Pathology Report CORRECTED

Report Type ..... Pathology Report
Date of Event ....
Sex ..... M
Hosp/Group .....
Record Status ....

ADDENDA:
Addendum
PROBE: LSI EGFR/CEP7 Dual-Color Probe

Cytogenetic Location: 7p12 / 7p11.1-q11.1
EGFR FISH STUDIES PERFORMED ON THE SQUAMOUS CELL CARCINOMA ARE NEGATIVE.
Number of cells analyzed: 71
Ratio EGFR/CEP7: 1.3
High Polysomy: 0%
SNR (signal to nucleus ratio): 2.3
Low Polysomy: 13(18.3%)
Trisomy: 9(12.7%)
Disomy: 49(69.0%)

ICD-O-3
Carcinoma, squamous cell, non-keratinizing, NOS 8072/3
Site: larynx, NOS C32.9
MW 9/29/12

This result should be integrated with all clinical and pathologic data in the
determination of a comprehensive diagnostic and treatment plan.
EGFR FISH analysis was manually performed and quantitatively assessed by
analysis of a minimum of 60 cells using the EGFR SpectrumOrange and the CEP7
SpectrumGreen probes.
EGFR FISH positive:
High Polysomy: > four gene copies in > 40% of cells
Gene Amplification: Ratio gene/chromosome more than two or > 15 gene copies in
> 10% of cells
EGFR FISH negative:
Disomy: < two gene copies in more than 90% of the cells
Trisomy: three gene copies in more than 10% of cells
Low Polysomy: > four gene copies in more than 10% but less than 40% of cells
References:
Rogers SJ, Box C, Chambers P, Barbachano Y, Nutting CM, Rhys-Evans P, Workman
P,Harrington KJ, Eccles SA. Determinants of response to epidermal growth
factor receptor tyrosine kinase inhibition in squamous cell carcinoma of the
head and neck. J Pathol. 2009 May;218(1):122-30.
Chung CH, Ely K, McGavran L, Varella-Garcia M, Parker J, Parker N, Jarrett
C,Carter J, Murphy BA, Netterville J, Burkey BB, Sinard R, Cmelak A, Levy
S,Yarbrough WG, Slebos RJ, Hirsch FR. Increased epidermal growth factor
receptor gene copy number is associated with poor prognosis in head and neck
squamous cell carcinomas. J Clin Oncol. 2006 Sep 1;24(25):4170-6.

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: BTH Date Reviewed: 9/28/12
MW 9/28/12

My signature is attestation that I have personally reviewed the submitted
material(s) and the above diagnosis reflects that evaluation.
Addendum
Immunoperoxidase stain for EGFR is positive. Immunoperoxidase stain for p16
is focally positive but negative as a surrogate marker for HPV. In-situ
hybridization for HPV is negative.

My signature is attestation that I have personally reviewed the submitted
material(s) and the above diagnosis reflects that evaluation.

FINAL DIAGNOSIS:
PART 1: LYMPH NODES, RIGHT CERVICAL, LEVELS 2, 3, AND 4, SELECTIVE DISSECTION
TWENTY-EIGHT LYMPH NODES, NO TUMOR PRESENT (0/28).
PART 2: LYMPH NODES, LEFT CERVICAL, LEVELS 2, 3, AND 4, SELECTIVE DISSECTION
A. MICROSCOPIC FOCUS OF METASTATIC SQUAMOUS CELL CARCINOMA IN ONE OUT
OF THIRTY-TWO LYMPH NODES (1/32).
B. THE LYMPH NODE WITH METASTATIC SQUAMOUS CELL CARCINOMA IS IN LEVEL 3
AND THERE IS NO EXTRACAPSULAR EXTENSION.
PART 3: LARYNX, TOTAL LARYNGECTOMY
A. SUPRAGLOTTIC INVASIVE SQUAMOUS CELL CARCINOMA, NONKERATINIZING
(2.5 CM).
B. ANGIOLYMPHATIC INVASION PRESENT.
C. PERINEURAL INVASION ABSENT.
D. RESECTION MARGINS ARE FREE OF CARCINOMA (ALSO SEE PART 4).
E. NINE LYMPH NODES, NO TUMOR PRESENT (0/9).
F. PATHOLOGIC STAGE: pT1 N2.
PART 4: LEFT LATERAL MARGIN, BIOPSY
NO TUMOR PRESENT.

