UK National Liver Histopathology EQA Scheme

Circulation L25_A

Case Response Analysis

This document is generated automatically by the EQA website. There is also a spreadsheet which includes the comments box. Members of the UKLPG quality subcommittee use the data to find points of consensus and formulate scoring criteria proposals. A meeting was held 6.6.25 Rachel Brown RMB Anshu Awasthi and Niamh Nolan. Please take a look at the agreed proposals – the virtual members meeting 18.6.25 will be an opportunity to raise questions. Members can be polled for opinions ad hoc at the meeting.

In the spreadsheet number of participants for each case varies between 104 and 106, use 80% of 104 for consensus = 83.2/84. RMB

This document gives information on individual cases in circulation L25_A of this scheme. It contains no personal details of participants.

Case Number: L25_A1

Number of responses: 105. Date of analysis: 14 May 2025

Clinical: Female 63 . Progressive hepatitis ? cause. Core biopsy right liver lobe. Extracted from clinical letter: 1. RTEL1 mutation with telomerase shortening 2. Familial pulmonary fibrosis related to the above 3. Hypogammaglobulinemia with IVIG infusions and replacement 4. Seronegative rheumatoid arthritis 5. Evolving pulmonary and hepatic fibrosis 6. Previous liver biopsy with indeterminate changes 7. Probable micro-vascular disorder of the liver (NCPH-type disease)

Specimen: Liver core

Macroscopic: Two cores 3-13mm - H&E needs re-scanning sent 13.09.2023

Immunohistochemistry: PASD, reticulin, van Gieson, Sirius Red, Orcein

Original Diagnosis: Despite the small and thin core, there is evidence of nodular regenerative hyperplasia and fibrosis of portal veins with neoformed blood vessels and sinusoidal fibrosis. There is minimal inflammatory activity within parenchyma, necroinflammatory score 1. Ishak stage 1. These findings could correlate with some degree of non-cirrhotic portal hypertension, as clinically suspected and fitting with the spectrum of liver disease associated with telomerase mutation.

Tumour:	**Popularity:**
- No tumour/lesion present	95.2%
focal nodular hyperplasia	1.9%
hepatocellular lesion, well differentiated NOS (please add comment)	1.0%
Other (please specify in Comments)	1.0%

Tumour 1:	**Tumour 2:**	**Count:**
- No tumour/lesion present		99
focal nodular hyperplasia		1

hepatocellular lesion, well differentiated NOS (please add comment)		1
Other (please specify in Comments)		1
- No tumour/lesion present	- No tumour/lesion present	1
focal nodular hyperplasia	focal nodular hyperplasia	1
		1

Pattern:	**Popularity:**
vascular disease	55.2%
steatosis	46.7%
Other (please specify in Comments)	27.6%
abnormal, no pattern discernible	2.9%
not applicable	2.9%
within normal limits	2.9%
cholestasis, bilirubinostasis	1.9%

Pattern 1:	**Pattern 2:**	**Count:**
vascular disease	steatosis	26
vascular disease		23
Other (please specify in Comments)		17
steatosis		13
Other (please specify in Comments)	steatosis	4
steatosis	Other (please specify in Comments)	3
vascular disease	Other (please specify in Comments)	2
steatosis	vascular disease	2
abnormal, no pattern discernible		2
not applicable		2
within normal limits		2
vascular disease	cholestasis, bilirubinostasis	1
vascular disease	not applicable	1
	Other (please specify in Comments)	1
abnormal, no pattern discernible	Other (please specify in Comments)	1
vascular disease	vascular disease	1
within normal limits	vascular disease	1
Other (please specify in Comments)	vascular disease	1
cholestasis, bilirubinostasis	steatosis	1
		1

Stages:	**Popularity:**
subtle architectural abnormalities, vascular disease	37.1%
no fibrosis/equivocal fibrosis	31.4%
mild/early fibrosis without bridging	15.2%
Other (please specify in Comments)	14.3%
fibrosis with bridging between vascular structures	1.0%

Diagnostic categories:	**Popularity:**
Other (please enter alternative diagnosis in comments box)	55.9%
manifestation of systemic or extrahepatic disease (please specify in comments box)	25.2%
- histologically indeterminate for cause	10.8%

steatotic liver disease - either alcohol related or metabolic dysfunction associated or both Met-ALD	4.5%
ductal plate malformation/polycystic liver disease/congenital hepatic fibrosis	1.8%
- not applicable (insufficient non-lesional tissue)	0.9%
steatotic liver disease - metabolic dysfunction associated MASLD	0.9%

Diagnosis Combination:	**Count:**
Other (please enter alternative diagnosis in comments box)	54
manifestation of systemic or extrahepatic disease (please specify in comments box)	24
- histologically indeterminate for cause	10
[No selections made]	4
Other (please enter alternative diagnosis in comments box), steatotic liver disease - either alcohol related or metabolic dysfunction associated or both Met-ALD	4
manifestation of systemic or extrahepatic disease (please specify in comments box), Other (please enter alternative diagnosis in comments box)	3
- histologically indeterminate for cause, ductal plate malformation/polycystic liver disease/congenital hepatic fibrosis	1
- histologically indeterminate for cause, Other (please enter alternative diagnosis in comments box)	1
- not applicable (insufficient non-lesional tissue)	1
ductal plate malformation/polycystic liver disease/congenital hepatic fibrosis	1
manifestation of systemic or extrahepatic disease (please specify in comments box), steatotic liver disease - either alcohol related or metabolic dysfunction associated or both Met-ALD	1
steatotic liver disease - metabolic dysfunction associated MASLD	1

Original report and further information (if any): Despite the small and thin core, there is evidence of nodular regenerative hyperplasia and fibrosis of portal veins with neoformed blood vessels and sinusoidal fibrosis. There is minimal inflammatory activity within parenchyma, necroinflammatory score 1. Ishak stage 1. These findings could correlate with some degree of non-cirrhotic portal hypertension, as clinically suspected and fitting with the spectrum of liver disease associated with telomerase mutation.

Points of consensus from dropdowns menus:
Tumour: Consensus for none. 2 FNH and 1 hepatocellular lesion – implies a mass forming lesion. 1 selecting FNH has NRH in the comment.

Pattern: over half vascular but does not reach consensus, many note the steatosis (mild).

Stage: just over 1/3 subtle architectural abnormalities/vascular, most of the rest none or mild, only 1 bridging fibrosis. A few mention the area of fibrosis – vein wall?, presumably trans jugular Bx we weren't told that.

Diagnosis: No consensus.

If no consensus from dropdowns can consensus be reached from the comments box?

'nodular regenerative hyperplasia' or 'NRH' = 61 if add 'microvascular' PSVD NCPH = 81, 3 more don't have this in free text but have either selected vascular pattern or recognised the vascular changes architecturally = 84, just consensus.

Ask members if they accept this to reach a consensus. Was accepted at the meeting by poll.

Complete answer for 10 marks would include: mention, anywhere in the response, of a vascular pattern of injury broadly.

If no recognition of vascular pattern just' minor changes' ' other' 'near normal' lose 5, just say 'RTEL1 assoc disease' often with reference to fibrosis but no reference to vascular changes? – ask members - members agreed to these scoring 5

lose 10; no recognition vascular pattern and a diagnosis of something else - a mass forming lesion, FNH (the one with NRH in comment score 5) well diff HCellular lesion or diagnosis of amyloid (in comments box) or ductal plate malformation. Members agreed to score 0.

