



South East England General Histopathology EQA Scheme

Round aa Final Case Analyses

Cases aa1 to aa12

Circulated: **January - February 2025**

160 responses (86.9%)

Prepared: **April 2025**

For information on scoring and statistical analysis, please see explanation on our website under section ["How the scoring works"](#).

Authorised by:

Dr Nipin Bagla

Date: **7th April 2025**

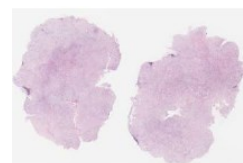
With thanks to those who contributed to this round:

Trust	ISO accreditation number
Worthing Hospital	8267
Maidstone Hospital	8062
Frimley Park Hospital	9727
Southend University Hospital	7880
East Surrey Hospital	N/A
Royal Sussex County Hospital	9337
Broomfield Hospital	9864
Charing Cross Hospital	9615
Eastbourne District General Hospital	8790
William Harvey Hospital	9246
Singleton Hospital	8990
St Thomas' Hospital	9323

University of Leeds Virtual Pathology provide digital slide scanning and image hosting for the scheme.

Case Number: aa1

Diagnostic category: Skin



Clinical : F54. Lesion of scalp ?Lipoma

Specimen : Lesion on scalp

Macro : Circumscribed and lobulated white tissue 18 x 14 x 9mm

Immuno : None provided

	Final Merges	Score
1	Chondroid syringoma / benign mixed tumour	96.03
2	Chordoma	0.64
3	Cutaneous Adnexal tumour	0.71
4	Metastatic mucinous breast carcinoma	0.32
5	Microcystic adnexal carcinoma	0.64
6	Mucinous carcinoma sweat glands	0.32
7	RULE OUT ADENOCARCINOMA METASTASIS WITH IHC	0.06
8	Syringoma	1.28

Most popular diagnosis: Chondroid syringoma / benign mixed tumour

Reported Diagnosis: Chondroid syringoma (mixed tumour), eccrine type

Case Number: aa2

Diagnostic category: GI



Clinical : F78. Seg 3 secondary. Liver biopsy

Specimen : Liver Biopsy

Macro : One grey fine needle core biopsy 28mm long.

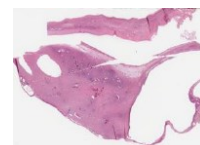
Immuno : Immunohistochemistry demonstrates positivity with CD56, TTF-1 and CAM 5.2 with a dot-like perinuclear accentuation and a proliferation index of 100% with MIB-1.

	Final Merges	Score
1	Small Cell Carcinoma / Neuroendocrine carcinoma	99.31
2	Merkel Cell Tumour	0.69

Most popular diagnosis: Small Cell Carcinoma / Neuroendocrine carcinoma

Reported Diagnosis: Small cell carcinoma (likely lung)

Case Number: aa3



Diagnostic category: Gynae

Clinical : F67. Clinically benign R ovarian cyst but a substantial solid element within the cyst.

Specimen : Hysterectomy and bilateral salpingo-oophorectomy

Macro : Cystic ovarian mass measuring 170 x 150 x 60mm with smooth, intact capsule, composed of one main cyst but containing a smaller cyst within it. Smooth cyst lining with fibrous wall, no predominant solid element.

Immuno : None provided

	Final Merges	Score
1	BENIGN BRENNER AND MUCINOUS CYSTADENOMA	86.75
2	Benign Brenner tumour	10.53
3	Cystadenoma / mucinous Cystadenofibroma	1.99
4	Granulosa cell tumour (FOXL2, INHIBIN positive)	0.07
5	Mature teratoma	0.66

Most popular diagnosis: BENIGN BRENNER AND MUCINOUS CYSTADENOMA

Reported Diagnosis: Benign mucinous Cystadenoma and benign Brenner tumour

Case Number: aa4



Diagnostic category: Lymphoreticular

Clinical : F66. Presented with bilateral breast masses / left gluteal masses, bilateral hydronephrosis and leg weakness. Clinically 5cm mass left breast UIQ, 3cm mass right UIQ. Left UIQ mass, free-hand biopsy done.

Specimen : Biopsy - Left UIQ mass

Macro : 4 pale cores 7-20mm

Immuno : Lesional cells are positive for CD45, CD20, PAX5, BCL2, BCL6 (weak), CD10 and MUM1. Few lymphoid cells express CD23. They are negative for CD30, cyclin D1, EBER ISH, and TdT. CD3 and CD5 show few intermixed T cells. The Ki-67 proliferation index is >95% in some foci.

