Criteria	Yes	No
Diagnosis Discrepancy		✓
Primary Tumor Site Discrepancy		✓
HIPAA Discrepancy		✓
Prior Malignancy History		✓
Dual/Synchronous Primary Noted		

Case is (circle): QUALIFIED DISQUALIFIED

Reviewer Initials RB Date Reviewed: 2.28.11 lw 10/21/11

UUID:DD89D265-9E20-49C2-93BD-666BE7D5E41B
TCGA-A1-A0SD-01A-PR Redacted

ICD-O-3
carcinoma, infiltrating duct, NOS 8500/3
Site: breast, NOS C50.9 lw 10/21/11

Final Pathologic Diagnosis:

A. Sentinel lymph node, left axilla, biopsy: No tumor (0/1).

B. Sentinal lymph node, left axilla, biopsy: No tumor (0/1).

C. Left breast, needle localized partial mastectomy:
1. Invasive ductal carcinoma, 4 cm, grade 2, present at anterior margin; see comment.
2. Ductal carcinoma in situ, low and intermediate nuclear grade with necrosis, negative margins; see comment.
3. Calcifications associated with DCIS and benign epithelium.
4. Proliferative fibrocystic changes (usual ductal hyperplasia, apocrine metaplasia, cyst formation).
5. Prior biopsy site changes.

D. Left axilla, excision: No tumor.

E. Lymph node, left axilla, biopsy: No tumor (0/1).

Note: *Breast Tumor Synoptic Comment*
- Laterality: Left breast.
- Invasive tumor type: Ductal.
- Invasive tumor size: 4 cm maximum diameter (eight consecutive specimen slices involved, each 0.5 cm thick).
- Invasive tumor grade (modified Bloom-Richardson):
  Nuclear grade: 3, 3 points.
  Mitotic count: 6 mitotic figures/10 HPF, 1 point.

Tubule/papilla formation: 10-75%, 2 points.
Total points and SBR grade = 6 points, grade 2.
- Lymphatic-vascular invasion: Not identified.
- Perineural invasion: Not identified.
- Resection margins for invasive tumor:
  - Deep margin: Negative; closest distance of tumor 0.2cm (slide C6)
  - Medial margin: Negative; closest distance of tumor 1.1 cm (gross).
  - Lateral margin: Negative; closest distance of tumor 1.3 cm (gross).
  - Anterior/superior margin: Positive (slides C13 and C17).
  - Anterior/inferior margin: Negative; closest distance of tumor 0.4 cm (slides C3 and C14).

- Ductal carcinoma in situ (DCIS) type: Cribriform.
- Ductal carcinoma in situ size: Foci span throughout the invasive component.
- Ductal carcinoma in situ nuclear grade: Low-to-intermediate.
- Necrosis in ductal carcinoma in situ: Present.
- Microcalcifications: Present in association with DCIS and benign ducts.
- Resection margins for ductal carcinoma in situ:
  - Deep margin: Negative; closest distance of tumor 0.2 cm (slide C2).
  - Medial margin: Negative; closest distance of tumor, <0.2 cm; (slide C1).
  - Lateral margin: Negative; closest distance of tumor greater than 1 cm (gross).
  - Anterior/superior margin: Negative; closest distance of tumor 0.5 cm (slide C2).
  - Anterior/inferior margin: Negative; closest distance of tumor greater than 1 cm (gross).
- Lymph node status: Negative.
  - Number of positive lymph nodes: 0.
  - Total number sampled: 3.

- AJCC/UICC stage: pT2N0MX.

Intraoperative Consult Diagnosis

FS1 (A) Sentinel lymph node cluster, left axilla, biopsy: No tumor seen. (Dr. [redacted]

FS2 (B) Left axilla, sentinel lymph node #2, biopsy: No tumor seen. (Dr. [redacted]

Clinical History

The patient is a year-old woman with a history of biopsy-proven low-grade invasive and in situ ductal carcinoma (') who undergoes left breast needle-localized lumpectomy and sentinel lymph node sampling.

Gross Description

The specimen is received fresh in five parts each labeled with the patient's name and unit number.

Part A is additionally labeled ' It consists of one soft, pink-yellow, irregular, glistening, unoriented, fibroadipose tissue fragment that is 2.8 x 1.8 x 0.9 cm. The specimen is entirely submitted for frozen section. The frozen remnant is entirely submitted in cassette A1.

Part B is additionally labeled ' It consists of one soft, pink-yellow, irregular, glistening, unoriented, fibroadipose tissue fragment that is 3 x 2.5 x 0.7 cm.A single large lymph node candidate is identified, bisected, and entirely submitted for intraoperative consultation with the remnant submitted in cassette B1. The remaining adipose tissue is submitted in cassette B2.

