

Liver histopathology EQA Scheme

Circulation LS Autumn 2018

Liver EQA: circulation LS

Summer 2018. 83 responses – number needed to reach >80% consensus diagnosis is 67.

Collated by members of EQA committee to identify and tabulate main diagnoses for each response.

The committee met by phone to discuss how cases might be scored.

The charts of diagnoses and suggestions for scoring were sent to EQA members, with an invitation to comment (2 sent comments). Also a note of potential discussion points.

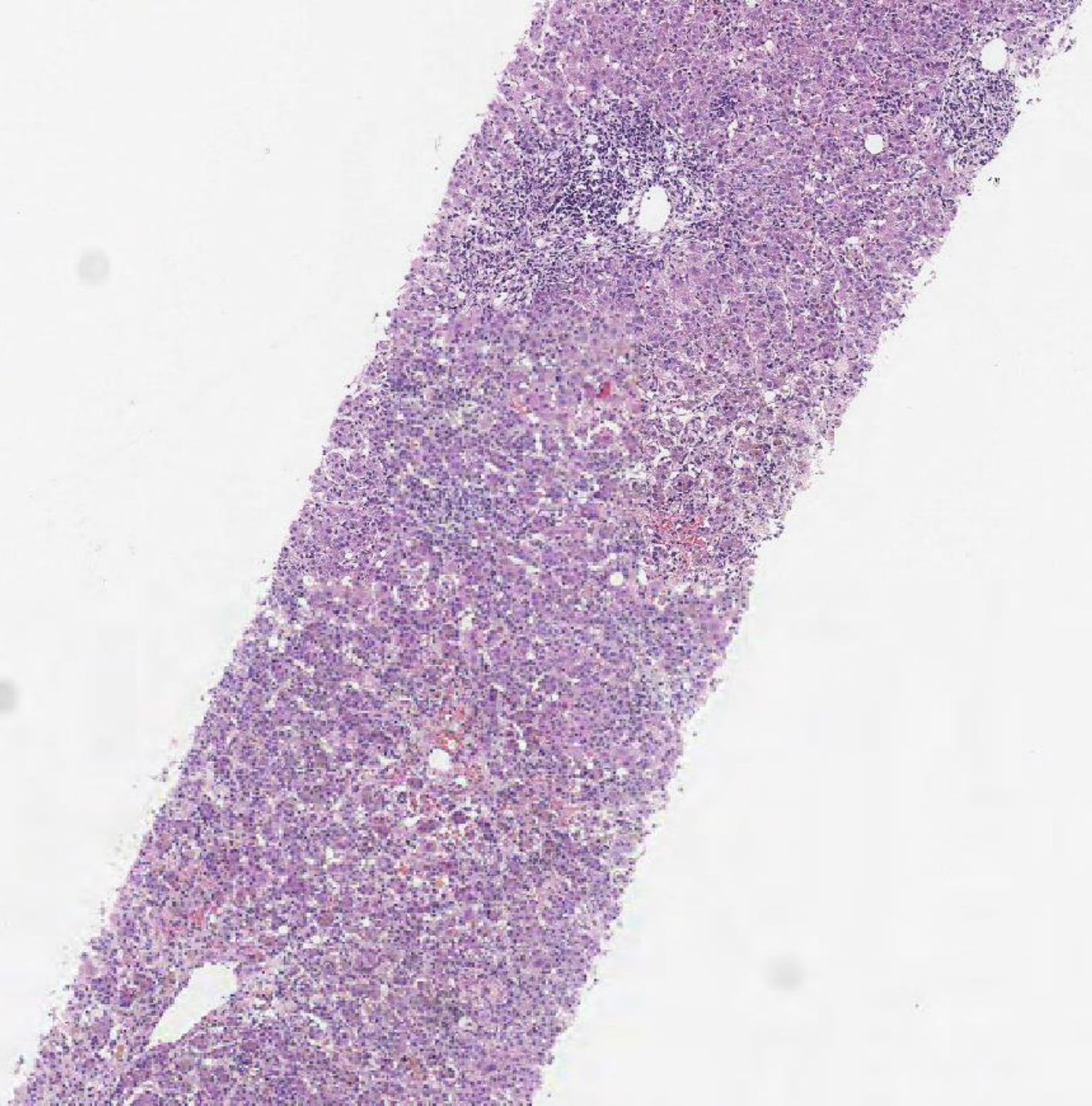
For non-members – to encourage pre-view of the cases – provide MCQ version with opportunity to send in responses - 12 received for LS.

Case LS1 35F

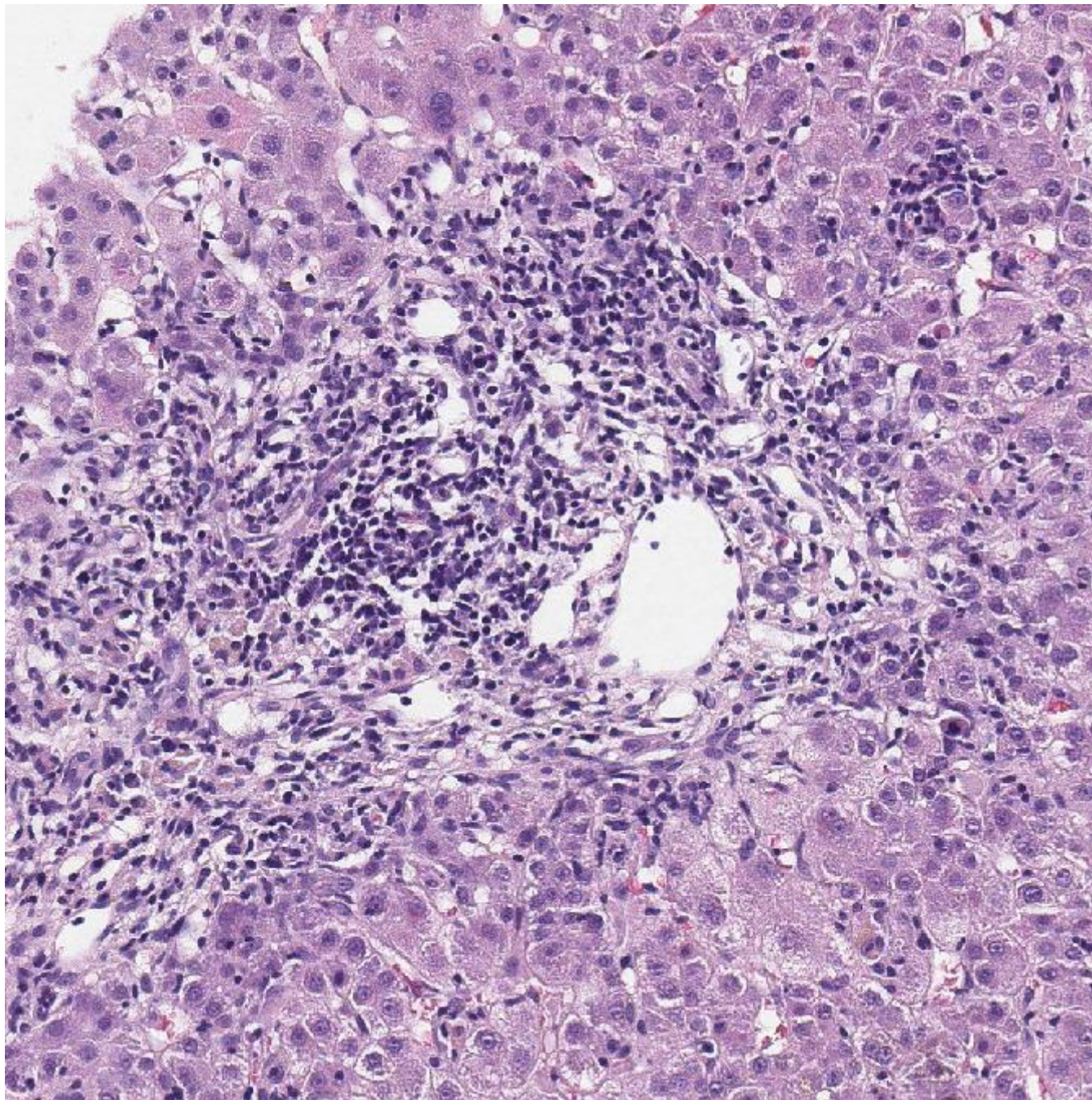
New onset severely deranged LFTs, no previous history. Admitted with severe jaundice and very deranged LFTs, ALT >1000
also retic, van Gieson, PASD



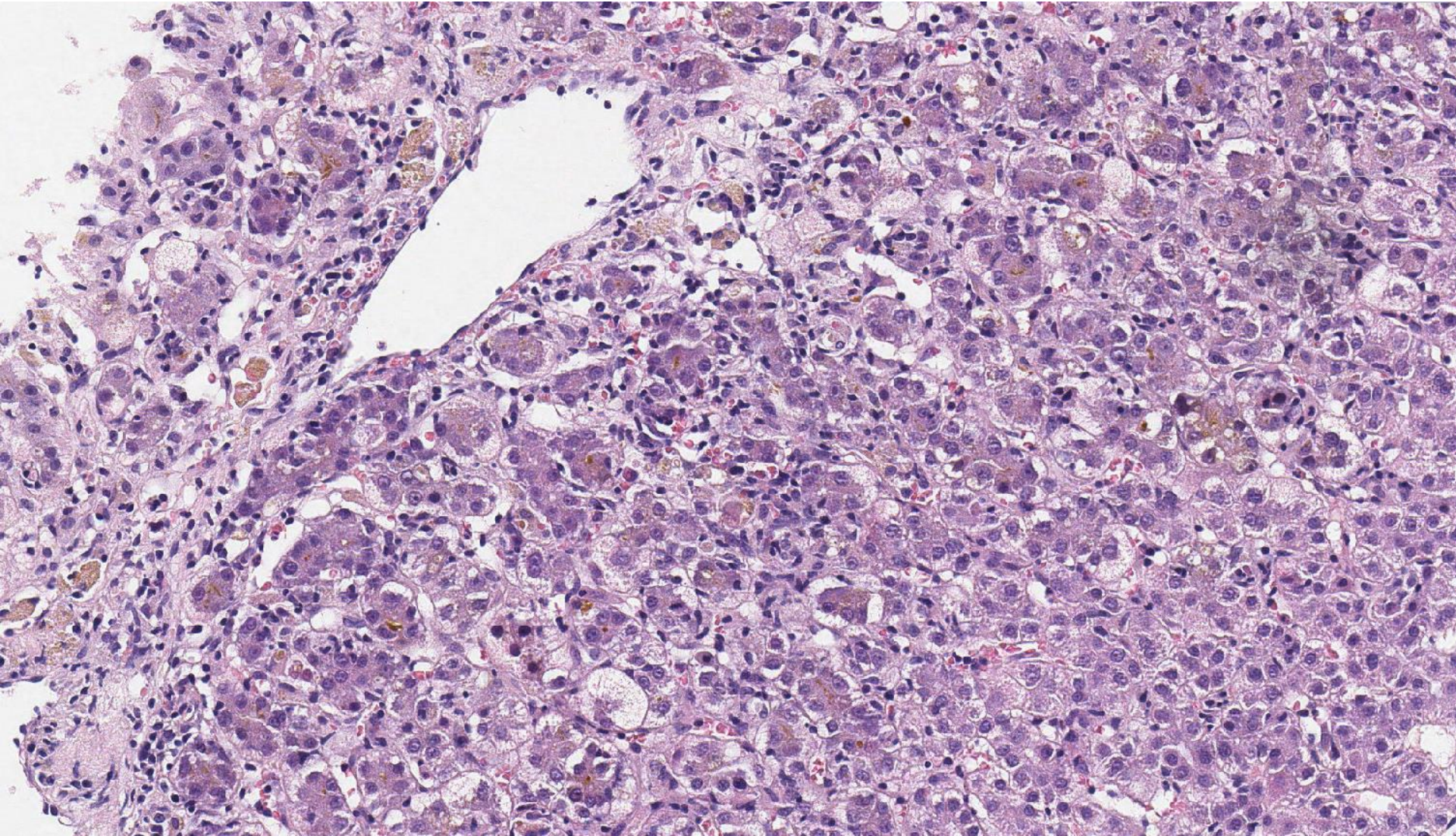
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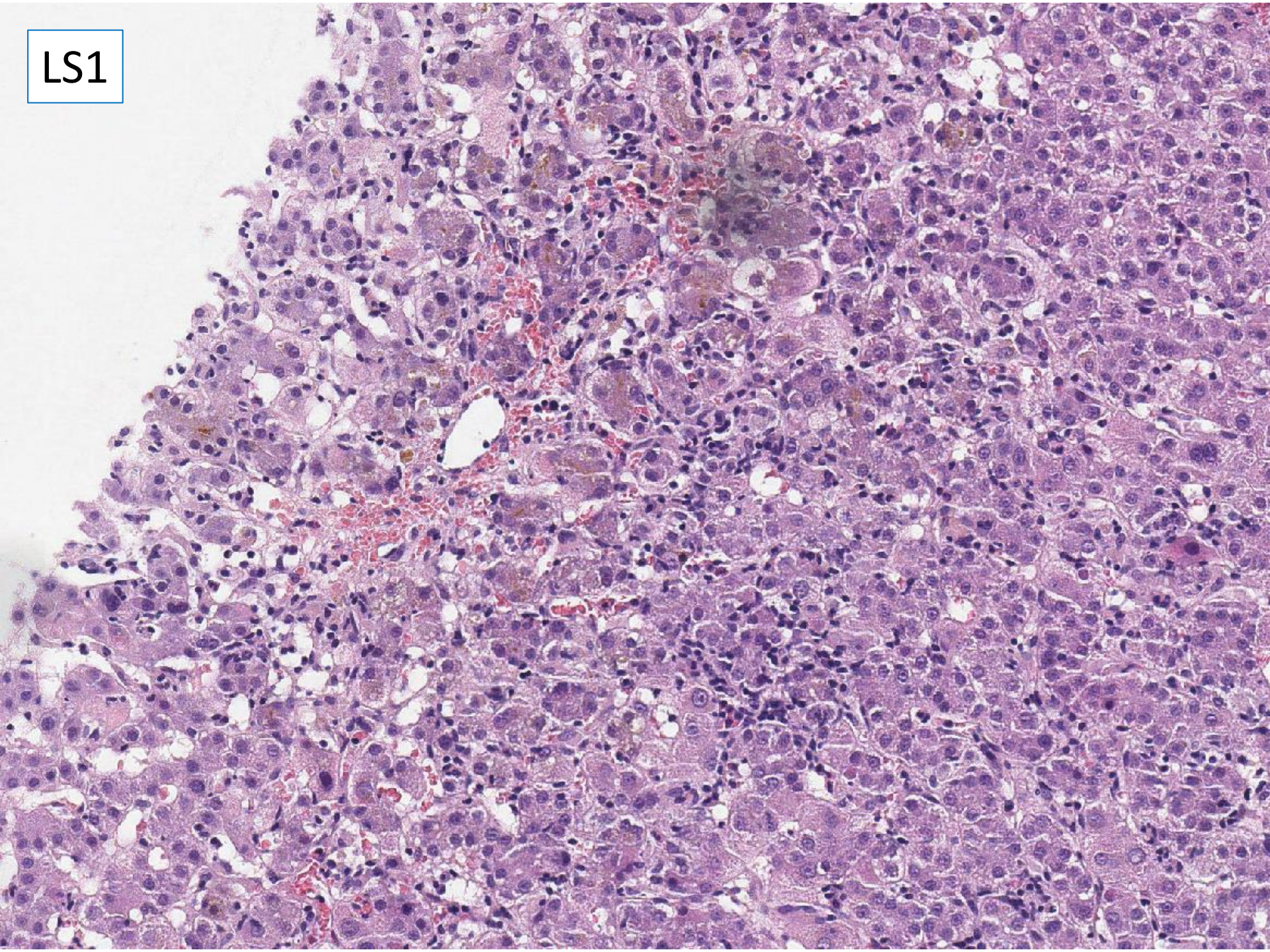
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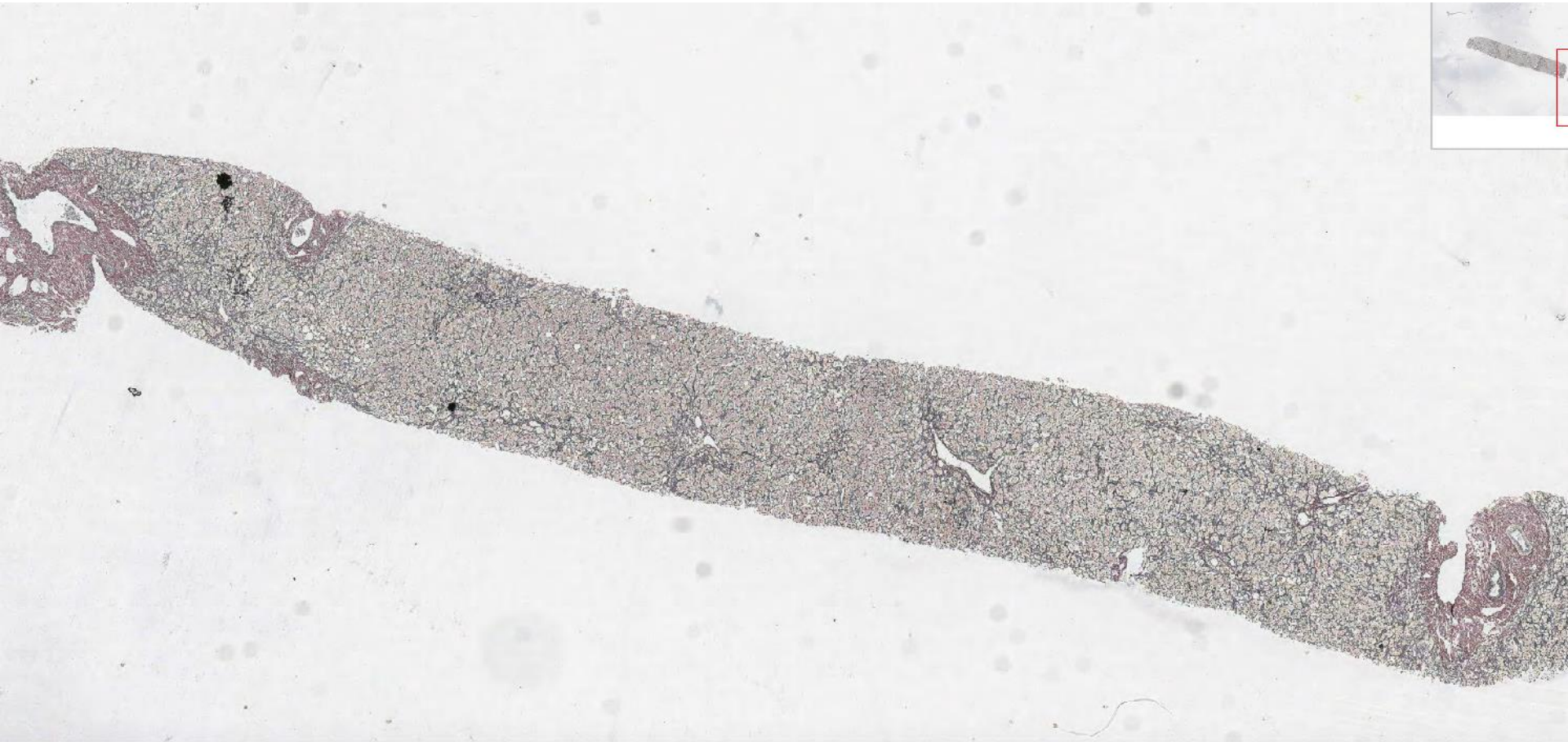
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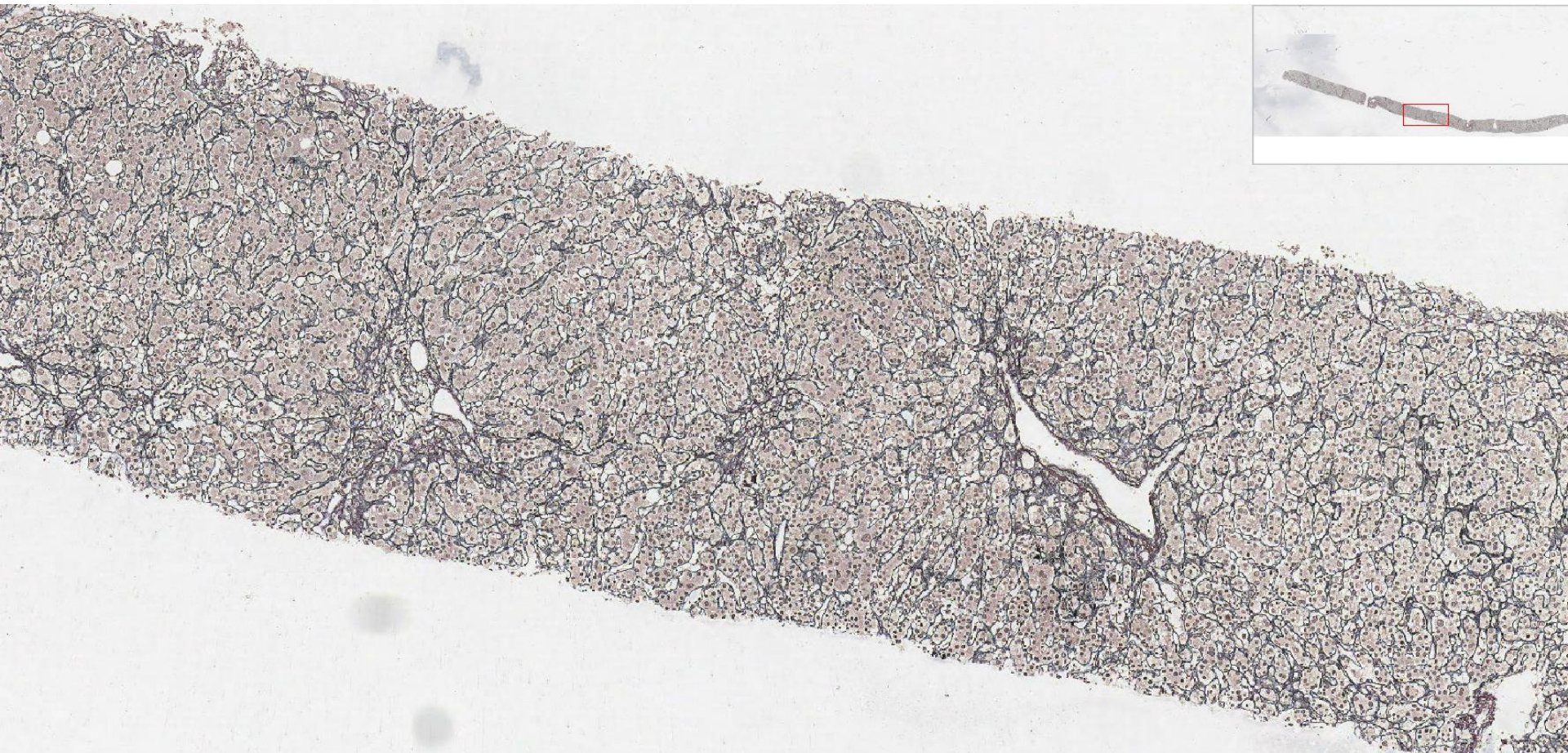
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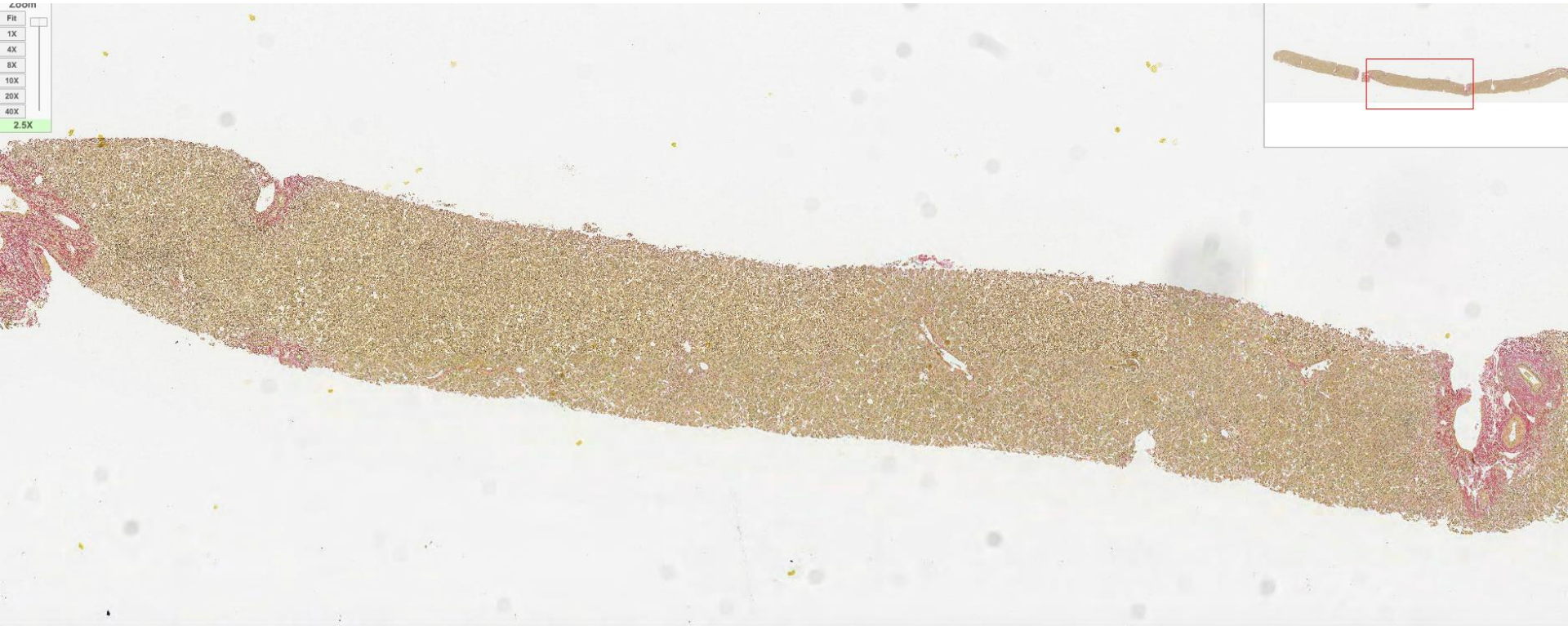
LS1



LS1

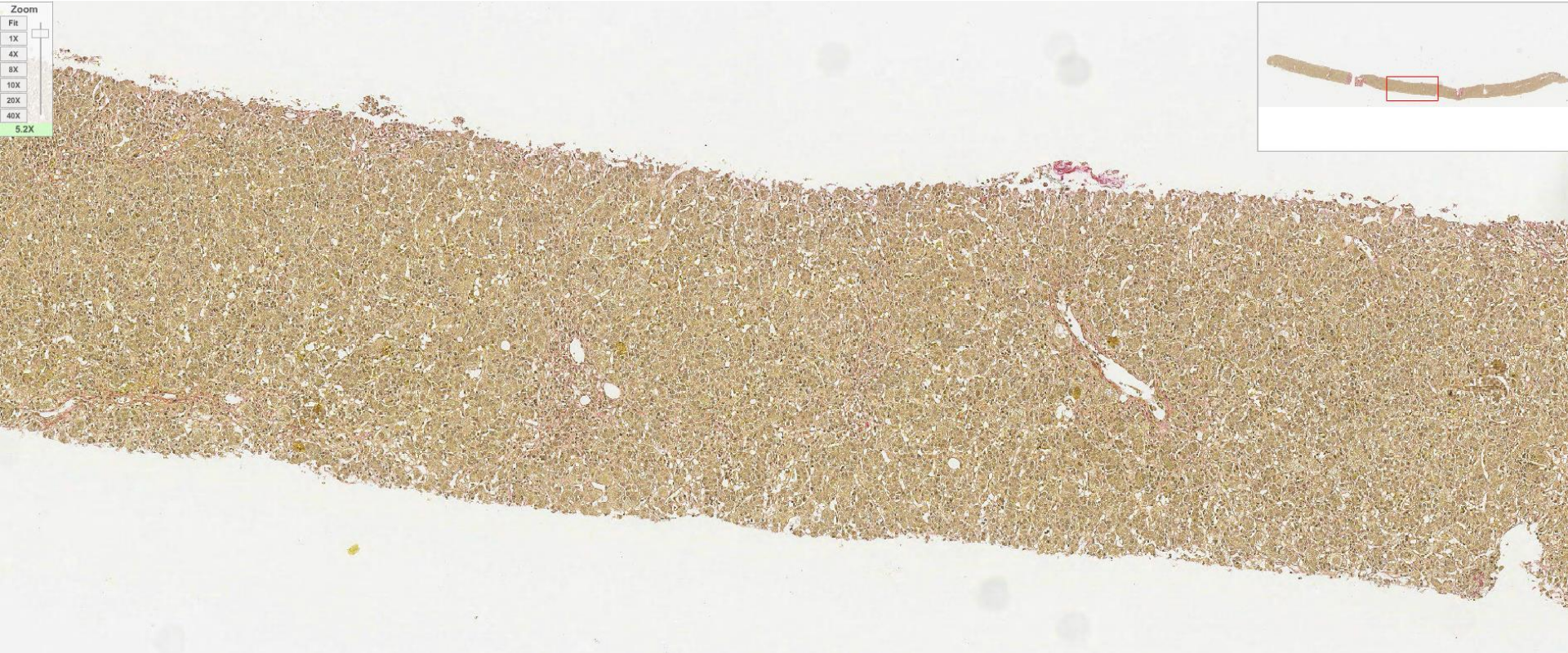


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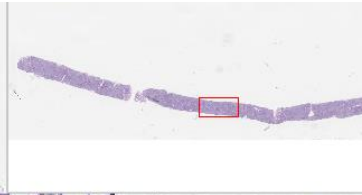
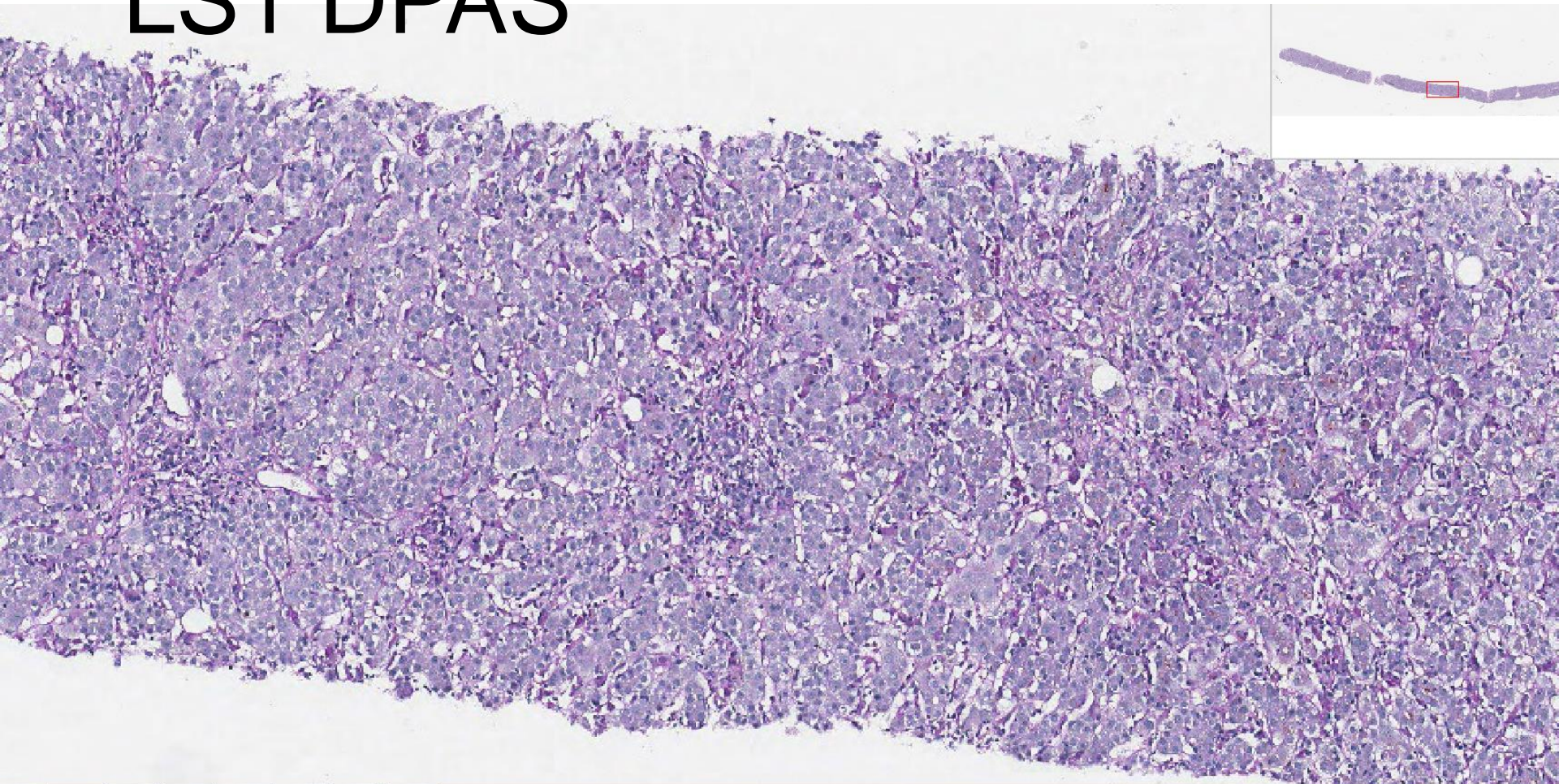


LS1

Zoom
Fit
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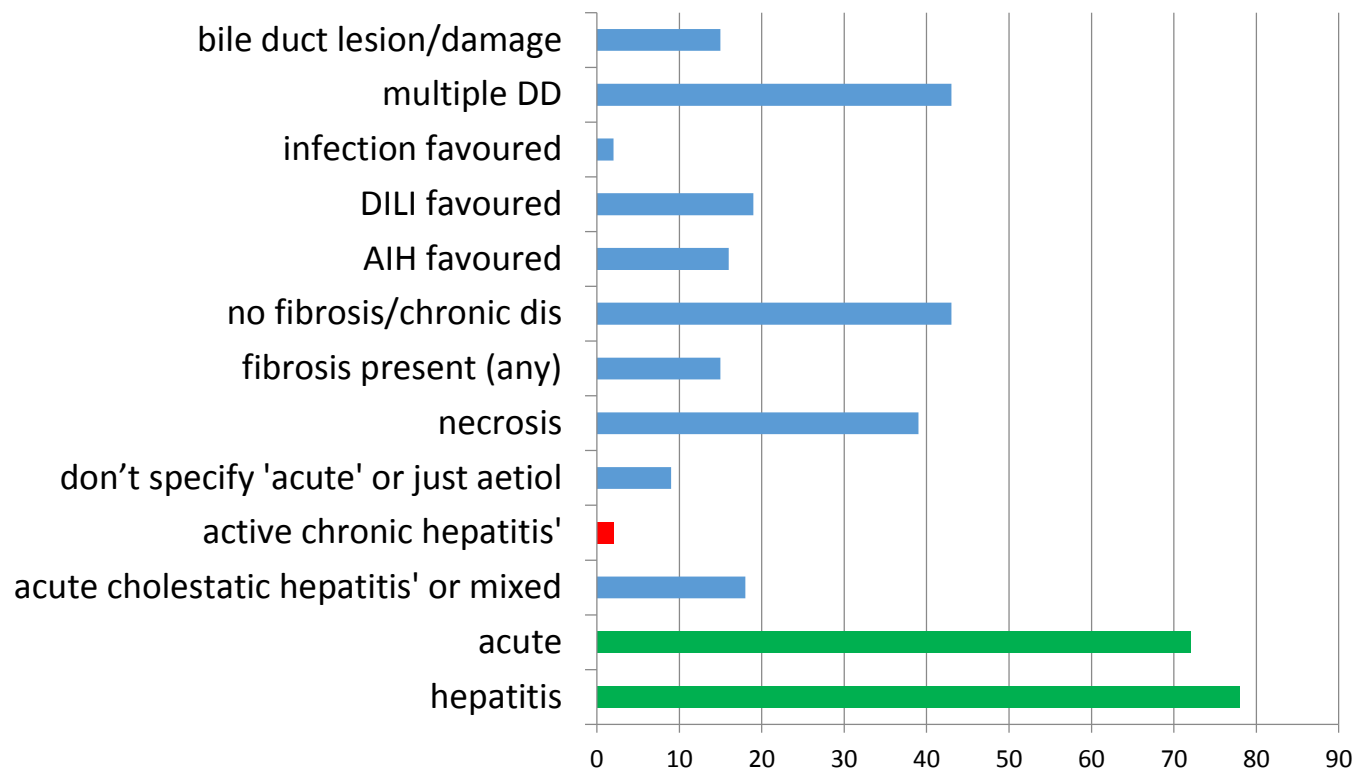


LS1 DPAS



Case LS1 35F

New onset severely deranged LFTs, no previous history. Admitted with severe jaundice and very deranged LFTs, ALT >1000
also retic, van Gieson, PASD



Consensus complete responses would include hepatitis as pattern of damage (78) majority acute (72 includes 2 'active' rather than 'acute' and includes 'acute cholestatic hepatitis') reaches EQA consensus. Score 10 points.

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hepatitis as pattern of damage (78) majority acute (72 includes 2 'active' rather than 'acute' and includes 'acute cholestatic hepatitis') reaches EQA consensus. Score 10 points.

- Discussion 1.11.18 most specify acute hepatitis and should do so to score 10, this is a good example of acute damage especially HVG
- Score 5 if other category hepatitis/suggesting chronicity
- 2 'active chronic hepatitis' (score 5)
- * 8 responses either don't describe a pattern of hepatitis but do include 'AIH' for example as DD i.e. only give potential aetiologies, or don't specifically say 'acute' (score 5) *5 in this group described fibrosis*
- 1 response 'AIH versus drugs or sclerosing cholangitis' also describe bridging fibrosis – (lose 10 points)

Case LS1 35F

New onset severely deranged LFTs, no previous history. Admitted with severe jaundice and very deranged LFTs, ALT >1000
also retic, van Gieson, PASD

Scoring summary agreed at meeting:

For full marks – hepatitis, active/severe/acute but not chronic, with a comment about aetiology that includes drug related.

Lose 5 marks – clear indication that there is chronic hepatitis

Lose 5 marks if autoimmune hepatitis without a differential diagnosis, or if there is no mention of drugs as a potential cause

Lose 10 marks for response which suggests PSC with fibrosis: 'AIH v drugs v PSC

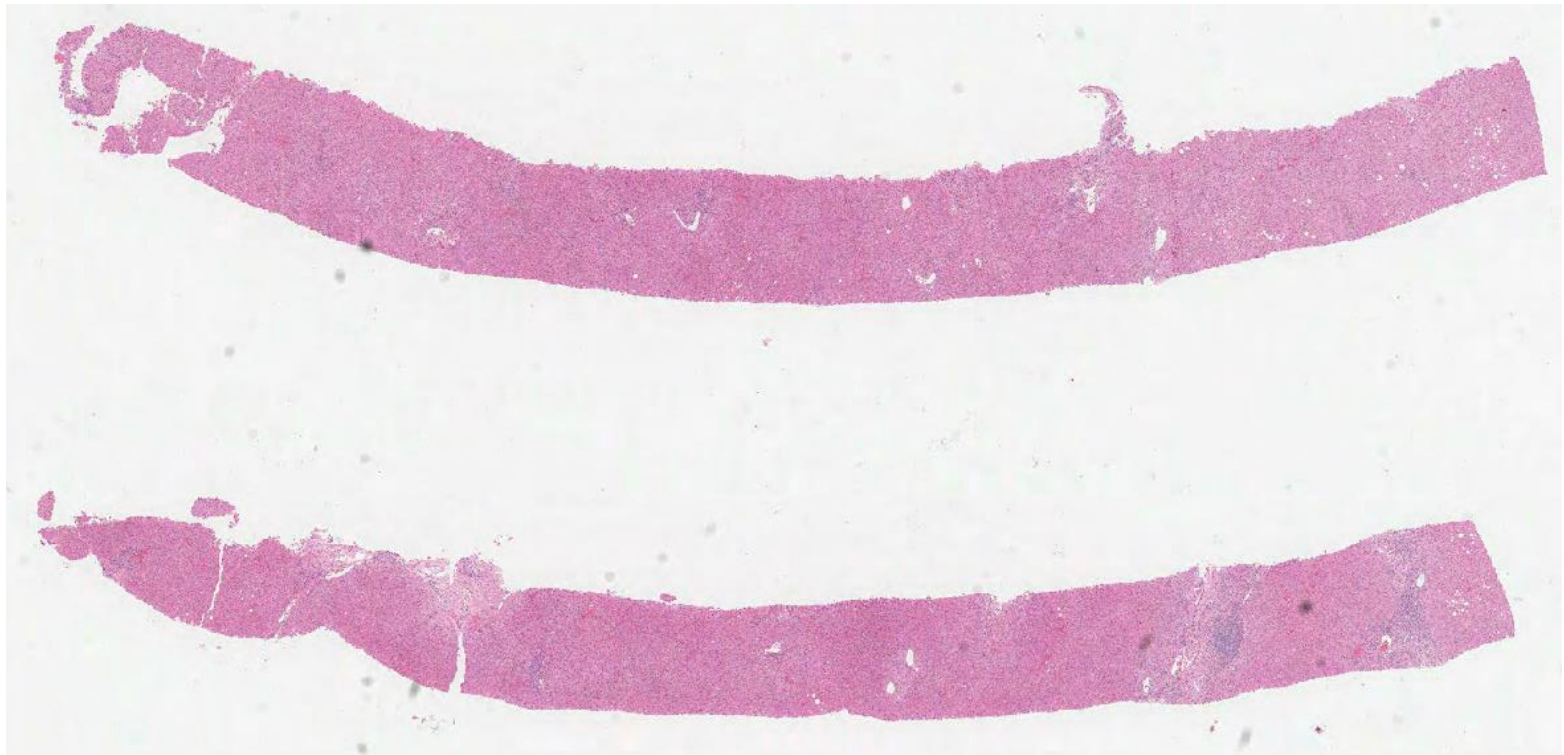
Case LS2 75M

Mixed picture of abnormal LFTs - on Sodium Valproate, risk factors for NAFLD (obesity, HBP and high cholesterol), also previous biliary issues with open cholecystectomy and CBD clearance for stones.

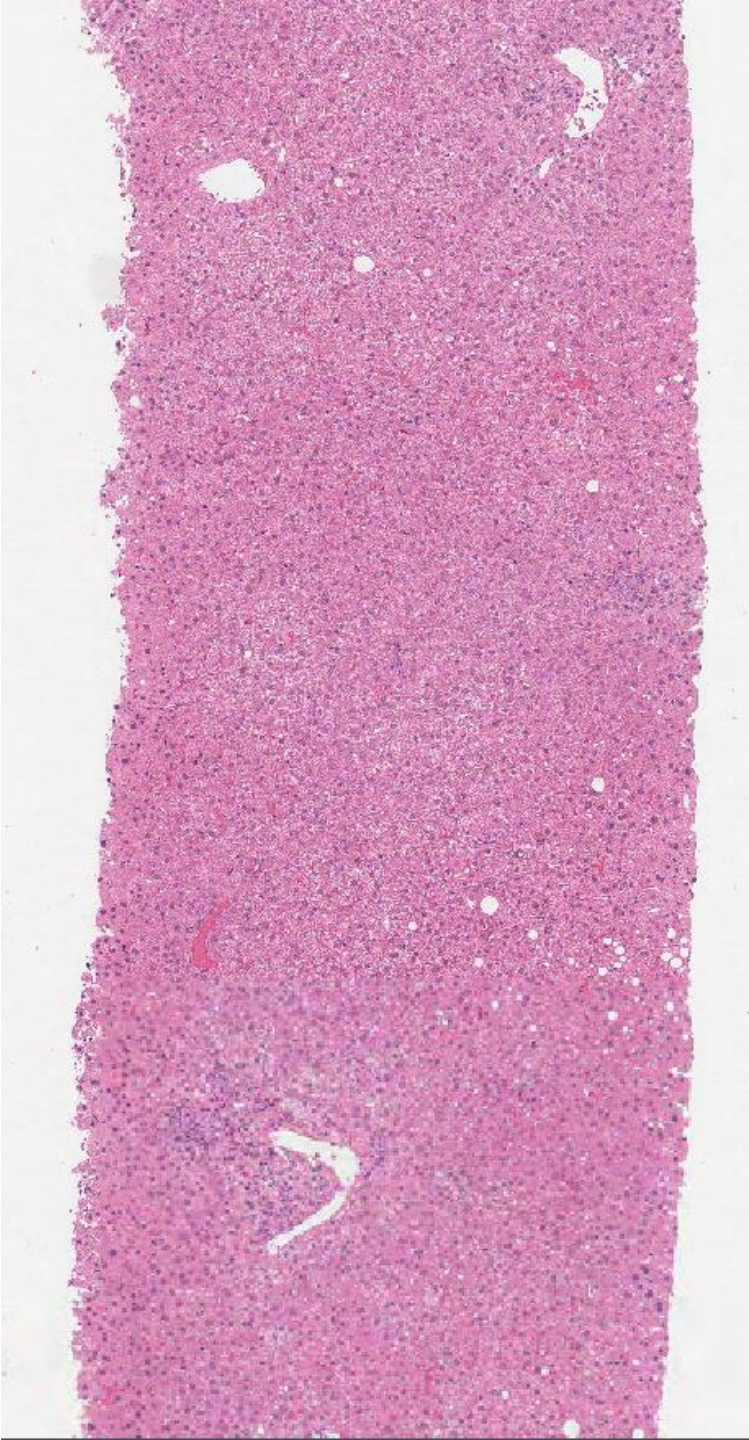
Surgical team working up for incisional hernia repair - but noted ongoing abnormal LFTs.

MRCP ?? PSC. Biopsy - ? NASH/?DILI or PSC.

