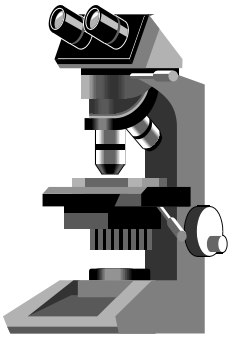
CALIFORNIA
TUMOR TISSUE REGISTRY

GASTROINTESTINAL PATHOLOGY

Minutes – Subscription A

November, 2007



SUGGESTED READING (General Topics from Recent Literature):

Influence of the HIPAA Privacy Rule on Health Research. Ness RB. *JAMA* 2007; 298:2164-2170.

Percentage of Gleason Pattern 4 and 5 Predicts Survival After Radical Prostatectomy. Cheng L, Davidson DD, et al. *Cancer* 2007; 110:1967-1972.

Squamous Cell Carcinoma of the Bladder. A Clinicopathologic Analysis of 45 Cases. Lagwinski N, Thomas A, et al. *Am J Surg Pathol* 2007; 31:1777-1787.

Hospital Lymph Node Examination Rates and Survival After Resection for Colon Cancer. Wong SL, Ji H, et al. *JAMA* 2007; 298:2149-2154.

Cytology of Nonneoplastic Occupational and Environmental Diseases of the Lung and Pleura. Laucirica R and Ostrowski ML. *Arch Pathol Lab Med* 2007; 131:1700-1708.

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FILE DIAGNOSES

CTTR Subscription A November 2007

Case 1:
Leiomyoma, small bowel
T-67100, M-80103

Case 2:
Gastrointestinal stromal tumor, malignant, stomach
T-63000, M-96103

Case 3:
Gastrointestinal stromal tumor of uncertain malignant potential, stomach
T-63000, M-88903

Case 4:
Hepatocellular carcinoma, low grade, liver
T-56000, M-81703

Case 5:
Metastatic signet ring adenocarcinoma (Krukenberg tumor), ovary
T-87000, M-84903

Case 6:
Adenocarcinoma, gallbladder
T-57000, M-81403

Case 7:
Adenocarcinoma (mucinous), gallbladder
T-57000, M-81403

Case 8:
Solid pseudopapillary tumor, pancreas
T-77100, M-80103

Case 9:
Adenosquamous carcinoma, stomach
T-63000, M-85603

Case 10:
Neuroendocrine carcinoma, cecum
T-67100, M-80103

Case No. 1, Accession No. 30652 **November 2007**

Alameda (Alameda County Medical Center) - Leiomyoma
Claremont - Leiomyoma
Hayward-Fremont - Smooth muscle tumor of uncertain malignant potential
Los Angeles (ABC Laboratories) - Leiomyoma
Long Beach (VA Hospital) - Leiomyoma
Monterey Peninsula (Community Hospital) - Leiomyoma
Mountain View (El Camino Hospital) - Smooth muscle tumor, favor benign
Oakland - Leiomyoma
Orange (Orange County Pathology Medical Group - Leiomyoma
Oxnard (St. John's Regional Medical Center) - Leiomyoma (2)
San Diego - Leiomyoma, small bowel
San Diego (Naval Medical Center) - Leiomyoma
San Diego (Scripps Clinic) - Leiomyoma
San Francisco (UCSF) - Leiomyoma
Santa Barbara - Leiomyoma
Santa Rosa (Santa Rosa Memorial Hospital) - Leiomyoma (3)
Sonoma (Sonoma Valley Hospital) - Leiomyoma
Woodland Hills - Leiomyoma
Alabama (Baptist Medical Center) - Leiomyoma
Alabama, Mt Olive - Leiomyoma
Florida (Jackson Memorial Hospital) - Leiomyoma
Georgia - Fibromatosis
Illinois (Burr Ridge) - Leiomyoma
Illinois (Heartland Regional) - Smooth muscle neoplasm (size suggests malignant neoplasm)
Illinois, Oak Brook - Leiomyoma
Illinois (Mac Neal Hospital) - Leiomyoma, small bowel
Indiana (St. Joseph) - Leiomyoma (4)
Kansas (Cytocheck Laboratory, LLC) - Leiomyoma (2)
Kentucky (University of Louisville) - Leiomyoma
Maryland (National Naval Medical Center) - Leiomyoma
Massachusetts (Berkshire Medical Center) - Leiomyoma
Michigan (Pathology Services of West Michigan) - Leiomyoma
Minnesota (Fairview Ridges Hospital) - Leiomyoma
Missouri (Missouri Delta Medical Center) - Benign fibromatosis
Missouri-Kansas City (Truman Medical Center) - Leiomyoma
Nebraska (Creighton University) - Leiomyoma
Nevada (Sunrise Hospital) - Leiomyoma, low grade
New Mexico, Albuquerque - Leiomyoma
New York (ECMC) - Leiomyoma
New York (Stony Brook University Residents) - Leiomyoma
New York (SUNY Downstate Medical Center) - Leiomyoma
New York (Westchester Medical Center) - Leiomyoma
Ohio (McCullough-Hyde Memorial Hospital) - Leiomyoma
Pennsylvania (Conemaugh Hospital) - Leiomyoma/uncertain malignant potential
Pennsylvania (St. Elizabeth Health Center) - Leiomyoma (small intestine)
Texas, Crystal Beach - Leiomyoma
Texas, Lubbock - Leiomyoma
Texas (San Antonio Christus Santa Rosa Children's Hospital) - Small intestine leiomyoma (GIST/leiomyoma)
Texas (Scott & White Hospital) - Smooth muscle tumor of low malignant potential
Washington, DC - Leiomyoma
West Virginia (Greenbrier Valley Medical Center) - Leiomyoma
Australia (Royal Hobart Hospital) - Low grade leiomyosarcoma
Australia (Sullivan Nicolaides Pathology) - Leiomyoma
Canada (Pasqua Hospital) - Leiomyoma

Canada (Sherbrooke University Hospital) - Leiomyoma
Hong Kong (Hong Kong Baptist Hospital) - Leiomyoma
Hong Kong (Kwong Wah Hospital) - Leiomyoma
Ireland (Kerry General Hospital) - Leiomyoma
Japan (Asashi General Hospital) - Gastrointestinal stromal tumor, low grade
Japan (Kyoto University Hospital) - Leiomyoma
Oman (Khoula Hospital) - Leiomyoma
Puerto Rico (University of Puerto Rico) - Leiomyoma
The Netherlands, Amstelveen - Leiomyoma small bowel
United Kingdom (Oxford Study Group) - Leiomyoma

Case 1 - Diagnosis:

Leiomyoma, small bowel
T-67100, M-80103

Case 1 - References:

Nagi B, Verma V, Vaiphei K, et al. Primary Small Bowel Tumors. A Radiologic-Pathologic Correlation. *Abdom Imaging* 2001; 26(5):474-480.
Ludwig DJ and Traverso LW. Gut Stromal Tumors and Their Clinical Behavior. *Am J Surg* 1997; 173(5): 390-394.
Gill SS, Heuman DM and Mihas AA. Small Intestinal Neoplasms. *J Clin Gastroenterol* 2001; 33(4):267-282.
Vallaeys JH, Cuvelier CA, Bekaert L, et al. Combined Leiomyomatosis of the Small Intestine and Colon. *Arch Pathol Lab Med* 1992; 116(3):281-283.

