# **Surgical Pathology Report**

Name:
DOB:
Gender: F
MRN:
Location:
Physician:

Case #:
Collected:
Received:
Reported:
Copy To:

# Pathologic Interpretation:

il

- A. LEFT BREAST SENTINEL NODE # 1 (COUNT
  - One lymph node negative for carcinoma (0/1), (see note).
- B. RIGHT BREAST SENTINEL NODE # 1, (COUNT
  - One lymph node negative for carcinoma (0/1), (see note).
- C. RIGHT BREAST SENTINEL NODE # 2. (COUNT
  - One lymph node negative for carcinoma (0/1), (see note).
- D. RIGHT BREAST SENTINEL NODE # 3, (COUNT
  - One lymph node negative for carcinoma (0/1), (see note).
- E. RIGHT BREAST SENTINEL NODE #4, (COUNT
  - One lymph node negative for carcinoma (0/1), (see note).

1CD-0-3

Carinoma infiltrating lobulular, Nos 8520/3

Sitz bread, NOS C50.9 2/8/11 hr



### F. LEFT BREAST MASTECTOMY:

- INVASIVE LOBULAR CARCINOMA, moderately differentiated (see note).
- Invasive carcinoma is present at least 0.3 cm from the nearest resection margin (slide F3).
- Invasive carcinoma extensively involves the nipple and dermis.
- No in situ carcinoma is identified.
- No definitive lymphovascular invasion is seen.
- Microcalcifications are present and associated with normal breast parenchyma.
- AJCC staging. PT3 NO (sh) Mx. Please see tumor summary.

Note: The invasive carcinoma measures 4.5 cm by gross measurement. However, based on adjacent sections in slides F9 through F12 the microscopic measurement of tumor size is estimated as at least 6.1 cm. Receptor studies were reported previously / ... Keratin stains on the lymph nodes will be reported in an addendum

### G. RIGHT BREAST MASTECTOMY:

- INVASIVE DUCTAL CARCINOMA, moderately differentiated, Nottingham grade 2 (3+3+1), measuring at least 1.1 cm in greatest dimension (slide G15). Two additional invasive foci each measuring 0.4 cm are found in slides G12 and G17.
- No lymphovascular invasion is seen.
- DUCTAL CARCINOMA IN SITU, high nuclear grade, solid on cribriform type, with central comedo necrosis and calcifications is present in 10 of 17 blocks (EIC positive), located more than 1.0 cm from nearest margin.

- AJCC staging PT1c NO(sh) Mx. See tumor summary.

Note: Hormone receptor studies and keratin stains on the lymph nodes will be reported in an addendum.

### H. LEFT BREAST ADDITIONAL SUPERIOR SKIN:

- Skin and benign breast parenchyma.
- I. LEFT BREAST ADDITIONAL MEDIAL SKIN:
  - Skin and benign breast parenchyma.

#### **TUMOR SUMMARY**

# **INVASIVE CARCINOMA OF THE BREAST (LEFT):**

Specimen: Total breast (including nipple and skin)
Procedure: Total mastectomy (including nipple and skin)

Lymph Node Sampling: Sentinel lymph node(s)

Specimen Integrity: Multiple designated specimens (eg, main excision and identified margins)

Specimen Laterality: Left

Tumor Focality: Single focus of invasive carcinoma

bilsturk



Macroscopic and Microscopic Extent of Tumor

Skin: Invasive carcinoma directly invades into the dermis or epidermis without skin ulceration

Histologic Type of Invasive Carcinoma: INVASIVE LOBULAR CARCINOMA

Histologic Grade: Nottingham Histologic Score/Overall Grade= 2 (scores of 6 or 7)

Margins: Margins uninvolved by invasive carcinoma

Lymph-Vascular Invasion: Not identified

Dermal Lymph-Vascular Invasion: Not identified

Lymph Nodes (required only if lymph nodes are present in the specimen)

