

Liver EQA Circulation LX cases 10-12

Judy Wyatt

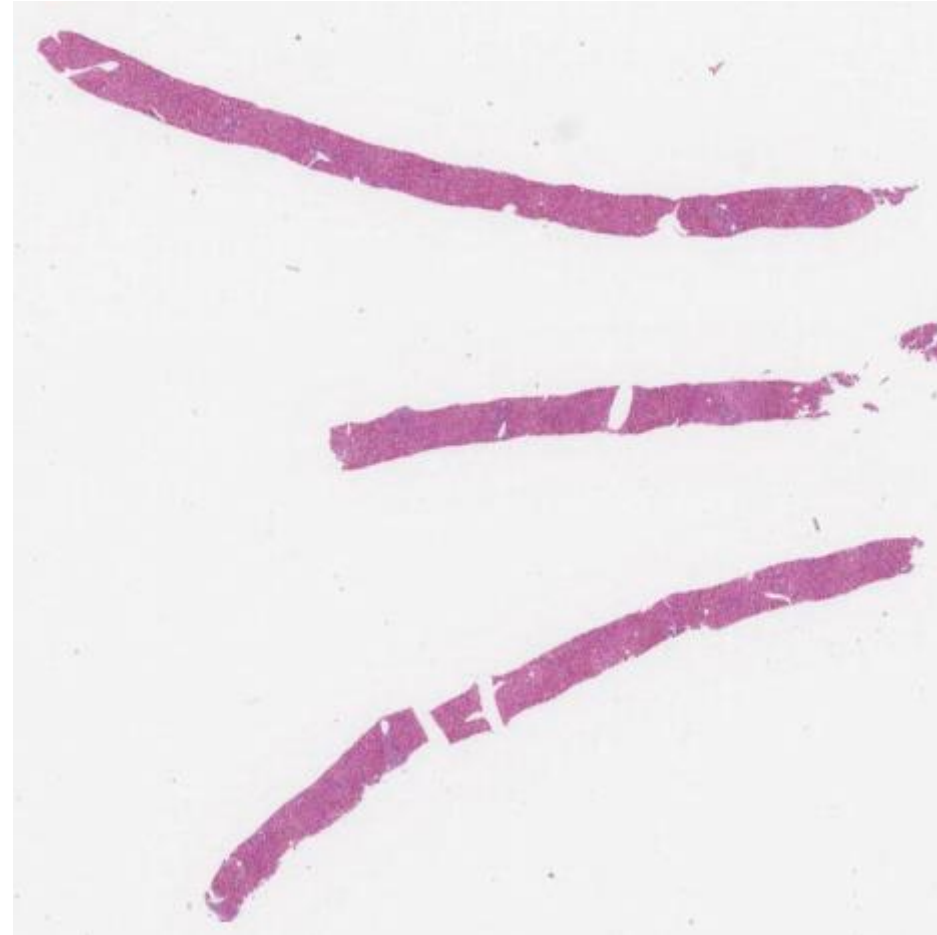
Case Number: LX10

Clinical: Female 78. Abnormal Liver function tests; ALT 1100; Alkaline phosphatase 300; Ducts not dilated on imaging; Liver normal on imaging; Autoantibodies negative; Immunoglobulins normal; HAV/HBV/HCV negative ; recent use of Flucloxacillin

