



CALIFORNIA
TUMOR TISSUE REGISTRY

TUMORS OF THE CHEST AND MEDIASTINUM

Minutes – Subscription A

September 2001



SUGGESTED READING (General Topics from Recent Literature):

- Clinical and Functional Significance of WHO Classification on Human Thymic Epithelial Neoplasms. A Study of 146 Consecutive Tumors. Okumura M, Miyoshi S, Fujii Y, et al. *Am J Surg Pathol* 2001; 25(1):103-110.
- Composite Hemangioendothelioma. A Complex, Low-Grade Vascular Lesion Mimicking Angiosarcoma. Nayler SJ, Rubin BP, Calonje E, Chan, JKC and Fletcher CD. *Am J of Surg Pathol* 2000; 24(3):352-361.
- Clinicopathologic Re-Evaluation of 100 Malignant Fibrous Histiocytomas. Fletcher CDM, Gustafson P, Rydholm A, et al. Prognostic Relevance of Subclassification. *J of Clin Oncol* 2001; 19(12):3045-3050.
- Ductal Intraepithelial Neoplasia of the Breast. Tavassoli FA. *Virchows Arch* 2001; 438:221-227.
- Predictive Value of Grade for Metastasis Development in the Main Histologic Types of Adult Soft Tissue Sarcomas. A Study of 1240 Patients from the French Federation of Cancer Centers Sarcoma Group. Coindre J-M, Terrier P, et al. *Cancer* 2001; 91(15):1914-1926.

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FILE DIAGNOSES

CTTR Subscription A

September 2001

Case 1:

Wegener's granulomatosis, lung
T-28000, D-7695

Case 2:

Sclerosing hemangioma, lung
T-28000, M-88320

Case 3:

Solitary fibrous tumor, pleura
T-29000, M-80001

Case 4:

Adenocarcinoma with bronchoalveolar features, lung
T-28000, M-82503

Case 5:

Large cell neuroendocrine carcinoma, lung
T-28000, M-80103

Case 6:

Carcinoid tumor, lung
T-28000, M-82401

Case 7:

Large cell undifferentiated carcinoma, lung
T-28000, M-80123

Case 8:

Clear cell tumor ("sugar tumor"), lung
T-28000, M-80001

Case 9:

Poorly differentiated malignant neoplasm, favor large cell carcinoma, lung
T-28000, M-80123

Case 10:

Encapsulated thymoma, mixed type
T-Y2300, M-85800

Bakersfield - Rheumatoid nodule
Bay Area - Necrotizing granulomatous inflammation, rule out infection, sarcoid etc. (3)
Hayward/Fremont - Caseating granuloma (4); Rheumatoid nodule (1)
Irvine (UCI Medical Center Residents) - Necrotizing vasculitis and granulomatosis; Wegener's granulomatosis vs. rheumatoid lung disease
LLUMC Pathology Residents - Caseating granulomatous tuberculoid reaction
Long Beach - Necrotizing granulomatous inflammation (7)
Monterey (Community Hospital of Monterey Peninsula) - Granulomas consistent with rheumatoid lung
Moreno Valley (Riverside County Regional Medical Center) - Necrotizing granulomatous disease (2)
Mountain View (El Camino Pathology Group) - Wegener's granulomatosis
Riverside (Kaiser Permanente) - Caseating granulomatous inflammation
San Diego (Naval Medical Center) - Necrotizing granulomatous inflammation with giant cell vasculitis, favor necrotizing sarcoid granulomatosis vs. TB (1); Granulomatous inflammation showing infections and sarcoidal patterns (2)
Santa Barbara (Cottage Hospital) - Wegener's granulomatosis
Santa Rosa (Santa Rosa Memorial Hospital) - Wegener's granulomatosis (3)
Ventura - Organizing pneumonia with necrotizing granuloma (2)
Yuba City - Assuming organisms absent on stains necrotizing sarcoid granulomatosis or Wegener's
Connecticut (University of Connecticut Health Center) - Necrotizing granulomatous vasculitis/Wegener's granulomatosis
Florida (Baptist Hospital) - Wegener's (1); Angiocentric granuloma - Wegener's (1) Wegener's granulomatosis (1) Chronic and caseating granulomatous inflammation ? AFB fungus (1)
Florida (Munroe Regional Medical Center) - Necrotizing granulomatous inflammation
Florida (Pathology Associates) - Granulomatous suppurative inflammation, rule out AFB, fungus
Florida (Winter Haven Hospital) - Necrotizing sarcoid granulomatosis
Georgia (Piedmont Hospital) - Favor Wegener's granulomatosis
Illinois (Cook County Hospital) - Giant cell carcinoma
Illinois (Du Page Pathology Associates) - Caseating granulomas
Indiana, Fort Wayne - Wegener's granulomatosis, right middle lobe, lung
Kansas (Truman Medical Center) - Wegener's necrotizing granulomatosis
Louisiana (LSUHSC Pathology Residents) - Wegener's granulomatosis
Maryland (Johns Hopkins Hospital) - Granulomatous inflammation with areas of necrosis; Differential diagnosis: Mycobacterial/fungal infection, necrotizing sarcoid, Wegener's granulomatosis (1); Necrotizing sarcoidal granulomatosis (2)
Maryland (National Cancer Institute Residents) - Caseating granulomas
Maryland (National Naval Medical Center) - Necrotizing granulomatous inflammation, r/o Wegener's (10); Wegener's (1)
Maryland (University of Maryland Medical System) - Wegener's granulomatosis
Massachusetts (Berkshire Medical Center) - Necrotizing granulomatous pneumonitis, favor infection
Massachusetts (Brigham and Women's Residents) - Infection (TB, fungus) vs. foreign body reaction vs. necrotizing sarcoidosis
Massachusetts (New England Medical Center) - Wegener's necrotizing arteritis (1); Rheumatoid nodule (2)
Michigan (St. Joseph Mercy Hospital) - Wegener's granulomatosis (2)
Minnesota (St. Cloud Hospital) - Granulomatous inflammation with vasculitis, ? Wegener's
Nebraska (Creighton Pathology Residents) - Benign granulomatous vasculitis (Wegener's)
New Jersey (Overlook Hospital) - Granulomatous disease, r/o TBC or fungus (3); Rheumatoid nodule (1)
New Mexico (Albuquerque) - Granulomatous pulmonary angitis, r/o tuberculosis, r/o Wegener's
New York (Long Island Jewish Medical Center) - Necrotizing granulomatosis and angitis - favor Churg-Strauss syndrome
New York (Stony Brook Residents) - Wegener's granulomatosis
North Carolina (St. Joseph Hospital / Mountain Area Pathology) - Wegener's (1); Wegener's granulomatosis (2); Wegener's vs. collagen vascular disease (rheumatoid) vs. sarcoid; Necrotizing sarcoid granulomatosis (1)
North Carolina (University of North Carolina) - Bronchocentric granulomatosis vs. Wegener's granulomatosis
North Carolina (Wake Forest University Baptist Medical Center Residents) - Pulmonary angitis and granulomatosis consistent with Wegener's granulomatosis
Pennsylvania (Allegheny General Hospital) - Plasma cell granuloma
Pennsylvania (Conemaugh Memorial Medical Center Residents) - Caseating granuloma
Pennsylvania (Lehigh Valley Hospital) - Granulomatous inflammation favor Wegener's granulomatosis

Pennsylvania (Memorial Medical Center) - Caseating granuloma
Puerto Rico (University of Puerto Rico) - Granulomatous disease
Texas (ProPath Services) - Wegener's granulomatosis (2)
Texas (Scott & White Memorial Hospital) - Necrotizing granulomatous pneumonitis, r/o Wegener's and infectious etiology
Washington, DC (Walter Reed Army Medical Center) - Granulomatous vasculitis; Wegner's granulomatosis
West Virginia (Greenbrier Valley Medical Center) - Granuloma - Wegener's ?
Wisconsin (Meriter Health Services) - Granulomatous pneumonitis with focal necrosis
Australia (North Queensland Pathology Group) - Necrotizing granulomatous condition. Tuberculosis should be excluded.
Australia (Royal Prince Alfred Hospital) - Wegener's granulomatosis
Japan (Yamanashi Medical University) - Tuberculosis (2); Necrotizing sarcoid granuloma (1)
Saudi Arabia (King Khalid University Hospital) - Tuberculous pneumonitis

Case 1 - Diagnosis:

Wegener's granulomatosis, lung

T-28000, D-7695

Consultation: Michael Koss, M.D. "Consistent with Wegener's granulomatosis."

