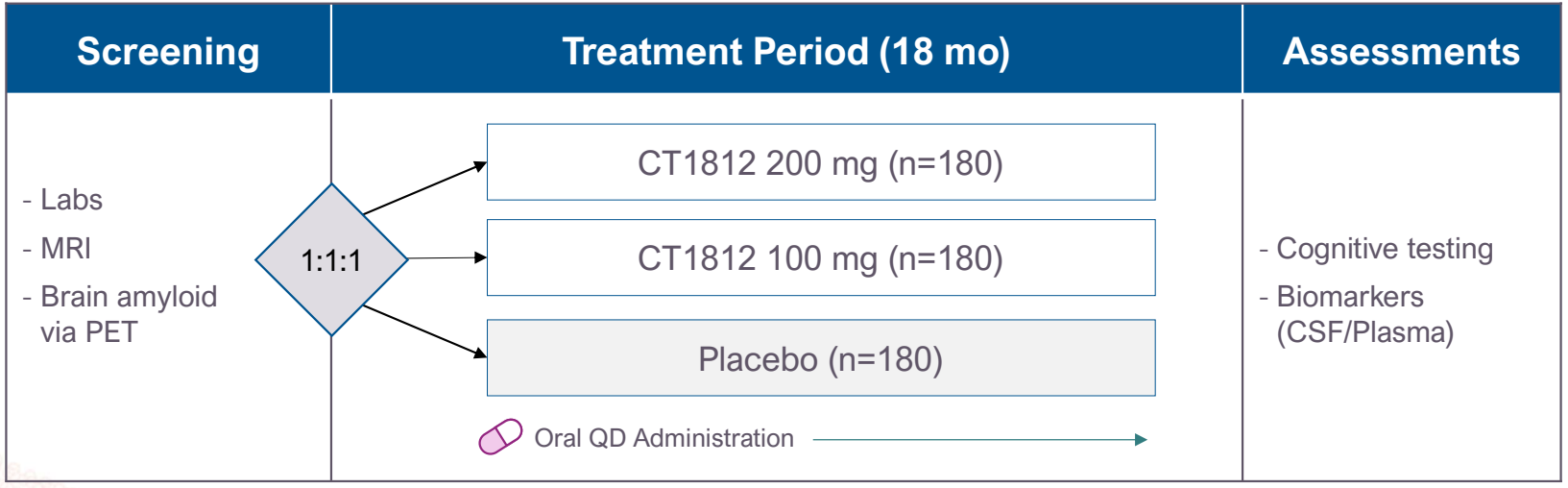
Expanding into Early Disease with $81M NIA Grant

Long-term Efficacy Study in 540 Adults with Early Alzheimer's Disease

First Study to Collect Data on Combination Use of CT1812 and Lecanemab



START COG0203 study (NCT05531656) supported by $81M NIA grant (R01AG065248) in collaboration with ACTC (U24AG057437)

KOL Perspective: Evolving Landscape in Alzheimer's Disease

Virtual Webinar April 12, 2024

Featured Experts

Martin J. Sadowski, MD, PhD, DSci
NYU School of Medicine

Everard (Jort) Vijverberg, MD, PhD
The Alzheimer Center Amsterdam and Neuroscience Amsterdam

Anton Porsteinsson, MD
Univ of Rochester Alzheimer's Disease Care, Research & Education

> "The drug which we know would target neurodegeneration would be any type of drug which would insulate a nerve cell from any type of insult. So for example, a drug which would protect a nerve cell from the effect of toxic oligomers."
>
> *M Sadowski*

