

Cognition Therapeutics Publishes Evidence Identifying Receptor Integral in Parkinson's Disease Pathology

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Pittsburgh, February 1, 2021 – [Cognition Therapeutics, Inc.](#), a clinical stage neuroscience company developing drugs that treat neurodegenerative disorders by regulating cellular damage response pathways, today announced that a peer-reviewed manuscript, entitled, "Sigma-2-Receptor Antagonists Rescue Neuronal Dysfunction Induced by Parkinson's Patient Brain-Derived α -Synuclein," has been published online in the Journal of Neuroscience Research (<http://dx.doi.org/10.1002/jnr.24782>). In this publication, Cognition scientists identify the sigma-2 (σ -2) receptor as integral in the pathology of Parkinson's disease.

In Parkinson's disease, cumulative damage from a variety of stressors results in structural changes in the α -synuclein protein. Aggregates of α -synuclein are strongly correlated with disease pathology in Parkinson's and related "synucleinopathies" such as dementia with Lewy bodies and multiple system atrophy. In these diseases, α -synuclein oligomers have been shown to disrupt several important cellular functions including autophagy and intracellular trafficking. When these processes are impaired, aggregated α -synuclein and other altered proteins build up in neurons, causing further damage and eventual cell death.

Cognition scientists conducted extensive screening to identify compounds that rescue neurons from α -synuclein oligomer-induced deficits, specifically in autophagy and trafficking processes. The compounds that had the most profound effects were discovered to be σ -2 receptor antagonists. This is consistent with findings reported in the literature describing σ -2 receptor components, TMEM97 and PGRMC1, as regulators of these pathways, but it is the first time that σ -2 antagonists have been demonstrated to have effects against α -synuclein oligomers.

"These data support the hypothesis that σ -2 receptor antagonists could represent a unique therapeutic approach to treating some of the underlying disease pathology in Parkinson's disease and potentially other related diseases like dementia with Lewy bodies," explained [Susan Catalano, Ph.D., Cognition's founder and chief science officer](#). "We have plans to explore one or more compounds from our library of σ -2 receptor antagonists in models of Parkinson's disease to better understand the role of σ -2 receptors in synucleinopathies."

About Cognition Therapeutics, Inc.

Cognition Therapeutics, Inc. has discovered and is developing a pipeline of novel, disease modifying, oral drug candidates to treat a broad array of neurodegenerative and neuro-ophthalmic disorders. Our pipeline compounds uniquely target the σ -2 receptor, a key regulator of the cellular damage response. CT1812, our lead product candidate, is being assessed in a comprehensive clinical program for Alzheimer's disease, including a 540-person Phase 2 study in collaboration with ACTC and supported by a competitive grant from the National Institute on Aging. Additional information about Cognition and its product candidates may be found online at www.cogrx.com.

Cautionary Statement Regarding Forward Looking Statements

This press release contains forward-looking statement, including those concerning the development and commercialization of Cognition Therapeutics' product candidates and pipeline, their potential benefits and the Company's expectations regarding its prospects. Forward-looking statements are subject to risks, assumptions and uncertainties that could cause actual future results to differ materially from such statements. These statements are based on information that is available as of date of this press release, and except as required by law, we undertake no obligation to update any such statements.

This press release contains references to CT1812, an investigational product. Use of CT1812 has not been approved by the FDA.