

Liver histopathology EQA Scheme

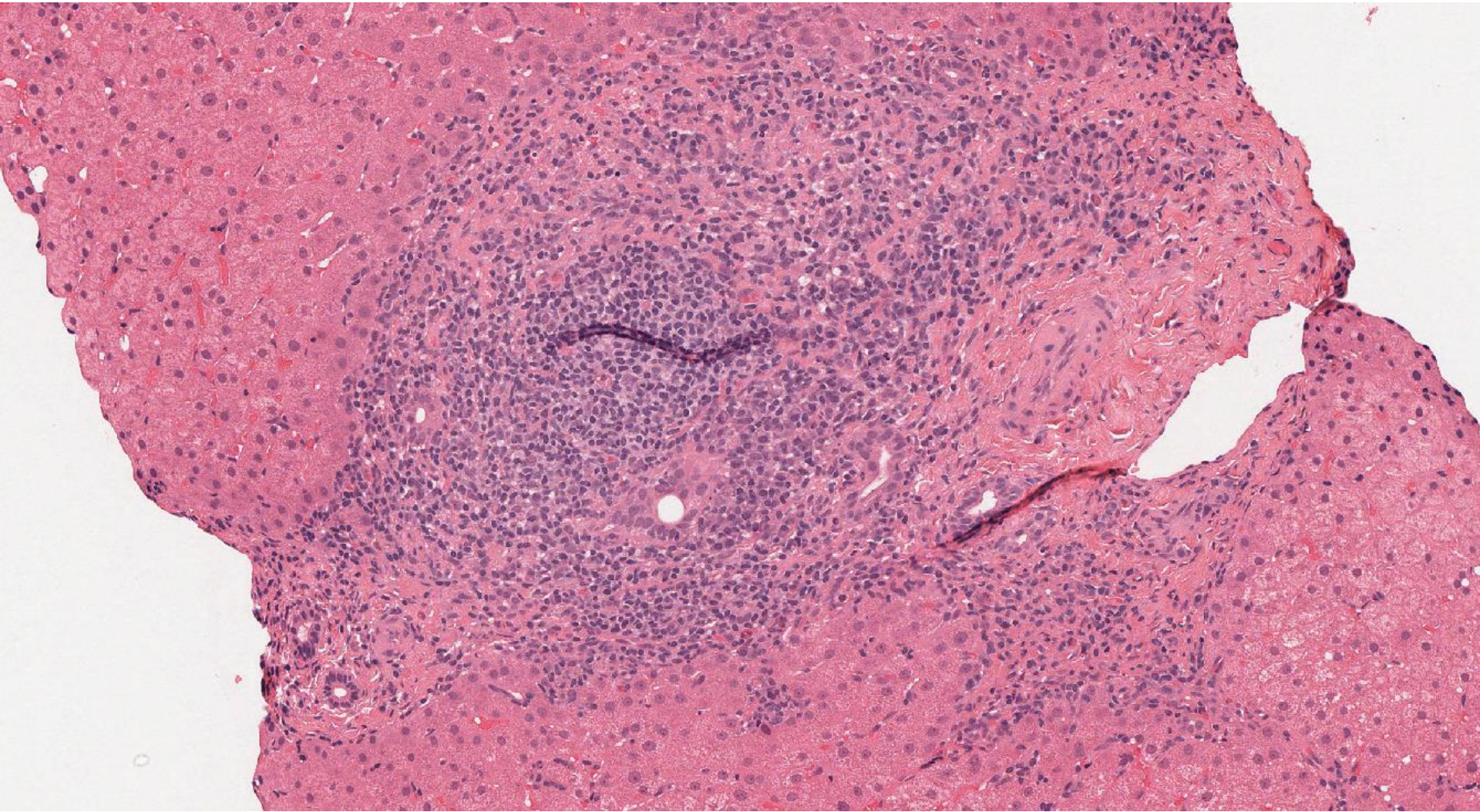
Circulation LR Spring 2018

Case LR1 56F

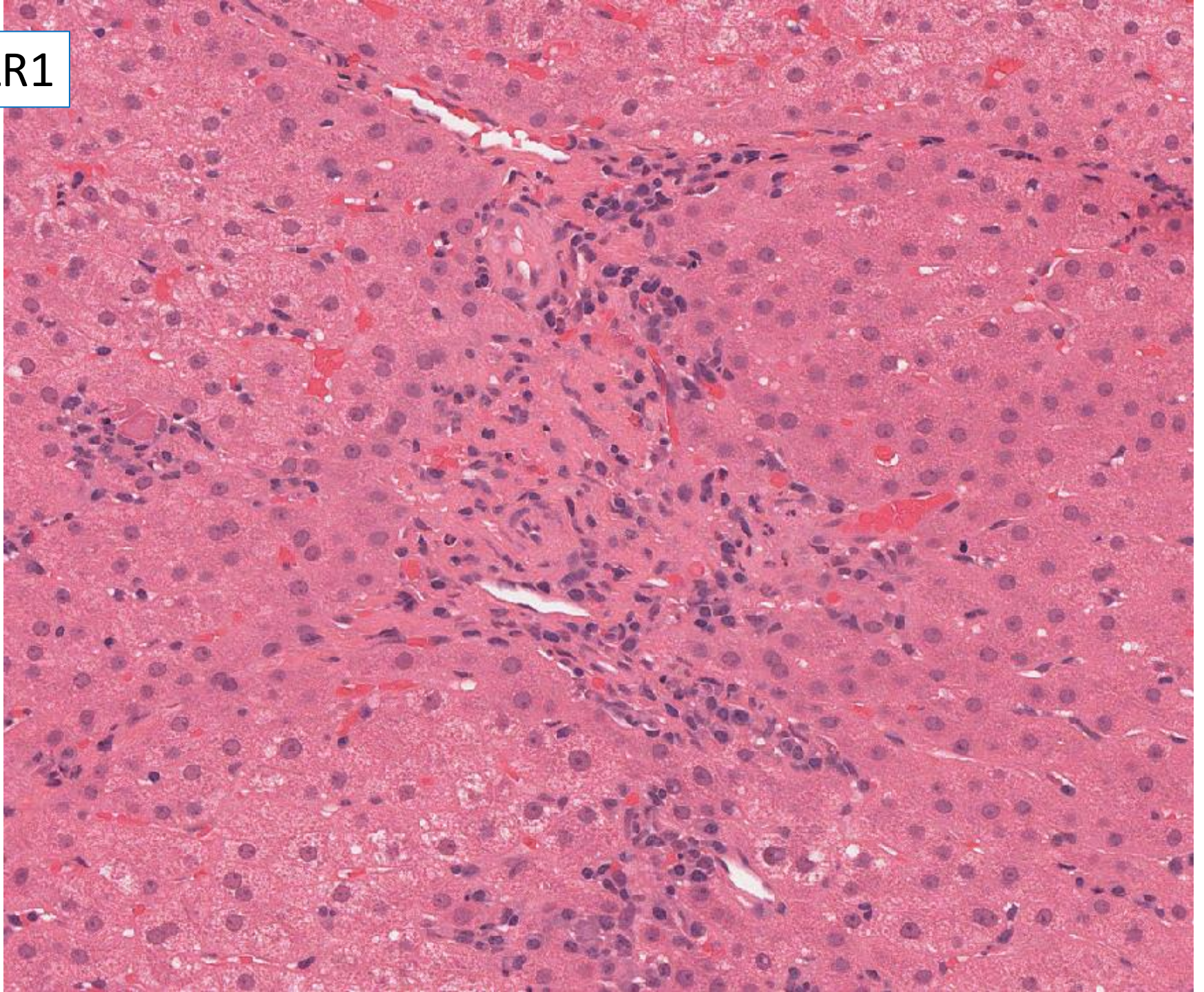
PBC. Staging. This is 2/3 of the specimen the other 1/3 for research. Also van Gieson, rhodanine



