

# Validation of an O-GlcNAcase inhibitor as a novel therapeutic agent against Alzheimer pathology

<https://neurodegenerationresearch.eu/survey/validation-of-an-o-glcna-case-inhibitor-as-a-novel-therapeutic-agent-against-alzheimer-pathology/>

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United Kingdom

## Title of project or programme

Validation of an O-GlcNAcase inhibitor as a novel therapeutic agent against Alzheimer pathology

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Alzheimer's Research UK

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€ 27,837

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20/03/2015

## Total duration of award in years

1

## Keywords

### Research Abstract

The brain requires energy to function properly, supplied to the brain in the form of glucose, a type of sugar. However as we get older there is a decrease in the brain's ability to use glucose, causing a decrease in the memory and conscious function of the brain. The decrease in the brain's ability to use glucose is accelerated in Alzheimer's disease (AD) where it is evident prior to the diagnosis of dementia, suggesting that glucose related alterations may occur early in the development of AD. One way the brain uses glucose is to attach it to proteins, a modification

called glycosylation. Glycosylation alters how proteins work and in AD brain there is a reduction in glycosylation. We have developed a way of preventing this reduction in glycosylation and the next step is to determine if preventing the reduction in the brain prevents the damaging alterations to brain proteins that occur as Alzheimer's develops.

**Further information available at:**

**Types:**

Investments < €500k

**Member States:**

United Kingdom

**Diseases:**

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**Years:**

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**Database Categories:**

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