# Neuroinflammation in frontotemporal dementia: The role of microglia in TDP-43-related disease

https://neurodegenerationresearch.eu/survey/neuroinflammation-in-frontotemporal-dementia-the-role-of-microglia-in-tdp-43-related-disease/

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**Country**

Australia

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Neuroinflammation in frontotemporal dementia: The role of microglia in TDP-43-related disease

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1

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**Research Abstract**

The brains of patients with frontotemporal dementia (FTD) show inflammation in affected regions, where neurodegeneration has occurred. In the brain, immune cells known as microglia are the main cell type that controls this inflammatory response. Microglia provide a protective surveillance function in the brain to allow rapid response to injury or disease but they can also take on toxic properties that drive neuron death. In FTD, it remains unclear whether inflammatory microglia are protective or toxic to neurons. In this study, microglia and

inflammatory molecules will be analysed over time in recently-developed genetically-modified mice that develop disease similar to human FTD, and these mice will be treated with an experimental drug to prevent brain inflammation. Findings from this project will therefore determine if pharmacological alteration of the microglial inflammatory response could be used to modify disease development and progression in FTD.

**Further information available at:**

https://www.dementiaresearchfoundation.org.au/researchers/adam-walker

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Australia

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