Carcinoma, infiltrating ductal, NOS 8500/3 Site: breast, NOS C50.9 2/18/11 lar

Case Number:

Collection Date:

Surgical Pathology Report

#### Diagnosis:

A: Sentinel lymph node #1, right axillary, excision

- Positive for metastatic adenocarcinoma in one of four lymph nodes (1/4)
- Size of metastasis: 0.6 cm
- Extracapsular extension: Present, extensive
- Intraoperative diagnosis confirmed

B: Sentinel lymph node #2, right axillary, excision

- Positive for metastatic adenocarcinoma in one lymph node (1/1) (metastatic focus present on frozen slide only)
- Size of metastasis: 0.1 cm
- Extracapsular extension: Not identified
- Intraoperative diagnosis confirmed

C: Non-sentinel lymph node, right axillary, excision

- Positive for metastatic adenocarcinoma in one lymph node (1/1)
- Size of metastasis: 0.6
- Extracapsular extension: Present, extensive
- Intraoperative diagnosis confirmed

D: Sentinel lymph node #3, right axillary, excision

- Positive for metastatic adenocarcinoma in one lymph node (1/1)
- Size of metastasis: 0.2
- Extracapsular extension: Not identified
- Intraoperative diagnosis confirmed

E: Breast, right, mastectomy

Tumor type: Invasive ductal carcinoma

Nottingham combined histologic grade: 3

Tubule formation score: 3 Nuclear pleomorphism score: 3

Mitotic count score: 3

Focality of tumor: Unifocal

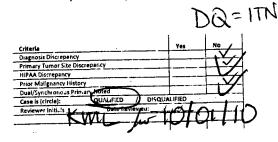
Tumor size (greatest dimension): 2.4 cm (gross measurement)

Tumor location: Outer half (at interface between upper outer and lower outer quadrants)

Lymphovascular invasion: Not identified

Perineural invasion. Present





In Situ Component: Present, ductal carcinoma in situ

In Situ Component type/Architecture pattern: Ductal carcinoma in situ, solid and comedo types

In Situ Component nuclear grade: 2-3

In Situ Component necrosis: Present

In Situ Component extent/size: DCIS present admixed with invasive ductal carcinoma, comprising approximately 5% of the total tumor volume

Extensive intraductal component: Absent

Nipple/skin involvement: Not identified

Margin status:

Invasive component: Negative; closest posterior margin 0.4 cm; all other margins more than 1.5

cm away

In Situ component: Negative; more than 1.0 cm away from all margins

Right axillary lymph nodes (none present in this specimen, but the total number includes

specimens A-D and F):

Total number with metastasis: 5 Total number examined: 17 (5/17) Size of largest metastasis: 0.6 cm

Extracapsular extension: Present, extensive

Microcalcifications: Present, associated with invasive ductal carcinoma

Other findings: Fibrocystic changes

AJCC PATHOLOGIC TNM STAGE: pT2 pN2a

Note: This pathologic stage assessment is based on information available at the time of this report, and is subject to change pending clinical review and additional information.

F: Lymph nodes, right axillary, lymphadenectomy

- Positive for metastatic adenocarcinoma in 1 of 10 lymph nodes (1/10)
- Size of metastasis: 0.1 cm
- Extracapsular extension: Not identified

#### Comment:

For the results of immunohistochemical stains for ER, PR and Her2/neu, please refer to the addendum report of the prior specimen

Intraoperative Consult Diagnosis: Frozen section was requested

FSA1/FSA2: Right axillary sentinel lymph node #1

- Metastatic carcinoma in one lymph node (1/2); Dr agrees.

FSB1: Right axillary sentinel lymph node #2

- Metastatic carcinoma in one lymph node (1/1); Dr agrees.

FSC1: Right axillary non-sentinel lymph node - Metastatic carcinoma in one lymph node (1/1)

FSD1: Right axillary sentinel lymph node #3

- At least micrometastatic carcinoma in one lymph node

Frozen Section Pathologist:

Clinical History: invasive ductal Ca, right breast, Grade 2.

Gross Description:

Received are six appropriately labeled containers.

Container A: Received fresh for frozen section is a 3 x 3 x 2 cm aggregate of multiple tan lymph node candidates and adipose tissue. Two larger lymph nodes were isolated, sectioned and frozen as FSA1 and FSA2.

