



CALIFORNIA
TUMOR TISSUE REGISTRY

“Tumors of the Breast”

Minutes – Subscription B

September, 2005



SUGGESTED READING (General Topics from Recent Literature):

Revision Of Breast Cancer Staging: The Sixth Edition Of The TNM Classification. Singletary SE, Greene FL, Breast Task Force. *Semin Surg Oncol*, 2003; 21(1):53-9.

Congenital Melanocytic Nevi: Clinical And Histopathological Features, Risk Of Melanoma, And Clinical Management. Tannous ZS, Mihm MC, Sober AJ, Duncan LM. *J Am Acad Dermatol*, 2005 Feb; 52(2):197-203.

Breast Cancer Metastasis. When, Where, How? Eccles SA, Paon L. *The Lancet*, 2005 Mar 19; 365:1006-7.

Statistical Errors In Immunologic Research. Murphy JR. *J Allergy Clin Immunol*, 2004 Dec; 114(6):1259-64.

Stem Cells, Cloning And Regulation. Guenin LM. *Mayo Clin Proc*, 2005 Feb; 80(2):241-50.

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FILE DIAGNOSES

(Preferably submitted on website at www.cttr.org. Click “subscriptions”, then “submit answers.”)

CTTR Subscription B

September 2005

Case 1:

**Juvenile fibroadenoma with microglandular adenosis, breast
T-04010, M-9030/0**

Case 2:

**Leiomyoma, breast
T-04010, M-8890/0**

Case 3:

**Collagenous fibroma, breast
T-04010, M-8810/0**

Case 4:

**Sclerosing adenosis, breast
T-04010, M-74220**

Case 5:

**Low grade phyllodes tumor
T-04010, M-9020/1**

Case 6:

**High grade sarcoma with myogenous differentiation (“leiomyosarcoma”), breast
T-04010, M-8890/3**

Case 7:

**Myxoid malignant fibrous histiocytoma (“myxofibrosarcoma”), breast
T-04010, M-8830/3**

Case 8:

**Basaloid adenoid cystic carcinoma, breast
T-04010, M-8200/3**

Case 9:

**Myofibroblastoma, breast
T-04010, M-76100**

Case 10:

**Diffuse large B-cell lymphoma, breast
T-04010, M-95903**

Escondido - Cellular (juvenile) fibroadenoma
Loma Linda (LLUMC Residents) - Microglandular adenosis with atypia
Palo Alto Pathology - Adenomyoepithelioma
Arizona, Phoenix - Fibroadenomatoid mastopathy (sclerosing lobular hyperplasia)
Arkansas (University of Arkansas Medical Center) - Lymphangioma, breast
Florida (Winter Haven Hospital) - Tubular adenosis
Georgia, Decatur - Juvenile fibroadenoma
Illinois (Heartland Regional Medical Center) - Fibrocystic changes with marked sclerosing adenosis with atypia
Kansas (Coffeyville Regional Medical Center) - Fibroadenoma with lactating adenosis
Kentucky (University of Louisville Hospital) - Juvenile fibroadenoma
Maryland (Johns Hopkins Medical Institute) - Juvenile fibroadenoma
Maryland (National Naval Medical Center) - Juvenile fibroadenoma
Massachusetts (UMass Memorial Health Care) - Adenomyoepithelioma
Michigan (St. Joseph Mercy Hospital) - Juvenile fibroadenoma
New York (Nassau University Medical Center) - Tubular adenoma
New York (Stony Brook University Hospital Residents) - Adenomyoepithelioma
New York (SUNY Downstate Medical Center) - Adenomyoepitheliomatosis
New York (Westchester Medical Center) - Adenosis
North Carolina (Womack Army Medical Center) - Juvenile fibroadenoma (5)
Ohio (MCO Pathology) - Juvenile papillomatosis
Pennsylvania (Conemaugh Memorial Medical Center) - Microglandular adenosis
Pennsylvania (Drexel University College of Medicine) - Adenomyoepithelioma
Tennessee (Duckworth Pathology Group) - Juvenile fibroadenoma
Texas (Scott & White Memorial Hospital) - Juvenile fibroadenoma
Texas (Wilford Hall Medical Center Residents) - Tubular adenoma
Texas, Crystal Beach - Lactating adenoma
Texas, Houston - Juvenile fibroadenoma
Texas, Lubbock - Adenomyoepithelioma
Texas, San Antonio - Juvenile fibroadenoma
Texas, Sugarland - Tubular adenoma
Washington (Wash 49) - Sclerosing lobular hyperplasia (1); Juvenile fibroadenoma (1)
West Virginia (Wetzel County Hospital) - Juvenile papillomatosis
Wisconsin (Marshfield Clinic) - Adenomyoepithelioma
Australia (Sullivan-Nicolaidis Pathology) - Tubular adenoma
China (Sir Run Run Shaw Hospital) - Juvenile fibroadenoma
Japan (Gunma University Hospital) - Fibroadenoma
Japan (Hamamatsu University School of Medicine) - Adenosis with duct hyperplasia
Japan, Chiba - Fibroadenoma, right breast
Puerto Rico (University of Puerto Rico) - Sclerosing adenosis
Qatar (Hamad Medical Corporation) - Adenomyoepithelioma
Spain (Povisa) - Adenosis with adenomyoepithelial hyperplasia
The Netherlands, Amstelveen - Breast in breast (hamartoma)
The Netherlands, Amsterdam - Florid adenosis

Case 1 - Diagnosis:

Juvenile fibroadenoma with microglandular adenosis, breast
T-04010, M-9030/0

Case 1 - References:

Devitt JE: Juvenile Giant Fibroadenoma Of The Breast. *Can J Surg*, 1974 Jul; 17(4):205-7.
 Fekete P, Petrek J, Majmudar B, et al: Fibroadenoma With Stromal Cellularity: A Clinicopathology Study Of 21 Patients. *Arch Pathol Lab Med*, 1987 May; 111(5):427-32.
 Krishnamurthy S, Ashfaq R, Shin HJ, Sneige N: Distinction Of Phyllodes Tumor From Fibroadenoma: A Reappraisal Of An Old Problem. *Cancer*, 2000 Dec 25; 90(6):342-9.
 Carstens PH: Ultrastructure Of Human Fibroadenoma. *Arch Pathol*, 1974 Jul; 98(1):23-32.
 Mechttersheimer G, Kruger KH, Born IA, Moller P: Antigenic Profile Of Mammary Fibroadenoma And Cystosarcoma Phyllodes. A Study Using Antibodies To Estrogen And Progesterone Receptors And To A Panel Of Cell Surface Molecules. *Pathol Res Pract*, 1990 Aug; 186(4):427-38.

Escondido - Leiomyoma
Loma Linda (LLUMC Residents) - Leiomyoma
Palo Alto Pathology - Angioleiomyoma
Arizona, Phoenix - Leiomyoma
Arkansas (University of Arkansas Medical Center) - Myofibroblastoma, breast
Florida (Winter Haven Hospital) - Nodular fasciitis
Georgia, Decatur - Myofibroblastoma
Illinois (Heartland Regional Medical Center) - Myofibroblastoma
Kansas (Coffeyville Regional Medical Center) - Cellular leiomyoma
Kentucky (University of Louisville Hospital) - Myofibroblastoma vs leiomyoma
Maryland (Johns Hopkins Medical Institute) - Myofibroblastoma/myoid hamartoma
Maryland (National Naval Medical Center) - Leiomyoma
Massachusetts (UMass Memorial Health Care) - Myofibroblastoma
Michigan (St. Joseph Mercy Hospital) - Leiomyoma
New York (Nassau University Medical Center) - Leiomyoma
New York (Stony Brook University Hospital Residents) - Myofibroblastoma
New York (SUNY Downstate Medical Center) - Myofibroblastoma
New York (Westchester Medical Center) - Leiomyoma
North Carolina (Womack Army Medical Center) - Leiomyoma (5)
Ohio (MCO Pathology) - Myofibroblastoma
Pennsylvania (Conemaugh Memorial Medical Center) - Leiomyoma
Pennsylvania (Drexel University College of Medicine) - Desmoid
Tennessee (Duckworth Pathology Group) - Leiomyoma
Texas (Scott & White Memorial Hospital) - Leiomyoma
Texas (Wilford Hall Medical Center Residents) - Leiomyoma
Texas, Crystal Beach - Fibrous tumor (fibroma vs solitary fibrous tumor)
Texas, Houston - Myofibroblastoma
Texas, Lubbock - Leiomyoma
Texas, San Antonio - Myofibroblastoma
Texas, Sugarland - Leiomyoma
Washington (Wash 49) - Spindle cell myoepithelioma (1); Myofibroblastoma (1)
West Virginia (Wetzel County Hospital) - Leiomyoma
Wisconsin (Marshfield Clinic) - Leiomyoma
Australia (Sullivan-Nicolaides Pathology) - Spindle cell tumor, ? myofibroblastoma
China (Sir Run Run Shaw Hospital) - Myofibroblastoma
Japan (Gunma University Hospital) - Solitary fibrous tumor
Japan (Hamamatsu University School of Medicine) - Myofibroblastoma
Japan, Chiba - Myoepithelioma, right breast
Puerto Rico (University of Puerto Rico) - Myofibroblastoma
Qatar (Hamad Medical Corporation) - Myofibroblastoma
Spain (Povisa) - Leiomyoma
The Netherlands, Amstelveen - Myofibroblastoma in male breast
The Netherlands, Amsterdam - Myofibroblastoma

Case 2 - Diagnosis:

Leiomyoma, breast

T-04010, M-8890/0

Case 2 - References:

Sidoni A, Luthy L, Bellezza G, et al: Leiomyoma Of The Breast: Case Report And Review Of The Literature. *Breast*, 1999 Oct; 8(5):289-90.
Alper M, Parlak AH, Kavak A, Aksoy KA: Bilateral Multiple Piloileiomyomas Of The Breast. *Breast*, 2004 Apr; 13(2):146-8.
Di Vita G, Barresi E, Raimondo D, Matranga S: Leiomyoma Of The Nipple. *Ann Ital Chir*, 2002 Jan-Feb; 73(1):81-3.
Kotsuma Y, Wakasa K, Yayoi E, et al: A Case Of Leiomyoma Of The Breast. *Breast Cancer*, 2001; 8(2):166-9. Review.

