

UUID:79C16F29-FA94-44CD-A971-558B23508CE3
TCGA-CN-A642-01A-PR

Redacted

Pathology Repo

Report Type .

Date of Event

Sex M

Authored by

Hosp/Group

Record Status CORRECTED

ICD-0-3

Carcinoma, squamous
cell NOS 8670/3
Site ^{path} Oral cavity C06.9
CSF
Tongue NOS C02.9
W 5/10/13

COMPREHENSIVE THERANOSTIC SUMMARY

IMMUNOHISTOCHEMISTRY:

p16:

RESULTS

NEGATIVE

**See Special Procedure reports below for additional details and background on

In situ/FISH and/or Molecular Anatomic Pathology testing as pertinent**

Comment:

INDETERMINATE

HPV ISH is

Pathologist:

** Report Electronically Signed Out **

By Pathologist:

My signature is attestation that I have personally reviewed the submitted

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

FINAL DIAGNOSIS:

PART 1: CENTRAL NERVE, RIGHT, BIOPSY
NERVE, NO TUMOR SEEN.

PART 2: RIGHT MANDIBLE MARROW MARGIN, BIOPSY
BONE SPICULES, NO TUMOR SEEN.

PART 3: LEFT MANDIBLE MARROW MARGIN, BIOPSY
BONE SPICULES, NO TUMOR SEEN.

PART 4: LEFT MANDIBULAR ALVEOLUS MARGIN, BIOPSY
NO TUMOR SEEN.

PART 5: FLOOR OF MOUTH MARGIN, BIOPSY
NO TUMOR SEEN.

PART 6: ANTERIOR TONGUE MARGIN, BIOPSY
MILD ACUTE MUCOSITIS, NO TUMOR SEEN.

PART 7: POSTERIOR TONGUE MARGIN, BIOPSY
NO TUMOR SEEN.

PART 8: ANTERIOR LIP MARGIN, BIOPSY
NO TUMOR SEEN.

PART 9: DEEP TONGUE MARGIN, BIOPSY
NO TUMOR SEEN.

PART 10: ANTERIOR HYOID MARGIN, BIOPSY
NO TUMOR SEEN.

PART 11: NECK, LEFT, LEVEL 1, DISSECTION
 A. ONE BENIGN LYMPH NODE (0/1).
 B. SUBMANDIBULAR GLAND WITH NO SIGNIFICANT HISTOLOGIC CHANGE.

PART 12: NECK, LEFT, LEVEL 2, DISSECTION
 A. LYMPHOID TISSUE IS ABSENT.
 B. NO TUMOR IS SEEN.

PART 13: NECK, LEFT, LEVELS 2-4, DISSECTION
 A. METASTATIC SQUAMOUS CELL CARCINOMA, 2.5 CM, IN ONE OF EIGHTY-ONE LYMPH NODES (1/81).
 B. EXTRACAPSULAR SPREAD IS PRESENT.
 C. POSITIVE LYMPH NODE IS IN LEVEL 2.

PART 14: NECK, RIGHT, LEVEL 1B, DISSECTION
 A. SIX BENIGN LYMPH NODES (0/6).
 B. SUBMANDIBULAR GLAND WITH NO SIGNIFICANT HISTOLOGIC CHANGE.

PART 15: NECK, RIGHT, LEVEL 2-4, DISSECTION
 A. METASTATIC SQUAMOUS CELL CARCINOMA, UP TO 6.0 CM, IN SIX OF TWENTY-ONE LYMPH NODES (6/21).
 B. JUGULAR VEIN IS INVOLVED BY CARCINOMA.
 C. EXTENSIVE EXTRACAPSULAR SPREAD IS PRESENT.

PART 16: NECK, LEFT, LEVEL 1B (ADDITIONAL), DISSECTION
 ONE BENIGN LYMPH NODE (0/1).

