

Carcinoma, infiltrating duct, NOS triple negative
8500/3 12/8/10
lw

Path Site Code: breast, upper outer quadrant C50.4
CQCF Site: breast, NOS C50.9

TSS:

UUID: 734305A3-5EC4-4DE4-B263-91A49082F146
TCGA-E2-A14X-01A-PR

Redacted

SPECIMENS:

- A. RIGHT BREAST WLE NEEDLE LOCALIZATION
- B. ADDITIONAL ANTERIOR INFERIOR MARGIN
- C. ADDITIONAL SUPERIOR MARGIN
- D. SENTINEL LYMPH NODE #1
- E. SENTINEL LYMPH NODE #2
- F. RIGHT AXILLARY CONTENTS LEVELS 1 & 2

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GROSS DESCRIPTION:

A. RIGHT BREAST WLE NEEDLE LOCALIZATION

Received fresh labeled with the patients identification and "Right Breast WLE needle localization" is an oriented (Single-Anterior, Double-Lateral, Triple-Superior and Quadruple-Inferior) 59g, 8.5 x 8.5 x 2.5cm needle localized lumpectomy with 2 radiographs. Ink code: Anterior-Yellow, Posterior-Black, Superior-Blue, Inferior-Orange, Medial-Green, Lateral-Yellow. Specimen serially sectioned from medial to lateral into 7 slices revealing a 2.5 x 1.5 x 1.5cm tan white firm well circumscribed mass abutting the anterior and posterior margins in slices 3-5. A portion of the specimen is submitted for tissue procurement. Representative sections are submitted.

- A1-A3: medial margin slice 1
- A4: superior margin slice 2
- A5-A6: anterior margin slice 3
- A7-A8: deep margin slice 3
- A9-A11: anterior margin slice 3
- A12-A14: deep margin with mass in A13 slice 3
- A15: superior margin slice 4
- A16: mass with anterior/deep margin slice 4
- A17-A18: mass with anterior margin slice 4
- A19-A20: mass with deep margin slice 4
- A21: superior margin slice 5
- A22-A23: mass with anterior/deep margin slice 5
- A24: inferior margin slice 5
- A25: area next to mass with anterior/deep margin slice 6
- A26: lateral margin slice 7

B. ADDITIONAL ANTERIOR INFERIOR MARGIN

Received fresh labeled with the patient's identification and "Additional Anterior/Inferior margin" is an oriented (Single-Anterior, Double-Inferior) 19g, 5 x 5 x 2.5cm fragment of fibrofatty tissue. Final Anterior margin is inked Yellow and the final Inferior margin is inked Orange. Serial sectioning reveals no discrete lesions. Toto B1-B14.

C. ADDITIONAL SUPERIOR MARGIN

Received fresh labeled with the patient's identification and "Additional Superior margin" is an oriented (Single-Anterior, Double-Inferior) 10g, 3 x 3 x 2cm fragment of fibrofatty tissue. Final margin is inked Black. Serial sectioning reveals no discrete lesions. Toto C1-C7.

D. SENTINEL LYMPH NODE #1

Received fresh labeled with the patient's identification and "SLN #1" are two possible lymph nodes 0.8 x 0.8 x 0.5cm and 0.5 x 0.3 x 0.2cm. A touch prep is taken and the larger lymph node is submitted in FSD. The smaller possible lymph node is submitted in D2.

E. SENTINEL LYMPH NODE #2 (CLUMP OF FREE NODES)

Received fresh labeled with the patient's identification and "SLN #2" are 3 tan pink lymph nodes ranging from 1.4 x 0.9 x 0.8cm to 1.4 x 0.8 x 0.6cm. Toto FSE1, FSE2 and FSE3.

F. RIGHT AXILLARY CONTENTS LEVELS 1 & 2

Received in formalin are multiple tan pink soft tissue fragments aggregating to 10 x 10 x 4cm. Dissection reveals multiple lymph nodes. Entirely submitted:

- F1: 5 lymph nodes
- F2: 5 lymph nodes
- F3: 1 lymph node
- F4: 1 lymph node
- F5: 1 lymph node
- F6: 1 lymph node

F7-F8: 1 lymph node
F9-F10: 1 lymph node
F11-F12: 1 lymph node
F13-F20: axillary tissue

RESULTS:
SUMMARY OF IMMUNOHISTOCHEMISTRY/SPECIAL STAINS

Material: Block A1
Population: Tissue

Stain/Marker:	Result:	Comment:
CALP	Positive	In DCIS

Material: Block A12
Population: Tissue

Stain/Marker:	Result:	Comment:
CD31	Positive	

Material: Block A24
Population: Tissue

Stain/Marker:	Result:	Comment:
CD31	Positive	

Material: Block B7
Population: Tissue

Stain/Marker:	Result:	Comment:
ESTROGEN RECEPTOR	Positive	Heterogeneous staining consistent with UDH

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.

