ref	Code	Case	Diagnosis	Comment	Score
2804	109	AP245	Pituitary adenoma (100%)	nil	100
2692	222	AP245	Pituitary adenoma	nil	100
2709	246	AP245	Pituitary adenoma	Reticulin stain to exclude normal pituitary gland. Immunohistochemical studies for GH, ACTH, PRL, TSH and FSH.	100
2816	333	AP245	Pituitary adenoma	Immunohistochemical studies for hormones e.g. ACTH, Growth hormone, prolactin etc.	100
2748	338	AP245	PITUITARY ADENOMA. 100%	Immunostain to define hormone production. Clinical correlation for invasiveness. Remote ddx of plasmacytoma excluded by CD79a.	100

2703	369	AP245	Pituitary adenoma. (100%)	nil	100
2677	448	AP245	Pituitary adenoma 100%	nil	100
2732	515	AP245	Pituitary adenoma	nil	100
2764	517	AP245	Pituitary adenoma 100%	nil	100
2800	530	AP245	Plasmacytoma	nil	20
2685	663	AP245	Pituitary adenoma	nil	100
2740	763	AP245	Pituitary adenoma	nil	100
2789	794	AP245	pituitary adenoma (100%)	nil	100

2719	873	AP245	Pituitary gland: Pituitary adenoma, perform immunohistochemical stains like prolactin, growth hormone to further delineate its function. (100% probability)	nil	100
2787	888	AP245	Pituitary adenoma 100%	nil	100
2756	911	AP245	Pituitary adenoma	A few mitotic figures and focal mild cellular atypia seen. Will perform Ki67 and p53 because in atypical cases/adenoma with uncertain malignant potential, Ki67 will be higher and p53 will be positive.	100
2809	109	AP246	Sclerosing hemangioma (100%)	Tumour cells are positive for EMA CK, BerEP4. Stromal cells are positive for TTF-1.	100
2694	222	AP246	Sclerosing haemangioma	nil	100

2710	246	AP246	Sclerosing hemangioma (papillary pneumocytoma)	nil	100
2817	333	AP246	Sclerosing hemangioma	nil	100
2749	338	AP246	SCLEROSING HEMANGIOMA. 100%	nil	100
2704	369	AP246	Sclerosing hemangioma.(100%)	nil	100
2678	448	AP246	Lung - sclerosing haemangioma 100%	nil	100
2733	515	AP246	Sclerosing hemangioma	nil	100
2765	517	AP246	Sclerosing haemangioma 100%	nil	100
2801	530	AP246	Sclerosing hemangioma	nil	100

2686	663	AP246	Consistent with sclerosing hemangioma	nil	100
2742	763	AP246	Sclerosing hemangioma	nil	100
2790	794	AP246	sclerosing hemangioma (100%)	nil	100
2727	873	AP246	Lung: Sclerosing haemangioma (100% probability)	nil	100
2788	888	AP246	Sclerosing hemangioma of lung (benign pneumocytoma) 100%	nil	100
2757	911	AP246	Sclerosing hemangioma	nil	100
2810	109	AP247	Inflammatory pseudotumour, perform IgG4 immunostain for possibility of IgG4-related sclerosing disease. (100%)	nil	100
2695	222	AP247	Inflammatory pseudotumour/IgG4 related sclerosing disease	nil	100

2711	246	AP247	IgG4 related sclerosing disease	Confirm with immunostains IgG and IgG4.	100
2818	333	AP247	Inflammatory pseudotumor, compatible with IgG4-related sclerosing lesion.	Immunohistochemical stain for IgG4	100
2750	338	AP247	INFLAMMATORY PSEUDOTUMOR consistent with IgG4-related sclerosing disease. 100%	Confirm by IgG4 immunostain.	100
2708	369	AP247	IgG4-related sclerosing cholangitis/hepatic inflammatory pseudotumor.(100%)	Do IgG and IgG4 stain. Correlate with clinical findings.	100
2679	448	AP247	IgG4-related sclerosing cholangitis 100%	Require confirmation by immunostaining with IgG4 and IgG and assess their ratio	95
2734	515	AP247	Consistent with post-treatment effect (e.g. chemotherapy), with cirrhosis in the background.	Need clinical correlation.	50
2766	517	AP247	Inflammatory pseudotumour 70% Epithelioid haemangioendothelioma 30%	nil	70
2802	530	AP247	Extensive fibrosclerosing lesion with periductular lymphoplasmacytic infiltrate, suggestive of Autoimmune process or Primary sclerosing cholangitis-like process. Maybe	nil	90