Part C is additionally labeled ' " It consists of a lumpectomy specimen measuring 5.4 cm from superior to inferior, 6.4 cm from medial to lateral and 2.6 cm from anterior to posterior. The specimen has been oriented with a long black surgical indicating the lateral position and a short black surgical suture indicating the superior position. The specimen is coronally sectioned from medial to lateral into 13 slices to reveal diffusely white-yellow breast parenchyma with an apparent biopsy site cavity extending from slices 7 through 10 and measuring 2.6 cm from superior to inferior, 4.4 cm from medial to lateral and 2.4 cm from anterior to posterior. The specimen is inked as follows for microscopic evaluation of surgical margins: Anterior-superior black-yellow, anterior-inferior green and posterior black. Representative sections are submitted as follows:

Cassette C1: Slice 1 (medial margin), perpendicular.
Cassette C2: Slice 3.
Cassette C3: Slice 4, inferior.

Cassette C4: Slice 5, inferior.
Cassette C5: Slice 6, superior.
Cassette C6: Slice 6, mid.
Cassette C7: Slice 6, inferior.
Cassette C8: Slice 7, superior.
Cassette C9: Slice 7, inferior.
Cassette C10: Slice 8, superior.
Cassette C11: Slice 8, mid.
Cassette C12: Slice 8, inferior.
Cassette C13: Slice 9, superior.
Cassette C14: Slice 9, mid.
Cassette C15: Slice 9, inferior.
Cassette C16: Slice 10, superior.
Cassette C17: Slice 10, mid.
Cassette C18: Slice 10, inferior.
Cassette C19: Slice 11.
Cassette C20: Slice 13 (lateral margin), perpendicular.
Slices 1, 6, 7, 8, 9, 10 and 13 are entirely submitted.

Part D is additionally labeled ". " It consists of two unoriented fragments of yellow-tan, fibroadipose tissue measuring 3.0 x 2.5 x 0.5 cm. The specimen is entirely submitted in cassette D1.

Part E is additionally labeled " ... It consists of a single unoriented fragment of tan-yellow, soft tissue measuring 0.6 x 0.5 x 0.3 cm. A single candidate lymph node is identified, measuring 0.6 cm in greatest dimension. The specimen is entirely submitted in cassette E1.

[redacted]/Pathology Resident

[redacted] MD/Pathologist
Signed:

Fee Codes:

Other Specimens

Specimen Class: **Status:** Signed Out **Accessioned**
Signed Out:

Specimen(s) Received: Lip, upper left
Final Diagnosis
Lip, upper left: Mucous retention cyst

[redacted]

Specimen Class: **Status:** Signed Out **Accessioned:**
Signed Out:

Specimen(s) Received: Left breast re-excision (fresh)
Final Diagnosis
Left breast, excisional biopsy:
1. No residual tumor.
2. Prior surgical site changes.
3. Microcalcifications in benign ducts and lobules.

[redacted] MD
[redacted] MD

__Specimen Class: Status: Signed Out Accessioned:
Signed Out:

Specimen(s) Received: Vaginal/Cervical/Endocervical, Thin Prep Imaged

Final Diagnosis

Vaginal/Cervical/Endocervical, Thin Prep Imaged

NEGATIVE FOR INTRAEPITHELIAL LESION OR MALIGNANCY.

Other Interpretations/Results:
SHIFT IN FLORA SUGGESTIVE OF BACTERIAL VAGINOSIS.

SPECIMEN ADEQUACY:
Satisfactory for evaluation.
Transformation zone components are present.

[redacted]

_Specimen Class: Status: Signed Out Accessioned:
Signed Out:

Specimen(s) Received: Left breast core biopsy at , N + 4

Final Diagnosis

Left breast, , core biopsy:
1. Invasive ductal carcinoma, SBR grade 1; see comment.
2. Ductal carcinoma in situ, intermediate grade with comedonecrosis.
3. Calcifications within ductal carcinoma in situ.

[redacted]

Procedure/Addenda for
ADDENDUM. **Date of Addendum.:**

Addendum Comment

An immunohistochemical test for estrogen and progesterone receptors as well as for HER2 was performed on block A1.

The test for estrogen receptors is positive. There is strong nuclear staining in >90% of tumor cells.

The test for progesterone receptors is positive. There is strong nuclear staining in >90% of tumor cells.

Result of HER2/neu test: This carcinoma is negative for HER2/neu oncoprotein over-expression.

An immunohistochemical assay was performed using the CB11 monoclonal antibody to HER2/neu oncoprotein. The staining intensity of this carcinoma was 1 on a scale of 0-3.

Carcinomas with staining intensity scores of *0 or 1* are considered *negative* for over-expression of HER2/neu oncoprotein.

Those with a staining intensity score of *2* are considered *borderline*. We and others have observed that many carcinomas with staining intensity scores of 2 do not show gene amplification. All carcinomas with staining intensity scores of 2 are therefore submitted for FISH testing. The results of the FISH test are issued directly from the molecular cytogenetics laboratory.

Carcinomas with staining intensity scores of *3* are considered *positive* for over-expression of HER2/neu oncoprotein. Tumors in this category show an excellent correlation between the results of immunohistochemical and FISH testing, and almost always show gene amplification.

