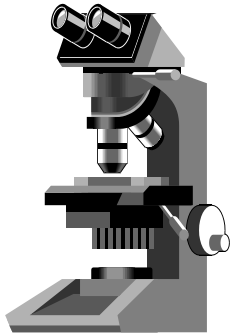


CALIFORNIA
TUMOR TISSUE REGISTRY



BREAST PATHOLOGY

Minutes – Subscription A

May 2000

SUGGESTED READING (General Topics from Recent Literature):

- MET* Expression Is Associated with Poor Outcome in Patients with Axillary Lymph Node Negative Breast Carcinoma. Camp, RL, et al. *Cancer* 1999; 86(11):2259-2265.
- Prophylactic Mastectomy and Inherited Predisposition to Breast Carcinoma. Hughes KS, et al. *Cancer* 1999; 86(11):2502-2516.
- An Analysis of Male and Female Breast Cancer Treatment and Survival Among Demographically Identical Pairs of Patients. Scott-Conner CEH, et al. *Surg* 1999; 125:775.
- Initial Paclitaxel Improves Outcome Compared with CMFP Combination Chemotherapy as Front-Line Therapy in Untreated Metastatic Breast Cancer. Bishop JF, et al. *J of Clin Oncol* 1999; 17(8):2355-2364.
- Ultrasound-Guided Needle Biopsy of the Breast. Staren ED, et al. *Surg* 1999; 126:629-635.
- Recent Developments in Stereotactic Breast Biopsy Methodologies. An Update for the Surgical Pathologist. Wong, AY, et al. *Adv in Anat Pathol* 2000; 7(1):26-35.
- Lymphatic Mapping and Sentinel Lymphadenectomy for Breast Cancer. Giuliano AE, et al. *Ann of Surg* 1994; 220(3):391-401.
- Axillary Dissection in Breast Cancer. When, Why, How Much, and for How Long? Another Operation Soon to be Extinct? Deckers, PJ. *J of Surg Oncol* 1991; 48:217-219.
- Management of the Axilla in Early Stage Breast Cancer. Will Sentinel Node Biopsy End the Debate? Cody HS III. *J Surg Oncol* 1999; 71(3):137-139.
- Another View of the Tamoxifen Trial. Kaufman CS. *J Surg Oncol* 1999; 72(1):1-8.

California Tumor Tissue Registry
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Loma Linda University School of Medicine
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Loma Linda, California 92350
(909) 558-4788
FAX: (909) 558-0188
E-mail: cttr@linkline.com
Web page: www.cttr.org
Case of the Month: www.llu.edu/llu/cttr/cotm

LLUMC Pathology Residents - Lactating adenoma
Mountain View (El Camino Hospital) - Focal lobular cancerization (DCIS) involving lactating breast
Orange (UCI Medical Center Residents) - Lactating adenoma
Ventura (Unilab) - Lactating adenoma (2)
Long Beach - Lactating adenoma (5)
Oakland (Kaiser) - Lactating adenoma (3)
San Diego (Naval Medical Center) - Lactating adenoma
Hayward (St. Rose Hospital) - Lactating adenoma (4)
Sacramento (UC Davis Health Systems) - Lactating adenoma vs. lactating breast
Colorado (Pueblo Pathology) - Lactating adenoma
Texas (Texas Tech University Medical Health Center) - Lactating adenoma
Florida (Munroe Regional Medical Center) - Lactating adenoma
Iowa (UIHC) - Lactating adenoma
Illinois (Northwestern Memorial Hospital) - Lactational change (possible lactating adenoma if mass present)
Indiana (Fort Wayne) - Cystic hypersecretory intraductal carcinoma
Michigan (Foote Hospital) - Lactating adenoma
Michigan (St. Joseph Mercy Hospital) - Lactational adenoma
Michigan (Oakwood Hospital) - Lactational nodule
Ohio (McCullough-Hyde Memorial Hospital) - Lobular hyperplasia
New Jersey (Overlook Hospital) - Lactational adenoma (3)
Pennsylvania (Lehigh Valley Hospital) - Lactating adenoma
Pennsylvania (Conemaugh Memorial Medical Center) - Lactating adenoma
Maryland (University of Maryland) - Lactating adenoma
Maryland (National Naval Medical Center) - Lactating adenoma (12)
Maryland (Woodbine) - Lactating adenoma (2)
New York (Long Island Jewish Medical Center) - Lactating adenoma
New York (Montefiore Medical Center) - Lactational adenosis (lactational adenoma)
Canada (Foothills Hospital) - Lactating adenoma
Japan (Kawasaki Medical School Hospital) - So-called lactating adenoma (3); Lactating breast (1)
Japan (Shimada City) - Lactating adenoma
Saudi Arabia (King Khalid University Hospital) - Lactating adenoma
Australia (Sydney) - Lactating adenoma

