

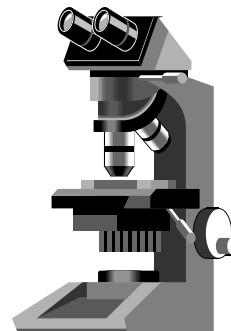


CALIFORNIA  
TUMOR TISSUE REGISTRY

## *GENITOURINARY PATHOLOGY*

Minutes – Subscription A

February 2011



### **SUGGESTED READING (General Topics from Recent Literature):**

- Cribriform-Morular Variant of Papillary Thyroid Carcinoma—Cytological and Immunocytochemical Findings of 18 Cases. Hirokawa M, Maekawa M, et al. *Diagn Cytopathol* 2010; 38:890-896.
- Renal cell Carcinomas with Intratumoral Fat and Concomitant Angiomyolipoma: Potential Pitfalls in Staging and Diagnosis. Aron M, Aydin H, et al. *Am J Clin Pathol* 2010; 134:807-812.
- Xp11.2 Translocation Renal Cell Carcinomas in Children and Young Adults: A Meta-Analysis. Rao Q, Guan B and Zhou XJ. *Int J Surg Pathol* 2010; 18:458-464.
- Spindle Cell Thymomas (WHO Type A): A Clinicopathologic Correlation of 41 Cases. Moran CA, Kalhor N and Suster S. *Am J Clin Pathol* 2010; 134:793-798.
- Optimal Immunohistochemical Markers for Distinguishing Lung Adenocarcinomas from Squamous Cell Carcinomas in Small Tumor Samples. Terry J, Leung S, et al. *Am J Surg Pathol* 2010; 34:1805-1811.

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](mailto:cttr@linkline.com)  
Web site & Case of the Month: [www.cttr.org](http://www.cttr.org)

## **FILE DIAGNOSES**

**CTTR Subscription A**

**February 2011**

**Case 1:**

Xanthogranulomatous pyelonephritis, kidney  
T-71000, M-44040

**Case 2:**

Oncocytoma, kidney  
T-71000, M-82900

**Case 3:**

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

**Case 4:**

Chromophobe renal cell carcinoma, kidney  
T-71000, M-83123

**Case 5:**

Papillary clear cell renal cell carcinoma, kidney  
T-72020, M-83123

**Case 6:**

Mantle cell lymphoma, kidney  
T-71000, M-95903

**Case 7:**

Seminoma, testis  
T-78000, M-90613

**Case 8:**

High grade urothelial carcinoma with focal glandular features, bladder  
T-74000, M-81203

**Case 9:**

Cystic nephroma, kidney  
T-71000, M-89601

**Case 10:**

Spindle cell neoplasm, probably sarcoma, bladder  
T-74000, M-88003

Alameda (Alameda County Medical Center) - Xanthogranulomatous pyelonephritis  
Arcadia (ABC Laboratories) - Xanthogranulomatous pyelonephritis  
Fontana (Kaiser Foundation Hospital) - Xanthogranulomatous pyelonephritis  
Hayward- Fremont (St. Rose Hospital) - Melanoma (clear cell sarcoma)  
Long Beach (Long Beach VA) - Xanthogranulomatous pyelonephritis (8)  
Oxnard (St. John's Regional Medical Center) - Xanthogranulomatous pyelonephritis (2)  
Sacramento (UC Davis Medical Center) - Xanthogranulomatous nephritis  
San Diego (Naval Medical Center) - Xanthogranulomatous pyelonephritis  
Santa Barbara (Miramonte Laboratories) - Xanthogranulomatous pyelonephritis  
Woodland Hills (Kaiser Permanente) - Xanthogranulomatous pyelonephritis  
Arkansas (Associated Pathologists Laboratory) - Xanthogranulomatous pyelonephritis  
Colorado (McKee Medical Center) - Malakoplakis  
Florida (Gastro Enterology of Ocala) - Angiomyolipoma  
Florida (Naples Pathology Associates) - Malakoplakis  
Florida (Munroe Regional Medical Center) - Xanthogranulomatous pyelonephritis  
Florida (The Pathology Group of NW Florida) - Xanthogranuloma pyelonephritis with malakoplakis  
Georgia, Atlanta - Xanthogranulomatous pyelonephritis  
Georgia (Emory University) - Xanthogranulomatous pyelonephritis  
Illinois, Chicago - Inflammatory malignant fibrous histiocytoma  
Illinois (Heartland Regional Medical Center) - Xanthogranulomatous pyelonephritis  
Illinois (Loyola University of Chicago) - Xanthogranulomatous pyelonephritis  
Illinois, Orland Park - Inflammatory malignant fibrous histiocytoma  
Maryland (University of Maryland Residents) - Xanthogranulomatous pyelonephritis  
Massachusetts (BWH-Pathology) - Xanthogranulomatous pyelonephritis  
Massachusetts, Peabody - Renal cell carcinoma  
Massachusetts (University of Massachusetts Medical Center Residents) - Xanthogranulomatous pyelonephritis  
Michigan, Caledonia - Xanthogranulomatous pyelonephritis  
Michigan (Pathology Consultants of Port Huron) - Xanthogranulomatous pyelonephritis  
Minnesota (Fairview Ridges Hospital) - Xanthogranulomatous pyelonephritis  
Missouri (Missouri Delta Medical Center) - Renal xanthogranulomatous  
Missouri (St. Luke's Hospital) - Xanthogranulomatous pyelonephritis (3)  
Nebraska (Creighton University Medical Center) - Xanthogranulomatous pyelonephritis  
New York (Buffalo General Hospital Residents) - Xanthogranulomatous pyelonephritis  
New York (Erie County Medical Center) - Xanthogranulomatous pyelonephritis  
New York (Staten Island University Hospital) - Xanthogranulomatous pyelonephritis  
New York (SUNY Downstate Medical Center Residents) - Xanthogranulomatous pyelonephritis  
New York (SUNY Stony Brook) - Xanthogranulomatous pyelonephritis  
New York (Westchester Medical Center) - Inflammatory myofibroblastic tumor  
Ohio, Columbus - Xanthogranulomatous pyelonephritis  
Ohio, Union Town - Xanthogranulomatous pyelonephritis  
Ohio (University of Toledo Medical Center Residents) - Xanthogranulomatous pyelonephritis  
Pennsylvania (Conemaugh Valley Memorial Hospital) - Xanthogranulomatous pyelonephritis  
Puerto Rico (University of Puerto Rico) - Xanthogranulomatous pyelonephritis rule out malignancy  
Texas (Carl R. Darnall Army Medical Center) - Xanthogranulomatous pyelonephritis  
Texas, Crystal Beach - Inflammatory pseudotumor  
Texas, Houston - Xanthogranulomatous pyelonephritis  
Texas, Lubbock - Xanthomatous pyelonephritis  
Virginia (Falls Church) - Xanthogranuloma  
Washington (Seattle VAMC) - Chronic acute inflammation (xanthogranulomatous pyelonephritis)  
West Virginia (Greenbrier Valley Medical Center) - Plasma cell granuloma  
Wisconsin (Medical Assessment and Consultation) - Xanthogranulomatous pyelonephritis  
Australia (Royal Hobart Hospital) - Xanthogranulomatous pyelonephritis  
Australia (Royal Prince Alfred Hospital) - Xanthogranulomatous pyelonephritis  
Canada (Pasqua Hospital) - Xanthogranulomatous pyelonephritis  
Canada (Saint-Antoine/Richeneu) - Xanthogranulomatous pyelonephritis

Canada (University of Sherbrooke) - Xanthomateous pyelonephritis  
England (John Radcliffe Hospital) - Xanthogranulomatous pyelonephritis  
Ireland (Kerry General Hospital) - Xanthogranulomatous pyelonephritis  
Ireland (University Hospital Galway) - Xanthogranulomatous pyelonephritis  
Japan (Aichi Medical University) - Xanthogranulomatous pyelonephritis  
Japan (Lions Mansion Najyo-Ekimae) - Xanthogranulomatous pyelonephritis, left kidney  
Japan (Setagaya-Ku) - Analgesic nephropathy  
Japan (Asahi General Hospital) - Xanthogranulomatous pyelonephritis  
Japan (Naval Medical Department of Pathology) - Xanthogranulomatous pyelonephritis  
Oman (Khoulia Hospital) - Xanthogranulomatous pyelonephritis  
Singapore (Singapore General Hospital) - Xanthogranulomatous pyelonephritis

**Case 1 - Diagnosis:**

Xanthogranulomatous pyelonephritis, kidney  
 T-71000, M-44040

**Case 1 - References:**

Xanthogranulomatous pyelonephritis: clinical experience with 41 cases. *Urology* 2008; Feb;71(2): p178-80.  
 Korkes F; Favoretto RL; Broglio M; Silva CA; Castro MG; Perez MD.  
  
