Genitourinary Grossing Guidelines

**Specimen Type:** URETERECTOMY (resection)

**Procedure:**
1. Measure the length and diameter of the ureter and document provided orientation, if provided.
   a. Include a range in diameter if there is variation.
2. Describe external adventitial surface of ureter.
3. Differentially ink the ureter into proximal, mid, and distal portions, if oriented.
   a. If un-oriented, differentially ink 2-3 colors.
4. If mass is not close to ureteral margin, shave the margin. If mass is close to margin, a perpendicular section should be taken.
5. **For non-neoplastic cases** → keep the ureter intact.
   **For neoplastic cases** → carefully open the ureter longitudinally while trying to avoid cutting through the tumor. Do not touch the mucosa with your fingers, as the mucosa is denuded easily.
6. Examine the mucosal surface for tumors, which are usually papillary.
7. Pin and photograph the specimen.
8. Serially section from one end to the opposite end, maintaining orientation.
   a. Do not make longitudinal sections!
9. Describe and measure lesion (length x width) and depth of invasion.
10. Document if the mass causes strictures or dilated segments.
11. Describe unremarkable mucosa and ureter wall.
12. If small enough, submit entire specimen sequentially or submit end margins and representative sections to include greatest depth of invasion.
   - Ureteral end margins should each be in their own cassette

**Gross Template:**
Labeled with the patient’s name (***), medical record number (***), designated “***”, and received [fresh/in formalin] is a segment of ureter with adherent soft tissue measuring *** cm in length x *** cm in diameter. [Provide orientation, if provided]. The adventitial surface is [describe abnormalities, defects, lesions] inked. Sectioning reveals [describe lesion- size, shape, color, consistency]. The mass measures *** cm from the proximal margin and *** cm from the distal margin. The mass has a *** cm maximum thickness and [is grossly superficial, invades into the wall/periureteric fat, extends to __ cm from the adventitial surface]. The uninvolved wall is tan-white and has a *** cm average thickness. The uninvolved mucosa is [pink-tan, unremarkable]. The lumen ranges from *** to *** cm in diameter. *** lymph nodes are identified ranging from *** to *** cm in greatest dimension. Gross photographs are taken. Representative sections are submitted [describe cassette submission].

Ink key:
Blue- proximal third
Black- mid portion
Green- distal third
Cassette Submission:
- **Incidental removal** – one cassette of representative cross sections
- **Stenotic lesions**
  - Cross sections of stenotic zone
  - Cross sections of proximal and distal areas
- **Neoplastic**
  - Proximal resection margin (en face)
  - Distal resection margin (en face)
  - One section per 1 cm of tumor, up to 4 cassettes
    - To include greatest depth of invasion into the ureteral wall and closest approach to the circumferential margin.
  - One cassette of grossly uninvolved ureter.
  - Submit all lymph nodes