

## **PRESS RELEASE**

### **OSTA ANNOUNCES PROMISING CLINICAL RESULTS ON BLOOD TEST FOR ALZHEIMER'S DISEASE**

**MONTREAL, QC – June 13, 2006** - Osta Biotechnologies Inc. today announced the results of a scale up clinical study involving 123 subjects for the development of a novel blood test for Alzheimer's disease (AD). This study was conducted by Dr. Hyman Schipper, a neurologist at the Sir Mortimer B. Davis – Jewish General Hospital (JGH) and McGill University. Data from this scale up study confirm the previous results on 82 subjects which showed statistically significant difference in patients suffering from AD compared to normal healthy controls and patients with Parkinson's disease. These results hold promise that this blood test provides a simple and reliable diagnosis of subjects suffering from early Alzheimer's disease.

These findings represent an important milestone in Osta's plan to develop a novel blood test for AD and provide an important advancement towards generating sufficient clinical data in order for the company to enter into co-development/commercialization agreements with pharmaceutical/diagnostic companies world-wide.

Currently, there are no commercial blood tests with proven utility in the evaluation of patients with sporadic (non-familial) AD. The causes of AD are not known, but major risk factors include old age and a family history of dementia. AD is the most common form of adult-onset dementia. It is estimated that between 5-10% of North Americans aged 65 and above suffer from AD. The prevalence of AD in the US is currently estimated at approximately 4 million people and, should effective therapy remain elusive, is anticipated to rise to about 14 million people by 2050.

At present, the degree of cognitive impairment is assessed by physicians using Mini-Mental State Examination (MMSE) scores, a battery of neuropsychological tests, blood tests to exclude potentially reversible causes of memory loss, and neuroimaging. However, these techniques are tedious, expensive and often inconclusive. There are several genetic markers such as Presenilin-1, Presenilin-2, and mutant APP that can identify relatively uncommon cases of familial AD, but these genetic markers have no role in the management of patients with the far more prevalent sporadic forms of the illness. Measurements of Tau and Amyloid peptides in the cerebrospinal fluid have proven to be useful biomarkers of sporadic AD, but these measurements require a relatively invasive spinal tap that is not ideal for the mass screening of patients with memory loss.

#### **Results of the Clinical Study**

The clinical study was conducted by Dr. Hyman M. Schipper, a Professor of Neurology & Medicine at McGill University and the Director of Centre for Neurotranslational Research at the Lady Davis Institute for Medical Research, JGH. The technology is based on a key protein called Heme Oxygenase-1 (HO-1). The presence of a plasma HO-1 suppressor (HOS) activity has been shown earlier by Dr. Schipper to distinguish AD patients from normal young controls (NYC), normal elderly controls (NEC), people with mild cognitive impairment (MCI) and people suffering from Parkinson's Disease (PD). In a scale up clinical study conducted at the JGH involving a total of 123 male and female subjects, the mean %HOS activity for the AD group (68.2%) was found to be significantly greater ( $P < 0.001$ ) than that of the NYC (8.6%), NEC (24.9%), MCI (38.5%) and PD (29.1%) cohorts. Mean plasma HOS activity of the MCI patients was found to be intermediate between NEC and AD values. Differences in plasma HOS activity among the NEC, MCI and PD groups were not statistically significant ( $P > 0.05$ ). In a multivariate analysis of HOS activity adjusting for diagnosis, gender, age, education, MMSE score, APOE e4 carrier status, and anti-acetylcholinesterase, only diagnosis interacted significantly with HOS activity ( $p < 0.0001$ ). MMSE scores, an indicator of the severity of cognitive impairment, were negatively correlated with HOS values (Pearson  $r = -0.38$ ;  $P < 0.0001$ ).

Dr. Hyman Schipper, Principal Investigator of the study commented "We are quite pleased with these results and are continuing to further scale up our clinical study to validate the HOS measurement and the recently identified HOS factor as a novel biomarker for the diagnosis of AD and prognosis of subjects with

MCI. The development of a blood test for the early diagnosis of sporadic AD would represent a breakthrough in the management of this devastating neurodegenerative condition.”

***Osta Biotechnologies Inc.***

Osta is a biopharmaceutical company listed on the TSX Venture Exchange (TSXV: OBI) dedicated to developing novel diagnostics and therapeutics for the aging population particularly in the areas of Alzheimer’s disease, Osteoporosis, Osteoarthritis, Aging and Cancer.

The TSX Venture Exchange does not accept responsibility for the adequacy or accuracy of this release.

*Certain information in this press release is forward-looking and is subject to numerous risks and uncertainties. By their nature, such forward-looking statements involve risks and uncertainties that could cause actual results to differ materially from those contemplated by the forward-looking statements. These risks include actions of Osta’s competitors, and those inherent in scientific research and development.*

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