FINAL DIAGNOSIS:

Collection Date:

PART 1: BREAST, LEFT, SEGMENTAL MASTECTOMY AT 2 O'CLOCK –
- A. INVASIVE LOBULAR CARCINOMA, CLASSICAL TYPE.
- B. NOTTINGHAM GRADE 2 (TUBULE FORMATION 3, NUCLEAR ATYPIA 2, MITOTIC ACTIVITY 1; TOTAL SCORE 6/9).
- C. INVASIVE TUMOR MEASURES 1.6 CM IN LARGEST DIMENSION (GROSS MEASUREMENT).
- D. NO LYMPHOVASCULAR IDENTIFIED.
- E. INVASIVE TUMOR IS 1 MM TO THE CLOSEST ANTERIOR MARGIN.
- F. LOBULAR CARCINOMA IN-SITU AND ATYPICAL LOBULAR HYPERPLASIA.
- G. NON-NEOPLASTIC BREAST TISSUE SHOWING FIBROCYSTIC CHANGE, SCLEROSING ADENOSIS, AND MICROCALCIFICATIONS.
- H. BIOPSY SITE CHANGE.
- I. INVASIVE TUMOR POSITIVE FOR ER, PR AND EQUIVOCAL FOR HER-2/NEU [redacted]

PART 2: AXILLARY SENTINEL LYMPH NODE #1, LEFT, BIOPSY –
FIVE LYMPH NODES, NEGATIVE FOR METASTATIC CARCINOMA (0/5).

PART 3: AXILLARY SENTINEL LYMPH NODE #2, LEFT, BIOPSY –
ONE LYMPH NODE, NEGATIVE FOR METASTATIC CARCINOMA (0/1).

PART 4: AXILLARY NON-SENTINEL LYMPH NODE TISSUE, LEFT, BIOPSY –
ONE LYMPH NODE, NEGATIVE FOR METASTATIC CARCINOMA (0/1).

CASE SYNOPSIS:

SYNOPTIC - PRIMARY INVASIVE CARCINOMA OF BREAST

LATERALITY:	Left
PROCEDURE:	Segmental
LOCATION:	Clock position:2
SIZE OF TUMOR:	Maximum dimension invasive component: 16 mm
MULTICENTRICITY/MULTIFOCALITY OF INVASIVE FOCI:	No
TUMOR TYPE (invasive component):	Infiltrating lobular carcinoma
HISTOLOGIC TYPE:	Classical
NOTTINGHAM SCORE:	Nuclear grade: 2 Tubule formation: 3 Mitotic activity score: 1 Total Nottingham score: 6 Nottingham grade (1, 2, 3): 2
ANGIOLYMPHATIC INVASION:	No
DERMAL LYMPHATIC INVASION:	Not applicable
CALCIFICATION:	Yes, benign zones
TUMOR TYPE, IN SITU:	LCIS
SURGICAL MARGINS INVOLVED BY INVASIVE COMPONENT:	No
LYMPH NODES POSITIVE:	0
LYMPH NODES EXAMINED:	7
METHOD(S) OF LYMPH NODE EXAMINATION:	H/E stain
NON-NEOPLASTIC BREAST TISSUE:	ALH, FCD
T STAGE, PATHOLOGIC:	pT1c
N STAGE, PATHOLOGIC:	pN0
M STAGE:	Not applicable
ESTROGEN RECEPTORS:	positive, H-score: 180
PROGESTERONE RECEPTORS:	positive, H-score: 75
HER2/NEU:	2+

ICDO-3
Carcinoma, lobular infiltrating NOS 8520/3
Site CBCF (L) Breast NOS C50.9
path (L) Breast upper outer quadrant C50.4
11/24/13

Addendum
Part #1:

HER-2/NEU IMMUNOHISTOCHEMISTRY [NEGATIVE:0,1+; EQUIVOCAL: 2+; POSITIVE: 3+]

	RESULT	SCORE
HER-2/NEU	Equivocal	2+

NOTE: HER2 FISH is being performed and the results will be subsequently reported.

HER2 IMMUNOHISTOCHEMISTRY TEST DETAILS: Using appropriate formalin fixed (8 – 96 hours). controls and tissue test block, 4B5 antibody clone is used as part of FDA approved and interpreted as follows: Score 0 (negative) = No staining is observed or membrane staining is observed in less than 10% of the tumor cells. Score 1+ (negative) = A faint/barely perceptible membrane staining is detected in more than 10% of the tumor cells. The cells are only stained in part of their membrane. Score 2+ (equivocal) = A weak to moderate complete membrane staining is observed in more than 10% of the tumor cells. This score requires reflex testing by FISH. Score 3+ (positive) = A strong complete membrane staining is observed in more than 30% of the tumor cells.

SPECIAL PROCEDURES:
FISH
Interpretation

nuc ish(D17Z1x2~5,ERBB2x2~8)[40]

No amplification of the HER-2/NEU gene was seen by interphase FISH analysis.

RESULTS:

Fluorescence in situ hybridization (FISH) analysis was performed on a formalin-fixed Block 1H (left segmental mastectomy @ 2:00) using the DNA probe for the HER-2/NEU gene An adequate number of invasive tumor cells were present and evaluated by two independent observers. The ratio of HER-2/NEU signals (ERBB2) to chromosome 17 centromere signals (D17Z1) was determined to be 1.34. A ratio of greater than 2.2 is considered to be amplified; therefore, **this specimen is not amplified.** Although amplification was not seen, many of the cells exhibited 3 or more signals for both the HER-2/NEU gene and for the chromosome 17 centromere. This may be indicative of either polyploidy or aneuploidy for chromosome 17. The average number of HER-2/NEU signals per cell was 3.26. The average number of signals for the chromosome 17 centromere was 2.44. Concurrent positive and negative control specimens showed the expected results.

This FISH test is performed using a modification of the FDA approved HER-2 DNA Probe Kit (1:2 LSI HER-2/neu / CEP17 probe : T-denhyb-2 buffer). This FISH test was developed and its performance determined by the Pursuant to the requirements of CLIA '88, this laboratory has established and verified the test's accuracy and precision.

Criteria	LW 10/24/13	Yes	No
Diagnosis Discrepancy			✓
Primary Tumor Site Discrepancy			✓
HIPAA Discrepancy			✓
Prior Malignancy History			✓
Dual/Synchronous Primary Noted			✓
Case is (circle):	QUALIFIED / DISQUALIFIED		
Reviewer Initials	Date Reviewed: 10/24/13		