Case Number: L25_A2

Number of responses: 105. Date of analysis: 14 May 2025

Clinical: Female 55. Admitted jaundiced on a background of a few months of fatigue. Transaminitis on bloods. Negative A-E serology. IgG 15.6. [LFTs at biopsy - ALT 840, bilirubin 376, ALP 207. ANA 1/80; other autoantibodies negative] Provisional diagnosis: Autoimmune hepatitis

Specimen: Native liver, needle biopsy

Macroscopic: Core

Immunohistochemistry: NA

Original Diagnosis: Severe portal, interface and lobular hepatitis with confluent necrosis and prior collapse. In keeping with acute autoimmune hepatitis.

Tumour:	**Popularity:**
- No tumour/lesion present	99.0%

Other (please specify in Comments)	1.0%

Tumour 1:	Tumour 2:	Count:
- No tumour/lesion present		101
- No tumour/lesion present	- No tumour/lesion present	3
Other (please specify in Comments)		1

Pattern:	Popularity:
lobular hepatitis	86.7%
cholestasis, bilirubinostasis	46.7%
chronic hepatitis	4.8%
Other (please specify in Comments)	4.8%
steatohepatitis	3.8%
chronic biliary disease	1.0%
not applicable	1.0%

Pattern 1:	Pattern 2:	Count:
lobular hepatitis		45
lobular hepatitis	cholestasis, bilirubinostasis	39
cholestasis, bilirubinostasis	lobular hepatitis	4
Other (please specify in Comments)		3
cholestasis, bilirubinostasis	steatohepatitis	2
steatohepatitis	cholestasis, bilirubinostasis	2
chronic hepatitis	chronic biliary disease	1
lobular hepatitis	chronic hepatitis	1
not applicable		1
		1
cholestasis, bilirubinostasis		1
chronic hepatitis		1
chronic hepatitis	cholestasis, bilirubinostasis	1
chronic hepatitis	lobular hepatitis	1
lobular hepatitis	Other (please specify in Comments)	1
Other (please specify in Comments)	Other (please specify in Comments)	1

Stages:	Popularity:
not applicable / no special stains to assess architecture	73.3%
hepatocyte loss or bridging - favour collapse not fibrosis	20.0%
no fibrosis/equivocal fibrosis	3.8%
mild/early fibrosis without bridging	1.9%
fibrosis with bridging between vascular structures	1.0%

Diagnostic categories:	Popularity:
acute / subacute hepatitis - autoimmune / drug / viral	61.2%
autoimmune hepatitis	25.0%
drug induced liver injury (please specify in comments box)	4.3%
Other (please enter alternative diagnosis in comments box)	3.4%
chronic cholangiopathy NOS	2.6%
non-hepatotrophic - viral, bacterial, parasitic (please specify in comment box)	1.7%
overlap syndrome	0.9%
steatotic liver disease - either alcohol related or metabolic dysfunction associated or both Met-ALD	0.9%

Diagnosis Combination:	Count:
acute / subacute hepatitis - autoimmune / drug / viral	63
autoimmune hepatitis	24
acute / subacute hepatitis - autoimmune / drug / viral, autoimmune hepatitis	3
acute / subacute hepatitis - autoimmune / drug / viral, drug induced liver injury (please specify in comments box)	2
acute / subacute hepatitis - autoimmune / drug / viral, Other (please enter alternative diagnosis in comments box)	2
chronic cholangiopathy NOS	2
Other (please enter alternative diagnosis in comments box)	2
acute / subacute hepatitis - autoimmune / drug / viral, chronic cholangiopathy NOS	1
autoimmune hepatitis, drug induced liver injury (please specify in comments box)	1
autoimmune hepatitis, overlap syndrome	1
drug induced liver injury (please specify in comments box)	1
drug induced liver injury (please specify in comments box), non-hepatotrophic - viral, bacterial, parasitic (please specify in comment box)	1
non-hepatotrophic - viral, bacterial, parasitic (please specify in comment box)	1
steatotic liver disease - either alcohol related or metabolic dysfunction associated or both Met-ALD	1

Original report and further information (if any): Severe portal, interface and lobular hepatitis with confluent necrosis and prior collapse. In keeping with acute autoimmune hepatitis.

Points of consensus from dropdowns menus:
Tumour: NA

Pattern: Lobular hepatitis either alone or with cholestasis = 89 = good consensus. Selecting chronic hepatitis, chronic biliary disease, steatohepatitis, is out of consensus. Ballooning is present – it is not an indicator of steatohepatitis in this setting (i.e no/very very little steatosis). Misinterpreting regenerative type ductules as seen in necrosis for a chronic biliary pattern?

Stage: 20% prepared to say necrosis/collapse on H&E. No consensus. (1% bridging fibrosis).

Diagnosis:
Acute/subacute AIH/drug/viral = 70, if add AIH alone and AIH/DILI =85, consensus. Just DILI =1 , 1 DILI and non hepatotrophic infection, 1 the latter alone = 88
5 imply chronic liver disease, chronic cholangiopathy/overlap, 1 steatotic liver disease

Few do comment wouldn't go just for AIH here.

Complete answer for 10 marks would include: pattern of lobular hepatitis +/- cholestasis and/or appropriate DD of acute injury; AIH/drug/viral and no reference to a chronic liver disease diagnosis.

Benefit of doubt? 1 selects just CH and AIH, 1 just selects AIH and non specific text. Couple have SH as a pattern but acute differentials as diagnosis (no comments from members therefore accepted)

lose 5 if diagnosis of chronic cholangiopathy, alone or with AIH 'overlap', steatotic liver disease n=5

Case Number: L25_A3

Number of responses: 105. Date of analysis: 14 May 2025

Clinical: Male 59. Patient undergoing a combined liver and kidney transplant. One representative section of his liver provided - which is reflective of the liver as a whole.

Specimen: Section from recipient's original liver (liver explant)

Macroscopic: Enlarged liver

Immunohistochemistry: None

Original Diagnosis: Polycystic liver disease

Tumour:	Popularity:
cyst (non-neoplastic)	53.3%
- No tumour/lesion present	36.2%
biliary hamartoma / von Meyenberg complex	16.2%
Other (please specify in Comments)	11.4%
haemangioma NOS	1.0%

Tumour 1:	Tumour 2:	Count:
cyst (non-neoplastic)		38
- No tumour/lesion present		33
Other (please specify in Comments)		10
cyst (non-neoplastic)	biliary hamartoma / von Meyenberg complex	10
biliary hamartoma / von Meyenberg complex	cyst (non-neoplastic)	4
Other (please specify in Comments)	biliary hamartoma / von Meyenberg complex	2
- No tumour/lesion present	- No tumour/lesion present	2
cyst (non-neoplastic)	- No tumour/lesion present	2
- No tumour/lesion present	cyst (non-neoplastic)	1
biliary hamartoma / von Meyenberg complex		1
haemangioma NOS		1
cyst (non-neoplastic)	cyst (non-neoplastic)	1

Pattern:	Popularity:
Other (please specify in Comments)	47.6%
not applicable	33.3%
chronic biliary disease	4.8%
within normal limits	2.9%
abnormal, no pattern discernible	1.9%
vascular disease	1.0%
cholestasis, bilirubinostasis	1.0%
steatosis	1.0%
chronic hepatitis	1.0%

Pattern 1:	Pattern 2:	Count:
Other (please specify in Comments)		47
not applicable		32
		8
chronic biliary disease		4

within normal limits		3
abnormal, no pattern discernible		2
not applicable	not applicable	2
Other (please specify in Comments)	Other (please specify in Comments)	1
Other (please specify in Comments)	vascular disease	1
cholestasis, bilirubinostasis		1
chronic hepatitis		1
Other (please specify in Comments)	chronic biliary disease	1
	not applicable	1
steatosis		1

