



Patient: [Redacted]

Referring Physician: [Redacted]

Gender: F

Hasn#:

Provider Group: [Redacted]

Date of Service: [Redacted]

A copy of this report will be faxed to: [Redacted]

## FINAL SURGICAL PATHOLOGY REPORT

### Diagnosis:

#### LEFT BREAST, MODIFIED RADICAL MASTECTOMY:

- Two foci of invasive ductal carcinoma, Nottingham grade 2 (see comment).
  - Size: 2.3 cm and 0.7 cm.
  - Location: lower outer (4:00) and inner (7:00) quadrants, respectively.
- Associated ductal carcinoma in situ (DCIS), intermediate nuclear grade, cribriform and micropapillary patterns with punctate necrosis and without calcifications.
  - Size: DCIS spans a region measuring approximately 3.8 cm and comprises 10% of tumor.
- Margins of resection are widely free of invasive and in situ tumor (at least 1.2 cm away).
- Focus suspicious for lymphovascular invasion identified.
- Micrometastatic carcinoma (1.7 mm) identified in one of fourteen axillary lymph nodes (1/14); no extranodal extension identified.
- Prior biopsy site changes present.
- Uninvolved breast parenchyma with fibrocystic changes and vascular calcifications.
- Benign skin and nipple.

**COMMENT:** The two foci of invasive ductal carcinoma are similar histologically. Although there was little tubule formation identified on prior needle biopsy of the 7:00 lesion, tubule formation is more apparent on excision (>10%). Thus, the overall histologic grade is Nottingham grade 2 for both lesions.

#### **PATHOLOGIC TUMOR STAGING SYNOPSIS:**

Type and grade (invasive): Invasive ductal carcinoma, Nottingham grade 2.  
 Type and grade (in situ): DCIS, intermediate nuclear grade.  
 Primary tumor: pT2(m).  
 Regional lymph nodes: pN1(mi).  
 Distant metastasis: N/A.

ICD-C-3  
 Carcinoma - Infiltrating Duct  
 Site: Path C  
 Cyst 100  
 Cyst 105  
 Cyst 109  
 8556/3  
 9/11/21/13

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**Stage: IIB.**

**Lymphovascular invasion: Not identified.**

**Margin status: R0, negative.**

### **Invasive Breast Cancer Tumor Staging Information**

AJCC Cancer Staging Handbook, 7th Ed., and CAP Protocol (revised  
Previous pathology specimens

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#### SPECIMEN IDENTIFICATION

Procedure/specimen type:

Modified radical mastectomy.

Laterality:

Left breast.

Lymph node sampling:

Axillary dissection.

#### INVASIVE CARCINOMA TUMOR CHARACTERISTICS

Histologic type:

Invasive ductal carcinoma.

Tumor site:

Lower outer (4:00) and inner (7:00) quadrants.

Tumor size:

2.3 cm and 0.7 cm.

Tumor focality:

Multifocal (two foci).

Histologic grade (Nottingham Score):

2 of 3 (Nottingham score 6 -7 of 9).

Tubule formation:

2 of 3.

Nuclear pleomorphism:

2-3 of 3.

Mitotic rate:

2 of 3.

Lymphovascular invasion:

Focus suspicious for lymphovascular invasion identified.

Macroscopic and microscopic extent of tumor:

Benign skin and nipple.

DUCTAL CARCINOMA IN SITU (DCIS):

Associated DCIS, intermediate nuclear grade, cribriform and micropapillary patterns, comprising 10% of tumor and spanning about 3.8 cm.

#### MARGINS

Invasive carcinoma:

Widely negative for tumor (at least 1.2 cm away).

Ductal carcinoma in situ:

Widely negative for tumor (at least 1.2 cm away).

#### LYMPH NODES

Total lymph nodes examined

14.

Number of lymph nodes involved

1 (micrometastasis).

Size of largest metastatic deposit:

1.7 mm.

Extranodal extension:

Absent.

#### PATHOLOGIC STAGING:

Primary Tumor (pT):

pT2(m).

Regional lymph nodes (pN):

pN1(mi).

Distant metastasis (pM):

N/A.

AJCC Stage:

IIB.

#### ANCILLARY STUDIES:

Estrogen receptor:

ProPath

POSITIVE (80-85% positive cells, moderate-strong intensity) (4:00).

Progesterone receptor:

Negative (0% positive cells) (4:00).

HER2:

Negative (score 0) (4:00).

