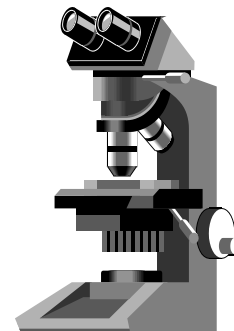


CALIFORNIA
TUMOR TISSUE REGISTRY

GENITOURINARY PATHOLOGY

Minutes – Subscription A

February, 2009



SUGGESTED READING (General Topics from Recent Literature):

Prognostic Significance of Localized Extra-Appendiceal Mucin Deposition in Appendiceal Mucinous Neoplasms. Yantiss, RK, Shia J, et al. *Am J Surg Pathol* 2009; 33:248-255.

Extent and Histologic Pattern of Atypical Ductal Hyperplasia Present on Core Needle Biopsy Specimens of the Breast Can Predict Ductal Carcinoma In Situ in Subsequent Excision. Wagoner MJ, Laronga C and Acs G. *Am J Clin Pathol* 2009; 131:112-121.

Defining a Molecular Phenotype for Benign and Malignant Parathyroid Tumors. Fernandez-Ranvier GG, Khanafshar E, et al. *Cancer* 2009; 115:334-344.

Malignant Gliomas with Primitive Neuroectodermal Tumor-Like Components. A Clinicopathologic and Genetic Study of 53 Cases. Perry A, Miller CR, et al. *Brain Pathol* 2009; 19:81-90.

Pathology Correlates of a Papanicolaou Diagnosis of Low-Grade Squamous Intraepithelial Lesion, Cannot Exclude High-Grade Squamous Intraepithelial Lesion. Al-Nourhji O, Beckmann MJ, et al. *Cancer* 2008; 114:469-473.

California Tumor Tissue Registry
c/o: Department of Pathology and Human Anatomy
Loma Linda University School of Medicine
11021 Campus Avenue, AH 335
Loma Linda, California 92350
(909) 558-4788
FAX: (909) 558-0188
E-mail: cttr@linkline.com
Web site & Case of the Month: www.cttr.org

FILE DIAGNOSES

CTTR Subscription A

February 2009

Case 1:

Classic seminoma, testis
T-78000, M-90613

Case 2:

Carcinosarcoma, prostate (TURP)
T-77100, M-89803

Case 3:

Cystic nephroma, kidney
T-71000, M-89601

Case 4:

Wilms tumor (nephroblastoma), kidney
T-71000, M-89603

Case 5:

Oncocytoma, kidney
T-71000, M-82900

Case 6:

Papillary renal cell carcinoma, kidney
T-Y4500, M-83123

Case 7:

Renal cell carcinoma, clear cell type, kidney
T-71000, M-83123

Case 8:

High grade carcinoma, urothelial origin, kidney
T-71000, M-80103

Case 9:

Epithelial-predominant Wilms tumor (nephroblastoma), kidney
T-71000, M-89603

Case 10:

Oncocytoma, kidney
T-71000, M-82900

Alameda (Alameda County Medical Center) - Seminoma
Arcadia - Anaplastic seminoma
Fontana (Kaiser Foundation Hospital) - Seminoma
Hayward-Fremont - Seminoma
Long Beach (Long Beach Veterans) - Seminoma (2)
Oakland - Seminoma
Oxnard (St. John's Regional Medical Center) - Seminoma (3)
Pleasant Hill - Seminoma
San Diego (Naval Medical Center) - Seminoma
Santa Barbara - Seminoma
Sonoma (Sonoma Valley Hospital) - Classic seminoma
Woodland Hills (Kaiser Permanente) - Seminoma
Chicago, Illinois - Classical seminoma (2)
Colorado (McKee Medical Center) - Classic seminoma
Florida (Naples Pathology Association) - Seminoma
Georgia, Decatur - Seminoma
Illinois, Burr Ridge - Seminoma
Illinois (Heartland Regional Medical Center) - Seminoma, classic
Illinois (MacNeal Hospital) - Seminoma, left testis
Louisiana (LSUHSC Pathology) - Seminoma
Maryland (University of Maryland) - Classic seminoma
Michigan (Oakwood Hospital) - Seminoma
Minnesota (Fairview Ridges Hospital) - Seminoma
Minnesota (University of Minnesota Division of Oral and Maxillofacial Pathology) - Seminoma
Missouri (Missouri Delta Medical Center) - Embryonal carcinoma
Nebraska (Creighton University) - Seminoma
New Mexico (University of New Mexico Residents) - Seminoma
New York (Albany Medical Center) - Seminoma
New York (Long Island Jewish Center) - Seminoma
New York, Milwood - Seminoma
New York (Stony Brook University Medical Center) - Seminoma
New York (St. Lukes Roosevelt Hospital) - Classic seminoma (2)
New York (SUNY Downstate Medical Center) - Seminoma
New York (Westchester Medical Center) - Seminoma, classic type
North Carolina (North Carolina Baptist Hospital) - Classical seminoma
North Carolina (Womack Army Medical Center) - Embryonal carcinoma, pure
Pennsylvania (Conemaugh Memorial Medical Center) - Seminoma
Pennsylvania (Lehigh Valley Hospital) - Seminoma classic
Pennsylvania (University of Pittsburgh Medical Center) - Anaplastic seminoma
Puerto Rico (University of Puerto Rico) - Classic seminoma
South Dakota (LCM Pathologists South Dakota Residents) - Seminoma
Texas, Crystal Beach - Seminoma, high grade
Texas, Houston - Seminoma
Texas, Lubbock - Classic seminoma
Texas (Scott and White Memorial Hospital) - Seminoma
Washington (Seattle VAMC) - Seminoma, spermatocytic
West Virginia (Greenbrier Valley Medical Center) - Spermatocytic seminoma
Wisconsin, Green Bay - Seminoma
Wisconsin, Madison - Seminoma
Australia (Royal Hobart Hospital) - Seminoma
Australia (Sullivan Nicolaides Pathology) - Seminoma
Brazil (Federal University of Sao Paulo) - Classic seminoma
Canada (Pasqua Hospital) - Seminoma

Canada (University of Sherbrooke) - Seminoma
Ireland (Beaumont Hospital) - Seminoma
Ireland (Kerry General Hospital) - Classic seminoma
Ireland (Mater Misericordiae University Hospital Residents) - Classic seminoma
Japan (Asashi General Hospital) - Seminoma
Japan (Koyoto University Hospital) - Seminoma,, testis
Japan (Shizuoka Tokushukei Hospital) - Seminoma
United Kingdom (John Radcliffe Hospital) - Classical seminoma

Case 1 - Diagnosis:

Classic seminoma, testis
 T-78000, M-90613

Case 1 - References:

Mai PL, Friedlander M, Tucker K, et al. The International Testicular Cancer Linkage Consortium. A Clinicopathologic Descriptive Analysis of 461 Familial Malignant Testicular Germ Cell Tumor Kindred. *Urol Oncol* 2009.
 Wood HM and Elder JS. Cryptorchidism and Testicular Cancer. Separating Fact From Fiction. *J Urol* 2009; 181(2):452-461.
 Barbagallo F, Paronetto MP, et al. Increased Expression and Nuclear Localization of the Centrosomal Kinase Nek2 in Human Testicular Seminomas. *J Pathol* 2009; 217(3):431-441.
 Treiye A, Blanc G, et al. Prepubertal Testicular Tumors. Frequently Overlooked. *J Pediatr Urol* 2007; 3(6):480-483.
 van Casteren NJ, de Jong J, et al. Evaluation of Testicular Biopsies for Carcinoma In-Situ. Immunohistochemistry is Mandatory. *Int J Androl* 2008.

