



Operative Procedure:

Right thoracotomy pneumonectomy

Specimen Received:

- A: Bronchial margin (FS)
- B: Right upper lobe (precision)
- C: Right lower lobe (FS)
- D: Inferior pulmonary ligament
- E: 10R
- F: 4R
- G: 2R
- H: Subcarinal lymph node
- I: Right upper lobe true surgical margin
- J: Right lower and middle lobes

1CD-0-3
 adenocarcinoma, NOS 8/40/13
 Site: lung, upper lobe C34.1

w
 9/24/12

Final Pathologic Diagnosis:

- A. Bronchial margin (FS), resection:
 Negative for tumor.
 Frozen section diagnosis is confirmed.

B. Right upper lobe lung resection:

Invasive adenocarcinoma, two foci, please see Synoptic Report below.

Specimen: Right upper lobe

Procedure: Lobectomy

Specimen laterality: Right upper lobe

Tumor site: Right upper lobe

Specimen integrity: Intact

Tumor size: Larger tumor: 4.5 cm in greatest dimension; smaller tumor: 1.9 cm in greatest dimension

Tumor focality: Separate tumor nodules in same lobe. Please see also part C.

Tumor histologic type: Adenocarcinoma

Tumor grade: Moderately to poorly differentiated

Visceral pleura invasion: Tumor abuts visceral pleura but does not perforate it (tumor is <1 mm from pleural surface)

Tumor extension: Both tumors are confined within the lung parenchyma, the larger one abutting the visceral pleura.

Margins:

Bronchial margin: Uninvolved by invasive carcinoma

Vascular margin: Pending.

[Not applicable; Cannot be assessed; Uninvolved by invasive carcinoma; Involved by invasive carcinoma]

Parenchymal margin: Not applicable

Parietal pleural margin: Not applicable

Chest wall margin: Not applicable

Other attached tissue margin: Not applicable

If all margins uninvolved by invasive carcinoma:

Criteria	Yes	No
Diagnosis Discrepancy		
Primary Tumor Site Discrepancy		
IPAA Discrepancy		
Prior Malignancy History		
Dual/Synchronous Primary Notes		
Case is (prior to):	QUALIFIED	DISQUALIFIED
Reviewer Initials	MB	MB
Date Reviewed	8/29/12	9/24/12

Distance of invasive carcinoma from closest margin: Less than 1 mm
Specify margin: Visceral pleura

Treatment effect: Not known
Lymph-vascular invasion: Not definitively identified

Pathologic Staging (pTNM):

TNM Descriptors: m (multiple primary tumors)
Primary tumor (pT): pT2b
Regional lymph nodes (pN): pN0
Number examined: 20
Number involved: 0
If lymph node(s) involved, specify involved nodal station(s): N/A
Distant metastasis (pM): pMX

Additional pathologic findings: Emphysematous changes

C. Right lower lobe, partial resection, please see also part J:

LUNG [Resection]
Invasive adenocarcinoma.
Specimen: Lobe(s) of lung (specify): Right lower lobe, wedge resection
(see part J as well)
Procedure: Wedge resection (specify):
Specimen laterality: Right
Tumor site: Right lower lobe
Specimen integrity: Intact
Tumor size: 2.4 cm (greatest dimension)
Tumor focality: Separate tumor nodules in different lobes (specify sites): Right lower lobe and right upper lobe (2 foci, see part B)
Tumor histologic type: Invasive adenocarcinoma
Tumor grade: Moderately differentiated
Visceral pleura invasion: Tumor abuts visceral pleura.
Tumor extension: Not identified
Margins:
Bronchial margin: Uninvolved by invasive carcinoma, (see part J)
Vascular margin: Uninvolved by invasive carcinoma, (see part J)
Parenchymal margin: The final margin is free of tumor. Please see part J.
Parietal pleural margin: Not applicable
Chest wall margin: Not applicable
Other attached tissue margin: Not applicable

If all margins uninvolved by invasive carcinoma:
Distance of invasive carcinoma from closest margin: 1 mm
Specify margin: Visceral pleura

Treatment effect: Not applicable
Lymph-vascular invasion: Not identified

Pathologic Staging (pTNM):

TNM Descriptors: m (multiple primary tumors)

Primary tumor (pT): pTb (see part B)

Regional lymph nodes (pN): pN0

Number examined: 20

Number involved: 0

If lymph node(s) involved, specify involved nodal station(s): N/A

Distant metastasis (pM): pMx

Additional pathologic findings: The parenchymal margin in part C is positive for tumor. However, part C (wedge resection) is assumed to be part of Right Lower Lobe in part J. Therefore, the final parenchymal margin is free of tumor.

Clinical correlation is recommended.

Please see also part J.

Frozen section diagnosis is confirmed.

D. Inferior pulmonary ligament, resection:

One lymph node, negative for metastatic tumor (0/1).

E. Lymph node, station 10R, resection:

One lymph node, negative for metastatic tumor (0/1).

F. Lymph node, station 4R, resection:

One lymph node, negative for metastatic tumor (0/1).

G. Lymph node, station 2R, resection:

One lymph node, negative for metastatic tumor (0/1).

H. Subcarinal lymph node, resection:

Two lymph nodes, negative for metastatic tumor (0/2).

I. Right upper lobe true surgical margin, resection:

Negative for tumor.

J. Right lower and middle lobes, resection:

Benign congested lung tissue.

Negative for tumor.

The resection margins are free of tumor.

Six lymph nodes, negative for metastatic tumor (0/6).