Case 1 – References:

Socias R, James DG and Pozniak A. Wegener and Wegener's Granulomatosis. *Thorax* 1987; 42(12):920-921.
 Epstein HY, Lee TH, Becker MH, et al. Wegener's Granulomatosis. Unusual Features. *NY State J Med* 1969; 69(18):2438-2440.
 Hoffman GS, Kerr GS, Leavitt RY, et al. Wegener Granulomatosis. An Analysis of 158 Patients. *Ann Intern Med* 1992; 116(6):488-498.
 Yoshikawa Y and Watanabe T. Pulmonary Lesion Wegener's Granulomatosis. A Clinicopathologic Study of 22 Autopsy Cases. *Hum Pathol* 1986; 17(4):401-410.
 Myers JL and Katzenstein AL. Wegener's Granulomatosis Presenting with Massive Pulmonary Hemorrhage and Capillaritis. *Am J Surg Pathol* 1987; 11(11):895-898.

Case No. 2, Accession No. 27760

September 2001

Bakersfield - Angiosarcoma
Bay Area - Sclerosing hemangioma (3)
Hayward/Fremont - Epithelioid hemangioendothelioma (5)
Irvine (UCI Medical Center Residents) - Sclerosing hemangioma
LLUMC Pathology Residents - Epithelioid angiosarcoma
Long Beach - Sclerosing hemangioma (7)
Monterey (Community Hospital of Monterey Peninsula) - Hemangioendothelioma
Moreno Valley (Riverside County Regional Medical Center) - Low grade vascular tumor/hemangioendothelioma (1); Epithelioid hemangioendothelioma (1)
Mountain View (El Camino Pathology Group) - Angiosarcoma
Riverside (Kaiser Permanente) - So-called sclerosing hemangioma
San Diego (Naval Medical Center) - Sclerosing hemangioma (1); Epithelioid hemangioendothelioma (1)
Santa Barbara (Cottage Hospital) - Sclerosing hemangioma
Santa Rosa (Santa Rosa Memorial Hospital) - Epithelioid hemangioendothelioma (2); Epithelioid hemangioendothelioma vs. sclerosing hemangioma (1)
Ventura - Angiosarcoma (2)
Yuba City - Angiosarcoma
Connecticut (University of Connecticut Health Center) - Epithelioid hemangioma of borderline malignancy
Florida (Baptist Hospital) - Epithelioid hemangioendothelioma (3); Intravascular sclerosing bronchioloalveolar tumor (IVBAT) (1)
Florida (Munroe Regional Medical Center) - Angiosarcoma
Florida (Pathology Associates) - Epithelioid hemangioendothelioma
Florida (Winter Haven Hospital) - Sclerosing hemangioma
Georgia (Piedmont Hospital) - Sclerosing hemangioma
Illinois (Cook County Hospital) - Kaposi's sarcoma

Illinois (Du Page Pathology Associates) - Sclerosing hemangioma
Indiana, Fort Wayne - IVBAT, upper lobe, right lung (epithelioid hemangioendothelioma)
Kansas (Truman Medical Center) - Epithelioid hemangioendothelioma
Louisiana (LSUHSC Pathology Residents) - Hemangioendothelioma
Maryland (Johns Hopkins Hospital) - Favor benign vascular neoplasm — such as a hemangioma (1); Sclerosing hemangioma vs. spindle cell hemangioma (1)
Maryland (National Cancer Institute Residents) - Epithelioid hemangioendothelioma
Maryland (National Naval Medical Center) - Epithelioid hemangioendothelioma (11)
Maryland (University of Maryland Medical System) - Epithelioid hemangioendothelioma
Massachusetts (Berkshire Medical Center) - Sclerosing hemangioma
Massachusetts (Brigham and Women's Residents) - Benign vascular tumor vs. sclerosing hemangioma (with aberrant factor VIII staining)
Massachusetts (New England Medical Center) - Hemangioma/hemangiomatosis
Michigan (St. Joseph Mercy Hospital) - Epithelioid hemangioendothelioma (2)
Minnesota (St. Cloud Hospital) - Sclerosed “hemangioma”
Nebraska (Creighton Pathology Residents) - Hemangioendothelioma
New Jersey (Overlook Hospital) - Sclerosing hemangioma (4)
New Mexico (Albuquerque) - Epithelioid hemangioendothelioma
New York (Long Island Jewish Medical Center) - Epithelioid hemangioendothelioma; Differential Dx: Sclerosing hemangioma
New York (Stony Brook Residents) - Sclerosing hemangioma
North Carolina (St. Joseph Hospital / Mountain Area Pathology) - Sclerosing hemangioma (3); Hemangioma (1); True vascular tumor (1)
North Carolina (University of North Carolina) - Sclerosing hemangioma
North Carolina (Wake Forest University Baptist Medical Center Residents) - Epithelioid hemangioendothelioma
Pennsylvania (Allegheny General Hospital) - Sclerosing hemangioma
Pennsylvania (Conemaugh Memorial Medical Center Residents) - Hemangioma, epithelioid
Pennsylvania (Lehigh Valley Hospital) - Epithelioid hemangioendothelioma
Pennsylvania (Memorial Medical Center) - Epithelioid hemangioma
Puerto Rico (University of Puerto Rico) - Angiosarcoma
Texas (ProPath Services) - Angiosarcoma (1); Sclerosing hemangioma (1)
Texas (Scott & White Memorial Hospital) - Sclerosing hemangioma
Washington, DC (Walter Reed Army Medical Center) - Epithelioid hemangioendothelioma
West Virginia (Greenbrier Valley Medical Center) - Sclerosing hemangioma
Wisconsin (Meriter Health Services) - Hemangioendothelioma
Australia (North Queensland Pathology Group) - Epithelioid hemangioma
Australia (Royal Prince Alfred Hospital) - Sclerosing hemangioma
Japan (Yamanashi Medical University) - Sclerosing hemangioma (2); Epithelioid hemangioendothelioma (1)
Saudi Arabia (King Khalid University Hospital) - Angiosarcoma

Case 2 - Diagnosis:

Sclerosing hemangioma, lung

T-28000, M-88320

Case 2 - References:

Nakatani Y, Inayama Y, Kamijo S, et al. Sclerosing Lung Hemangioma. *Am J Surg Pathol* 1999; 23(2):240-243.
 Devouassoux-Shisheboran M, Hayashi T, et al. A Clinicopathologic Study of 100 Cases of Pulmonary Sclerosing Hemangioma with Immunohistochemical Studies. TTF-1 is Expressed in Both Round and Surface Cells Suggesting an Origin from Respiratory Epithelium. *Am J Surg Pathol* 2000; 24(7):906-916.
 Rodriguez-Soto J, Colby TV and Rouse RV. A Critical Examination of the Immunophenotype of Pulmonary Sclerosing Hemangioma. *Am J Surg Pathol* 2000; 24(3):442-450.
 Papla B. Sclerosing Hemangioma of the Lung - Benign Sclerosing Pneumocytoma. *Pol J Pathol* 1999; 50(2):99-106.
 Chan AC and Chan JK. Pulmonary Sclerosing Hemangioma Consistently Expresses Thyroid Transcription Factor-1 (TTF-1). A New Clue to its Histogenesis. *Am J Surg Pathol* 2000; 24(11):1531-1536.