My signature is attestation that I have personally reviewed the submitted

tissue. Grossly, there is a 2.5 x 2.3 x 0.9 cm tan-white, firm, exophytic
supraglottic tumor mainly involving the right side. Anterior commissure,
preepiglottic soft tissue, vocal cords, and aryepiglottic folds are not involved. The rest of the mucosa is unremarkable.
There are two possible lymph nodes attached to the left side of the larynx
measuring in greatest dimension 1.8 cm each. Multiple possible lymph nodes
from anterior soft tissue are identified ranging in greatest dimension from
0.1 to .5 cm.
The tumor is entirely submitted.
Normal tissue and tissue from tumor is banked for SPORE Head and Neck Tissue
Bank. Digital imaging photographs are taken.
INK CODE:
Black anterior soft tissue
Blue pre-epiglottic soft tissue
Orange area under hyoid bone, not true margin
Red banked area
CASSETTE CODE:
3A base of tongue margin, shave
3B left lateral edge, shave,
3C right lateral margin, shave
3D inferior margin, shave (including superior portion of the tracheostomy
mucosal site)
3E tracheostomy skin site, perpendicular
3F tracheostomy soft tissue opening, perpendicular
3G representative of left vocal cords
3H representative of right vocal cords
3I-J tumor and preepiglottic soft tissue, right to left.
3K-L reminder of tumor,
3M-N one lymph node in each, bisected (attached to left larynx)
3O one lymph node, bisected, anterior soft tissue
3P one lymph node, anterior soft tissue
3Q possible lymph nodes, anterior soft tissue
Part 4 is received fresh labeled with the patient's name, initials XX and
"left lateral margin". Received are two, pale yellow-tan soft tissue fragments cervical and some is 0.3 x 0.2 and 1.5 x 0.5 x 0.4 cm. A frozen
section is performed with an intraoperative diagnosis completed. The specimen
is entirely submitted for processing in a cassette labeled 4AFS.
Grossed by:

INTRAOPERATIVE CONSULTATION:
4AFS: LARYNX, LEFT LATERAL MARGIN, (frozen section)-
A. SUFFICIENT FOR ANCILLARY STUDIES
B. BENIGN
C. NO TUMOR SEEN

MICROSCOPIC:
Microscopic examination substantiates the above diagnosis.

material(s) and the final diagnosis reflects that evaluation.

GROSS DESCRIPTION:
The specimen is received in 4 parts.
Part 1 is received fresh labeled with the patient's name, initials and "right neck levels 2, 3, 4". Received is an unoriented, irregular mass of finely lobulated to coarsely lobulated 11 x 6 x 2 cm adipose tissue. The specimen is divided into 3 equal segments and designated as levels A (finely lobulated segment) through C. Multiple lymph nodes are identified ranging in size from 0.1 to 2 cm. The lymph nodes are entirely submitted.
Section code:
1A - level A -bisected lymph node
1B - level A - bisected lymph node
1C - level A - 4 possible lymph nodes
1D - level B - 2 larger lymph nodes
1E - level B - 4 lymph nodes
1F - level B - 2 bisected lymph nodes
1G - level B.- 6 smallest lymph nodes
1H - level C - 4 possible lymph nodes
1I - level C - 3 possible lymph nodes
Part 2 is received fresh labeled with the patient's name, initials and "left neck-levels 2, 3, 4 (tie superior)". Received is an oriented, irregular, 12 x 3 x 3 cm, adipose neck dissection with a single suture designating superior. The specimen is subdivided into 3 equal segments and designated as levels 2 through 4. Multiple lymph nodes are identified ranging in size from 0.2 to 2.6 cm in greatest dimension. Several of the larger lymph nodes within level 2 appear suspicious. The lymph nodes are entirely submitted.
Section code:
2A - 2C - level 2 - trisected largest lymph node
2D - level 2-bisected lymph node
2E - level 2-two bisected lymph nodes (one LN inked blue)
2F - level 2- two possible smaller lymph nodes
2G - level 3-bisected lymph node
2H - level 3-bisected lymph node
2I - level 3-four possible lymph nodes
2J - level 3-three smaller possible lymph nodes
2K - level 4- four possible lymph nodes
2L - level 4-five possible lymph nodes
2M - level 4-seven minute possible lymph nodes
Part 3 is received fresh labeled with the patient's name, initials and "larynx". It consists of a total laryngectomy measuring 11.5 x 8.0 x 7.0 cm with attached hyoid bone, skin (4.0 x 3.5 cm) with a tracheostomy site, and fibroadipose tissue with multiple lymph nodes attached the anterior soft

