

South East England General Histopathology EQA Scheme

Round r Final Case Analyses

Cases 841 to 852

Circulated January to February 2022

155 responses (90.64%)

Prepared March 2022

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

Authorised by:

Junt

Prof J Schofield

Date: 28/03/2022

With thanks to those who contributed to this round:

Trust	ISO accreditation number
East Sussex Healthcare NHS Trust	8790
Maidstone and Tunbridge Wells NHS Trust	8062
Mid and South Essex NHS Foundation Trust	7880
Western Sussex Hospitals NHS Foundation Trust	1
Swansea Bay University Health Board	8990
East Kent Hospitals University NHS Foundation Trust	9246
Epsom and St Helier University Hospitals NHS Trust	8626
Kingston Hospital NHS Foundation Trust	8132
Imperial College Healthcare NHS Trust	9615
The Princess Alexandra Hospital NHS Trust	8820
King's College Hospital - NHS Foundation Trust	8620
Guys and St Thomas's NHS Foundation Trust	9323
Frimley Park Hospital NHS Foundation Trust	9727

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Case Number: 841 Click here to view digital image

Diagnostic category: Miscellaneous

Clinical : M59. Destructive lesion within the coccyx

Specimen : Core biopsy from Coccyx lesion

Macro : Core biopsy

Immuno : Immunohistochemistry reveals expression of AE1/3, CK8/18, EMA and Brachyury by the tumour. There is very occasional and weak expression of S100 by scattered cells within the tumour but the vast majority of the tumour cells are negative. The tumour is negative for desmin and CD34.

	Final Merges	Score
1	Chordoma	10.0

Most popular diagnosis: Chordoma

Reported Diagnosis: Chordoma

Case Number: 842 Click here to view digital image

Diagnostic category: Respiratory

- **Clinical** : M32. US biopsy lingular mass 18G. New mass lingula. Known breast cancer 2017. New lung cancer?
- **Specimen** : Rt Lung biopsy
- Macro : One fine needle core, grey, cream and slightly yellowish in colour measuring 20mm long.

Immuno : POS: CK7, MNF116, CA125 (focal), ER (3+5=8), Gata 3, PR (1+3=4). NEG: CK20, CDX-2, TTF1, PSA, HSA, PSAP, Napsin A.

	Final Merges	Score
1	Metastatic breast carcinoma	9.99
2	Primary lung adenocarcinoma	0.01

Most popular diagnosis: Metastatic breast carcinoma

Reported Diagnosis: Metastatic breast carcinoma

Case Number: 843 <u>Click here to view digital image</u>

Diagnostic category: Breast

- **Clinical** : F78. B3 Lesion on previous biopsy
- **Specimen** : Breast

Macro : Left breast VAE. Fibrofatty tissue 50x30x7mm

Immuno : IHC: S100 +ve, ER, PR, p63-ve

	Final Merges	Score
1	Microglandular Adenosis +/-Atypical	9.14
2	Adenomyoepithelioma / myoepithelioma/myofibroblastoma	0.15
3	Acinic cell carcinoma of breast	0.20
4	Invasive ductal carcinoma (and previous biopsy cavity)	0.07
5	Adenomyoepithelial adenosis	0.07
6	Tubular adenosis / adenoma	0.10
7	(Nodular) adenosis	0.24
8	Carcinoma arising in MGA	0.03

Most popular diagnosis: Microglandular Adenosis +/- Atypical

Reported Diagnosis: Adenosis, conventional and microglandular types

Case Number: 844 <u>Click here to view digital image</u>

Diagnostic category: Endocrine

- Clinical : F39.Incidental adrenal lesion on CT
- Specimen : Adrenal Lesion

Macro : Haemorrhagic well circumscribed lesion within adrenal

	Final Merges	Score
1	Myelolipoma	9.36
2	Myelofibroma	0.07
3	Extramedullary haematopoesis	0.50
4	Angiomyolipoma	0.07

Most popular diagnosis: Myelolipoma

Reported Diagnosis: Myelolipoma

Case Number: 845 <u>Click here to view digital image</u>

Diagnostic category: Lymphoreticular

Clinical : F22. Oriental name. painful raised LN left axilla, ?Reactive

Specimen : Lymph Node Left Axilla

Macro : A core of tissue, measuring 9 x 2 mm with a diameter of less than 1 mm.

Immuno : Occasional small residual follicles are present with CD20. CD3 shows increased T-cells with approximately equal numbers of CD4 and CD8, the latter also staining with TIA.

There are MPO-positive macrophages. CD123 shows numerous plasmacytoid dendritic cells. CD 30 shows scattered activated cells. MUM1 stains only a few plasma cells and lymphoid cells.

ZN, PASD and Warthin-Starry negative for infectious organisms.

	Final Merges	Score
1	Kikuchi lymphadenitis / disease	9.79
2	T cell lymphoma	0.07
3	Infectious mononucleosis	0.07
4	Blastic plasmacytoid dendritic cell neoplasm	0.07

Most popular diagnosis: Kikuchi lymphadenitis / disease

Reported Diagnosis: Kikuchi- Fujimoto disease (proliferative phase)

Case Number: 846 Click here to view digital image

Diagnostic category: Gynae

- **Clinical** : F34. Primary subfertility and pain. Fibroid on anterior wall of uterus
- Specimen : Fibroid
- **Macro** : Multiple firm, pale tissue fragments total 20mm maximum. These have a pale solid appearance on sectioning.

Immuno : AE1-AE3 and calretinin were positive, BerEP4 was negative.