Further examination of the adipose tissue finds four additional lymph node candidates from  $5 \times 5 \times 3$  mm to  $7 \times 4 \times 4$  mm. All lymph node candidates are submitted as is in block A1. Fibrofatty tissue is retained in formalin.

Container B: Received fresh for frozen section is a  $1.5 \times 1.0 \times 0.5$  cm fragment of yellow fibrofatty tissue within which one lymph node candidate was identified at the time of frozen section. The lymph node was serially sectioned and was frozen as FSB1. Fibrofatty tissue is retained in formalin.

Container C: Received fresh for frozen section is a  $1.0 \times 0.5 \times 0.5$  cm fragment of pink/yellow fibrofatty lymphoid tissue. The fragment was frozen as FSC1, NTR.

Container D: Received fresh for frozen section is a  $1 \times 1 \times 0.5$  cm fragment of yellow lobulated fibrofatty lymphoid tissue. The fragment was serially sectioned, was frozen as FSD1, NTR.

Container E:

Specimen fixation: formalin

Time in fixative: approximately 8 hours, 45 mins

Type of mastectomy: unspecified

Size of specimen: 880 grams; 22 cm medial to lateral x 25.5 cm superior to inferior x 4 cm anterior to posterior

Orientation of specimen: Per the specimen requisition, a short stitch indicates superior and a long stitch indicates lateral.

At the time of Tissue Procurement triage, the specimen is inked as follows: anterior=blue, posterior=black, and lateral=yellow.

Skin ellipse dimensions:  $18.0 \times 13.5 \text{ cm}$ ; The lightly pigmented skin ellipse is remarkable for some blue sentinel dye discoloration lateral and slightly inferior to the nipple.

Nipple/areola: Nipple: 1.0 cm

Areola: 2.7 cm

The structures are unremarkable.

Axillary tail: There is no well delineated axillary tail. The lateral most breast tissue is sectioned, however, no lymph node candidates are identified.

Biopsy site: absent

Residual tumor: present, A 2.4 x 2.0 x 1.9 cm firm white mass with a somewhat gritty cut surface and stellate borders is identified. This mass has no hemorrhagic areas or necrotic areas readily identified.

Location of tumor: roughly located in the midline between the upper outer quadrant and the lower outer quadrant

Distance of mass/biopsy site from surgical margin: The mass is focally 6 mm to the black inked posterior margin, 1.5 cm to the skin (anterior margin), 9 cm to the inferior margin, 11 cm to the superior margin, at least 4.5 cm to the lateral margin and distant (at least 14 cm) to the medial margin.

Gross involvement of skin or fascia/muscle by tumor: absent

Description of remainder of breast: The remainder of the mastectomy specimen consists of yellow lobulated fibroadipose tissue separated by thin fibrous septae. Much of the breast consists of dense white fibrous breast tissue. The breast tissue medial to the mass is intensely stained with a blue dye. There are some areas within this firm breast tissue which are firmer than others.

Other remarkable features: On the superior edge of the tumor a small metal radiographic marker is identified.

Tissue submitted for special investigations: Tumor and normal was taken by Tissue Procurement.

Digital photograph taken: no

**Block Summary:** 

(Inking: anterior=blue, posterior=black, lateral=yellow)

E1 - nipple

E2 - mass and closest black inked deep margin, perpendicular sections

E3 - perpendicular sections to closest skin margin (no tumor represented)

E4-E8 - additional tumor (E7,E8 one slice, bisected)

E9-E10 - breast tissue immediately surrounding mass

E11 - inner upper quadrant

E12 - inner lower quadrant

E13 - outer upper quadrant

E14 - outer lower quadrant

E15-E16 - lateral breast tissue

Container F is additionally labeled "right axillary contents." It holds a  $12 \times 9.5 \times 3.0$  cm aggregate of multiple fragments of yellow lobulated fibroadipose tissue which are palpated for lymph node candidates. Multiple lymph node candidates from  $4 \times 4 \times 3$  mm to  $1.4 \times 1.0 \times 0.6$  cm are identified.



## Block summary;

F1 - five lymph node candidates

F2 - two lymph node candidates

F3 - one lymph node candidate, serially sectioned

F4 - one lymph node candidate, sectioned

F5 - one lymph node candidate, sectioned

F6-F7 - one lymph node candidate, sectioned

F8 - one lymph node candidate, sectioned

F9 - one lymph node candidate, sectioned

# Light Microscopy:

Light microscopic examination is performed.

## Signature

I have personally conducted the evaluation of the above specimens and have rendered the above diagnosis(es).