CASE STUDY · ONCOLOGY

Rapid Pediatric Neuroblastoma Trial Startup

25 sites in 9 countries · MIBG scintigraphy, CT, MRI · Curie score and INRC

Challenge

Intrinsic Imaging supported this study's imaging activities, addressing the scientific and operational considerations that inform the work of an imaging CRO and imaging core lab. Pediatric oncology trials often enroll small, geographically dispersed populations, making timely activation and screening assessment critical operational priorities. The sponsor required central review capability encompassing MIBG scintigraphy, CT and MRI, with Curie scoring and INRC response assessment, to be fully operational within weeks across 25 sites in 9 countries. Eligibility determinations had to be returned promptly so that central imaging review supported, rather than delayed, enrollment decisions.

The imaging requirements were complex. MIBG scintigraphy required consistent acquisition and scoring, while CT and MRI were needed to assess soft-tissue disease and support INRC classification. Participating centers varied in equipment and experience, local imaging practice differed across countries, and pediatric imaging demanded careful attention to patient comfort, sedation and radiation considerations. Activation had to be completed within weeks while retaining the documentation and methodological controls expected of a registration-quality pediatric trial, which meant aligning site readiness, acquisition guidance, reader preparation and submission workflows without allowing expedited activation to introduce avoidable variability. MIBG scoring and anatomical imaging contribute different information to neuroblastoma assessment. Coordinated review preserves those complementary roles while keeping the urgent screening decision distinct from the later interpretation of response.

Intrinsic Imaging's Solution

Intrinsic Imaging completed the imaging charter and site training within four weeks, establishing the full central review framework on an accelerated schedule without abbreviating its rigor. Our team developed concise imaging guidance for each modality and delivered training to site teams on an accelerated schedule. Submission processes were streamlined, and each examination was checked promptly for completeness and technical adequacy.

Dedicated nuclear medicine readers provided real-time eligibility assessments, prioritizing screening examinations so that enrollment decisions proceeded without imaging-related delay. Nuclear medicine readers and radiologists were trained and calibrated on Curie scoring and INRC conventions before reading began, and project managers monitored screening examinations closely, coordinating with sites to resolve any issues quickly. Central review of Curie scores and INRC response assessments continued under the same charter throughout the trial, preserving continuity between screening and subsequent response evaluation.

Adjudication procedures were defined before reading began, ensuring that disagreements in Curie scoring or INRC response classification would be resolved consistently. Adjudicators reviewed the complete imaging record under the same charter, and their decisions were documented to provide a clear audit trail. Expedited activation was linked throughout to coordinated preparation of acquisition guidance, reader training and central review operations, allowing the core laboratory to support urgent enrollment needs while maintaining the consistency expected of a pediatric oncology trial.

Intrinsic Imaging’s Results

- 30 days to first site activation across a pediatric oncology network spanning 25 sites in 9 countries with differing equipment and imaging experience
- 72 hours maximum turnaround for eligibility reads, with screening examinations prioritized by dedicated nuclear medicine readers so enrollment decisions met protocol timelines
- Zero imaging-related enrollment delays over the course of the trial, despite small and geographically dispersed patient populations at participating centers
- 4 weeks to complete the imaging charter and site training, with multimodal Curie and INRC review operating under full methodological controls from the first patient

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Read the full study online: https://intrinsicimaging.com/case-studies/accelerated-pediatric

About Intrinsic Imaging, LLC

Intrinsic Imaging is an ISO certified medical imaging CRO and 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 650 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.

Contact:
Intrinsic Imaging, LLC
580 Main St., Suite 210
Bolton, MA, 01740, USA
+1 978-616-4650
Contact@IntrinsicImaging.com