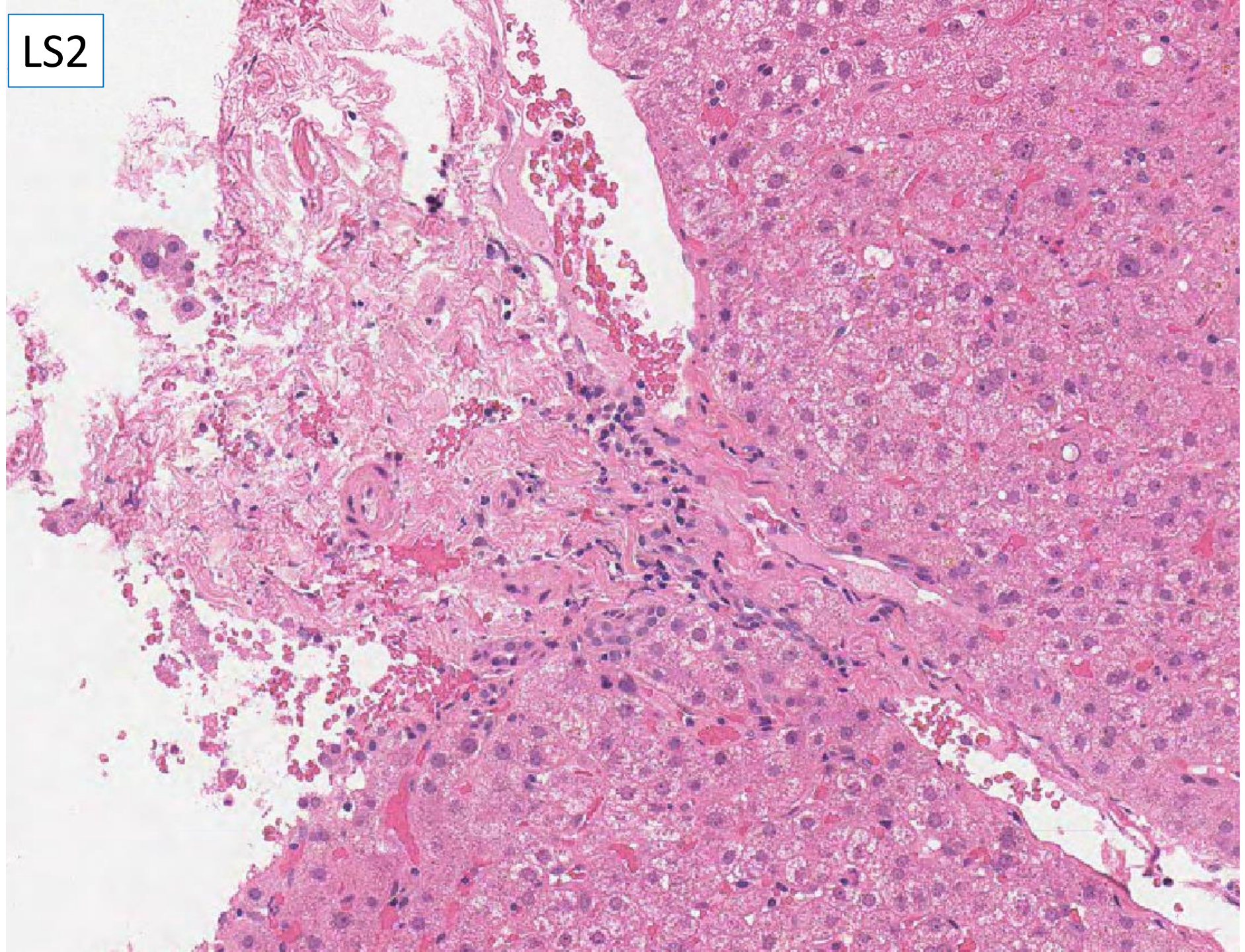
Also HVG, rhodanine



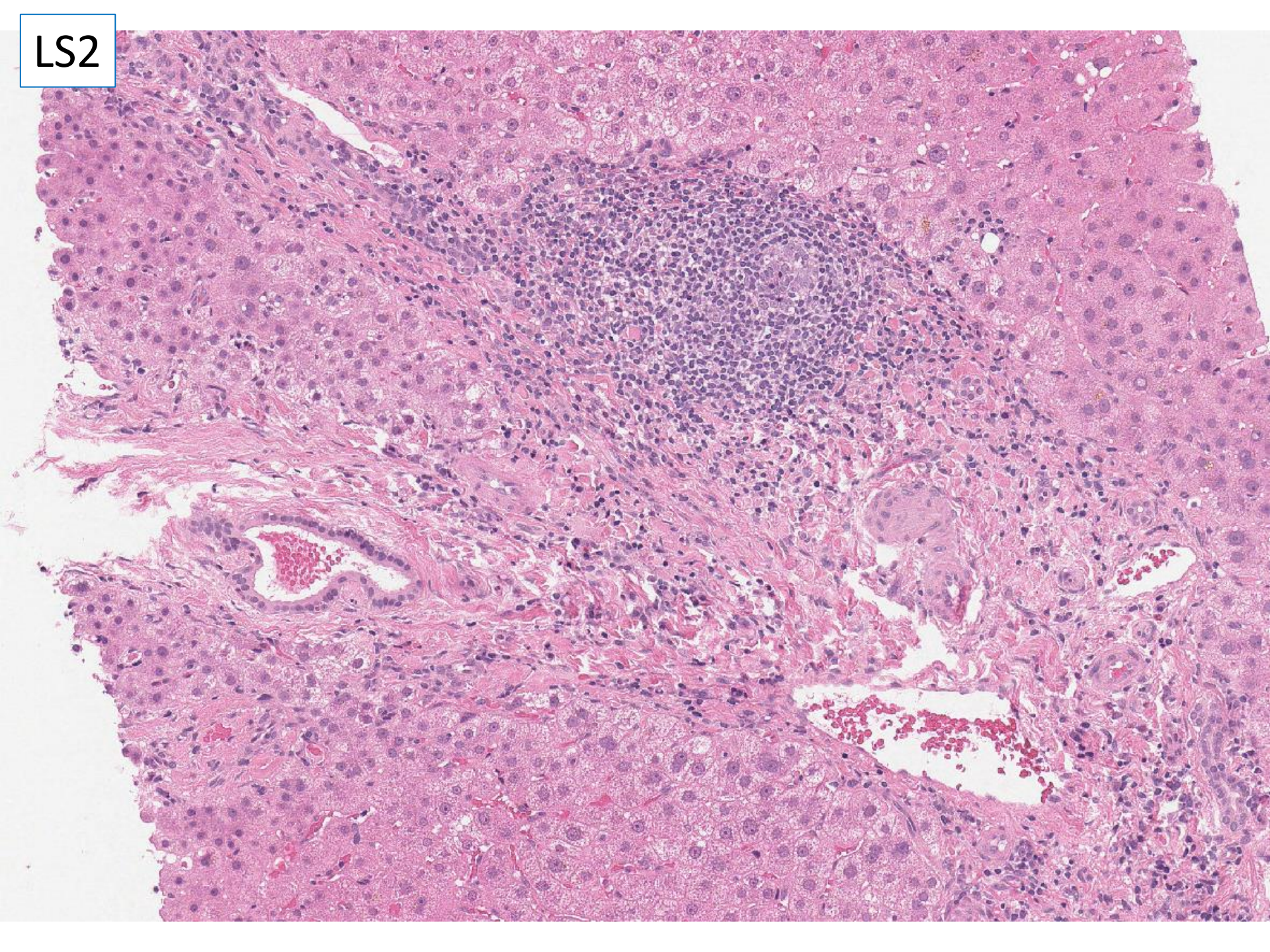
LS2



LS2

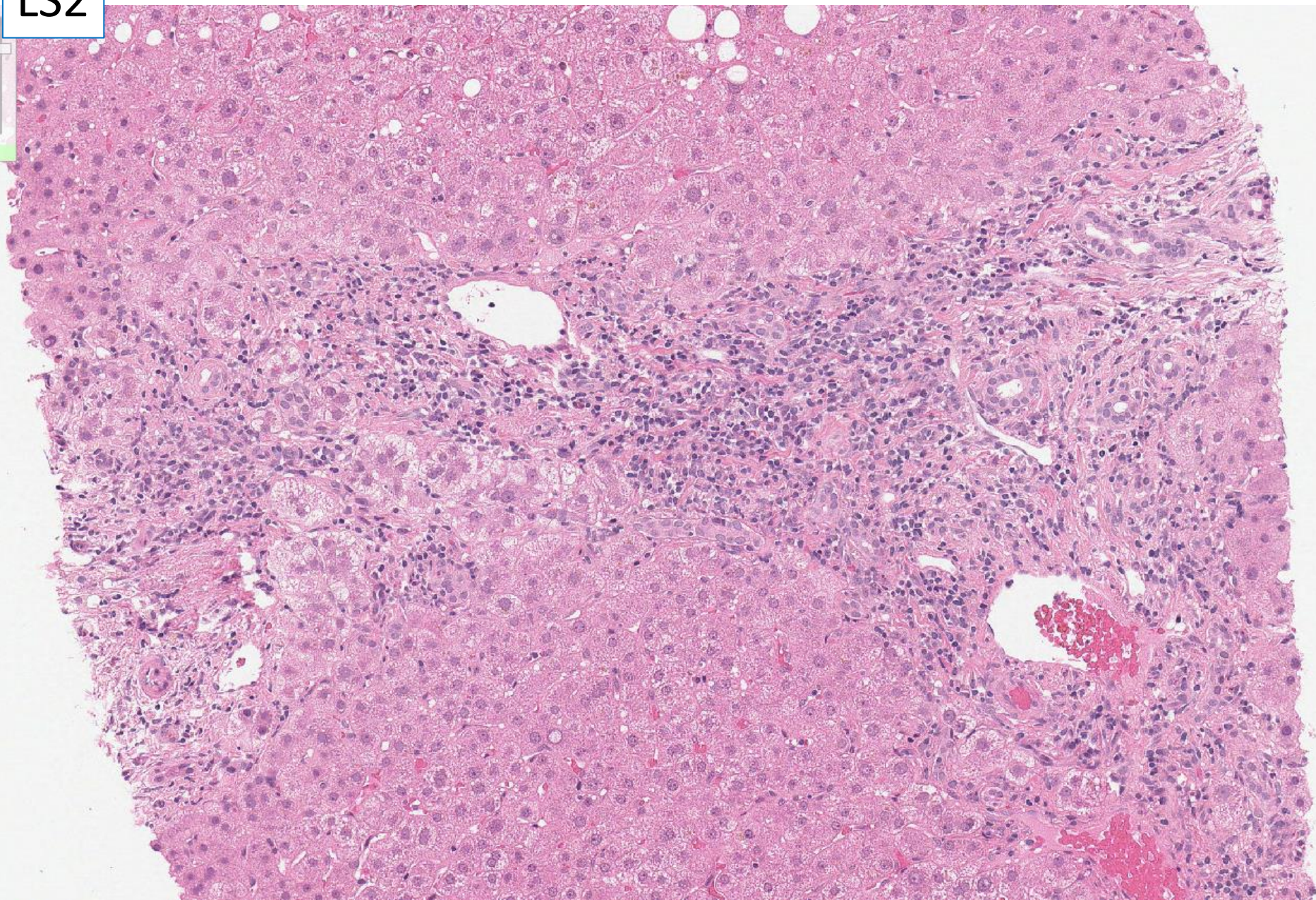


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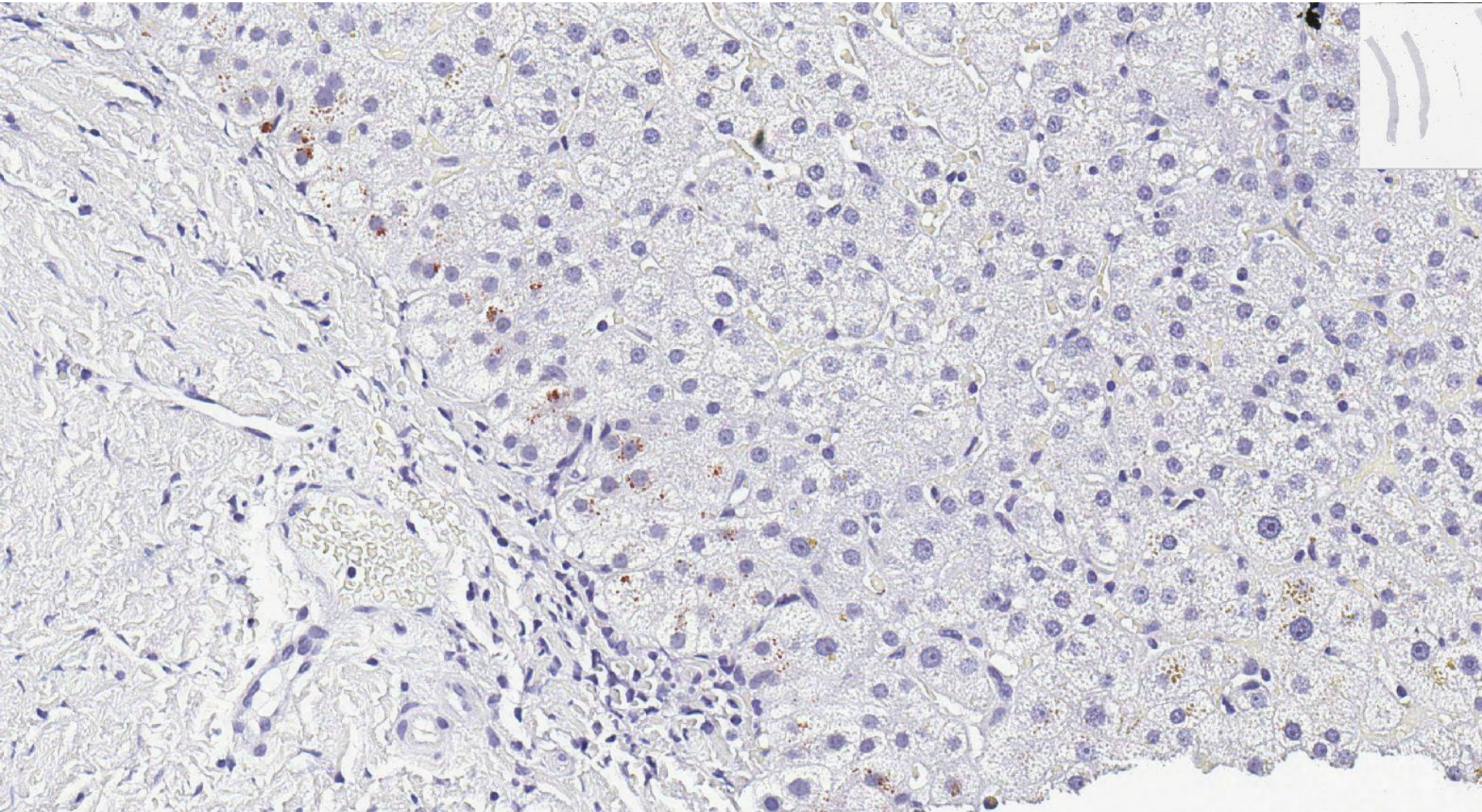


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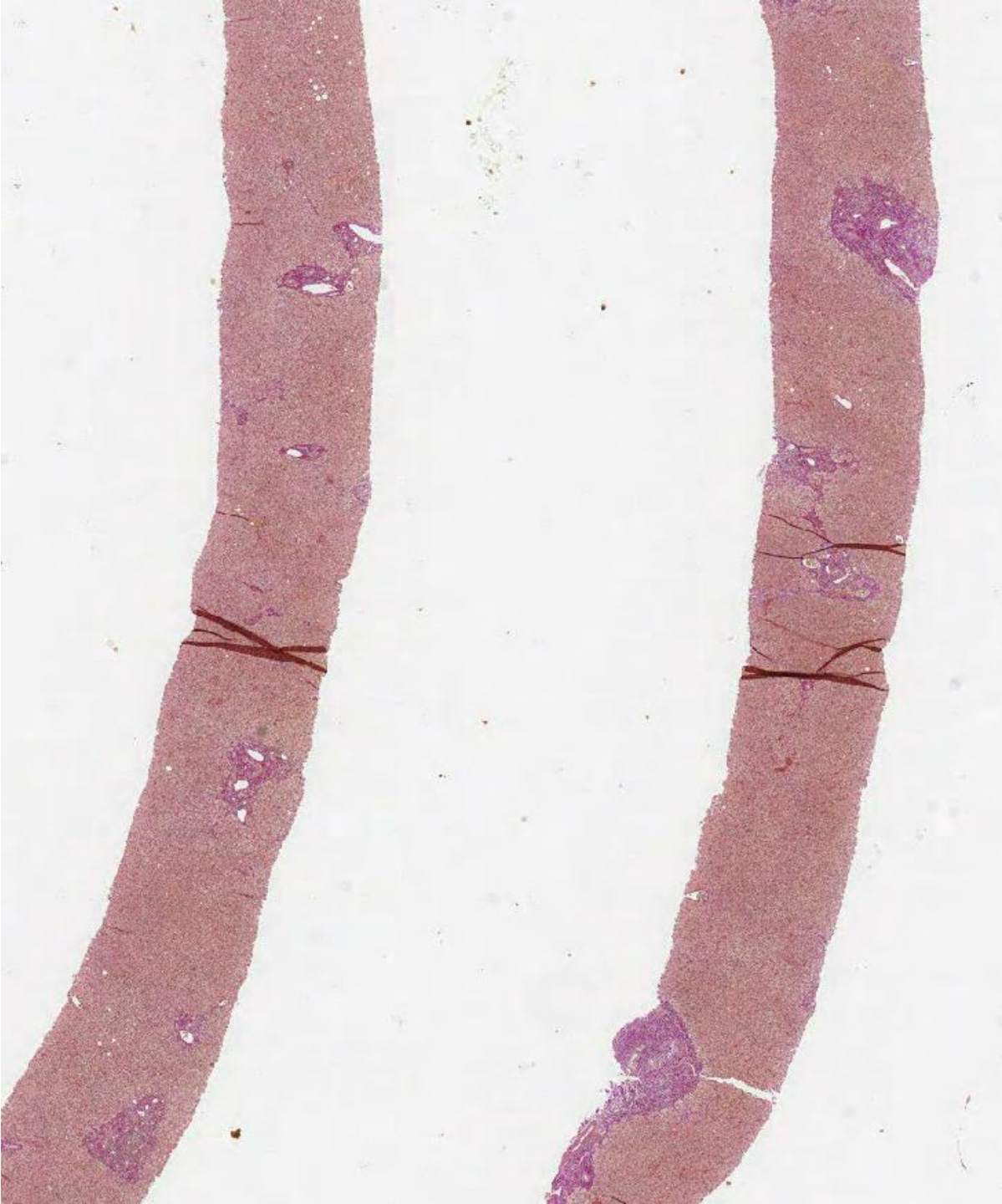
2X



LS2 rhodanine

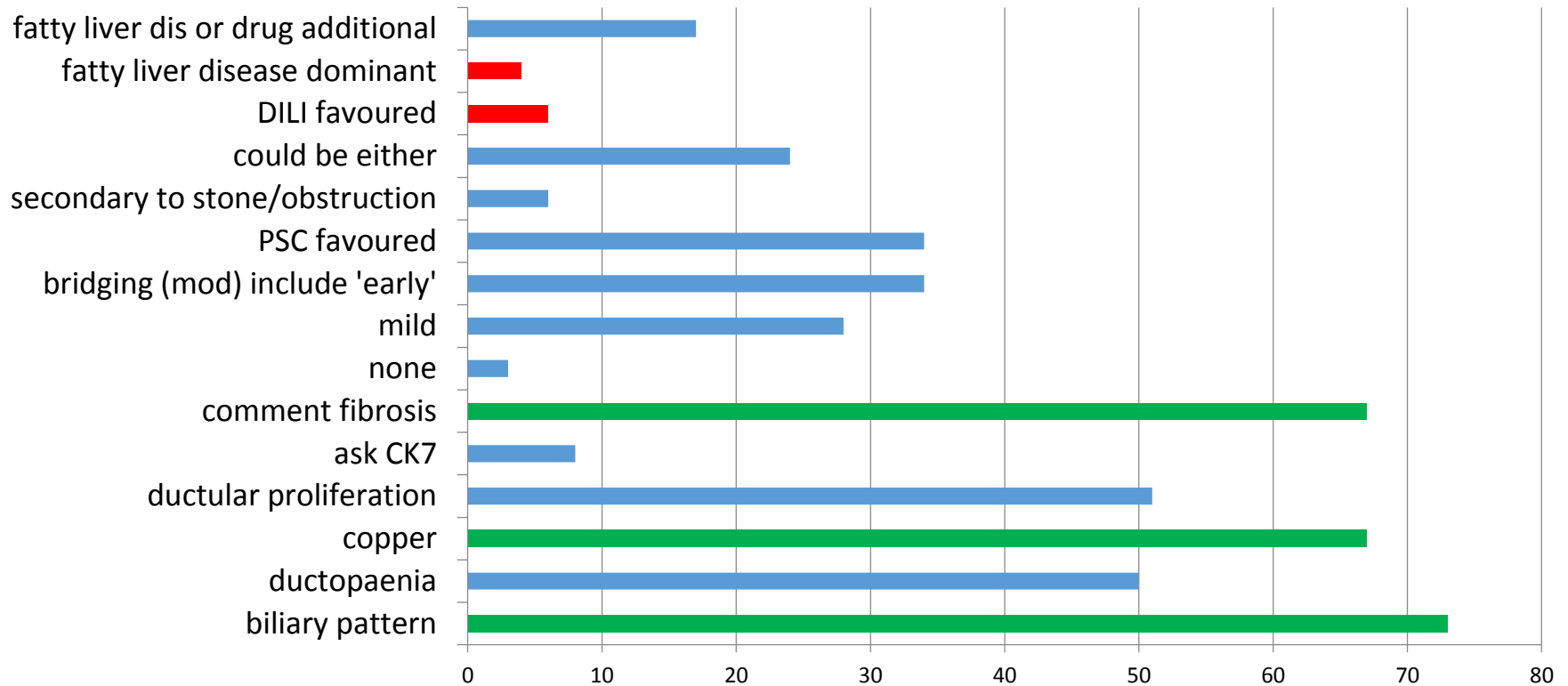


LS2



Case LS2 75M

Mixed picture of abnormal LFTs - on Sodium Valproate, risk factors for NAFLD (obesity, HBP and high cholesterol), also previous biliary issues with open cholecystectomy and CBD clearance for stones. MRCP ?? PSC. Biopsy - ? NASH/?DILI or PSC. Also HVG, rhodanine



Consensus complete responses would include description of biliary pattern in broad terms or 'cholangiopathy' as dominant or significant process (73, some do include a DD see below), and comment on fibrosis (67, right on borderline).
67 described presence of copper.

LS2

Consensus complete responses would include description of biliary pattern in broad terms or 'cholangiopathy' as dominant or significant process (73, some do include a DD see below), and comment on fibrosis (67, right on borderline).

67 described presence of copper.

Those favouring either PSC (33) or large duct obstruction 'secondary' (6) or said it could be either of these (24) combined = 63, short of EQA consensus but is majority view on most likely aetiologies.

Suggested scoring: for 10 points

Biliary disease and comment on fibrosis

? Lose 5 marks if no comment fibrosis (HVG provided) agreed

? lose 5 marks if don't mention presence of copper discussion 1.11.18 no, people may have used this as part of their assessment without specifically describing it

? **Lose 5 marks** as currently collated any response with biliary conditions as a significant differential have been included as 'biliary pattern' 3 examples (currently not included in totals) might be scored as 5 where other differentials clearly given more weight?

- Sodium Valproate can cause this and must be considered. PSC should be considered if autoantibodies are raised. There are no features of fatty liver disease here.
- Not diagnostic. No features of NAFLD, valproate or PSC. Could be related to biliary stones.
- Drug-induced aetiology is favoured; however, post-obstructive change is possible. Correlate with clinical history, virology and serology.

Other responses included in totals do include differentials or mention possible additional diseases (17 with DILI or NAFLD as possible additional diagnoses) some not that different to the above so should probably allow any response with biliary as DD, becomes very subjective

– agreed 1.11.18 any response with biliary included would not lose points

Lose 10 marks (score 0) if DILI or fatty liver disease as favoured diagnosis without any mention of a biliary differential diagnosis(7) agreed 1.11.18 where no mention of biliary

Case LS2 75M

Mixed picture of abnormal LFTs - on Sodium Valproate, risk factors for NAFLD (obesity, HBP and high cholesterol), also previous biliary issues with open cholecystectomy and CBD clearance for stones.

Surgical team working up for incisional hernia repair - but noted ongoing abnormal LFTs.

MRCP ?? PSC. Biopsy - ? NASH/?DILI or PSC.

Also HVG, rhodanine

Scoring summary agreed at meeting:

For full marks – some indication that this is a biliary pattern of disease, and a comment on fibrosis. There was variation in descriptions; responses with biliary disease mentioned anywhere were accepted.

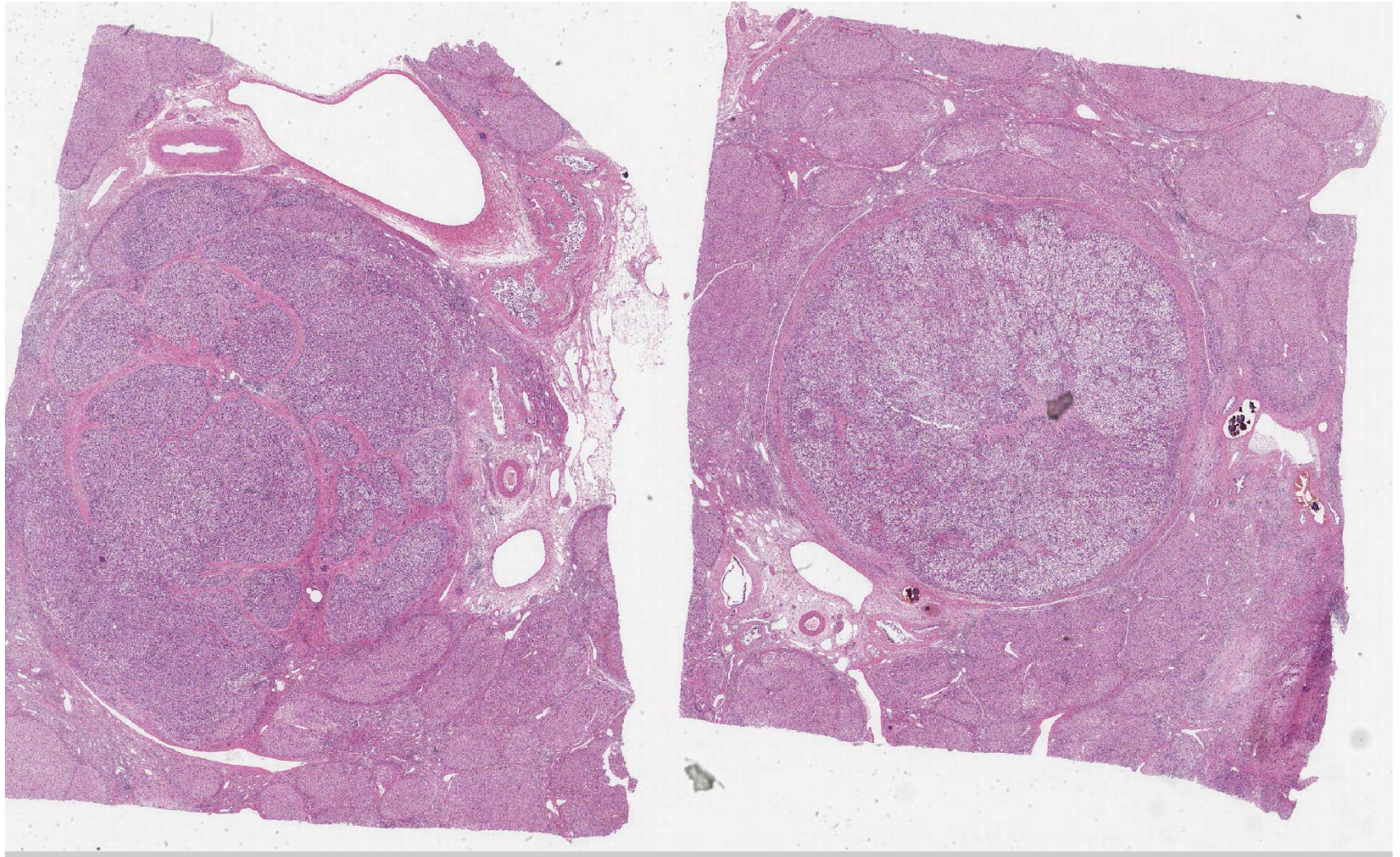
Lose 5 marks – no comment on fibrosis, unless clearly chronic cholestatic disease,

Since this was on the borderline, 'Chronic cholestatic disease' taken to imply chronic disease, so additional comment specifically on fibrosis not essential.

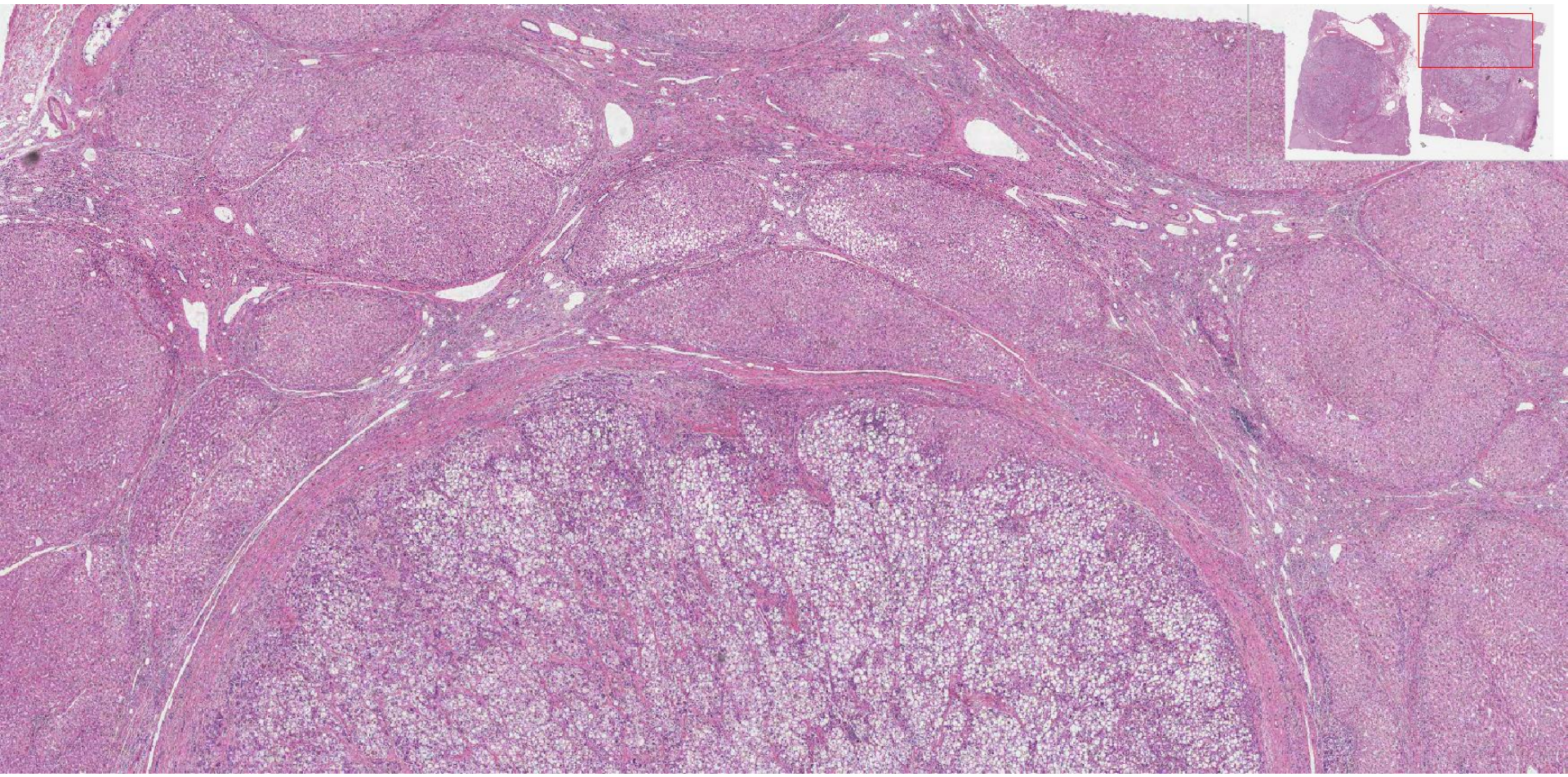
Lose 10 marks – a differential diagnosis not including biliary disease.

Case LS3 53M

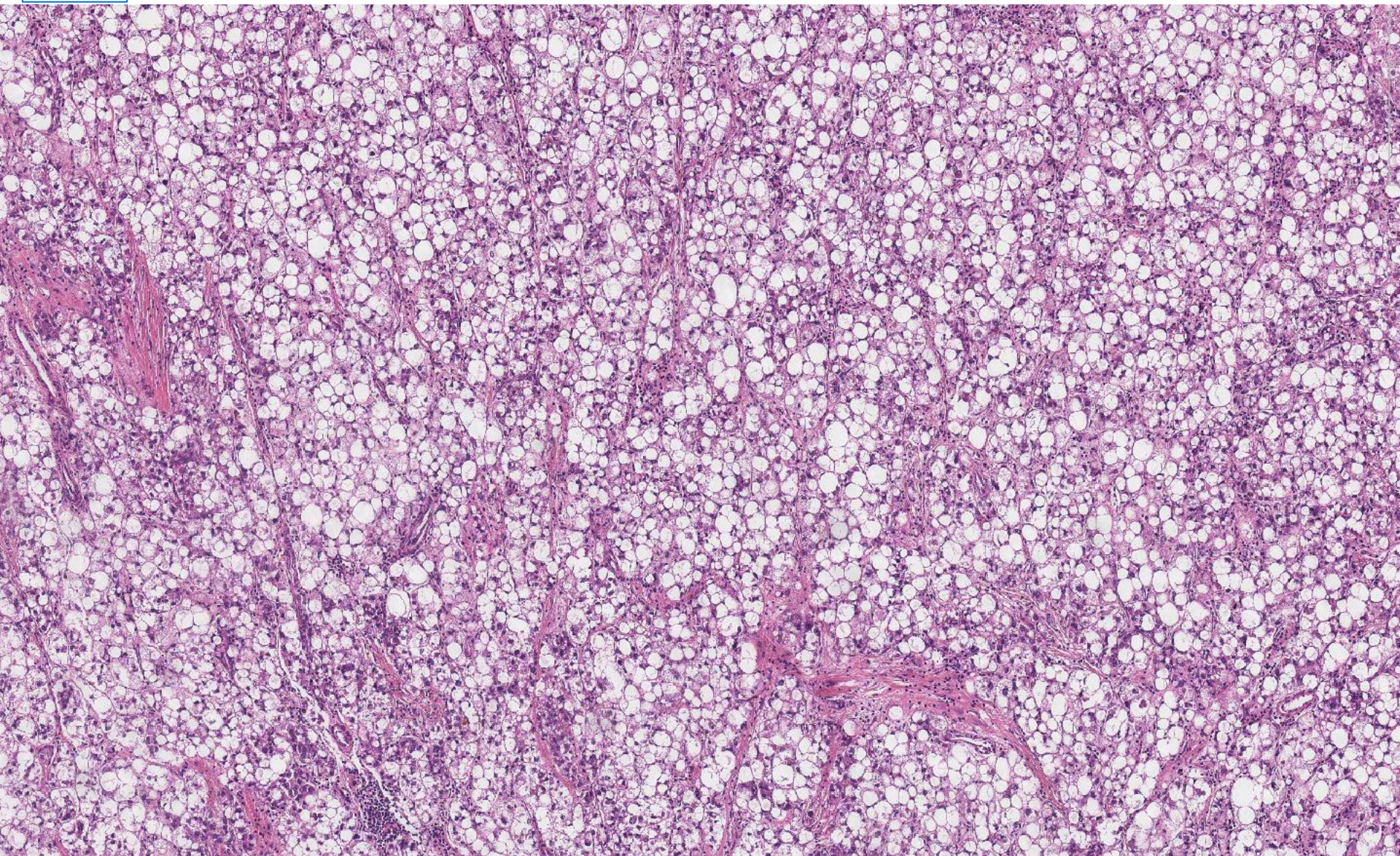
HCC on background of treated HCV. No additional stains



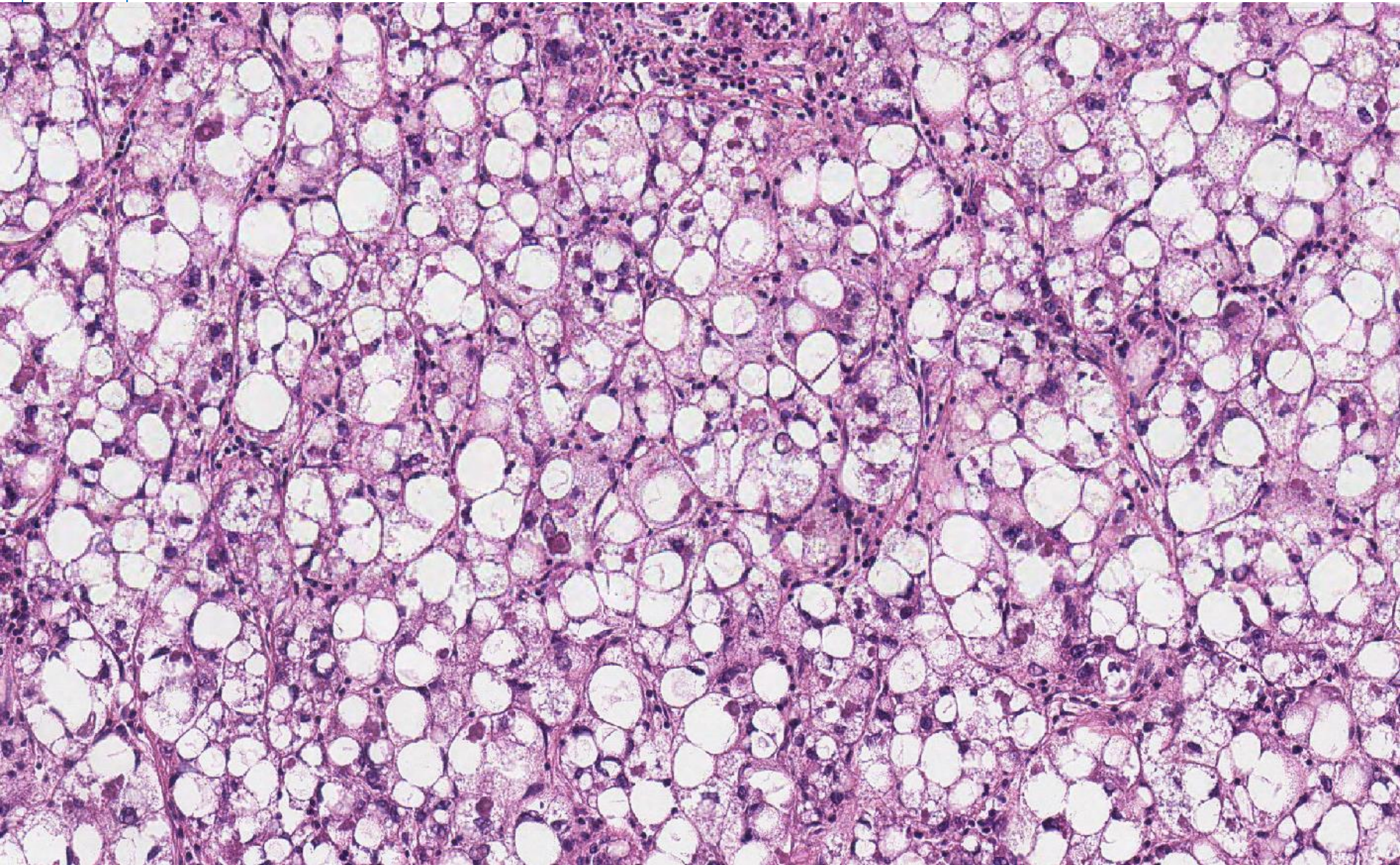
LS3



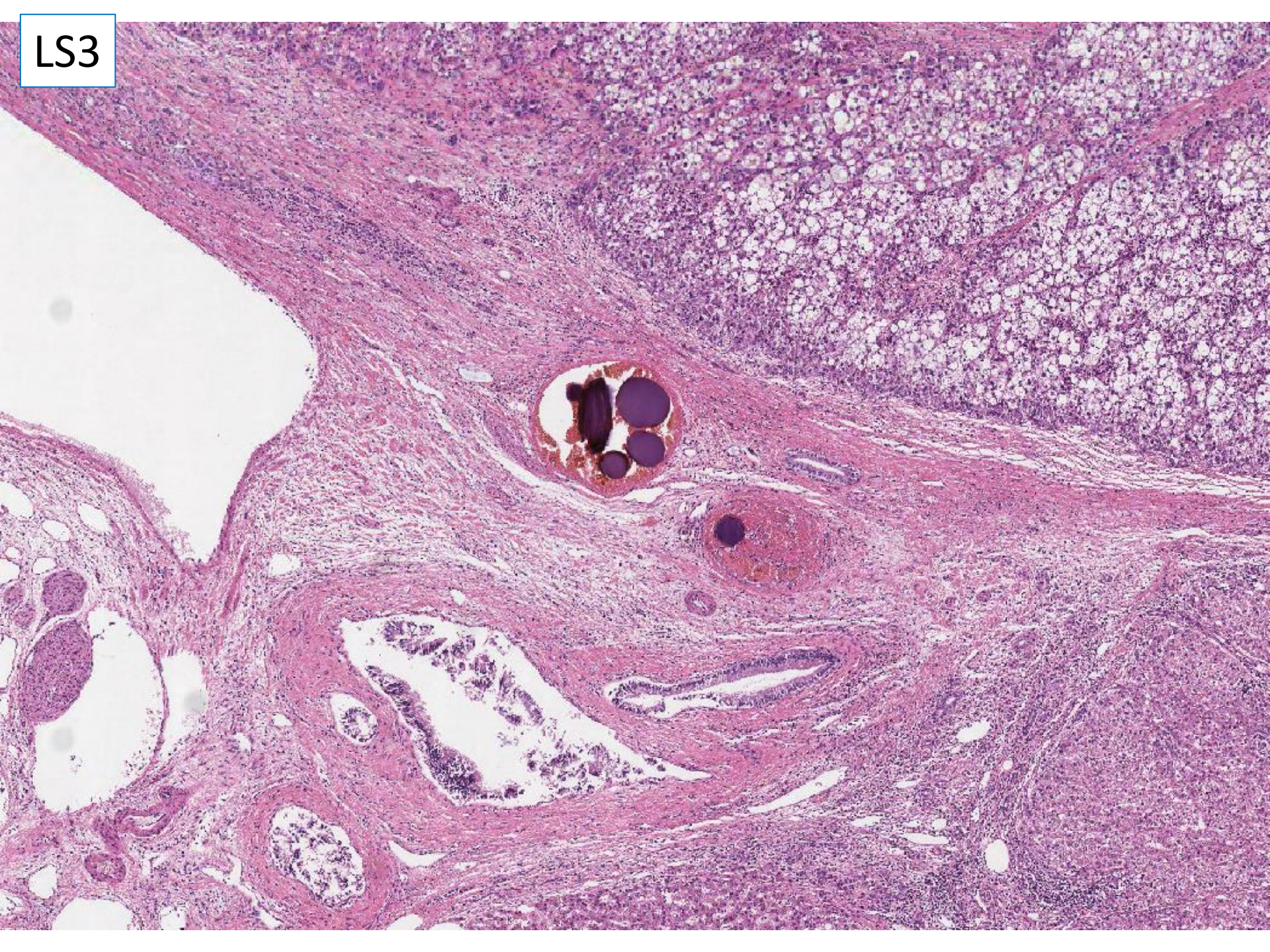
LS3



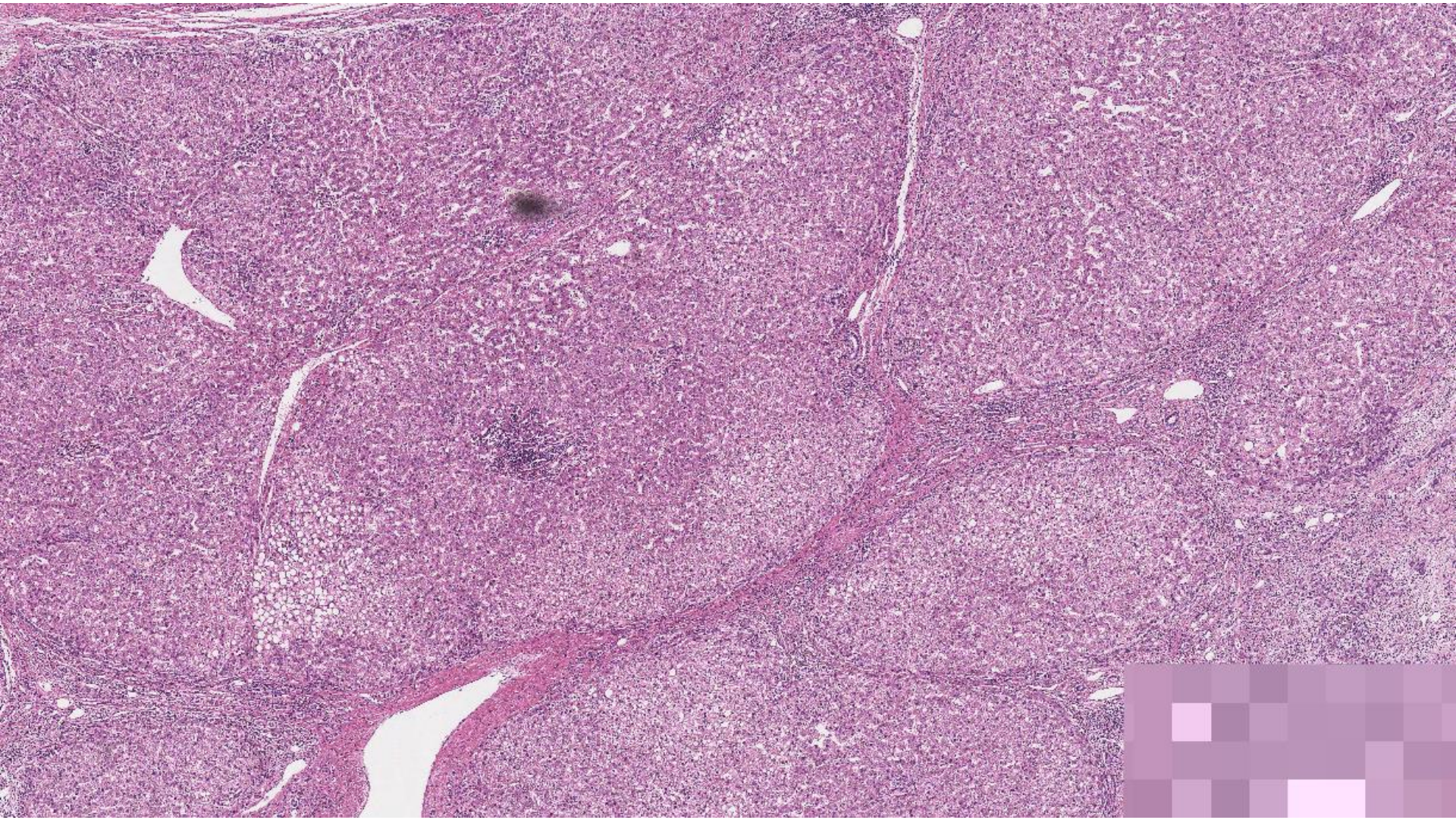
LS3



LS3

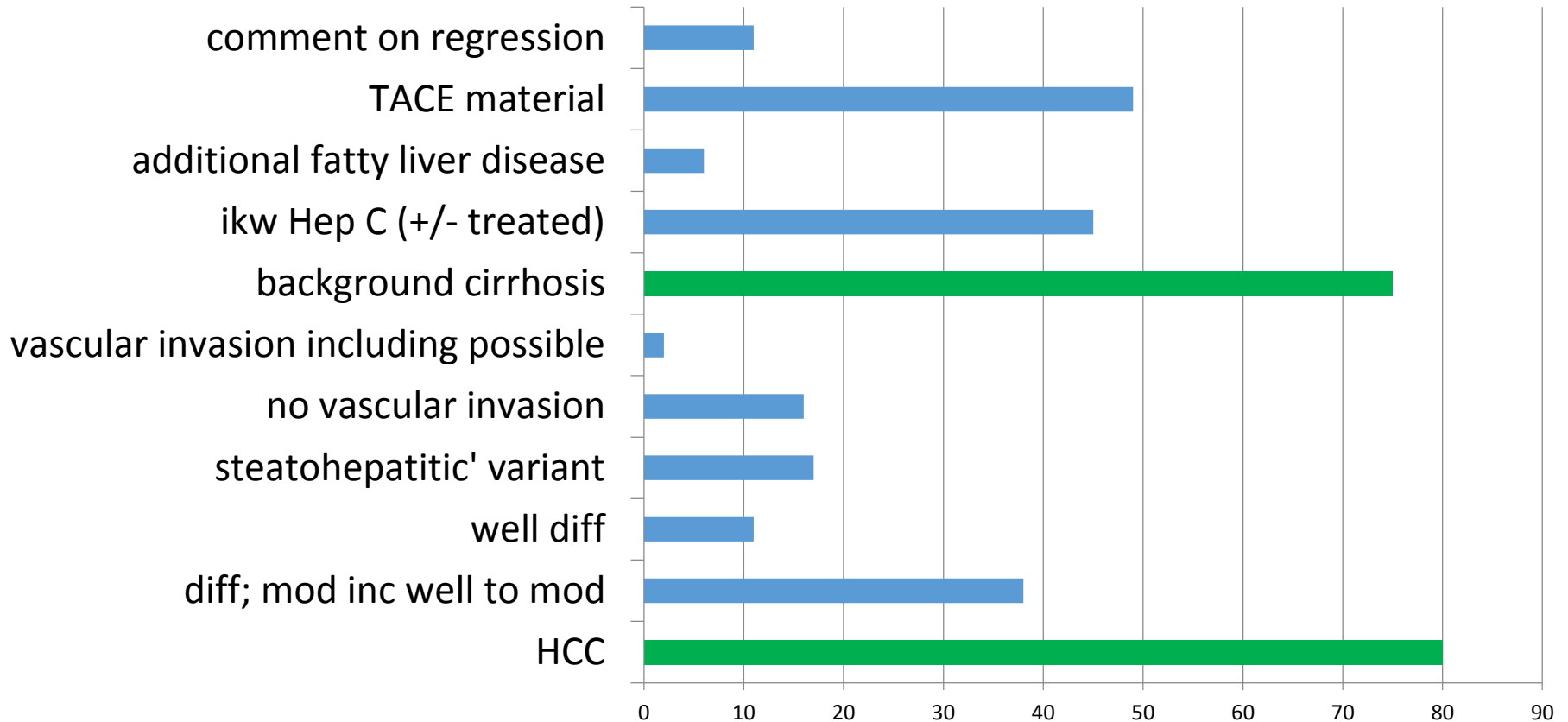


LS3



Case LS3 53M

HCC on background of treated HCV. No additional stains



Consensus complete responses would include

HCC (80) and cirrhosis (75). More than half commented on Hep C (often mentioning 'treated') and the presence of TACE material.

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HCC (80) and cirrhosis (75). More than half commented on Hep C (often mentioning 'treated') and the presence of TACE material.