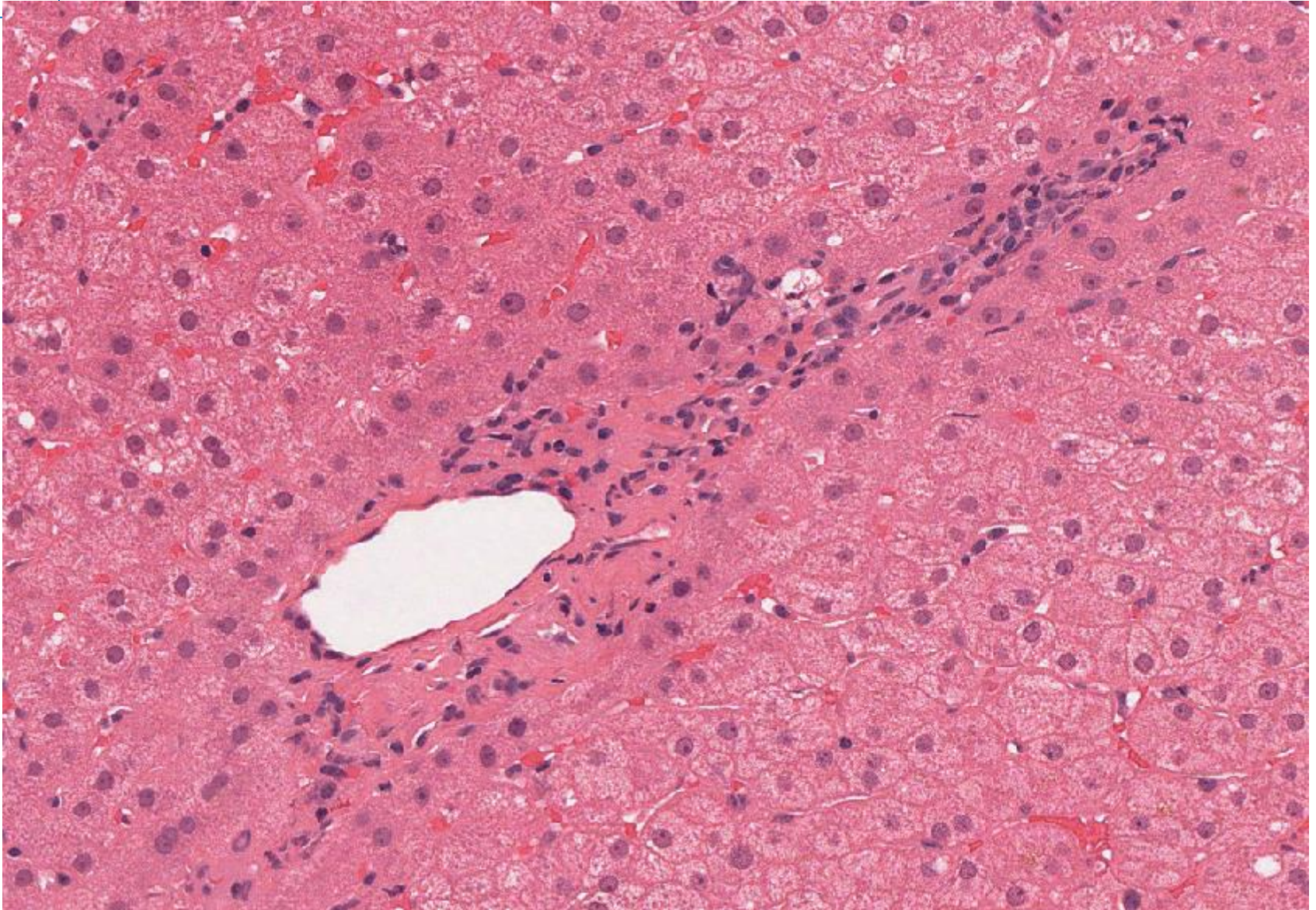
LR1



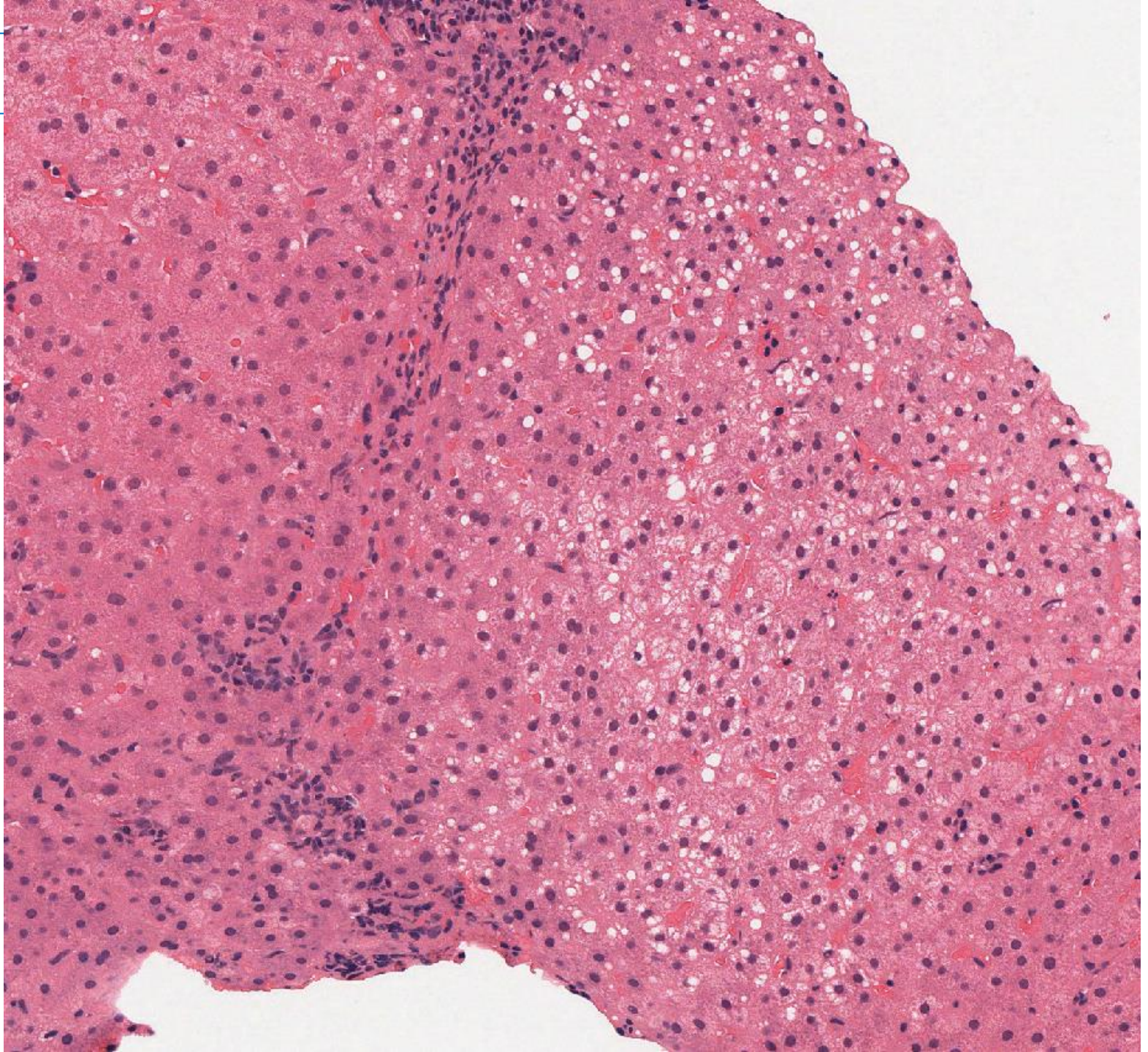
LR1



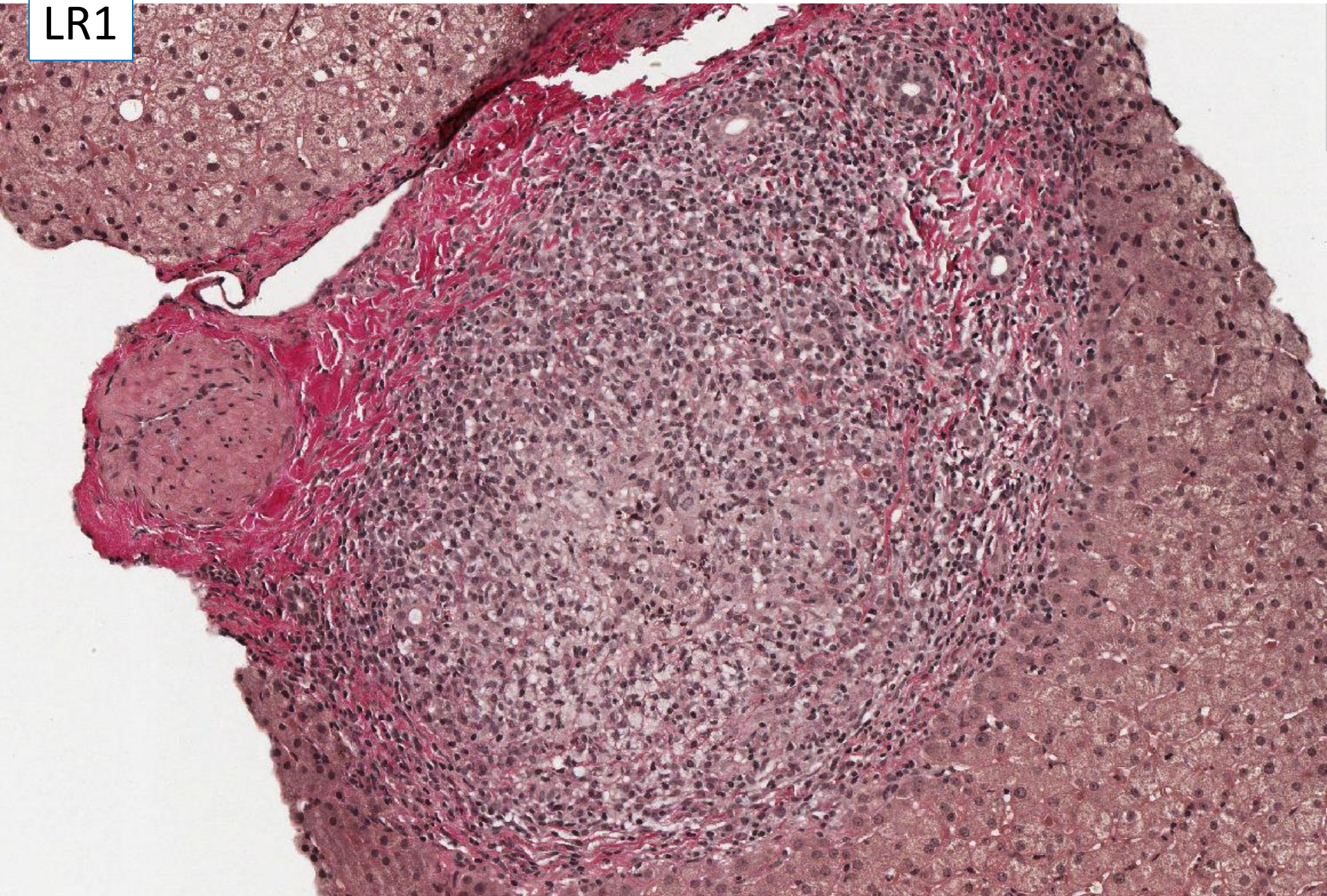
LR1



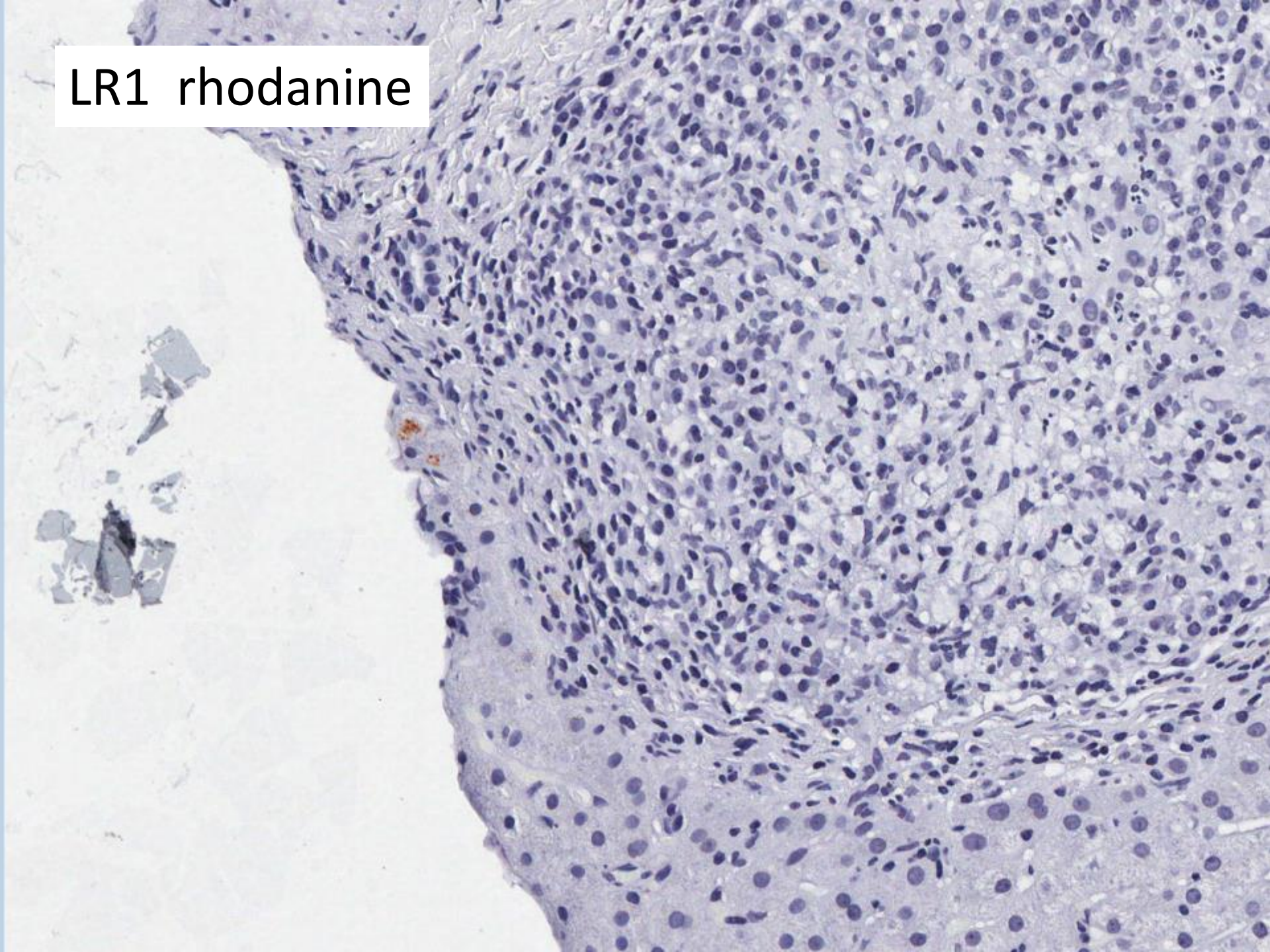
LR1



LR1

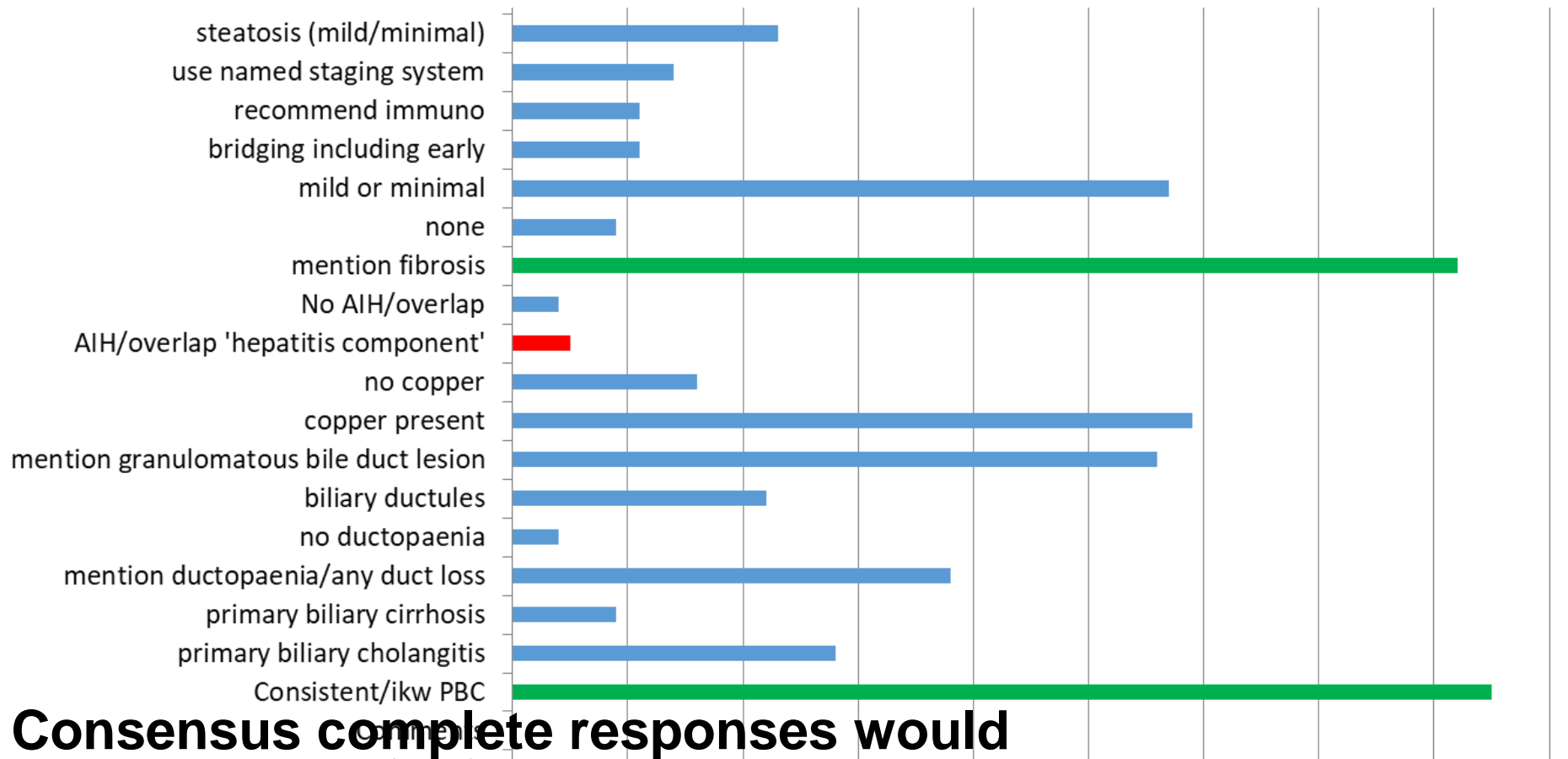


LR1 rhodanine



Case LR1 56F

PBC. Staging. This is 2/3 of the specimen the other 1/3 for research.
Also van Gieson, rhodanine



Consensus complete responses would

include

Consistent with PBC and a comment on fibrosis

Most responses clearly favoured PBC –

score 10

Consensus complete responses would include

Consistent with PBC and a comment on fibrosis

Most responses clearly favoured PBC – score 10

? **Lose 5 marks** if (these responses currently counted as ‘consistent with PBC’ giving 85 total) the committee view was that marks would not be deducted for any of these:

i) ‘active chronic hepatitis in keeping with PBC’ no

ii) ‘consistent with but not specific for PBC’ no

iii) ‘Consistent with PBC, stage II, but somewhat atypical, suggesting changes secondary to treatment. Need a drug history.’ no

iv) Features consistent with PBC but it appears patchy which may be due to treatment. differential diagnosis worth excluding is PSC no

v) differential of drug reaction no

vi) ...also very mild NAFLD ‘resembling diabetic hepatopathy’ no

vii) ‘Features consistent with PBC. Overlap with AIH should be considered given the presence plasma cells and lack of copper associated protein.’ no

LR1

? Lose 5 marks if

‘Possible AIH/PBC overlap although features of PBC are not prominent. What is that diagnosis based on? Review prior biopsies if any. Serology? LFTs?’ possibly – put to members

? Lose 5 marks if no mention of fibrosis agreed

Lose 10 marks (score 0) if clearly favour AIH (2) agreed

Case LR1 56F

PBC. Staging. This is 2/3 of the specimen the other 1/3 for research.
Also van Gieson, rhodanine

Scoring summary agreed at meeting:

For full marks – favour PBC, comment on fibrosis/stage

Score 5 marks – features of PBC not prominent and favour AIH

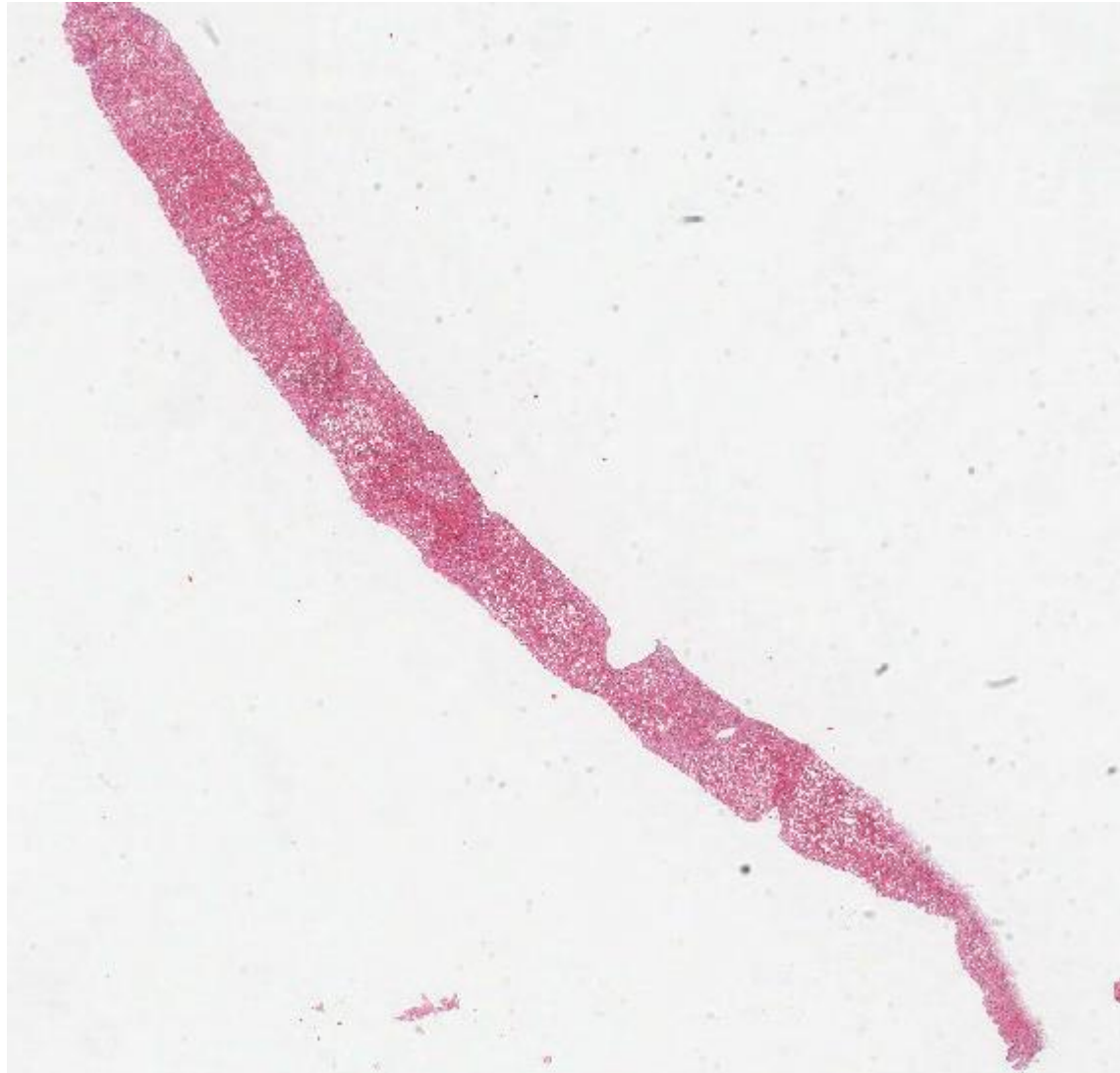
- No mention of stage
- Score 0 marks: favour AIH as main diagnosis

Comments: rare to use a named staging system in these responses, more use in clinical trials.

Expect to see inflammation in PBC – caution for overlap

Case LR2 47M

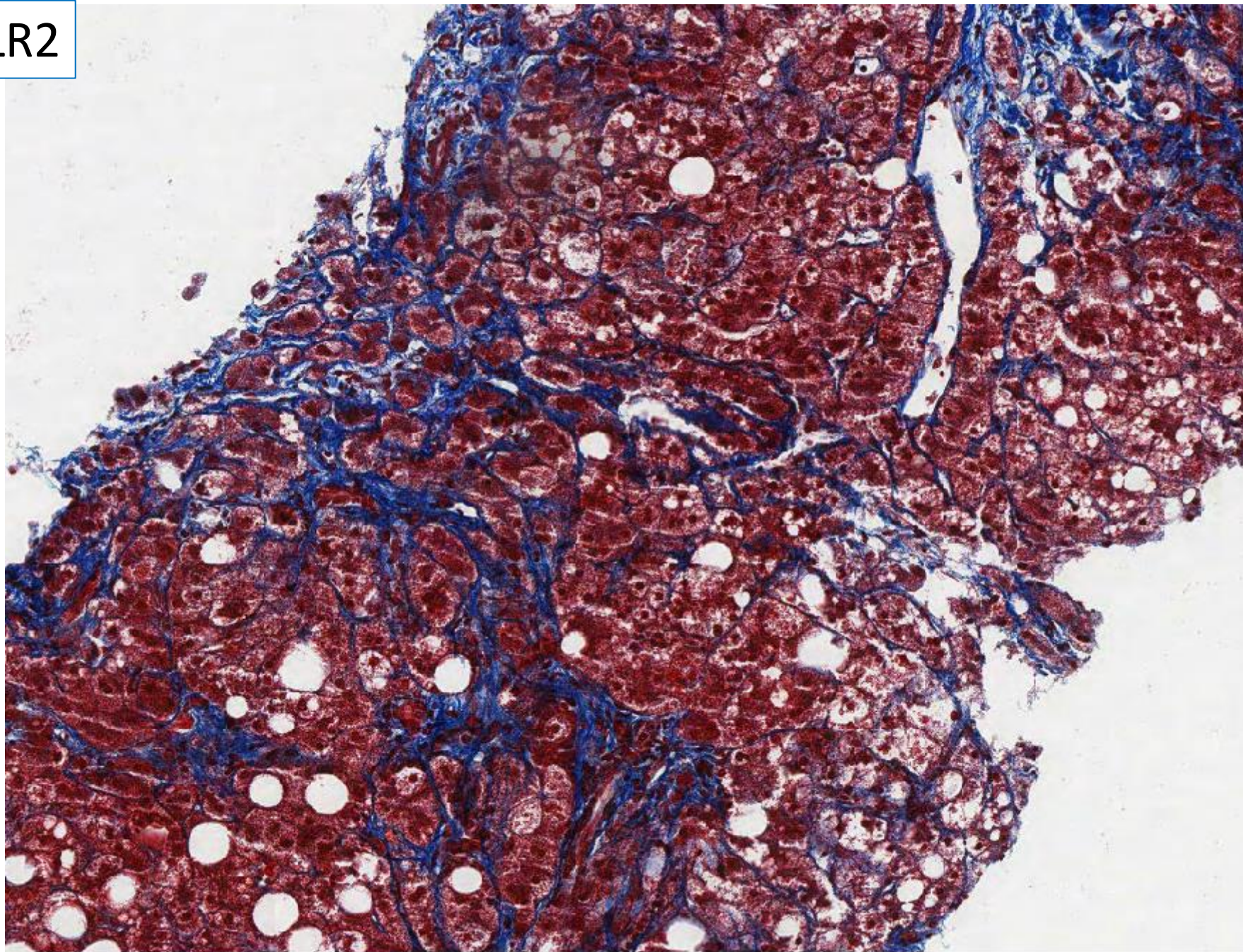
Elevated Fibroscan. ? Cirrhosis Also Masson trichrome