Escondido - Hamartoma
Loma Linda (LLUMC Residents) - Collagenous fibroma
Palo Alto Pathology - Fibromatosis vs. neural
Arizona, Phoenix - Angioleiomyoma with lobular hyperplasia
Arkansas (University of Arkansas Medical Center) - Mammary hamartoma
Florida (Winter Haven Hospital) - R/O diabetic mastopathy
Georgia, Decatur - Fibrous tumor
Illinois (Heartland Regional Medical Center) - Fibromatosis
Kansas (Coffeyville Regional Medical Center) - Fibromatosis
Kentucky (University of Louisville Hospital) - Pseudoangiomatous stromal hyperplasia vs fibrous tumor
Maryland (Johns Hopkins Medical Institute) - Pseudoangiomatous stromal hyperplasia
Maryland (National Naval Medical Center) - Fibromatosis
Massachusetts (UMass Memorial Health Care) - Fibromatosis
Michigan (St. Joseph Mercy Hospital) - Hamartoma
New York (Nassau University Medical Center) - Neurofibroma
New York (Stony Brook University Hospital Residents) - Angiofibroma
New York (SUNY Downstate Medical Center) - Fibromatosis
New York (Westchester Medical Center) - Fibrosis with PASH
North Carolina (Womack Army Medical Center) - Fibromatosis (5)
Ohio (MCO Pathology) - Collagenous fibroma
Pennsylvania (Conemaugh Memorial Medical Center) - Stromal fibrosis
Pennsylvania (Drexel University College of Medicine) - Myofibroblastic tumor vs PASH
Tennessee (Duckworth Pathology Group) - Solitary fibrous tumor
Texas (Scott & White Memorial Hospital) - Fibromatosis
Texas (Wilford Hall Medical Center Residents) - Diabetic mastopathy
Texas, Crystal Beach - Fibromatosis
Texas, Houston - Hamartoma
Texas, Lubbock - Hamartoma
Texas, San Antonio - Fibromatosis
Texas, Sugarland - Pseudo-angiomatous stromal hyperplasia
Washington (Wash 49) - Fibromatosis (2)
West Virginia (Wetzel County Hospital) - Fibrolipoma
Wisconsin (Marshfield Clinic) - Hamartoma
Australia (Sullivan-Nicolaides Pathology) - Hamartoma
China (Sir Run Run Shaw Hospital) - Neurofibroma
Japan (Gunma University Hospital) - Fibrous tumor of breast
Japan (Hamamatsu University School of Medicine) - Radial scar
Japan, Chiba - Fibrous tumor, right breast
Puerto Rico (University of Puerto Rico) - Fibromatosis
Qatar (Hamad Medical Corporation) - Hamartoma
Spain (Povisa) - Fibrous tumor vs stromal hamartoma
The Netherlands, Amstelveen - Fibromatosis
The Netherlands, Amsterdam - PASH

CASE 3 - Diagnosis:

**Collagenous fibroma, breast
T-04010, M-8810/0**

Director's note: Tumor circumscription, haphazard growth and abundant collagen help distinguish CF from fibromatosis. DRC

Case 3 - References:

Bernal K, Nelson M, Neff JR, et al: Translocation (2;11)(q31;q12) Is Recurrent In Collagenous Fibroma (desmoplastic fibroblastoma). *Cancer Genet Cytogenet*, 2004 Mar; 149(2):161-3.
Clement PB, Young RH, Azzopardi JG: Collagenous Spherulosis Of The Breast. *Am J Surg Pathol*, 1987 Jun; 11(6):411-7.

Case No. 4 - Accession Nos. 29411 & 24702

September, 2005

Escondido - Apocrine adenosis
Loma Linda (LLUMC Residents) - Lactating adenoma
Palo Alto Pathology - Apocrine adenosis
Arizona, Phoenix - Adenosis tumor (florid adenosis)
Arkansas (University of Arkansas Medical Center) - Adenosis tumor, breast
Florida (Winter Haven Hospital) - Adenosis
Georgia, Decatur - Sclerosing adenosis and focal columnar cell hyperplasia
Illinois (Heartland Regional Medical Center) - Fibrocystic change with marked columnarization of lobules with atypia
Kansas (Coffeyville Regional Medical Center) - Lactating adenomatosis
Kentucky (University of Louisville Hospital) - Cystic hypersecretory hyperplasia
Maryland (Johns Hopkins Medical Institute) - Fibrocystic changes including blunt duct adenosis and columnar alteration of the lobule with prominent apical snouts and secretions
Maryland (National Naval Medical Center) - Atypical apocrine adenosis
Massachusetts (UMass Memorial Health Care) - Blunt duct adenosis with columnar cell changes and focal atypia
Michigan (St. Joseph Mercy Hospital) - Adenosis
New York (Nassau University Medical Center) - Complex fibroadenoma
New York (Stony Brook University Hospital Residents) - Benign cystic secretory hyperplasia
New York (SUNY Downstate Medical Center) - Secretory adenosis
New York (Westchester Medical Center) - Sclerosing adenosis
North Carolina (Womack Army Medical Center) - Fibrocystic changes (5)
Ohio (MCO Pathology) - Sclerosing breast lesion, c/w radial scar
Pennsylvania (Conemaugh Memorial Medical Center) - Ductal hyperplasia
Pennsylvania (Drexel University College of Medicine) - Sclerosing intraductal papilloma with epithelial hyperplasia
Tennessee (Duckworth Pathology Group) - Complex sclerosing lesion
Texas (Scott & White Memorial Hospital) - Adenosis
Texas (Wilford Hall Medical Center Residents) - Complex sclerosing lesion, favor sclerosing adenosis
Texas, Crystal Beach - Adenosis with atypical hyperplasia - papillomatosis
Texas, Houston - Involutional changes
Texas, Lubbock - Sclerosing lobular hyperplasia
Texas, San Antonio - Ductal adenosis
Texas, Sugarland - Fibroadenoma
Washington (Wash 49) - Duct papilloma (1); Apocrine adenoma (1)
West Virginia (Wetzel County Hospital) - Intraductal papilloma
Wisconsin (Marshfield Clinic) - Adenosis tumor
Australia (Sullivan-Nicolaides Pathology) - Complex sclerosing lesion
China (Sir Run Run Shaw Hospital) - Radial scar
Japan (Gunma University Hospital) - Pseudo-angiomatous stromal hyperplasia
Japan (Hamamatsu University School of Medicine) - Adenosis
Japan, Chiba - Apocrine adenoma, right breast
Puerto Rico (University of Puerto Rico) - Adenosis tumor
Qatar (Hamad Medical Corporation) - Mild fibrocystic changes
Spain (Povisa) - Adenosis
The Netherlands, Amstelveen - Adenoma ?
The Netherlands, Amsterdam - Adenosis tumor with CAPS