 Renal failure, sepsis, and bilateral kidney tumors. Xanthogranulomatous pyelonephritis. *Kidney Int* 2008;  
 Mar;73(6): p787-8. Ott U; Busch M; Steiner T; Schubert J; Grone E; Grone HJ; Wolf G.  
  
 Pediatric xanthogranulomatous pyelonephritis masquerading as complex renal mass. *Urology* 2007; Aug;70(2):  
 p372.e11-2. Bottalico T; Parks S; Zaslau S; Tarry WF.  
  
 Renal parenchymal malacoplakia: a different stage of xanthogranulomatous pyelonephritis? *J Pediatr Surg* 2007;  
 Jul;42(7): pE35-8. Yigiter M; Ilgici D; Celik M; Arda IS; Hicsonmez A.  
  
 Rare coexistence of keratinizing squamous metaplasia with xanthogranulomatous pyelonephritis. Report of a case  
 with the role of immunocytochemistry in the differential diagnosis. *Acta Cytol* 2007; Jan-Feb;51(1): p92-4.  
 Dhingra KK; Singal S; Jain S.

**Case No. 2, Accession No. 31161**

**February 2011**

Alameda (Alameda County Medical Center) - Oncocytoma  
Arcadia (ABC Laboratories) - Oncocytic adenoma  
Fontana (Kaiser Foundation Hospital) - Oncocytoma  
Hayward- Fremont (St. Rose Hospital) - Oncocytoma  
Long Beach (Long Beach VA) - Oncocytoma (8)  
Oxnard (St. John's Regional Medical Center) - Oncocytoma (2)  
Sacramento (UC Davis Medical Center) - Oncocytoma  
San Diego (Naval Medical Center) - Oncocytoma  
Santa Barbara (Miramonte Laboratories) - Oncocytoma  
Woodland Hills (Kaiser Permanente) - Oncocytoma  
Arkansas (Associated Pathologists Laboratory) - Oncocytoma  
Colorado (McKee Medical Center) - Oncocytoma  
Florida (Gastro Enterology of Ocala) - Oncocytoma  
Florida (Naples Pathology Associates) - Oncocytoma  
Florida (Munroe Regional Medical Center) - Oncocytoma  
Florida (The Pathology Group of NW Florida) - Oncocytoma  
Georgia, Atlanta - Oncocytoma  
Georgia (Emory University) - Oncocytoma  
Illinois, Chicago - Oncocytoma

Illinois (Heartland Regional Medical Center) - Renal oncocytoma  
Illinois (Loyola University of Chicago) - Oncocytoma  
Illinois, Orland Park - Oncocytoma  
Maryland (University of Maryland Residents) - Oncocytoma  
Massachusetts (BWH-Pathology) - Oncocytoma  
Massachusetts, Peabody - Renal cell carcinoma  
Massachusetts (University of Massachusetts Medical Center Residents) - Oncocytoma  
Michigan, Caledonia - Renal oncocytoma  
Michigan (Pathology Consultants of Port Huron) - Oncocytoma  
Minnesota (Fairview Ridges Hospital) - Oncocytoma  
Missouri (Missouri Delta Medical Center) - Renal oncocytoma  
Missouri (St. Luke's Hospital) - Oncocytoma (3)  
Nebraska (Creighton University Medical Center) - Oncocytoma  
New York (Buffalo General Hospital Residents) - Oncocytoma  
New York (Erie County Medical Center) - Oncocytoma  
New York (Staten Island University Hospital) - Oncocytoma  
New York (SUNY Downstate Medical Center Residents) - Oncocytoma  
New York (SUNY Stony Brook) - Oncocytoma  
New York (Westchester Medical Center) - Oncocytoma  
Ohio, Columbus - Oncocytoma  
Ohio, Union Town - Oncocytoma  
Ohio (University of Toledo Medical Center Residents) - Oncocytoma of kidney  
Pennsylvania (Conemaugh Valley Memorial Hospital) - Oncocytoma  
Puerto Rico (University of Puerto Rico) - Oncocytoma  
Texas (Carl R. Darnall Army Medical Center) - Oncocytoma  
Texas, Crystal Beach - Oncocytoma  
Texas, Houston - Oncocytoma  
Texas, Lubbock - Oncocytoma  
Virginia (Falls Church) - Oncocytoma  
Washington (Seattle VAMC) - Oncocytoma  
West Virginia (Greenbrier Valley Medical Center) - Oncocytoma  
Wisconsin (Medical Assessment and Consultation) - Oncocytoma  
Australia (Royal Hobart Hospital) - Oncocytoma  
Australia (Royal Prince Alfred Hospital) - Oncocytoma  
Canada (Pasqua Hospital) - Oncocytoma  
Canada (Saint-Antoine/Richeneu) - Oncocytoma  
Canada (University of Sherbrooke) - Oncocytoma  
England (John Radcliffe Hospital) - Oncocytoma  
Ireland (Kerry General Hospital) - Oncocytoma  
Ireland (University Hospital Galway) - Oncocytoma  
Japan (Aichi Medical University) - Renal oncocytoma  
Japan (Lions Mansion Najyo-Ekimae) - Oncocytoma, right kidney  
Japan (Setagaya-Ku) - Oncocytoma  
Japan (Asahi General Hospital) - Oncocytoma  
Japan (Naval Medical Department of Pathology) - Oncocytoma  
Oman (Khoula Hospital) - Oncocytoma  
Singapore (Singapore General Hospital) - Oncocytoma

## **Case 2 - Diagnosis:**

Oncocytoma, kidney  
 T-71000, M-82900

## **Case 2 - References:**

Renal oncocytoma with loss of chromosomes Y and 1 evolving to papillary carcinoma in connection with gain of chromosome 7. Coincidence or progression? *Cancer Genet Cytogenet* 2005; Nov;163(1): p81-5. Al-Saleem T; Balsara BR; Liu Z; Feder M; Testa JR; Wu H; Greenberg RE.

Caveolin-1 immunohistochemical analysis in differentiating chromophobe renal cell carcinoma from renal oncocytoma. *Am J Clin Pathol* 2006; Mar;125(3): p392-8. Garcia E; Li M.

Synchronous renal and adrenal masses: an analysis of 80 cases. *Ann Diagn Pathol* 2009; Feb;13(1): p9-15. Bahrami A; Truong LD; Shen SS; Krishnan B.

Concurrent angiomyolipoma and two oncocytomas in the same kidney. *Ann Diagn Pathol* 2007; Apr;11(2): p132-6. Bahrami A; Schwartz MR; Ayala AG; Goldfarb RA; Brady JR; Takei H; Ro JY.

Renal oncocytoma with hyaline globules: cytologic diagnosis by guided fine needle aspiration, a case report. *Indian J Pathol Microbiol* 2005; Apr;48(2): p230-5. Deshpande A; Munshi M.

### Case No. 3, Accession No. 31152

February 2011

Alameda (Alameda County Medical Center) - Nephroblastoma (Wilms tumor)  
Arcadia (ABC Laboratories) - Neuroblastoma  
Fontana (Kaiser Foundation Hospital) - Wilms tumor  
Hayward-Fremont (St. Rose Hospital) - Wilms tumor  
Long Beach (Long Beach VA) - Wilms tumor (8)  
Oxnard (St. John's Regional Medical Center) - Wilms (2)  
Sacramento (UC Davis Medical Center) - Anaplastic Wilms tumor  
San Diego (Naval Medical Center) - Wilms tumor  
Santa Barbara (Miramonte Laboratories) - Wilms tumor  
Woodland Hills (Kaiser Permanente) - Nephroblastoma  
Arkansas (Associated Pathologists Laboratory) - Nephroblastoma  
Colorado (McKee Medical Center) - Nephroblastoma  
Florida (Gastro Enterology of Ocala) - Wilms tumor (neg for anaplasia)  
Florida (Naples Pathology Associates) - Wilms tumor  
Florida (Munroe Regional Medical Center) - Wilms tumor  
Florida (The Pathology Group of NW Florida) - Nephroblastoma  
Georgia, Atlanta - Nephroblastoma  
Georgia (Emory University) - Nephroblastoma (Wilms tumor)  
Illinois, Chicago - Wilms tumor  
Illinois (Heartland Regional Medical Center) - Nephroblastoma  
Illinois (Loyola University of Chicago) - Wilms tumor  
Illinois, Orland Park - Wilms tumor  
Maryland (University of Maryland Residents) - Nephroblastoma (Wilms tumor)  
Massachusetts (BWH-Pathology) - Wilms tumor  
Massachusetts, Peabody - Nephroblastoma (Wilms)  
Massachusetts (University of Massachusetts Medical Center Residents) - Wilms tumor  
Michigan, Caledonia - Wilms tumor  
Michigan (Pathology Consultants of Port Huron) - Wilms tumor  
Minnesota (Fairview Ridges Hospital) - Nephroblastoma  
Missouri (Missouri Delta Medical Center) - Wilms tumor  
Missouri (St. Luke's Hospital) - Wilms tumor (2); Nephroblastoma (1)  
Nebraska (Creighton University Medical Center) - Wilms tumor  
New York (Buffalo General Hospital Residents) - Nephroblastoma, triphasic  
New York (Erie County Medical Center) - Neuroblastoma  
New York (Staten Island University Hospital) - Wilms tumor  
New York (SUNY Downstate Medical Center Residents) - Wilms tumor  
New York (SUNY Stony Brook) - Wilms tumor with favorable histology  
New York (Westchester Medical Center) - Wilms tumor  
Ohio, Columbus - Wilms tumor  
Ohio, Union Town - Wilms tumor

