

Phase II Alzheimer's Amyloid PET and MRI

55 sites

3T MRI, amyloid PET

Volumetric and visual PET endpoints

Challenge

In a Phase II Alzheimer's disease program, the trial's biomarker endpoints depended on detecting subtle changes in brain volume and amyloid burden over time. Yet the 55 participating academic and commercial imaging centers operated scanners from multiple vendors, each introducing its own measurement variability into volumetric MRI quantification and amyloid PET assessment. Left uncontrolled, this cross-site noise threatened to obscure the very treatment effects the study was designed to detect, undermining both the secondary and exploratory biomarker endpoints.

Our Solution

Intrinsic Imaging implemented phantom-based site qualification to characterize and calibrate each scanner before a single subject was imaged, and every subsequent submission was automatically verified against the prescribed acquisition parameters. Central assessment paired quantitative volumetric analysis of regional atrophy with standardized visual PET scoring performed by trained readers, ensuring that both the quantitative and qualitative endpoints were derived under uniform, controlled conditions across all vendors and sites.

Results

- Cross-site measurement variation reduced by 38%
- Reliable secondary and exploratory biomarker endpoints
- Comparable imaging data across scanner vendors

Read the full study online: <https://www.intrinsicimaging.com/case-studies/central-nervous-system>

About Intrinsic Imaging, LLC

Intrinsic Imaging is a full-service medical imaging core lab providing comprehensive services in support of Phase I-IV clinical trials and Class I, II, III medical device trials. Intrinsic Imaging is also a world leader in conducting Artificial Intelligence studies. With its team of more than 750 board-certified and fellowship-trained physicians, Intrinsic Imaging's team has sub-specialization in all therapeutic areas, including Cardiovascular, Central Nervous System, Gastroenterology, Musculoskeletal, Oncology and Ophthalmology. Certified by the British Standards Institution (BSI), Intrinsic Imaging is the only company in the world to hold five ISO certifications specifically for providing imaging core lab services on clinical trials. For more information, please visit www.IntrinsicImaging.com.

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