

# Novel drugs for treating Alzheimer's disease

<https://www.neurodegenerationresearch.eu/survey/novel-drugs-for-treating-alzheimers-disease/>

## Principal Investigators

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### Country

United Kingdom

## Title of project or programme

Novel drugs for treating Alzheimer's disease

## Source of funding information

Alzheimer's Society

## Total sum awarded (Euro)

€ 97,460

## Start date of award

17/06/2013

## Total duration of award in years

2.8

## Keywords

### Research Abstract

Previously, we have identified a drug target, amyloid binding alcohol dehydrogenase (also called 17b hydroxysteroid dehydrogenase type 10, ABAD), which we and others have shown, that if inhibited can prevent both mitochondrial and synaptic dysfunction and thus prevent the subsequent memory loss in living Alzheimer's disease animal models. From a previous Alzheimer's Society awarded grant, and more recently from a collaboration with an industrial pharmaceutical partner, we have identified three series of small molecular inhibitors. Some of these compounds we have synthesized are novel, while others are drugs for the treatment of other diseases, but have not yet been tested in Alzheimer's disease models, though all have nanomolar IC50 values. Therefore, in this two year proposal, we wish to advance these compounds through to the next level of cellular testing and medicinal chemistry to obtain lead compounds. Specifically, we have developed a series of cell based assays in order to test them

for their inhibition of ABAD, protection against amyloid induced cell damage, but also their general drug like properties including toxicity and blood brain barrier permeability. Compounds will be entered into our pipeline and if required, chemically modified to improve the desired bioavailability properties, allowing them to progress into being tested in living animal models for the disease.

**Further information available at:**

**Types:**

Investments < €500k

**Member States:**

United Kingdom

**Diseases:**

N/A

**Years:**

2016

**Database Categories:**

N/A

**Database Tags:**

N/A