Ohio (University of Toledo Medical Center Residents) - Wilms tumor  
Pennsylvania (Conemaugh Valley Memorial Hospital) - Wilms tumor (nephroblastoma)  
Puerto Rico (University of Puerto Rico) - Wilms tumor, favorable histology  
Texas (Carl R. Darnall Army Medical Center) - Nephroblastoma/Wilms tumor  
Texas, Crystal Beach - Nephroblastoma  
Texas, Houston - Wilms tumor  
Texas, Lubbock - Wilms tumor  
Virginia (Falls Church) - Wilms tumor  
Washington (Seattle VAMC) - Reinoblastoma/Wilms  
West Virginia (Greenbrier Valley Medical Center) - Nephroblastoma  
Wisconsin (Medical Assessment and Consultation) - Nephroblastoma (Wilms tumor)  
Australia (Royal Hobart Hospital) - Wilms tumor, kidney  
Australia (Royal Prince Alfred Hospital) - Wilms tumor  
Canada (Pasqua Hospital) - Wilms tumor  
Canada (Saint-Antoine/Richeneu) - Wilms tumor  
Canada (University of Sherbrooke) - Wilms tumor  
England (John Radcliffe Hospital) - Wilms tumor  
Ireland (Kerry General Hospital) - Wilms tumor  
Ireland (University Hospital Galway) - Wilms tumor  
Japan (Aichi Medical University) - Nephroblastoma  
Japan (Lions Mansion Najyo-Ekimae) - Nephroblastoma, mixed type, left kidney  
Japan (Setagaya-Ku) - Nephroblastoma  
Japan (Asahi General Hospital) - Nephroblastoma  
Japan (Naval Medical Department of Pathology) - Wilms tumor (nephroblastoma)  
Oman (Khoula Hospital) - Nephroblastoma  
Singapore (Singapore General Hospital) - Nephroblastoma (favorable histology)

### **Case 3 - Diagnosis:**

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

### **Case 3 - References:**

Amplification and expression of EGFR and ERBB2 in Wilms tumor. *Cancer Genet Cytogenet* 2009; Oct 15;194(2): p88-95. Vasei M; Modjtahedi H; Ale-Booyeh O; Mosallaei A; Kajbafzadeh AM; Shahriari M; Ghaderi AA; Soleymanpour H; Kosari F; Moch H; Sauter G.

C-kit protein expression in Wilms' tumour: an immunohistochemical study. *Eur J Surg Oncol* 2009; Jun;35(6): p629-35. Giordano G; Campanini N; Rocco A; Donofrio V; Bertolini P; Falletti J; Pettinato G.

Nonviable tumor tissue should not upstage Wilms' tumor from stage I to stage II: a report from the SIOP 93-01 nephroblastoma trial and study. *Pediatr Dev Pathol* 2009; Mar-Apr;12(2): p111-5. Vujanic GM; Harms D; Bohoslavsky R; Leuschner I; de Kraker J; Sandstedt B.

Metanephric adenoma vs. Wilms' tumor: a report of 2 cases with diagnosis by fine needle aspiration and cytologic comparisons. *Acta Cytol* 2007; May-Jun;51(3): p464-7. Khayyata S; Grignon DJ; Aulicino MR; Al-Abbadi MA.

The National Wilms Tumor Study: a 40 year perspective. *Lifetime Data Anal* 2007; Dec;13(4): p463-70. D'Angio GJ.

**Case No. 4, Accession No. 31164**

**February 2011**

Alameda (Alameda County Medical Center) - Renal cell carcinoma, chromophobe type  
Arcadia (ABC Laboratories) - Oncocytoma

Fontana (Kaiser Foundation Hospital) - Chromophobe renal cell carcinoma  
Hayward- Fremont (St. Rose Hospital) - Chromophobe renal cell carcinoma  
Long Beach (Long Beach VA) - Chromophobe renal cell carcinoma (8)  
Oxnard (St. John's Regional Medical Center) - Chromophobe carcinoma (2)  
Sacramento (UC Davis Medical Center) - Chromophobe renal cell carcinoma  
San Diego (Naval Medical Center) - Chromophobe renal cell carcinoma  
Santa Barbara (Miramonte Laboratories) - Chromophobe carcinoma  
Woodland Hills (Kaiser Permanente) - Chromophobe renal cell carcinoma  
Arkansas (Associated Pathologists Laboratory) - Renal cell carcinoma, chromophobe cell type  
Colorado (McKee Medical Center) - Chromophobe renal cell carcinoma  
Florida (Gastro Enterology of Ocala) - Chromophobe renal cell carcinoma  
Florida (Naples Pathology Associates) - Renal cell carcinoma, chromophobe type  
Florida (Munroe Regional Medical Center) - Chromophobe renal cell carcinoma  
Florida (The Pathology Group of NW Florida) - Renal cell carcinoma, clear cell type  
Georgia, Atlanta - Chromophobe renal cell carcinoma  
Georgia (Emory University) - Chromophobe carcinoma  
Illinois, Chicago - Clear cell carcinoma  
Illinois (Heartland Regional Medical Center) - Chromophobe renal cell carcinoma  
Illinois (Loyola University of Chicago) - Chromophobe  
Illinois, Orland Park - Clear cell carcinoma  
Maryland (University of Maryland Residents) - Chromophobe renal cell carcinoma  
Massachusetts (BWH-Pathology) - Renal cell carcinoma, chromophobe type  
Massachusetts, Peabody - Renal cell carcinoma, chromophobe  
Massachusetts (University of Massachusetts Medical Center Residents) - Chromophobe renal cell carcinoma  
Michigan, Caledonia - Chromophobe renal cell carcinoma, eosinophilic variant, Fuhrman nuclear grade 3  
Michigan (Pathology Consultants of Port Huron) - Chromophobe renal cell carcinoma  
Minnesota (Fairview Ridges Hospital) - Renal cell carcinoma, chromophobe  
Missouri (Missouri Delta Medical Center) - Chromophobe renal cell carcinoma  
Missouri (St. Luke's Hospital) - Chromophobe renal cell carcinoma (3)  
Nebraska (Creighton University Medical Center) - Chromophobe renal cell carcinoma  
New York (Buffalo General Hospital Residents) - Chromophobe renal cell carcinoma  
New York (Erie County Medical Center) - Chromophobe renal cell carcinoma  
New York (Staten Island University Hospital) - Chromophobe renal cell carcinoma  
New York (SUNY Downstate Medical Center Residents) - Chromophobe renal cell carcinoma  
New York (SUNY Stony Brook) - Chromophobe renal cell carcinoma  
New York (Westchester Medical Center) - Chromophobe renal cell carcinoma  
Ohio, Columbus - Chromophobe renal cell carcinoma  
Ohio, Union Town - Chromophobe renal cell carcinoma  
Ohio (University of Toledo Medical Center Residents) - Chromophobe renal cell carcinoma  
Pennsylvania (Conemaugh Valley Memorial Hospital) - Chromophobe renal cell carcinoma  
Puerto Rico (University of Puerto Rico) - Chromophobe renal cell carcinoma  
Texas (Carl R. Darnall Army Medical Center) - Renal cell carcinoma, chromophobe type  
Texas, Crystal Beach - Chromophobe renal cell carcinoma  
Texas, Houston - Renal cell carcinoma, granular cell type  
Texas, Lubbock - Chromophobe carcinoma  
Virginia (Falls Church) - Chromophobe renal cell carcinoma, eosinophytic variant  
Washington (Seattle VAMC) - Renal cell carcinoma, chromophobe growth part  
West Virginia (Greenbrier Valley Medical Center) - Renal cell carcinoma  
Wisconsin (Medical Assessment and Consultation) - Renal cell carcinoma, clear cell type  
Australia (Royal Hobart Hospital) - Chromophobe type of renal cell carcinoma  
Australia (Royal Prince Alfred Hospital) - Chromophobe renal cell carcinoma  
Canada (Pasqua Hospital) - Chromophobe carcinoma  
Canada (Saint-Antoine/Richeneu) - Chromophobe renal carcinoma  
Canada (University of Sherbrooke) - Renal cell carcinoma, chromophobe type  
England (John Radcliffe Hospital) - Chromophobe carcinoma  
Ireland (Kerry General Hospital) - Chromophobe carcinoma  
Ireland (University Hospital Galway) - Chromophobe carcinoma



