Alzheimer's blow as another drug trial abandoned

Oliver Moody, Science Correspondent February 16 2017, 12:01am, The Times



The clinical trial was closed down after doctors said the drug had virtually no chance of working GETTY IMAGES

The trial of a much-heralded drug for Alzheimer's disease has been abandoned early in what some experts said was a fatal blow to hopes of treating patients in the near future.

Months after the failure of two other promising medications at the final hurdle, an experiment involving 2,000 patients in the mild and moderate stages of the disease was closed down yesterday after doctors concluded that it had virtually no chance of working.

The treatment, known as verubecestat and developed by Merck, the pharmaceutical company, was regarded as one of the best hopes of finding a drug capable of slowing or reversing the spread of Alzheimer's through the brain. Scientists said that the collapse of the trial was grim news for more than 500,000 Britons who have been diagnosed with the disease, for which there is still no effective treatment. Because verubecestat had been shown to switch off the production of the poisonous clumps of amyloid protein that had long been thought to be the main cause of the disease, there was optimism that it could work where drugs attacking the amyloid at a later stage had failed.

Senior researchers argued that this strategy now appeared doomed. Bart De Strooper, director of Britain's new £250 million Medical Research Council-led dementia science institute, told *The Times* that in the near future there could be little that the drugs industry could do to help people who already had Alzheimer's diagnosed.

After the decades of research and billions of pounds that have been poured into trying to wipe out amyloid, Professor De Strooper suggested that it was time to pursue fresh tactics such as antiinflammatory drugs.

"It's certainly clear that anti-amyloid therapy does not really work in mild to moderate Alzheimer's," he said. "Apparently it is already too late to tackle it [when amyloid clumps have developed]. . . It's very disappointing but it's an important lesson."

Chris Whitty, chief scientific adviser to the Department of Health, said that the trial's premature closure showed that there was still much to be learnt about how dementia worked. "It does highlight that we do not yet have a proper understanding of the pathways to dementia," he said. "Having this would make it much easier to design drugs to prevent and treat Alzheimer's."

Researchers are moving their attention to other aspects of the disease, including the roles played by the brain's immune system and another toxic protein known as tau. Others are trying to recruit "pre-symptomatic" patients who have the disease but show no obvious signs of it. The hope is that drugs that have failed in more advanced cases could prevent the disorder if they are administered early enough. Verubecestat is still being tested on a group of these patients.

Clare Walton, of the Alzheimer's Society, said that the latest clinical trial failure was disheartening but by no means fatal for the idea that amyloid was the key to treating the disease.

"It's disappointing that there's been another failure but it reminds us of the importance of care research," she said.