

Parkinson's Trial With DaT-SPECT Imaging

40 sites

DaT-SPECT, 3T MRI

Striatal binding ratios

Challenge

Quantitative striatal binding ratios derived from DaT-SPECT imaging served both as an enrollment screening tool and as a longitudinal biomarker in this Parkinson's disease trial. However, differences in imaging systems and reconstruction practices across 40 sites introduced variability into precisely the measurements the trial depended upon. Without harmonization, apparent differences in binding ratios risked reflecting scanner characteristics rather than underlying biology, undermining both screening accuracy and biomarker reliability.

Our Solution

Intrinsic Imaging qualified every site through phantom imaging, characterizing each system's quantitative performance before subjects were scanned, and aligned reconstruction parameters across platforms to maximize comparability. Central review combined quantitative striatal binding ratio measurement with standardized visual interpretation, so that enrollment decisions and longitudinal assessments each drew on consistent, controlled methodology regardless of the acquiring site.

Results

- Reduced cross-site signal variation
- Accurate imaging-based enrollment screening
- Reliable longitudinal biomarker data

Read the full study online: <https://www.intrinsicimaging.com/case-studies/cns-parkinsons>

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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