Japan (Aichi Medical University) - Chromophobe renal cell carcinoma  
Japan (Lions Mansion Najyo-Ekima) - Chromophobe renal cell carcinoma, right kidney  
Japan (Setagaya-Ku) - Clear cell carcinoma  
Japan (Asahi General Hospital) - Chromophobe renal cell carcinoma  
Japan (Naval Medical Department of Pathology) - Chromophobe renal cell carcinoma  
Oman (Khoula Hospital) - Chromophobe renal cell carcinoma  
Singapore (Singapore General Hospital) - Chromophobe renal cell carcinoma

**Case 4 - Diagnosis:**

Chromophobe renal cell carcinoma, kidney  
 T-71000, M-83123

**Case 4 - References:**

Pathobiology and prognosis of chromophobe renal cell carcinoma. *Urol Oncol* 2008; Nov-Dec;26(6): p604-9.  
 Klatte T; Han KR; Said JW; Bohm M; Allhoff EP; Kabbinavar FF; Beldegrun AS; Pantuck AJ.  
  
 Tumour necrosis in chromophobe renal cell carcinoma: clinical data to distinguish aggressive variants. *Eur J Surg Oncol* 2008; Jun;34(6): p687-91. Zini L; Leroy X; Lemaitre L; Devos P; Aubert S; Biserte J; Villers A.  
  
 Diagnostic value of cytokeratin 7 and parvalbumin in differentiating chromophobe renal cell carcinoma from renal oncocytoma. *Anal Quant Cytol Histol* 2006; Aug;28(4): p228-36. Adley BP; Papavero V; Sugimura J; Teh BT; Yang XJ.  
  
 Classification of renal neoplasms based on molecular signatures. *J Urol* 2006; Jun;175(6): p2302-6. Yang XJ; Sugimura J; Schafernak KT; Tretiakova MS; Han M; Vogelzang NJ; Furge K; Teh BT.  
  
 Fuhrman grading is not appropriate for chromophobe renal cell carcinoma. *Am J Surg Pathol* 2007; Jun;31(6): p957-60. Delahunt B; Sika-Paotonu D; Bethwaite PB; McCredie MR; Martignoni G; Eble JN; Jordan TW.  
  
 The pathology of renal epithelial neoplasms. *Semin Oncol* 2006; Oct;33(5): p534-43. Reuter VE.

**Case No. 5, Accession No. 31130**

**February 2011**

Alameda (Alameda County Medical Center) - Renal cell carcinoma, clear cell type  
Arcadia (ABC Laboratories) - Oncocytoma  
Fontana (Kaiser Foundation Hospital) - Clear cell renal cell carcinoma  
Hayward- Fremont (St. Rose Hospital) - Papillary renal cell carcinoma  
Long Beach (Long Beach VA) - Clear cell renal cell carcinoma (8)  
Oxnard (St. John's Regional Medical Center) - Renal cell carcinoma (2)  
Sacramento (UC Davis Medical Center) - Clear cell renal cell carcinoma, Fuhrman nuclear grade 2  
San Diego (Naval Medical Center) - Renal cell carcinoma, morphologically consistent with renal cell carcinoma with Xp11.2/TFE3 translocation  
Santa Barbara (Miramonte Laboratories) - Papillary renal cell carcinoma  
Woodland Hills (Kaiser Permanente) - Clear cell renal cell carcinoma  
Arkansas (Associated Pathologists Laboratory) - Renal cell carcinoma, clear cell type  
Colorado (McKee Medical Center) - Clear cell renal cell carcinoma  
Florida (Gastro Enterology of Ocala) - Renal cell carcinoma, clear cell type  
Florida (Naples Pathology Associates) - Renal cell carcinoma, clear cell type  
Florida (Munroe Regional Medical Center) - Renal cell carcinoma, clear cell  
Florida (The Pathology Group of NW Florida) - Papillary renal cell carcinoma  
Georgia, Atlanta - Clear cell (conventional) renal cell carcinoma  
Georgia (Emory University) - Chromophobe carcinoma  
Illinois, Chicago - Papillary carcinoma  
Illinois (Heartland Regional Medical Center) - Renal cell carcinoma, clear cell type

Illinois (Loyola University of Chicago) - Papillary renal cell carcinoma  
Illinois, Orland Park - Papillary carcinoma  
Maryland (University of Maryland Residents) - Papillary renal cell carcinoma with clear cell features, see note. Note:  
 Recommend testing for familial carcinoma (xp11.2)  
Massachusetts (BWH-Pathology) - Renal cell carcinoma, clear cell type  
Massachusetts, Peabody - Renal cell carcinoma, clear cell  
Massachusetts (University of Massachusetts Medical Center Residents) - Clear cell renal cell carcinoma  
Michigan, Caledonia - Renal cell carcinoma, clear cell type, Fuhrman nuclear grade 3  
Michigan (Pathology Consultants of Port Huron) - Renal cell carcinoma, clear cell  
Minnesota (Fairview Ridges Hospital) - Renal cell carcinoma, clear cell  
Missouri (Missouri Delta Medical Center) - Clear cell carcinoma  
Missouri (St. Luke's Hospital) - Renal cell carcinoma, NOS (1); Renal cell (clear cell) carcinoma (1); Clear cell renal cell carcinoma (1)  
Nebraska (Creighton University Medical Center) - Renal cell carcinoma (unclassified)  
New York (Buffalo General Hospital Residents) - Papillary renal cell carcinoma, type 1  
New York (Erie County Medical Center) - Papillary renal cell carcinoma  
New York (Staten Island University Hospital) - Papillary renal cell carcinoma  
New York (SUNY Downstate Medical Center Residents) - Papillary renal cell carcinoma, clear cell renal cell carcinoma with papillary features  
New York (SUNY Stony Brook) - Clear cell papillary renal cell carcinoma  
New York (Westchester Medical Center) - Clear cell renal cell carcinoma  
Ohio, Columbus - Renal cell carcinoma, clear cell type, Fuhrman grade 2  
Ohio, Union Town - Papillary renal cell carcinoma  
Ohio (University of Toledo Medical Center Residents) - Clear renal cell carcinoma, with papillary features  
Pennsylvania (Conemaugh Valley Memorial Hospital) - Clear cell renal cell carcinoma  
Puerto Rico (University of Puerto Rico) - Clear cell renal cell carcinoma, rule out papillary renal cell carcinoma  
Texas (Carl R. Darnall Army Medical Center) - Renal cell carcinoma, clear cell conventional type  
Texas, Crystal Beach - Renal cell carcinoma, clear cell type  
Texas, Houston - Papillary carcinoma  
Texas, Lubbock - Renal cell carcinoma, clear cell type  
Virginia (Falls Church) - Clear cell papillary renal cell carcinoma  
Washington (Seattle VAMC) - Renal cell carcinoma, papillary growth pattern  
West Virginia (Greenbrier Valley Medical Center) - Renal cell carcinoma  
Wisconsin (Medical Assessment and Consultation) - Renal cell carcinoma (Chromophobe cell type)  
Australia (Royal Hobart Hospital) - Clear cell type of renal cell carcinoma  
Australia (Royal Prince Alfred Hospital) - Papillary renal cell carcinoma, type 1  
Canada (Pasqua Hospital) - Xp11.2 renal cell carcinoma  
Canada (Saint-Antoine/Richeneu) - Clear cell carcinoma  
Canada (University of Sherbrooke) - Clear cell carcinoma  
England (John Radcliffe Hospital) - Papillary clear cell renal cell carcinoma  
Ireland (Kerry General Hospital) - Clear cell carcinoma of kidney  
Ireland (University Hospital Galway) - Papillary carcinoma  
Japan (Aichi Medical University) - Papillary renal cell carcinoma  
Japan (Lions Mansion Najyo-Ekimae) - Papillary renal cell carcinoma, type 2, left kidney  
Japan (Setagaya-Ku) - Clear cell carcinoma, papillary  
Japan (Asahi General Hospital) - Clear cell renal cell carcinoma  
Japan (Naval Medical Department of Pathology) - Papillary renal cell carcinoma  
Oman (Khoulia Hospital) - Clear cell renal cell carcinoma  
Singapore (Singapore General Hospital) - Papillary renal cell carcinoma

#### **Case 5 - Diagnosis:**

Papillary clear cell renal cell carcinoma, kidney  
 T-72020, M-83123

#### **Case 5 - References:**

Melanotic clear cell epithelioid angiomyolipoma: a rare entity and a mimic of clear cell renal carcinoma.  
 Histopathology 2007; Feb;50(3): p393-4. Goyal R; Joshi K; Singh SK; Radotra BD.