Case No. 2, Accession No. 30847

February 2009

Alameda (Alameda County Medical Center) - Sarcomatoid carcinoma
Arcadia - Carcinosarcoma
Fontana (Kaiser Foundation Hospital) - Prostatic ductal carcinoma, sarcoma
Hayward-Fremont - Leiomyosarcoma
Long Beach (Long Beach Veterans) - High grade sarcoma, NOS (2)
Oakland - Undifferentiated carcinoma consistent with focal differentiated ?
Oxnard (St. John's Regional Medical Center) - Carcinosarcoma (3)
Pleasant Hill - Sarcomatoid carcinoma
San Diego (Naval Medical Center) - Ductal adenocarcinoma of prostate with sarcomatoid differentiation
Santa Barbara - Rhabdomyosarcoma
Sonoma (Sonoma Valley Hospital) - Sarcomatoid carcinoma
Woodland Hills (Kaiser Permanente) - Carcinosarcoma
Chicago, Illinois - Malakoplakia (2)
Colorado (McKee Medical Center) - Carcinosarcoma
Florida (Naples Pathology Association) - Sarcomatoid urothelial cell carcinoma
Georgia, Decatur - Adenocarcinoma and adjacent pleomorphic neoplasia
Illinois, Burr Ridge - Giant cell carcinoma, prostate
Illinois (Heartland Regional Medical Center) - Sarcomatoid carcinoma
Illinois (MacNeal Hospital) - Prostatic sarcoma, prostate
Louisiana (LSUHSC Pathology) - Carcinosarcoma/sarcomatoid carcinoma
Maryland (University of Maryland) - Carcinosarcoma (sarcomatoid carcinoma)
Michigan (Oakwood Hospital) - Sarcomatoid carcinoma
Minnesota (Fairview Ridges Hospital) - Gleason's 3 adenocarcinoma, stromal sarcoma
Minnesota (University of Minnesota Division of Oral and Maxillofacial Pathology) - Sarcomatoid carcinoma of the prostate
Missouri (Missouri Delta Medical Center) - Adenocarcinoma involving 3/6 chips (Gleason's score 10)
Nebraska (Creighton University) - Sarcomatoid carcinoma
New Mexico (University of New Mexico Residents) - Ductal adenocarcinoma with sarcomatoid change
New York (Albany Medical Center) - Sarcomatoid carcinoma
New York (Long Island Jewish Center) - Carcinosarcoma
New York, Milwood - Carcinosarcoma

New York (Stony Brook University Medical Center) - Sarcomatoid carcinoma
New York (St. Lukes Roosevelt Hospital) - Sarcomatoid carcinoma (carcinosarcoma) (2)
New York (SUNY Downstate Medical Center) - Sarcomatoid carcinoma
New York (Westchester Medical Center) - Adenocarcinoma of prostate, Gleason 5+5=10
North Carolina (North Carolina Baptist Hospital) - Carcinosarcoma
North Carolina (Womack Army Medical Center) - Clear cell adenocarcinoma of the prostate
Pennsylvania (Conemaugh Memorial Medical Center) - High grade sarcoma, favor leiomyosarcoma
Pennsylvania (Lehigh Valley Hospital) - Carcinosarcoma
Pennsylvania (University of Pittsburgh Medical Center) - Carcinosarcoma
Puerto Rico (University of Puerto Rico) - Adenocarcinoma of prostate with sarcomatoid component/giant cell carcinoma of prostate
South Dakota (LCM Pathologists South Dakota Residents) - Poorly differentiated carcinoma
Texas, Crystal Beach - Carcinosarcoma (adenocarcinoma and pleomorphic sarcoma)
Texas, Houston - Spindle cell carcinoma
Texas, Lubbock - Anaplastic carcinoma
Texas (Scott and White Memorial Hospital) - High grade pleomorphic prostate adenocarcinoma
Washington (Seattle VAMC) - Adenocarcinoma prostate with pleomorphic giant cells
West Virginia (Greenbrier Valley Medical Center) - High grade sarcoma
Wisconsin, Green Bay - Invasive poorly differentiated urothelial carcinoma
Wisconsin, Madison - Sarcomatoid carcinoma
Australia (Royal Hobart Hospital) - Carcinosarcoma prostate (with component of osteosarcoma)
Australia (Sullivan Nicolaides Pathology) - Carcinosarcoma
Brazil (Federal University of Sao Paulo) - Carcinosarcoma
Canada (Pasqua Hospital) - Sarcomatoid carcinoma
Canada (University of Sherbrooke) - Carcinosarcoma
Ireland (Beaumont Hospital) - High grade transitional cell carcinoma
Ireland (Kerry General Hospital) - High grade (sarcomatoid) carcinoma
Ireland (Mater Misericordiae University Hospital Residents) - Carcinosarcoma
Japan (Asashi General Hospital) - Sarcomatoid carcinoma
Japan (Koyoto University Hospital) - Sarcomatoid carcinoma, prostate
Japan (Shizuoka Tokushukei Hospital) - Sarcomatoid carcinoma
United Kingdom (John Radcliffe Hospital) - Prostatic adenocarcinoma

Case 2 - Diagnosis:

Carcinosarcoma, prostate (TURP)
 T-77100, M-89803

Directors Note: The relative percentage of malignant epithelial and malignant stromal components varied from block to block. Most study set slides showed both components. (drc)

Case 2 - References:

Hansel DE and Epstein JI. Sarcomatoid Carcinoma of the Prostate. A Study of 42 Cases. *Am J Surg Pathol* 2006; 30(10):1316-1321.
 Lindboe CF and Klem KH. Carcinosarcoma of the Prostate. *APMIS* 2006; 114(2):153-158.
 Subramanian VS, Coburn M and Miles BJ. Carcinosarcoma of the Prostate with Multiple Metastases. Case Report and Review of the Literature. *Urol Oncol* 2005; 23(3):181-183.
 Perez N, Castillo M, Santos Y, et al. Carcinosarcoma of the Prostate. Two Cases with Distinctive Morphologic and Immunohistochemical Findings. *Virchows Arch* 2005; 446(5):511-516.
 Fukawa T, Numata K, et al. Prostatic Carcinosarcoma. A Case Report and Review of Literature. *Int J Urol* 2003; 10(2):108-113.

Case No. 3, Accession No. 30831

February 2009

Alameda (Alameda County Medical Center) - Cystic nephroma
Arcadia - Polycystic kidney disease
Fontana (Kaiser Foundation Hospital) - Cystic nephroma

