TSS ID

SPECIMENS:

A. SENTINEL LYMPH NODE RIGHT AXILLA #1
B. SLN RIGHT AXILLA #2
C. SLN RIGHT AXILLA #3
D. EXC. RIGHT BREAST CA.

ICD-O-3
Carcinoma, infiltrating ductal, NOS 85001
Site. breast, NOS C50.9
2/8/11
JL

SPECIMEN(S):

A. SENTINEL LYMPH NODE RIGHT AXILLA #1
B. SLN RIGHT AXILLA #2
C. SLN RIGHT AXILLA #3
D. EXC. RIGHT BREAST CA.

GROSS DESCRIPTION:

A. SENTINEL LYMPH NODE RIGHT AXILLA #1
Received fresh is a tan pink lymph node 0.5 x 0.5 x 0.3cm. The specimen is bisected and 2 touch preps are taken. Toto A1.
B. SLN RIGHT AXILLA #2
Received fresh is a tan pink lymph node 1.5 x 0.5 x 0.5cm. The specimen is bisected and 2 touch preps are taken. Toto B1.
C. SLN RIGHT AXILLA
Received fresh is are 3 tan pink lymph nodes ranging from 0.5cm to 1.2cm in greatest dimensions. Each specimen is bisected and touch preps are taken. Toto C1.
D. EXCISION RIGHT BREAST: Single Stitch-Anterior/Double Stitch-Lateral/Triple Stitch-Superior
Received fresh is a 59g oriented tan pink WLE breast specimen, 7.0cm from superior to inferior, 6.0cm from anterior to posterior and 5.5cm from medial to lateral. The specimen is inked as follows: Red-Superior, Orange-Inferior, Blue-Anterior, Black-Posterior, Green-Medial, Yellow-Lateral. The specimen is serially sectioned from lateral to medial into 7 slices; slice 1 being most lateral, slice 7 being most medial. The cut surface reveal a gray white firm well circumscribed mass 2.1 x 1.7 x 1.5cm, 0.6cm from the closest superior margin, located in slices 3, 4 and 5. A surgical clip is identified in slice 3. The mass is 0.9cm from the deep margin and greater than 1.0cm from the remaining margins. The remaining cut surfaces reveal yellow lobulated adipose tissue interspersed with gray white fibrous tissue. A portion of the specimen is submitted for tissue procurement. Representative sections are submitted as follows:
D1: lateral margin, perpendicular sections taken from superior to inferior, slice 1
D2: area adjacent to mass with deep margin, slice 2
D3: mass with anterior/superior margin, slice 3
D4: mass with superior/deep margin, clip identified, slice 3
D5: anterior/inferior margin, slice 3
D6: inferior/deep margin, slice 3
D7: mass with superior and anterior margin, slice 4
D8: anterior/inferior, slice 4
D9: mass with superior and deep margin, slice 4
D10: inferior/deep margin, slice 4
D11: superior/deep margin, slice 5
D12: anterior/superior margin, slice 5
D13: anterior margin, slice 5
D14: area next to mass with anterior and deep margin, slice 6
D15: anterior margin, slice 6
D16: deep margin, slice 6
D17: medial margin, perpendicular sections submitted from superior to inferior, slice 7
As per attached diagram

DIAGNOSIS:

A. SENTINEL LYMPH NODE #1, RIGHT AXILLA, BIOPSY:
- ONE LYMPH NODE, NEGATIVE FOR CARCINOMA (0/1).

B. SENTINEL LYMPH NODE #2, RIGHT AXILLA, BIOPSY:
- MICROMETASTATIC CARCINOMA (1.5 MM) IN ONE LYMPH NODE (1/1) (SEE NOTE).

NOTE: The metastasis is subcapsular. No extranodal extension is seen; however, there is cautery artifact at one edge of the metastasis limiting evaluation. The touch prep slides were reviewed and show no evidence of metastasis. Dr. has reviewed specimen B.

