



Christenson, Alan (MRN 16743072)

All Reviewers List

Berry, Mark Francis, MD on 12/22/2017 10:16

Result Doned by

Reviewed By

Berry, Mark Francis, MD

Reviewed On

12/22/2017 10:16

Surgical Procedure (Order 490902262)

Results

Status: **Edited Result - FINAL** (Collected: 4/15/2016 00:00)

Collection Information

Collected: 4/15/2016 12:00 AM

Received: 4/15/2016 4:48 PM

Resulting Agency: SHC LAB

300 Pasteur Drive
Palo Alto CA

Surgical Procedure

Order: 490902262

Status: **Edited Result - FINAL** Visible to patient: **Yes (MyHealth)**

Narrative

Performed by: **SHC**

***** THIS IS AN ADDENDUM REPORT *****

Accession No: SHS-16-17490

SPECIMEN SUBMITTED:

A. 4(R) LYMPH NODE (FSA)

B. RIGHT PLEURAL BIOPSY (FSB)

C. 4R LYMPH NODE

D. LEVEL II LYMPH NODE

E. LEVEL 7 LYMPH NODE

F. RIGHT LUNG BILOBECTOMY (FSF)

DIAGNOSIS:

A. LYMPH NODE, 4R, BIOPSY

-- ONE LYMPH NODE, NEGATIVE FOR MALIGNANCY (0/1)

B. PLEURA, RIGHT, BIOPSY

-- CHRONIC INFLAMMATION AND REACTIVE CHANGES, NEGATIVE FOR MALIGNANCY

C. LYMPH NODES, 4R, REGIONAL RESECTION

-- THIRTEEN LYMPH NODES, NEGATIVE FOR MALIGNANCY (0/13)

D. LYMPH NODES, LEVEL 2, REGIONAL RESECTION

-- TEN LYMPH NODES, NEGATIVE FOR MALIGNANCY (0/10)

E. LYMPH NODES, LEVEL 7, REGIONAL RESECTION

-- TWENTY-ONE LYMPH NODES, NEGATIVE FOR MALIGNANCY (0/21)

F. LUNG, RIGHT LOWER LOBE AND MIDDLE LOBE, BI-LOBECTOMY

-- INVASIVE SQUAMOUS CELL CARCINOMA, MODERATELY-DIFFERENTIATED, 5.2 CM, PRESENT AT THE VASCULAR MARGIN (SEE COMMENT AND SYNOPSIS TABLE)

-- SQUAMOUS CELL CARCINOMA INVOLVING ONE OF SIX LYMPH NODES BY DIRECT EXTENSION (1/6)

LIN/MARTIN/BERRY/KAO

COMMENT: We have reviewed the frozen sections and concur with the diagnosis rendered. Sections of the bilobectomy specimen (specimen F) contain moderately-differentiated invasive squamous cell carcinoma, extending to the vascular margin of the lower lobe (slide F1). The carcinoma also invades into the bronchus (slide F11). The PASd stain (performed on block F13) provides no evidence to support a diagnosis of mucoepidermoid carcinoma. Perineural invasion is present. Dr. Berry has reviewed selected slides and concurs. Additional information is summarized in the table below.

LUNG CARCINOMA SUMMARY

Site Right lower lobe
Specimen Type Bilobectomy
Tumor Type Invasive squamous cell carcinoma
Size (cm) 5.2 cm
Histologic Grade Moderately-differentiated
Separate Tumor Nodules (Absent/Present) Absent
Bronchial & Vascular Resection Margins Positive vascular resection margin (slide F1)
Vascular Invasion (Venous Or Arteriolar) Both venous and arteriolar
Pleural Involvement Not identified
Lymph Node Status, Ipsilateral Positive (1/51, by direct extension)
Location (Specify) Hilar/peribronchial lymph node
Largest Metastatic Focus 1.6 cm
Extracapsular Extension Not identified
Lymph Node Status, Contralateral Not examined
Nonneoplastic Lung No significant abnormality
Distant Metastasis (Specify) Not examined
TNM (AJCC, 7th Edition) pT2b, pN1

CLINICAL HISTORY: 79 year-old male with right lower lung mass with biopsy proven clinical stage T2bN0 non-small cell lung cancer