Case No. 2, Accession No. 30593 November 2007

Alameda (Alameda County Medical Center) - Gastrointestinal stromal tumor, malignant
Claremont - Gastrointestinal stromal tumor
Hayward-Fremont - Gastrointestinal stromal tumor, high grade
Los Angeles (ABC Laboratories) - Gastrointestinal stromal tumor, grade II-III/III
Long Beach (VA Hospital) - Malignant gastrointestinal stromal tumor
Monterey Peninsula (Community Hospital) - Gastrointestinal stromal tumor (malignant features)
Mountain View (El Camino Hospital) - Malignant GI stromal tumor
Oakland - Gastrointestinal stromal tumor
Orange (Orange County Pathology Medical Group - Gastrointestinal stromal tumor
Oxnard (St. John's Regional Medical Center) - Malignant gastrointestinal stromal tumor (1); Gastrointestinal stromal tumor, malignant (1)
San Diego - Gastrointestinal stromal tumor
San Diego (Naval Medical Center) - Gastrointestinal stromal tumor, malignant
San Diego (Scripps Clinic) - Malignant gastrointestinal stromal tumor
San Francisco (UCSF) - Gastrointestinal stromal tumor (high risk)
Santa Barbara - Gastrointestinal stromal tumor
Santa Rosa (Santa Rosa Memorial Hospital) - Malignant gastrointestinal stromal tumor (GIST) (3)
Sonoma (Sonoma Valley Hospital) - Gastrointestinal stromal tumor, high risk
Woodland Hills - Gastrointestinal stromal tumor
Alabama (Baptist Medical Center) - Malignant gastrointestinal stromal tumor
Alabama, Mt Olive - Gastrointestinal stromal tumor, high malignant potential
Florida (Jackson Memorial Hospital) - Gastrointestinal stromal tumor
Georgia - Gastrointestinal stromal tumor
Illinois (Burr Ridge) - GIST, malignant
Illinois (Heartland Regional) - Gastrointestinal stromal tumor, malignant
Illinois, Oak Brook - Gastrointestinal stromal tumor, high grade
Illinois (Mac Neal Hospital) - Gastrointestinal stromal tumor, stomach
Indiana (St. Joseph) - Gastrointestinal stromal tumor (4)
Kansas (Cytocheck Laboratory, LLC) - Malignant GIST (spindle cell sarcoma) (1); Leiomyosarcoma (1)
Kentucky (University of Louisville) - Malignant gatrointestinal stromal tumor

Maryland (National Naval Medical Center) - Gastrointestinal stromal tumor, high risk
Massachusetts (Berkshire Medical Center) - Gastrointestinal stromal tumor
Michigan (Pathology Services of West Michigan) - Malignant gastrointestinal stromal tumor
Minnesota (Fairview Ridges Hospital) - Gastrointestinal stromal tumor, high risk
Missouri (Missouri Delta Medical Center) - Gastrointestinal stromal tumor
Missouri-Kansas City (Truman Medical Center) - Gastrointestinal stromal tumor
Nebraska (Creighton University) - Malignant gastrointestinal stromal tumor (GIST)
Nevada (Sunrise Hospital) - Gastrointestinal stromal tumor
New Mexico, Albuquerque - Gastrointestinal stromal tumor, malignant
New York (ECMC) - Gastrointestinal stromal tumor (GIST), high risk category
New York (Stony Brook University Residents) - High risk (malignant), gastrointestinal stromal tumor
New York (SUNY Downstate Medical Center) - Gastrointestinal stromal tumor, high risk, malignant
New York (Westchester Medical Center) - Malignant gastrointestinal stromal tumor
Ohio (McCullough-Hyde Memorial Hospital) - Malignant gastrointestinal stromal tumor
Pennsylvania (Conemaugh Hospital) - Gastrointestinal stromal tumor, malignant/GANT
Pennsylvania (St. Elizabeth Health Center) - Gastrointestinal stromal tumor, malignant
Texas, Crystal Beach - Gastrointestinal stromal tumor
Texas, Lubbock - Malignant gastrointestinal stromal tumor
Texas (San Antonio Christus Santa Rosa Children's Hospital) - Gastric gastrointestinal stromal tumor, malignant
Texas (Scott & White Hospital) - Malignant gastrointestinal stromal tumor
Washington, DC - Gastrointestinal stromal tumor
West Virginia (Greenbrier Valley Medical Center) - Gastrointestinal stromal tumor
Australia (Royal Hobart Hospital) - Gastointestinal stromal tumor (malignant i.e. high risk of aggressive behavior)
Australia (Sullivan Nicolaides Pathology) - Gastrointestinal stromal tumour
Canada (Pasqua Hospital) - Gastrointestinal stromal tumor, probably malignant
Canada (Sherbrooke University Hospital) - Gastrointestinal stromal tumor
Hong Kong (Hong Kong Baptist Hospital) - Gastrointestinal stromal tumor, malignant
Hong Kong (Kwong Wah Hospital) - Gastrointestinal stromal tumor, high risk
Ireland (Kerry General Hospital) - Gastrointestinal stromal tumor
Japan (Asashi General Hospital) - Gastrointestinal stromal tumor, high grade
Japan (Kyoto University Hospital) - Gastrointestinal stromal tumor, malignant (high grade)
Oman (Khoula Hospital) - Malignant gastrointestinal stromal tumour
Puerto Rico (University of Puerto Rico) - Malignant gastrointestinal stromal tumor
The Netherlands, Amstelveen - Gastrointestinal stromal tumor
United Kingdom (Oxford Study Group) - Gastrointestinal stromal tumor with high malignant potential

Case 2 - Diagnosis:

Gastrointestinal stromal tumor, malignant, stomach
T-63000, M-96103

Case 2 - References:

Park SH, Kim MJ, Kwon J, et al. Solitary Fibrous Tumor Arising from Stomach. CT Findings. *Yonsei Med* J 2007; 48(6):1056-1060.
Dematteo RP, gold JS, Saran L, et al. Tumor Mitotic Rate, Size, and Location Independently Predict Recurrence After Resection of Primary Gastrointestinal Stromal Tumor (GIST). *Cancer* 2007; (Epub ahead of print).
Rakovich G. Stromal Tumour of the Stomach. *Can J Surg* 2007; 50(6):E25-6.
Hassan I, You YN, Shyyan R, et al. Surgically Managed Gastrointestinal Stromal Tumors. A Comparative and Prognostic Analysis. *Ann Surg Oncol* 2007; (Epub ahead of Print).
Goessl C, Hempfling W, Hoppe B, et al. Endoscopic Enucleation of Small Gastrointestinal Stromal Tumors from the Stomach. *Endoscopy* 2007; (Epub ahead of Print).

Case No. 3, Accession No. 30708 November 2007

Alameda (Alameda County Medical Center) - Gastrointestinal stromal tumor, GANT variant
Claremont - Gastrointestinal stromal tumor
Hayward-Fremont - Gastrointestinal stromal tumor

Los Angeles (ABC Laboratories) - Gastrointestinal stromal tumor, low grade
Long Beach (VA Hospital) - Gastrointestinal stromal tumor, unknown malignant potential
Monterey Peninsula (Community Hospital) - Gastrointestinal stromal tumor
Mountain View (El Camino Hospital) - GI stromal tumor
Oakland - Gastrointestinal stromal tumor
Orange (Orange County Pathology Medical Group - Gastrointestinal stromal tumor
Oxnard (St. John's Regional Medical Center) - Gastrointestinal stromal tumor (1); Gastrointestinal stromal tumor, probably benign (1)
San Diego - Gastrointestinal stromal tumor
San Diego (Naval Medical Center) - Gastrointestinal stromal tumor
San Diego (Scripps Clinic) - Gastrointestinal stromal tumor, favor benign
San Francisco (UCSF) - Gastrointestinal stromal tumor, low risk
Santa Barbara - Gastrointestinal stromal tumor
Santa Rosa (Santa Rosa Memorial Hospital) - Gastrointestinal stromal tumor (GIST) (3)
Sonoma (Sonoma Valley Hospital) - Gastrointestinal stromal tumor, high risk
Woodland Hills - Gastrointestinal stromal tumor
Alabama (Baptist Medical Center) - Gastrointestinal stromal tumor
Alabama, Mt Olive - Gastrointestinal stromal tumor, high malignant potential
Florida (Jackson Memorial Hospital) - Gastrointestinal stromal tumor
Georgia - Gastrointestinal stromal tumor
Illinois (Burr Ridge) - Gastrointestinal stromal tumor, benign
Illinois (Heartland Regional) - Gastrointestinal stromal tumor (of uncertain malignant potential)
Illinois, Oak Brook - Gastrointestinal stromal tumor, low malignant potential
Illinois (Mac Neal Hospital) - Gastrointestinal stromal tumor, stomach
Indiana (St. Joseph) - Gastrointestinal stromal tumor (4)
Kansas (Cytocheck Laboratory, LLC) - Gastrointestinal stromal tumor, intermediate risk (1); Neural sheath tumor (1)
Kentucky (University of Louisville) - Gastrointestinal stromal tumor, intermediate risk
Maryland (National Naval Medical Center) - Fibromatosis, intraabdominal
Massachusetts (Berkshire Medical Center) - Epithelioid GIST with secondary amylidosis
Michigan (Pathology Services of West Michigan) - Gastrointestinal stromal tumor
Minnesota (Fairview Ridges Hospital) - Gastrointestinal stromal tumor, high risk
Missouri (Missouri Delta Medical Center) - Schwannoma
Missouri-Kansas City (Truman Medical Center) - Gastrointestinal stromal tumor
Nebraska (Creighton University) - Malignant gastrointestinal stromal tumor (GIST)
Nevada (Sunrise Hospital) - Gastrointestinal stromal tumor
New Mexico, Albuquerque - Gastrointestinal stromal tumor
New York (ECMC) - Gastrointestinal stromal tumor with epithelioid and spindle differentiation
New York (Stony Brook University Residents) - Gastrointestinal stromal tumor
New York (SUNY Downstate Medical Center) - Gastrointestinal stromal tumor, intermediate risk/malignant GIST
New York (Westchester Medical Center) - Gastrointestinal stromal tumor with degeneration
Ohio (McCullough-Hyde Memorial Hospital) - Gastrointestinal stromal tumor
Pennsylvania (Conemaugh Hospital) - Gastrointestinal stromal tumor, malignant
Pennsylvania (St. Elizabeth Health Center) - Gastrointestinal stromal tumor, malignant
Texas, Crystal Beach - Gastric stromal tumor
Texas, Lubbock - Gastrointestinal stromal tumor
Texas (San Antonio Christus Santa Rosa Children's Hospital) - Gastrointestinal stromal tumor, probably benign
Texas (Scott & White Hospital) - Gastrointestinal stromal tumor
Washington, DC - Gastrointestinal stromal tumor
West Virginia (Greenbrier Valley Medical Center) - Gastrointestinal stromal tumor
Australia (Royal Hobart Hospital) - Gastrointestinal stromal tumor (intermediate risk of aggressive behavior)
Australia (Sullivan Nicolaides Pathology) - Gastrointestinal stromal tumor
Canada (Pasqua Hospital) - Gastrointestinal stromal tumor
Canada (Sherbrooke University Hospital) - Gastrointestinal stromal tumor
Hong Kong (Hong Kong Baptist Hospital) - Gastrointestinal stromal tumor, probably malignant
Hong Kong (Kwong Wah Hospital) - Gastrointestinal stromal tumor, intermediate risk
Ireland (Kerry General Hospital) - Gastrointestinal stromal tumor
Japan (Asashi General Hospital) - Gastrointestinal stromal tumor

