11B-0-3

Date Coll:

SURGICAL PATHOLOGY REPORT

Carcinoma, infiltrating duct, Nos 8500/3 Site: breast, Nos C50.9

#### SPECIMEN

A. Right breast tissue long stitch 12 o'clock, short stitch apical node and axillary contents

B. Left breast tissue stitch marks 12 o'clock

### CLINICAL NOTES

PRE-OP DIAGNOSIS: Right multifocal invasive breast tumor 9 o'clock and 1 o'clock status post core biopsy Left breast DCIS 2 o'clock and LCIS at 9 o'clock.

POST-OP DIAGNOSIS: Right MRM, left simple mastectomy.

# GROSS DESCRIPTION

A. Received fresh labeled "right breast tissue and axillary contents" is a 19.0 cm. (medial to lateral) x 16.0cm. (superior to inferior) x 5.2 cm. (anterior to posterior) soft, lobulated tan gold-white portion of fibroadipose tissue in keeping with breast designated as right per requisition slip and container and oriented by a single suture as stated previously. An  $11.5 \times 8.0$  $\times$  3.0 cm. portion of axillary fat extends from the lateral aspect of the specimen. There is a  $12.5 \times 6.9$  cm. brown portion of skin with an eccentric, everted,  $1.5 \times 1.5 \times 0.5$  cm. nipple along the anterior aspect. On section, the nipple appears unremarkable. The intact deep margin is inked black and the specimen is sectioned. There is a moderately well circumscribed, 3.8 cm. (superior to inferior)  $\boldsymbol{x}$ 3.5 cm. (medial to lateral)  $\times$  3.2 cm. (anterior to posterior) rubbery tan white tumor mass at the junction of the upper and lower inner quadrants. A portion of tumor and a portion of normal parenchyma are submitted for tissue procurement as requested. The tumor is present to within 1.5 cm. of the inked deep margin and 1.0  $\,$ cm. of the anterior surface of the specimen (subsequently inked blue). Approximately 6.5 cm. lateral to the primary lesion is a second, palpable firm tan white tumor mass measuring 2.0 cm. (medial to lateral) x 1.8 cm. (anterior to posterior) x 1.3 cm. (superior to inferior). The second lesion is located within the lower outer quadrant. The second tumor extends to within 1.4 cm. of the inked deep margin. The parenchyma between the two lesions is dense tan white. An apparent core biopsy site is noted at the junction of the four quadrants (see blocks 10 and 11). No additional mass lesion or abnormality is identified. The remaining cut surfaces consist predominantly of glistening lobulated golden yellow adipose tissue with a moderate amount of interspersed tan white fibrous tissue. Located at the apex of the attached axillary dissection is a rubbery 1.4 cm. tan white lymph node (see block 16). Multiple additional rubbery tan white to tan pink tissues in keeping with lymph nodes measuring up to 5 cm. in greatest dimension are recovered from the remainder of the axillary fat. The largest node appears in keeping with a matted lymphoid aggregate with tan white cut surfaces suggestive of metastasis (see representative sections blocks 19 and 20). Received separately within the specimen container is an additional, ovoid, 2.5 cm. rubbery tan tissue in keeping with lymph node. Representative sections are submitted in 24 cassettes as labeled.

BLOCK SUMMARY: 1 and 2 - large tumor to inked deep margin; 3 and 4 - large tumor to anterior surface (inked blue); 5 and 6 - large tumor to adjacent parenchyma

7 - smaller tumor lower outer quadrant to inked deep margin; 8 and 9 - remainder of smaller tumor.

10 and 11 - parenchyma between the two lesions including presumptive prior core biopsy site; 12 - random upper outer quadrant; 13 - upper inner quadrant; 14 - lower inner quadrant; 15 - lower outer quadrant; 16 - bisected apical node; 17 - three whole lymph nodes; 18 - one bisected lymph node; 19 and 20 - representative from largest (?matted) node, three sections total; 21 and 22 - bisected separately received lymph node (one half per cassette); RR1 nipple; RR2 skin over main tumor.

B. Received fresh labeled "left breast tissue" is a 17.5 cm. (medial to lateral) x 14.8 cm. (superior to inferior) x 4.8 cm. (anterior to posterior) soft, lobulated tan gold-white portion of fibroadipose tissue in keeping with breast designated as left per requisition slip and container and oriented by suture as stated previously. There is a 9.5 cm. (medial to lateral) x 4.4 cm. (superior to inferior) wrinkled brown skin ellipse with an eccentric, everted, 1.5 x 1.5 x 0.8 cm. nipple along the anterior aspect. Within 1 cm. of the superior skin margin, corresponding to the junction of the upper inner and outer quadrants, is a  $7.4 \times 4.5$ cm. defect which communicates with a subjacent 9.5 cm. (medial to lateral) x 5.0 cm. (anterior to posterior) x 4.0 cm. (superior to inferior) vacant biopsy cavity (?biopsy cavities). The cavity is oblique traversing the lower inner quadrant, extending to the upper outer. The cavity focally extends to within 0.8 cm. of the inked deep margin at its medial aspect (see blocks 1 and 2). A stellate firm focus measuring  $1.0 \times 1.0 \times 1.0 \text{ cm}$ . is identified along the deep margin 3.5 cm. inferior to the medial portion of the cavity (see blocks 3 and 4). Residual discrete lesion is not identified grossly along the periphery of the cavity. Margins are inked as follows: anterior surface defect orange; inferior black and posterior blue. The remaining cut surfaces consist predominantly of glistening lobulated golden yellow adipose tissue with a scant amount of interspersed delicate tan white fibrous tissue. Representative sections are submitted in 17 cassettes as labeled.