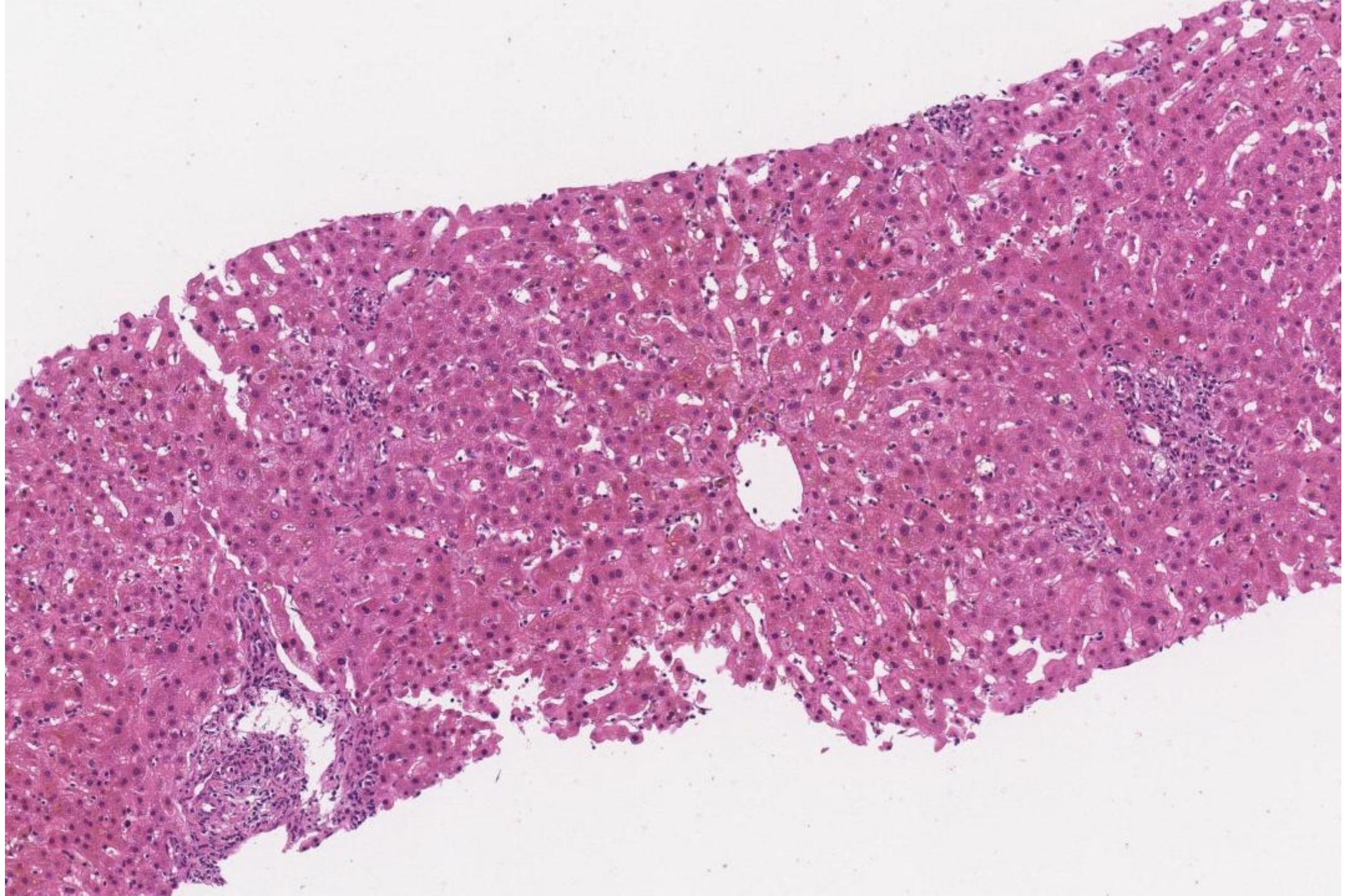
Specimen: Liver biopsy

Macroscopic: 3 cores of liver, combined length 37mm

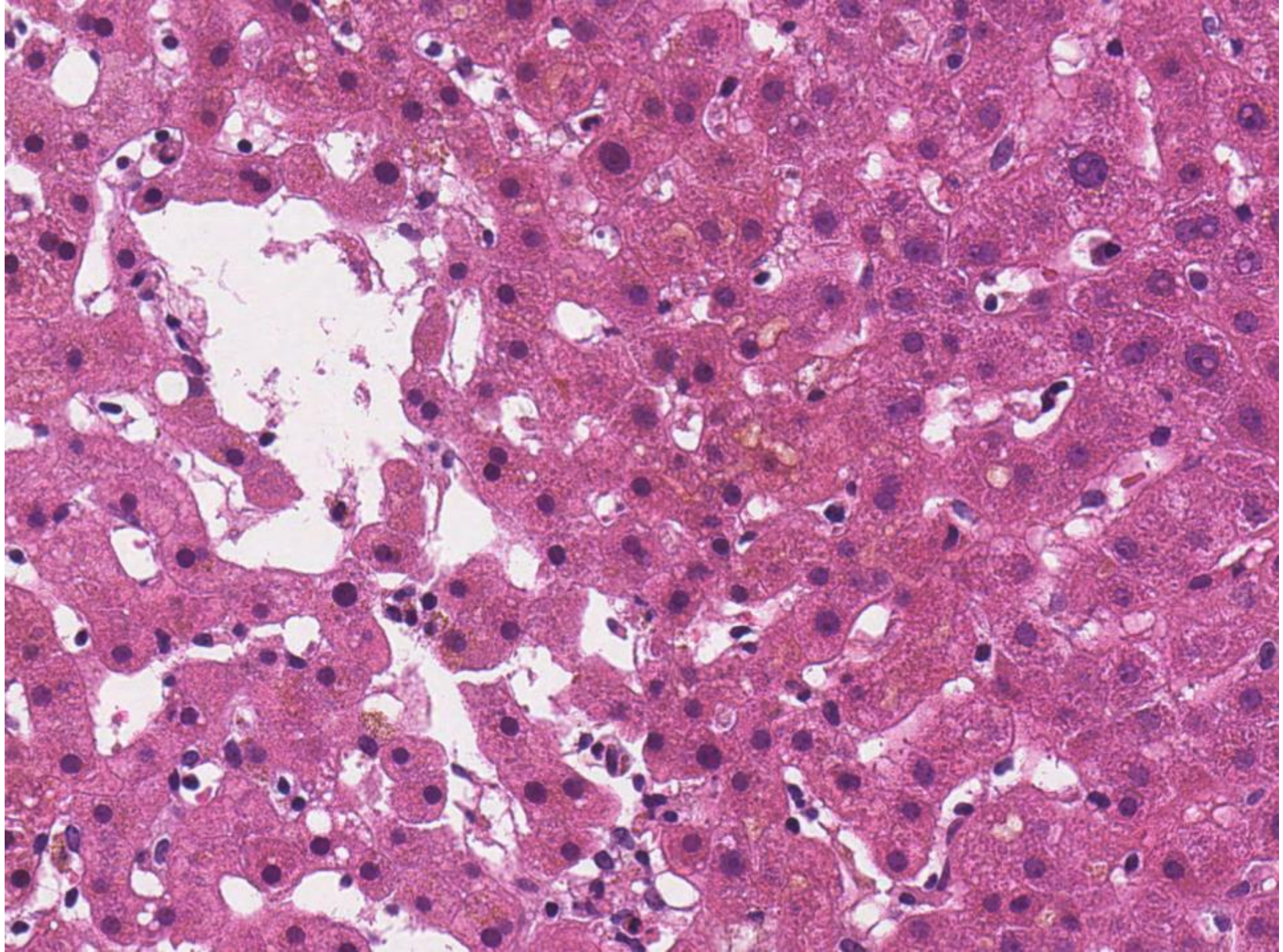
Immunohistochemistry: retic provided



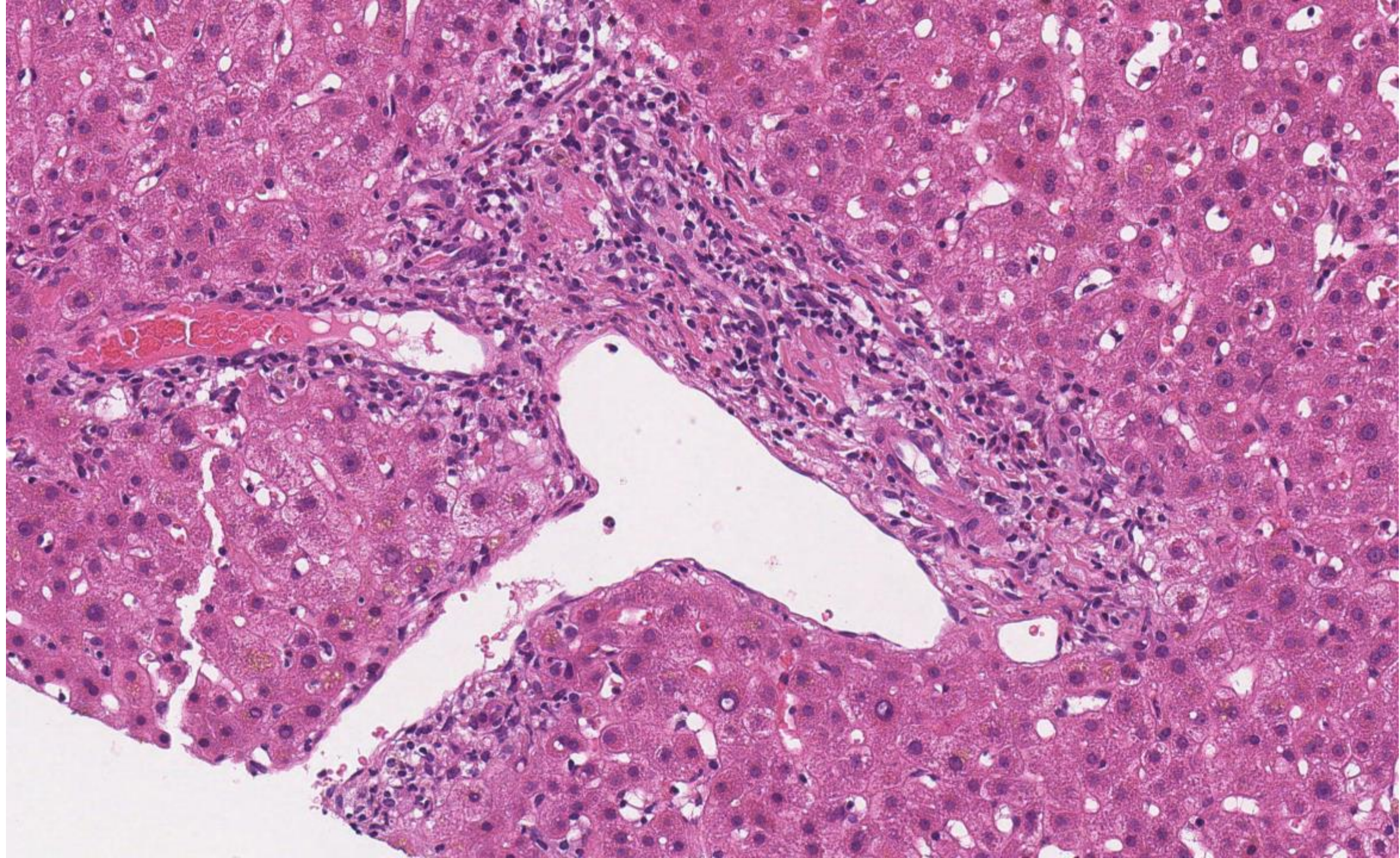
LX10



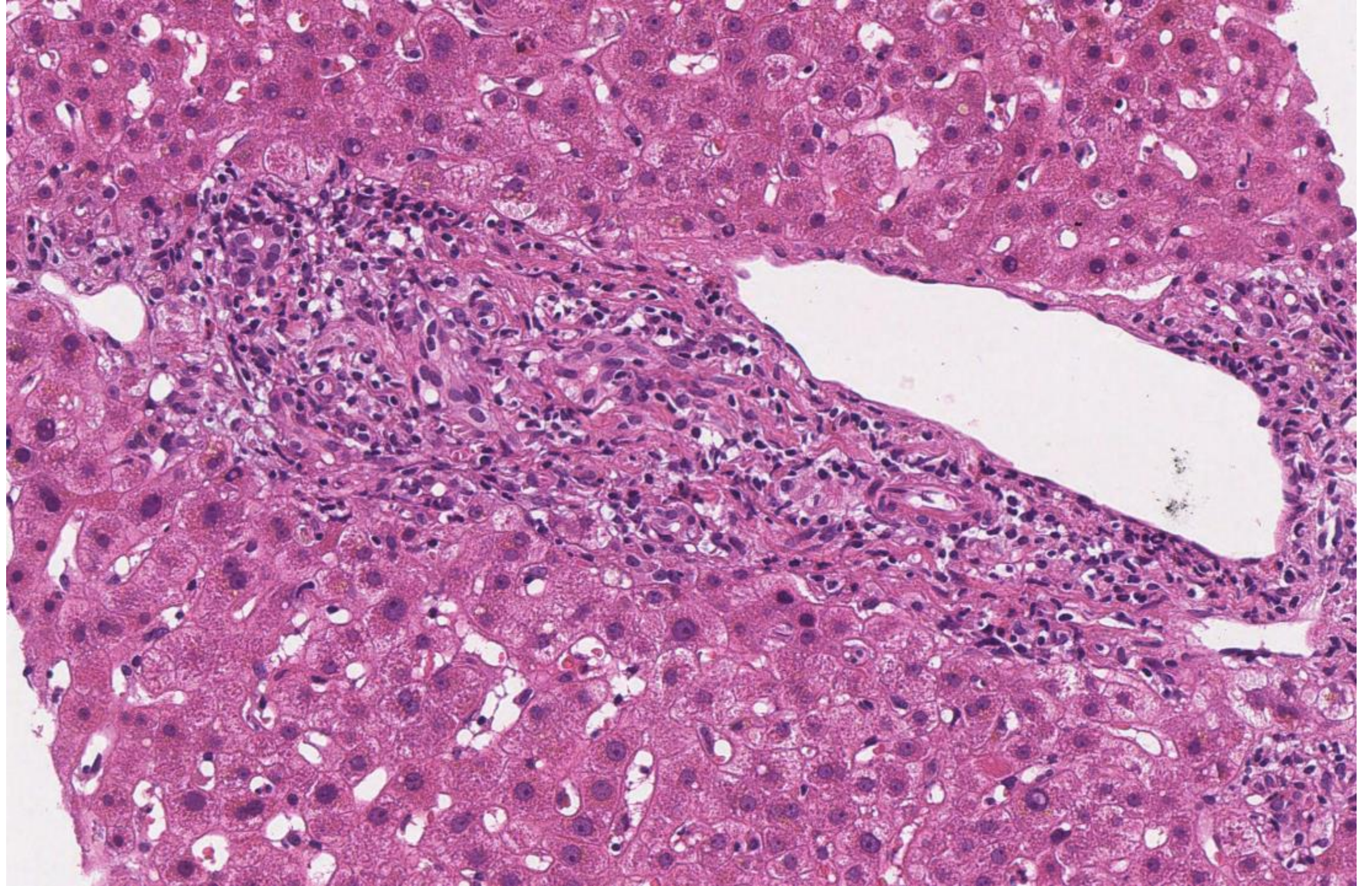
LX10



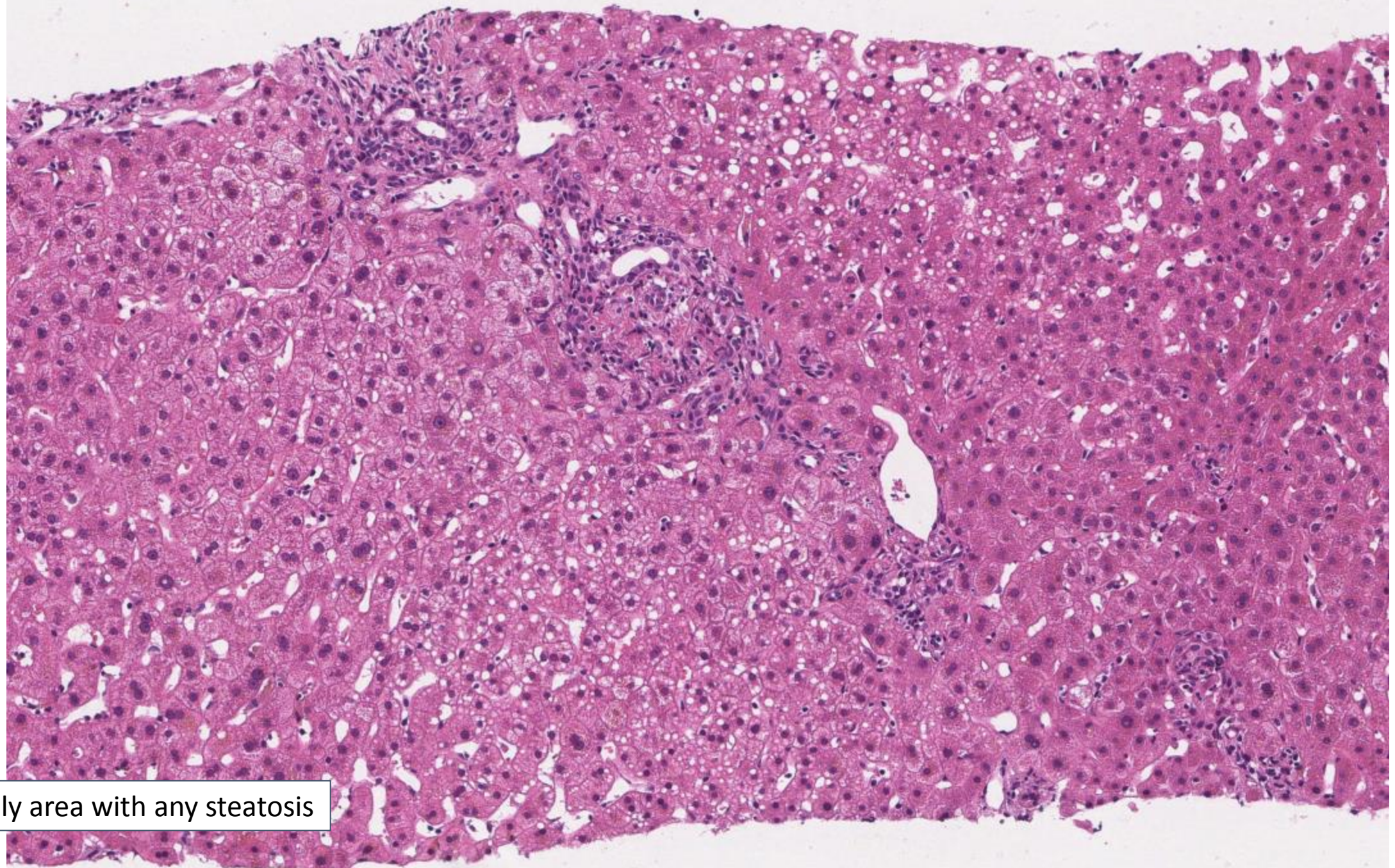
LX10



LX10

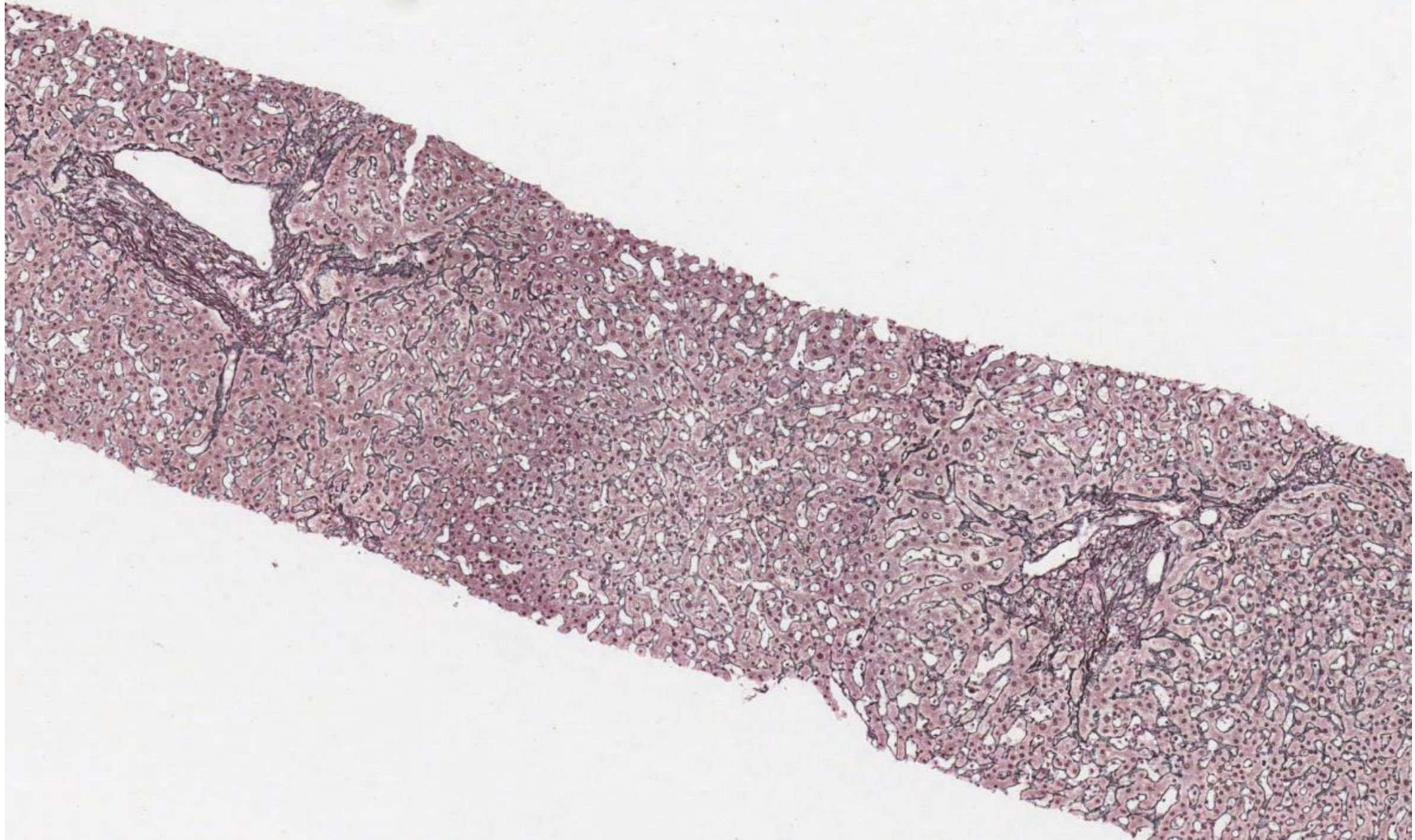


LX10



The only area with any steatosis

LX10



LX10

Tumour 1:	Tumour 2:	Count:
- No tumour/lesion present		81
- No tumour/lesion present	- No tumour/lesion present	3
		1
leukaemia/lymphoma (please specify in Comments)		1

Pattern:	Popularity:
cholestasis, bilirubinostasis	83.7%
Other (please specify in Comments)	14.0%
chronic hepatitis	12.8%
lobular hepatitis	9.3%
not applicable	4.7%
steatosis	3.5%
chronic biliary disease	3.5%

79 cholst/bili either alone or in combination (not implying strongly a second pattern or diagnosis) selected or describe it in comment

LX10

Pattern 1:	Pattern 2:	Count:
cholestasis, bilirubinostasis		44
cholestasis, bilirubinostasis	Other (please specify in Comments) 6 no 'other' described 2 possible duct loss	8
cholestasis, bilirubinostasis	lobular hepatitis all say DILI some imply lob hep part of DILI	5
cholestasis, bilirubinostasis	chronic hepatitis 2 mention portal inflame, all 4 say DILI	4
Other (please specify in Comments)	All say DILI 2 mention cholest in comments	2
	2 don't mention cholest	2
chronic hepatitis	cholestasis, bilirubinostasis all say DILI (1 fluoxetine)	3
chronic hepatitis	All say DILI and nothing rel to CH in comment no description cholst	3
