ICD-O-3
Carcinoma, infiltrating duct and mucinous 8523/3
Site Code: breast, NOS C50.9 1/12/11 lw

Patient

Surgical Pathology: Additional Info

Surg Path

UUID:267F1EFD-AB89-4124-B803-00CC0E8E9CD2
TCGA-B6-A0IN-01A-PR Redacted

CLINICAL HISTORY:
Breast carcinoma x 2.

GROSS EXAMINATION:
A. "Reexcision right lateral breast, long suture lateral, short suture superior", received fresh and placed in formalin. The specimen is a 10 x 5.5 x 3 cm predominantly fatty tissue specimen with a 6 x 1 cm skin ellipse with a well healed central linear scar. The specimen is inked blue anteriorly, black posteriorly, and red superiorly in accordance with the short and long sutures. The specimen is serially sectioned to reveal a 2 x 2.2 x 0.7 cm indurated white fibrotic area most consistent with biopsy cavity with additional fibrofatty tissue and no abdominal masses is present. The area containing the biopsy cavity is submitted in toto in Blocks A1-A8. Additional medial tissue is submitted in Blocks A9-A10 (please refer to 1 for specific location in biopsy).

B. "Right breast biopsy, long suture lateral, short suture superior", received fresh and placed in formalin. The specimen is 72.4 gram, 8.5 x 6.2 x 2.5 cm excision of breast tissue with a triangular skin resection measuring 5.2 x 1.5 cm. The specimen is inked blue anteriorly, black posteriorly, red superiorly and sectioned from medial to lateral to reveal a 2.2 x 2.1 x 1.1 cm white-tan and white irregular nodule which approaches the initial posterior margin of resection grossly. The tissue medial to the mass is submitted in Blocks B1-B2 and the tissue containing the mass is submitted from medial to lateral in toto in Blocks B3-B9 (refer to mammogram for specific location). An additional section of uninvolved lateral tissue is submitted in Block B10. Additionally there is a free floating fragment of predominantly fatty tissue with a suture which measures 4 x 3.5 x 0.7 (designated new posterior margin per surgeon). The portion of tissue containing the suture is Block B11. Tissue is submitted fresh for estrogen and progesterone receptors.
Dr.

DIAGNOSIS:

A. "RE-EXCISION RIGHT LATERAL BREAST", (RE-EXCISION):

INTERMEDIATE GRADE DUCTAL CARCINOMA IN SITU. NO EVIDENCE OF INVASIVE CARCINOMA.
TYPE OF IN SITU CARCINOMA: CRIBRIFORM AND SOLID, WITH EXTENSIVE LOBULAR CANCERIZATION.
SIZE OF IN SITU CARCINOMA, 2.2 CM.
STATUS OF NON-NEOPLASTIC BREAST TISSUE: STROMAL FIBROSIS, AND CHANGES CONSISTENT WITH PRIOR BIOPSY SITE.
MICROCALCIFICATIONS PRESENT, IN ASSOCIATION WITH DUCTAL CARCINOMA IN SITU.
SURGICAL MARGIN STATUS, POSITIVE MULTIFOCALLY FOR DUCTAL CARCINOMA IN SITU.

B. "RIGHT BREAST", (STEREOTACTIC NEEDLE BIOPSY):

INFILTRATING DUCTAL ADENOCARCINOMA. SEE COMMENT.
N.S.A.B.P. NUCLEAR GRADE 2-3 OF 3.
N.S.A.B.P. HISTOLOGIC GRADE 3 OF 3.
GROSS TUMOR SIZE, 2.2 CM.
SIZE OF INVASIVE COMPONENT, 1.6 CM.
LYMPHATIC/VASCULAR INVASION, ABSENT.
MULTIFOCAL TUMOR, NO.
DUCTAL CARCINOMA IN SITU PRESENT, OCCUPYING 20% OF TUMOR.