Hayward-Fremont - Multicystic nephroma
Long Beach (Long Beach Veterans) - Cystic nephroma (2)
Oakland - Cystic change, multi-invasion cyst nephroma
Oxnard (St. John's Regional Medical Center) - Renal cystic disease (2); Multicystic nephroma renal cystic disease, do not see evidence of neoplasm (1)
Pleasant Hill - Cystic nephroma
San Diego (Naval Medical Center) - Cystic nephroma (multilocular renal cyst)
Santa Barbara - Adult polycystic kidney
Sonoma (Sonoma Valley Hospital) - Medullary sponge kidney
Woodland Hills (Kaiser Permanente) - Multilocular cyst (cystic nephroma)
Chicago, Illinois - Multilocular cystic renal cell carcinoma (2)
Colorado (McKee Medical Center) - Cystic nephroma
Florida (Naples Pathology Association) - Polycystic kidney
Georgia, Decatur - Cystic nephroma
Illinois, Burr Ridge - Multicystic nephroma
Illinois (Heartland Regional Medical Center) - Multilocular cyst (adult cystic nephroma)
Illinois (MacNeal Hospital) - Mixed epithelial and stromal tumor, left kidney
Louisiana (LSUHSC Pathology) - Multicystic nephroma
Maryland (University of Maryland) - MEST
Michigan (Oakwood Hospital) - Mixed epithelial and right stromal tumor of kidney
Minnesota (Fairview Ridges Hospital) - Cystic nephroma
Minnesota (University of Minnesota Division of Oral and Maxillofacial Pathology) - Multilocular cyst (cystic nephroma)
Missouri (Missouri Delta Medical Center) - Cystic nephroma
Nebraska (Creighton University) - Cystic nephroma
New Mexico (University of New Mexico Residents) - Cystic nephroma
New York (Albany Medical Center) - Cystic nephroma
New York (Long Island Jewish Center) - Multicystic nephroma
New York, Milwood - Cystic nephroma
New York (Stony Brook University Medical Center) - Cystic nephroma
New York (St. Lukes Roosevelt Hospital) - Cystic nephroma (2)
New York (SUNY Downstate Medical Center) - Cystic nephroma vs. mixed epithelial and stromal tumor
New York (Westchester Medical Center) - Multicystic nephroma with focal clear cell carcinoma
North Carolina (North Carolina Baptist Hospital) - Cystic nephroma
North Carolina (Womack Army Medical Center) - Cystic renal dysplasia
Pennsylvania (Conemaugh Memorial Medical Center) - Multicystic nephroma
Pennsylvania (Lehigh Valley Hospital) - Multicystic nephroma
Pennsylvania (University of Pittsburgh Medical Center) - Cystic nephroma
Puerto Rico (University of Puerto Rico) - Multilocular cystic renal cell carcinoma/cystic nephroma
South Dakota (LCM Pathologists South Dakota Residents) - Multicystic nephroma
Texas, Crystal Beach - Cystic nephroma
Texas, Houston - Polycystic disease
Texas, Lubbock - Multilocular renal cyst
Texas (Scott and White Memorial Hospital) - Multilocular cyst (cystic nephroma)
Washington (Seattle VAMC) - Localized cystic disease
West Virginia (Greenbrier Valley Medical Center) - Multilocular cyst
Wisconsin, Green Bay - Cystic nephroma
Wisconsin, Madison - Cystic nephroma
Australia (Royal Hobart Hospital) - Cystic nephroma
Australia (Sullivan Nicolaides Pathology) - Cystic nephroma
Brazil (Federal University of Sao Paulo) - Multicystic nephroma
Canada (Pasqua Hospital) - Cystic nephroma
Canada (University of Sherbrooke) - Mixed epithelial stromal tumor
Ireland (Beaumont Hospital) - Cystic nephroma
Ireland (Kerry General Hospital) - Multicystic nephroma
Ireland (Mater Misericordiae University Hospital Residents) - Cystic nephroma
Japan (Asashi General Hospital) - Cystic nephroma

Japan (Koyoto University Hospital) - Cystic nephroma, kidney
Japan (Shizuoka Tokushukai Hospital) - Cystic nephroma
United Kingdom (John Radcliffe Hospital) - Cystic nephroma

Case 3 - Diagnosis:

Cystic nephroma, kidney
T-71000, M-89601

Consultation: Stanford University, CA, Neeraja Kambham, M.D., “Cystic nephroma”.

Case 3 - References:

Montironi, R, Mazzuccelli, R et al. Cystic Nephroma and Mixed Epithelial and Stromal Tumour of the Kidney. Opposite Ends of the Spectrum of the Same Entity? *Eur Urol* 2008; 54:1237-1246.
Patnayak R, Reddy MK, Subramanian S, et al. Multilocular Cystic Nephroma of the Kidney. *Indian J Pathol Microbiol* 2008; 51(4):563-565.
Zhou M, Kort E, Hoekstra P, et al. Adult Cystic Nephroma and Mixed Epithelial and Stromal Tumor of the Kidney Are the Same Disease Entity. Molecular and Histologic Evidence. *Am J Surg Pathol* 2009; 33(1):72-80.
Chen KT. Cytology of Cystic Nephroma. A Case Report. *Acta Cytol* 2008; 52(1):91-93.
Lane BR, Campbell SC, et al. Adult Cystic Nephroma and Mixed Epithelial and Stromal Tumor of the Kidney. Clinical, Radiographic and Pathologic Characteristics. *Urol* 2008; 71(6):1142-1148.

Case No. 4, Accession No. 30863

February 2009

Alameda (Alameda County Medical Center) - Nephroblastoma
Arcadia - Adenocarcinoma, rule out Wilms tumor
Fontana (Kaiser Foundation Hospital) - Wilms tumor
Hayward-Fremont - Wilms tumor
Long Beach (Long Beach Veterans) - Wilms tumor
Oakland - Wilms tumor
Oxnard (St. John's Regional Medical Center) - Nephroblastoma (2)
Pleasant Hill - Wilms tumor
San Diego (Naval Medical Center) - Wilms tumor
Santa Barbara - Wilms tumor
Sonoma (Sonoma Valley Hospital) - Wilms tumor (nephroblastoma)
Woodland Hills (Kaiser Permanente) - Nephroblastoma
Chicago, Illinois - Nephroblastoma
Colorado (McKee Medical Center) - Nephroblastoma
Florida (Naples Pathology Association) - Nephroblastoma
Georgia, Decatur - Wilms tumor, epithelial prominent
Illinois, Burr Ridge - Nephroblastoma
Illinois (Heartland Regional Medical Center) - Nephroblastoma
Illinois (MacNeal Hospital) - Wilms tumor, right kidney
Louisiana (LSUHSC Pathology) - Nephroblastoma
Maryland (University of Maryland) - Wilms tumor
Michigan (Oakwood Hospital) - Wilms tumor
Minnesota (Fairview Ridges Hospital) - Nephroblastoma with anaplasia
Minnesota (University of Minnesota Division of Oral and Maxillofacial Pathology) - Wilms (nephroblastoma)
Missouri (Missouri Delta Medical Center) - Wilms tumor (nephroblastoma)
Nebraska (Creighton University) - Wilms tumor
New Mexico (University of New Mexico Residents) - Nephroblastoma
New York (Albany Medical Center) - Nephroblastoma (Wilms tumor)
New York (Long Island Jewish Center) - Triphasic Wilms tumor
New York, Milwood - Wilms tumor
New York (Stony Brook University Medical Center) - Wilms tumor
New York (St. Lukes Roosevelt Hospital) - Nephroblastoma (2)
New York (SUNY Downstate Medical Center) - Wilms tumor

