ICD-O-3
Carcinoma, infiltrating duct, NOS 8500/3
Path Site Code: breast, upper outer quadrant C50.4
CQLF Site: breast, NOS C50.9
12/9/10 lw

TSS Pt Id:

SPECIMENS:

A. SENTINEL LYMPH NODE #1 LEFT AXILLA
B. SENTINEL LYMPH NODE #2 LEFT AXILLA
C. SENTINEL LYMPH NODE #3 LEFT AXILLA
D. LEFT BREAST
E. RIGHT BREAST SKIN

UUID:AA1BACC4-0B3D-4E2E-865E-24B570DA4E74
TCGA-E2-A10A-01A-PR Redacted

SPECIMEN(S):

A. SENTINEL LYMPH NODE #1 LEFT AXILLA
B. SENTINEL LYMPH NODE #2 LEFT AXILLA
C. SENTINEL LYMPH NODE #3 LEFT AXILLA
D. LEFT BREAST
E. RIGHT BREAST SKIN

INTRAOPERATIVE CONSULTATION DIAGNOSIS:

TP A-C: Negative for tumor. By Dr., called to Dr.

GROSS DESCRIPTION:

A. SENTINEL LYMPH NODE #1 LEFT AXILLA
Received fresh labeled with patient name designated "A – sentinel lymph node #1 left axilla" is a fragment of beige-tan possible lymphoid tissue measuring 1.1 x 0.9 x 0.3 cm. The specimen is serially sectioned. Touch preps were performed. The entire specimen is submitted in cassette A1.

B. SENTINEL LYMPH NODE #2 LEFT AXILLA
Received fresh labeled with patient name designated "B – sentinel lymph node #2" is a fragment of yellow-red fibroadipose tissue measuring 3.2 x 1.5 x 0.7 cm. One possible lymph node is identified measuring 1.2 x 0.6 x 0.5 cm. The specimen is bisected. Touch preps were performed. The entire lymph node is submitted in cassette B1.

C. SENTINEL LYMPH NODE#3 LEFT AXILLA
Received fresh labeled with patient name designated "C – sentinel lymph node #3 left axilla" is a fragment of beige-tan possible lymphoid tissue measuring 1.2 x 0.6 x 0.4 cm. The specimen is serially sectioned, touch preps were performed. The entire specimen is submitted in cassettes C1.

D. LEFT BREAST
Received fresh labeled with patient name designated "D – left breast" is a resected mastectomy specimen weighing 676 grams and measuring 22.5 x 19 x 3 cm. The specimen is received with orientation. A suture designates the axillary end of breast. The deep margin is inked black. The overlying beige-tan ellipse of skin measures 14.5 x 4.2 cm. The light brown areola measures 3.5 cm in diameter. The everted nipple measures 1.1 cm in diameter. The specimen is serially sectioned from medial to lateral. Cut section shows a firm beige-tan mass in the upper outer quadrant approaching the deep surgical margin at closest distance 1.3 cm and is located 5 cm from the axillary tail. The lesion measures 3.6 x 3 x 2.2 cm. This lesion extends to the lower outer quadrant for about 2.5 x 1.5 cm. A second possible lesion is noted in the upper outer quadrant superior to the first main mass approaching the deep surgical margin at a distance of 2.5 cm. This area is located 5.2 cm from the first lesion and measures 0.5 x 0.5 x 0.4 cm. A third possible subareolar is noted located 4.5 cm from the first main mass in the upper outer quadrant. This third lesion measures 0.6 x 0.5 x 0.5 cm. A fourth possible mass is located approximately 2.5 cm from the main mass in the upper outer quadrant and approaches the deep margin at a distance of 2.2 cm. The fourth lesion measures 0.5 x 0.3 x 0.3 cm. The remainder of the breast parenchyma shows multiple patchy fibrous firm tissue. A portion of the specimen is submitted for tissue procurement. Representative sections are submitted as follows:

D1-D3: the main mass in the upper outer quadrant with overlying deep margin
D4-D5: remainder of the main mass in the upper outer quadrant
D6: lesion #2 upper outer quadrant
D7: lesion #3 subareolar
D8: lesion #4 upper outer quadrant
D9-D10: additional firm fibrous tissue adjacent to main mass of lower outer quadrant
D11-D14: additional section lower outer quadrant
D15-D16: fibrous tissue central subareolar
D17-D18: representative sections upper inner quadrant
D19-D21: representative sections lower inner quadrant
D22: section of nipple
D23: representative sections of skin

D24-D28: multiple possible axillary lymph nodes

E. RIGHT BREAST TISSUE SKIN
Received in formalin in a container labeled with the patient name designated "e. right breast skin" is an irregular fragment of beige-tan skin measuring 11.4 x 4.5 x 0.3 cm. The surface of the specimen is unremarkable. A section shows unremarkable skin tissue. Representative sections are submitted in cassettes E1-E3.

DIAGNOSIS:

A. SENTINEL LYMPH NODE #1, LEFT AXILLA, EXCISION:
- ONE LYMPH NODE, NEGATIVE FOR TUMOR (0/1).

B. SENTINEL LYMPH NODE #2, LEFT AXILLA, EXCISION:
- ONE LYMPH NODE, NEGATIVE FOR TUMOR (0/1).

C. SENTINEL LYMPH NODE #3, LEFT AXILLA, EXCISION:
- ONE LYMPH NODE, NEGATIVE FOR TUMOR (0/1).

D. LEFT BREAST, MASTECTOMY:
- INVASIVE DUCTAL CARCINOMA, MULTIFOCI, SBR GRADE II.
- SIZE OF LARGEST TUMOR FOCUS MEASURING 6.1 X 4.5 CM.
- DUCTAL CARCINOMA IN-SITU, CRIBRIFORM AND MICROPAPILLARY TYPES.
- ATTACHED SKIN AND NIPPLE, NEGATIVE FOR TUMOR.
- SURGICAL RESECTION MARGINS, NEGATIVE FOR TUMOR.
- SEE TEMPLATE.

SYNOPTIC REPORT - BREAST
Specimens Involved
Specimens: D: LEFT BREAST

Specimen Type: Mastectomy
Needle Localization: No
Laterality: Left
Invasive tumor: Present
Multifocality: Yes
WHO CLASSIFICATION
Invasive ductal carcinoma, NOS 8500/3
Specimen size: Size of Invasive focus 6.1cm
Additional dimensions: 4.5cm x 2.2cm
Tumor Site: Upper outer quadrant
Lower outer quadrant
Margins: Negative
Distance from closest margin: 1.3cm
Margin: deep
Tubular score: 2 (10-75% tubule)
Nuclear grade: 2
Mitotic score (Olympus 40x): 2 (7-13/10)
Modified Scarff Bloom Richardson Grade: II (6-7 points)
Necrosis: Present
Vascular/Lymphatic Invasion: Indeterminate
Lobular neoplasia: None
Lymph nodes: Sentinel lymph node only
Lymph node status: Negative 0 / 3
Non-neoplastic areas: Fibrocystic disease, pseudoangiomatous stromal hyperplasia
DCIS present
DCIS Quantity: Estimate % 10
DCIS type: Cribriform
Micropapillary
DCIS location: Associated with invasive tumor
Nuclear grade: Intermediate
Necrosis: Absent
Location of CA++: Benign epithelium
Pathological staging (pTN): pT 3 N 0
Comment(s): See breast biomarker template

SYNOPTIC REPORT - BREAST, ER/PR RESULTS
Specimens Involved
Specimens: D: LEFT BREAST