DIAGNOSIS:

Lactational Changes (“Lactating Adenoma”), Breast
T-04000, M-81400

REFERENCES:

Linzell JL, et al. Mechanism of Milk Secretion. *Physio Rev* 1971; 51(3):564-597.
Reeves ME, et al. Lactating Adenoma Presenting as a Giant Breast Mass. *Surg* 2000; 127(5):586-588.
Slavin JL, et al. Nodular Breast Lesions During Pregnancy and Lactation. *Histopathol* 1993; 22(5):481-485.
Novotny DB, et al. Fine Needle Aspiration of Benign and Malignant Breast Masses Associated with Pregnancy. *Acta Cytol* 1991; 35(6):676-686.
James K, et al. Breast Tumour of Pregnancy (‘Lactating’ Adenoma). *J Pathol* 1988; 156(1):37-44.

LLUMC Pathology Residents - Fibroadenoma
Mountain View (El Camino Hospital) - Cellular fibroadenoma
Orange (UCI Medical Center Residents) - Fibrocystic change with lactating change (6); Fibroadenoma with lactating change (2)
Ventura (Unilab) - Sclerosing lobular hyperplasia (2)
Long Beach - Fibroadenoma (5)
Oakland (Kaiser) - Fibroadenoma variant (3)
San Diego (Naval Medical Center) - Sclerosing ? hyperplasia with superimposed secretory change
Hayward (St. Rose Hospital) - Pericanalicular fibroadenoma (4)
Sacramento (UC Davis Health Systems) - Fibroadenoma
Colorado (Pueblo Pathology) - Fibroadenoma
Texas (Texas Tech University Medical Health Center) - Duct ectasia
Florida (Munroe Regional Medical Center) - Juvenile fibroadenoma
Iowa (UIHC) - Sclerosing lobular hyperplasia (fibroadenomatoid mastopathy)
Illinois (Northwestern Memorial Hospital) - Fibroadenoma
Indiana (Fort Wayne) - Ductal adenoma
Michigan (Foote Hospital) - Benign cystosarcoma phyllodes tumor with lactational change in adjacent breast
Michigan (St. Joseph Mercy Hospital) - Fibroadenoma
Michigan (Oakwood Hospital) - Juvenile fibroadenoma
Ohio (McCullough-Hyde Memorial Hospital) - Benign phyllodes tumor
New Jersey (Overlook Hospital) - Fibroadenoma (3)
Pennsylvania (Lehigh Valley Hospital) - Fibroadenoma
Pennsylvania (Conemaugh Memorial Medical Center) - Fibroadenoma with tubular adenoma features
Maryland (University of Maryland) - Hamartoma
Maryland (National Naval Medical Center) - Hamartoma (9); Fibroadenoma (3)
Maryland (Woodbine) - Fibroadenoma (2)
New York (Long Island Jewish Medical Center) - Fibroadenomatoid tumor with mild chronic inflammation
New York (Montefiore Medical Center) - Complex fibroadenoma
Canada (Foothills Hospital) - Duct ectasia
Japan (Kawasaki Medical School Hospital) - Fibroadenoma, organoid (3); Benign phyllodes tumor (1)
Japan (Shimada City) - Juvenile fibroadenoma
Saudi Arabia (King Khalid University Hospital) - Fibroadenoma
Australia (Sydney) - Hamartoma in lactating breast

DIAGNOSIS:

Hamartoma with Adjacent Lactational Changes, Breast

T-04000, M-75500

REFERENCES:

Daya D, et al. Hamartoma of the Breast, an Underrecognized Breast Lesion. A Clinicopathologic and Radiographic Study of 25 Cases. *Am J Clin Pathol* 1995; 103(6):685-689.
Oberman HA. Hamartomas and Hamartoma Variants of the Breast. *Semin Pathol* 1989;135-145.
Hessler C, et al. Hamartoma of the Breast. Diagnostic Observations of 16 Cases. *Radiology* 1978; 126:95-98.

