**Amyloid-β associated neuroinflammation and astrocyte dysfunction**

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Reactive astrocytes and activated microglia are tightly associated with amyloid-β plaques in Alzheimer’s disease (AD). Both cell types are likely to be involved in an inflammatory response that coincides with increased AD severity. The role of these activated glial cells is a topic of great scientific interest as, on the one hand, glial activation has been considered as an endogenous defensive mechanism against plaque deposition but, on the other hand, the persistent activation and associated inflammation may also contribute to neuronal dysfunction and AD progression. We have analysed molecular changes in both microglia and astrocytes and observed a.o. an increase in the immunoproteasome and a decrease genes involved in physiological astrocyte function. The astrocyte dysfunction may contribute to the cognitive impairment in AD.

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**More information:** <http://www.nin.knaw.nl/research_groups/hol_group>

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