Number of sentinel lymph nodes examined: 1

Total number of lymph nodes examined (sentinel and nonsentinel): 1

Number of lymph nodes with macrometastases (>0.2 cm): 0

Number of lymph nodes with micrometastases (>0.2 mm to 0.2 cm and/or >200 cells):0

Number of lymph nodes with isolated tumor cells (≤0.2 mm and ≤200 cells): 0

Pathologic Staging (based on information available to the pathologist) (pTNM) (Note M)

pT3: Tumor >50 mm in greatest dimension

Regional Lymph Nodes (pN)

Category (pN)

:0Ng

No regional lymph node metastasis identified histologically

Note: Isolated tumor cell (ITC) clusters are defined as small clusters of cells not greater than 0.2 mm or single tumor cells, or a cluster of fewer than 200 cells in a single histologic cross-section. ITCs may be detected by routine histology or by immunohistochemical (IHC) methods. Nodes containing only ITCs are excluded from the total positive node count for purposes of N classification but should be included in the total number of

nodes evaluated.

Modifier

(sn): Only sentinel node(s) evaluated. If 6 or more sentinel nodes and/or nonsentinel nodes are removed, this modifier

should not be used.

Distant Metastasis (M): Not applicable

Ancillary Studies
Estrogen Receptor

Performed on another specimen:

Results: Immunoreactive tumor cells present (≥1%)

Progesterone Receptor

Performed on another specimen:

Results: Immunoreactive tumor cells present (≥1%)

**HER2 Immunoperoxidase Studies** 

Performed on another specimen:

Results: Negative (Score 0)

Microcalcifications: Present in non-neoplastic tissue

### INVASIVE CARCINOMA OF THE BREAST (RIGHT):

Specimen: Total breast (including nipple and skin)

Procedure: Total mastectomy (including nipple and skin)

Lymph Node Sampling: Sentinel lymph node(s)

Specimen Integrity: Single intact specimen (margins can be evaluated)

Specimen Laterality: Right

Tumor Focality: Multiple foci of invasive carcinoma

Number of foci: 3

Sizes of individual foci: 1.1 cm, 0.4 cm, 0.4 cm

### **SURGICAL PATHOL Report**

Macroscopic and Microscopic Extent of Tumor

Skin: Invasive carcinoma does not invade into the dermis or epidermis

Nipple: DCIS does not involve the nipple epidermis Skeletal muscle: No skeletal muscle present

Ductal carcinoma in situ (DCIS): DCIS is present, EIC positive

Size of (Extent) of DCIS

Number of blocks with DCIS: 10

Number of blocks examined: 17

Architectural Patterns: Comedo, Cribriform, Solid

Nuclear Grade: Grade III (high)

Necrosis: Present, central (expansive "comedo" necrosis)

Lobular Carcinoma in Situ (LCIS): Not identified

Histologic Type of Invasive Carcinoma: INVASIVE DUCTAL CARCINOMA (no special type or otherwise specified)

Histologic Grade: Nottingham Histologic Score

Tubules: 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 1

Overall Grade: Grade 2 (scores of 6 or 7)

Margins: Margins uninvolved by invasive carcinoma and DCIS

Treatment Effect: Response to Presurgical (Neoadjuvant) Therapy: No known presurgical therapy

Lymph-Vascular Invasion: Not identified

Dermal Lymph-Vascular Invasion: Not identified

Lymph Nodes (required only if lymph nodes are present in the specimen)

Number of sentinel lymph nodes examined: 4

Total number of lymph nodes examined (sentinel and nonsentinel): 4

Number of lymph nodes with macrometastases (>0.2 cm): 0

Number of lymph nodes with micrometastases (>0.2 mm to 0.2 cm and/or >200 cells):0

Number of lymph nodes with isolated tumor cells (≤0.2 mm and ≤200 cells): 0

Extranodal Extension: Not identified

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

# Pathologic Staging (based on information available to the pathologist) (pTNM) (Note M) pT1c: Tumor >10 mm but 20mm in greatest dimension

Regional Lymph Nodes (pN)

Category (pN)

pN0:

No regional lymph node metastasis identified histologically

Note: Isolated tumor cell (ITC) clusters are defined as small clusters of cells not greater than 0.2 mm or single tumor cells, or a cluster of fewer than 200 cells in a single histologic cross-section. ITCs may be detected by routine histology or by immunohistochemical (IHC) methods. Nodes containing only ITCs are excluded from the total positive node count for purposes of N classification but should be included in the total number of

nodes evaluated.

