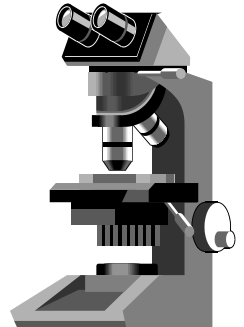


CALIFORNIA
TUMOR TISSUE REGISTRY

BREAST PATHOLOGY

Minutes – Subscription A

February 2015



SUGGESTED READING (General Topics from Recent Literature):

- Babwah JP, Khalifa M and Rowsell C. Analysis of Addenda in Anatomic Pathology as a Quality Monitoring Initiative. *Arch Pathol Lab Med* 2014; 138: 1514-1519.
- Sherman ME, Piedmonte M, et al. Pathologic Findings at Risk-Reducing Salpingo-Oophorectomy: Primary Results From Gynecologic Oncology Group Trial GOG-0199. *J Clin Oncol* 2014; 32:3275-3283.
- Kim MY, Go H, et al. Napsin A Is a Useful Marker for Metastatic Adenocarcinomas of Pulmonary Origin. *Histopathol* 2014; 65:195-206.
- Nguyen T, Khalaf N, et al. Statin Use Is Associated With a Decreased Risk of Barrett's Esophagus. *Gastroenterology* 2014; 147:314-323.
- Bonnelykke-Behrndtz ML, Schmidt H, et al. Prognostic Stratification of Ulcerated Melanoma: Not Only the Extent Matters. *Am J Clin Pathol* 2014; 142:845-856.

California Tumor Tissue Registry
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FILE DIAGNOSES

CTTR Subscription A

February 2015

Case 1:

Pseudoangiomatous stromal hyperplasia (PASH), breast

Case 2:

Adenosis tumor, breast

Case 3:

Adenoid cystic carcinoma, breast

Case 4:

Mucinous carcinoma, breast

Case 5:

Malignant high grade phyllodes tumor with liposarcomatous areas

Case 6:

Gynecomastia, breast

Case 7:

Metaplastic carcinoma with chondroid differentiation (“carcinosarcoma”), breast

Case 8:

Clear cell ductal carcinoma, breast

Case 9:

Invasive ductal carcinoma, high grade, breast

Case 10:

Metastatic carcinoma, breast primary, femur

Alameda (Alameda County Medical Center) - Pseudoangiomatous stromal hyperplasia (PASH) (6)
Fontana (Kaiser Foundation Hospital) - PASH
Glendale - Pseudoangiomatous stromal hyperplasia
Hayward/Alameda (St. Rose Hospital) - PASH
Long Beach (Long Beach Veterans Hospital) - Pseudoangiomatous stromal hyperplasia (2)
Palo Alto (Veterans Hospital) - PASH
San Jose - Pseudoangiomatous stromal hyperplasia
Santa Barbara (Miramonte Laboratory) - Pseudoangiomatous stromal hyperplasia
San Francisco (San Francisco General Hospital) - Pseudoangiomatous hyperplasia (PASH)
San Francisco (UCSF) - Pseudoangiomatous stromal hyperplasia (PASH)
Torrence (Harbor-UCLA Medical Center) - Pseudoangiomatous stromal hyperplasia (Factor VIII +)
Woodland Hills (Kaiser Permanente) - Pseudoangiomatous stromal hyperplasia
Arkansas (Associated Pathologists Laboratory) - Pseudoangiomatous stromal hyperplasia (PASH) (2)
Delaware (Armed Forces Medical Examiner System Residents) - Pseudoangiomatous stromal hyperplasia
Florida (Florida Atlantic University) - Pseudoangiomatous stromal hyperplasia
Florida (GastroEnterology Associates of Ocala) - Juvenile fibroadenoma
Georgia, Atlanta - Pseudoglandular stromal hyperplasia
Georgia (Wellstar Healthcare System) - PASH (2); Low grade angiosarcoma (1); Pseudoangiomatous stromal hyperplasia (1)
Illinois (Heartland Regional Medical Center) - Pseudoangiomatous stromal hyperplasia
Iowa (Allen Memorial Hospital) - Pseudoangiomatous stromal hyperplasia
Maryland (University of Maryland Medical System) - Pseudoangiomatous stromal hyperplasia
Massachusetts (University of Massachusetts Residents) - Pseudoangiomatous stromal hyperplasia
Minnesota (Fairview Ridges Hospital) - Pseudoangiomatous stromal hyperplasia
Mississippi (University of Mississippi Medical Center) - PASH
Missouri (Washington University Fellows) - Pseudoangiomatous stromal hyperplasia
Ohio, Union Town - Pseudoangiomatous stromal hyperplasia
Nebraska (Creighton University Medical Center) - Pseudoangiomatous stromal hyperplasia (PASH) (2)
North Carolina, Clemmons - Angiosarcoma, grade 1
North Carolina (Eastern Carolina Pathology Associates) - PASH
Ohio (Summa Health System Residents) - Pseudoangiomatous stromal hyperplasia
Ohio (University of Toledo Medical Center) - Pseudoangiomatous stromal hyperplasia
Pennsylvania (Drexel University College of Medicine Residents) - Pseudoangiomatous stromal hyperplasia
Pennsylvania (Lehigh Valley Hospital) - Angiosarcoma
Puerto Rico (University of Puerto Rico) - Vascular lesion, low grade angiosarcoma vs. hemangioma/diffuse angiomatosis
South Dakota (University of South Dakota) - Pseudoangiomatous stromal hyperplasia
Texas (Crystal Beach) - Stromal (sclerosing-capillary) and ductal hyperplasia
Australia (Royal Prince Alfred Hospital) - Pseudoangiomatoid stromal hyperplasia (1); Angiosarcoma (1)
Australia (St. Vincent's Hospital) - Pseudoangiomatous stromal hyperplasia
Canada (Pasqua Hospital) - PASH
Ireland, Bon Secours Tralee - Pseudoangiomatous stromal hyperplasia
Ireland (Kerry General Hospital) - Angiosarcoma
Ireland (Mayo General Hospital) - Pseudoangiomatous stromal hyperplasia
Japan (Asahi General Hospital) - Angiosarcoma
Japan, Kyoto - Mastopathy with pseudoangiomatous stromal hyperplasia (PASH), breast
Japan, Setagaya-Ku - Fibrocystic disease
Oman (Khoula Hospital) - Low grade angiosarcoma
Spain (CHUVI Hospital) - Pseudoangiomatous hyperplasia of mammary stroma

Case 1 - Diagnosis:

Pseudoangiomatous stromal hyperplasia (PASH), breast

Case 1 - References:

- Aspiration biopsy of nodular pseudoangiomatous stromal hyperplasia of the breast: clinicopathologic correlates in 10 cases. *Diagn Cytopathol* 2005; Jun;32(6): p345-50. Levine PH; Nimeh D, et al.
- Nodular pseudoangiomatous stromal hyperplasia of mammary stroma in a case showing rapid tumor growth. *Breast Cancer* 2005;12(4): p331-6. Taira N; Ohsumi S, et al.
- Phyllodes tumors of the breast: the role of pathologic parameters. *Am J Clin Pathol* 2005; Apr;123(4): p529-40. Tan PH; Jayabaskar T, et al.
- Malignant neoplasms infiltrating pseudoangiomatous' stromal hyperplasia of the breast: an unrecognized pathway of tumour spread. *Histopathology* 2002; Sep;41(3): p208-15. Damiani S; Eusebi V; Peterse JL.
- Tumorous PASH presenting as rapid unilateral breast enlargement. *Mayo Clin Proc* 2013; Jul;88(7): pe75. Holloway TL; Jatoi I.
- Pseudoangiomatous stromal hyperplasia of the vulva presenting as a polypoid vulvar lesion: a lesion associated with anogenital mammary-like tissue-report of a case and review of the literature. *J Low Genit Tract Dis* 2013; Oct;17(4): pe5-7. Heller DS; Aisner SC, et al.

