

**AMR SEMINARS: LIST OF CASES
(GROUPING OF CASES PER CONTRIBUTOR)**

*Legend: The number on the right side of each diagnosis indicates the Seminar number (#).

V Adsay

- Gastrointestinal-type clear cell sarcoma (52).
- Malignant Glomus Tumor (Glomangiosarcoma) of the kidney (54).
- Invasive poorly differentiated medullary-type carcinoma, arising in the ampulla (56).
- (Analogized to a) Quiz-case. Proximal type epithelioid sarcoma of the leg (58).
- Massive gastric juvenile/hyperplastic polyposis (SMAD4 related) with minute foci of invasive carcinoma (60).
- Quiz case: a soft tissue mass involving the wall of sigmoid colon: → Rosai Dorfman disease (62).
- Quiz case: markedly thin colonic wall in chronic constipation: → (64).
- Intraductal papillary mucinous neoplasm of the pancreas with extensive high-grade dysplasia (CIS), pancreatobiliary type, with microinvasion (66).

A Agaimy

- Inflammatory angiomyolipoma of the liver with features overlapping with IgG4-related pseudotumor (63).
- Sporadic microsatellite unstable colorectal carcinoma of the CIMP methylator phenotype (BRAF+) with extensive rhabdoid features and "probably secondary" SMARCB1 loss (65).

PW Allen

- Iuxta-articular myxoma (12).
- Hectopic hamartomatous thymoma (13).
- Granulosa cell tumor of ovary with florid mesothelial hyperplasia (15).
- Nuchal fibroma (17).
- Atypical decubital fibroplasia (19).
- Low-grade fibromyxoid sarcoma (21).
- "Eskimoma" (23).
- Periosteal lipoma (25).
- Hyaline fibromatosis (27).
- Solitary superficial angiomyxoma with epithelial components, subcutis, and scalp (29).
- Desmoplastic fibroblastoma (31).
- Infiltrating (and recurring) glomus tumor of the deep soft tissues misdiagnosed as synovial sarcoma (33).
- Hemosiderotic fibrohistiocytic lipomatous lesion of the foot – ankle (35).
- Undiagnosed soft tissue tumor, presumably benign, with features of desmoplastic fibroblastoma, solitary fibrous tumor, and pleomorphic hyalinizing angiectatic tumor (37).
- Multiple gastric intramucosal cysts and fundic gland polyps in Zollinger-Ellison's syndrome (39).
- Spindle cell / composite hemangioendothelioma (41).
- Lipofibromatosis? Lipoblastoma?, retroperitoneum (43).
- Primary retroperitoneal borderline mucinous tumor (45).
- Retiform hemangioendothelioma (Dabska), skin of left heel (47).
- Female adnexal tumor of probable Wolffian origin (FATWO), mesentery and retroperitoneum (49).
- Apocrine gland cyst with hemosiderotic dermatofibroma-like stroma of the skin and subcutis of the calf (51).
- Benign lymphoepithelial cyst, head of pancreas (53).
- Injection site high-grade angiosarcoma, subcutis, left buttock region, associated with hemosiderin and large calcified masses of old fat necrosis, presumably secondary to subcutaneous iron injections 20 years previously (55).
- Inflammatory myxo-hyaline tumor, dermis and subcutis, left shoulder and back (57)
- Sclerotic (fibroma-like) lipoma, dorsum of right hand (59).
- Aggressive angiomyxoma, left labium majus (61)
- Pseudo-myogenic (epithelioid sarcoma-like) haemangioendothelioma vastus medialis muscle mimicking ectopic myxoinflammatory hyaline tumour with minimal myxoid areas, proliferative myositis,). (63).
- Polypoid endometriosis with necrosis clinically simulating a sarcoma in the pouch of Douglas (65).
- Massive localised lymphedema in morbid obesity as a slowly growing, pendulous, large subcutaneous mass of the right groin (66).

CE Bacchi

- Hodgkin's disease of mixed cellularity with multi-nucleated giant cells of Warthin-Finkeldey type (18).
- Malignant ectomesenchymoma of soft tissues (20).
- Liver in a "tropical splenomegaly syndrome" (22).
- Oxyphilic clear cell carcinoma of the ovary (25).
- Mucinous cystadenocarcinoma of the breast (28).
- Low-grade endometrial stromal sarcoma of the vagina (31).
- Mixed epithelial-stromal tumor of the kidney (34).
- Malignant tumor, NOS (36).
- Granulomatous slack skin (38).
- Lymphoplasmacytic lymphoma associated with peliosis hepatis (40).
- Rhabdomyomatous carcinoma of the thymus of posterior mediastinum (42).
- Metastasizing cellular dermatofibroma of the skin (45).
- Malignant Leydig cell tumor of the testis in a 1-year-old boy with isosexual pseudoprecocity (47).
- Intestinal perineurioma with infiltrative features (49).
- Glomangioma of the posterior mediastinum (51).
- Mastocytosis in lymph node (53).
- Sclerosing extramedullary hematopoietic tumor (SEMHT) associated with chronic idiopathic myelofibrosis - intraabdominal. (55).
- Microcystic stromal tumor of the ovary (57)
- Anaplastic embryonal rhabdomyosarcoma of the orbit (59).
- MPNST, epithelioid variant but low-grade of the posterior mediastinum (other diagnostic possibilities? myxopapillary ependymoma, thymoma – ectopic, ...) (61).
- ALK-positive anaplastic large cell lymphoma mimicking nodular sclerosis Hodgkin lymphoma with null phenotype (64).
- Transformation of follicular lymphoma, Grade 2 into CD30-positive large B-cell lymphoma with anaplastic features with exclusive involvement of subcapsular and medullary sinuses (66).

D Ben-Dor

- Adrenal oncocytoma (32)
- Benign adenomyoepithelioma of the breast (34).
- Carcinoma ex pleomorphic adenoma (encapsulated, non-invasive, carcinoma in situ), parotid gland (36).
- Follow-up case to AMR Seminar #32, case1. Adrenal oncocytoma, malignant (37).
- Follicular adenoma of the thyroid with papillary architecture (39).
- Pregnancy luteoma with florid degenerative changes vs juvenile granulosa cell tumor arising independently adjacent to (collision) or pregnancy luteoma vs juvenile granulosa cell tumor with extensive luteinization (mimicking luteoma) (40).
- Merkel cell carcinoma of the scalp presenting as simultaneous metastatic lesion in the gums of the upper and lower jaws (42).
- Sarcomatoid urothelial carcinoma of the bladder with pseudoangiosarcomatous features (44).
- Parotid clear cell oncocytosis, presumably diffuse bilateral (46).
- Uterine leiomyoma with non-lymphomatous massive T-cell infiltrates secondary to treatment with GnRH agonist (48).
- High grade undifferentiated adnexal carcinoma of the skin (50).
- Langerhans cell histiocytosis of lymph node (52).
- Bile duct adenoma with neuroendocrine proliferation (54).
- Non-sebaceous lymphadenoma (vs lymphoepithelial carcinoma) (56).
- Periprostatic gastro-intestinal stromal tumor (58).
- Osteogenic sarcoma of the left mandible, osteoblastic type, presenting as an extra-osseous myxoid tumor, in a patient with a history of retinoblastoma and radiation therapy in early childhood (60).
- Encapsulated Hurthle cell carcinoma of the thyroid with extensive cytoplasmic clear cell changes (62).
- Seminoma (cKIT, sall4 positive) developing in a cryptorchid testis s/p orchiopexy and presenting as a contralateral inguinal lymph node metastasis (64).
- Basal cell adenocarcinoma of parotid, possibly developing over time in a pre-existing basal cell adenoma (66).

O Ben-Itzhak

- Hydatid cyst (echinococcosis) of bone (49).
- Postradiation osteosarcoma of the pleura in a patient with previous diagnosis of Hodgkin's disease and probable atypical myofibroblastic cell proliferation with ossification of soft tissue of the axilla (O Ben-Itzhak) (50).
- Thyroid follicular carcinoma-like tumor of the kidney (or thyroid-like follicular variant of papillary carcinoma?) (52).
- Congenital melanocytic tumor of the face, scalp and orbit (54).
- Xanthomatous variant of "inflammatory pseudotumor" ("unclassified epithelioid and spindle cell neoplasm with pseudoxanthomatous features") (56).
- Yttrium associated gastritis (58).
- Cutaneous leishmaniasis with pseudoepitheliomatous hyperplasia (60).
- Malakoplakia of the colon (62).

GJ Berry

- EBV-associated B cell lymphoma of the placenta (4).
- Large cell lymphoma with sclerosis of the ovary (5).
- Epithelioid hemangioendothelioma of the lung (6).
- Overlap ALCL/HD of the lymph node (7).
- Congenital cystic lymphangiectasia of the lung (8).
- Kawasaki's disease (9)
- Kikuchi's disease (11)
- Giant cell myocarditis (12)
- Large B-cell lymphoma associated with unclassified sarcoma ("collision tumor") (10)
- Florid polymyositis in a case of upper motor neuron disease (14).
- Carcinoid heart disease (16).
- Solitary fibrous tumor of pleura with entrapped pulmonary parenchymal elements (18).
- Bronchogenic cyst compressing ascending aorta and left coronary artery (22).
- Pulmonary capillaritis in Wegener's granulomatosis (20).
- Isolated form of Takayasu's arteritis (24).
- Enteropathy associated T-cell lymphoma (26).
- Intra-arterial tumor emboli of the lung (28).
- Benign granular cell tumor of bronchus (30).
- Epithelioid psammomatous melanotic schwannoma (32).
- Microcrystalline pulmonary intravascular material secondary to intravenous injection of oral Vicodin tablets (34).
- Extranodal dendritic reticulum cell sarcoma (36).
- Pompe disease involving the heart (alpha-1,4-Glucosidase deficiency) (38).
- Pulmonary heterotopia in a monoamniotic twin (40).
- Tracheal paraganglioma (42).
- Desmin cardiomyopathy (44).
- Histiocytoid cardiomyopathy (46).
- Hamazaki-Wesenberg bodies ("yellow-brown bodies") in granulomatous lymphadenitis (48).
- Sarcomatoid variant of anaplastic carcinoma of the thyroid (50).
- Acute mononucleosis, tonsil (52).
- Intracardiac teratoma (left atrium) (54).
- Anaplastic large cell lymphoma (56).
- Medullary carcinoma with glandular/cribriform pattern (58).
- Localized malignant mesothelioma, epithelioid type, pseudoglandular pattern (60).
- Pleuropulmonary blastoma, type I, regressed (62).
- Pleuropulmonary blastoma, type III (62).
- Congenital peribronchial myofibroblastic tumor (64).