not applicable	All describe cholest and say DILI	3
cholestasis, bilirubinostasis	Steatosis all 3 say DILI 1 steatosis>5%	3
chronic biliary disease	Both D DILI and don't say anything chronic in comments 1 likely cholst	1
	the other no description cholst	1
lobular hepatitis	cholestasis, bilirubinostasis 1 DILI cholst hep cw fluclox,	1
	1 no evid back liv disease and subtle sin infiltrates	1
cholestasis, bilirubinostasis	cholestasis, bilirubinostasis	2
chronic hepatitis	chronic hepatitis makes D DILI doesn't describe cholestasis	1
chronic biliary disease	lobular hepatitis makes D DILI doesn't comment anything AIH does describe cholst	1
cholestasis, bilirubinostasis	not applicable	1

Cholestasis in pattern or comments in all but 8 responses

Stages:	Popularity:
no fibrosis/equivocal fibrosis	59.3%
mild/early fibrosis without bridging	26.7%
not applicable / no special stains to assess architecture	10.5%
hepatocyte loss or bridging - favour collapse not fibrosis	1.2%
Other (please specify in Comments)	1.2%

LX10

Clinical: Female 78. Abnormal Liver function tests; ALT 1100; Alkaline phosphatase 300; Ducts not dilated on imaging; Liver normal on imaging; Autoantibodies negative; Immunoglobulins normal; HAV/HBV/HCV negative ; recent use of Flucloxacillin

Diagnostic categories:	Popularity:
drug induced liver injury (please specify in comments box)	97.7%
- no evidence of diffuse/background liver disease	1.2%
vanishing bile duct syndrome	1.2%

84/86 of which
75/84 mention
fluclox / antibiotic

Diagnosis Combination:	Count:
drug induced liver injury (please specify in comments box)	84