Case No. 2, Accession No. 28185

February 2015

Alameda (Alameda County Medical Center) - Sclerosing adenosis (tumoral adenosis) (6)

Fontana (Kaiser Foundation Hospital) - Adenosis

Glendale - Columnar cell change

Hayward/Alameda (St. Rose Hospital) - Periductal stromal hyperplasia (benign phyllodes tumor)

Long Beach (Long Beach Veterans Hospital) - Fibrocystic disease with nodular pattern (1); Fibroadenoma with adenosis (1)

Palo Alto (Veterans Hospital) - Fibroadenoma consistent with adenosis

San Jose - Fibroadenoma

Santa Barbara (Miramonte Laboratory) - Fibroadenoma

San Francisco (San Francisco General Hospital) - Hamartoma

San Francisco (UCSF) - Mammary hamartoma

Torrence (Harbor-UCLA Medical Center) - Complex fibroadenoma

Woodland Hills (Kaiser Permanente) - Fibroadenoma

Arkansas (Associated Pathologists Laboratory) - Microglandular adenosis (1); Tubular adenoma (1)

Delaware (Armed Forces Medical Examiner System Residents) - Complex sclerosing lesion

Florida (Florida Atlantic University) - Fibrocystic changes with focal sclerosing adenosis

Florida (GastroEnterology Associates of Ocala) - Intraductal papilloma consistent with atypia

Georgia, Atlanta - Sclerosing adenosis

Georgia (Wellstar Healthcare System) - Fibroadenoma (2); Hamartoma (2)

Illinois (Heartland Regional Medical Center) - Nodular sclerosing adenosis

Iowa (Allen Memorial Hospital) - Fibroadenoma

Maryland (University of Maryland Medical System) - Sclerosing adenomyoepithelioma

Massachusetts (University of Massachusetts Residents) - Ductal adenoma

Minnesota (Fairview Ridges Hospital) - Benign proliferative/fibroepithelial lesion

Mississippi (University of Mississippi Medical Center) - Fibroadenoma

Missouri (Washington University Fellows) - Complex sclerosing lesion

Ohio, Union Town - Tubular adenoma

Nebraska (Creighton University Medical Center) - Adenosis (2)

North Carolina, Clemmons - Adenomyoepithelioma

North Carolina (Eastern Carolina Pathology Associates) - Lactating adenoma

Ohio (Summa Health System Residents) - Adenosis

Ohio (University of Toledo Medical Center) - Juvenile papillomatosis

Pennsylvania (Drexel University College of Medicine Residents) - Microglandular adenosis

Pennsylvania (Lehigh Valley Hospital) - Complex sclerosing lesion

Puerto Rico (University of Puerto Rico) - Sclerosing intraductal papilloma/complex fibroadenoma

South Dakota (University of South Dakota) - Breast hamartoma

Texas (Crystal Beach) - Fibrocystic disease with sclerosing adenosis and lobular hyperplasia (radial sclerosing lesion)

Australia (Royal Prince Alfred Hospital) - Adenosis tumor (1); Intraduct papilloma with sclerosis (1)
Australia (St. Vincent's Hospital) - Complex sclerosing lesion
Canada (Pasqua Hospital) - Ductal adenoma
Ireland, Bon Secours Tralee - Fibroadenoma
Ireland (Kerry General Hospital) - Invasive ductal carcinoma
Ireland (Mayo General Hospital) - Radial scar
Japan (Asahi General Hospital) - Fibrocystic disease with focal sclerosing adenosis
Japan, Kyoto - Mastopathy with sclerosing adenosis, breast
Japan, Setagaya-Ku - Adenosis
Oman (Khoula Hospital) - Adenosis (1); Microglandular adenosis on a background of fibrocystic disease (1)
Spain (CHUVI Hospital) - Complex fibroadenoma (sclerosing adenosis with fibroadenomatous changes)

Case 2 - Diagnosis:

Adenosis tumor, breast

Case 2 - References:

Nodular sclerosing adenosis of breast: A diagnostic pitfall in fine needle aspiration cytology. *J Cytol* 2013; Jan;30(1): p49-51 Sreedharanunni S; Das A; Veenu S, et al.
 Mimickers of breast malignancy on breast sonography. *J Ultrasound Med* 2013; Nov;32(11): p2029-36. Cho SH; Park SH.
 Microglandular adenosis: a non-obligate precursor of triple-negative breast cancer? *Histol Histopathol* 2013; Sep;28(9): p1099-108. Wen YH; Weigelt B; Reis-Filho JS.
 Fine-needle aspiration cytology of sclerosing adenosis of the breast: a retrospective review of cytologic features in conjunction with corresponding histologic features and radiologic findings. *Am J Clin Pathol* 2012; Jul;138(1): p96-102. Kundu UR; Guo M, et al.
 Acinic cell carcinoma of the breast arising in microglandular adenosis. *Case Rep Pathol* 2013; 2013:736048. Falletti J; Coletti G, et al.

Case No. 3, Accession No. 29250

February 2015

Alameda (Alameda County Medical Center) - Adenoid cystic carcinoma (6)
Fontana (Kaiser Foundation Hospital) - Mucinous spherulosis
Glendale - Adenoid cystic carcinoma
Hayward/Alameda (St. Rose Hospital) - Collagenous spherulosis, basophilic variant
Long Beach (Long Beach Veterans Hospital) - Adenoid cystic carcinoma (2)
Palo Alto (Veterans Hospital) - Adenoid cystic carcinoma
San Jose - Adenoid cystic carcinoma
Santa Barbara (Miramonte Laboratory) - Collagenous spherulosis
San Francisco (San Francisco General Hospital) - Carcinoma arising in microglandular adenosis
San Francisco (UCSF) - Intraductal papilloma with collagenous spherulosis
Torrence (Harbor-UCLA Medical Center) - Secretory carcinoma
Woodland Hills (Kaiser Permanente) - Adenoid cystic carcinoma
Arkansas (Associated Pathologists Laboratory) - Adenoid cystic carcinoma (2)
Delaware (Armed Forces Medical Examiner System Residents) - Adenoid cystic carcinoma
Florida (Florida Atlantic University) - Adenoid cystic carcinoma
Florida (GastroEnterology Associates of Ocala) - Atypical ductal hyperplasia
Georgia, Atlanta - Adenoid cystic carcinoma
Georgia (Wellstar Healthcare System) - Adenoid cystic carcinoma (4)
Illinois (Heartland Regional Medical Center) - Adenoid cystic carcinoma
Iowa (Allen Memorial Hospital) - Adenoid cystic carcinoma
Maryland (University of Maryland Medical System) - Adenoid cystic carcinoma
Massachusetts (University of Massachusetts Residents) - Mucinous spherulosis
Minnesota (Fairview Ridges Hospital) - Adenoid cystic carcinoma
Mississippi (University of Mississippi Medical Center) - Collagenous spherulosis