M Bisceglia

- Atypical polypoid adenomyoma of the uterus (12).
- Mesoblastic nephroma plus multicystic nephroma in adult (13).
- Congenital mesoblastic nephroma (14).
- Peripheral T-cell lymphoma with erythrophagocytic histiocytosis in bone marrow? (17).
- Secondary chondrosarcoma of digit (17).
- Giant cutaneous trichilemmal horn (17).
- Quiz-case: Mycobacterial avium infection (20).
- Littoral cell angioma of the spleen plus renal cell carcinoma plus angiomatous meningioma (20).
- Hypertrophic cardiomyopathy in an infant (22).
- Central core disease with structured cores (24)
- Quiz case-1: Metastatic chondrosarcoma to the skin of nose from a primary of the digit (26).
- Retroperitoneal lymphangiomyoma versus (renal) angiomyolipoma without adipocytic component (26).
- Inflammatory pseudotumor of the kidney (26).
- Chester-Erdheim disease involving the brain (case A) and involving bone (case B) (28).
- Quiz case-3: Congenital dyserythropoietic anemia, type II (29).
- Quiz case-2: Pneumatosis cystoides intestinalis (31).
- Quiz case-1: Hyperplastic transplanted parathyroid in the forearm (31).
- Heffner tumor (as an additional case) (34).
- Lipofibromatous hamartoma of the median nerve and lipofibromatous hamartoma of the medial plantar nerve with macrodactyly (34).
- Edometrioid primary carcinoma of the uterine salpyngx (as an additional case) (35).
- Chester-Erdheim disease evolution in Langerhans' cell histiocytosis (as a Follow up case) (35).
- McArdle's disease or myophosphorylase deficiency (36).
- Lymphangioma-like adenomatoid tumor of the adrenal gland (36).
- Brucella orchitis (38).
- Lymphadenoma of the parotid gland without sebaceous metaplasia (38).
- Toxoplasmic lymphadenitis (40).
- Quiz case-1: Myoepithelioma of the vulva (41).
- Unilateral renal cystic disease of nongenetic etiology (42).
- Quiz Case-1: India ink endoscopic tattooing (44).
- Bone metastases from cutaneous basal cell carcinoma (44).
- Massive lymph node metastasis of aneurysmal fibrous histiocytoma (primary in the skin). So-called (benign) metastasizing cutaneous fibrous histiocytoma (metastasizing "benign" fibrous histiocytoma of the skin) (46).
- Familial complete androgen insensitivity syndrome (Morris syndrome or testicular feminization syndrome) (48).
- Medullary sponge kidney with small kidney (50).
- "Spontaneous" multiple adenomas" (spontaneous adenomatosis) of liver (52).
- Fatal systemic venous air embolism following endoscopic retrograde cholangiopancreatography (54).
- Leiomyomatosis peritonealis disseminata (56).
- Unclassified non-pleomorphic renal sarcoma (possibly de novo malignant solitary fibrous tumor of kidney) (58).
- Sporadic lymphangioliomyomatosis involving lymph nodes and lung (58).
- Phosphaturic mesenchymal tumor, mixed connective tissue type (58).
- Pathological examination confirmed the diagnosis of recurrent, giant keloid of the sacral region, which was still focally present at the lateral excision margins (59).

- Retroperitoneal atypical sporadic Kaposi's sarcoma involving the adrenal, with sarcomatous transformation on local recurrence (59).
- Primary embryonal rhabdomyosarcoma of prostate in adult (59).
- Subcutaneous and lymph node metastasis from (cutaneous) basal cell carcinoma with squamous cell differentiation (60).
- Rosai-Dorfman disease, lymph node localization (60).
- Richly vascularised, benign mesenchymal hemangioblastoma-like tumor of soft tissue (60).
- Diffuse pulmonary dendriform ossification, associated with interstitial lung fibrosis in a patient with scleroderma and a mediastinal bronchogenic cyst (61).
- Diffuse pulmonary dendriform ossification, idiopathic (61).
- Mitochondrial myopathy presenting with progressive external ophthalmoplegia (PEO) (61).
- Tufted angioma arising in/on a recurrent congenital lymphangioma (63).
- Undifferentiated embryonal sarcoma of liver (65).

IJ Bleiweiss

- Malignant phyllodes tumor with spindle cell and liposarcomatous elements (1).
- Goblet cell carcinoid of the ovary (2).
- Residual intraductal and infiltrating duct carcinoma of the breast with chemotherapy induced changes (3).
- Metastatic hemangiopericytoma of meninges (angioblastic meningioma) to pleura and paravertebral area (4).
- Black thyroid due to minocycline (4).
- Metastatic paraganglioma in lymph nodes (5).
- Prostatic chips infiltrated by poorly differentiated adenocarcinoma with signet ring cell differentiation (6).
- Ovary infiltrated by malignant melanoma (6).
- Chondroblastoma, probably recurrent (7).
- Glomus tumor of the stomach (9).
- C-cell hyperplasia of the thyroid (10).
- Synovial chondromatosis of temporo-mandibular joint (11).
- Ductal adenocarcinoma of heterotopic pancreas in pylorum (12).
- Malignant phyllodes tumor of the breast with heterologous elements (15).
- ? Hemangiopericytoma of stomach (17).
- Ossifying fibromyxoid tumor of soft parts (19).
- Adenomyoepithelioma of the breast (21).
- Pseudoangiomatous hyperplasia of mammary stroma (23).
- Nodular fasciitis? Fibromatosis, involving the breast (25).
- Congenital mediastinal teratoma with immature neural elements (27).
- Retrograde lymphatic spread to the breast of metastatic ovarian carcinoma from axillary lymph node metastasis (29).
- Low grade (myofibro-)sarcoma plus tubular carcinoma (collision tumor) versus sarcomatoid carcinoma (31).
- Microglandular adenosis of the breast (33).
- Metastatic medullary carcinoma of the thyroid simulating melanoma (35).
- Myxoid liposarcoma, metastatic to the breast. (38).
- Basal cell carcinoma of the nipple (42).
- Osteogenic sarcoma, probably radiation-induced (44).
- Invasive adenosquamous carcinoma (low-grade metaplastic carcinoma) (46).
- Cellular type of congenital mesoblastic nephroma (49).
- Glomus tumor of the stomach (51).
- Alveolar soft part sarcoma (53).
- Ectopic breast tissue – pubic site (55).
- Syringomatous adenoma of nipple (57).
- Collision of metastatic lobular carcinoma of breast with primary sarcomatoid carcinoma of the small bowel (59).
- Solitary fibrous tumor of breast (vs periductal stromal tumor) (61).
- Eccrine spiradenoma of the breast (63).
- Myofibroblastoma possibly involving fibroadenoma of the breast vs weird phyllodes (65).

N Cartagena, Jr

- Cutaneous myofibroma of the foot (2).
- Myositis ossificans of the thigh (3).
- Follicular lymphoma of the parotid secondary to Dilantin (4).
- Follicular small-cleaved cell lymphoma of the lymph node (5).
- Sarcomatous transformation of a choroid plexus carcinoma of the right lateral ventricle (6).
- Spleen with paraimmunoblastic variant of small lymphocytic lymphoma/leukemia (7).
- Tigroid degeneration of myocardium (10).
- Metastatic hidroadenocarcinoma (9)
- Granulomatous slack skin (12).

JKC Chan

- Kimura's disease involving soft tissue of the neck (1).
- Metanephric adenoma of the kidney (2).
- Soft tissue -large cell lymphoma with unusual myxoid stroma (2).
- Keratin globules of the ovary (3).
- Cervical cryptococcal lymphadenitis (3).
- Penicillium marneffrei infection of the colon (4).
- Medullary thyroid carcinoma, pseudopapillary variant (5).
- Diffuse large cell lymphoma of B-lineage, with prominent fibrillary matrix and rosettes, of lymphnode (6).
- Littoral cell angioma of the spleen (7).
- Epithelioid hemangioendothelioma of the brain (8).
- Cutaneous lymphadenoma (9)
- Leigh's disease or subacute necrotizing encephalomyelopathy (10).
- Leydig cell tumor (malignant) with unusual myxoid change (11).
- Metachromatic leukodystrophy of the brain (12)
- Sparganosis of the brain (13).
- Sclerosing adenosis of the prostate (15).
- Dysembryoplastic neuroepithelial tumor (17).
- Myospherulosis (19).
- Ectomesenchymal chondromyxoid tumor of the tongue (20).
- Metanephric adenoma (20).
- Pancreatoblastoma (22).
- Tubular adenosis with DCIS (22).
- Inflammatory follicular dendritic cell tumor of liver (inflammatory pseudotumor of liver) (24).
- Ependymoma, clear cell type plus papillary type (24).
- Fat embolism of the lung and kidney (26).
- Prototheca zopfii infection (28).
- Light chain disease associated with plasmacytoma (28).
- Necrotizing fasciitis due to group-A streptococcus (30)
- Pleuropulmonary blastoma, type I (31).
- Mucocele with myxoglobulosis of the appendix (32).
- Cotyledonoid dissecting leiomyoma of the uterus (32).
- Sclerosing extramedullary hematopoietic tumor in chronic myeloid leukemia (33).
- Dedifferentiated adenoid cystic carcinoma of submandibular gland (34).
- Lymph node –involvement by angiomyolipoma (36).
- Radiation-induced pseudocarcinomatous proliferations of the urinary bladder (38).
- Peritoneum – decidualized endometriosis with myxoid change. (39).
- Acinar cell cystadenoma of the pancreas (? Acinar cystic transformation) (39).
- Lymphangiomyomatosis and multifocal micronodular pneumocyte hyperplasia (41).
- Severe acute respiratory syndrome due to SARS coronavirus infection (41).
- Olfactory neuroblastoma with glandular differentiation –nasal cavity (43).
- Cocaine-induced osteocartilaginous necrosis and mucosal ulceration/inflammation (46).
- Lymph node – Kawasaki disease (48).
- Parotid gland – Metastatic Merkel cell carcinoma, with rhabdomyosarcoma differentiation (metastatic “Merkel cell carcinosarcoma”) (53).
- Tubulocystic carcinoma of the kidney. (55)

TV Colby

- Diffuse pulmonary lymphangiomatosis (9).
- Seminoma with cystic change in thymus associated with epithelial proliferation (thymoma?) (10)
- Therapy-related changes in a carcinoid tumor (12).
- Lymphangiomyomatosis (LAM) of lung (14).
- Malignant mesothelioma, "sarcomatous" type, with prominent lymphoid reaction (17).
- Pulmonary capillary hemangiomas (19).
- Subcutaneous phycomycosis (21)
- Intrahepatic cholangiocarcinoma (23).
- *Rhodococcus equi* infection in AIDS (23).
- Cortical thymoma/thymic carcinoma sequence (24).
- Fibromatosis of the chest wall presenting as a pleural mass (27).
- Metastatic low-grade endometrial stromal sarcoma from the pelvis (27).
- Quiz case-1: Chronic clofazimine therapy effect (27).
- Quiz case-2: Disseminated toxoplasmosis (in transplanted lung) (29).
- Erdheim-Chester disease involving the lung (29).
- Epithelioid hemangioendothelioma of the liver (30).
- Inflammatory fibrosarcoma of the lung (32).
- Abdominal localized malignant mesothelioma of the cecum (34).
- Phlegmonous enterocolitis due to *E. coli* (37).
- Quiz-Case-1: Hypereosinophilic syndrome (39).
- Visceral juvenile xanthogranuloma of the lung (39).
- Metastatic (benign) papilloma of the breast (41).
- Quiz case-1: Metastatic mixed tumor of salivary gland (parotid) to the lung (43).
- Churg-Strauss disease of the gut (43).
- Quiz Cases-2: Amebic pneumonia (44).
- Metastatic Merkel cell carcinoma with sarcomatoid component and glandular differentiation (44).
- Metastatic (benign) meningioma (46).
- Unique pulmonary cystic, probably hamartomatous, lesions in the lung in a patient with von Hippel Lindau disease (48).
- Malignant mesothelioma (of the pleura) with invasion of the lung, presenting with pneumothorax, in a patient with (concurrent) mesothelioma in the peritoneum (50).
- Iatrogenic pulmonary emboli (52).
- Histologic changes (lung) consistent with so-called hyper-IgG4 disease (54).
- Kimura's disease associated with chronic clinical manifestations (bulky cervical adenopathy), soft tissue edema and fibrosis, and cutaneous lesions (56).
- Massive embolic foreign material consistent with microcrystalline cellulose (from crushed up oral tablets, type unknown) with associated pulmonary hypertension and right ventricular hypertrophy (58).
- Poorly differentiated synovial sarcoma with anomalous expression of desmin (and I guess ER) (60).
- Silicone lung embolization from ruptured breast implant (62).
- Metastatic chondrosarcoma with exclusively granular cell features (64).
- Secondary vascular proliferation (reactive angioendotheliomatosis) of the colon in a patient with ulcerative colitis and heart disease (65).
- Quiz case 1. Epithelioid angiosarcoma (65)