LLUMC Pathology Residents - Infiltrating poorly differentiated breast carcinoma, favor pleomorphic lobular carcinoma
Mountain View (El Camino Hospital) - Infiltrating lobular carcinoma, "pleomorphic" variant
Orange (UCI Medical Center Residents) - Lobular carcinoma
Ventura (Unilab) - Infiltrating lobular carcinoma (2)
Long Beach - Infiltrating lobular carcinoma (5)
Oakland (Kaiser) - Pleomorphic lobular carcinoma (3)
San Diego (Naval Medical Center) - Pleomorphic lobular carcinoma (9); Infiltrating mammary carcinoma (2)
Hayward (St. Rose Hospital) - Anaplastic (signet ring) carcinoma (1); Infiltrating lobular carcinoma (3)
Sacramento (UC Davis Health Systems) - Infiltrating pleomorphic lobular carcinoma, cannot rule out melanoma
Colorado (Pueblo Pathology) - Metastatic melanoma
Texas (Texas Tech University Medical Health Center) - Lobular carcinoma
Florida (Munroe Regional Medical Center) - Myoepithelial carcinoma
Iowa (UIHC) - Lipid-rich carcinoma
Illinois (Northwestern Memorial Hospital) - Infiltrating lobular carcinoma, variant type (classic & solid)
Indiana (Fort Wayne) - Infiltrating lobular carcinoma
Michigan (Foote Hospital) - Pleomorphic lobular carcinoma
Michigan (St. Joseph Mercy Hospital) - Invasive lobular carcinoma, pleomorphic variant
Michigan (Oakwood Hospital) - Invasive lobular carcinoma, pleomorphic type
Ohio (McCullough-Hyde Memorial Hospital) - Lobular carcinoma
New Jersey (Overlook Hospital) - Infiltrating duct carcinoma (3)
Pennsylvania (Lehigh Valley Hospital) - Invasive lobular carcinoma
Pennsylvania (Conemaugh Memorial Medical Center) - Metastatic ? gastric carcinoma? invasive lobular carcinoma
Maryland (University of Maryland) - Infiltrating lobular carcinoma, focally
Maryland (National Naval Medical Center) - Infiltrating lobular carcinoma (11); Pleomorphic lobular carcinoma (1)
Maryland (Woodbine) - Melanoma (2)
New York (Long Island Jewish Medical Center) - Pleomorphic infiltrating lobular carcinoma
New York (Montefiore Medical Center) - Mammary carcinoma with pleomorphic lobular and tubular features
Canada (Foothills Hospital) - Lobular carcinoma, pleomorphic variant
Japan (Kawasaki Medical School Hospital) - Invasive lobular carcinoma (3); Metastatic carcinoma (1)
Japan (Shimada City) - Invasive lobular carcinoma
Saudi Arabia (King Khalid University Hospital) - Infiltrating lobular carcinoma
Australia (Sydney) - Pleomorphic lobular carcinoma

DIAGNOSIS:

Pleomorphic Lobular Carcinoma, Breast
T-04000, M-80223

REFERENCES:

- Fechner RE. Histologic Variants of Infiltrating Lobular Carcinoma of the Breast. *Hum Pathol* 1975; 6(3):373.
Sastre-Garau X, et al. Infiltrating Lobular Carcinoma of the Breast. Clinicopathologic Analysis of 975 Cases with Reference to Data on Conservative Therapy and Metastatic Patterns. *Cancer* 1996; 77(1):113-120.
Lee JS, et al. Arguments Against Routine Contralateral Mastectomy or Undirected Biopsy for Invasive Lobular Breast Cancer. *Surg* 1995;118(4): 640-647.
Bentz JS, et al. Pleomorphic Lobular Carcinoma of the Breast. Clinicopathologic Features of 12 Cases. *Mod Pathol* 1998; 11(9):814-822.
Auger M, et al. Fine-Needle Aspiration Cytology of Pleomorphic Lobular Carcinoma of the Breast. Comparison with the Classic Type (See Comments). *Cancer* 1997; 81(1):29-32.
Radhi JM. Immunohistochemical Analysis of Pleomorphic Lobular Carcinoma. Higher Expression of p53 and Chromogranin and Lower Expression of ER and PgR. *Histopathol* 2000; 36(2):156-160.

LLUMC Pathology Residents - Papillary carcinoma
Mountain View (El Camino Hospital) - Intracystic papillary carcinoma
Orange (UCI Medical Center Residents) - Papilloma
Ventura (Unilab) - Subareolar duct papillomatosis (2)
Long Beach - Papillary carcinoma, low grade (5)
Oakland (Kaiser) - Papillary carcinoma, non-invasive (DCIS) (3)
San Diego (Naval Medical Center) - Intraductal papillary carcinoma (8); Atypical intraductal papilloma (2)
Hayward (St. Rose Hospital) - Intraductal papillary carcinoma (4)
Sacramento (UC Davis Health Systems) - Florid papillomatosis
Colorado (Pueblo Pathology) - Florid papillomatosis of nipple
Texas (Texas Tech University Medical Health Center) - Papilloma
Florida (Munroe Regional Medical Center) - Juvenile papillomatosis
Iowa (UIHC) - Papillary carcinoma, invasive
Illinois (Northwestern Memorial Hospital) - Papillary carcinoma and ductal carcinoma in-situ, cribriform type
Indiana (Fort Wayne) - Papillary carcinoma
Michigan (Foote Hospital) - Papillary carcinoma
Michigan (St. Joseph Mercy Hospital) - Non-invasive papillary carcinoma (1)
Michigan (Oakwood Hospital) - Papillary DCIS, low grade
Ohio (McCullough-Hyde Memorial Hospital) - Multiple papillomatosis
New Jersey (Overlook Hospital) - Papillary intraductal carcinoma (3)
Pennsylvania (Lehigh Valley Hospital) - Intraductal papillary carcinoma arising in papilloma
Pennsylvania (Conemaugh Memorial Medical Center) - Intracystic papillary carcinoma
Maryland (University of Maryland) - Intracystic papillary carcinoma
Maryland (National Naval Medical Center) - Intraductal papillary carcinoma
Maryland (Woodbine) - Papillary carcinoma, non-invasive (1); Florid papillomatosis (1)
New York (Long Island Jewish Medical Center) - Invasive papillary carcinoma of breast
New York (Montefiore Medical Center) - Papillary adenocarcinoma, well-differentiated involving the central ducts
Canada (Foothills Hospital) - Papillary carcinoma, intracystic
Japan (Kawasaki Medical School Hospital) - Papillary carcinoma, intracystic (2); Intraductal papilloma (2)
Japan (Shimada City) - Papillary carcinoma
Saudi Arabia (King Khalid University Hospital) - Intracystic papillary carcinoma
Australia (Sydney) - Intraductal papillary carcinoma (low grade)