- **Suggested scoring: for 10 points** HCC and cirrhosis
- **? Lose 5 marks** if; DD offered with dysplastic nodule, immuno suggested agreed 1.11.18
- **? Lose 5 marks** if 'normal' background liver agreed
- **? Lose 5 marks** if 'HCC most likely' i.e not a definitive diagnosis of HCC agreed
- **? Lose 5 marks** if DD FNH, dysplastic nodule early HCC. Central scar described, just 'glutathione synthase' immuno mentioned agreed
- **Lose 10 marks (score 0) if** high grade dysplastic nodule as only diagnosis (1)

Case LS3 53M

HCC on background of treated HCV. No additional stains

Scoring summary agreed at meeting:

For full marks – definite diagnosis of HCC and comment on background liver cirrhosis

Lose 5 marks – not a definite diagnosis of HCC – ‘most likely’ or differential with dysplastic nodule with suggested stains

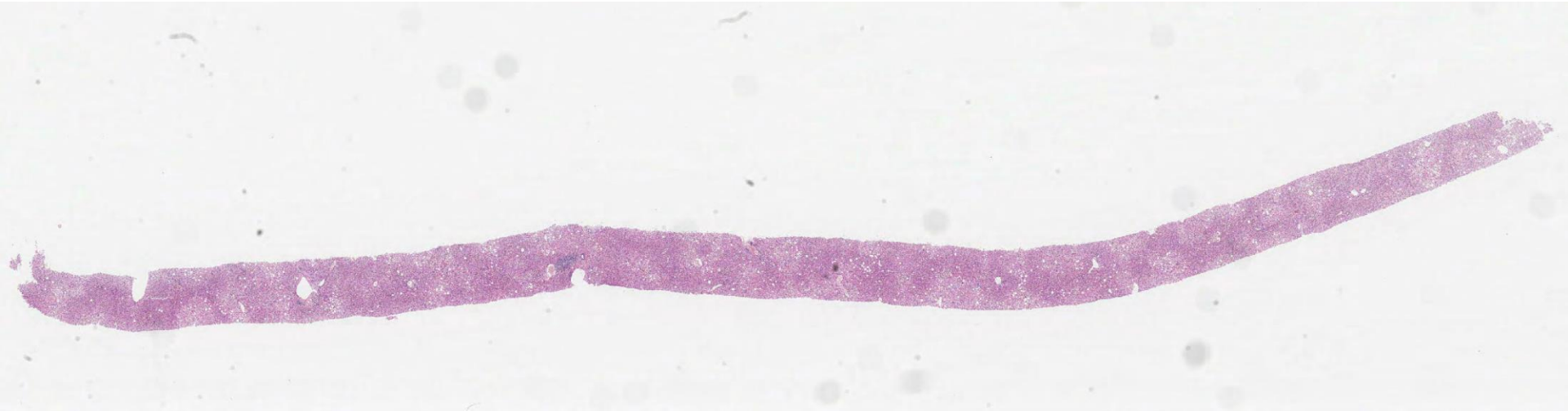
Lose 5 marks - background liver ‘normal’ or no comment on background liver

Lose 10 marks – unequivocal diagnosis of high grade dysplastic nodule

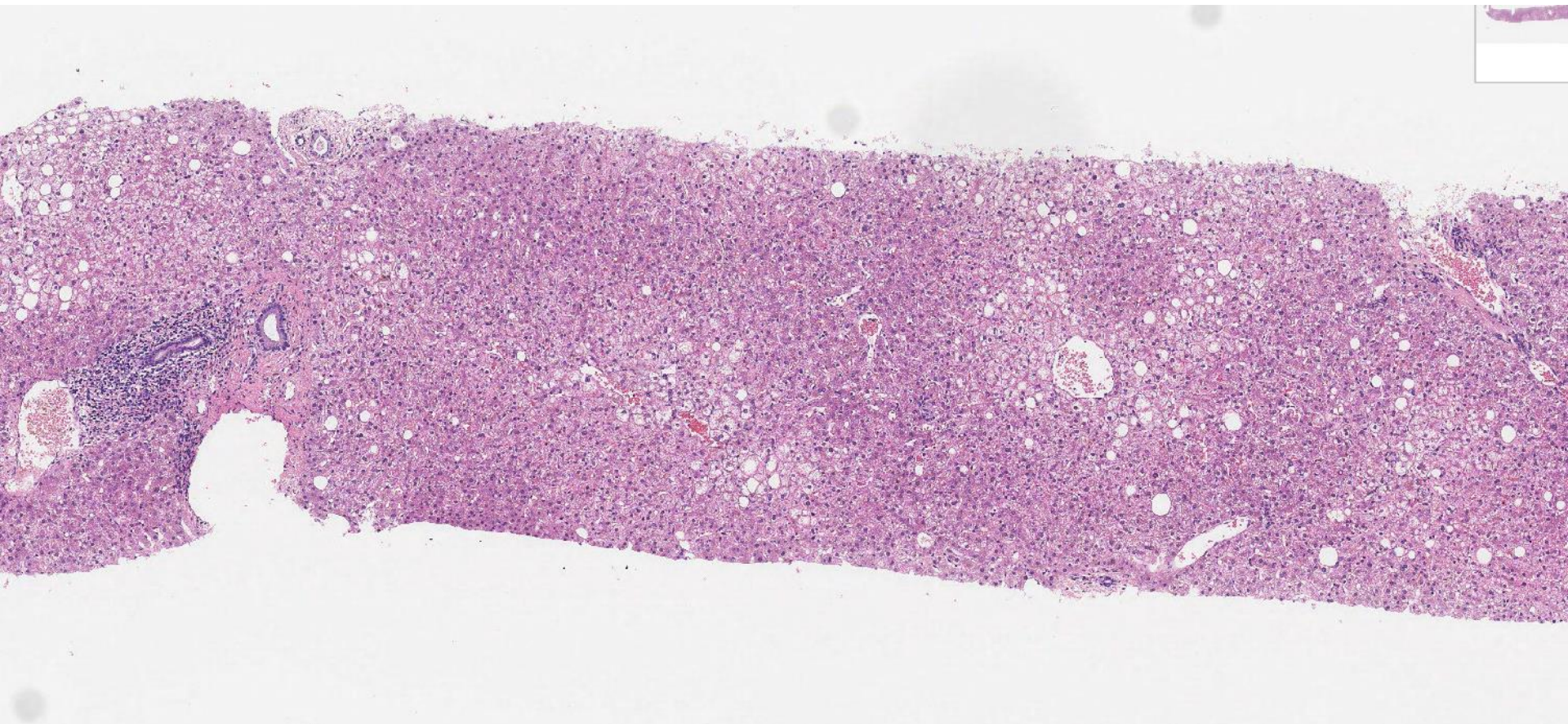
Case LS4 67M

methotrexate for psoriasis, fatty liver on US, elevated P3NP, fibroscan 6kPa. Risk factors for metabolic liver disease (BMI 32). ? methotrexate liver injury, ? hepatic fibrosis.

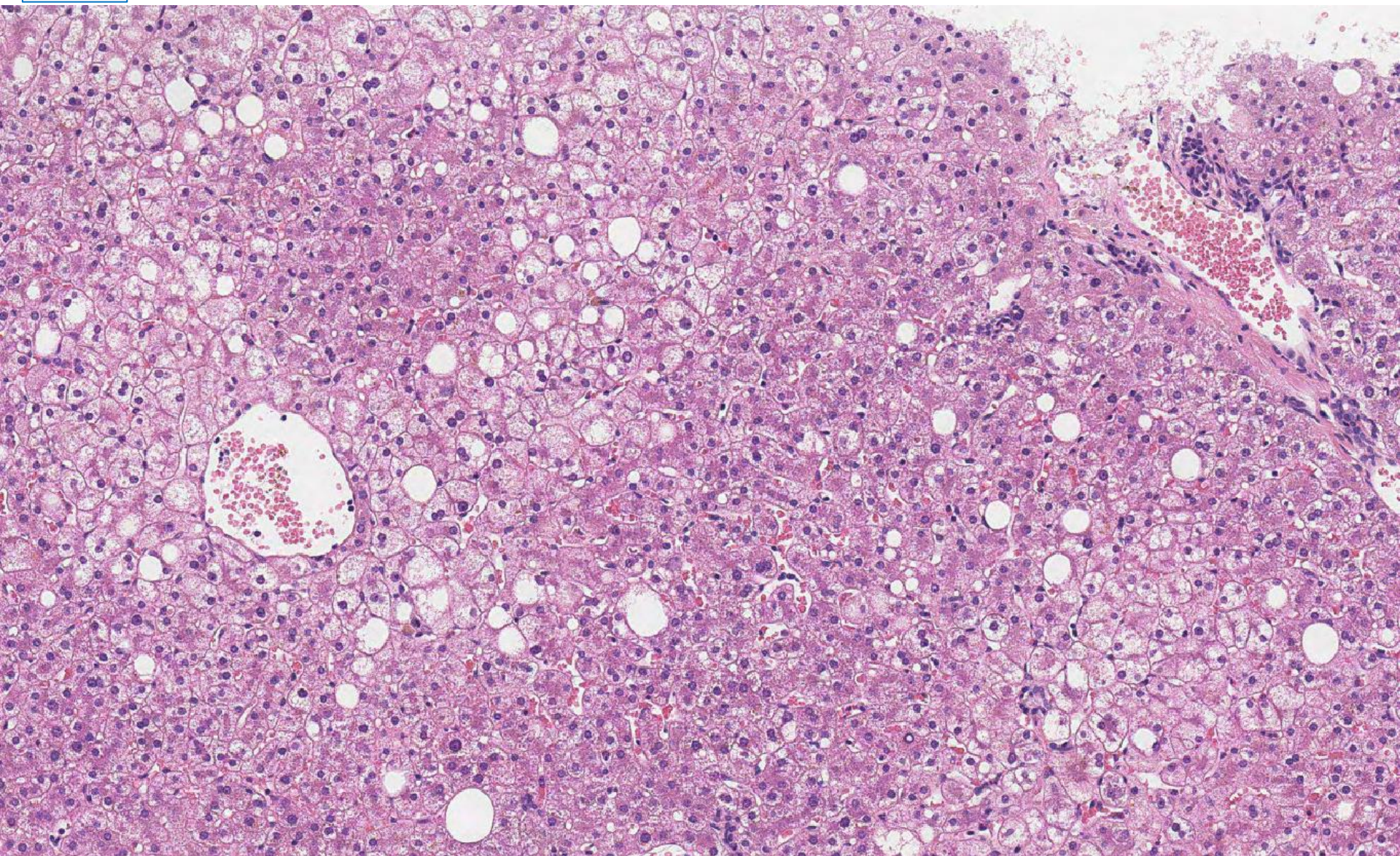
Also van Gieson, retic, Cam 5.2



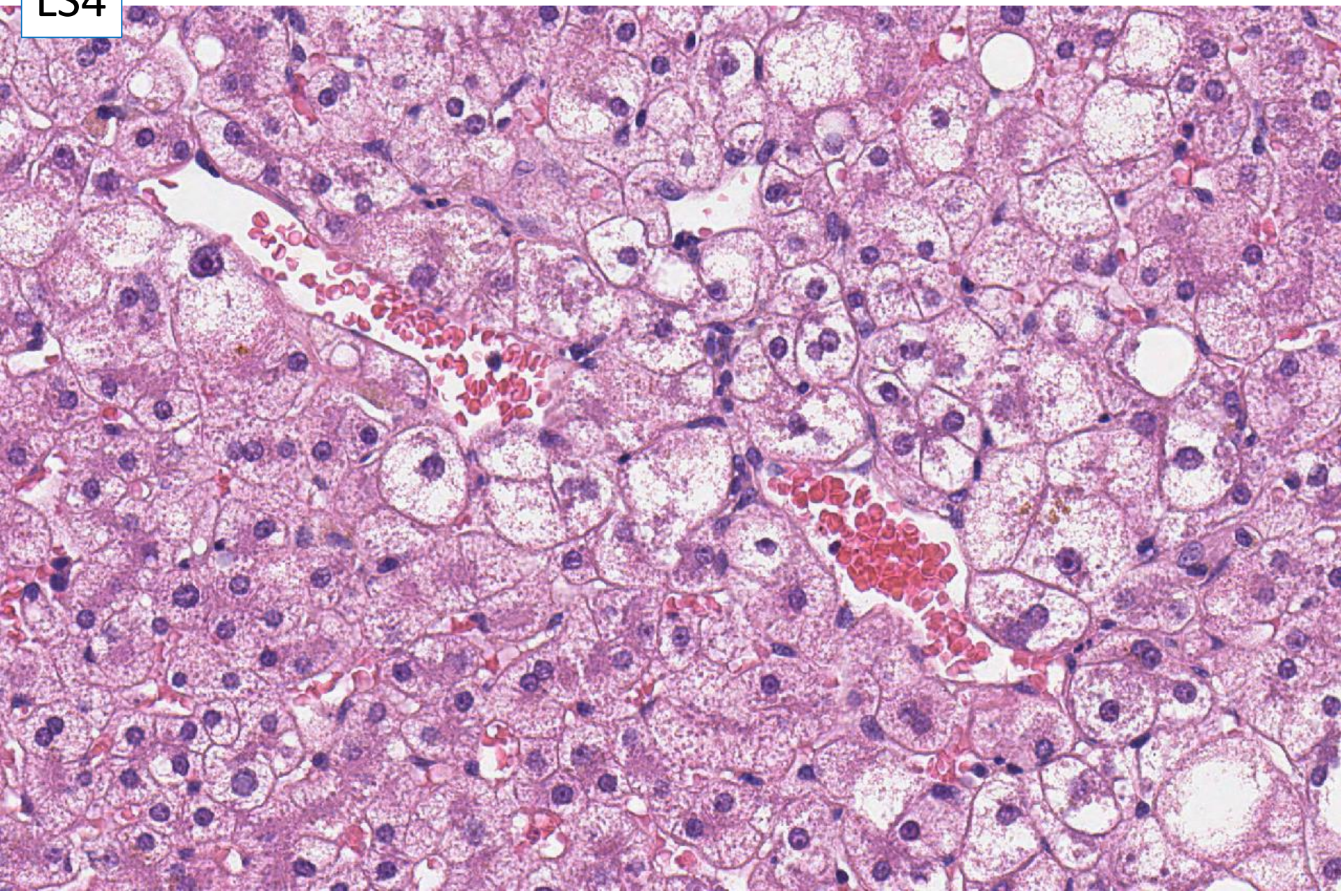
LS4

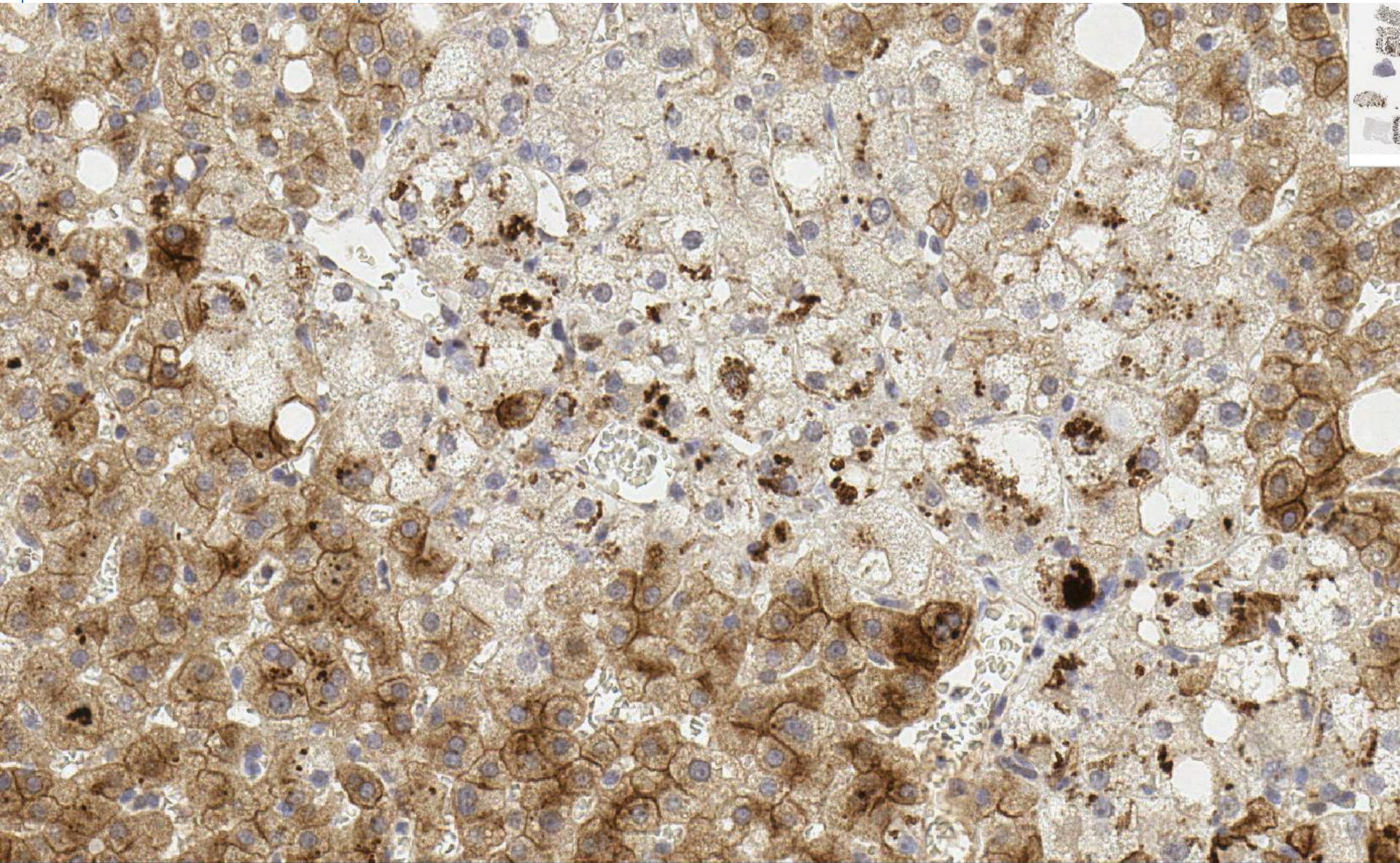


LS4

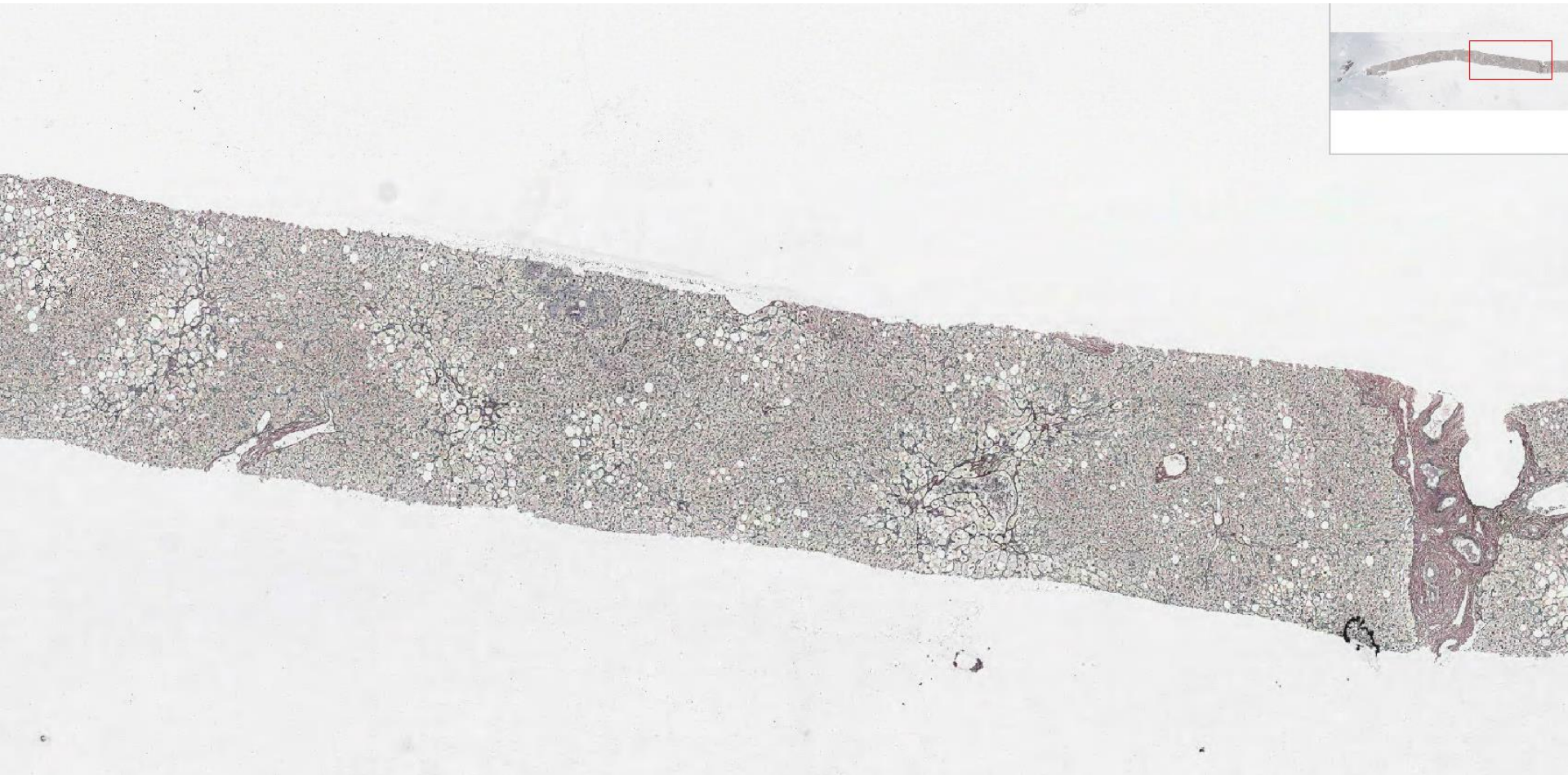


LS4





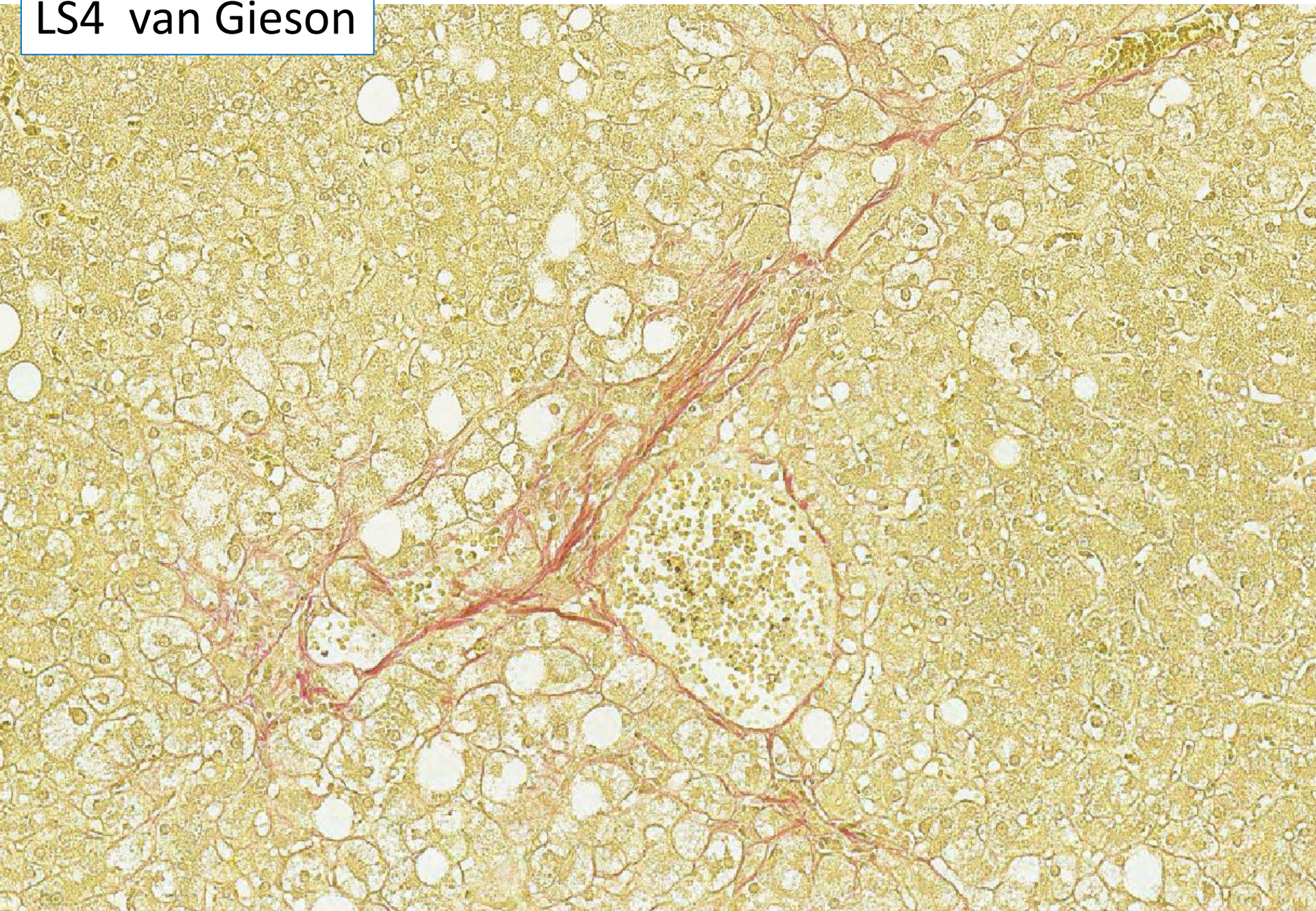
LS4 reticulin



LS4 van Gieson



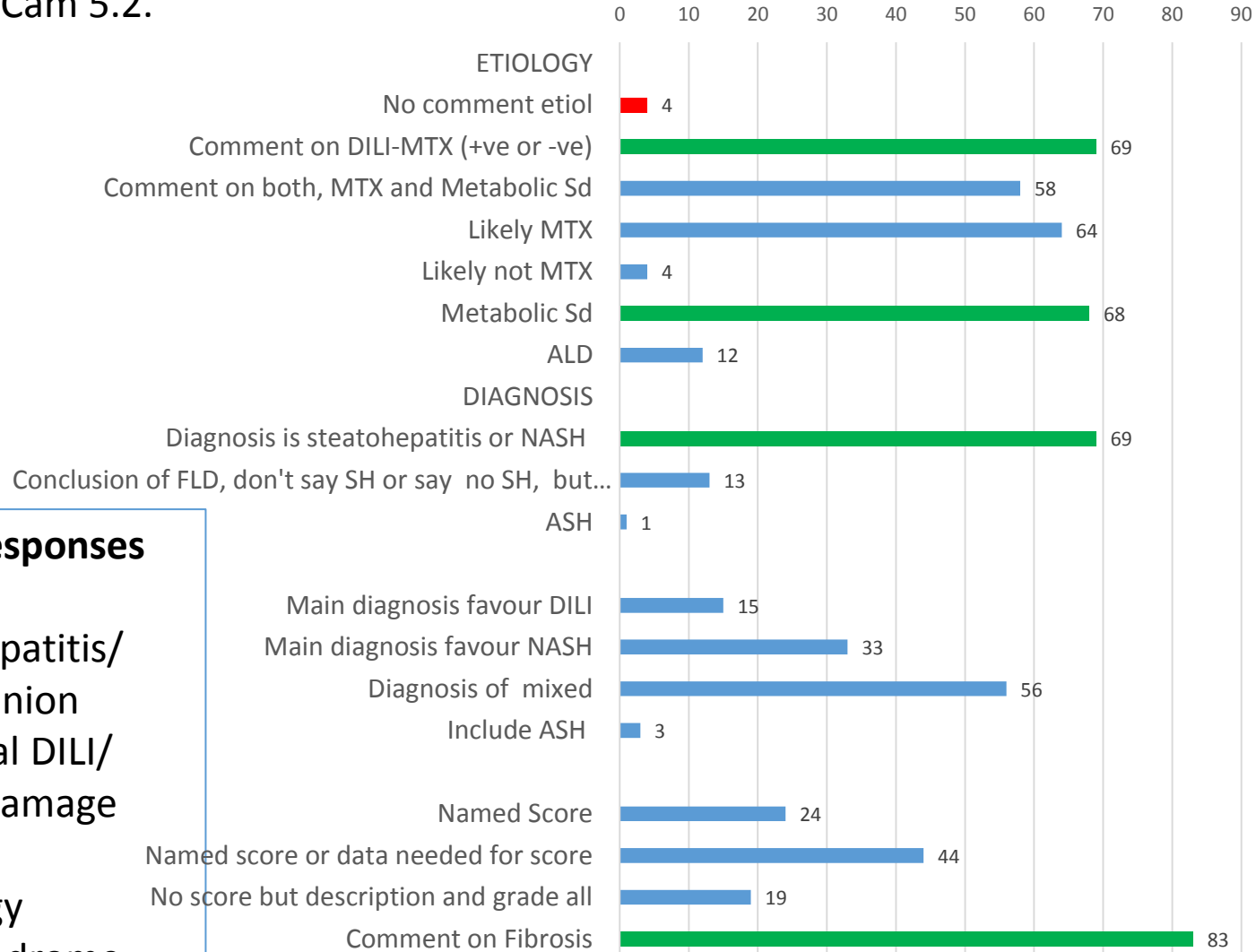
LS4 van Gieson



Case LS4 67 M

Methotrexate for psoriasis, fatty liver on US, elevated P3NP, fibroscan 6kPa. Risk factors for metabolic liver disease (BMI 32). ? methotrexate liver injury, ? hepatic fibrosis.

Also: van Gieson, retic, Cam 5.2.



Consensus complete responses would include:

- 1 Diagnosis of steatohepatitis/ NASH, as a majority opinion
- 2 Comment on potential DILI/ Methotrexate related damage
- 3 Comment on aetiology including Metabolic syndrome
- 4 Comment on fibrosis

Case LS4 67M

methotrexate for psoriasis, fatty liver on US, elevated P3NP, fibroscan 6kPa. Risk factors for metabolic liver disease (BMI 32). ? methotrexate liver injury, ? hepatic fibrosis.

Also van Gieson, retic, Cam 5.2

Scoring summary agreed at meeting:

For full marks need to include steatohepatitis, a comment on fibrosis and comment on both potential role of methotrexate and other risk factor (metabolic and/or alcohol)

Lose 5 marks for – no mention of methotrexate and/or no mention of other aetiology for fatty liver disease

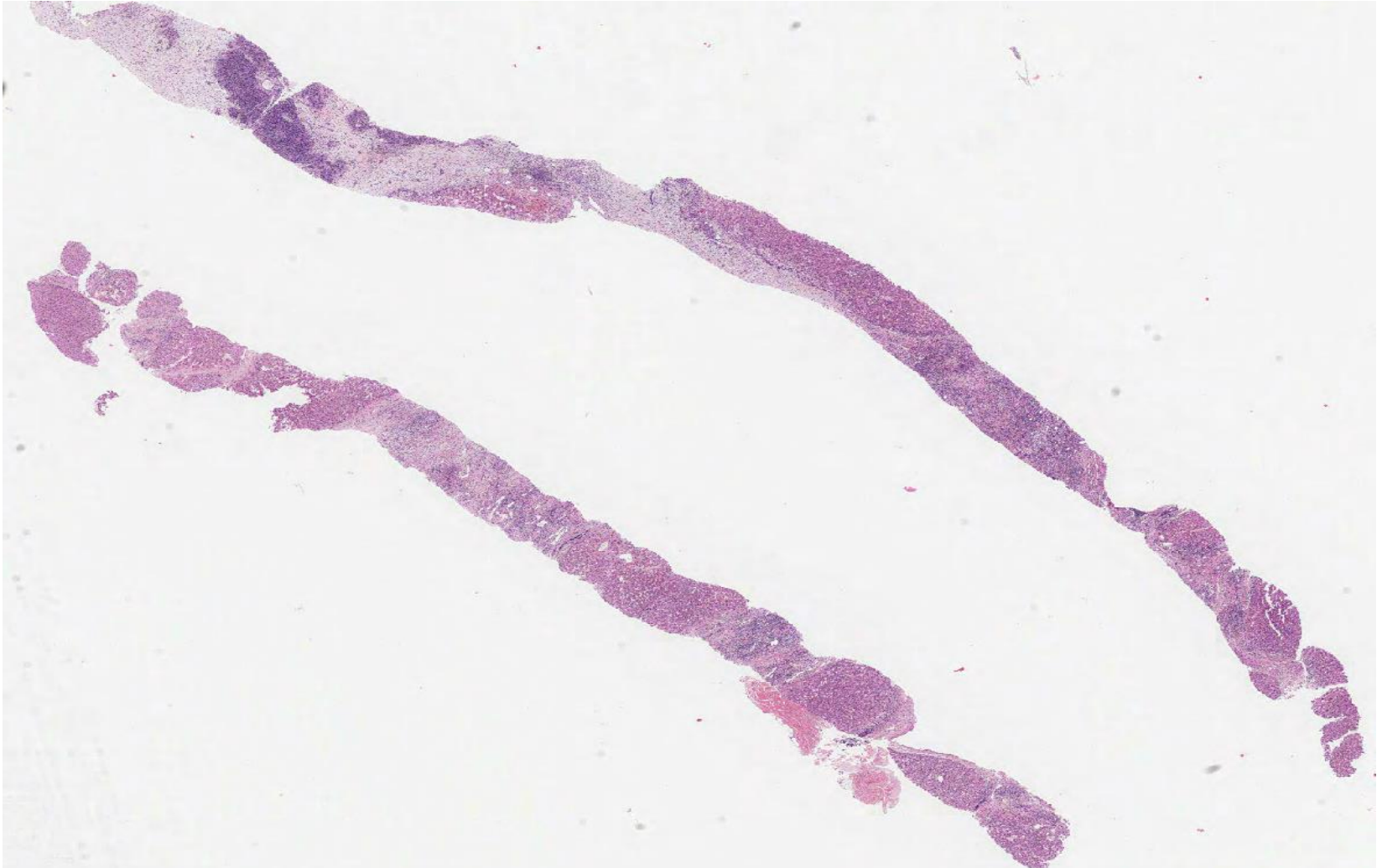
Lose 5 marks for responses which don't include 'steatohepatitis' since this was within consensus

Lose 10 marks for glycogenic hepatopathy, acute hepatitis due to MTX , or for responses with neither 'steatohepatitis' nor aetiology

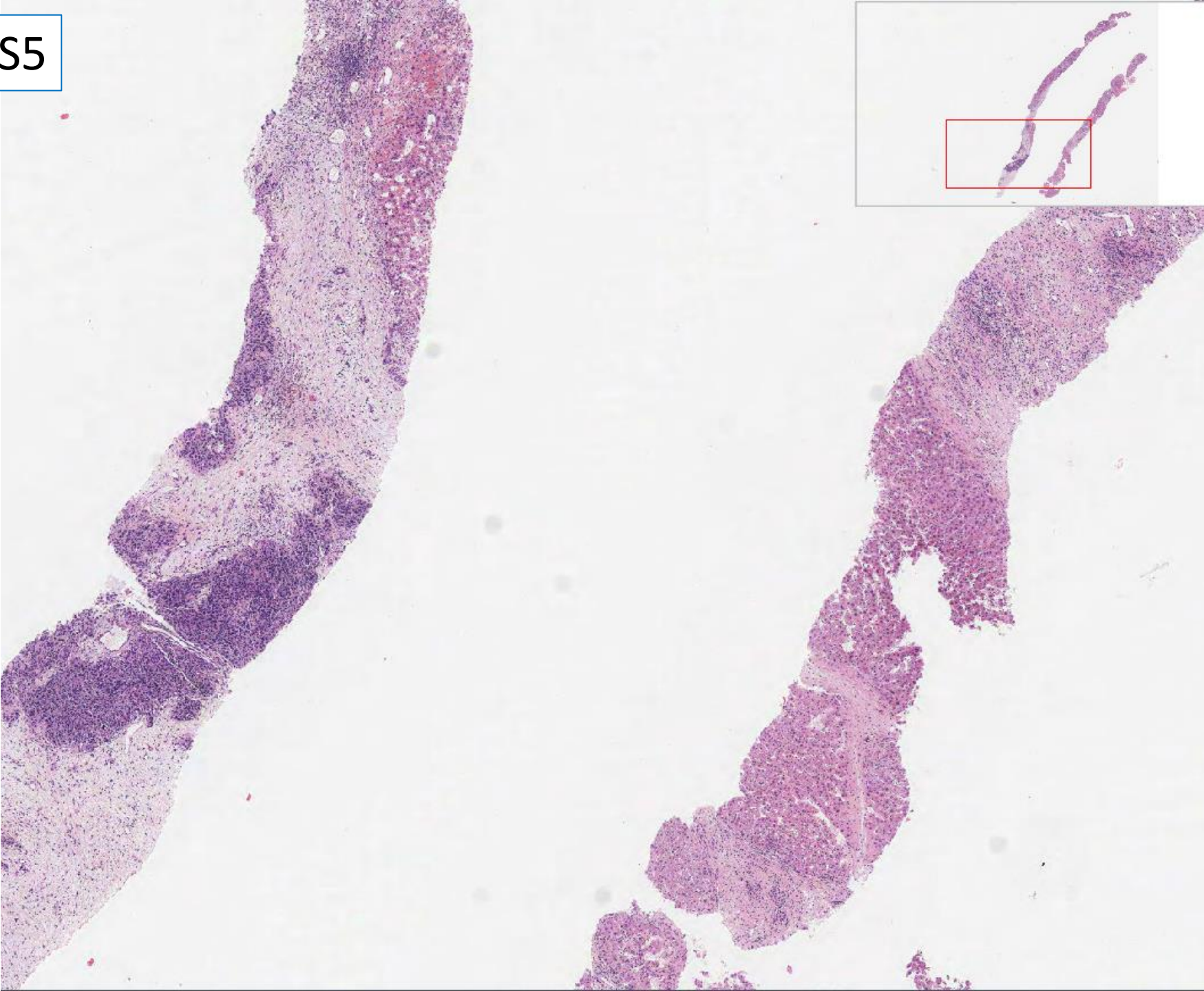
Case LS5 63M

MRI shows focal lesion.in segment 4 which has grown.
? HCC or cholangiocarcinoma. AFP not raised

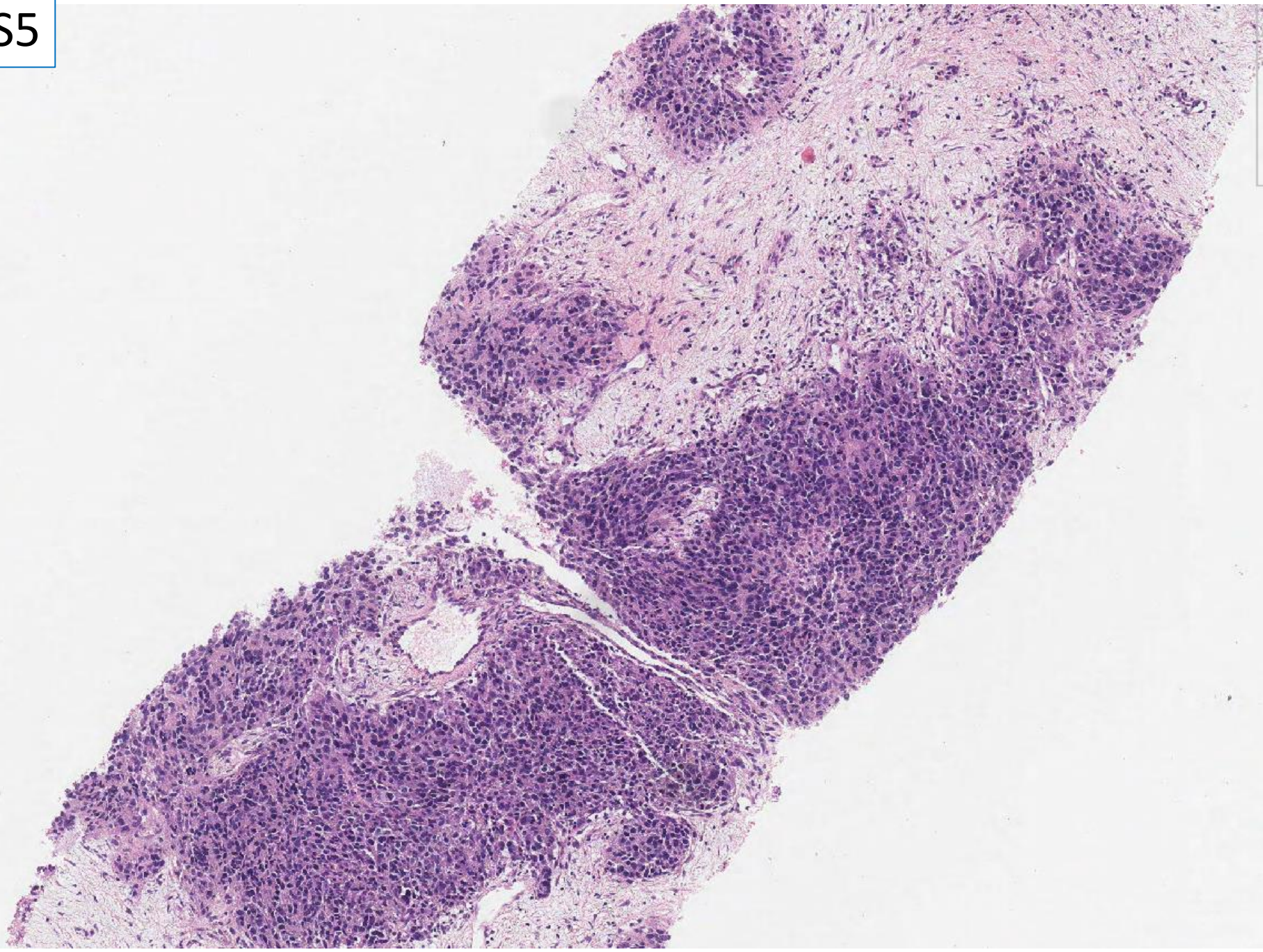
Targeted liver biopsy. Also HepPar1, AE1/AE3, CK19, CD34



