

Neuronetrix

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FOR IMMEDIATE RELEASE:

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Neuronetrix begins pivotal multi-center clinical trial of Alzheimer's diagnostic device

Louisville, KY (December 15, 2010) — [Neuronetrix](http://www.neuronetrix.com) today announced the first test of the COGNISION™ System as part of the company's pivotal multi-center clinical trial. The first subject was tested December 10th at the University of Kentucky's [Sanders-Brown Alzheimer's Disease Center](#). The multi-center study will evaluate Neuronetrix's proprietary COGNISION™ System as a practical non-invasive test for the early detection of Alzheimer's disease.

In the ongoing study, dementia subjects who are presumed to have Alzheimer's disease will be evaluated using a number of research protocols including magnetic resonance imaging (MRI), cerebrospinal fluid (CSF) analysis, and a battery of psychometric tests. The dementia subjects will then undergo the 30 minute COGNISION™ Test which involves recording brainwaves while the subject listens to a series of auditory stimuli.

Healthy control subjects will undergo a brief psychometric exam and then take the COGNISION™ Test. The COGNISION™ Software will then be trained to distinguish a healthy subject from one who might have Alzheimer's disease.

"While several new technologies are being evaluated as diagnostic biomarkers of Alzheimer's disease including PET imaging, MRI volumetry, and CSF analysis, only COGNISION™ holds the potential of a practical, reliable, and inexpensive Alzheimer's test which can be administered in a doctor's office," said K.C. Fadem, President of Neuronetrix.

To ensure that the COGNISION™ System is capable of acquiring the same quality data independent of study site or staff, the same study protocols will be performed at other clinical sites including Duke University, [The Memory Clinic](#) in Bennington Vermont, and two other centers in the U.S. A total of approximately 240 subjects will be included in the study which is expected to last 12-18 months.

"We have been working with our clinical study partners for almost 3 years to design this very complex study and we are very excited to have finally tested subject one," said Mauktik Kulkarni, Director of Research & Clinical Affairs of Neuronetrix.

The COGNISION™ System

The technology behind the COGNISION™ System is called event-related potentials (ERP). These are essentially measurements of brainwave activity as the subject's brain processes a sequence of sounds. It has been demonstrated in



COGNISION™ System

numerous neuroscience research labs that subjects with Alzheimer's disease process these sounds differently than healthy adults and this difference can be detected using sensitive ERP equipment. "ERPs are the only biomarkers which directly measure cognitive performance and are therefore the ideal biomarker for evaluating cognitive disorders like Alzheimer's" said Fadem.

The COGNISION™ System includes a sophisticated, battery-powered, headset which can be used by clinical staff even if they are not trained in electrophysiology. The advanced manufacturing methods and microprocessor controlled test administration ensure high quality test data even in an office setting. The COGNISION™ System also includes an online electronic subject record system and automated software for evaluating the ERP tests.

About Alzheimer's Disease

Alzheimer's disease is a chronic neurodegenerative disease of the brain which eventually leads to death. Today, Alzheimer's disease affects over five million Americans with 500,000 new cases reported each year. Medicare/Medicaid spending exceeds \$100 billion on beneficiaries with Alzheimer's and other dementias.

About Neuronetrix

Neuronetrix is an emerging med-tech company focused on revolutionizing the diagnosis of subjects with neurologic disorders by providing accurate and meaningful diagnostic information to physicians early in the disease process.

Information about Neuronetrix is available at <http://www.neuronetrix.com> or by contacting K.C. Fadem at kfadem@neuronetrix.com or (502) 561-9040.