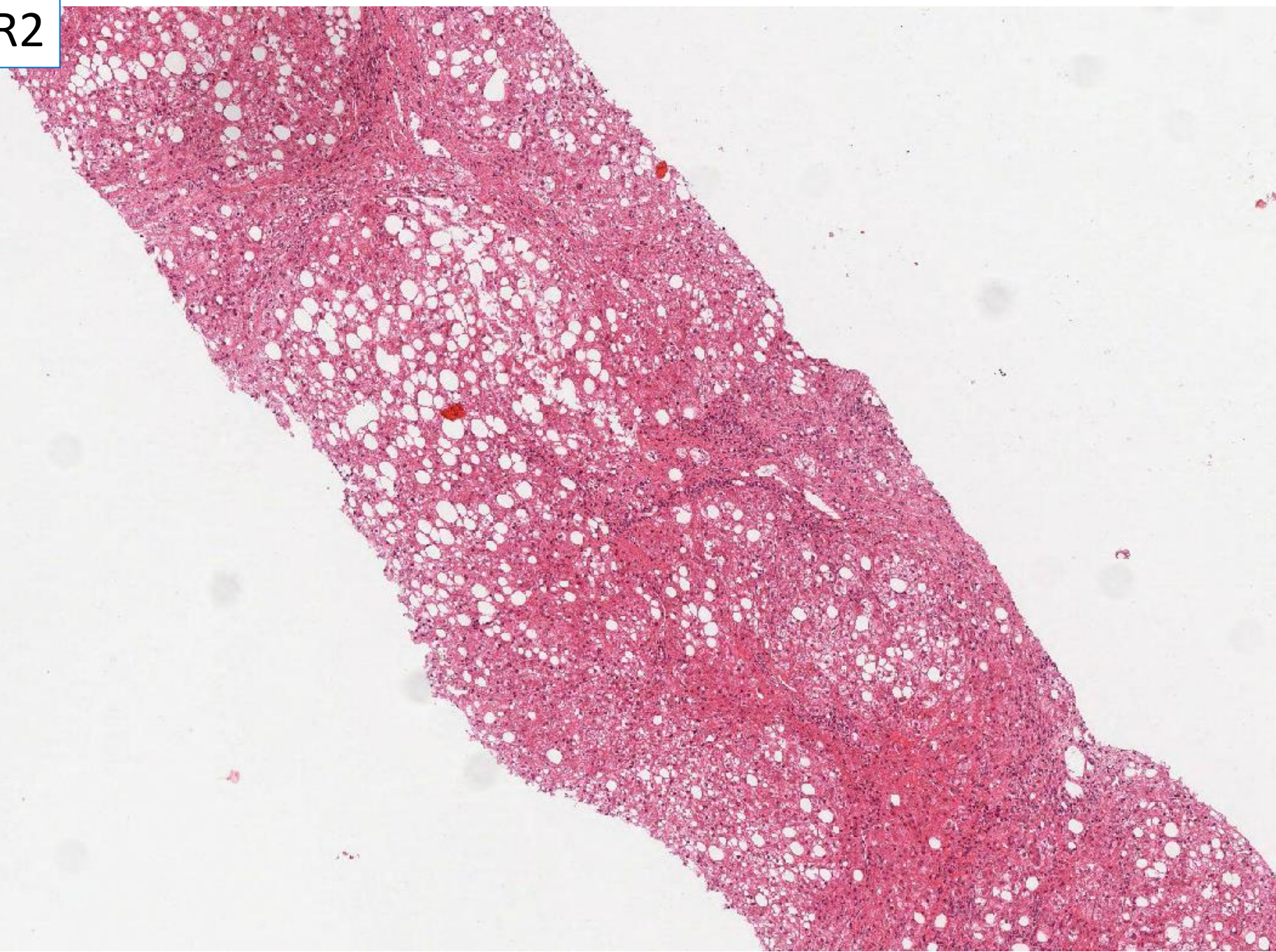
LR2 masson trichrome



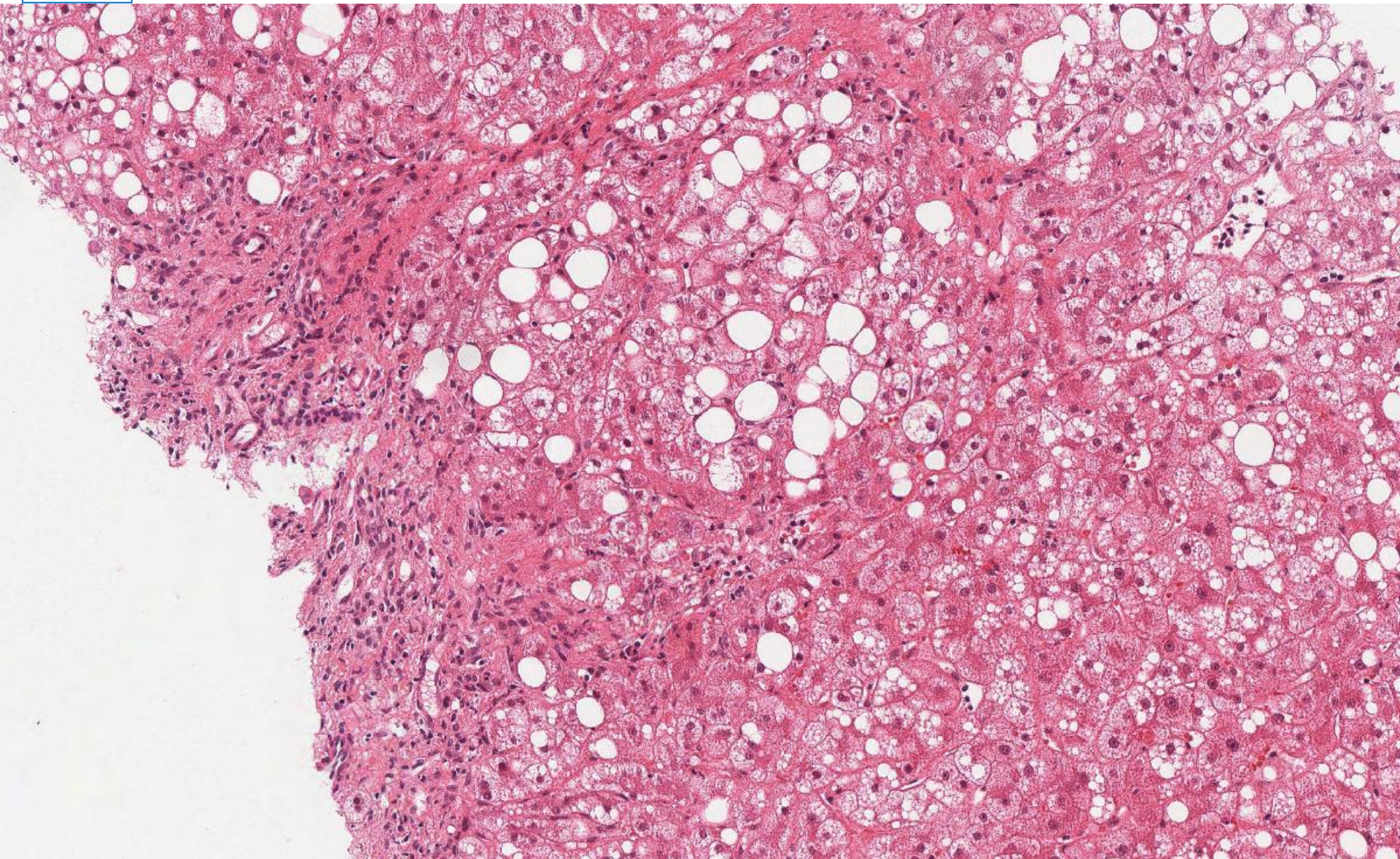
LR2



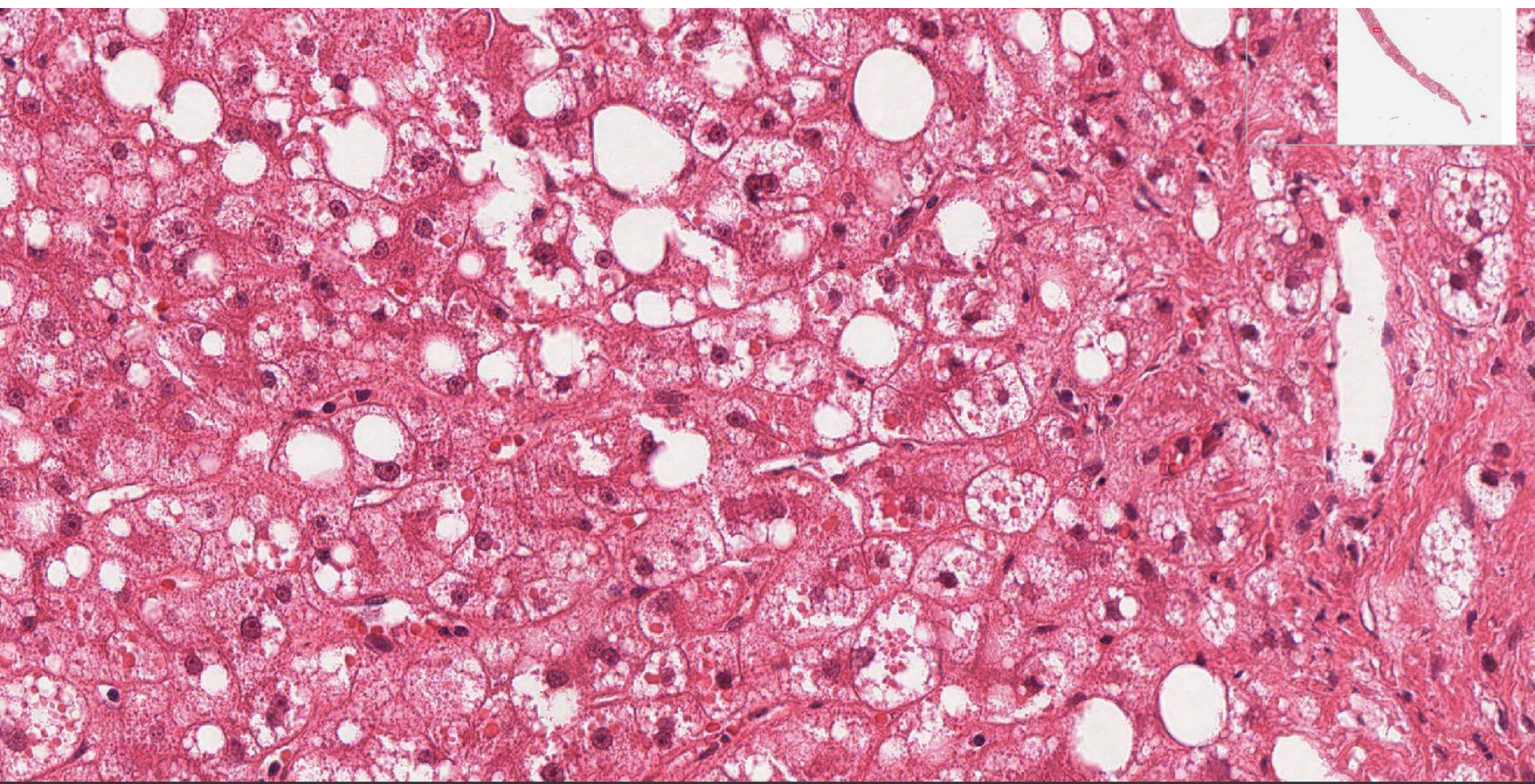
LR2



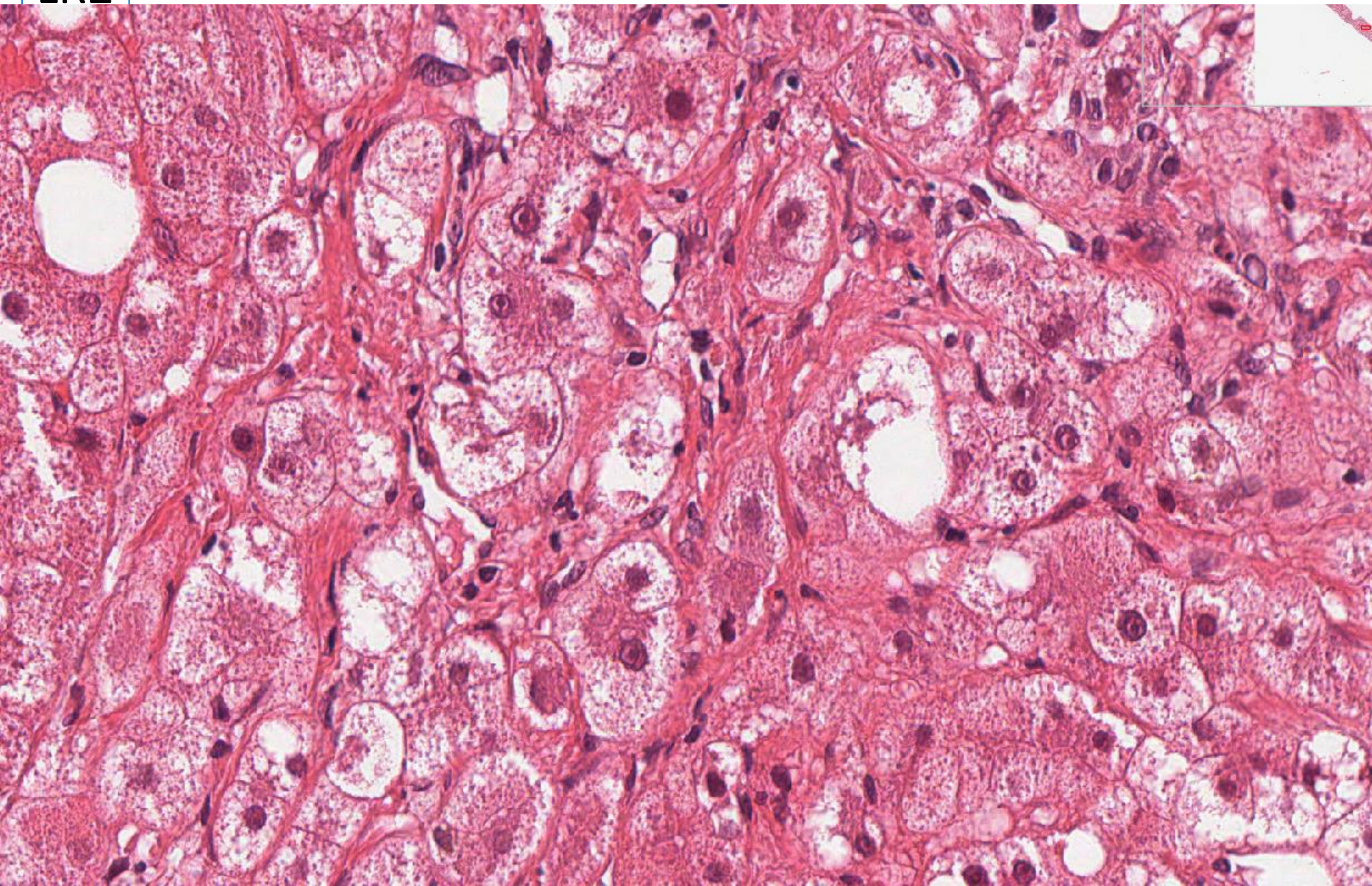
LR2



LR2

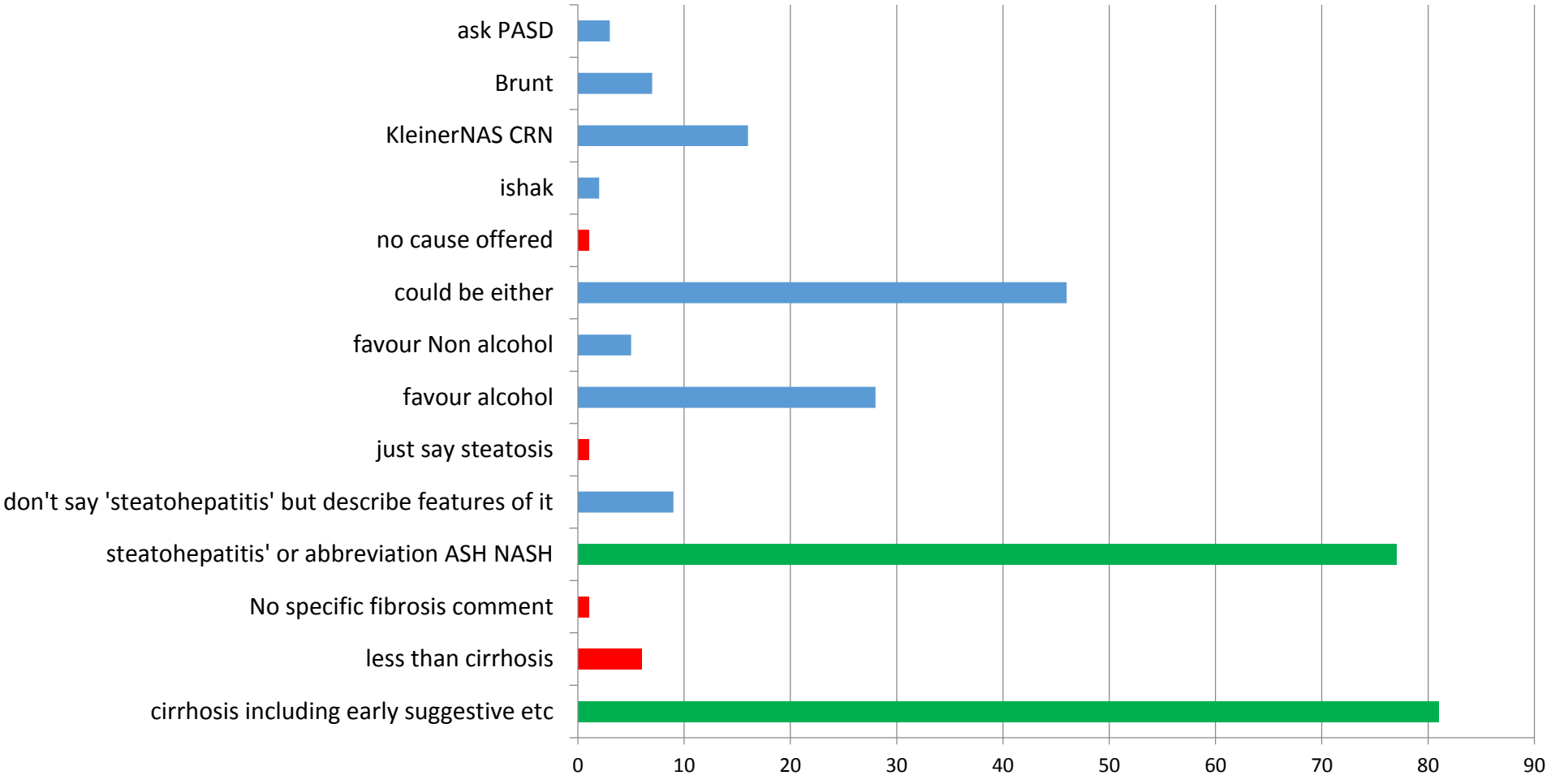


LR2



Case LR2 47M

Elevated Fibroscan. ? Cirrhosis Also Masson trichrome



Consensus complete responses would include cirrhosis and steatohepatitis and aetiology comment

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- **Suggested scoring: for 10 points** include cirrhosis (includes 'early' 'consistent with' 'incipient' etc) and 'steatohepatitis' (*and aetiology comment*)
- **Lose 5 marks** if don't actually say 'cirrhosis' use 'advanced fibrosis' or say '4/4' (currently included in cirrhosis count) just discussion not lose 5 marks
- **Lose 5 marks** if say fibrosis is less than cirrhosis (usually bridging) agree
- **Lose 10 marks** if no comment on fibrosis – clinical information does say '?cirrhosis' lose only 5 if said SH
- **Lose 5 marks** if don't say 'steatohepatitis' even if features of it described – this has been the policy in previous circulations – can't assume that the person reading the report knows that 'ballooning, Mallory' etc are features of steatohepatitis.
- ?OR
- **Lose 5 marks** if just say steatosis and don't describe features of steatohepatitis – yes
- Lose 5 if no comment aetiology

Case LR2 47M

Elevated Fibroscan. ? Cirrhosis Also Masson trichrome

Scoring summary agreed at meeting:

For full marks, need cirrhosis, include early/incipient, steatohepatitis and comment on cause.

Score 5 marks if – less than cirrhosis or no comment

Score 5 marks if - Response does not include 'steatohepatitis' nor indicate that the cirrhosis is due to the late stage of fatty liver disease.