- no evidence of diffuse/background liver disease	1
vanishing bile duct syndrome	1

LX10

Summary of proposed scoring:

Consensus for cholestatic pattern of injury (91.9%), no or mild fibrosis (86.0%) and DILI (97.7%) - specifically fluclox (75/84 specifically include Fluclox / antibiotic in comments).

For 10 points need cholestasis, and attributable to DILI (mentioning flucloxacillin) and no more than mild fibrosis

- Lose 5 for no choice or description of cholestasis (5 people).
- Lose 5 points for DILI without referencing flucloxacillin / antibiotic?

Should we deduct points for stage other than no fibrosis or mild/early fibrosis?

i.e. for 'not applicable / no special stains to assess architecture, collapse or (9 people)
for 'hepatocyte loss or bridging, favour collapse not fibrosis' (1 person)

Lose 10 for diagnosis other than DILI (considers leukaemia/lymphoma
– 'difficult case' but not expressing doubt otherwise

Lose 5 for VBDS Cholestasis, not mention DILI, N/A for stage

Committee – some debate on whether to score for stage, a consensus of members said no or mild fibrosis based on an H&E and retic therefore should be scored. 1

Original report and further information (if any): Drug induced liver injury- pattern of bland cholestasis with minimal inflammation

Case Number: LX11

Clinical: Female 70. Unexplained abnormal LFTs with ? hepatitis B infection. Indeterminate positive hepatitis B, also rheumatoid arthritis, awaiting immunosuppression medication.

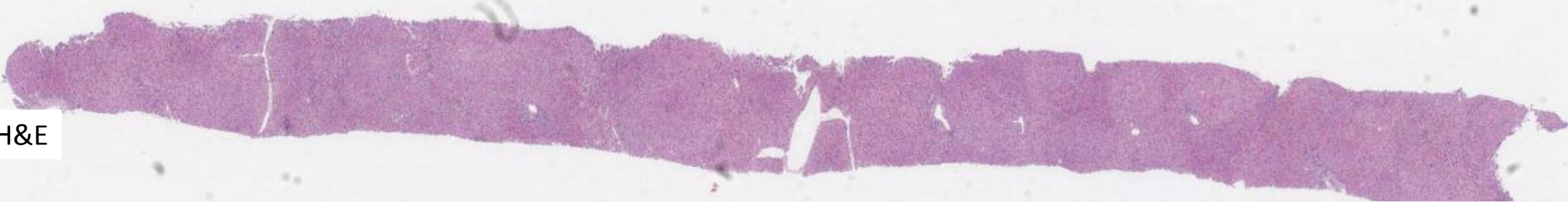
Liver biopsy to determine cause of liver abnormality and to confirm / exclude liver hepatitis B infection.