Bakersfield - Localized fibrous tumor of pleura
Bay Area - Solitary fibrous tumor (2); Inflammatory pseudotumor (1)
Hayward/Fremont - Solitary fibrous tumor (5)
Irvine (UCI Medical Center Residents) - Solitary fibrous tumor
LLUMC Pathology Residents - Solitary fibrous tumor of pleura
Long Beach - Solitary fibrous tumor (7)
Monterey (Community Hospital of Monterey Peninsula) - Solitary fibrous tumor
Moreno Valley (Riverside County Regional Medical Center) - Solitary fibrous tumor (2)
Mountain View (El Camino Pathology Group) - Solitary fibrous tumor
Riverside (Kaiser Permanente) - Solitary fibrous tumor
San Diego (Naval Medical Center) - Solitary fibrous tumor (2)
Santa Barbara (Cottage Hospital) - Solitary fibrous tumor
Santa Rosa (Santa Rosa Memorial Hospital) - Solitary fibrous tumor (3)
Ventura - Localized fibrous tumor of pleura (2)
Yuba City - Solitary fibrous tumor
Connecticut (University of Connecticut Health Center) - Solitary fibrous tumor
Florida (Baptist Hospital) - Localized fibrous tumor (1); Solitary fibrous tumor (myofibroblastoma) (1); Solitary (localized fibrous tumor (1); Malignant localized fibrous tumor of pleura (1)
Florida (Munroe Regional Medical Center) - Solitary fibrous tumor
Florida (Pathology Associates) - Solitary fibrous tumor
Florida (Winter Haven Hospital) - Localized benign fibrous tumor of pleura
Georgia (Piedmont Hospital) - Solitary fibrous tumor
Illinois (Cook County Hospital) - Spindle cell carcinoma
Illinois (Du Page Pathology Associates) - Benign fibrous pleural tumor
Indiana, Fort Wayne - Solitary fibrous tumor, right chest wall
Kansas (Truman Medical Center) - Solitary fibrous tumor of pleura
Louisiana (LSUHSC Pathology Residents) - Localized fibrous tumor (benign) of pleura
Maryland (Johns Hopkins Hospital) - Solitary fibrous tumor (2)
Maryland (National Cancer Institute Residents) - Solitary fibrous tumor
Maryland (National Naval Medical Center) - Solitary fibrous tumor (11)
Maryland (University of Maryland Medical System) - Solitary fibrous tumor
Massachusetts (Berkshire Medical Center) - Solitary fibrous tumor
Massachusetts (Brigham and Women's Residents) - Fibromatosis (desmoid) vs. solitary fibrous tumor (2)
Massachusetts (New England Medical Center) - Solitary fibrous tumor
Michigan (St. Joseph Mercy Hospital) - Solitary fibrous tumor (2)
Minnesota (St. Cloud Hospital) - Solitary fibrous tumor
Nebraska (Creighton Pathology Residents) - Solitary fibrous tumor of pleura
New Jersey (Overlook Hospital) - Localized fibrous tumor (4)
New Mexico (Albuquerque) - Solitary fibrous tumor
New York (Long Island Jewish Medical Center) - Solitary fibrous tumor, histologically this is a typical nodular fasciitis
New York (Stony Brook Residents) - Solitary fibrous tumor
North Carolina (St. Joseph Hospital / Mountain Area Pathology) - Solitary fibrous tumor (5)
North Carolina (University of North Carolina) - Solitary fibrous tumor of pleura
North Carolina (Wake Forest University Baptist Medical Center Residents) - Solitary fibrous tumor
Pennsylvania (Allegheny General Hospital) - Solitary fibrous tumor
Pennsylvania (Conemaugh Memorial Medical Center) - Solitary fibrous tumor
Pennsylvania (Lehigh Valley Hospital) - Solitary fibrous tumor of pleura
Pennsylvania (Memorial Medical Center) - Solitary fibrous tumor
Puerto Rico (University of Puerto Rico) - Solitary fibrous tumor
Texas (ProPath Services) - Fibrous mesothelioma (2)
Texas (Scott & White Memorial Hospital) - Solitary fibrous tumor

Washington, DC (Walter Reed Army Medical Center) - Solitary fibrous tumor
West Virginia (Greenbrier Valley Medical Center) - Fibrohistiocytoma
Wisconsin (Meriter Health Services) - Solitary fibrous tumor vs. fibromatosis
Australia (North Queensland Pathology Group) - Solitary fibrous tumor
Australia (Royal Prince Alfred Hospital) - Solitary fibrous tumor (7); Nodular fasciitis (1)
Japan (Yamanashi Medical University) - Desmoid (1); Solitary fibrous tumor (2)
Saudi Arabia (King Khalid University Hospital) - Solitary fibrous tumor

Case 3 - Diagnosis:

Solitary fibrous tumor, pleura

Director's note: Although morphology favors fibromatosis, the CD34 was positive. There probably is a histologic spectrum in SFTs. (drc)

T-29000, M-80001

Case 3 - References:

Briselli M, Mark EJ and Dickersin GR. Solitary Fibrous Tumors of the Pleura. Eight New Cases and Review of 360 Cases in the Literature. *Cancer* 1981; 47(11):2678-2689.
 Vallat-Decouvelaere AV, Dry SM and Fletcher CD. Atypical and Malignant Solitary Fibrous Tumors in Extrathoracic Locations. Evidence of their Comparability to Intra-Thoracic Tumors. *Am J Surg Pathol* 1998; 22(12):1501-1511.
 Yang X and Soimakallio S. Pleural Signs of Small Peripheral Pulmonary Masses. Pathologic Correlation with Radiographs and Diagnostic Value. *Eur J Radiol* 1997; 25(2):146-151.
 Ordonez NG. Localized (Solitary) Fibrous Tumor of the Pleura. *Adv Anat Pathol* 2000; 7(6):327-340.

Case No. 4, Accession No. 25605

September 2001

Bakersfield - Bronchioloalveolar carcinoma

Bay Area - Bronchioloalveolar carcinoma (2); Atypical adenomatous hyperplasia (1)

Hayward/Fremont - Non-mucinous bronchoalveolar carcinoma (5)

Irvine (UCI Medical Center Residents) - Bronchioloalveolar carcinoma

LLUMC Pathology Residents - Well-differentiated invasive adenocarcinoma with bronchioloalveolar features

Long Beach - Bronchioloalveolar cell carcinoma (7)

Monterey (Community Hospital of Monterey Peninsula) - Bronchoalveolar carcinoma

Moreno Valley (Riverside County Regional Medical Center) - Bronchoalveolar tumor (1); Bronchioloalveolar carcinoma (1)

Mountain View (El Camino Pathology Group) - Bronchoalveolar carcinoma

Riverside (Kaiser Permanente) - Bronchioloalveolar carcinoma

San Diego (Naval Medical Center) - Adenocarcinoma with bronchioloalveolar features (1); Non-mucinous bronchoalveolar tumor (1)

Santa Barbara (Cottage Hospital) - Undifferentiated adenocarcinoma predominantly bronchioloalveolar pattern

Santa Rosa (Santa Rosa Memorial Hospital) - Bronchoalveolar carcinoma (3)

Ventura - Bronchioloalveolar carcinoma (2)

Yuba City - Bronchoalveolar carcinoma

Connecticut (University of Connecticut Health Center) - Bronchoalveolar carcinoma, mucinous

Florida (Baptist Hospital) - Bronchoalveolar carcinoma (2); Adenocarcinoma, bronchoalveolar carcinoma (1); Pneumonic pattern of bronchoalveolar (1)

Florida (Munroe Regional Medical Center) - Bronchioalveolar carcinoma

Florida (Pathology Associates) - Bronchioloalveolar carcinoma

Florida (Winter Haven Hospital) - Bronchioalveolar carcinoma

Georgia (Piedmont Hospital) - Bronchioloalveolar carcinoma

Illinois (Cook County Hospital) - Bronchioloalveolar carcinoma

Illinois (Du Page Pathology Associates) - Bronchioloalveolar carcinoma

Indiana, Fort Wayne - Bronchioloalveolar carcinoma, non-mucinous type, upper lobe, right lung