Case 4 - Diagnosis:

**Sclerosing adenosis, breast
T-04010, M-74220**

Case 4 - References:

Page DL, Vander Zwag R, Rogers LW, et al: Relation Between Component Parts Of Fibrocystic Disease Complex And Breast Cancer. *J Natl Cancer Inst*, 1978; 61:1055-63.

Clement PB, Azzopardi JG: Microglandular Adenosis Of The Breast. A Lesion Simulating Tubular Carcinoma. *Histopathology*, 1983; 169-80.

Lee KC, Chan JK, Gwi E: Tubular Adenosis Of The Breast. A Distinctive Benign Lesion Mimicking Invasive Carcinoma. *Am J Surg Pathol*, 1996 Jan; 20(1):46-54.

Nielsen BB: Adenosis Tumour Of The Breast – A Clinicopathological Investigation Of 27 Cases. *Histopathology*, 1987 Dec; 11(12):1259-75.

Gill HK, Ioffe OB, Berg WA: When Is A Diagnosis Of Sclerosing Adenosis Acceptable At Core Biopsy? *Radiology*, 2003 Jul; 228(1):50-70.

Rosen PP: Microglandular Adenosis: A Benign Lesion Simulating Invasive Mammary Carcinoma. *Am J Surg Pathol*, 1983 Mar; 7(2):137-44.

Case No. 5 - Accession No. 28788

September, 2005

Escondido - Phyllodes tumor, benign
Loma Linda (LLUMC Residents) - Phyllodes tumor
Palo Alto Pathology - Phylloides, benign
Arizona, Phoenix - Phyllodes tumor, benign
Arkansas (University of Arkansas Medical Center) - Fibroadenoma
Florida (Winter Haven Hospital) - Fibroadenoma
Georgia, Decatur - Benign phyllodes tumor
Illinois (Heartland Regional Medical Center) - Benign phylloides tumor
Kansas (Coffeyville Regional Medical Center) - Benign phylloides tumor
Kentucky (University of Louisville Hospital) - Cystic fibroadenoma
Maryland (Johns Hopkins Medical Institute) - Sclerosing papillary lesion with phylloidal features (stromal cellularity falls short of benign phylloides)
Maryland (National Naval Medical Center) - Fibroadenoma with pseudoangiomatous stromal hyperplasia
Massachusetts (UMass Memorial Health Care) - Benign phylloides tumor
Michigan (St. Joseph Mercy Hospital) - Phylloides tumor
New York (Nassau University Medical Center) - Phyllodes tumor, benign
New York (Stony Brook University Hospital Residents) - Phylloides tumor, low grade
New York (SUNY Downstate Medical Center) - Fibroadenoma phylloides
New York (Westchester Medical Center) - Benign phyllodes tumor
North Carolina (Womack Army Medical Center) - Benign phylloides tumor (5)
Ohio (MCO Pathology) - Benign phyllodes tumor
Pennsylvania (Conemaugh Memorial Medical Center) - Fibroadenoma
Pennsylvania (Drexel University College of Medicine) - Phyllodes tumor
Tennessee (Duckworth Pathology Group) - Fibroadenoma
Texas (Scott & White Memorial Hospital) - Low grade phylloides tumor
Texas (Wilford Hall Medical Center Residents) - Benign phylloides tumor
Texas, Crystal Beach - Fibroadenoma
Texas, Houston - Phylloides tumor
Texas, Lubbock - Phylloides tumor, benign
Texas, San Antonio - Benign phyllodes tumor
Texas, Sugarland - Phyllodes tumor, benign
Washington (Wash 49) - Phyllodes tumor, benign (2)
West Virginia (Wetzel County Hospital) - Phylloides tumor
Wisconsin (Marshfield Clinic) - Phylloides tumor, benign
Australia (Sullivan-Nicolaides Pathology) - Benign phyllodes tumour
China (Sir Run Run Shaw Hospital) - Intracystic adenofibroma
Japan (Gunma University Hospital) - Benign phyllodes tumor
Japan (Hamamatsu University School of Medicine) - Benign phyllodes tumor
Japan, Chiba - Phyllodes tumor, benign
Puerto Rico (University of Puerto Rico) - Fibroadenoma
Qatar (Hamad Medical Corporation) - Phylloides tumor, low grade
Spain (Povisa) - Benign phyllodes tumor
The Netherlands, Amstelveen - Benign fibroadenoma
The Netherlands, Amsterdam - Phyllodes (benign)

Case 5 - Diagnosis:

**Low grade phyllodes tumor
T-04010, M-9020/1**

Case 5 - References:

- Krishnamurthy S, Ashfaq R, Shin HJ, Sneige N: Distinction Of Phyllodes Tumor From Fibroadenoma: A Reappraisal Of An Old Problem. *Cancer*, 2000 Dec 25; 90(6):342-9.
- Geisler DP, Boyle MJ, Malnar KF, et al: Phyllodes Tumors Of The Breast: A Review Of 32 Cases. *Am Surg*, 2000 Apr; 66(4):360-6.
- Chhieng DC, Cangiarella JF, Waisman J, et al: Fine-Needle Aspiration Cytology Of Spindle Cell Lesions Of The Breast. *Cancer*, 1999 Dec 25; 87(6):359-71.
- Kleer CG, Giordano TJ, Braun T, Oberman HA: Pathologic, Immunohistochemical, And Molecular Features Of Benign And Malignant Phyllodes Tumors Of The Breast. *Mod Pathol*, 2001 Mar; 14(3):185-90.
- Chaney AW, Pollack A, McNeese MD, et al: Primary Treatment Of Cystosarcoma Phyllodes Of The Breast. *Cancer*, 2000 Oct 1; 89(7):1502-11.