New York (Westchester Medical Center) - Monophasic Wilms tumor
North Carolina (North Carolina Baptist Hospital) - Nephroblastoma with prominent embryonal tubular pattern
North Carolina (Womack Army Medical Center) - Nephroblastoma
Pennsylvania (Conemaugh Memorial Medical Center) - Wilms tumor
Pennsylvania (Lehigh Valley Hospital) - Nephroblastoma
Pennsylvania (University of Pittsburgh Medical Center) - Nephroblastoma
Puerto Rico (University of Puerto Rico) - Wilms tumor
South Dakota (LCM Pathologists South Dakota Residents) - Wilms tumor
Texas, Crystal Beach - Carcinoma transitional consistent with adenocarcinomatous differentiation and necrosis
Texas, Houston - Wilms tumor
Texas, Lubbock - Wilms tumor
Texas (Scott and White Memorial Hospital) - Wilms tumor
Washington (Seattle VAMC) - Wilms tumor consistent with favorable histology
West Virginia (Greenbrier Valley Medical Center) - Nephroblastoma
Wisconsin, Green Bay - Nephroblastoma
Wisconsin, Madison - Wilms tumor
Australia (Royal Hobart Hospital) - Nephroblastoma
Australia (Sullivan Nicolaides Pathology) - Nephroblastoma, epithelial predominant
Brazil (Federal University of Sao Paulo) - Nephroblastoma
Canada (Pasqua Hospital) - Nephroblastoma
Canada (University of Sherbrooke) - Wilms tumor (epithelial predominance)
Ireland (Beaumont Hospital) - Wilms tumor
Ireland (Kerry General Hospital) - Wilms tumor
Ireland (Mater Misericordiae University Hospital Residents) - Nephroblastoma/Wilms tumor
Japan (Asashi General Hospital) - Nephroblastoma
Japan (Koyoto University Hospital) - Nephroblastoma, mixed, kidney
Japan (Shizuoka Tokushukei Hospital) - Nephroblastoma
United Kingdom (John Radcliffe Hospital) - Nephroblastoma

Case 4 - Diagnosis:

Wilms tumor (nephroblastoma), kidney
 T-71000, M-89603

Case 4 - References:

Giel DW, Williams MA, et al. Renal Function Outcomes in Patients Treated with Nephron Sparing Surgery for Bilateral Wilms Tumor. *J Urol* 2007; 178 (4 Pt 2): 1786-1789.
 Ahmed HU, Arya M, et al. An Update on the Management of Wilms Tumor. *Eur J Surg Oncol* 2007; 33(7):824-831.
 Klattig J, Sierig R, et al. Wilms Tumor Protein Wt1 is an Activator of the Anti-Mullerian Hormone Receptor Gene Amhr2. *Mol Cell Biol* 2007; 27(12):4355-4364.
 Khayyata S, Grignon DJ, et al. Metanephric Adenoma vs. Wilms Tumor. A Report of 2 Cases with Diagnosis by Fine Needle Aspiration and Cytologic Comparisons. *Acta Cytol* 2007; 51(3):464-467.
 Wittmann S, Zirn B, et al. Loss of 11q and 16q in Wilms Tumors is Associated with Anaplasia, Tumor Recurrence, and poor Prognosis. *Genes Chromosomes Cancer* 2007; 46(2):163-170.
 Hohenstein P. and Hastle ND. The Many Facets of the Wilms Tumour Gene, WT1. *Hum Mol Genet* 2006; 15 Spec No 2:R196-201.

Case No. 5, Accession No. 30775

February 2009

Alameda (Alameda County Medical Center) - Renal cell carcinoma, clear cell type
Arcadia - Oncocytoma
Fontana (Kaiser Foundation Hospital) - Proximal tubular adenoma
Hayward-Fremont - Oncocytoma
Long Beach (Long Beach Veterans) - Oncocytoma (2)
Oakland - Renal cell carcinoma, low grade
Oxnard (St. John's Regional Medical Center) - Oncocytoma (3)
Pleasant Hill - Papillary carcinoma
San Diego (Naval Medical Center) - Papillary renal cell carcinoma

Santa Barbara - Oncocytoma
Sonoma (Sonoma Valley Hospital) - Oncocytoma
Woodland Hills (Kaiser Permanente) - Renal cell carcinoma with oncocytic features
Chicago, Illinois - Papillary renal cell carcinoma (2)
Colorado (McKee Medical Center) - Collecting duct carcinoma
Florida (Naples Pathology Association) - Oncocytoma
Georgia, Decatur - Renal cell carcinoma, not otherwise specified
Illinois, Burr Ridge - Renal cell carcinoma, (thyroid carcinoma-like)
Illinois (Heartland Regional Medical Center) - Oncocytoma
Illinois (MacNeal Hospital) - Papillary renal cell carcinoma, right kidney
Louisiana (LSUHSC Pathology) - Tubulocystic carcinoma/low grade collecting duct RCC
Maryland (University of Maryland) - Papillary renal cell carcinoma, oncocytic type, Furhman, grade 2
Michigan (Oakwood Hospital) - Conventional renal cell carcinoma
Minnesota (Fairview Ridges Hospital) - Oncocytoma
Minnesota (University of Minnesota Division of Oral and Maxillofacial Pathology) - Oncocytoma
Missouri (Missouri Delta Medical Center) - Collecting duct cancer
Nebraska (Creighton University) - Papillary renal cell carcinoma
New Mexico (University of New Mexico Residents) - Renal cell carcinoma, NOS
New York (Albany Medical Center) - Papillary renal cell carcinoma, type I
New York (Long Island Jewish Center) - Papillary renal cell carcinoma vs. clear cell RCC with some eosinophilic cells and histiocytes
New York, Milwood - Tubulocystic carcinoma
New York (Stony Brook University Medical Center) - Papillary renal cell carcinoma
New York (St. Lukes Roosevelt Hospital) - Oncocytoma, tubular pattern (1); Papillary carcinoma (1)
New York (SUNY Downstate Medical Center) - Papillary renal cell carcinoma
New York (Westchester Medical Center) - Papillary carcinoma (type II) or clear cell carcinoma
North Carolina (North Carolina Baptist Hospital) - Oncocytoma with prominent macrocystic changes
North Carolina (Womack Army Medical Center) - Oncocytoma
Pennsylvania (Conemaugh Memorial Medical Center) - Oncocytoma
Pennsylvania (Lehigh Valley Hospital) - Oncocytoma
Pennsylvania (University of Pittsburgh Medical Center) - Cystic renal cell carcinoma
Puerto Rico (University of Puerto Rico) - Papillary renal cell carcinoma, rule out oncocytoma
South Dakota (LCM Pathologists South Dakota Residents) - Oncocytoma
Texas, Crystal Beach - Adenocarcinoma, oncocytic type
Texas, Houston - Well-differentiated adenocarcinoma, oncocytic type
Texas, Lubbock - Renal carcinoma, oncocytic type
Texas (Scott and White Memorial Hospital) - Chromophobe renal cell carcinoma
Washington (Seattle VAMC) - Renal oncocytoma
West Virginia (Greenbrier Valley Medical Center) - Oncocytoma
Wisconsin, Green Bay - Oncocytoma
Wisconsin, Madison - Oncocytoma
Australia (Royal Hobart Hospital) - Oncocytoma (microcystic pattern)
Australia (Sullivan Nicolaides Pathology) - Papillary renal cell carcinoma, type 2
Brazil (Federal University of Sao Paulo) - Metastatic papillary thyroid carcinoma, oncocytic variant
Canada (Pasqua Hospital) - Papillary renal cell carcinoma
Canada (University of Sherbrooke) - Thyroid follicular-like renal cell carcinoma
Ireland (Beaumont Hospital) - Papillary carcinoma
Ireland (Kerry General Hospital) - Oncocytoma
Ireland (Mater Misericordiae University Hospital Residents) - Oncocytoid renal cell carcinoma
Japan (Asahi General Hospital) - Oncocytoma
Japan (Koyoto University Hospital) - Oncocytoma
Japan (Shizuoka Tokushukei Hospital) - Renal cell carcinoma
United Kingdom (John Radcliffe Hospital) - Renal oncocytic epithelial tumor favor oncocytoma

Case 5 - Diagnosis:

Oncocytoma, kidney
 T-71000, M-82900

Case 5 - References:

