

Researchers investigating potential drug for treatment of Alzheimer's disease

August 31 2012

A compound developed to treat neuropathic pain has shown potential as an innovative treatment for Alzheimer's disease, according to a study by researchers at Cleveland Clinic's Lerner Research Institute and Anesthesiology Institute.

"Cleveland Clinic dedicated two years of research into the examination of this compound and our findings show it could represent a novel [therapeutic target](#) in the treatment of Alzheimer's disease," said Mohamed Naguib, M.D., Professor of Anesthesiology, Cleveland Clinic Lerner College of Medicine. "Development of this compound as a potential drug for Alzheimer's would take many more years, but this is a promising finding worthy of further investigation."

In a study published online in the *Neurobiology of Aging*, the compound MDA7 induced beneficial immune responses that limited the development of Alzheimer's disease. Treatment with the compound restored cognition, memory and synaptic plasticity – a key neurological foundation of [learning and memory](#) – in an [animal model](#).

Neuroinflammation is an important mechanism involved in the progression of Alzheimer's disease. The MDA7 compound has anti-inflammatory properties that act on the CB2 receptor – one of the two [cannabinoid receptors](#) in the body – but without the negative side effects normally seen with cannabinoid compounds.

Alzheimer's disease is an irreversible, [fatal brain disease](#) that slowly

destroys memory and thinking skills. About 5 million people in the United States have Alzheimer's disease. With the aging of the population, and without successful treatment, there will be 16 million Americans and 106 million people worldwide with Alzheimer's by 2050, according to the 2011 Alzheimer's Disease Facts and Figures report from the Alzheimer's Association.

Provided by Cleveland Clinic

Citation: Researchers investigating potential drug for treatment of Alzheimer's disease (2012, August 31) retrieved 3 May 2024 from <https://medicalxpress.com/news/2012-08-potential-drug-treatment-alzheimer-disease.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.