PART 17: MANDIBLE AND TONGUE, RIGHT HEMIMANDIBULECTOMY AND RIGHT PARTIAL GLOSSECTOMY
 A. INVASIVE SQUAMOUS CELL CARCINOMA, 6.3 CM, MODERATELY TO POORLY DIFFERENTIATED, INVOLVING FLOOR OF MOUTH, LATERAL ORAL TONGUE, AND SUBLINGUAL GLAND. MANDIBULAR BONE IS FREE OF CARCINOMA.
 B. EXTENSIVE VASCULAR AND PERINEURAL INVASION IS PRESENT.
 C. ANTERIOR FLOOR OF MOUTH TISSUE EDGE IS INVOLVED BY CARCINOMA.
 D. CARCINOMA IS 0.1 CM FROM THE MIDLINE/DEEP TISSUE EDGE. ANTERIOR AND POSTERIOR FLOOR OF MOUTH TISSUE EDGES ARE FREE OF CARCINOMA. SEE OTHER PARTS FOR FINAL MARGINS.
 E. METASTATIC CARCINOMA, 8.7 CM, IN SUBCUTANEOUS SOFT TISSUE, LEVEL 1.
 F. pT4a N3.

COMMENT:

Preliminary impression discussed with
 Expression of p63, P40, cytokeratin 5/6 and AE1/3 is maintained in areas of
 poorly differentiated squamous cell carcinoma.

Pathologist:

** Report Electronically Signed Out **

By Pathologist:

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

GROSS DESCRIPTION:

Part 1 is received fresh labeled with the patient' s name, initials XXX, medical record # and "right central nerve". It consists of a 0.5 x 0.3 x 0.3 cm, tan-gray tissue. The specimen is entirely submitted in cassette 1A.
Formalin exposure time: 52 hours
Part 2 is received fresh labeled with the patient' s name, initials XXX, medical record # and "right mandible marrow margin". It consists of two pieces of tissue measuring 0.3 x 0.2 x 0.2 cm and 0.2 x 0.2 x 0.2 cm. The specimen is entirely submitted in cassette 2AFS.
Formalin exposure time: 56 hours
Part 3 is labeled with the patient' s name, initials XXX, medical record # and "left mandible marrow margin". It consists of soft tissue measuring 1.1 x 0.2 x 0.2 cm in aggregate. The specimen is entirely submitted in cassette 3AFS.
Formalin exposure time: 56 hours
Part 4 is labeled with the patient' s name, initials XXX, medical record # and "left mandibular alveolus margin". It consists of two pieces of tissue measuring 0.6 x 0.2 x 0.2 cm and 2.4 x 0.1 x 0.1 cm. The specimen is entirely submitted in cassette 4AFS.
Formalin exposure time: 56 hours
Part 5 is received fresh labeled with the patient' s name, initials XXX, medical record # and "floor of mouth margin". It consists of tan-pink, soft tissue measuring 3.0 x 0.5 x 0.2 cm. The specimen is entirely submitted in cassette 5AFS.
Formalin exposure time: 56 hours
Part 6 is received fresh labeled with the patient' s name, initials XXX, medical record # and "anterior tongue margin". It consists of soft tissue measuring 2.5 x 0.5 x 0.3 cm. The specimen is entirely submitted in cassette 6AFS.
Formalin exposure time: 56 hours
Part 7 is received fresh labeled with the patient' s name, initials XXX, medical record # and "posterior tongue margin". It consists of tan-pink, soft tissue measuring 3 x 1 x 0.5 cm. The specimen is entirely submitted in cassette 7AFS.
Formalin exposure time: 56 hours
Part 8 is received fresh labeled with the patient' s name, initials XXX, medical record # and "anterior lip margin". It consists of tan-pink, soft

tissue, 2.8 x 0.3 x 0.2 cm. The specimen is entirely submitted in cassette

8AFS. Formalin exposure time: 56 hours

Part 9 is received fresh labeled with the patient's name, initials XXX,

medical record # and "deep tongue margin". The specimen consists of tan-pink, soft tissue, 1.1 x 0.6 x 0.4 cm, entirely submitted in 9AFS. Formalin exposure

time: 56 hours

Part 10 is received fresh labeled with the patient's name, initials XXX,

medical record # and "anterior hyoid margin". It consists of tan-pink, soft

tissue measuring 1.3 x 0.8 x 0.4 cm. The specimen is entirely submitted in cassette 10AFS.

