



## **Aptinyx Presents Data on NMDA Receptor Modulator NYX-458 in a Preclinical Model of Parkinson's Cognitive Impairment at the AAT-AD/PD Focus Meeting 2018**

March 15, 2018

**Evanston, Ill., March 15, 2018** – Aptinyx Inc., a clinical-stage biopharmaceutical company developing transformative therapies for challenging neurologic disorders, today announced the presentation of preclinical data that supports advancing the development of a novel N-methyl D-aspartate (NMDA) receptor modulator, NYX-458, as a treatment for cognitive impairment associated with Parkinson's disease. Results from the preclinical study will be presented at the 2018 AAT-AD/PD™ Focus Meeting, March 15-18, 2018 in Torino, Italy.

The study was conducted in a non-human primate model of Parkinson's disease cognitive impairment induced by chronic low dosing of MPTP. NYX-458 and vehicle were evaluated for their effects in a battery of cognitive tests that are components of the Cambridge Neuropsychological Test Automated Battery (CANTAB) often used in human clinical studies of cognitive function. Unlike vehicle, NYX-458 significantly increased sustained attention, improved cognitive flexibility, and enhanced working memory as early as two hours following a single oral dose, and those effects were maintained for up to three weeks post-dosing. In a number of the assessments, NYX-458 dosing ultimately resulted in a full reversal of cognitive impairment and performance back to baseline levels. No evident tolerability issues were observed with NYX-458.

"The reversal of cognitive impairment we observed in this study suggests NYX-458 has the potential to be a meaningful therapy for patients suffering from some of the most devastating symptoms of Parkinson's disease," said Cassia Cearley, Ph.D., vice president of research at Aptinyx. "These results in a relevant and highly translatable model warrant the advancement of NYX-458 into clinical studies."

Through NMDA receptor modulation, NYX-458 enhances synaptic plasticity and restores normal neural cell function. Improving neural cell communication and function translates into improvements in learning, memory, and cognition, the deterioration of which is increasingly recognized as a major component of Parkinson's disease. Aptinyx continues to conduct investigational new drug (IND)-enabling studies on NYX-458 and plans to submit an IND to the U.S. Food and Drug Administration in 2018.

Aptinyx's chemistry and discovery platform has generated numerous novel small-molecule modulators of the NMDA receptor, including NYX-2925, NYX-783, and NYX-458. In studies to date, these molecules have demonstrated high oral bioavailability, diverse NMDA receptor subtype binding profiles and pharmacology, and differentiated efficacy in preclinical models of various nervous system conditions.

### **2018 AAT-AD/PD Focus Meeting Presentation Details**

**NYX-458, a NMDA Receptor Modulator, Improves Cognitive Deficits in a Non-human Primate MPTP Model of Cognitive Impairment in Parkinson's Disease ( [Abstract #151](#) )**

**Presenter:** Amanda Gross, Ph.D., Aptinyx

**Poster Session:** 8:00 a.m. to 6:00 p.m. CET on Saturday, March 17, 2018

### **About Aptinyx**

Aptinyx Inc. is a clinical-stage biopharmaceutical company discovering and developing transformative therapies for challenging disorders of the brain and nervous system. Aptinyx has a proven platform for discovery of novel compounds that work through a unique mechanism to modulate – rather than block or over-activate – NMDA receptors and enhance synaptic plasticity, the foundation of neural cell communication. Drugs that modulate NMDA receptors in this distinct way have both robust efficacy and exceptionally favorable safety. The company's lead drug candidate, NYX-2925, is in Phase 2 clinical development as a therapy for neuropathic pain and its second drug candidate, NYX-783, is in Phase 1 clinical development for the treatment of post-traumatic stress disorder (PTSD). Both programs have received Fast Track designation by the FDA. Aptinyx is also advancing additional compounds from its proprietary chemistry platform, which continues to generate a rich and diverse pipeline of small-molecule NMDA receptor modulators with the potential to treat an array of neurologic disorders. For more information, visit [www.aptinyx.com](http://www.aptinyx.com).

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