Missouri (Washington University Fellows) - Adenoid cystic carcinoma
Ohio, Union Town - Adenoid cystic carcinoma
Nebraska (Creighton University Medical Center) - Adenoid cystic carcinoma (2)
North Carolina, Clemmons - Adenoid cystic carcinoma
North Carolina (Eastern Carolina Pathology Associates) - Adenoid cystic carcinoma
Ohio (Summa Health System Residents) - Adenoid cystic carcinoma
Ohio (University of Toledo Medical Center) - Adenoid cystic carcinoma
Pennsylvania (Drexel University College of Medicine Residents) - Adenoid cystic carcinoma
Pennsylvania (Lehigh Valley Hospital) - Adenoid cystic carcinoma
Puerto Rico (University of Puerto Rico) - Adenoid cystic carcinoma
South Dakota (University of South Dakota) - Adenoid cystic carcinoma
Texas (Crystal Beach) - Collagenous spherulosis
Australia (Royal Prince Alfred Hospital) - Adenoid cystic carcinoma (2)
Australia (St. Vincent's Hospital) - Adenoid cystic carcinoma
Canada (Pasqua Hospital) - Adenoid cystic carcinoma
Ireland, Bon Secours Tralee - Adenoid cystic carcinoma
Ireland (Kerry General Hospital) - Adenoid cystic carcinoma
Ireland (Mayo General Hospital) - Adenoid cystic carcinoma
Japan (Asahi General Hospital) - Adenoid cystic carcinoma
Japan, Kyoto - Adenoid cystic carcinoma, breast
Japan, Setagaya-Ku - Mucinous carcinoma
Oman (Khoula Hospital) - Adenoid cystic carcinoma
Spain (CHUVI Hospital) - Adenoid cystic carcinoma

Case 3 - Diagnosis:

Adenoid cystic carcinoma, breast

Case 3 - References:

CD10 and HHF35 actin in the differential diagnosis between Collagenous spherulosis and adenoid-cystic carcinoma of the breast. *Pathol Res Pract* 2012; Jul 15;208(7): p405-9. Cabibi D; Giannone AG, et al.
 Adenoid cystic carcinomas constitute a genomically distinct subgroup of triple-negative and basal-like breast cancers. *J Pathol* 2012; Jan;226(1): p84-96. Wetterskog D; Lopez-Garcia MA, et al.
 Adolescent male adenoid cystic breast carcinoma. *Am Surg* 2012; May;78(5): pE288-9. Liu J; Jia W, et al.
 A review of adenoid cystic carcinoma of the breast with emphasis on its molecular and genetic characteristics. *Hum Pathol* 2013; Mar;44(3): p301-9. Vranic S; Bender R, et al.
 Salivary gland-like tumors of the breast express basal-type immunohistochemical markers. *Appl Immunohistochem Mol Morphol* 2013; Jul;21(4): p283-6. Reyes C; Jorda M; Gomez-Fernandez C.
 Mutation profiling of adenoid cystic carcinomas from multiple anatomical sites identifies mutations in the RAS pathway, but no KIT mutations. *Histopathology* 2013; Mar;62(4): p543-50. Wetterskog D; Wilkerson PM, et al

Case No. 4, Accession No. 31721

February 2015

Alameda (Alameda County Medical Center) - Mucinous carcinoma (6)
Fontana (Kaiser Foundation Hospital) - Mucinous carcinoma
Glendale - Mucinous carcinoma
Hayward/Alameda (St. Rose Hospital) - Mucinous carcinoma
Long Beach (Long Beach Veterans Hospital) - Mucinous carcinoma (2)
Palo Alto (Veterans Hospital) - Mucinous carcinoma consistent with neuroendocrine differentiation
San Jose - Colloid carcinoma
Santa Barbara (Miramonte Laboratory) - Mucinous carcinoma
San Francisco (San Francisco General Hospital) - Mucinous carcinoma
San Francisco (UCSF) - Mucinous carcinoma
Torrence (Harbor-UCLA Medical Center) - Mucinous (colloid) carcinoma
Woodland Hills (Kaiser Permanente) - Mucinous carcinoma
Arkansas (Associated Pathologists Laboratory) - Mucinous carcinoma, type B (2)

Delaware (Armed Forces Medical Examiner System Residents) - Mucinous carcinoma
Florida (Florida Atlantic University) - Mucinous carcinoma
Florida (GastroEnterology Associates of Ocala) - Mucinous adenocarcinoma
Georgia, Atlanta - Mucinous (colloid) carcinoma
Georgia (Wellstar Healthcare System) - Invasive mucinous carcinoma (4)
Illinois (Heartland Regional Medical Center) - Mucinous carcinoma
Iowa (Allen Memorial Hospital) - Mucinous (colloid) carcinoma
Maryland (University of Maryland Medical System) - Mucinous carcinoma
Massachusetts (University of Massachusetts Residents) - Mucinous carcinoma
Minnesota (Fairview Ridges Hospital) - Mucinous carcinoma
Mississippi (University of Mississippi Medical Center) - Mucinous carcinoma
Missouri (Washington University Fellows) - Invasive mucinous carcinoma
Ohio, Union Town - Mucinous carcinoma
Nebraska (Creighton University Medical Center) - Mucinous carcinoma with neuroendocrine features (2)
North Carolina, Clemmons - Mucinous carcinoma, type B
North Carolina (Eastern Carolina Pathology Associates) - Mucinous carcinoma
Ohio (Summa Health System Residents) - Colloid carcinoma
Ohio (University of Toledo Medical Center) - Mucinous carcinoma
Pennsylvania (Drexel University College of Medicine Residents) - Mucinous carcinoma
Pennsylvania (Lehigh Valley Hospital) - Mucinous adenocarcinoma
Puerto Rico (University of Puerto Rico) - Mucinous carcinoma, rule out solid type papillary carcinoma
South Dakota (University of South Dakota) - Mucinous carcinoma
Texas (Crystal Beach) - Colloid (mucinous) carcinoma
Australia (Royal Prince Alfred Hospital) - Mucinous adenocarcinoma (2)
Australia (St. Vincent's Hospital) - Invasive solid papillary carcinoma
Canada (Pasqua Hospital) - Mucinous carcinoma
Ireland, Bon Secours Tralee - Mucinous carcinoma
Ireland (Kerry General Hospital) - Carcinoma with neuroendocrine features
Ireland (Mayo General Hospital) - Colloid (mucinous) carcinoma
Japan (Asahi General Hospital) - Mucinous carcinoma
Japan, Kyoto - Mucinous carcinoma, breast
Japan, Setagaya-Ku - Mucinous carcinoma
Oman (Khoula Hospital) - Mucinous/colloid carcinoma
Spain (CHUVI Hospital) - Mucinous carcinoma (type B)