K Cooper

- Mycobacterial necrotizing lymphadenitis (17).
- "Sclerosing hemangioma" of the lung (19).
- Angiomyolipoma of liver (21).
- Hydatid cyst (23).
- Quiz case-2: Bilharzioma of the rectum (24).
- Bilharzioma (25).
- Anaplastic variant of spermatocytic seminoma with a high-grade sarcoma showing myogenic differentiation (27).
- Cardiac fibroma (29).
- Herpes virus proctitis in ulcerative colitis (31).
- Ischemic colitis secondary to CMV vasculopathy (33).
- Rhinoscleroma (35).
- Pseudoactinomycotic radiate granules in endocervical curettage (37).
- Large cell neuroendocrine carcinoma of the larynx. (39).
- Idiopathic retroperitoneal fibrosis (Ormond's disease) (41).
- Inflammatory myofibroblastic tumor of the kidney (43).
- Myxoid schwannoma (45).
- Angiomatoid fibrous histiocytoma (AKA angiomatoid "MFH") of the adrenal (47).
- Phosphaturic mesenchymal tumor of soft tissue (49).
- Malignant ectomesenchymoma arising in a uterine MMMT (51).
- Metastatic low-grade endometrial stromal sarcoma (53).
- Recurrent malignant GIST with diffuse rhabdoid morphology - jejunum. (55).
- Epithelioid sarcoma, proximal type (57).
- Meningeal metastatic GIST (59).
- Chronic sclerosing sialadenitis of the submandibular gland (Kuttner's tumor) (61).
- Benign endocervical polyp with exuberant gestational-associated changes (63).
- Metanephric stromal tumor in a 2-year-old female child (65).

I Damjanov

- Undifferentiated embryonal sarcoma (28).
- Parachordoma (29).
- Malignant melanoma of the vagina with ganglioneuroblastic differentiation (35).
- Anaplastic T-cell lymphoma (31).
- Primitive neuroectodermal tumor of the ovary, arising in a teratoma (33).
- Carcinosarcoma of the urinary bladder metastatic to the clitoris (37).
- Inflammatory leiomyosarcoma of the abdomen (39).
- GIST of the liver, metastatic to the lymph nodes, with giant cell reaction (41).
- Necrobiotic xanthogranuloma –skin-subcutis (43).
- Malignant Sertoli cell tumor metastatic to the abdominal lymph nodes (45).
- Atrial myxoma with glandular inclusions (47).
- Acral myxoinflammatory fibroblastic sarcoma (inflammatory myxohyaline tumor) (49).
- Low-grade sarcoma of the bladder, multinodular (51).
- Hodgkin's lymphoma (53).
- Rosai-Dorfman disease of soft tissue – thigh. (55)
- Wilms' tumor with heterologous elements and diffuse anaplasia (57)
- Recurring malignant melanoma with osteogenic metaplasia (59).
- Heterotopic mesenteric ossification, also known as mesenteritis ossificans (61).
- Yolk sac carcinoma, parietal yolk sac type, in a lymph node metastasis of a testicular NSGCT (63).
- Midline NK/T cell extranodal lymphoma, nasal type involving the lungs, heart, pancreas, stomach (65).

AP Dei Tos

- Fibroepithelial tumor of breast with digital fibroma-like inclusions in stromal component (16).
- Primitive choriocarcinoma of the urinary bladder (18).
- Dedifferentiated chordoma (21).
- Inflammatory leiomyosarcoma (23).
- Atypical teratoid/Rhabdoid Tumor of the brain (25).
- Spindle cell carcinoma (carcinosarcoma) of the esophagus with prominent basaloid differentiation (27).
- Renal extranodal Rosai-Dorfman's disease (29).
- Dedifferentiated liposarcoma with neural-like whorling pattern (31).
- Infiltrating squamous cell carcinoma of the liver arisen in hepatic cyst of foregut type (33).
- Pulmonary epithelioid angiosarcoma (35).
- EWS/PNET of the meninges (39).
- Malignant mixed Mullerian tumor with heterologous (chondrosarcomatous) differentiation of the peritoneum (41).
- Low-grade endometrial stromal sarcoma with sex cord differentiation (45).

PP de Saint Maur

- Malignant mesenchymoma (14).
- Inflammatory pseudotumor of the skin (16).
- Perineal nodular induration of cyclist (atypical decubital fibroplasia and elastofibroma) (18).
- Liposarcoma? Surgically induced? (20).
- Toxic acute necrosis in a liver with Caroli's disease (22).
- Desmoplastic fibroblastoma (24).
- Crohn's disease of the appendix vs idiopathic granulomatous appendicitis (26).
- (Possible) colonic location of Behcet's disease (28).
- Colitis cystica profunda diffusa resulting of protracted ulcerative colitis (30).
- Benign schwannoma of digestive tract (32).
- Lumbar nuchal-type fibroma in an adolescent boy with probable Gardner's syndrome (34).
- Fulminating pneumonia by *Corynebacterium jeikeium* (36).
- Synovial chondromatosis (38).

O Dietze

- Papillary carcinoma of the thyroid within follicular tumor (28).
- Osteosarcoma of the bladder (30).
- Quiz case-1: Atypical lipomatous tumor with spindle cell features vs variant of myxofibrosarcoma, vs other possibilities (32).
- Low-grade epithelioid MPNST versus high-grade extraskeletal myxoid chondrosarcoma (32).
- Neurofibroma with epithelioid features and granular cell differentiation (34).
- Aggressive systemic mastocytosis, myelodysplastic syndrome (chronic myelomonocytic leukaemia) (38).
- Clear cell change in colorectal adenoma (40).
- Adenocarcinoma of the urinary bladder with well differentiated tubulo-villous and poorly differentiated signet ring cell areas, most probably of urachal origin (42).
- Rhabdoid meningioma, gr. 3 (44).
- Low grade malignant Mullerian mixed tumor (47).
- Ameloblastic carcinoma (49).
- Chronic histiocytic intervillitis (51).
- Gama-Gandy bodies in splenomegaly, probably secondary to an underlying liver disease (51).
- Clear cell atypical fibroxanthoma (53).
- Diversion colitis (55).
- Congenital granular cell tumor (57).
- Lymph node involvement by lymphangiomyomatosis (LAM) (59).
- Endometriosis of the colon (61).
- Metastatic breast cancer to adrenal myelolipoma ('tumor in tumor' phenomenon) (63).
- Intravascular large B-cell lymphoma of the skin (65).

H Dominguez-Malagon

- Malignant melanoma (interpreted as epithelioid angiosarcoma) (10).
- Myofibroblastic sarcoma? (11).
- Carcinosarcoma of the rete testis vs embryonal carcinoma with chondrosarcomatous elements (12).
- Malignant meningioma of the parapharyngeal space (13).
- Spindle cell sarcoma of the thyroid (fibrosarcoma?) (15).
- Epithelioid angiosarcoma with alveolar pattern (17).
- Amphicrine medullary carcinoma of thyroid with luminal differentiation (19).
- Glomus-like neuroendocrine carcinoma (21).
- Epithelioid angiosarcoma of the breast (23).
- Lymphoepithelioma-like anaplastic carcinoma of the thyroid (25).
- Fibrolamellar (oncocytic) carcinoma of the liver with abundant cytoplasmic pale inclusions (27).
- Biliary adenofibroma (29).
- Primary yolk sac tumor of the appendix versus poorly differentiated adenocarcinoma with yolk sac features (31).
- Xanthomatous/angiomatic meningioma (with microcystic and secretory features) (33).
- Extrapneumatic solid-cystic tumor (35).
- Spindle cell hemangioma (37).
- Malignant papillary mesothelioma presenting as an ovarian mass (primary ovarian malignant mesothelioma?) (39).
- Cellular neurothekeoma (41).
- Adenocarcinoma of the pigmented retinal epithelium (44).
- Quiz case 1: Primary synovial sarcoma of the kidney (45).
- Chordoid meningioma? (45).
- Pulmonary adenofibroma (fibroadenoma of the lung, fibroleiomyomatous hamartoma, adeno-leiomyomatous hamartoma) (48).
- Clear cell carcinoma of the kidney with sarcomatous areas of divergent differentiation (chondrosarcoma, rhabdomyosarcoma) (50).
- Solitary fibrous tumor of the prostate (53).
- Infectious mononucleosis tonsillitis with geographic necrosis (55).
- Dedifferentiated solitary fibrous tumor? Dedifferentiated peripheral nerve sheath tumor (perineurioma)? (57).
- Plexiform fibrohistiocytic tumor/cellular neurothekeoma (57).
- Calcifying cystic odontogenic tumor (Gorlin cyst) (59).
- Dedifferentiated solitary fibrous tumor of the pleura (61).
- Extra-axial nasal meningioma (65).

G Elmberger

- Malignant basomelanocytic tumor of the skin (50).
- Thyroid sclerosing mucoepidermoid carcinoma with eosinophilia, plus Hashimoto thyroiditis, plus oncocytic adenoma/adenomatoid oncocytic nodule (52).
- Microcystic adnexal carcinoma of the tongue (MAC) - A tumor derived from Ebner's glands (54).
- Nasal seromucinous hamartoma with focal REAH-like features (56).
- Pseudotumoral intracranial Erdheim-Chester disease (polyostotic sclerosing histiocytosis) mimicking a primary brain-meningeal tumor as manifestation of previously undiagnosed systemic disease (58).
- Sclerosing polycystic adenosis (SPA) of parotid gland (60).
- Mixed adenoneuroendocrine carcinoma of the rectum (64).
- Hard metal/Cobalt pneumoconiosis (giant cell interstitial pneumonia; GIP) (66).

J Epstein

- Extensive intraductal carcinoma of the prostate (IDC-P) with separate incidental minute foci of Gleason score 3+3=6 adenocarcinoma (60).
- Oncocytoma of the kidney with marked diffuse degenerative atypia (62).

V Eusebi

- Malignant rhabdoid tumor of the temporo-parietal (6).
- Cystic islet cell tumor of the pancreas (7).
- Benign "triton" tumor of the vagina (8).
- Papillary carcinoma of the thyroid, macrofollicular variant (9).
- Dedifferentiated chordoma (10).
- Central neurocytoma (11).
- Thymoma (12).
- Pleomorphic invasive lobular carcinoma with apocrine differentiation (13).
- Squamous cell carcinoma of bladder with schistosoma hematobium (15).
- Acinic cell carcinoma of parotid with thyroid-like pattern (17).
- Leiomyosarcoma with areas of rhabdomyoblastic differentiation (19).
- Monophasic synovial-sarcoma (21).
- B-cell malignant lymphoma of the breast mimicking carcinoma (23).
- Mesothelioma invading thyroid (25).
- Transitional cell carcinoma of the bladder merging with a large cell anaplastic carcinoma component, an invasive micropapillary component and oat cell carcinoma (27).
- Metastatic malignant mesothelioma to the maxillary bone (29).
- Matrix producing carcinoma (malignant mixed tumor) or epimyoeptithelial carcinoma (31).
- Malignant adenomatoid tumor of the testis vs adenomatoid tumor (33).
- Metastasizing granular cell tumor (35).
- Benign schwannoma with cellular (neuroblast-like component) (37).
- Chondroblastoma of the sphenoid (39).
- Primary intraosseous meningioma (41).
- Invasive (ductal?) carcinoma of the pancreas, basaloid type (43).
- Invasive "breast tumor resembling the tall cell variant of papillary carcinoma of thyroid" (47).
- ? Metastatic osteosarcoma (45).
- Intracranial Rosai-Dorfman disease (49).
- In situ squamous cell carcinoma of the breast with myoeptithelial cell differentiation (51).
- Follicular dendritic cell tumor primary in breast (53).
- Langerhans cell sarcoma of the oral cavity (tongue). (55).
- Idiopathic hypertrophic cranial pachymeningitis (57).
- Subcutaneous metastasis from meningeal hemangiopericytoma (59).
- Lymphoepithelioma-like carcinoma, Regaud type, of the breast (61).
- Monophasic synovial sarcoma, glandular-type, arising within the median nerve of the right forearm (61).
- Low-grade (G1) invasive carcinoma, with features of syringoid (low grade adenosquamous) carcinoma merging with adenoid cystic carcinoma (65).