OPERATION: Right VATS with right thoracotomy

FROZEN SECTION DIAGNOSIS:

FSA: MEDIASTINAL LYMPH NODE, 4R, BIOPSY
-- NO CARCINOMA PRESENT
(Yang/Hazard)

FSB1: PLEURA, RIGHT, BIOPSY
-- BLAND INFLAMED MESOTHELIAL PROLIFERATION. NO CARCINOMA IDENTIFIED; DEFER TO PERMANENTS

FSB2: PLEURA, RIGHT, BIOPSY
-- PAUCICELLULAR FIBROUS PLAQUE
(Yang/Long)

FSF: LUNG, RIGHT LOWER LOBE, BI-LOBECTOMY
-- NEGATIVE BRONCHIAL MARGIN
(Yang/Higgins)

ROSS DESCRIPTION: Six specimens are received labeled with the patient's name and medical record number.

The first specimen labeled "4R lymph node" is received fresh from the OR for frozen section and consists of a 0.3 x 0.3 x 0.3 cm red-tan tissue fragment which was entirely frozen as FSA (tissue exhausted at frozen section).

The second specimen labeled "right pleural biopsy" is received fresh from the OR for frozen section and consists of a 3.5 x 2 x 1.5 cm aggregate multiple irregular red-tan tissue fragments which were inked black at the time of frozen section. This tissue was entirely frozen as FSB1 (tissue not exhausted at frozen section). The frozen section remnant is wrapped and entirely submitted in block B1. Also received is a 4 x 3 x 0.5 cm fragment of tan-red tissue within which a 1 cm hard nodule is identified. This area was inked green and a portion was frozen as FSB2 (tissue not exhausted at frozen section). The frozen section remnant is wrapped and entirely submitted in block B2. Representative sections of remaining tissue are submitted in blocks B3 and B4.

The third specimen labeled "4R lymph node" is received in formalin and consists of a 4 x 4 x 3 cm aggregate of multiple fragments of yellow fibrofatty tissue. Thirteen lymph node candidates (0.2 cm-1.3 cm in greatest dimension) are identified. Whole lymphoid fragments are submitted in blocks C1. Intact and partially disrupted lymphoid fragments are sectioned and submitted in blocks C2-C4 (two fragments per block; in each block one fragment is inked blue and one fragment is not inked). One partially disrupted lymphoid fragment is inked blue, is sectioned and submitted in block C5. The remaining lymphoid fragment is sectioned and submitted in block C6. Some fibrofatty tissue is retained in formalin.

The fourth specimen labeled "level 2 lymph node" is received in formalin and consists of a 2.0 x 1.5 x 0.8 cm aggregate of multiple irregular black-brown lymphoid fragments. The larger fragments are submitted in block D1. The smaller fragments are submitted between sponges in block D2. All tissue is submitted.

The fifth specimen labeled "level 7 lymph node" is received in formalin and consists of a 4.5 x 3 x 1.8 cm aggregate of multiple small yellow-black fragments of fatty lymphoid tissue. There appears to be complete and fragmented lymph nodes present. Four whole lymphoid fragments are submitted in block E1. Fragments of lymphoid tissue are submitted in blocks E2 and E3. One intact fragment of lymphoid tissue is trisected and submitted in block E4. The remaining intact lymphoid fragments are sectioned and submitted in blocks E5-E7 (three fragments per block; in each block, one fragment is inked blue, one fragment is inked black and one fragment is not inked). A small amount of fibrofatty tissue is retained in formalin.

The sixth specimen labeled "right lung bi-lobectomy" is received fresh from the OR for frozen section and consists of a 579 g, 15 x 13 x 8 cm specimen consistent with the right middle and lower lobes of lung. The pleura is dark purple-brown, smooth and glistening with focal delicate lesions. The bronchial and vascular staple margins are identified, as is a 7.5 cm in length staple line on the superior aspect of the lower lobe, and a 7 cm in length 2nd staple line is noted on the superior-anterior aspect of the middle lobe. At one end of the staple line, there is a 2nd staple line at the site of middle lobe vasculature.