The utility of PAX-2 in distinguishing metastatic clear cell renal cell carcinoma from its morphologic mimics: an immunohistochemical study with comparison to renal cell carcinoma marker. *Am J Surg Pathol* 2008; Oct;32(10): p1462-7. Gokden N; Gokden M; Phan DC; McKenney JK.

Cytopathology of uncommon malignant renal neoplasms in the pediatric age group. *Diagn Cytopathol* 2005; May;32(5): p281-6. Radhika S; Bakshi A; Rajwanshi A; Nijhawan R; Das A; Kakkar N; Joshi K; Marwaha RK; Rao KL.

Association of cytokeratin 7 and 19 expression with genomic stability and favorable prognosis in clear cell renal cell cancer. *Int J Cancer* 2008; Aug 1;123(3): p569-76. Mertz KD; Demichelis F; Sboner A; Hirsch MS; Dal Cin P; Struckmann K; Storz M; Scherrer S; Schmid DM; Strebel RT; Probst-Hensch NM; Gerstein M; Moch H; Rubin MA.

Expression of S-100 protein in renal cell neoplasms. *Hum Pathol* 2006; Apr;37(4): p462-70. Lin F; Yang W; Betten M; Teh BT; Yang XJ.

Diagnostic value of cytokeratin 7, CD10 and mesothelin in distinguishing ovarian clear cell carcinoma from metastasis of renal clear cell carcinoma. *Histopathology* 2007; Dec;51(6): p874-6. Leroy X; Farine MO; Buob D; Wacrenier A; Copin MC.

## Case No. 6, Accession No. 31162

February 2011

Alameda (Alameda County Medical Center) - B-cell lymphoma  
Arcadia (ABC Laboratories) - Small lymphocytic lymphoma  
Fontana (Kaiser Foundation Hospital) - B-cell lymphoma  
Hayward- Fremont (St. Rose Hospital) - ML, lymphoplasmacytic type  
Long Beach (Long Beach VA) - Lymphoma, mantle cell (8)  
Oxnard (St. John's Regional Medical Center) - Lymphoma (2)  
Sacramento (UC Davis Medical Center) - Mantle cell lymphoma  
San Diego (Naval Medical Center) - Mantle cell lymphoma  
Santa Barbara (Miramonte Laboratories) - B-cell lymphoma  
Woodland Hills (Kaiser Permanente) - Mantle cell lymphoma  
Arkansas (Associated Pathologists Laboratory) - Mantle cell lymphoma  
Colorado (McKee Medical Center) - Mantle cell lymphoma  
Florida (Gastro Enterology of Ocalo) - B-cell small lymphocytic lymphoma  
Florida (Naples Pathology Associates) - B-cell lymphoma  
Florida (Munroe Regional Medical Center) - Non-Hodgkins lymphoma, marginal zone  
Florida (The Pathology Group of NW Florida) - Marginal zone lymphoma  
Georgia, Atlanta - Non-Hodgkin lymphoma, favor MALT lymphoma  
Georgia (Emory University) - Small B-cell lymphoma, favor mantle zone lymphoma  
Illinois, Chicago - Diffuse large B-cell lymphoma  
Illinois (Heartland Regional Medical Center) - Malignant lymphoma, B-cell favor MALT lymphoma  
Illinois (Loyola University of Chicago) - Mantle cell lymphoma  
Illinois, Orland Park - Diffuse large B-cell lymphoma  
Maryland (University of Maryland Residents) - Mantle cell lymphoma  
Massachusetts (BWH-Pathology) - MALT lymphoma  
Massachusetts, Peabody - B-cell lymphoma, kidney  
Massachusetts (University of Massachusetts Medical Center Residents) - Mantle cell lymphoma  
Michigan, Caledonia - Malignant B-cell lymphoma, marginal zone type  
Michigan (Pathology Consultants of Port Huron) - Mantle cell lymphoma  
Minnesota (Fairview Ridges Hospital) - B-cell lymphoma  
Missouri (Missouri Delta Medical Center) - Well-differentiated lymphocytic lymphoma

Missouri (St. Luke's Hospital) - Small B cell lymphoma, probably mantle cell lymphoma (1); Lymphoma, well-differentiated lymphocytic (B-cell) (1); CD5 negative, Mantle cell lymphoma (1)  
Nebraska (Creighton University Medical Center) - Mantle cell lymphoma  
New York (Buffalo General Hospital Residents) - Mantle cell lymphoma  
New York (Erie County Medical Center) - Small B cell lymphoma (marginal zone variant of mantle cell)  
New York (Staten Island University Hospital) - MALT lymphoma, low grade  
New York (SUNY Downstate Medical Center Residents) - Mantle cell lymphoma  
New York (SUNY Stony Brook) - CD5 negative Mantle cell lymphoma  
New York (Westchester Medical Center) - Mantle cell lymphoma  
Ohio, Columbus - B-cell lymphoma, favor mantle cell  
Ohio, Union Town - Malignant lymphoma, B-cell type, MALT  
Ohio (University of Toledo Medical Center Residents) - Mantle cell lymphoma of kidney  
Pennsylvania (Conemaugh Valley Memorial Hospital) - Mantle cell lymphoma  
Puerto Rico (University of Puerto Rico) - Mantle cell lymphoma  
Texas (Carl R. Darnall Army Medical Center) - Mantle cell lymphoma  
Texas, Crystal Beach - Non-Hodgkins lymphoma, mature lymphocytic B-cell type  
Texas, Houston - B-cell lymphoma, CLL  
Texas, Lubbock - Mantle cell lymphoma  
Virginia (Falls Church) - B-cell lymphoma  
Washington (Seattle VAMC) - Malignant lymphoma, small lymphocytic lymph mantle cell  
West Virginia (Greenbrier Valley Medical Center) - B-cell lymphoma  
Wisconsin (Medical Assessment and Consultation) - Malignant lymphoma, B-cell non-Hodgkin; suggestive of mantle cell lymphoma  
Australia (Royal Hobart Hospital) - Renal infiltration by NHL (marginal zone lymphoma)  
Australia (Royal Prince Alfred Hospital) - B-cell Hodgkin lymphoma favor extranodal marginal zone lymphoma  
Canada (Pasqua Hospital) - Mantle cell lymphoma  
Canada (Saint-Antoine/Richeneu) - Low grade B-cell lymphoma (lymphoplasmacytic)  
Canada (University of Sherbrooke) - Non-Hodgkin B-cell lymphoma  
England (John Radcliffe Hospital) - Mantle cell lymphoma  
Ireland (Kerry General Hospital) - Chronic lymphocytic lymphoma/leukemia  
Ireland (University Hospital Galway) - Mantle cell lymphoma  
Japan (Aichi Medical University) - Mantle cell lymphoma  
Japan (Lions Mansion Najyo-Ekimae) - Malignant lymphoma, right kidney  
Japan (Setagaya-Ku) - Malignant lymphoma  
Japan (Asahi General Hospital) - Small lymphocytic lymphoma  
Japan (Naval Medical Department of Pathology) - B-cell lymphoma  
Oman (Khoulia Hospital) - Marginal zone lymphoma  
Singapore (Singapore General Hospital) - Mantle cell lymphoma

#### **Case 6 - Diagnosis:**

Mantle cell lymphoma, kidney  
 T-71000, M-95903

Outside consultation: (Genzyme): "Mantle cell lymphoma, kidney"

#### **Case 6 - References:**

Acute renal failure due to mantle cell lymphoma--a case report and discussion of the literature. *Clin Nephrol* 2007; Jun;67(6): p394-6. Davies J; Healey DA; Wood KM; Jones K; Kanagasundaram NS.

Immunophenotypic variations in mantle cell lymphoma. *Am J Clin Pathol* 2009; Nov;132(5): p699-706. Gao J; Peterson L; Nelson B; Goolsby C; Chen YH.

Marginal zone variant of mantle cell lymphoma: CD5-negative cyclin D1-positive variant posing a diagnostic dilemma. *Pathol Int* 2009; May;59(5): p317-21. Golardi N; Velasco MR; Elghetany MT.

Instances of mantle cell lymphoma morphologically mimicking other subtypes of B-cell lymphoid proliferation. *South Med J* 2009; Apr;102(4): p369-73 Schuetz MJ; Zafar N; Vasef MA.

MALT lymphoma involving the kidney: a report of 10 cases and review of the literature. *Am J Clin Pathol* 2007; Sep;128(3): p464-73. Garcia M; Konoplev S; Morosan C; Abruzzo LV; Bueso-Ramos CE; Medeiros LJ.