Case 4 - Diagnosis:

Mucinous carcinoma, breast

Case 4 - References:

- Secretory carcinoma of breast: pattern of MUC 2/MUC 4/MUC 6 expression. *Breast J* 2013; Mar-Apr;19(2): p222-4. Shet T; Valsangar S; Dhende S.
- Precursor lesions of mucinous carcinoma of the breast: analysis of 130 cases. *Am J Surg Pathol* 2013; Jul;37(7): p1076-84. Kryvenko ON; Chitale DA, et al.
- Expression of MUC1, MUC2, MUC5AC and MUC5B in mucinous lesions of the breast. *Pathobiology* 2012;79(3): p144-53. Kim D; Jung WH; Koo JS.
- Invasive lobular carcinoma with extracellular mucin as a distinct variant of lobular carcinoma: a case report. *Diagn Pathol* 2012;7:91. Haltas H; Bayrak R, et al.
- Pathogenesis of colloid (pure mucinous) carcinoma of exocrine organs: Coupling of gel-forming mucin (MUC2) production with altered cell polarity and abnormal cell-stroma interaction may be the key factor in the morphogenesis and indolent behavior of colloid carcinoma in the breast and pancreas. *Am J Surg Pathol* 2003; May;27(5): p571-8. Adsay NV; Merati K, et al.
- Can mucinous lesions of the breast be reliably diagnosed by core needle biopsy? *Am J Clin Pathol* 2002; Jul;118(1): p82-4. Renshaw AA.
- Mammary mucinous carcinoma with marked cytoplasmic hyalinization. A report of 2 cases with emphasis on fine needle aspiration cytologic findings. *Acta Cytol* 2003; Nov-Dec;47(6): p1045-9. Ng WK.

Alameda (Alameda County Medical Center) - Malignant phyllodes tumor (6)
Fontana (Kaiser Foundation Hospital) - Malignant phyllodes tumor
Glendale - Periductal stromal sarcoma
Hayward/Alameda (St. Rose Hospital) - Malignant phyllodes tumor with metaplasia
Long Beach (Long Beach Veterans Hospital) - Malignant phyllodes tumor (2)
Palo Alto (Veterans Hospital) - Malignant phyllodes with liposarcomatous differentiation
San Jose - Malignant phyllodes tumor with liposarcoma
Santa Barbara (Miramonte Laboratory) - Myofibroblastoma
San Francisco (San Francisco General Hospital) - Malignant phyllodes sarcoma
San Francisco (UCSF) - Malignant phyllodes tumor
Torrence (Harbor-UCLA Medical Center) - Malignant phyllodes tumor
Woodland Hills (Kaiser Permanente) - High grade phyllodes tumor with heterologous (liposarcoma) elements
Arkansas (Associated Pathologists Laboratory) - Phyllodes tumor with liposarcoma (2)
Delaware (Armed Forces Medical Examiner System Residents) - Malignant phyllodes tumor with liposarcomatous differentiation
Florida (Florida Atlantic University) - Malignant phyllodes with liposarcoma
Florida (GastroEnterology Associates of Ocala) - Malignant fibrous histiocytoma
Georgia, Atlanta - Malignant phyllodes tumor with focal liposarcoma
Georgia (Wellstar Healthcare System) - Malignant phyllodes tumor (3); Epithelioid hemangioendothelioma (1)
Illinois (Heartland Regional Medical Center) - Phyllodes tumor, high grade
Iowa (Allen Memorial Hospital) - Phyllodes tumor
Maryland (University of Maryland Medical System) - High grade phyllodes tumor, with sarcomatous overgrowth
Massachusetts (University of Massachusetts Residents) - Malignant phyllodes with liposarcomatoid differentiation
Minnesota (Fairview Ridges Hospital) - Malignant phyllodes tumor with liposarcomatous differentiation
Mississippi (University of Mississippi Medical Center) - Malignant phyllodes
Missouri (Washington University Fellows) - Malignant phyllodes tumor
Ohio, Union Town - Phyllodes tumor
Nebraska (Creighton University Medical Center) - Malignant phyllodes tumor (2)
North Carolina, Clemmons - Liposarcoma (arising in phyllodes tumor)
North Carolina (Eastern Carolina Pathology Associates) - Malignant phyllodes tumor
Ohio (Summa Health System Residents) - Metaplastic carcinoma
Ohio (University of Toledo Medical Center) - Malignant phyllodes with heterologous component
Pennsylvania (Drexel University College of Medicine Residents) - Malignant phyllodes
Pennsylvania (Lehigh Valley Hospital) - Malignant Phyllodes tumor
Puerto Rico (University of Puerto Rico) - Malignant phyllodes tumor with liposarcomatous differentiation
South Dakota (University of South Dakota) - High grade malignant phyllodes tumor
Texas (Crystal Beach) - Cystosarcoma phyllodes
Australia (Royal Prince Alfred Hospital) - Malignant phyllodes tumor (1); Pleomorphic undifferentiated sarcoma, breast (1)
Australia (St. Vincent's Hospital) - Malignant phyllodes tumor with liposarcomatous differentiation
Canada (Pasqua Hospital) - Malignant phyllodes tumor with liposarcomatous areas
Ireland, Bon Secours Tralee - Malignant phyllodes tumor
Ireland (Kerry General Hospital) - Malignant phyllodes tumor
Ireland (Mayo General Hospital) - Malignant phyllodes tumor
Japan (Asahi General Hospital) - Phyllodes tumor
Japan, Kyoto - Malignant phyllodes tumor, breast
Japan, Setagaya-Ku - Phyllodes tumor
Oman (Khoula Hospital) - Malignant phyllodes tumor with liposarcomatous differentiation
Spain (CHUVI Hospital) - Malignant phyllodes tumor with liposarcomatous areas

Case 5 - Diagnosis:

Malignant high grade phyllodes tumor with liposarcomatous areas

Case 5 - References:

- Malignant phyllodes tumor with liposarcomatous differentiation. *Arch Pathol Lab Med* 2005; Mar;129(3): p421-2. Isotalo PA; George RL, et al.
- Malignant phyllodes tumor with pleomorphic liposarcomatous stroma diagnosed by fine needle aspiration cytology: a case report. *Acta Cytol* 2002; Jan-Feb;46(1): p50-6. Vera-Alvarez J; Marigil-Gomez M, et al.
- Osteosarcomatous differentiation in lung metastases from a malignant phyllodes tumour of the breast. *J Clin Pathol* 2004; Apr;57(4): p432-4. Tsubochi H; Sato N, et al.
- Phyllodes tumours of the breast--a retrospective study from 1982-2000 of 50 cases in Portsmouth. NLM ID: PMC1963973. *Ann R Coll Surg Engl* 2005; Sep;87(5): p339-44. Sotheran W; Domjan J, et al.
- Malignant phyllodes tumor composed almost exclusively of a fibrosarcomatous component: a case report and review of malignant phyllodes tumors with metastases. *Breast Cancer* 2010; Jul;17(3): p218-24. Suzuki-Uematsu S; Shiraishi K, et al.
- Phyllodes tumor of the breast: a retrospective study of the impact of histopathological factors in local recurrence and distant metastasis. *Ann Saudi Med* 2013; Mar-Apr;33(2): p162-8. Sawalhi S; Al-Shatti M.
- Phyllodes tumours of the breast - differentiating features in core needle biopsy. *Histopathology* 2011; Oct;59(4): p600-8. Tsang AK; Chan SK, et al.
- Comparison of stromal CD10 expression in benign, borderline, and malignant phyllodes tumors among Egyptian female patients. *Indian J Pathol Microbiol* 2011; Oct-Dec;54(4): p741-4. Ibrahim WS.

Case No. 6, Accession No. 25105

February 2015

Alameda (Alameda County Medical Center) - Gynecomastia (6)
Fontana (Kaiser Foundation Hospital) - Gynecomastia
Glendale - Gynecomastia
Hayward/Alameda (St. Rose Hospital) - Gynecomastia
Long Beach (Long Beach Veterans Hospital) - Gynecomastia (2)
Palo Alto (Veterans Hospital) - Gynecomastia with lactational changes
San Jose - Hamatoma
Santa Barbara (Miramonte Laboratory) - Gynecomastia
San Francisco (San Francisco General Hospital) - Gynecomastia
San Francisco (UCSF) - Gynecomastia
Torrence (Harbor-UCLA Medical Center) - Gynecomastia
Woodland Hills (Kaiser Permanente) - Mammary hamartoma in gynecomastia
Arkansas (Associated Pathologists Laboratory) - Gynecomastia (2)
Delaware (Armed Forces Medical Examiner System Residents) - Gynecomastia
Florida (Florida Atlantic University) - Fibrocystic change with focal lactational change
Florida (GastroEnterology Associates of Ocala) - Gynecomastia
Georgia, Atlanta - Gynecomastia
Georgia (Wellstar Healthcare System) - Gynecomastia/lactational-like adenoma (4)
Illinois (Heartland Regional Medical Center) - Gynecomastia with adenosis
Iowa (Allen Memorial Hospital) - Gynecomastia
Maryland (University of Maryland Medical System) - Gynecomastia
Massachusetts (University of Massachusetts Residents) - Gynecomastia
Minnesota (Fairview Ridges Hospital) - Gynecomastia with secretory changes
Mississippi (University of Mississippi Medical Center) - Gynecomastia
Missouri (Washington University Fellows) - Gynecomastia
Ohio, Union Town - Gynecomastia
Nebraska (Creighton University Medical Center) - Gynecomastia (2)
North Carolina, Clemmons - Gynecomastia
North Carolina (Eastern Carolina Pathology Associates) - Gynecomastia
Ohio (Summa Health System Residents) - Gynecomastia
Ohio (University of Toledo Medical Center) - Gynecomastia
Pennsylvania (Drexel University College of Medicine Residents) - Gynecomastia with lactational change
Pennsylvania (Lehigh Valley Hospital) - Gynecomastia

Puerto Rico (University of Puerto Rico) - Gynecomastia, hyalinized type
South Dakota (University of South Dakota) - Gynecomastia with fibroadenoma
Texas (Crystal Beach) - Subareolar sclerosing ductal hyperplasia
Australia (Royal Prince Alfred Hospital) - Gynecomastia (2)
Australia (St. Vincent's Hospital) - Gynecomastia
Canada (Pasqua Hospital) - Gynecomastia with PASH
Ireland, Bon Secours Tralee - Gynecomastia
Ireland (Kerry General Hospital) - Gynecomastia
Ireland (Mayo General Hospital) - Gynecomastia
Japan (Asahi General Hospital) - Gynecomastia with focal pseudo-lactational hyperplasia
Japan, Kyoto - Gynecomastia, breast
Japan, Setagaya-Ku - Gynecomastia
Oman (Khoula Hospital) - Gynecomastia
Spain (CHUVI Hospital) - Gynecomastia with lactational changes

Case 6 - Diagnosis:

Gynecomastia, breast

Case 6 - References:

The 3-layered ductal epithelium in gynecomastia. *Am J Surg Pathol* 2012; May;36(5): p762-8. Kornegoor R; Verschuur-Maes AH, et al.
 The psychological burden of idiopathic adolescent gynecomastia. *Plast Reconstr Surg* 2012; Jan;129(1): p1-7. Kinsella C; Landfair A, et al.
 Gynecomastia: pathophysiology, evaluation, and management. *Mayo Clin Proc* 2009; Nov;84(11): p1010-5. Johnson RE; Murad MH.
 Pharmacokinetics and pharmacodynamics of anastrozole in pubertal boys with recent-onset gynecomastia. *J Clin Endocrinol Metab* 2009; Aug;94(8): p2975-8. Mauras N; Bishop K, et al.
 Is cytology useful in the diagnostic workup of male breast lesions? A retrospective study over a 16-year period and review of the recent literature. *Acta Cytol* 2010; May-Jun;54(3): p259-64. Wauters CA; Kooistra BW, et al.
 Cytomorphology of male breast lesions: diagnostic pitfalls and clinical implications. *Diagn Cytopathol* 2012; Feb;40(2): p179-84. Rosa M; Masood S.

Case No. 7, Accession No. 26882

February 2015

Alameda (Alameda County Medical Center) - High grade carcinoma, consistent with metaplastic carcinoma (6)
Fontana (Kaiser Foundation Hospital) - Metaplastic carcinoma
Glendale - Metaplastic carcinoma
Hayward/Alameda (St. Rose Hospital) - Post radiation chondrosarcoma
Long Beach (Long Beach Veterans Hospital) - Recurrent poorly differentiated breast carcinoma (1); Angiosarcoma (1)
Palo Alto (Veterans Hospital) - Metaplastic carcinoma
San Jose - Invasive ductal carcinoma
Santa Barbara (Miramonte Laboratory) - High grade carcinoma
San Francisco (San Francisco General Hospital) - Poorly differentiated carcinoma
San Francisco (UCSF) - Metaplastic carcinoma
Torrence (Harbor-UCLA Medical Center) - Metaplastic carcinoma
Woodland Hills (Kaiser Permanente) - Poorly differentiated invasive ductal carcinoma with radiation therapy effect
Arkansas (Associated Pathologists Laboratory) - Adenocarcinoma with chondroid differentiation (2)
Delaware (Armed Forces Medical Examiner System Residents) - Metaplastic carcinoma
Florida (Florida Atlantic University) - Metaplastic carcinoma
Florida (GastroEnterology Associates of Ocala) - Metaplastic carcinoma, infiltrating
Georgia, Atlanta - Metaplastic carcinoma
Georgia (Wellstar Healthcare System) - Metaplastic carcinoma (3); High grade angiosarcoma (1)
Illinois (Heartland Regional Medical Center) - Metaplastic carcinoma
Iowa (Allen Memorial Hospital) - Metaplastic carcinoma