Japan (Kyoto University Hospital) - Gastrointestinal stromal tumor
Oman (Khoula Hospital) - Gastrointestinal stromal tumor
Puerto Rico (University of Puerto Rico) - Gastrointestinal stromal tumor
The Netherlands, Amstelveen - Gastrointestinal stromal tumor, malignant
United Kingdom (Oxford Study Group) - Gastrointestinal stromal tumor with intermediate malignant potential

Case 3 - Diagnosis:

Gastrointestinal stromal tumor of uncertain malignant potential, stomach
T-63000, M-88903

Case 3 - References:

Nada R, Vaiphei K, Singh R, et al. Gastrointestinal Stromal Tumors the Assessment of Malignant Potential. *Indian J Pathol Microbiol* 2001; 44(4):393-397.

Gu M, Ghafari S, Nguyen PT, et al. Cytologic Diagnosis of Gastrointestinal Stromal Tumors of the Stomach By Endoscopic Ultrasound-Guided Fine-Needle Aspiration Biopsy. Cytomorphologic and Immunohistochemical Study of 12 Cases. *Diagn Cytopathol* 2001; 25(6):343-350.

Debol SM, Stanley, MW and Mallery JS. Can Fine Needle Aspiration Cytology Adequately Diagnose and Predict the Behavior of Gastrointestinal Stromal Tumors? *Adv Anat Pathol* 2001; 8(2):93-97.

Muro-Cacho CA, Cantor AB, and Morgan M. Prognostic Factors in Malignant Gastrointestinal Stromal Tumors. *Ann Clin Lab Sci* 2000; 30(3):239-247.

Boggino HE, Fernandez MP and Logrono R. Cytomorphology of Gastrointestinal Stromal Tumor. Diagnostic Role of Aspiration Cytology, Core Biopsy, and Immunochemistry. *Diagn Cytopathol* 2000; 23(3):156-160.

Miettinen M, Sarlomo-Rikala M and Lasota J. Gastrointestinal Stromal Tumors. Recent Advances in Understanding of Their Biology. *Hum Pathol* 1999; 1213-1220.

Case No. 4, Accession No. 30576 November 2007

Alameda (Alameda County Medical Center) - Hepatocellular carcinoma
Claremont - Liver cell adenoma
Hayward-Fremont - Hepatocellular carcinoma (with AAT globules)
Los Angeles (ABC Laboratories) - Hepatocellular carcinoma
Long Beach (VA Hospital) - Hepatocellular carcinoma
Monterey Peninsula (Community Hospital) - Hepatocellular carcinoma
Mountain View (El Camino Hospital) - Hepatocellular carcinoma
Oakland - Hepatocellular carcinoma
Orange (Orange County Pathology Medical Group - Hepatocellular carcinoma
Oxnard (St. John's Regional Medical Center) - Hepatoma (2)
San Diego - Fibrolamellar hepatocellular carcinoma
San Diego (Naval Medical Center) - Hepatocellular carcinoma
San Diego (Scripps Clinic) - Hepatocellular carcinoma
San Francisco (UCSF) - Hepatocellular carcinoma
Santa Barbara - Hepatoma
Santa Rosa (Santa Rosa Memorial Hospital) - Hepatocellular carcinoma
Sonoma (Sonoma Valley Hospital) - Hepatocellular carcinoma
Woodland Hills - Hepatocellular carcinoma, fibrolamellar type
Alabama (Baptist Medical Center) - Hepatocellular carcinoma
Alabama, Mt Olive - Fibrolamellar carcinoma
Florida (Jackson Memorial Hospital) - Fibrolamellar hepatocellular carcinoma
Georgia - Hepatocellular carcinoma, ? fibrolamellar
Illinois (Burr Ridge) - Hepatocellular carcinoma
Illinois (Heartland Regional) - Hepatocellular carcinoma
Illinois, Oak Brook - Hepatocellular carcinoma, fibrolamellar variant
Illinois (Mac Neal Hospital) - Cavernous hemangioma, liver
Indiana (St. Joseph) - Hepatocellular carcinoma (4)
Kansas (Cytocheck Laboratory, LLC) - Hepatocellular carcinoma (1); Hepatoma (1)
Kentucky (University of Louisville) - Fibrolamellar carcinoma

Maryland (National Naval Medical Center) - Fibrolamellar hepatocellular carcinoma
Massachusetts (Berkshire Medical Center) - Fibrolamellar carcinoma
Michigan (Pathology Services of West Michigan) - Hepatic adenoma
Minnesota (Fairview Ridges Hospital) - Hepatocellular carcinoma, fibrolamellar
Missouri (Missouri Delta Medical Center) - Hematoma vs. pelosis hepatitis
Missouri-Kansas City (Truman Medical Center) - Poorly differentiated hepatocellular carcinoma
Nebraska (Creighton University) - Hepatocellular carcinoma, fibrolamellar variant
Nevada (Sunrise Hospital) - Fibrolamellar hepatocellular carcinoma
New Mexico, Albuquerque - Hepatocellular carcinoma, fibrolamellar type
New York (ECMC) - Fibrolamellar hepatocellular carcinoma
New York (Stony Brook University Residents) - Hepatocellular carcinoma
New York (SUNY Downstate Medical Center) - Fibrolamellar hepatocellular carcinoma
New York (Westchester Medical Center) - Hepatocellular carcinoma
Ohio (McCullough-Hyde Memorial Hospital) - Hepatoma
Pennsylvania (Conemaugh Hospital) - Hepatocellular carcinoma
Pennsylvania (St. Elizabeth Health Center) - Hepatoma/hepatocellular carcinoma
Texas, Crystal Beach - Hepatocellular adenoma
Texas, Lubbock - Lamellar carcinoma
Texas (San Antonio Christus Santa Rosa Children's Hospital) - Heptocellular carcinoma
Texas (Scott & White Hospital) - Hepatocellular carcinoma
Washington, DC - Hepatic adenoma
West Virginia (Greenbrier Valley Medical Center) - Well-differentiated hepatocellular carcinoma
Australia (Royal Hobart Hospital) - Fibrolamellar hepatocellular carcinoma
Australia (Sullivan Nicolaides Pathology) - Hepatocellular carcinoma, fibrolamellar variant
Canada (Pasqua Hospital) - Hepatocellular carcinoma
Canada (Sherbrooke University Hospital) - Hepatocellular carcinoma
Hong Kong (Hong Kong Baptist Hospital) - Well-differentiated hepatocellular carcinoma
Hong Kong (Kwong Wah Hospital) - Hepatocellular carcinoma
Ireland (Kerry General Hospital) - Well-differentiated hepatocellular carcinoma
Japan (Asashi General Hospital) - Fibrolamellar hepatocellular carcinoma
Japan (Kyoto University Hospital) - Hepatocellular adenoma
Oman (Khoula Hospital) - Hepatocellular carcinoma (? fibrolamellar)
Puerto Rico (University of Puerto Rico) - Hepatocellular adenoma
The Netherlands, Amstelveen - Hepatocellular carcinoma
United Kingdom (Oxford Study Group) - Hepatocellular carcinoma