Stages:	**Popularity:**
not applicable / no special stains to assess architecture	76.2%
advanced fibrosis with bridging and nodularity/cirrhosis	7.6%
Other (please specify in Comments)	3.8%
fibrosis with bridging between vascular structures	2.9%
no fibrosis/equivocal fibrosis	1.9%
mild/early fibrosis without bridging	1.0%

Diagnostic categories:	**Popularity:**
ductal plate malformation/polycystic liver disease/congenital hepatic fibrosis	79.8%
Other (please enter alternative diagnosis in comments box)	16.2%
manifestation of systemic or extrahepatic disease (please specify in comments box)	4.0%

Diagnosis Combination:	**Count:**
ductal plate malformation/polycystic liver disease/congenital hepatic fibrosis	78
Other (please enter alternative diagnosis in comments box)	16
[No selections made]	7
manifestation of systemic or extrahepatic disease (please specify in comments box)	3
ductal plate malformation/polycystic liver disease/congenital hepatic fibrosis, manifestation of systemic or extrahepatic disease (please specify in comments box)	1

Original report and further information (if any): Polycystic liver disease *Points of consensus from dropdowns menus:*

Tumour: cyst or VM complex, not consensus, 'other' used. 1 haemangioma.
Pattern: NA
Stage: NA

Diagnosis: 79 make the selection.

If no consensus from dropdowns can consensus be reached from the comments box? All but 2 of those not selecting it from the dropdown say 'polycystic' in the text box.

Complete answer for 10 marks would include; DPM/polycystic disease.

Simple biliary cyst only, lose 5.

just haemangioma (only other selections steatosis and advanced fibrosis) n=1 lose 10

Case Number: L25_A4

Number of responses: 105. Date of analysis: 14 May 2025

Clinical: Female 39. Incidental segment IVb liver lesion on CT for kidney stone investigation. Initially thought to be FNH, may be adenoma.

Specimen: Native liver, targeted needle biopsy

Macroscopic: Core

Immunohistochemistry: There is diffuse hepatocellular immunopositivity for serum amyloid A and glutamine synthetase, although there is no non-lesional tissue for comparison. Normal LFABP immunopositivity is retained. There is extensive but patchy capillarisation (CD34). No nuclear Beta catenin immunopositivity.

Original Diagnosis: Inflammatory liver cell adenoma

Tumour:	Popularity:
hepatocellular adenoma inflammatory	78.1%
hepatocellular adenoma NOS	12.4%
hepatocellular adenoma beta catenin activated	4.8%
- No tumour/lesion present	3.8%
hepatocellular adenoma HNFalpha1 inactivated	1.9%
Other (please specify in Comments)	1.0%
hepatocellular lesion, well differentiated NOS (please add comment)	0.0%

Tumour 1:	Tumour 2:	Count:
hepatocellular adenoma inflammatory		79
hepatocellular adenoma NOS		11
hepatocellular adenoma beta catenin activated		5
- No tumour/lesion present		3
hepatocellular adenoma HNFalpha1 inactivated		2
Other (please specify in Comments)		1
hepatocellular adenoma inflammatory	- No tumour/lesion present	1
hepatocellular adenoma inflammatory	hepatocellular adenoma inflammatory	1
hepatocellular adenoma inflammatory	hepatocellular adenoma NOS	1
hepatocellular adenoma NOS	hepatocellular adenoma NOS	1

Pattern:	Popularity:
not applicable	84.8%
within normal limits	2.9%
vascular disease	1.9%
acute venous outflow obstruction	1.0%

Pattern 1:	Pattern 2:	Count:
not applicable		85
		10
not applicable	not applicable	4
within normal limits		3
vascular disease		2

acute venous outflow obstruction	1

Stages:	**Popularity:**
not applicable / no special stains to assess architecture	81.0%
no fibrosis/equivocal fibrosis	1.9%
advanced fibrosis with bridging and nodularity/cirrhosis	1.0%
subtle architectural abnormalities, vascular disease	1.0%
Other (please specify in Comments)	1.0%

Diagnostic categories:	**Popularity:**
- not applicable (insufficient non-lesional tissue)	71.9%
Other (please enter alternative diagnosis in comments box)	17.5%
- no evidence of diffuse/background liver disease	7.0%
- histologically indeterminate for cause	1.8%
manifestation of systemic or extrahepatic disease (please specify in comments box)	1.8%

Diagnosis Combination:	**Count:**
[No selections made]	48
- not applicable (insufficient non-lesional tissue)	41
Other (please enter alternative diagnosis in comments box)	10
- no evidence of diffuse/background liver disease	4
- histologically indeterminate for cause	1
manifestation of systemic or extrahepatic disease (please specify in comments box)	1

Original report and further information (if any): Inflammatory liver cell adenoma

Points of consensus from dropdowns menus:
Tumour:
Hepatocellular adenoma inflammatory mentioned by 79+3=82 participants
Hepatocellular adenoma NOS 11+1=12 participants

hepatocellular adenoma beta catenin activated – 5 participants
hepatocellular adenoma HNFalpha1 inactivated – 2 participants

No mention of adenoma – 3 participants

Pattern: Not applicable 84%

Stage: Not applicable or no fibrosis 83%
Advanced fibrosis 1 participant (1/3 who hasn't called it an adenoma)

Diagnosis:

Complete answer for 10 marks would include: Hepatocellular adenoma in any form (as need to use NOS to reach consensus not able to specify subtype).

If no mention of hepatocellular adenoma diagnosis lose 10 marks n=3

Case Number: L25_A5

Number of responses: 105. Date of analysis: 14 May 2025

Clinical: Male 56. None provided Further information from EPR: Amyopathic dermatomyositis (on Privigen infusions, hydroxychloroquine, tacrolimus, prednisolone, sildenafil, nifedipine, iloprost). Longstanding deranged LFTs. BMI 23. LFTs ALT 78, AlkPhos 188, Bili 14, Alb 32. US abdomen - Left lobe of liver appears slightly enlarged with a slightly nodular outline and heterogenous echotexture suggestive of fibrotic change. Fibroscan 14.6 kPa

Specimen: Medical liver biopsy

Macroscopic: One core of tissue measuring 24mm in length

Immunohistochemistry: Retic, VG and CK7

Original Diagnosis: Nodular regenerative hyperplasia

Tumour:	Popularity:
- No tumour/lesion present	97.1%
Other (please specify in Comments)	1.9%

Tumour 1:	Tumour 2:	Count:
- No tumour/lesion present		100
Other (please specify in Comments)		2
- No tumour/lesion present	- No tumour/lesion present	2
		1

Pattern:	Popularity:
vascular disease	44.8%
Other (please specify in Comments)	29.5%
cholestasis, bilirubinostasis	16.2%
chronic biliary disease	15.2%
chronic hepatitis	10.5%
not applicable	3.8%
abnormal, no pattern discernible	1.9%
lobular hepatitis	1.0%

