

UCLA Breast Frozen Section Guidelines

Sentinel Lymph node FS:

Breast surgeons may ask for FS on sentinel lymph node(s). Many believe that there should be only one sentinel lymph node (the first lymph node to drain from the breast tumor) but this is not the case. There may be one or more SLNs guided by both blue dye and radioactive colloid. Surgeons may ask for the presence of macrometastasis in one or multiple lymph nodes or the presence of any carcinoma in a post-neoadjuvant chemotherapy treated-patient with or without treatment effect, and they may use this information to perform a complete axillary LN dissection at the same OR setting.

Types of breast cancer LN metastases:

Isolated tumor cells: focus ≤ 0.2 mm or fewer than 200 cells are considered N0(i+)

Micrometastases: focus >0.2 mm - 2 mm are N1mi

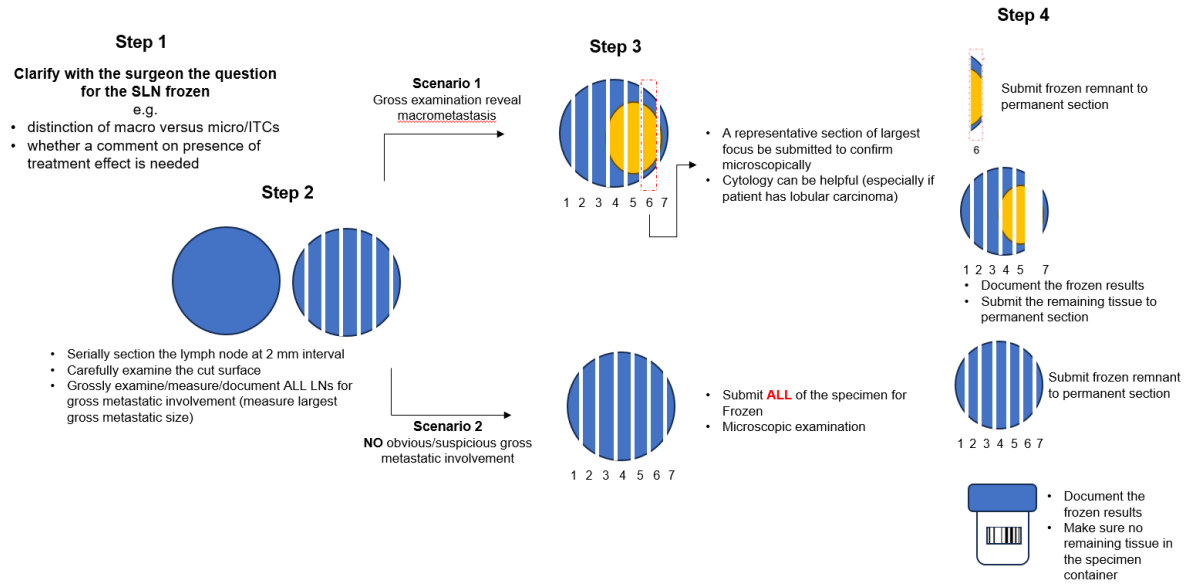
Macrometastases: focus > 2 mm are N1

Procedure:

1. Clarify with the surgeon the question for the SLN frozen (e.g., distinction of macro versus micro/ITCs, number of LNs to freeze, comment on treatment effect)
2. Measure the lymph node in three dimensions.
3. Serially section each lymph node at 2mm intervals and grossly examine for gross metastatic involvement. If you grossly see involvement then document on the frozen form.
 - a. **If obvious**/suspicious gross metastatic involvement is seen, a representative section of largest focus should be submitted to confirm microscopically. Cytology can be helpful (especially if patient has lobular carcinoma).
 - b. **If NO obvious**/suspicious gross metastatic involvement is seen and only a representative portion of the LN is submitted for FS, the remaining portion of the LN should be submitted for frozen evaluation to exclude microscopic metastases.

This is only a general guide and should not replace clear communication with the surgeon, reasonable clinical judgement, and support from the faculty attendings.

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Breast Mass and Margin Gross FS:

Don't do it! A FS on a lumpectomy margin is not recommended due to high fat composition leading to technical difficulty particularly with invasive lobular carcinoma. Some surgeons may request an intra-operative "ink and gross." Luckily, these happen infrequently.

Procedure:

1. Ink breast tissue with 6 colors (UCLA standard protocol).
2. Bread-loaf into 3-5 mm intervals.
3. Assess tumor to surgical margin grossly.
4. Report Gross assessment (No FS done).
5. The Attending on the Breast Service is available for consultation.