Case 4 - Diagnosis:

Hepatocellular carcinoma, low grade, liver
T-56000, M-81703

Case 4 - References:

Kitay-Coheny, Amiel A, Ashur Y, et al. Analysis of Chromosomal Aberrations in Large Hepatocellular Carcinomas by Comparative Genomic Hybridization. *Cancer Genet Cytogenet* 2001; 131(1):60-64.
Li D, Mallory T and Satomura S. AFP-L3 A New Generation of Tumor Marker for Hepatocellular Carcinoma. *Clin Chim Acta* 2001; 313(1-2):15-19.
Koo SH, Ihm CH, Kwon KC, et al. Genetic Alterations in Hepatocellular Carcinoma and Intrahepatic Cholangiocarcinoma. *Cancer Genet Cytogenet* 2001; 130(1):22-28.
Bergsland EK. Molecular Mechanisms Underlying the Development of Hepatocellular Carcinoma. *Semin Oncol* 2001; 28(5):521-531.
Little SA and Fong Y. Hepatocellular Carcinoma. Current Surgical Management. *Semin Oncol* 2001; 28(5):474-486.

Case No. 5, Accession No. 30595 November 2007

Alameda (Alameda County Medical Center) - Metastatic signet ring cell adenocarcinoma, (Krukenberg tumor)
Claremont - Krukenberg tumor
Hayward-Fremont - Metastatic signet ring carcinoma (? gastric origin)

Los Angeles (ABC Laboratories) - Krukenberg tumor metastatic mucinous adenocarcinoma, signet ring cell type
Long Beach (VA Hospital) - Signet ring cell carcinoma most likely metastatic
Monterey Peninsula (Community Hospital) - Metastatic signet ring adenocarcinoma
Mountain View (El Camino Hospital) - Metastatic signet ring adenocarcinoma "Krukenberg tumor"
Oakland - Krukenberg carcinoma
Orange (Orange County Pathology Medical Group - Signet ring cell carcinoma (Krukenberg tumor)
Oxnard (St. John's Regional Medical Center) - Krukenburg (1); Metastatic signet ring carcinoma (1)
San Diego - Fibroma with signet ring cell, rule out signet ring cell tumor
San Diego (Naval Medical Center) - Metastatic signet ring cell carcinoma
San Diego (Scripps Clinic) - Krukenberg tumor
San Francisco (UCSF) - Metastatic adenocarcinoma, signet ring
Santa Barbara - Leiomyoma
Santa Rosa (Santa Rosa Memorial Hospital) - Metastatic signet-ring adenocarcinoma (Krukenberg tumor) (1); Krukenberg tumor (3)
Sonoma (Sonoma Valley Hospital) - Krukenberg tumor of ovary
Woodland Hills - Metastatic signet ring cell carcinoma
Alabama (Baptist Medical Center) - Krukenberg tumor
Alabama, Mt Olive - Krukenberg tumor
Florida (Jackson Memorial Hospital) - Krukenberg tumor
Georgia - Krukenberg tumor
Illinois (Burr Ridge) - Krukenberg tumor, ovary
Illinois (Heartland Regional) - Metastatic signet ring cell carcinoma (Krukenberg tumor)
Illinois, Oak Brook - Signet ring cell carcinoma, stomach
Illinois (Mac Neal Hospital) - Metastatic signet ring cell carcinoma, ovary (Krukenberg's tumor)
Indiana (St. Joseph) - Metastatic signet ring adenocarcinoma (Krukenberg tumor) (3); Fibroma (signet ring cell carcinoma needs to be excluded) (1)
Kansas (Cytocheck Laboratory, LLC) - Metastatic signet ring cell carcinoma (1); Fibrothecoma (1)
Kentucky (University of Louisville) - Krukenberg tumor
Maryland (National Naval Medical Center) - Metastatic poorly differentiated adenocarcinoma with signet ring features (Krukenberg tumor)
Massachusetts (Berkshire Medical Center) - Krukenberg tumor
Michigan (Pathology Services of West Michigan) - Thecofibroma
Minnesota (Fairview Ridges Hospital) - Metastatic poorly differentiated adenocarcinoma, signet ring cell type
Missouri (Missouri Delta Medical Center) - Metastatic adenocarcinoma probably gastric (Krukenberg tumor)
Missouri-Kansas City (Truman Medical Center) - Mucinous adenocarcinoma, favor metastatic
Nebraska (Creighton University) - Krukenberg tumor metastatic mucinous adenocarcinoma signet ring cell type
Nevada (Sunrise Hospital) - Metastatic signet ring cell carcinoma (Krukenberg tumor) ?, gastric primary
New Mexico, Albuquerque - Metastatic signet ring adenocarcinoma
New York (ECMC) - Luteinized thecoma
New York (Stony Brook University Residents) - Krukenberg tumor
New York (SUNY Downstate Medical Center) - Metastatic signet ring cell adenocarcinoma
New York (Westchester Medical Center) - Signet ring cell carcinoma, metastatic to ovary
Ohio (McCullough-Hyde Memorial Hospital) - Fibroma, rule out Krukenberg/metastasis
Pennsylvania (Conemaugh Hospital) - Fibroma and Krukenberg tumor
Pennsylvania (St. Elizabeth Health Center) - Metastatic adenocarcinoma/signet ring/Krukenberg tumor, rule out gastrointestinal primary
Texas, Crystal Beach - Signet ring adenocarcinoma, probably metastatic
Texas, Lubbock - Metastatic adenocarcinoma
Texas (San Antonio Christus Santa Rosa Children's Hospital) - Ovarian metastatic adenocarcinoma (Krukenberg)
Texas (Scott & White Hospital) - Metastatic signet ring cell carcinoma
Washington, DC - Krukenberg tumor
West Virginia (Greenbrier Valley Medical Center) - Gastric adenocarcinoma metastatic to ovary (Krukenberg)
Australia (Royal Hobart Hospital) - Krukenberg tumor
Australia (Sullivan Nicolaides Pathology) - Metastatic adenocarcinoma, Krukenberg tumour
Canada (Pasqua Hospital) - Krukenberg tumor
Canada (Sherbrooke University Hospital) - Signet ring stromal tumor
Hong Kong (Hong Kong Baptist Hospital) - Krukenberg's tumor

Hong Kong (Kwong Wah Hospital) - Krukenberg's tumour (metastatic signet ring cell carcinoma)
Ireland (Kerry General Hospital) - Krukenberg tumor of ovary
Japan (Asashi General Hospital) - Fibroma with minor sex cord elements
Japan (Kyoto University Hospital) - Metastatic signet ring cell carcinoma (Krukenberg tumor)
Oman (Khoula Hospital) - Metastatic signet-ring carcinoma
Puerto Rico (University of Puerto Rico) - Signet ring adenocarcinoma/metastatic
The Netherlands, Amstelveen - Metastatic mucinous adenocarcinoma
United Kingdom (Oxford Study Group) - Metastatic mucinous adenocarcinoma, ovary (Krukenberg)

Case 5 - Diagnosis:

Metastatic signet ring adenocarcinoma (Krukenberg tumor), ovary
T-87000, M-84903

Case 5 - References:

Yook JH, Oh ST and Kim BS. Clinical Prognostic Factors for Ovarian Metastasis in Women with Gastric Cancer. *Hepatogastroenterology* 2007; 54(75):955-959.
Young RH. From Krukenberg to Today. The Ever Present Problems Posed by Metastatic Tumors in the Ovary. Part II. *Adv Anat Pathol* 2007; 14(3):149-177.
Lerwill MF and Young RH. Ovarian Metastases of Intestinal-Type Gastric Carcinoma. A Clinicopathologic Study of 4 Cases with Contrasting Features to Those of the Krukenberg Tumor. *Am J Surg* 2006; 30(11):1382-1388.
Kakushima N, Kamoshida T, Hirai S, et al. Early Gastric Cancer with Krukenberg Tumor and Review of Cases of Intramucosal Gastric Cancers with Krukenberg Tumor. *J Gastroenterol* 2003; 38(12):1176-1180.
Lashgari M, Behmaram B, Hoffman JS, et al. Primary Biliary Carcinoma with metastasis of the Ovary. *Gynecol Oncol* 1992; 47(2):272-274.

