# **City General Hospital - Surgical Pathology**

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#### PATHOLOGY REPORT

PATIENT: Baker, Arthur J. MRN: CGH657483

**ACCESSION:** S-24-8801 **DOB:** 06/25/1956

PHYSICIAN: Dr. Wu (Thoracic Surgery) RECEIVED: 04/19/2024

**SPECIMEN DATE:** 04/19/2024 **REPORTED:** 04/23/2024

### SPECIMEN(S):

A. Lung, right upper lobe with adjacent chest wall, en bloc resection

- B. Rib, third, medial margin
- C. Lymph nodes, part of 4R, resection
- D. Lymph node, level X, resection
- E. Lymph node, level XI, resection
- F. Rib, fourth, medial margin
- G. Lymph node, 2R, resection
- H. Lymph node, level IX, resection
- I. Lymph node, level VII, resection

**CLINICAL INFORMATION:** Lung mass.

### **FINAL DIAGNOSIS:**

## A. Lung, Right Upper Lobe with Adjacent Chest Wall, En Bloc Resection:

- Invasive Poorly Differentiated Adenocarcinoma. (See Comment and Microscopic Description)
- **Tumor Size:** 5.5 cm in greatest dimension.
- Extent: Tumor extends into the soft tissues of the chest wall adjacent to ribs (pT3).
- Margins: Radial (Chest Wall), Vascular, and Bronchial margins of resection are free of tumor.
- **Pleural Invasion:** Visceral pleural invasion identified; tumor extends to pleural surface.
- Lymphovascular Invasion: Venous (large vessel) invasion present. Lymphatic (small vessel)

invasion negative.

- Regional Lymph Nodes (Hilar): 4 hilar lymph nodes negative for metastatic carcinoma (0/4).
- **Associated Findings:** Apical emphysematous changes. Benign pleural plaque. Nonnecrotizing granulomatous lymphadenitis in hilar nodes.
- Pathologic Stage (AJCC 8th Ed.): pT3 N0 (See C-I for mediastinal nodes; M status not assessed).
- B. Rib, Third, Medial Margin: Negative for malignancy.
- **C. Lymph Nodes, Part of 4R, Resection:** Nonnecrotizing granulomatous lymphadenitis; negative for malignancy (0/? nodes).
- **D. Lymph Node, Level X, Resection:** Nonnecrotizing granulomatous lymphadenitis; negative for malignancy (0/1 node implied).
- **E. Lymph Node, Level XI, Resection:** Nonnecrotizing granulomatous lymphadenitis; negative for malignancy (0/1 node implied).
- F. Rib, Fourth, Medial Margin: Negative for malignancy.
- **G. Lymph Node, 2R, Resection:** Nonnecrotizing granulomatous lymphadenitis; negative for malignancy (0/? nodes).
- **H. Lymph Node, Level IX, Resection:** Nonnecrotizing granulomatous lymphadenitis; negative for malignancy (0/1 node implied).
- **I. Lymph Node, Level VII, Resection:** Nonnecrotizing granulomatous lymphadenitis; negative for malignancy (0/? nodes).

#### **COMMENT:**

Immunohistochemistry performed on the tumor reveals positive staining for both CEA and TTF-1 with a negative result for CK5/6 and P63. This pattern of staining is indicative of adenocarcinoma. Nonnecrotizing granulomas are noted in multiple examined lymph node stations; special stains (acid-fast, fungal organisms) are negative.

# **GROSS DESCRIPTION:**

A. Received fresh labeled "right upper lobe with chest wall" is a 308 g, 18.0 X 11.0 X 4.5 cm lobectomy specimen with attached chest wall component including three ribs. Bronchial stump 1.5 cm length, 1.5 cm diameter. Several soft gray-black perihilar lymph nodes measuring up to 2.4 cm recovered (4 submitted). A 19 cm staple line traverses the pleura. Pleura is smooth to scabrous tan red with subjacent induration adjacent to adherent ribs. Pleura overlying induration inked orange; external rib surface inked blue. Sectioning reveals a 5.5 X 4.7 X 3.5 cm rubbery tan-white to gray-black tumor mass subjacent to adherent ribs, appearing to extend into intercostal muscles and within 0.1 cm of inked pleural surface. A separate 1.4 cm pleural nodule is noted. Remaining parenchyma spongy tan-red.

B, F: Rib margin segments.

C, D, E, G, H, I: Lymph node station submissions as soft tan-gray tissue fragments. Representative sections submitted.

### MICROSCOPIC DESCRIPTION:

Sections of the lung tumor reveal a poorly differentiated non-small cell carcinoma. The tumor does not have any well formed glands or areas of keratinization. Tumor extends from the lung through the chest wall into the soft tissue adjacent to ribs. Direct extension into the chest wall is present. Venous (large vessel) invasion is positive. Arterial (large vessel) invasion is negative. Lymphatic (small vessel) invasion is negative. Margins of resection (bronchial, vascular, chest wall radial) are negative. All examined hilar lymph nodes (0/4) and sampled mediastinal lymph nodes (parts C, D, E, G, H, I) are negative for metastatic carcinoma. Non-necrotizing granulomatous lymphadenitis noted in multiple lymph nodes. Special stains for acid-fast and fungal organisms are negative. Apical emphysematous changes and a benign pleural plaque noted.

Electronically Signed: Dr. Linda Hoffman, MD | Date/Time: 23/04/2024 17:00h