DIAGNOSIS:

Papillary Carcinoma, Breast
T-04000, M-80503

REFERENCES:

Murad TM, et al. Malignant and Benign Papillary Lesions of the Breast. *Hum Pathol* 1977; 8(4):379-390.
Buhl-Jorgensen SE, et al. Cancer Risk in Intraductal Papilloma and Papillomatosis. *Surg Gynecol Obstet* 1968; 127(6):1307-1312.
Rosen PP, et al. Arthur Purdy Stout and Papilloma of the Breast. Comments on the Occasion of His 100th Birthday. *Am J Surg Pathol* 1986; 10(Suppl 1):100-107.
Papotti M, et al. Immunohistochemical Analysis of Benign and Malignant Papillary Lesions of the Breast. *Am J Surg Pathol* 1983; 7(5):451-461.

LLUMC Pathology Residents - Mucinous (colloid) carcinoma
Mountain View (El Camino Hospital) - Colloid carcinoma
Orange (UCI Medical Center Residents) - Mucinous carcinoma
Ventura (Unilab) - Colloid carcinoma (2)
Long Beach - Colloid carcinoma (5)
Oakland (Kaiser) - Mucinous carcinoma (3)
San Diego (Naval Medical Center) - Mucinous carcinoma (10); Infiltrating ductal carcinoma
Hayward (St. Rose Hospital) - Mucinous carcinoma (4)
Sacramento (UC Davis Health Systems) - Colloid carcinoma
Colorado (Pueblo Pathology) - Invasive mucinous carcinoma
Texas (Texas Tech University Medical Health Center) - Adenocarcinoma , mucinous
Florida (Munroe Regional Medical Center) - Mucinous carcinoma (colloid carcinoma)
Iowa (UIHC) - Mucinous carcinoma
Illinois (Northwestern Memorial Hospital) - Colloid carcinoma
Indiana (Fort Wayne) - Colloid mucinous carcinoma
Michigan (Foote Hospital) - Mucinous carcinoma
Michigan (St. Joseph Mercy Hospital) - Invasive mucinous (colloid) carcinoma
Michigan (Oakwood Hospital) - Invasive mucinous carcinoma
Ohio (McCullough-Hyde Memorial Hospital) - Mucinous adenocarcinoma
New Jersey (Overlook Hospital) - Colloid carcinoma (3)
Pennsylvania (Lehigh Valley Hospital) - Mucinous carcinoma
Pennsylvania (Conemaugh Memorial Medical Center) - Colloid carcinoma with apocrine differentiation
Maryland (University of Maryland) - Mucinous (colloid) carcinoma
Maryland (National Naval Medical Center) - Colloid carcinoma (12)
Maryland (Woodbine) - Mucinous carcinoma (2)
New York (Long Island Jewish Medical Center) - Colloid carcinoma
New York (Montefiore Medical Center) - Mucinous carcinoma
Canada (Foothills Hospital) - Colloid carcinoma
Japan (Kawasaki Medical School Hospital) - Mucinous carcinoma (4)
Japan (Shimada City) - Mucinous carcinoma
Saudi Arabia (King Khalid University Hospital) - Mucinous carcinoma
Australia (Sydney) - Mucinous carcinoma

DIAGNOSIS:

Mucinous Carcinoma (Colloid Carcinoma), Breast

T-04000, M-84803

REFERENCES:

- Tellem M, et al. Mucin Producing Carcinoma of the Breast. Tissue Culture, Histochemical and Electron Microscopic Study. *Cancer* 1966;19(4):573-384.
- Rasmussen BB. Human Mucinous Breast Carcinomas and Their Lymph Node Metastases. A Histological Review of 247 Cases. *Pathol Res Pract* 1985;180(4): 377-382.
- Coady AT, et al. Mucinous Carcinoma of the Breast. Further Characterization of its Three Subtypes. *Histopathol* 1989; 15(6):617-626.
- Kato N, et al. Mucinous Carcinoma of the Breast. A Multifaceted Study with Special Reference of Histogenesis and Neuroendocrine Differentiation. *Pathol Int* 1999; 49(11):947-955.
- Avisar E, et al. Pure Mucinous Carcinoma of the Breast. A Clinicopathologic Correlation Study. *Ann Surg Oncol* 1998; 5(5):447-451.
- Andre S, et al. Mucinous Carcinoma of the Breast. A Pathologic Study of 82 Cases. *J Surg Oncol* 1995; 58(3):162-167.

LLUMC Pathology Residents - Histiocytoid carcinoma
Mountain View (El Camino Hospital) - Infiltrating lobular carcinoma, "histiocytoid" variant
Orange (UCI Medical Center Residents) - Fat necrosis with macrophage response
Ventura (Unilab) - Infiltrating lobular carcinoma (2)
Long Beach - Inflammatory carcinoma (5)
Oakland (Kaiser) - Histiocytoid carcinoma (3)
San Diego (Naval Medical Center) - Histiocytoid carcinoma
Hayward (St. Rose Hospital) - Carcinoma simplex (1); Infiltrating lobular carcinoma (3)
Sacramento (UC Davis Health Systems) - Infiltrating lobular carcinoma
Colorado (Pueblo Pathology) - Invasive apocrine carcinoma
Texas (Texas Tech University Medical Health Center) - Infiltrating ductal carcinoma
Florida (Munroe Regional Medical Center) - Invasive lobular carcinoma, histiocytic type
Iowa (UIHC) - Histiocytoid variant of lobular carcinoma
Illinois (Northwestern Memorial Hospital) - Infiltrating lobular carcinoma, classic type
Indiana (Fort Wayne) - Histiocytoid infiltrating lobular carcinoma
Michigan (Foote Hospital) - Apocrine carcinoma
Michigan (St. Joseph Mercy Hospital) - Invasive apocrine carcinoma
Michigan (Oakwood Hospital) - Invasive carcinoma with signet ring cells
Ohio (McCullough-Hyde Memorial Hospital) - Inflammatory carcinoma
New Jersey (Overlook Hospital) - Invasive duct carcinoma with histiocytoid features (2); With granular cell features with focal signet ring cell component (1)
Pennsylvania (Lehigh Valley Hospital) - Lobular carcinoma
Pennsylvania (Conemaugh Memorial Medical Center) - Infiltrating lobular carcinoma, histiocytic variant ?? infiltrating apocrine carcinoma
Maryland (University of Maryland) - Infiltrating lobular carcinoma, histiocytoid variant (histiocytoid carcinoma)
Maryland (National Naval Medical Center) - Histiocytoid carcinoma
Maryland (Woodbine) - Infiltrating lobular carcinoma (2)
New York (Long Island Jewish Medical Center) - Infiltrating lobular carcinoma (histiocytoid variant)
New York (Montefiore Medical Center) - Lobular carcinoma with histiocytoid features
Canada (Foothills Hospital) - Histiocytoid carcinoma
Japan (Kawasaki Medical School Hospital) - Invasive lobular carcinoma, apocrine variant (1); metastatic carcinoma (1); Apocrine carcinoma (1); Signet-ring cell carcinoma (1)
Japan (Shimada City) - Invasive apocrine carcinoma
Saudi Arabia (King Khalid University Hospital) - Infiltrating lobular carcinoma with signet ring feature
Australia (Sydney) - Lobular carcinoma – histiocytoid variant

DIAGNOSIS:

Histiocytoid ("Myoblastomatoid") Carcinoma, Breast
 T-04000, M-80103

REFERENCES:

Eusebi V, et al. Myoblastomatoid (Histiocytoid) Carcinoma of the Breast. *Am J Surg Pathol* 1995; 19(5):553-562.
 Filototico M, et al. Histiocytoid Carcinoma of the Breast. A Problem of Differential Diagnosis for the Pathologist. Report of a Case. *Pathologica* 1983; 75:429-433.
 Walford N, et al. Histiocytoid Breast Carcinoma. A Apocrine Variant of Lobular Carcinoma. *Histopathol* 1989; 14:515-522.
 Raju U, et al. The Histologic Spectrum of Apocrine Breast Proliferations. A Comparative Study of Morphology and DNA Content by Image Analysis. *Hum Pathol* 1993; 24(2):173-181.
 Abati AD, et al. Apocrine Mammary Carcinoma. A Clinicopathological Study of 72 Cases. *Am J Clin Pathol* 1990; 94(4):371-377.