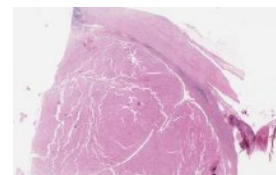
	Final Merges	Score
1	Aggressive BCL / DLBCL / High grade BCL	96.03
2	Burkitt lymphoma	0.74
3	FOLLICULAR CELL LYMPHOMA	2.50
4	Lymphoma	0.74

Most popular diagnosis: Aggressive BCL / DLBCL / High grade BCL

Reported Diagnosis: High grade B cell lymphoma with BCL2, BCL6 and C-myc rearrangement

Case Number: aa5

Diagnostic category: GU



Clinical : M83. Right renal tumour

Specimen : Renal tumour

Macro : Upper pole renal tumour measuring up to 74mm, confined to the kidney.

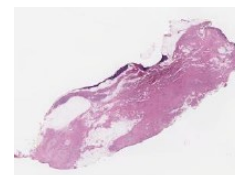
Immuno : CK7+ CD117+, CK20 -, CD10-, Vimentin-

	Final Merges	Score
1	Chromophobe carcinoma kidney	98.00
2	Renal Oncocytoma	1.33
3	chromophobe adenoma	0.67

Most popular diagnosis: Chromophobe carcinoma kidney

Reported Diagnosis: Chromophobe renal cell carcinoma.

Case Number: aa6



Diagnostic category: Breast

Clinical : F69. Dense nodularity right outer breast, subtle change of echogenicity versus left side.

Specimen : Breast

Macro : 4g. 35 x 25 x 10 mm. Firm pale change throughout. No focal lesion.

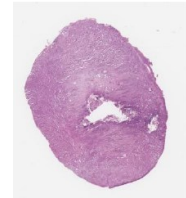
Immuno : S100+. ER, CK5/6, P63 and SMMHC negative

	Final Merges	Score
1	Microglandular adenosis	90.59
2	Atypical microglandular adenosis	3.53
3	Acinic cell carcinoma	0.65
4	Adenoid cystic carcinoma	0.65
5	Ductal carcinoma of breast	1.96
6	MGA like ca	0.65
7	Sclerosing adenosis	0.65
8	Secretory carcinoma of the breast	1.31

Most popular diagnosis: Microglandular adenosis

Reported Diagnosis: Microglandular adenosis

Case Number: aa7



Diagnostic category: Respiratory

Clinical : F70. Posterior tracheal wall biopsy, debulked for biopsy.

Specimen : Tracheal Wall

Macro : Irregular nodular tissue, 15x10x10mm.

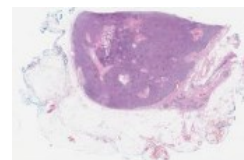
Immuno : CK7, TTF-1, Thyroglobulin, BerEP4 positive.
WT-1, CA125, CK20, ER, PR, CDX2, P63, CK5, SMA
negative

	Final Merges	Score
1	(Papillary) Adenocarcinoma from thyroid primary	98.51
2	Lung adenocarcinoma	0.84
3	Lung adenocarcinoma with thyroid like features	0.65

Most popular diagnosis: (Papillary) Adenocarcinoma from thyroid primary

Reported Diagnosis: Metastatic papillary thyroid carcinoma

Case Number: aa8



Diagnostic category: Miscellaneous

Clinical : M38. Non-functioning left infrarenal para-aortic mass.
Paraganglioma.

Specimen : Nodule

Macro : Fat measuring 55 x 40 x 28mm containing a circumscribed
nodule measuring 40mm.

Immuno : None Provided

**THIS CASE HAS BEEN EXCLUDED
FROM PERSONAL ANALYSES**

	Final Merges	Score
1	Castleman disease	52.88
2	Accessory spleen / splenunculus	36.88
3	Angiomyolipoma	0.63
4	Amyloidosis (confirmatory stain, e.g. Congo red, required)	0.63
5	Ectopic Parathyroid Tissue	1.25
6	ECTOPIC THYMIC TISSUE	0.06
7	Epithelial haemangioma	0.31
8	IgG4-related disease	0.31
9	Inflammatory myofibroblastic tumour	1.25
10	Inflammatory pseudotumor	1.25
11	Low grade lymphoma	0.06
12	Lymph node with plasmacytosis ?amyloid - to exclude/confirm low grade Non Hodgkin's lymphoma with immunostains	0.31
13	Paraganglioma	1.88
14	Reactive Lymph node NOS	1.81
15	Reactive lymphoid changes, favour Kimura's disease	0.50

Most popular diagnosis: Castleman disease

Reported Diagnosis: Hyaline vascular Castleman disease

Case Number: aa9

Diagnostic category: **Digital Only - Miscellaneous**

Clinical : F26. ? Fibroepithelial polyp, mucosa LL6-LL7

Specimen : Polyp

Macro : Three irregular pieces of cream and beige tissue, the largest measuring 9mm.

