###### Purpose

To provide a procedure for the processing of a breast core through the standard lymphoma workup protocol.

1. **Principle**

###### To take imprints, submit fresh breast tissue for as many special studies as possible, and submit sections for permanent section so that a diagnosis can be made microscopically by a Pathologist.

###### Equipment

* Ruler
* Forceps

1. **Safety**

* **PPE** should be worn.
* **FORMALIN** is a known carcinogen.

1. **Supplies and Reagents**

* 6 Glass Slides (2 uncharged, 4 +)
* RPMI Tissue Culture Media- Flow Cytometry
* Tissue Culture Media (sterile)- Cytogenetics
* Small Clear Plastic Jars
* **10% NEUTRAL BUFFERED FORMALIN** (pH range 6.9 – 7.2)
* Aqueous Buffered Zinc Formalin (Z-Fix)

1. **Quality Control**

All tissue should be submitted.

1. **Limitations/ Notes**

The following may influence the validity of test results:

The specimen should be received fresh so that imprints can be made and tissue can be procured for special studies

1. **Procedure**
2. The specimen will be received fresh or may arrive already divided into two containers (saline and formalin).
3. Dictate the number, the size range, the color, and the consistency of the cores.
4. Imprints should be done (on the fresh tissue or tissue received in saline) for possible Diff-Quik stains (2 – uncharged slides) and FISH (4 on + slides). The cytology imprints will be held for possible Diff Quik stain in the Cytology Lab. The FISH imprints will be picked up by the Cytogenetics Lab. If specific FISH tests are to be performed, the pathologist assigned to the case should notify Cytogenetics directly.
5. Tissue should be submitted for routine histology, flow cytometry (RPMI tissue culture media), and cytogenetics (sterile tissue culture media). If received in two containers, the cores received in formalin should be submitted for routine histology and the cores received in saline should be submitted for flow cytometry and cytogenetics after imprints are made.
6. If there is enough, a second cassette should be submitted that is fixed in zinc buffered formalin fixative. After 6-8 hours of fixation, the z-fixed section can be transferred to formalin. If submitted, the z-fix block should be #1.
7. All cores submitted for permanent sections should be placed between blue sponges and inked with hematoxylin.
8. Include in the dictation the cold ischemic time and approximate hours of fixation.
9. If there is not enough tissue for all studies, consult the pathologist assigned to the case. The priority should be formalin, imprints, flow cytometry, cytogenetics, and z-fixative. The priority may vary depending on the preference of the pathologist assigned to the case.
10. In the pathology report, include a detailed description of the special studies that are submitted related to the lymphoma workup protocol.
11. The cassette(s) should be loaded on the appropriate large processor to allow for a **minimum** of 6-8 hours of fixation. If grossed later in the day and 6-8 hour of fixation cannot be attained, hold the specimen to be processed next day, making sure the case is assigned to the appropriate pathologist.
12. **References**

Hruban RH, Westra, WH, Phelps, PH, & Isacson, C: Surgical Pathology Dissection An Illustrated Guide, New York, NY, Springer-Verlag Inc., 1996.

Lester, SC: Manual of Surgical Pathology, New York, NY, Churchill

Livingstone, 2001.

1. **Authorized Reviewers**

* Medical Director, Anatomic Pathology
* Chief, Surgical Pathology

##### Document Control

##### Location of Master: Master electronic file stored on the Beaumont Laboratory server under

S:\AP\_Grossing\_Manual

**Number of Controlled Copies posted for educational purposes: 0**

**Number of circulating Controlled Copies: 1**

**Location of circulating Controlled Copies: Master Grossing Manual** located in Surgical Pathology

##### Document History

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| Prepared by: *Heather Genson, HTL(ASCP)CMPACM* | 5/7/2015 | **r00** |  |  |
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| *Mitual B Amin, MD* | 1/20/2016 | **r00** |  |  |
| *Kurt Bernacki, MD* | 10/27/2017 | **r00** |  |  |
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| *Kurt Bernacki, MD* | 10/20/2021 | **r00** |  |  |
| Revised by: Heather Genson, HTL(ASCP)CMPACM | 04/28/2022 | **r01** | Updated fixation times for Z-Fix |  |
| Approved by: *Kurt Bernacki, MD* | 5/4/2022 | **r01** |  |  |
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