Case No. 6 - Accession No. 28552

September, 2005

- Escondido - Metaplastic carcinoma
- Loma Linda (LLUMC Residents) - Leiomyosarcoma
- Palo Alto Pathology - Leiomyosarcoma, poorly-differentiated
- Arizona, Phoenix - Leiomyosarcoma
- Arkansas (University of Arkansas Medical Center) - Sarcoma, favor angiosarcoma, breast
- Florida (Winter Haven Hospital) - Malignant fibrous histiocytoma
- Georgia, Decatur - Stromal sarcoma, ? rhabdomyosarcoma
- Illinois (Heartland Regional Medical Center) - Spindle cell malignant neoplasm, favor metaplastic carcinoma
- Kansas (Coffeyville Regional Medical Center) - Sarcoma, high grade (leiomyosarcoma?) (rhabdomyosarcoma?)
- Kentucky (University of Louisville Hospital) - Malignant phyllodes tumor with rhabdomyoblastic differentiation
- Maryland (Johns Hopkins Medical Institute) - Poorly-differentiated neoplasm with rhabdoid features, favor metaplastic carcinoma (diagnosis influenced by age)
- Maryland (National Naval Medical Center) - Rhabdomyosarcoma
- Massachusetts (UMass Memorial Health Care) - Leiomyosarcoma
- Michigan (St. Joseph Mercy Hospital) - Rhabdomyosarcoma
- New York (Nassau University Medical Center) - Rhabdomyosarcoma
- New York (Stony Brook University Hospital Residents) - High grade sarcoma, arising in a pre-existing phylloides tumor
- New York (SUNY Downstate Medical Center) - High grade sarcoma, favor leiomyosarcoma
- New York (Westchester Medical Center) - Malignant phyllodes tumor
- North Carolina (Womack Army Medical Center) - Poorly-differentiated sarcoma (5)
- Ohio (MCO Pathology) - Rhabdomyosarcoma, alveolar and pleomorphic
- Pennsylvania (Conemaugh Memorial Medical Center) - Leiomyosarcoma
- Pennsylvania (Drexel University College of Medicine) - Malignant phyllodes tumor with sarcomatous overgrowth
- Tennessee (Duckworth Pathology Group) - Sarcoma
- Texas (Scott & White Memorial Hospital) - Leiomyosarcoma
- Texas (Wilford Hall Medical Center Residents) - High grade sarcoma, with myoid differentiation
- Texas, Crystal Beach - Sarcoma, high grade (? Angiosarcoma)
- Texas, Houston - Metaplastic carcinoma
- Texas, Lubbock - Leiomyosarcoma
- Texas, San Antonio - Pleomorphic high-grade sarcoma with rhabdomyosarcomatous differentiation
- Texas, Sugarland - Leiomyosarcoma
- Washington (Wash 49) - Angiosarcoma, high grade (1); Rhabdomyosarcoma (1)
- West Virginia (Wetzel County Hospital) - Rhabdomyosarcoma
- Wisconsin (Marshfield Clinic) - High grade sarcoma, possibly leiomyosarcoma
- Australia (Sullivan-Nicolaides Pathology) - High grade sarcoma, ? leiomyosarcoma
- China (Sir Run Run Shaw Hospital) - Sarcoma
- Japan (Gunma University Hospital) - Stromal sarcoma
- Japan (Hamamatsu University School of Medicine) - Malignant phyllodes tumor
- Japan, Chiba - Phyllodes tumor, malignant

Puerto Rico (University of Puerto Rico) - Rhabdomyosarcoma
Qatar (Hamad Medical Corporation) - Leiomyosarcoma (probably part of a malignant phylloides tumor)
Spain (Povisa) - Leiomyosarcoma
The Netherlands, Amstelveen - Metaplastic carcinoma
The Netherlands, Amsterdam - Metaplastic carcinoma

Case 6 - Diagnosis:

**High grade sarcoma with myogenous differentiation (“leiomyosarcoma”), breast
T-04010, M-8890/3**

Case 6 - References:

Pandey M, Mathew A, Abraham EK, Rajan B: Primary Sarcoma Of The Breast. J Surg Oncol, 2004 Sep 1; 87(3):121-5.
Adem C, Reynolds C, Ingle JN, Nascimento AG: Primary Breast Sarcoma: Clinicopathologic Series From The Mayo Clinic And Review Of The Literature. Br J Cancer, 2004 Jul 19; 91(2):237-41. Review.