G Falconieri

- Ossifying fibromyxoid tumor (26).
- Hyalinized spindle cell lesion c/w intrapulmonary solitary fibrous tumor (28).
- Onchocerca volvulus infection of the skin (28).
- Giant cell tumor of the larynx vs aneurysmal bone cyst (30).
- Non germ cell tumor arising in a germ cell tumor (32).
- Papillary (chromophil) renal cell carcinoma (34).
- Syncytiotrophoblastic cell rich seminoma (36).
- Meningioma of the middle ear (38).
- Warthin-like papillary carcinoma of the thyroid (40).
- Parachordoma / myoepithelioma of the stomach (42).
- Quiz Cases-3: Bothryoid or phyllodes prostatic adenocarcinoma (44).
- Small spindle and epithelioid cell sarcoma, NOS (44).
- Recurrent melanoma associated with (focal) osteoclast-like multinucleated giant cell reaction (46).
- Inflammatory myofibroblastic tumor of the lung (48).
- Focal nodular hyperplasia of the liver with sarcoid-like granulomas (50).
- Russel body gastritis (50).
- Cellular fibroepithelial tumor with malignant stroma (Adenosarcoma? atypical phylloides tumor?) (52).
- Sinonasal Schwannoma (54).
- Sinonasal ameloblastoma (56).
- Atypical mesothelial tumor, not otherwise specified (58)
- Clear cell tumor of unknown etiology (60).
- Pleomorphic sarcoma, NOS in the lung – probably metastasis from malignant phyllodes tumor of the breast (62).
- Papillary carcinoma of thyroid with follicular architecture, and a malignant spindle cell proliferation (dedifferentiation vs solitary fibrous tumor [associated with PTC]) (64).
- Compound melanocytic nevus with granular cell changes of the skin (65).

F Fedeli

- Mucinous carcinoma of the skin (58).
- Epithelioid angiosarcoma of the adrenal gland (60).
- Signet-ring stromal tumor of the testis (62).
- Pancreatoblastoma (64).
- Adult hepatoblastoma fetal type (66).

JA Ferreiro

- Mixed adrenocortical adenoma-pheocromocytoma (16).
- Adrenal oncocytoma vs oncocytic carcinoma (18).
- Non-Hodgkin's lymphoma in a Warthin tumor (21).

C Fisher

- Ossifying fibromyxoid tumor with stromal cysts (21).
- Follicular dendritic cell sarcoma of the breast (23).
- Malignant glandular Triton tumor with neuroendocrine differentiation (25).
- Lymphangiomatosis (27).
- Acral myxoinflammatory fibroblastic sarcoma or inflammatory myxohyaline tumor of distal extremities with virocyte or Reed-Sternberg-like cells, or inflammatory myxoid tumor of soft tissue with giant bizarre cells (29).
- Diabetic mastopathy (sclerosing lymphocytic lobulitis) (31).
- Synovial sarcoma with prominent glandular component (33).
- Hemosiderotic fibrohistiocytic lipomatous tumor (35).
- Myxoid biphasic synovial sarcoma with SYT-SSX2 fusion transcripts (37).
- Clear cell sarcoma (of tendon sheath) arising in the palate (39).
- Perivascular epithelioid cell tumor (PEComa) resembling clear cell myomelanocytic tumor (41).
- Kaposi's sarcoma with unusual features of the iliac lymph node (43).
- Giant cell tumor involving sigmoid colon, following excision of borderline mucinous ovarian tumor with sarcoma-like mural nodules) (45).
- Synovial sarcoma with squamous differentiation (47). Neurofibromatous involvement of ileum with 'diffuse ganglioneuromatosis' in a patient with NF-1 and retroperitoneal malignant peripheral nerve sheath tumor (49).
- Inflammatory leiomyosarcoma in HIV positive male of the pelvis (51).
- Presacral (retrorectal) dermoid cyst with Paget's disease in a patient with possible Currarino syndrome (53).
- Angiosarcoma arising in AV fistula previously used for dialysis in renal transplant recipient. (55).
- ? Sarcomatoid adrenal cortical carcinoma with metastatic rhabdomyosarcoma in lymph nodes (and lung) (57).
- Anastomosing hemangioma of kidney (59).
- Epithelioid inflammatory myofibroblastic sarcoma (61).
- Dedifferentiated solitary fibrous tumor with divergent osteosarcomatous and rhabdomyosarcomatous differentiation (63).
- Endometrial stromal sarcoma with YWHAE-FAM22A/B (NUTM2A/B) rearrangement (65).

CDM Fletcher

- Epithelioid angiosarcoma of deep soft tissue (4).
- True histiocytic lymphoma/interdigitating reticulum cell sarcoma of the small intestine (5).
- Follicular dendritic reticulum cell tumor of the lymph node (6).
- Angiomyofibroblastoma of the vulva (7).
- Infiltrating glomus tumor of soft tissue (8).
- Low-grade myxofibrosarcoma (9).
- Leiomyoma with perinodular hydropic degeneration (10).
- Low-grade Dabskoid angiosarcoma (11).
- "Myofibroblastoma with fatty component" (12).
- ? Myofibroblastoma of breast (14).
- Giant cell tumor of soft tissues (16).
- Renal carcinoma and angiosarcoma ("collision tumor") (18).
- Leiomyomatosis of the mediastinum (20).
- Pleomorphic hyalinizing angiectatic tumor (22).
- Cartilaginous hamartoma of the chest wall (24).
- Primary pigmented nodular adrenocortical disease (26).
- ? Phyllodes tumor of the prostate? Low-grade soft tissue neoplasm? Adenosarcoma of prostate (29).
- Primary abdominal monophasic synovial sarcoma (31).
- Massive localized lymphoedema in morbid obesity (33).
- Sclerosing paraganglioma of the parapharyngeal space (35).
- Aneurysmal bone cyst of soft tissue (37).
- Splenic lymphangioma (39).
- Acantholytic /pseudovascular squamous cell carcinoma (with myxoid stroma) (41).
- Duodenal gangliocytic paraganglioma (43).
- Extraskelatal Ewing's sarcoma /PNET (45).
- Nasal chondromesenchymal hamartoma (??) (47).
- Oncocytic glomus tumour (49).
- Reactive fibrovascular proliferation, possibly engrafted on a vascular malformation, of soft tissue of the neck (51).
- Deciduoid malignant mesothelioma (53).
- Scrotal lymphoedema (with smooth muscle hyperplasia) (55).
- Hibernoma, spindle cell variant (57).
- Retroperitoneal perirenal sclerosing PEComa (59).
- Sclerosing fibroinflammatory lesion (? type) of the neck (61).
- Malignant glomus tumor of stomach (63).
- Renal cell carcinoma, clear cell type, with very prominent smooth muscle proliferation (65).

AL Folpe

- Clear cell myomelanocytic tumor of the falciform ligament (33).
- Epithelioid variant of pleomorphic liposarcoma, arising as a component of a dedifferentiated liposarcoma (34).
- Phosphaturic mesenchymal tumor, mixed connective tissue variant causing oncogenic osteomalacia (36).
- Myoepithelioma of soft tissue, probably of low-grade malignancy (38).
- Extraspinal myxopapillary ependymoma (40).
- Crystal storing histiocytosis (42).
- “Early” pleomorphic hyalinizing angiectatic tumor of soft parts (44).
- Intranodal palisaded myofibroblastoma (46).
- Metastatic primitive neuroectodermal tumor (resembling medulloepithelioma), arising in the setting of prior testicular germ cell tumor (48).
- Multifocal duodenal gangliocytic paraganglioma with extensive ganglioneuromatous differentiation with lymph node involvement (AL Folpe) (50).
- Intravascular large B-cell lymphoma involving an inflammatory fibroid polyp (53).
- Primary epithelioid sarcoma of bone (55).
- Dedifferentiated liposarcoma (with one small focus closely resembling spindle cell lipoma) (57).
- Subchondral acute inflammation in severe arthritis (59).
- Melanotic translocation Xp11-related neoplasm of renal type, primary to the ovary (61).
- Polycystic lipomembranous osteodysplasia with sclerosing leukoencephalopathy (PLOS) (63).
- Merkel cell carcinoma of the skin showing heterologous rhabdomyoblastic differentiation was made (65).

J Forteza-Vila

- Non Hodgkin's B-cell lymphoma (monocytoid with large neoplastic B-cell) rich in non-neoplastic reactive T-cells (11).
- Neoplastic angioendotheliomatosis plus progressive multifocal leukoencephalopathy (13).
- Malignant round cell tumor vs mediastinal sarcoma (malignant HPC) (15).
- Alveolar rhabdomyosarcoma (18).
- High-grade neuroendocrine neoplasm vs metastatic amelanotic malignant melanoma (22).
- PNET vs rhabdoid tumor (21).
- Inflammatory pseudotumor of the brain (24).
- Banti's syndrome (26).
- Fatal Kikuchi's disease versus LES (28).
- HELLP syndrome with pseudoangiosarcomatous features (30).
- Xanthomatous/angiomatic meningioma (with microcystic and secretory features (33).
- Peripheral T-cell lymphoma unspecified (predominantly large cell) (35).
- Cutaneous and visceral Kaposi's sarcoma with cardiac tamponade (37).
- Langerhans' cell sarcoma (malignant histiocytosis X) (39).
- Peripheral, extranodal, large T-cell lymphoma (NOS) (41).
- Angioinvasive scedosporium apiospermum (aspergillus-like) of the heart (43).
- Micronodular thymoma with lymphoid stroma (45).
- Brain venous infarction vs a postinfectious hemorrhagic leukoencephalopathy (47).
- Sarcomatoid carcinoma of the adrenal gland (49).
- Gliomatosis cerebri (51).
- Splenic marginal zone lymphoma with progression to a diffuse B cell lymphoma with overexpression of MYC (53).
- Hepatocarcinoma with metastases to lymph nodes, pancreas, spleen, heart, intestinal mucosa, and scalp with mucinous differentiation (55).
- Idiopathic sclerosing encapsulating peritonitis (abdominal cocoon) (57).
- Pulmonary leiomyomatosis in a patient diagnosed with sarcoma of the endometrial stroma with low level of malignancy (59).
- Histiocytic Sarcoma / Dendritic cell tumor involving thoracic vertebrae and perivertebral soft tissue (61).
- Myelosarcoma in association with myelofibrosis that shows a macroscopic appearance mimicking "peritoneal carcinomatosis" (64).
- EWING-PNET retroperitoneal sarcoma (66).

