Criteria	Yes	No
Diagnosis Discrepancy		✓
Primary Tumor Site Discrepancy		✓
HIPAA Discrepancy		✓
Prior Malignancy History		✓
Dual/Synchronous Primary Noted		✓
Case is (circle): QUALIFIED DISQUALIFIED		
Reviewer Initials RB Date Reviewed: 9/29/11		

10/21/11

UUID:89A67051-898A-4E2A-A874-E0165F274E63
TCGA-A1-A0SG-01A-PR

Redacted

ICD-O-3
carcinoma, infiltrating micropapillary, intraductal 8507/3
Site: breast, NOS C50.9 lw 10/21/11

Final Pathologic Diagnosis:

A. Right axillary sentinel lymph node #1, count = 3500, dissection: Metastatic adenocarcinoma in one of two lymph nodes (1/2).

B. Right axillary sentinel lymph node #2, count = 500, dissection: No tumor in two lymph nodes (0/2).

C. Right breast, partial mastectomy:
1. Invasive micropapillary carcinoma, 2.1 cm, associated with microcalcifications; see comment.
2. Atypical lobular hyperplasia.
3. Fibroadenoma.
4. Microcalcifications in benign ducts.

D. Sentinel lymph node #3, count = 350, dissection: No tumor in two lymph nodes (0/2).

Note:

Breast Tumor Synoptic Comment

- Laterality: Right.
- Invasive tumor type: Invasive micropapillary carcinoma.
- Invasive tumor size: 2.1 cm maximum diameter. The tumor is present in slices 4, 5, 9, and 10; however the tumor has been banked from slices 6, 7, and 8. Therefore, the tumor extends through seven consecutive slices, each with a width of approximately 0.3 cm, for a total maximum diameter of 2.1 cm.
- Invasive tumor grade (modified Bloom-Richardson): 2
  Nuclear grade: 3, 3 points.
  Mitotic count: < 10 mitotic figures/10 HPF, 1 point.
  Tubule/papilla formation: Definite tubule formation in <10%, 3 points.

Total points and SBR grade = 7 points, grade 2.
- Lymphatic-vascular invasion: None identified.
- Perineural invasion: None identified.
- Resection margins for invasive tumor:
  - Deep margin: Negative (1 cm).
  - Medial margin: Negative (0.9 cm).
  - Lateral margin: Negative (0.6 cm).
  - Anterior/superior margin: Negative (0.5 cm).
  - Anterior/inferior margin: Negative (greater than 1 cm).

- Ductal carcinoma in situ (DCIS) type: None identified.

- Microcalcifications: Present involving both benign ducts and invasive carcinoma.

- Lobular carcinoma in situ (LCIS): None identified.

- Lymph node status:
  - Number of positive lymph nodes: 1.
  - Total number sampled: 6.
- Diameter of largest metastasis: 2.1 mm.
- Extranodal extension: Absent.
- AJCC/UICC stage: pT2N1aMX.

- Nontumorous breast tissue: Atypical lobular hyperplasia, fibroadenoma, and sclerosing adenosis.

- Additional comments: We reviewed the original frozen section slides and concur with the frozen section diagnosis rendered. The metastatic tumor in Part A was only present in the additionally submitted sections of the lymph node (slide A2). Level sections on A2-A4 confirms the diagnosis. Select slides from part C were shown at the the faculty in attendance concurred with the above diagnosis of micropapillary type of invasive carcinoma. Dr. has reviewed A2 and concurs with the diagnosis.

An immunohistochemical test for estrogen and progesterone receptors was performed on block C9.

The test for estrogen receptors is positive. There is 3+ nuclear staining in >95% of tumor cells.

The test for progesterone receptors is positive. There is 3+ nuclear staining in >95% of tumor cells.

Result of HER2/neu test: This carcinoma is negative for HER2/neu oncoprotein over-expression.

An immunohistochemical assay was performed on block C9 using the CB11 monoclonal antibody to HER2/neu oncoprotein. The staining intensity of this carcinoma was 1 on a scale of 0-3.

Carcinomas with staining intensity scores of *0 or 1* are considered *negative* for over-expression of HER2/neu oncoprotein.