Case No. 6, Accession No. 30491 November 2007

Alameda (Alameda County Medical Center) - Adenocarcinoma
Claremont - Poorly differentiated adenocarcinoma, GB
Hayward-Fremont - Adenocarcinoma, gallbladder, high grade
Los Angeles (ABC Laboratories) - Poorly differentiated adenocarcioma
Long Beach (VA Hospital) - Adenocarcinoma
Monterey Peninsula (Community Hospital) - Adenocarcinoma, gallbladder primary
Mountain View (El Camino Hospital) - Poorly differentiated adenocarcinoma
Oakland - Poorly differentiated carcinoma (MET) squamous differentiation
Orange (Orange County Pathology Medical Group - Adenocarcinoma
Oxnard (St. John's Regional Medical Center) - Poorly differentiatied adenocarcinoma (1); Adenocarcinoma (1)
San Diego - Poorly differentiated adenocarinoma, rule out adenosquamous carcinoma
San Diego (Naval Medical Center) - Adenocarcinoma of the gallbladder
San Diego (Scripps Clinic) - Adenocarcinoma
San Francisco (UCSF) - Invasive adenocarcinoma
Santa Barbara - Undifferentiated carcinoma
Santa Rosa (Santa Rosa Memorial Hospital) - Adenocarcinoma of gallbladder (3)
Sonoma (Sonoma Valley Hospital) - Adenocarcinoma of gallbladder, high grade
Woodland Hills - Adenocarcinoma
Alabama (Baptist Medical Center) - Gallbladder adenocarcinoma
Alabama, Mt Olive - Invasive poorly differentiated adenocarcinoma of the gallbladder arising in the background of adenocarcinoma in-situ
Florida (Jackson Memorial Hospital) - Poorly differentiated adenocarcinoma of the gallbladder
Georgia - Poorly differentiated adenocarcinoma
Illinois (Burr Ridge) - Infiltrating adenocarcinoma, gallbladder
Illinois (Heartland Regional) - Invasive adenocarcinoma, poorly differentiated
Illinois, Oak Brook - Invasive adenocarcinoma, moderate differentiated
Illinois (Mac Neal Hospital) - Cholangiocarcinoma, gallbladder
Indiana (St. Joseph) - Adenocarcinoma (4)
Kansas (Cytocheck Laboratory, LLC) - Adenocarcinoma of gallbladder (? Adenosquamous type) (2)

Kentucky (University of Louisville) - Gallbladder adenocarcinoma, poorly differentiated
Maryland (National Naval Medical Center) - Invasive moderately differentiated adenocarcinoma
Massachusetts (Berkshire Medical Center) - Pancreatobiliary adenocarcinoma
Michigan (Pathology Services of West Michigan) - Adenocarcinoma
Minnesota (Fairview Ridges Hospital) - Adenocarcinoma, moderately differentiated, invasive
Missouri (Missouri Delta Medical Center) - Invasive adenocarinoma, poorly differentiated
Missouri-Kansas City (Truman Medical Center) - Gallbladder adenocarcinoma, primary
Nebraska (Creighton University) - Poorly differentiated adenocarcinoma of gallbladder
Nevada (Sunrise Hospital) - Gallbladder adenocarcinoma, poorly differentiated
New Mexico, Albuquerque - Poorly differentiated adenocarcinoma carcinoma
New York (ECMC) - Adenocarcinoma, primary gallbladder
New York (Stony Brook University Residents) - Carcinosarcoma
New York (SUNY Downstate Medical Center) - Poorly differentiated gallbladder adenocarcinoma
New York (Westchester Medical Center) - Poorly differentiated adenocarcinoma of gallbladder
Ohio (McCullough-Hyde Memorial Hospital) - Adenocarcinoma
Pennsylvania (Conemaugh Hospital) - Poorly differentiated adenocarcinoma of gallbladder
Pennsylvania (St. Elizabeth Health Center) - Poorly differentiated adenocarcinoma, probable gallbladder origin also surface dysplasia/atypia of gallbladder mucosa, in-situ carcinoma
Texas, Crystal Beach - Adenocarcinoma gallbladder
Texas, Lubbock - Adenocarcinoma
Texas (San Antonio Christus Santa Rosa Children's Hospital) - Adenocarcinoma, gallbladder
Texas (Scott & White Hospital) - Adenocarcinoma
Washington, DC - Invasive poorly differentiated adenocarcinoma
West Virginia (Greenbrier Valley Medical Center) - Adenocarcinoma
Australia (Royal Hobart Hospital) - Poorly differentiated adenocarcinoma, gallbladder
Australia (Sullivan Nicolaides Pathology) - Adenocarcinoma, gallbladder
Canada (Pasqua Hospital) - Adenocarcinoma
Canada (Sherbrooke University Hospital) - Invasive adenocarcinoma
Hong Kong (Hong Kong Baptist Hospital) - Adenocarcinoma
Hong Kong (Kwong Wah Hospital) - Adenocarcinoma of the gallbladder (moderately differentiated)
Ireland (Kerry General Hospital) - Cholangiocarcinoma
Japan (Asashi General Hospital) - Moderately to poorly differentiated adenocarcinoma of gallbladder
Japan (Kyoto University Hospital) - Adenocarcinoma
Oman (Khoula Hospital) - Adenocarcinoma
Puerto Rico (University of Puerto Rico) - Adenosquamous carcinoma
The Netherlands, Amstelveen - Poorly differentiated adenocarcinoma
United Kingdom (Oxford Study Group) - Dysplasia and adenocarcinoma, gallbladder

Case 6- Diagnosis:

Adenocarcinoma, gallbladder
T-57000, M-81403

Case 6 - References:

Krishnani N, Shukla S, and Jain M. Fine Needle Aspiration Cytology in Xanthogranulomatous Cholecystitis, Gallbladder Adenocarcinoma and Co-Existent Lesions. *Acta Cyto* 2000; Acta Cytol 44(4):508-514.
Albores-Saavedra J and Henson DE. Pyloric Gland Metaplasia with Perineural Invasion of the Gallbladder. A Lesion That Can Be Confused with Adenocarcinoma. *Cancer* 1999; 86(12):2625-2631.
Nakashima H, Nagafuchi K, Satoh H, et al. Hepatoid Adenocarcinoma of the Gallbladder. *J Hepatobiliary Pancreat Surg* 2000; 7(2):226-230.
North JH, Pack MS, Hong C, et al. Prognostic Factors for Adenocarcinoma of the Gallbladder. An Analysis of 162 Cases. *Am Surg* 1998; 64(5):437-440.

