

# Researchers investigate mechanism of Alzheimer's therapy

July 8 2013, by Allison Elliott-Shannon

---



A new paper in the *Journal of Neuroscience* details an advance in treatment of Alzheimer's disease.

Researchers at the University of Kentucky Sanders-Brown Center on Aging, led by faculty member Donna Wilcock, have recently published a new paper in the *Journal of Neuroscience* detailing an advance in treatment of Alzheimer's disease.

Gammagard IVIg is a therapy that has been investigated for treatment of Alzheimer's. Despite small clinical studies that have reported efficacy of

the approach, the mechanism of action is poorly understood.

The UK researchers set out to investigate the mechanism by which the treatment may act in the brain to lower amyloid deposition (amyloid deposits being a key pathology in Alzheimer's).

To conduct their investigation, researchers introduced IVIg directly into the brains of mice which carry a [human gene](#) causing them to develop [amyloid plaques](#). They found that IVIg lowers amyloid deposits in the brains of the mice over the course of seven days. Their data suggest that the modulation of inflammation in the brain by IVIg is a key event that leads to the reduction in amyloid deposition.

The scientists hypothesize that the IVIg acts as an immune modulator, and this immune modulation is responsible for the reductions in amyloid pathology.

The data suggests that modulating the [immune response](#) in the brain may help ameliorate the Alzheimer's pathology. Researchers are currently investigating other ways to produce the same modulation of the immune response because the access of IVIg to the brain when administered peripherally is very limited.

Provided by University of Kentucky

Citation: Researchers investigate mechanism of Alzheimer's therapy (2013, July 8) retrieved 18 April 2024 from <https://medicalxpress.com/news/2013-07-mechanism-alzheimer-therapy.html>

<p>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.</p>
--