

A Systematic Programme to Develop and Evaluate the Best Candidate Treatments for Repositioning as Therapies for Alzheimer s Disease (SMART-AD).

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Country

United Kingdom

Title of project or programme

A Systematic Programme to Develop and Evaluate the Best Candidate Treatments for Repositioning as Therapies for Alzheimer s Disease (SMART-AD).

Source of funding information

The Wellcome Trust

Total sum awarded (Euro)

€ 2,457,619

Start date of award

20/11/2013

Total duration of award in years

4.0

The project/programme is most relevant to:

Alzheimer's disease & other dementias

Keywords

Research Abstract

This innovative programme will identify drug candidates for repositioning in Alzheimers Disease (AD). We will compare the transcriptional signature of AD with the signatures of up to 4000 drugs with established safety in man to identify 100 candidates with the most promising therapeutic potential. State of the art gene profiling will be used to determine the ability of the candidates to modify the expression of disease-associated transcripts in hippocampal neurons, with the best 20 drugs going forward to test for biological efficacy in in-vitro assays for a wide-range of pathogenic mechanisms implicated in AD. The six agents with the most favourable impact will then be evaluated in the best rodent model of AD to obtain the proof-of-principle evidence that would support a clinical program. Importantly assays used will measure a range of key pathological and behavioural outcomes, as well as determining the drugs impact on disease-associated transcriptional changes. Each stage will be overseen by an independent expert panel to ensure drug selection is rigorous and appropriate for AD. The overall aim of this programme of research is to identify the best candidate to be taken forward to clinical trial in people with AD.

Lay Summary

Further information available at:

Types:

Investments > €500k

Member States:

United Kingdom

Diseases:

Alzheimer's disease & other dementias

Years:

2016

Database Categories:

N/A

Database Tags:

N/A