Maryland (University of Maryland Medical System) - Metaplastic carcinoma in background of pleomorphic lobular carcinoma

Massachusetts (University of Massachusetts Residents) - Metaplastic carcinoma with chondroid differentiation

Minnesota (Fairview Ridges Hospital) - Metaplastic carcinoma

Mississippi (University of Mississippi Medical Center) - Angiosarcoma

Missouri (Washington University Fellows) - Metaplastic carcinoma

Ohio, Union Town - Metaplastic carcinoma

Nebraska (Creighton University Medical Center) - Metaplastic carcinoma (2)

North Carolina, Clemmons - Invasive mammary carcinoma with radiation effect

North Carolina (Eastern Carolina Pathology Associates) - Sarcomatoid carcinoma

Ohio (Summa Health System Residents) - Recurrent carcinoma

Ohio (University of Toledo Medical Center) - Metaplastic carcinoma

Pennsylvania (Drexel University College of Medicine Residents) - Invasive ductal carcinoma with radiation effect

Pennsylvania (Lehigh Valley Hospital) - Metaplastic carcinoma

Puerto Rico (University of Puerto Rico) - Metaplastic carcinoma

South Dakota (University of South Dakota) - Poorly differentiated invasive ductal carcinoma with treatment effect

Texas (Crystal Beach) - Carcinoma metaplastic (with cartilaginous features)

Australia (Royal Prince Alfred Hospital) - Metaplastic carcinoma (2)

Australia (St. Vincent's Hospital) - Metaplastic carcinoma (with chondroid differentiation)

Canada (Pasqua Hospital) - Metaplastic carcinoma

Ireland, Bon Secours Tralee - Epithelioid angiosarcoma

Ireland (Kerry General Hospital) - Apocrine carcinoma

Ireland (Mayo General Hospital) - Metaplastic carcinoma

Japan (Asahi General Hospital) - Metaplastic carcinoma with chondroid differentiation

Japan, Kyoto - Metaplastic carcinoma, breast

Japan, Setagaya-Ku - Metaplastic carcinoma

Oman (Khoula Hospital) - Metaplastic carcinoma

Spain (CHUVI Hospital) - Matrix producing metaplastic carcinoma, with chondroid differentiation

Case 7 - Diagnosis:

Metaplastic carcinoma with chondroid differentiation ("carcinosarcoma"), breast

Case 7 - References:

Do primary mammary osteosarcoma and chondrosarcoma exist? A review of a large multi-institutional series of malignant matrix-producing breast tumours. *Breast* 2013; Feb;22(1): p13-8. Rakha EA; Tan PH, et al.

Metaplastic carcinoma of the breast: cytological diagnosis and diagnostic pitfalls. *Acta Cytol* 2011;55(4): p313-8. Joshi D; Singh P; Zonunfawni Y; Gangane N

Matrix-producing carcinoma of the breast: fine needle aspiration cytology findings of a rare subtype of metaplastic carcinoma. *Cytopathology* 2011; Dec;22(6): p421-2. Bagga PK; Mittal A; Mahajan NC.

Metaplastic breast carcinoma with extensive osseous differentiation: a report of two cases and review of the literature. *Tumori* 2011 Jul-Aug;97(4): pe1-5. Lang R; Fan Y; Fu X; Fu L.

Metaplastic carcinoma of the breast. *Hum Pathol* 2010; Jul;41(7): p960-70. Okada N; Hasebe T, et al.

Case No. 8, Accession No. 31891

February 2015

Alameda (Alameda County Medical Center) - Clear cell breast carcinoma (6)

Fontana (Kaiser Foundation Hospital) - Sebaceous carcinoma

Glendale - Lipid-rich carcinoma

Hayward/Alameda (St. Rose Hospital) - Infiltrating lobular carcinoma, clear cell type

Long Beach (Long Beach Veterans Hospital) - Clear cell carcinoma (1); Apocrine carcinoma (1)

Palo Alto (Veterans Hospital) - Lipid-rich carcinoma

San Jose - Lipid-rich carcinoma

Santa Barbara (Miramonte Laboratory) - Clear cell carcinoma

San Francisco (San Francisco General Hospital) - Metastatic renal cell carcinoma

San Francisco (UCSF) - Invasive lobular carcinoma, alveolar variant

Torrence (Harbor-UCLA Medical Center) - Glycogen-rich carcinoma
Woodland Hills (Kaiser Permanente) - Invasive histiocytoid/lipid-rich carcinoma
Arkansas (Associated Pathologists Laboratory) - Sebaceous carcinoma (2)
Delaware (Armed Forces Medical Examiner System Residents) - Invasive ductal carcinoma with clear cell change
Florida (Florida Atlantic University) - Histiocytic carcinoma
Florida (GastroEnterology Associates of Ocala) - Lobular carcinoma, clear cell variant
Georgia, Atlanta - Lipid-rich carcinoma
Georgia (Wellstar Healthcare System) - Invasive mammary carcinoma, clear cell type (2); Metastatic renal cell carcinoma vs. primary (1); Invasive ductal carcinoma, histiocytoid variant (1)
Illinois (Heartland Regional Medical Center) - Sebaceous carcinoma
Iowa (Allen Memorial Hospital) - Lipid-rich carcinoma
Maryland (University of Maryland Medical System) - Lipid-rich clear cell carcinoma
Massachusetts (University of Massachusetts Residents) - Clear cell carcinoma (lipid-rich carcinoma)
Minnesota (Fairview Ridges Hospital) - Lipid-rich mammary carcinoma
Mississippi (University of Mississippi Medical Center) - Invasive ductal carcinoma
Missouri (Washington University Fellows) - Lipid-rich carcinoma
Ohio, Union Town - Lipid-rich carcinoma
Nebraska (Creighton University Medical Center) - Apocrine carcinoma (type B) (2)
North Carolina, Clemmons - Invasive lobular carcinoma, histiocytoid variant
North Carolina (Eastern Carolina Pathology Associates) - Metastatic carcinoma with clear cell features likely RCC
Ohio (Summa Health System Residents) - Invasive lobular carcinoma
Ohio (University of Toledo Medical Center) - Lipid-rich carcinoma
Pennsylvania (Drexel University College of Medicine Residents) - Lipid-rich ductal carcinoma
Pennsylvania (Lehigh Valley Hospital) - Sebaceous carcinoma
Puerto Rico (University of Puerto Rico) - Lipid-rich carcinoma, rule out apocrine carcinoma
South Dakota (University of South Dakota) - Lipid-rich carcinoma
Texas (Crystal Beach) - Secretory carcinoma
Australia (Royal Prince Alfred Hospital) - Lipid-rich carcinoma (2)
Australia (St. Vincent's Hospital) - Sebaceous carcinoma
Canada (Pasqua Hospital) - Invasive carcinoma, lipid-rich
Ireland, Bon Secours Tralee - Lipid-rich carcinoma
Ireland (Kerry General Hospital) - Histiocytoid carcinoma
Ireland (Mayo General Hospital) - Clear cell carcinoma
Japan (Asahi General Hospital) - Glycogen-rich clear cell carcinoma
Japan, Kyoto - Lipid-rich carcinoma, breast
Japan, Setagaya-Ku - Lipid-rich carcinoma
Oman (Khoula Hospital) - Clear cell carcinoma
Spain (CHUVI Hospital) - Clear cell carcinoma of the breast