LLUMC Pathology Residents - Myxoid liposarcoma
Mountain View (El Camino Hospital) - Myxoid liposarcoma
Orange (UCI Medical Center Residents) - Liposarcoma, low grade
Ventura (Unilab) - Myxoid liposarcoma (2)
Long Beach - Myxoid liposarcoma (5)
Oakland (Kaiser) - Myxoid liposarcoma (3)
San Diego (Naval Medical Center) - Myxoid liposarcoma (10); Myxoid and renal cell liposarcoma (1)
Hayward (St. Rose Hospital) - Myxoid liposarcoma (4)
Sacramento (UC Davis Health Systems) - Myxoid liposarcoma
Colorado (Pueblo Pathology) - Myxoid liposarcoma
Texas (Texas Tech University Medical Health Center) - Recurrent carcinoma
Florida (Munroe Regional Medical Center) - Myxoid liposarcoma
Iowa (UIHC) - Liposarcoma
Illinois (Northwestern Memorial Hospital) - Myxoid liposarcoma
Indiana (Fort Wayne) - Recurrent myxoid liposarcoma
Michigan (Foote Hospital) - Myxoid liposarcoma
Michigan (St. Joseph Mercy Hospital) - Myxoid liposarcoma
Michigan (Oakwood Hospital) - Myxoid liposarcoma
Ohio (McCullough-Hyde Memorial Hospital) - Myxoid liposarcoma
New Jersey (Overlook Hospital) - Myxoid liposarcoma (3); Myxoid cell component (1)
Pennsylvania (Lehigh Valley Hospital) - Myxoid liposarcoma
Pennsylvania (Conemaugh Memorial Medical Center) - Liposarcoma
Maryland (University of Maryland) - Myxoid liposarcoma
Maryland (National Naval Medical Center) - Myxoid liposarcoma
Maryland (Woodbine) - Myxoid liposarcoma (2)
New York (Long Island Jewish Medical Center) - Myxoid liposarcoma
New York (Montefiore Medical Center) - Myxoid liposarcoma
Canada (Foothills Hospital) - Myxoid liposarcoma
Japan (Kawasaki Medical School Hospital) - Liposarcoma, myxoid/round cell variant (2); Stromal sarcoma (1); Malignant phyllodes tumor (1)
Japan (Shimada City) - Myxoid liposarcoma
Saudi Arabia (King Khalid University Hospital) - Myxoid liposarcoma
Australia (Sydney) - Myxoid liposarcoma

DIAGNOSIS:

Myxoid Liposarcoma, Breast
 T-04000, M-88523

REFERENCES:

- Fujii H, et al. Genetic Divergence in Clonal Evolution of Breast Cancer. *Cancer Res* 1996; 56(7):1493-1497.
 Knight JC, et al. Translocation t(12; 16)(q13; p11) in Myxoid Liposarcoma and Round Cell Liposarcoma. Molecular and Cytogenetic Analysis. *Cancer Res* 1995; 55(1): 24-27.
 Titius BR, et al. (Bilateral Breast Carcinoma after Recurrent Myxoid Liposarcoma of the Breast). *Pathologie* 1995; 16(3):230-240.
 Sreekantaiah C, et al. Cytogenetic Findings in Liposarcoma Correlate with Histopathologic Subtypes. *Cancer* 1992; 69(10):2484-2495.
 Pollard SG, et al. Breast Sarcoma. A Clinicopathologic Review of 25 Cases. *Cancer* 1990; 66(5):941-944.
 Foschini MP, et al. Sarcomatoid Neoplasms of the Breast. Proposed Definitions for Biphasic and Monophasic Sarcomatoid Mammary Carcinomas. *Semin Diagn Pathol* 1993; 10(2):128-136.

LLUMC Pathology Residents - Medullary carcinoma

Mountain View (El Camino Hospital) - Metaplastic carcinoma, high grade, with heterologous features

Orange (UCI Medical Center Residents) - Ductal carcinoma

Ventura (Unilab) - Infiltrating ductal carcinoma (2)

Long Beach - High grade carcinoma (5)

Oakland (Kaiser) - Metaplastic carcinoma (3)

San Diego (Naval Medical Center) - Poorly differentiated adenocarcinoma (6); Grade III, infiltrating ductal carcinoma (4)

Hayward (St. Rose Hospital) - Infiltrating ductal carcinoma (4)