- Osunkoya AO, Cohen C, Lawson D, et al. Claudin-7 and Claudin-8. Immunohistochemical Markers for the Differential Diagnosis of Chromophobe Renal Cell Carcinoma and Renal Oncocytoma. *Hum Pathol* 2009; 40(2):206-210.
- Aslam MI, Spencer L, Garcea G, et al. A Case of Liver Metastasis from an Oncocytoma with a Focal Area of Chromophobe Renal Cell Carcinoma. A Wolf in Sheep's Clothing. *Int J Surg Pathol* 2008; 21.
- Lebret T, Poulain JE, et al. Percutaneous Core Biopsy for Renal Masses. Indications, Accuracy and Results. *J Urol* 2007; 178 (4 Pt 1) 1184-1188.
- Rowse C, Fleshner N, et al. Papillary Renal Cell Carcinoma Within a Renal Oncocytoma. Case Report of an Incidental Finding of a Tumour Within a Tumour. *J Clin Pathol* 2007; 60(4):426-428.
- Adley BP, Papavero V, et al. Diagnostic Value of Cytokeratin 7 and Parvalbumin in Differentiating Chromophobe Renal Cell Carcinoma from Renal Oncocytoma. *Anal Quant Cytol Histol* 2006; 28(4):228-236.
- Memeo L, Jhang J, et al. Immunohistochemical Analysis for Cytokeratin 7, KIT, and PAX2. Value in the Differential Diagnosis of Chromophobe Cell Carcinoma. *Am J Clin Pathol* 2007; 127(2):225-229.

Case No. 6, Accession No. 30818

February 2009

Alameda (Alameda County Medical Center) - Renal cell carcinoma, papillary type

Arcadia - Clear cell carcinoma

Fontana (Kaiser Foundation Hospital) - Chromophil renal cell carcinoma

Hayward-Fremont - Papillary renal cell carcinoma, type II

Long Beach (Long Beach Veterans) - Renal papillary carcinoma (2)

Oakland - Renal cell carcinoma

Oxnard (St. John's Regional Medical Center) - Renal cell carcinoma (2); Real cell carcinoma, clear cell, pigmented type (1)

Pleasant Hill - Papillary carcinoma

San Diego (Naval Medical Center) - Papillary renal cell carcinoma

Santa Barbara - Chromophil renal cell carcinoma

Sonoma (Sonoma Valley Hospital) - Papillary renal cell carcinoma

Woodland Hills (Kaiser Permanente) - Renal cell carcinoma, grade 2 out of 4

Chicago, Illinois - Chromophobe renal cell carcinoma (2)

Colorado (McKee Medical Center) - Papillary renal cell carcinoma

Florida (Naples Pathology Association) - Papillary renal cell carcinoma

Georgia, Decatur - Papillary renal cell carcinoma

Illinois, Burr Ridge - Renal cell carcinoma

Illinois (Heartland Regional Medical Center) - Renal cell carcinoma, papillary type

Illinois (MacNeal Hospital) - Papillary renal cell carcinoma, right kidney

Louisiana (LSUHSC Pathology) - Papillary renal cell carcinoma

Maryland (University of Maryland) - Papillary renal cell carcinoma, Furhman, Grade 3

Michigan (Oakwood Hospital) - Conventional renal cell carcinoma

Minnesota (Fairview Ridges Hospital) - Papillary renal cell carcinoma

Minnesota (University of Minnesota Division of Oral and Maxillofacial Pathology) - Renal cell carcinoma, papillary type I

Missouri (Missouri Delta Medical Center) - Renal cell cancer, chromophil type (papillary)

Nebraska (Creighton University) - Papillary renal cell carcinoma

New Mexico (University of New Mexico Residents) - Papillary renal cell carcinoma, type II

New York (Albany Medical Center) - Papillary renal cell carcinoma, type 2

New York (Long Island Jewish Center) - Papillary renal cell carcinoma

New York, Milwood - Papillary renal cell carcinoma

New York (Stony Brook University Medical Center) - Papillary renal cell carcinoma

New York (St. Lukes Roosevelt Hospital) - Renal cell carcinoma, papillary type (1); Papillary carcinoma (1)

New York (SUNY Downstate Medical Center) - Papillary renal cell carcinoma

New York (Westchester Medical Center) - Clear cell carcinoma (with lipofusion pigment)

North Carolina (North Carolina Baptist Hospital) - Xanthogranulomatous pyelonephritis

North Carolina (Womack Army Medical Center) - Renal cell carcinoma, papillary type 2

Pennsylvania (Conemaugh Memorial Medical Center) - Papillary renal cell carcinoma, type II

Pennsylvania (Lehigh Valley Hospital) - Papillary renal cell carcinoma
Pennsylvania (University of Pittsburgh Medical Center) - Clear cell renal cell carcinoma
Puerto Rico (University of Puerto Rico) - Papillary renal cell carcinoma
South Dakota (LCM Pathologists South Dakota Residents) - Papillary renal cell carcinoma
Texas, Crystal Beach - Papillary renal cell carcinoma
Texas, Houston - Adenocarcinoma
Texas, Lubbock - Chromophobe renal cell carcinoma
Texas (Scott and White Memorial Hospital) - Papillary renal cell carcinoma
Washington (Seattle VAMC) - Papillary renal cell carcinoma
West Virginia (Greenbrier Valley Medical Center) - Chromophobe renal cell carcinoma
Wisconsin, Green Bay - Renal papillary carcinoma
Wisconsin, Madison - Papillary renal cell carcinoma
Australia (Royal Hobart Hospital) - Papillary type of renal cell carcinoma
Australia (Sullivan Nicolaides Pathology) - Clear cell carcinoma, Fuhrman, grade 2
Brazil (Federal University of Sao Paulo) - Translocation carcinoma
Canada (Pasqua Hospital) - Papillary renal cell carcinoma
Canada (University of Sherbrooke) - Chromophobe carcinoma
Ireland (Beaumont Hospital) - Papillary carcinoma
Ireland (Kerry General Hospital) - Papillary renal cell carcinoma
Ireland (Mater Misericordiae University Hospital Residents) - Unclassified renal cell carcinoma
Japan (Asahi General Hospital) - Clear cell renal cell carcinoma, eosinophilic variant
Japan (Koyoto University Hospital) - Clear cell renal cell carcinoma, kidney
Japan (Shizuoka Tokushukei Hospital) - Renal cell carcinoma
United Kingdom (John Radcliffe Hospital) - Papillary renal cell carcinoma

Case 6- Diagnosis:

Papillary renal cell carcinoma, kidney
 T-Y4500, M-83123

Case 6 - References:

Lau LC, Tan PH, et al. Cytogenetic Alterations in Renal Tumors. A Study of 38 Southeast Asian Patients. *Cancer Genet Cytogenet* 2007; (1):1-7.
 Rowsell C, Fleshner N, et al. Papillary Renal Cell Carcinoma Within a Renal Oncocytoma. Case Report of an Incidental Finding of a Tumour Within a Tumour. *J Clin Pathol* 2007; 60(4):426-428.
 Wang KL, Weinrach DM, et al. Renal Papillary Adenoma. A Putative Precursor of Papillary Renal Cell Carcinoma. *Hum Pathol* 2007; 38(2):239-246.
 Lim JC and Wojcik EM. Fine-Needle Aspiration Cytology of Papillary Renal Cell Carcinoma. The Association with Concomitant Secondary Malignancies. *Diagn Cytopathol* 2006; 34(12):797-800.
 Yamanaka K, Miyake H, et al. Papillary Renal Cell Carcinoma. A Clinicopathological Study of 35 Cases. *Int J Urol* 2006; 13(8):1049-1052.