	Final Merges	Score
1	Adenomatoid tumour +/- Leiomyoma	9.96
2	Multilocular peritoneal inclusion cyst	0.02
3	Benign multicystic mesothelioma	0.02

Most popular diagnosis: Adenomatoid tumour +/- Leiomyoma

Reported Diagnosis: Adenomatoid tumour

Case Number: 847 <u>Click here to view digital image</u>

Diagnostic category: GI

- Clinical : F70. Dyspepsia and retrosternal burning. Stomach: nodular mucosa with a whitish coating involving the gastric body.
- Specimen : Gastric biopsy

Macro : Six fragments up to 4mm

	Final Merges	Score
1	Gastric mucosal calcinosis / Calcification	9.07
2	Heterotopic pancreas / pancreatic acinar metaplasia	0.13
3	Foreign material in lamina propria (looks like lanthanum)	0.08
4	Fundic gland polyp	0.08
5	Iron pill gastritis /? siderosis	0.42
6	Malakoplakia / giardiasis / amebiasis	0.03
7	PPI therapy changes	0.10
8	Hypergastrinemia	0.03
9	Normal gastric body mucosa	0.06

Most popular diagnosis: Gastric mucosal calcinosis / Calcification

Reported Diagnosis: Gastric mucosal calcinosis

Case Number: 848 Click here to view digital image

Diagnostic category: GU

Clinical : F54. Left kidney

Specimen : Kidney

Macro : Left nephrectomy and adrenal gland. Kidney 150x85x80mm with adrenal gland 55x30x20mm. Superior pole of kidney nodular yellow tumour 80x70x70mm. Patchy haemorrhage bulges into perinephric fat. Involves renal vein.

	Final Merges	Score
1	Clear cell renal cell carcinoma	9.59
2	Chromophobe RCC	0.35
3	Adrenal cortical carcinoma	0.05
4	MiT family translocation RCC	0.01

Most popular diagnosis: Clear cell renal cell carcinoma

Reported Diagnosis: Clear cell renal cell carcinoma (Grade 3)

Case Number: 849 Click here to view digital image

Diagnostic category: Skin

- **Clinical** : F49. Right chest wall, suspicious subcutaneous lesion
- **Specimen** : Punch biopsy of skin, chest wall
- Macro : 4mm punch biopsy of skin, 7mm deep.
- **Immuno** : Pan Keratin negative, S100 positive, CD68 positive

	Final Merges Granular cell tumour	Score
1	Granular cell tumour	10.0

Most popular diagnosis: Granular cell tumour

Reported Diagnosis: Granular cell tumour

Case Number: 850 <u>Click here to view digital image</u>

Diagnostic category: Endocrine

Clinical	: M65. Left lower renal pole Bosniak 3 cyst + adrenal lesion
Specimen	: Adrenal Lesion
Macro	: Yellow cystic renal tumour 35mm and tan congested nodule in adrenal measuring 20x17x12mm
Immuno	: Adrenal nodule: Synaptophysin, Chromogranin A and S100 positive;

Melan A, Calretinin, pancytokeratin (AE1/AE3) negative

	Final Merges	Score
1	Pheochromocytoma	9.79
2	Adrenal hyperplasia	0.07
3	Adenoma	0.13
4	Adrenocortical neoplasm	0.01

Most popular diagnosis: Pheochromocytoma

Reported Diagnosis: Adrenal Pheochromocytoma

EDUCATIONAL CASE

Case Number: 851 Click here to view digital image

Diagnostic category: Skin

Clinical : M20. ?Blue naevus right forearm. R/O MM

Specimen : Right forearm skin

Macro : Ellipse 11x8x7mm with 7mm bluish macule and 4mm underlying brown lesion

Immuno : Beta catenin + cyclin D1 expressed throughout lesion.

Suggested diagnoses:

 Deep penetrating naevus Blue naevus Cellular blue naevus Deep Penetrating Blue Naevus Benign naevus Combined naevus (penetrating / cellular blue) Dermatosis papulosa nigrans Malignant melanoma Deep penetrating naevus naevocellualris Langerhan's pigmented histiocytosis 	x123 x16 x13 x6 x2	
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Reported Diagnosis: Deep penetrating naevus

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EDUCATIONAL CASE

Case Number: 852 Click here to view digital image

Diagnostic category: Respiratory

Clinical : M69. Thrombocytopenia - mild anaemia. ?NHL/ ?MDS ?ITP

Specimen : BMT

- **Macro** : Two pieces of haemorrhagic and cream trephine biopsy the longest piece measures 14mm long
- Immuno : Positive for CK7, MNF116, TTF1 and Napsin. Negative for CK20, CK56, CD56, CDX2, PSA, PSAP, PAX8, OCT34 and p63.

Suggested diagnoses:

٠	Metastatic lung adenocarcinoma	x107	
٠	Metastatic lung carcinoma	x26	
٠	Metastatic poorly differentiated carcinoma	x3	
	Metastatic lung adenocarcinoma with features of MDS in bone marrow	x3	
•	METASTATIC LUNG ADENOCARCINOMA AND MYELODYSPLASTIC SYNDROME	xЗ	
٠	Metastatic TTF1 Positive Adenocarcinoma of Lung Origin		
٠	Metastatic adenocarcinoma of lung and marrow hypercellularity? reactive		
٠	Bone marrow involvement by metastatic non-small cell lung carcinoma		
٠	Metastatic Pulmonary Carcinoma in Bone		
٠	Sclerotic adenocarcinoma, immuno profile indicates lung primary, PSA -ve		
	indicates not prostate		
٠	Metastatic ca		
٠	Adenocarcinoma, lung		
٠	Metastatic non-small cell carcinoma		
٠	Bone marrow metastatic deposit of primary lung adenocarcinoma		

Reported Diagnosis: Poorly differentiated adenocarcinoma

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