Sacramento (UC Davis Health Systems) - High grade carcinoma

Colorado (Pueblo Pathology) - Pure squamous cell carcinoma

Texas (Texas Tech University Medical Health Center) - Ductal carcinoma

Florida (Munroe Regional Medical Center) - Metaplastic carcinoma

Iowa (UIHC) - High grade carcinoma, NOS

Illinois (Northwestern Memorial Hospital) - Poorly differentiated carcinoma

Indiana (Fort Wayne) - Anaplastic carcinoma

Michigan (Foote Hospital) - Lipid rich carcinoma

Michigan (St. Joseph Mercy Hospital) - Poorly differentiated squamous carcinoma

Michigan (Oakwood Hospital) - Invasive ductal carcinoma, high grade

Ohio (McCullough-Hyde Memorial Hospital) - Carcinosarcoma

New Jersey (Overlook Hospital) - Metaplastic carcinoma with necrosis (2); Medullary carcinoma (1)

Pennsylvania (Lehigh Valley Hospital) - Metaplastic carcinoma

Pennsylvania (Conemaugh Memorial Medical Center) - Metaplastic carcinoma

Maryland (University of Maryland) - Invasive ductal carcinoma, Grade III, medullary-like

Maryland (National Naval Medical Center) - Poorly differentiated carcinoma (7); Metaplastic carcinoma (4); Comedo carcinoma (1)

Maryland (Woodbine) - Comedo carcinoma (2)

New York (Long Island Jewish Medical Center) - Infiltrating poorly differentiated duct carcinoma with medullary features

New York (Montefiore Medical Center) - Extensively necrotic poorly differentiated squamous cell carcinoma with focal clear cell features, r/o metastasis

Canada (Foothills Hospital) - Metaplastic carcinoma

Japan (Kawasaki Medical School Hospital) - Undifferentiated carcinoma (2); Invasive ductal carcinoma, high-grade (2)

Japan (Shimada City) - Squamous cell carcinoma

Saudi Arabia (King Khalid University Hospital) - High grade ductal carcinoma (1); Metastatic carcinoma (3); Poorly differentiated squamous cell carcinoma (2)

Australia (Sydney) - High grade ductal carcinoma, NOS

DIAGNOSIS:

High Grade Ductal Carcinoma, Breast

T-04000, M-85003

REFERENCES:

- Tsuda H, et al. Myoepithelial Differentiation in High-Grade Massive Ductal Carcinomas with Large Central Acellular Zones. *Hum Pathol* 1999; 30(10):1134-1139.
- Al-Sobhi SS, et al. Extent of Lumpectomy for Breast Cancer After Diagnosis by Stereotactic Core Versus Wire Localization Biopsy. *Ann Surg Oncol* 1999; 6(4):330-335.
- Roberti NE. The Role of Histologic Grading in the Prognosis of Patients with Carcinoma of the Breast. Is This a Neglected Opportunity? *Cancer* 1997; 80(9):1708-1716.
- Domagala W, et al. Nuclear p53 Protein Accumulates Preferentially In Medullary and High-Grade Ductal but Rarely in Lobular Breast Carcinomas. (See Comments). *Am J Pathol* 1994; 144(1):205.
- Domagala W, et al. Vimentin I Preferentially Expressed in High-Grade Ductal and Medullary, But Not in Lobular Breast Carcinomas. *Am J Pathol* 1990; 137(5):1059-1064.
- Colecchia M, et al. p53 Protein Expression in Fine-Needle Aspirates of Breast Cancer. An Immunocytochemical Assay for Identifying High-Grade Ductal Carcinomas. *Diagn Cytopathol* 1995; 13(2):128-132.

LLUMC Pathology Residents - Low grade cystosarcoma phyllodes
Mountain View (El Camino Hospital) - Cystosarcoma
Orange (UCI Medical Center Residents) - Phyllodes tumor, low grade
Ventura (Unilab) - Phyllodes tumor (2)
Long Beach - Phyllodes tumor, low malignant potential (5)
Oakland (Kaiser) - Phyllodes tumor, benign (3)
San Diego (Naval Medical Center) - Phyllodes tumor (8); Borderline phyllodes tumor (2)
Hayward (St. Rose Hospital) - Phyllodes tumor, low grade (4)
Sacramento (UC Davis Health Systems) - Cystosarcoma phyllodes
Colorado (Pueblo Pathology) - Phyllodes tumor
Texas (Texas Tech University Medical Health Center) - Giant fibroadenoma
Florida (Munroe Regional Medical Center) - Phyllodes tumor
Iowa (UIHC) - Phyllodes tumor, low grade
Illinois (Northwestern Memorial Hospital) - Benign phyllodes tumor
Indiana (Fort Wayne) - Phyllodes tumor
Michigan (Foote Hospital) - Malignant cystosarcoma phyllodes
Michigan (St. Joseph Mercy Hospital) - Phyllodes tumor, borderline type
Michigan (Oakwood Hospital) - Phyllodes tumor
Ohio (McCullough-Hyde Memorial Hospital) - Cystosarcoma phyllodes, low grade
New Jersey (Overlook Hospital) - Phyllodes tumor, borderline (1); Benign phyllodes tumor (2)
Pennsylvania (Lehigh Valley Hospital) - Phyllodes tumor
Pennsylvania (Conemaugh Memorial Medical Center) - Malignant phyllodes tumor
Maryland (University of Maryland) - Cystosarcoma phyllodes, low grade
Maryland (National Naval Medical Center) - Phyllodes tumor, low grade
Maryland (Woodbine) - Phyllodes tumor, benign (2)
New York (Long Island Jewish Medical Center) - Phyllodes tumor of low malignant potential
New York (Montefiore Medical Center) - Cystosarcoma phyllodes of uncertain malignant potential
Canada (Foothills Hospital) - Phyllodes tumor, low grade
Japan (Kawasaki Medical School Hospital) - Phyllodes tumor, low-grade (4)
Japan (Shimada City) - Pseudoangiomatous hyperplasia
Saudi Arabia (King Khalid University Hospital) - Phyllodes tumor (intermediate/borderline).
Australia (Sydney) - Phyllodes tumor—borderline (mitoses up to 6/10 HPF)