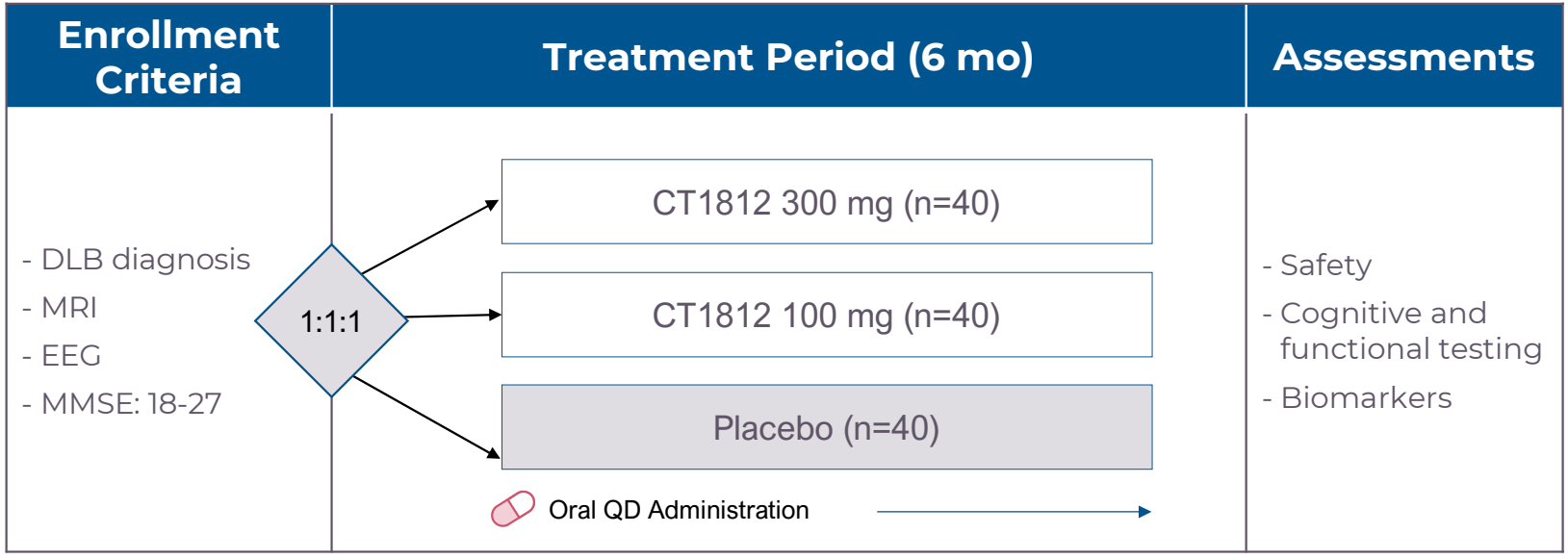
Takeaway from the Experts

Plaque removal with Aβ immunotherapies may be enhanced by the addition of agents that protect against oligomers or other stressors given in tandem or in sequence

Studying Mild-to-Moderate DLB with $30M Grant

Enrollment Complete (n=120)
Topline Expected 2H-2024

"The most common dementia you have never heard of "
- James Galvin; University of Miami

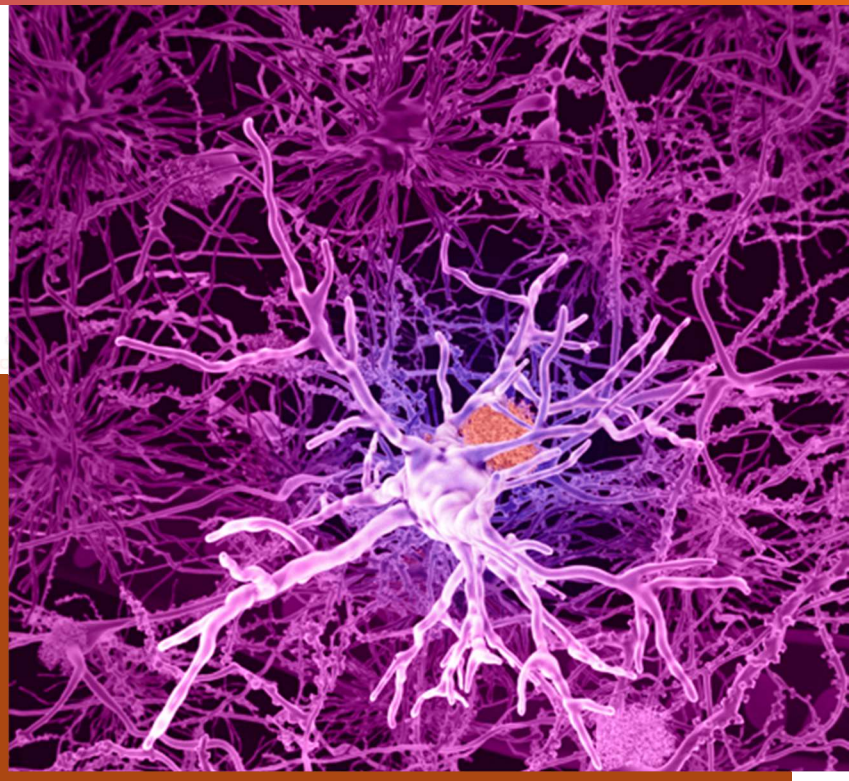


Conducted in collaboration with LBDA & University of Miami with principal investigator: James E. Galvin, MD, MPH

SHIMMER COG1201 study (NCT05225415) partially funded by $30M NIA grant R01AG071643

BREAKING News Enrollment Target Reached: April 2024

Geographic Atrophy Secondary to Dry AMD



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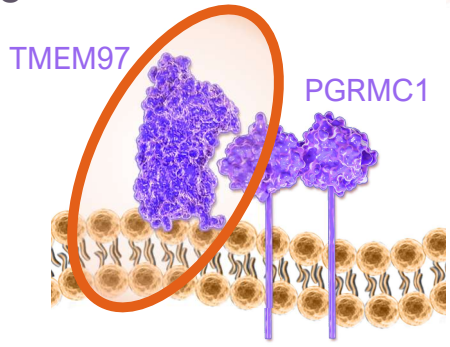
CT1812- Oral Agent for the Treatment of Dry AMD