			superimposed on a massive hepatocytes loss (previous fulminant hepatitis?)		
2687	663	AP247	Inflammatory pseudotumor	nil	100
2741	763	AP247	Inflammatory fibrosing/sclerosing process	Differential diagnoses include IgG4-related sclerosing disease (confirmed by IgG4 and IgG immunostaining) and inflammatory pseudotumor-group of diseases.	100
2791	794	AP247	inflammatory fibrosclerosing lesion with obliterative phlebitis, favor inflammatory pseudotumour (100%)	Clinical correlation and immunostaining for IgG-4 to exclude underlying IgG-4 related disease.	100
2728	873	AP247	Liver: Inflammatory pseudotumour, perform CD21&CD35 to exclude follicular dendritic cell tumour (100% probability)	nil	100
2779	888	AP247	Inflammatory pseudotumor 100%	nil	100

2758	911	AP247	Inflammatory pseudotumor	To perform IgG4 and IgG to see if it is a IgG4-related sclerosing disease.	100
2811	109	AP248	Low grade fibromyxoid sarcoma (100%).	nil	100
2696	222	AP248	Low grade fibromyxoid sarcoma	nil	100
2712	246	AP248	Low grade fibromyxoid sarcoma	nil	100
2819	333	AP248	Low grade fibromyxoid sarcoma	Molecular study to demonstrate the specific FUS-CREB3L1/2 fusions.	100
2751	338	AP248	LOW GRADE FIBROMYXOID SARCOMA. 100%	nil	100
2718	369	AP248	Low grade fibromyxoid sarcoma.(100%)	Examine more blocks and correlate with clinical radiological findings to exclude myxoid fibrosarcoma.	100

2680	448	AP248	Thigh - low grade fibromyxoid sarcoma 100%	nil	100
2735	515	AP248	Low grade fibromyxoid sarcoma	nil	100
2767	517	AP248	Nodular fasciitis 100%	nil	20
2803	530	AP248	Fibrosarcoma, fibromyxoid type (low grade fibromyxoid sarcoma)	nil	100
2772	663	AP248	Favor low grade fibromyxoid sarcoma. Differential diagnosis include solitary fibrous tumour, nodular fasciitis.	Suggest immunostaining for CD34, vimentin, smooth muscle actin, desmin and B-catenin, and also correlation with radiological findings.	80
2743	763	AP248	Low grade fibromyxoid sarcoma	To be confirmed by molecular genetic study	100
2794	794	AP248	myxoid spindle cell tumour, favor low grade fibromyxoid sarcoma(100%)	nil	100

2729	873	AP248	Soft tissue: favour low-grade fibromyxoid sarcoma, perform S-100 protein to rule out nerve sheath tumour (100% probability)	nil	100
2781	888	AP248	Myxofibrosarcoma (myxoid MFH) 100%	Immunostain for S100 protein to exclude myxoid liposarcoma	70
2759	911	AP248	Myxofibrosarcoma (low grade)	nil	70
2812	109	AP249	Intraductal papillary carcinoma (100%)	Immunostains for muscle specific actin and p63 show abscence of myoepithelial cells in the papillae.	95
2697	222	AP249	Intraductal papilloma	nil	50
2713	246	AP249	Solid papillary carcinoma	Immunostain (p63, actin) to demonstrate an intact layer of myoepithelial cells at the periphery of the tumor.	100