Immuno : None provided



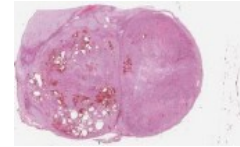
	Final Merges	Score
1	Benign ossifying fibroma	83.94
2	Benign granular cell tumour	0.63
3	DENTIGEROUS TUMOUR (NEEDS LEVELS TO ASSESS IF LESION CONTAINS DENTIGEROUS EPITHELIUM)	0.06
4	Fibroma / Epulis	9.69
5	Fungal infection? Histoplasmosis with ulcer inflammation calcification	0.31
6	Giant Cell Granuloma	1.81
7	Hyper-parathyroidism	0.13
8	Leishmaniasis with ulcer inflammation and calcification - special stains to confirm	0.31
9	NON-OSSIFYING FIBROMA	0.63
10	Pyogenic granuloma	1.25
11	Reperative granuloma	0.63
12	Spindled squamous cell carcinoma? (but I would do more work on this)	0.63

Most popular diagnosis: Benign ossifying fibroma

Reported Diagnosis: **Peripheral ossifying fibroma (calcifying fibrous epulis/calcifying fibroblastic granuloma)**

Case Number: aa10

Diagnostic category: Endocrine



Clinical : ?45. PET positive nodule left adrenal.

Specimen : Left adrenalectomy

Macro : Adrenal gland with a small amount of attached adipose tissue weighing 49g. Slicing shows adrenal tissue with multiple tan nodules measuring 5mm and 20mm in maximum dimension. Some of these nodules have areas of haemorrhage.

Immuno : Positive for CD10, MNF116, RCC, vimentin, Negative for S100, chromogranin, synaptophysin.

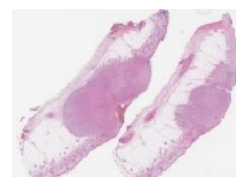
	Final Merges	Score
1	Clear cell renal cell carcinoma	100.00

Most popular diagnosis: Clear cell renal cell carcinoma

Reported Diagnosis: **Metastatic RCC to adrenal gland**

EDUCATIONAL CASE

Case Number: aa11



Diagnostic category: Miscellaneous

Clinical : M82. Nodule on scalp

Specimen : Skin Excision

Macro : Ellipse of sutured skin measuring 32x38x11mm. There is a 17mm module present.

Immuno : Positive with CD10, focally positive with SMA and negative with AE1/AE3, p40, Desmin, SOX10 and CD34

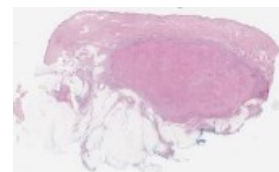
1	Pleomorphic dermal sarcoma (PDS)	51.87
2	AFX - atypical fibroxanthoma	37.81
3	AFX / pleomorphic sarcoma	3.23
4	Atypical fibrous histiocytoma	0.65
5	Superficial pleomorphic dermal sarcoma	1.94
6	Atypical fibroxanthoma with fibrosarcomatous transformation	0.65
7	High grade leiomyosarcoma	0.65
8	high grade sarcoma, NOS	0.65
9	PEComa	0.65

Reported Diagnosis: **Pleomorphic Dermal Sarcoma**

EDUCATIONAL CASE

Case Number: aa12

Diagnostic category: Skin



Clinical : F43. Anterior abdominal wall masses excised during abdominoplasty.

Specimen : Abdomen Skin Nodule

Macro : An irregular disc of skin 35x33x14mm with a firm central dermal nodule measuring 22 x20x15mm.

Immuno : Congo red staining positive with apple green/yellow birefringence on cross-polarisation. CD68 confirms numerous histiocytes. CD3,CD20 and CD79a show mixed T-cells, B-cells and plasma cells, the latter showing mixed light chain expression by immunohistochemistry. Insulin immunohistochemistry positive

1	Amyloid deposition - insulin related	48.30
2	Amyloid deposition	42.18
3	Fat necrosis associated with insulin injections	0.68
4	foreign body type giant cell reaction to? Silicon	0.68
5	Insulin granuloma	0.68
6	Light chain amyloidosis with foreign body reaction	0.68
7	Necrotizing granulomata with possible Malakoplakia	0.68
8	Plasma cell neoplasm with amyloid	0.68

Reported Diagnosis: Nodular Amyloidoma of insulin-type (Alns)