ICD-O-3
Carcinoma, infiltrating ductal, NOS 8500/3
Site: breast, NOS C50.9 2/12/11 lw

Diagnosis:
A: Lymph node, right axillary sentinel #1, removal
- No metastatic carcinoma identified in one lymph node (0/1)

B: Lymph node, right axillary sentinel #2, removal
- Isolated tumor cell cluster (ITC) identified (on H and E) in one lymph node, 0.12 mm in greatest dimension, negative for extracapsular extension (see comment)

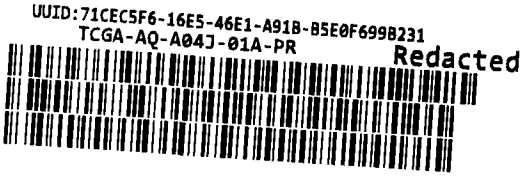
C: Lymph node, left axillary sentinel #1, removal
- No metastatic carcinoma identified in one lymph node (0/1)

D: Lymph node, left axillary sentinel #2, removal
- No metastatic carcinoma identified in one lymph node (0/1)

E: Breast, right, total mastectomy

Tumor Histologic Type: invasive ductal carcinoma

Nottingham Combined Histologic Grade: 3 (9 of 9)
Tubule formation score: 3
Nuclear pleomorphism score: 3
Mitotic Count Score: 3



Focality of tumor: unifocal

Tumor size (greatest dimension): 2.7 cm (by gross examination)

Lymphovascular invasion: not identified

In Situ component: present

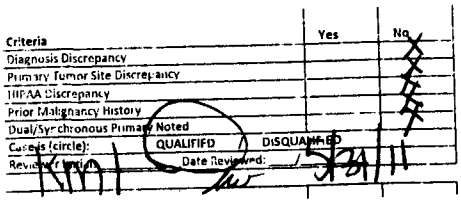
In Situ component type/architecture pattern: ductal carcinoma in situ (DCIS); solid, comedo, micropapillary and cribriform patterns

In Situ component nuclear grade: 3

In Situ component necrosis: present

In Situ component extent/size: DCIS comprises approximately 50% of the tumor and is present admixed with and adjacent to invasive carcinoma

Margin Status:
Invasive component: widely negative



In Situ component: widely negative

Microcalcifications: present associated with in situ and invasive carcinoma

Hormone receptor studies: results will be issued in an addendum report

Other findings:
- Biopsy site changes
- Proliferative fibrocystic change including sclerosing adenosis
- Duct ectasia

AJCC PATHOLOGIC TNM STAGE: pT2 pN0(i+) pMx
Note: The 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: Breast, left, total mastectomy
- Lobular carcinoma in situ
- Proliferative fibrocystic change
- Duct ectasia
- No invasive carcinoma identified

Comment:
The frozen sections of the right axillary sentinel lymph node # 2 (specimen B) are reviewed and are negative for tumor cells. The isolated tumor cells are only identified on the permanent section levels.

Intraoperative Consult Diagnosis:

FSA1: Right axillary sentinel lymph node #1, biopsy
- No tumor seen (0/1)

FSB1: Right axillary sentinel lymph node #2, biopsy
- No tumor seen (0/1)

FSC1: Lymph node, left axillary sentinel lymph node #1, biopsy
- Negative for metastatic carcinoma in one lymph node (0/1)

FSD1: Left axillary sentinel node #2, biopsy
- Negative for metastatic carcinoma in one lymph node (0/1)

Gross Description:
Received are six appropriately labeled containers. Specimens A-D are received fresh for frozen section.

Container A is additionally labeled "right axillary sentinel lymph node #1." It

holds a 1.5 x 1.0 x 1.0 cm lymph node candidate which is serially sectioned and entirely frozen as FSA1

Container B is additionally labeled "right axillary sentinel lymph node #2." It holds a 1.5 x 1.0 x 1.0 cm yellow/tan lymph node candidate which is serially sectioned and entirely submitted in block FSB1

Container C is additionally labeled "left axillary sentinel lymph node #1." It holds a 2 x 1 x 1 cm aggregate of yellow/tan fibrofatty tissue containing one lymph node candidate which is serially sectioned and frozen as FSC1. A small amount of fat remains in formalin.

Container D is additionally labeled "left axillary sentinel lymph node #2." It holds a 1 x 1 x 1 cm fragment of yellow/tan fibrofatty tissue which is serially sectioned and entirely frozen as FSD1

Container E:

Specimen fixation: formalin

Time in fixative: 9 hours

Type of mastectomy: total

Size of specimen: 25 cm medial to lateral, 20.5 cm superior to inferior, 6.0 cm anterior to posterior; weighing 890 grams

Orientation of specimen: There is a long suture lateral, and a short suture superior. The specimen is inked as follows:
superior/blue, inferior/red, deep/black. The specimen is sectioned from medial towards lateral.