Specimen: liver biopsy **Macroscopic:** 1 core 18mm long **Additional stains:** retic, CK7, HBsAg



LX11

H&E

A horizontal strip of tissue stained with hematoxylin and eosin (H&E). The tissue shows a dense, pinkish-purple color, indicating the presence of cellular nuclei and cytoplasm. The staining is uniform across the length of the strip.

reticulin

A horizontal strip of tissue stained with reticulin. The tissue appears dark brown and fibrous, with a dense, irregular texture. The staining highlights the reticulin fibers within the tissue.

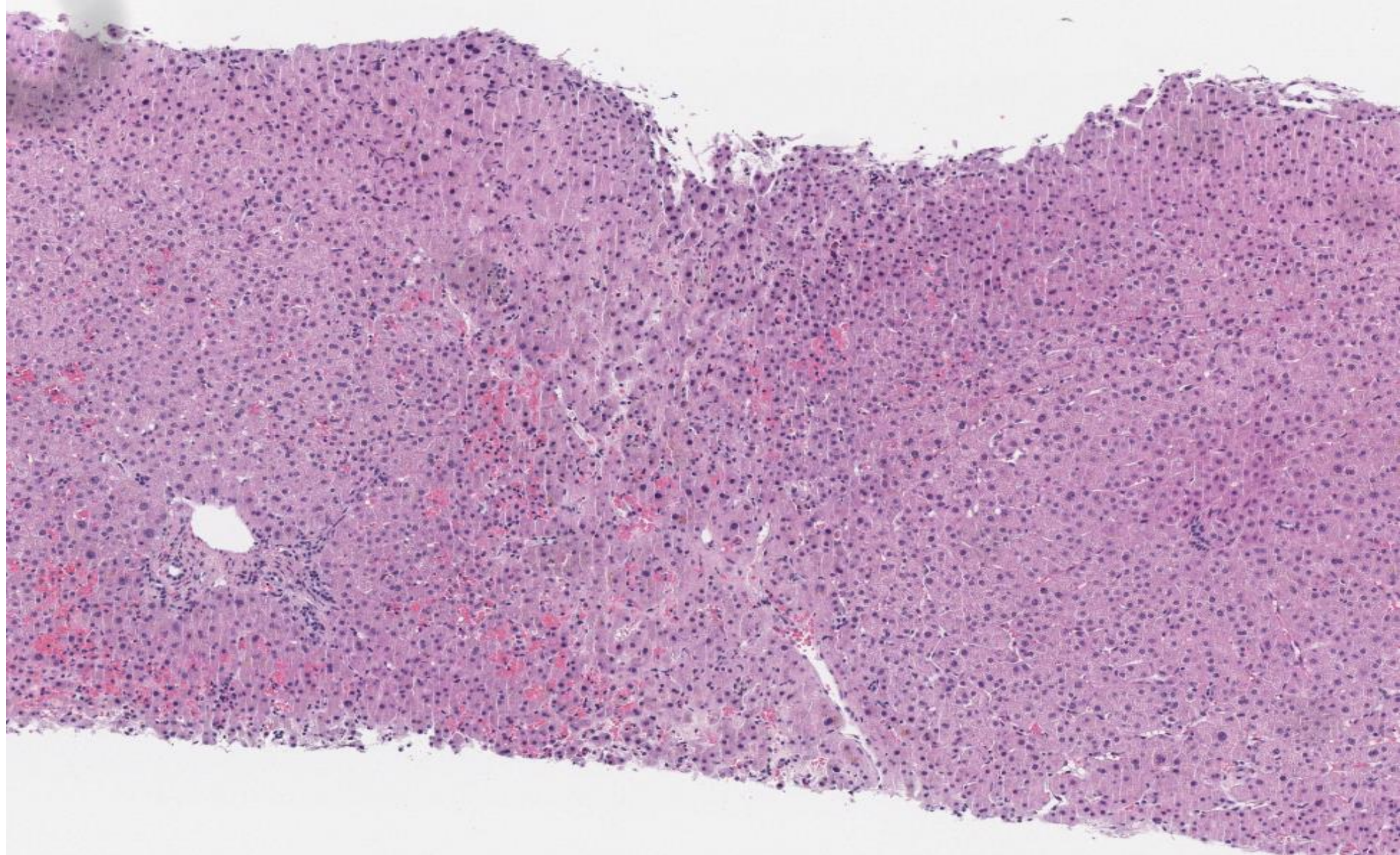
CK7

A horizontal strip of tissue stained with CK7. The tissue shows a light brown color with some darker brown spots, indicating the presence of CK7 protein. The staining is localized and patchy.

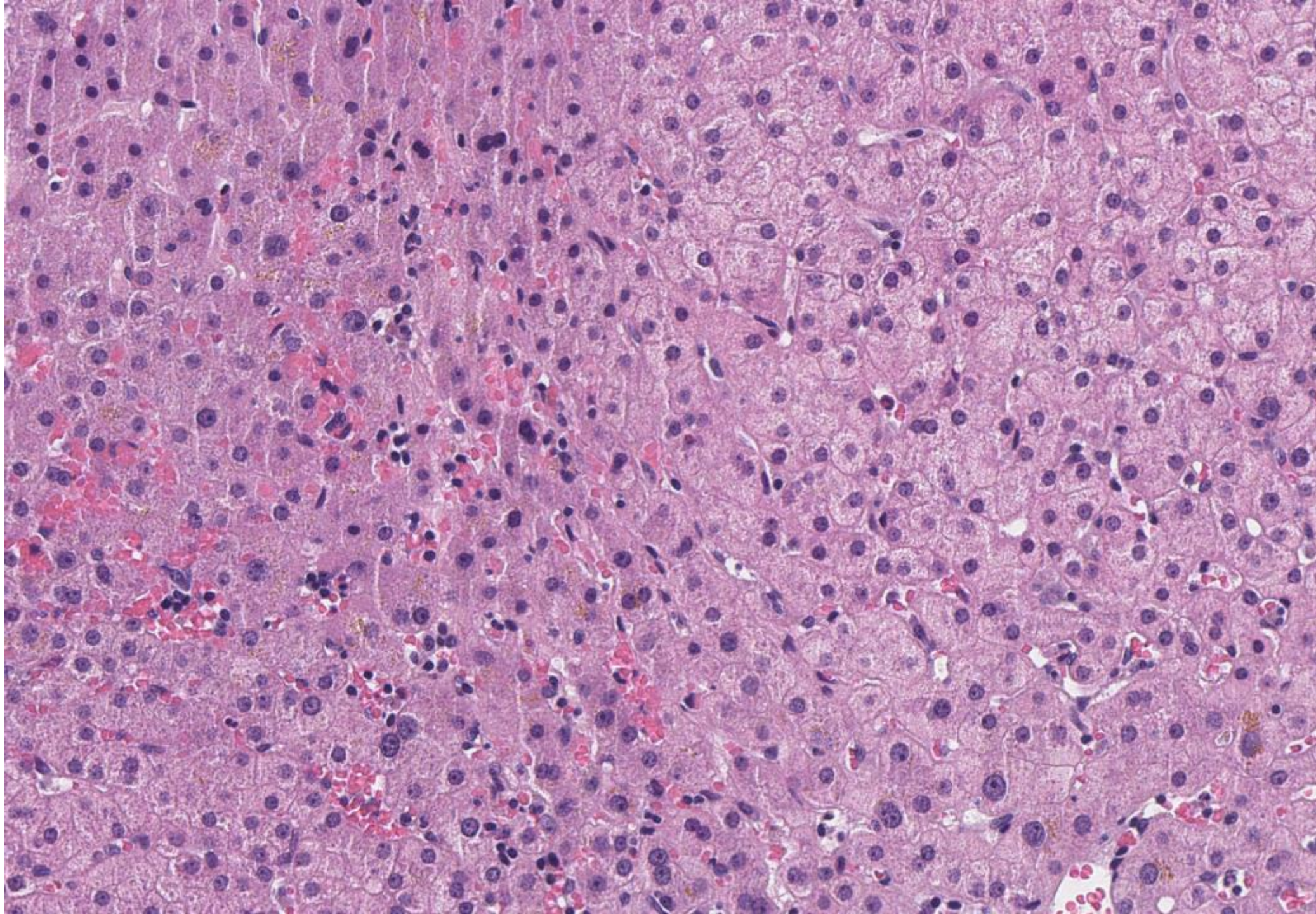
HBsAg

A horizontal strip of tissue stained for HBsAg. The tissue shows a light brown color with some darker brown spots, indicating the presence of HBsAg protein. The staining is localized and patchy.