DIAGNOSIS:**Phyllodes Tumor, Breast**

T-04000, M-90213

REFERENCES:

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 Pollard SG, et al. Breast Sarcoma. A Clinicopathologic Review of 25 Cases. *Cancer* 1990;66(5):941-944.
 Geisler DP, et al. Phyllodes Tumors of the Breast. A Review of 32 Cases. *Am Surg* 2000; 66(4):360-366.
 Barth RJ Jr. Histologic Features Predict Local Recurrence After Breast Conserving Therapy of Phyllodes Tumors. *Breast Cancer Res Treat* 1999; 57(3):291-295.
 Chhieng DC, et al. Fine-Needle Aspiration Cytology of Spindle Cell Lesions of the Breast. *Cancer* 1999; 25;87(6):359-371.

LLUMC Pathology Residents - Angiosarcoma, intermediate grade
Mountain View (El Camino Hospital) - Angiosarcoma
Orange (UCI Medical Center Residents) - Angiosarcoma, low grade
Ventura (Unilab) - Angiosarcoma (2)
Long Beach - Angiosarcoma (5)
Oakland (Kaiser) - Angiosarcoma (3)
San Diego (Naval Medical Center) - Angiosarcoma, low grade
Hayward (St. Rose Hospital) - Angiosarcoma (4)
Sacramento (UC Davis Health Systems) - Hemangioma
Colorado (Pueblo Pathology) - Angiosarcoma
Texas (Texas Tech University Medical Health Center) - Angiosarcoma, well-differentiated
Florida (Munroe Regional Medical Center) - Angiosarcoma
Iowa (UIHC) - Angiosarcoma
Illinois (Northwestern Memorial Hospital) - Angiosarcoma, grade 2
Indiana (Fort Wayne) - Angiosarcoma
Michigan (Foote Hospital) - Angiosarcoma
Michigan (St. Joseph Mercy Hospital) - Angiosarcoma
Michigan (Oakwood Hospital) - Angiosarcoma, well-differentiated
Ohio (McCullough-Hyde Memorial Hospital) - Angiosarcoma
New Jersey (Overlook Hospital) - Angiosarcoma, grade 2 (3)
Pennsylvania (Lehigh Valley Hospital) - Well-differentiated angiosarcoma of breast
Pennsylvania (Conemaugh Memorial Medical Center) - Angiosarcoma
Maryland (University of Maryland) - Angiosarcoma, low-grade
Maryland (National Naval Medical Center) - Angiosarcoma
Maryland (Woodbine) - Angiosarcoma (2)
New York (Long Island Jewish Medical Center) - Angiosarcoma, low grade
New York (Montefiore Medical Center) - Angiosarcoma
Canada (Foothills Hospital) - Angiosarcoma
Japan (Kawasaki Medical School Hospital) - Angiosarcoma (4)
Japan (Shimada City) - Angiosarcoma
Saudi Arabia (King Khalid University Hospital) - Angiosarcoma (grade/type II)
Australia (Sydney) - Angiosarcoma

DIAGNOSIS:

Angiosarcoma, Intermediate Grade, Breast

T-04000, M-91203

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- Ciatto S, et al. Sarcomas of the Breast. A Multicenter Series of 70 Cases. *Neoplasma* 1992; 39(6):375-379.
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Ohsawa M, et al. Use of Immunohistochemical Procedures in Diagnosing Angiosarcoma. Evaluation of 98 Cases. *Cancer* 1995; 75(12):2867-2874.
Rosen PP, et al. Mammary Angiosarcoma. A Prognostic Significance of Tumor Differentiation. *Cancer* 1988; 62(10):2145-2151.