**Case No. 7, Accession No. 31222**

**February 2011**

Alameda (Alameda County Medical Center) - Seminoma  
Arcadia (ABC Laboratories) - Seminoma  
Fontana (Kaiser Foundation Hospital) - Seminoma  
Hayward- Fremont (St. Rose Hospital) - Seminoma  
Long Beach (Long Beach VA) - Classic seminoma (8)  
Oxnard (St. John's Regional Medical Center) - Seminoma (2)  
Sacramento (UC Davis Medical Center) - Seminoma  
San Diego (Naval Medical Center) - Seminoma with atypia  
Santa Barbara (Miramonte Laboratories) - Seminoma  
Woodland Hills (Kaiser Permanente) - Seminoma  
Arkansas (Associated Pathologists Laboratory) - Embryonal carcinoma  
Colorado (McKee Medical Center) - Seminoma  
Florida (Gastro Enterology of Ocalo) - Seminoma (classic)  
Florida (Naples Pathology Associates) - Seminoma  
Florida (Munroe Regional Medical Center) - Seminoma  
Florida (The Pathology Group of NW Florida) - Seminoma  
Georgia, Atlanta - Seminoma  
Georgia (Emory University) - Seminoma  
Illinois, Chicago - Classical seminoma  
Illinois (Heartland Regional Medical Center) - Classic seminoma  
Illinois (Loyola University of Chicago) - Seminoma  
Illinois, Orland Park - Classical seminoma  
Maryland (University of Maryland Residents) - Seminoma  
Massachusetts (BWH-Pathology) - Anaplastic seminoma  
Massachusetts, Peabody - Seminoma, testis  
Massachusetts (University of Massachusetts Medical Center Residents) - Seminoma  
Michigan, Caledonia - Seminoma  
Michigan (Pathology Consultants of Port Huron) - Seminoma  
Minnesota (Fairview Ridges Hospital) - Classic seminoma, ITGCN-U  
Missouri (Missouri Delta Medical Center) - Embryonal carcinoma  
Missouri (St. Luke's Hospital) - Embryonal carcinoma (1); Seminoma (2)  
Nebraska (Creighton University Medical Center) - Seminoma  
New York (Buffalo General Hospital Residents) - Seminoma  
New York (Erie County Medical Center) - Seminoma  
New York (Staten Island University Hospital) - Seminoma  
New York (SUNY Downstate Medical Center Residents) - Classic seminoma  
New York (SUNY Stony Brook) - Seminoma, classic type and intratubular seminoma  
New York (Westchester Medical Center) - Seminoma with ITGCN  
Ohio, Columbus - Seminoma  
Ohio, Union Town - Seminoma  
Ohio (University of Toledo Medical Center Residents) - Seminoma of testis  
Pennsylvania (Conemaugh Valley Memorial Hospital) - Seminoma, classical  
Puerto Rico (University of Puerto Rico) - Seminoma, classic  
Texas (Carl R. Darnall Army Medical Center) - Seminoma  
Texas, Crystal Beach - Spermatocytic seminoma  
Texas, Houston - Classic seminoma  
Texas, Lubbock - Seminoma

Virginia (Falls Church) - Seminoma  
Washington (Seattle VAMC) - Seminoma  
West Virginia (Greenbrier Valley Medical Center) - Spermatocytic seminoma  
Wisconsin (Medical Assessment and Consultation) - Seminoma  
Australia (Royal Hobart Hospital) - Seminoma testis  
Australia (Royal Prince Alfred Hospital) - B-cell Hodgkin lymphoma favor extranodal marginal zone lymphoma  
Canada (Pasqua Hospital) - Seminoma  
Canada (Saint-Antoine/Richeneu) - Seminoma  
Canada (University of Sherbrooke) - Embryonal carcinoma  
England (John Radcliffe Hospital) - Seminoma  
Ireland (Kerry General Hospital) - Classical seminoma  
Ireland (University Hospital Galway) - Seminoma  
Japan (Aichi Medical University) - Anaplastic seminoma  
Japan (Lions Mansion Najyo-Ekimae) - Seminoma, left testis  
Japan (Setagaya-Ku) - Seminoma  
Japan (Asahi General Hospital) - Seminoma  
Japan (Naval Medical Department of Pathology) - Seminoma  
Oman (Khoulia Hospital) - Seminoma with high mitotic rate (atypical seminoma)  
Singapore (Singapore General Hospital) - Seminoma

#### **Case 7 - Diagnosis:**

Seminoma, testis  
 T-78000, M-90613

#### **Case 7 - References:**

Cytologic diagnosis of metastatic seminoma to the prostate and urinary bladder: a case report. *Diagn Cytopathol* 2008; Oct;36(10): p734-8. Alsharif M; Aslan DL; Jessurun J; Gulbahce HE; Pambuccian SE.

The most common, clinically significant misdiagnoses in testicular tumor pathology, and how to avoid them. *Adv Anat Pathol* 2008; Jan;15(1): p18-27. Ulbright TM.

A rare case of classic testicular seminoma in an 86-year-old shows similar proliferation rate as in younger men. *Urology* 2007; Nov;70(5): p1007.e7-9. Foell K; Martens M; Izawa JJ.

Long-term outcome of stage I seminoma. *Am J Clin Oncol* 2007; Apr;30(2): p205-10. Yang GY; Li B; Wagner TD; Donohue KA; Flaherty L; Kuettel MR.

Evolving concepts in stage I seminoma. *BJU Int* 2009; Nov;104(9 Pt B): p1357-61. Warde P; Gospodarowicz M.

#### **Case No. 8, Accession No. 31230**

**February 2011**

Alameda (Alameda County Medical Center) - Urothelial carcinoma, invasive  
Arcadia (ABC Laboratories) - High grade urothelial carcinoma  
Fontana (Kaiser Foundation Hospital) - Transitional cell carcinoma  
Hayward- Fremont (St. Rose Hospital) - High grade transitional cell carcinoma with mucinous metaplasia  
Long Beach (Long Beach VA) - Transitional cell carcinoma, high grade (8)  
Oxnard (St. John's Regional Medical Center) - Adenocarcinoma (1); Mixed transitional cell carcinoma/adenocarcinoma (1)  
Sacramento (UC Davis Medical Center) - High grade urothelial carcinoma  
San Diego (Naval Medical Center) - High grade invasive urothelial carcinoma  
Santa Barbara (Miramonte Laboratories) - High grade transitional cell carcinoma  
Woodland Hills (Kaiser Permanente) - High grade invasive urothelial with signet ring cell features  
Arkansas (Associated Pathologists Laboratory) - Urothelial carcinoma with glandular differentiation  
Colorado (McKee Medical Center) - High grade invasive urothelial carcinoma  
Florida (Gastro Enterology of Ocala) - Urothelial carcinoma, high grade, invasive