Case 8 - Diagnosis:

Clear cell ductal carcinoma, breast

Case 8 - References:

A case report of glycogen-rich clear cell carcinoma of breast. *Indian J Pathol Microbiol* 2010; Apr-Jun;53(2): p374-5. Thondavadi SR; Krishnamurthy J; Gubbanna VM.
 Investigation of tumor suppressor genes apart from VHL on 3p by deletion mapping in sporadic clear cell renal cell carcinoma (cRCC). *Urol Oncol* 2013; Oct;31(7): p1333-42. Singh RB; Amare Kadam PS.
 Metastatic endometrial endometrioid carcinoma with clear cell changes to the breast: a case report. *Ann Diagn Pathol* 2013; Feb;17(1): p127-30. Farghaly H.
 Breast metastasis from clear cell renal cell carcinoma. *J Ultrasound* 2013; Jul 5;16(3): p127-30. Botticelli A; De Francesco GP; Di Stefano D.
 Clear cell carcinoma of the breast with immunohistochemical evidence of divergent differentiation. *Ann Diagn Pathol* 2002; Aug;6(4): p250-6. Shirley SE; Escoffery CT, et al.
 Clear cell carcinoma of the breast with solid papillary pattern: a case report with immunohistochemical profile. *J. Clin Pathol* 2003 Jul; 56(7):552-4. Gurbuz Y; Ozkara SK.
 Glycogen-rich clear cell carcinoma of the breast: a chameleon? *Acta Cytol* 2005; Jul-Aug;49(4): p467-8. Ferrara G; Dalena AM, et al.

Cytological analysis of glycogen-rich carcinoma of the breast: report of two cases. *J Med Invest* 2002; Aug;49(3-4): p193-6. Satake N; Uehara H, et al.
 Fine-needle aspiration cytology of glycogen-rich carcinoma of breast: report of a case and review of literature. *Diagn Cytopathol* 2005; Oct;33(4): p263-7. Das AK; Verma K; Aron M.
 Clear cell 'sugar' tumor of the breast: another extrapulmonary site and review of the literature. *Am J Surg Pathol* 2002; May;26(5): p670-5. Govender D; Sabaratnam RM; Essa AS.

Case No. 9, Accession No. 31691

February 2015

Alameda (Alameda County Medical Center) - Invasive ductal carcinoma, grade 3 and high grade ductal carcinoma in-situ (6)
Fontana (Kaiser Foundation Hospital) - Poorly differentiated carcinoma
Glendale - High grade carcinoma
Hayward/Alameda (St. Rose Hospital) - Infiltrating ductal carcinoma (pseudomedullary)
Long Beach (Long Beach Veterans Hospital) - Invasive ductal carcinoma consistent with component of comedo-pattern DCIS (ductal carcinoma in-situ) (2)
Palo Alto (Veterans Hospital) - High grade ductal carcinoma with DCIS and focal squamous differentiation
San Jose - Invasive ductal carcinoma and ductal carcinoma in-situ
Santa Barbara (Miramonte Laboratory) - Undifferentiated carcinoma
San Francisco (San Francisco General Hospital) - Medullary carcinoma
San Francisco (UCSF) - Ductal carcinoma, SBR, grade 3
Torrence (Harbor-UCLA Medical Center) - High grade infiltrating ductal carcinoma with comedo-type ductal carcinoma in-situ
Woodland Hills (Kaiser Permanente) - Poorly differentiated invasive ductal carcinoma
Arkansas (Associated Pathologists Laboratory) - Invasive high grade ductal carcinoma with comedo carcinoma (2)
Delaware (Armed Forces Medical Examiner System Residents) - Invasive high grade ductal carcinoma
Florida (Florida Atlantic University) - Invasive ductal carcinoma associated with extensive intraductal component
Florida (GastroEnterology Associates of Ocala) - Medullary carcinoma
Georgia, Atlanta - Metaplastic carcinoma with focal squamous differentiation
Georgia (Wellstar Healthcare System) - DCIS with comedo necrosis, high grade invasive mammary carcinoma with squamous cell features (1); DCIS and invasive ductal carcinoma (3)
Illinois (Heartland Regional Medical Center) - Ductal carcinoma, grade 3
Iowa (Allen Memorial Hospital) - Invasive ductal carcinoma, grade 3, with medullary features
Maryland (University of Maryland Medical System) - Invasive ductal carcinoma, high grade with focal squamous metaplasia, DCIS, high grade, comedo type
Massachusetts (University of Massachusetts Residents) - Invasive ductal carcinoma, poorly differentiated
Minnesota (Fairview Ridges Hospital) - Infiltrating ductal carcinoma and high grade DCIS
Mississippi (University of Mississippi Medical Center) - Poorly differentiated invasive carcinoma
Missouri (Washington University Fellows) - Invasive ductal carcinoma of no special type
Ohio, Union Town - Invasive duct carcinoma
Nebraska (Creighton University Medical Center) - Ductal adenocarcinoma (basal-type) (2)
North Carolina, Clemmons - Invasive ductal carcinoma with DCIS, comedo-type
North Carolina (Eastern Carolina Pathology Associates) - Poorly differentiated ductal adenocarcinoma
Ohio (Summa Health System Residents) - Invasive ductal carcinoma
Ohio (University of Toledo Medical Center) - Invasive ductal carcinoma with associated DCIS
Pennsylvania (Drexel University College of Medicine Residents) - Glycogen rich ductal carcinoma
Pennsylvania (Lehigh Valley Hospital) - Invasive ductal carcinoma
Puerto Rico (University of Puerto Rico) - Invasive ductal carcinoma, high grade
South Dakota (University of South Dakota) - High grade invasive ductal carcinoma
Texas (Crystal Beach) - Ductal carcinoma (pleomorphic anaplastic (hypersecretory etc) and intraductal comedo
Australia (Royal Prince Alfred Hospital) - Grade 3 invasive ductal carcinoma with DCIS (1); High grade invasive ductal carcinoma (1)
Australia (St. Vincent's Hospital) - Invasive ductal carcinoma (grade 3) with basal-like morphologic features
Canada (Pasqua Hospital) - Invasive duct carcinoma
Ireland, Bon Secours Tralee - Medullary carcinoma