Formalin exposure time: 56 hours

Part 11 is received fresh labeled with the patient's name, initials XXX,

medical record # and "left neck level 1". The specimen consists of two pieces

of irregular, gray-yellow, brown tissue, 1.4 x 0.7 x 0.4 cm and 2.2 x 3.7 x

1.7 cm.

Cassette code:

11A two potential lymph nodes, 0.8 cm, each bisected

11B representative section of uninvolved submandibular gland. Formalin exposure time: 52 hours

Part 12 is received fresh labeled with the patient's name, initials XXX,

medical record # and "left neck level 2". The specimen consists of gray-tan,

yellow, irregular tissue with rubbery consistency measuring 2.4 x 1.4 x 0.6

cm. No lymph nodes are identified. The specimen is entirely submitted in

cassettes 12A and 12B. Formalin exposure time: 52 hours

Part 13 is received fresh labeled with the patient's name, initials XXX,

medical record # and "left neck level 2-4, long stitch at 2A, short stitch at

2B". The specimen consists of a gray-brown, irregular, soft tissue, 13.5 x

7.5 x 1.5 cm. Gross photographs are taken.

Level 2A: 2.5 x 1.4 x 0.9 cm grossly involved lymph node is identified. Tissue

is banked for (red ink=banked area) from this positive lymph node) by

Cassette code: 13A potential lymph nodes

13B potential lymph nodes

13C and D potential lymph nodes

13E representative section of largest metastatic lymph node

13F representative section of vessel lumen with no tumor emboli

Level 2B: Cassette code: 13G-J potential lymph nodes each

Level 3: The specimen measures 4.2 x 2.7 x 0.8 cm in overall dimensions.

Cassette code: 13K three potential lymph nodes (one 1.8 cm lymph node bisected)
13L potential lymph nodes
13M potential lymph nodes
13N one 2.4 cm lymph node, trisected
Level 4: The specimen measures 2.6 x 2.5 x 1 cm in overall dimensions.
Cassette code: 13O five potential lymph nodes
13P-Q two potential lymph nodes each. Formalin exposure time: 52 hours
Part 14 is received fresh labeled with the patient's name, initials XXX,
medical record # and "right neck level 1B". The specimen is in three pieces
and consists of pieces of submandibular gland measuring 1.7 x 1.1 x 1.1 cm and
2 x 1.8 x 1 cm. There is an additional soft tissue measuring 2.2 x 2 x 0.5 cm
in overall dimensions. Three potential lymph nodes are identified. The specimen is entirely submitted in cassette 14A through 14C.
Cassette code: 14A-B submandibular gland and soft tissue
14C potential lymph nodes. Formalin exposure time: 52 hours
Part 15 is received fresh labeled with the patient's name, initials XXX,
medical record # and "right neck level 2-4, stitch at level 2". The specimen
consists of irregular, firm, brown-gray tissue with attached muscle, 11.7 x
7.7 x 2.5 cm. Jugular vein, 5.5 x 1.1 cm, that runs through the specimen is
noted. No tumor thrombus is identified when jugular vein lumen is exposed.
Level 2: The specimen consists of irregular, firm, brown-gray tissue measuring 7 x 5.5 x 2.5 cm in overall dimensions. On cut section 3.6 x 6 x
2.5 cm conglomerated mass (lymph node?) infiltrative to the muscle and surrounding structures and in relation to the jugular vein is noted.
Cassette code: 15A proximal jugular vein margin, mass in relation to jugular vein
15B distal jugular vein margin, mass in relation to jugular vein
15C mass in relation to jugular vein
15D-E mass in relation to surrounding tissue
Level 3: The specimen measures 4.5 x 4.5 x 1.7 cm in overall dimensions.
Cassette code: 15F three potential lymph nodes
15G two potential lymph nodes
15H conglomerated lymph nodes measuring 2 x 1.5 x 3.5 cm in dimension
Level 4: The specimen consists of firm, brown-gray, irregular tissue measuring
3.7 x 2.5 x 0.5 cm in overall dimensions.
Cassette code: 15I two potential lymph nodes
15J one potential lymph node, trisected. Formalin exposure time: 34 hours
Part 16 is received fresh labeled with the patient's name, initials XXX,
medical record # and "left neck level 1B (additional)". The specimen consists

