ICD-O-3

Carcinoma, infiltrating duct, NOS

8500/3 12/8/10

Path Site Code: breast, upper inner quadrant C50.2
CQCF Site: breast, NOS C50.9

TSS

SPECIMENS:

A. SLN #1
B. SLN #2
C. SENTINEL NODE #3 LEFT AXILLA
D. LEFT BREAST AND LOWER AXILLA TAIL

SPECIMEN(S):

A. SLN #1
B. SLN #2
C. SENTINEL NODE #3 LEFT AXILLA
D. LEFT BREAST AND LOWER AXILLA TAIL

GROSS DESCRIPTION:

A. SLN #1
Received fresh are two tan pink lymph nodes 0.9 x 0.6 x 0.5cm and 0.5 x 0.4 x 0.2cm. The specimen is serially sectioned and two touch preps are taken.
A1: 1 lymph node
A2: 1 lymph node
B. SLN #2
Received fresh is a tan pink lymph node 0.6 x 0.4 x 0.3cm. The specimen is serially sectioned and a touch prep is taken. Toto B1.
C. SLN #3 LEFT AXILLA
Received fresh is a tan pink lymph node 1.1 x 0.9 x 0.6cm. The specimen is serially sectioned and a touch prep is taken. Toto C1.
D. LEFT BREAST AND LOWER AXILLA-Stitch in axilla
Received fresh is an oriented 1314g, 30 x 28 x 6cm mastectomy with 15 x 6cm tan pink skin ellipse, 1.2 cm centrally located, partially raised nipple and 1.5 cm areolar rim. The specimen is inked as follows: Anterior/Superior-Blue, Anterior/Inferior-Orange, Posterior-Black. The specimen is serially sectioned from medial to lateral into 12 slices, slice 1 being most medial, slice 12 being most lateral. The nipple is located in slice 7. The cut surfaces reveal a gray white ill defined firm mass 3.5 x 2.8 x 2cm, 1.8cm from the deep margin located in slices 4, 5, 6 and 7. The area surrounding the mass is remarkable for fibrosis and possible fat necrosis. The lower axillary tail is 6 x 5 x 3cm. Dissection reveals 4 possible lymph nodes ranging from 0.5 x 0.5 x 0.5cm to 0.8 x 0.8 x 0.5cm. A portion of the specimen is submitted for tissue procurement. Representative sections are submitted as follows:
D1: nipple slice 7
D2: base of nipple slice 7
D3: UIQ area next to mass slice 3
D4-D5: mass bisected UIQ slice 4
D6: anterior margin UIQ slice 4
D7: deep margin UIQ slice 4
D8: mass UIQ slice 5
D9: deep margin UIQ slice 5
D10: skin slice 5
D11-D12: mass UIQ slice 6
D13: deep margin UIQ slice 6
D14: LIQ slice 6
D15-D16: mass bisected UC slice 7
D17: deep margin UC slice 7
D18: LC with inferior margin slice 7
D19: UOQ next to mass slice 8
D20: LOQ slice 8
D21: 2 lymph nodes
D22: 2 lymph nodes
D23-D26: lower axillary tissue

DIAGNOSIS:

A. SENTINEL LYMPH NODE #1, LEFT BREAST, BIOPSY:
- TWO LYMPH NODES, NEGATIVE FOR CARCINOMA (0/2).

B. SENTINEL LYMPH NODE #2, LEFT BREAST, BIOPSY:
- ONE LYMPH NODE, NEGATIVE FOR CARCINOMA (0/1).

C. SENTINEL LYMPH NODE #3, LEFT BREAST, BIOPSY:
- ONE LYMPH NODE, NEGATIVE FOR CARCINOMA (0/1).

D. BREAST, LEFT, MASTECTOMY:
- INVASIVE DUCTAL CARCINOMA, MODERATELY DIFFERENTIATED (SBR GRADE 2), WITH MICROPAPILLARY FEATURES (SEE NOTE).
  - TUMOR MEASURES 3.5 CM IN GREATEST DIMENSION.
  - MARGINS, NEGATIVE FOR CARCINOMA.
- DUCTAL CARCINOMA IN SITU, CRIBRIFORM AND SOLID TYPES, NUCLEAR GRADE 2, WITH NECROSIS AND MICROCALCIFICATIONS, MINOR COMPONENT.
- PREVIOUS BIOPSY SITE CHANGES PRESENT.
- SKIN AND NIPPLE, NEGATIVE FOR CARCINOMA.
- THREE LYMPH NODES, NEGATIVE FOR CARCINOMA (0/3).

