Specimen Handling Guidelines for Formalin-Fixed Paraffin-Embedded (FFPE) Tissue

If protocol-specific tissue handling instructions for FFPE tissue are not provided in the protocol or through a linked resource (usually in Section 15 in SWOG-led protocols), then follow the instructions outlined below.

Fixing Tissue in Formalin

1. Place the fresh tissue in formalin. **Do not exceed 24 hours fixation time.**
2. Fixed tissue must be processed and embedded in paraffin within 24 hours. Follow institutional procedures for tissue processing and embedding.

FFPE Tissue Slides

- FFPE tissue slides are tissue sliced from an FFPE tissue block and mounted to a glass slide.
  - These vary in thickness and are typically 4-7 µm (microns)
- Slides often may be submitted if the institution cannot release an FFPE tissue block, but this is dependent on the protocol.
- To submit FFPE tissue slides, cut sequential sections from the representative FFPE tissue block as indicated in the protocol.
  - If these instructions are not in the protocol, then cut slides at 4-5 µm (“micron”) thickness on positively charged slides.
- Slides may be stained or unstained. Unstained slides can be positively-charged (often indicated with a + or X – see figure) or uncharged.
  - If not specified in the protocol, then charged slides are preferred.

FFPE Tissue Scrolls (or curls)

1. Scrolls (also called curls) are FFPE tissue sections that are not mounted to glass slides. These are often thicker sections of tissue (e.g., 10 – 20 micron thickness).
2. Add scrolls to a small flat-bottom or conical tube.

Storage of FFPE tissue

1. Store FFPE tissue blocks and slides at room temperature until shipment.

Required Documents for Shipping FFPE Tissue Blocks and Slides:

2. Corresponding pathology report indicating the morphological diagnosis. The report must be labeled with the SWOG Participant ID # and surgical pathology identification number.
3. SWOG Online Specimen Tracking System Packing List.
   a. Note: for quantity of specimens, list the quantities of stained and unstained slides separately.

Biospecimen Bank Retention of FFPE Tissue Blocks and Slides:

FFPE tissue blocks and slides submitted for translational medicine or biobanking will not be returned. If the tissue is needed for participant care, approval for release of the FFPE tissue block or slides must be obtained from Dr. Jimmy Rae before the block can be returned.

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