M Fukunaga

- Extrapancreatic solid-cystic tumor (34).
- Lymphoepithelioma-like carcinoma of the renal pelvis (36).
- Diaphragmatic stromal endometriosis with catamenial pneumothorax (38).
- Malignant myoepithelioma of the vulva (40).
- Florid papillomatosis (adenoma) of the nipple (42).
- Ochronotic arthropathy (44).
- Osteogenic melanoma of the foot (46).
- Hepatoid carcinoma with serous component of the Fallopian tube (48).
- Perivascular epithelioid cell tumor (PEComa) of the uterus (50).
- Papillary squamotransitional cell carcinoma of the uterine cervix (52).
- Mesonephric adenocarcinoma of the uterine cervix with mesonephric hyperplasia (54).
- Angiosarcoma of the kidney (56).
- Cotyledonoid dissecting leiomyoma of the uterus (Sternberg tumor) (58).
- Wolffian tumor of the broad ligament (female adnexal tumor of probable Wolffian origin) (60).
- Canalicular adenoma of minor salivary gland (M Fukunaga) (62).
- Reactive atypical fibrovascular proliferation (reactive angioendotheliomatosis?) (64).
- Mixed-epithelial papillary cystadenoma of borderline malignancy of the ovary, Mullerian type MEBMM with squamous overgrowth (SO) (66).

MJ Gaffey

- Unusual glandular proliferation (metaplastic vs. hyperplastic vs carcinoma) cervix (8).

C Goldenberg

- Undifferentiated malignant neoplasm (sarcoma, NOS?) (13).
- Neuroepithelioma vs malignant paraganglioma (15).
- Malignant spindle cell neoplasm (17).
- Thyroid lymphoma (19).
- Intestinal endometriosis (22).

JR Goldblum

- Angiomatoid malignant fibrous histiocyoma (35).

J Goldstein

- Solid, cystic and papillary tumor of the pancreas (5).
- Collision tumor of the ovary: papillary serous adenocarcinoma plus rhabdomyosarcoma (6).
- Measles appendicitis (7).
- Inflammatory pseudotumor of the urinary bladder (13).
- ? Neoplastic malignant histiocytic process (16).
- Hepatoid carcinoma of the ovary (18).
- Anaplastic large cell lymphoma with high content of reactive histiocytes (20).
- Malignant mesothelioma -paratesticular (22).
- Bile duct cystadenoma vs metastatic adenocarcinoma (25).
- Recurrent superficial angiomyxoma vs lobular nerve sheath myxoma (29).
- Malignant neuroendocrine tumor in fibropolycystic disease of liver (30).
- Ovarian, cystic monodermal teratoma (32).
- Giant cell fibroblastoma of childhood or proliferative fasciitis and myositis of childhood versus pleomorphic myogenic sarcoma (34).
- Atypical, solitary fibrous tumor (37).
- Lipoleiomyosarcoma (well-differentiated liposarcoma with leiomyomatous differentiation) (39).
- Salivary duct carcinoma (41).
- Chronic lymphocytic leukemia and hepatocellular carcinoma (41).

AM Gown

- Quiz case: Low-grade myofibrosarcoma of bone with rhabdoid inclusions (24).
- Polypoid mesothelioma of the colon (26).
- Polypoid mesothelioma of the colon (26).
- Plexiform fibrohistiocytic tumor (28).
- Metastatic adrenal cortical carcinoma (34).
- Histiocytosis with signet ring change; negative for carcinoma (36).
- High-grade pleural-based thymic carcinoma vs metastatic thymic carcinoma to the pleura (40).
- Epithelioid sarcoma, “proximal” type (38).
- PEC-oma of the liver (42).
- ? Alveolar soft part sarcoma (44).
- Spindle cell melanoma vs. epithelioid malignant peripheral nerve sheath tumor (46).
- Epithelioid schwannoma (49)
- Sertoliform adenoma of the rete testis (53).
- Thymic carcinoma - mediastinum (55).
- Pleomorphic rhabdomyosarcoma (57).
- Desmoplastic small round cell tumor confined to uterus (59).
- Adenocarcinoma, primary (endometrioid?) or metastatic to ovary (66).

G Herrera

- Placental site trophoblastic tumor (1).
- Sinus histiocytosis with massive neck lymphadenopathy (4).

O Hes

- Biphasic alveolo-squamoid renal carcinoma (65).

TT Holland

- Papillary eccrine adenoma of the skin (2).
- Cutaneous sporotrichosis (3).

M Hurt

- Gouty tophus of the skin (1).
- Benign lymphangioendothelioma of skin (2).
- Fibrous histiocytoma of the skin (giant dermatofibroma) (3).
- Metaplastic synovial cyst of the skin (5).
- Metastatic adenocarcinoma of the umbilicus (6).
- Ectopic ductal carcinoma of breast of soft tissue (7).
- Atypical apocrine lesion of the breast (8).
- Foreign body reaction to silicone of the breast (8).
- Granular cell epulis (10).

M Huszar

- Retroperitoneal malignant "triton" tumor (rhabdomyosarcoma plus malignant schwannoma) (1).

T Krausz

- Various diagnoses: "undifferentiated malignant tumor" of the uterus, probably metastatic, with epithelioid morphology (11).
- Scleroderma with atrophy of subcutaneous adipose tissue (12).
- Mikulicz disease plus Hodgkin's disease in parotid lymphnode (13).
- Malignant mesothelioma, "lymphohistiocytic" variant (16).
- Leiomyoma with pregnancy associated changes vs leiomyosarcoma (19).
- Poorly differentiated angiosarcoma of ovary (22).
- "Deep" pseudorheumatoid nodule (granuloma annulare) (25).
- Malignant paraganglioma with both conventional and sarcomatoid patterns (27).
- Spindle cell epithelioma of the vagina? Blastematos heterotopic Wilm's tumor? (29).
- Mucoepidermoid carcinoma of the thymus (32).
- ? Variant of myxoid chondrosarcoma of soft tissue (34).
- Metastatic acinar cell carcinoma, microglandular/microcystic variety) of the pancreas (38).
- Lipomatous hemangiopericytoma vs peculiar variant of atypical lipomatous tumor (40).
- Myolipoma (42).
- Kaposi's sarcoma of the scrotum vs angiosarcoma in a HIV+ patient (44).
- Retroperitoneal angiomyolipoma (46).
- Ligneous vaginitis in association with adenosis (48).
- Congenital neurocristic cutaneous hamartoma of the scalp (50).
- Epithelioid malignant mesothelioma, low nuclear grade, with prominent papillary pattern (52).
- Chronic pneumonitis of infancy due to *abca3* gene mutation (54).
- Reticular perineurioma (56).
- Colon with focal transmural ischemic necrosis following Kayexalate treatment for hyperkalemia (58)
- Salivary gland type tumor, most consistent with low-grade epithelial-myoepithelial carcinoma (low-grade adenomyoepithelioma) (60).
- Chronic granulomatous disease presenting as fungal pneumonia (62).
- Biphasic malignant mesothelioma with peculiar, probably therapy-induced, hyalinising micronodules (64).
- Ovarian steroid cell tumor, not otherwise specified (malignant) (66).

J Lamovec

- Mesenchymal chondrosarcoma of soft tissue vs extrasosseous osteosarcoma (2).
- Xanthogranuloma of the skin (3).
- Clear cell chondrosarcoma of femoral head (4).
- Variant of fibroma of tendon sheath with disturbing pleomorphism of the finger (5).
- Epithelioid sarcoma of soft tissue (6).
- Medullary carcinoma of the thyroid with oxyphilic and "squamoid" features (7).
- Metastatic sarcomatoid carcinoma of right humerus, of probable renal origin (8).
- Epithelioid hemangiosarcoma of the thyroid (9).
- Adult neuroblastoma, differentiating? primary retroperitoneal, with metastases to omentum & ovaries. Ganglioneuromatous differentiation in the metastasis to the retroperitoneal lymph node (10).
- ? Unusual variant of non small desmoplastic small round cell tumor (11).
- Endolymphatic stromal myosis & retroperitoneal metastasis having pseudoangiosarcomatous pattern of growth (12).
- Benign peritoneal micro- and macro-cystic mesothelioma, with focal mural mesothelial proliferation (13).
- Meningeal hemangiopericytoma (15).
- Anaplastic large cell lymphoma CD30+ (17).
- Whipple disease (19).
- Granulocytic sarcoma (21).
- Myeloid metaplasia of breast (23).
- Congenital cystic adenomatoid malformation of the lung, type III (25).
- Sclerosing epithelioid fibrosarcoma vs malignant solitary fibrous tumor (27).
- Paraganglioma of the thyroid (29).
- (AL-)Amyloid lymphadenopathy (31).
- Epithelioid sarcoma of proximal type (33).
- Malignant phyllodes tumor associated with infiltrating lobular carcinoma of the breast (collision tumor) (35).
- Retroperitoneal hemangioblastoma extending from spinal canal (37).
- Hyperplastic callus in soft tissue at the site of the fractured surgically fixed femur associated with osteogenesis imperfecta (? type IV) (39).
- Lipoblastoma intramuscular (41).
- Renal cell carcinoma, chromophobe cell type, pigmented, associated (in collision) with angiomyolipoma (43).
- Aneurysmal type of solitary fibrous tumor / pericytoma-like fibroblastoma (45).
- Quiz case-1: Infiltrating ductal carcinoma of the breast with neuroendocrine features with charcoal pigment injected for intraoperative localization (J Lamovec) (47).
- Intraductal and invasive oncocytic papillary-mucinous carcinoma of the pancreas (47).
- Unclassified malignant epithelioid and spindle cell tumor with clear cell features and bizarre giant cells and prominent inflammatory and foam cell component (49).
- Perivascular epithelioid cell tumor (PEComa), malignant, probably metastatic (to bone) of unknown primary site (51).
- Metastatic glioblastoma to bone (53).
- Apocrine carcinoma of the skin the chest with sebaceous (sebaceous-like) and mucinous differentiation (55).
- Multiple pulmonary metastases of giant cell tumor of bone (57).
- SETTLE, metastatic to lung (59).
- Superficial (dermal/subcutaneous) lymphangiomatosis (with visceral – pleural / peritoneal

involvement with chylothorax and chylous ascites) (61).

- Pseudosarcomatous fibroepithelial stromal polyp of perivulvar skin (61).
- Hybrid hemosiderotic fibrolipomatous tumor/myxoinflammatory fibroblastic sarcoma (65).

CJ Manivel

- Giant cell tumor of pancreas (14).
- "Black thyroid" in a case of cystic fibrosis (17).
- Meningioma with myxomatous and chordoma-like features (19).
- Amyloid tumor of the iliacus muscle (21).

AM Marchevsky

- Anastomosing hemangiomas of the kidney (60).
- Quiz case: Cystic bronchiectases in a patient with bilateral lung transplant, previously diagnosed with Langerhans cell histiocytosis) (62).
- Malignant melanoma of the lung; presumed lung primary in the absence of previous history of malignant melanoma and negative work-up for extrapulmonary lesions (64).

SJ Melnick

- Retromastoid melanotic progonoma of infancy (2).
- Rhabdoid tumor of the lung (3).
- Malignant fibrous histiocytoma of the lung (4).
- Combined germ cell / sex-cord-epithelial tumor of the ovary (5).
- Infantile myofibromatosis of the mandible (6).
- Astroblastoma of the brain (7).
- Medullomyoblastoma (8).
- Partially differentiated cystic nephroblastoma (9).
- Ki-1 lymphoma vs lymphocytic depletion Hodgkin's disease (10).

T Mentzel

- Well-differentiated cutaneous angiosarcoma mimicking clinical rosacea (36).
- Cutaneous CD8+/TIA+ T-cell lymphoma (38).
- Spindle cell rhabdomyosarcoma in adult (40).
- Reticular perineurioma of soft tissue (42).
- Spindle cell carcinoma of the parotid gland consistent with a SETTLE-type tumor (spindle cell carcinoma of possible branchial cleft origin) (44).
- Intravascular myopericytoma of soft tissue (46).
- Progressive nodular histiocytoma (48).
- Polimorphous sweat gland carcinoma of the skin (50).
- Lupus panniculitis (Lupus erythematosus profundus) (52).
- Liposarcoma of the thigh, mixed type (54).
- Hybrid perineurioma and (ancient) schwannoma (56).
- Reticular schwannoma (58).
- Recurring myxoid fibroblastic neoplasm of the leg (60).
- Granulomatous mycosis fungoides of the skin (62).
- Tumour-like erythema elevatum et diutinum (64).
- Pleural dedifferentiated solitary fibrous tumour (66).

