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## Neuroinflammation and Alzheimer's disease

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Neuroinflammation is a common feature of Alzheimer's disease pathology, which is characterized by the presence of reactive astrocytes and activation of the microglia (the brain's resident macrophages), as well as increased expression of pro-inflammatory cytokines and complement system activation. Amyloid beta protein accumulation in the brain of Alzheimer's disease patients is the activator of the complement system and leads to glial cells activation and subsequent release of neurotoxic substances and free oxygen radicals. We are studying different aspects of neuroinflammation in a cohort of two groups "post-mortem human brain tissue" of Alzheimer's disease and age-matched controls in different brain areas including frontal and temporal cortices to highlight the role of innate immunity in the disease and if it can be considered as potential targets for treating Alzheimer's disease.

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