Score 5 marks if - No comment on aetiology

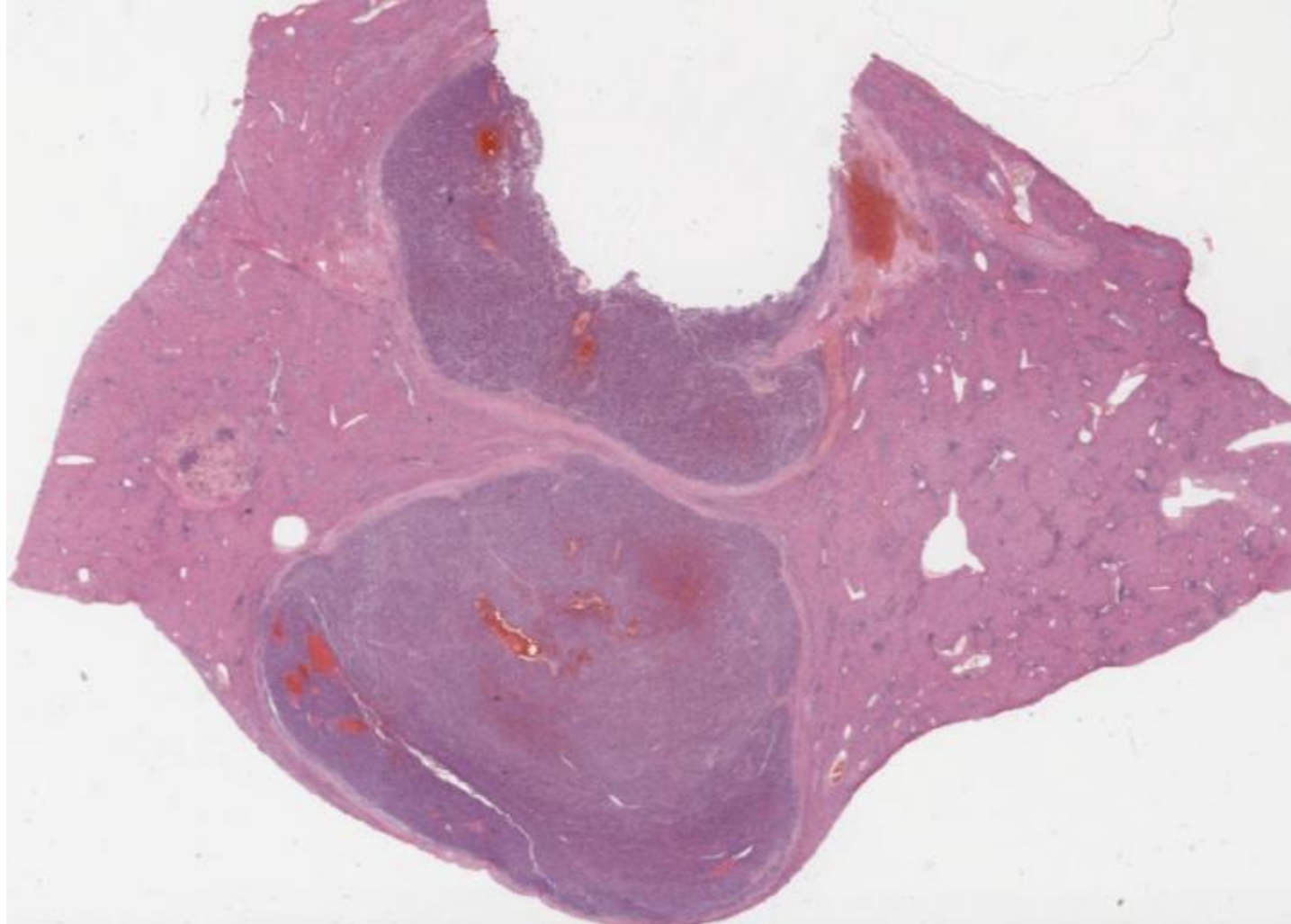
Discussion – we have previously required a diagnosis of 'steatohepatitis' as distinct from steatosis when the features of ballooning and Mallory Denk bodies are clearly present as in this case.

However for scoring – on review of responses, if the text indicated that the cirrhosis was due to late stage fatty liver disease, the word 'steatohepatitis' was not essential for full marks.

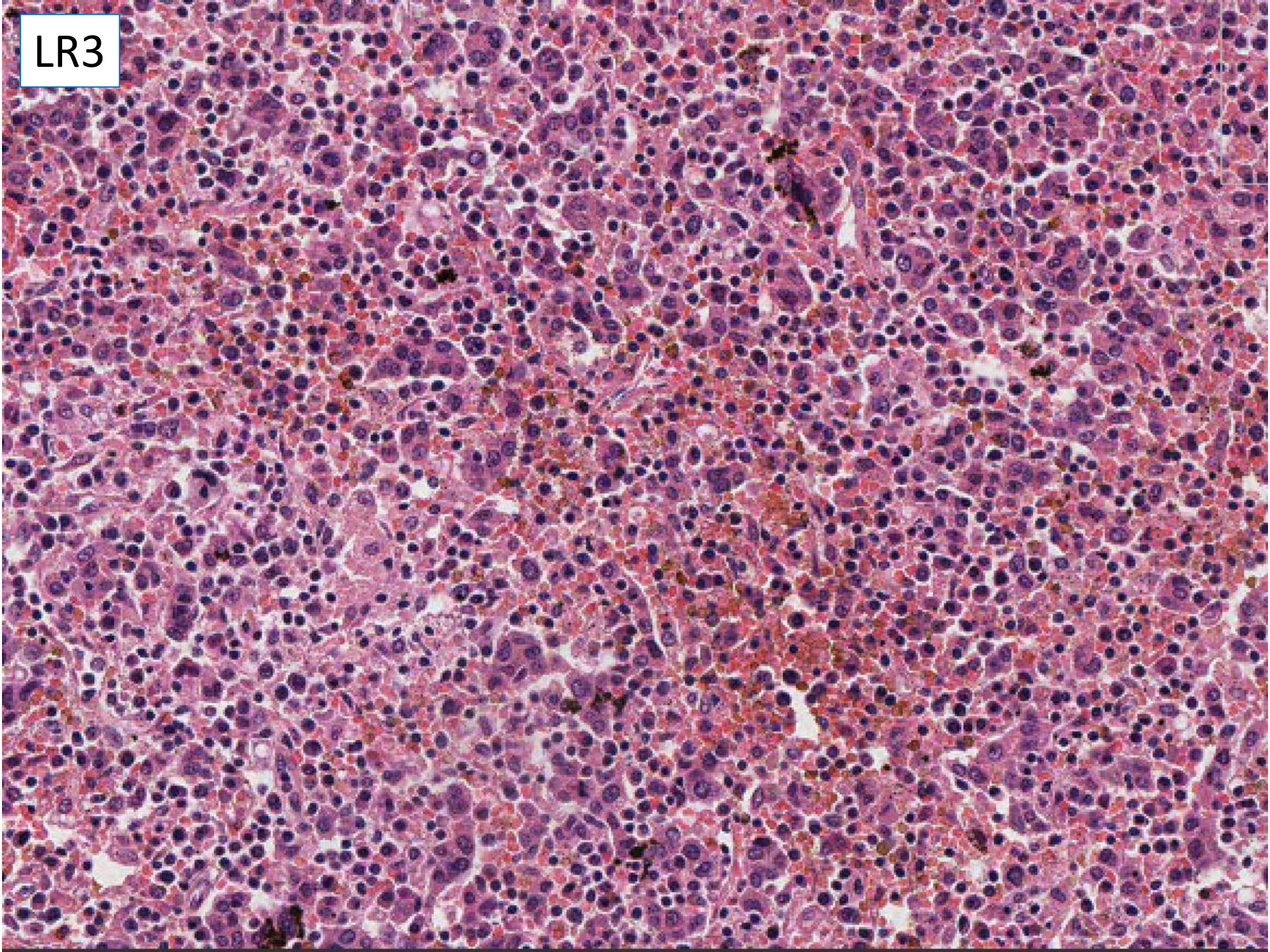
(fatty liver disease being classified as steatosis/steatohepatitis/cirrhosis)

Case LR3 91F

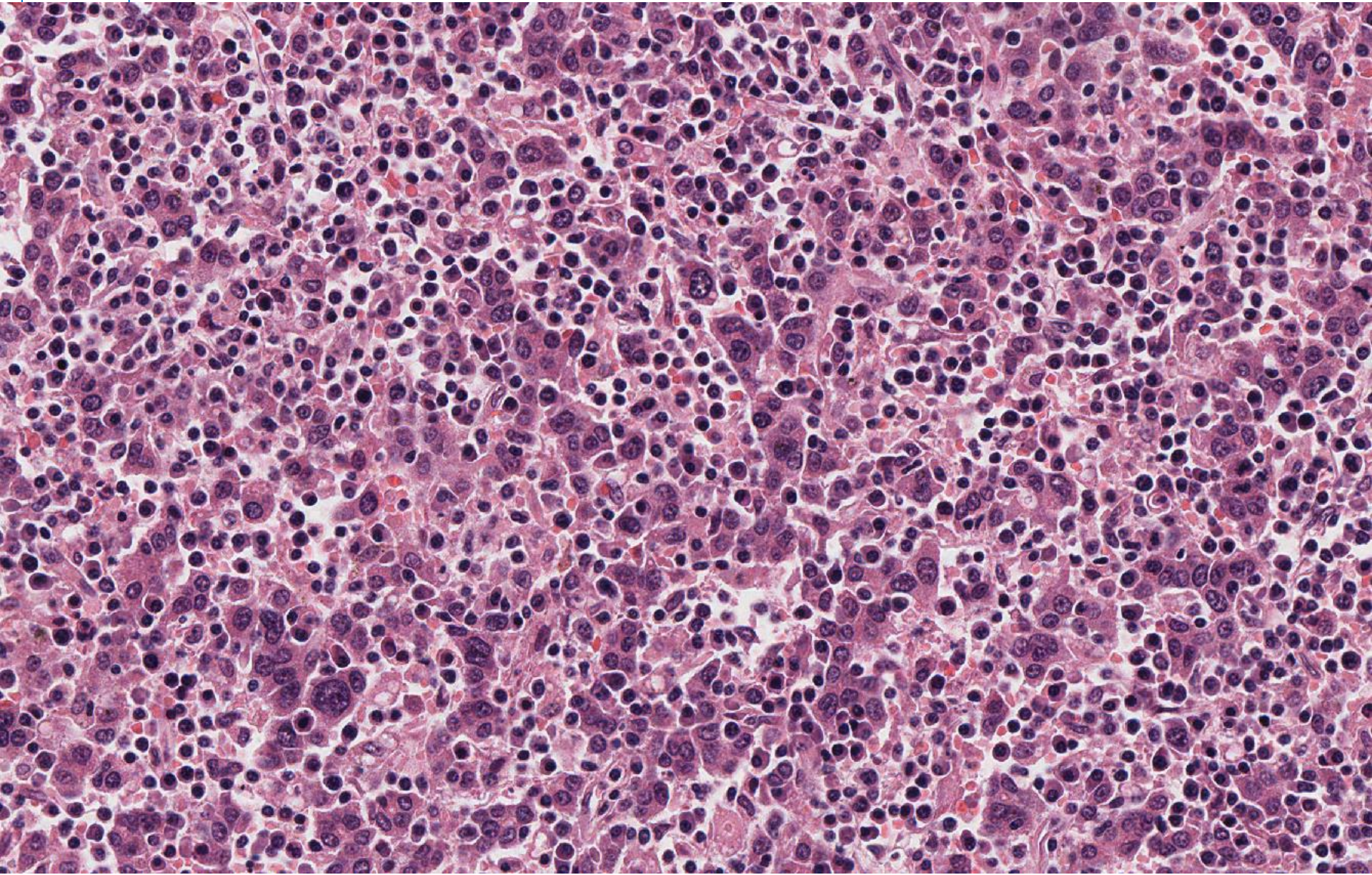
140x110x40mm liver segment. slicing shows a 65x50x50mm tumour with a variegated appearance including areas of necrosis and haemorrhage. three smaller satellite nodules. section from main lesion.



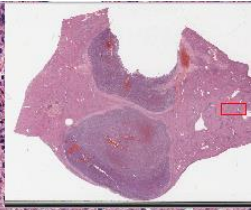
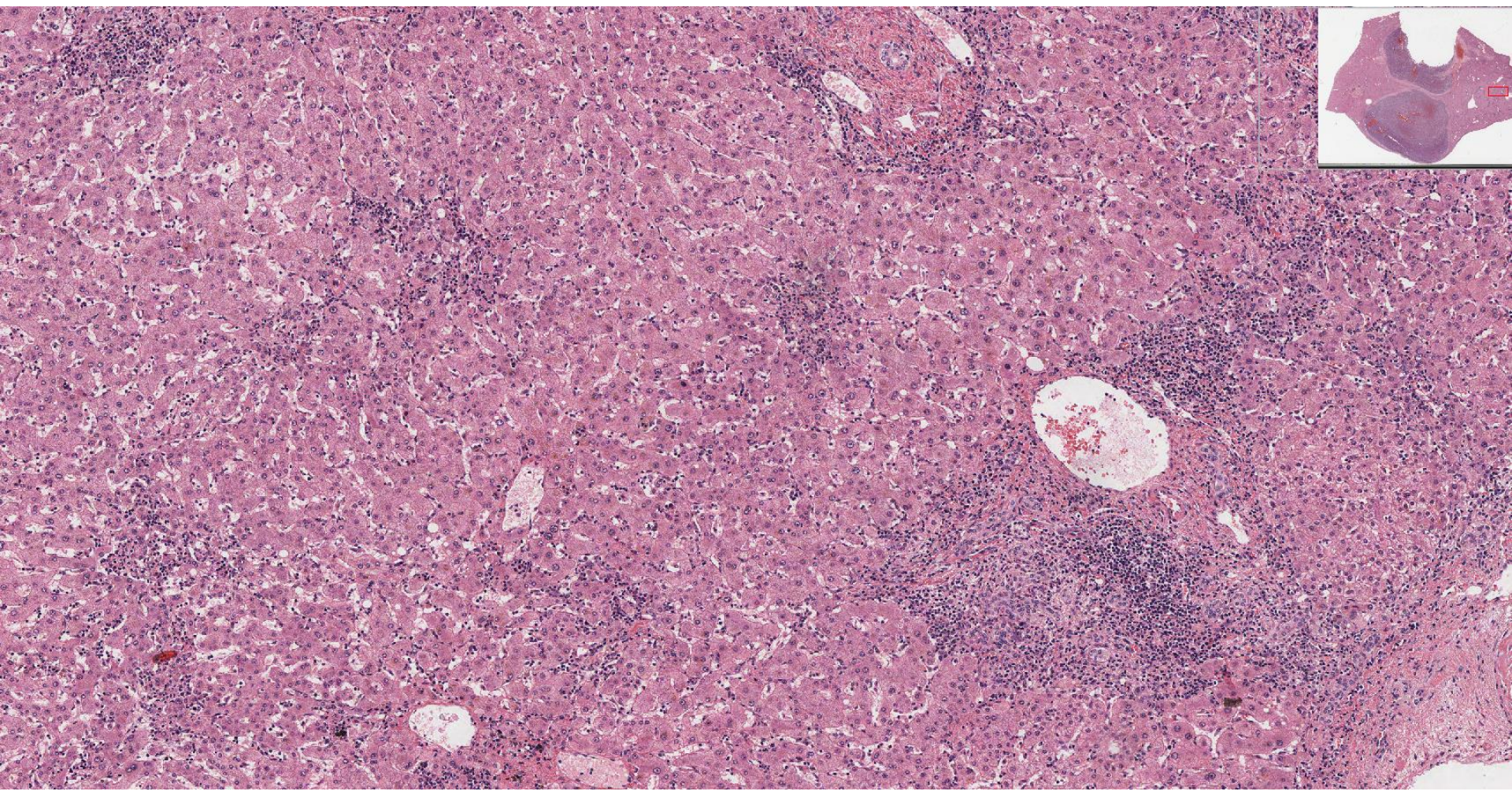
LR3



