Neurocentria Presents Results of Phase 2 Clinical Study of MMFS in Elderly with Mild Cognitive Impairment at Alzheimer's Association International Conference (AAIC) 2015

Data from double-blind placebo-controlled clinical trial, now published in the Journal of Alzheimer's Disease, supports ongoing studies in early Alzheimer's patients

WALNUT CREEK, California., July 13, 2015 — Neurocentria, Inc., a privately held clinical phase pharmaceutical company developing novel therapies for the treatment of Alzheimer's (AD) and other neurodegenerative diseases, announced detailed results from the Phase 2 study (NC001) with MMFS-01, a synaptic density enhancer, in 51 subjects with mild cognitive impairment (MCI), at the Alzheimer's Association International Conference (AAIC) 2015 being held in Washington D.C. from July 18-23.

Study NC001 (ClinicalTrials.gov identifier NCT02363634) is a placebo-controlled, double-blind, parallel-group, randomized Phase 2 clinical study in 51 elderly adults with MCI. Subjects were randomized to either MMFS-01 or placebo. The study assessed changes form baseline to 6 weeks and 12 weeks in cognition, mood, and sleep. The clinical endpoints of a Neuropsychological Test Battery (NTB) was assessed for cognition and Hamilton-Anxiety (HAM-A) and Positive and Negative Affect Schedule (PANAS).

MMFS-01 demonstrated an improvement in overall cognitive ability as measured by the NTB, a composite score of tests in four major cognitive domains including executive function, working memory, attention, and episodic memory. With MMFS-01, overall cognitive ability improved significantly at Week 6 ($p=0.017$) and maintained improvement at Week 12 (p-0.002) relative to placebo. The effect size was large at both Week 6 (Cohen's $d = 0.67$) and Week 12 (Cohen's $d = 0.92$). To further quantify the clinical significance of MMFS-01, results on TMT-B test were compared to normative data from age-matched cognitively-normal controls. MMFS-01 treatment restored impaired executive function of the subjects nearly back to that of age-matched cognitively-normal controls, suggesting MMFS-01 is clinically significant. Importantly, MMFS-01 was safe and well tolerated, with no serious adverse events and no difference in number of adverse events compared to placebo.

About MMFS

MMFS targets synaptic, a hallmark of the aging brain and which is strongly associated with the degree of cognitive impairment. In preclinical studies, MMFS is effective at reversing cognitive deficits in aging and AD model rodents. Evidence supports at least three pathways to efficacy through increase of intracellular magnesium at the synapse: upregulation of NMDA receptor expression, and improvement of mitochondrial function that both augments synaptic protein transport and decreases BACE-1-mediated Aβ deposition. MMFS treatment prevents and restores synaptic loss and cognitive impairment in AD-model mice.

Neurocentria is currently testing the effects of MMFS in another clinical trial in mild-moderate AD, which is expected to finish in 2016. This study was the first to test Neurocentria's leading candidate compound, MMFS, for improving cognition and mood.