FINAL SURGICAL PATHOLOGY REPORT

Diagnosis:

A. - H.) LUNG AND LYMPH NODES, LEFT LOWER LOBE AND MEDIASTINAL/HILAR NODES (N6, N7, N9L, N10L, AND N11L), LOBECTOMY AND EXCISIONS:

- INVASIVE MUCINOUS ADENOCARCINOMA, WELL DIFFERENTIATED.
  - Spanning 15.5 cm, involving almost entire left lower lobe.
  - Tumor does not penetrate pleura (PL0).
  - Post-obstructive pneumonitis present.
- MARGIN STATUS: NEGATIVE.
  - Closest margin is bronchial at 0.3 cm.
- ZERO OF EIGHT LYMPH NODES INVOLVED BY TUMOR (0/8).

PATHOLOGIC TUMOR STAGING SUMMARY:

Histologic type and grade: Invasive mucinous adenocarcinoma, low-grade (well differentiated).
Primary tumor: pT3, 15.5 cm in greatest dimension (see comment).
Regional lymph nodes: pN0, 0/8.
Distant metastasis: N/A.
Pathologic tumor stage: IIB (see comment).
Margin status: R0, negative.
Lymphatic and perineural invasion: Not identified.

COMMENT: Although the tumor grossly spans 15.5 cm in greatest dimension, the invasive component inciting a desmoplastic response is smaller (probably just over 3 cm) and raises a possible alternate (potential) classification as T2a and stage IB based on recent literature from

(addendum to follow). A short panel of immunostains argues against colorectal origin (CK7+/CK20-/CDX2-/Villin-); and lends some immunohistochemical support to a pulmonary origin (CK7+, weakly Napsin-A positive, although it is negative for TTF-1). The extensive involvement of the LLL argues strongly for a pulmonary primary. Intradepartmental consultation with Dr.[redacted]s obtained.

The prior bronchial biopsy diagnosis of bronchoalveolar/mucinous adenocarcinoma is noted [redacted]

Lung Tumor Staging Information

Data derived from current specimen. Staging in accordance with or modified from AJCC Cancer Staging Handbook,[redacted] and CAP protocol, February[redacted]

[redacted]

Procedure:	Lobectomy and lymph node excisions.
Specimen type:	Lung and lymph nodes.
Specimen laterality:	Left.
Specimen integrity:	Intact.

TUMOR FEATURES:

Tumor site:	Left lower lobe of lung.
Tumor size:	Spans 15.5 cm, with invasive component probably just over 3 cm.
Tumor focality:	Unifocal.
Histologic type:	Broncoalveolar carcinoma, mucinous (invasive mucinous adenocarcinoma).
Histologic grade:	Low-grade (well differentiated, G1).
Lymphovascular invasion:	Not identified.
Perineural invasion:	Not identified.
Visceral pleural invasion:	Not identified (PL0).
Tumor extension into extrapulmonary structures:	Not identified.
Treatment effect:	Not identified.

LYMPH NODES:	Zero of eight lymph nodes (0/8: para-aortic, mediastinal, hilar, peribronchial).

MARGIN EVALUATION:	Negative.
Distance to closest margin:	Bronchial at 0.3 cm.
Bronchial margin:	0.3 cm.
Vascular margin:	0.3 cm.
Parenchymal margin:	0.3-0.5 cm.
Parietal pleural margin:	Cannot be assessed.
Chest wall margin:	Cannot be assessed.
Other margins:	N/A.

PATHOLOGIC TUMOR STAGING DESCRIPTORS:

Primary tumor:	pT3.
Regional lymph nodes:	pN0.
Distant metastasis:	N/A.
Pathologic stage:	pIIB.
Margin status:	R0.

Additional pathologic findings:	Post-obstructive pneumonitis.

[redacted]

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Source of Specimen:

A. Lung;Left lower lobe
B. Lung bx;N11L
C. Lung bx;N10L
D. Lung bx;N9L
E. Lung bx;N11L #2
F. Lung bx;N11L #3
G. Lung bx;N6
H. Lung bx;N7

Clinical History/Operative Dx:

Left lower lobe adenocarcinoma

Intraoperative Diagnosis:

A. FSA: Left lower lobe lung: Bronchial margin free of tumor. (Dr
The intraoperative interpretation(s) was/were performed and rendered at

Gross Description:

A. The specimen is labeled left lower lobe and is received without fixative. It consists of a heavy and dense lobe of lung which measures 17 x 10.5 x 9 cm and weighs 528 grams. The pleural surface of the lung shows some blotchy violaceous discoloration near the hilum. The pleural surface is otherwise pale red with a translucent appearance. In the posterior-inferior surface of the lung there is a prominent area of retraction and irregularity involving an area approximately 4 cm in maximum dimension. The pleural surface in this area is inked. At the hilum the bronchial margin is identified and removed as a thin shave for frozen section. There are no obvious peribronchial nodes. Sectioning of the lung reveals an ill-defined pale yellow firm neoplasm underlying the area of pleural disruption. This neoplasm measures 6 cm in its superior-inferior most extension, abutting the pleural surface of both the inferior-lateral portion of the lung as well as the basilar surface (measuring 15.5 cm in superior-inferior axis). This neoplasm generally blends in perceptively with the surrounding beefy and dense lung parenchyma extending nearly to the apical edge. There is a 5 x 3.5 cm area at the apical most portion of the lung which appears uninvolved by the process, as well as a 1.2 cm area along the anterior-medial basilar edge of the lung. Sectioning of the bronchi reveals no gross intrabronchial lesions. The stapled parenchymal margin is grossly negative by 3-5 mm. Representative sections of the subpleural mass are obtained for research purposes. Representative sections are submitted. Section summary: A1) bronchial margin from frozen section, A2) vascular margins, A3) lateral-inferior mass and overlying pleural surface (inked), A4-A5) additional sections of lateral inferior mass, A6) sections of basilar surface of lung, A7-A8) sections of mid lower lung lobe, A9) sections of apical lower lung lobe, A10-A11) section of bronchus and immediately adjacent pulmonary parenchyma (block A11 for light decalcification).

B. The specimen is labeled N11L and is received in formalin. It consists of two 0.6 - 0.7 cm fragments of tan to dull red and anthracotic tissue which are submitted in cassette B1.

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C. The specimen is labeled N10L and is received in formalin. It consists of a single 1.5 x 0.9 x 0.6 cm tan lymph node. The node is serially sectioned and entirely submitted in cassette C1. [redacted]

D. The specimen is labeled N9L and is received in formalin. It consists of a single violet-tan 1.5 x 0.8 x 0.7 cm lymph node. It is serially sectioned and entirely submitted in D1. [redacted]

E. The specimen is labeled N11L #2 and is received in formalin. It consists of a 0.7 x 0.6 x 0.4 cm fragment of gray-tan and anthracotic tissue. It is trisected and submitted in cassette E1. [redacted]

F. The specimen is labeled N11L #3 and is received in formalin. It consists of a single 0.7 x 0.3 x 0.2 cm fragment of dull red tissue which is submitted intact in cassette F1. [redacted]

G. The specimen is labeled N6 and is received in formalin. It consists of a 1.1 x 1.0 x 0.6 cm fragment of soft fibrofatty tissue. Within the fatty tissue there are two areas of anthracotic discoloration which vary from 0.6 - 0.2 cm in maximum dimension. The anthracotic areas are submitted in cassette G1. [redacted]

H. The specimen is labeled N7 and is received in formalin. It consists of four fragments of reddish violet and anthracotic tissue along with focal adherent fatty tissue. These four fragments vary from 0.6 cm in maximum dimension to 1.8 x 1 x 0.7 cm. The largest fragment is serially sectioned and submitted in cassette H1. The second largest fragment is submitted intact in cassette H2. The two remaining fragments are each bivalved and submitted in cassette H3 (larger inked). [redacted]

Microscopic Description:

A. The sections show an invasive mucinous adenocarcinoma with lepidic growth pattern peripherally as well as a central zone inciting desmoplastic response (the latter zone is estimated to be just over 3 cm). The tumor consists of numerous glands lined by mucinous epithelium having low-intermediate grade nuclei. The tumor abuts the visceral pleura and focally invades the elastic fibers of that pleura (but does not fully transgress the elastic fibers of the pleura or penetrate to the visceral pleural surface). The bronchovascular margin is negative (along with an adjacent benign peribronchial node, 0/1). All together (including nodes in specimens B-H) there are eight benign lymph nodes (0/8).

Per request of [redacted] the tumor is stained to try to confirm pulmonary origin. The tumor shows strong expression of CK7, weak expression of Napsin, but is negative for: TTF-1, CDX2, Villin, and CK20.

B. Microscopic sections have been examined. The microscopic findings are reflected in the diagnosis rendered.

C. Microscopic sections have been examined. The microscopic findings are reflected in the diagnosis rendered.

D. Microscopic sections have been examined. The microscopic findings are reflected in the diagnosis rendered.

E. Microscopic sections have been examined. The microscopic findings are reflected in the diagnosis

[redacted]

rendered.

F. Microscopic sections have been examined. The microscopic findings are reflected in the diagnosis rendered.

G. Microscopic sections have been examined. The microscopic findings are reflected in the diagnosis rendered.

H. Microscopic sections have been examined. The microscopic findings are reflected in the diagnosis rendered.