Modifier (sn): Only sentinel node(s) evaluated. If 6 or more sentinel nodes and/or nonsentinel nodes are removed, this

modifier should not be used.

Distant Metastasis (M): Not applicable

**Ancillary Studies** 

Estrogen Receptor: Pending Progesterone Receptor: Pending

HER2 Immunoperoxidase Studies: Pending

#### Microcalcifications:

- Present in DCIS

NOTE: Some immunohistochemical antibodies are analyte specific reagons (ASRs) validated by our laboratory. These ASRs are clinically useful indicators that do not require FDA approval. These clones are used: IDS=ER, PgR 636=PR, A485=HER2, H-11=EGFR. All immunohistochemical stains are used with formalin or molecular fixed, paraffin embedded itssue. Detection is by Envision Method. The results are read by a nativalents as positive or nemative.

As the attending pathologist, I attest that I: (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

- A. Left Breast Sentinel Lymph Node # 1 (count
  - Negative for keratin staining cells.
- B. Right Breast Sentinel Lymph Node # 1 (count
  - Negative for keratin staining cells.
- C. Right Breast Sentinel Lymph Node # 2, (count
  - Negative for keratin staining cells.
- D. Right Breast sentinel node # 3, (count
  - Negative for keratin staining cells.
- E. Right Breast sentinel node # 4, (count
  - Negative for keratin staining cells.
- G. Right Breast Mastectomy:
  - The tumor cells are positive for ER and HER2/Neu (3+) and negative for PR.

**Intraoperative Consultation** 

A. Sentinel node #1 count on left breast, FS: Lymph node, no carcinoma seen.

B. Right breast sentinel node # 2, count , FS: Negative for carcinoma.

C. Right breast sentinel node # 3, count FS: Negative for carcinoma.

D. Right breast sentinel node # 3, count FS: Negative for carcinoma.

E. Right breast sentinel node # 4, count FS: Negative for carcinoma.

#### **Clinical History:**

Left breast biopsy – invasive lobular carcinoma with direct skin involvement 4.5 cm mass left breast anterior depth central to nipple, 4.5 cm biopsy marking clip in upper outer quadrant (calcification) and one in posterior depth in superior lateral quadrant.

# **Operation Performed**

Bilateral mastectomy with sentinel node biopsy, possible axillary

## Pre Operative Diagnosis:

None Provided

# SURGICAL PATHOL Report

# Specimen(s) Received:

on left breast, FS A: Sentinel node # 1 count

B: Right breast sentinel node # 2, count FS

C: Right breast sentinel node # 3, count i. FS

D: Right breast sentinel node # 3, count FS

E: Right breast sentinel node # 4, count

F: Left breast

G: Right breast

H: Additional superior skin left breast

I: Left breast additional medial skin

# **Gross Description:**

Received in formalin are four separate tissues. Submitted for frozen section. A.

The first is one fragment of rubbery, brown-tan tissue that measures  $1.5 \times 1.0 \times 0.3$  cm. Submitted in toto in cassette

The second is one fragment of brown-tan rubbery tissue, measuring  $2.0 \times 1.1 \times 0.3$  cm. Submitted in toto cassette A2FS.

The third is one fragment of rubbery brown-tan tissue that measures  $1.8 \times 1.5 \times 0.3$  cm. Submitted in toto in cassette A3FS.

The fourth is one fragment of rubbery brown-tan tissue that measures  $2.2 \times 1.5 \times 0.3$  cm. Submitted in toto in cassette A4FS.

