

Identification of a Tau Oligomer Structure That is Toxic to Neurons
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New York, NY, September 4, 2013 – [Oligomerix, Inc.](http://www.oligomerix.com), a privately held company pioneering the development of disease modifying therapeutics for Alzheimer’s disease (AD) and related neurodegenerative disorders, announced today the publication of a collaborative study in the peer-reviewed *International Journal of Cell Biology* that found tau oligomer trimers were specifically toxic to neuronal cultures.

The study, titled “Trimeric tau is toxic to human neuronal cells at low nanomolar concentrations,” was conducted in collaboration with Professor Michael Sierks, Ph.D., at Arizona State University. Tau protein’s normal function is to stabilize structures within neurons necessary for proper signal transmission. While monomeric tau did not cause neurotoxicity, trimeric tau, which accumulates in AD, exerted marked toxicity towards neurons even at very low concentrations. Dimeric tau only showed toxicity at higher concentrations in the study.

These results indicate that a particular subset of tau oligomer structures may be pathological factors in AD and adds to accumulating evidence that extracellular tau oligomers may be part of a key mechanism in AD pathogenesis. Dimeric and trimeric structures have recently been reported by academic investigators to be involved in the spread of pathology between

cultured neurons from brain. These results give insight into the specific forms of tau that are most neurotoxic and support the importance of targeting extracellular tau oligomers for the development of therapeutic interventions for AD. Multiple late-stage clinical trials targeting amyloid have failed indicating that this approach may be insufficient for changing the course of AD.

"Amyloid may be an initiating factor of AD, whereas tau has been shown to be involved in the spread of pathology and therefore, is a more promising target for developing a disease modifying drug," said James Moe, Ph.D., MBA, President and CEO of Oligomerix. "For these reasons we are actively engaged in developing both small molecule and immunotherapeutic approaches targeting extracellular tau oligomers and are optimistic about finding efficacious drugs to combat the growing Alzheimer's pandemic."

ABOUT OLIGOMERIX

Oligomerix, Inc. is a biopharmaceutical company focused on the discovery and development of small molecule inhibitors, immunotherapeutic approaches and biomarkers targeting tau oligomers. The Company was founded in 2006 and is headquartered at Audubon Biomedical Science and Technology Park at Columbia University Medical Center and is carrying out its in vivo studies at New York Medical College. The Company is seeking strategic partners to help accelerate these exciting programs. For more information, visit www.oligomerix.com.

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