Case No. 7, Accession No. 30602 **November 2007**

Alameda (Alameda County Medical Center) - Adenocarcinoma
Claremont - Adenocarcinoma, GB
Hayward-Fremont - Mucinous carcinoma, gallbladder
Los Angeles (ABC Laboratories) - Adenocarcinoma
Long Beach (VA Hospital) - Adenocarcinoma
Monterey Peninsula (Community Hospital) - Adenocarcinoma
Mountain View (El Camino Hospital) - Moderately differentiated adenocarcinoma
Oakland - Adenocarcinoma
Orange (Orange County Pathology Medical Group - Adenocarcinoma
Oxnard (St. John's Regional Medical Center) - Adenocarcinoma (2)
San Diego - Adenocarcinoma, gallbladder
San Diego (Naval Medical Center) - Adenocarcinoma, favor gallbladder primary
San Diego (Scripps Clinic) - Adenocarcinoma
San Francisco (UCSF) - Invasive adenocarcinoma
Santa Barbara - Adenocarcinoma
Santa Rosa (Santa Rosa Memorial Hospital) - Adenocarcinoma of gallbladder (1); Cystadenocarcinoma of gallbladder (2)
Sonoma (Sonoma Valley Hospital) - Adenocarcinoma of gallbladder, well-differentiated
Woodland Hills - Adenocarcinoma
Alabama (Baptist Medical Center) - Gallbladder adenocarcinoma
Alabama, Mt Olive - Adenocarcinoma, favor metastatic
Florida (Jackson Memorial Hospital) - Intestinal type of adenocarcinoma of the gallbladder
Georgia - Adenocarcinoma with mucinous features
Illinois (Burr Ridge) - Invasive cystadenocarcinoma, gallbladder
Illinois (Heartland Regional) - Invasive adenocarcinoma, moderately differentiated
Illinois, Oak Brook - Well-differentiated adenocarcinoma
Illinois (Mac Neal Hospital) - Cholangiocarcinoma, gallbladder
Indiana (St. Joseph) - Adenocarcinoma (2); Chronic active cholecystitis (1); Well-differentiated adenocarcinoma, intestinal type, invasive (1)
Kansas (Cytocheck Laboratory, LLC) - Adenocarcinoma of the gallbladder, gastric type (2)
Kentucky (University of Louisville) - Mucinous adenocarcinoma
Maryland (National Naval Medical Center) - Invasive well-differentiated adenocarcinoma with intestinal features
Massachusetts (Berkshire Medical Center) - Adenocarcinoma, intestinal type
Michigan (Pathology Services of West Michigan) - Adenocarcinoma
Minnesota (Fairview Ridges Hospital) - Adenocarcinoma, well-differentiated, invasive
Missouri (Missouri Delta Medical Center) - Well-differentiated adenocarcinoma
Missouri-Kansas City (Truman Medical Center) - Mucinous adenocarcinoma, favor gallbladder primary
Nebraska (Creighton University) - Mucinous adenocarcinoma of gallbladder, well-differentiated
Nevada (Sunrise Hospital) - Invasive adenocarcinoma, mucinous type
New Mexico, Albuquerque - Adenocarcinoma
New York (ECMC) - Adenocarcinoma with focal clear cell features
New York (Stony Brook University Residents) - Well-differentiated adenocarcinoma
New York (SUNY Downstate Medical Center) - Well-differentiated gallbladder adenocarcinoma
New York (Westchester Medical Center) - Mucinous adenocarcinoma of gallbladder
Ohio (McCullough-Hyde Memorial Hospital) - Adenocarcinoma
Pennsylvania (Conemaugh Hospital) - Mucinous adenocarcinoma
Pennsylvania (St. Elizabeth Health Center) - Adenocarcinoma of gallbladder, moderately differentiated
Texas, Crystal Beach - Adenocarcinoma, gallbladder
Texas, Lubbock - Adenocarcinoma
Texas (San Antonio Christus Santa Rosa Children's Hospital) - Mucinous adenocarcinoma, gallbladder
Texas (Scott & White Hospital) - Adenocarcinoma
Washington, DC - Invasive moderately differentiated adenocarcinoma
West Virginia (Greenbrier Valley Medical Center) - Well-differentiated adenocarcinoma
Australia (Royal Hobart Hospital) - Moderately differentiated adenocarcinoma, gallbladder
Australia (Sullivan Nicolaides Pathology) - Adenocarcinoma, gallbladder

Canada (Pasqua Hospital) - Adenocarcinoma
Canada (Sherbrooke University Hospital) - Adenomyoma
Hong Kong (Hong Kong Baptist Hospital) - Adenocarcinoma
Hong Kong (Kwong Wah Hospital) - Adenocarcinoma of the gallbladder (poorly differentiated)
Ireland (Kerry General Hospital) - Well-differentiated cholangiocarcinoma
Japan (Asashi General Hospital) - Adenocarcinoma of gallbladder
Japan (Kyoto University Hospital) - Adenocarcinoma
Oman (Khoula Hospital) - Adenocarcinoma (mucinous carcinoma)
Puerto Rico (University of Puerto Rico) - Adenocarcinoma, intestinal type
The Netherlands, Amstelveen - Moderate differentiated adenocarcinoma
United Kingdom (Oxford Study Group) - Gallbladder, mucinous adenocarcinoma

Case 7 - Diagnosis:

Adenocarcinoma (mucinous), gallbladder
T-57000, M-81403

Case 7 - References:

Pandey M, Pathak AK, Gautam A, et al. Carcinoma of the Gallbladder. A Retrospective Review of 99 Cases. *Dig Dis Sci* 2001; 46(6):1145-1151.
Buisine MP, Devisme L, Degand P, et al. Developmental Mucin Gene Expression in the Gastroduodenal Tract and Accessory Digestive Glands II. Duodenum and Liver, Gallbladder, and Pancreas. *J Histochem Cytochem* 2000; 48(12):1667-1676.
Yanagisawa N, Mikami T, Mitomi H, et al. CD44 Variant Overexpression in Gallbladder Carcinoma Associated with Tumor Dedifferentiation. *Cancer* 2001; 91(2):408-416.
Yamaguchi K, Chijiiwa K, Saiki S, et al. Reliability of Frozen Section Diagnosis of Gallbladder Tumor for Detecting Carcinoma and Depth of Its Invasion. *J Surg Oncol* 1997; 65(2):132-136.
Tsukada K, Kurosaka I, Uchida K, et al. Lymph Node Spread From Carcinoma of the Gallbladder. *Cancer* 1997; 80(4):661-667.
Mizuno T, Eimoto T, Tada T, et al. Mucinous Tumor of the Gallbladder with a Separate Nodule of Anaplastic Carcinoma. *Arch Pathol Lab Med* 1999; 123(12):1280-1284.

Case No. 8, Accession No. 30767 November 2007

Alameda (Alameda County Medical Center) - Solid-pseudopapillary tumor
Claremont - Acinar pancreatic
Hayward-Fremont - Solid pseudopapillary tumor
Los Angeles (ABC Laboratories) - Solid-cystic pseudopapillary tumor
Long Beach (VA Hospital) - Solid pseudopapillary tumor
Monterey Peninsula (Community Hospital) - Solid pseudopapillary tumor
Mountain View (El Camino Hospital) - Solid-pseudopapillary tumor of pancreas
Oakland - Oncocytic carcinoma vs ? solid/papillary
Orange (Orange County Pathology Medical Group - Solid pseudopapillary tumor
Oxnard (St. John's Regional Medical Center) - Islet cell tumor (2)
San Diego - Endocrine neoplasm, pancreas
San Diego (Naval Medical Center) - Solid pseudopapillary neoplasm
San Diego (Scripps Clinic) - Solid pseudopapillary tumor
San Francisco (UCSF) - Solid pseudopapillary tumor
Santa Barbara - Solid and cystic neoplasm
Santa Rosa (Santa Rosa Memorial Hospital) - Solid pseudopapillary neoplasm of pancreas (3)
Sonoma (Sonoma Valley Hospital) - Pancreatic endocrine tumor
Woodland Hills - Endocrine neoplasm
Alabama (Baptist Medical Center) - Solid pseudopapillary tumor
Alabama, Mt Olive - Solid cystic-papillary epithelial neoplasm
Florida (Jackson Memorial Hospital) - Solid and pseudopapillary tumor of the pancreas
Georgia - Solid pseudopapillary tumor
Illinois (Burr Ridge) - Pancreatic endocrine neoplasm
Illinois (Heartland Regional) - Solid pseudopapillary tumor
Illinois, Oak Brook - Solid pseudopapillary tumor