2820	333	AP249	Endocrine DCIS arising/ involving ductal papilloma	Immunostaining for neuroendocrine markers e.g. Chromogranin, synaptophysin	100
2752	338	AP249	DUCTAL CARCINOMA IN SITU arising from INTRADUCT PAPILLOMA. 100%	The DCIS is predominantly cribriform, low grade(Van Nuys). ER stain can highlight the clonal pattern in DCIS.	95
2717	369	AP249	Solid papillary ductal carcinoma-in-situ.(100%)	Do CK5/6 and p63 to confirm diagnosis and exclude small invasive foci.	100
2681	448	AP249	Breast - Atypical Intraductal papilloma / Papillary Neoplasm 100%	Immunostains required: 1.Actin to highlight myoepithelial cells in the papillary lesion 2.CK14 to assess intensity of staining of the ductal cells If both are lacking / reduced, need to suspect DCIS involving intraductal papilloma.	80

2736	515	AP249	Ductal carcinoma in-situ (suggestive of neuroendocrine subtype) complicating intraductal papilloma.	Performing neuroendocrine immunostain (e. g. synaptophysin, chromogranin) to confirm / exclude the neuroendocrine nature of the DCIS.	100
2768	517	AP249	Ductal carcinoma in-situ 70% Intraductal papilloma 30%	Special stain for myoepithelial cells	70
2805	530	AP249	Intraductal papillary neoplasm, consistent with Papilloma with atypia (Atypical papilloma)	IHC for ER, CK5/6 and 34betaE12 to rule out Papilloma with Ductal carcinoma in situ.	80
2688	663	AP249	Ductal carcinoma in situ, low grade (Van Nuys)	nil	95
2744	763	AP249	Ductal carcinoma in situ, low grade	Need to rule out endocrine ductal carcinoma in situ	95
2795	794	AP249	endocrine DCIS	To confirm with immunostaining for neuroendocrine markers and to differentiate from florid epitheliosis in	100

				papilloma by pattern of ER and CK5/6 staining	
2730	873	AP249	Breast: Papillary intraductal carcinoma, suggestive of neuroendocrine differentiation, perform neuroendocrine markers, like synaptophysin and chromogranin, also p63 to rule out invasion (100% probability)	nil	100
2782	888	AP249	Intraductal carcinoma with intraductal papillomas 100%	nil	95
2760	911	AP249	Intraductal papillary carcinoma	to look for neuroendocrine differentiation with neuroendocrine markers (synaptophysin and chromogranin)	95
2813	109	AP250	Lymphangiomyomatosis (100%)	Tumour cells are positive for actin, HMB-45, melanA and microophthalmia transcription factor.	100
2698	222	AP250	Lymphangiomyoma	nil	90

2714	246	AP250	Lymphangioleiomyomatosis	Confirmation with immunostains HMB45 and myogenic markers	100
2821	333	AP250	Lymphangiomyomatosis	Immunostaining for HMB45	100
2753	338	AP250	INTRAVENOUS LEIOMYOMATOSIS. 100%	nil	50
2705	369	AP250	Lymangioleiomyomatosis.(100%)	Do HMB45, melan A, desmin and actin stains.	95
2682	448	AP250	Pelvic wall - Cotyledonoid dissecting leiomyoma 100%	nil	50
2737	515	AP250	PECOMA	nil	95
2769	517	AP250	Leiomyomatosis 100%	nil	50
2806	530	AP250	Lymphangioleiomyomatosis	IHC for HMB-45 for correlation	100

2689	663	AP250	Intravenous leiomyomatosis	nil	50
2745	763	AP250	PEComa/lymphangioleiomyomatosis	To be confirmed by HMB45 immunostaining	100
2796	794	AP250	lymphangiomyomatosis (spectrum of PEComa)	To confirm with immunostaining for HMB45	100
2731	873	AP250	Abdominal cavity, pelvic region: Lymphangiomyoma, confirm with HMB45 stain. (100% probability)	nil	90
2783	888	AP250	Lymphangiomyomatosis involving lymph node 100%	nil	100
2761	911	AP250	Lymphangioleiomyomatosis	to be confirmed with HMB45.	100
2814	109	AP251	Renal oncocytoma (100%)	nil	100
2699	222	AP251	Renal oncocytoma	nil	100