Ireland (Kerry General Hospital) - Ductal carcinoma NST
Ireland (Mayo General Hospital) - Infiltrating ductal carcinoma
Japan (Asahi General Hospital) - Invasive ductal carcinoma
Japan, Kyoto - Squamous cell carcinoma, high grade, breast
Japan, Setagaya-Ku - Metaplastic carcinoma
Oman (Khoulia Hospital) - High grade invasive ductal carcinoma
Spain (CHUVI Hospital) - Metaplastic carcinoma with squamous differentiation

Case 9 - Diagnosis:

Invasive ductal carcinoma, high grade, breast

Case 9 - References:

Ultrasound characteristics of histologically proven grade 3 invasive ductal breast carcinoma. *Australas Radiol* 2005; Dec;49(6): p476-9. Rotstein AH; Neerhut PK.
 Invasive ductal carcinoma of the breast with a large central acellular zone associated with matrix-producing carcinoma. *Tumori* 2004; Sep-Oct;90(5): p498-500. Hama Y; Tsuda H, et al.
 An evaluation of ductal carcinoma in-situ of breast and its correlation with the grade of associated invasive component. *Indian J Pathol Microbiol* 2001; Jul;44(3): p297-300. Konar K; Chatterjee U; Dutta SK.
 Predictors of invasive breast cancer in patients with an initial diagnosis of ductal carcinoma in situ: a guide to selective use of sentinel lymph node biopsy in management of ductal carcinoma in situ. *J Am Coll Surg* 2005; Apr;200(4): p516-26. Yen TW; Hunt KK, et al.
 Important histologic outcome predictors for patients with invasive ductal carcinoma of the breast. *Am J Surg Pathol* 2011; Oct;35(10): p1484-97. Hasebe T; Iwasaki M, et al.
 Invasive ductal breast cancer within a malignant phyllodes tumor: case report and assessment of clonality. *Hum Pathol* 2010; Feb;41(2): p293-6. Macher-Goeppinger S; Marme F, et al.
 Does ductal carcinoma in situ accompanying invasive carcinoma affect prognosis? *Surgery* 2009; Oct;146(4): p561-7; discussion 567-8. Chagpar AB; McMasters KM, et al.

Case No. 10, Accession No. 31895

February 2015

Alameda (Alameda County Medical Center) - Metastatic breast carcinoma
Fontana (Kaiser Foundation Hospital) - Metastatic breast carcinoma
Glendale - Metastatic carcinoma
Hayward/Alameda (St. Rose Hospital) - Metastatic carcinoma of breast origin (ductal)
Long Beach (Long Beach Veterans Hospital) - Metastatic breast carcinoma (right femur) with lobular features (1); Metastatic breast carcinoma (1)
Palo Alto (Veterans Hospital) - Metastatic lobular carcinoma
San Jose - Metastatic breast carcinoma
Santa Barbara (Miramonte Laboratory) - Metastatic lobular carcinoma
San Francisco (San Francisco General Hospital) - Metastatic carcinoma
San Francisco (UCSF) - Metastatic carcinoma, morphologically consistent with breast primary
Torrence (Harbor-UCLA Medical Center) - Metastatic lobular carcinoma
Woodland Hills (Kaiser Permanente) - Metastatic mammary carcinoma (metastatic pleomorphic lobular carcinoma)
Arkansas (Associated Pathologists Laboratory) - Metastatic ductal carcinoma to bone (2)
Delaware (Armed Forces Medical Examiner System Residents) - Metastatic carcinoma, consistent with lobular mammary carcinoma
Florida (Florida Atlantic University) - Metastatic breast cancer of bone
Florida (GastroEnterology Associates of Ocala) - Metastatic ductal carcinoma, breast
Georgia, Atlanta - Metastatic carcinoma suggestive of lobular carcinoma
Georgia (Wellstar Healthcare System) - Metastatic breast carcinoma (4)
Illinois (Heartland Regional Medical Center) - Metastatic carcinoma consistent with breast origin
Iowa (Allen Memorial Hospital) - Metastatic carcinoma consistent with breast primary
Maryland (University of Maryland Medical System) - Metastatic invasive ductal carcinoma
Massachusetts (University of Massachusetts Residents) - Metastatic lobular carcinoma
Minnesota (Fairview Ridges Hospital) - Metastatic breast carcinoma

Mississippi (University of Mississippi Medical Center) - Metastatic breast adenocarcinoma
Missouri (Washington University Fellows) - Metastatic ductal carcinoma
Ohio, Union Town - Metastatic carcinoma consistent with breast primary
Nebraska (Creighton University Medical Center) - Metastatic carcinoma, breast primary (2)
North Carolina, Clemmons - Metastatic lobular carcinoma
North Carolina (Eastern Carolina Pathology Associates) - Metastatic adenocarcinoma, breast primary
Ohio (Summa Health System Residents) - Metastatic carcinoma
Ohio (University of Toledo Medical Center) - Metastatic carcinoma of breast origin
Pennsylvania (Drexel University College of Medicine Residents) - Metastatic mammary carcinoma
Pennsylvania (Lehigh Valley Hospital) - Metaplastic carcinoma
Puerto Rico (University of Puerto Rico) - Metastatic carcinoma, probably lobular carcinoma of breast
South Dakota (University of South Dakota) - Metastatic carcinoma consistent with breast primary
Texas (Crystal Beach) - Carcinoma infiltrating ductal and lobular
Australia (Royal Prince Alfred Hospital) - Metastatic lobular carcinoma (2)
Australia (St. Vincent's Hospital) - Invasive lobular carcinoma, pleomorphic variant
Canada (Pasqua Hospital) - Metastatic renal carcinoma
Ireland, Bon Secours Tralee - Metastatic breast carcinoma
Ireland (Kerry General Hospital) - Metastatic carcinoma
Ireland (Mayo General Hospital) - Metastatic lobular carcinoma
Japan (Asahi General Hospital) - Metastatic carcinoma derived from breast
Japan, Kyoto - Metastatic breast carcinoma, femur
Japan, Setagaya-Ku - Metaplastic carcinoma
Oman (Khoula Hospital) - Metastatic breast carcinoma, probably lobular
Spain (CHUVI Hospital) - Metastatic breast carcinoma

Case 10 - Diagnosis:

Metastatic carcinoma, breast primary, femur

Case 10 - References:

Cutaneous metastatic breast carcinoma with clear cell features. *J Cutan Pathol* 2013; Aug;40(8): p753-7. Shinohara MM; Tozbikian G, et al.
 Breast cancer metastatic to the gastric wall. *Pol J Pathol* 2011; Dec;62(4): p282-5. Wysocka K; Okon K; Matyja A.
 Metastatic breast carcinoma to parathyroid adenoma on fine needle cytology sample: report of a case. *Diagn Cytopathol* 2011; Sep;39(9): p681-5. Fulciniti F; Pezzullo L, et al.
 Metastatic breast carcinoma simulating linitis plastica of the colon: report of a case. *Surg Today* 2011; Apr;41(4): p542-5. Okido M; Seo M, et al.
 Metastasis from breast cancer to an endometrial polyp; treatment options and follow-up. Report of a case and review of the literature. *Eur J Gynaecol Oncol* 2011;32(2): p228-30. Hooker AB; Radder CM, et al.