

Beckman Coulter introduces cutting-edge assays for neurodegenerative disease research

15 January 2025 | News

New, fully automated, high-throughput Research Use Only assays offered on Beckman Coulter Immunoassay Analyzers



US-based Beckman Coulter Diagnostics, a global leader in advanced diagnostics, has announced availability of new Research Use Only (RUO) blood-based biomarker immunoassays designed to advance neurodegenerative disease research.

These assays are intended to assess p-Tau217, GFAP, NfL, and APOE ϵ 4 biomarkers, which are emerging as the most important biomarkers in neurodegenerative diseases research, including interventional clinical trials.

p-Tau217 (phosphorylated Tau217) is a critical biomarker to detect tau and amyloid pathology. Tau and amyloid pathology refer to the abnormal accumulation of tau and amyloid beta proteins in the brain. Current evidence shows that plasma p-Tau217 is a sensitive biomarker present through all stages of Alzheimer's disease (AD) and in research has shown to distinguish AD from other neurodegenerative disorders.

GFAP (Glial Fibrillary Acidic Protein) is a cytoskeletal, intermediate filament protein. While not AD specific, current evidence suggests that detection of increasing GFAP levels in plasma can be used to assess early stages of AD.

NfL (Neurofilament Light Chain) is a key indicator of axonal damage and neurodegeneration, regardless of cause. Elevated levels of NfL in cerebrospinal fluid and blood are associated with several neurodegenerative conditions, including AD and Parkinson's disease, and may be used for predicting cognitive decline and monitoring treatment efficacy.

APOE ϵ 4 (Apolipoprotein ϵ 4) gene is the most significant genetic risk factor for developing AD. Beckman Coulter Diagnostics' new APOE ϵ 4 immunoassay offers >99% concordance with PCR genotyping in only 20 minutes.

