Discovery of antibody biomarkers for Alzheimer's Disease

https://neurodegenerationresearch.eu/survey/discovery-of-antibody-biomarkers-for-alzheimer%c2%92s-disease/ Principal Investigators

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Contact information of lead PI Country

USA

Title of project or programme

Discovery of antibody biomarkers for Alzheimer's Disease

Source of funding information

NIH (NIA)

Total sum awarded (Euro)

484403.6697

Start date of award

01/05/2016

Total duration of award in years

1

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Acquired Cognitive Impairment... Aging... Alzheimer's Disease... Alzheimer's Disease including Alzheimer's Disease Related Dementias (AD/ADRD)... Brain Disorders... Dementia... Immune System... Neurodegenerative... Neurosciences... Prevention... Translational Research

Research Abstract

? DESCRIPTION (provided by applicant): The discovery of serum biomarkers for Alzheimer's disease (AD) represents an enormous unmet medical need. This project will further explore the hypothesis that the adaptive immune system might react to unusual antigens produced as a result of AD pathology and as a result produce high levels of antibodies that would not be found

in a normal individual. There is some evidence that this is the case. To discover these antibodies we plan to screen large libraries of bead-displayed synthetic oligomers and find compounds that retain far more antibodies from AD serum samples than from controls. These molecules would be employed as first generation ""capture agents"" for the AD-specific antibodies in a multiplexed Luminex-like diagnostic assay. If this R21 preliminary investigation is successful, it would set the stage for compound optimization and a much larger validation trial that could lead to an effective blood test for AD.

Further information available at:

Types: Investments < €500k

Member States: United States of America

Diseases: N/A

Years: 2016

Database Categories: N/A

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