M Michal

- Carcinoma arising in ectopic hamartomatous thymoma (17).
- Reticulum cell tumor with monoclonal gammopathy (18).
- (Giant) plexiform xanthomatous tumor (20).
- Salivary gland anlage tumor (22).
- Retroperitoneal myolipoma (22).
- Castleman disease (hyaline-vascular variant) with follicular dendritic cell stromal overgrowth (sarcoma) (24).
- Talerman's tumor of the testis (24).
- Well-differentiated acinic cell carcinoma associated with lymphoid stroma (26).
- Sex cord stromal tumor of the testis with features of the adult type of granulosa cell tumor (26).
- Well-differentiated acinic cell carcinoma associated with lymphoid stroma (28).
- Sex cord stromal tumor of the testis with features of the adult type of granulosa cell tumor (28).
- Synovial metaplasia in lipoma (30).
- Adenoid-cystic carcinoma of the ovary (30).
- FATWO (Wolffian adnexal tumor) (32).
- Peripheral nerve sheath tumor with neuromelanin (32).
- Placental site trophoblastic tumor (34).
- Benign renal angiomyoadenomatous tumor (34).
- Sex-cord tumor with annular tubules unassociated with Peutz-Jeghers syndrome (37).
- Spindle and cuboidal renal cell carcinoma (lipoma) (37).
- Oncocytic carcinoma of the stomach (o parietal carcinom of the stomach) (39).
- Pseudoneoplastic hyperplasia of the islet cells with perineurial spread of the pancreas most probably due to the obstruction of the ductus choledocus (39).
- Dendritic neurofibroma with pseudorosettes (41).
- Sinonasal tubulopapillary low-grade adenocarcinoma (43).
- Low-grade trichoblastic carcinosarcoma of the skin (45).
- Prolapse of the fallopian tube after hysterectomy associated with exuberant angiomyofibroblastic stromal response (47).
- Round-cell variant of low-grade perineurial sarcoma? (49).
- Cribriform adenocarcinoma of the tongue (51).
- Oncocytic papillary renal cell carcinoma (53).
- Primitive small cell tumor with epithelial, gangliocytic, neuroendocrine and mesenchymal differentiation (53).
- Corticomedullary tumor of the adrenal glands (55).
- Salivary gland-type adenoma of the hypophysis (55).
- Ovarian fibroma with hyaline globules (M Michal).
- Mammary analogue secretory carcinoma of salivary glands, containing the ETV6-NTRK3 fusion gene (59).
- Placental site trophoblastic tumor of the testis arising as a component of germ cell tumor (61).
- Hyalinized endometrioid adenocarcinoma (63).
- Metastasis of teratocarcinosarcoma of the nasal cavity (65).

M Miettinen

- Chordoma-like primary soft tissue sarcoma (parachordoma) (4).
- Periosteal chondrosarcoma, with myxoid features, grade 2, of femur (5).
- Intra-abdominal desmoplastic small round cell tumor (6).
- Ossifying fibromyxoid tumor, malignant of the soft tissue –arm (7).
- True histiocytic lymphoma of the small intestine (8).
- Splenic large B-cell lymphoma with a red pulp distribution (9).
- Giant cell tumor of tendon sheath, cellular variant (10).
- Littoral cell angiosarcoma of the spleen (11).
- High-grade angiosarcoma of deep tissue (12).
- High-grade angiosarcoma of deep tissue (13).
- Sarcomatoid renal carcinoma (14).
- Carcinoma of anal ducts (15).
- Gastro-intestinal autonomic nerve cell tumor (GANT) (18).
- Epithelioid malignant schwannoma (20).
- Solitary fibrous tumor of upper respiratory tract (22).
- Undifferentiated (embryonal sarcoma) of the liver (24).
- Unclassified sarcoma of the lower limb, with intravenous growth pattern (26).
- Inguinal lymph node metastasis from aggressive papillary adenocarcinoma of sweat gland origin (28).
- Extragastrintestinal stromal tumor of the urinary bladder sierosa (34).
- Unclassified hemangioendothelioma variant, probably originating from the inferior vena cava - uncertain biologic potential (34).
- Dendritic reticulum cell sarcoma, probably of nodal origin (36).
- Retroperitoneal uterine-type leiomyoma (38).
- Malignant glomus tumor of the stomach (40).
- Inflammatory malignant fibrous histiocytoma of the pelvis (43).
- Round cell liposarcoma with cord-like growth pattern (47).
- True leiomyosarcoma of jejunum, high grade (47).
- Gastric schwannoma (49).
- Extraskkeletal osteosarcoma (53).
- Dendritic reticulum cell tumor (sarcoma) arising in Castleman disease – apparently extra-nodal tumor – small bowel (55).
- Quiz case-1. Inflammatory myofibroblastic tumor of stomach (55).
- Sclerosing perineurioma (57).
- Fibrous umbilical polyp (59).
- Epithelioid angiosarcoma involving adrenal (61).
- Subcutaneous adult myofibroma of the thigh (63).
- Rhabdomyosarcoma (pleomorphic), high-grade (65).

H Molina-Kirsch

- Central chondrosarcoma, gr. III (16).
- Post-traumatic neuroma (18).
- Large cell lymphoma from MALT-oma of the breast (20).
- *Angyostrongiloides Costarricensis* (21).
- Low-grade endometrial stromal sarcoma vs metastatic adenocarcinoma in the uterus (23).
- Pleomorphic large T/NK lymphoma of the face (25).
- Primary melanoma originated in a cystic teratoma (27).

E Montgomery

- Colchicine effect in a hyperplastic polyp (38).
- Enterocolic (lymphocytic) phlebitis (40).
- Brown bowel syndrome (42).
- Lipofibromatosis (finger) (44).
- Juxtaglomerular cell tumor of the kidney (46).
- Inflammatory fibroid polyp of the small bowel (48).
- Mucosal tear / “fractured colon” in collagenous colitis with perforation (50).
- Giant cell angiofibroma (Giant cell rich solitary fibrous tumor) (52).
- Ectopic ependymoma of the groin (54).
- Pyloric gland adenoma with high-grade dysplasia in a background of autoimmune metaplastic atrophic gastritis (56).
- Chest wall hamartoma (56).
- Fibrous hamartoma of infancy (58)
- Solitary fibrous tumor with areas of giant cells (giant cell angiofibroma/giant cell rich solitary fibrous tumor) of the esophagus (60).
- Littoral cell angioma of the spleen (62).
- Taxane effect in cholecystectomy specimen. (64)

LA Moral

- Metastatic lobular carcinoma of the breast to ovary (2).
- Carcinoma arising in mixed tumor (carcinoma ex-pleomorphic adenoma) of the parotid (3).
- Progressive multifocal leukoencephalopathy of the brain (3).
- Plasma cell granuloma of the meninges of the brain (4).
- Microcystic meningioma (5).
- Tanycytic ependymoma of the spinal cord (6).
- Giant cell vasculitis involving left fallopian tube (7).
- Intraventricular malignant meningotheliomatous and secretory meningioma (8).
- Pleomorphic xanthoastrocytoma (9).
- Meningeal sarcoma (10)
- Malignant mixed mullerian tumor of vagina (11).
- Giant cell granulomatous hypophysitis (12).
- Toxoplasmosis of the cerebellum in a HIV-patient (14).
- Endometrial mullerian adenosarcoma (16).
- Glioblastoma, epithelioid-sarcomatoid type (18).

CA Moran

- Extraskelatal Ewing's sarcoma, primary in the lung (peripheral neuroectodermal tumor) (1).
- Pulmonary blastoma with trophoblast-type giant cells (2).
- Spindle cell thymoma of the mediastinum (3).
- Liposarcoma of the anterior mediastinum (4).
- Benign solitary fibrous tumor of the pleura (5).
- Paranglioma of the lung (6).
- Mediastinal multilocular thymic cyst with incidental seminomatous component (7).
- Metastatic malignant melanoma of the lung (8).
- Embryonal carcinoma (or yolk sac tumor) of mediastinum (10).
- Epithelioid hemangioendothelioma of the anterior mediastinum with osteoclast-type giant cells (9).
- Schwannoma of the anterior mediastinum (11).
- Primary rhabdomyosarcoma of the mediastinum (12).
- Primary synovial sarcoma of mediastinum (14).
- Alveolar adenoma of lung (15).
- Inflammatory pseudotumor of lymphnode (18).
- Gastro-intestinal myogenic stromal tumor with prominent myxoid matrix (20)
- Pulmonary alveolar microlithiasis (24).
- Low grade vascular proliferation with features of intraosseous hemangioma / epithelioid hemangioendothelioma (26).
- Hemangiopericytoma? Solitary fibrous tumor? multicentric? (29).
- Aldosteronoma (33).
- Interdigitating reticulum cell sarcoma? (37).
- Mixed epithelial and stromal tumor of the kidney (50).
- Endometriosis of the lung (53).
- Elastofibroma (60).
- Malignant meningioma, primary in the pleura (62).

A Nascimento

- Neuroblastoma-like neurilemmoma (17).
- Solitary fibrous tumor of meninges (19).
- Cellular schwannoma with necrotizing granulomas (22).

G Pelosi

- Poorly differentiated synovial sarcoma of the vagina (51).
- Combined small-cell carcinoma with skeletal muscle differentiation and spindle cell sarcoma component of myofibroblastic type may be suggested for this case (52).
- Neurinoma of the mediastinum with extensive regressive changes including pseudocystic spaces (ancient Schwannoma) (54).
- Deep extra-abdominal fibromatosis (desmoid tumor) of the chest with involvement of the parietal pleura and fat tissue of the mediastinum (56).

K Perry

- Kimura disease (in both soft tissue and regional lymph nodes). (65)

F Pettersson

- Primary renal Ewing sarcoma/PNET. (65)

S Ramon y Cajal

- Pleomorphic adenoma (mixed tumor) of the male breast (1).
- Acantholytic squamous cell carcinoma, pigmented, of the skin of nose (2).
- Gliosarcoma with lipomatous differentiation cerebello-pontine angle (3).
- Malignant tumor of probable neuroectodermal origin of the orbit (4).
- Solitary plasmacytoma of nasal cavity (6).
- Spindle cell tumor - ? Dendritic reticulum cell sarcoma of the liver (7).
- Mucous cell adenoma of bronchial glands (8).
- Pulmonary hydatidosis (9).
- Adenocarcinoma of prostate plus "adenoid basal cell" carcinoma (10).
- Desmoplastic fibroma (11).
- Undifferentiated large cell carcinoma of the lung (12).
- Chronic rejection of liver (13).
- Mesenchymal chondrosarcoma (15).
- Gaucher disease, type I (17).
- Gangliocytic paraganglioma (19).
- Florid mesothelial hyperplasia versus malignant mesothelioma (21).
- Chondroblastoma of the acetabulum (23).
- HHV-8 related Castleman's disease in lymphnode & spleen in a HIV+ patient (25).
- Meningioangiomatosis: a form of mixed glio-neuronal tumors (27).
- Polypoid cystitis due to schistosoma hematobium (30).
- Glioneuronal tumor with rosette (32).
- Chronic rejection in lung transplant with herpes virus-type inclusions (35).
- Epithelioid angiosarcoma (37).
- Hepatobiliary cystadenocarcinoma with "ovarian-like stroma" (40).
- Uterine adenomatoid tumor (42).
- Consistent with malignant solitary fibrous tumor of the pleura (46).
- Epithelioid hemangioendothelioma with prominent intravascular dissemination (48).
- High-grade malignant pleomorphic tumor of the pleura (50).
- Metastasis of sarcoma to brain (see comments) (52).
- Primary ovarian fibrosarcoma (54).
- Primary mucinous cystadenocarcinoma of the breast (56).
- Soft tissue chondroma vs chondroid tumor of unknown malignant potential (58).
- Intra-ductal papillary mucinous tumor with low-grade dysplasia (60).
- Light-chain disease involving the lung (62).
- Clear cell chondrosarcoma of the rib (64).
- Pleomorphic xanthoastrocytoma of the brain, Grade II, WHO 2011 (66).