Kansas (Truman Medical Center) - Bronchioloalveolar carcinoma

Louisiana (LSUHSC Pathology Residents) - Bronchoalveolar carcinoma

Maryland (Johns Hopkins Hospital) - Adenocarcinoma with bronchioloalveolar features (1); Clara cell type adenocarcinoma (2)
Maryland (National Cancer Institute Residents) - Bronchioloalveolar carcinoma
Maryland (National Naval Medical Center) - Bronchioalveolar carcinoma, non-mucinous type (8); Well-differentiated adenocarcinoma (3)
Maryland (University of Maryland Medical System) - Bronchioloalveolar carcinoma
Massachusetts (Berkshire Medical Center) - Bronchoalveolar carcinoma, non-mucinous type
Massachusetts (Brigham and Women's Residents) - Adenocarcinoma with bronchioloalveolar features
Massachusetts (New England Medical Center) - Adenocarcinoma with prominent bronchioalveolar features
Michigan (St. Joseph Mercy Hospital) - Bronchoalveolar adenocarcinoma, non-mucinous type (2)
Minnesota (St. Cloud Hospital) - Bronchoalveolar carcinoma
Nebraska (Creighton Pathology Residents) - Bronchoalveolar carcinoma - non-mucinous
New Jersey (Overlook Hospital) - Adenocarcinoma, well-differentiated (4)
New Mexico (Albuquerque) - Bronchioloalveolar carcinoma
New York (Long Island Jewish Medical Center) - Bronchial alveolar carcinoma
New York (Stony Brook Residents) - Bronchioloalveolar carcinoma
North Carolina (St. Joseph Hospital / Mountain Area Pathology) - Bronchioloalveolar carcinoma (5)
North Carolina (University of North Carolina) - Bronchioloalveolar carcinoma
North Carolina (Wake Forest University Baptist Medical Center Residents) - Non-mucinous bronchioloalveolar carcinoma
Pennsylvania (Allegheny General Hospital) - Bronchoalveolar carcinoma
Pennsylvania (Conemaugh Memorial Medical Center Residents) - Bronchoalveolar carcinoma
Pennsylvania (Lehigh Valley Hospital) - Bronchoalveolar carcinoma
Pennsylvania (Memorial Medical Center) - Bronchioloalveolar carcinoma
Puerto Rico (University of Puerto Rico) - Bronchioloalveolar carcinoma
Texas (ProPath Services) - Non-mucinous bronchoalveolar carcinoma (1); Peripheral adenocarcinoma of lung, bronchoalveolar type (1)
Texas (Scott & White Memorial Hospital) - Bronchioloalveolar carcinoma
Washington, DC (Walter Reed Army Medical Center) - Adenocarcinoma with bronchioloalveolar features
West Virginia (Greenbrier Valley Medical Center) - Adenocarcinoma - bronchioloalveolar
Wisconsin (Meriter Health Services) - Bronchioloalveolar carcinoma
Australia (North Queensland Pathology Group) - Bronchoalveolar carcinoma
Australia (Royal Prince Alfred Hospital) - Bronchioloalveolar carcinoma
Japan (Yamanashi Medical University) - Papillary adenocarcinoma (1); Bronchioloalveolar carcinoma (2)
Saudi Arabia (King Khalid University Hospital) - Bronchioalveolar adenocarcinoma

Case 4 - Diagnosis:

Adenocarcinoma with bronchoalveolar features, lung

T-28000, M82503

Case 4 - References:

Bonomo L, Storto ML, Ciccotosto C, et al. Bronchioloalveolar Carcinoma of the Lung. *Eur Radiol* 1998; 8(6):996-1001.
 Dumont P, Gasser B, Rouge C, Massard G, et al. Bronchoalveolar Carcinoma. Histopathologic Study of Evolution in a Series of 105 Surgically Treated Patients. *Chest* 1998; 113(2):391-395.
 Okubo K, Mark EJ, Flieder D, et al. Bronchoalveolar Carcinoma, Clinical, Radiologic and Pathologic Factors and Survival. *J Thorac Cardiovasc Surg* 1999; 118(4):702-709.
 Mihara N, Ichikado K, Johkoh T, et al. The Subtypes of Localized Bronchioloalveolar Carcinoma. CT - Pathologic Correlation in 18 Cases. *AJR Am J Roentgenol* 1999; 173(1):75-79.
 Breathnach OS, Ishibe N, Williams J, et al. Clinical Features of Patients with Stage IIIB and IV Bronchioloalveolar Carcinoma of the Lung. *Cancer* 1999; 86(7):1165-1173.

Case No. 5, Accession No. 29002

September 2001

Bakersfield - Neuroendocrine carcinoma (small cell carcinoma)
Bay Area - Neuroendocrine carcinoma (3)
Hayward/Fremont - Atypical carcinoid (5)

Irvine (UCI Medical Center Residents) - Neuroendocrine carcinoma
LLUMC Pathology Residents - Large cell neuroendocrine carcinoma
Long Beach - Neuroendocrine carcinoma (high-grade) (7)
Monterey (Community Hospital of Monterey Peninsula) - Neuroendocrine carcinoma
Moreno Valley (Riverside County Regional Medical Center) - Neuroendocrine carcinoma, high grade (1); Neuroendocrine carcinoma, large cell (1)
Mountain View (El Camino Pathology Group) - Large cell neuroendocrine carcinoma (resembling large cell lymphoma)
Riverside (Kaiser Permanente) - Neuroendocrine carcinoma, large cell type
San Diego (Naval Medical Center) - Large cell neuroendocrine carcinoma (1); Non-small cell carcinoma with neuroendocrine features (1)
Santa Barbara (Cottage Hospital) - Large cell neuroendocrine carcinoma
Santa Rosa (Santa Rosa Memorial Hospital) - Large cell neuroendocrine carcinoma (3)
Ventura - Large cell neuroendocrine carcinoma (2)
Yuba City - Neuroendocrine carcinoma
Connecticut (University of Connecticut Health Center) - Lymphoma vs. small cell carcinoma
Florida (Baptist Hospital) - Large cell neuroendocrine carcinoma (2); Neuroendocrine carcinoma, large cell type (1); Poorly differentiated neuroendocrine carcinoma (1)
Florida (Munroe Regional Medical Center) - Atypical carcinoid
Florida (Pathology Associates) - Poorly differentiated neuroendocrine carcinoma
Florida (Winter Haven Hospital) - Neuroendocrine carcinoma
Georgia (Piedmont Hospital) - Need more immunostains
Illinois (Cook County Hospital) - Small cell carcinoma
Illinois (Du Page Pathology Associates) - Atypical carcinoid tumor
Indiana, Fort Wayne - Large cell neuroendocrine carcinoma, upper lobe, right lung
Kansas (Truman Medical Center) - Small cell carcinoma - intermediate variant
Louisiana (LSUHSC Pathology Residents) - Neuroendocrine carcinoma (malignant carcinoid)
Maryland (Johns Hopkins Hospital) - High grade carcinoma with neuroendocrine features primary vs. metastatic, would perform TTF1, chromogranin, synaptophysin immunoperoxidase stains (1); Favor atypical carcinoid tumor vs. small cell carcinoma (2)
Maryland (National Cancer Institute Residents) - Large cell neuroendocrine carcinoma
Maryland (National Naval Medical Center) - Large cell neuroendocrine carcinoma
Maryland (University of Maryland Medical System) - Metastatic Merkel cell carcinoma or poorly differentiated neuroendocrine carcinoma of lung
Massachusetts (Berkshire Medical Center) - Large cell, neuroendocrine features
Massachusetts (Brigham and Women's Residents) - Metastatic Merkel cell carcinoma vs. large cell neuroendocrine
Massachusetts (New England Medical Center) - Large cell carcinoma with neuroendocrine features
Michigan (St. Joseph Mercy Hospital) - Large cell neuroendocrine carcinoma (1); Malignant carcinoid (1)
Minnesota (St. Cloud Hospital) - Large cell neuroendocrine carcinoma
Nebraska (Creighton Pathology Residents) - Large cell neuroendocrine tumor
New Jersey (Overlook Hospital) - Large cell carcinoma with neuroendocrine features (4)
New Mexico (Albuquerque) - Neuroendocrine carcinoma, large cell type
New York (Long Island Jewish Medical Center) - Neuroendocrine carcinoma
New York (Stony Brook Residents) - Carcinoma with neuroendocrine differentiation
North Carolina (St. Joseph Hospital / Mountain Area Pathology) - Large cell carcinoma (2); Neuroendocrine carcinoma (1); Large cell neuroendocrine carcinoma (2)
North Carolina (University of North Carolina) - Large cell neuroendocrine carcinoma
North Carolina (Wake Forest University Baptist Medical Center Residents) - Large cell neuroendocrine carcinoma
Pennsylvania (Allegheny General Hospital) - Large cell neuroendocrine carcinoma
Pennsylvania (Conemaugh Memorial Medical Center Residents) - Small cell carcinoma
Pennsylvania (Lehigh Valley Hospital) - Small cell carcinoma
Pennsylvania (Memorial Medical Center) - Small cell carcinoma
Puerto Rico (University of Puerto Rico) - Neuroendocrine carcinoma, large cell type
Texas (ProPath Services) - Small cell carcinoma of lung (1); Small cell (oat cell) carcinoma of lung (1)
Texas (Scott & White Memorial Hospital) - Large cell neuroendocrine carcinoma
Washington, DC (Walter Reed Army Medical Center) - Large cell neuroendocrine carcinoma