2715	246	AP251	Oncocytoma	nil	100
2823	333	AP251	oncocytoma	nil	100
2754	338	AP251	ONCOCYTOMA. 100%	Colloidal iron stain can be used to exclude remote ddx of chromophobe renal cell carcinoma.	100
2706	369	AP251	Oncocytoma.(100%)	nil	100
2683	448	AP251	Kidney - Renal Oncocytoma 100%	nil	100
2738	515	AP251	Renal oncocytoma	nil	100
2770	517	AP251	Renal oncocytoma 100%	nil	100
2807	530	AP251	Oncocytoma	nil	100

2690	663	AP251	Oncocytoma	nil	100
2746	763	AP251	Renal oncocytoma	nil	100
2798	794	AP251	oncocytoma (100%)	nil	100
2725	873	AP251	Kidney: Oncocytoma (100% probability)	nil	100
2785	888	AP251	Renal oncocytoma 100%	nil	100
2762	911	AP251	Oncocytoma	nil	100
2815	109	AP252	Progressive multifocal leukoencephalopathy (PML) (100%)	Polyomavirus particles can be identified on electron microscopy or by in-situ hybridization. Also perform immunostain to exclude coexisting toxoplasmosis.	100

2702	222	AP252	Metastatic carcinoma	nil	0
2716	246	AP252	Progressive multifocal leukoencephalopathy	Correlate with microbiology investigations. Diagnosis of JC viral infection is normally confirmed with CSF PCR.	100
2824	333	AP252	demyelinating disease, compatible with progressive multifocal leukoencephalopathy	nil	100
2755	338	AP252	Consistent with PROGRESSIVE MULTIFOCAL LEUKOENCEPHALOPATHY. 100%	Diagnosis to be confirmed by immunostains, ISH or EM for JC virus and SV40 virus. Less likely ddx of herpes encephalitis excluded by immunostains or ISH. Remote ddx of cryptococcus excluded by mucicarmine stain. Radiation induced necrosis also a remote ddx after	100

				exclusion of infection.	
2707	369	AP252	Progressive multifocal leukoencephalopathy.(100%)	nil	100
2684	448	AP252	Brain - Progressive multifocal leukoencephalopathy 100%	Scattered oligodendroglial cells bearing nuclear changes, compatible with JC virus infection	100
2739	515	AP252	Consistent with post-irradiation effect and demyelination.	nil	80
2771	517	AP252	Demyelinating disease, 100%, consisting with Progressive multifocal leukoencephalopathy	nil	100
2808	530	AP252	Progressive multifocal leukoencephalopathy with presence of viral inclusions consistent with JC papova virus.	nil	100
2691	663	AP252	Radiation change	nil	50
2797	763	AP252	Demyelination with atypical cells, suggestive of progressive multifocal leukoencephalopathy	1. Suggest immunostaining for JC virus 2. Differential	100

				diagnoses are demyelination as a paraneoplastic syndrome, and radionecrosis. Need to correlate with history of radiation and exact site of lesions.	
2799	794	AP252	Progressive multifocal leukoencephalopathy (100%)	Clinical and radiologic correlation to differentiate from radionecrosis.	100
2726	873	AP252	Brain: Progressive multifocal leukoencaphalopathy, perform PAS, Ziehl Neelsen and Grocott stains to rule out infective lesions like Whipple disease, TB, and fungal infection. (100% probability)	nil	100
2786	888	AP252	Subacute hemorrhagic infarction related to irradiation 100%	To exclude infective cause by special stains: Grocott and ZN.	50
2763	911	AP252	Progressive multifocal leukoencephalopathy	to be confirmed with immunostain for JC virus	100