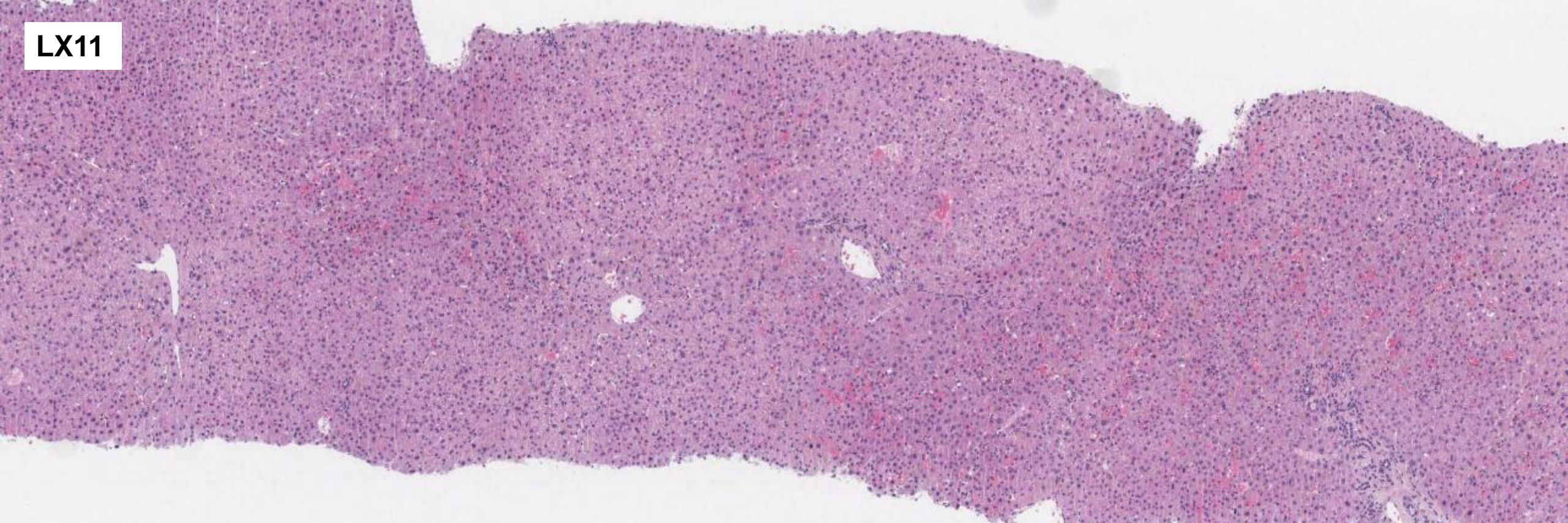
LX11



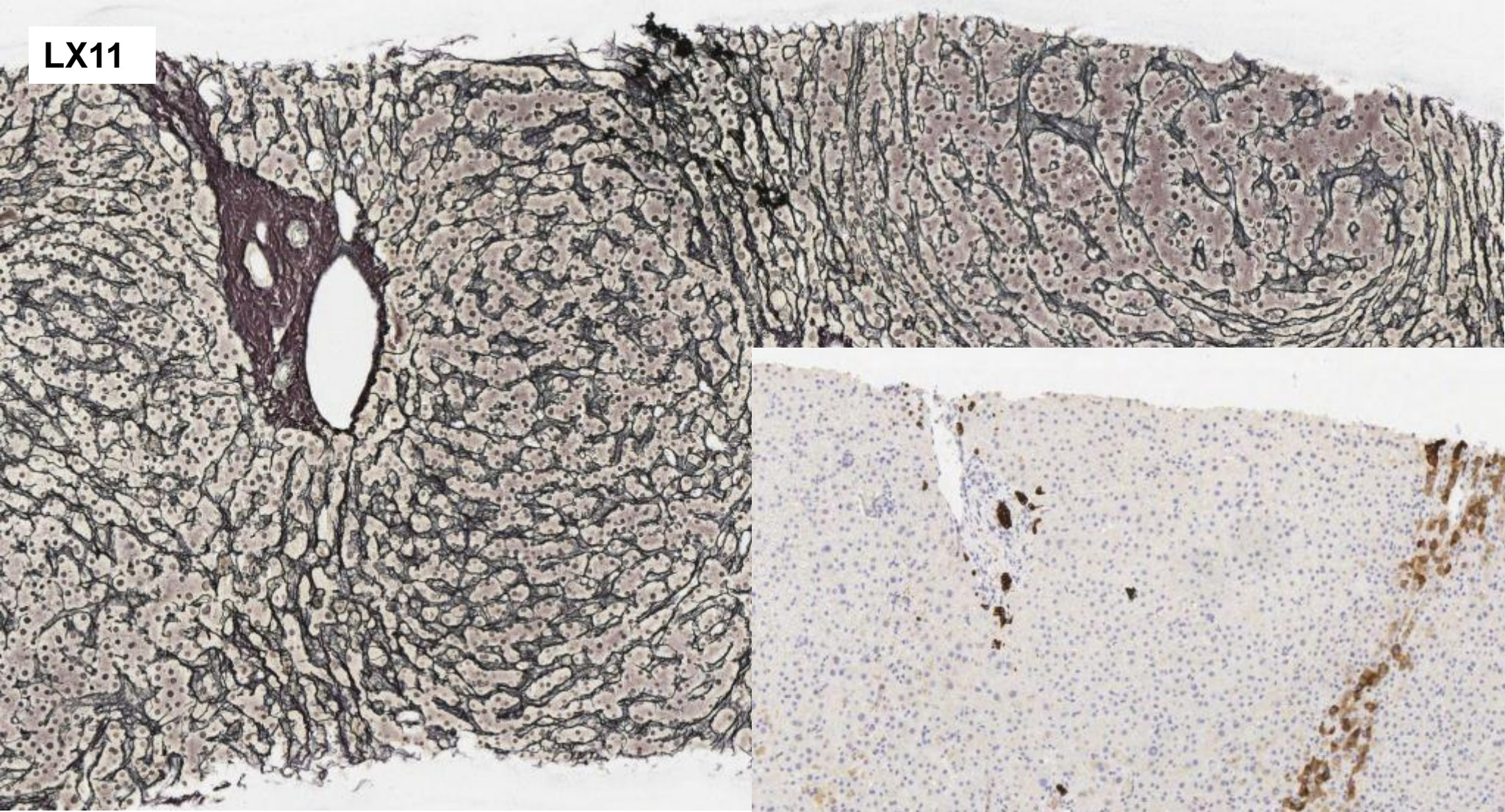
LX11



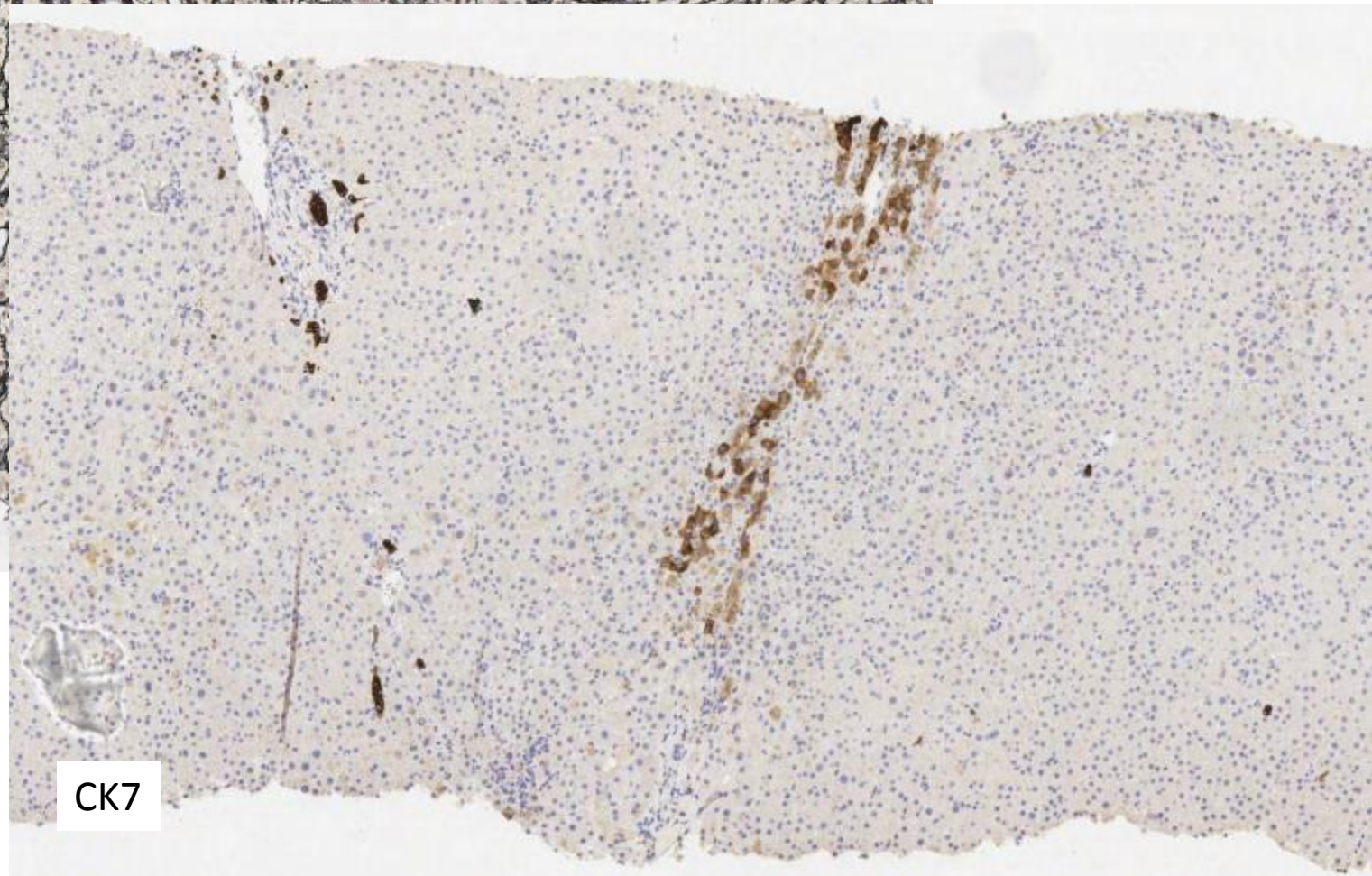
LX11



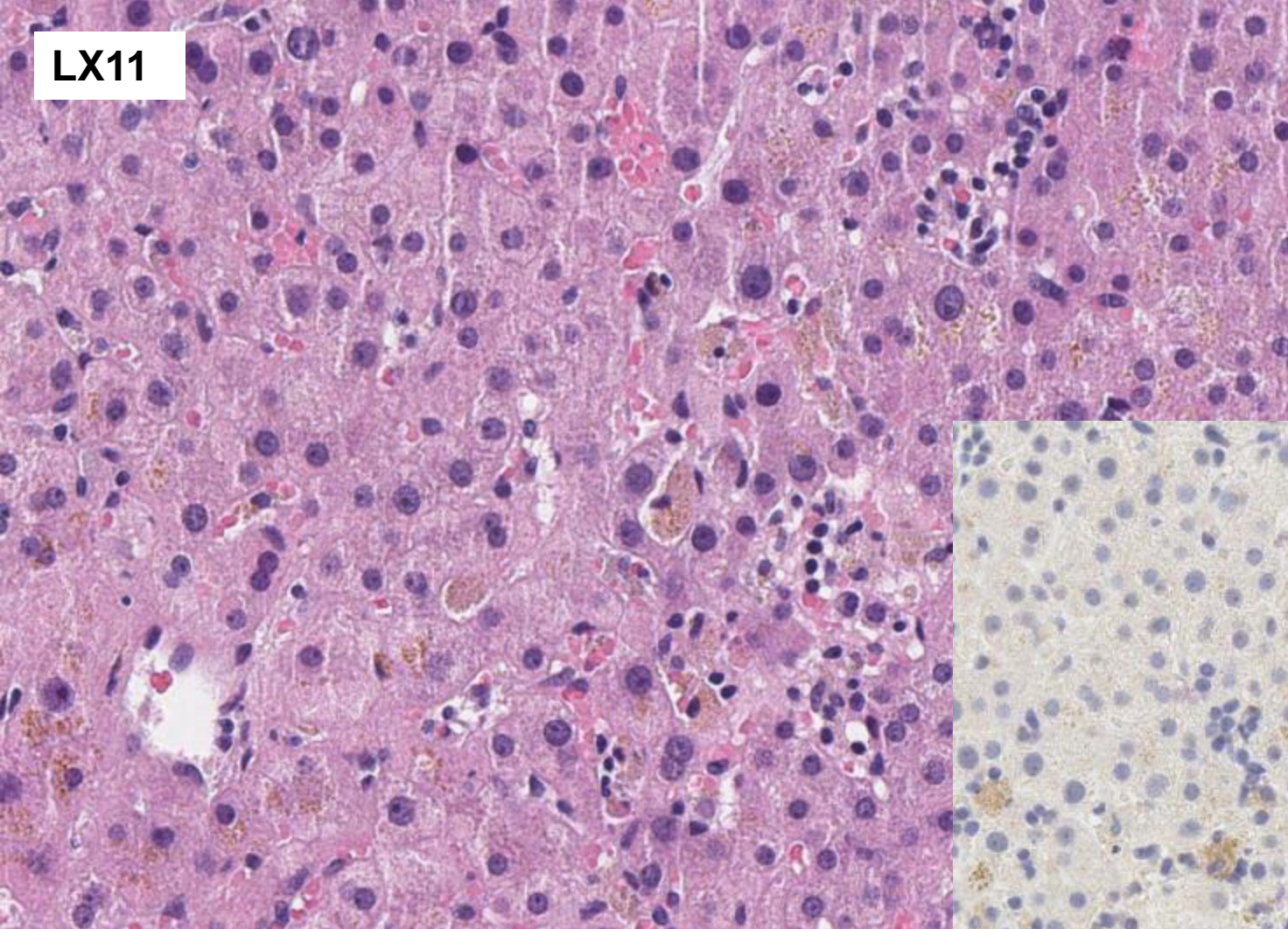
LX11



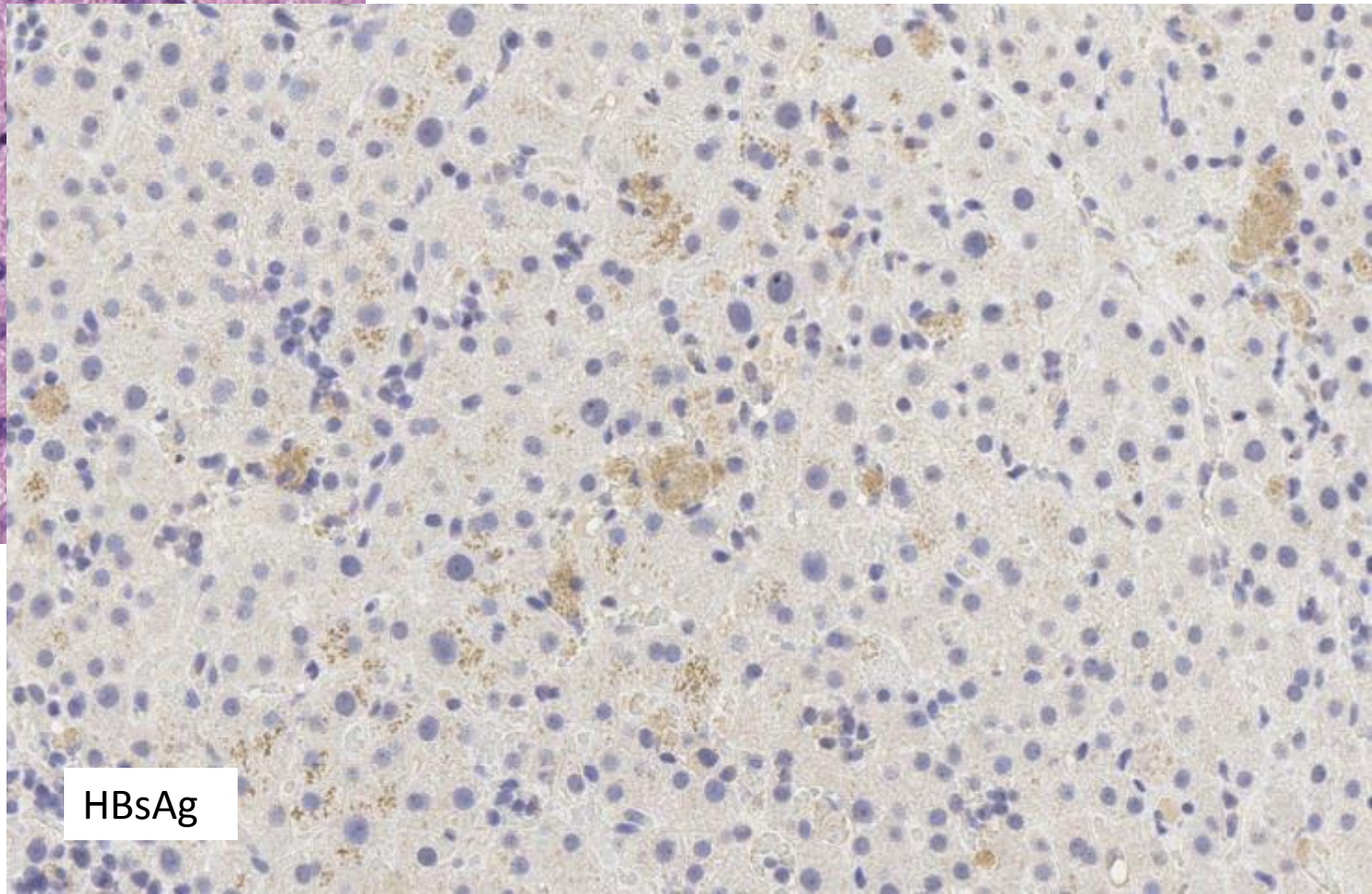
CK7



LX11



HBsAg



LX11

Tumour:	Popularity:
- No tumour/lesion present	96.5%
Other (please specify in Comments)	2.3%

Pattern:	Popularity:
lobular hepatitis	40.7%
vascular disease	31.4%
Other (please specify in Comments)	31.4%
chronic hepatitis	14.0%
chronic biliary disease	5.8%
not applicable	4.7%
within normal limits	1.2%
cholestasis, bilirubinostasis	1.2%
acute venous outflow obstruction	1.2%
abnormal, no pattern discernible	1.2%

Stages:	Popularity:
subtle architectural abnormalities, vascular disease	36.0%
no fibrosis/equivocal fibrosis	24.4%
not applicable / no special stains to assess architecture	11.6%
Other (please specify in Comments)	10.5%
hepatocyte loss or bridging - favour collapse not fibrosis	8.1%
mild/early fibrosis without bridging	8.1%
fibrosis with bridging between vascular structures	1.2%

Diagnostic categories:	Popularity:
Other (please enter alternative diagnosis in comments box)	33.7%
manifestation of systemic or extrahepatic disease (please specify in comments box)	30.2%
acute / subacute hepatitis - autoimmune / drug / viral	17.4%
chronic viral hepatitis (hepatotropic viruses - please specify in comments box)	16.3%
- histologically indeterminate for cause	7.0%
vanishing bile duct syndrome	4.7%
autoimmune hepatitis	3.5%
drug induced liver injury (please specify in comments box)	2.3%