DIAGNOSIS:

- A. BREAST, RIGHT, NEEDLE LOCALIZATION WIDE LOCAL EXCISION:
- INVASIVE DUCTAL CARCINOMA, SBR GRADE 3, WITH MICROPAPILLARY FEATURES (SEE NOTE).
 - INVASIVE CARCINOMA MEASURES 2.5 CM.
 - INVASIVE CARCINOMA IS PRESENT AT THE ANTERIOR MARGIN AND IS 0.3 CM FROM THE POSTERIOR MARGIN.
 - EXTENSIVE LYMPHASCULAR INVASION IS PRESENT.
 - DUCTAL CARCINOMA IN SITU (DCIS), SOLID TYPE, NUCLEAR GRADE 3, WITH NECROSIS, MINOR COMPONENT.
 - DCIS IS FOCALLY WITHIN 0.4 CM OF THE MEDIAL MARGIN.
 - PREVIOUS BIOPSY SITE CHANGES PRESENT.

NOTE: The additional anterior inferior margin (specimen B) is free of invasive carcinoma. Surgical correlation is recommended. CD31 stains show positive staining around tumor foci near superior and posterior margins consistent with tumor in lymphovascular channels.

- B. BREAST, RIGHT, ADDITIONAL ANTERIOR INFERIOR MARGIN, EXCISION:
- FOCAL ATYPICAL DUCTAL HYPERPLASIA (ADH) AND USUAL DUCTAL HYPERPLASIA (UDH).
- C. BREAST, RIGHT, ADDITIONAL SUPERIOR MARGIN, EXCISION:
- INVASIVE DUCTAL CARCINOMA, SBR GRADE 3.
- TUMOR MEASURES 0.6 CM.
- TUMOR IS WITHIN 0.2 CM OF THE NEW MARGIN.
- LYMPHVASCULAR INVASION IS PRESENT.
- DCIS, SOLID TYPE, NUCLEAR GRADE 3, WITH NECROSIS, MINOR COMPONENT.
- D. SENTINEL LYMPH NODE #1, RIGHT AXILLA, BIOPSY:
- ONE LYMPH NODE, NO TUMOR SEEN (0/1).
- E. SENTINEL LYMPH NODE #2, RIGHT AXILLA, BIOPSY:
- METASTATIC CARCINOMA TO TWO OF THREE LYMPH NODES, LARGEST METASTASIS IS 0.7 CM, WITH NO EXTRANODAL EXTENSION (2/3).
- F. AXILLARY CONTENTS, RIGHT, LEVELS 1 AND 2, DISSECTION:
- METASTATIC CARCINOMA TO 3 OF 17 LYMPH NODES, LARGEST METASTASIS IS 1.5 CM WITH EXTRANODAL EXTENSION (3/17).

SYNOPTIC REPORT - BREAST

Specimen Type: Excision
Needle Localization: Yes - For mass
Laterality: Right
Invasive Tumor: Present
Multifocality: Yes
WHO CLASSIFICATION
Invasive ductal carcinoma, NOS 8500/3
Tumor size: 2.5cm
Tumor Site: Upper outer quadrant
Margins: Negative
Distance from closest margin: Less than 0.2cm superior
Tubular Score: 3
Nuclear Grade: 3
Mitotic Score: 3
Modified Scarff Bloom Richardson Grade: 3
Necrosis: Absent
Vascular/Lymphatic Invasion: Present
Extent: extensive
Lobular neoplasia: None
Lymph nodes: Sentinel lymph node and axillary dissection
Lymph node status: Positive 5 / 21 Extranodal extension
Non-neoplastic areas: fibroadenoma

DCIS present
Margins uninvolved by DCIS
DCIS Quantity: Estimate 5%
DCIS Type: Solid
DCIS Location: Associated with invasive tumor
Nuclear grade: High
Necrosis: Present

ER/PR/HER2 Results

ER: Negative
PR: Negative
HER2: Negative by IHC

Pathological staging (pTN): pT 2 N 2

SYNOPTIC REPORT - BREAST, ER/PR RESULTS

Specimen: Surgical Excision
Block Number: A22 and F12 (lymph node)

ER: Negative Allred Score: 0 = Proportion Score 0 + Intensity Score 0
PR: Negative Allred Score: 0 = Proportion Score 0 + Intensity Score 0

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.

SYNOPTIC REPORT - BREAST HER-2 RESULTS

Specimen: Surgical Excision
Block Number: F12 (lymph node)

Interpretation: NEGATIVE

Intensity: 1+
% Tumor Staining: 5%
Fish Ordered: No

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 Pathology Department takes full responsibility for this test's performance.

CLINICAL HISTORY:

year old female with Abnormal MMG- Bx Right Breast at 9-10 o'clock IDC ER-. MRI showed additional abnormality 2.6cm posterior to this.

PRE-OPERATIVE DIAGNOSIS:

Right Breast Cancer

INTRAOPERATIVE CONSULTATION:

FSD-TPD: One lymph node negative for tumor.
FSE1-FSE2-FSE3: Positive for metastatic Adenocarcinoma.
Diagnoses called to Dr. at (D) and (E) by Dr.

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

Criteria	Yes	No
Diagnosis Discrepancy		
Primary Tumor Site Discrepancy		
HPAA Discrepancy		
Prior Malignancy History		
Trial/Synchronous Biopsy Noted		
Case is (circle):	QUALIFIED	REQUALIFIED
Reviewer Initials		
Date Reviewed		