Pattern 1:	Pattern 2:	Count:
vascular disease		35
Other (please specify in Comments)		19
chronic biliary disease		6
chronic hepatitis		5
not applicable		3
		3
cholestasis, bilirubinostasis		3
chronic biliary disease	cholestasis, bilirubinostasis	3
cholestasis, bilirubinostasis	chronic biliary disease	3
vascular disease	Other (please specify in Comments)	3
cholestasis, bilirubinostasis	vascular disease	2
Other (please specify in Comments)	cholestasis, bilirubinostasis	2

chronic hepatitis	Other (please specify in Comments)	2
Other (please specify in Comments)	Other (please specify in Comments)	2
vascular disease	chronic hepatitis	2
abnormal, no pattern discernible		2
chronic hepatitis	cholestasis, bilirubinostasis	1
chronic biliary disease	lobular hepatitis	1
vascular disease	not applicable	1
cholestasis, bilirubinostasis	Other (please specify in Comments)	1
Other (please specify in Comments)	chronic biliary disease	1
vascular disease	chronic biliary disease	1
cholestasis, bilirubinostasis	chronic hepatitis	1
vascular disease	cholestasis, bilirubinostasis	1
chronic biliary disease	vascular disease	1
Other (please specify in Comments)	vascular disease	1

Stages:	**Popularity:**
mild/early fibrosis without bridging	34.3%
subtle architectural abnormalities, vascular disease	29.5%
fibrosis with bridging between vascular structures	17.1%
Other (please specify in Comments)	6.7%
no fibrosis/equivocal fibrosis	6.7%
advanced fibrosis with bridging and nodularity/cirrhosis	3.8%
hepatocyte loss or bridging - favour collapse not fibrosis	1.0%

Diagnostic categories:	**Popularity:**
Other (please enter alternative diagnosis in comments box)	42.6%
manifestation of systemic or extrahepatic disease (please specify in comments box)	20.9%
drug induced liver injury (please specify in comments box)	20.0%
chronic cholangiopathy NOS	7.8%
acute / subacute hepatitis - autoimmune / drug / viral	4.3%
- histologically indeterminate for cause	3.5%
autoimmune hepatitis	0.9%

Diagnosis Combination:	**Count:**
Other (please enter alternative diagnosis in comments box)	43
manifestation of systemic or extrahepatic disease (please specify in comments box)	16
drug induced liver injury (please specify in comments box)	14
chronic cholangiopathy NOS	7
[No selections made]	5
drug induced liver injury (please specify in comments box), manifestation of systemic or extrahepatic disease (please specify in comments box)	5
acute / subacute hepatitis - autoimmune / drug / viral	3
- histologically indeterminate for cause	2
drug induced liver injury (please specify in comments box), Other (please enter alternative diagnosis in comments box)	2
manifestation of systemic or extrahepatic disease (please specify in comments box), Other (please enter alternative diagnosis in comments box)	2
- histologically indeterminate for cause, drug induced liver injury (please specify in comments box)	1
- histologically indeterminate for cause, Other (please enter alternative diagnosis in comments box)	1
acute / subacute hepatitis - autoimmune / drug / viral, autoimmune hepatitis	1

acute / subacute hepatitis - autoimmune / drug / viral, manifestation of systemic or extrahepatic disease (please specify in comments box)	1
chronic cholangiopathy NOS, drug induced liver injury (please specify in comments box)	1
chronic cholangiopathy NOS, Other (please enter alternative diagnosis in comments box)	1

Original report and further information (if any): Nodular regenerative hyperplasia

Tumour: *97% agreed – No tumour*

Pattern: *Vascular disease 44.8%*
Cholestasis & bilrubinostasis & chronic biliary disease (16.2%+15.2% = 31.4%)
Chronic hepatitis 10.5%

Stage: *No consensus*
Mild/early fibrosis 34.3%
Subtle architectural abn, vascular disease 29.5%
Fibrosis with briging between vascular structures 17.5%
advanced fibrosis with bridging and nodularity/cirrhosis 3.8%

Diagnosis: *No consensus*

No consensus from dropdowns

But 85 participants mention NRH in comments.

Complete answer for 10 marks would include: any mention of nodular regenerative hyperplasia/vascular disease.

As it is only point of consensus if missing NRH/vascular disease/regenerative hyperplasia or synonyms in comments lose 5

Ask members whether to include – if accepted for scoring use criteria as given. Members voted to include this case.

Case Number: L25_A6

Number of responses: 105. Date of analysis: 14 May 2025

Clinical: Female 60. Resection of a 50mm liver cyst

Specimen: Liver resection

Macroscopic: Liver resection containing a 50 x 35 x 44mm cystic lesion.

Immunohistochemistry: None

Original Diagnosis: mucinous cystic neoplasm; no high-grade dysplasia or invasive malignancy

Tumour:	**Popularity:**

mucinous cystic neoplasm	97.1%
cyst (non-neoplastic)	2.9%
- No tumour/lesion present	1.0%
Other (please specify in Comments)	0.0%

Tumour 1:	Tumour 2:	Count:
mucinous cystic neoplasm		99
cyst (non-neoplastic)		2
mucinous cystic neoplasm	mucinous cystic neoplasm	2
mucinous cystic neoplasm	- No tumour/lesion present	1
cyst (non-neoplastic)	cyst (non-neoplastic)	1

Pattern:	Popularity:
within normal limits	40.0%
not applicable	33.3%
Other (please specify in Comments)	9.5%
steatosis	5.7%
abnormal, no pattern discernible	1.0%
cholestasis, bilirubinostasis	1.0%

Pattern 1:	Pattern 2:	Count:
within normal limits		41
not applicable		31
		12
Other (please specify in Comments)		8
steatosis		6
not applicable	not applicable	3
not applicable	Other (please specify in Comments)	1
within normal limits	within normal limits	1
Other (please specify in Comments)	cholestasis, bilirubinostasis	1
abnormal, no pattern discernible		1

Stages:	Popularity:
not applicable / no special stains to assess architecture	68.6%
no fibrosis/equivocal fibrosis	14.3%
mild/early fibrosis without bridging	1.0%
subtle architectural abnormalities, vascular disease	1.0%
Other (please specify in Comments)	1.0%

Diagnostic categories:	Popularity:
- no evidence of diffuse/background liver disease	52.8%
Other (please enter alternative diagnosis in comments box)	26.4%
- not applicable (insufficient non-lesional tissue)	20.8%

Diagnosis Combination:	Count:
[No selections made]	52
- no evidence of diffuse/background liver disease	28
Other (please enter alternative diagnosis in comments box)	14
- not applicable (insufficient non-lesional tissue)	11

Original report and further information (if any): mucinous cystic neoplasm; no high-grade dysplasia or invasive malignancy

Points of consensus from dropdowns menus:
Tumour: Mucinous cystic neoplasm – 102 participants
Cyst (non-neoplastic) – 2 participants (in text - Simple biliary & Choledochal Cyst)

Pattern: within normal limits, not applicable – majority
6 mention steatosis, 1 cholestasis/bilrubinostasis, 1 abnormal, no pattern discernible
Stage: Not applicable/no fibrosis - 82.9%
Diagnosis: NA

Complete answer for 10 marks would include: Mucinous cystic neoplasm

If missing 'mucinous cystic neoplasm' from response lose 5 (2 participants)

Case Number: L25_A7

Number of responses: 105. Date of analysis: 14 May 2025

Clinical: Female 66. On Imuran for long term colitis; MRCP no features of PSC; IgG IgM normal; rapidly rising bilirubin; had treatment 2 weeks previously (2 doses) Augmentin; ANA 1:80;

Specimen: Liver core biopsy

Macroscopic: 1 x liver core biopsy 18mm length

Immunohistochemistry: H&E; retic; PAS; Massons Trichrome

Original Diagnosis: mixed hepatocellular and Cholestatic pattern of liver injury likely DILI related to Augmentin; ? background ASH/NASH given steatosis (mild); occasional Mallory Denk bodies; mild peri-cellular fibrosis- no hostoy given of alcohol, metabolic etc