prothrombotic disorder (please specify in comments box)	1.2%
chronic cholangiopathy NOS	1.2%

No consensus for anything in drop down menus

LX11

Pattern 1:	Pattern 2:	Count:
lobular hepatitis		16
Other (please specify in Comments)		14
vascular disease		12
lobular hepatitis	Other (please specify in Comments)	9
chronic hepatitis		5
vascular disease	lobular hepatitis	4
vascular disease	chronic hepatitis	3
lobular hepatitis	chronic biliary disease	2
not applicable		2
vascular disease	Other (please specify in Comments)	2
chronic hepatitis	vascular disease	2
lobular hepatitis	vascular disease	2
vascular disease	vascular disease	1
within normal limits	within normal limits	1
chronic biliary disease	chronic biliary disease	1
		1
abnormal, no pattern discernible		1
acute venous outflow obstruction		1
chronic biliary disease		1
chronic biliary disease	chronic hepatitis	1
cholestasis, bilirubinostasis	lobular hepatitis	1
chronic hepatitis	lobular hepatitis	1
Other (please specify in Comments)	not applicable	1
vascular disease	not applicable	1
Other (please specify in Comments)	Other (please specify in Comments)	1

Diagnosis Combination:	Count:
Other (please enter alternative diagnosis in comments box)	20
manifestation of systemic or extrahepatic disease (please specify in comments box)	17
chronic viral hepatitis (hepatotropic viruses - please specify in comments box)	10
acute / subacute hepatitis - autoimmune / drug / viral	8
- histologically indeterminate for cause	5
manifestation of systemic or extrahepatic disease (please specify in comments box), Other (please enter alternative diagnosis in comments box)	4
