NeuTARGETs: Targeting the propagation of pathogenic protein assemblies in neurodegenerative disease

https://neurodegenerationresearch.eu/survey/neutargets-targeting-the-propagation-of-pathogenic-protein-assemblies-in-neurodegenerative-disease/

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Multiple

Contact information of lead PI Country

France|Germany|Sweden

Title of project or programme

NeuTARGETs: Targeting the propagation of pathogenic protein assemblies in neurodegenerative disease

Source of funding information

JPND-Cross Disease

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Start date of award

01/01/2015

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3.0

The project/programme is most relevant to:

Alzheimer's disease & other dementias Parkinson's disease & PD-related disorders

Keywords

Research Abstract

Similar to prion diseases, more common fatal neurodegenerative diseases such as Alzheimer's and Parkinson's disease are linked to the aggregation of different proteins (including Tau, Abeta

and alpha- synuclein in the brain of affected patients. Furthermore most of the resulting brain lesions initially appear in specific brain areas and the pathology progresses along interconnected areas in a predictable manner. Interestingly, it has been shown that similar to the prion protein, these proteins are able to act as seed and to cause the aggregation of the normal protein. Therefore propagation of the aggregates in the brain could be a common mechanism for the propagation of these diseases.

In this proposal we want to identify the conditions that lead to aggregation of Abeta and asynuclein, respectively in Alzheimer's and Parkinson's and to identify possible targets to perturb the formation and the propagation of the aggregates. We will also analyze the pathway of spreading of these aggregates between neurons in order to identify specific target to stop their diffusion in the brain.

Lay Summary Further information available at:

Types: Investments > €500k, JPND Projects

Member States: France, Germany, JPND, Sweden

Diseases:

Alzheimer's disease & other dementias, Parkinson's disease & PD-related disorders

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