West Virginia (Greenbrier Valley Medical Center) - Granular sarcoma
Wisconsin (Meriter Health Services) - Large cell neuroendocrine carcinoma, grade 3
Australia (North Queensland Pathology Group) - Small cell carcinoma
Australia (Royal Prince Alfred Hospital) - Large cell neuroendocrine carcinoma
Japan (Yamanashi Medical University) - Small cell carcinoma (2); Poorly differentiated non-small carcinoma (1)
Saudi Arabia (King Khalid University Hospital) - Neuroendocrine carcinoma

Case 5 - Diagnosis:

Large cell neuroendocrine carcinoma, lung
T-28000, M-80103

Case 5 - References:

Garcia-Yuste M, Matilla JM, Alvarez-Gago T, et al. Prognostic Factors in Neuroendocrine Lung Tumors. A Spanish Multicenter Study. Multicenter Study of Neuroendocrine Tumors of the Lung of the Spanish Society of Pneumology and Thoracic Surgery (EMETNE-SEPAR). *Ann Thorac Surg* 2000; 70(1):258-263.
Brambilla E, Lantuejoul S and Sturm N. Divergent Differentiation in Neuroendocrine Lung Tumors. *Semin Diagn Pathol* 2000; 17(2):138-148. Review.
Linnoila RI, Mulshine JL, Steinberg SM, et al. Neuroendocrine Differentiation in Endocrine and Nonendocrine Lung Carcinomas. *Am J Clin Pathol* 1988; 90(6):641-652.
Piehl MR, Gould VE, Warren WH, et al. Immunohistochemical Identification of Exocrine and Neuroendocrine Subsets of Large Cell Lung Carcinomas. *Pathol Pract* 1988; 183(6):675-682.

Case No. 6, Accession No. 24512

September 2001

Bakersfield - Atypical carcinoid tumor
Bay Area - Carcinoid (3)
Hayward/Fremont - Carcinoid (5)
Irvine (UCI Medical Center Residents) - Carcinoid
LLUMC Pathology Residents - Moderately differentiated neuroendocrine carcinoma (atypical carcinoma)
Long Beach - Carcinoid (7)
Monterey (Community Hospital of Monterey Peninsula) - Carcinoid
Moreno Valley (Riverside County Regional Medical Center) - Low grade neuroendocrine carcinoma/carcinoid (1); Carcinoid, spindle cell (1)
Mountain View (El Camino Pathology Group) - Carcinoid tumor
Riverside (Kaiser Permanente) - Carcinoid tumor
San Diego (Naval Medical Center) - Carcinoid tumor (2)
Santa Barbara (Cottage Hospital) - Carcinoid tumor
Santa Rosa (Santa Rosa Memorial Hospital) - Carcinoid tumor (3)
Ventura - Carcinoid tumor (2)
Yuba City - Carcinoid
Connecticut (University of Connecticut Health Center) - Carcinoid
Florida (Baptist Hospital) - Carcinoid tumor (2); Atypical carcinoid tumor (2)
Florida (Munroe Regional Medical Center) - Carcinoid tumor
Florida (Pathology Associates) - Carcinoid tumor
Florida (Winter Haven Hospital) - Paraganglioma
Georgia (Piedmont Hospital) - Carcinoid
Illinois (Cook County Hospital) - Carcinoid
Illinois (Du Page Pathology Associates) - Carcinoid tumor
Indiana, Fort Wayne - Carcinoid neoplasm with spindle-cell features, lower lobe, left lung
Kansas (Truman Medical Center) - Carcinoid tumor, spindle cell variant
Louisiana (LSUHSC Pathology Residents) - Hemangiopericytoma
Maryland (Johns Hopkins Hospital) - Carcinoid tumor (2)
Maryland (National Cancer Institute Residents) - Carcinoid tumor

Maryland (National Naval Medical Center) - Paraganglioma (5); Carcinoid tumor (6)
Maryland (University of Maryland Medical System) - Typical carcinoid
Massachusetts (Berkshire Medical Center) - Carcinoid
Massachusetts (Brigham and Women's Residents) - Carcinoid tumor
Massachusetts (New England Medical Center) - Spindle cell carcinoma with paraganglioma features
Michigan (St. Joseph Mercy Hospital) - Carcinoid tumor
Minnesota (St. Cloud Hospital) - Well-differentiated neuroendocrine carcinoma
Nebraska (Creighton Pathology Residents) - Carcinoid tumor
New Jersey (Overlook Hospital) - Carcinoid (4)
New Mexico (Albuquerque) - Carcinoid tumor
New York (Long Island Jewish Medical Center) - Carcinoid tumor
New York (Stony Brook Residents) - Classic carcinoid
North Carolina (St. Joseph Hospital / Mountain Area Pathology) - Carcinoid (5)
North Carolina (University of North Carolina) - Carcinoid tumor
North Carolina (Wake Forest University Baptist Medical Center Residents) - Carcinoid tumor
Pennsylvania (Allegheny General Hospital) - Carcinoid/paraganglioma
Pennsylvania (Conemaugh Memorial Medical Center Residents) - Carcinoid
Pennsylvania (Lehigh Valley Hospital) - Carcinoid
Pennsylvania (Memorial Medical Center) - Carcinoid tumor
Puerto Rico (University of Puerto Rico) - Carcinoid tumor
Texas (ProPath Services) - Bronchial carcinoid tumor (2)
Texas (Scott & White Memorial Hospital) - Carcinoid
Washington, DC (Walter Reed Army Medical Center) - Carcinoid tumor
West Virginia (Greenbrier Valley Medical Center) - Carcinoid tumor
Wisconsin (Meriter Health Services) - Carcinoid tumor (neuroendocarcinoma, grade 1)
Australia (North Queensland Pathology Group) - Carcinoid
Australia (Royal Prince Alfred Hospital) - Carcinoid tumor
Japan (Yamanashi Medical University) - Atypical carcinoid (2); Typical carcinoid (1)
Saudi Arabia (King Khalid University Hospital) - Carcinoid tumor

Case 6 - Diagnosis:

Carcinoid tumor, lung

T-28000, M-82401

Case 6 - References:

Ferguson MK, Landreneau RJ, Hazelrigg SR, et al. Long-Term Outcome After Resection for Bronchial Carcinoid Tumors. *Eur J Cardiothorac Surg* 2000; 18(2):156-161.
 Levi F, Te VC, Randimbison L, et al. Epidemiology of Carcinoid Neoplasms in Vaud, Switzerland. *Br J Cancer* 2000; 83(7):952-955.
 Beasley MB, Thunnissen FB, et al. Pulmonary Atypical Carcinoid. Predictors of Survival in 106 Cases. *Hum Pathol* 2000; 31(10):1255-1265.