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

D. BREAST, RIGHT, WIDE LOCAL EXCISION:
- INVASIVE DUCTAL CARCINOMA, MODERATELY DIFFERENTIATED (SBR GRADE 2) WITH FOCAL NECROSIS (SEE NOTE).
  - TUMOR MEASURES 2.1 X 1.7 X 1.5 CM.
  - INVASIVE CARCINOMA IS 0.3 CM FROM POSTERIOR MARGIN.
  - LYMPHVASCULAR INVASION IS IDENTIFIED.
- DUCTAL CARCINOMA IN SITU (DCIS), SOLID AND CRIBRIFORM TYPES, NUCLEAR GRADE 2-3, WITH FOCAL NECROSIS.
- ATYPICAL DUCTAL HYPERPLASIA.

NOTE: Microcalcifications are seen in vessels and non-neoplastic breast tissue.
SYNOPTIC REPORT - BREAST
Specimen Type: Excision
Needle Localization: No
Laterality: Right
Invasive Tumor: Present
Multifocality: No
WHO CLASSIFICATION
Invasive ductal carcinoma, NOS 8500/3
Tumor size: 2.1cm
Additional dimensions: 1.7cm x 1.5cm
Tumor Site: 9:00
Margins: Negative
Distance from closest margin: 0.3cm
deep
Tubular Score: 3
Nuclear Grade: 2
Mitotic Score: 2
Modified Scarff Bloom Richardson Grade: 2
Necrosis: Present
Vascular/Lymphatic Invasion: Present
Lobular neoplasia: None
Lymph nodes: Sentinel lymph node only
Lymph node status: Positive 1 / 3
Micrometastases: Yes
Non-neoplastic areas: columnar cell change

DCIS present
Margins uninvolved by DCIS :0.5 cm from the superior margin
DCIS Quantity: Estimate 20%
DCIS Type: Solid
Cribriform
DCIS Location: Both associated and separate from invasive tumor mass
Nuclear grade: Intermediate
Necrosis: Present
Location of CA++: Benign epithelium

ER/PR/HER2 Results
ER: Positive
PR: Positive
HER2: Pending by FISH

Pathological staging (pTN): pT 2 N 1

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

ER: Positive Allred Score: 8 = Proportion Score 5 + Intensity Score 3
PR: Positive Allred Score: 6 = Proportion Score 3 + 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:
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 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.

SYNOPTIC REPORT - BREAST HER-2 RESULTS
Specimen: Surgical Excision
Block Number:

Interpretation: EQUIVOCAL
Intensity: 2+
% Tumor Staining: 20%
Fish Ordered: Yes , on Date

METHODOLOGY:
Tissue was fixed in 10% neutral buffered formalin for no less than 8 and no longer than 24 hours. Her2 analysis was performed using the FDA approved Dako HercepTest (TM) test kit using rabbit anti-human HER2. This assay was not modified. External kit-slides provided by the manufacturer (cell lines with high, low and negative HER2 protein expression) and in-house known HER2 amplified control tissue were evaluated along with the test tissue. Adequate, well preserved, clear-cut invasive carcinoma was identified for HER2 evaluation. Interpretation of the HER2 immunohistochemical stain is guided by published results in the medical literature, information provided by the reagent manufacturer and by internal review of staining performance.

This assay has been validated according to the 2007 joint recommendations and guidelines from ASCO and CAP and from the NCCN HER2 testing in Breast Cancer Task Force. The takes full responsibility for this test's performance.

PRE-OPERATIVE DIAGNOSIS:
Right breast cancer.

PRE-OPERTATIVE CONSULTATION:
TPA/TPB/TPC: Negative for carcinoma. Diagnosis called to Dr. at Dr..
D. Gross Inspection Diagnosis: 2.1 cm tumor at 0.6cm from closest superior margin. Diagnosis called to Dr. at by Dr.

ADDENDUM:
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

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by Dr.. 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 D9 Source of case: RPCI
Tissue fixation formalin-fixed tissue Outside Case No: NA
Tissue source breast Results interpreted: yes
HER2/CEP17 ratio: 1.05

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 , Institute 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:., Pathologist,
Microscopic/Diagnostic Dictation:., Pathologist,
Final Review:., Pathologist,
Final Review:., Pathologist
Microscopic/Diagnostic Dictation:., Pathologist,
Final Review:., Pathologist,
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:		