Illinois (Mac Neal Hospital) - Solid and pseudopapillary tumor, pancreas
Indiana (St. Joseph) - Acinar cell carcinoma (1); Solid pseudopapillary tumor (1); Islet cell tumor (1); Endocrine carcinoma (1)
Kansas (Cytocheck Laboratory, LLC) - Solid pseudopapillary tumor (1); Islet cell tumor (1)
Kentucky (University of Louisville) - Solid pseudopapillary tumor of the pancreas
Maryland (National Naval Medical Center) - Solid pseudopapillary tumor
Massachusetts (Berkshire Medical Center) - Solid pseudopapillary carcinoma
Michigan (Pathology Services of West Michigan) - Solid and pseudopapillary tumor
Minnesota (Fairview Ridges Hospital) - Solid pseudopapillary tumor of pancreas
Missouri (Missouri Delta Medical Center) - Solid and papillary tumor of the pancreas
Missouri-Kansas City (Truman Medical Center) - Solid pseudopapillary tumor
Nebraska (Creighton University) - Solid pseudopapillary tumor
Nevada (Sunrise Hospital) - Solid pseudopapillary tumor
New Mexico, Albuquerque - Solid pseudopapillary tumor
New York (ECMC) - Solid pseudopapillary tumor of the pancreas
New York (Stony Brook University Residents) - Solid pseudopapillary neoplasm
New York (SUNY Downstate Medical Center) - Solid pseudopapillary tumor
New York (Westchester Medical Center) - Solid pseudopapillary tumor of pancreas
Ohio (McCullough-Hyde Memorial Hospital) - Pheochromocytoma
Pennsylvania (Conemaugh Hospital) - Solid pseudopapillary neoplasms
Pennsylvania (St. Elizabeth Health Center) - Solid pseudopapillary tumor (solid and cystic pancreatic tumor)
Texas, Crystal Beach - Endocrine tumor pancreas
Texas, Lubbock - Islet cell tumor
Texas (San Antonio Christus Santa Rosa Children's Hospital) - Pancreas solid pseudopapillary neoplasm
Texas (Scott & White Hospital) - Solid and pseudopapillary tumor
Washington, DC - Solid pseudopapillary tumor
West Virginia (Greenbrier Valley Medical Center) - Ductal adenocarcinoma
Australia (Royal Hobart Hospital) - Solid pseudopapillary neoplasm pancreas
Australia (Sullivan Nicolaides Pathology) - Solid pseudopapillary tumour, pancreas
Canada (Pasqua Hospital) - Solid cystic papillary epithelial neoplasm
Canada (Sherbrooke University Hospital) - Pseudopapillary solid tumor
Hong Kong (Hong Kong Baptist Hospital) - Solid pseudopapillary tumor
Hong Kong (Kwong Wah Hospital) - Pancreatic neuroendocrine tumour
Ireland (Kerry General Hospital) - Solid pseudopapillary tumour
Japan (Asashi General Hospital) - Solid pseudopapillary tumor of pancreas
Japan (Kyoto University Hospital) - Solid-pseudopapillary neoplasm
Oman (Khoula Hospital) - Solid cystic papillary epithelial neoplasm
Puerto Rico (University of Puerto Rico) - Solid pseudopapillary tumor
The Netherlands, Amstelveen - Solid pseudopapillary tumor
United Kingdom (Oxford Study Group) - Solid pseudopapillary neoplasm, pancreas

Case 8 - Diagnosis:

Solid pseudopapillary tumor, pancreas
T-77100, M-80103

Case 8 - References:

Tapia B, Ahrens W, Kenney B, et al. Acinar Cell Carcinoma vs. Solid Pseudopapillary Tumor of the Pancreas in Children. A Comparison of Two Rare and Overlapping Entities with Review of the Literature. *Pediatr Dev Pathol* 2007; 13: 1 (Epub ahead of Print).
Volkan Adsay N. Cystic Lesions of the Pancreas. *Mod Pathol* 2007; 1:S71-93.
Yu CC Tseng JH, Yeh CN, et al. Clinicopathological Study of Solid and Pseudopapillary Tumor of Pancreas. Emphasis on Magnetic Resonance Imaging Findings. *World J Gastroenterol* 2007; 13(12):181-1815.
Hernandez JM, Centeno BA and Kelley ST. Solid Pseudopapillary Tumors of the Pancreas. Case Presentation and Review of the Literature. *Am Surg* 2007; 73(3):290-293.
Butturini G, Brighenti A, Capelli P, et al. Clinical and Biological Behavior of Pancreatic Solid Pseudopapillary Tumors. Report on 31 Consecutive Patients. *J Surg Oncol* 2007; 95(4):304-310.

Case No. 9, Accession No. 30411 **November 2007**

Alameda (Alameda County Medical Center) - Adenosqumous carcinoma
Claremont - Poorly differentiated adenocarcinoma
Hayward-Fremont - Mucoepidermoid carcinoma
Los Angeles (ABC Laboratories) - Poorly differentiated adenosquamous carcinoma
Long Beach (VA Hospital) - Poorly differentiated adenocarcinoma
Monterey Peninsula (Community Hospital) - Gastric adenocarcinoma
Mountain View (El Camino Hospital) - Poorly differentiated adenocarcinoma (hepatoid features?)
Oakland - Adenosquamous carcinoma
Orange (Orange County Pathology Medical Group - Adenosquamous cell carcinoma
Oxnard (St. John's Regional Medical Center) - Squamous cell carcinoma (2)
San Diego - Adenosquamous (mucoepidermoid) carcinoma
San Diego (Naval Medical Center) - Undifferentiated gastric carcinoma with lymphoid stroma
San Diego (Scripps Clinic) - Adenosquamous carcinoma
San Francisco (UCSF) - Adenosquamous carcinoma
Santa Barbara - High grade carcinoma
Santa Rosa (Santa Rosa Memorial Hospital) - Adenosquamous cell carcinoma (3)
Sonoma (Sonoma Valley Hospital) - Lymphoepithelioma-like carcinoma
Woodland Hills - Adenosquamous carcinoma
Alabama (Baptist Medical Center) - Gastric adenocarcinoma
Alabama, Mt Olive - Squamous cell carcinoma, keratinizing
Florida (Jackson Memorial Hospital) - Adenosquamous carcinoma
Georgia - Adenosquamous carcinoma
Illinois (Burr Ridge) - Infiltrating squamous cell carcinoma, esophagus
Illinois (Heartland Regional) - Adenosquamous carcinoma, poorly differentiated
Illinois, Oak Brook - Squamous carcinoma with glandular differentiation
Illinois (Mac Neal Hospital) - Adenocarcinoma, rule out squamous cell carcinoma
Indiana (St. Joseph) - Adenocarcinoma with squamous differentiation (1); Adenosquamous carcinoma (1); Adenocarcinoma vs. adenolymphoma vs. carcinosarcoma (1); Adenosquamous carcinoma (1)
Kansas (Cytocheck Laboratory, LLC) - Squamous cell carcinoma (2)
Kentucky (University of Louisville) - Adenosquamous carcinoma
Maryland (National Naval Medical Center) - Invasive adenosquamous carcinoma
Massachusetts (Berkshire Medical Center) - Poorly differentiated carcinoma, squamous adenocarcinoma and undifferentiated features
Michigan (Pathology Services of West Michigan) - Adenosquamous carcinoma
Minnesota (Fairview Ridges Hospital) - Adenosquamous carcinoma
Missouri (Missouri Delta Medical Center) - Invasive moderately differentiated squamous cell carcinoma
Missouri-Kansas City (Truman Medical Center) - Adenosquamous carcinoma
Nebraska (Creighton University) - Squamous cell carcinoma of esophagus, poorly
Nevada (Sunrise Hospital) - Gastric carcinoma with lymphoid stroma (lymphoepitehlioma-like carcinoma)
New Mexico, Albuquerque - Poorly differentiated squamous cell carcinoma
New York (ECMC) - Adenosquamous carcinoma
New York (Stony Brook University Residents) - Adenosquamous carcinoma
New York (SUNY Downstate Medical Center) - Adenosquamous carcinoma
New York (Westchester Medical Center) - Adenosquamous carcinoma of G.E. junction
North Carolina (North Carolina Baptist) - Basaloid squamous cell carcinoma
Ohio (McCullough-Hyde Memorial Hospital) - Poorly differentiated adenocarcinoma
Pennsylvania (Conemaugh Hospital) - Mucoepidermoid carcinoma/adenosquamous carcinoma
Pennsylvania (St. Elizabeth Health Center) - Adenosquamous carcinoma
Texas, Crystal Beach - Adenocarcinoma poorly differentiated
Texas, Lubbock - Adenosquamous carcinoma
Texas (San Antonio Christus Santa Rosa Children's Hospital) - Gastric high grade carcinoid
Texas (Scott & White Hospital) - Adenosquamous cell carcinoma
Washington, DC - Adenosquamous/squamous carcinoma
West Virginia (Greenbrier Valley Medical Center) - Adenocarcinoma, NOS
Australia (Royal Hobart Hospital) - Adenosquamous carcinoma, stomach

Australia (Sullivan Nicolaides Pathology) - Adenosquamous carcinoma, stomach
Canada (Pasqua Hospital) - Adenocarcinoma
Canada (Sherbrooke University Hospital) - Adenosquamous carcinoma
Hong Kong (Hong Kong Baptist Hospital) - Poorly differentiated adenosquamous carcinoma
Hong Kong (Kwong Wah Hospital) - Adenosquamous carcinoma of the stomach
Ireland (Kerry General Hospital) - Carcinoma, ?adenosquamous
Japan (Asashi General Hospital) - Adenosquamous cell carcinoma
Japan (Kyoto University Hospital) - Adenosquamous carcinoma
Oman (Khoula Hospital) - Adenosquamous carcinoma
Puerto Rico (University of Puerto Rico) - Adenosquamous/squamous cell carcinoma
The Netherlands, Amstelveen - Adenosquamous carcinoma
United Kingdom (Oxford Study Group) - Carcinosarcoma, stomach

Case 9 - Diagnosis:

Adenosquamous carcinoma, stomach
T-63000, M-85603

Case 9 - References:

Lee WA, Woo DK, Kim YI, et al. P53, p16, and RB Expression in Adenosquamous and Squamous Cell Carcinomas of the Stomach. *Pathol Res Pract* 1999; 195(11):747-752.
Zaridze D, Borisova E, Maximovitch D, et al. Aspirin Protects Against Gastric Cancer. Results of a Case-Control Study from Moscow, Russia. *Int J Cancer* 1999; 82(4):473-476.
Mori E, Watanabe A, Maekawa S, et al. Adenosquamous Carcinoma of the Remnant Stomach. Report of a Case. *Surg Today* 2000; 30(7):643-646.
Sato Y, Shimozono T, Kawano S, et al. Gastric Carcinosarcoma, Co-Existence of Adenosquamous Carcinoma and Rhabdomyosarcoma. A Case Report. *Histopathol* 2001; 39(5):543-544.
Kitadai Y, Sasaki A, Ito M, et al. Helicobacter Pylori Infection Influences Expression of Genes Related to Angiogenesis and Invasion in Human Gastric Carcinoma Cells. *Biochem Biophys Res Commun* 2003; 311(4):809-814.

