

Diabetes drug 'significantly reverses memory loss' in mice with Alzheimer's



A drug developed for diabetes could be used to treat Alzheimer's after scientists found it "significantly reversed memory loss" in mice through a triple method of action.

The research, published in *Brain Research*, could bring substantial improvements in the treatment of Alzheimer's disease through the use of a drug originally created to treat type 2 diabetes.

Lead researcher Professor Christian Holscher of Lancaster University in the UK said the novel treatment "holds clear promise of being developed into a new treatment for chronic neurodegenerative disorders such as Alzheimer's disease."

Alzheimer's disease is the most common cause of dementia and the numbers are expected to rise to two million people in the UK by 2051 according to Alzheimer's Society, who part-funded the research.

Dr Doug Brown, Director of Research and Development at Alzheimer's Society, said: ""With no new treatments in nearly 15 years, we need to find new ways of tackling Alzheimer's. It's imperative that we explore whether drugs developed to treat other conditions can benefit people with Alzheimer's and other forms of dementia. This approach to research could make it much quicker to get promising new drugs to the people who need them."

This is the first time that a triple receptor drug has been used which acts in multiple ways to protect the brain from degeneration. It combines GLP-1, GIP and Glucagon which are all growth factors. Problems with growth factor signalling have been shown to be impaired in the brains of Alzheimer's patients.

The study used APP/PS1 mice, which are transgenic mice that express human mutated genes that cause Alzheimer's. Those genes have been found in people who have a form of Alzheimer's that can be inherited. Aged transgenic mice in the advanced stages of neurodegeneration were treated.