



HARMONIZED DIAGNOSTIC
ASSESSMENT OF DEMENTIA
FOR THE LONGITUDINAL AGING STUDY IN INDIA

LASI-DAD Biomarker Update

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2025 International Meeting

Biomarker Update

- How many waves of data collection have you conducted?
 - Wave 1 (2017-19, N=4,096)
 - Wave 2 (2022-24, N=4,635)
 - Participants aged 60 and older residing in 22 states, representing 98% of the Indian population
 - Wave 2 response rate among Wave 1 participants was 84%
- What have you collected in the past?
 - Venous blood
 - Physical measures
- What biomarkers are you collecting currently?
 - Whole blood-based assays: CBC, HbA1c
 - Serum-based assays: renal (including cystatin C), liver, and thyroid functions; lipid panel; lipoprotein (a); hsCRP; ProBNP; homocysteine; vitamin B12; folic acid; vitamin D; ferritin and iron studies
 - Plasma-based assays: beta-amyloid 42, beta-amyloid 40, total tau protein, phosphorylated tau¹⁸¹ protein, neurofilament light (NFL), glial fibrillary acidic protein (GFAP)

Biomarker Update

- What biomarkers are you collecting currently?
 - Whole genome sequencing
 - DNA methylation – near completion
 - MRI brain at 11 sites (N about 1,000)
- What biomarkers are you planning for future?
 - Proteomics on OLINK platform using wave 1 & wave 2 specimens – fund pending
 - Plan for wave 3 proposal
 - Repeat biomarkers measured during previous two waves
 - Add phosphorylated tau²¹⁷ protein