SPECIMEN:
Other
mastectomy
Block Number: D4
ER: Positive - Allred Score: 7 = Proportion score: 4 + Intensity Score 3
PR: Positive - Allred Score: 8 = Proportion Score 5 + Intensity Score 3
COMMENT:
The Allred score for estrogen and progesterone receptors is calculated by adding the sum of the proportion score (0 = no staining, 1 = <1% of cells staining, 2 = 1 - 10% of cells staining, 3 = 11-30% of cells staining, 4 = 31-60% of cells staining, 5 = >60% of cells staining) to the intensity score (1 = weak intensity of staining, 2 = intermediate intensity of staining, 3 = strong intensity of staining), with a scoring range from 0 to 8.
ER/PR positive is defined as an Allred score of >2 and ER/PR negative is defined as an Allred score of less than or equal to 2.
Methodology: Fixation Type and Length: Tissue was fixed in 10% neutral buffered formalin
) for no less than 8 and no longer than 24 hours. Antibody and Assay Methodology: Mouse anti-human ER and PR,
Comment: This assay can be used to select invasive breast cancer patients for hormone therapy (1). ER and PR analysis was performed on this case by immunohistochemistry utilizing the ER (ER 1D5, 1:100) and PR (PGR 136, 1:100) antibody provided by following the manufacturer's instructions listed in the package insert. This assay was not modified, and adherence to all instruction and guidelines were strictly followed. Interpretation of the ER/PR immunohistochemical staining characteristics is guided by published results in the medical literature (1), information provided by the reagent manufacturer and by internal review of staining performance within the Pathology Department.
1. Harvey JM, et al. Estrogen receptor status by immunohistochemistry is superior to the ligand-binding assay for predicting response to adjuvant endocrine therapy in breast cancer. J Clin Oncol. 17:1474-1481, 1999

CLINICAL HISTORY:
None given

PRE-OPERATIVE DIAGNOSIS:
Left breast ca

ADDENDUM:
E. RIGHT BREAST SKIN, EXCISION:
- FRAGMENT OF UNREMARKABLE SKIN, NEGATIVE FOR TUMOR.

PathVysion HER-2 DNA Probe Kit
Case No
Analytical Interpretation of Results: HER-2 NOT AMPLIFIED
Clinical Interpretation of results
Amplification of the HER-2 gene was evaluated with interphase fluorescence in-situ hybridization (FISH) on formalin-fixed paraffin embedded tissue sections using a chromosome 17 centromeric probe and a HER-2 probe that spans the entire HER-2 gene in the
. A majority of tumors cells displayed 2 chromosome 17 signals and 2 HER-2 signals, with a HER-2/CEP 17 Ratio </=2.0, consistent with no amplification of the HER2/neu gene.
Block used D4 Source of case: RPCI
Tissue fixation formalin-fixed tissue Outside Case No: NA
Tissue source breast Results interpreted: yes
HER2/CEP17 ratio: 1.21
This ratio is derived by dividing the total number of LSI HER-2/neu signals by the total number of CEP17 signals in at least 20 interphase nuclei with nonoverlapping nuclei in the neoplastic mammary epithelial cells. Cells with no signals or with signals of only one color are disregarded.

Method of ratio enumeration: manual count

Limitations

The Vysis PathVysion Kit is not intended for use to screen for or diagnose breast cancer. It is intended to be used as an adjunct to other prognostic factors currently used to predict disease-free and overall survival in stage II, node-positive breast cancer patients. In making decisions regarding adjuvant CAF treatment, all other available clinical information should also be taken into consideration, such as tumor size, number of involved lymph nodes, and steroid receptor status. No

treatment decision for stage II, node-positive breast cancer patients should be based on HER-2/neu

gene amplification status alone.

Overview of this test

FDA APPROVED REAGENT

PathVysion HER-2 DNA Probe Kit is FDA approved for selection of patients for whom Herceptin® therapy is being considered. These tests were performed in the under the direction

of The results of these studies should always be interpreted in the context of the clinical, morphological, and immunophenotypic diagnosis.

Gross Dictation:,
Microscopic/Diagnostic Dictation:., Pathologist,
Microscopic/Diagnostic Dictation: Pathologist,
Microscopic/Diagnostic Dictation: Pathologist
Final Review: Pathologist,
Final: Pathologist,
Addendum: Pathologist,
Addendum Final: Pathologist,
Addendum: Pathologist,
Addendum Review: Pathologist,
Addendum Final:., Pathologist,
Addendum: Pathologist,
Addendum Final:., Pathologist,

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 _____ Date Reviewed: __/__/__		