UUID: 3358FEB5-6356-43A3-896D-508F3830859E TCGA-EW-A2FV-01A-PR Re Redacted

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Pathologic Interpretation:

A. LEFT BREAST MASTECTOMY:

- INVASIVE MAMMARY CARCINOMA, MICROPAPILLARY TYPE with focal ductal features, poorly differentiated, Nottingham Grade 3 (3 + 3 + 3 = 9), 7.5 cm in greatest dimension, present in 13/14 slides, constituting 80% of tissue sampled.
- The invasive tumor is focally present less han 0.1 cm from the anterior/skin margin and less than 0.1 cm from the deep posterior margin in 5 blocks.
- Extensive lymphovasculr invasion is present in numerous foci in multiple blocks.
- DUCTAL CARCINOMA IN STU, high nuclear grade (DIN 3), micropapillary type, present as a single focus (slide 7).
- Skin with scar and extensive dermal lymphovascular invasion.
- Skeletal muscle is present.
- ER, PR and HER2 are pending, an addendum will follow. (please see tumor summary)

B. LEFT INTRA MAMMARY LYMPH NODE DISSECTION:

- METASTATIC CARCINOMA is present in five (5) of five (5) lymph nodes with extranodal extension (5/5).
- The largest metastatic deposit is 1.2 cm in greatest linear dimension.

C. LEFT AXILLARY LYMPH NODE DISSECTION:

- METASTATIC CARCINOMA to seventeen (17) of twenty (20) lymph nodes (17/20).
- The largest metastatic deposit is 2.9 cm in greatest linear dimension.

D. ADDITIONAL LEFT BREAST TISSUE:

- Fibroadipose tissue, negative for carcinoma.

E. LEFT LYMPH NODE DISSECTION (LEVEL 3):

- METASTATIC CARCINOMA to two (2) of two (2) lymph nodes (2/2), largest metastatic deposit is 2.2 cm in greatest linear dimension.

LYMPH NODE DISSECTION ABOVE LEFT BRACHIAL PLEXUS: F.

- METASTATIC CARCINOMA to five (5) of five (5) lymph nodes, largest metastatic deposit is 1.8 cm in greatest linear dimension.

Tumor Summary

Specimen:

- Total breast (including nipple and skin)

Procedure:

- Total mastectomy (including nipple and skin)

Lymph Node Sampling:

- Axillary dissection (partial or complete dissection)
- Lymph nodes present within the breast specimen (ie, intramammary lymph nodes) Specimen integrity:

- Single intact specimen (margins can be evaluated)

Carcinoma, investve micropepillary, intraductal 8507/3 Site: brust, vos 050.9

Specimen Laterality:

- Left

Tumor Site: Invasive Carcinoma

- Lower outer quadrant
- Upper inner quadrant
- Lower inner quadrant
- Central

Tumor Size: Size of Largest Invasive Carcinoma

- Greatest dimension of largest focus of invasion over 0.1 cm: 7.5 cm
- Additional dimensions: 6 x 2 cm

Tumor Focality:

- Single focus of invasive carcinoma

Macroscopic and Microscopic Extent of tumor:

- Skin: Invasive carcinoma directly invades into the dermis without skin ulceration
- Nipple: DCIS does not involve the nipple epidermis
- Skeletal muscle: Skeletal muscle is present and is free of carcinoma

Ductal Carcinoma In Situ (DCIS):

- DCIS is present
- Extensive intraductal component (EIC) negative

*Size (Extent) of DCIS

Estimated size (extent) of DCIS (greatest dimension using gross and microscopic evaluation) is at least: 0.15 cm

Number of blocks with DCIS: 1
Number of blocks examined: 14
<u>Architectural Pattern:</u> Micropapillary
<u>Nuclear Grade</u>: Grade III (high)

Necrosis: Not identified

Lobular Carcinoma In Situ (LCIS): Not identified.

Histologic Type of Invasive Carcinoma:

- Invasive micropapillary carcinoma with focal ductal features

Histologic Grade: Nottingham Histologic Score

- Glandular (Acinar) /Tubular Differentiation: Score 3: <10% of tumor area forming glandular/tubular structures
- Nuclear Pleomorphism: Score 3: Vesicular nuclei, often with prominent nucleoli, exhibiting marked variation in size and shape, occasionally with very large and bizarre forms
- Mitotic Count Score 3
- Overall Grade: Grade 3: scores of 8 or 9

Margins:

- Margins uninvolved by invasive carcinoma
 - Distance from anterior margin: <1 mm
 - Distance from posterior margin: <1 mm
- Margins uninvolved by DCIS

Treatment Effect: Response to Presurgical (Neoadjuvant) therapy:

- In the Breast: No known presurgical therapy
- In the Lymph Nodes: No known presurgical therapy

Lymph-Vascular Invasion: PRESENT

Dermal Lymph-Vascular Invasion: PRESENT

Lymph Nodes:

- Number of sentinel lymph nodes examined: 0
- Total number of lymph nodes examined (sentinel and Nonsentinel): 32
- Number of lymph nodes with macrometastases (>0.2 cm): 29
- Size of largest metastatic deposit: 2.9 cm

*Extranodal Extension: Present

*Method of Evaluation of Sentinel Lymph Nodes: Hematoxylin and eosin (H&E), one level

