

## Genitourinary Grossing Guidelines

**Specimen Type:** ORCHIECTOMY (for TUMOR)

**Note:** Radical orchiectomy is the unilateral removal of testis, epididymis and spermatic cord for the surgical treatment of malignancy, usually germ cell tumors. The goal of pathologic evaluation is to determine the type and extent of malignancy.

- Note:** - Prior to sectioning the testis, it is best to obtain sections of the spermatic cord to avoid contamination by testicular tumor, which is often loose and friable.
- Shave the spermatic cord margin while the specimen is fresh (tissue retracts after fixation and this section will be difficult to take).
  - After fixation, submit representative cross-sections of proximal, mid, and distal spermatic cord (be clear in cassette summary as to the designation of location on cord, such as “base of cord [nearest testis proper]”).

### **Procedure:**

1. Weigh and measure the specimen.
2. Measure testis and the length and diameter of spermatic cord.
3. Ink the entire surfaces of spermatic cord and testis.
4. Shave the resection margin of spermatic cord (including blood vessels and vas deferens) while specimen is FRESH.
5. Section the spermatic cord longitudinally, look for tumor spread along the cord.
6. Submit representative mid and base of spermatic cord before cutting the testis
7. Bisect the testis and epididymis along the longitudinal axis of the epididymis and through the rete testis, identify the tumor, and **photograph one half of the specimen or both halves.**
8. Serially section the testis at 3 mm intervals parallel or perpendicular to the first plane.
9. Describe the tumor:
  - a. Size in 3 dimensions, demarcation, number
  - b. Color; consistency; homogeneity or lack of it
  - c. Presence of cysts, necrosis, hemorrhage, bone, or cartilage
10. Examine each slice carefully; measure the distance of tumor to rete testis, look for tumor invasion into rete testis, hilar fat, epididymis, spermatic cord, tunica albuginea, and/or other structures.
11. Describe the non-neoplastic testis: stringy? atrophy? fibrosis? nodules?

### **Gross Template:**

Labeled with the patient's name (\*\*), medical record number (\*\*), designated “\*\*\*\*”, and received [fresh/in formalin] is a(n) \*\* gram, \*\* x \*\* x \*\* cm [*intact/disrupted*] orchiectomy. The spermatic cord measures \*\* cm in length x \*\* cm in diameter. The tunica vaginalis is [*disrupted/intact/partial/etc.*]. The tunica vaginalis is opened and reveals a testis that measures \*\* x \*\* x \*\* cm. The tunica albuginea is [*smooth and white or describe lesions present*]. The epididymis measures \*\* x \*\* x \*\* cm.

Sectioning reveals a \*\* x \*\* x \*\* cm lesion in the testicular parenchyma/paratesticular region. The lesion has a [*describe circumscription, cut surface, necrosis, hemorrhage,*

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*focality*]. The lesion [*is confined to the testis, distance from rete testis, invades rete testis, invades hilar soft tissue, invades epididymis, invades the tunica albuginea, invades the tunica vaginalis*].

The remaining testicular parenchyma is [*tan-brown and unremarkable, fibrotic or describe additional lesions*]. No additional lesions are grossly identified. Gross photographs are taken. The lesion is submitted in its entirety (if you can fit the mass in 10 cassettes or fewer). Representative sections are submitted [*describe cassette submission*].

Ink Key:

Black- tunica vaginalis

### Cassette Submission: 8-10 cassettes

- Include sections of spermatic cord
  - o One cassette with en face margin
    - Take this section while specimen is fresh. The cord retracts after fixation.
  - o One cassette sampling mid and distal/base spermatic cord. If tumor invades spermatic cord, submit a **longitudinal** section of tumor with involved spermatic cord
- Submit **entire tumor if you can fit in 10 cassettes or fewer (CAP protocol)**
  - o If tumor is greater than 10 cm, submit 1 block per 1 cm of maximum tumor dimension
  - o If tumor is multifocal, sample the additional nodules
  - o Ensure sections contain tumor with rete testis, with unremarkable testis and tunica albuginea (even away from tumor) to best appreciate lymphatic invasion
    - Tumor with rete testis and hilar soft tissue
    - Sample hemorrhagic and necrotic areas
    - Sample solid/fleshy/cystic areas
- Epididymis

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