

# Pathological substrate of clinical variability in AD

<https://www.neurodegenerationresearch.eu/survey/pathological-substrate-of-clinical-variability-in-ad/>

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### Country

Netherlands

## Title of project or programme

Pathological substrate of clinical variability in AD

## Source of funding information

ZonMw

## Total sum awarded (Euro)

€ 820,790

## Start date of award

01/12/2014

## Total duration of award in years

4.0

## The project/programme is most relevant to:

Alzheimer's disease & other dementias

## Keywords

### Research Abstract

Alzheimer's disease (AD) usually and typically presents with memory disturbance. However, up to 30% of AD presents with non-amnestic symptoms, especially in early onset AD. This points to a phenotypic heterogeneity that is poorly understood and rarely investigated. Recognition of variable phenotypes will lead to a better understanding of pathological pathways in AD and may have consequences for therapy and management. Even more so it is needed to enable the

clinician to make a more accurate prognosis.

To identify possible underlying anatomical and neuropathological changes we will

1. Perform comprehensive postmortem tissue analysis in a uniquely identified patient cohort with the parietal pathological phenotype (according to the distribution of AD pathology), clinically validated to have a non-amnesic presentation of AD. The results will be compared with the typical temporal pathological AD phenotype and healthy controls. The in depth analysis will include neuropathological analysis with extensive immunohistochemical analysis and state-of-the-art morphometric analysis in 7 cortical areas and the striatum.

2. Apply the results of this retrospective tissue analysis to prospectively gathered brain tissue, by performing the same comprehensive tissue analysis combined with volumetric and network analysis of relevant brain areas on post mortem MRI thereby bridging the gap between clinical and histopathological phenotypes.

### **Lay Summary**

**Further information available at:**

**Types:**

Investments > €500k

**Member States:**

Netherlands

**Diseases:**

Alzheimer's disease & other dementias

**Years:**

2016

**Database Categories:**

N/A

**Database Tags:**

N/A