B Rubin

- Multiple plexiform tumorlets of the uterus (64).
- Extrapleural solitary fibrous tumor of stomach, giant cell angiofibroma variant (66).

A Sara

- Dys hormonogenic goiter (1).
- Ductal carcinoma in situ of the breast versus papillary carcinoma (2).
- Angioblastic meningioma (hemangioblastoma variant) of the cerebellopontine angle (3).
- Well-differentiated adenocarcinoma simulating fetal lung (pulmonary blastoma) lung (4).
- Neurocytoma of the brain (5).
- Biphasic neoplasm of the mediastinum (8).
- Dedifferentiated liposarcoma (9).
- Irradiated low-grade glioma vs radiation changes (10).
- Mixed tumor of the breast (11).
- Malignant mesenchymoma (12).

G Schibi-Brilliant

- Gonadoblastoma of the ovary (1).
- Subcutaneous myxopapillary ependymoma of the sacrococcygeal region (7).
- Malignant mixed tumor of the bronchial glands (9).

SJ Schnitt

- Ligneous cervicitis (28).

JZ Sickel

- Rhabdomyosarcoma with mixed embryonal and aveolar features of soft tissue (5).
- Synovial sarcoma of the thigh (6).
- Cutaneous Ki-1 (+) large cell lymphoma of T-cell lineage of the neck and vulva (7).
- Lymphoepithelioma-like carcinoma of the uterine cervix (8).
- Primary yolk sac carcinoma of the stomach (9).
- Gliomatosis peritonei (10).
- Leishmania lymphadenitis (12).
- Extraskelletal myxoid chondrosarcoma (11).
- Placental site trophoblastic tumor (14).
- Castleman's disease with dendritic reticulum cell dysplasia (15).
- Hepatic cysticercosis (18).
- Spindle cell (metaplastic) carcinoma of the breast with focal neural differentiation (20).
- Invasive ductal carcinoma with neuroendocrine differentiation (endometrioid-like glandular) (22).
- Invasive hydatidiform mole with associated malignant trophoblastic proliferation (24).
- Spenic-gonadal fusion (26).
- Enteropathy-associated T-cell lymphoma (28).
- Adenoid cystic carcinoma of the breast, grade I (30).
- Well-differentiated endometrioid carcinoma resembling FATWO (33).
- Giant cell interstitial pneumonia (35).
- Quiz case-2: Duplicatio intestinalis (35).
- Parvovirus B19 infection. (37).
- Metastatic renal cell carcinoma involving liver with associated peliosis hepatis (39).
- Coccidioidomycosi of the testes and epididys (40).
- Poorly differentiated transitional cell carcinoma of the urinary bladder with clear cell features (42).
- Extramedullary hematopoiesis involving the urinary bladder (44).
- Small cell neuroendocrine carcinoma of uterine cervix (46).
- Seminoma with associated hyperplasia and cystic dilatation of rete testis (48).
- Metastatic pancreatic adenocarcinoma simulating a primary mucinous tumor of the ovary (50).
- Necrotizing eosinophilic myocarditis with associated vasculitis, consistent with Churg-Strauss syndrome (52).
- True epithelial "mucoepidermoid" cyst arising within an intrapancreatic accessory spleen (54).
- Quiz case 2: Pulmonary Dirofilaria Repens (55).
- Quiz case 3: Entamoeba gingivalis admixed with Actinomyces in maxillary abscess (55).
- De-differentiated chromophobe renal cell carcinoma with osteosarcomatous differentiation (56).
- Clear cell ovarian adenocarcinoma arising in association with a dermoid cyst with striking verrucous hyperplasia (58).
- Quiz case: Myospherulosis (58).

EG Silva

- Dedifferentiated endometrioid adenocarcinoma of the uterus (47).
- Endometrioid carcinoma of the ovary (clear cell variant) (49).
- Well-differentiated Sertoli-Leydig cell tumor of the ovary (51).
- Primary ovarian carcinoma, microcystic type (54).
- Low-grade serous carcinoma (57).
- Intraplacental gestational choriocarcinoma (63).

M Sobrinho Simoes

- Quiz case: of the thyroid (60).
- Malignant small round cell tumor (NEC vs PNET vs others...) (63).
- Spindle cell sarcoma, NOS of liver (likely malignant solitary fibrous tumour) (66).

DV Spagnolo

- Hodgkin's disease with synus histiocytosis with massive lymphadenopathy (16).
- PNET vs metastatic neuroblastoma (18).
- Extra-articular pigmented villo-nodular synovitis (?) (20).
- Hyaline cell-rich chondroid syringoma (22).
- Desmoplastic ganglioglioma, non-DIG type, in an adult (24).
- Desmoplastic fibroblastoma or collagenous fibroma (26).
- Unclassified fibromatous tumor, probably benign: probably a myxoid variant of desmoplastic fibroma (26).
- Pleomorphic hyalinizing angiectatic tumor of soft parts (28).
- Inflammatory myofibroblastic tumor of the spleen with necrotizing, suppurative granulomatous inflammation (30).
- Agranular CD4+CD56+CD2- cutaneous lymphoma (32).
- T-cell granular lymphocytic leukemia involving lymph node (34).
- Tumefactive soft tissue extension from longstanding Paget's disease simulating sarcoma (Paget's pseudosarcoma) (36).
- Pediatric renal neoplasm characterized by epithelioid morphology, basement membrane production, focal HMB-45 immunoreactivity, and t(6;11) (p21.1;q12) (38).
- Aggressive NK-cell lymphoma with terminal hemophagocytic syndrome (40).
- Undiagnosed and unclassified high-grade malignant neoplasm with polyphenotypism (42).
- Leydig cell tumor with adipocytic differentiation and spindle cell differentiation with extensive stromal myxoid/myxohyaline change (and? osteoid) (42).
- Malignant mesothelioma (epithelioid) presenting as an abdominal wall soft tissue mass (44).
- Rosai-Dorfman disease involving the patella (46).
- Reactive microglandular/microtubular proliferation in a benign nasal polyp (aka microglandular adenosis) versus low-grade tubular carcinoma (48).
- Indeterminate cell tumor / sarcoma; indeterminate cell histiocytosis; dendritic cell sarcoma, not otherwise specified - skin (50).
- Gastric schwannoma (54).
- Florid marginal zone hyperplasia of the spleen mimicking splenic marginal zone lymphoma (56).
- Acquired thymic multilocular cyst with epithelial hyperplasia (medullary) and prominent lymphoplasmacytic and follicular lymphoid hyperplasia (58).
- Cutaneous myeloid sarcoma ("aleukemic" myeloid leukemia cutis), consistent with acute myelomonocytic leukemia (AMML) (60).
- Extra-articular diffuse-type tenosynovial giant cell tumour (extra-articular PVNS) of the thigh (62).
- Follicular dendritic cell sarcoma, recurrent, arising in hyaline-vascular Castleman disease and containing an infiltrate of immature thymic T cells (64).
- EBV-associated smooth muscle neoplasm (EBVSMN) of the mesentery in the setting of congenital immunodeficiency (common variable immunodeficiency) (66).

JA Strauchen

- Large cell anaplastic lymphoma secondary to chronic immunosuppression (12).
- Leprosy lymphadenitis (13).
- Monocytic sarcoma (15).
- Polyvinyl-pirrolidone granuloma of bone (17).
- Hodgkin's disease versus Hodgkin's disease-like Ki-1 positive ALC lymphoma (19).
- Gamma heavy chain disease (21).
- Canine lymphoma (23).
- T-cell rich large B-cell lymphoma (25).
- Post-transplantation syndrome in lymph node (Castleman's multicentric disease plus Kaposi's sarcoma-related to KSHV (27).
- Lymphohistiocytoid malignant mesothelioma (29).
- Angiotropic B-cell lymphoma (31).
- Mastocytosis (33).
- Plexiform fibrohistiocytic tumor with regional lymph node metastases (35).
- Endometrial marginal-zone B cell lymphoma, extranodal (MALT-type) (37). Infectious mononucleosis (39).
- Necrotizing enterocolitis due to clostridium septicum (41).
- Rhinocerebral mucormycosis (43).
- Abdominal angiostrongylosis due to angiostrongylus Costaricensis (45).
- Hepatic "MALT" lymphoma (extranodal marginal-zone B cell lymphoma of mucosa-associated lymphoid tissue type) associated with primary sclerosing cholangitis (47).
- "Adenoid" glioblastoma (malignant astrocytoma, WHO grade 4, with divergent epithelial-mesenchymal differentiation) (49).
- Subcutaneous panniculitis-like T-cell lymphoma involving the breast (51).
- Angiotropic metastasis of malignant melanoma (53).
- Atypical lipomatous tumor/inflammatory well differentiated liposarcoma - retroperitoneum. (55).
- Erdheim-Chester disease with cardiac involvement (57)
- Sclerosing angiomatoid nodular transformation (SANT) of the spleen (59).
- Anaplastic large cell lymphoma, ALK negative, breast implant-related (61).
- EBV infection versus peripheral T-cell lymphoma (63).
- ? EBV-positive inflammatory pseudotumor of liver with oligoclonal T-cell expansion secondary to EBV infection versus peripheral T-cell lymphoma (63).
- Anaplastic large cell lymphoma of the skin, ALK positive (65).
- Inflammatory pseudotumor/inflammatory myofibroblastic tumor of lung (66).

S Suster

- Primary neuroendocrine carcinoma of the uterus (1).
- Keratin globulos in lymph node in a patient with squamous cell carcinoma (2).
- Mucinous meningioma of the brain (3).
- Hürthle cell tumor with necrosis of the thyroid secondary to FNA (3).
- Synovial sarcoma monophasic (S Suster) (4).
- Tubular adenoma with atypical epithelial hyperplasia breast (5).
- Embryonal carcinoma of the abdomen (6).
- Epimyoeipithelial carcinoma of the parotid (7).
- Sarcomatoid carcinoma vs angiosarcoma of the kidney (7).
- Retroperitoneal metastatic embryonal carcinoma with sarcomatous transformation (8).
- Plexiform fibrohistiocytic tumor of the abdominal skin (8).
- Subcutaneous nodule on the arm composed of small round cells with round nuclei in a myxoid stroma – absent mitotic activity - *no diagnosis* (9).
- Sarcoma, NOS (10).
- Epithelioid malignant schwannoma (11).
- Epithelioid malignant schwannoma (12).
- ? Malignant mixed tumor of salivary gland (13).
- Malignant glomus tumor (14).
- Recurrent abdominal mesenteric fibromatosis (16).
- Histiocytosis X of lymph node "S-100 protein negative" (Langerhans cell granulomatosis) (18).
- Malignant lymphoma with rosette formation (19).
- ? Monophasic synovial sarcoma of the retroperitoneum (20).
- Quiz-case-1: Verruga peruana (22).
- (? Burnt out primary in the testis with) metastases: yolk sac tumor plus teratoma with a neuroepithelioma component in the retroperitoneum and metastatic chondrosarcoma to the heart? (23).
- Giant adenomatoid tumor of the uterus (26).
- Unusual renal cell carcinoma with tubulo-papillary features, unclassified (27).
- Clear cell epithelioid smooth muscle tumor of low-grade malignant potential (28).
- Quiz case-3: Malignant Sertoli cell tumor with focal spindle cell (sarcomatoid) features) (29).
- ? Myoepithelioma of soft tissues (31).
- ? Malignant epithelioid neoplasm of the serosal surface of bowel (29).
- ? Low-grade fibrohistiocytic tumor (32).
- ? Monophasic synovial sarcoma with metaplastic cartilage (32).
- ? Myxoid and spindle cell sarcoma, low grade, consistent with extraskeletal myxoid chondrosarcoma (33).
- Quiz case-1: Membranous fat necrosis (34).
- Low-grade versus benign spindle cell “true” histiocytic proliferation? “Fibrous histiocytoma” of soft tissue? Missed-the-boat-oma? (34)
- Quiz Case-1: Chester-Erdheim disease of the lung (35).
- Hyalinizing mesenchymal neoplasms of undetermined malignant potential (35).
- Spindle cell sarcoma, NOS (36).
- Low-grade spindle cell myofibroblastic proliferation (38).
- ? Low-grade carcinoma of unknown origin. ***F-Up in Sem. #45: low-grade endometrial stromal sarcoma (39).
- Quiz case-2: Cutaneous adult myofibroma (41).
- Dermal hamartoma with follicular and (?) eccrine differentiation (41).