Case No. 7, Accession No. 30707

February 2009

Alameda (Alameda County Medical Center) - Renal cell carcinoma, clear cell type
Arcadia - Clear cell carcinoma
Fontana (Kaiser Foundation Hospital) - Clear cell renal cell carcinoma
Hayward-Fremont - Clear cell carcinoma, kidney Fuhrman II
Long Beach (Long Beach Veterans) - Renal clear cell carcinoma
Oakland - Renal clear cell carcinoma
Oxnard (St. John's Regional Medical Center) - Renal cell carcinoma, clear cell (3)
Pleasant Hill - Clear cell carcinoma
San Diego (Naval Medical Center) - Clear cell renal cell carcinoma
Santa Barbara - Renal cell carcinoma
Sonoma (Sonoma Valley Hospital) - Clear cell, renal cell carcinoma
Woodland Hills (Kaiser Permanente) - Renal cell carcinoma, grade 2 out of 4
Chicago, Illinois - Clear cell carcinoma (2)

Colorado (McKee Medical Center) - Classic renal cell carcinoma, clear cell type
Florida (Naples Pathology Association) - Clear cell, renal cell carcinoma
Georgia, Decatur - Renal cell carcinoma, clear cell/conventional type
Illinois, Burr Ridge - Renal cell carcinoma favor papillary
Illinois (Heartland Regional Medical Center) - Renal cell carcinoma, clear cell type, grade 2-3
Illinois (MacNeal Hospital) - Clear cell renal cell carcinoma, right kidney
Louisiana (LSUHSC Pathology) - Renal cell carcinoma, clear cell type, grade 2
Maryland (University of Maryland) - Renal cell carcinoma, clear cell type, grade 2
Michigan (Oakwood Hospital) - Clear cell carcinoma
Minnesota (Fairview Ridges Hospital) - Clear cell, renal cell carcinoma
Minnesota (University of Minnesota Division of Oral and Maxillofacial Pathology) - Renal cell carcinoma, clear cell
Missouri (Missouri Delta Medical Center) - Renal cell cancer, clear cell type
Nebraska (Creighton University) - Renal clear cell carcinoma
New Mexico (University of New Mexico Residents) - Renal cell carcinoma, clear cell type
New York (Albany Medical Center) - Renal cell carcinoma, clear cell type
New York (Long Island Jewish Center) - Clear cell renal cell carcinoma
New York, Milwood - Clear cell renal cell carcinoma
New York (Stony Brook University Medical Center) - Low grade renal cell carcinoma
New York (St. Lukes Roosevelt Hospital) - Renal cell carcinoma, chromphobe type (2)
New York (SUNY Downstate Medical Center) - Clear cell renal cell carcinoma
New York (Westchester Medical Center) - Clear cell carcinoma
North Carolina (North Carolina Baptist Hospital) - Clear cell carcinoma, Fuhrman, grade 2
North Carolina (Womack Army Medical Center) - Renal cell carcinoma, clear cell type
Pennsylvania (Conemaugh Memorial Medical Center) - Renal cell carcinoma, clear cell type
Pennsylvania (Lehigh Valley Hospital) - Renal cell carcinoma of clear cell type
Pennsylvania (University of Pittsburgh Medical Center) - Clear cell renal cell carcinoma
Puerto Rico (University of Puerto Rico) - Clear cell renal cell carcinoma, Fuhrman, grade 2
South Dakota (LCM Pathologists South Dakota Residents) - Renal cell carcinoma, clear cell type
Texas, Crystal Beach - Clear cell carcinoma
Texas, Houston - Renal cell carcinoma, clear cell type
Texas, Lubbock - Renal cell carcinoma, clear cell type
Texas (Scott and White Memorial Hospital) - Renal cell carcinoma, clear cell type
Washington (Seattle VAMC) - Clear cell renal cell carcinoma
West Virginia (Greenbrier Valley Medical Center) - Renal cell carcinoma
Wisconsin, Green Bay - Renal clear cell carcinoma
Wisconsin, Madison - Clear cell renal carcinoma
Australia (Royal Hobart Hospital) - Clear cell type of renal cell carcinoma (grade I)
Australia (Sullivan Nicolaides Pathology) - Clear cell carcinoma, Fuhrman, grade 4
Brazil (Federal University of Sao Paulo) - Clear cell carcinoma
Canada (Pasqua Hospital) - Clear cell carcinoma
Canada (University of Sherbrooke) - Clear cell carcinoma
Ireland (Beaumont Hospital) - Renal cell carcinoma, clear cell type
Ireland (Kerry General Hospital) - Clear cell renal carcinoma
Ireland (Mater Misericordiae University Hospital Residents) - Clear cell renal cell carcinoma
Japan (Asahi General Hospital) - Clear cell renal cell carcinoma
Japan (Koyoto University Hospital) - Clear cell renal cell carcinoma, kidney
Japan (Shizuoka Tokushukei Hospital) - Renal cell carcinoma
United Kingdom (John Radcliffe Hospital) - Clear cell renal cell carcinoma

Case 7 - Diagnosis:

Renal cell carcinoma, clear cell type, kidney
 T-71000, M-83123

Case 7 - References:

Goyal R, Joshi K, et al. Melanotic Clear Cell Epithelioid Angiomyolipoma. A Rare Entity and a Mimic of Clear Cell Renal Carcinoma. *Histopathol* 2007; 50(3):393-394.

Shioi K, Komiya A, et al. Vascular Cell Adhesion Molecule 1 Predicts Cancer-Free Survival in Clear Cell Renal Carcinoma Patients. *Clin Cancer Res* 2006; 12(24):7339-7346.

Grignon DJ and Che M. Clear Cell Renal Cell Carcinoma. *Clin Lab Med* 2005; (2):305-316.

Kassouf W and Sanchez-Ortiz R. Cytoreductive Nephrectomy for Metastatic Renal Cell Carcinoma with Nonclear Cell Histology. *J Urol* 2007; 178(5):1896-1900.

Ianhez LE, Lucon M, et al. Renal Cell Carcinoma in Renal Transplant Patients. *Urol* 2007; 69(3):462-464.

Case No. 8, Accession No. 30713

February 2009

Alameda (Alameda County Medical Center) - Renal cell carcinoma, collecting duct type

Arcadia - Clear cell carcinoma

Fontana (Kaiser Foundation Hospital) - Transitional cell carcinoma

Hayward-Fremont - Transitional cell carcinoma

Long Beach (Long Beach Veterans) - Poorly differentiated carcinoma (transitional carcinoma of renal pelvis)

Oakland - Renal cell carcinoma

Oxnard (St. John's Regional Medical Center) - Renal cell carcinoma (3)

Pleasant Hill - Urothelial carcinoma

San Diego (Naval Medical Center) - Urothelial cell carcinoma of renal pelvis

Santa Barbara - Transitional cell carcinoma, high grade

Sonoma (Sonoma Valley Hospital) - Chromophobe renal cell carcinoma

Woodland Hills (Kaiser Permanente) - Renal cell carcinoma, grade 4 out of 4

Chicago, Illinois - Urothelial carcinoma (2)

Colorado (McKee Medical Center) - Medullary carcinoma

Florida (Naples Pathology Association) - Urothelial cell carcinoma, high grade

Georgia, Decatur - Collecting duct carcinoma

Illinois, Burr Ridge - Renal cell carcinoma, chromophobe

Illinois (Heartland Regional Medical Center) - Invasive high grade urothelial carcinoma

Illinois (MacNeal Hospital) - High grade urothelial carcinoma, rule out metastatic adenocarcinoma, right kidney

