



## **Blood Test Shows Statistically Significant Association With Alzheimer's Disease (AD), May Predict Conversion of Mild Cognitive Impairment to AD**

LONDON, BIRMINGHAM, England and VIENNA, July 16 /PRNewswire/ -- Dr. Zsuzsanna Nagy of the University of Birmingham today presented data from a clinical study, funded by Cytox Limited, demonstrating that a simple blood-based biomarker discriminated between patients with Alzheimer's disease (AD) and control subjects. The findings were statistically highly significant, and the test discriminated between the two groups with 80% sensitivity and 80% specificity. The results also showed that 40% of the mild cognitive impairment (MCI) patients tested had the same test results as AD patients. Follow up study of MCI patients enrolled in an earlier study found that the test allowed early identification of those MCI patients who later developed dementia. The results were presented at the 2009 Alzheimer's Association International Conference on Alzheimer's Disease (ICAD 2009), held in Vienna, Austria.

The blood test measures the integrity of the cell cycle G1/S restriction point in peripheral blood lymphocytes. Dr. Nagy, the inventor of the test and scientific co-founder of Cytox Ltd, was the principal investigator of the study, which was conducted in collaboration with the Oxford Project to Investigate Memory and Aging (OPTIMA). According to Dr. Nagy, "The results of this study support the cell cycle hypothesis of Alzheimer's disease - specifically, that G1/S cell cycle regulatory failure leads to the downstream development of the characteristic pathologies of the disease, the amyloid plaques and tau tangles. Most importantly, the findings validate the use of our lymphocyte test as a biomarker of Alzheimer's disease and suggest that the test is predictive of cognitive deficit developing in MCI patients."

### **About University of Birmingham**

The University of Birmingham is a world leading research-led institution and member of the elite Russell group of universities. Expertise within its five Colleges includes Medicine and Dentistry, Engineering and Physical Sciences, Life and Environmental Sciences, Social Sciences and Arts and Law. The University was one of the first civic universities, receiving its Royal Charter in 1900, and is one of the largest in the UK, with 27,000 students. The University of Birmingham is consistently ranked as a top UK university with a world presence and counts eight Nobel Prize winners amongst alumni and staff. According to the recent independent UK Research Assessment Exercise, nearly 90% of the University of Birmingham's research activity has international impact.

### About Cytox Limited

Cytox is a UK company developing products and services for neurodegenerative disorders. The company provides biomarker services to pharmaceutical industry clients conducting clinical trials with drugs for the treatment of Alzheimer's disease (AD) and mild cognitive impairment (MCI). Cytox's blood tests enable the prediction of which patients with MCI will develop AD. The biomarkers are based on the cell cycle hypothesis of AD and were invented by Dr. Zsuzsanna Nagy at the University of Oxford and the University of Birmingham. For more information about Cytox, please visit the web site at <http://www.cytoxgroup.com/>.

Source: Cytox Limited

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