

# Predictors of Functional Ability in MCI

<https://neurodegenerationresearch.eu/survey/predictors-of-functional-ability-in-mci/>

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### Country

USA

## Title of project or programme

Predictors of Functional Ability in MCI

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mild cognitive impairment, Activities of Daily Living, specific biomarkers, Dementia, functional disability

## Research Abstract

DESCRIPTION (provided by applicant): Considerable effort is being made to detect dementia (particularly Alzheimer's disease) at its very early stages. Mild cognitive impairment (MCI) is described as the intermediate stage between normal aging and dementia. The diagnostic criteria for this disorder are currently not well defined and have been redefined over the past decade. Two of the major changes in definition of MCI are the inclusion of mild activities of daily living (ADL) impairments (that do not interfere with the ability to work and carry out life activities) and subtypes of MCI (those with amnesic and multiple-domain MCI). The types and degree of

daily functional impairment are not well understood and predictors of such impairment need to be further investigated if we are to find better diagnostic criteria and early treatments for MCI. Biomedical markers, such as brain region atrophy has received much attention for the detection MCI and dementia in its earliest stages. These biomarkers alone, however, provide limited clinical utility. The current project has three major goals: 1) to examine the rate of functional decline in different subtypes of MCI (e.g., amnesic-MCI, multiple-domain MCI) over a 4-year period using an observation-based ADL task. Additionally, to examine how each ADL sub-task best predicts conversion from MCI to dementia in the different MCI subtypes, 2) to examine the relationship between biomarkers and specific types of ADL impairments, and 3) to determine the best predictors (i.e., biomarkers or neuropsychological performance) of ADL dysfunction at baseline and over time in MCI patients. A total of 55 MCI participants will be enrolled into this study from an Alzheimer's Disease Research Center (ADRC) and will be followed for a total 4 years. All participants will have already completed a neuropsychological test battery and will have undergone neuroimaging at the ADRC. Participants will be administered an observation-based ADL task. The relationship between specific CNS biomarkers and daily functional ability will be examined. How well the CNS biomarker measures, deficits in neuropsychological performance and daily functional impairment predict the rate of conversion to a specific type of MCI will also be analyzed; additionally, how specific biomarkers and neuropsychological performance predict functional disabilities will be examined in MCI subtypes at baseline as well as over a 4 year period. The results will better characterize functional impairment in the subtypes of MCI as well as better provide a better clinical understanding of abnormal biomarkers as they relate to ADL functioning.

**Further information available at:**

**Types:**

Investments < €500k

**Member States:**

United States of America

**Diseases:**

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