BLOCK SUMMARY: 1 and 2 - biopsy cavity to closest inked deep margin; 3 and 4 - bisected nodule subjacent to biopsy cavity extending to inked deep margin (one half per cassette); 5 through 12 - representative biopsy cavity to anterior defect and adjacent parenchyma sequentially from medial to lateral; 13 - random upper outer quadrant; 14 - upper inner quadrant; 15 - lower inner quadrant; 16 - lower outer quadrant; 17 - nipple.

## MICROSCOPIC DESCRIPTION

A. This modified radial mastectomy specimen contains two foci of invasive ductal carcinoma. The larger is in the mid-medial portion measuring 3.8 cm. The smaller one is in the lower outer quadrant, 6.5 cm lateral to the larger tumor. Morphologically, they are quite similar and both of high grade. Between the tumors, lymphovascular space invasion is present without parenchymal invasion. The smaller tumor is also associated with high-grade ductal carcinoma in situ. It is likely, therefore, that these two foci represent separate primaries, even though there remains a possibility that the smaller tumor is metastatic. Please see the template below. The template incorporates the findings on both of the tumors.

Invasive carcinoma:

Histologic type: Infiltrating ductal carcinoma
Histologic grade: Both tumors are poorly differentiated
Overall grade: Elston SBR grade 3
Architectural score: 3

Nuclear score: 3 Mitotic score: 3 Greatest dimension (pT): The larger tumor measures 3.8 cm and the smaller measures 2 cm, pT2. Specimen margins: Negative Vessel invasion: Extensive lymphatic invasion present. Calcification: Negative. Nipple (Paget's): Negative for Pagets's. Dermal lymphatic invasion present. Invasion of skin or chest wall: Negative. Ductal carcinoma in situ: Both tumors are associated with similar high-grade ductal carcinoma in situ. Histologic pattern: Cribriform and solid Nuclear grade: 3 Central necrosis: Positive % DCIS of total tumor (if mixed): DCIS is a minor component. Extensive intraductal component (present/absent): Absent Specimen margins: Negative Calcification: Positive Description of non-tumorous breast: Fibrocystic changes present

including

cysts and apocrine metaplasia. Random sections of the lower quadrant and lower outer quadrant disclose lymphatic invasion.

Comments: In the mid-breast, a biopsy site is noted consistent with prior core biopsy. This site discloses lymphovascular space invasion.

# Lymph nodes:

Number of positive nodes of total: Eight out of 10 lymph contain metastatic carcinoma, including the apical node, 8/10.

Size of largest metastasis: 1.0 cm

Extracapsular extension (present/absent): Absent pN: pN2a

Distant metastasis (pM): Cannot be assessed.

Prognostic markers: Previously performed.

B. This simple mastectomy specimen contains a large biopsy cavity. In the vicinity there is lobular carcinoma in situ. No invasive tumor and no ductal carcinoma in situ present. An E-cadherin stain was performed on block #1. Fibrocystic changes are noted, including cysts, apocrine metaplasia, florid ductal hyperplasia and calcifications. The nipple is negative for tumor, as is the overlying skin.

[A few of the antibodies used in our laboratory may be classified as analvte

specific reagents. These antibodies are monitored and controlled in our

laboratory and their performance for in vitro diagnosis is well described in

the medical literature. They have not been cleared or approved by the FDA.]

### DIAGNOSIS

A. Right breast, modified radical mastectomy Two foci (multifocal) of invasive ductal carcinoma, Elston SBR grade 3.

Extensive lympovascular space invasion is present.

Skin, all margins negative for tumor.

Metastatic disease present in 8/10 axillary lymph nodes.

Dermal lymphatics of nipple positive for tumor.

B. Left breast, simple mastectomy -

Breast with large prior biopsy cavity and lobular carcinoma in situ.

Fibrocystic changes present.

No invasive carcinoma or ductal carcinoma present.

M.D. (Electronic Signature)

--- End Of Report ---

Criteria		1
Diagnosis Discrepancy	Yes	No /
Primary Tumor Site Discrepancy	<del></del>	
HIPAA Discrepancy	<del></del>	<del></del>
Prior Malignancy History		<del></del>
Dual/Synchronous Prilipary Noted		<del></del>
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Reviewer Initials Date Reviewed:	- 113 PT	
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