**PEDIATRIC BONE TUMORS**

Most pediatric bone and soft tissue tumor resections are performed at UCLA Santa Monica. Cases operated at Mattel Children’s Hospital may have gross specimens transported to Santa Monica for grossing by the bone and soft tissue resident.

For intraoperative handling and submission of tissue for ancillary studies, please review the general pediatric pathology guidelines, and discuss the case with the Bone and Soft Tissue pathology attending, or with Dr. Goldstein, before proceeding.

UCLA is a participating member of the Children’s Oncology Group (COG) and a tissue bank for pediatric neoplasms maintained at the COG Biopathology Center (BPC) at Nationwide Children’s Hospital/Ohio State University. Many pediatric oncology patients will be randomized into therapeutic protocols. Since the protocols and trial studies often change, better to check if any special things need to be done BEFORE proceeding with dissection and fixation.

Please refer to the Bone and Soft Tissue Grossing Guidelines for sample dictation and general instructions. College of American Pathologists’ pediatric tumor synoptic reports should be used, and the full CAP protocols may be reviewed for additional information.

For all pediatric tumors for which there is sufficient material available, after satisfying protocol requirements and our needs (including our TPCL), additional frozen tissue can be submitted to the BPC. TPCL personnel will be available during regular work hours to assist with the procurement of tissue for COG protocols and tissue banking.

**Specific Specimen Processing**

For cases that may require mapping of tumor to assess distribution and extent of treatment tumor necrosis, please refer to the diagram attached for grossing illustrations and sample dictations (kindly provided by Dr. Florette K, Gray Hazard, Lucille Packard Children’s Hospital, Stanford University School of Medicine.) “Pilot” sections of tumors obtained prior to fixation may be submitted for next day preview and preliminary diagnosis. Block maps on photographs similar to those in the illustration are encouraged for large and complex specimens.
A full cross section of the tumor is submitted as described below and illustrated in the accompanying block map.

A1 – Surgical resection margin skin, soft tissue
A2 – Surgical resection margin bone marrow
A3, etc…

Sample Gross Template Pediatric Bone tumor
Received [fresh/in formalin] labeled with the patient's name, medical record number and designated "[*]*" is a [*]* x [*]* x [*] cm [list bone received] amputated [above/below] the [name closest joint: elbow, knee, shoulder].

The external skin is [insert color] with [no scars/multiple scars/a dominant scar] located [#] cm from the resection margin. [No] obvious tumor is identified along the surface of the specimen. [If tumor is seen, measure and describe.] Representative sections of the skin and soft tissue as well as portions of bone marrow scooped from the bone at the surgical resection margin are taken and submitted in cassettes A1 and A2, as described below. The specimen is frozen overnight and serially sectioned longitudinally using a band saw. These frozen longitudinal sections reveal [homogeneous/heterogeneous], [insert color], tumoral tissue measuring [*]*x[*]*x[*] cm.

There [is/are] [#] tumor nodule(s) present. [If multiple tumor nodules are present, describe.] The tumor is located within the medullary cavity [with/without] extension into the adjacent soft tissue. The joint space [is/is not] involved by tumor. The tumor is present [#] cm from the surgical resection margin and [#] cm from the closest soft tissue margin. Frozen longitudinal sections that contain the greatest cross section of tumor are fixed in formalin and decalcified.