Case No. 10, Accession No. 30570 November 2007

Alameda (Alameda County Medical Center) - Poorly differentiated carcinoma
Claremont - Poorly differentiated adenocarcinoma
Hayward-Fremont - Medullary carcinoma
Los Angeles (ABC Laboratories) - Anaplastic small cell carcinoma with endocrine differentiation
Long Beach (VA Hospital) - Poorly differentiated adenocarcinoma with neuroendocrine differentiation
Monterey Peninsula (Community Hospital) - Carcinoma, poorly differentiated vs. undifferentiated
Mountain View (El Camino Hospital) - Lymphoepithelioma-like carcinoma
Oakland - Neuroendocrine carcinoma
Orange (Orange County Pathology Medical Group - Adenocarcinoma
Oxnard (St. John's Regional Medical Center) - Neuroendocrine carcinoma (2)
San Diego - Poorly differentiated carcinoma with endocrine features
San Diego (Naval Medical Center) - Neuroendocrine carcinoma
San Diego (Scripps Clinic) - Poorly differentiated neuroendocrine carcinoma
San Francisco (UCSF) - Adenocarcinoma, medullary pattern
Santa Barbara - Small cell neuroendocrine carcinoma
Santa Rosa (Santa Rosa Memorial Hospital) - Large cell neuroendocrine carcinoma (1); Neuroendocrine carcinoma (2)
Sonoma (Sonoma Valley Hospital) - Carcinoid tumor
Woodland Hills - Adenocarcinoma
Alabama (Baptist Medical Center) - Poorly differentiated adenocarcinoma
Alabama, Mt Olive - Medullary carcinoma
Florida (Jackson Memorial Hospital) - Undifferentiated carcinoma of the colon
Georgia - Poorly differentiated adenocarcinoma, ? microsatellite instability
Illinois (Burr Ridge) - Carcinoid tumor
Illinois (Heartland Regional) - Adenoendocrine carcinoma (composite carcinoid adenocarcinoma), poorly differentiated

Illinois, Oak Brook - EC cell tumor of cecum
Illinois (Mac Neal Hospital) - Neuroedocrine carcinoma, cecum
Indiana (St. Joseph) - Carcinoid (3); Neuroendocrine carcinoma or adenocarcinoma with neuroendocrine differentiation (1)
Kansas (Cytocheck Laboratory, LLC) - Poorly differentiated carcinoma (2)
Kentucky (University of Louisville) - Neuroendocrine carcinoma vs. medullary carcinoma of colon
Maryland (National Naval Medical Center) - Invasive poorly differentiated carcinoma with neuroendocrine features
Massachusetts (Berkshire Medical Center) - Mixed neuroendocrine and adenocarcinoma
Michigan (Pathology Services of West Michigan) - Undifferentiated carcinoma, cecum
Minnesota (Fairview Ridges Hospital) - Poorly differentiated carcinoma, medullary type
Missouri (Missouri Delta Medical Center) - Lymphoepithelioma, malignant
Missouri-Kansas City (Truman Medical Center) - Neuroendocrine carcinoma
Nebraska (Creighton University) - Poorly differentiated adenocarcinoma with neuroendocrine features
Nevada (Sunrise Hospital) - Mixed glandular-neuroendocrine carcinoma
New Mexico, Albuquerque - Neuroendocrine carcinoma, intermediate grade
New York (ECMC) - Appendiceal goblet cell carcinoid
New York (Stony Brook University Residents) - Medullary carcinoma
New York (SUNY Downstate Medical Center) - Poorly differentiated adenocarcinoma with neuroendocrine features
New York (Westchester Medical Center) - Large cell neuroendocrine carcinoma
North Carolina (North Carolina Baptist) - Medullary carcinoma of colon
Ohio (McCullough-Hyde Memorial Hospital) - ? malignant carcinoid tumor
Pennsylvania (Conemaugh Hospital) - Adenoendocrine carcinoma
Pennsylvania (St. Elizabeth Health Center) - Endocrine tumor of small intestine, malignant favor, adenocarcinoid (adenocarcinoma, carcinoid)
Texas, Crystal Beach - Adenocarcinoma consistent with features at neuroendocrine differentiation (carcinoid-like)
Texas, Lubbock - Neuroendocrine carcinoma
Texas (San Antonio Christus Santa Rosa Children's Hospital) - Cecal high-grade carcinoid
Texas (Scott & White Hospital) - Large cell neuroendocrine carcinoma
Washington, DC - Neuroendocrine carcinoma
West Virginia (Greenbrier Valley Medical Center) - Malignant carcinoid
Australia (Royal Hobart Hospital) - Poorly differentiated carcinoma with possible MSI-H phenotype
Australia (Sullivan Nicolaides Pathology) - Medullary (solid, poorly differentiated)
Canada (Pasqua Hospital) - Undifferentiated carcinoma
Canada (Sherbrooke University Hospital) - Neuroendocrine carcinoma (large cell)
Hong Kong (Hong Kong Baptist Hospital) - Undifferentiated carcinoma
Hong Kong (Kwong Wah Hospital) - Endocrine cell tumor
Ireland (Kerry General Hospital) - Poorly differentiated carcinoma
Japan (Asashi General Hospital) - Adenoendocrine cell carcinoma
Japan (Kyoto University Hospital) - Neuroendocrine carcinoma
Oman (Khoula Hospital) - Undifferentiated carcinoma
Puerto Rico (University of Puerto Rico) - Poorly differentiated carcinoma with neuroendocrine markers (metastatic)
The Netherlands, Amstelveen - Adenocarcinoma and neuroendocrine differentiation
United Kingdom (Oxford Study Group) - Poorly differentiated endocrine carcinoma, cecum

Case 10 - Diagnosis:

Neuroendocrine carcinoma, cecum
T-67100, M-80103

Case 10 - References:

Vortmeyer AO, Lubensky IA, Merino MJ, et al. Concordance of Genetic Alterations in Poorly Differentiated Colorectal Neuroendocrine Carcinomas and Associated Adenocarcinomas. *Natl Cancer Inst* 1997; 89(19):1448-1453.
Soga J. Carcinoids of the Colon and Ileocecal Region. A Statistical Evaluation of 363 Cases Collected From the Literature. *J Exp Clin Cancer Res* 1998; 17(2):139-148.
Portel-Gomes GM, Grimelius L, Johansson H, et al. Chromogranin A in Human Neuroendocrine Tumors. An Immunohistochemical Study with Region-Specific Antibodies. *Am J Surg Pathol* 25(10):1261-1267.
Cai YC, Banner B, Glickman J, et al. Cytokeratin 7 and 20 and Thyroid Transcription Factor 1 Can Help Distinguish Pulmonary From Gastrointestinal Carcinoid and Pancreatic Endocrine Tumors. *Hum Pathol* 2001; 32(10):1087-1093.
Demellawy DE, Samkari A, Sur M, et al. Primary Small Cell Carcinoma of Cecum. *Ann Diagn Pathol* 2006; 10(3):162-165.

Wang L, Warner NE and Sherrod AE. Pathlogic Quiz Case. A 79-Year-Old Woman with a Black, Ulcerated Cecal Tumor and 3 Negative Guaiac Test Results. Medullary Adenocarcinoma of the Colon, Poorly Differentiated. *Arch Pathol Lab Med* 2005; 129(1):113-114.