Louisiana (LSUHSC Pathology) - Urothelial cell carcinoma

Maryland (University of Maryland) - Renal cell carcinoma, clear cell type, grade 4

Michigan (Oakwood Hospital) - Poorly differentiated carcinoma, favor urothelial

Minnesota (Fairview Ridges Hospital) - Urothelial carcinoma, high grade, invasive

Minnesota (University of Minnesota Division of Oral and Maxillofacial Pathology) - Renal cell carcinoma, collecting duct type

Missouri (Missouri Delta Medical Center) - Renal cell cancer consistent with sarcomatoid features focally

Nebraska (Creighton University) - Urothelial carcinoma

New Mexico (University of New Mexico Residents) - Urothelial carcinoma, high grade

New York (Albany Medical Center) - Collecting duct renal cell carcinoma

New York (Long Island Jewish Center) - High grade clear cell renal cell carcinoma

New York, Milwood - Adrenal cortical carcinoma

New York (Stony Brook University Medical Center) - High grade urothelial carcinoma

New York (St. Lukes Roosevelt Hospital) - Transitional cell carcinoma, high grade (1) Mesothelial carcinoma (1)

New York (SUNY Downstate Medical Center) - Clear cell renal cell carcinoma

New York (Westchester Medical Center) - High grade urothelial carcinoma

North Carolina (North Carolina Baptist Hospital) - Invasive high grade urothelial carcinoma

North Carolina (Womack Army Medical Center) - Collecting duct carcinoma (?)

Pennsylvania (Conemaugh Memorial Medical Center) - Urothelial carcinoma, high grade

Pennsylvania (Lehigh Valley Hospital) - Transitional cell carcinoma, high grade

Pennsylvania (University of Pittsburgh Medical Center) - High grade urothelial carcinoma

Puerto Rico (University of Puerto Rico) - Urothelial cell carcinoma, high grade

South Dakota (LCM Pathologists South Dakota Residents) - Renal cell carcinoma, collecting duct type

Texas, Crystal Beach - Carcinoma transitional consistent with necrosis vs. chromophobe renal

Texas, Houston - Renal cell carcinoma, sarcomatoid variety

Texas, Lubbock - Chromophobe renal cell carcinoma

Texas (Scott and White Memorial Hospital) - High grade renal cell carcinoma, NOS
Washington (Seattle VAMC) - Carcinoma consistent with high grade growth pattern, urothelial primary
West Virginia (Greenbrier Valley Medical Center) - Renal cell carcinoma
Wisconsin, Green Bay - Collecting duct carcinoma of Bellini
Wisconsin, Madison - Transitional cell carcinoma
Australia (Royal Hobart Hospital) - Clear cell type of renal cell carcinoma, grade 4
Australia (Sullivan Nicolaides Pathology) - Differentiated
Brazil (Federal University of Sao Paulo) - High grade urothelial carcinoma
Canada (Pasqua Hospital) - Urothelial carcinoma
Canada (University of Sherbrooke) - Urothelial carcinoma
Ireland (Beaumont Hospital) - High grade TCC
Ireland (Kerry General Hospital) - Collecting duct carcinoma
Ireland (Mater Misericordiae University Hospital Residents) - Collecting duct carcinoma
Japan (Asashi General Hospital) - Collecting duct carcinoma
Japan (Koyoto University Hospital) - Urothelial carcinoma, renal pelvis
Japan (Shizuoka Tokushukei Hospital) - Transitional cell carcinoma
United Kingdom (John Radcliffe Hospital) - Invasive urothelial carcinoma

Case 8 - Diagnosis:

High grade carcinoma, urothelial origin, kidney
 T-71000, M-80103

Case 8 - References:

Cho KS, Cho DS, et al. A Proposal for a Novel Staging System in Renal Pelvicaliceal Urothelial Carcinomas. *Hum Pathol* 2007; 38(11):1639-1648.
 Kuehn A, Paner GP, et al. Expression Analysis of Kidney-Specific Cadherin in a Wide Spectrum of Traditional and Newly Recognized Renal Epithelial Neoplasms. Diagnostic and Histogenetic Implications. *Am J Surg Pathol* 2007; 31(10):1528-1533.
 Orsola A, Trias I, et al. Renal Collecting (Bellini) Duct Carcinoma Displays Similar Characteristics to Upper Tract Urothelial Cell Carcinoma. *Urol* 2005; 65(1):49-54.
 Olgac S, Mazumdar M, Dalbagni G, et al. Urothelial Carcinoma of the Renal Pelvis. A Clinicopathologic Study of 130 Cases. *Am J Surg Pathol* 2004; 28(12):1545-1552.
 Sasaki H, Hasegawa N, Ikemoto I, et al. Simultaneous Renal Cell Carcinoma and Urothelial Carcinoma in Ipsilateral Kidney, Report of Two Cases. *Hinyokika Kiyo* 2006; 52(11):855-857.

Case No. 9, Accession No. 30916

February 2009

Alameda (Alameda County Medical Center) - Metanephric adenoma
Arcadia - Nephrogenic adenoma
Fontana (Kaiser Foundation Hospital) - Metanephric adenoma
Hayward-Fremont - Nephroblastoma, partially differentiated
Long Beach (Long Beach Veterans) - Nephroblastoma carcinoma (2)
Oakland - Multicystic nephroma vs. Wilms
Oxnard (St. John's Regional Medical Center) - Wilms (2); Nephroblastomatosis (1)
Pleasant Hill - Metanephric adenoma
San Diego (Naval Medical Center) - Metanephric adenoma
Santa Barbara - Metanephric adenoma
Sonoma (Sonoma Valley Hospital) - Wilms tumor (papillonodular)
Woodland Hills (Kaiser Permanente) - Nephroblastoma
Chicago, Illinois - Metanephric adenoma (2)
Colorado (McKee Medical Center) - Wilms tumor
Florida (Naples Pathology Association) - Metanephric adenoma
Georgia, Decatur - Wilms tumor, partially cystic
Illinois, Burr Ridge - Cystic nephroblastoma
Illinois (Heartland Regional Medical Center) - Favor differentiated epithelial nephroblastoma
Illinois (MacNeal Hospital) - Clear cell sarcoma, right kidney
Louisiana (LSUHSC Pathology) - Primitive neuroectodermal tumor

