

# Laboratory Testing for Alzheimer's Disease

**As new therapeutics for Alzheimer's disease (AD) are approved, laboratory testing can help identify candidates for treatment.**

**Ensure your patients receive the best possible care and support by incorporating ARUP's full suite of Alzheimer's disease tests into your diagnostic workup.**

## **3019017 | Phospho-Tau 217, Plasma**

Blood-based biomarkers are a less invasive and cost-effective testing option for the diagnosis of AD. Current research supports phosphorylated tau 217 (pTau 217) as a highly accurate and specific marker for the detection of amyloid pathology.

- Specimens from the Eli Lilly and Company I5T-MC-AACI trial (TRAILBLAZER-ALZ 2) were used to validate this assay, and it was shown to have high correlation with amyloid pathology as measured by positron emission tomography (PET) imaging.
- The Simoa® assay kit uses pTau 217 antibody technology licensed from Eli Lilly and Company and is performed on Quanterix's SP-X® platform.

## **3017653 | Alzheimer's Disease Markers, CSF**

This test uses FDA-approved kits and instrumentation. Its performance is backed by significant data, and test results have been demonstrated to closely correlate with amyloid PET scan results.

- Test results provide two ratios: Phospho-Tau(181)/Abeta42 Ratio and Total-Tau/Abeta42 Ratio, which offers better concordance with amyloid PET imaging when compared to Abeta42, pTau 181, and tTau individually.

## **2013341 | Apolipoprotein E (APOE) Genotyping, Alzheimer Disease Risk**

Apolipoprotein E (*APOE*) testing is recommended if treatment with monoclonal antibodies is being considered because of the risk of amyloid-related imaging abnormalities (ARIA) in individuals who are homozygous for the *APOE* e4 variant.

- *APOE* testing is also useful in Alzheimer's disease risk assessment and may be useful for genetic counseling purposes.