Pathologic Staging (pTNM): pT3, pN3a, pM n/a

Primary Tumor: pT3: Tumor >50 mm in greatest dimension

Regional Lymph Nodes: pN3a: Metastases in 10 or more axillary lymph nodes (at least 1 tumor deposit greater than 2.0 mm)

Distant Metastasis: Not applicable

Ancillary Studies:

Estrogen Receptor: PENDING Progesterone Receptor: PENDING

Her2/NEU: PENDING

Microcalcifications: Not identified

NOTE: Same immunohistochemical antibodies are analyte specific reagents (ASRs) validated by our laboratory. These ASRs are clinically useful indicators that do not require FDA approval. These clones are used: 1D5=BR, PgR 636=PR, A485=HBR2, H-11=BGFR, All immunohistochemical stavis are used with formal in or molecular fixed, paraffin embedded tissue. Detection is by Brivision Method. The results are read by a pathologist as positive or negative.

As the attending pathologist, I attest that 1: (i) Examined the relevant preparation(s) for the specimen(s); and (ii) Rendered the diagnosis(es).

Electronically Signed Out By

Procedures/Addenda Addendum

Date Ordered:

Status: Signed Out

Date Complete: Date Reported:

Addendum Diagnosis

The tumor cells are positive for ER and PR, negative for HER2 (0).

Clinical History:

Status post previous lumpectomy

Operation Performed

Left breast completion, mastectomy with axillary node dissection

Pre Operative Diagnosis:

Left breast cancer

Specimen(s) Received:

A: Left breast (short superior and long lateral)

B: Intra mammary lymph node

C: Left axillary lymph nodes

D: Additional left breast tissue

E: Level 3 lymph nodes

F: Lymph nodes above brachial plexus

Gross Description:

A. Received in formalin is a modified left radical mastectomy specimen that weighs 190 grams and measures 16.0 x 11.0 x 1.0 cm. There is a tan ellipse of skin that measures 6.3 x 5.8 cm, an areola measuring 4.2 x 4.0 cm and a nipple that measures 1.0 cm. There is a white lesion on the 11 o'clock aspect of the areola that measures 0.5 cm in greatest dimension. Along the 12 o'clock to 6 o'clock aspect of the nipple, it appears to be slightly retracted. Grossly, no other lesions or masses are identified. The specimen has previously being inked black and sectioned to allow for fixing. On cut section, there is a 7.5 x 6.0 x 2.0 cm ill-defined, indurated, tan/yellow lesion that is retro-areolar in location. This lesion comes within 0.2 mm of the deep margin, 0.6 cm from the inferior margin, 4.5 cm from the superior margin, 3.5 cm from the inferior margin, 4.5 cm from the lateral margin and 2.5 cm from the medial margin. The remainder of the breast parenchyma is composed predominantly of homogeneous yellow adipose tissue with a 20% stroma to 80% adipose tissue ratio. Grossly, no lymph nodes are identified. A small section of the specimen was taken for research. Sections submitted as follows:

- 1-10 Section of mass in relation to deep inked margin, nipple and skin
- 11 Upper inner quadrant
- 12 Lower inner quadrant
- 13 Upper outer quadrant
- 14 Lower outer quadrant
- B. Received in formalin is a piece of fibroadipose connective tissue that measures 4.6 x 3.8 x 1.3 cm. Grossly, five lymph nodes are identified. The largest measures 1.4 cm in greatest diameter. Sections as follows:
 - 1 Largest lymph node, trisected
 - 2 One lymph node, trisected
 - 3 One lymph node, bisected
 - 4 Up to three lymph nodes
 - 5-7 Possible lymph nodes
- C. Received in formalin is a segment of fibroconnective adipose tissue with grossly identifiable enlarged lymph nodes that measures 12.0 x 5.8 x 2.5 cm. Grossly, nineteen lymph nodes are identified. The largest measuring 3.7 x 2.7 x 1.6 cm. Sections submitted as follows:
 - 1 Five lymph nodes, submitted in toto
 - 2 Representative sections of largest lymph node
 - 3 Representative sections of two lymph nodes
 - 4 Representative section of one lymph node
 - 5 Representative section of one lymph node
 - 6 Representative sections of two lymph nodes
 - 7 Representative sections of two lymph nodes
 - 8 Representative sections of three lymph nodes
 - 9 Representative section of one lymph node
 - 10 Possible lymph nodes
- D. Received in formalin is a piece of fibroconnective adipose tissue that measures 5.0 x 2.5 x 0.5 cm. Submitted in toto in two cassettes.
- E. Received in formalin are two pieces of fibroconnective adipose tissue, one measuring 1.1 x 0.6 x 0.5 cm and the other measuring 3.0 x 1.2 x 0.5 cm. Sections submitted as follows:
 - 1 Smaller specimen bisected and submitted in toto
 - 2 Larger piece bisected and submitted in toto
- F. Received in formalin are several fragments of fibroconnective adipose tissue that measure in aggregate 5.0 x 1.0 x 0.5 cm. Grossly, five lymph nodes are identified, ranging in size from 1.0 to 1.5 cm in greatest dimension. Sections submitted as follows:
 - 1 Largest lymph node bisected and submitted in toto
 - 2 One lymph node, bisected
 - 3 Three lymph nodes submitted in toto

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IIPAA Discrepancy		
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