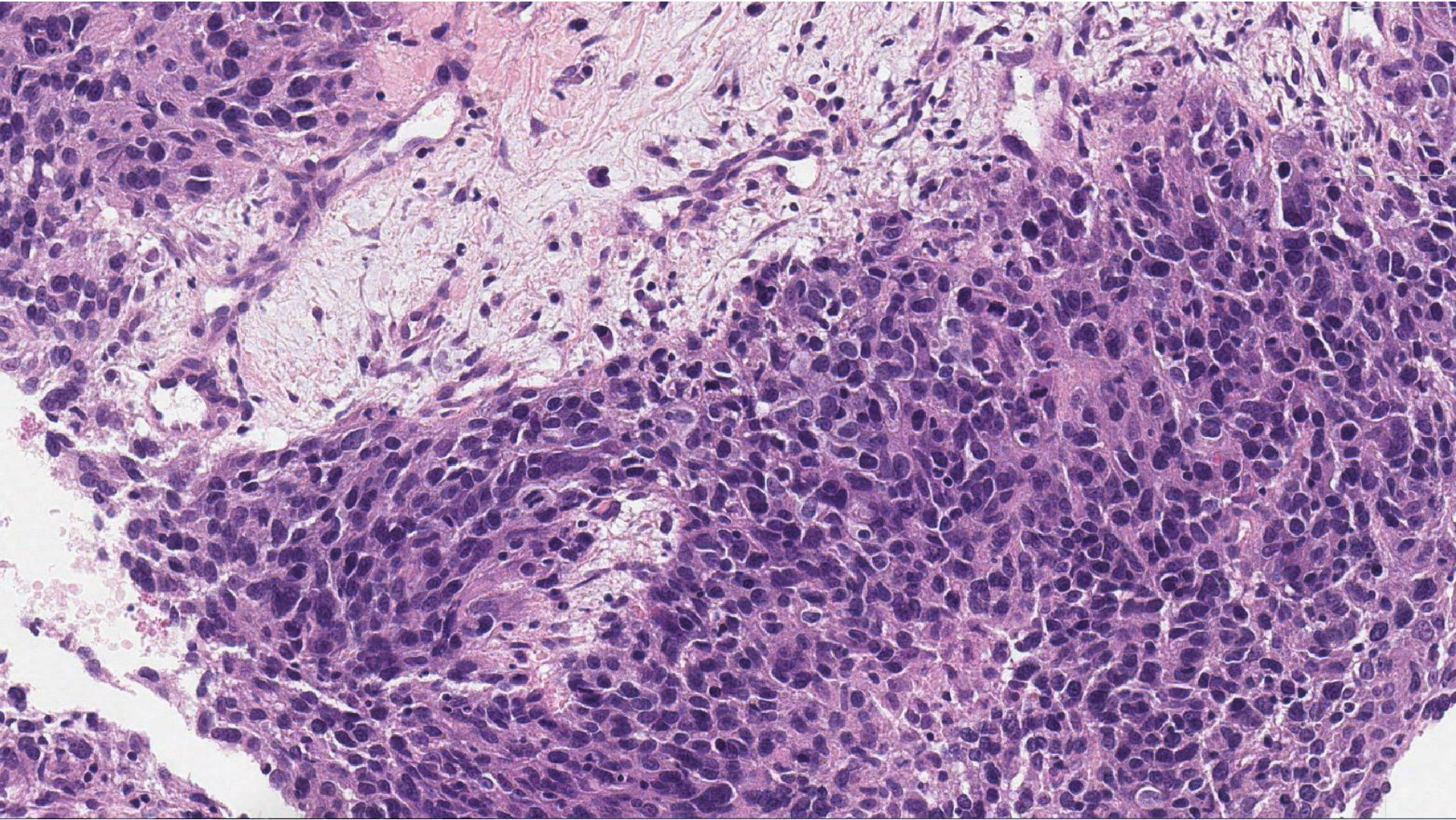
LS5



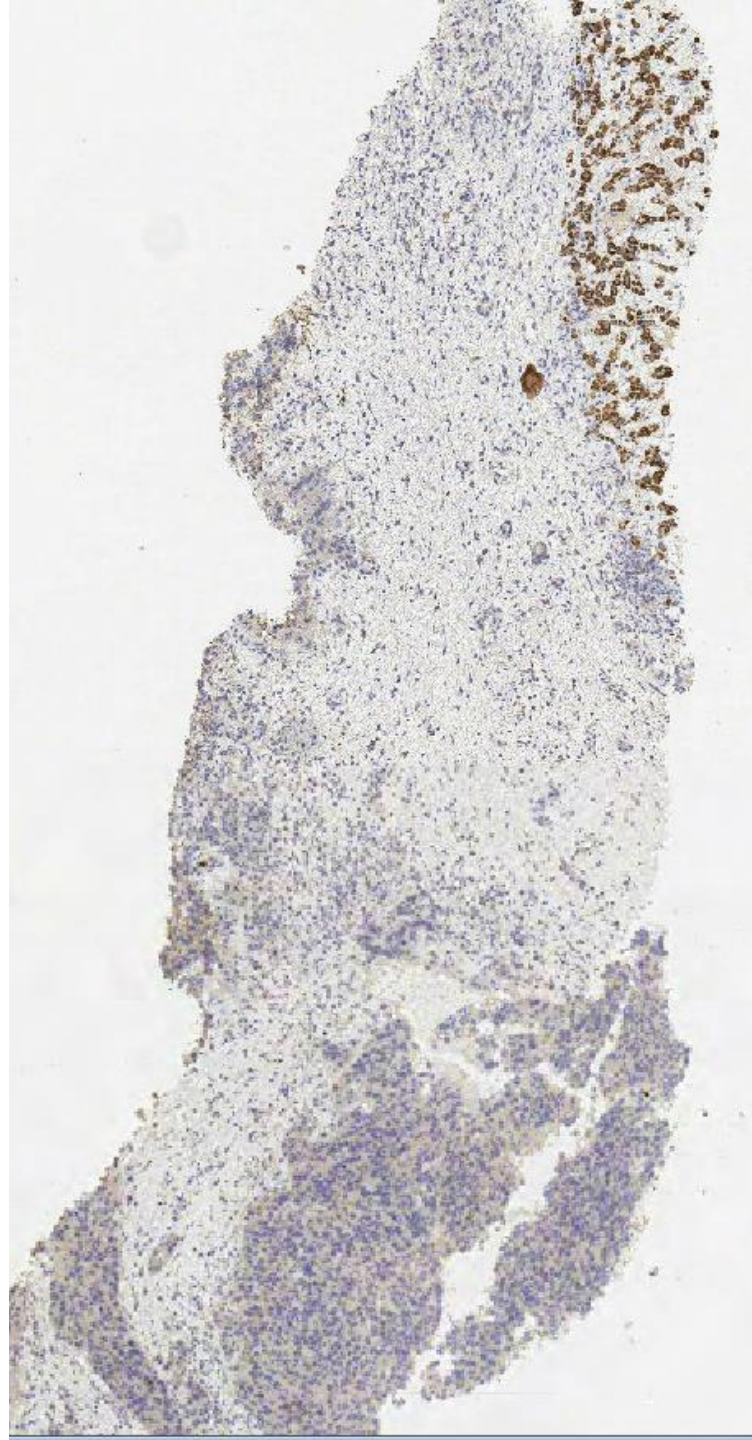
LS5



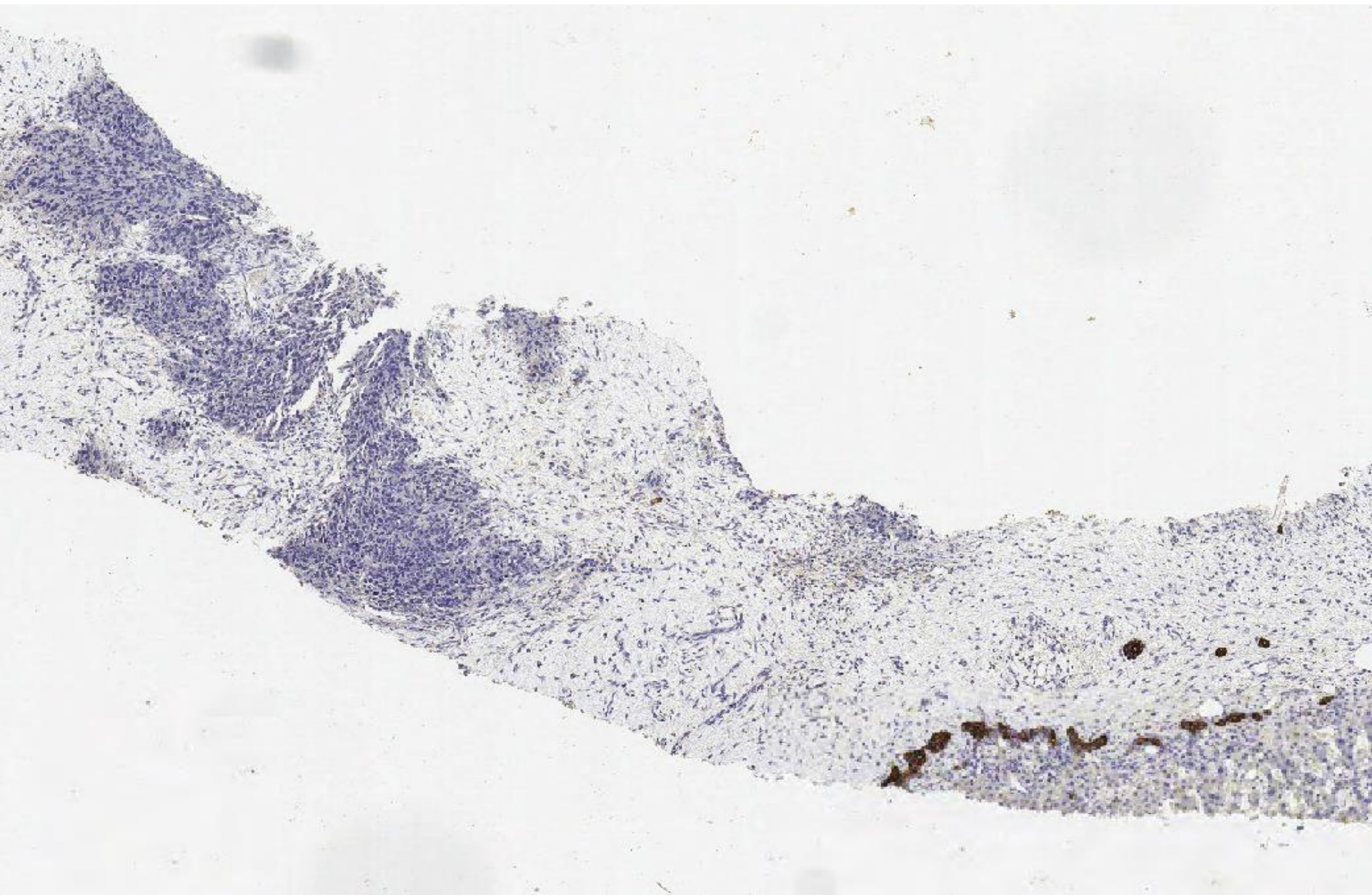
LS5



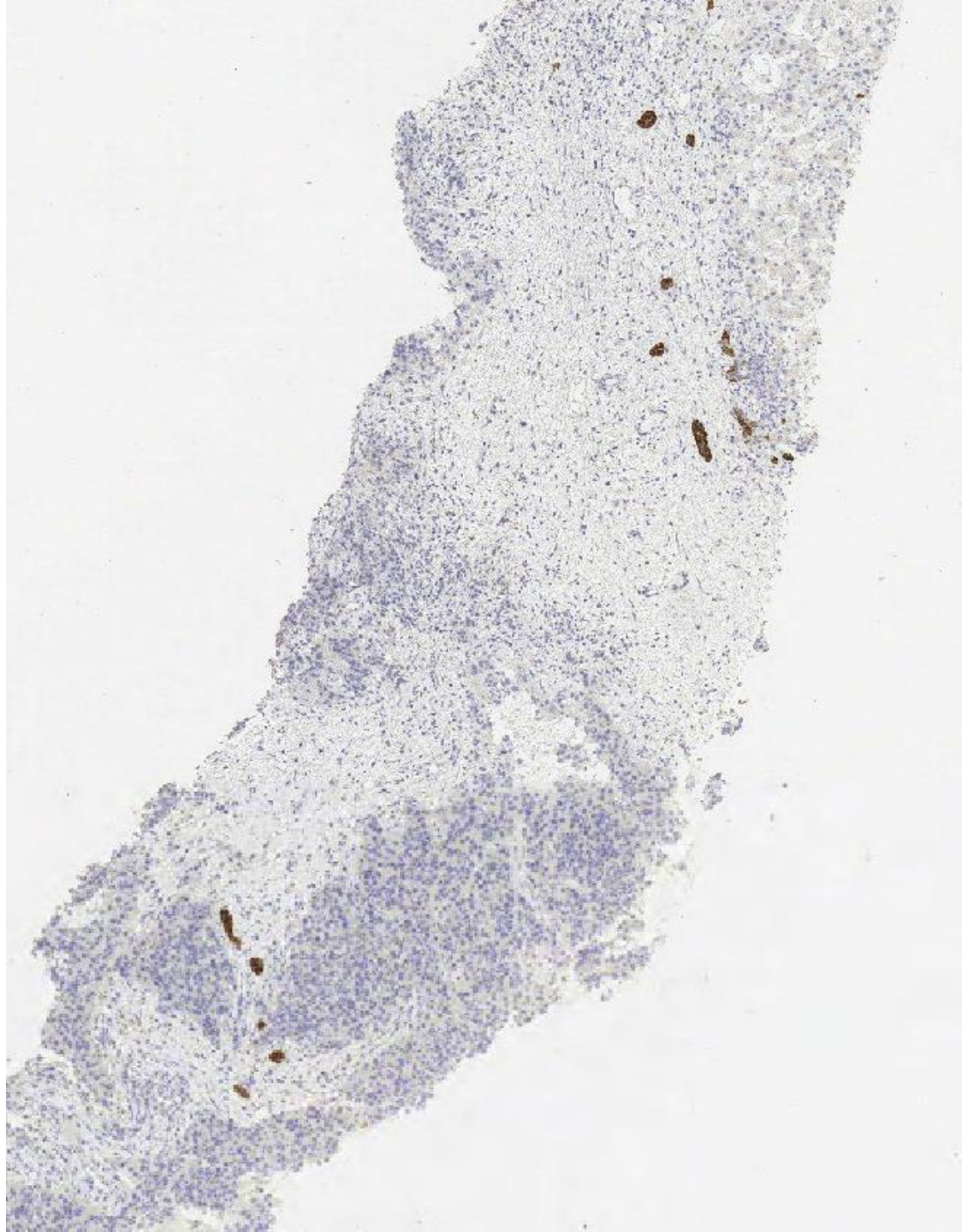
LS5 heppar1



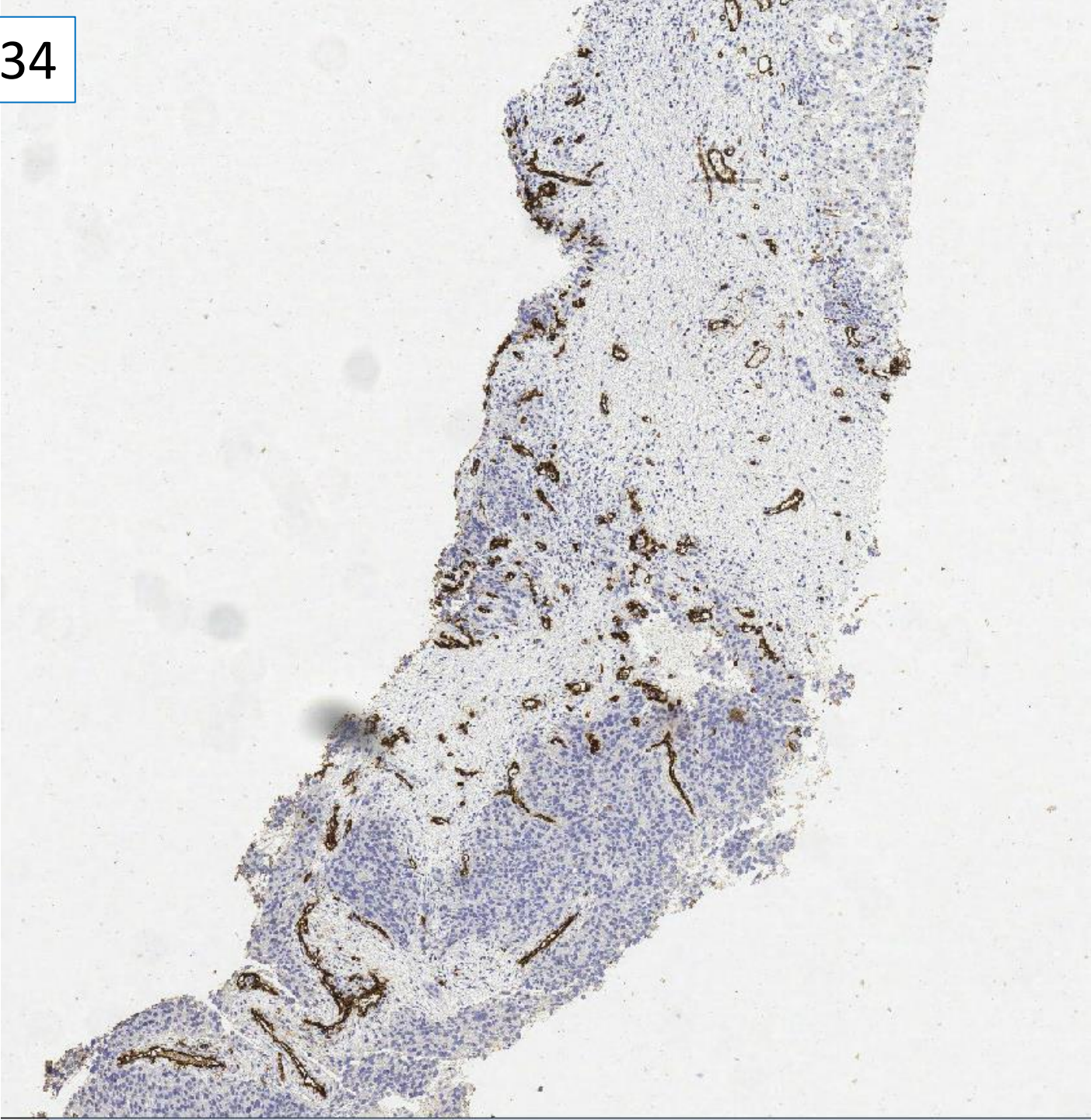
LS5 AE1 AE3



LS5 CK19



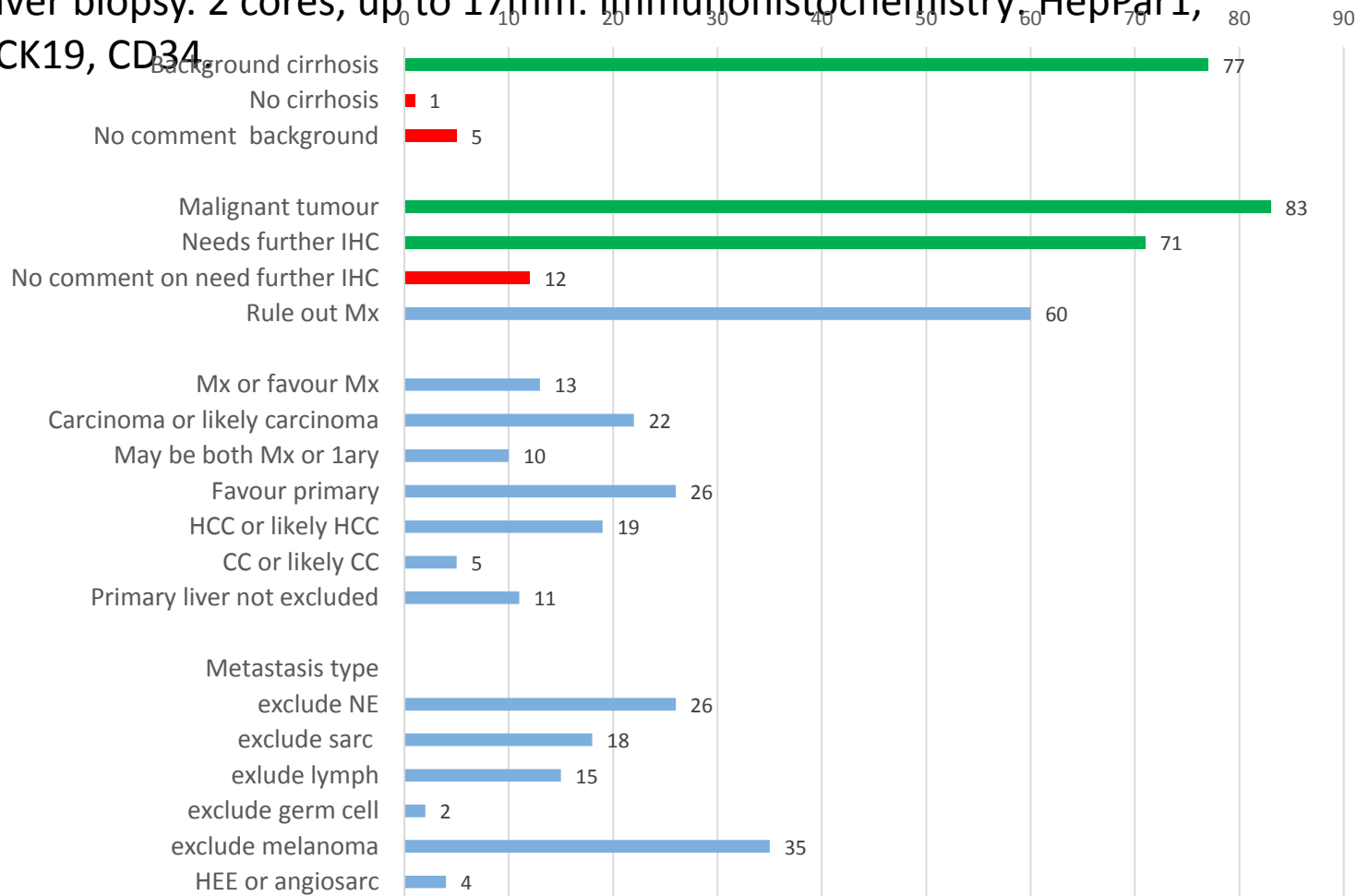
LS5 CD34



Case LS5 63 M

MRI shows focal lesion in segment 4 which has grown. ? HCC or cholangiocarcinoma. AFP not raised.

Targeted liver biopsy. 2 cores, up to 17mm. Immunohistochemistry: HepPar1, AE1/AE3, CK19, CD34



Consensus complete responses would include:

1 Diagnosis of malignant tumour (100%), 2 Need of further IHC 3 Cirrhosis

Case LS5 63 M

MRI shows focal lesion in segment 4 which has grown. ? HCC or cholangiocarcinoma. AFP not raised.

Targeted liver biopsy. 2 cores, up to 17mm. Immunohistochemistry: HepPar1, AE1/AE3, CK19, CD34.

Suggested scoring: for 10 points: Three consensus responses, malignancy, need for further IHC and cirrhosis

Lose 5 marks if: no comment on cirrhosis or says 'no cirrhosis'

Lose 5 marks if: ? As there is no consensus for a specific tumour diagnosis (clinical question of HCC vs CC), responses with a specific diagnosis should lose 5

Lose 10 marks if: ? As there is no consensus for a specific tumour diagnosis (clinical question of HCC vs CC), responses with a specific diagnosis and no need of further IHC

Case LS5 63M

MRI shows focal lesion in segment 4 which has grown.

? HCC or cholangiocarcinoma. AFP not raised

Targeted liver biopsy. Also HepPar1, AE1/AE3, CK19, CD34

Scoring summary agreed at meeting:

For full marks – clear diagnosis of malignant tumour, but uncertain exactly what +/- need for additional immunohistochemistry. Also presence of background cirrhosis.

Lose 5 marks if – no mention of background liver, or not cirrhotic.

Lose 5 marks if – definite diagnosis of cholangiocarcinoma, with no alternative and no need for further immunohistochemistry.

There were also some responses which did not specifically state the need for further immunohistochemistry, but which did not give a single definite diagnosis – no marks deducted.

Follow up clinical information at meeting: also negative for CK5/6, CK14, p53, AFP, glypican, CK7, TTF1, S100, synaptophysin, CD31 no canalicular positivity for CD10 or pCEA.

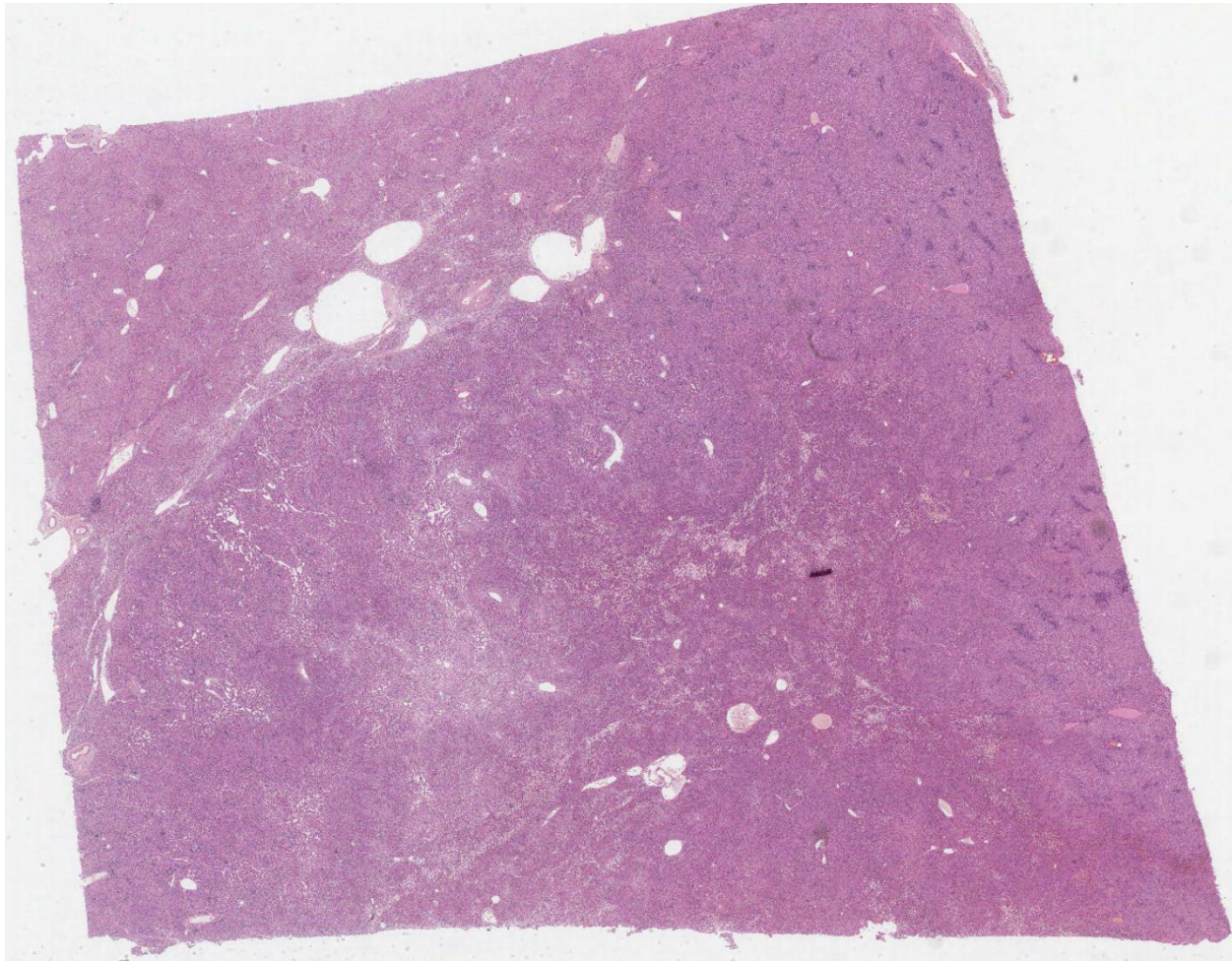
Conclusion: not possible to establish a primary site. Clinically no extra-hepatic malignancy, most likely HCC. Had TACE but progressed, developed further liver lesions and one bone lesion. Receiving hospice care 6 months later.

Case LS6 36 F

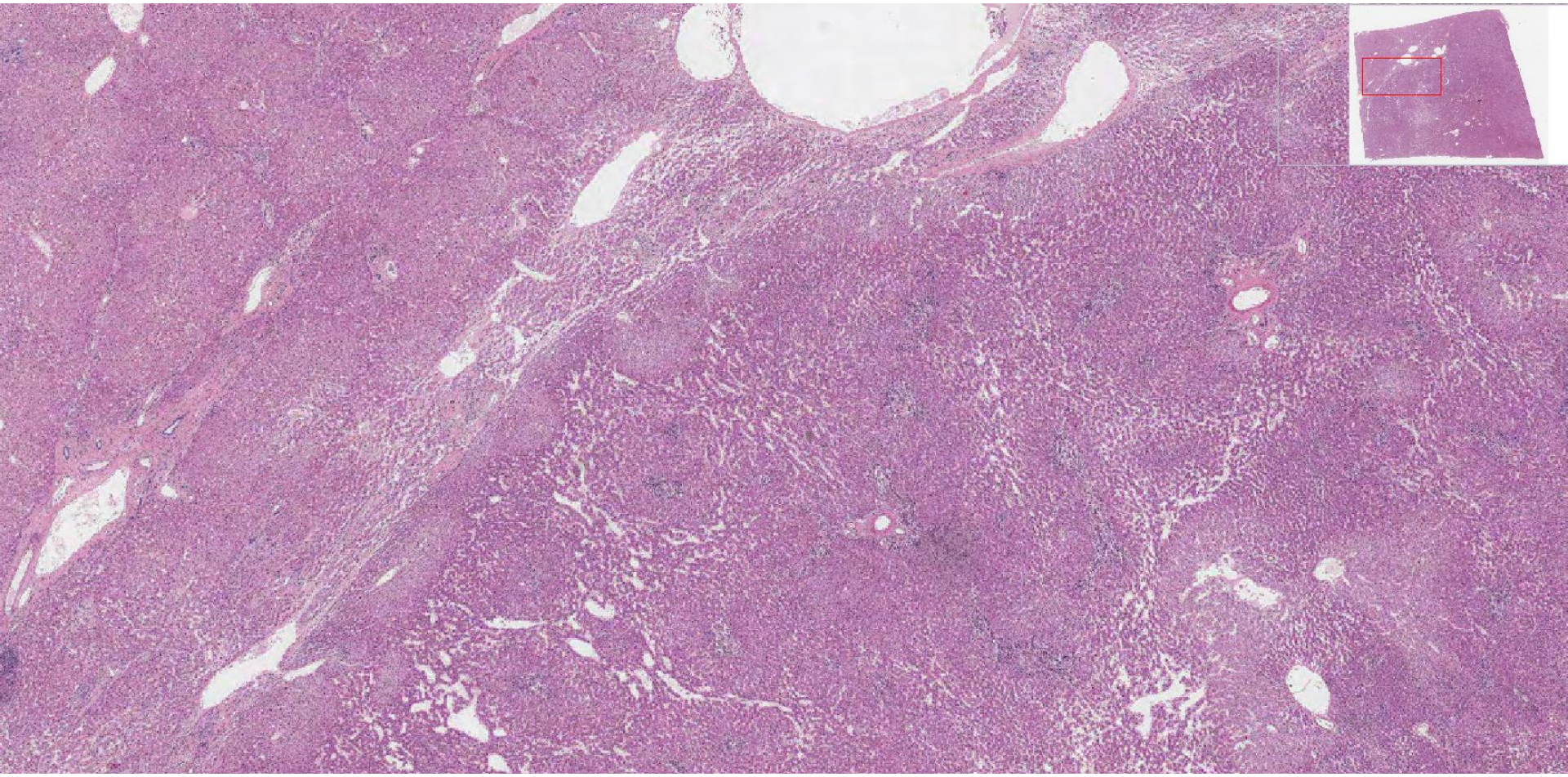
Turner syndrome. Focal liver lesion, ? Adenoma

Liver segments 6&7, contains a 50mm round tumour, slightly paler than surrounding liver.

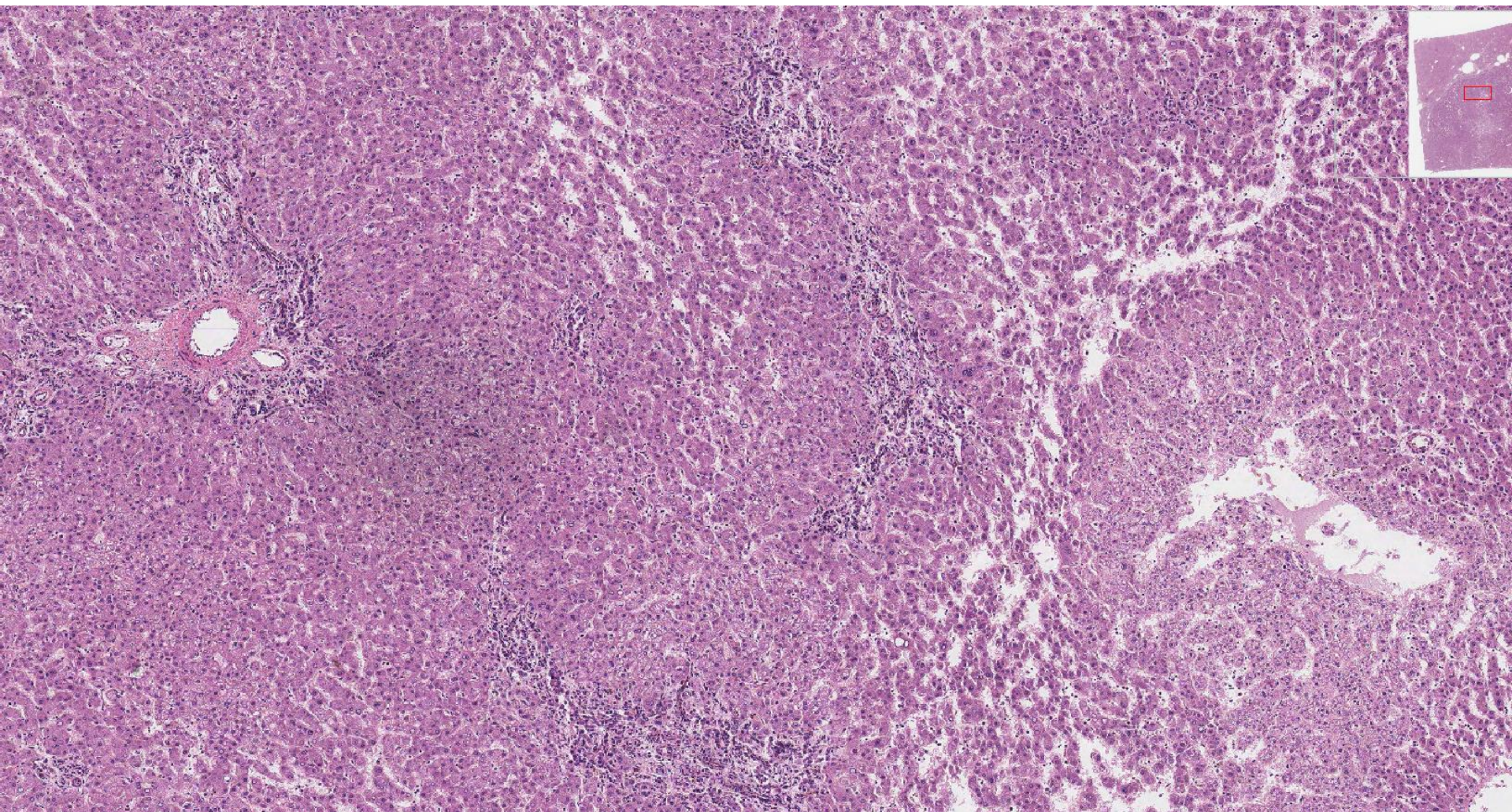
Also amyloid A, glutamine synthetase, beta catenin



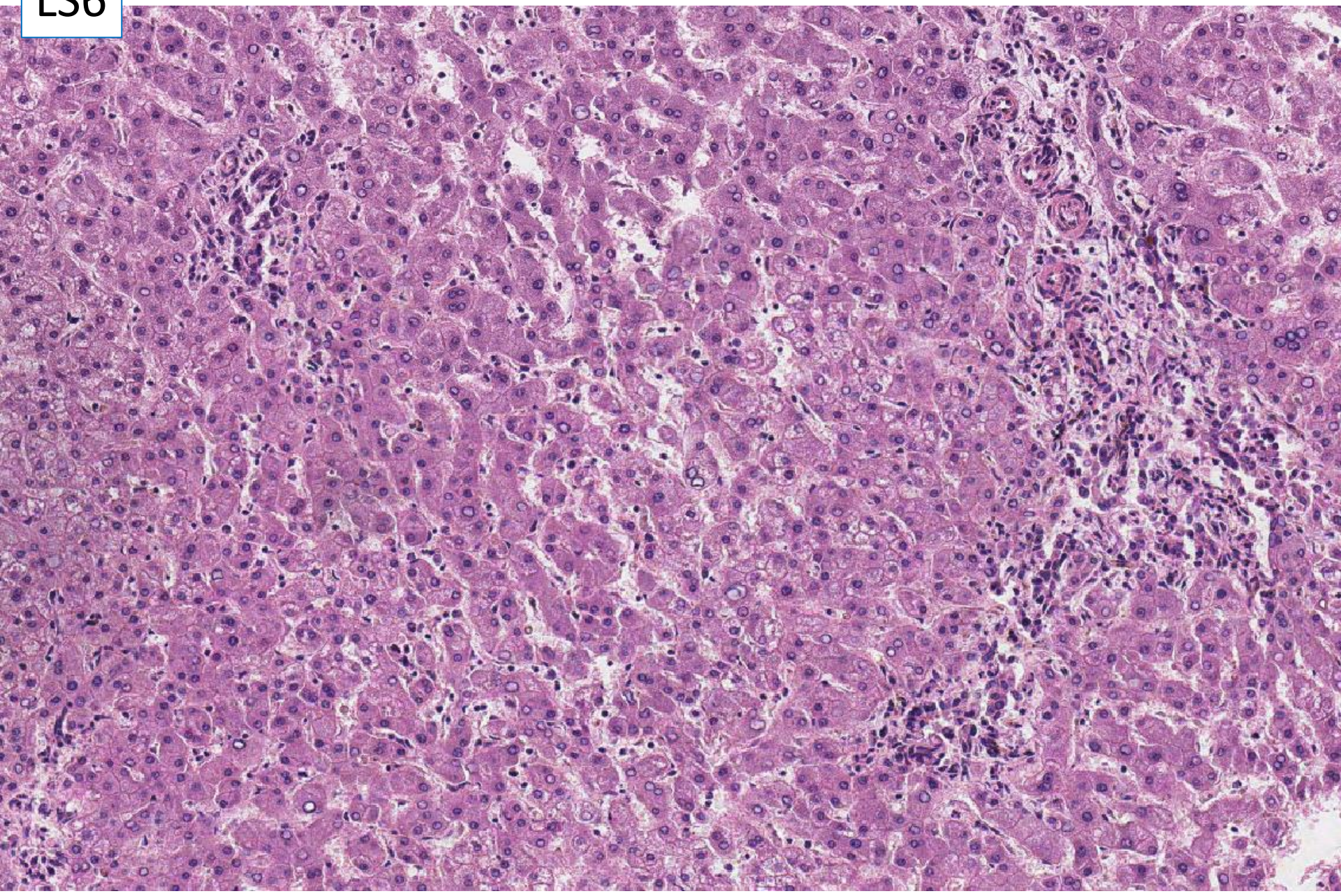
LS6



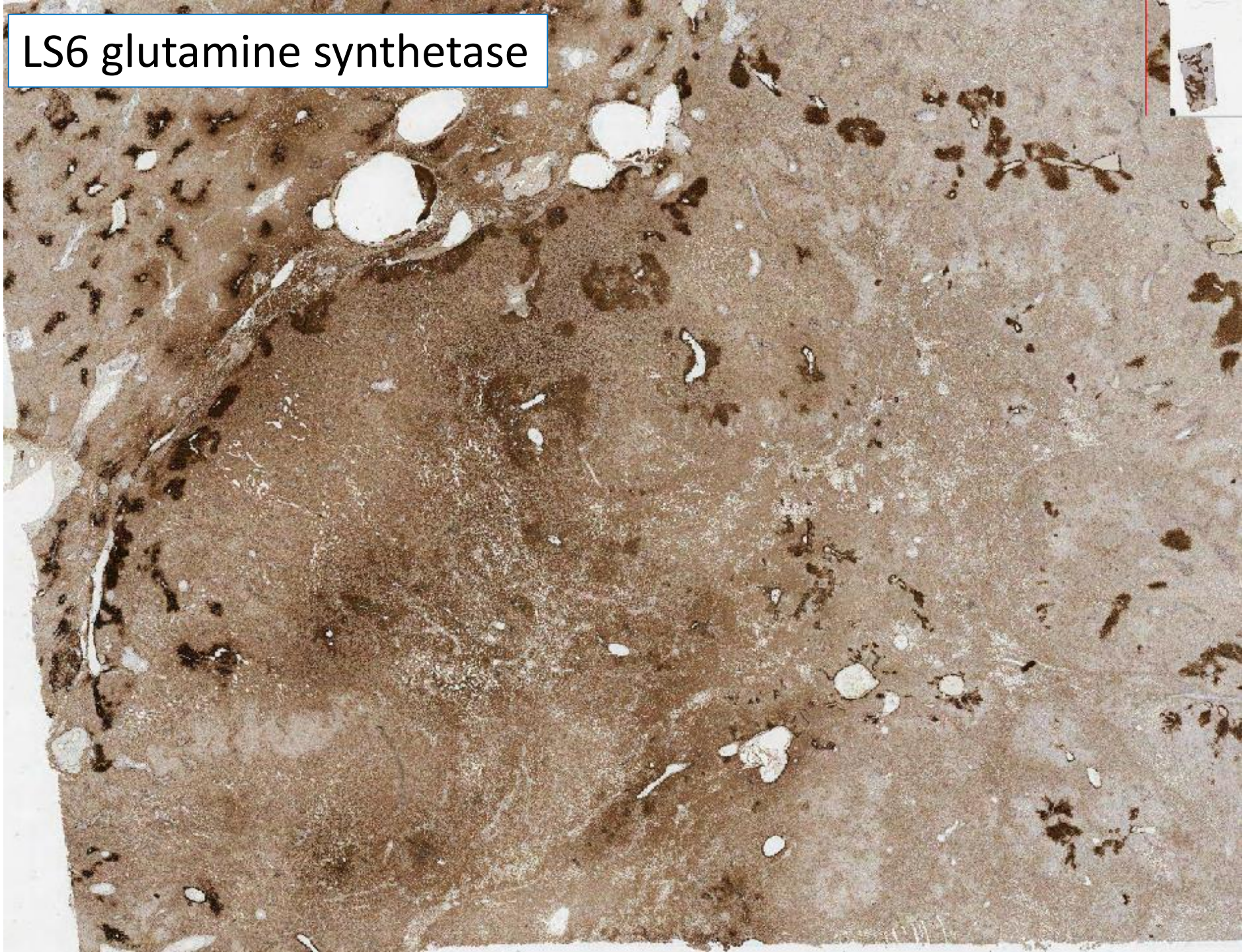
LS6



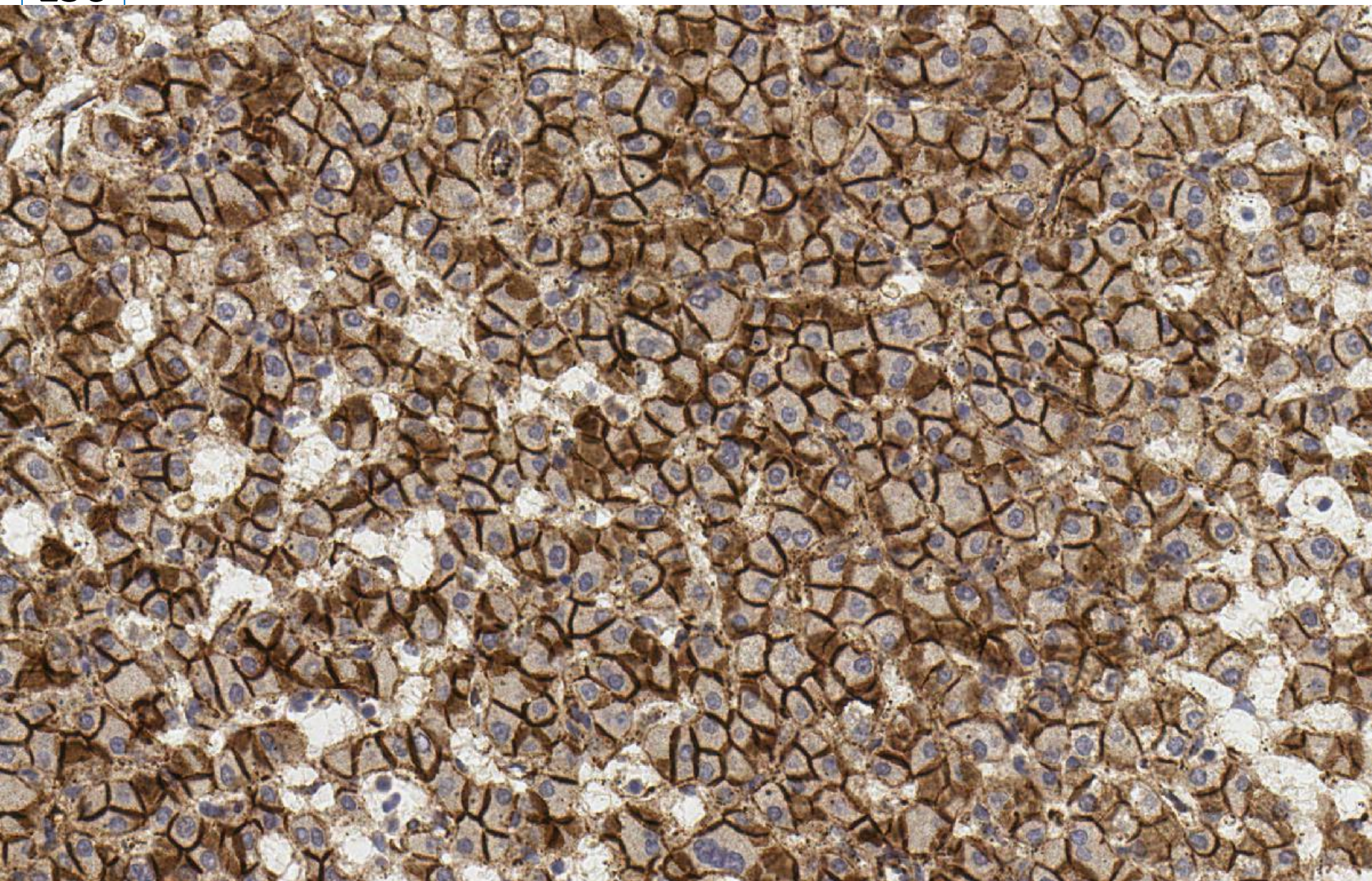
LS6



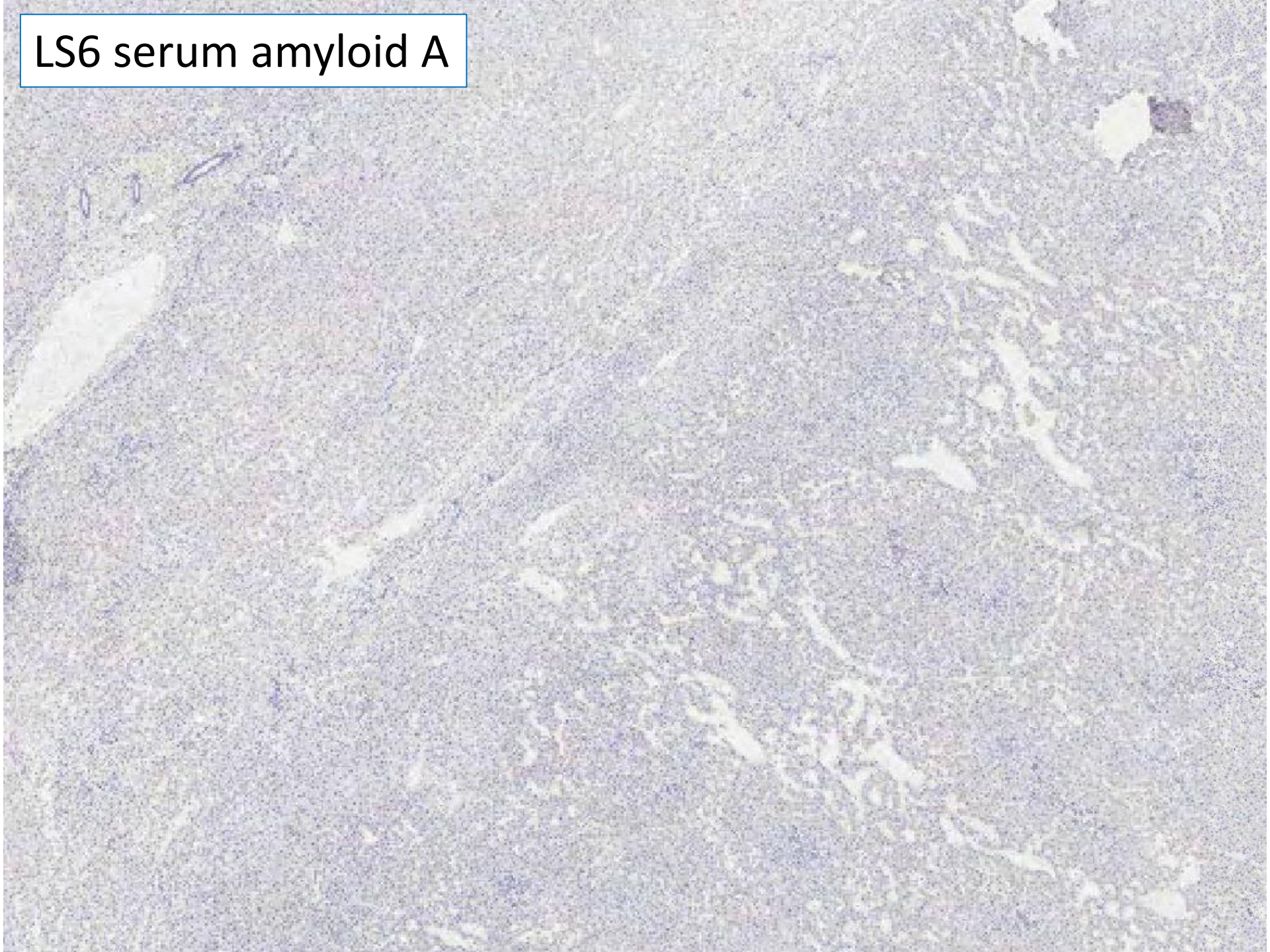
LS6 glutamine synthetase



LS6

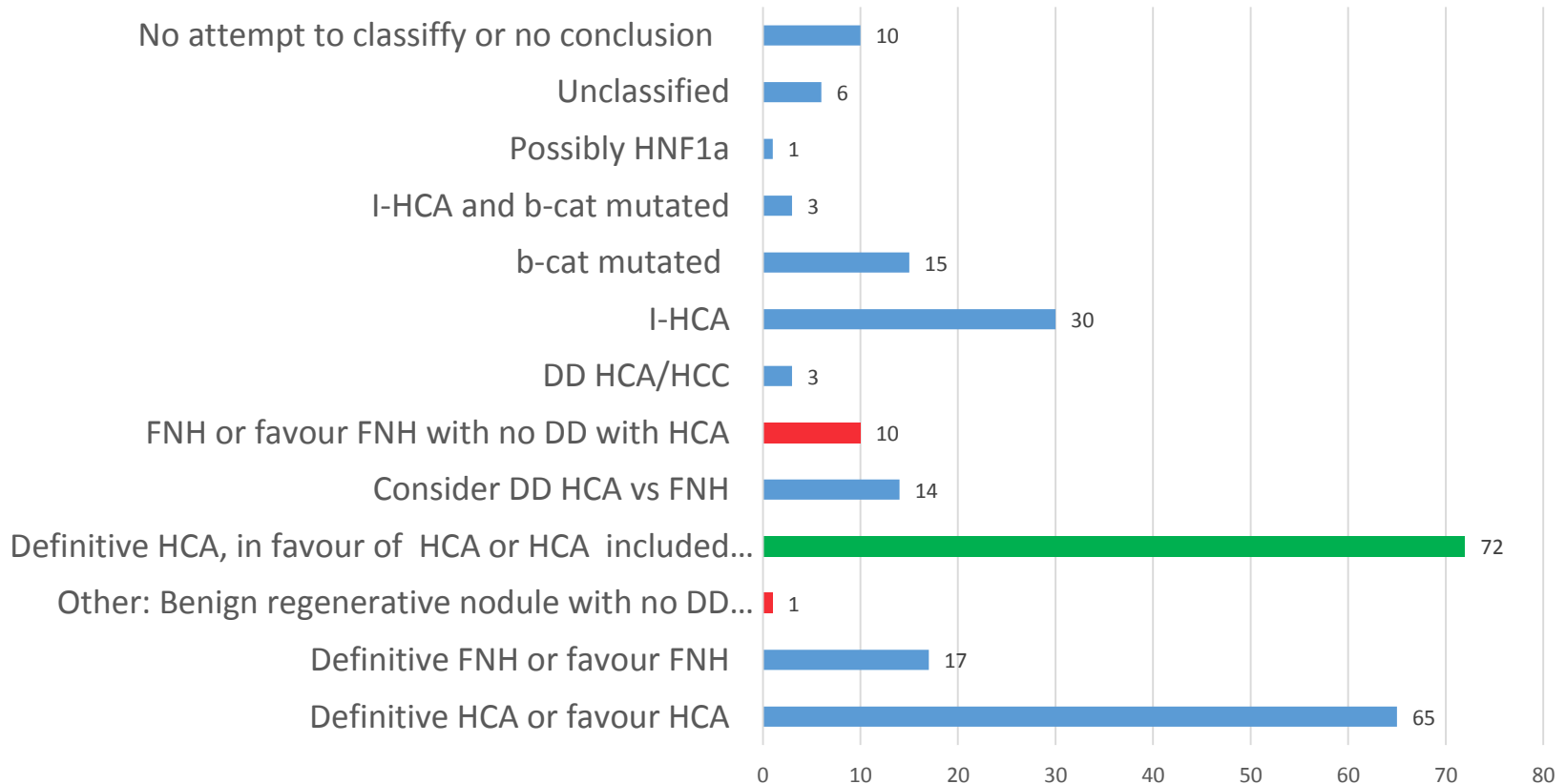


LS6 serum amyloid A



Case LS6 36 F

Turner syndrome. Liver segment 6/7. Liver segments 6&7, 113g, 90x60x40mm. Contains a 50mm round tumour, slightly paler than surrounding liver. Immunohistochemistry: Amyloid A, glutamine synthetase, beta catenin.



Consensus reached for:

HCA, or favour HCA, or HCA included in differential diagnosis (72)

No malignancy

Case LS6 36 F

Turner syndrome. Liver segment 6/7. Liver segments 6&7, 113g, 90x60x40mm. Contains a 50mm round tumour, slightly paler than surrounding liver. Immunohistochemistry: Amyloid A, glutamine synthetase, beta catenin.

Suggested scoring: for 10 points:

Reached consensus if the diagnosis includes a definitive diagnosis of HCA, diagnosis in favour of HCA or HCA is included in the differential diagnosis. Complete response consensus for lack of malignancy.

Lose 5 marks if: Other definite diagnosed proposed, with no consideration of HCA in the differential diagnosis.

Lose 10 marks if: Malignancy (0 responses)

Case LS6 36 F

Turner syndrome. Focal liver lesion, ? Adenoma

Liver segments 6&7, contains a 50mm round tumour, slightly paler than surrounding liver.

Also amyloid A, glutamine synthetase, beta catenin

Scoring summary agreed at meeting:

For full marks – diagnosis of hepatocellular adenoma, or adenoma included within the differential diagnosis with focal nodular hyperplasia.

Lose 5 marks for – unequivocal diagnosis of focal nodular hyperplasia, with no differential diagnosis.

Lose 10 marks for – benign hepatocellular lesion, possibly regenerative nodule.

Comments: several reported membranous beta catenin staining as positive – but this is the normal staining pattern – infrequent positive nuclei are seen in beta-catenin activated HCA

In our experience amyloid is unreliable in inflammatory HCA – in other respects this was typical for inflammatory HCA which was the original diagnosis.