Case No. 7, Accession No. 28834

September 2001

Bakersfield - Large cell carcinoma
Bay Area - Poorly differentiated carcinoma, ? lymphoepithelial carcinoma (3)
Hayward/Fremont - Large cell non-keratinizing carcinoma (5)
Irvine (UCI Medical Center Residents) - Poorly differentiated neoplasm, unknown origin
LLUMC Pathology Residents - Lymphoepithelioma-like carcinoma
Long Beach - Large cell carcinoma (7)
Monterey (Community Hospital of Monterey Peninsula) - Large cell carcinoma
Moreno Valley (Riverside County Regional Medical Center) - Squamous cell carcinoma, poorly differentiated (1); Squamous cell carcinoma (1)

Mountain View (El Camino Pathology Group) - Large cell undifferentiated carcinoma (lymphoepithelioma-like?)
Riverside (Kaiser Permanente) - Large cell carcinoma
San Diego (Naval Medical Center) - Large cell carcinoma (6); Poorly differentiated carcinoma (3); Large cell carcinoma, lymphoepithelioma-like variant (1)
Santa Barbara (Cottage Hospital) - Large cell carcinoma
Santa Rosa (Santa Rosa Memorial Hospital) - Non-oat cell carcinoma, large cell type (1); Undifferentiated large cell carcinoma (1); Poorly differentiated large cell carcinoma (1)
Ventura - Large cell carcinoma (2)
Yuba City - Neuroendocrine carcinoma or poorly-differentiated small cell carcinoma
Connecticut (University of Connecticut Health Center) - Giant cell carcinoma
Florida (Baptist Hospital) - Large cell carcinoma (1); Giant cell carcinoma (large cell, undifferentiated) (1); Poorly differentiated giant cell carcinoma (1); Large cell undifferentiated carcinoma (1)
Florida (Munroe Regional Medical Center) - Large cell carcinoma
Florida (Pathology Associates) - Giant cell carcinoma
Florida (Winter Haven Hospital) - Large cell carcinoma
Georgia (Piedmont Hospital) - Large cell carcinoma, possibly neuroendocrine
Illinois (Cook County Hospital) - Squamous cell carcinoma
Illinois (Du Page Pathology Associates) - Undifferentiated large cell carcinoma
Indiana, Fort Wayne - Giant cell undifferentiated carcinoma (lymphoepithelial carcinoma with osteoclast-like giant cells), lower lobe, left lung
Kansas (Truman Medical Center) - Large cell carcinoma
Louisiana (LSUHSC Pathology Residents) - Squamous cell carcinoma, poorly differentiated
Maryland (Johns Hopkins Hospital) - Large cell carcinoma (2)
Maryland (National Cancer Institute Residents) - Lymphoepithelioma-like carcinoma vs. undifferentiated carcinoma
Maryland (National Naval Medical Center) - Large cell undifferentiated carcinoma (9)
Maryland (University of Maryland Medical System) - Poorly differentiated non-small cell carcinoma; Differential diagnosis: Undifferentiated carcinoma with giant cell
Massachusetts (Berkshire Medical Center) - Giant cell carcinoma/poorly differentiated squamous carcinoma with giant cells
Massachusetts (Brigham and Women's Residents) - Favor large cell undifferentiated carcinoma
Massachusetts (New England Medical Center) - Giant cell variant of adenocarcinoma with squamous differentiation
Michigan (St. Joseph Mercy Hospital) - Squamous cell carcinoma (1); Lymphoepithelioma-like carcinoma (1)
Minnesota (St. Cloud Hospital) - Poorly differentiated carcinoma, ? metastasis
Nebraska (Creighton Pathology Residents) - Non-small cell carcinoma/poorly-differentiated squamous
New Jersey (Overlook Hospital) - Lymphoepitheliomatous carcinoma (2); Large cell carcinoma (2)
New Mexico (Albuquerque) - Non-small cell carcinoma
New York (Long Island Jewish Medical Center) - Lymphoepithelioma-like carcinoma with presence of osteoclast-like cells
New York (Stony Brook Residents) - Undifferentiated large cell carcinoma
North Carolina (St. Joseph Hospital / Mountain Area Pathology) - Large cell carcinoma (3); Large cell carcinoma, probably squamous cell (1); Large cell undifferentiated carcinoma (1)
North Carolina (University of North Carolina) - Large cell undifferentiated carcinoma
North Carolina (Wake Forest University Baptist Medical Center Residents) - Poorly differentiated malignancy, favor giant cell carcinoma
Pennsylvania (Allegheny General Hospital) - Poorly differentiated large cell carcinoma, nasopharyngeal type
Pennsylvania (Conemaugh Memorial Medical Center Residents) - Large cell carcinoma
Pennsylvania (Lehigh Valley Hospital) - Squamous cell carcinoma
Pennsylvania (Memorial Medical Center) - Large cell carcinoma
Puerto Rico (University of Puerto Rico) - Metastatic squamous cell carcinoma
Texas (ProPath Services) - Large cell carcinoma (1); Undifferentiated large cell carcinoma (1)
Texas (Scott & White Memorial Hospital) - Large cell carcinoma
Washington, DC (Walter Reed Army Medical Center) - Non-small cell carcinoma/poorly differentiated large cell carcinoma
West Virginia (Greenbrier Valley Medical Center) - Non-small cell carcinoma
Wisconsin (Meriter Health Services) - Undifferentiated pleomorphic non small cell carcinoma 1° vs. 2°
Australia (North Queensland Pathology Group) - Lymphoepithelial-like large cell carcinoma
Australia (Royal Prince Alfred Hospital) - Undifferentiated large cell carcinoma (? lymphoepithelioma-like carcinoma)

Japan (Yamanashi Medical University) - Squamous cell carcinoma (2); Poorly differentiated non-small carcinoma (1)
Saudi Arabia (King Khalid University Hospital) - Poorly differentiated non-small cell carcinoma, with focal squamous like-differentiation

Case 7 - Diagnosis:

Large cell undifferentiated carcinoma, lung

T-28000, M-80123

Case 7 - References:

Okada M, Tsubota N, Yoshimura M, et al. Role of Pleural Lavage Cytology Before Resection for Primary Lung Carcinoma. *Ann Surg* 1999; 229(4):579-584.
Mitsudomi T, Oyama T, Nishida K, et al. p53 Nuclear Immunostaining and Gene Mutations in Non-Small Cell Lung Cancer and their Effects on Patient Survival. *Ann Oncol* 1995; 6 Suppl 3:S9-13.
Andre F, Grunenwald D, Pignon JP, et al. Survival of Patients with Resected N2 Non Small Cell Lung Cancer. Evidence for a Subclassification and Implications. *J Clin Oncol* 2000; 18(16):2981-2989.
Di Giorgio A, Mingazzini P, Sammartino P, et al. Host Defense and Survival in Patients with Lung Carcinoma. *Cancer* 2000; 89(10):2038-2045.

Case No. 8, Accession No. 23380

September 2001

Bakersfield - Non-small cell carcinoma, favor metastatic
Bay Area - Clear cell ("sugar") tumor (3)
Hayward/Fremont - Clear cell (sugar) tumor (5)
Irvine (UCI Medical Center Residents) - Sugar tumor
LLUMC Pathology Residents - Clear cell (sugar) tumor
Long Beach - Clear cell tumor (sugar tumor) (7)
Monterey (Community Hospital of Monterey Peninsula) - Clear cell carcinoma (1); Sclerosing hemangioma (2)
Moreno Valley (Riverside County Regional Medical Center) - Clear cell tumor of the lung (2)
Mountain View (El Camino Pathology Group) - Benign clear cell (sugar) tumor
Riverside (Kaiser Permanente) - Benign clear cell tumor ("sugar tumor")
San Diego (Naval Medical Center) - Benign sugar tumor (1); Carcinoid tumor vs. paraganglioma (1)
Santa Barbara (Cottage Hospital) - Clear cell tumor
Santa Rosa (Santa Rosa Memorial Hospital) - Clear cell tumor (3)
Ventura - Hemangiopericytoma (2)
Yuba City - ? clear cell lesion
Connecticut (University of Connecticut Health Center) - Clear cell tumor
Florida (Baptist Hospital) - Clear cell tumor (3); ? hemangiopericytoma vs. clear cell tumor, etc.
Florida (Munroe Regional Medical Center) - Clear cell adenoma
Florida (Pathology Associates) - Clear cell tumor
Florida (Winter Haven Hospital) - Benign sugar tumor
Georgia (Piedmont Hospital) - Possibly carcinoid tumor
Illinois (Cook County Hospital) - Clear cell carcinoma
Illinois (Du Page Pathology Associates) - Benign clear cell tumor
Indiana, Fort Wayne - Clear cell neoplasms (bronchial), lower lobe, (left lung, favor clear cell myoepithelioma)
Kansas (Truman Medical Center) - Clear cell tumor
Louisiana (LSUHSC Pathology Residents) - Clear cell ("sugar") tumor
Maryland (Johns Hopkins Hospital) - Clear cell (sugar) tumor vs. metastatic renal cell carcinoma would perform HMB45, cytokeratin/EMA immunostains (1); Clear cell ("sugar") tumor (1)
Maryland (National Cancer Institute Residents) - Benign clear cell tumor (sugar tumor)
Maryland (National Naval Medical Center) - Clear cell tumor
Maryland (University of Maryland Medical System) - Benign clear cell tumor (sugar tumor)
Massachusetts (Berkshire Medical Center) - "Sugar tumor"
Massachusetts (Brigham and Women's Residents) - Clear cell tumor (sugar tumor)
Massachusetts (New England Medical Center) - Clear cell tumor of the lung