Maryland (University of Maryland) - Clear cell sarcoma
Michigan (Oakwood Hospital) - Metanephric adenoma
Minnesota (Fairview Ridges Hospital) - Nephroblastoma
Minnesota (University of Minnesota Division of Oral and Maxillofacial Pathology) - Metanephric adenoma
Missouri (Missouri Delta Medical Center) - Clear cell sarcoma
Nebraska (Creighton University) - Metanephric adenoma
New Mexico (University of New Mexico Residents) - Cystic partially differentiated nephroblastoma, papillonodular variant
New York (Albany Medical Center) - Metanephric adenoma
New York (Long Island Jewish Center) - Epithelial predominant Wilms tumor
New York, Milwood - Glomerulocystic kidney
New York (St. Lukes Roosevelt Hospital) - Cystic nephroblastoma (2)
New York (SUNY Downstate Medical Center) - Metanephric adenoma vs. Wilms tumor
New York (Westchester Medical Center) - Metanephric adenoma
North Carolina (North Carolina Baptist Hospital) - Neuroblastoma
North Carolina (Womack Army Medical Center) - Nephroblastoma, nodular blastemal pattern
Pennsylvania (Conemaugh Memorial Medical Center) - Metanephric adenoma
Pennsylvania (Lehigh Valley Hospital) - Metanephric adenoma vs. differentiated
Pennsylvania (University of Pittsburgh Medical Center) - Mesoblastic nephroma
Puerto Rico (University of Puerto Rico) - Metanephric adenofibroma
South Dakota (LCM Pathologists South Dakota Residents) - Clear cell sarcoma
Texas, Crystal Beach - Wilms tumor
Texas, Houston - Nephroblastoma
Texas, Lubbock - Medullary carcinoma
Texas (Scott and White Memorial Hospital) - Metanephric adenoma
Washington (Seattle VAMC) - Metanephric adenoma
West Virginia (Greenbrier Valley Medical Center) - Nephroblastoma
Wisconsin, Green Bay - Congenital mesoblastic nephroma
Wisconsin, Madison - Partially differentiated Wilms tumor
Australia (Royal Hobart Hospital) - Metanephric adenoma
Australia (Sullivan Nicolaides Pathology) - Nephroblastoma, poorly
Brazil (Federal University of Sao Paulo) - Papillonodular variant of cystic partially differentiated nephroblastoma
Canada (Pasqua Hospital) - Cystic partially differentiated nephroblastoma
Canada (University of Sherbrooke) - Metanephric adenoma
Ireland (Beaumont Hospital) - Metanephric adenoma
Ireland (Kerry General Hospital) - Wilms tumor
Ireland (Mater Misericordiae University Hospital Residents) - Nephroblastoma
Japan (Asahi General Hospital) - Metanephric adenoma
Japan (Koyoto University Hospital) - Renal cell carcinoma, unclassified, kidney
Japan (Shizuoka Tokushukai Hospital) - Nephroblastoma
United Kingdom (John Radcliffe Hospital) - Metanephric adenoma

Case 9 - Diagnosis:

Epithelial-predominant Wilms tumor (nephroblastoma), kidney
 T-71000, M-89603

Consultation: Dr. Craig Zuppan (formerly of the NWTS group): “Epithelial-predominant Wilms tumor”.

Case 9 - References:

- Dolan M and Mascotti K. Cytogenetically Unrelated Clones In Different Histologic Components of a Wilms Tumor. *Cancer Genet Cytogenet* 2005; 159(1):63-68.
 Hohenstein P and Hastie ND. The Many Facets of the Wilms Tumour Gene, WT1. *Hum Mol Genet* 2006; 15;15 Spec No 2:R196-201.
 Schinstine M, Abati A, et al. Cytological Identification of Metastatic Epithelial Nephroblastoma in Pleural Fluid. Report of a Case and Review of Literature. *Diagn Cytopathol* 2006; 34(9):621-625.
 Radhika S, Bakshi A, et al. Cytopathology of Uncommon Malignant Renal Neoplasms in the Pediatric Age Group. *Diagn Cytopathol* 2005; 32(5):281-286.

Alameda (Alameda County Medical Center) - Oncocytoma
Arcadia - Oncocytoma
Fontana (Kaiser Foundation Hospital) - Oncocytoma
Hayward-Fremont - Chromophobe carcinoma
Long Beach (Long Beach Veterans) - Oncocytoma (2)
Oakland - Oncocytoma
Oxnard (St. John's Regional Medical Center) - Oncocytoma (3)
Pleasant Hill - Oncocytoma
San Diego (Naval Medical Center) - Oncocytoma
Santa Barbara - Oncocytoma
Sonoma (Sonoma Valley Hospital) - Oncocytoma
Woodland Hills (Kaiser Permanente) - Oncocytoma
Chicago, Illinois - Eosinophilic variant of chromophobe renal cell carcinoma (2)
Colorado (McKee Medical Center) - Oncocytoma
Florida (Naples Pathology Association) - Oncocytoma
Georgia, Decatur - Renal oncocytoma
Illinois, Burr Ridge - Oncocytoma
Illinois (Heartland Regional Medical Center) - Oncocytoma
Illinois (MacNeal Hospital) - Oncocytoma, right kidney
Louisiana (LSUHSC Pathology) - Oncocytoma
Maryland (University of Maryland) - Oncocytoma
Michigan (Oakwood Hospital) - Oncocytoma
Minnesota (Fairview Ridges Hospital) - Oncocytoma
Minnesota (University of Minnesota Division of Oral and Maxillofacial Pathology) - Oncocytoma
Missouri (Missouri Delta Medical Center) - Oncocytoma
Nebraska (Creighton University) - Oncocytoma
New Mexico (University of New Mexico Residents) - Oncocytoma
New York (Albany Medical Center) - Oncocytoma
New York (Long Island Jewish Center) - Oncocytoma
New York, Milwood - Oncocytoma
New York (Stony Brook University Medical Center) - Oncocytoma
New York (St. Lukes Roosevelt Hospital) - Oncocytoma (2)
New York (SUNY Downstate Medical Center) - Oncocytoma
New York (Westchester Medical Center) - Oncocytoma
North Carolina (North Carolina Baptist Hospital) - Oncocytoma
North Carolina (Womack Army Medical Center) - Oncocytoma
Pennsylvania (Conemaugh Memorial Medical Center) - Oncocytoma
Pennsylvania (Lehigh Valley Hospital) - Oncocytoma
Pennsylvania (University of Pittsburgh Medical Center) - Oncocytoma
Puerto Rico (University of Puerto Rico) - Oncocytoma
South Dakota (LCM Pathologists South Dakota Residents) - Oncocytoma
Texas, Crystal Beach - Oncocytoma
Texas, Houston - Oncocytoma
Texas, Lubbock - Collecting duct carcinoma
Texas (Scott and White Memorial Hospital) - Oncocytoma
Washington (Seattle VAMC) - Chromophobe renal cell carcinoma
West Virginia (Greenbrier Valley Medical Center) - Oncocytoma
Wisconsin, Green Bay - Oncocytoma
Wisconsin, Madison - Oncocytoma
Australia (Royal Hobart Hospital) - Oncocytoma
Australia (Sullivan Nicolaides Pathology) - Oncocytoma
Brazil (Federal University of Sao Paulo) - Oncocytoma

Canada (Pasqua Hospital) - Oncocytoma
Canada (University of Sherbrooke) - Oncocytoma
Ireland (Beaumont Hospital) - Oncocytoma
Ireland (Kerry General Hospital) - Oncocytoma
Ireland (Mater Misericordiae University Hospital Residents) - Oncocytoma
Japan (Asashi General Hospital) - Oncocytoma
Japan (Koyoto University Hospital) - Oncocytoma, kidney
Japan (Shizuoka Tokushukai Hospital) - Renal oncocytoma
United Kingdom (John Radcliffe Hospital) - Oncocytoma

Case 10 - Diagnosis:

Oncocytoma, kidney
T-71000, M-82900

Case 10 - References:

Couturier J. Genomic Classification of Renal Cell Tumors In Adults. *Ann Pathol* 2008; 28(5):402-408.
Cheng L, Zhang S, MacLennan GT, et al. Molecular and Cytogenetic Insights Into the Pathogenesis, Classification, Differential Diagnosis, and Prognosis of Renal Epithelial Neoplasms. *Hum Pathol* 2009; 40(1):10-29
Alamara C, Karapanagiotou EM, et al. Renal Oncocytoma. A Case Report and Short Review of the Literature. *Eur J Intern Med* 2008; 19(7):e67-69.
Tickoo SK and Gopalan A. Pathologic Features of Renal Cortical Tumors. *Urol Clin North Am* 2008; 35(4):551-561.
Algaba F. Renal Adenomas. Pathological Differential Diagnosis with Malignant Tumors. *Adv Urol* 2008; 974848, *Epub* 2008.