Case No. 7 - Accession No. 28913

September, 2005

Escondido - Matrix-producing metaplastic carcinoma
Loma Linda (LLUMC Residents) - High grade myxofibrosarcoma
Palo Alto Pathology - Myxoid MFH
Arizona, Phoenix - Metaplastic carcinoma
Arkansas (University of Arkansas Medical Center) - Myxofibrosarcoma, breast
Florida (Winter Haven Hospital) - Rhabdomyosarcoma
Georgia, Decatur - Inflammatory myofibroblastic tumor/sarcoma
Illinois (Heartland Regional Medical Center) - Spindle cell malignant neoplasm, favor MFH
Kansas (Coffeyville Regional Medical Center) - Malignant fibrous histiocytoma, high grade (myxoid areas)
Kentucky (University of Louisville Hospital) - Myxoid malignant fibrous histiocytoma
Maryland (Johns Hopkins Medical Institute) - High grade myxoid neoplasm, metastatic carcinoma vs malignant phylloides
Maryland (National Naval Medical Center) - Malignant fibrous histiocytoma
Massachusetts (UMass Memorial Health Care) - Myxoid chondrosarcoma
Michigan (St. Joseph Mercy Hospital) - MFH
New York (Nassau University Medical Center) - Myxoid liposarcoma
New York (Stony Brook University Hospital Residents) - High-grade myxoid sarcoma
New York (SUNY Downstate Medical Center) - Inflammatory myofibroblastic tumor
New York (Westchester Medical Center) - Pleomorphic sarcoma, favor MFH
North Carolina (Womack Army Medical Center) - High grade myxoid sarcoma (5)
Ohio (MCO Pathology) - Myxoid malignant fibrous histiocytoma
Pennsylvania (Conemaugh Memorial Medical Center) - Myxoid chondrosarcoma
Pennsylvania (Drexel University College of Medicine) - Myxoid fibrosarcoma
Tennessee (Duckworth Pathology Group) - Sarcoma, liposarcoma?
Texas (Scott & White Memorial Hospital) - Pleomorphic high grade sarcoma, favor rhabdomyosarcoma
Texas (Wilford Hall Medical Center Residents) - High grade sarcoma
Texas, Crystal Beach - Phylloides tumor (possibly infarcted)
Texas, Houston - Breast sarcoma
Texas, Lubbock - Malignant fibrous histiocytoma
Texas, San Antonio - Myxoid MFH
Texas, Sugarland - Sarcoma, NOS
Washington (Wash 49) - Myxoid liposarcoma (1); Myxoid MFH (1)
West Virginia (Wetzel County Hospital) - Myxosarcoma
Wisconsin (Marshfield Clinic) - High grade sarcoma with rhabdomyosarcomatous differentiation
Australia (Sullivan-Nicolaides Pathology) - Myxoid malignant fibrous histiocytoma
China (Sir Run Run Shaw Hospital) - Malignant fibrous histiocytoma, inflammatory type
Japan (Gunma University Hospital) - Myxoid malignant fibrous histiocytoma
Japan (Hamamatsu University School of Medicine) - Myxoid liposarcoma
Japan, Chiba - Malignant fibrous histiocytoma, left breast
Puerto Rico (University of Puerto Rico) - Myxoid liposarcoma
Qatar (Hamad Medical Corporation) - High grade sarcoma, probably MFH
Spain (Povisa) - Myxoid stromal sarcoma (myxoid liposarcoma?)

The Netherlands, Amstelveen - Metaplastic carcinoma
The Netherlands, Amsterdam - Sarcoma (metaplastic?)

Case 7 - Diagnosis:

**Myxoid malignant fibrous histiocytoma (“myxofibrosarcoma”), breast
T-04010, M-8830/3**

Case 7 - References:

Merck C, Angervall L, Kindblom LG, Oden A. Myxofibrosarcoma: Malignant Soft Tissue Tumor Of Fibroblastic-Histiocytic Origin. A Clinicopathological And Prognostic Study Of 10 Cases Using Multivariate Analysis. *Acta Pathol Microbiol Immunol Scand*, 1983; 282:1-40.
Weiss SW, Enzinger FM: Myxoid Variant Of Malignant Fibrous Histiocytoma. *Cancer*, 1977 Apr; 39(4):1672-85.
Mentzel T, Colonje E, Wadden C, et al: Myxofibrosarcoma: Clinicopathologic Analysis Of 75 Cases With Emphasis On The Low Grade Variant. *Am J Surg Pathol*, 1996 Apr; 20(4):391-405.

Case No. 8 - Accession No. 28803

September, 2005

Escondido - Carcinoid

Loma Linda (LLUMC Residents) - Acinic cell tumor vs myoepithelioma

Palo Alto Pathology - Ductal carcinoma, NOS (involving old fibroadenoma?)

Arizona, Phoenix - Infiltrating ductal carcinoma with mucin secretion

Arkansas (University of Arkansas Medical Center) - Adenoid cystic carcinoma, breast

Florida (Winter Haven Hospital) - Basaloid carcinoma

Georgia, Decatur - Adenoid cystic carcinoma, high grade

Illinois (Heartland Regional Medical Center) - Adenoid cystic carcinoma

Kansas (Coffeyville Regional Medical Center) - Poorly-differentiated adenocarcinoma

Kentucky (University of Louisville Hospital) - Adenoid cystic carcinoma, high grade

Maryland (Johns Hopkins Medical Institute) - Poorly-differentiated carcinoma, not adenoid cystic

Maryland (National Naval Medical Center) - Benign mixed tumor

Massachusetts (UMass Memorial Health Care) - Adenoid cystic carcinoma

Michigan (St. Joseph Mercy Hospital) - Ductal carcinoma

New York (Nassau University Medical Center) - Carcinoma with chondroid metaplasia

New York (Stony Brook University Hospital Residents) - Adenoid cystic carcinoma

New York (SUNY Downstate Medical Center) - Variant of adenocystic carcinoma

New York (Westchester Medical Center) - Metaplastic carcinoma vs malignant skin adnexal tumor