Florida (Naples Pathology Associates) - Urothelial cell carcinoma, high grade  
Florida (Munroe Regional Medical Center) - Papillary urothelial carcinoma, with invasion  
Florida (The Pathology Group of NW Florida) - Nested variant of urothelial carcinoma with goblet cell metaplasia  
Georgia, Atlanta - Invasive urothelial carcinoma with nested growth pattern  
Georgia (Emory University) - Invasive urothelial carcinoma with glandular differentiation  
Illinois, Chicago - Urothelial carcinoma  
Illinois (Heartland Regional Medical Center) - High grade urothelial carcinoma  
Illinois (Loyola University of Chicago) - Urothelial carcinoma  
Illinois, Orland Park - Urothelial carcinoma  
Maryland (University of Maryland Residents) - Invasive high grade urothelial cell carcinoma with glandular features  
Massachusetts (BWH-Pathology) - Invasive urothelial carcinoma with glandular differentiation  
Massachusetts, Peabody - Transitional cell carcinoma, bladder  
Massachusetts (University of Massachusetts Medical Center Residents) - Urothelial cell carcinoma  
Michigan, Caledonia - Adenocarcinoma of urinary bladder with flat urothelial carcinoma-in-situ  
Michigan (Pathology Consultants of Port Huron) - Transitional cell carcinoma, grade III  
Minnesota (Fairview Ridges Hospital) - Urothelial carcinoma, high grade, with glandular signet ring cell differentiation  
Missouri (Missouri Delta Medical Center) - Infiltrating urothelial carcinoma  
Missouri (St. Luke's Hospital) - Transitional cell carcinoma, high grade (1); Urothelial carcinoma, high grade (1); Papillary urothelial carcinoma with glandular differentiation (1)  
Nebraska (Creighton University Medical Center) - Invasive urothelial carcinoma with glandular differential  
New York (Buffalo General Hospital Residents) - High grade urothelial carcinoma  
New York (Erie County Medical Center) - Invasive urothelial carcinoma with focal glandular features  
New York (Staten Island University Hospital) - Adenocarcinoma of bladder  
New York (SUNY Downstate Medical Center Residents) - High grade urothelial carcinoma with glandular differentiation  
New York (SUNY Stony Brook) - Signet ring cell carcinoma of the bladder  
New York (Westchester Medical Center) - Invasive urothelial carcinoma with glandular differentiation  
Ohio, Columbus - High grade invasive urothelial carcinoma  
Ohio, Union Town - Urothelial carcinoma with glandular differentiation  
Ohio (University of Toledo Medical Center Residents) - High grade invasive urothelial carcinoma with signet ring feature of bladder  
Pennsylvania (Conemaugh Valley Memorial Hospital) - Invasive high grade urothelial carcinoma  
Puerto Rico (University of Puerto Rico) - Infiltrating urothelial carcinoma with glandular differentiation  
Texas (Carl R. Darnall Army Medical Center) - Transitional cell carcinoma  
Texas, Crystal Beach - Transitional cell carcinoma  
Texas, Houston - Invasive high grade transitional cell carcinoma  
Texas, Lubbock - High grade papillary urothelial carcinoma  
Virginia (Falls Church) - Urothelial carcinoma, nested variant  
Washington (Seattle VAMC) - Urothelial carcinoma with serous cell prod  
West Virginia (Greenbrier Valley Medical Center) - Urothelial carcinoma  
Wisconsin (Medical Assessment and Consultation) - Invasive urothelial carcinoma with focal glandular differentiation  
Australia (Royal Hobart Hospital) - High grade urothelial carcinoma with glandular differentiation  
Australia (Royal Prince Alfred Hospital) - Invasive urothelial carcinoma  
Canada (Pasqua Hospital) - Invasive urothelial carcinoma with glandular differentiation  
Canada (Saint-Antoine/Richeneu) - Infiltrating urothelial carcinoma nested variant  
Canada (University of Sherbrooke) - Invasive urothelial carcinoma with glandular differentiation  
England (John Radcliffe Hospital) - Transitional cell carcinoma with glandular differentiation  
Ireland (Kerry General Hospital) - Transitional cell carcinoma  
Ireland (University Hospital Galway) - Urothelial carcinoma, with mucinous and possible neuroendocrine differentiation  
Japan (Aichi Medical University) - Invasive urothelial carcinoma  
Japan (Lions Mansion Najyo-Ekimae) - Urothelial carcinoma, urinary bladder  
Japan (Setagaya-Ku) - Transitional cell carcinoma  
Japan (Asahi General Hospital) - Nested variant of urothelial carcinoma  
Japan (Naval Medical Department of Pathology) - Invasive urothelial carcinoma  
Oman (Khoula Hospital) - Infiltrating urothelial carcinoma with glandular differentiation

Singapore (Singapore General Hospital) - Infiltrating urothelial carcinoma, high grade

**Case 8 - Diagnosis:**

High grade urothelial carcinoma with focal glandular features, bladder  
T-74000, M-81203

**Case 8 - References:**

Divergent differentiation in urothelial carcinoma and other bladder cancer subtypes with selected mimics. *Histopathology* 2009; Jun;54(7): p885-900. JH; Iczkowski KA.

Coexistent intraurothelial carcinoma and muscle-invasive urothelial carcinoma of the bladder: clonality and somatic down-regulation of DNA mismatch repair. *Hum Pathol* 2009; Jul;40(7): p988-97. Blanes A; Rubio J; Sanchez-Carrillo JJ; Diaz-Cano SJ.

Fascin determination in urothelial carcinomas of the urinary bladder: a marker of invasiveness. *Arch Pathol Lab Med* 2008; Dec;132(12): p1912-5. Karasavvidou F; Barbanis S; Pappa D; Moutzouris G; Tzortzis V; Melekos MD; Koukoulis G.

The many faces of urothelial carcinoma: an update with an emphasis on recently described variants. *Adv Anat Pathol* 2008; Jul;15(4): p218-33. Nigwekar P; Amin MB.

Histologic variants of infiltrating urothelial carcinoma. *Arch Pathol Lab Med* 2007; Aug;131(8): p1244-56. Zhai QJ; Black J; Ayala AG; Ro JY.

Urothelial carcinoma of the renal pelvis with rhabdoid features. *Pathol Int* 2009; May;59(5): p322-5. Fukumura Y; Fujii H; Mitani K; Sakamoto Y; Matsumoto T; Suda K; Yao T.

**Case No. 9, Accession No. 31295**

**February 2011**

Alameda (Alameda County Medical Center) - Cystic nephroma  
Arcadia (ABC Laboratories) - Polycystic kidney  
Fontana (Kaiser Foundation Hospital) - Renal cell carcinoma  
Hayward- Fremont (St. Rose Hospital) - Multiloculated cyst (cystic nephroma)  
Long Beach (Long Beach VA) - Cystic nephroma (8)  
Oxnard (St. John's Regional Medical Center) - Cystic renal cell carcinoma (2)  
Sacramento (UC Davis Medical Center) - Cystic nephroma  
San Diego (Naval Medical Center) - Cystic nephroma  
Santa Barbara (Miramonte Laboratories) - Multilocular cystic renal cell carcinoma  
Woodland Hills (Kaiser Permanente) - Multilocular cyst (cystic nephroma)  
Arkansas (Associated Pathologists Laboratory) - Multilocular cyst (cystic nephroma)  
Colorado (McKee Medical Center) - Multicystic nephroma  
Florida (Gastro Enterology of Ocala) - Cystic nephroma  
Florida (Naples Pathology Associates) - Cystic nephroma  
Florida (Munroe Regional Medical Center) - Cystic nephroma  
Florida (The Pathology Group of NW Florida) - Multicystic nephroma  
Georgia, Atlanta - Cystic nephroma  
Georgia (Emory University) - Cystic nephroma  
Illinois, Chicago - Cystic nephroma  
Illinois (Heartland Regional Medical Center) - Multilocular renal cyst  
Illinois (Loyola University of Chicago) - Mixed epithelial and stromal tumor of kidney  
Illinois, Orland Park - Cystic nephroma  
Maryland (University of Maryland Residents) - Cystic nephroma  
Massachusetts (BWH-Pathology) - Multilocular cystic renal cell carcinoma  
Massachusetts, Peabody - Multilocular cystic renal cell carcinoma



Massachusetts (University of Massachusetts Medical Center Residents) - Multilocular cystic renal cell carcinoma  
Michigan, Caledonia - Cystic renal cell carcinoma  
Michigan (Pathology Consultants of Port Huron) - Cystic nephroma  
Minnesota (Fairview Ridges Hospital) - Mixed epithelial-stromal tumor of the kidney  
Missouri (Missouri Delta Medical Center) - Renal lymphangioma  
Missouri (St. Luke's Hospital) - Cystic hamartoma (1); Multicystic nephroma (1); Cystic nephroma (multilocular cyst) (1)  
Nebraska (Creighton University Medical Center) - Cystic nephroma  
New York (Buffalo General Hospital Residents) - Cystic nephroma  
New York (Erie County Medical Center) - Cystic nephroma  
New York (Staten Island University Hospital) - Cystic nephroma  
New York (SUNY Downstate Medical Center Residents) - Cystic nephroma  
New York (SUNY Stony Brook) - Cystic nephroma  
New York (Westchester Medical Center) - Cystic nephroma  
Ohio, Columbus - Cystic nephroma  
Ohio, Union Town - Tubulocystic carcinoma of kidney  
Ohio (University of Toledo Medical Center Residents) - Cystic nephroma  
Pennsylvania (Conemaugh Valley Memorial Hospital) - Cystic nephroma  
Puerto Rico (University of Puerto Rico) - Cystic nephroma  
Texas (Carl R. Darnall Army Medical Center) - Cystic nephroma  
Texas, Crystal Beach - Cystic nephroma  
Texas, Houston - Renal carcinoma, collecting duct type  
Texas, Lubbock - Multilocular cyst  
Virginia (Falls Church) - Cystic nephroma  
Washington (Seattle VAMC) - Multicystic lesion/cystadenoma  
West Virginia (Greenbrier Valley Medical Center) - Polycystic kidney  
Wisconsin (Medical Assessment and Consultation) - Cystic nephroma  
Australia (Royal Hobart Hospital) - Cystic nephroma  
Australia (Royal Prince Alfred Hospital) - Multilocular cystic nephroma  
Canada (Pasqua Hospital) - Cystic nephroma  
Canada (Saint-Antoine/Richeneu) - Mixed epithelial and stromal tumor (MEST)  
Canada (University of Sherbrooke) - Mixed epithelial and stromal tumor  
England (John Radcliffe Hospital) - Cystic nephroma  
Ireland (Kerry General Hospital) - Multilocular cystic renal clear cell carcinoma  
Ireland (University Hospital Galway) - Multicystic nephroma  
Japan (Aichi Medical University) - Multilocular cystic renal cell carcinoma  
Japan (Lions Mansion Najyo-Ekimae) - Cystic nephroma, left kidney  
Japan (Setagaya-Ku) - Cystic renal cell carcinoma  
Japan (Asahi General Hospital) - Cystic nephroma  
Japan (Naval Medical Department of Pathology) - Cystic nephroma  
Oman (Khoulia Hospital) - Cystic nephroma  
Singapore (Singapore General Hospital) - Cystic nephroma

#### **Case 9 - Diagnosis:**

Cystic nephroma, kidney  
 T-71000, M-89601

#### **Case 9 - References:**

Cystic nephroma (multilocular cyst) and mixed epithelial and stromal tumor of the kidney: a spectrum of the same entity? *Ann Diagn Pathol* 2006; Apr;10(2): p77-82. Jevremovic D; Lager DJ; Lewin M.