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Ki-67:	High (40% positive cells) (4:00).
Estrogen receptor:	POSITIVE (20% positive cells, moderate-strong intensity) (7:00).
Progesterone receptor:	Negative (0% positive cells) (7:00).
HER2:	Negative (score 0) (7:00).
Ki-67:	High (65% positive cells) (7:00).

### Source of Specimen:

Breast; left breast radical mastectomy

### Clinical History/Operative Dx:

Breast cancer

### Gross Description:

Single specimen designated left breast radical mastectomy. Initially received in a fresh state for Oncogenotyping tissue harvest is a left modified radical mastectomy weighing 809 grams, and measuring 20.8 x 17.3 x 5.8 cm (not including axillary extension), and the axillary wing extending 10.5 x 9.0 x 4.0 cm. The overlying ellipse of tan-brown skin is 22.8 x 11.3 cm, with a paracentral dark brown, wrinkled areola, 3.2 cm in diameter and a flattened 1.1 cm nipple. A palpable mass is appreciated in the lower outer quadrant. A suture marks the medial apex of the specimen. The surgical margins are now differentially inked as follows:

Superior-superficial is marked blue,  
Inferior-superficial is marked orange,  
Deep is marked black.

The breast is serially sectioned perpendicularly through the medial-lateral long axis, to reveal a partially circumscribed, dense pink-gray, tumor mass measuring upwards of 2.3 x 1.5 x 1.3 cm (slabs 4-6, from lateral). This mass is placed in the lower outer quadrant, approximating the 4:00 position and grossly approaching within 1.8 cm of the deep, 2.3 cm of the inferior superficial, 5.0 cm of the lateral extension of breast (not including axillary) and greater than 12.0 cm from the most medial extension of breast. The

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tumor includes an embedded hook-shaped metallic clip. Representative portion of the tumor, peri-neoplastic, and normal breast parenchyma is submitted for Oncogenotyping studies.

A second, discrete, poorly visualized glistening tan lesion, is within the lower inner quadrant, approximating the 7:00 position, and measuring up to 0.7 x 0.5 x 0.5 cm and placed within 2.3 cm of the inferior superficial, 2.4 cm of the deep, and greater than 5.0 cm from the most medial extension of breast. A second biopsy site clip is not appreciated.

The cut sections of the remainder of the breast demonstrate prominent ductal tracts in the subareolar lesion, up to 0.5 cm in diameter, exuding yellow-gray cheesy material, and bluish purulent fluid. Several blue dome cysts are up to 0.6 cm.

Initial examination of the axillary extension of fat reveals fifteen lymph node candidates, ranging from 0.2 cm - 2.0 x 1.7 x 1.2 cm in greatest dimension. The lymph node tissue is represented for microscopic evaluation.

### Cassette summary:

- A1) nipple, subareolar tissue, two pieces,
- A2) medial and lateral extension of skin,
- A3-A5) large tumor mass, lower outer quadrant, represented,
- A6) deep margin adjacent to large tumor mass,
- A7) inferior superficial margin adjacent to large tumor mass,
- A8-A10) lateral extension of breast tissue, adjacent to large mass, slabs 3, 2, 1, respectively,
- A11) breast tissue medial to large tumor, slab 7,
- A12-A14) second nodular lesion and inferior superficial margin and deep margin (A14),
- A15) central breast-subareolar,
- A16) upper outer quadrant, slab 3,
- A17) upper inner quadrant, second slab from medial,
- A18) four small lymph node candidates,
- A19) three lymph node candidates, most proximal to breast,
- A20) four lymph node candidates,
- A21) single lymph node candidate bisected,
- A22) single lymph node candidate trisected,
- A23) enlarged flattened lymph node bisected,
- A24) largest lymph node candidate serially sectioned and submitted.

### Microscopic Description:

Microscopic sections have been examined. The microscopic findings are reflected in the diagnosis rendered.

Intradepartmental consultation: has reviewed selected slides and concurs.

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END OF REPORT (FINAL)		
Criteria	Yes	No
Diagnosis Discrepancy		<input checked="" type="checkbox"/>
Primary Tumor Site Discrepancy		<input checked="" type="checkbox"/>
HPAA Discrepancy		<input checked="" type="checkbox"/>
Prior Malignancy History		<input checked="" type="checkbox"/>
Dual/Synchronous Primary		<input checked="" type="checkbox"/>
Case is (in file):	QUALIFIED	DISQUALIFIED
Reviewed by:	Date Reviewed: 12/21/12	