THE AGING COGNITION EVALUATION (ACE) CSF REGISTRY; 2011 UPDATE

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Introduction: This is a longitudinal study to evaluate cognition and collect blood and CSF in healthy males and females >60 years old every 6 months for an indefinite period. This longitudinal study has been active since April, 2006.

Aims: To collect neurodegenerative disease biomarker material as early as possible during the prodromal stage by means of longitudinal collection of biological samples and clinical cognition data. The study is ongoing and this is the May 2011 update.

Methods: The methods used to evaluate cognition are the MMSE and the CDR System evaluating 5 domains of cognition. Cognition evaluations are performed at every 6 month visit with simultaneous biological sampling.

Results: One hundred and twenty cognitively normal males and females have been enrolled to date. Ninety five subjects (37 CSF subjects) have undergone between 1 and 7 six monthly assessments and sampling. At baseline, the subjects demonstrated cognitive function which was normal for their age. In terms of MCI criteria, 23 of the subjects on one or more visits showed Power of Attention scores which were more than 1.5 sd poorer than data from an age matched sample from the CDR database and 10 subjects for Continuity of Attention. None of the other composites showed deficits in more than a handful of subjects.

Conclusions: These interim results are consistent with emerging data showing that attention deficits are important features of aging and are more prevalent in disorders such as stroke, delirium and various dementias than previously believed.