

Renal Biopsy

Procedure for Handling Tissue for Light Microscopy, Immunofluorescent Histology, and Electron Microscopy

Biopsy specimens are typically obtained by percutaneous needle biopsy, and more rarely, by "open" wedge biopsy. Ideally, a minimum of **3 biopsy cores** are taken and should be assessed to ensure they contain cortex/glomeruli. If tissue cores cannot be assessed immediately and placed in the appropriate fixative/preservative but need "short-term" transport for assessment/allocation (ie, from biopsy suite to pathology), we recommend keeping the tissue moist with a small amount of saline or placing on a saline soaked Telfa. **Do not** use either of the fixatives for this type of short-term transport and **do not** allow the tissue to dry out.

The 3 cores should be allocated as follows:

- 2 cores placed in 10% neutral buffered formalin
 - One core for Light Microscopy (LM)
 - One core for Electron Microscopy (EM)
 - · Formalin is the preferred fixative for the EM core but glutaraldehyde/Trumps fixative is also acceptable
- 1 core placed in Michel's Transport/Zeus preservative
 - Used for immunofluorescence (IF) staining
 - o The IF specimen should be a minimum of 0.6 cm in length and contain approximately 5 or more glomeruli

Required Information

The following is required to be included with the specimen prior to shipping. Failure to provide this information will result in delayed processing.

- 1. The patient's full first and last name **and** a second unique identifier **must** be present on each of the specimen containers.
 - a. The name on the containers must match the paperwork being sent with the specimens.
 - b. Second unique identifiers include: patient medical record, specimen/accession number or order number, or patient's birth date.
- 2. Complete the "Renal Biopsy Patient Information" form or provide Electronic Health Record printouts which include the following information:
 - a. MCL Client Account Number
 - b. The referring/contact nephrologist's name and phone number
 - c. A copy of the patient's medical history and current relevant lab results

Shipping Information

- 1. Ship biopsies as ambient. **Do not** place on ice, dry ice, or freeze the formalin or Michel's/Zeus specimens.
- 2. Include all required paperwork/information from above in the biohazard bag along with the specimen.
- 3. Ship specimen and paperwork to:

Shipping address: Mayo Clinic Laboratories

3050 Superior Drive NW

Attn: Pathology – SDSC Building

Rochester, MN 55905