Tumour:	**Popularity:**
- No tumour/lesion present	99.0%

Tumour 1:	**Tumour 2:**	**Count:**
- No tumour/lesion present		100
- No tumour/lesion present	- No tumour/lesion present	4
		1

Pattern:	**Popularity:**
cholestasis, bilirubinostasis	81.0%
steatohepatitis	38.1%
lobular hepatitis	24.8%
steatosis	10.5%
chronic biliary disease	8.6%
chronic hepatitis	5.7%
Other (please specify in Comments)	4.8%
vascular disease	1.9%

Pattern 1:	Pattern 2:	Count:
cholestasis, bilirubinostasis	steatohepatitis	23
steatohepatitis	cholestasis, bilirubinostasis	12
cholestasis, bilirubinostasis		11
cholestasis, bilirubinostasis	lobular hepatitis	10
cholestasis, bilirubinostasis	steatosis	8
lobular hepatitis	cholestasis, bilirubinostasis	8
lobular hepatitis		5
chronic biliary disease	cholestasis, bilirubinostasis	4
cholestasis, bilirubinostasis	Other (please specify in Comments)	3
cholestasis, bilirubinostasis	chronic biliary disease	2
		2
steatohepatitis		2
cholestasis, bilirubinostasis	vascular disease	2
chronic biliary disease	steatosis	1
lobular hepatitis	steatosis	1
steatohepatitis	steatosis	1
chronic hepatitis	cholestasis, bilirubinostasis	1
Other (please specify in Comments)		1
chronic biliary disease		1
chronic hepatitis		1
chronic hepatitis	chronic biliary disease	1
cholestasis, bilirubinostasis	chronic hepatitis	1
lobular hepatitis	chronic hepatitis	1
steatohepatitis	chronic hepatitis	1
Other (please specify in Comments)	Other (please specify in Comments)	1
lobular hepatitis	steatohepatitis	1

Stages:	Popularity:
fibrosis with bridging between vascular structures	61.0%
mild/early fibrosis without bridging	18.1%
hepatocyte loss or bridging - favour collapse not fibrosis	6.7%
advanced fibrosis with bridging and nodularity/cirrhosis	5.7%
no fibrosis/equivocal fibrosis	4.8%
Other (please specify in Comments)	1.9%
subtle architectural abnormalities, vascular disease	1.0%

Diagnostic categories:	Popularity:
drug induced liver injury (please specify in comments box)	57.7%
steatotic liver disease - either alcohol related or metabolic dysfunction associated or both Met-ALD	20.1%
chronic cholangiopathy NOS	5.4%
acute / subacute hepatitis - autoimmune / drug / viral	4.7%
primary sclerosing cholangitis	3.4%
steatotic liver disease - alcohol related liver disease	2.0%
steatotic liver disease - metabolic dysfunction associated MASLD	2.0%
Other (please enter alternative diagnosis in comments box)	2.0%
large bile duct obstruction	1.3%
primary biliary cholangitis	1.3%

Diagnosis Combination:	Count:
drug induced liver injury (please specify in comments box)	45
drug induced liver injury (please specify in comments box), steatotic liver disease - either alcohol related or metabolic dysfunction associated or both Met-ALD	26
chronic cholangiopathy NOS, drug induced liver injury (please specify in comments box)	6
acute / subacute hepatitis - autoimmune / drug / viral	3
drug induced liver injury (please specify in comments box), primary sclerosing cholangitis	3
drug induced liver injury (please specify in comments box), steatotic liver disease - metabolic dysfunction associated MASLD	3
[No selections made]	2
acute / subacute hepatitis - autoimmune / drug / viral, primary biliary cholangitis	2
Other (please enter alternative diagnosis in comments box)	2
primary sclerosing cholangitis	2
steatotic liver disease - alcohol related liver disease	2
steatotic liver disease - either alcohol related or metabolic dysfunction associated or both Met-ALD	2
acute / subacute hepatitis - autoimmune / drug / viral, drug induced liver injury (please specify in comments box)	1
acute / subacute hepatitis - autoimmune / drug / viral, steatotic liver disease - either alcohol related or metabolic dysfunction associated or both Met-ALD	1
chronic cholangiopathy NOS	1
chronic cholangiopathy NOS, large bile duct obstruction	1
drug induced liver injury (please specify in comments box), large bile duct obstruction	1
drug induced liver injury (please specify in comments box), steatotic liver disease - alcohol related liver disease	1
Other (please enter alternative diagnosis in comments box), steatotic liver disease - either alcohol related or metabolic dysfunction associated or both Met-ALD	1

Original report and further information (if any): mixed hepatocellular and Cholestatic pattern of liver injury likely DILI related to Augmentin; ? background ASH/NASH given steatosis (mild); occasional Mallory Denk bodies; mild peri-cellular fibrosis- no hostoy given of alcohol, metabolic etc

Points of consensus from dropdowns menus:
Tumour: No tumour

Pattern: Cholestasis / bilirubinostasis – 81%

Stage: No consensus, most favoring bridging fibrosis

Diagnosis: DILI 76 -> 91 when add into comments

Steatotic liver disease did not reach consensus 48%

Complete answer for 10 marks would include: cholestasis , DILI as a cause (comments box will be accounted for) – 91 people

11 lose 5 for missing one of these two criteria

2 lose 10 for absence of both (just chronic biliary diagnosis, just steatotic liver disease).

Case Number: L25_A8

Number of responses: 105. Date of analysis: 14 May 2025

Clinical: Male 66. Liver resection for a hepatocellular carcinoma (imaging diagnosis). This is a section from the background liver.

Specimen: Liver resection

Macroscopic: Liver resection containing a 47mm lesion. The background liver was noted to show cystic changes associated with large septal tracts and a nodular appearance.

Immunohistochemistry: H&E and EPSR provided

Original Diagnosis: Features of a ductal plate malformation. At least severe fibrosis in the provided section.

Tumour:	Popularity:
- No tumour/lesion present	72.4%
biliary hamartoma / von Meyenberg complex	18.1%
Other (please specify in Comments)	4.8%
cyst (non-neoplastic)	3.8%
bile duct adenoma / peribiliary gland hamartoma	1.0%
focal nodular hyperplasia	1.0%

Tumour 1:	Tumour 2:	Count:
- No tumour/lesion present		73
biliary hamartoma / von Meyenberg complex		14
Other (please specify in Comments)		3
		3
cyst (non-neoplastic)	biliary hamartoma / von Meyenberg complex	2
- No tumour/lesion present	- No tumour/lesion present	2
cyst (non-neoplastic)		2
focal nodular hyperplasia		1
bile duct adenoma / peribiliary gland hamartoma		1
- No tumour/lesion present	biliary hamartoma / von Meyenberg complex	1
biliary hamartoma / von Meyenberg complex	biliary hamartoma / von Meyenberg complex	1
biliary hamartoma / von Meyenberg complex	Other (please specify in Comments)	1
Other (please specify in Comments)	Other (please specify in Comments)	1

Pattern:	Popularity:
Other (please specify in Comments)	63.8%
not applicable	11.4%
chronic biliary disease	10.5%
within normal limits	4.8%
cholestasis, bilirubinostasis	4.8%
chronic hepatitis	1.0%
abnormal, no pattern discernible	1.0%

Pattern 1:	Pattern 2:	Count:
Other (please specify in Comments)		64
not applicable		10
chronic biliary disease		9
		7
within normal limits		5
cholestasis, bilirubinostasis	chronic biliary disease	2
not applicable	not applicable	2
cholestasis, bilirubinostasis	Other (please specify in Comments)	1
Other (please specify in Comments)	Other (please specify in Comments)	1
cholestasis, bilirubinostasis	cholestasis, bilirubinostasis	1
Other (please specify in Comments)	cholestasis, bilirubinostasis	1
abnormal, no pattern discernible		1
chronic hepatitis		1