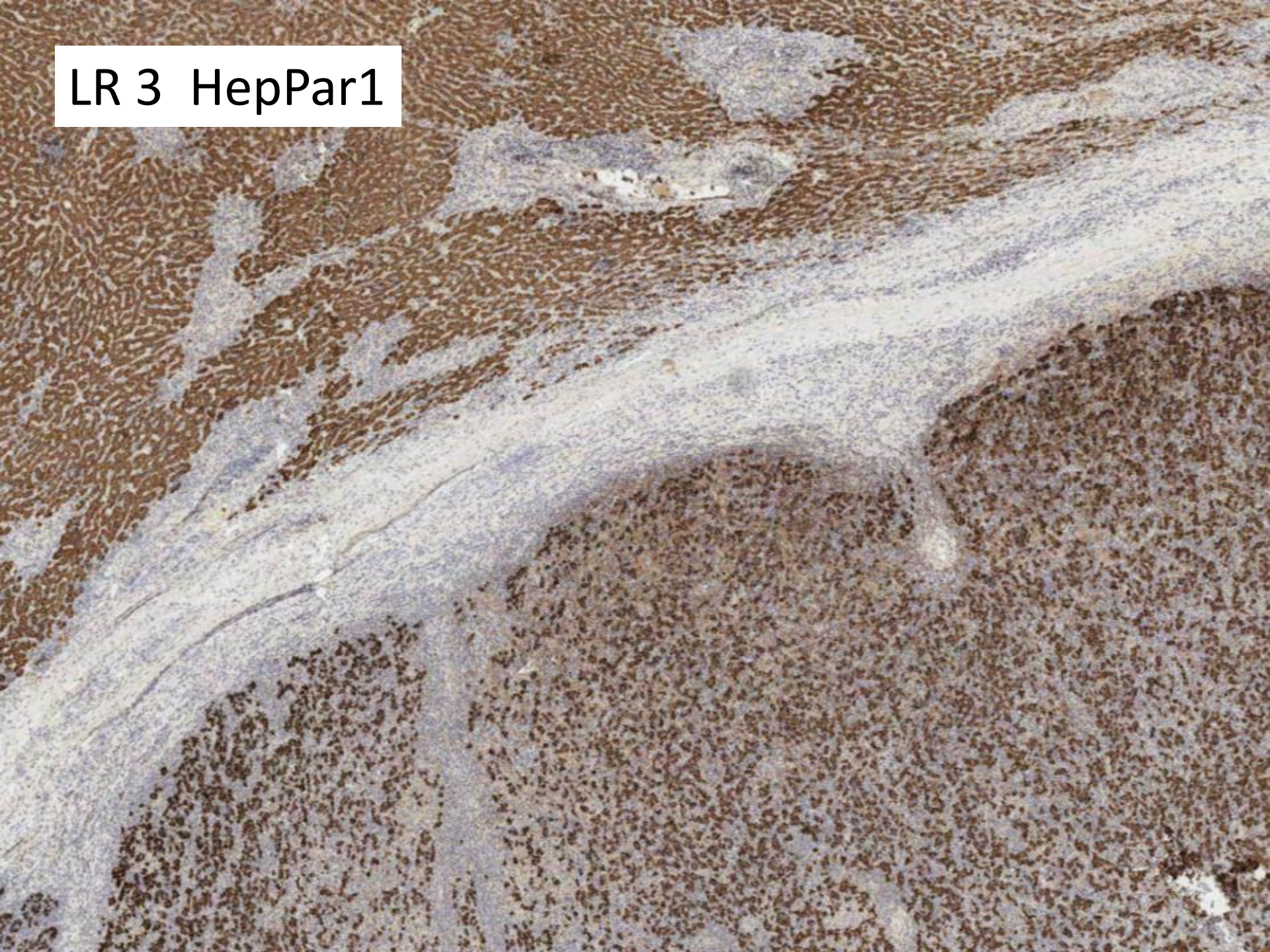
LR3



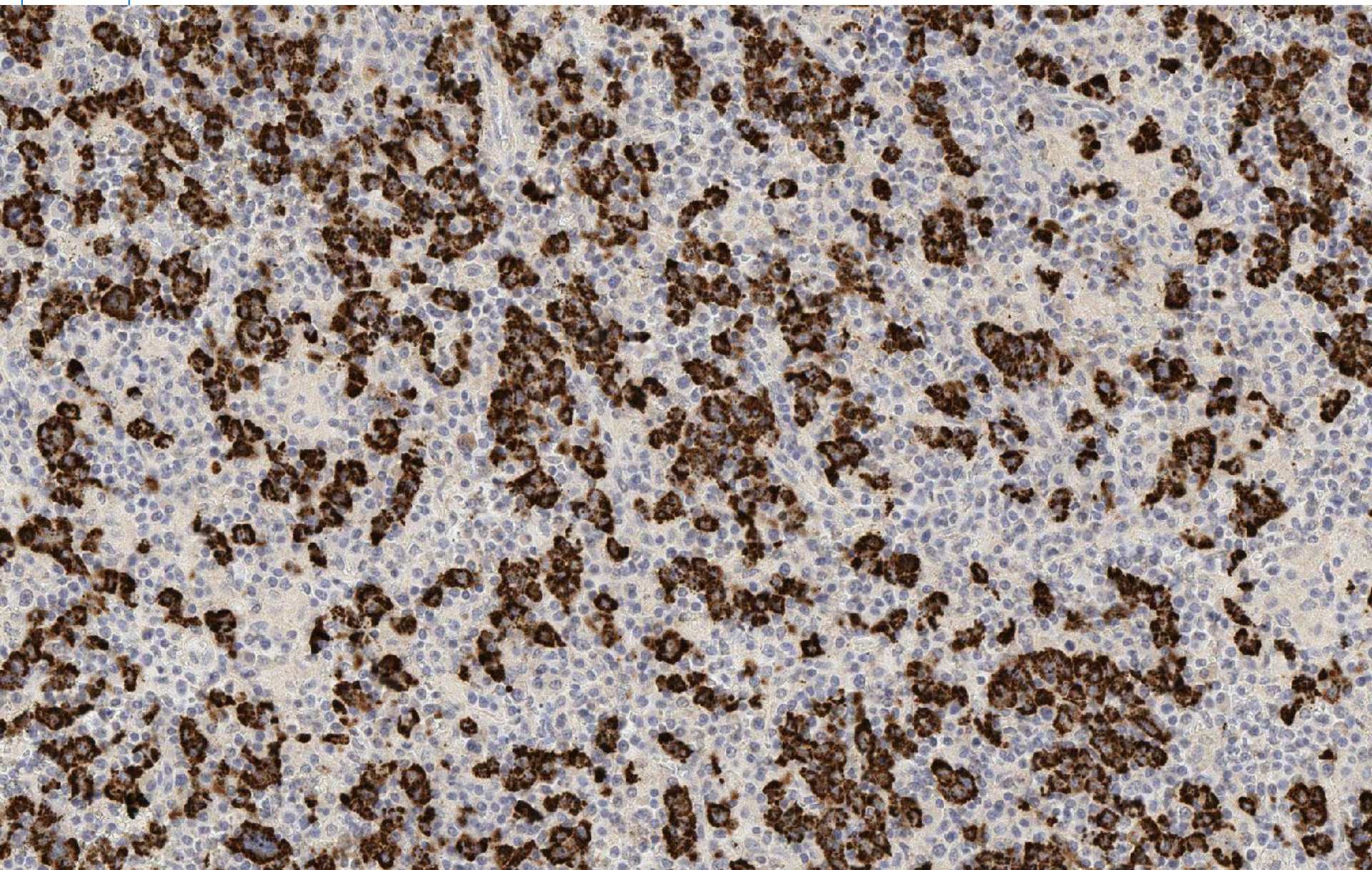
LR3



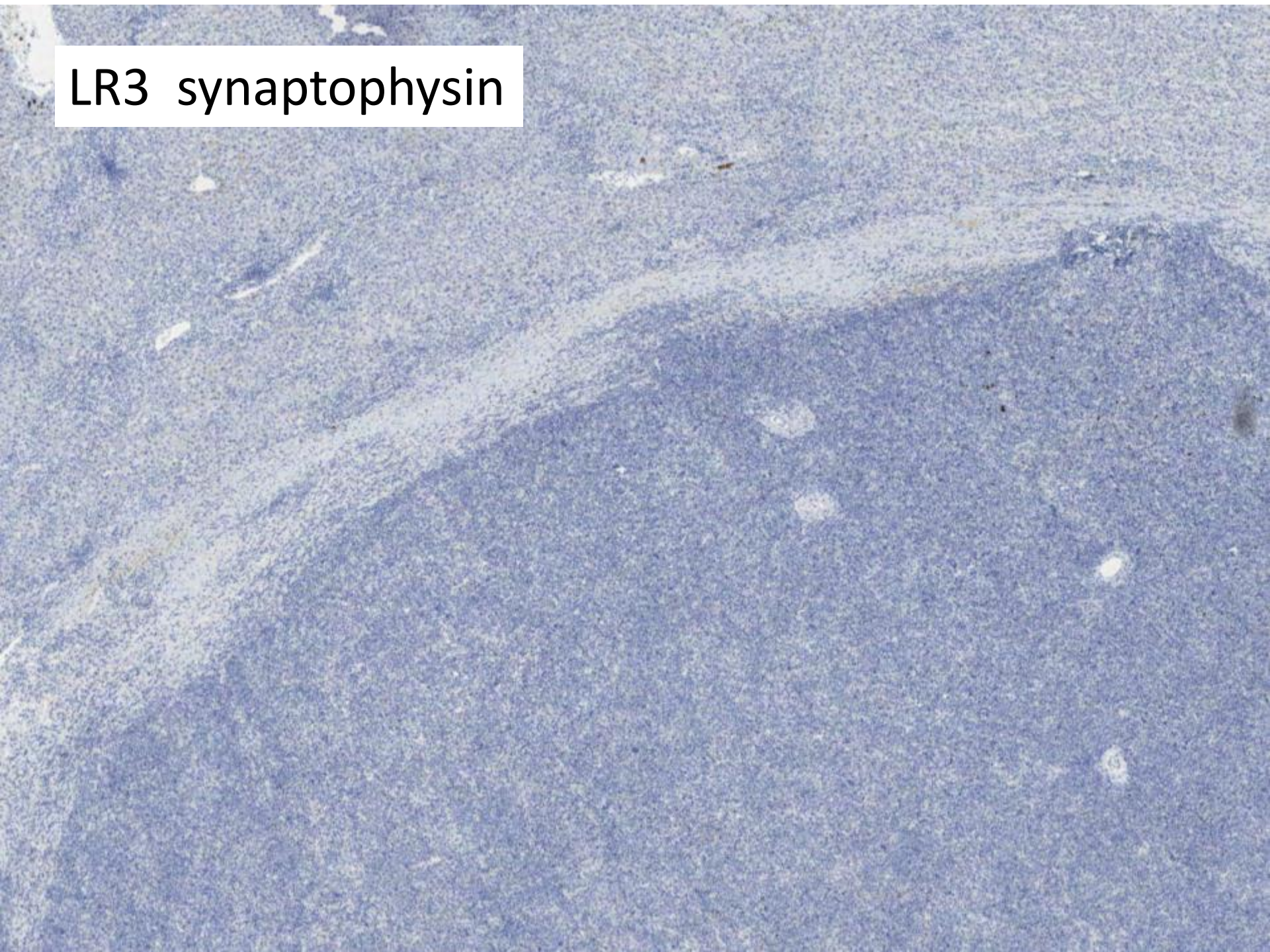
LR 3 HepPar1



LR3

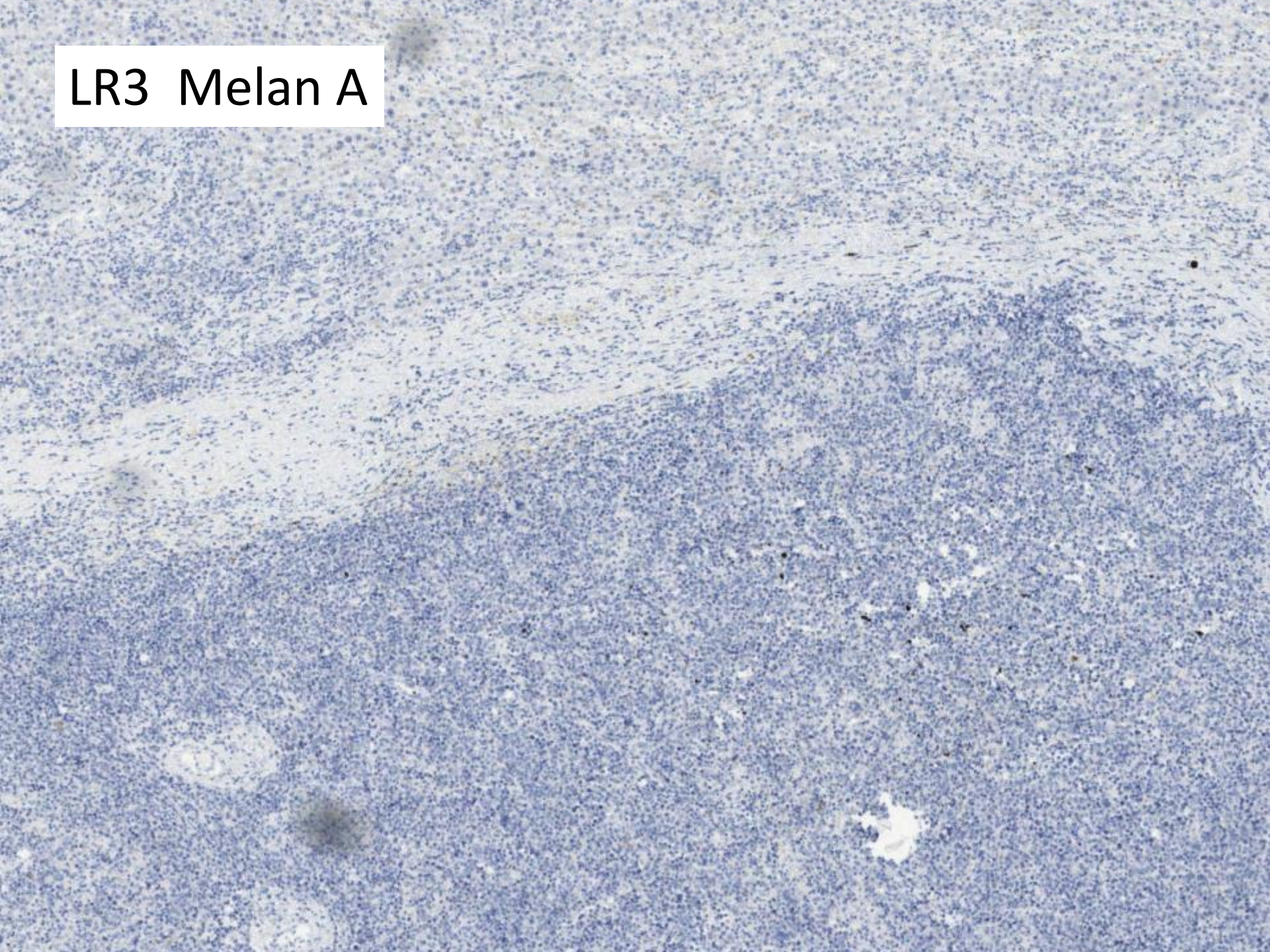


LR3 synaptophysin



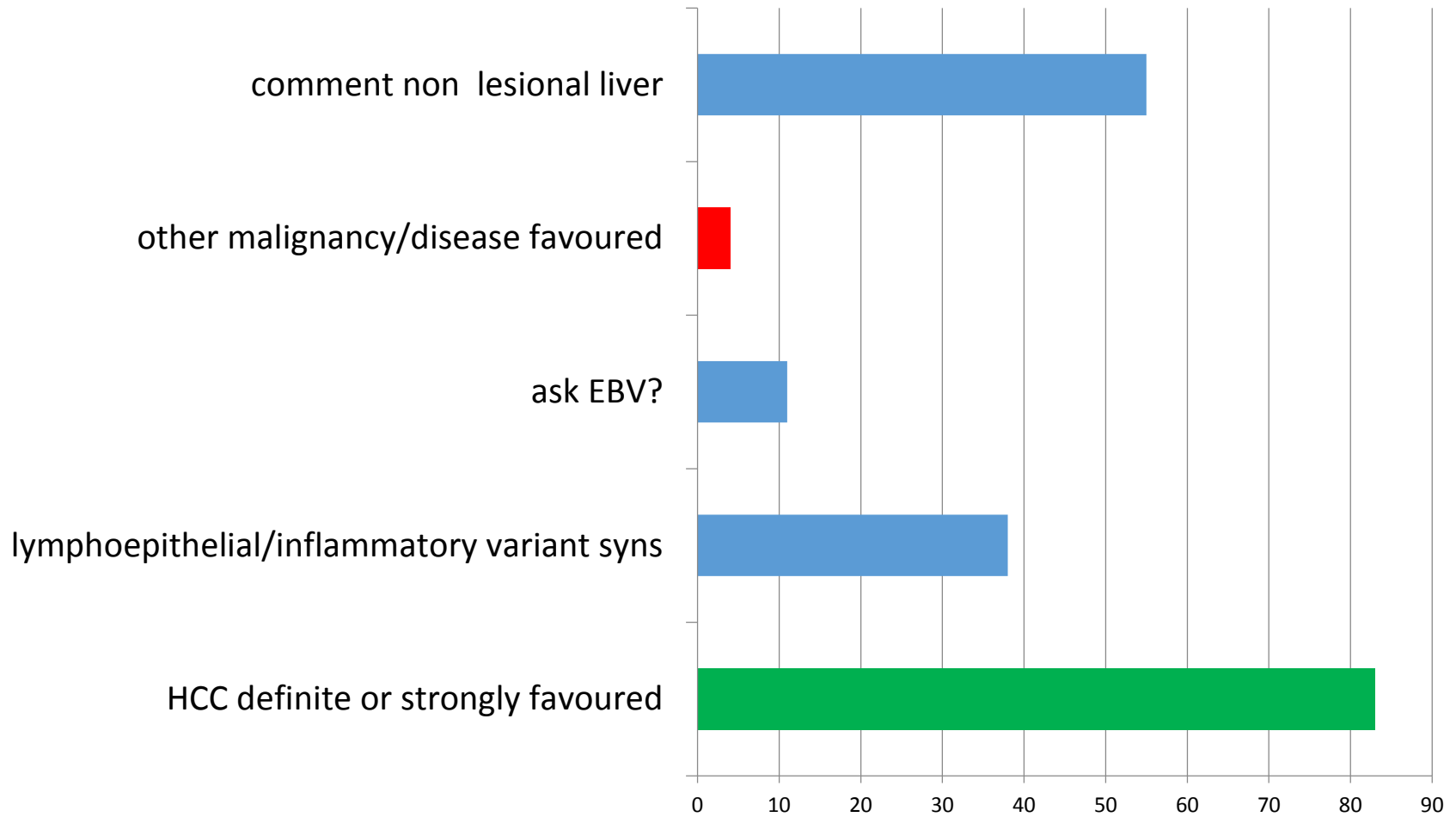
LR3 SI00

LR3 Melan A



Case LR3 91F

140x110x40mm liver segment. slicing shows a 65x50x50mm tumour with a variegated appearance including areas of necrosis and haemorrhage. three smaller satellite nodules. section from main lesion.



Consensus complete responses would include Hepatocellular carcinoma (HCC)

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Lose 5 marks if

‘Poorly-differentiated carcinoma, hepatoid - would want to do more immunos . Differential diagnosis includes hepatocellular carcinoma (which usually loses HepPar1 when poor diff).

‘Consider HCC and metastatic hepatoid adenocarcinoma. Needs further investigation. Nodules of epithelial tumour, Hep Par 1 positive. Other immunocytochemistry negative.’

Nomenclature ‘liver cell carcinoma’? all above ok