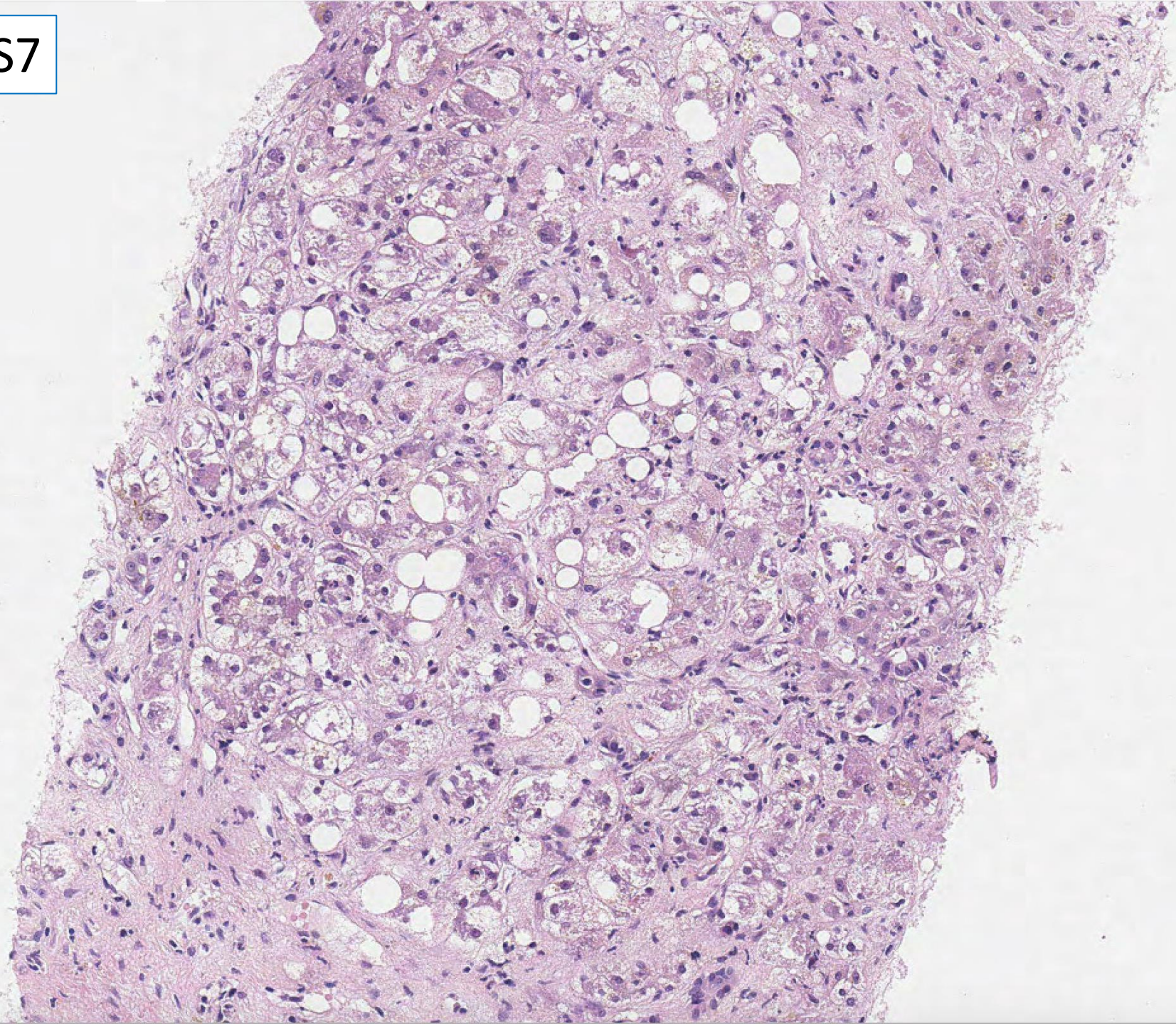
Case LS7 25 M

patient with subacute hepatic failure

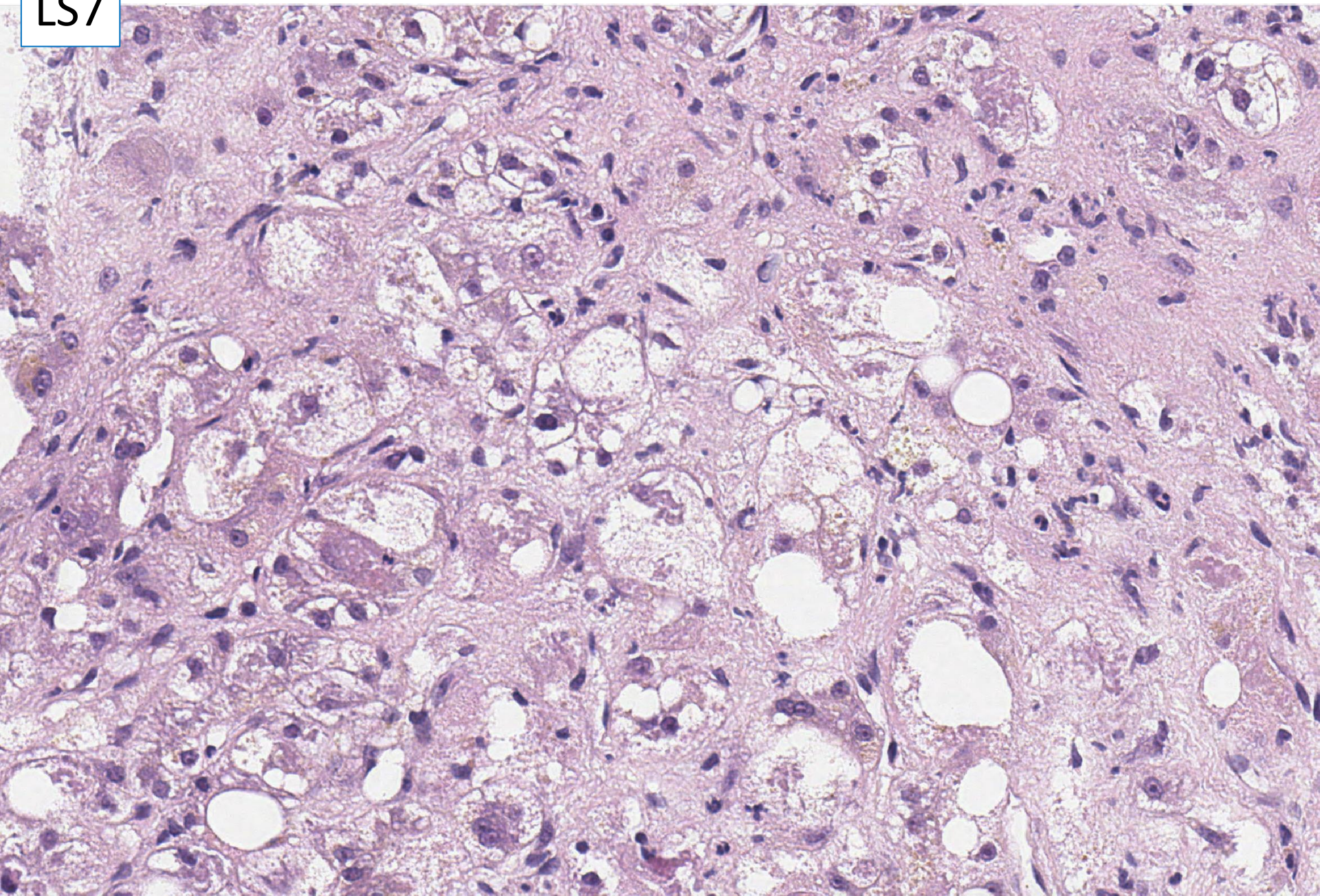
Also van Gieson, DPAS, reticulin



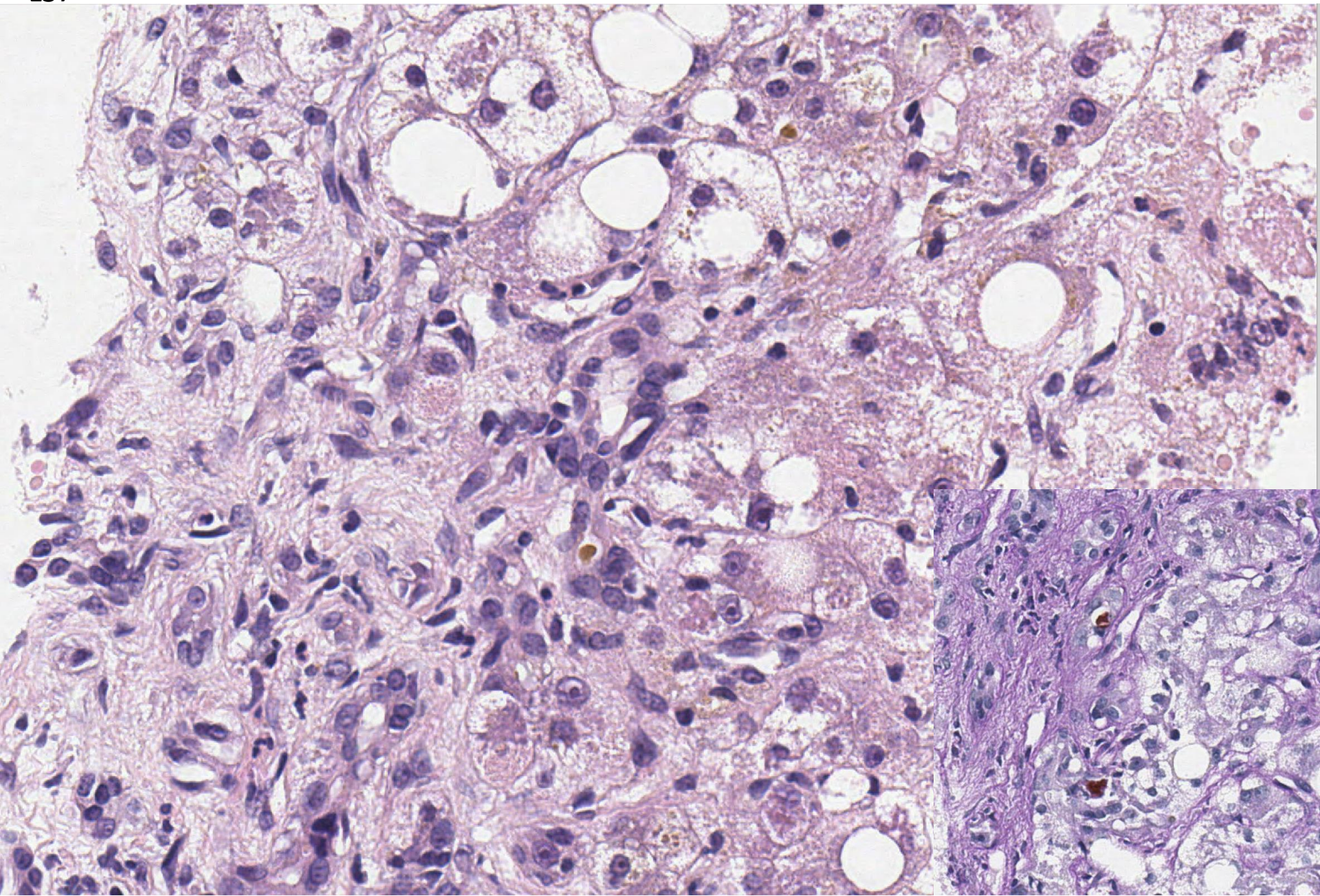
LS7



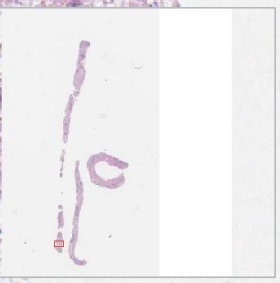
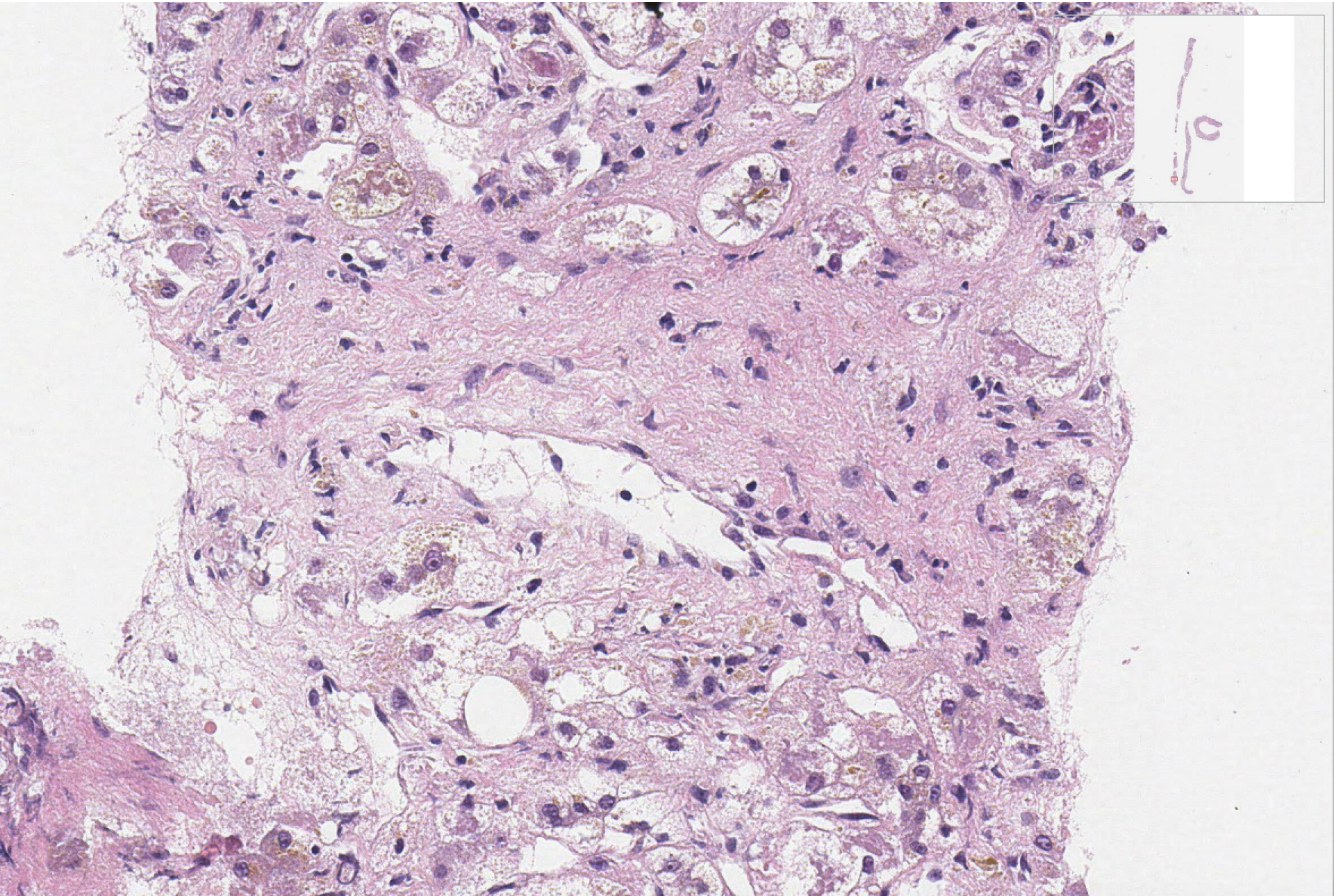
LS7



LS7

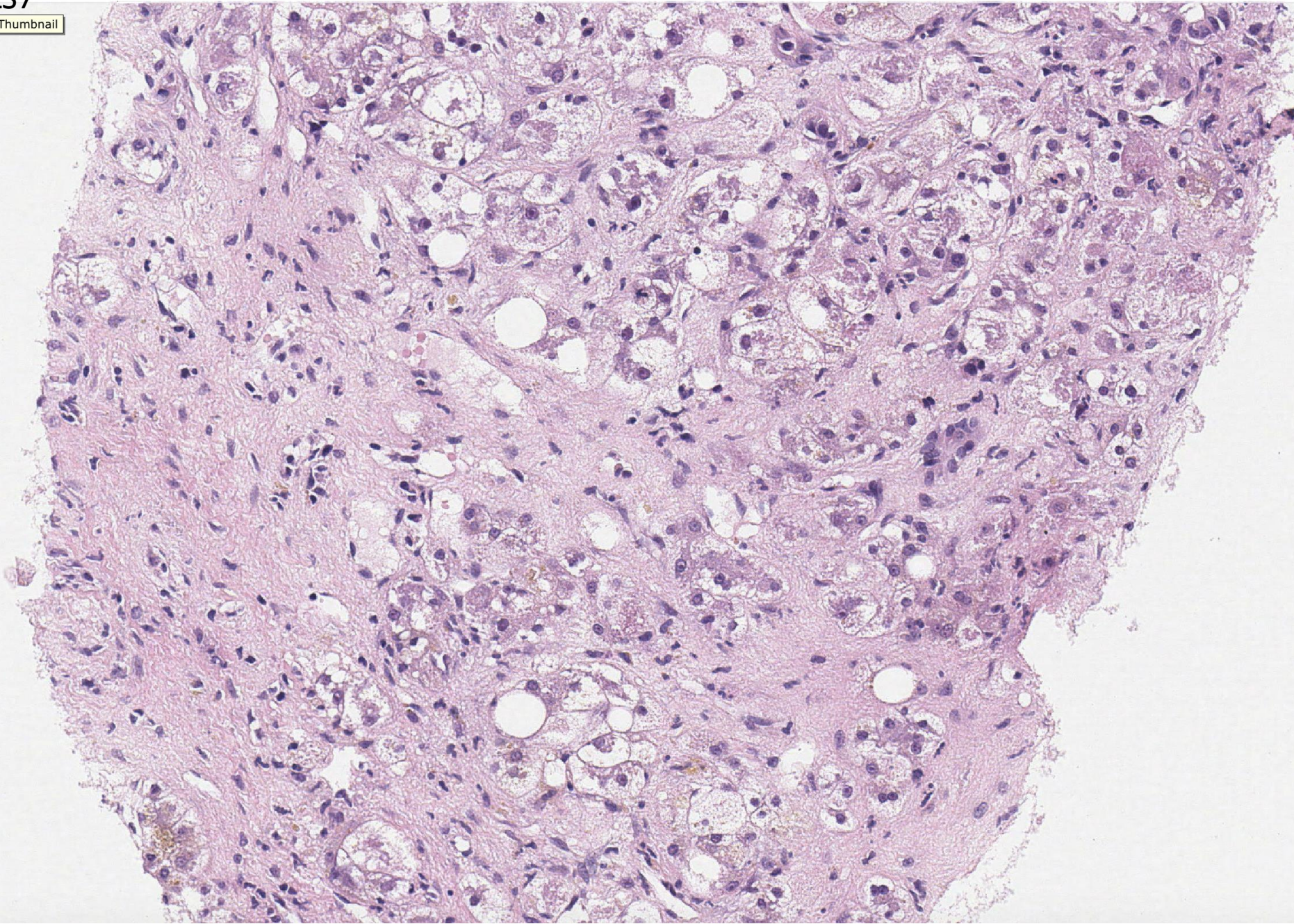


LS7



LS7

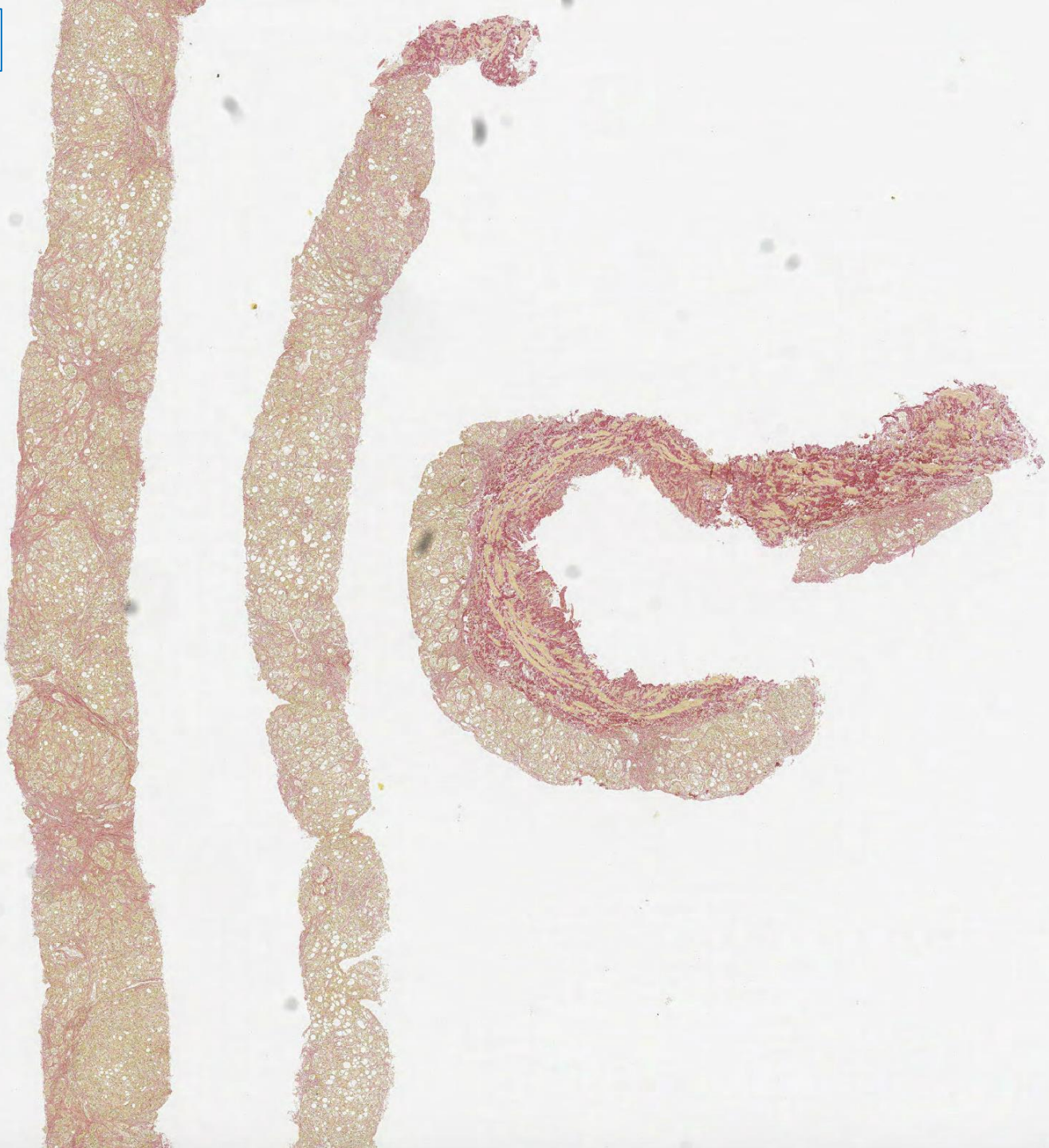
Thumbnail



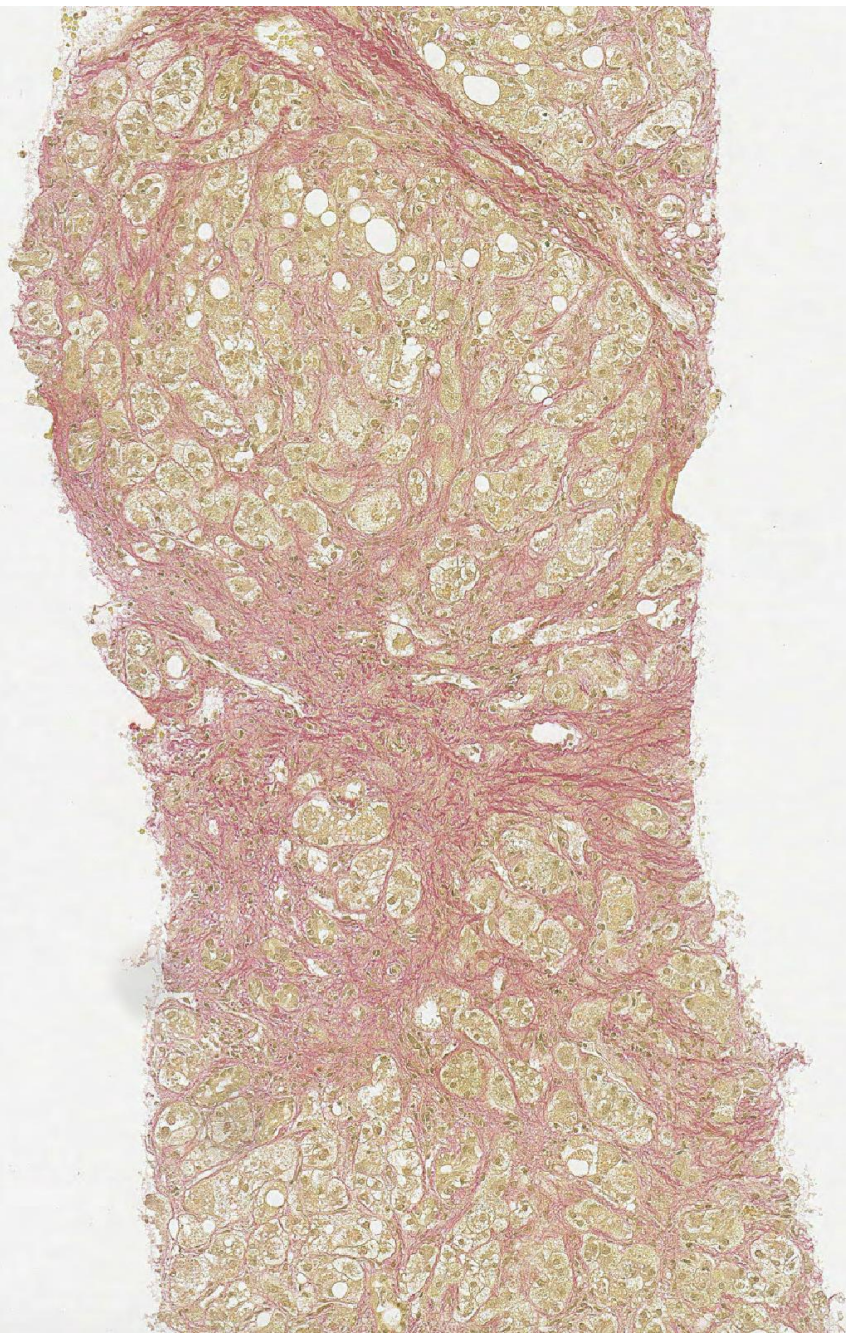
LS7 retic



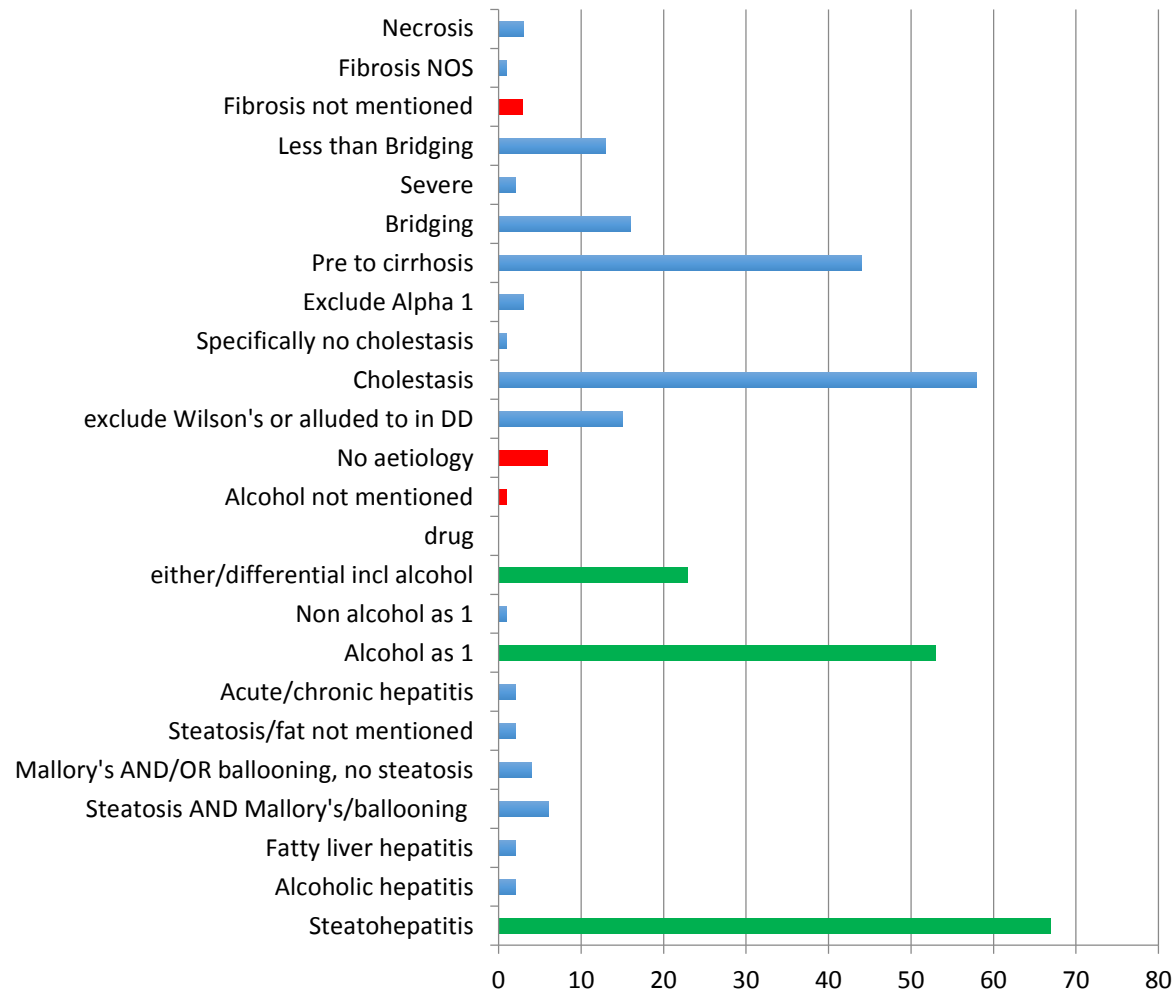
LS7 van Gieson



LS7 van Gieson



LS7. Male 25 year. Patient with subacute liver failure. Transjugular biopsy. H&E, van Gieson, DPAS and reticulin



Consensus complete response would include:

Steatohepatitis (or fatty liver hepatitis/alcoholic hepatitis),
reference to alcohol as possible cause and mention presence of fibrosis

**LS7. Male 25 year. Patient with subacute liver failure. Transjugular biopsy.
H&E, van Gieson, DPAS and reticulin**

Suggested scoring: for 10 points as above, steatohepatitis, include alcohol in DD and comment fibrosis

? Lose 5 marks

1. Steatosis and describes Mallory's and/or ballooning but doesn't mention steatohepatitis
2. Steatosis and no mention of histological features of steatohepatitis
3. Steatohepatitis but no mention of alcohol as a possible cause
4. "Alcoholic foamy degeneration" "*extensive portal fibrosis, with bridging but no establish fibrosis*"(??typo)
5. Lose 5 if no comment on fibrosis

Lose 10 marks

1. "Subacute hepatitis with parenchymal collapse and regeneration...no fibrosis can be substantiated" (not alluding to alcohol)
2. "Post necrotic fibrosis-submassive necrosis"
3. "acute on chronic liver damage" ("piece of information missing" - ??alcohol

Additional comments:

58 people commented on presence of cholestasis and offered discussion of significance
- decompensation, sepsis etc

15 people referred to need to consider Wilson's disease

3 people referred to possible Alpha-1-antitrypsin deficiency

6 people referred to central hyaline sclerosis (or similar form of words)

Case LS7 25 M

patient with subacute hepatic failure

Also van Gieson, DPAS, reticulin

	A	Fatty change and fibrosis
	B	Alcoholic foamy degeneration
	C	Steatohepatitis, suggests alcohol related
	D	Steatohepatitis, probably NASH
	E	Subacute hepatitis with collapse

Case LS7 25 F

patient with subacute hepatic failure

Also van Gieson, DPAS, reticulin

Scoring summary agreed at meeting:

For full marks – steatohepatitis (accepts alcoholic hepatitis or fatty liver hepatitis) with alcohol included in the differential for aetiology, and a comment on fibrosis.

Lose 5 marks for – don't state steatohepatitis, or just steatosis

Lose 5 marks for – alcohol not mentioned as a possible cause

Lose 5 marks for – no mention of fibrosis

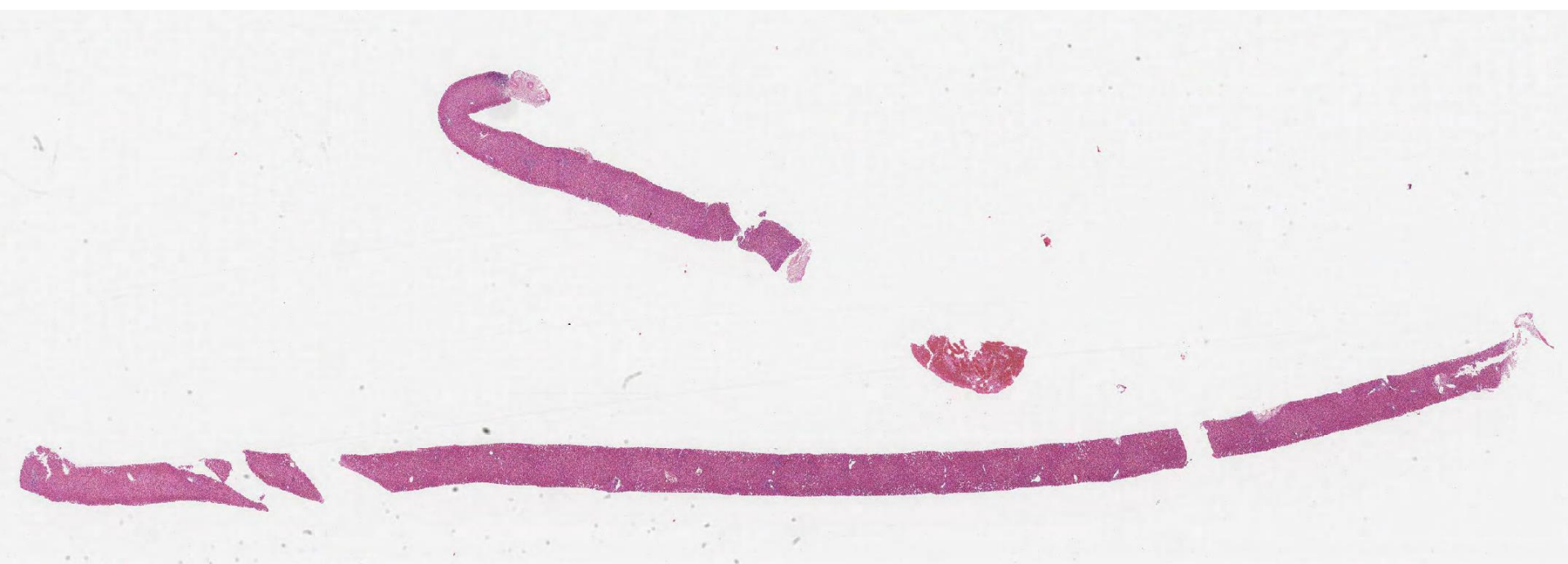
Lose 5 marks for – alcoholic foamy degeneration

Lose 10 marks for – subacute hepatitis, post necrotic fibrosis, acute on chronic liver damage – or two of above reasons to lose 5 marks.

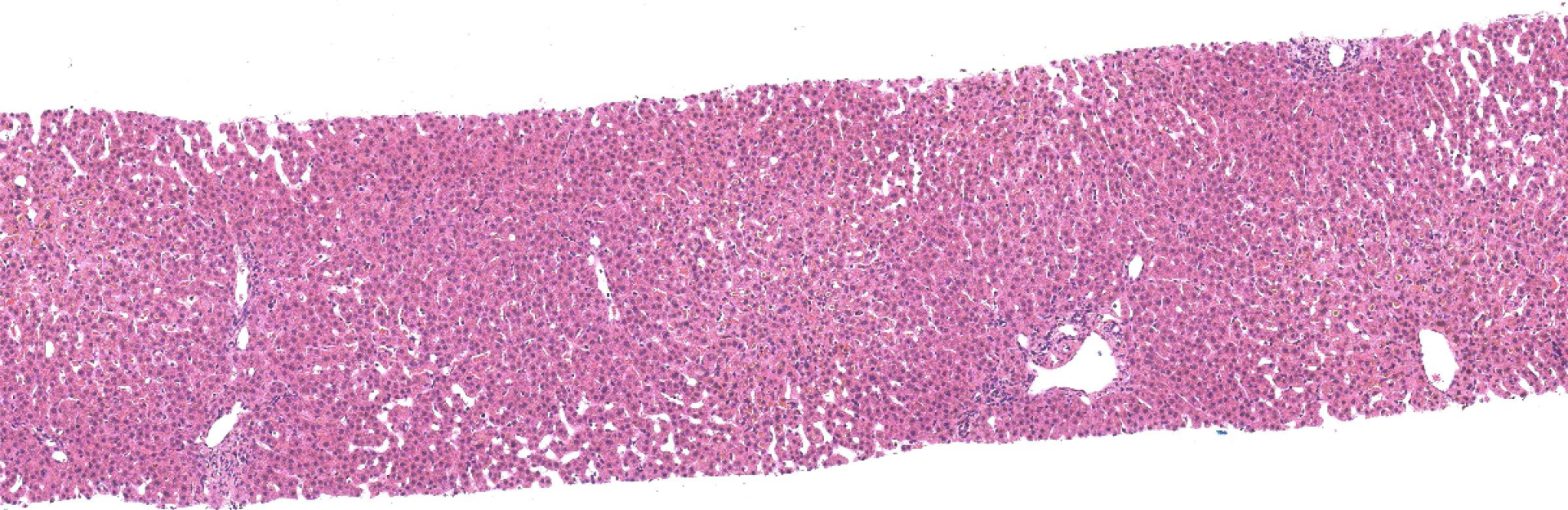
Case LS8 17 F

presented with 4 week history of increasing jaundice and itch. Started combined oral contraceptive pill 3 weeks prior to onset of jaundice. Viral and autoimmune serology negative.

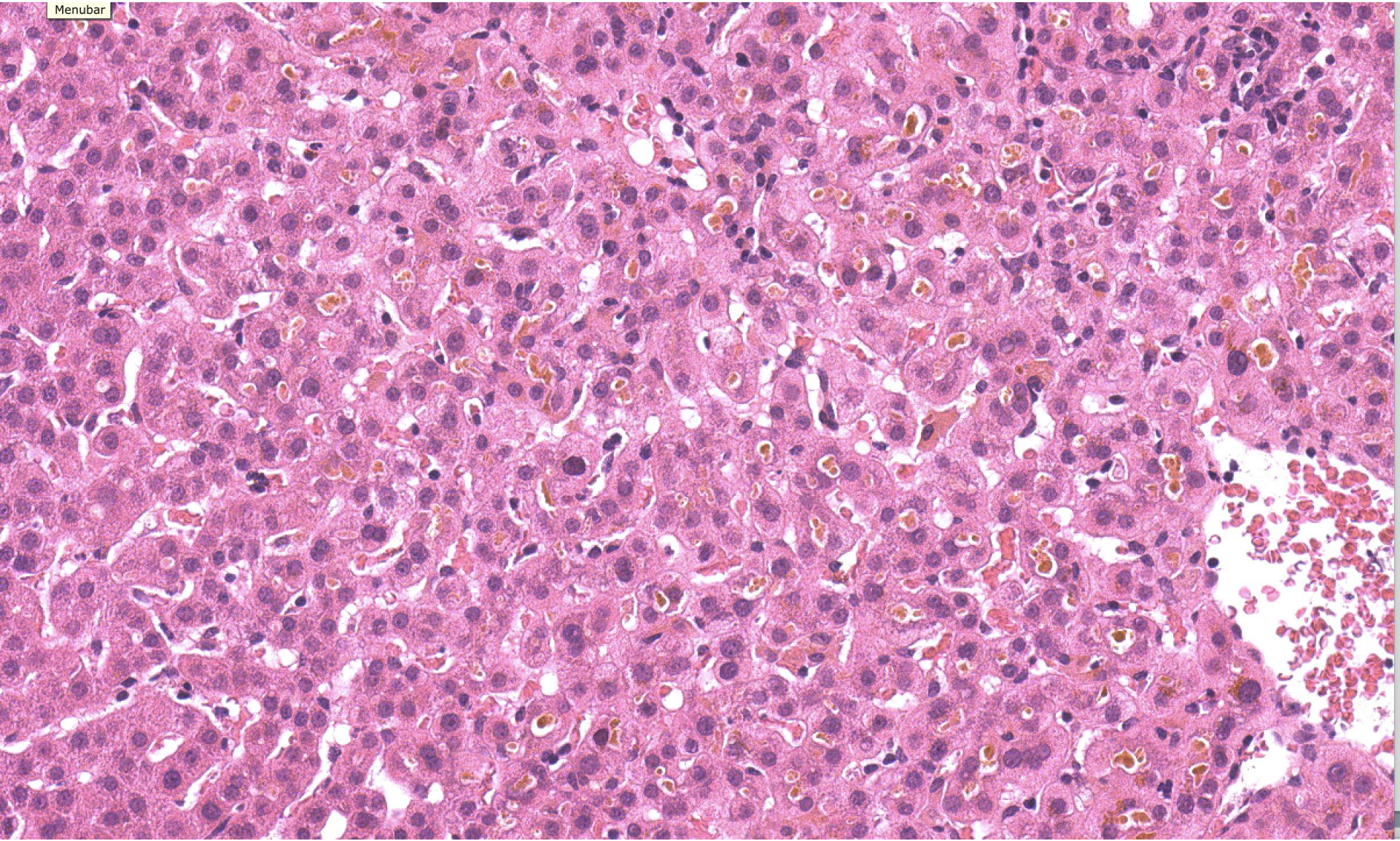
No additional stains

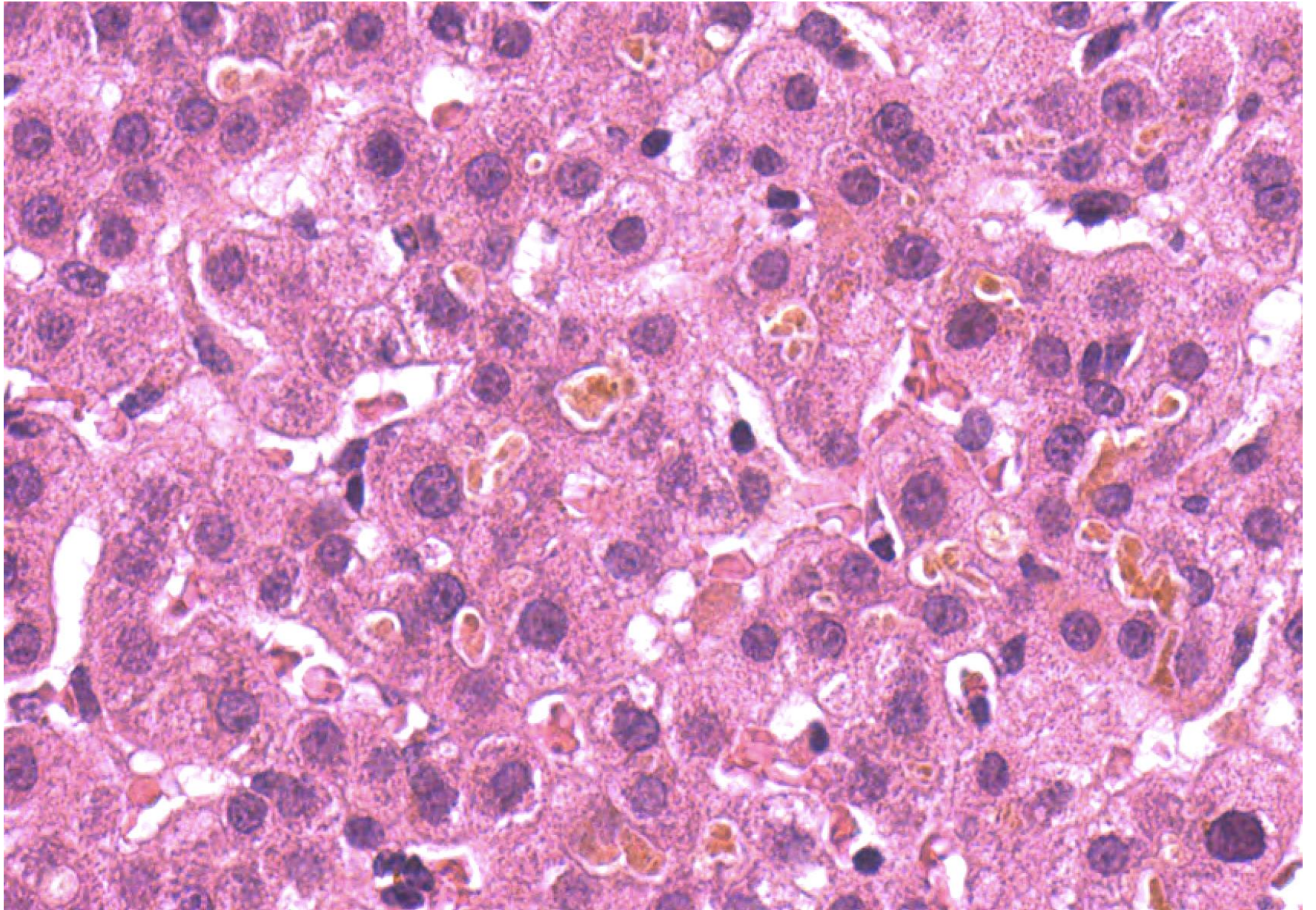


LS8

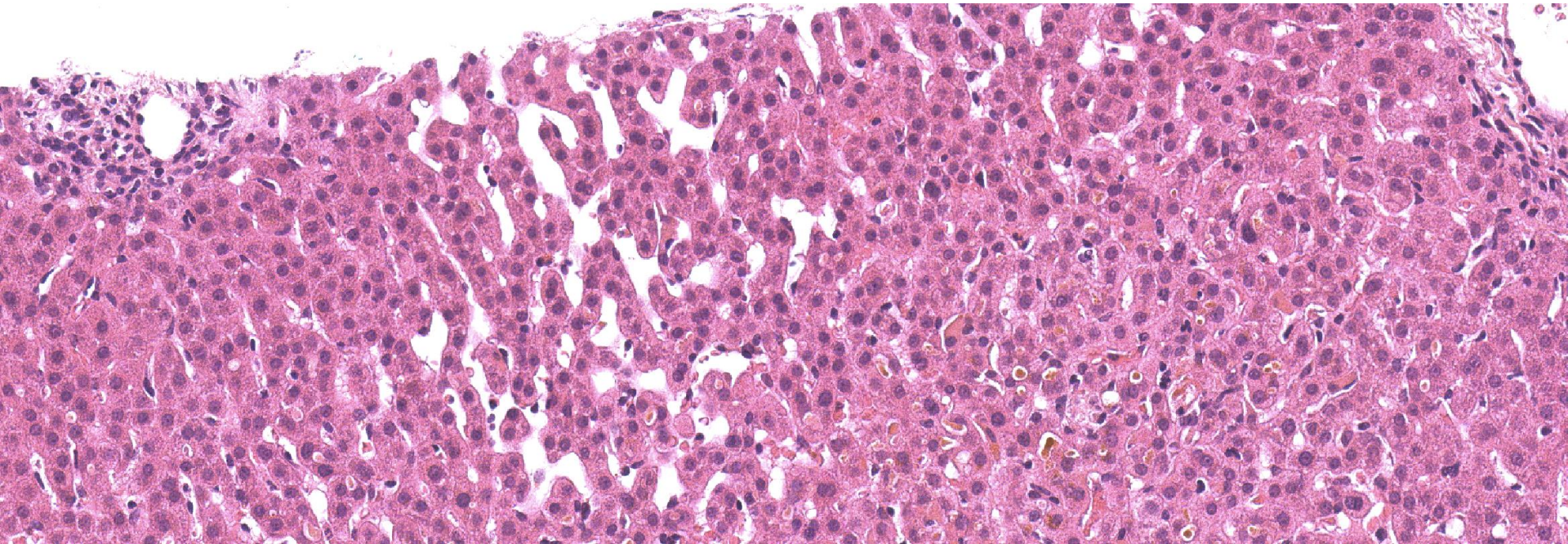


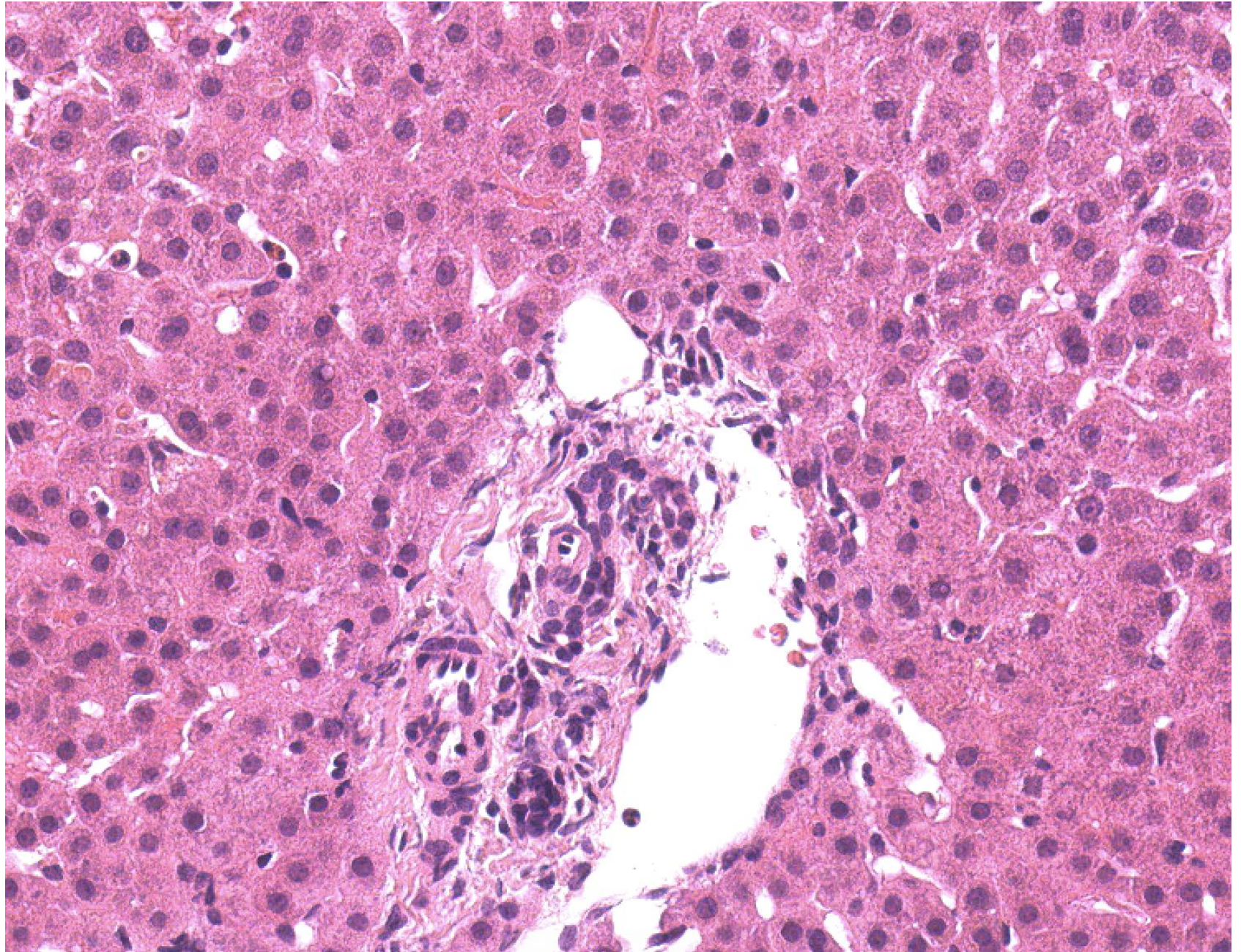
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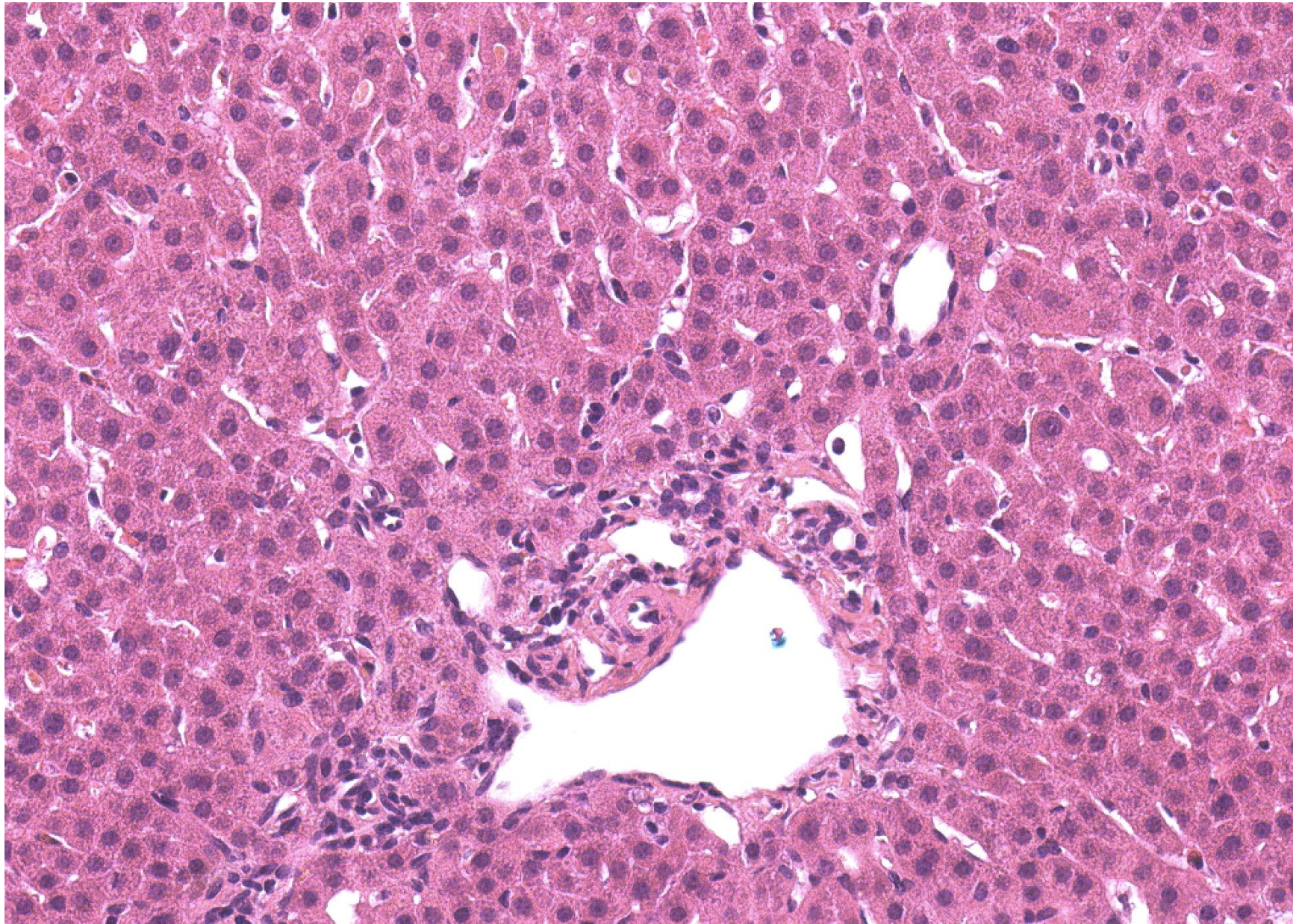