The following statement applies to all immunohistochemistry, Insitu Hybridization Assays (ISH & FISH), Molecular Anatomic Pathology, and Immunofluorescent Testing:
The testing was developed and its performance characteristics determined by
the , Department of Pathology, as required by the CLIA
'88 regulations. The testing has not been cleared or approved for the specific use by the U.S. Food and Drug Administration, but the FDA has determined such approval is not necessary for clinical use. Tissue fixation
ranges from a minimum of 2 to a maximum of 84 hours.
This laboratory is certified under the Clinical Laboratory Improvement Amendments of 1988 ("CLIA") as qualified to perform high-complexity clinical
testing. Pursuant to the requirements of CLIA, ASR's used in this laboratory
have been established and verified for accuracy and precision. Additional
information about this type of test is available upon request.
CASE SYNOPSIS:
SYNOPTIC DATA - LARYNX RESECTIONS
TYPE OF LARYNGECTOMY: Total
TUMOR LATERALITY: Other location: Primary right with extension across
midline
ATTACHED STRUCTURES: Pyriform sinus, Base of tongue, Tracheotomy, Skin
TUMOR LOCATION/SEGMENT: Supraglottic
TUMOR SIZE: Maximum dimension: 2.5 cm
HISTOLOGIC TYPE OF TUMOR: Squamous cell carcinoma
HISTOLOGIC GRADE: Moderately differentiated
STRUCTURES INVOLVED BY TUMOR: Epiglottis
LYMPH NODES: Lymph nodes positive, Right: 0
Total number of right sided lymph nodes examined: 28
Lymph nodes positive, Left: 1
Total number of left sided lymph nodes examined: 32
Site of 'other' lymph nodes: Anterior soft tissue
Lymph nodes positive, 'other': 0
Total number of 'other' lymph nodes examined: 9
EXTRACAPSULAR SPREAD OF LYMPH NODE METASTASES
No
INTRA-PERINEURAL INVASION: Absent
VASCULAR INVASION: Yes
SURGICAL MARGIN INVOLVEMENT: Free (2 mm or more)
T STAGE, PATHOLOGIC: Supraglottis, pT1
N STAGE, PATHOLOGIC: pN2
M STAGE, PATHOLOGIC: pMX

PATIENT HISTORY:
As a negative shorter one with a CHIEF COMPLAINT/PRE-OP/POST-OP DIAGNOSIS:
Cancer of larynx.
PROCEDURE: Laryngectomy and bilateral neck dissections.
SPECIFIC CLINICAL QUESTION: Margins and nodes.

OUTSIDE TISSUE DIAGNOSIS: Yes-squamous cell carcinoma.
PRIOR MALIGNANCY: No.
CHEMORADIATION: No
ORGAN TRANSPLANT: No.
IMMUNOSUPPRESSION: No.
OTHER DISEASES: No.
HISTO TISSUE SUMMARY/SLIDES REVIEWED:
Part 1: Neck Dissection, Level 2, 3, 4
Taken:

Stain	Block
H&E x 1	A
H&E x 1	B
H&E x 1	C
H&E x 1	D
H&E x 1	E
H&E x 1	F
H&E x 1	G
H&E x 1	H
H&E x 1	I

Part 2: Neck Dissection, Levels 2, 3, 4
Taken:

Stain	Block
H&E x 1	A
H&E x 1	B
H&E x 1	C
H&E x 1	D
H&E x 1	E
H&E x 1	F
H&E x 1	G
H&E x 1	H
H&E x 1	I
H&E x 1	J
H&E x 1	K
H&E x 1	L
H&E x 1	M

Part 3: Larynx, Total Laryngectomy
Taken:

Stain/	Block
H&E x 1	A
H&E x 1	B
H&E x 1	C
H&E x 1	D
H&E x 1	E
H&E x 1	F
H&E x 1	G
H&E x 1	H
H&E Recut x 1	I
IEGFR x 1	I
IBNKNC x 1	I
IBNKNC x 1	I
IBNKNC x 1	I
IBNKNC x 1	I
IBNKNC x 1	I
IBNKNC x 1	I
H&E x 1	I
HPV x 1	I
IISH x 1	I

IISH x 1 I
P16 x 1 I
V-EGFR x 1 I
H&E x 1 J
H&E x 1 K
H&E x 1 L
H&E x 1 M
H&E x 1 N
H&E x 1 O
H&E x 1 P
H&E x 1 Q
H&E x 1 R
Part 4: Left Lateral Margin
Taken:
Stain/ Block
H&E x 1 A FS
TC1