Michigan (St. Joseph Mercy Hospital) - Clear cell (sugar) tumor (2)
Minnesota (St. Cloud Hospital) - Clear cell tumor
Nebraska (Creighton Pathology Residents) - Malacoplakia
New Jersey (Overlook Hospital) - Clear cell tumor (4)
New Mexico (Albuquerque) - Granular cell tumor
New York (Long Island Jewish Medical Center) - Clear cell tumor (sugar tumor)
New York (Stony Brook Residents) - Clear cell tumor (“sugar” tumor)
North Carolina (St. Joseph Hospital / Mountain Area Pathology) - Sugar tumor (clear cell) (2); Sugar tumor (1); Clear cell tumor (2)
North Carolina (University of North Carolina) - Sugar tumor
North Carolina (Wake Forest University Baptist Medical Center Residents) - Sugar tumor
Pennsylvania (Allegheny General Hospital) - Fechner “sugar” tumor
Pennsylvania (Conemaugh Memorial Medical Center Residents) - Clear cell tumor (sugar tumor)
Pennsylvania (Lehigh Valley Hospital) - Carcinoid
Pennsylvania (Memorial Medical Center) - Clear cell tumor (sugar tumor)
Puerto Rico (University of Puerto Rico) - Benign clear cell tumor
Texas (ProPath Services) - Clear cell tumor (1); Fibroleiomyomatous hamartoma (1)
Texas (Scott & White Memorial Hospital) - Benign salivary gland type tumor
Washington, DC (Walter Reed Army Medical Center) - Clear cell tumor
West Virginia (Greenbrier Valley Medical Center) - Clear cell “sugar” tumor
Wisconsin (Meriter Health Services) - Sugar tumor vs. poorly fixed granular cell tumor
Australia (North Queensland Pathology Group) - Clear cell tumor
Australia (Royal Prince Alfred Hospital) - Benign clear cell tumour (“sugar tumour” / Pcoma)
Japan (Yamanashi Medical University) - Clear cell sugar tumor (2); Inflammatory pseudotumor (1)
Saudi Arabia (King Khalid University Hospital) - Clear (sugar) cell tumor

Case 8 - Diagnosis:

Clear cell tumor (“sugar tumor”), lung

T-28000, M-80001

Case 8 – References:

Hoch WS, Patchefsky AS, Takeda M, et al. Benign Clear Cell Tumor of the Lung. An Ultrastructural Study. *Cancer* 1974; 33(5):1328-1336.
 Gaffey MJ, Mills SE, Askin FB, et al. Clear Cell Tumor of the Lung. A Clinicopathologic, Immunohistochemical, and Ultrastructural Study of Eight Cases. *Am J Surg Pathol* 1990; 14(3):248-259.
 Mills SE, Zarbo RJ, Weiss LM, et al. Clear Cell Tumor of the Lung. Immunohistochemical and Ultrastructural Evidence of Melanogenesis. *Am J Surg Pathol* 1991; 15(7):644-653.

Case No. 9, Accession No. 18285

September 2001

Bakersfield - Malignant tumor, favor malignant germ cell tumor
Bay Area - Malignant mesothelioma (2); Metastatic carcinoma (1)
Hayward/Fremont - Large cell non-keratinizing carcinoma (5)
Irvine (UCI Medical Center Residents) - Metastatic poorly differentiated neoplasm, favor melanoma
LLUMC Pathology Residents - Atypical carcinoid vs. anaplastic carcinoma
Long Beach - Large cell carcinoma (7)
Monterey (Community Hospital of Monterey Peninsula) - Carcinoma
Moreno Valley (Riverside County Regional Medical Center) - Neuroendocrine carcinoma, rhabdoid variant (2)
Mountain View (El Camino Pathology Group) - Undifferentiated carcinoma vs. melanoma
Riverside (Kaiser Permanente) - Malignant neoplasm, rule out malignant melanoma
San Diego (Naval Medical Center) - Adenocarcinoma (1); Poorly-differentiated carcinoma with clear cell feature (1)
Santa Barbara (Cottage Hospital) - Large cell malignant neoplasm, ? metastatic melanoma
Santa Rosa (Santa Rosa Memorial Hospital) - Malignant undifferentiated neoplasm - need stains (1); Non-small cell malignant neoplasm (suggest stains) (1); Malignant neoplasm (1)

Ventura - Large cell carcinoma (2)
Yuba City - Carcinoma ? metastatic
Connecticut (University of Connecticut Health Center) - Undifferentiated large cell carcinoma
Florida (Baptist Hospital) - Undifferentiated carcinoma (? Germ cell) (2); ? Metastatic melanoma (1); ? germ cell tumor (? seminoma with chorio components?) vs. amelanotic malignant melanoma, etc. (1)
Florida (Munroe Regional Medical Center) - Melanoma vs. large cell lymphoma
Florida (Pathology Associates) - Anaplastic large cell malignancy, immunos ?
Florida (Winter Haven Hospital) - Epithelioid mesothelioma
Georgia (Piedmont Hospital) - Rule out metastatic carcinoma
Illinois (Cook County Hospital) - Bronchial derived adenocarcinoma
Illinois (Du Page Pathology Associates) - Poorly differentiated adenocarcinoma
Indiana, Fort Wayne - Undifferentiated large cell neoplasm, upper lobe, right lung, rule out metastatic melanoma
Kansas (Truman Medical Center) - Papillary adenocarcinoma vs. mesothelioma
Louisiana (LSUHSC Pathology Residents) - Poorly differentiated malignant neoplasm (need immunoperoxidase stains)
Maryland (Johns Hopkins Hospital) - Poorly differentiated carcinoma with spindle cell features vs. mesothelioma - would perform cytokeratin and calretinin immunostains (1); Poorly differentiated neoplasm (2)
Maryland (National Cancer Institute Residents) - Large cell carcinoma, undifferentiated
Maryland (National Naval Medical Center) - Poorly differentiated malignancy, favor metastatic melanoma
Maryland (University of Maryland Medical System) - Poorly differentiated carcinoma consistent with metastasis
Massachusetts (Berkshire Medical Center) - Metastatic high grade adenocarcinoma, favor breast
Massachusetts (Brigham and Women's Residents) - Favor large cell neuroendocrine carcinoma
Massachusetts (New England Medical Center) - High grade neoplasm, probably primary
Michigan (St. Joseph Mercy Hospital) - Large cell carcinoma (1); Seminoma (1)
Minnesota (St. Cloud Hospital) - Poorly differentiated adenocarcinoma
Nebraska (Creighton Pathology Residents) - Non-small cell carcinoma/large cell undifferentiated
New Jersey (Overlook Hospital) - Large cell undifferentiated carcinoma (4)
New Mexico (Albuquerque) - Malignant neoplasm, rule out malignant melanoma
New York (Long Island Jewish Medical Center) - Non-small cell carcinoma with some signet-ring cells (melanoma cannot be ruled out)
New York (Stony Brook Residents) - Malignant melanoma
North Carolina (St. Joseph Hospital / Mountain Area Pathology) - Large cell carcinoma (2); Poorly differentiated (large cell) carcinoma (2); Non-small cell carcinoma (1); ? malignant, NOS (1)
North Carolina (University of North Carolina) - Favor poorly differentiated carcinoma
North Carolina (Wake Forest University Baptist Medical Center Residents) - Poorly differentiated malignancy, favor large cell carcinoma
Pennsylvania (Allegheny General Hospital) - Large cell carcinoma
Pennsylvania (Conemaugh Memorial Medical Center Residents) - Squamous cell carcinoma, poorly differentiated non-small cell carcinoma favor squamous
Pennsylvania (Lehigh Valley Hospital) - Non-small cell carcinoma, possibly with neuroendocrine features
Pennsylvania (Memorial Medical Center) - Non-small cell carcinoma favor squamous cell carcinoma
Puerto Rico (University of Puerto Rico) - Undifferentiated large cell tumor/germ cell tumor
Texas (ProPath Services) - Large cell carcinoma (1); Poorly differentiated squamous cell carcinoma (1)
Texas (Scott & White Memorial Hospital) - Poorly differentiated large cell carcinoma (rule out mesothelioma)
Washington, DC (Walter Reed Army Medical Center) - Metastatic adenocarcinoma, favor breast primary
West Virginia (Greenbrier Valley Medical Center) - Undifferentiated carcinoma (melanoma)
Wisconsin (Meriter Health Services) - Large cell carcinoma vs. yolk sac tumor
Australia (North Queensland Pathology Group) - Metastatic tumor ? melanoma
Australia (Royal Prince Alfred Hospital) - ? clear cell carcinoma (? Primary or secondary) ? melanoma
Japan (Yamanashi Medical University) - Large cell carcinoma (3)
Saudi Arabia (King Khalid University Hospital) - Malignant mesothelioma (4); Poorly differentiated adenocarcinoma (2)