The examination of this case material and the preparation of this report were performed by the staff pathologist.

Intraoperative Consult Diagnosis:

FSA: Bronchial margin:

Negative for carcinoma.

FSC: Right lower lobe:

Non small cell carcinoma.

F/S TAT: 22 mins.

Gross Description:

The specimen is received in ten parts, all labeled with the patient's name. Specimen A is received fresh for frozen section evaluation additionally labeled "bronchial margin-FS." The specimen consists of a piece of cartilage with a eccentric lumen. The specimen measures 2 x 1.5 x 0.4 cm. The eccentric lumen measures 0.5 cm in diameter. The specimen is submitted for frozen section evaluation. The remainder of the specimen is submitted for permanent section evaluation in cassette A1.

Part B is received in a formalin filled container additionally labeled "right upper lobe." The specimen is consistent with the upper lobe of a lung. The specimen measures 13 x 15 x 5.8 cm. There is a staple line, which is 9 cm inferior to the bronchial margin. The pleural surface is a dull gray-tan color. There is a central apical scar, which has a white cloudy appearance. The specimen has been previously sectioned for tissue procurement by the Tissue Bank. Additionally, there is a defect in the pleura of the lobe. Multiple enlarged lymph nodes are appreciated in the peribronchial region. There are two areas of umbilication in the pleural surface, one near the superior end of the lobe and one near the inferior end. Serial sectioning reveals two masses underlying both umbilications. The masses have a variegated appearance with some areas appearing to be necrotic. The lung parenchyma has grossly visible air spaces and several emphysematous blebs. The larger mass measures 5.4 x 5.4 x 4.9 cm, and extends into the lumen of the bronchus. This mass abuts the pleural surface and is 0.7 cm from the bronchial margin. The smaller mass measures 1.9 x 0.9 x 1.1 cm, abuts the pleural surface and is 6.5 cm from the bronchial margin. Four potential lymph nodes are found, the greatest dimension of each lymph node is 2.4 cm, 2.2 cm, 1.8 cm and 1.2 cm.

Representative sections are submitted as follows:

- B1 large tumor nearest pleural surface;
- B2 large tumor;
- B3 large tumor;
- B4 large tumor;
- B5 small tumor;
- B6 parenchyma;
- B7-8 one lymph node bisected;
- B9-10 one lymph node bisected;
- B11-12 one lymph node bisected;
- B13 one lymph node bisected;
- B14 vascular margins;
- B15 larger mass to include bronchus;
- B16 staple line adjacent to bronchial margin/ larger mass (over-inked blue)

Specimen C is received fresh for frozen section evaluation additionally labeled "right lower lobe." The specimen consists of a wedge of lung parenchyma. The specimen measures 5.5 x 3.5 x 2.2 cm. There is a staple line running along the specimen that measures 11.4 cm in length. Serial sectioning of the specimen reveals a white mass that abuts the pleural surface. The mass measures approximately 2.4 x 1.8 x 0.7 cm. The mass abuts the staple line.

Representative sections are submitted as follows:

- C1 remainder from frozen section evaluation for permanent section evaluation;
- C2 representative section through the tumor;
- C3-4 mass to inked staple line.

Specimen D is received in a formalin filled container additionally labeled "inferior pulmonary ligament." The specimen consists of a single fragment of fibrofatty tissue with a potential lymph node. The specimen measures 1.5 x 1.2 x 0.7 cm. Further palpation reveals two potential lymph nodes, which are submitted in whole in cassette D1.

Part E is received in a formalin filled container additionally labeled "10R." The specimen consists of a probable lymph node, a firm fragment of tissue that is dark red in coloration. The specimen measures 2.1 x 1.4 x 0.8 cm. The specimen is bisected and submitted in two cassettes.

Specimen F is received in a formalin filled container additionally labeled "4R." The specimen consists of a fragment of fibrofatty firm tissue that measures 3.5 x 2.5 x 1.7 cm. Representative sections are submitted in cassettes F1 and F2.

Specimen G is received in a formalin filled container additionally labeled "2R." The specimen consists of a fragment of lymph node tissue measuring 1.0 x 0.8 x 0.5 cm. The specimen is bisected and entirely submitted in one cassette.

Specimen H is received in a formalin filled container additionally labeled "subcarinal lymph node". The specimen consists of two lymph node tissue fragments measuring 3.0 x 1.6 x 0.5 cm for the larger one and 1.8 x 1.6 x 0.5 cm for the small one. The entire specimen is submitted as follows:

- H1 One lymph node bisected;
- H2-H3 one lymph node bisected.

Specimen I is received in a formalin filled container additionally labeled "right upper lobe true surgical margin". The specimen consists of a fragment of bronchial margin measuring 1.7 x 1.2 x 0.6 cm. The specimen is bisected and entirely submitted in one cassette.

Specimen J is received in a formalin filled container additionally labeled "right lower and middle lobes". The lung measures 15.0 x 14.0 x 4.5 cm with attached portion of bronchus that measures 6.0 cm in length and 2.0 cm in diameter. Received are also 5 lymph nodes measuring 1.0 x 1.0 x 0.5 cm in

greatest dimension each. Two sections from the lung are submitted in cassettes J1 and J2.

- J3 Two probable lymph nodes;
- J4 one lymph node, bisected;
- J5 two lymph nodes, bisected;
- J6 bronchial and vascular margins;
- J7 one lymph node bisected.

Microscopic Description:

The final diagnosis of each specimen incorporates the microscopic examination findings.

END OF REPORT

Taken:

Gender: M