# **FINAL DIAGNOSIS:**

Collection Date:

BREAST, LEFT, TOTAL MASTECTOMY (120.1 GRAMS) -

- A. METAPLASTIC CARCINOMA OF THE BREAST, SPINDLE CELL TYPE, NOTTINGHAM GRADE II (TUBULE FORMATION 3, NUCLEAR PLEOMORPHISM 3, MITOTIC ACTIVITY 1; TOTAL SCORE 7/9).
- B. THE INVASIVE TUMOR MEASURES 3.8 CM IN GREATEST DIMENSION.
- C. NO LYMPHOVASCULAR SPACE INVASION IS NOTED.
- D. INKED MARGINS ARE NEGATIVE FOR CARCINOMA; HOWEVER, A FOCUS OF INVASIVE CARCINOMA IS LESS THAN 1.0 MM (LESS THAN 0.1 CM) FROM THE ANTERIOR INKED MARGIN.
- E. THE INVASIVE CARCINOMA IS LOCATED IN THE CENTRAL AREA.
- F. THE NIPPLE DERMIS AND ADJACENT SKIN DERMIS, BUT NOT THE EPIDERMIS, ARE INVOLVED BY INVASIVE CARCINOMA.
- G. NIPPLE DUCTS WITH SQUAMOUS METAPLASIA.
- H. PREVIOUS BIOPSY SITE CHANGES.
- I. THE INVASIVE TUMOR CELLS ARE NEGATIVE FOR ESTROGEN RECEPTOR, WEAKLY POSITIVE FOR PROGESTERONE RECEPTOR, AND NEGATIVE FOR HER-2, AS PER PREVIOUS PATHOLOGY REPORT (see comment).
- J. NON-NEOPLASTIC BREAST WITH RADIAL SCARS.

#### COMMENT:

Due to the weakly positive PR result on the core biopsy based on stains performed at receptor immunohistochemistry will be repeated and an addendum will follow.

hormone

### Addendum

\*\* BREAST TUMOR IMMUNOHISTOLOGY RESULTS\*\*

## HORMONE RECEPTOR IMMUNOHISTOCHEMISTRY

RESULT H SCORE RAW IMMUNOSTAINING SEMIQUANTITATION

ER: Weakly positive 10 (0: 91%; 1+: 8%; 2+: 1%; 3+: 0%)

PR: Negative 0 (0: 100%; 1+: 0%; 2+: 0%; 3+: 0%)

ESTROGEN/PROGESTERONE RECEPTORS (ER/PR) TEST DETAILS: Using formalin fixed tissues (8-96 hours) and appropriate positive and negative internal/external controls; the test for the presence of hormone receptor protein is performed by the immunoperoxidase method according to the ASCO-CAP Guidelines. A positive Estrogen or Progesterone receptor tumor shows nuclear immunostaining in greater than or equal to 1% of the tumor cells (i.e. and H-score of 1 or higher). The ER and PR Histologic Score (H-Score, or HS) is calculated as the sum of intensity of staining times the proportion of cells staining and has a dynamic range of 0 to 300. The semiquantitation immunostaining raw data used to calculate the H-score is also shown above in the report. Generally, the H-score correlates to percentage of positive cells. According to

the correlation of mean H-score versus percent cells staining for ER is as follows: H-score of 251 (>75% cells staining); H-score of 130 (51-75% cells staining); H-score of 42 (10-50% cells staining); H-score of 4 (<10% cells staining). Estrogen receptor antibody SP1, an IVD, is performed using the

Progesterone receptor antibody 1F2, an IVD, is performed using the

UUID:1DB8FAFB-FC4A-4401-8316-30FB5352335D
TCGA-BH-A6R9-01A-PR
Redacted

Carenomo, metaplantie, ducta (1850/3)

Cade to highest 8575/3

path

Carenoma, metaplantie, aparille all
(8575/3)

Cade to highest 8575/3

Cade to highest 8575/3

Site Core

Code to highest 8575/3

Site Code

Code to highest 8575/3

#### CASE SYNOPSIS: SYNOPTIC - PRIMARY INVASIVE CARCINOMA OF BREAST LATERALITY: l eft PROCEDURE: Simple mastectomy LOCATION: Central subareolar SIZE OF TUMOR: Maximum dimension invasive component: 38 mm MULTICENTRICITY/MULTIFOCALITY OF INVASIVE FOCI: TUMOR TYPE (invasive component): Metaplastic carcinoma NOTTINGHAM SCORE: Nuclear grade: 3 Tubule formation: 3 Mitotic activity score: 1 Total Nottingham score: 7 Nottingham grade (1, 2, 3): 2 ANGIOLYMPHATIC INVASION: No DERMAL LYMPHATIC INVASION: No **CALCIFICATION:** No SURGICAL MARGINS INVOLVED BY INVASIVE COMPONENT: No Distance of invasive tumor to closest margin: 1 mm PAGET'S DISEASE OF NIPPLE: LYMPH NODES EXAMINED: 0 METHOD(S) OF LYMPH NODE EXAMINATION: Other: None. SKIN INVOLVED (ULCERATION): No T STAGE, PATHOLOGIC: pT2 N STAGE, PATHOLOGIC: pNX M STAGE: Not applicable **ESTROGEN RECEPTORS:** negative PROGESTERONE RECEPTORS: positive, H-score: 60 HER2/NEU: MICROSCOPIC: Block 1B: Antibody/Antigen Result Vimentin . Positive S-100 Rare weakly positive cells. CK5 Positive. AE1/AE3 Weakly positive. CK17 Positive. P63 Positive. CK14 Positive. Block 1C: Antibody/Antigen Result P63 Highlights tumor cells and myoepithelial cells. Smooth muscle myosin heavy chain Highlights myoepithelial cells. Utilizing formalin-fixed (8-96 hour range), paraffin embedded tissue, immunohistology is performed with the following selected antibodies and designated antibody clone(s), directed against the following antigenic target(s), with adequate positive and negative internal and external controls. Antibodies are optimized appropriate for fixation times. ANTIBODY CLONE TARGET ANTIGEN VENDOR Vimentin V9 Mesenchymal cells S-100 Polyclonal Rabbit Melanoma screen

XM26

E3

4A4

LL002

SMMS-1

AE1/AE3

CK 5

CK 17

CK 14

Myosin

p63

AE1/AE3

Criteria (w 6	120/	/3	Yes	lio
Diagnosis Discrepant /				\ \
Primary rumor Site Discrepancy				
H!?A^ Discrepancy				
Prior Malignancy History				
Dual/Synchronous Primary Noted				7.7
Case is (circle): CUALI	FED /	DISQUA	LIFIED	

High molec wt keratin

High molec wt keratin

High molec wt keratin

Myoepithelial cells

Myoepithelial cells

carcinomas