Those with a staining intensity score of *2* are considered *indeterminate*. We and others have observed that many carcinomas with staining intensity scores of 2 do not show gene amplification. All carcinomas with staining intensity scores of 2 are therefore submitted for FISH testing. The results of the FISH test are issued directly from the molecular cytogenetics laboratory.

Carcinomas with staining intensity scores of *3* are considered *positive* for over-expression of HER2/neu oncoprotein. Tumors in this category show an excellent correlation between the results of immunohistochemical and FISH testing, and almost always show gene amplification.

Slide A2 was shown at the departmental Consensus Conference, and the faculty in attendance concurred with the above diagnosis.

Intraoperative Consult Diagnosis

FS1 (A) Right axillary SLN #1, biopsy: Negative for carcinoma. (Dr.

Clinical History

The patient is a year-old woman with right breast carcinoma.

Gross Description

The specimen is received in four parts, each labeled with the patient's name and medical record number.

Part A is received fresh and labeled It consists of one pink-yellow, soft, fatty tissue that measures 3.1 x 2.5 x 0.8 cm. The specimen is strained and two candidate lymph nodes are found, the smallest is inked blue and submitted with a representative section of the largest submitted for frozen diagnosis #1, thereafter submitted in cassette A1. The remnant of the largest lymph node is transected and entirely submitted in cassettes A2-A3, and the remnant of the yellow fatty tissue is submitted in cassette A4.

Part B, additionally labeled consists of a single fragment of yellow, fibrofatty tissue measuring 2 x 1.8 x 0.4 cm. The specimen is entirely submitted in cassette B1.

Part C, additionally labeled consists of a right breast specimen oriented with a short superior and a long stitch lateral. The specimen measures 3.2 cm from anterior to posterior, 5 cm from medial to lateral and 6.5 cm from superior to inferior. The resection margins are inked as follows for microscopic evaluation: anterior superior in blue, anterior inferior in green and posterior in black. The specimen is serially sectioned from medial to lateral into twelve slices. There is gray-white, fibrous tissue in the superior half of the specimen in slices 3-11, measuring 2.4 x 2 x 1.5 cm. White fibrous tissue extends from this area to the anterior inferior aspect in slices 5-8. The gray-white fibrous tissue appears extend to the inked margin in the posterior superior aspect of slices 3 and 4, and appears to be 0.5 cm from the anterior superior inked margins in slices 5 and 9. Representative sections are submitted as follows:

Cassette C1:	Representative medial margin, slice 1, bread-loafed.
Cassette C2:	Representative section of slice 3.
Cassettes C3-C5:	Slice 4.
Cassette C6:	Representative section of slice 5.
Cassette C7:	Representative section of slice 6.
Cassette C8:	Representative section of slice 8.
Cassette C9:	Representative section of slice 9.
Cassettes C10-C11:	Representative sections of slice 10.
Cassette C12:	Representative section of slice 11.
Cassette C13:	Representative lateral margin, slice 12, bread-loafed.

Part D, additionally labeled consists of a single, yellow, fibrofatty tissue fragment measuring 2.5 x 1.5 x 0.4 cm. The specimen is entirely submitted in cassette D1.

The immunoperoxidase stain(s) reported above were developed and their performance characteristics determined by the . They have not been cleared or approved by the U. S. Food and Drug Administration. The FDA has determined that such clearance or approval is not necessary. These tests are used for clinical purposes. They should not be regarded as investigational or for research. This laboratory is certified under the Clinical Laboratory Improvement Amendments of 1988 ("CLIA") as qualified to perform high-complexity clinical testing.

Signed

Fee Codes:

Other Specimens

Specimen Class: **Status:** Signed Out **Accessioned:**
Signed Out:

Specimen(s) Received: Right axillary contents

Final Diagnosis

Axilla, right, "contents," excision:

1. Scar tissue, fat necrosis and suture with giant cell reaction. No malignancy is identified.

2. No metastatic tumor identified in five lymph nodes. (0/5)

Specimen Class: Status: Signed Out Accessioned:
Signed Out:

Specimen(s) Received:

Final Diagnosis

Review of from

Breast, right, 10 o'clock, core biopsies: Infiltrating ductal carcinoma, SBR Grade 2; see comment.

END OF REPORT