NOTE: A CD31 immunostain has been ordered to rule out lymphvascular invasion and ER, PR, and Her FISH has been ordered. Those results will be reported in an addendum.

SYNOPTIC REPORT - BREAST
Specimen Type: Mastectomy
Needle Localization: No
Laterality: Left
Invasive Tumor: Present
Multifocality: No
WHO CLASSIFICATION
Invasive ductal carcinoma, NOS 8500/3
Tumor size: 3.5cm
Tumor Site: Upper inner quadrant
Margins: Negative
Distance from closest margin: Greater than 1cm
deep
Tubular Score: 3
Nuclear Grade: 2
Mitotic Score: 2
Modified Scarff Bloom Richardson Grade: 2
Necrosis: Absent
Lobular neoplasia: None
Lymph nodes: Sentinel lymph node only
Lymph node status: Negative 0 / 7

DCIS present
Margins uninvolved by DCIS
DCIS Quantity: Estimate 5%
DCIS Type: Solid
Cribriform
DCIS Location: Associated with invasive tumor
Nuclear grade: Intermediate
Necrosis: Present
Location of CA++: DCIS

Pathological staging (pTN): pT 2 N 0

CLINICAL HISTORY:
year old with multifocal Invasive Cancer in Upper Inner Quadrant of Left Breast

PRE-OPERATIVE DIAGNOSIS:
Left Breast Cancer

INTRAOPERATIVE CONSULTATION:
TPA/TPB/TPC: Negative for tumor. Diagnosis called to Dr. at y Dr.

ADDENDUM:
RESULTS:
SUMMARY OF IMMUNOHISTOCHEMISTRY/SPECIAL STAINS

Material: Block D12
Population: Tumor Cells

Stain/Marker:	Result:	Comment:
CD31	Negative	Shows no evidence of lymphvascular invasion

The interpretation of the above immunohistochemistry stain or stains is guided by published results in the medical literature, provided package information from the manufacturer and by internal review of staining performance and assay validation within the Immunohistochemistry Laboratory. The use of one or more reagents in the above tests is regulated as an analyte specific reagent (ASR). These tests were developed and their performance characteristic determined by the Department of Pathology Laboratory. 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.

Special stains and/or immunohistochemical stains were performed with appropriately stained positive and negative controls.

SYNOPTIC REPORT - BREAST, ER/PR RESULTS
Specimen: Surgical Excision
Block Number: D11

ER: Positive Allred Score: 8 = Proportion Score 5 + Intensity Score 3
PR: Positive Allred Score: 4 = Proportion Score 2 + Intensity Score 2

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:
Tissue was fixed in 10% neutral buffered formalin for no less than 8 and no longer than 24 hours.
Immunohistochemistry was performed using the mouse anti-human ER (ER 1D5, 1:100) and PR (PGR 136, 1:100) provided by Dako following the manufacturer s instructions. This assay was not modified.
Interpretation of the ER/PR immunohistochemical stain is guided by published results in the medical literature, information provided by the reagent manufacturer and by internal review of staining performance.
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 by Dr. A majority of tumors cells displayed extensive polysomy 17 with 4 to 6 chromosome 17 signals and 2 to 3 HER-2 signals, with a HER-2/CEP 17 Ratio </=2.0, consistent with no amplification of the HER2/neu gene.
Block used D11 Source of case:
Tissue fixation formalin-fixed tissue Outside Case No: NA
Tissue source breast Results interpreted: yes
HER2/CEP17 ratio: 1.29
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 Dr. The results of these studies should always be interpreted in the context of the clinical, morphological, and immunophenotypic diagnosis.

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