Genetic Evidence

- Genetic Mutation (SNP) in TMEM97-VTN locus confers decreased risk of dry AMD
  - Further study will determine if and how SNP affects TMEM97 expression or function



Biology

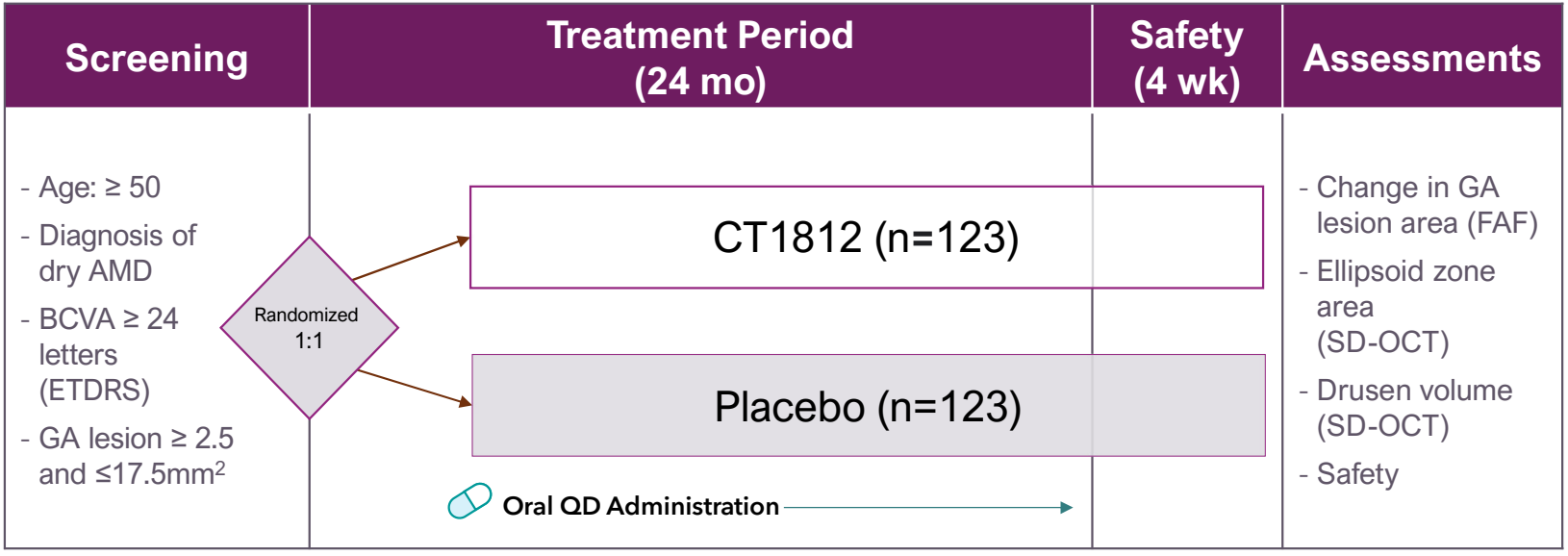
- Knocking down TMEM97 rescues retinal pigment epithelial (RPE) cells from death by oxidative stress
  - Supports role of TMEM97 in dry AMD
- Literature supports role of σ-2 in relevant processes: autophagy, vesicle trafficking, lipid metabolism, cellular stress

Proteomic Studies

- Proteomics from Alzheimer's trials in patients given CT1812 showed differential movement in proteins known to be involved in dry AMD

Phase 2 CT1812 in GA Secondary to Dry AMD

Magnify
COG2201



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Financial Position

Financials as of December 31, 2023

- Cash and Cash Equivalents: $29.9 million
- Including net proceeds from March 2024 raise of $10.4M, expected cash runway through May 2025

Grant funding for CT1812 studies as of Dec 31, 2023

- Preclinical through Phase 2: appx $171.0 million
  - Approximate funding used: ($103.5 million)
  - *Remaining grant funding:* **$67.5 million**

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CT1812 – Multiple Catalysts

PROGRAM	PRECLINICAL	PHASE 1	PHASE 2	PHASE 3	STATUS
ALZHEIMER'S DISEASE					
MILD TO MODERATE	COG0201 • SHINE				Topline data mid-2024
EARLY TO MILD	COG0203 • START				Actively recruiting
DLB					
MILD TO MODERATE	COG1201 • SHIMMER				Topline data 2H-2024
DRY AMD					
GEOGRAPHIC ATROPHY	COG2201 • MAGNIFY				Actively recruiting

COMPLETED STUDIES:

MILD TO MODERATE	Phase 2 COG0202 • SEQUEL (synaptic function)
MILD TO MODERATE	Phase 1 COG0105 • SPARC (synaptic density)
MILD TO MODERATE	Phase 1b COG0104 • SNAP (target engagement)

Thank You

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