North Carolina (Womack Army Medical Center) - Metaplastic carcinoma (5)

Ohio (MCO Pathology) - Adenoid cystic carcinoma

Pennsylvania (Conemaugh Memorial Medical Center) - Invasive cribriform carcinoma

Pennsylvania (Drexel University College of Medicine) - Adenoid cystic carcinoma of the breast

Tennessee (Duckworth Pathology Group) - Malignant mixed tumor

Texas (Scott & White Memorial Hospital) - Invasive duct carcinoma

Texas (Wilford Hall Medical Center Residents) - Small cell carcinoma

Texas, Crystal Beach - Infiltrating ductal carcinoma

Texas, Houston - (1) Solid variant of invasive cribriform carcinoma; (2) Malignant transformation of fibroadenoma

Texas, Lubbock - Metaplastic carcinoma

Texas, San Antonio - Infiltrating ductal carcinoma, NOS

Texas, Sugarland - Adenoid cystic carcinoma

Washington (Wash 49) - Adenoid cystic carcinoma (1); Dedifferentiated liposarcoma (1)

West Virginia (Wetzel County Hospital) - Metastatic small cell carcinoma

Wisconsin (Marshfield Clinic) - Adenoid cystic carcinoma

Australia (Sullivan-Nicolaides Pathology) - Grade III invasive ductal carcinoma (basal cell type)

China (Sir Run Run Shaw Hospital) - Adenoid cystic carcinoma

Japan (Gunma University Hospital) - Mucinous carcinoma with endocrine features

Japan (Hamamatsu University School of Medicine) - Adenoid cystic carcinoma, basaloid

Japan, Chiba - Adenoid cystic carcinoma, right breast

Puerto Rico (University of Puerto Rico) - Sclerotic fibroadenoma with invasive ductal carcinoma

Qatar (Hamad Medical Corporation) - Adenoid cystic carcinoma

Spain (Povisa) - Adenoid cystic carcinoma

The Netherlands, Amstelveen - Adenoid cystic carcinoma, solid type

The Netherlands, Amsterdam - Adenoid cystic carcinoma

Case 8 - Diagnosis:

Basaloid adenoid cystic carcinoma, breast

T-04010, M-8200/3

Case 8 - References:

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Ronnett BM, Epstein JI: A Case Showing Sclerosing Adenosis And An Unusual Form Of Basal Cell Hyperplasia. *Am J Surg Pathol*, 1989 Oct; 13(10):866-72.

Lobb EA, Butow PN, Barratt A, et al: Communication And Information-Giving In High Risk Breast Cancer Consultations: Influence On Patient Outcomes. *Br J Cancer*, 2004 Jan 26; 90(2):321-7.

Janni W, Rack B, Schindlbeck C, et al: The Persistence Of Isolated Tumor Cells In Bone Marrow From Patients With Breast Carcinoma Predicts An Increased Risk For Recurrence. *Cancer*, 2005 Mar 1; 103(5):884-91.

Case No. 9 - Accession No. 30235

September, 2005

Escondido - Muscular hamartoma

Loma Linda (LLUMC Residents) - Solitary fibrous tumor vs mammary myofibroblastoma

Palo Alto Pathology - Myofibroblastoma

Arizona, Phoenix - Myofibroblastoma

Arkansas (University of Arkansas Medical Center) - Myofibroblastoma, breast

Florida (Winter Haven Hospital) - Myoepithelioma

Georgia, Decatur - Solitary fibrous tumor

Illinois (Heartland Regional Medical Center) - Myofibroblastoma

Kansas (Coffeyville Regional Medical Center) - Leiomyosarcoma, low grade

Kentucky (University of Louisville Hospital) - Myofibroblastoma vs leiomyoma

Maryland (Johns Hopkins Medical Institute) - Myofibroblastoma

Maryland (National Naval Medical Center) - Myofibroblastoma

Massachusetts (UMass Memorial Health Care) - Solitary fibrous tumor

Michigan (St. Joseph Mercy Hospital) - Solitary fibrous tumor

New York (Nassau University Medical Center) - Myofibroblastoma

New York (Stony Brook University Hospital Residents) - Solitary fibrous tumor

New York (SUNY Downstate Medical Center) - Myofibroblastic tumor, favor solitary fibrous tumor

New York (Westchester Medical Center) - Myofibroblastoma

North Carolina (Womack Army Medical Center) - Leiomyosarcoma (5)

Ohio (MCO Pathology) - Myofibroblastoma

Pennsylvania (Conemaugh Memorial Medical Center) - Myofibroblastoma

Pennsylvania (Drexel University College of Medicine) - Leiomyoma

Tennessee (Duckworth Pathology Group) - Solitary fibrous tumor

Texas (Scott & White Memorial Hospital) - Myofibroblastoma

Texas (Wilford Hall Medical Center Residents) - Myofibroblastoma

Texas, Crystal Beach - Sarcoma (? Leiomyosarcoma)

Texas, Houston - Myofibroblastoma

Texas, Lubbock - Solitary fibrous tumor

Texas, San Antonio - Myofibroblastoma

Texas, Sugarland - Myofibroblastoma

Washington (Wash 49) - Spindle cell myoepithelioma (1); Myoepithelioma (1)

