ADNI Alzheimer's Disease Neuroimaging Initiative

ADNI-1 Plasma total tau

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Summary

This is an analysis of the axonal protein tau in plasma on ADNI-1 samples. Tau is a microtubule-associated protein with six isoforms with MW of 48-67 kDa. Numerous studies have shown a marked increase of tau in cerebrospinal fluid (CSF) in Alzheimer's disease (AD). Some recent studies also suggest that tau can be measured in blood samples, and that the level reflects ongoing neuronal damage or degeneration.

Method

Plasma tau was analyzed by the Single Molecule array (Simoa) technique and the Human total tau assay that uses a combination of monoclonal antibodies that give a measure of total tau levels. Values are given as pg/mL.
Four (4) samples contained tau levels in plasma below the Limit of detection (LOD), and are marked as "NA" with a comment "<LOD" in the spreadsheet.
Thirtyfour (34) samples (+ 2 ADNI RARC samples) contained tau levels in plasma below the Lower Limit of Quantification (LLOQ) that was set to 1.0 pg/mL based on the concentration at which the majority of samples had a CV > 20 %. Values are given for these samples, but with the comment "<LLOQ" in the spreadsheet.

Dataset Information

This methods document applies to the following dataset(s) available from the ADNI repository:

Dataset Name	Date Submitted
Blennow Lab – ADNI-1 – Plasma tau – Data file	03 August 2015

About the Authors

This document was prepared by Prof. Kaj Blennow, University of Gothenburg, Sweden. For more information please contact Kaj Blennow by email **kaj.blennow@neuro.gu.se**.