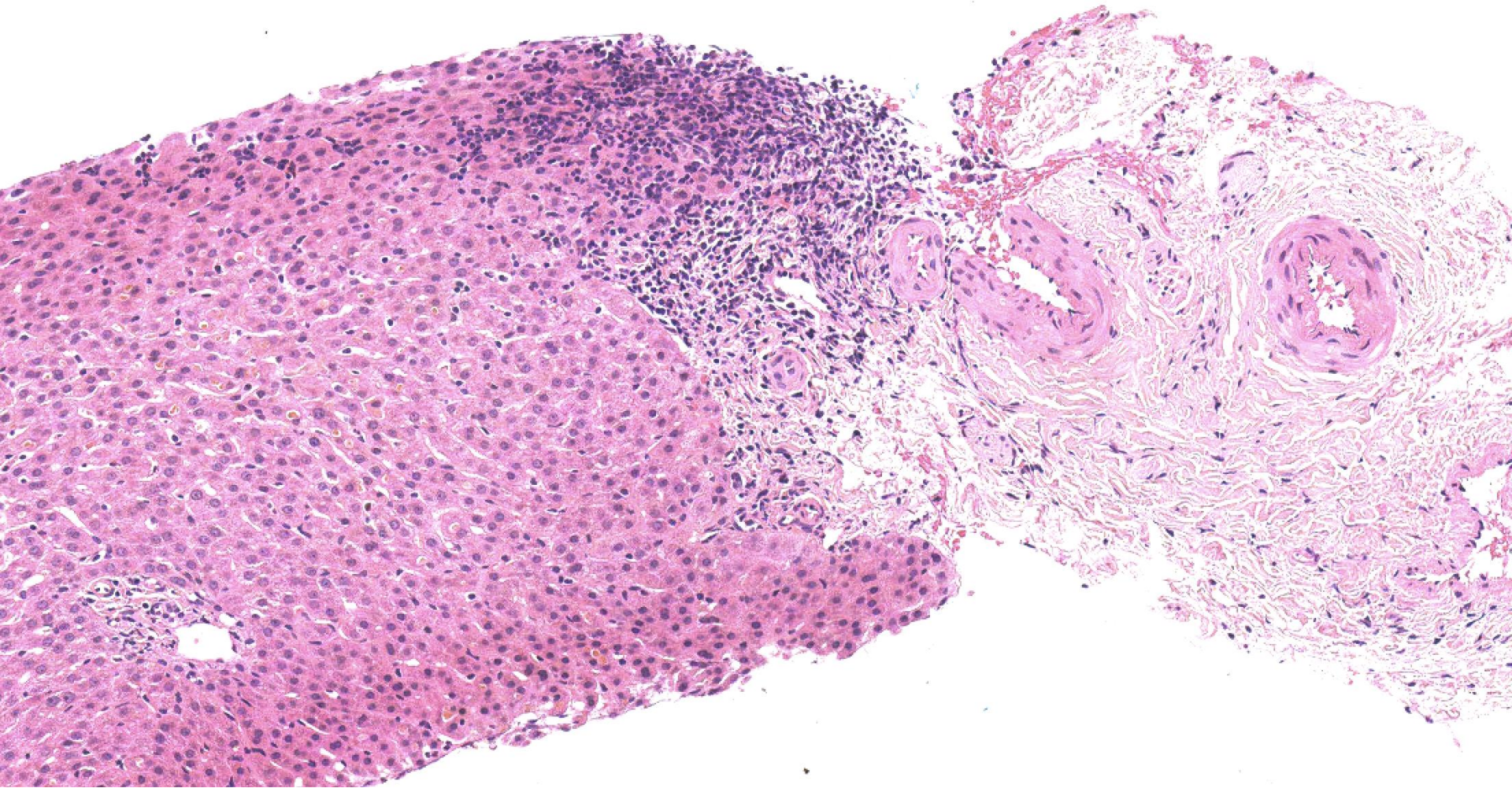
LS8





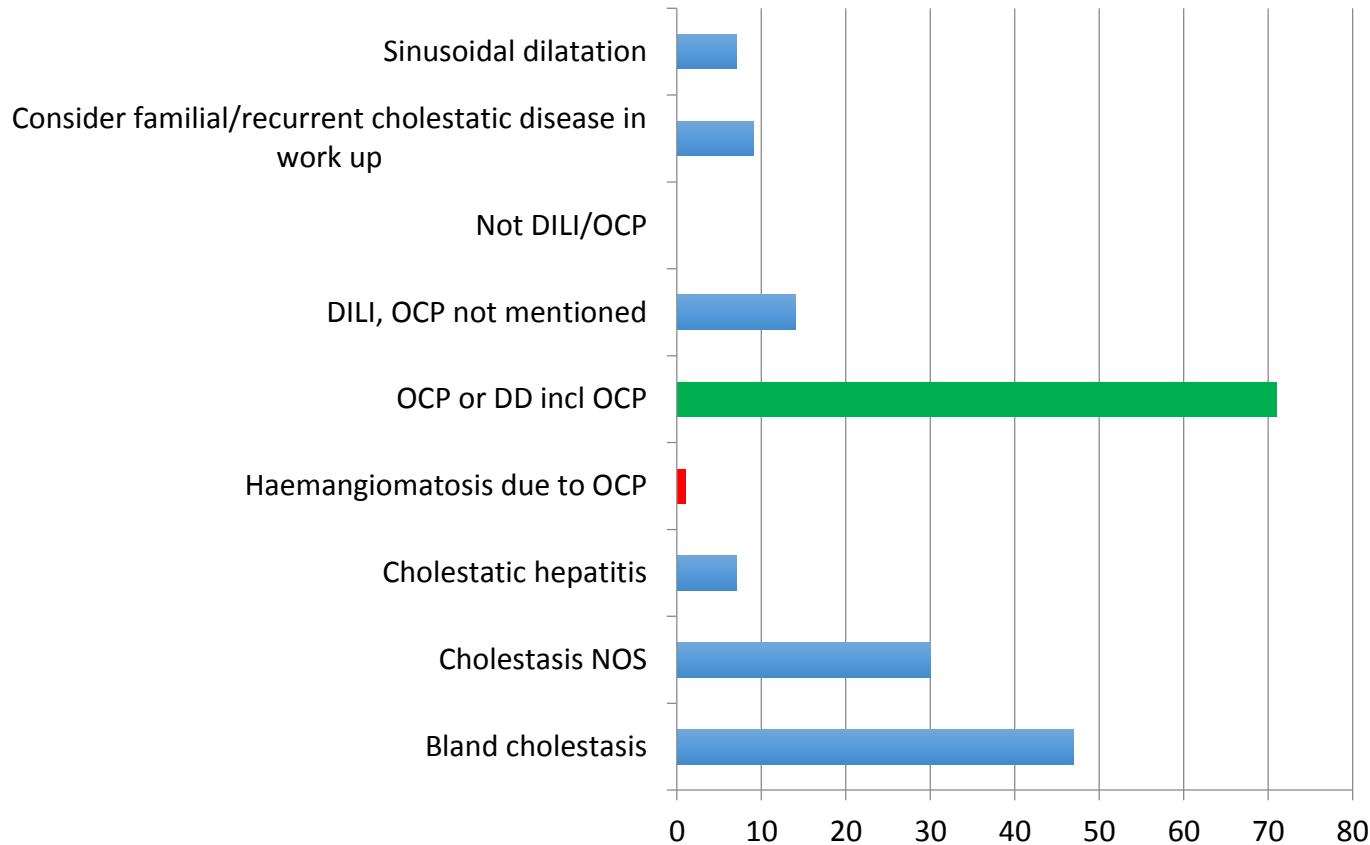


LS8



LS8 Female 17 years

Presented with 4 week history of increasing jaundice and itch. Started combined oral contraceptive pill 3 weeks prior to onset of jaundice. Viral and autoimmune serology negative.



Consensus complete diagnosis would include: (bland) cholestasis, and the fact this is consistent with a reaction to the contraceptive pill.

LS8 Female 17 years

Presented with 4 week history of increasing jaundice and itch. Started combined oral contraceptive pill 3 weeks prior to onset of jaundice. Viral and autoimmune serology negative.

Suggested scoring - for 10 points -

Cholestasis/bland cholestasis and reference to the OCP as cause /possible cause.
'Cholestasis' or 'bland cholestasis' - terminology used by 77.

Accept cholestatic hepatitis ? definitions, not really a hepatitis, this to lose 5 marks

Lose 5 marks if:

Cholestasis due to DILI but OCP specifically not mentioned agreed

As per 1 but mentioned “steroids” would not lose 5

Called cholestatic hepatitis differential included sepsis as well as OCP?DILI agreed lose 5

“?benign recurrent intrahepatic cholestasis triggered by pill” would not lose 5

Lose 10 marks if:

“oral contraceptive induced hepatic haemangiomas” agreed

Case LS8 17 F

presented with 4 week history of increasing jaundice and itch. Started combined oral contraceptive pill 3 weeks prior to onset of jaundice. Viral and autoimmune serology negative.

No additional stains

Scoring summary agreed at meeting:

For full marks: cholestasis or bland cholestasis, attributable to oral contraceptive pill

Lose 5 marks for – unequivocal cholestatic hepatitis

Lose 5 marks for – no mention of the oral contraceptive pill / OCP ('steroids' accepted)

Lose 10 marks for – OCP induced hepatic haemangiomas (cholestasis not mentioned)

Comments: 'Drug induced liver injury' / DILI – felt to be too non-specific – this pattern of cholestasis is very characteristic of OCP induced cholestasis.

Cholestatic hepatitis – is a different pattern of DILI, with hepatocyte injury, inflammation and lobular disarray - features not seen here.

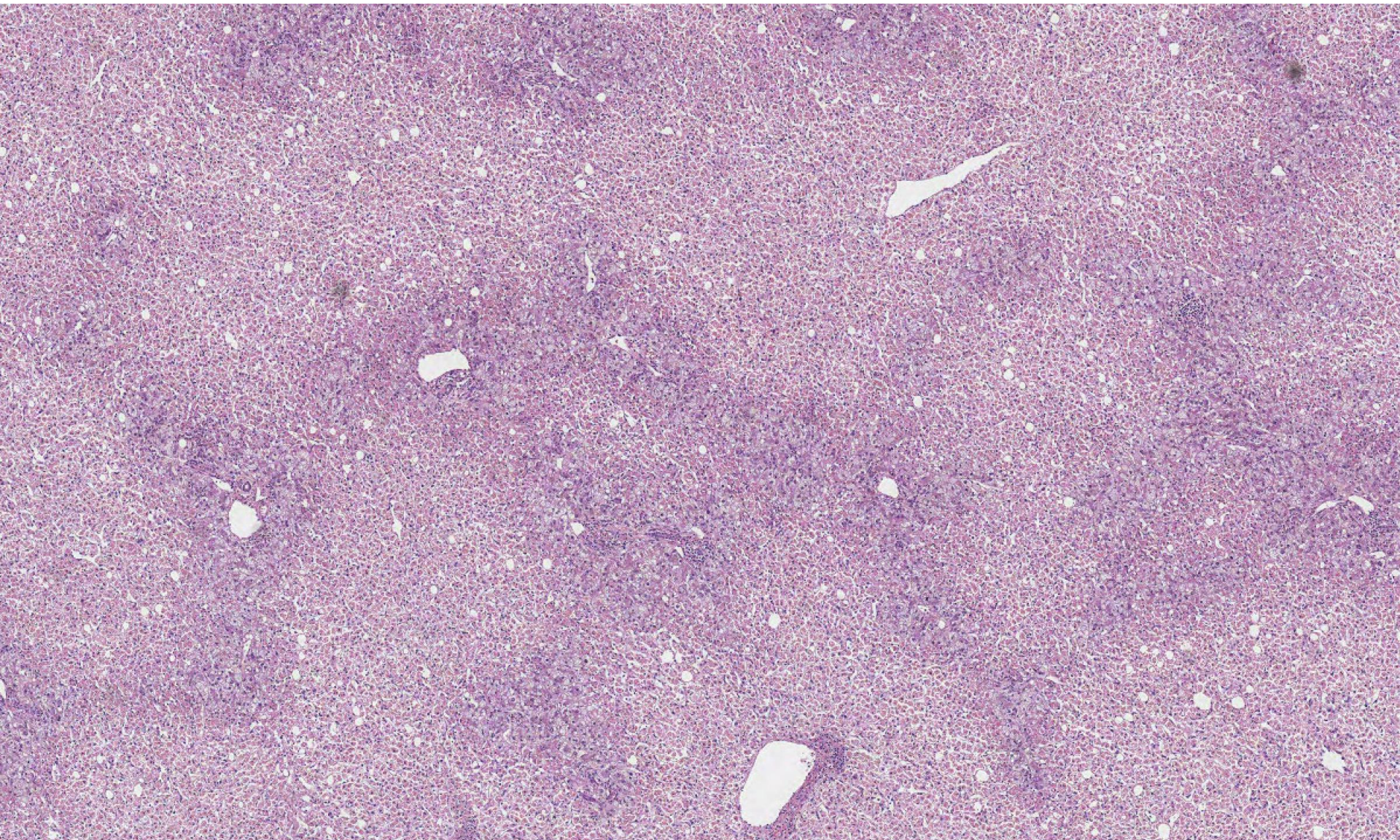
Case LS9 30 F

Paracetamol overdose

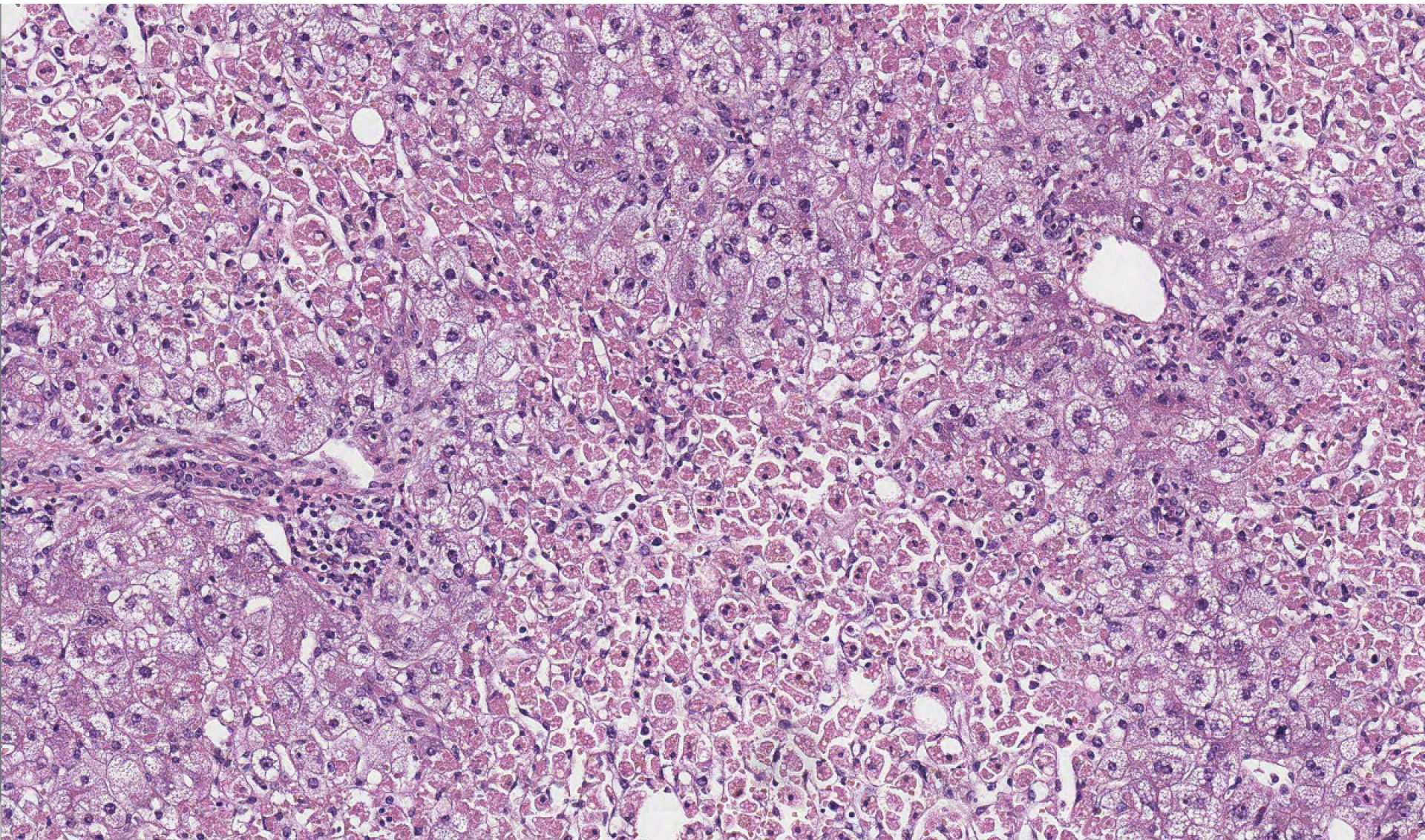
Native liver, hepatectomy. No additional stains



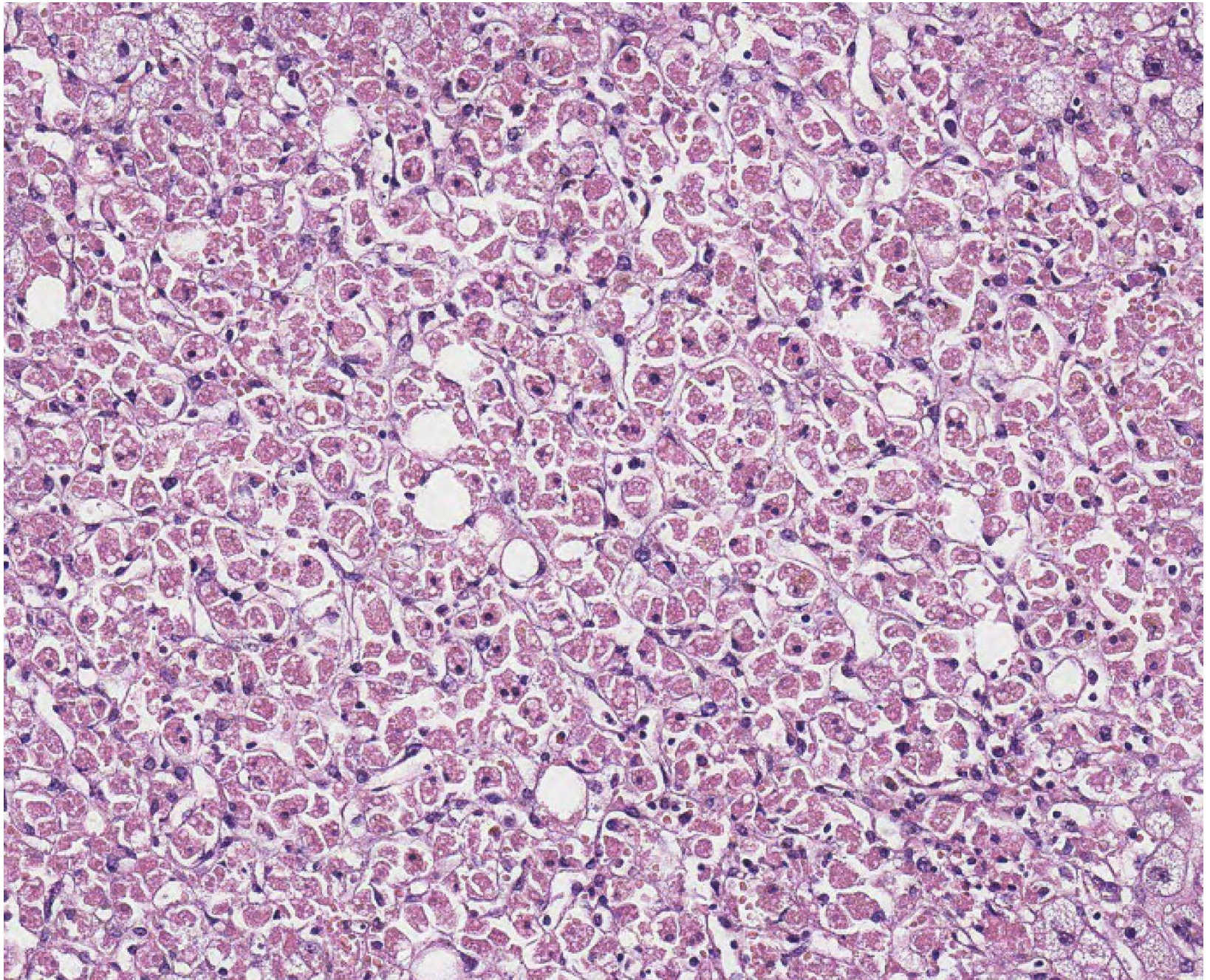
LS9



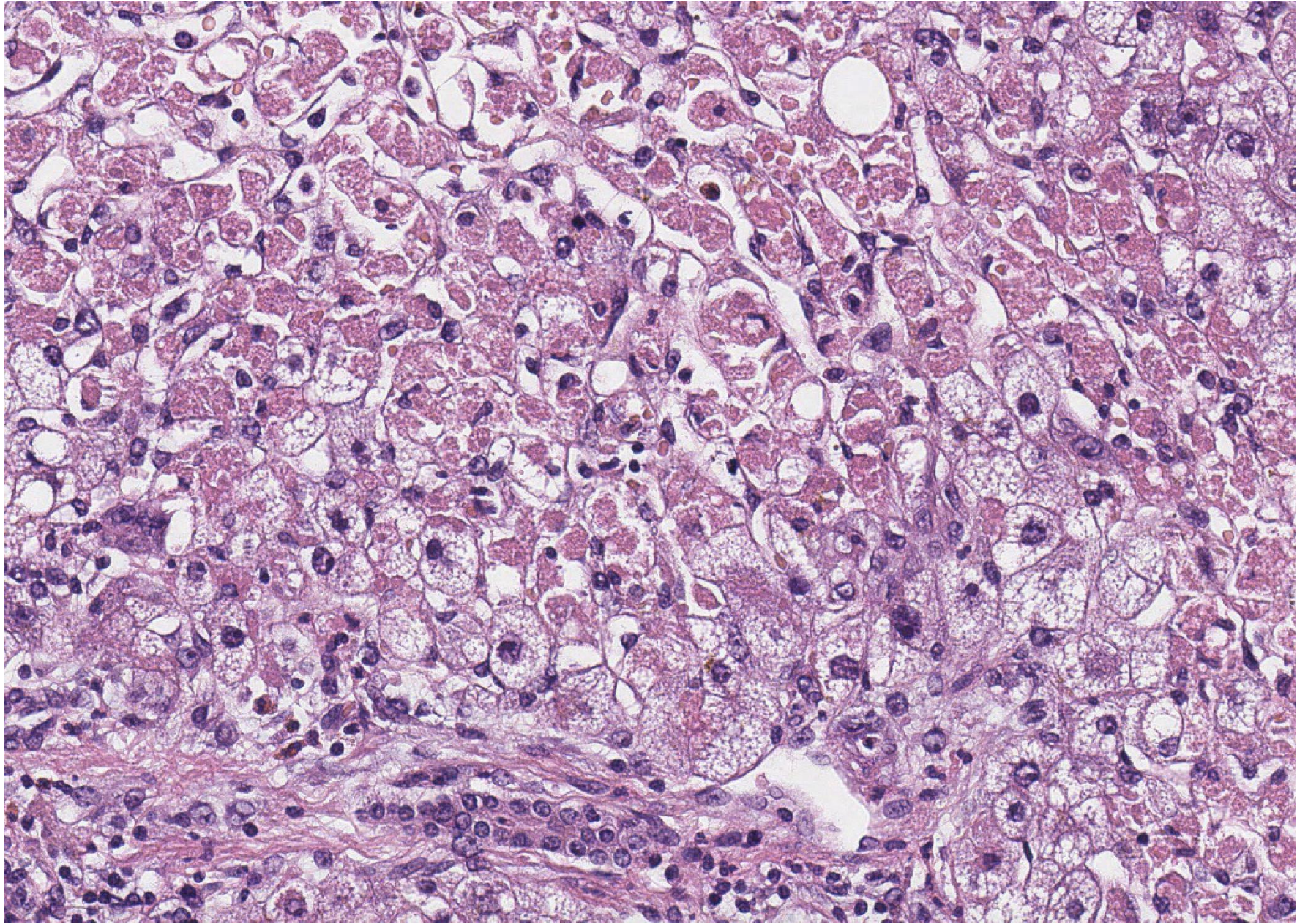
LS9



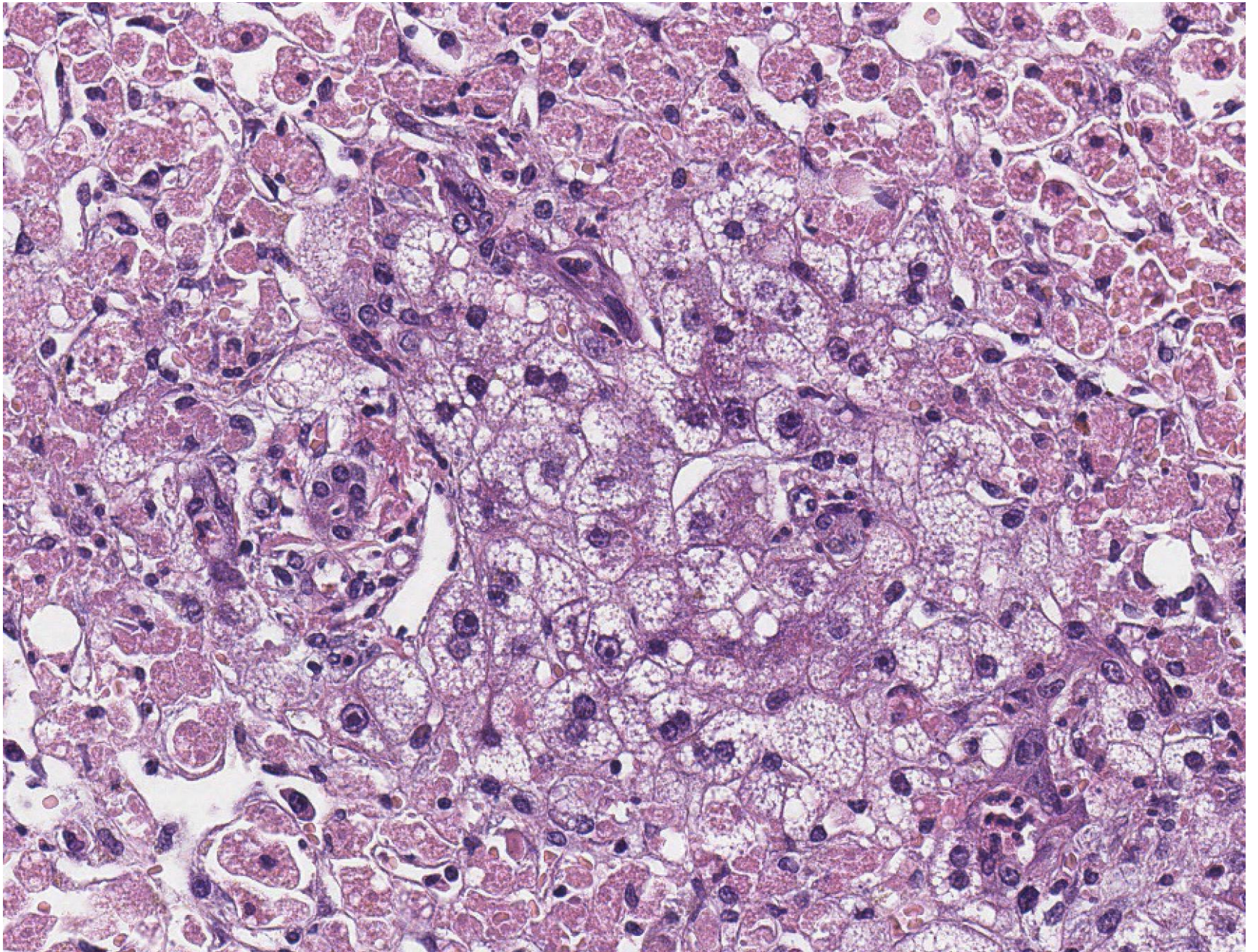
LS9



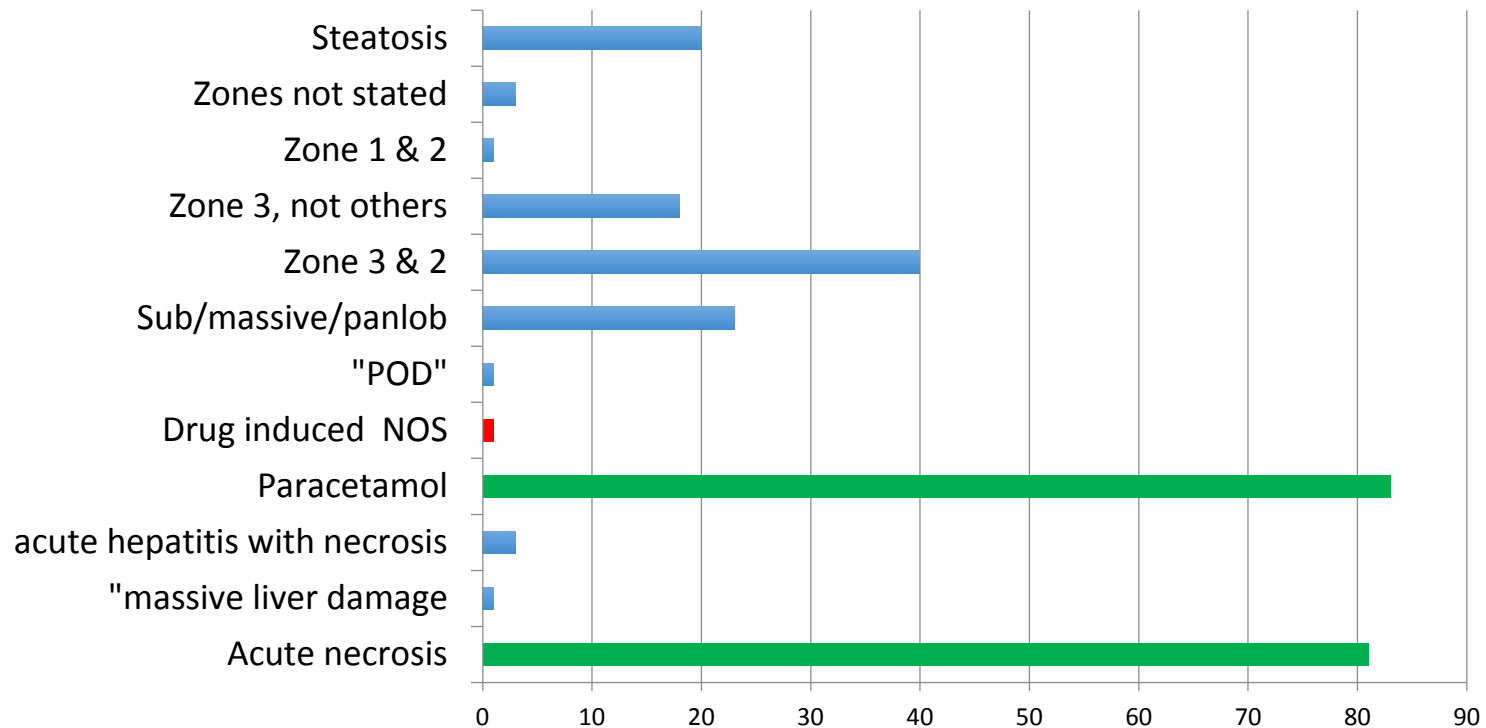
LS9



LS9



LS9. Female 30 years. Paracetamol overdose.
Specimen: Native liver, hepatectomy.
Macroscopic description: Soft pale liver with tan mottling.
Immunohistochemistry: Nil.



Consensus complete response:

Acute necrosis due to paracetamol, or as possible/likely cause

LS9. Female 30 years. Paracetamol overdose.
Specimen: Native liver, hepatectomy.
Macroscopic description: Soft pale liver with tan mottling.

Suggested scoring - for 10 points -

Acute necrosis due to paracetamol

These were discussed by committee and considered ok:

- Called hepatitis with necrosis but attribute to paracetamol
- Acute drug-induced hepatitis and massive cellular necrosis.
- “Panacinar necrosis due to POD”
- Massive liver cell damage (attributed to paracetamol)

Lose 5 marks:

Drug induced but paracetamol not mentioned

Nobody loses 10 marks!

Case LS9 30 F

Paracetamol overdose

Native liver, hepatectomy. No additional stains

Scoring summary agreed at meeting:

For full marks – severe liver injury with extensive necrosis attributed to paracetamol

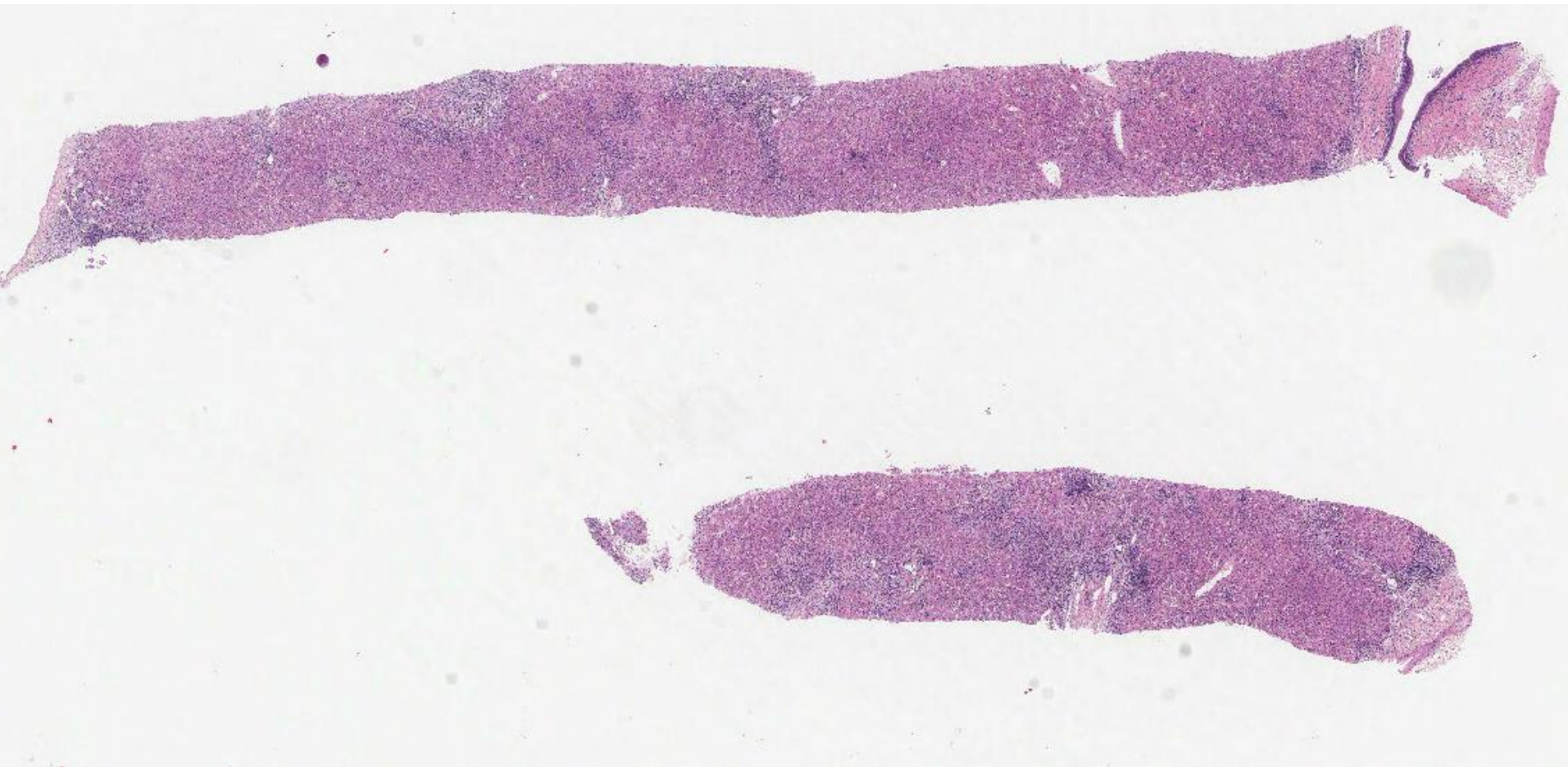
Lose marks for – acute drug induced hepatitis and massive necrosis (paracetamol not specified)

Comment: this is severe zonal necrosis rather than a hepatitis. Several commented on the zones affected – acinar zones 2-3. However, these aspects were not scored.

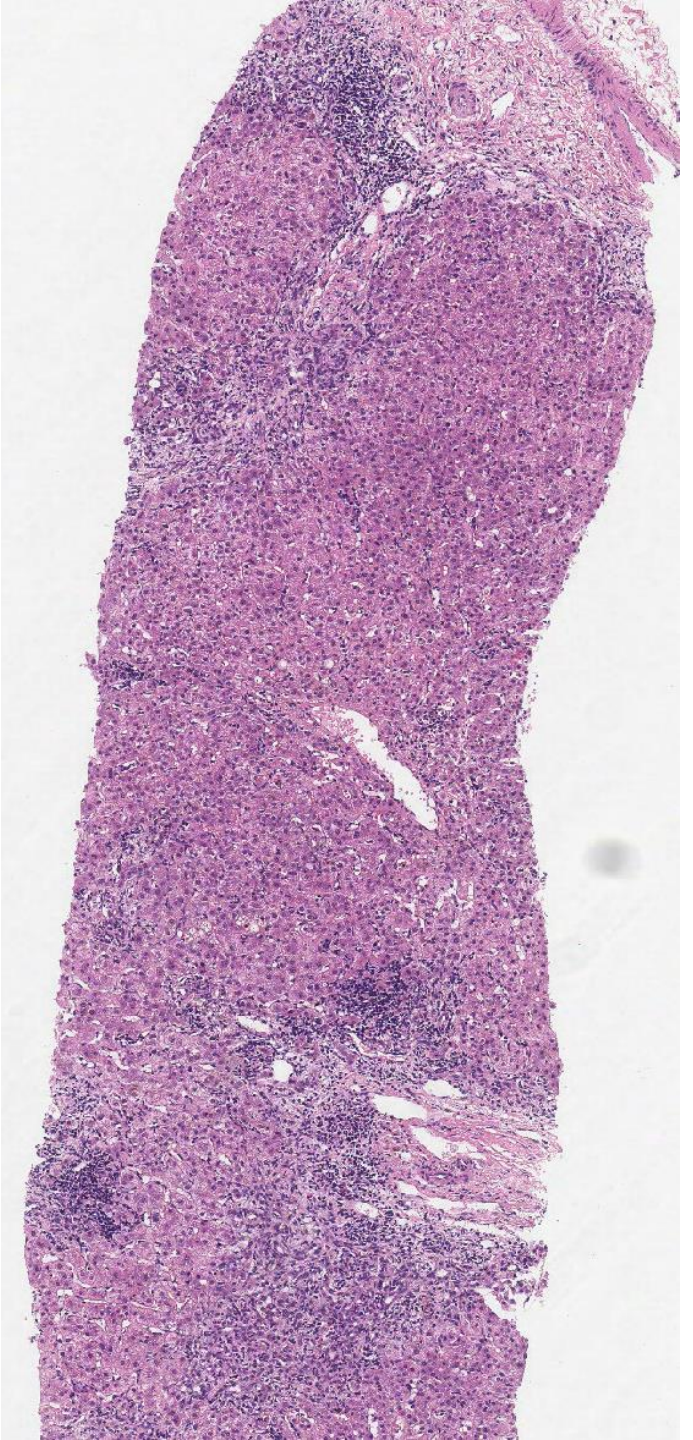
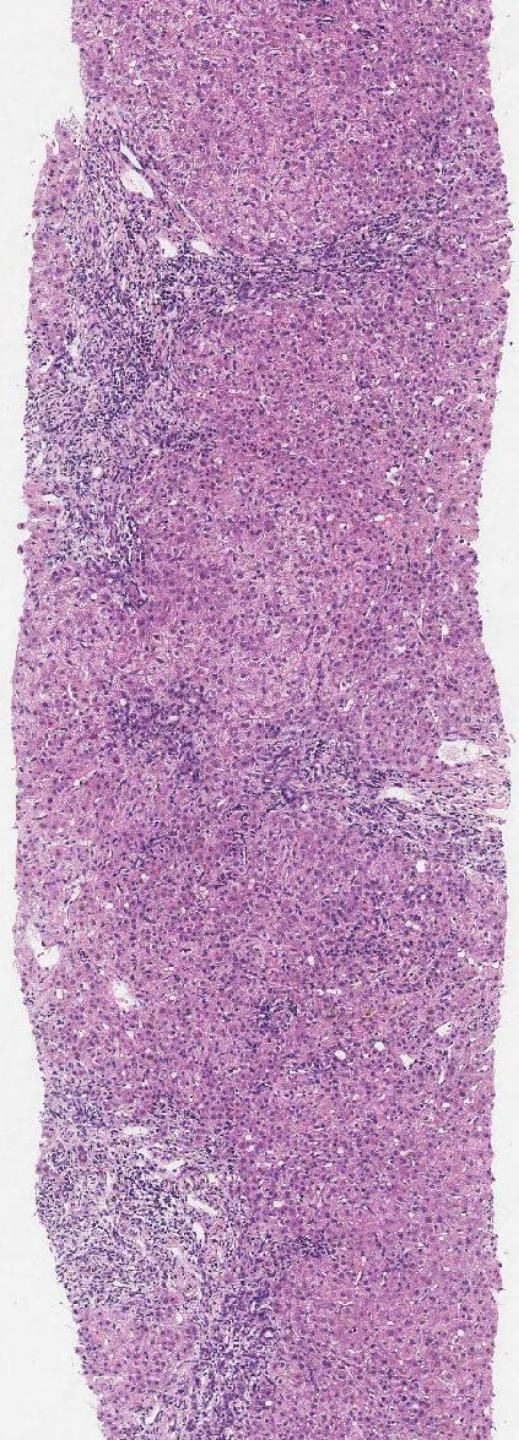
Case LS10 50F

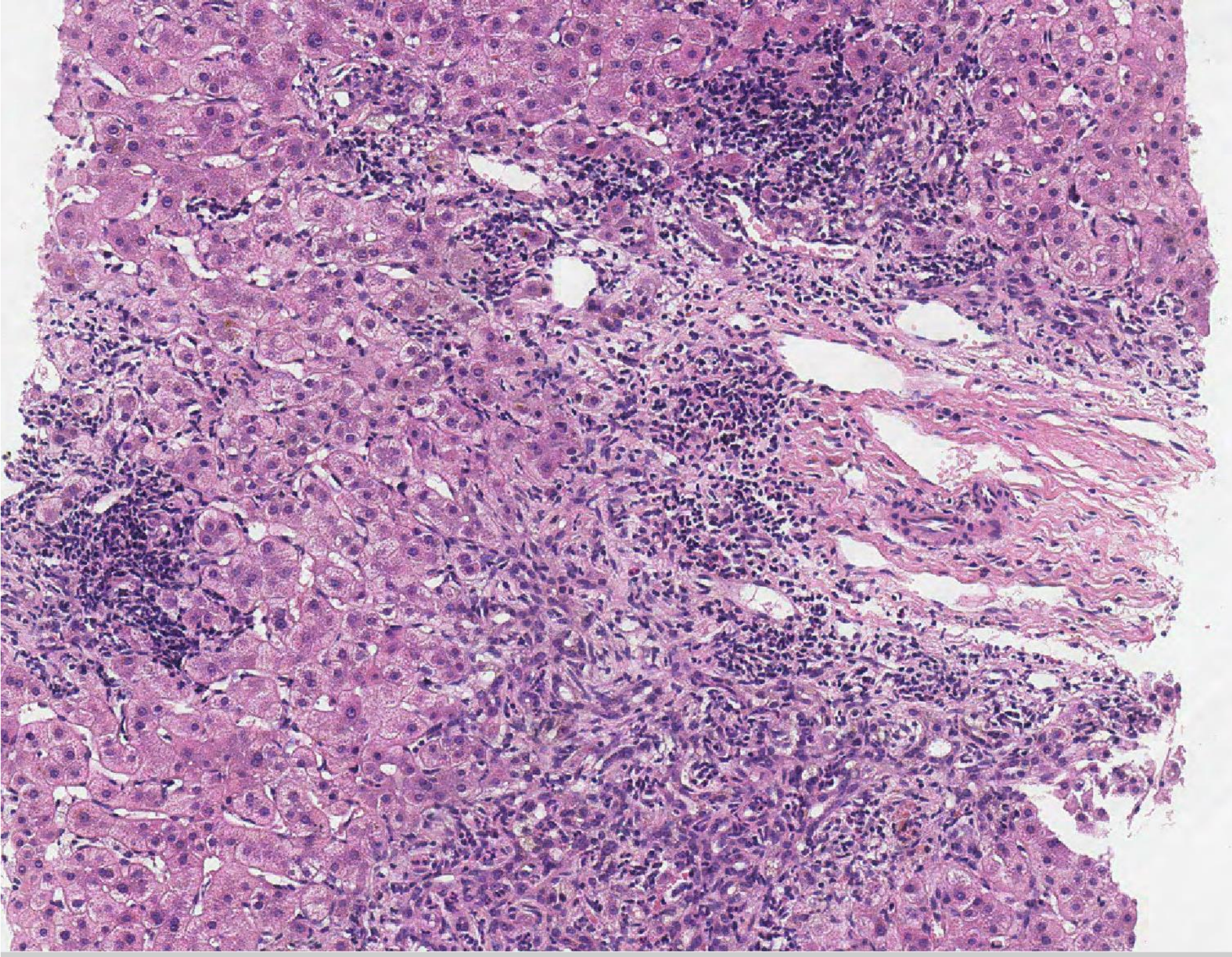
PBC, urso non-responder. Elevated ALT, ? AIH overlap. ALT 255, ALP 615, bilirubin 53, IgG 15.5

