

Children's Oncology Group

Molecular Characterization Initiative (MCI)

Comprehensive molecular testing at diagnosis, including germline
Whole Exome, RNA Fusion Panel, Methylation Array

Rapid return of results at no cost to patient/family or institution

Results may refine diagnosis and suggest alternative treatments

Please see the "Fact Sheet for Site Pathologists" for more detailed information

MCI Tissue Requirements

Frozen tissue (preferred): Minimum of 30 mg with ~60% cellularity

Three cores 16-18 gauge approximately 8-10mm in length, OR
Approximately 5 x 5 x 5mm (approximately pea size)

FFPE: Aim for cumulative tissue ~ dime sized

Minimum three cores 16-18 gauge approximately 8-10mm in length
Cores **MUST** be in the same block

***Consider a change in practice when cores are submitted separately by
clinicians or if pathology separates cores into multiple blocks.

***If cores are in separate blocks for diagnosis, the blocks will need to be melted
and the tissue re-embedded into a single block prior to obtaining recut unstained
slides for submission to the Biopathology Center.

Decalcification: Only EDTA decalcified tissue can be submitted at this time.

MCI Eligible Diagnoses

Acute Lymphoblastic Leukemia (ALL)

Acute Myelogenous Leukemia (AML)

Bone (OST)

Central Nervous System (CNS)

Ewing Sarcoma (EWS)

Germ Cell Tumors (GCT)

Hodgkin Disease (HOD)

Liver Tumors (HEP)

Neuroblastoma (NBL)

Non-Hodgkin Lymphoma (NHL)

Rare Tumors (RAR) – includes thyroid, colon, others

Renal Tumors (REN)

Soft Tissue Sarcomas (STS)