The immunoperoxidase stain(s) reported above were developed and their performance characteristics determined by the [redacted]. They have not been cleared or approved by the U. S. Food and Drug Administration. 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") as qualified to perform high-complexity clinical testing.

Specimen Class: **Status:** Signed Out **Accessioned:**
Signed Out:

Specimen(s) Received: Vaginal/Cervical/Endocervical, Direct

Final Diagnosis

Vaginal/Cervical/Endocervical, Direct

NEGATIVE FOR INTRAEPITHELIAL LESION OR MALIGNANCY.

SPECIMEN ADEQUACY:
Satisfactory for evaluation.
Transformation zone components are present.

[redacted]

Specimen Class: **Status:** Signed Out **Accessioned:**
Signed Out:

Specimen(s) Received: Endometrium, biopsy

Final Diagnosis

Endometrium, biopsy: Inactive endometrium; no evidence of hyperplasia or carcinoma.

[redacted]

Specimen Class: **Status:** Signed Out **Accessioned:**
Signed Out:

Specimen(s) Received: Endometrium, biopsy

Final Diagnosis

Endometrium, biopsy: Weakly proliferative pattern with gland and stromal breakdown.

[redacted]

Specimen Class: **Status:** Signed Out **Accessioned**
Signed Out:

Specimen(s) Received: Vaginal/Cervical/Endocervical, Direct

Final Diagnosis

Vaginal/Cervical/Endocervical, Direct

BENIGN CELLULAR CHANGES.

Predominance of Coccobacilli consistent with shift in vaginal flora.

SPECIMEN ADEQUACY:

Satisfactory for evaluation. Endocervical cells present.

[redacted]

Specimen Class: Status: Signed Out Accessioned
Signed Out:

Specimen(s) Received: Endometrium, biopsy

Final Diagnosis

Endometrium, biopsy: Proliferative endometrium with irregular maturation, no evidence of hyperplasia or carcinoma.

[redacted]

Specimen Class: Status: Signed Out Accessioned
Signed Out:

Specimen(s) Received: Vaginal/Cervical/Endocervical, Direct

Final Diagnosis

Vaginal/Cervical/Endocervical, Direct

BENIGN CELLULAR CHANGES.

Predominance of Coccobacilli consistent with shift in vaginal flora.

SPECIMEN ADEQUACY:

Satisfactory for evaluation. Endocervical cells present.

[redacted]

Specimen Class: Status: Signed Out Accessioned:
Signed Out:

Specimen(s) Received: Left Breast, Fine Needle Aspiration

Final Diagnosis

Left Breast, Fine Needle Aspiration:

1. Benign cyst. See comment.

2. Fibrocystic change.

[redacted]

Specimen Class: Status: Signed Out Accessioned
Signed Out:

Specimen(s) Received: Endometrium, biopsy

Final Diagnosis

Endometrium, biopsy: Simple hyperplasia without atypia; see comment.

[redacted]

Specimen Class: Status: Signed Out Accessioned:
Signed Out:

Specimen(s) Received: Endocervical, Direct

Final Diagnosis

Endocervical, Direct

BENIGN CELLULAR CHANGES.

Cytologically benign endometrial cells present in a postmenopausal woman.

SPECIMEN ADEQUACY:

Satisfactory for evaluation. Endocervical cells present.

[redacted]

Specimen Class: **Status:** Signed Out **Accessioned:**
Signed Out:

Specimen(s) Received: A: Probable polyps, B: Endometrium, curretage

Final Diagnosis

A. Endometrium, probable polyp, biopsy: Proliferative endometrium with focal simple hyperplasia, in part polypoid.

B. Endometrium, curettage:
1. Proliferative endometrium with irregular maturation.
2. Focal simple hyperplasia.
3. Focal tubal metaplasia.

[redacted]

Specimen Class: **Status:** Signed Out **Accessioned**
Signed Out:

Specimen(s) Received: Endometrium, biopsy

Final Diagnosis

Endometrium, biopsy: Disordered proliferative endometrium with cystic and oncocytic changes and stromal breakdown; see note.

[redacted]

Specimen Class: **Status:** Signed Out **Accessioned:**
Signed Out:

Specimen(s) Received: Endometrium, biopsy

Final Diagnosis

Endometrium, biopsy: Disordered proliferative endometrium with focal stromal breakdown.

[redacted]

QA Review(s)

Consultation Obtained

Status: Complete as of roblem?
Reviewers: [redacted]
Result(s): Agree
elated specimen(s):

Specimen Class: **Status:** Signed Out **Accessioned:**
Signed Out:

Specimen(s) Received: ENDOCERVICAL

Final Diagnosis

CELLULAR CHANGES WITHIN NORMAL LIMITS
BENIGN

Conversion
Signed Out by Cytotechnologist

Specimen Class: **Status:** Signed Out **Accessioned**
Signed Out:

Specimen(s) Received: A) ENDOMETRIAL BX

Final Diagnosis

UTERUS, ENDOMETRIUM, BIOPSY: SECRETORY ENDOMETRIUM. SEE NOTE.

Conversion

[redacted] MD

END OF REPORT