The lung is bread-loafed to exhibit a 5.2 x 4.3 x 4.1 cm mass with well-defined, scalloped borders and a firm pink-tan, slightly gritty

Christenson, Alan (MRN 16743072)

cut surface. This mass is focally involving the bronchial wall and is also pushing against the vasculature at the margin (mass is 0.3 cm from vascular margin represented in block F1). Focal calcification of bronchial cartilage is noted. A 1.3 x 0.9 x 0.6 cm endobronchial mass is noted and is contiguous with the main parenchymal mass. Focally a peribronchiolar lymph node is grossly involved by the mass. The remainder of the lung parenchyma is dark red, spongy, hemorrhagic in the basilar lower lobe and with marked mucus plugging in the portions of the lung immediately surrounding the mass. No other parenchymal abnormalities are noted.

Representative sections are submitted as follows:

F1-F2, lower lobe vascular margins, en face
F3, bronchial margin, en face (superseded by frozen section FSF)
F4, two whole peribronchiolar lymph node candidates
F5, one peribronchiolar lymph node candidate bisected
F6-F7, lower lobe parenchymal staple margin, en face
F8, middle lobe vascular margin en face
F9-F10, middle lobe parenchymal margin, en face
F11, mass extending into bronchus, to include endobronchial mass
F12, mass pushing against vascular margin
F13, representative mass with parenchymal vasculature
F14, central mass
F15, peribronchiolar lymph node involved by mass
F16, peribronchiolar lymph node not grossly involved by mass
F17, normal middle lobe
F18, normal lower lobe
Boland (4/16/2016)

I have reviewed the specimen and agree with the interpretation above. CHIA-SUI KAO, M.D. Electronically signed 4/22/2016 5:03 PM

ADDENDUM:

ADDENDUM COMMENT: At the request of the treating clinicians unstained slides were sent to Phenopath Labs for PD-L1 testing by IHC. The 22C3 pharmDx assay was utilized. The tumor proportion score show <1% positivity and is interpreted as NO PD-L1 expression. The diagnosis remains unchanged.

ADDENDUM DIAGNOSIS:

F. LUNG, RIGHT LOWER LOBE AND MIDDLE LOBE, BI-LOBECTOMY
-- NO PD-L1 EXPRESSION BY IMMUNOHISTOCHEMICAL STAINING
(<1%)

BERRY

I have reviewed the specimen and agree with the interpretation above. GERALD J. BERRY, M.D. Electronically signed 12/22/2017 9:33 AM

Specimen Collected:
04/15/16 00:00

Last Resulted: 12/22/17
10:03

[Order Details](#) [Lab and Collection Details](#) [Routing](#)
[Result History](#) - [Result Edited](#)

Components SmartLink Information

[Surgical Procedure \(Order #490902262\) on 4/15/16](#)

Provider Information

Ordering User	Ordering Provider	Authorizing Provider
Results, Shc Incoming Clinical (943301)	Mark Francis Berry, MD (S0171277)	Mark Francis Berry, MD (S0171277)

Lab Information

SHC LAB
300 Pasteur Drive
Palo Alto, California 94305

Order Details (Link to original order)

Parent Order ID	Child Order ID
490902261	490902262

Patient Release Status:

This result is viewable by the patient in MyHealth.

Last viewed in MyHealth:

1/14/2018 6:06 PM

By:

Alan Christenson

Additional Information

Specimen ID	Bill Type	Client ID
SHS-16-17490		

Additional Information

Specimen Date Taken	Specimen Time Taken	Specimen Received Date	Specimen Received Time	Result Date	Result Time
Apr 15, 2016	12:00 AM	Apr 15, 2016	4:48 PM	Dec 22, 2017	10:03 AM

Routing History

Priority	Sent On	From	To	Message Type
	5/17/2016 10:53 AM	Maron, David Joel, MD	Chu, William Nain-Cheng, MD	Results

Surgical Procedure [490902261]

Electronically signed by: **Results, Shc Incoming Clinical on 04/15/16** Status: **Completed**
0000
Ordering user: Results, Shc Incoming Clinical 04/15/16 Ordering provider: Berry, Mark Francis, MD
0000
Authorized by: Berry, Mark Francis, MD Ordering mode: Standard
Frequency: Once 04/15/16 - 1 occurrence
[Order details](#)