Skin ellipse dimensions: 18 x 10 cm

Nipple/areola: 1.0 cm/3.0 cm

Axillary tail: not present

Biopsy site: not identified

Residual tumor: present

Location of tumor: upper outer quadrant; The tumor is a centrally necrotic, ill-defined mass which is 2.7 x 2.5 x 2.3 cm.

Distance of mass/biopsy site from surgical margin: The tumor is located 1.3 cm

from the black inked posterior margin, 2 cm from
the blue inked superior soft tissue margin, 8 cm from the red inked
inferior soft tissue margin, 3 cm subjacent to the skin, 5
cm from the lateral margin and remote from the medial margin.

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

Description of remainder of breast: composed primarily of fat intermixed with
yellow/tan, centrally dense fibroconnective tissue with
multiple cysts measuring up to 0.8 cm in greatest dimension

Other remarkable features: The tumor is surrounded by dark blue dye staining.

Tissue submitted for special investigations: tumor and normal are given to
Tissue Procurement

Digital photograph taken: none

Block Summary:
(Inking: superior=blue, inferior=red, deep=black)

E1 - nipple, serially sectioned
E2 - areola, en face
E3 - central tumor
E4 - tumor and black inked deep margin
E5 - closest blue inked superior margin
E6-E7 - sections of tumor in relationship to adjacent breast parenchyma
E8 - upper inner quadrant
E9 - lower inner quadrant
E10 - upper outer quadrant
E11 - lower outer quadrant

Container F:

Specimen fixation: formalin

Time in fixative: 8.5 hours

Type of mastectomy: total

Size of specimen: 22 cm medial to lateral, 25 cm superior to inferior, 5 cm
anterior to posterior; 990 grams

Orientation of specimen: Long suture=lateral, short suture=superior
Inking: superior=green, inferior=red, deep=black; The specimen is
sectioned from medial towards lateral.

Skin ellipse dimensions: 17.5 x 9.0 cm

Nipple/areola: 1.1 cm/3.5 cm

Axillary tail: not present

Biopsy site: not identified

Residual tumor: not present

Description of remainder of breast: composed primarily of fat intermixed with centrally dense white/tan, slightly nodular fibrofatty tissue with multiple cysts measuring up to 1.3 cm in greatest dimension

Other remarkable features: There is focal blue dye staining in the central to lower inner quadrant of the breast

Tissue submitted for special investigations: normal is given to Tissue Procurement

Digital photograph taken: none

Block Summary:
(Inking: superior=green, inferior=red, deep=black)

F1 - nipple, serially sectioned
F2 - areola, en face
F3-F4 - upper inner quadrant
F5-F6 - lower inner quadrant
F7-F8 - upper outer quadrant
F9-F10 - lower outer quadrant
F11-F12 - central/subareolar

Procedures/Addenda:
Addendum

Addendum
The following addendum is issued to report the results of estrogen receptor, progesterone receptor, and HER2/neu immunohistochemical studies.

Results:

Estrogen receptor (clone SP1):
Interpretation: NEGATIVE

Computer-assisted quantitative score: 0%

Progesterone receptor (clone 1E2):
Interpretation: NEGATIVE
Computer-assisted quantitative score: 0%

HER2/neu (clone 4B5, FDA-approved):
Interpretation: NEGATIVE
Computer-assisted quantitative score: 0

Site: right breast
Performed on block: E3
Fixation: 10% neutral buffered formalin
Fixation time: 6-48 hours

Reference range:
Estrogen receptor and progesterone receptor: <1%=NEGATIVE, 1-10% WEAK POSITIVE,
>10% POSITIVE

HER2/neu: 0,1=NEGATIVE FOR OVEREXPRESSION, 2=INDETERMINATE, 3=POSITIVE FOR
OVEREXPRESSION

Comment:
The quantitative scores reported above were obtained using the FDA-approved The control slides for this case show appropriate staining.

Some of the immunohistochemical reagents used in this case may be classified as analyte specific reagents (ASR) or research use only (RUO) reagents. These were developed and have performance characteristics determined by the These reagents have not been cleared or approved by the US Food and Drug Administration (FDA). The FDA has determined that such clearance or approval is not necessary. These tests are used for clinical purposes. They should not be regarded as investigational or for research. This laboratory is certified under the Clinical Laboratory Improvement Amendments of 1988 (CLIA-88) as qualified to perform high complexity clinical laboratory testing.