Renal cystic diseases: a review. *Adv Anat Pathol* 2006; Jan;13(1): p26-56. Bisceglia M; Galliani CA; Senger C; Stallone C; Sessa A.

Cystic nephroma and mixed epithelial and stromal tumor of kidney: a detailed clinicopathologic analysis of 34 cases and proposal for renal epithelial and stromal tumor (REST) as a unifying term. *Am J Surg Pathol* 2007;

Apr;31(4): p489-500 Turbinder J; Amin MB; Humphrey PA; Srigley JR; De Leval L; Radhakrishnan A; Oliva E.

Cytology of cystic nephroma: a case report. *Acta Cytol* 2008; Jan-Feb;52(1): p91-3. Chen KT.

Mixed epithelial and stromal tumor of the kidney and cystic nephroma share overlapping features: reappraisal of 15 lesions. *Arch Pathol Lab Med* 2006; Jan;130(1): p80-5. Antic T; Perry KT; Harrison K; Zaytsev P; Pins M; Campbell SC; Picken..

## Case No. 10, Accession No. 21445

February 2011

Alameda (Alameda County Medical Center) - Sarcoma, favor leiomyosarcoma

Arcadia (ABC Laboratories) - Xanthogranulomatous pyelonephritis

Fontana (Kaiser Foundation Hospital) - Sarcoma

Hayward-Fremont (St. Rose Hospital) - Liposarcoma

Long Beach (Long Beach VA) - Pecoma (8)

Oxnard (St. John's Regional Medical Center) - Sarcoma, vs. metastasizing leiomyoma (1); Pecoma DDx: epithelioid leiomyosarcoma (1)

Sacramento (UC Davis Medical Center) - Epithelioid leiomyoma

San Diego (Naval Medical Center) - Perivascular epithelioid cell tumor

Santa Barbara (Miramonte Laboratories) - Leiomyoma

Woodland Hills (Kaiser Permanente) - Malignant granular cell tumor

Arkansas (Associated Pathologists Laboratory) - Recurrent leiomyoma

Colorado (McKee Medical Center) - Leiomyoma

Florida (Gastro Enterology of Ocala) - Liposarcoma, dedifferentiated

Florida (Naples Pathology Associates) - Leiomyosarcoma

Florida (Munroe Regional Medical Center) - STUMP

Florida (The Pathology Group of NW Florida) - Malignant, sarcomatoid renal cell carcinoma vs. sarcoma

Georgia, Atlanta - Spindle cell lesion, favor sarcoma

Georgia (Emory University) - Perivascular epithelioid cell tumor (Pecoma)

Illinois, Chicago - Leiomyosarcoma

Illinois (Heartland Regional Medical Center) - Spindle cell stromal tumor

Illinois (Loyola University of Chicago) - Malignant spindle cell neoplasm

Illinois, Orland Park - Leiomyosarcoma

Maryland (University of Maryland Residents) - Spindle cell neoplasm, see note: Provided immunostains are insuff for definitive diagnosis. DDx includes spindle cell/sarcomatoid carcinoma vs. sarcoma/primary vs. metastatic

Massachusetts (BWH-Pathology) - Sarcomatoid carcinoma

Massachusetts, Peabody - Leiomyosarcoma

Massachusetts (University of Massachusetts Medical Center Residents) - Pecoma (perivascular epithelioid cell tumor)

Michigan, Caledonia - Sarcomatoid carcinoma

Michigan (Pathology Consultants of Port Huron) - Epithelioid leiomyosarcoma, low grade

Minnesota (Fairview Ridges Hospital) - Malignant fibrous histiocytoma vs. malignant granular cell tumor

Missouri (Missouri Delta Medical Center) - Leiomyoma

Missouri (St. Luke's Hospital) - Epithelioid sarcoma (1); Sarcoma (clear cell) (1); Synovial sarcoma (1)

Nebraska (Creighton University Medical Center) - Epithelioid Pecoma

New York (Buffalo General Hospital Residents) - Hemangiopericytoma

New York (Erie County Medical Center) - Sarcoma, NOS (rule out liposarcoma)

New York (Staten Island University Hospital) - Periurethral leiomyoma

New York (SUNY Downstate Medical Center Residents) - Pecoma, epithelioid GIST

New York (SUNY Stony Brook) - Pecoma

New York (Westchester Medical Center) - Leiomyosarcoma, vs. atypical leiomyoma

Ohio, Columbus - Rhabdomyosarcoma

Ohio, Union Town - Leiomyosarcoma

Ohio (University of Toledo Medical Center Residents) - Pecomas of peritoneum

Pennsylvania (Conemaugh Valley Memorial Hospital) - Epithelioid leiomyosarcoma  
Puerto Rico (University of Puerto Rico) - Pecoma/Leydig cell tumor  
Texas (Carl R. Darnall Army Medical Center) - Inflammatory pseudotumor  
Texas, Crystal Beach - Leiomyosarcomatous lesion  
Texas, Houston - Sarcomatoid carcinoma  
Texas, Lubbock - Leiomyosarcoma  
Virginia (Falls Church) - Solitary fibrous tumor  
Washington (Seattle VAMC) - Stromal cell tumor  
West Virginia (Greenbrier Valley Medical Center) - Histiocytic granular cell proliferation (Malakoplakia)  
Wisconsin (Medical Assessment and Consultation) - Probable histiocytic infiltrate, rule out granular cell reaction to previous surgery. Need additional data, especially CD-68  
Australia (Royal Hobart Hospital) - Perivascular epithelioid cell tumor (Pecoma)  
Australia (Royal Prince Alfred Hospital) - Epithelioid leiomyoma rule out angiomylipoma with scant fat  
Canada (Pasqua Hospital) - Granular cell tumor  
Canada (Saint-Antoine/Richeneu) - Granular lesion  
Canada (University of Sherbrooke) - Epithelioid leiomyoma  
England (John Radcliffe Hospital) - Extrarenal rhabdoid tumor  
Ireland (Kerry General Hospital) - Leiomyosarcoma  
Ireland (University Hospital Galway) - Pecoma  
Japan (Aichi Medical University) - Granular cell reaction  
Japan (Lions Mansion Najyo-Ekimae) - Pecoma, periurethral region  
Japan (Setagaya-Ku) - Solitary fibrous tumor  
Japan (Asahi General Hospital) - Lymphangioma  
Japan (Naval Medical Department of Pathology) - Extraintestinal GIST  
Singapore (Singapore General Hospital) - Angiomylipoma

#### **Case 10 - Diagnosis:**

Spindle cell neoplasm, probably sarcoma, bladder  
 T-74000, M-88003

#### **Case 10 - References:**

Spindle cell lesions of the bladder and urinary tract. *Histopathology* 2009; Nov;55(5): p491-504. Shanks JH; Iczkowski KA.

Pseudosarcomatous myofibroblastic proliferations of the bladder: a clinicopathologic study of 42 cases. *Am J Surg Pathol* 2006; Jul;30(7): p787-94. Harik LR; Merino C; Coindre JM; Amin MB; Pedeutour F; Weiss SW.

An approach to the classification of spindle cell proliferations in the urinary bladder. *Adv Anat Pathol* 2005; Nov;12(6): p312-23. McKenney JK.

Soft tissue tumors of the urinary bladder, Part I: myofibroblastic proliferations, benign neoplasms, and tumors of uncertain malignant potential. *Hum Pathol* 2007; Jun;38(6): p807-23. Lott S; Lopez-Beltran A; MacLennan GT; Montironi R; Cheng L.

Extragastrintestinal stromal tumor of the urinary wall bladder: case report and review of the literature. *Pathologica* 2008; Jun;100(3): p173-5. Mekni A; Chelly I; Azzouz H; Ben Ghorbel I; Bellil S; Haouet S; Kchir N; Zitouna M; Bellil K.