

## **Validation of a new blood test for diagnosis of Alzheimer's Disease**

Dementia is a common ailment of the elderly, and its incidence is increasing as the population ages. It can be distressing for both patients and their relatives, and in severe forms requires expensive nursing care - a significant and growing burden upon health systems in Europe and around the world. A non-invasive biomarker based diagnostic test would be quicker, cheaper and possibly more reliable than current diagnostic approaches which rely upon a mixture of interviews (MMSE or similar), interpretation of a patient's health-records, possibly brain-scans (MRI, CT or PET imaging) and sampling of cerebrospinal spinal fluids.

We have developed a new diagnostic approach based on a signature of six blood biomarkers mainly involved in neuroinflammation and neuroprotection. The initial validation exercise using serum from 140 healthy controls and 88 well-characterized mild to severe Alzheimer patients (MMST 8- 26) showed that this biomarker suite for the diagnosis of Alzheimer's disease gave an excellent sensitivity and specificity of 92% and 99% respectively.

We are currently running several clinical validation studies to confirm, that the test is also suitable for MCI patients due to Alzheimer's Disease and differential diagnosis of Alzheimer's Disease and Vascular Dementia.