All currently in HCC count

Lose 10 marks if other diagnosis (4) check if HCC possible/in differential diagnosis with strategy which would lead to consensus diagnosis (in this case HCC) if not do lose 10

Myeloproliferative, EMH, lymphoma, LCH, adrenocortical, neuroendocrine.

Case LR3 91F

140x110x40mm liver segment. slicing shows a 65x50x50mm tumour with a variegated appearance including areas of necrosis and haemorrhage. three smaller satellite nodules. section from main lesion.

Scoring summary agreed at meeting:

For full marks need hepatocellular carcinoma as definite or favoured diagnosis.

Lose 10 marks for other diagnosis, with no mention of HCC in the differential (mainly haematolymphoid)

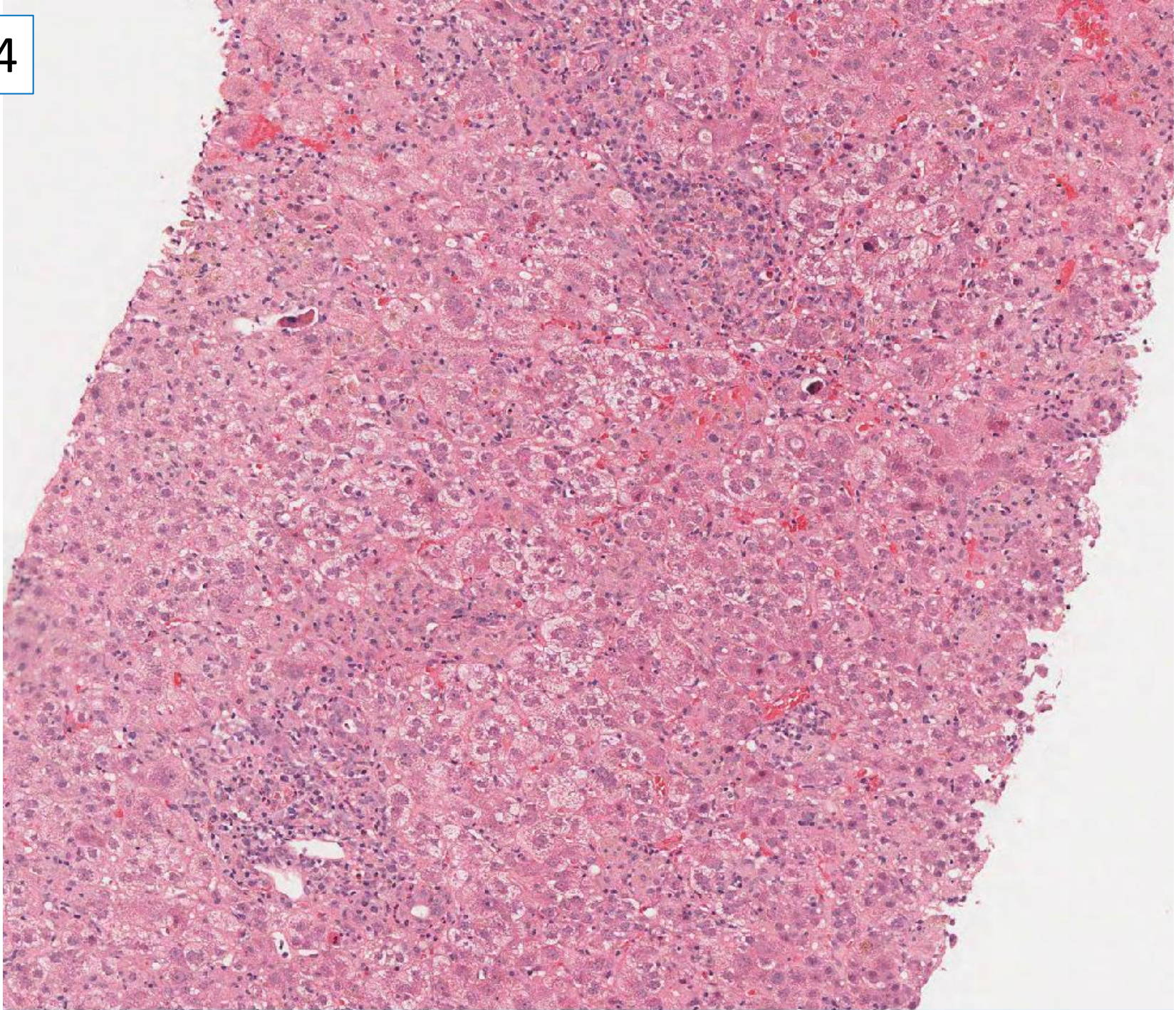
Follow up information: AFP pre-operatively was >100,000. Most recent appointment – scan clear, normal AFP. Discharged from follow up.

Case LR4 72F

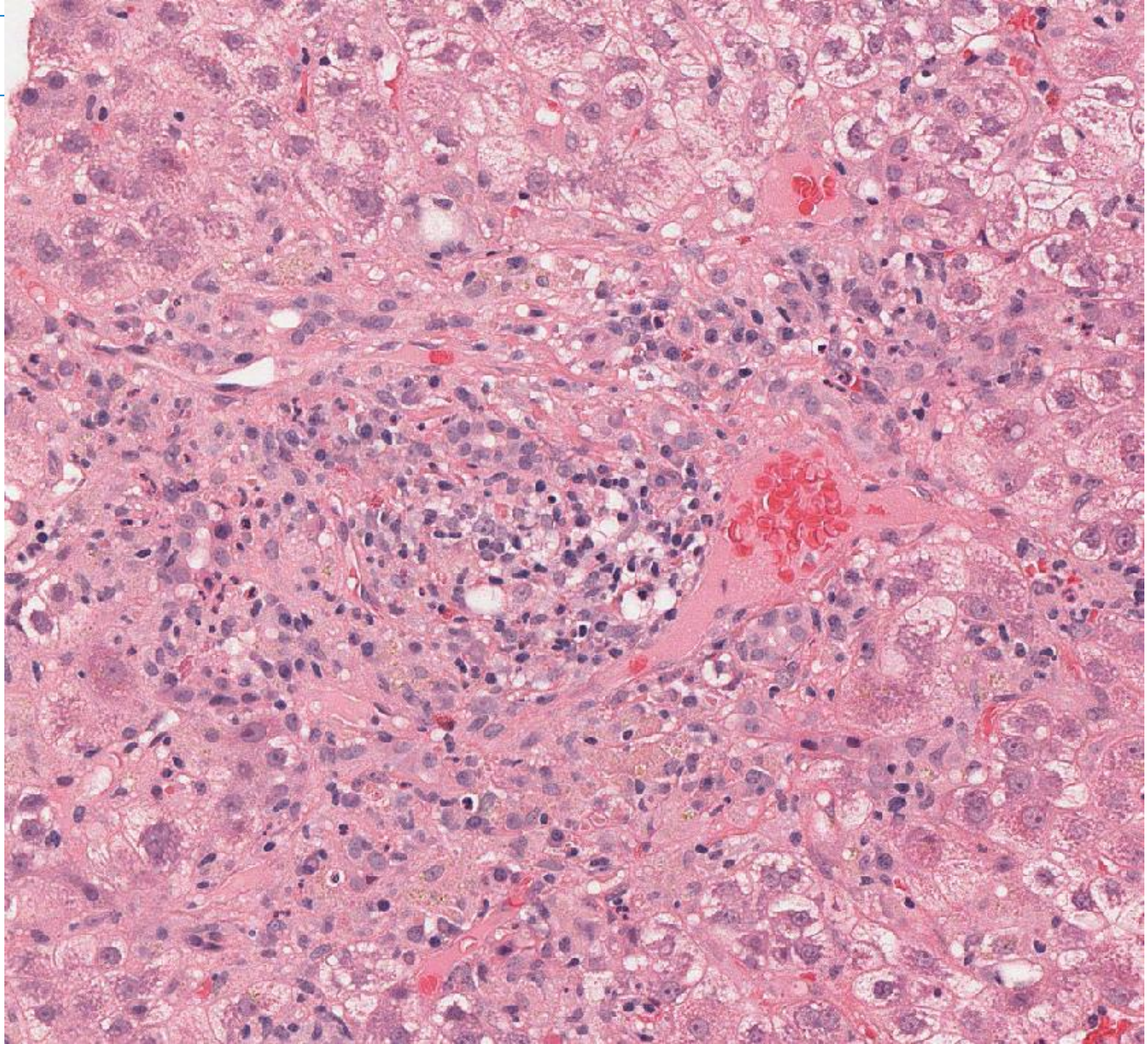
Acute hepatitis, cause? seronegative autoimmune hepatitis?
Also Van Gieson