West Virginia (Wetzel County Hospital) - Myofibroblastoma

Wisconsin (Marshfield Clinic) - Pseudoangiomatous stromal hyperplasia

Australia (Sullivan-Nicolaides Pathology) - Myofibroblastoma

China (Sir Run Run Shaw Hospital) - Solitary fibrous tumor

Japan (Gunma University Hospital) - Myofibroblastoma

Japan (Hamamatsu University School of Medicine) - Solitary fibrous tumor

Japan, Chiba - Myoepithelioma, left breast

Puerto Rico (University of Puerto Rico) - Pseudoangiomatous stromal hyperplasia, fascicular
Qatar (Hamad Medical Corporation) - Solitary fibrous tumor
Spain (Povisa) - Myofibroblastoma vs myoid-muscular hamartoma
The Netherlands, Amstelveen - Solid fibrous tumor ?
The Netherlands, Amsterdam - Myofibroblastoma

Case 9 - Diagnosis:

**Myofibroblastoma, breast
T-04010, M-76100**

Case 9 - References:

Fisher C: Myofibroblastic Malignancies. *Adv Anat Pathol*, 2004 Jul 1; 11(4):191-201. Review.
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Nakanishi I, Kajikawa K, Okada Y, Eguchi K: Myofibroblasts In Fibrous Tumors And Fibrosis In Various Organs. *Acta Pathol Jpn*, 1981 May; 31(3):423-37.

Case No. 10 - Accession No. 29079

September, 2005

Escondido - Diffuse large cell lymphoma
Loma Linda (LLUMC Residents) - Diffuse large B-cell lymphoma
Palo Alto Pathology - Diffuse large B-cell lymphoma (evolving from FCC?)
Arizona, Phoenix - B-cell lymphoma/leukemia, kappa chain restricted
Arkansas (University of Arkansas Medical Center) - Burkitt lymphoma, breast
Florida (Winter Haven Hospital) - High grade lymphoma
Georgia, Decatur - Diffuse large B-cell lymphoma
Illinois (Heartland Regional Medical Center) - Malignant lymphoma, diffuse, B-cell, intermediate grade
Kansas (Coffeyville Regional Medical Center) - Malignant lymphoma, diffuse, small B-cell (? Burkett's)
Kentucky (University of Louisville Hospital) - Diffuse large B-cell lymphoma
Maryland (Johns Hopkins Medical Institute) - Diffuse large B-cell lymphoma, follicular center origin
Maryland (National Naval Medical Center) - Diffuse large B-cell lymphoma
Massachusetts (UMass Memorial Health Care) - Burkitt's lymphoma
Michigan (St. Joseph Mercy Hospital) - Large cell lymphoma
New York (Nassau University Medical Center) - Burkitt lymphoma
New York (Stony Brook University Hospital Residents) - Follicular lymphoma
New York (SUNY Downstate Medical Center) - High grade B-cell lymphoma with plasmacytoid features
New York (Westchester Medical Center) - Diffuse large B-cell lymphoma
North Carolina (Womack Army Medical Center) - Diffuse large B-cell lymphoma (5)
Ohio (MCO Pathology) - Diffuse large B-cell lymphoma
Pennsylvania (Conemaugh Memorial Medical Center) - Burkitt's lymphoma
Pennsylvania (Drexel University College of Medicine) - Lymphoma
Tennessee (Duckworth Pathology Group) - B-cell lymphoma
Texas (Scott & White Memorial Hospital) - Large B-cell lymphoma
Texas (Wilford Hall Medical Center Residents) - Follicular lymphoma
Texas, Crystal Beach - Slide missing from box
Texas, Houston - MALT lymphoma ?
Texas, Lubbock - Large cell lymphoma, B-cell type
Texas, San Antonio - Malignant lymphoma, favor Burkitt
Texas, Sugarland - Malignant lymphoma
Washington (Wash 49) - Peripheral B-cell lymphoma (lymphoplasmacytoid lymphoma) (1); High grade B-cell malignant lymphoma (e.g. Burkitt's) versus plasmacytoma (1)
West Virginia (Wetzel County Hospital) - B-cell diffuse lymphoma
Wisconsin (Marshfield Clinic) - Burkitt-like or diffuse large B-cell lymphoma
Australia (Sullivan-Nicolaides Pathology) - Diffuse B-cell lymphoma
China (Sir Run Run Shaw Hospital) - Non-Hodgkin's malignant lymphoma
Japan (Gunma University Hospital) - Atypical Burkitt lymphoma
Japan (Hamamatsu University School of Medicine) - Malignant lymphoma, diffuse large B-cell type

Japan, Chiba - Malignant lymphoma, diffuse large B-cell type
Puerto Rico (University of Puerto Rico) - Burkitt lymphoma
Qatar (Hamad Medical Corporation) - Non-Hodgkin's lymphoma, Burkitt like
Spain (Povisa) - Plasmacytoma
The Netherlands, Amstelveen - Diffuse large B-cell lymphoma
The Netherlands, Amsterdam - Diffuse large B-cell lymphoma

Case 10 - Diagnosis:

**Diffuse large B-cell lymphoma, breast
T-04010, M-95903**

Case 10 - References:

Alizadeh AA, Eisen MB, Davis RE, et al: Distinct Types Of Diffuse Large B-Cell Lymphoma Identified By Gene Expression Profiling. *Nature*, 2000 Feb 3; 403(6769):503-11.
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Lossos IS, Czerwinski DK, Alizadeh AA, et al: Prediction Of Survival In Diffuse Large B-Cell Lymphoma Based On The Expression Of Six Genes. *N Engl J Med*, 2004 Apr 29; 350(18):1828-37.
Shipp MA, Ross KN, Tamayo P, et al: Diffuse Large B-Cell Lymphoma Outcome Prediction By Gene Expression Profiling And Supervised Machine Learning. *Nat Med*, 2002 Jan; 8(1):68-74.