Case 9 - Diagnosis:

Poorly differentiated malignant neoplasm, favor large cell carcinoma, lung

T-28000, M-80123

Case 9 – References:

Keller SM, Adak S, Wagner H, et al. Mediastinal Lymph Node Dissection Improves Survival in Patients with Stage II and IIIa Non-Small Cell Lung Cancer. *Ann Thorac Surg* 2000; 70:365-366.
Feins RH. Clinical Trials in Lung Cancer. Truth, Justice, and the American Way. *Ann Thorac Surg* 2000; 70(4):1139-1141.
Delmonte VC, Alberti O, Saldiva PH, et al. Large Cell Carcinoma of the Lung. Ultrastructural and Immunohistochemical Features. *Chest* 1986; 90:524-527.

Case No. 10, Accession No. 29015

September 2001

Bakersfield - Lymphocyte predominant thymoma
Bay Area - Thymoma, lymphocyte predominant type (3)
Hayward/Fremont - Thymoma, mixed spindle/lymphocytic type (5)
Irvine (UCI Medical Center Residents) - Thymoma
LLUMC Pathology Residents - Mixed lymphocytic and epithelial thymoma
Long Beach - Thymoma (7)
Monterey (Community Hospital of Monterey Peninsula) - Thymoma
Moreno Valley (Riverside County Regional Medical Center) - Thymoma (2)
Mountain View (El Camino Pathology Group) - Thymoma
Riverside (Kaiser Permanente) - Thymoma, mixed type (Muller-Hermalink classification)
San Diego (Naval Medical Center) - Thymoma (1); Thymoma, mixed lymphocytic and epithelial (1)
Santa Barbara (Cottage Hospital) - Thymoma
Santa Rosa (Santa Rosa Memorial Hospital) - Thymoma (3)
Ventura - Thymoma (2)
Yuba City - Thymoma, lymphocyte predominant
Connecticut (University of Connecticut Health Center) - Mixed thymoma
Florida (Baptist Hospital) - Thymoma (mixed) (1); Thymoma (2); Spindle epithelioid thymoma with neuroendocrine features
Florida (Munroe Regional Medical Center) - Thymoma
Florida (Pathology Associates) - Thymoma
Florida (Winter Haven Hospital) - Spindle cell - lymphocytic thymoma
Georgia (Piedmont Hospital) - Thymoma
Illinois (Cook County Hospital) - Thymoma
Illinois (Du Page Pathology Associates) - Thymoma
Indiana, Fort Wayne - Thymoma (lymphocyte predominant/with spindle cell features), anterior mediastinum
Kansas (Truman Medical Center) - Thymoma, lymphocytic
Louisiana (LSUHSC Pathology Residents) - Thymoma (mixed lymphocytic-epithelial)
Maryland (Johns Hopkins Hospital) - Thymoma (1); Spindle cell thymoma (1)
Maryland (National Cancer Institute Residents) - Thymoma
Maryland (National Naval Medical Center) - Thymoma
Maryland (University of Maryland Medical System) - Thymoma
Massachusetts (Berkshire Medical Center) - Thymoma
Massachusetts (Brigham and Women's Residents) - Encapsulated thymoma, type AB (mixed)
Massachusetts (New England Medical Center) - Thymoma
Michigan (St. Joseph Mercy Hospital) - Thymoma (2)
Minnesota (St. Cloud Hospital) - Lymphocyte predominant thymoma, need immunoperoxidase stains to confirm
Nebraska (Creighton Pathology Residents) - Thymoma - small lymphocytic type
New Jersey (Overlook Hospital) - Thymoma
New Mexico (Albuquerque) - Thymoma
New York (Long Island Jewish Medical Center) - Thymoma, mixed type
New York (Stony Brook Residents) - Thymoma, mixed type
North Carolina (St. Joseph Hospital / Mountain Area Pathology) - Thymoma (5)
North Carolina (University of North Carolina) - Thymoma
North Carolina (Wake Forest University Baptist Medical Center Residents) - Spindle cell thymoma

Pennsylvania (Allegheny General Hospital) - Thymoma
Pennsylvania (Conemaugh Memorial Medical Center Residents) - Thymoma
Pennsylvania (Lehigh Valley Hospital) - Thymoma, mostly spindle cell type
Pennsylvania (Memorial Medical Center) - Thymoma
Puerto Rico (University of Puerto Rico) - Thymoma, malignant
Texas (ProPath Services) - Thymoma, mixed pattern (2)
Texas (Scott & White Memorial Hospital) - Thymoma
Washington, DC (Walter Reed Army Medical Center) - Thymoma
West Virginia (Greenbrier Valley Medical Center) - Thymoma
Wisconsin (Meriter Health Services) - Thymoma
Australia (North Queensland Pathology Group) - Thymoma, lymphoepithelial spindle cell type
Australia (Royal Prince Alfred Hospital) - Thymoma (mixed lymphocytic-epithelioid)
Japan (Yamanashi Medical University) - Thymoma (3)
Saudi Arabia (King Khalid University Hospital) - Thymoma

Case 10 - Diagnosis:

Encapsulated thymoma, mixed type

T-Y2300, M-85800

Case 10 - References:

Komaki R, Putnam JB Jr, Shin DM, et al. Thymic Neoplasms. *Curr Opin Oncol* 1997; 9(2):156-160.
 Nakajima J, Takamoto S, Oka T, et al. Flow Cytometric Analysis of Lymphoid Cells in Thymic Epithelial Neoplasms. *Eur J Cardiothorac Surg* 2000; 18(3):287-292.
 Camera L, Brunetti A, Romano M, et al. Morphological Imaging of Thymic Disorders. *Ann Med* 1999; 31(2):57-62.
 Chhieng DC, Rose D, Ludwig ME, et al. Cytology of Thymomas. Emphasis on Morphology and Correlation with Histologic Subtypes. *Cancer* 2000; 90(1):24-32.
 Murakawa T, Nakajima J, Kohno T, et al. Results from Surgical Treatment for Thymoma. 43 Years of Experience. *Jpn J Thorac Cardiovasc Surg* 2000; 48(2):89-95.