## ABSTRACT

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Imaging of pediatric brain tumors: A COG Diagnostic Imaging Committee/SPR Oncology Committee/ASPNR White Paper.

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Tumors of the central nervous system are the most common solid malignancies in children and the most common cause of pediatric cancer-related mortality. Imaging plays a central role in diagnosis, staging, treatment planning, and response assessment of pediatric brain tumors. However, the substantial variability in brain tumor imaging protocols across institutions leads to variability in patient risk stratification and treatment decisions, and complicates comparisons of clinical trial results. This White Paper provides consensus-based imaging recommendations for evaluating pediatric patients with primary brain tumors. The proposed brain magnetic resonance imaging protocol recommendations balance advancements in imaging techniques with the practicality of deployment across most imaging centers.

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