Stages:	Popularity:
advanced fibrosis with bridging and nodularity/cirrhosis	34.3%
Other (please specify in Comments)	27.6%
fibrosis with bridging between vascular structures	21.9%
not applicable / no special stains to assess architecture	5.7%
mild/early fibrosis without bridging	2.9%
no fibrosis/equivocal fibrosis	1.0%

Diagnostic categories:	Popularity:
ductal plate malformation/polycystic liver disease/congenital hepatic fibrosis	81.2%
Other (please enter alternative diagnosis in comments box)	14.9%
chronic cholangiopathy NOS	2.0%
hepatolithiasis	1.0%
drug induced liver injury (please specify in comments box)	1.0%

Diagnosis Combination:	Count:
ductal plate malformation/polycystic liver disease/congenital hepatic fibrosis	80
Other (please enter alternative diagnosis in comments box)	14
[No selections made]	6
chronic cholangiopathy NOS	2
drug induced liver injury (please specify in comments box)	1
ductal plate malformation/polycystic liver disease/congenital hepatic fibrosis, hepatolithiasis	1
ductal plate malformation/polycystic liver disease/congenital hepatic fibrosis, Other (please enter alternative diagnosis in comments box)	1

Original report and further information (if any): Features of a ductal plate malformation. At least severe fibrosis in the provided section.

Complete answer for 10 marks would include: Ductal plate malformation (synonyms in comments accounted for).

If DPM/CHF missing from response but mention von Meyenberg lose 5 – (4 people)

If any reference to the entire spectrum of DPM/CHF missing – lose 10 (8 people)

Case Number: L25_A9

Number of responses: 105. Date of analysis: 14 May 2025

Clinical: Female 54. decompensated cirrhosis; history diabetes; viral screen neg; auto antibodies neg; GGT 121; ALT normal; elevated total bilirubin (69); no other history available

Specimen: Liver core biopsy transjugular

Macroscopic: 3 cores of liver 5mm 7mm 9mm

Immunohistochemistry: H&E; retic, PAS

Original Diagnosis: steatohepatitis and cirrhosis; possibly etabolic (given Diabetes history) but need to exclude alcohol equally

Tumour:	Popularity:
- No tumour/lesion present	96.2%
Other (please specify in Comments)	1.9%
hepatocellular carcinoma	1.0%
cholangiocarcinoma	0.0%

Tumour 1:	Tumour 2:	Count:
- No tumour/lesion present		97
- No tumour/lesion present	- No tumour/lesion present	4
Other (please specify in Comments)		2
		1
hepatocellular carcinoma		1

Pattern:	Popularity:
steatohepatitis	91.4%
steatosis	11.4%
cholestasis, bilirubinostasis	6.7%
chronic hepatitis	1.9%
chronic biliary disease	1.9%
Other (please specify in Comments)	1.9%
lobular hepatitis	1.0%

Pattern 1:	Pattern 2:	Count:
steatohepatitis		78
steatohepatitis	cholestasis, bilirubinostasis	7
steatosis		4
steatosis	steatohepatitis	3
steatohepatitis	steatosis	3
steatohepatitis	steatohepatitis	2
		1
chronic hepatitis		1
Other (please specify in Comments)		1
steatohepatitis	chronic biliary disease	1
steatosis	chronic biliary disease	1

steatosis	lobular hepatitis	1
steatohepatitis	Other (please specify in Comments)	1
chronic hepatitis	steatohepatitis	1

Stages:	**Popularity:**
advanced fibrosis with bridging and nodularity/cirrhosis	93.3%
not applicable / no special stains to assess architecture	4.8%
no fibrosis/equivocal fibrosis	1.0%
hepatocyte loss or bridging - favour collapse not fibrosis	1.0%

Diagnostic categories:	**Popularity:**
steatotic liver disease - either alcohol related or metabolic dysfunction associated or both Met-ALD	55.6%
steatotic liver disease - metabolic dysfunction associated MASLD	38.9%
Other (please enter alternative diagnosis in comments box)	2.8%
chronic cholangiopathy NOS	0.9%
steatotic liver disease - alcohol related liver disease	0.9%
ascending cholangitis	0.9%

Diagnosis Combination:	**Count:**
steatotic liver disease - either alcohol related or metabolic dysfunction associated or both Met-ALD	55
steatotic liver disease - metabolic dysfunction associated MASLD	41
Other (please enter alternative diagnosis in comments box), steatotic liver disease - either alcohol related or metabolic dysfunction associated or both Met-ALD	3
[No selections made]	2
ascending cholangitis	1
chronic cholangiopathy NOS, steatotic liver disease - either alcohol related or metabolic dysfunction associated or both Met-ALD	1
steatotic liver disease - alcohol related liver disease	1
steatotic liver disease - either alcohol related or metabolic dysfunction associated or both Met-ALD, steatotic liver disease - metabolic dysfunction associated MASLD	1

Original report and further information (if any): steatohepatitis and cirrhosis; possibly etabolic (given Diabetes history) but need to exclude alcohol equally

Points of consensus from dropdowns menus:
Tumour: no tumour

Pattern: consensus for 'steatohepatitis' specifically

Stage: consensus for advanced fibrosis / cirrhosis

Diagnosis: strong consensus for steatotic liver disease either metabolic or alcohol related.

Complete answer for 10 marks would include cirrhosis, steatohepatitis and diagnosis of steatotic liver disease referencing aetiology.

If 'steatohepatitis' missing lose 5

If advanced fibrosis/cirrhosis missing from response lose 5

If considering additional diagnosis (biliary) lose 5

If diagnosis of HCC lose 10

Case Number: L25_A10

Number of responses: 105. Date of analysis: 14 May 2025

Clinical: Male 77. Bladder G3 T3 TCC. New liver lesion.

Specimen: Liver biopsy

Macroscopic: Two cores of tissue measuring up to 16mm plus two smaller fragments

Immunohistochemistry: None

Original Diagnosis: Angiomyolipoma

Tumour:	Popularity:
angiomyolipoma	79.0%
Other (please specify in Comments)	14.3%
- No tumour/lesion present	3.8%
hepatocellular adenoma HNFalpha1 inactivated	1.9%
hepatocellular lesion, well differentiated NOS (please add comment)	1.0%
hepatocellular carcinoma	1.0%

Tumour 1:	Tumour 2:	Count:
angiomyolipoma		81
Other (please specify in Comments)		14
hepatocellular adenoma HNFalpha1 inactivated		2
- No tumour/lesion present		2
hepatocellular carcinoma		1
hepatocellular lesion, well differentiated NOS (please add comment)		1
- No tumour/lesion present	- No tumour/lesion present	1
angiomyolipoma	- No tumour/lesion present	1
angiomyolipoma	angiomyolipoma	1
Other (please specify in Comments)	Other (please specify in Comments)	1

Pattern:	Popularity:
steatosis	90.5%
steatohepatitis	2.9%
not applicable	2.9%
vascular disease	1.9%
Other (please specify in Comments)	1.0%

Pattern 1:	Pattern 2:	Count:
steatosis		90
		5

not applicable		3
steatohepatitis		2
steatosis	vascular disease	2
steatosis	Other (please specify in Comments)	1
steatosis	steatohepatitis	1
steatosis	steatosis	1

Stages:	**Popularity:**
not applicable / no special stains to assess architecture	65.7%
no fibrosis/equivocal fibrosis	24.8%

