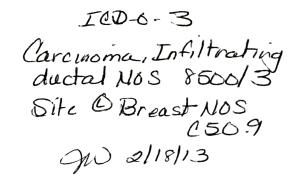
## FINAL PATHOLOGIC DIAGNOSIS

A. Left axillary sentinel lymph node #1; biopsy:

- Two lymph nodes, no tumor (0/2)

B. Left axillary sentinel lymph node #2; biopsy:

- One lymph node, no tumor (0/1)





C. Left breast; simple mastectomy:

 Invasive ductal carcinoma, SBR grade III arising in a background of ductal carcinoma in situ, high nuclear grade, solid type, with central necrosis.
 See parameters.

- Uninvolved breast parenchyma with rare microcalcifications associated with benign acini and focal apocrine metaplasia

## **Breast Pathologic Parameters**

1. Invasive carcinoma:

A. Microscopic measurement: 7mm

B. Composite histologic (modified SBR) grade: III

- Architecture: 3

- Nuclear grade: 3

- Mitotic count: 2

C. Associated intraductal carcinoma in situ (DCIS): present

- Intermediate and high nuclear grades, solid type with central necrosis

- Extent of DCIS microscopically is consistent with the  $10.2 \times 5.4 \times 3.5$  cm of non-mass like enhancement seen radiographically.

- 2. Excisional biopsy margins: Free of tumor
- Invasive carcinoma >1cm from closest margin
- DCIS 8mm from anterior margin, superior aspect
- 3. Blood vessel and lymphatic invasion: Absent
- 4. Nipple and skin: Unremarkable
- 5. Skeletal muscle: Absent
- 6. Axillary lymph nodes: Negative (0/3)
- 7 Special studies (invasive component, current specimen)
- ER: weak expression in 30% of cells
- PR: no expression
- Ki-67: 10-20%
- HER2 (FISH): pending
- 8. pTNM (AJCC, 7th edition, 2010): pT1b, NO(sn), MX

## Clinical History:

mammogram on that revealed a large area of pleomorphic calcifications biopsied as ductal carcinoma in situ, high grade, solid type with central necrosis. Left breast MRI on evealed segmental clumped non-mass enhancement with mixed kinetics measuring 10.2 x 5.4 x 2.5 cm associated with a lateral biopsy clip. A 0.7 x 1.0 x 1.0 cm mass with washout kinetics, suspicious for invasive component was seen just posterior to the biopsy clip. The patient undergoes simple mastectomy, sentinel lymph node biopsy and breast

reconstruction.

Specimens Received:

A: Left sentinel lymph node #1

B: Sentinel node #2 left axilla

C: Left breast

**Gross Description:** 

The specimens are received in three containers each labeled with the patient's name and medical record number.

A. The first container is additionally identified as, 'left sentinel node #1'.

Received fresh for intraoperative diagnosis is a 4.0 x 2.0 x 1.0 cm segment of tan-pink fibrofatty tissue that is dissected for lymph node candidates. Frozen section diagnosis is 'lymph node, no tumor' per . The frozen section remnants are entirely submitted in cassettes A1 FS and A2 FS. The remaining tissue is entirely submitted in cassettes A3 and A4.

B. The second container is additionally identified as, 'sentinel node #2, left axilla'. Received fresh for intraoperative diagnosis is a  $3 \times 2.0 \times 2.0 \text{ cm}$  segment of tan-brown rubbery tissue grossly consistent with a lymph node. The

cut section reveals an unremarkable surface. The entire lymph node is frozen.

Post section diagnosis is 'lymph node, no tumor' for . The frozen section remnant is entirely submitted in cassette B1FS.

C. The third container is additionally identified as, 'left breast'. Received fresh and placed in formalin is a 2640 gm mastectomy specimen measuring 32.5 cm from medial to lateral, 32.5 cm from superior to inferior and 5.3 cm from anterior to posterior. There is 80 cm long by 0.7-6.5 cm wide tan-brown, wrinkled skin ellipse on the anterior surface, with ashort suture designating the superior pole and a long suture designating the lateral pole. The areola measures 5.5 x 3.5 cm areola and the nipple 1.5 cm in diameter. The nipple areolar complex displays no evidence of ulceration or retraction. No axillary tail is present with the specimen. The deep surface is inked black, the anterior-superior surface blue and the anterior-inferior surface green and the breast is serially sectioned from medial to lateral into 11 slices. There is a  $1.1 \times 0.9 \times 0.8$  cm, gray-tan mass in slices 7 and 8, 5.5 cm from black ink and 2.0 cm from blue ink. A metallic clip is identified in slice 7. A 1.5 cm (greatest dimension) biopsy site is identified, adjacent to the lesion, with a probable metallic clip (vs. staple) within the node. Additional masses or nodules are not noted. Representative sections are submitted as follows:

C1-8: Representative sections of lesion, slice 7 and 8 (clip in C1, C3 closest approach to blue ink)

C9: Intramammary lymph node, adjacent to mass, bisected

C10: Representative slice 6, medial to mass

C11: Representative slice 9, lateral to mass

C12: UOQ, slice # 10

C13: UIQ, slice # 3

C14: LOQ, slice # 9

C15: LIQ, slice # 2

C16: Representative skin

C17-18: Nipple

Tissue fixed for at least 6 hours in 10% NBF and no more than 72 hours.

