Novel imaging and endothelial biomarkers of small vessel cerebrovascular disease

https://neurodegenerationresearch.eu/survey/novel-imaging-and-endothelial-biomarkers-of-small-vessel-cerebrovascular-disease/

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Country

USA

Title of project or programme

Novel imaging and endothelial biomarkers of small vessel cerebrovascular disease

Source of funding information

NIH (NIA)

Total sum awarded (Euro)

€ 2,858,903.67

Start date of award

30/09/2016

Total duration of award in years

2

The project/programme is most relevant to:

Alzheimer's disease & other dementias

Keywords

Cerebrovascular Disorders, Microvascular Dysfunction, Serological, endothelial dysfunction, CXCL6 gene

Research Abstract
Project Summary /Abstract Small vessel cerebrovascular disease and Alzheimer's disease are

the two most common causes of cognitive decline in the elderly, but methods for determining the relative contributions of both these pathologies to functional impairment, understanding their interactions, predicting progression and defining targets for clinical trials remain underdeveloped. The overarching goal of this proposal is to further develop novel neuroimaging and serologic biomarkers of cerebrovascular disease. Accomplishing this goal will improve early detection, diagnosis, and prognosis of small vessel cerebrovascular disease in older subjects, and provide better targets and outcome metrics for clinical trials. We propose to longitudinally study 400 well characterized older subjects from ongoing projects at UCSF and UCD who present with a range of cerebrovascular burden and functional decline. Our search for biomarkers will focus on novel neuroimaging variables and measures of endothelial dysfunction. Our aims will address the relationships between these markers and measures of amyloid burden, cognition, and change over time.

Lay Summary

Project Narrative Small vessel cerebrovascular disease and Alzheimer's disease are the two most common causes of cognitive decline in the elderly, but methods for determining the relative contributions of both these pathologies to functional impairment, understanding their interactions, predicting progression and defining targets for clinical trials remain underdeveloped. The overarching goal of this proposal is to further develop novel neuroimaging and serologic biomarkers of cerebrovascular disease. Accomplishing this goal will improve early detection, diagnosis, and prognosis of small vessel cerebrovascular disease in older subjects, and provide better targets and outcome metrics for clinical trials.

Further information available at:

Types:
Investments > €500k

Member States:
United States of America

Diseases:
Alzheimer's disease & other dementias

Years:
2016

Database Categories:
N/A

Database Tags:
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