of adipose tissue measuring 1.6 x 0.8 x 0.5 cm. The specimen is entirely submitted in cassette 16A. Formalin exposure time: 34 hours Part 17 is received fresh labeled with the patient's name, initials XXX, medical record # and "mandible and tongue", 11.5 x 7 x 8.5 cm. It consists of a 10 x 4.4 x 2.3 cm right subtotal glossectomy, a 7.2 cm in anterior-posterior, 4.4 cm in medial-lateral, 2.6 cm in superior-inferior right hemimandibulectomy, and a 8.6 x 5.6 x 0.6 cm anterior neck submental skin excision. Five teeth are attached to the mandible. The submental skin shows a brown area, 0.9 x 0.3 cm. Additionally, left submandibular gland is present, 3.2 x 2.4 x 1.8 cm. There is an ulcerated firm tan mass, 6.3 x 2.8 x 2.4 cm, involving floor of the mouth. This tumor grossly abuts the midline deep tissue edge. The tumor also abuts the mandible bone but the bone grossly seems to be intact. There is a second necrotic friable tan mass, 8.7 x 4.2 x 2.5 cm, that is located between adjacent to the right submandibular gland. This mass extends into the subcutaneous tissue. The mass is grossly present at the posterior soft tissue margin. Gross photographs are taken. Ink code: Green ink midline deep tissue edge Blue ink anterior floor of the mouth tissue edge Orange ink posterior floor of the mouth tissue edge Cassette code: left mandible bone margin posterior mandible bone margin section of mandible right tumor abuts the bone 17D midline deep tissue edge, two radial sections 17E anterior floor of the mouth tissue edge, two radial sections 17F posterior floor of the mouth tissue edge, two radial sections 17G base of tongue sample 17H tumor in relation to possible submandibular gland 17I tumor in relation to skeletal muscle 17J tumor in relation to skin 17K tumor in relation to potential sublingual gland 17L possible potential lymph nodes in relation to metastatic second mass 17M tumor in relation to left submandibular gland Formalin exposure time: 34 hours Dictated by:

INTRAOPERATIVE CONSULTATION:

2AFS: RIGHT MANDIBULAR MARROW MARGIN, BIOPSY (frozen section)

A. SUFFICIENT FOR ANCILLARY STUDIES.

B. BENIGN.

C. NO TUMOR SEEN.

3AFS: LEFT MANDIBULAR MARROW MARGIN, BIOPSY (frozen section)

- A. SUFFICIENT FOR ANCILLARY STUDIES.
- B. BENIGN.
- C. NO TUMOR SEEN.
- 4AFS: LEFT MANDIBULAR ALVEOLUS MARGIN, BIOPSY (frozen section)
 - A. SUFFICIENT FOR ANCILLARY STUDIES.
 - B. BENIGN.
 - C. NO TUMOR SEEN.
- 5AFS: FLOOR OF MOUTH MARGIN, BIOPSY (frozen section)
 - A. SUFFICIENT FOR ANCILLARY STUDIES.
 - B. BENIGN.
 - C. NO TUMOR SEEN.
- 6AFS: ANTERIOR TONGUE MARGIN, BIOPSY (frozen section)
 - A. SUFFICIENT FOR ANCILLARY STUDIES.
 - B. BENIGN.
 - C. NO TUMOR SEEN.
- 7AFS: POSTERIOR TONGUE MARGIN, BIOPSY (frozen section)
 - A. SUFFICIENT FOR ANCILLARY STUDIES.
 - B. BENIGN.
 - C. NO TUMOR SEEN.
- 8AFS: ANTERIOR TIP MARGIN, BIOPSY (frozen section)
 - A. SUFFICIENT FOR ANCILLARY STUDIES.
 - B. BENIGN.
 - C. NO TUMOR SEEN.
- 9AFS: DEEP TONGUE MARGIN, BIOPSY (frozen section)
 - A. SUFFICIENT FOR ANCILLARY STUDIES.
 - B. BENIGN.
 - C. NO TUMOR SEEN.
- 10AFS: ANTERIOR HYOID MARGIN, BIOPSY (frozen section)
 - A. SUFFICIENT FOR ANCILLARY STUDIES.
 - B. BENIGN.
 - C. NO TUMOR SEEN.

