

PATIENT HISTORY:

CHIEF COMPLAINT/PRE-OP/POST-OP DIAGNOSIS: 1.2-cm mass upper inner quadrant left breast, core biopsy invasive ductal carcinoma.

LMP DATE: Not provided.

PROCEDURE: Left segmental mastectomy, sentinel lymph node biopsy.

SPECIFIC CLINICAL QUESTION: Not provided.

OUTSIDE TISSUE DIAGNOSIS: No.

PRIOR MALIGNANCY: No.

CHEMORADIATION THERAPY: No.

OTHER DISEASES: No.

UUID: 801A4E2F-E26E-424F-BF42-CD0D9CD62BCE
TCGA-BH-A0W3-01A-PR

Redacted

**ADDENDA:****Addendum**

Immunostains for HER-2/neu were performed on block 1B.

HER2 IMMUNOHISTOCHEMISTRY: Using appropriate formalin fixed (8 - 96 hours), controls and tissue test block, 4B5 antibody clone is used as part of FDA approved Pathway on the and interpreted as follows:

2+ = A weak to moderate complete membrane staining is
(Equivocal) observed in more than 10% of the tumor cells)

NOTE: Her-2/Neu FISH was ordered and will be subsequently reported.

CASE SYNOPSIS:

SYNOPTIC - PRIMARY INVASIVE CARCINOMA OF BREAST

LATERALITY:

Left

PROCEDURE:

Segmental

LOCATION:

Upper inner quadrant

SIZE OF TUMOR:

Maximum dimension invasive component: 15 mm

MULTICENTRICITY/MULTIFOCALITY OF INVASIVE FOCI:

No

TUMOR TYPE (invasive component):

Ductal adenocarcinoma, NOS

NOTTINGHAM SCORE:

Nuclear grade: 2

Tubule formation: 3

Mitotic activity score: 1

Total Nottingham score: 6

Nottingham grade (1, 2, 3): 2

ANGIOLYMPHATIC INVASION:

No

DERMAL LYMPHATIC INVASION:

Not applicable

CALCIFICATION:

No

TUMOR TYPE, IN SITU:

Cribiform

Micropapillary

SURGICAL MARGINS INVOLVED BY INVASIVE COMPONENT:

No

LYMPH NODES EXAMINED:

4

METHOD(S) OF LYMPH NODE EXAMINATION:

H/E stain

SENTINEL NODE METASTASIS:

Yes

T STAGE, PATHOLOGIC:

pT1c

N STAGE, PATHOLOGIC:

pN1a

M STAGE:

Not applicable

ESTROGEN RECEPTORS:

positive, H-score: 300

PROGESTERONE RECEPTORS:

positive, H-score: 225

HER2/NEU:

2+

INTERPRETATION

nuc ish(D17Z1,ERBB2)x2-6[80]

No amplification of the HER-2/NEU gene was seen by interphase FISH analysis.

RESULTS:

Fluorescence in situ hybridization (FISH) analysis was performed on a formalin-fixed Block 1B (Left segmental mastectomy 10:00) using the DNA probe for the HER-2/NEU gene. An adequate number of invasive tumor cells were present and evaluated by four independent observers. The ratio of HER-2/NEU signals (ERBB2) to chromosome 17 centromere signals was determined to be 1.69. A ratio of greater than 2.2 is considered to be amplified with ratios of 1.80 to 2.20 in the equivocal range; therefore, this specimen is not amplified. The average number of HER-2/NEU signals per cell was 4.10. The average number of signals for the chromosome 17 centromere was 2.43. Many of the cells exhibited 3 or more signals for both the HER-2/NEU gene and for the chromosome 17 centromere. This may be indicative of either polyploidy or aneuploidy for chromosome 17. Concurrent positive and negative control specimens showed the expected results.

This FISH test is performed using a modification of the Vysis FDA approved PathVysion HER-2 DNA Probe Kit (1:2 LSI HER-2/neu / CEP17 probe: T-denyb-2 buffer). This FISH test was developed and its performance determined by the

Pursuant to the requirements of CLIA '88, this laboratory has established and verified the test's accuracy and precision.

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	10/15/11	10/15/11

Criteria	Yes	No
Diagnosis Discrepancy		<input checked="" type="checkbox"/>
Primary Tumor Site Discrepancy		<input checked="" type="checkbox"/>
HIPAA Discrepancy		<input checked="" type="checkbox"/>
Prior Malignancy History		<input checked="" type="checkbox"/>
Dist/Synchronous Primary Malignancy		<input checked="" type="checkbox"/>
Case is (circle): <u>QUALIFIED</u> / DISQUALIFIED		
Reviewer Initials: <u>MB</u> Date Reviewed: <u>1/24/10</u>		

FINAL DIAGNOSIS:

PART 1: BREAST, LEFT, SEGMENTAL MASTECTOMY AT 10:00-

- A. INVASIVE DUCTAL CARCINOMA, NOTTINGHAM GRADE 2 (TUBULAR FORMATION 3, NUCLEAR GRADE 2, MITOTIC ACTIVITY 1; TOTAL SCORE 6/9).
- B. THE INVASIVE TUMOR MEASURES 1.5 CM IN LARGEST DIMENSION (GROSS MEASUREMENT).
- C. DUCTAL CARCINOMA IN SITU (DCIS), MICROPAPILLARY AND CRIBRIFORM PATTERNS, NUCLEAR GRADE 2.
- D. DCIS ACCOUNTS FOR 6% OF TOTAL TUMOR VOLUME, ADMIXED WITH OR CLOSE TO INVASIVE COMPONENT.
- E. INVASIVE TUMOR IS 2.5 MM FROM ANTERIOR MARGIN AND 4 MM FROM POSTERIOR MARGIN; DCIS IS LESS THAN 0.2 MM FROM THE ANTERIOR MARGIN.
- F. NO LYMPHOVASCULAR INVASION IDENTIFIED.
- G. ATYPICAL DUCTAL HYPERPLASIA.
- H. NON-NEOPLASTIC BREAST TISSUE SHOWING PAPILLOMA, FIBROCYSTIC CHANGE AND DUCTAL EPITHELIAL HYPERPLASIA.
- I. BIOPSY SITE CHANGES.
- J. TUMOR IS POSITIVE FOR ER AND PR, HER-2/NEU SCORE 2+ (✓)

PART 2: ADDITIONAL ANTERIOR MARGIN, NEW ANTERIOR MARGIN, EXCISION - BENIGN BREAST FIBROADIPOSE TISSUE.

PART 3: LEFT AXILLARY SENTINEL LYMPH NODE #1, BIOPSY -

- A. ONE OF TWO (1/2) LYMPH NODES, POSITIVE FOR METASTATIC CARCINOMA (SEE COMMENT).
- B. THE TUMOR MEASURES 1 CM.

PART 4: LEFT SENTINEL LYMPH NODE #2, BIOPSY -

ONE LYMPH NODE NEGATIVE FOR METASTATIC CARCINOMA (0/1).

PART 5: LEFT SENTINEL LYMPH NODE #3, BIOPSY -

ONE LYMPH NODE, NEGATIVE FOR METASTATIC CARCINOMA (0/1).