Diagnostic categories:	**Popularity:**
steatotic liver disease - either alcohol related or metabolic dysfunction associated or both Met-ALD	68.8%
steatotic liver disease - metabolic dysfunction associated MASLD	12.5%
Other (please enter alternative diagnosis in comments box)	8.8%
- not applicable (insufficient non-lesional tissue)	3.8%
- no evidence of diffuse/background liver disease	2.5%
- histologically indeterminate for cause	1.3%
drug induced liver injury (please specify in comments box)	1.3%
manifestation of systemic or extrahepatic disease (please specify in comments box)	1.3%

Diagnosis Combination:	**Count:**
steatotic liver disease - either alcohol related or metabolic dysfunction associated or both Met-ALD	52
[No selections made]	28
steatotic liver disease - metabolic dysfunction associated MASLD	10
Other (please enter alternative diagnosis in comments box)	6
- not applicable (insufficient non-lesional tissue)	3
- no evidence of diffuse/background liver disease	2
- histologically indeterminate for cause	1
drug induced liver injury (please specify in comments box), steatotic liver disease - either alcohol related or metabolic dysfunction associated or both Met-ALD	1
manifestation of systemic or extrahepatic disease (please specify in comments box), steatotic liver disease - either alcohol related or metabolic dysfunction associated or both Met-ALD	1
Other (please enter alternative diagnosis in comments box), steatotic liver disease - either alcohol related or metabolic dysfunction associated or both Met-ALD	1

Original report and further information (if any): Angiomyolipoma

Points of consensus from dropdowns menus:
Tumour: 83 angiomyolipoma (84 for consensus!) of those selecting 'other' etc 5 have 'angiomyolipoma' as favoured or differential in comments = 89.
Quite a few mention they would do immuno

Pattern: consensus for steatosis in background liver, 92 (5 more SH or steatosis and vascular). 7 no comment on background liver are out of consensus (but not going to use for scoring, no consensus on aetiology/diagnosis, good practice to comment on background liver).

Stage: no consensus

Diagnosis: No consensus for aetiology background liver disease.

Complete answer for 10 marks would include: angiomyolipoma either selected or considered in comments.

lose 5 other benign mass forming lesion, just 'lipoma' or other variant thereof, adenoma.

Ask members; those not specifically describing a mass forming lesion score 5 or 0? (history was of 'new liver lesion' risks of re biopsy) Re look by RMB comments such as 'fat mimicking a lesion' ? gas/ 'pneumatosis' actually don't specifically imply the lesion has been missed.

Lose 10 for HCC n=1

Case Number: L25_A11

Number of responses: 105. Date of analysis: 14 May 2025

Clinical: Male 61. Resection of a liver mass. Type 2 diabetes mellitus, hypertension.

Specimen: Liver resection

Macroscopic: Liver resection containing a 16mm lobulated tan-green lesion.

Immunohistochemistry: Glutamine synthetase, glypican-3, HepPar1, HSP70 and EPSR

Original Diagnosis: Hepatocellular carcinoma, background steatosis with occasional ballooned hepatocytes consistent with steatohepatitis in clinical context likely MASH. Perilesional however EPSR shows at least severe fibrosis.

Tumour:	Popularity:
hepatocellular carcinoma	95.2%
hepatocellular carcinoma variant (specify in Comments)	1.9%
hepatocellular lesion, well differentiated NOS (please add comment)	1.9%
hepatocellular lesion - dysplastic nodule	1.0%
- No tumour/lesion present	1.0%
focal nodular hyperplasia	1.0%
Other (please specify in Comments)	1.0%

Tumour 1:	Tumour 2:	Count:
hepatocellular carcinoma		94
hepatocellular carcinoma	hepatocellular carcinoma	3
hepatocellular carcinoma variant (specify in Comments)		2
hepatocellular lesion, well differentiated NOS (please add comment)		2
hepatocellular carcinoma	- No tumour/lesion present	1
hepatocellular carcinoma	hepatocellular lesion - dysplastic nodule	1

hepatocellular carcinoma	Other (please specify in Comments)	1
focal nodular hyperplasia		1

Pattern:	Popularity:
steatosis	60.0%
steatohepatitis	24.8%
not applicable	6.7%
Other (please specify in Comments)	4.8%
chronic hepatitis	1.9%
cholestasis, bilirubinostasis	1.9%
acute venous outflow obstruction	1.0%
abnormal, no pattern discernible	1.0%

Pattern 1:	Pattern 2:	Count:
steatosis		55
steatohepatitis		23
not applicable		6
		6
steatosis	cholestasis, bilirubinostasis	2
Other (please specify in Comments)		2
steatosis	Other (please specify in Comments)	2
steatohepatitis	steatosis	2
steatosis	steatosis	1
chronic hepatitis	steatosis	1
not applicable	not applicable	1
steatohepatitis	Other (please specify in Comments)	1
abnormal, no pattern discernible		1
acute venous outflow obstruction		1
chronic hepatitis		1

Stages:	Popularity:
advanced fibrosis with bridging and nodularity/cirrhosis	65.7%
fibrosis with bridging between vascular structures	21.9%
not applicable / no special stains to assess architecture	3.8%
no fibrosis/equivocal fibrosis	2.9%
mild/early fibrosis without bridging	1.0%

Diagnostic categories:	Popularity:
steatotic liver disease - metabolic dysfunction associated MASLD	42.7%
steatotic liver disease - either alcohol related or metabolic dysfunction associated or both Met-ALD	41.3%
- histologically indeterminate for cause	9.3%
Other (please enter alternative diagnosis in comments box)	5.3%
- no evidence of diffuse/background liver disease	1.3%

Diagnosis Combination:	Count:
[No selections made]	32
steatotic liver disease - metabolic dysfunction associated MASLD	31
steatotic liver disease - either alcohol related or metabolic dysfunction associated or both Met-ALD	29
- histologically indeterminate for cause	7

Other (please enter alternative diagnosis in comments box)	3
- no evidence of diffuse/background liver disease	1
Other (please enter alternative diagnosis in comments box), steatotic liver disease - either alcohol related or metabolic dysfunction associated or both Met-ALD	1
steatotic liver disease - either alcohol related or metabolic dysfunction associated or both Met-ALD, steatotic liver disease - metabolic dysfunction associated MASLD	1

Original report and further information (if any): Hepatocellular carcinoma, background steatosis with occasional ballooned hepatocytes consistent with steatohepatitis in clinical context likely MASH. Perilesional however EPSR shows at least severe fibrosis.

Points of consensus from dropdowns menus:
Tumour: strong consensus for HCC = 101 (1 response using boxes for a differential? With dysplastic nodule – not the intention, only use both dropdowns if you feel there are 2 separate tumours present).

Pattern: consensus for steatosis and/or SH in background liver =84

Stage: consensus for at least bridging 87.6%

Diagnosis: no consensus for diagnosis/aetiology of background liver disease.

Complete answer for 10 marks would include: HCC either selected or clearly favoured in comment, steatosis broadly in background liver and at least bridging fibrosis.

If one or both of steatosis and advanced fibrosis missing from response lose 5
lose 10 if not diagnosing/favouring HCC n=1 (FNH)

ask members about 1 response (to be shown at meeting) lose 5 or 10? (wouldn't consider adenoma differential in advanced fibrosis). Members voted to score 0.

Case Number: L25_A12

Number of responses: 105. Date of analysis: 14 May 2025

Clinical: Male 63. Persistent rising liver chemistry after vismodegib (kinase inhibitor in hedgehog pathway). Undefined situation.