Also reticulin, Shikata, keratin 7

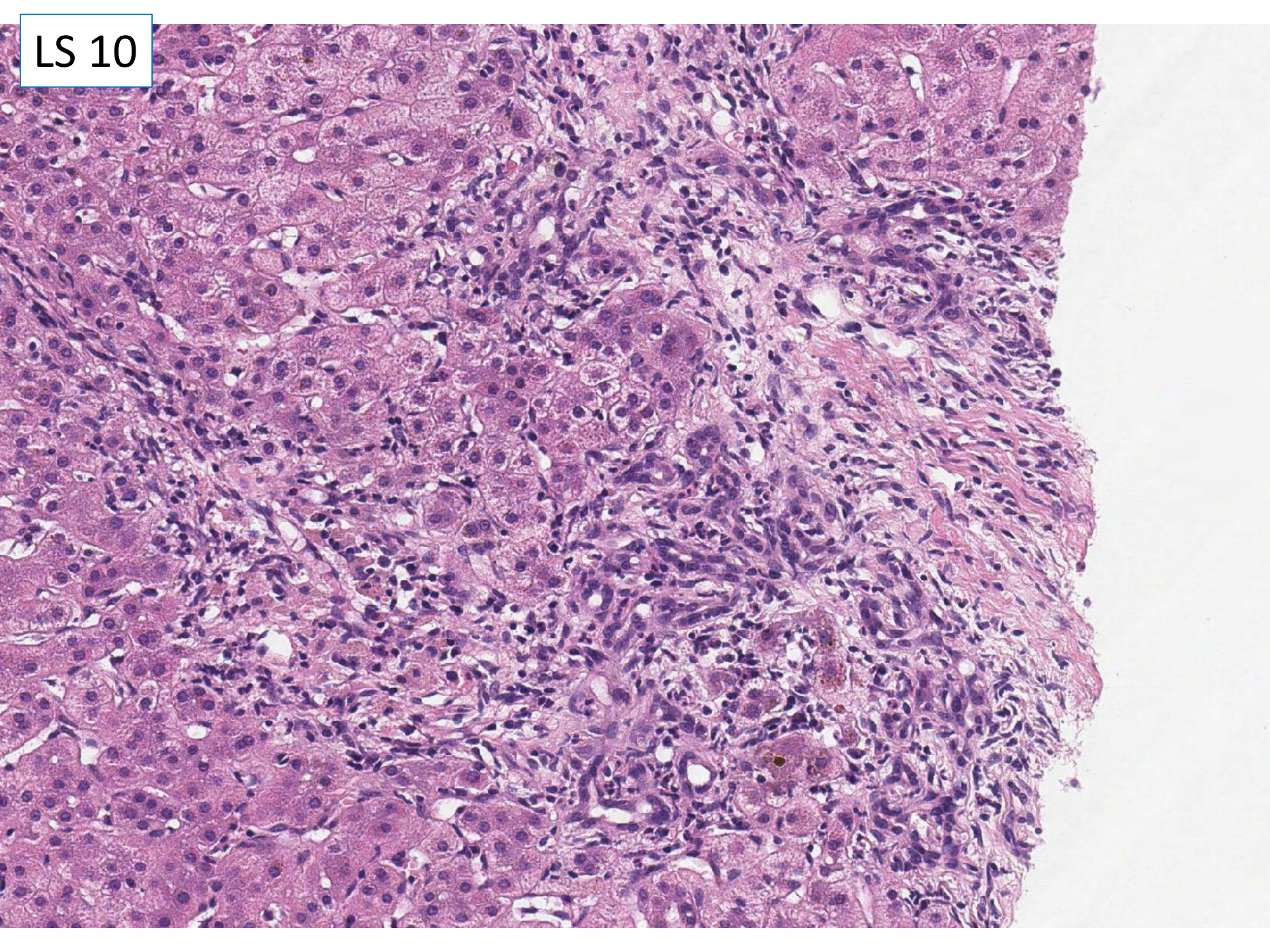


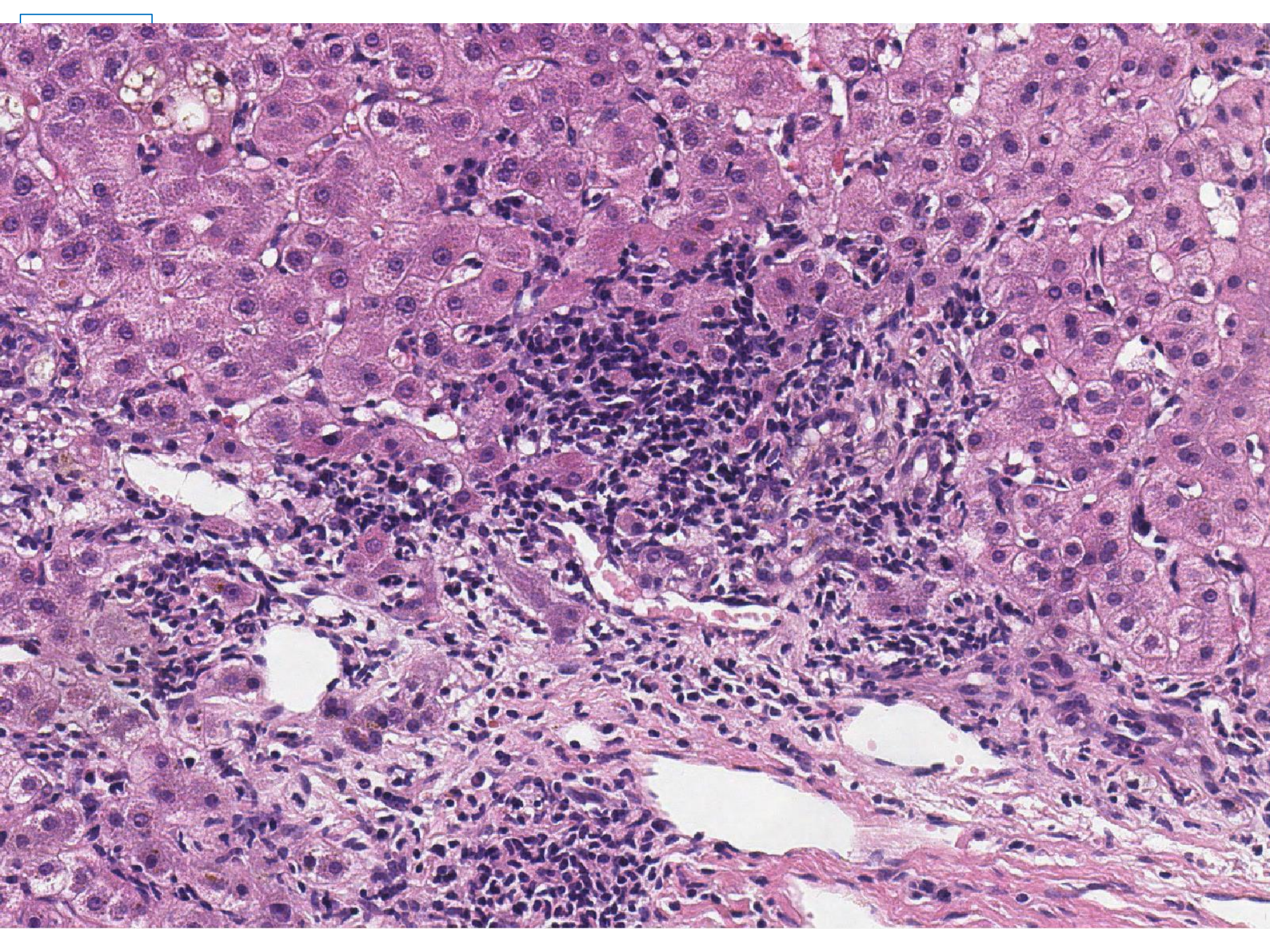
LS



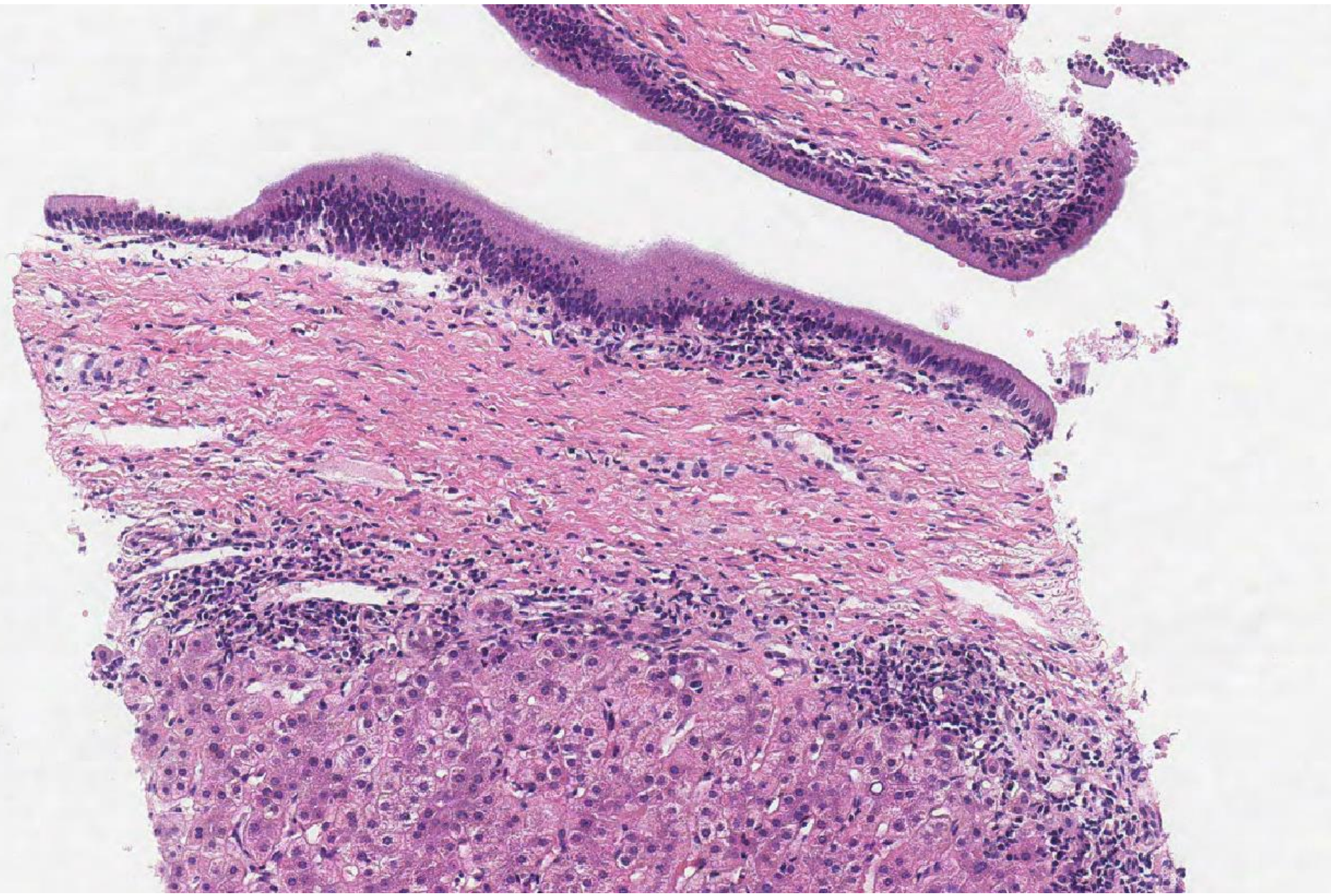


LS 10

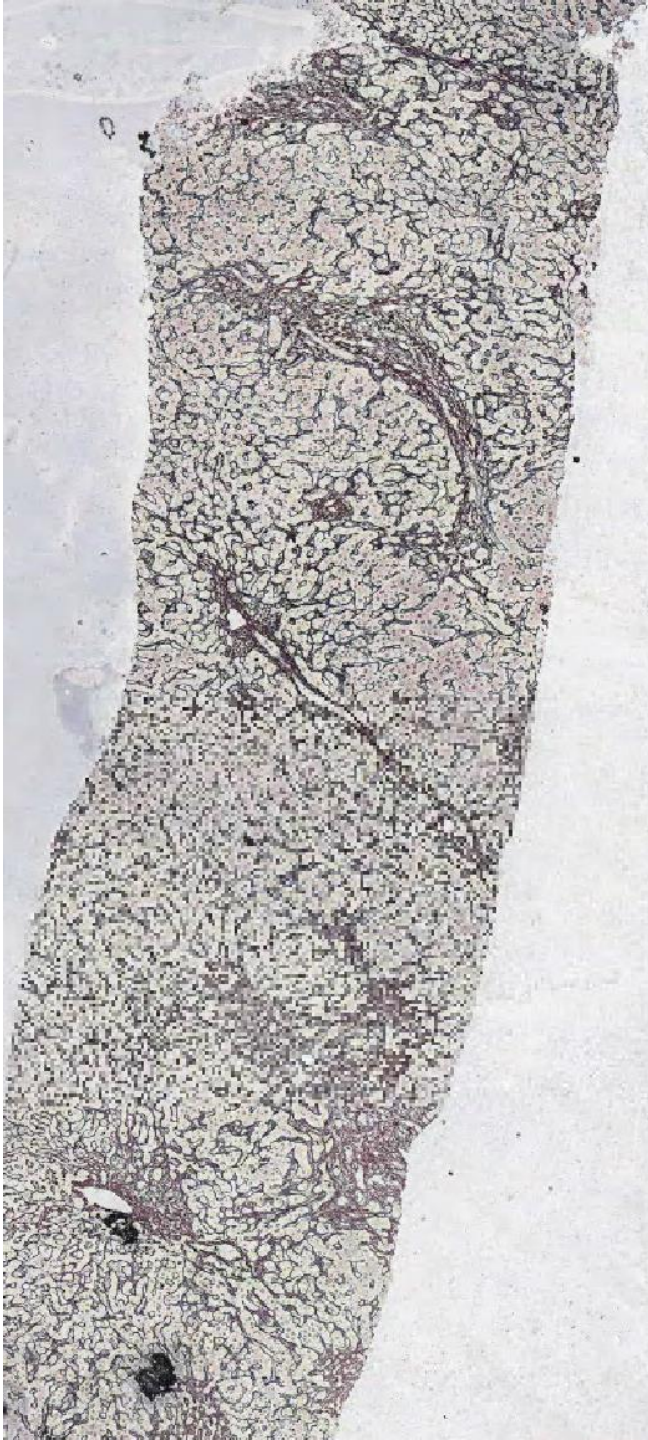




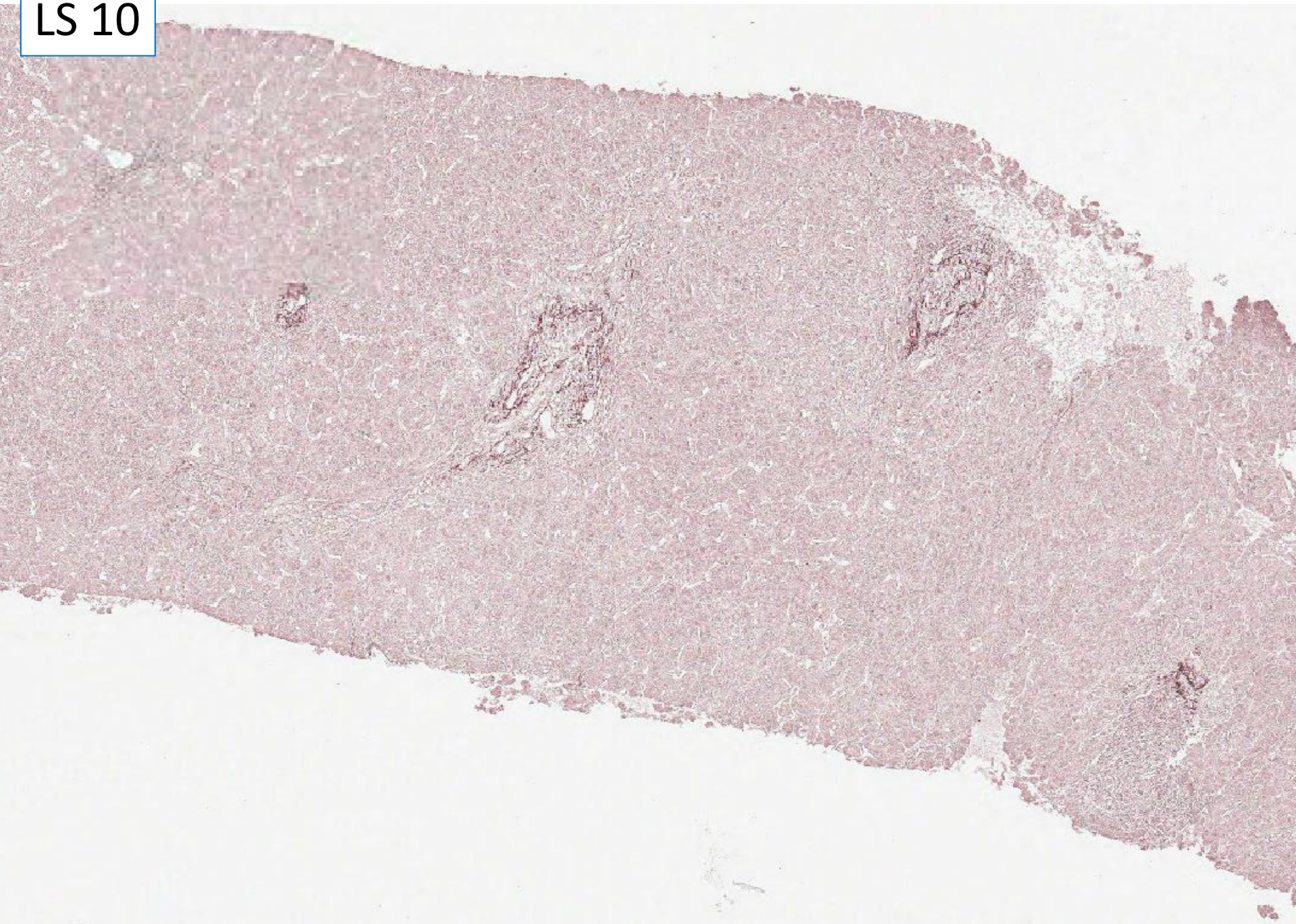
LS 10



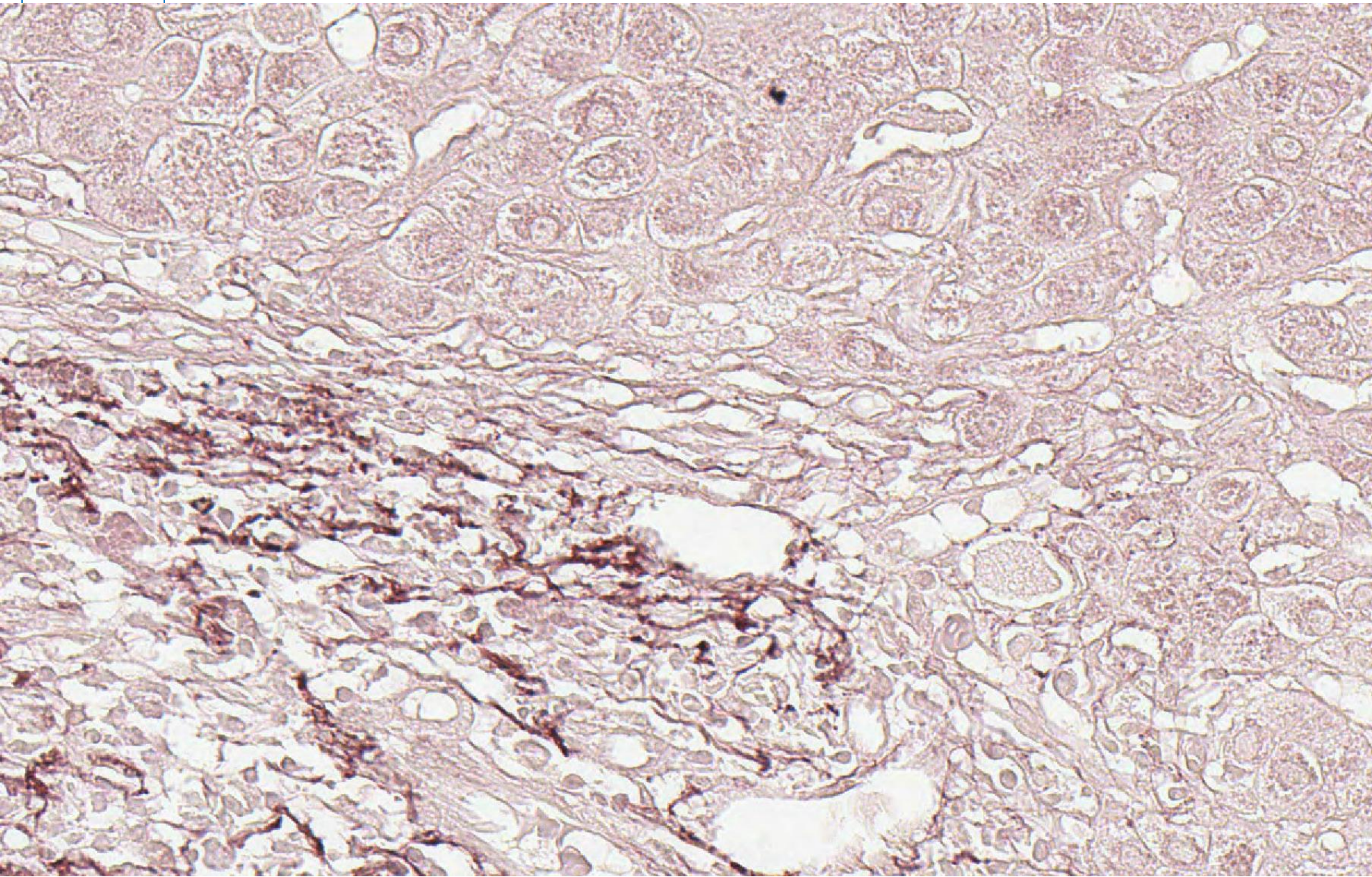
LS 10



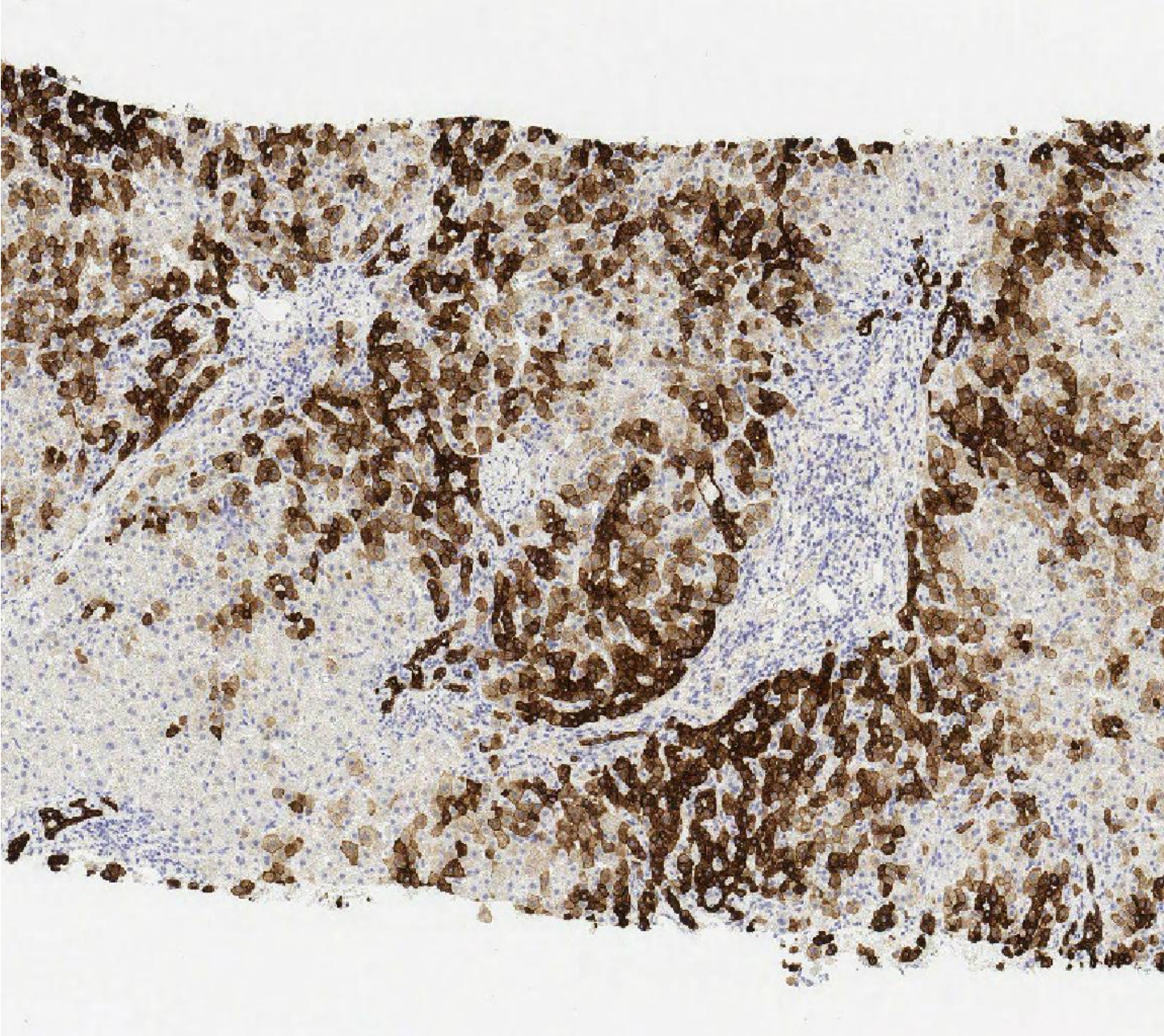
LS 10



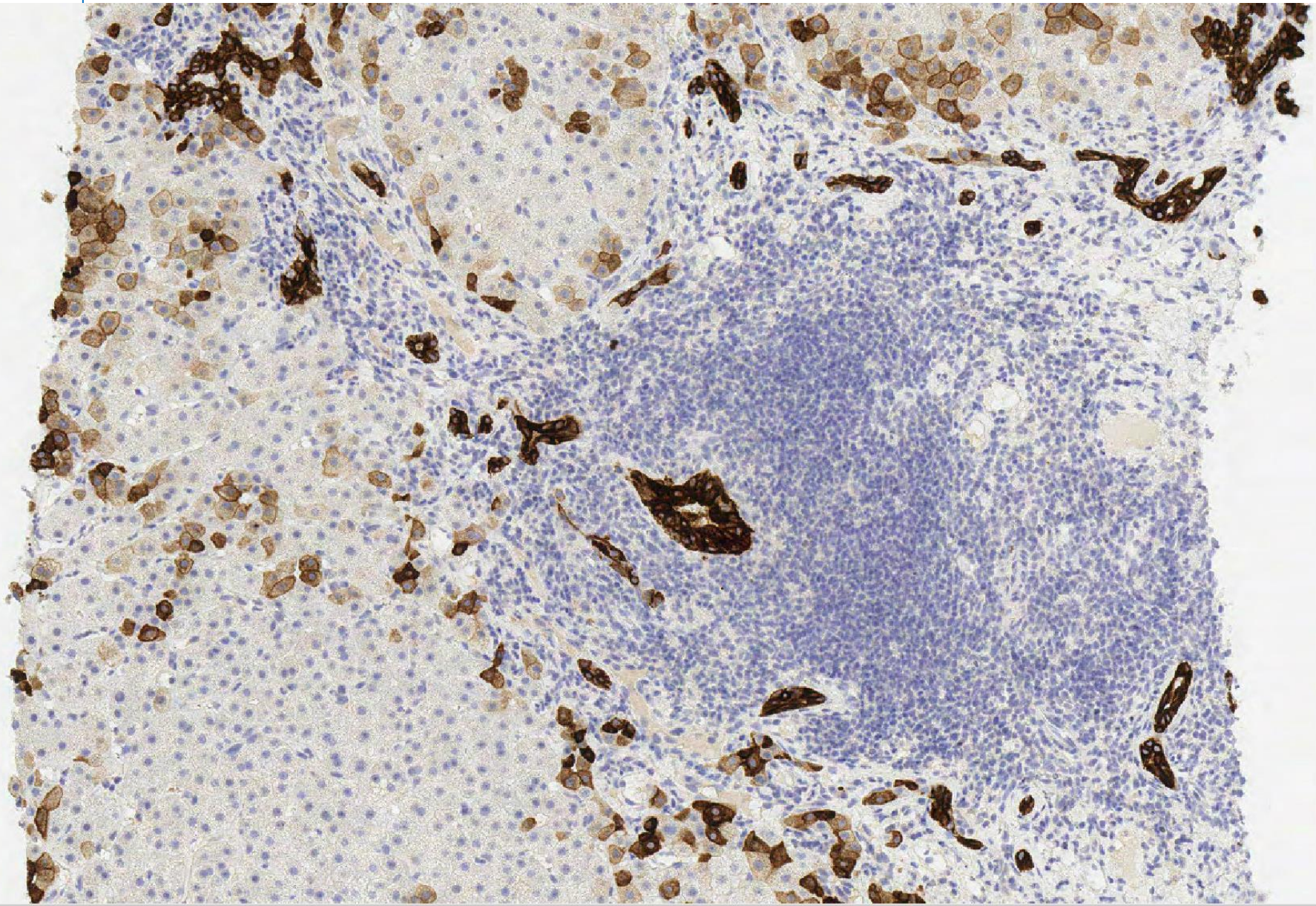
LS 10



LS 10



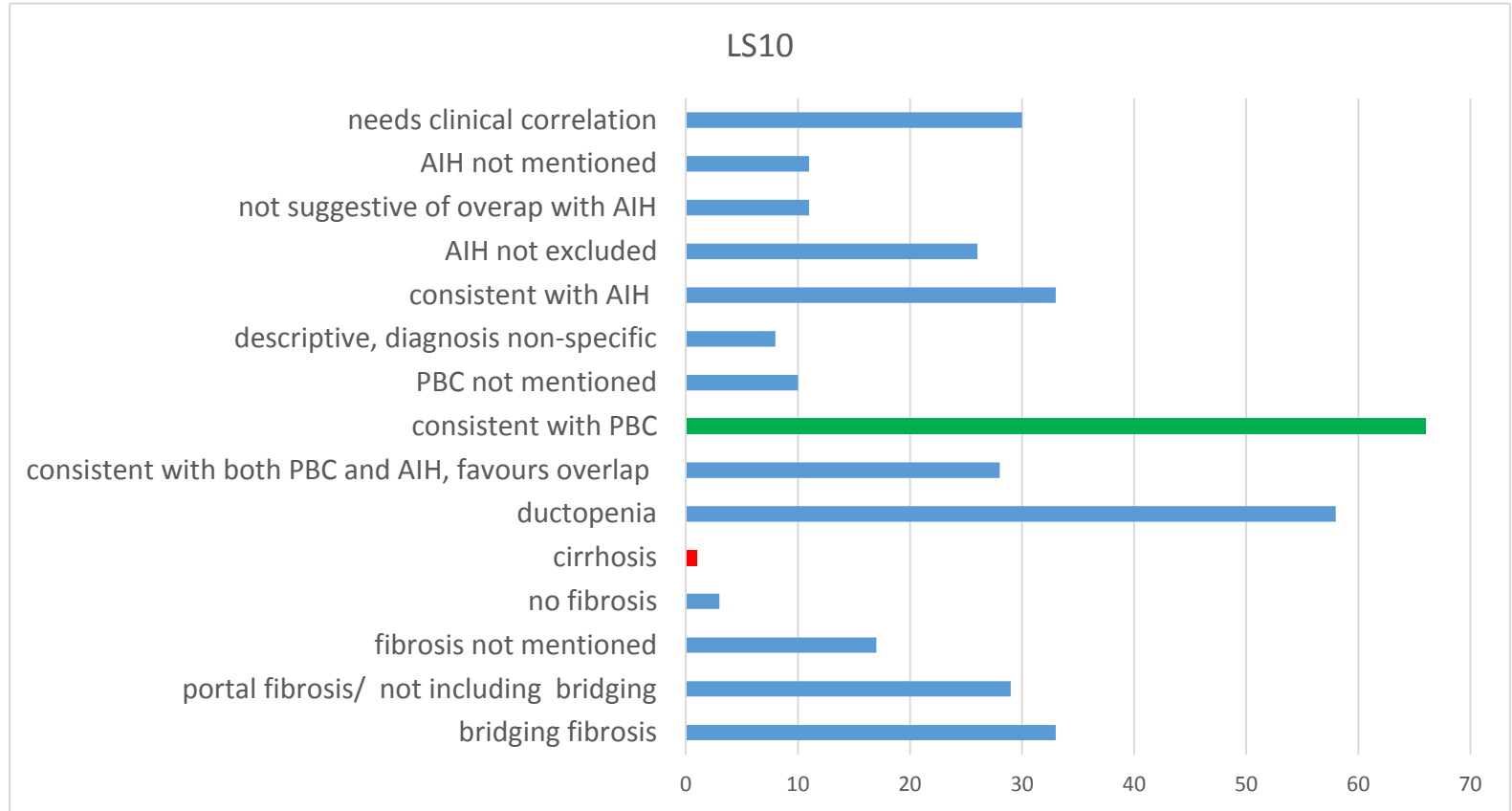
LS 10



Case LS10 50F

PBC, urso non-responder. Elevated ALT, ? AIH overlap. ALT 255, ALP 615, bilirubin 53, IgG 15.5

Also reticulin, Shikata, keratin 7



Consensus complete responses would include

biliary features, ductopenia, consistent with clinical diagnosis of PBC, with indication of disease stage.

And a comment on AIH overlap – but this needs full clinical parameters - Ig, autoantibodies.

There are 59 considering additional AIH is at least possible – not sufficient consensus to score.

Case LS10 50F

PBC, urso non-responder. Elevated ALT, ? AIH overlap. ALT 255, ALP 615, bilirubin 53, IgG 15.5
Also reticulin, Shikata, keratin 7

Suggested scoring: for 10 points **Is this suitable for scoring?**

'consistent with PBC' or 'primary biliary cholangitis' anywhere in response' 73 responses.

and some comment on autoimmune hepatitis - 72 responses - although no consensus on whether present or not.

Can't comment on fibrosis stage because insufficient connective tissue stains.

? Lose 5 marks if say PSC

If don't mention PBC

If don't mention AIH, autoimmune hepatitis or 'overlap' anywhere in report - 7

'overlap syndrome' without naming the diseases that are overlapping

Clear diagnosis of cirrhosis (only 1 person)

Some text which may lose 5 marks – but this case is probably not for scoring anyway – included to give examples of the range of diagnoses:

- i) acute on chronic cholangiopathy, exclude dominant stricture/malignancy
- ii) chronic cholangiopathy, interface and lobular infl. Consistent with an overlap syndrome
- iii) cirrhosis, chronic cholangiopathy, hepatitis component suggestive of overlap
- iv) canalicular bile plugs present - not expected in PBC ? Drug
- v) mostly compatible with PSC, AIH not excluded
- vi) large duct obstruction requires imaging ? PSC
- vii) Biliary injury, not typical of PBC, with active hepatitis. Differential diagnosis drug reaction and infection, with AIH/PBC overlap less likely
- viii) exclude duct obstruction and DILI in view of cholestasis
- ix) chronic active hepatitis with biliary features
- x) acute hepatitis on background PBC
- xi) AIH, exclude large duct obstruction, biliary disease but not definite features to suggest PBC
- xii) review by expert liver pathologist

Case LS10 57F

Fatty liver, previous positive antibodies and raised IgG. significantly elevated fibroscan suggestive of cirrhosis - liver biopsy to assess/stage disease.

Scoring summary agreed at meeting:

For full marks – any mention of PBC.

This case was considered likely to be unsuitable for scoring at the time of collation, but can reach consensus if any discussion of PBC is accepted. This was agreed at the meeting by a show of hands.

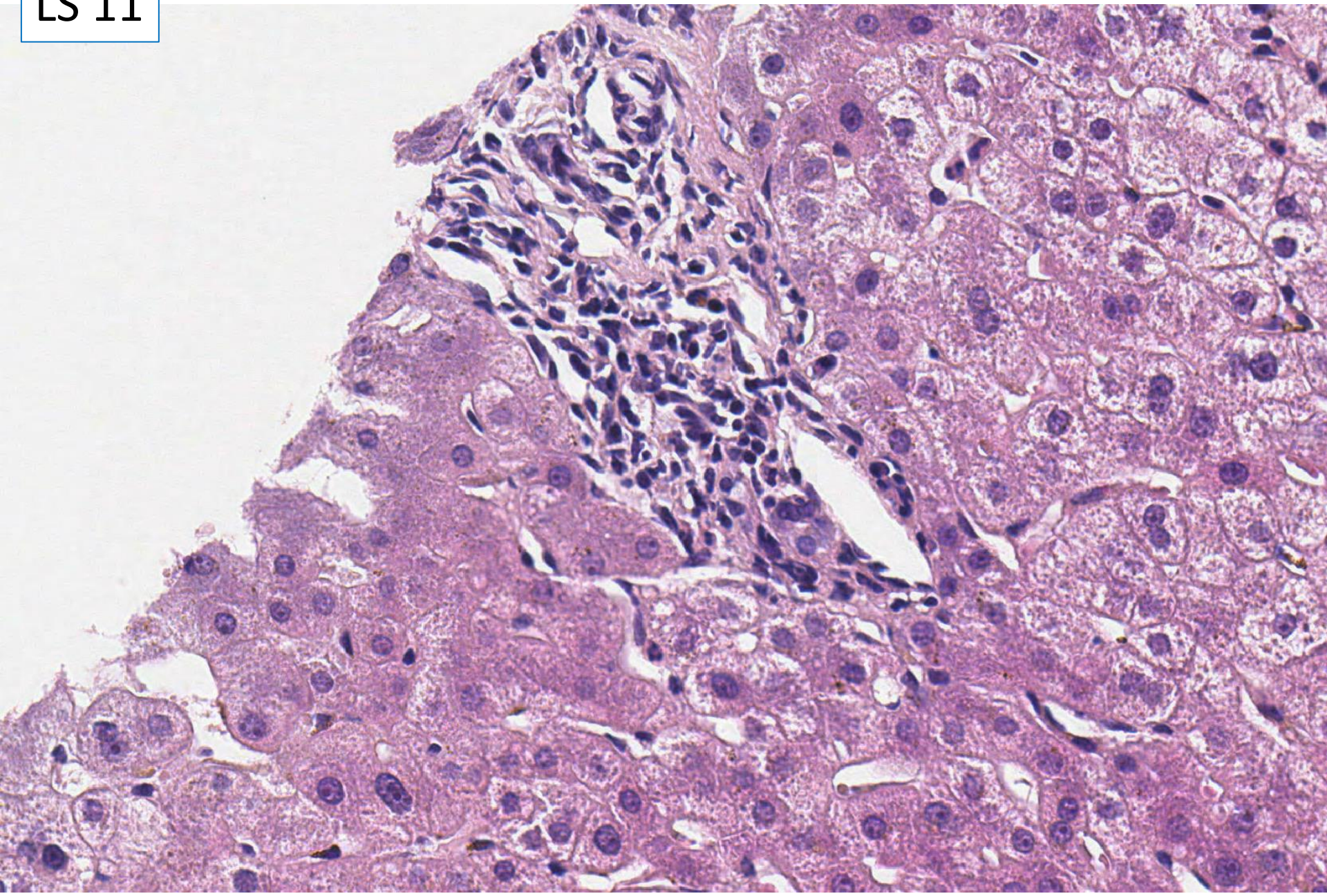
Lose 5 marks – no specific mention of PBC – includes responses of PSC (unclear if intended or a typo) and of large bile duct obstruction.

Case LS11 50 M

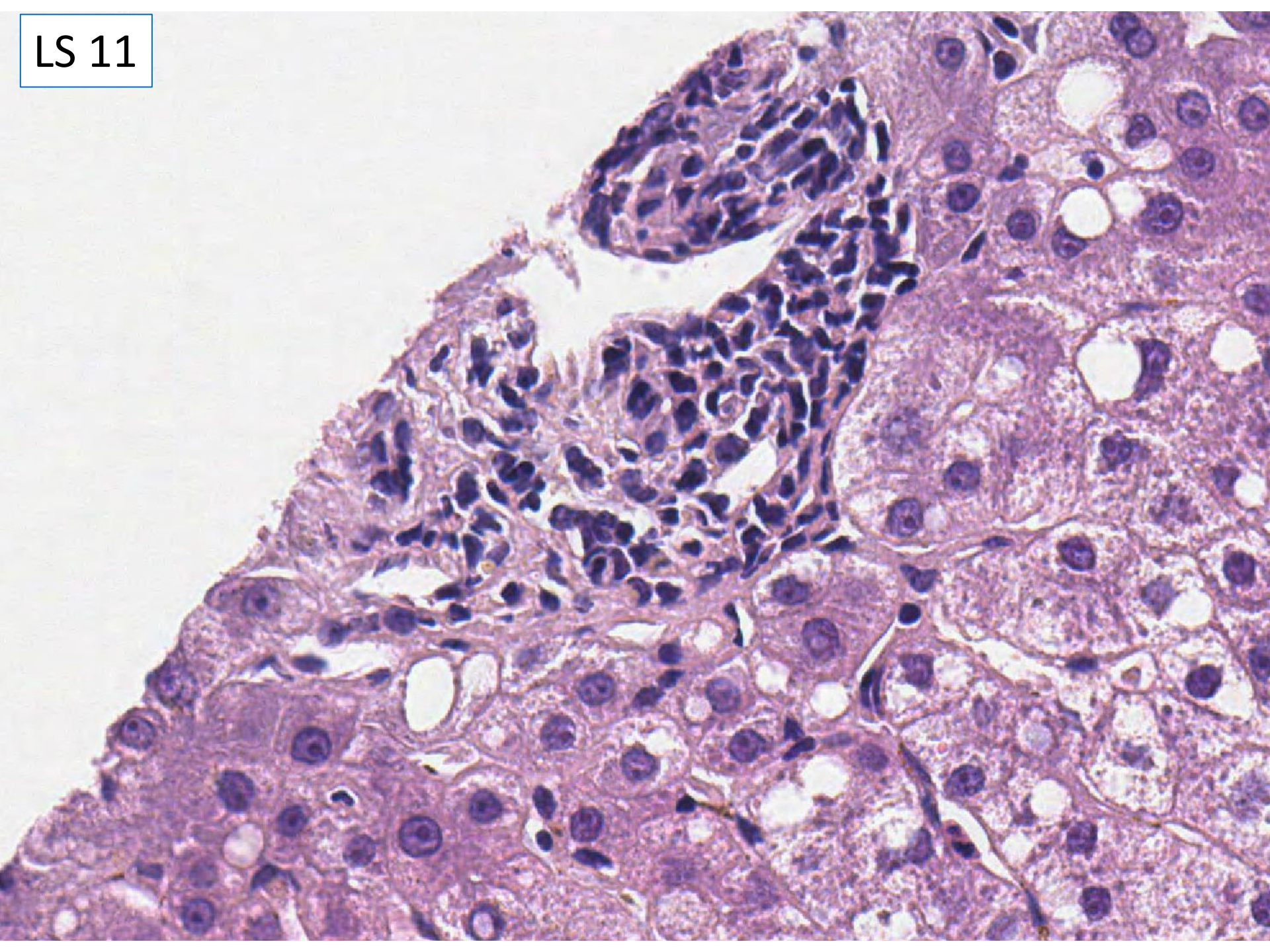
MBT for AML 11.1.18. Massively deranged LFTs, ALT 600
? GVHD, ? other liver pathology