MICROSCOPIC:

Microscopic examination substantiates the above diagnosis.

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 - PRIMARY UPPER AERODIGESTIVE TRACT AND SALIVARY
GLAND

TUMORS

SPECIMEN TYPE: Resection: HEMIGLOSSECTOMY, HEMIMANDIBULECTOMY

TUMOR SITE: Oral Cavity

TUMOR SIZE: Greatest dimension: 6.3 cm

HISTOLOGIC TYPE: Squamous cell carcinoma, conventional

HISTOLOGIC GRADE: G3

PRIMARY TUMOR (pT): pT4a

REGIONAL LYMPH NODES (pN): pN3

Number of regional lymph nodes examined: 108

Number of regional lymph nodes involved: 7

Extra-capsular extension of nodal tumor: Present

DISTANT METASTASIS (pM): pMX

MARGINS: Margins uninvolved by tumor

VENOUS/LYMPHATIC (LARGE/SMALL VESSEL) INVASION (V/L):

Present

PERINEURAL INVASION: Present

PATIENT HISTORY:

CHIEF COMPLAINT/ PRE-OP/ POST-OP DIAGNOSIS: SCCA tongue/floor of mouth.

PROCEDURE: Neck dissection, mandibulectomy, glossectomy.

SPECIFIC CLINICAL QUESTION: Not answered.

OUTSIDE TISSUE DIAGNOSIS: Not answered.

PRIOR MALIGNANCY: Not answered.

CHEMORADIATION THERAPY: Not answered.

ORGAN TRANSPLANT: Not answered.

IMMUNOSUPPRESSION: Not answered.

OTHER DISEASES: Not answered.

HISTO TISSUE SUMMARY/SLIDES REVIEWED:

Part 1: Right Central Nerve

Stain. Block

H&E x 1 A

Part 2: Right Mandible Marrow Margin

Stain/ Block

H&E x 1 AFS

Part 3: Left Mandible Marrow Margin

Stain. Block

H&E x 1 AFS

Part 4: Right Mandibular Alveolus Margin

Stain/ Block

H&E x 1 AFS

Part 5: Floor of Mouth Margin

Stain/ Block

H&E x 1 AFS

Part 6: Anterior Tongue Margin

Stain/ Block

H&E x 1 AFS

Part 7: Posterior Tongue Margin

Stain/ Block
H&E x 1 AFS
Part 8: Anterior Lip Margin

Stain/ Block
H&E x 1 AFS
Part 9: Deep Tongue Margin

Stain/ Block
H&E x 1 AFS
Part 10: Anterior Hyoid Margin

Stain Block
H&E x 1 AFS
Part 11: Left Neck Level 1

Stain/ Block
H&E x 1 A
H&E x 1 B
Part 12: Left Neck Level 2

Stain/ Block
H&E x 1 A
H&E x 1 B
Part 13: Left Neck Level 2-4

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
H&E x 1 N
H&E x 1 O
H&E x 1 P
H&E x 1 Q
Part 14: Right Neck Level 1B

Stain/ Block
H&E x 1 A
H&E x 1 B
H&E x 1 C
Part 15: Right Neck Level 2-4

Stain/ Block
H&E x 1 A
H&E x 1 B
H&E x 1 C

ANEG Mouse x 1 D
 ANEG Rab x 1 D
 ACK5/6 x 1 D
 AE1/3 x 1 D
 HCOM x 1 D
 ISHBK x 1 D
 ISHBK x 1 D
 H&E x 1 D
 HPV x 1 D
 IISH x 1 D
 P16 x 1 D
 P40 x 1 D
 P63 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
 Part 16: Left Neck Level 1B (Additional)

Stain/ Block
 H&E x 1 A
 Part 17: Mandible and Tongue

Stain/ Block
 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
 H&E x 1
 H&E x 1
 H&E x 1

Criteria	Yes	No
Diagnosis Discrepancy		✓
Primary Tumor Site Discrepancy		✓
HiPAA Discrepancy		✓
Prior Malignancy History		
Dual/Synchronous Primary		
Case is (circle):	QUALIFIED	DISQUALIFIED
Reviewer Initials	DATE	DATE

4/2/13
 3/28/13