Specimen: Liver biopsy

Macroscopic: liver core 25mm

Immunohistochemistry: H&E and EPSR

Original Diagnosis: Compatible with a drug induced liver injury with a subacute/acute hepatitic pattern

Tumour:	**Popularity:**

- No tumour/lesion present	100.0%

Tumour 1:	Tumour 2:	Count:
- No tumour/lesion present		100
- No tumour/lesion present	- No tumour/lesion present	5

Pattern:	Popularity:
lobular hepatitis	68.6%
cholestasis, bilirubinostasis	39.0%
Other (please specify in Comments)	8.6%
chronic hepatitis	7.6%
chronic biliary disease	2.9%
not applicable	2.9%
abnormal, no pattern discernible	1.9%
vascular disease	1.0%

Pattern 1:	Pattern 2:	Count:
lobular hepatitis		43
lobular hepatitis	cholestasis, bilirubinostasis	13
cholestasis, bilirubinostasis		12
cholestasis, bilirubinostasis	lobular hepatitis	10
Other (please specify in Comments)		6
chronic hepatitis	cholestasis, bilirubinostasis	3
chronic biliary disease		2
		2
lobular hepatitis	not applicable	2
chronic hepatitis	Other (please specify in Comments)	1
lobular hepatitis	Other (please specify in Comments)	1
chronic hepatitis	lobular hepatitis	1
Other (please specify in Comments)	lobular hepatitis	1
cholestasis, bilirubinostasis	chronic hepatitis	1
lobular hepatitis	chronic hepatitis	1
not applicable		1
abnormal, no pattern discernible		1
chronic hepatitis		1
vascular disease		1
cholestasis, bilirubinostasis	abnormal, no pattern discernible	1
chronic biliary disease	cholestasis, bilirubinostasis	1

Stages:	Popularity:
no fibrosis/equivocal fibrosis	49.5%
mild/early fibrosis without bridging	35.2%
hepatocyte loss or bridging - favour collapse not fibrosis	9.5%
not applicable / no special stains to assess architecture	1.9%
Other (please specify in Comments)	1.9%
subtle architectural abnormalities, vascular disease	1.0%

Diagnostic categories:	Popularity:
drug induced liver injury (please specify in comments box)	75.2%
acute / subacute hepatitis - autoimmune / drug / viral	15.6%
Other (please enter alternative diagnosis in comments box)	2.8%

chronic cholangiopathy NOS	1.8%
- histologically indeterminate for cause	0.9%
autoimmune hepatitis	0.9%
primary sclerosing cholangitis	0.9%
overlap syndrome	0.9%
vanishing bile duct syndrome	0.9%

Diagnosis Combination:	**Count:**
drug induced liver injury (please specify in comments box)	77
acute / subacute hepatitis - autoimmune / drug / viral	16
chronic cholangiopathy NOS, drug induced liver injury (please specify in comments box)	2
Other (please enter alternative diagnosis in comments box)	2
[No selections made]	1
- histologically indeterminate for cause	1
acute / subacute hepatitis - autoimmune / drug / viral, drug induced liver injury (please specify in comments box)	1
autoimmune hepatitis, drug induced liver injury (please specify in comments box)	1
drug induced liver injury (please specify in comments box), Other (please enter alternative diagnosis in comments box)	1
overlap syndrome	1
primary sclerosing cholangitis	1
vanishing bile duct syndrome	1

Original report and further information (if any): Compatible with a drug induced liver injury with a subacute/acute hepatitic pattern

Points of consensus from dropdowns menus:
Tumour: NA

Pattern: from dropdowns 83 lobular hepatitis +/- cholestasis (84 for consensus!) perivenular injury doesn't sit easily in the defined patterns, selecting a chronic pattern of injury – chronic hepatitis chronic biliary disease is out of consensus (most of these responses consider at least a DD of DILI).

Stage: consensus for loss/collapse, no or mild fibrosis. 1 vascular change will lose marks anyway, 1 response no stain – there is! but not to mark down.

Diagnosis: good consensus for DILI either alone or combined with other acute aetiologies =96

Complete answer for 10 marks would include; DILI, ideally favoured but accepted if mentioned as differential.

lose 10; vascular pattern and venous outflow obstruction n=1, chronic biliary pattern and PSC n=1. 1 no selections made apart from stage and no comment. 1 to be shown at meeting; vanishing bile duct sy does have cholestasis in pattern – ask members score 5 or 10. Members voted to score this 0.

Case Number: L25_A13

Number of responses: 105. Date of analysis: 14 May 2025

Clinical: Male 10. acute seronegative hepatitis ??autoimmune disease.

Specimen: biopsy

Macroscopic: cores 1.5 and 0.5cm

Immunohistochemistry: orcein

Original Diagnosis: removed by RMB! Attend the meeting to find out!

Tumour:	Popularity:
- No tumour/lesion present	60.0%
leukaemia/lymphoma (please specify in Comments)	1.9%

Tumour 1:	Tumour 2:	Count:
- No tumour/lesion present		62
		40
leukaemia/lymphoma (please specify in Comments)		1
- No tumour/lesion present	- No tumour/lesion present	1
leukaemia/lymphoma (please specify in Comments)	leukaemia/lymphoma (please specify in Comments)	1

Pattern:	Popularity:
lobular hepatitis	42.9%
chronic hepatitis	21.9%
cholestasis, bilirubinostasis	7.6%
Other (please specify in Comments)	6.7%
not applicable	1.0%
chronic biliary disease	1.0%

Pattern 1:	Pattern 2:	Count:
		42
lobular hepatitis		26
chronic hepatitis		9
lobular hepatitis	cholestasis, bilirubinostasis	6
lobular hepatitis	chronic hepatitis	6
chronic hepatitis	lobular hepatitis	5
Other (please specify in Comments)		4
lobular hepatitis	Other (please specify in Comments)	2
Other (please specify in Comments)	Other (please specify in Comments)	1
chronic hepatitis	cholestasis, bilirubinostasis	1
chronic hepatitis	chronic biliary disease	1
cholestasis, bilirubinostasis	chronic hepatitis	1
not applicable		1

Stages:	Popularity:
no fibrosis/equivocal fibrosis	34.3%
not applicable / no special stains to assess architecture	18.1%
mild/early fibrosis without bridging	4.8%
hepatocyte loss or bridging - favour collapse not fibrosis	1.9%

Diagnostic categories:	Popularity:
acute / subacute hepatitis - autoimmune / drug / viral	43.7%
autoimmune hepatitis	28.2%
Other (please enter alternative diagnosis in comments box)	9.9%
drug induced liver injury (please specify in comments box)	7.0%
Wilson disease	4.2%
- histologically indeterminate for cause	2.8%
non-hepatotrophic - viral, bacterial, parasitic (please specify in comment box)	2.8%
overlap syndrome	1.4%

Diagnosis Combination:	Count:
[No selections made]	42
acute / subacute hepatitis - autoimmune / drug / viral	28
autoimmune hepatitis	15
Other (please enter alternative diagnosis in comments box)	6
drug induced liver injury (please specify in comments box)	3
- histologically indeterminate for cause	2
acute / subacute hepatitis - autoimmune / drug / viral, Wilson disease	2
autoimmune hepatitis, drug induced liver injury (please specify in comments box)	2
autoimmune hepatitis, non-hepatotrophic - viral, bacterial, parasitic (please specify in comment box)	2
acute / subacute hepatitis - autoimmune / drug / viral, Other (please enter alternative diagnosis in comments box)	1
autoimmune hepatitis, overlap syndrome	1
Wilson disease	1

Original report and further information (if any): Removed by RMB!

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