- Received in formalin are two fragments of rubbery brown-tan tissue that measures 2.5 x 2.0 x 0.3 cm in aggregate. В. Submitted in toto in cassette B1FS.
- Received in formalln is one fragment of rubbery brown-tan tissue that measures  $2.9 \times 2.9 \times 0.3$  cm. The tissue is C. submitted in toto in cassette C1FS.
- Received in formalin is one fragment of brown-tan tissue that measures  $2.2 \times 0.6 \times 0.3$  cm. Submitted in toto in cassette D. D1FS.
- Received in formalin is one fragment of tan-yellow tissue, measuring 2.5 x 1.4 x 0.3 cm. Submitted in toto in cassette E. E1FS.
- Received in formalin is a 420 gram left partial mastectomy specimen (17.5 x 15.0 x 5.5 cm) with a white-tan skin ellipse (12.2 x 7.0 cm). The nipple measures 1.5 cm in diameter, the areola measures 3.5 cm in diameter. The specimen F. resection margins have previously being inked black. The specimen has been previously cut. There is a 4.5 x 3.5 x 2.5 cm irregular firm, grey-tan poorly circumscribed mass located centrally in the specimen posterior to the nipple. This mass lies within 4.0 cm of the deep resection margin, 0.8 cm of the superior resection margin, 5.5 cm of the lateral resection margin, 2.0 cm of the medial resection margin and 2.0 cm from the inferior resection margin. This mass appears to grossly invade the nipple and skin. The mass also appears to contain minute amounts of hemorrhage and necrosis. There is a 1.5 x 1.5 x 0.8 cm irregular white smoothly lobulated mass with a rubbery, firm consistency located 1.5 cm from the lateral resection margin and 0.7 cm from the deep resection margin. No additional lesions are seen. The remainder of the breast parenchyma consists of grossly unremarkable adipose tissue with dense white fibrous stroma. Sections submitted as follows:
  - Nipple
  - Superior margin with skin 2&3
  - Inferior margin with skin
  - Deep margin
  - Medial margin
  - Breast parenchyma adjacent to 4.5 cm mass 7&8
  - Composite section of 4.5 cm mass 9-12
  - Mass with necrosis 13
  - Additional sections of 4.5 cm mass 14-17
  - 1.5 cm above described mass 18
  - 19&20 Unremarkable breast tissue

# SURGICAL PATHOL Report

- Received in formalin is a 420 gram right simple mastectomy specimen (15.5 x 15.0 x 4.5 cm) with a white-tan skin ellipse G. (11.5 x 9.0 cm). The nipple measures 1.7 cm in diameter and the areola measures 5.0 cm in diameter. The surgical resection margins have been previously inked black. The specimen has been previously cut. There is a  $3.5 \times 3.0 \times 1.0$ cm firm, grey-tan mass with areas of calcification and hemorrhage, located in the upper outer quadrant as well as the lower outer quadrant. This mass lies within 1 mm of the nearest resection margin. No additional lesions are seen. The remainder of the breast parenchyma is dense-white fibrous stroma with unremarkable adipose tissue. Sections submitted 1
  - **Nipple**
  - 2 Skin
  - 3 Lower outer quadrant
  - 4 Upper outer quadrant
  - 5 Lower inner quadrant
  - 6 Upper inner quadrant
  - 7 Deep margin
  - 8-11 Mass with nearest resection margin
  - 12-17 Representative sections of mass
- Received in formalin is a fragment of skin with attached adipose tissue, measuring 14.0 x 1.5 cm. The skin is tan-white H. and rubbery. No lesions are grossly noted. The specimen is unoriented. Tissue submitted in toto in two cassettes H1-
- Received in formalin is an unoriented portion of white-tan skin with attached adipose tissue, measuring  $6.5 \times 3.0 \times 2.5$  cm. I. No lesions are grossly appreciated. Submitted in toto in two cassettes A1-A13.

Diagnosis Discrepancy Primary Tumor Site Discrepancy HIPAA Discrepancy Prior Malignancy Histor Case is (circle):