- Quiz case-2: Nodular “metastatic” calcification of the lung secondary to hyperparathyroidism (43).
- Quiz Cases-4: Epithelioid variant of malignant peripheral nerve sheath tumor (vs melanoma with spindle cells, myxoid and balloon cell areas) (44).
- Quiz Case-1: Neurotropic malignant melanoma with rhabdoid features (vs epithelioid MPNST or malignant granular cell tumor) (46).
- Lipoblastic nerve sheath tumor with signet-ring lipoblastic cells (49).
- “Don’t know – HELP!” (52).
- Quiz case fibrosarcomatous transformation of DFSP with metaplastic bone (or focal osseous differentiation) or extraskeletal osteosarcoma (52).
- Filiform polyposis of the colon (54)
- Follicular neoplasm of the thyroid of undetermined malignant potential (55).
- Quiz case 4 Post-radiation angiosarcoma arising in the chest wall and secondarily invading the thyroid (55).
- Extraskeletal myxoid chondrosarcoma? (57).
- “I don’t know – HELP”: Epithelioid vascular neoplasm? Primitive cartilaginous tumor?
- Quiz case: low grade spindle cell sarcoma” consistent with either a low-grade myxo-fibrosarcoma or a low-grade malignant solitary fibrous tumor (58).
- Poorly differentiated malignant neoplasm with evidence of epithelial differentiation, NOS (59).
- Myofibroblastic tumor? Inflammatory pseudotumor? Myxo-inflammatory fibroblastic sarcoma?
- (61).
- Pseudotumoral reactive fibro/myofibroblastic proliferation? Inflammatory myxoinflammatory fibroblastic sarcoma) (61).
- Low-grade stromal tumor of the gastric wall – type undetermined? (63)
- Quiz case-3. Epithelioid angiosarcoma of the pleura secondarily invading the lung (63).
- Quiz case-2. Pleomorphic rhabdomyosarcoma of soft tissue in an adult patient (63).
- Quiz case 1. Lymphadenopathic Kaposi’s sarcoma with Castleman-like changes in a HIV+ patient (63).
- Quiz case 2. Crystal-storing histiocytosis of the lung (65).
- Retroperitoneal (??) “low-grade epithelioid neoplasm of undetermined histogenesis” (66).

W Tsang

- Sino-nasal HPC-like tumor (23).
- Primary malignant mesothelioma of the spleen (25).
- Combined renal cell oncocytoma and angiomyolipoma (27).

PE Wakely, Jr

- Malignant solitary fibrous tumor (or inflammatory fibroblastic sarcoma) (39).
- Quiz case n. 3. Polymorphous hemangioendothelioma of lymph node (41).
- ? Glycogen-rich (clear cell) carcinoma of the breast (43).
- Mesenchymal chondrosarcoma of the L5 vertebral body (43).
- Quiz case (2). Hamazaki-Wesenberg bodies with granulomas (45).
- Mediastinal extrarenal rhabdoid tumor (undifferentiated sarcoma with rhabdoid features) (45).
- Renal oncocytosis (47).
- Mycobacterial spindle cell pseudotumor (49).
- Adult Wilms' tumor, monophasic epithelial type, metastatic (49).
- Rhabdomyomatous giant fibrovascular polyp of the esophagus (51).
- Embryonal rhabdomyosarcoma of the uterine cervix (53).
- Adamantinoma, squamous pattern, left tibia. (55).
- Extranodal Rosai-Dorfman disease, left tibia. (55).
- Alveolar rhabdomyosarcoma, maxilla, in an adult (57)
- Adult type rhabdomyoma (57)
- Metanephric adenoma (58)
- Papillary thyroid carcinoma metastatic to the kidney mimicking a primary papillary renal cell carcinoma (59).
- Meningioma, psammomatous variant (59).
- Systemic mastocytosis initially masquerading as undifferentiated pleomorphic sarcoma with metastasis to lymph node (62).
- Pleomorphic liposarcoma, epithelioid variant (64).
- Intravascular/Intravenous leiomyomatosis with intracardiac extension (66).

N Weidner

- Epithelioid monophasic synovialsarcoma (10).
- Fetal-type hepatoblastoma vs adenoma (11).
- Perineurioma (13).
- Pleomorphic invasive lobular carcinoma of breast (14).
- Collecting duct carcinoma of kidney (16).
- Inflammatory pseudotumor of bladder (pseudosarcomatous fibromyxoid tumor) (18).
- Massive chondroid differentiation in fibrous dysplasia of bone (fibrocartilagineous dysplasia) vs fibrocartilaginous mesenchymoma of bone (20).
- Chondroid lipoma (22).
- "Benign intramural glandulo-cystic proliferation" in the bowel (24).
- Quiz case 2: Xanthoma of the skin (26).
- Quiz case-2: "Epimyoeipithelial carcinoma plus a stromal sarcoma" of the breast (28).
- Quiz case-1: Well-differentiated neuroendocrine carcinoma of the lung (30).
- Low-grade breast tumor c/w adenoid cystic carcinoma (32).
- Quiz case-2: Hemangiopericytoma-like tumor of the nose (34).
- Quiz case-3: Pancreatoblastoma, in adult (39).
- Quiz case-2: Ovarian ependymoma (39).

LM Weiss

- Retroperitoneal intra-abdominal desmoplastic small round cell tumor (5).
- Monocytoid B cell lymphoma of the lymph node (6).
- ? Possible "rhabdoid" variant of GIST of the stomach (7).
- Unclassifiable malignant neoplasm of the liver (8).
- ? Epithelioid leiomyosarcoma (9).
- Hepatocellular carcinoma with neuroendocrine features (10).
- Hairy cell leukemia in extralymphoid tissue (11).
- Hairy cell leukemia in extralymphoid tissue (12).
- Angiosarcoma of the peritoneum (14).
- Sclerosing Sertoli cell tumor (16).
- Pleomorphic adenoma of lung (18).
- Malignant mastocytosis with myeloproliferative syndrome (20).
- Poorly differentiated retinoblastoma (22).
- Solitary fibrous tumor of the kidney (24).
- Benign lymphoepithelial cyst of the pancreas (26).
- Liver metastasis from acinar cell carcinoma of pancreatic origin (28).
- Quiz case (1). Well-differentiated neuroendocrine carcinoma of the lung (30).
- Atypical lymphoid infiltrate, consistent with an abnormal immune response (30).
- Fibrous pseudotumor of the digits (33).
- Rosai-Dorfman's disease of skin (extranodal: skin) (35).
- Mantle cell lymphoma, involving intestine (36).
- Mantle cell lymphoma, involving the intestine (37).
- ALK-negative anaplastic large cell lymphoma (39).
- Mucinous tubular and spindle cell carcinoma (42).
- Interdigitating dendritic cell tumor versus sustentaculoma of the adrenal (43).
- Ganglioneuroma, with focal neurofibroma and atypical areas (49).
- Histiocytic sarcoma of the stomach (51).
- Mature cystic teratoma with sarcomatous component (embryonal rhabdomyosarcoma) (53)
- Gamma-delta lymphoma, perhaps an aggressive variant of hepatosplenic T-cell lymphoma-spleen. (55).
- Mixed cortical adenoma and composite pheochromocytoma-ganglioneuroma (57).
- Indeterminate cell tumor of the spleen (59).
- Dedifferentiated chondrosarcoma with giant cell tumor-like areas (61).
- Renal metanephric adenoma (63).

BM Wenig

- Polymorphous adenocarcinoma of minor salivary gland (11).
- Epithelioid angiosarcoma of adrenal gland (13).
- Papillary carcinoma of the thyroid, columnar cell variant (15).
- High-grade sarcoma c/w malignant peripheral nerve sheath tumor vs a possible mucinous cystic neoplasm with associated sarcomatous stroma (17).
- Heffner tumor (19).
- Malignant, undifferentiated large cell neoplasm, NOS (21).
- Epithelial neoplasm? Paraganglioma? Glomoid indeterminate tumor? CASTLE? (23).
- Intraductal oncocytic papillary neoplasm of the pancreas (25).
- Sarcomatoid carcinoma of the parotid (27).
- Tophaceous pseudogout of calcium pyrophosphate dehydrate deposition disease or CPP crystal deposition disease (29).
- Sialoblastoma (31).
- Undifferentiated malignant neoplasm of unknown origin (33).
- Pneumocystis carinii infection of the small intestine with CMV infection (35).
- Necrotizing granulomatous inflammation of soft tissue of unknown etiology (37).
- Histiocytoid variant of eccrine sweat gland carcinoma of the eyelid and orbit (41).
- Neuroendocrine carcinoma –for lack of an alternative diagnosis (44).
- Undifferentiated malignant tumor in the parotid with extensive angioinvasion (AFIP's suggested opinions: A) Intermediate to high-grade sarcoma consistent with MFH; B) Unusual intermediate to high-grade pleomorphic sarcomatous neoplasm of uncertain origin vs sarcomatoid carcinoma with sebaceous cell differentiation) (46).
- Sino-nasal glomangiomyopericytoma/HPC-like tumor versus atypical intranasal meningioma (48).
- Oncocytoma likely arising from intranodal salivary gland parenchyma (54).
- Quiz case – Intraoral, sublingual STUMP (59).
- Invasive paraganglioma incompletely excised; nine regional lymph nodes negative for metastatic tumor (57)
- Oncocytic carcinoma of the parotid gland (61).
- Thyroid gland with encapsulated (noninvasive) undifferentiated (anaplastic) thyroid carcinoma arising in association with a differentiated follicular epithelial cell lesion (63).
- Metastatic prostatic adenocarcinoma to the adrenal gland (66).

M Wick

- Quiz case-1: (49)

A Yosepovich

- Adenoid cystic carcinoma of the breast with solid high-grade areas (61).
- Secretory carcinoma of the breast (63).
- Benign breast lesion (adenomyoepithelioma vs hamartoma vs microglandular adenosis vs adenosis tumor) (65).

E Zambrano

- Unusual spindle cell lesion with extensively hyalinized stroma, NOS (57)
- Low-grade myofibroblastic neoplasm of the maxillary bone (60).
- Quiz case: 29-year-old female with a mobile mass in her left vulvar region (60).