Criteria	Yes	No
Diagnosis Discrepancy		X
Primary Tumor Site Discrepancy		X
HIPAA Discrepancy		X
Prior Malignancy History		X
Dual/Synchronous Primary Noted		
Case is (circle): QUALIFIED DISQUALIFIED		
Review Needed	Date Review: 1-13-11	

TYPE OF IN-SITU CARCINOMA, CRIBRIFORM AND SOLID.
STATUS OF NON-NEOPLASTIC BREAST TISSUE: PROLIFERATIVE FIBROCYSTIC CHANGES.
SKIN AND MUSCLE, WITHOUT SIGNIFICANT HISTOLOGIC ABNORMALITIES.
MICROCALCIFICATIONS, ABSENT.
SURGICAL MARGIN STATUS (SEE COMMENT).
ESTROGEN/PROGESTERONE RECEPTOR AND CELL CYCLE ANALYSIS: PENDING.
METHODOLOGY: IMMUNOHISTOCHEMISTY, PARAFFIN BLOCK B6.
RESULTS WILL BE ISSUED IN AN ADDENDUM.

COMMENT: Intraductal carcinoma is seen at the posterior inked surgical margin of resection in part "B". However, the region further designated as "new" posterior margin is negative for tumor.

Focal mucinous differentiation is present in the main invasive tumor mass (part "B"). However, this represents a minority of the invasive component which otherwise is poorly-differentiated.

I certify that I personally conducted the diagnostic evaluation of the above specimen(s) and have rendered the above diagnosis(es).

M.D.

Electronically signed

ADDENDUM 1:

Tissue was sent to the for assay of the estrogen and progesterone receptors. The estrogen receptor activity was judged to be positive with an estimated FMOL value of 54. The progesterone receptor activity was judged as negative with an estimated FMOL value of 0. Please refer to for a complete report.

I certify that I personally conducted the diagnostic evaluation of the above specimen(s) and have rendered the above diagnosis(es).

Electronically signed

ADDENDUM 2:
HER2/neu IMMUNOHISTOCHEMICAL ANALYSIS

Immunostaining for HER2/neu (c-erbB-2) oncoprotein is performed on recut sections of block B7. The tumor cells exhibit staining of their cell membrane (score 2+), indicating that they do overexpress HER2/neu oncoprotein.

METHOD: The immunostaining is done using DAKO rabbit anti-human c-erbB-2 oncoprotein which is an affinity-isolated antibody

. The immunostaining is performed after antigen retrieval by heating the unstained sections at 95 degrees centigrade for 20 minutes in 10 mM citrate buffer, pH 6.0. The primary antibody is used at a dilution of 1:3000 (manual staining), with an incubation for one hour at 37 degrees centigrade. The Histostain Plus kit is used as the detection system.

I certify that I personally conducted the diagnostic evaluation of the above specimen(s) and have rendered the above diagnosis(es).

Electronically signed

CI ADDENDUM 1:
COMMENT: This addendum is issued to report the results of HER2/neu FISH analysis performed at in the

This assay was performed for comparison with the results of the HER2/neu FISH analysis performed at on the same block.

HER2/NEU FISH ANALYSIS

RESULTS: Fluorescence in situ hybridization (FISH) with probes for the HER2/neu region of chromosome 17 (17q11.2q12) and the centromere of chromosome 17 (D17Z1) was performed on block B7. The HER2/neu and centromere 17 signals were enumerated in 60 nuclei from an invasive area of the tumor located by comparison with the hematoxylin and eosin stained adjacent section. The HER2/neu to centromere 17 ratio was 2.00 +/- 0.89 (mean +/- 1 S.D.). For comparison, analysis at a ratio of 2.18.

INTERPRETATION: This specimen IS NOT AMPLIFIED for the HER2/neu gene. A HER2/neu to D17Z1 ratio greater than 2.00 usually indicates HER2/neu gene amplification. In this case, statistical analysis of the results indicate that the result IS NOT significantly greater than 2.00. Most nuclei had 2 copies of the chromosome 17 centromere and 3 copies of the HER2/neu gene.

METHODOLOGY: The PathVysion Her2 DNA Probe Kit was used to obtain these results. The PathVysion HER2 DNA Probe Kit is designed to detect amplification of the HER2/neu gene via fluorescence in situ hybridization (FISH) in formalin-fixed paraffin-embedded human breast cancer tissue specimens. The use of these FISH probes has been approved by the U.S. Food and Drug Administration. This test is not intended to screen for or diagnose breast cancer. It is intended to be used as an adjunct to existing clinical and pathologic information currently used for the prognosis of breast cancer patients.

I certify that I personally conducted the diagnostic evaluation of the above specimen(s) and have rendered the above diagnosis(es).

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