

## **BREAST PATHOLOGY GROSSING GUIDELINES**

### **THINGS TO CONSIDER:**

- A. Please review ALL imaging and pathology (including outside reports, operative and oncology notes) PRIOR to grossing any breast case.
  - a. It may be helpful to create a diagram to assist when grossing
- B. Faxitron nodal specimens to document the presence of a clip.
  - a. Annotate image properly (for identification and orientation) and document in the gross description that a Faxitron image was taken
- C. Evaluate the mass/lesion size after sectioning: correlate with the location in the clinical and imaging findings and association with clip.
- D. Multiple masses/lesions/clips: Document the distance between them in your gross description.
- E. Cassette summary should be descriptive enough to correlate gross sampling with microscopic/clinical/imaging findings.
- F. Nodal tissue sections should be thin, no larger than a standard postage stamp size to optimize fixation and histology.
  - a. There should be space around the tissue on all sides so that tissue is not touching the sides of the cassette.
  - b. Tissue should be around 3mm in thickness and failure to submit appropriately sized sections could result in cassettes needing to be reprocessed and delaying the case
  - c. All breast cassettes should be submitted for the 8-hour processor to ensure proper processing and fixation

### **FORMALIN FIXATION**

**Due to CAP-recommended guidelines for ER and HER2/neu (including FISH) testing, specimens should be placed in formalin within one hour after the time of surgery or biopsy (collection time). Furthermore, the breast tissue should be in contact with formalin for at least 6 hours, not to exceed 72 hours.**

**Note:** The exception to this is when the requisition states 'Rule out Lymphoma' or a prior core needle biopsy diagnosis was reported as lymphoma. In these cases, an assessment for a lymphoma work-up should be made (for potential flow cytometric studies or B5 fixation) before placing the breast tissue in 10% NBF.

**Specimen collection time:** The OR staff records the collection time of breast specimens in Beaker and contacts SurgPath personnel to pick up specimens in a timely fashion.

**Ischemic time:** Breast excisions/re-excisions/lumpectomies/partial mastectomies and all mastectomies (including prophylactic ones) are to be **immediately** (within 1 hour) weighed and placed in 10% neutral buffered formalin (NBF) once received or picked up from the OR. Ideally, this task will be performed by the personnel/technician prior to

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accessioning the case. The time the specimen was placed in 10% NBF will be written on the specimen container and documented in Case Notes in Beaker. The collection time and the time the specimen has been placed in 10% NBF will be used to calculate ischemic time:

(Time tissue placed in formalin [documented in case notes]) – (Collection time) =  
Ischemic Time

**When a specimen comes in late on Friday:** Gross the specimen such that you identify the tumor and submit sections of the tumor for the Friday 8-hour processor. If the specimen is still very fresh, then please submit the remaining sections (including lymph nodes) during the weekend such that they'll run on the Sunday processor.

**As always, RECORD THE ISCHEMIC TIME AND THE FORMALIN FIXATION TIME**

**For long weekends/holiday schedule:** All breast main specimens should be prioritized and grossed in before long weekends. Tissue should be submitted for the 8-hour processor for the same day, or the next available 8-hour process per the holiday schedule without going over 72 hours of total fixation.

Note that you may need to place tissue in alcohol if there is risk of over-fixation. You should review this with a PA and/or pathologist beforehand.

### **Calculating formalin fixation times**

Monday – Friday	calculate fixation time until 12am
Sunday	calculate fixation time until 8pm on Sunday

### **Specimen Type: AXILLARY LYMPH NODES**

#### **Procedure:**

1. Weigh, measure, and indicate orientation if provided
2. If oriented (typically- level 1 and level 2), arbitrarily cut into two levels and palpate for lymph nodes. To ensure a thorough dissection is performed section the fibroadipose tissue as well.
3. Submit all lymph nodes (**ideally between 10-20 LN for a full dissection**)
4. If less than 10 lymph node candidates, submit at least 5 more cassettes of adipose tissue.

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### **Gross Template:**

#### **MMODAL COMMAND: "INSERT DISSECTION"**

It consists of a [*measure in three dimensions\*\*\**] portion of fibroadipose tissue. Multiple lymph nodes are identified ranging from [*smallest to largest\*\*\**] cm in maximum dimension. The lymph nodes are sectioned to reveal [*describe cut surface, pink-tank, smooth \*\*\**]. All identified lymph nodes are entirely submitted. [*only put multiple lymph nodes in a single cassette if unsectioned\*\*\**]

[*insert cassette summary\*\*\**]

#### **MMODAL COMMAND: "INSERT ORIENTED NODE"**

It consists of a [*measure in three dimensions\*\*\**] cm portion of oriented fibroadipose tissue. [*Indicate orientation provided\*\*\**]. [*State Number\*\*\**] lymph nodes are found from level 1, which range from [*smallest to largest\*\*\**] cm in maximum dimension. [*State Number*] of lymph nodes are found from level 2, which range from [*smallest to largest\*\*\**] cm in maximum dimension. The lymph nodes are sectioned to reveal [*describe cut surface, indicate if grossly evident metastatic tumor present and provide maximum dimension\*\*\**]. Representative sections of the grossly positive lymph nodes and all remaining identified lymph nodes are entirely submitted.

### **Cassette Submission:**

10-15 cassettes

- submit all lymph nodes grossly negative for metastasis
- submit representative section(s) of grossly positive lymph nodes.
- Indicate largest dimension of LN in cassette summary

### **Sample Cassette Submission:**

A1	Four lymph nodes intact
A2	One grossly positive lymph node (2.1cm in maximum dimension)
A3	Two lymph nodes (differentially inked blue and black, both bisected)
A4-A9	Remaining fibroadipose tissue