

Reach α -synuclein-dependent neurodegeneration: clinical development of therapeutic AFFITOPE vaccines for Parkinson's disease and multisystem atrophy

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Principal Investigators

Institution

Contact information of lead PI

Country

European Commission

Title of project or programme

Reach α -synuclein-dependent neurodegeneration: clinical development of therapeutic AFFITOPE vaccines for Parkinson's disease and multisystem atrophy

Source of funding information

European Commission FP7-Seventh Framework Programme

Total sum awarded (Euro)

€ 5,999,706

Start date of award

01/10/2013

Total duration of award in years

4.0

The project/programme is most relevant to:

Parkinson's disease & PD-related disorders

Keywords

Research Abstract

The goal of SYMPATH is to advance clinical development of therapeutic vaccines targeting α -synuclein (aSyn)-driven neurodegenerative diseases (ND). It addresses Parkinson's disease (PD) and multiple system atrophy (MSA), two synucleopathies, for which no causal therapy exists. Ultimately, both lead to patient disability and death, which along with patient number (PD) and age of onset (MSA, PD) define their high medical need status.

The proposed programme focuses on 2 vaccine candidates, PD01A and PD03A, delivered by the innovative AFFITOME® technology. Both are peptide-protein conjugate vaccines and first-in-class candidates. They were selected to elicit antibodies neutralizing aSyn but sparing compensatory α -synuclein. Pre-clinical evaluation confirmed their disease-modifying activity in various models. The unprecedented clinical approach, called TANDEM strategy, uses the synergy resulting from applying 2 vaccine candidates in 2 complementary indications linked through their pathology. TANDEM PD/MSA capitalizes on (i) excellent clinical research centres and their associated national/European networks, (ii) platform methods assessing aSyn species as candidate biomarkers and (iii) preliminary clinical experience with PD01A, the first aSyn targeting vaccine ever tested in humans. Its core is formed by 2 phase I studies testing PD01A in MSA and PD03A in PD/MSA. Importantly, trial design (duration, endpoints, vaccine dose and schedule) will ensure collection of initial biomarker data connecting clinical results of PD- and MSA trajectories. SYMPATH defines the logical next development step of both AFFITOPE® vaccine candidates for synucleopathies and generates information/material (biobank) rendering them more amenable to rational drug development. Successful completion of the programme promises reaching aSyn pathology with an active vaccine as a causal therapy for PD/MSA, thus advancing one or both candidates as prime targets for product development and investment.

Lay Summary

Further information available at:

Types:

Investments > €500k

Member States:

European Commission

Diseases:

Parkinson's disease & PD-related disorders

Years:

2016

Database Categories:

N/A

Database Tags:

N/A