acute / subacute hepatitis - autoimmune / drug / viral, Other (please enter alternative diagnosis in comments box)	3
[No selections made]	2
acute / subacute hepatitis - autoimmune / drug / viral, manifestation of systemic or extrahepatic disease (please specify in comments box)	2
autoimmune hepatitis	2
chronic viral hepatitis (hepatotropic viruses - please specify in comments box), manifestation of systemic or extrahepatic disease (please specify in comments box)	2
drug induced liver injury (please specify in comments box)	2
vanishing bile duct syndrome	2
- histologically indeterminate for cause, Other (please enter alternative diagnosis in comments box)	1
acute / subacute hepatitis - autoimmune / drug / viral, chronic viral hepatitis (hepatotropic viruses - please specify in comments box)	1
acute / subacute hepatitis - autoimmune / drug / viral, vanishing bile duct syndrome	1
autoimmune hepatitis, manifestation of systemic or extrahepatic disease (please specify in comments box)	1
chronic cholangiopathy NOS, vanishing bile duct syndrome	1
chronic viral hepatitis (hepatotropic viruses - please specify in comments box), Other (please enter alternative diagnosis in comments box)	1
prothrombotic disorder (please specify in comments box)	1

LX11 Is there a consensus using comments?

57/86 (66.3%) included nodular regenerative hyperplasia/ NRH
in the comments

28 Chronic hepatitis B

14 Acute / subacute hepatitis

2 autoimmune hepatitis

Committee – this is a textbook example of NRH should have
been recognisable?

Valuable education.