



Stellate Therapeutics Publishes Positive Results in PLOS ONE on Neuroprotective Properties of Lead Candidate STL-101

Paris, France – 1 September 2021: Stellate Therapeutics Inc. (“the Company”, “Stellate”), a global biotechnology company developing disease-modifying therapies based on molecules derived from the microbiome to treat neurological conditions, is pleased to announce the publication of data evaluating the efficacy of the Company’s microbiome-derived lead candidate, STL-101 (synthesized queuine) in *in vitro* experiments. The data, published in the peer-reviewed scientific journal PLOS ONE, demonstrate that STL-101 has neuroprotective properties.

Growing evidence suggests that human gut bacteria, which inhabit our microbiome, are linked to several neurodegenerative disorders, such as Parkinson’s disease and Alzheimer’s disease. Queuine is also known to play an important role in protein synthesis by regulating speed and fidelity of mRNA translation.

The data published in PLOS ONE show that STL-101, a chemically synthesized form of queuine, has neuroprotective properties in several neuronal cell models of proteinopathies and neurodegeneration such as Parkinson’s and Alzheimer’s diseases.

In Parkinson’s disease models, the data showed an increase in neuronal survival associated with a decrease in alpha-synuclein aggregation, a hallmark of the disease. Additionally, cells treated with STL-101 showed increased survival and decreased neuroinflammation in Alzheimer’s disease models.

This is the first time STL-101 has been shown to prevent and delay cell death as well as protein aggregation in neurons. These results support the potential use of STL-101 as a therapeutic for Parkinson’s and Alzheimer’s diseases. Stellate is now planning further research to better understand the mechanism of action of queuine and to test the efficacy of STL-101 in *in vivo* models of neurodegeneration.

The full title of the publication is: “*Queuine, a bacterial-derived hypermodified nucleobase, shows protection in in vitro models of neurodegeneration*”, and can be accessed [here](#).

Dr. Patricia Richard, Director of Neuroscience of Stellate Therapeutics, commented: “We are proud of this potentially ground-breaking research, which marks a promising step towards the potential use of STL-101 as a treatment for Parkinson’s and Alzheimer’s diseases. By moving this

molecule into clinical trials, we are hopeful that STL-101 could benefit the millions of people who are affected by neurological disorders, and who currently face few or no treatment options.”

Sophie Durand, Chief Executive Officer of Stellate Therapeutics, said: “We are thrilled to be pursuing this novel approach to treating neurological conditions. Our gut microbiome offers new and promising therapeutic avenues as well as a major paradigm shift in the way we consider chronic diseases.”

About Stellate Therapeutics

Stellate Therapeutics is a private global biotechnology company that develops small molecules produced by the microbiome into first-in-class therapies for neurological diseases (Parkinson’s and Alzheimer’s diseases). Stellate is also evaluating a portfolio of new drug candidates in other conditions, with capabilities across discovery, screening, production and diagnostic development. For more information, visit www.stellate-tx.com.

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