



## Cognition Therapeutics Presents New Proteomic Data on Effect of CT1812 Treatment on Normalization of Disrupted Alzheimer's Disease Processes

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NEW YORK, Aug. 04, 2022 (GLOBE NEWSWIRE) -- [Cognition Therapeutics, Inc.](#) (NASDAQ: CGTX) announced that [Mary Hamby, Ph.D.](#), vice president of research, presented results at the Alzheimer's Association International Conference (AAIC) of proteomic analysis of clinical biomarker data from the SPARC study of oral once-daily treatment with CT1812 in mild-to-moderate Alzheimer's disease. The analytic results support the proposed synaptoprotective mechanism of action of CT1812 and role in normalizing cellular processes known to be adversely disrupted in [Alzheimer's disease](#).

The analyses demonstrated the effect of CT1812 on multiple priority Alzheimer's biomarkers, including YKL-40, a biomarker of inflammation, which is upregulated in Alzheimer's disease and is subject of intense focus by the field. Participants treated with CT1812 exhibited a downward shift in YKL-40 towards levels observed in healthy, non-demented individuals, supporting a positive impact of CT1812 on disease biology.

"Increased levels of YKL-40 are a well-known indicator of inflammation. Given that patients treated with CT1812 demonstrated a decrease in this biomarker, we believe additional study is warranted to determine if this shift in YKL-40 signals a dampening of inflammation in the brain," explained Dr. Hamby. "Also of 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 by several independent, large-scale genome-wide association studies (GWAS)."

"The data from this study build upon the biomarker analyses from the first cohort of the ongoing Phase 2 SHINE study," added [Lisa Ricciardi](#), Cognition's president and CEO. "We are encouraged by the results thus far and we look forward to seeing how these findings translate into clinical benefit in Alzheimer's patients, as the complete study reads out."

Dr. Hamby's oral presentation: "CSF proteomics analysis to investigate the pharmacodynamic response of the S2R modulator CT1812 in Alzheimer's disease patients from the SPARC clinical trial," was held on August 4 in the virtual session: Biomarkers (non-neuroimaging) - Proteomics in Alzheimer's disease and dementia with Lewy bodies (VO-5-12). The archived session is available on the AAIC platform through September 4, 2022.

Dr. Hamby concluded, "We would like to thank our SPARC study collaborators at Yale Alzheimer's Disease Research Center, Emory University Integrated Proteomics Core and the University of Gothenburg for their collaborative efforts conducting the analyses we presented at AAIC and their insights interpreting the data."

### About CT1812

CT1812 is an oral small molecule designed to penetrate the blood-brain barrier and bind selectively to the sigma-2 ( $\sigma$ -2) receptor complex. The  $\sigma$ -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.

To date, CT1812 has been well tolerated in clinical studies to date. Mild and transient elevations of liver enzymes without indication of liver injury have been recorded. No SAEs have been reported in patients treated with CT1812.

CT1812 is an experimental candidate and has not been approved by the U.S. FDA or other regulatory agency. It is currently in development for mild-to-moderate Alzheimer's disease in the SHINE study ([NCT03507790](#) / [shineADstudy.com](#)) and dementia with Lewy bodies in the SHIMMER study ([NCT05225415](#)).

### About the SPARC Study

In the SPARC study ([NCT03493282](#)), 23 participants were randomized to receive CT1812 or placebo for 24 weeks and were then assessed for safety, tolerability and impact on biomarkers of target engagement and disease progression. No significant treatment differences in synaptic density were observed in participants administered CT1812 or placebo, as measured by SV2a signal change compared to baseline. However, volumetric MRI showed a trend ( $p=0.0641$ ) towards a reduction in the loss of composite brain volume in CT1812-treated patients (pooled) compared to placebo. In addition, in regions of the brain associated with learning and memory, the hippocampus, prefrontal and pericentral cortex, there was a nominally statistically significant reduction in brain volume atrophy.

Among the 23 study participants, CT1812 was found to be generally well tolerated, consistent with findings from prior studies. Treatment-emergent adverse events (TEAEs) were well balanced across all treatment groups. Elevated liver enzymes occurred in three individuals in the treatment arm but resolved upon discontinuation of study drug. No serious TEAEs were recorded.

### 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  $\sigma$ -2 receptor modulators can regulate pathways that are impaired in these diseases. We believe that targeting the  $\sigma$ -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 <https://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, are forward-looking statements. These statements 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. These and other risks and uncertainties are described more fully in the “Risk Factors” section of our most recent filings with the Securities and Exchange Commission and are available at [www.sec.gov](http://www.sec.gov). 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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