



Cognition Therapeutics Presents Proteomic Biomarker Data Demonstrating Prominent Effects of CT1812 in Altering Underlying Alzheimer's Disease Processes

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NEW YORK, March 28, 2023 (GLOBE NEWSWIRE) -- [Cognition Therapeutics, Inc.](#) (NASDAQ: CGTX) presented results of a meta-analysis from the first cohort (SHINE-A) of 24 participants in the Phase 2 SHINE (COG0201; [NCT03507790](#)) and the complete dataset from the Phase 1b SPARC (COG0105; [NCT03493282](#)) studies in adults with mild-to-moderate Alzheimer's disease who were treated with either CT1812 or placebo. Treatment with CT1812 was associated with statistically significant and directionally positive effects on key proteins and corresponding Alzheimer's disease pathways. These included:

- Synapse health
- Neuroinflammation
- and amyloid- β ($A\beta$) biology.

These robust biomarker findings point towards a prominent effect of CT1812 in altering underlying disease processes active in Alzheimer's disease progression. Of particular note, CT1812 had a significant impact on CSF levels of clusterin (CLU), which has been identified as a genetic risk factor for Alzheimer's disease and is a mediator of amyloid toxicity. In addition, CT1812 treatment resulted in a significant shift in levels of prion protein (PRPN), a major constituent of the $A\beta$ oligomer receptor complex and the receptor component to which $A\beta$ oligomers bind. The biomarker findings summarized in the poster further strengthen our understanding of CT1812's effect on $A\beta$ oligomer-driven neurotoxicity.

"Combining the proteomic data from two trials that enrolled participants with mild-to-moderate disease and who were similarly treated with CT1812 allowed for a statistically robust analysis of cerebrospinal fluid samples," explained [Mary Hamby, Ph.D.](#), VP of research at Cognition Therapeutics. "We and our collaborators at Emory University were particularly interested in the change in levels of PRPN. This is consistent with other clinical and preclinical data, showing that modulation of the sigma-2 receptor results in displacement of oligomers from their target receptor on neurons."

A comparative analysis of the overlap between the SHINE and SPARC datasets revealed 28 biomarkers that were significantly altered as a result of treatment with CT1812, 11 of which are priority biomarkers of Alzheimer's biology. Subsequent unbiased pathway analysis mapped these biomarkers to specific brain networks and biological pathways, indicating a clear role for these proteins in synaptic function, neuroinflammation and $A\beta$ biology.

"It was encouraging to find that the pathways identified by this new well-powered analysis continue to point towards an important effect of CT1812 on synapses and amyloid biology," added [Anthony Caggiano, M.D., Ph.D.](#), Cognition's chief medical officer and head of R&D. "We believe that these findings add to mounting evidence that CT1812 has an impact on the binding of $A\beta$ oligomers to synapses and on the pathways involved. We look forward to seeing how the effect of CT1812 on these underlying biological processes may translate into clinical benefit as our ongoing trials begin to read out in the coming months."

These findings are being presented this week by Dr. Hamby in a poster titled "Pharmacodynamic Effects of the S2R Modulator CT1812 in Alzheimer's Disease (AD) Patients Observed in a Meta-analysis of CSF Proteomes from SPARC and SHINE Part A" at AD/PD™ 2023: the International Conference on Alzheimer's & Parkinson's Diseases.

The poster will be available online and in person at the AD/PD™ 2023 conference in Gothenburg, Sweden through April 1, 2023. Following the conclusion of the conference, the poster will be made available on our website on the [Publications](#) webpage.

About CT1812

CT1812 is an experimental orally delivered small molecule designed to penetrate the blood-brain barrier and bind selectively to the sigma-2 (σ -2) receptor complex. The σ -2 receptor complex is involved in the regulation of key cellular processes such as membrane trafficking and autophagy that are damaged by toxic interaction with $A\beta$ oligomers, oxidative stress and other stressors. This damage to sensitive synapses can progress to a loss of synaptic function, which manifests as cognitive impairment and Alzheimer's disease progression. Participants are currently being recruited in the SHINE study ([NCT03507790](#)) of CT1812 in adults with mild-to-moderate Alzheimer's disease and in the SHIMMER study ([NCT05225415](#)) of CT1812 in adults with dementia with Lewy bodies.

About Cognition Therapeutics, Inc.

Cognition Therapeutics, Inc. is a clinical-stage biopharmaceutical company engaged in the discovery and development of innovative, small molecule therapeutics targeting age-related degenerative disorders of the central nervous system and retina. We are currently investigating our lead candidate CT1812 in [clinical programs](#) in Alzheimer's disease, dementia with Lewy bodies (DLB) and dry age-related macular degeneration (dry AMD). We believe CT1812 and our pipeline of σ -2 receptor modulators can regulate pathways that are impaired in these diseases. We believe that targeting the σ -2 receptor with CT1812 represents a mechanism functionally distinct from other current approaches in clinical development for the treatment of degenerative diseases. More about Cognition Therapeutics and its pipeline can be found at <http://cogrx.com>.

Forward-Looking Statements

This press release contains forward-looking statements within the meaning of The Private Securities Litigation Reform Act of 1995. All statements contained in this press release, other than statements of historical facts or statements that relate to present facts or current conditions, including but not limited to, statements regarding our product candidates, 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 Phase 2 START and Phase 1b SPARC studies of CT1812 and any analysis of the results therefrom, are forward-looking statements. These statements, including statements relating to the timing and expected results of our clinical trials, and cash runway, 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 press release 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 and pre-clinical studies being predictive of the results of 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 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 ongoing COVID-19 pandemic on our business, supply chain and labor force; and the risks and uncertainties described in the “Risk Factors” section of our annual report filed with the Securities & Exchange Commission. 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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