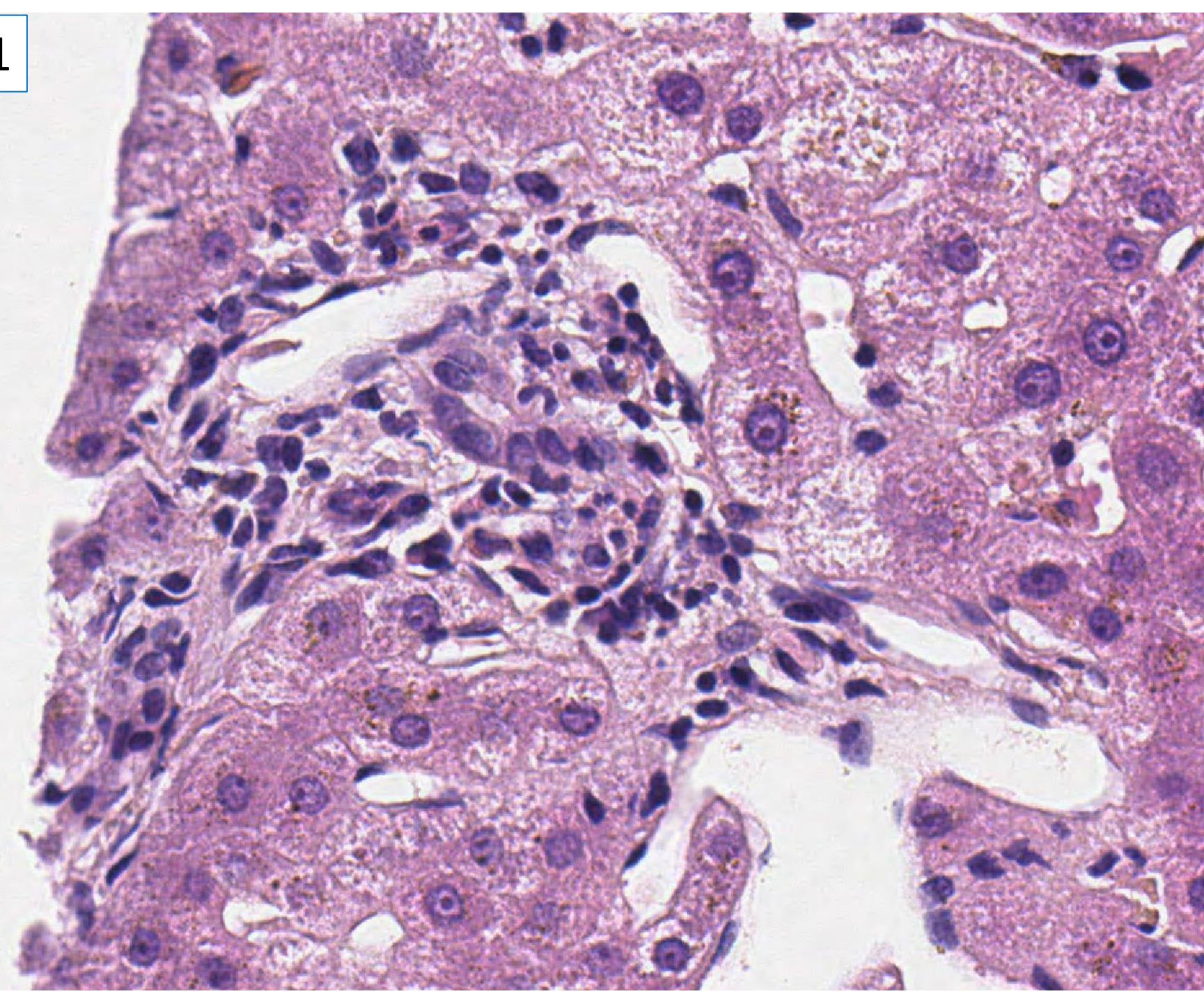
LS 11

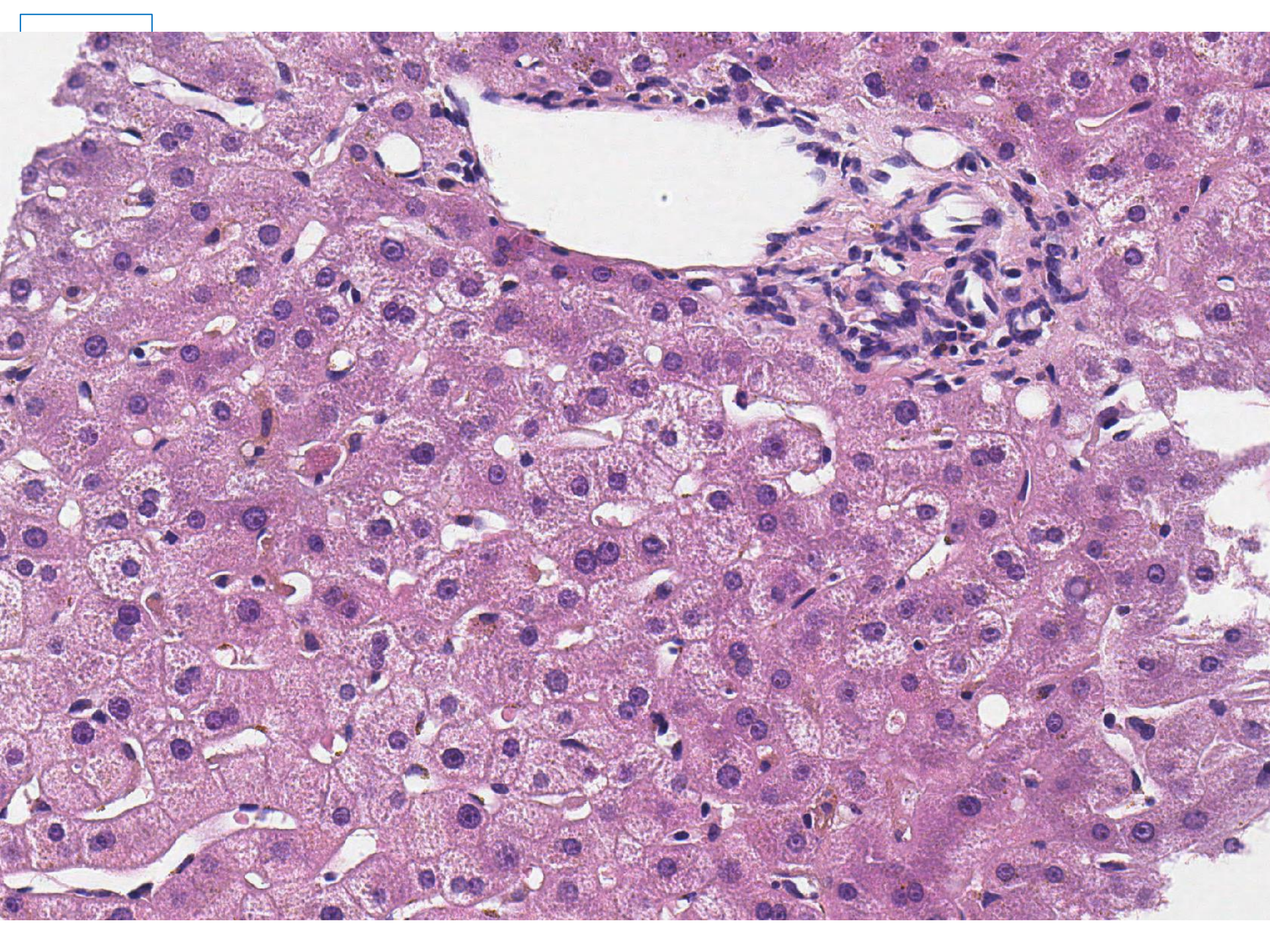


LS 11

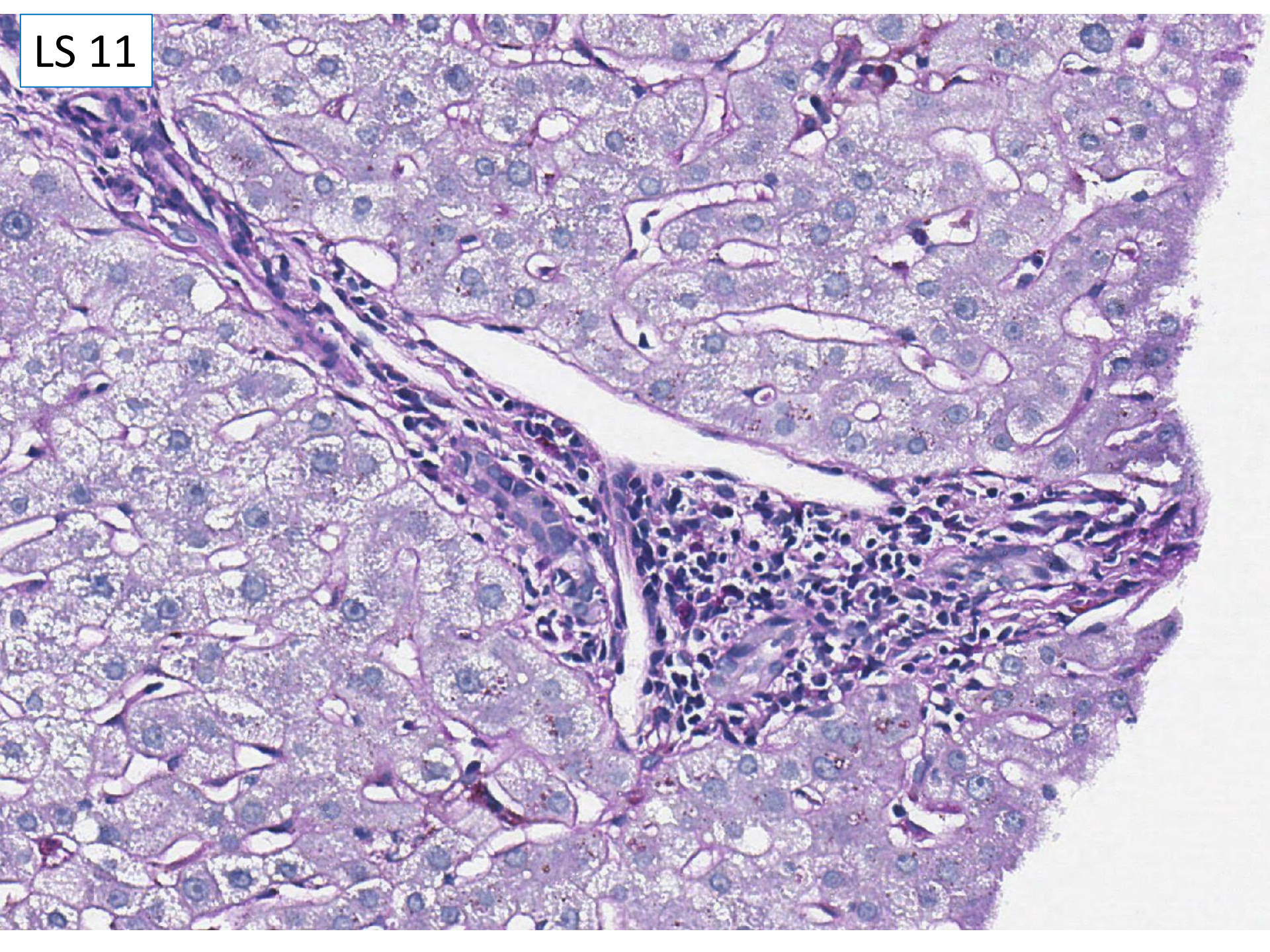


LS 11

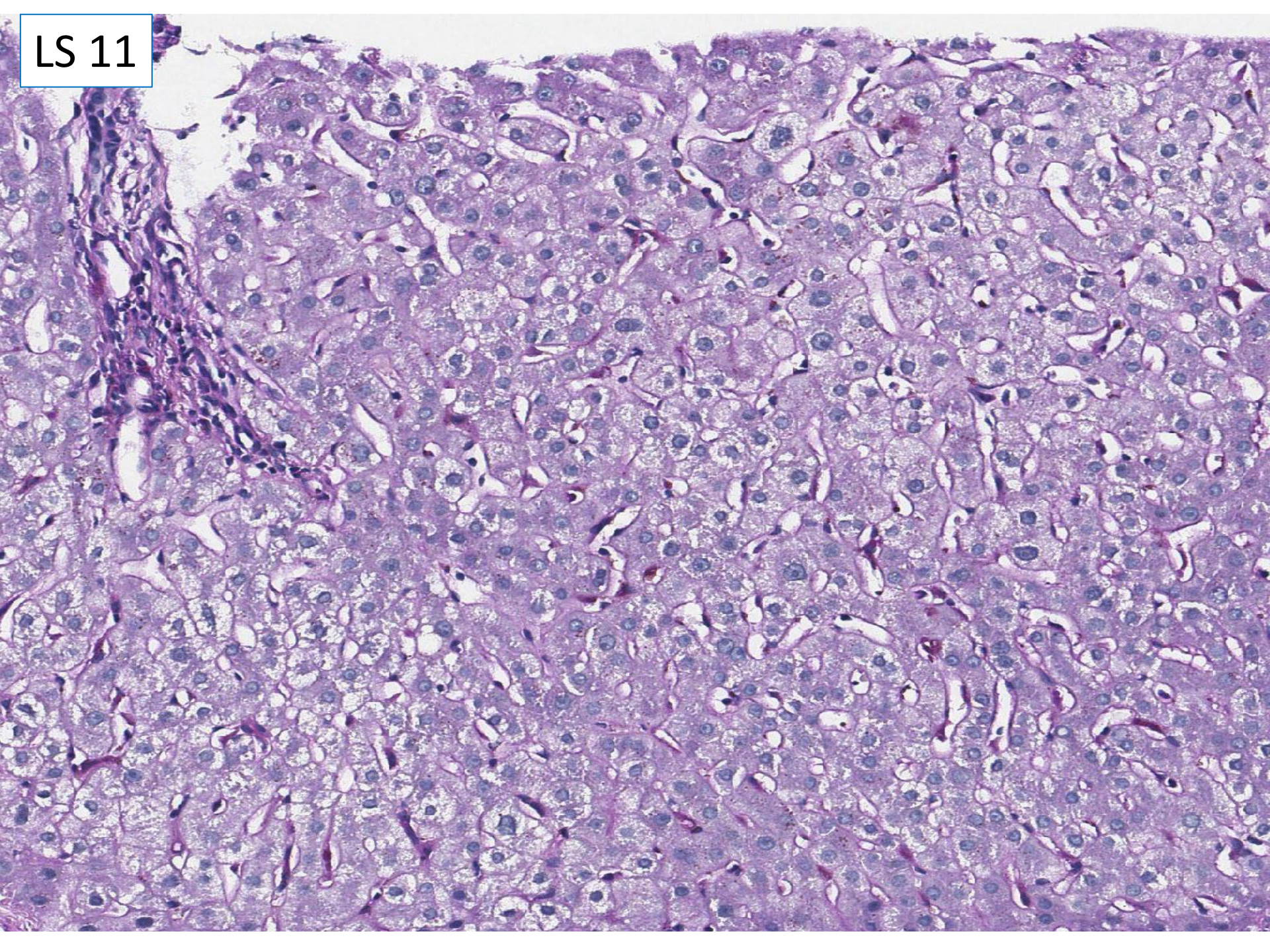




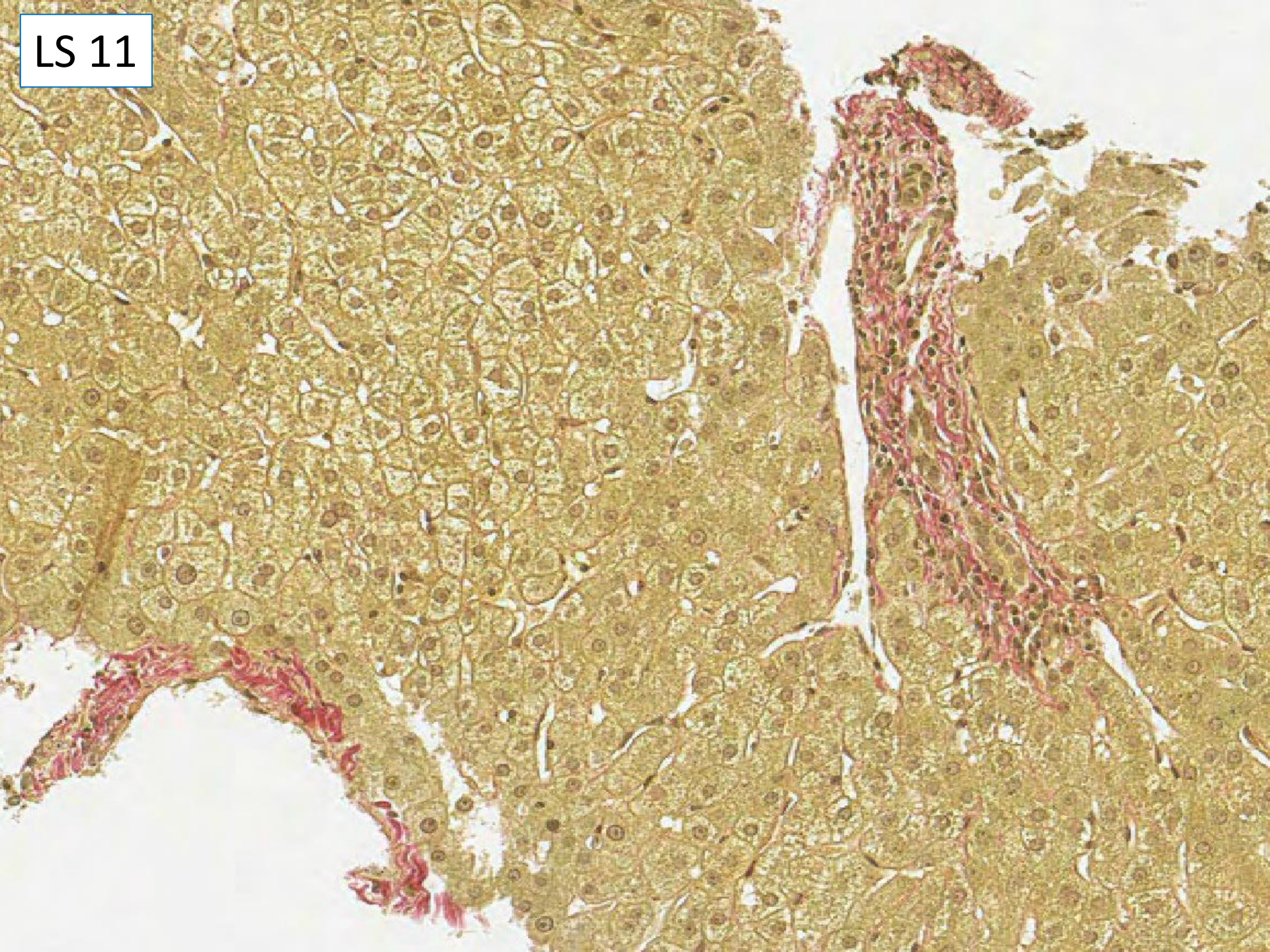
LS 11



LS 11

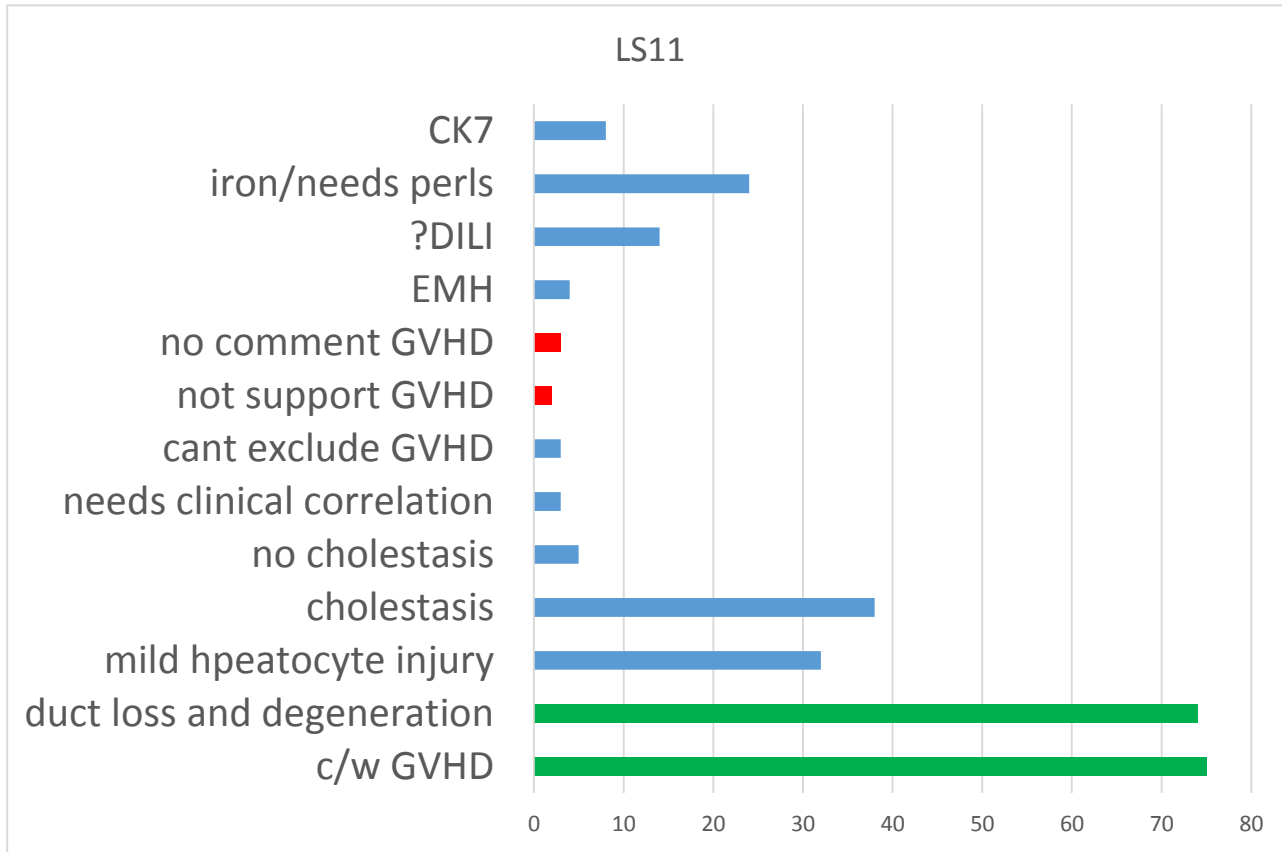


LS 11



Case LS11 50 M

MBT for AML 11.1.18. Massively deranged LFTs, ALT 600
? GVHD, ? other liver pathology



Consensus complete responses would include
Consensus that this is consistent with GVHD (75/83).

Case LS11 50 M

MBT for AML 11.1.18. Massively deranged LFTs, ALT 600
? GVHD, ? other liver pathology

Suggested scoring: for 10 points diagnosis of GVHD +/- other differential.

Lose 5 marks if 'cannot exclude GVHD' but alternative diagnosis is preferred

Lose 10 marks (score 0) if 'not supportive of GVHD' or no comment on GVHD

.....

Discussion points. I was surprised by the degree of consensus in this case.

Clinically this was considered to be a definite diagnosis of GVHD and responded well to treatment.

It illustrates how features of GVHD can be very subtle despite the high level of liver enzymes – but there is no marked hepatitis or alternative cause. I think you have to look hard for evidence of bile duct injury.

I noted comments on cholestasis present or absent – I didn't see any, and I've noticed I often don't when others do – what criteria are we using?

What would the role be for CK7 in this case ?

case LS11 50 M

MBT for AML 11.1.18. Massively deranged LFTs, ALT 600
? GVHD, ? other liver pathology

Scoring summary agreed at meeting:

For full marks – changes consistent with graft v host disease, and/or favouring this over alternative diagnoses.

In view of strong consensus for GVHD -

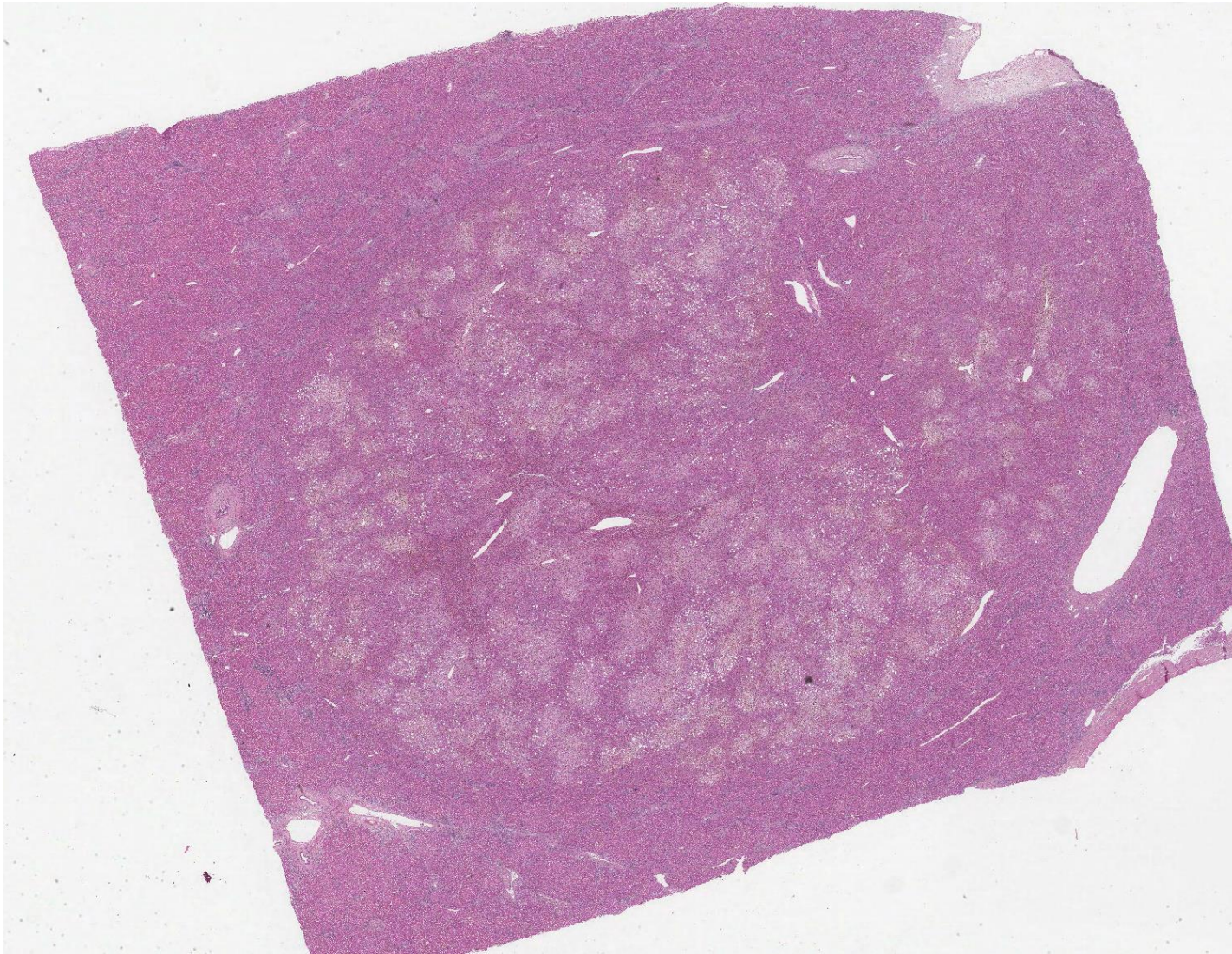
Lose 5 marks for diagnoses favouring an alternative diagnosis over GVHD, or when 'rejection' terminology used in response (2 people)

Lose 10 marks for no mention of GVHD and alternative diagnosis made (DILI)

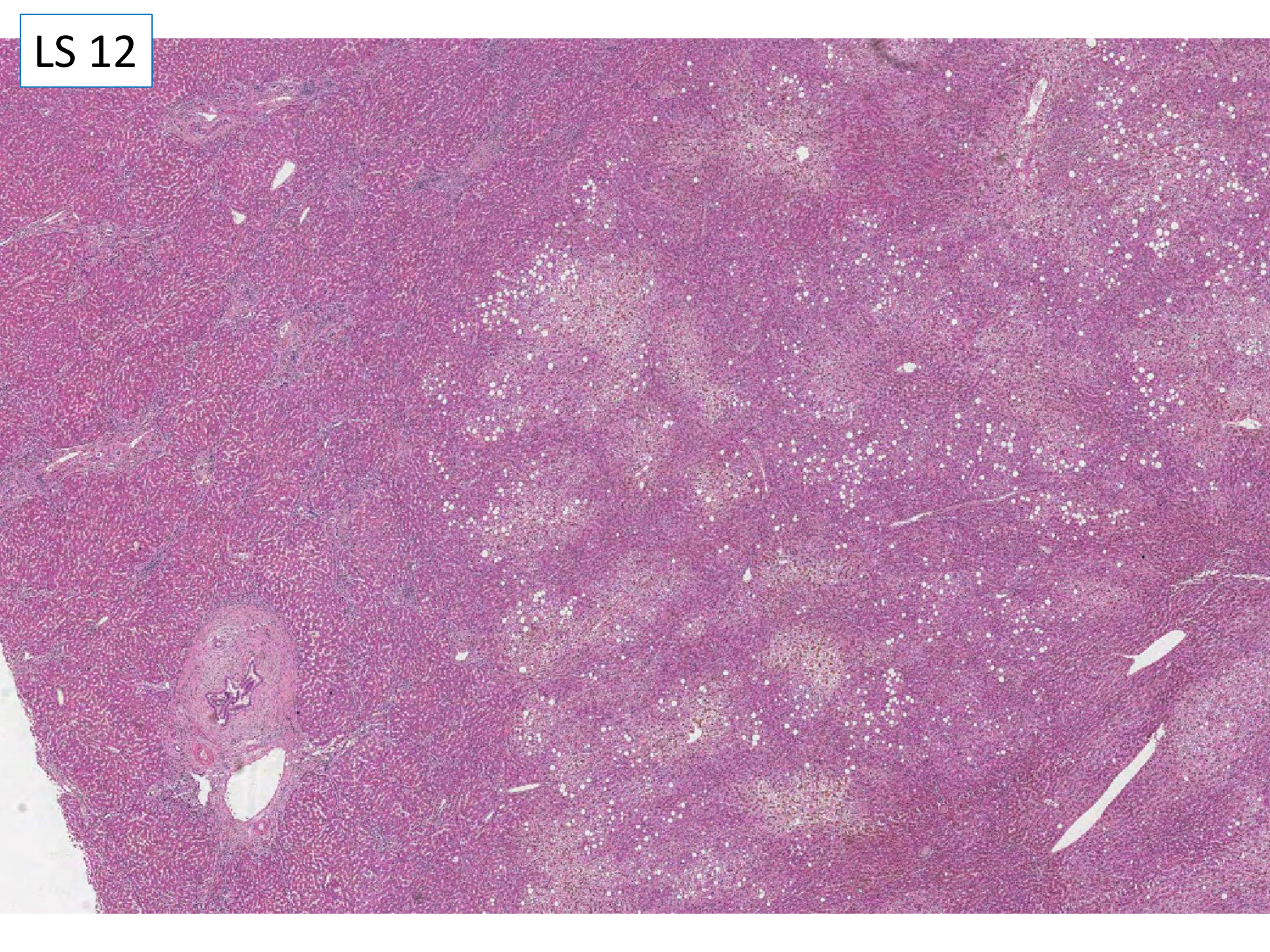
Case LS12 37 M

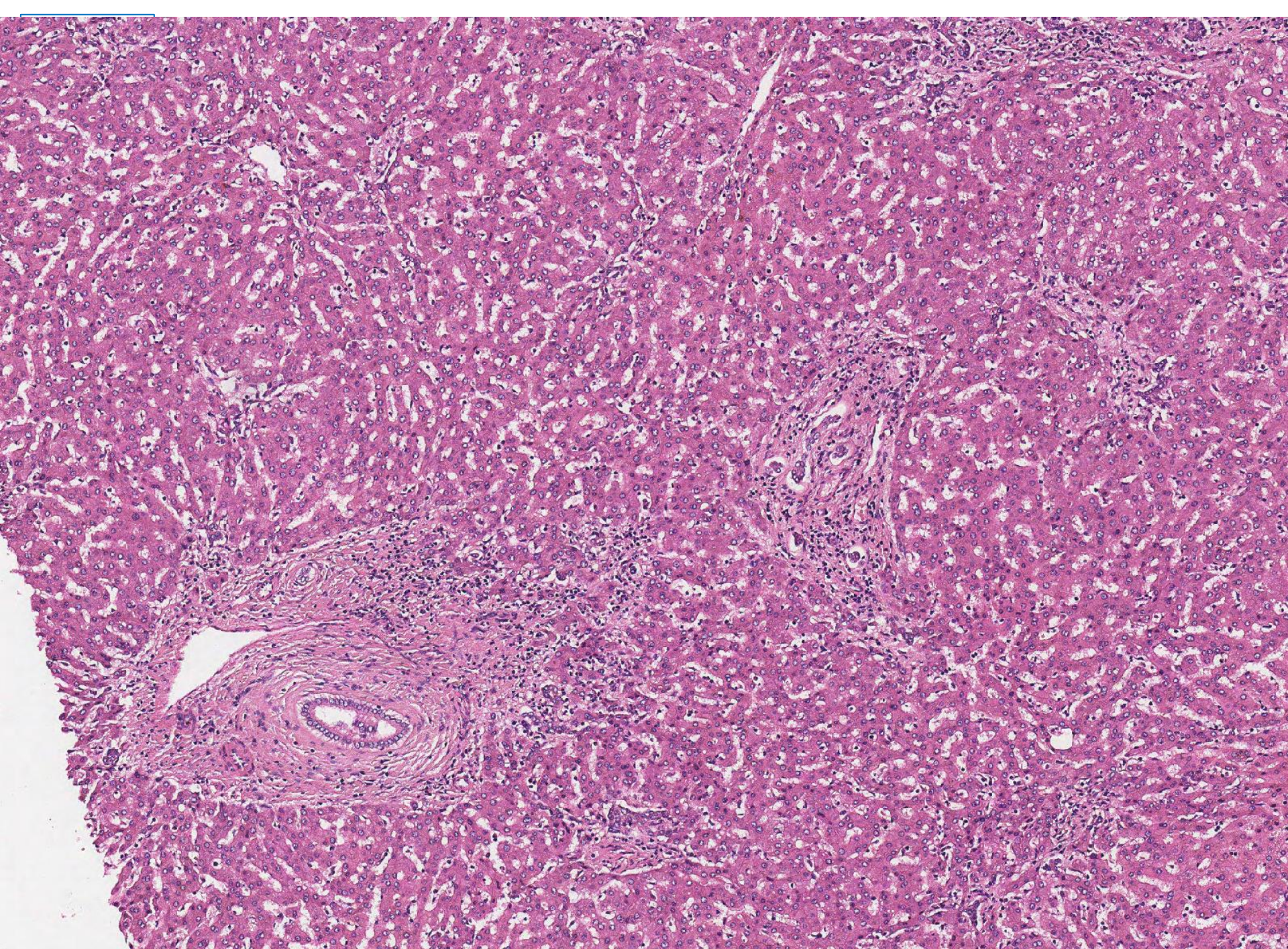
OLT for PSC

Explant liver - non nodular liver with a focal lesion in segment 7/8 which is pale in colour and measures 18 x 12 x 15 mm.

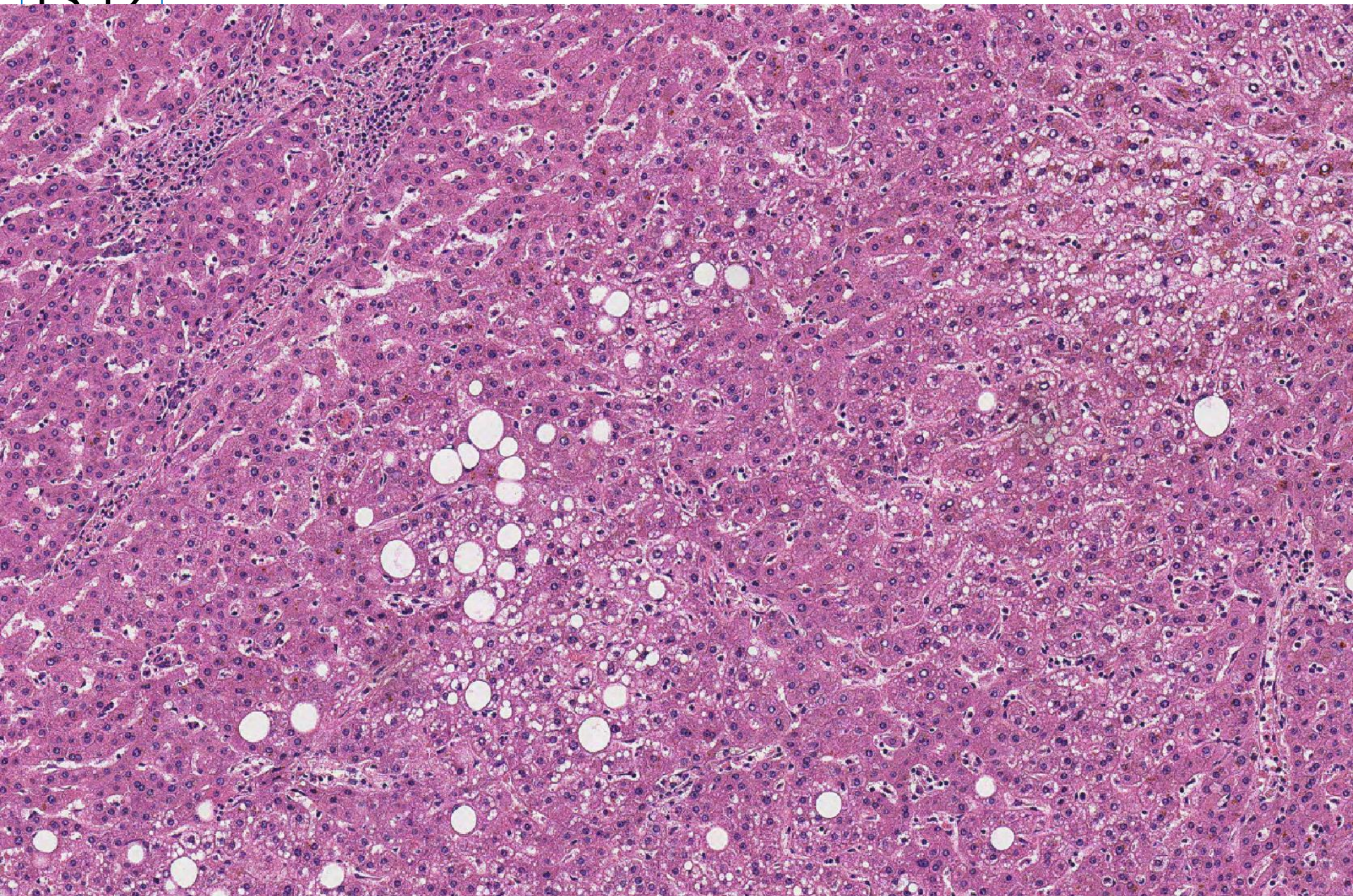


LS 12

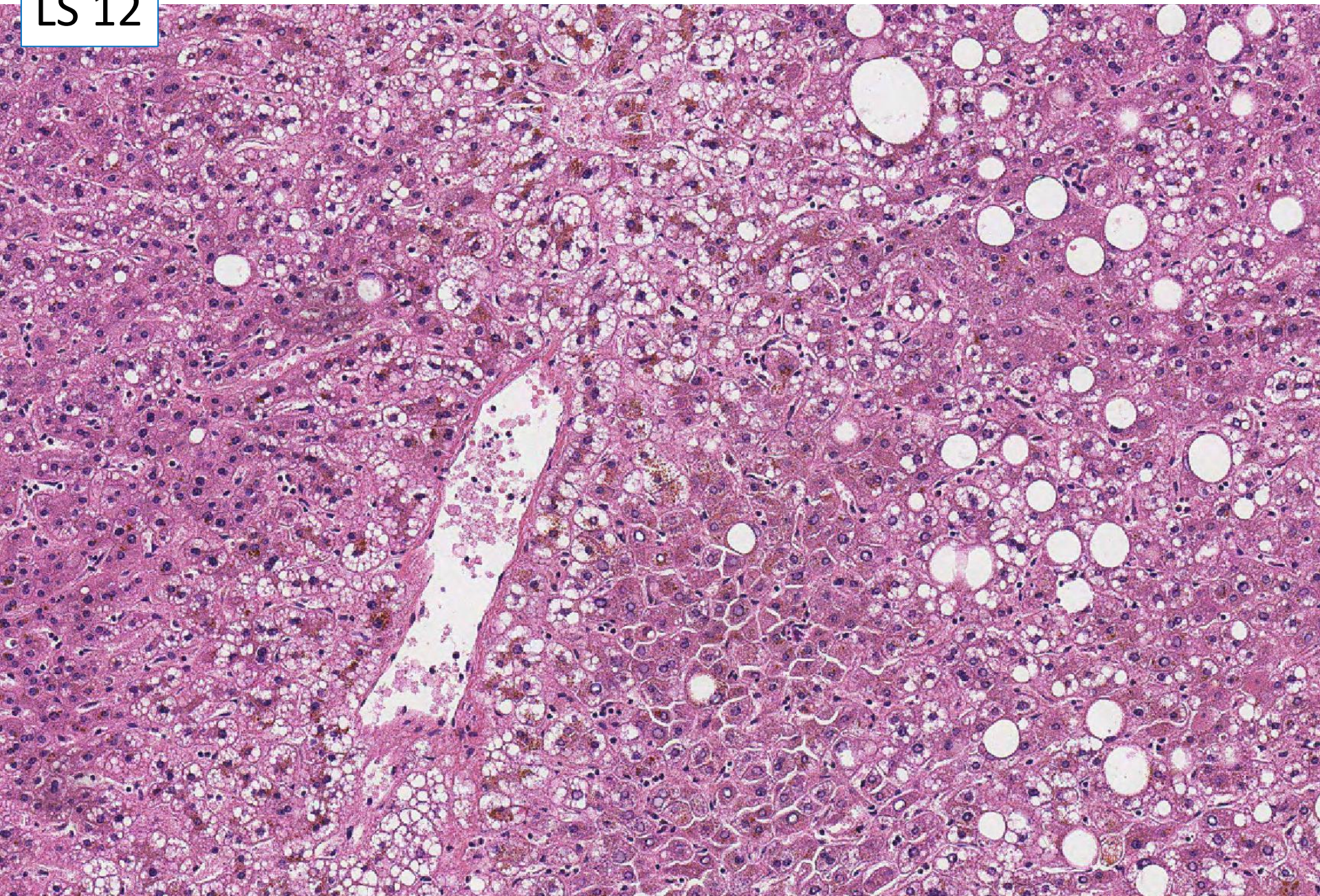




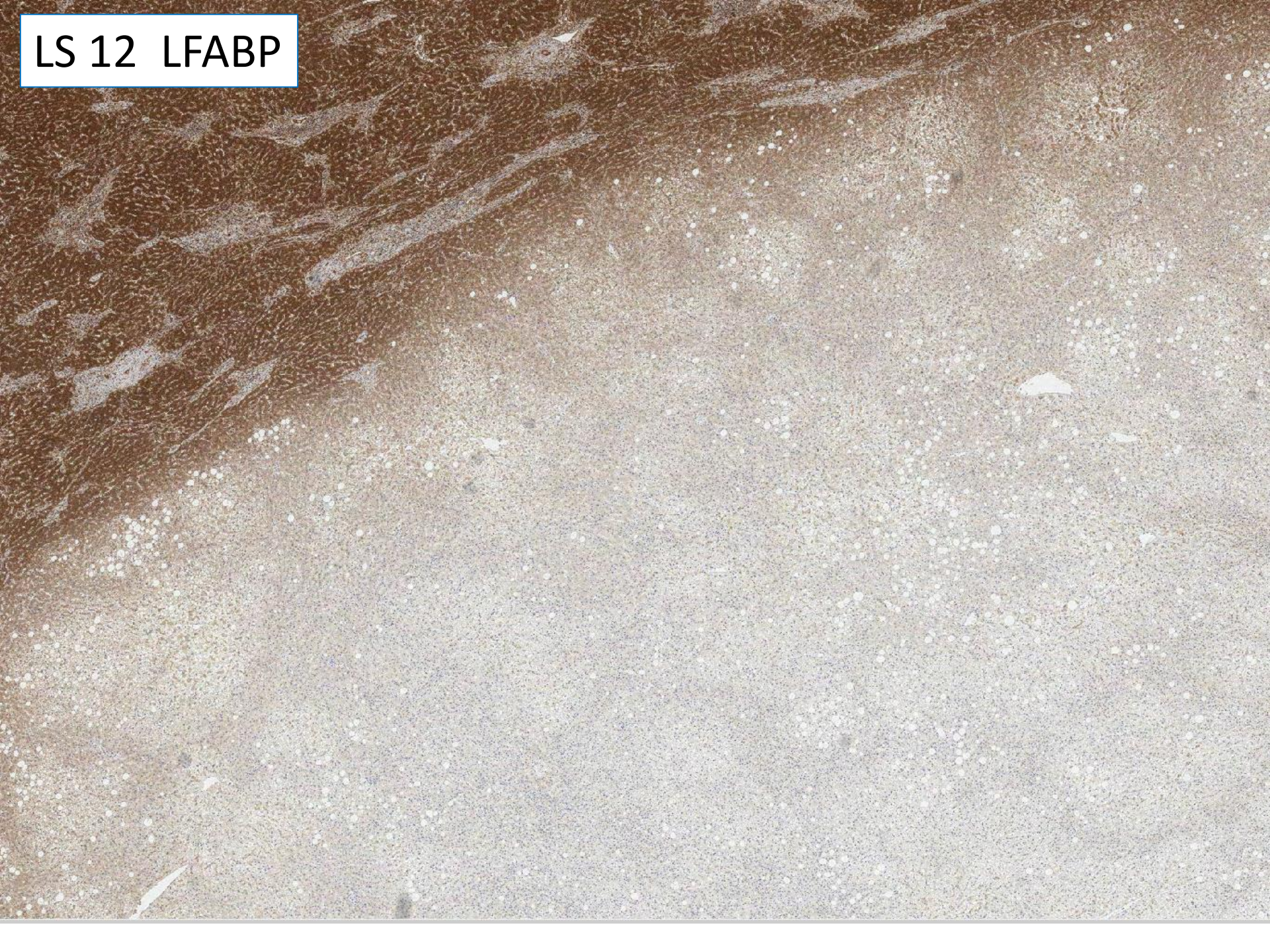
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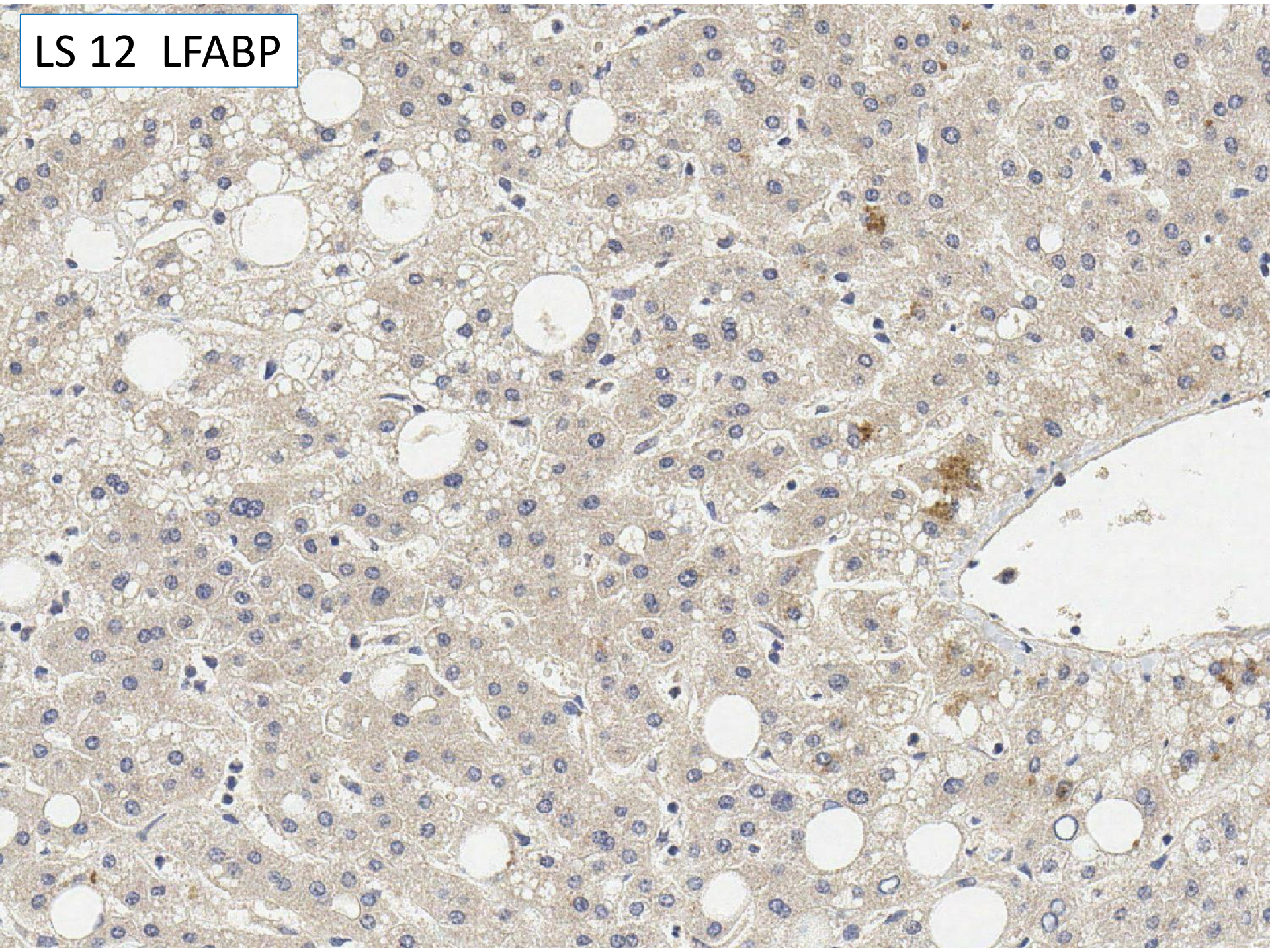
LS 12



LS 12 LFABP

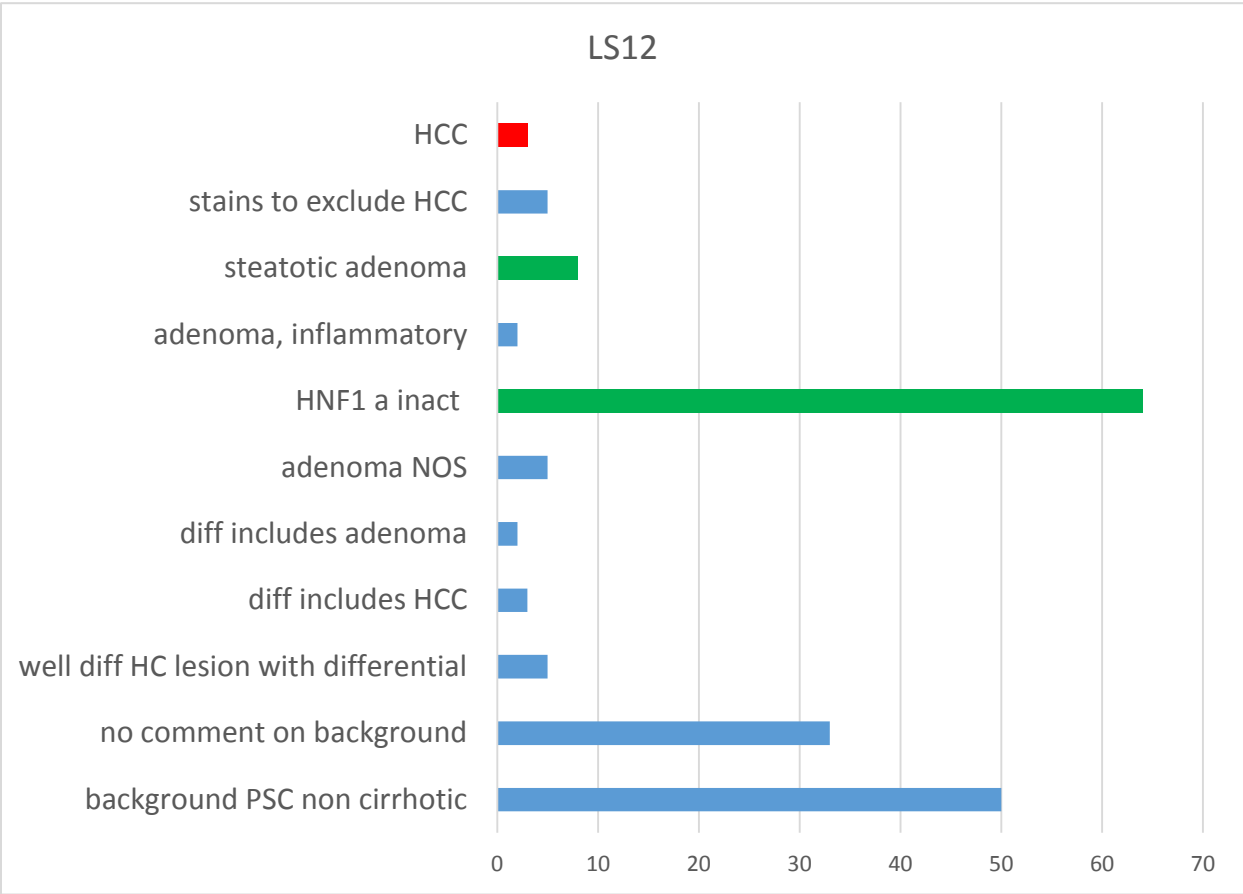


LS 12 LFABP



Case LS12 37 M

OLT for PSC. Explant liver - non nodular liver with a focal lesion in segment 7/8 which is pale in colour and measures 18 x 12 x 15 mm.



Consensus complete responses would include
hepatocellular adenoma, HNF1a inactivated/ steatotic type,
on a background of PSC, not cirrhotic.

Case LS12 37 M

OLT for PSC. Explant liver - non nodular liver with a focal lesion in segment 7/8 which is pale in colour and measures 18 x 12 x 15 mm.

Suggested scoring: for 10 points Hepatocellular adenoma, HNF1a inactivated or steatotic subtype (combined total = 72).

Insufficient participants commented on background liver so not included in scoring.

Lose 5 marks for hepatocellular adenoma, NOS, or inflammatory variant

Lose 5 marks for differential diagnosis including HCC but needed special stains to confirm. - as long as strategy to get to correct diagnosis

Lose 10 marks (score 0) if - definite diagnosis of hepatocellular carcinoma

Case LS12 37 M

OLT for PSC

Explant liver - non nodular liver with a focal lesion in segment 7/8 which is pale in colour and measures 18 x 12 x 15 mm.

Scoring summary agreed at meeting:

For full marks – hepatocellular adenoma – HNF1a inactivated or steatotic subtype

Lose 5 marks for – hepatocellular adenoma NOS or inflammatory subtype

Lose 5 marks for differential diagnosis including HCC but needed special stains to confirm. - as long as strategy to get to correct diagnosis

Lose 10 marks (score 0) if - definite diagnosis of hepatocellular carcinoma

The end