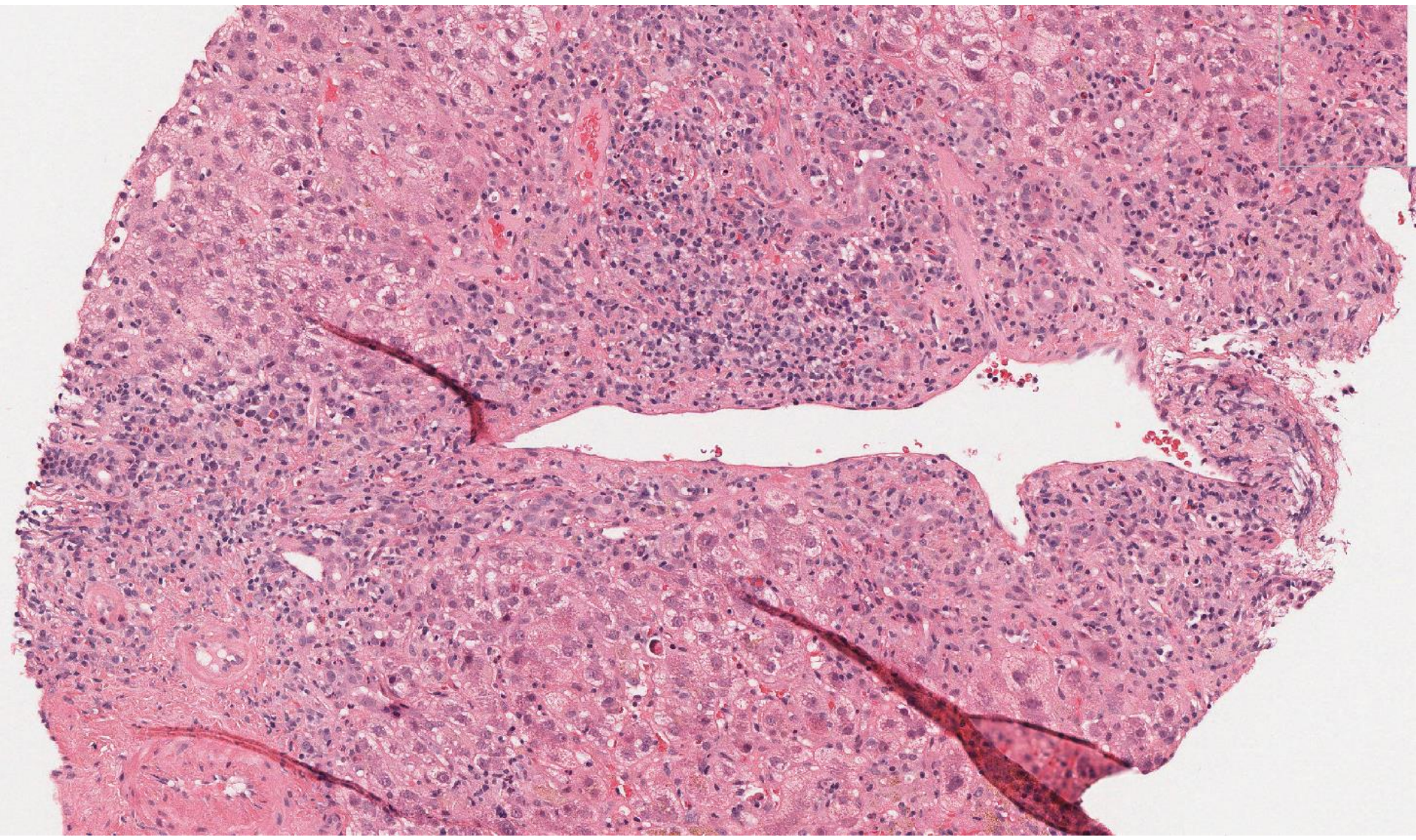
LR4



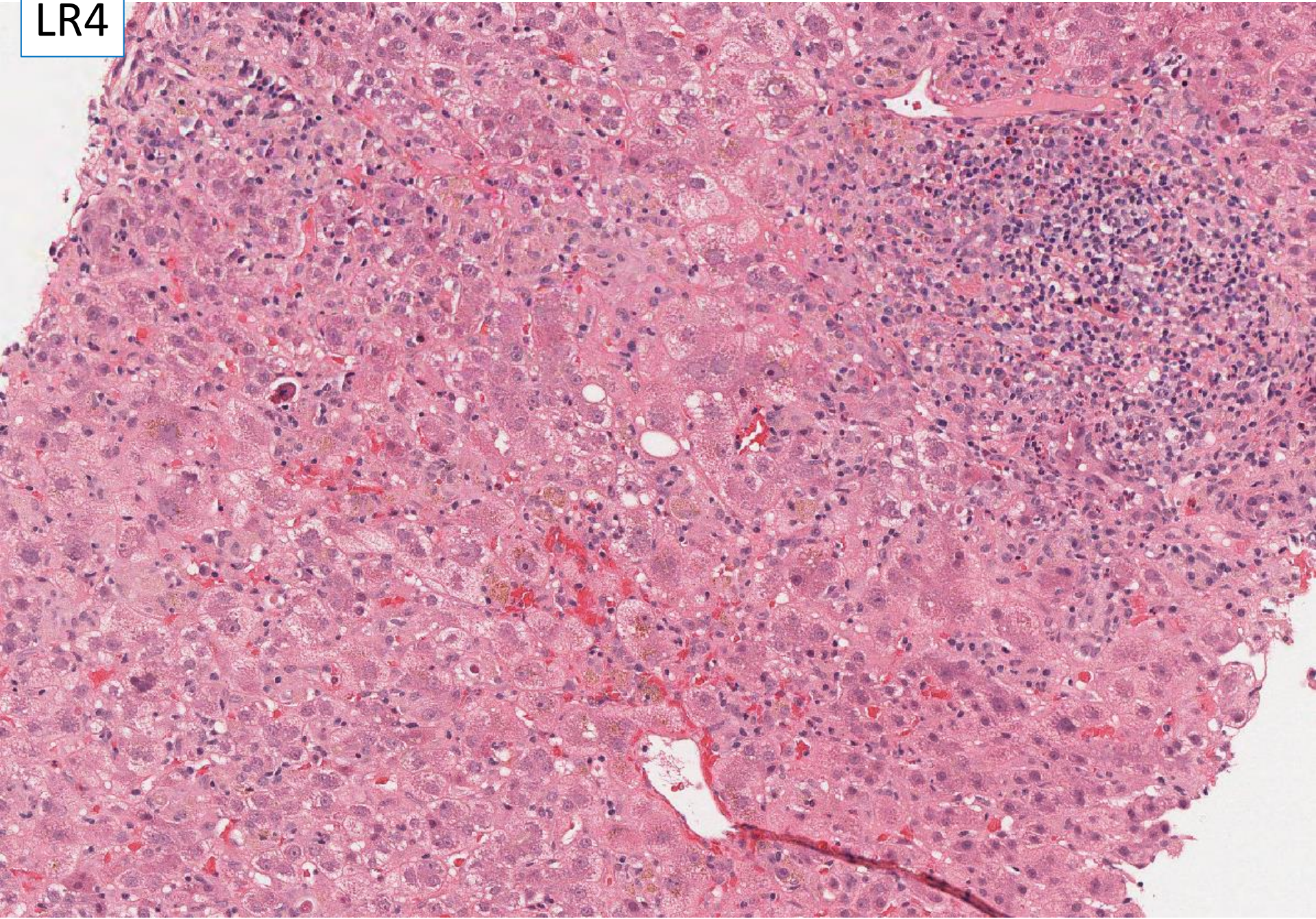
LR4



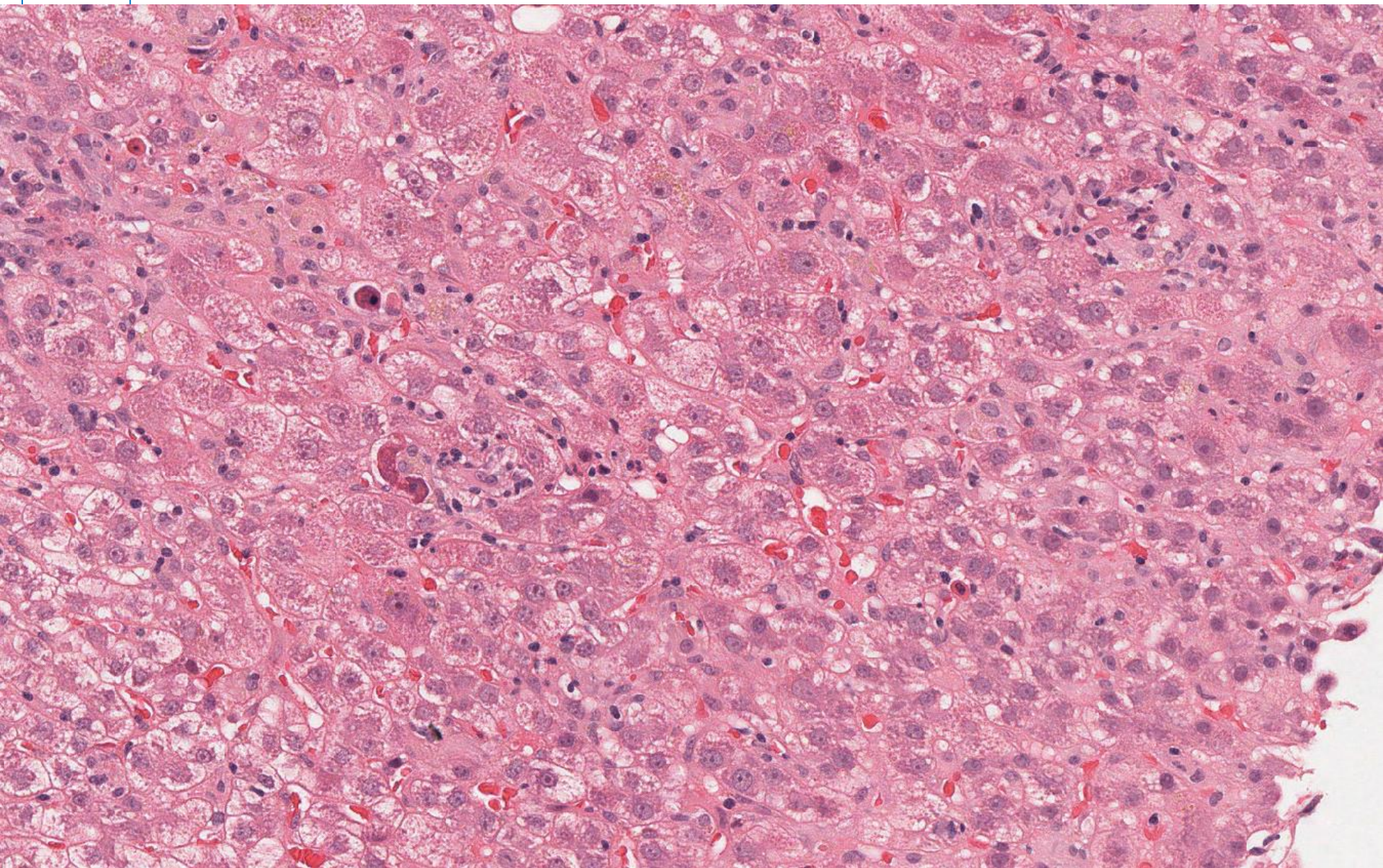
LR4



LR4



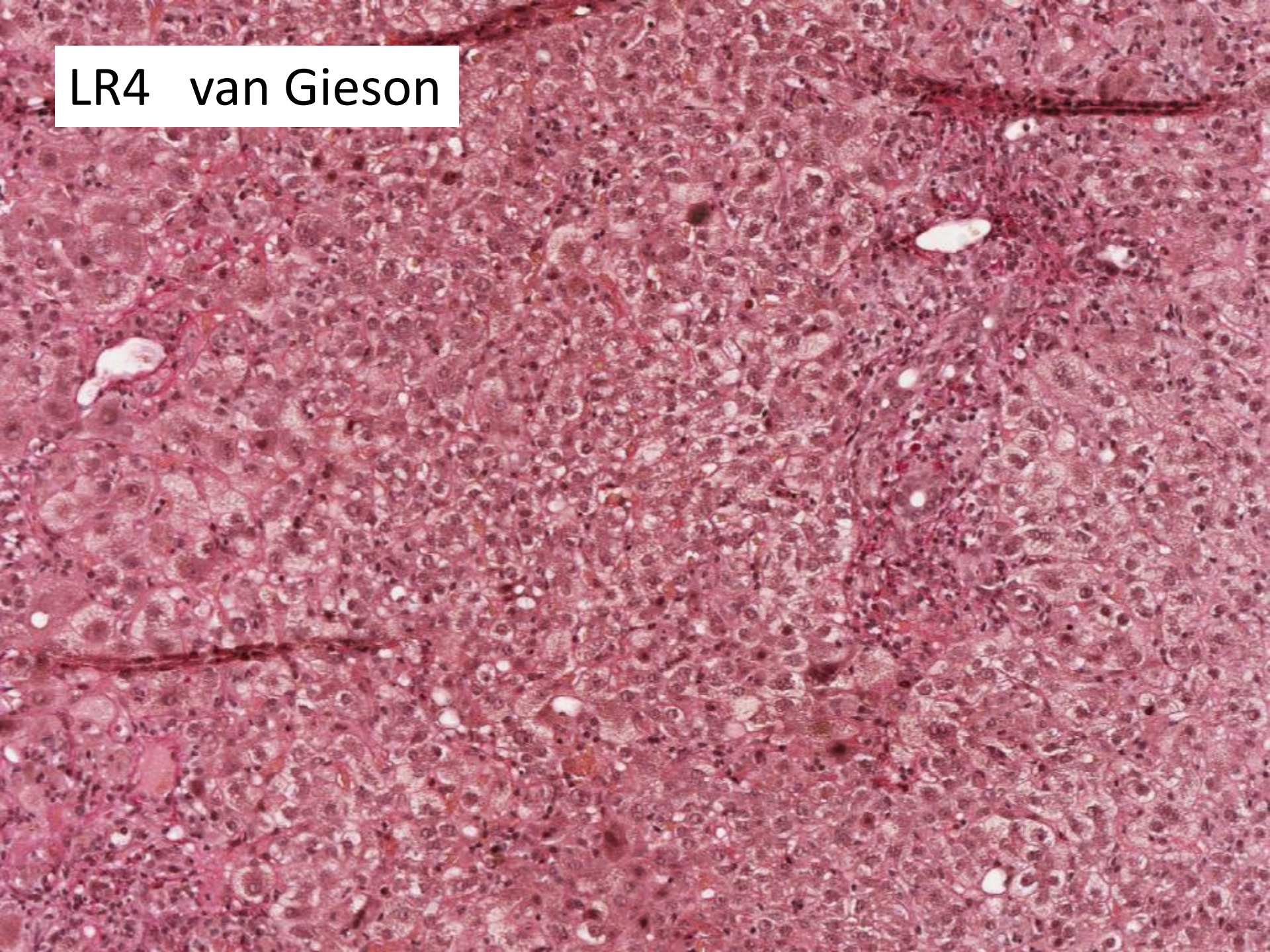
LR4



LR4

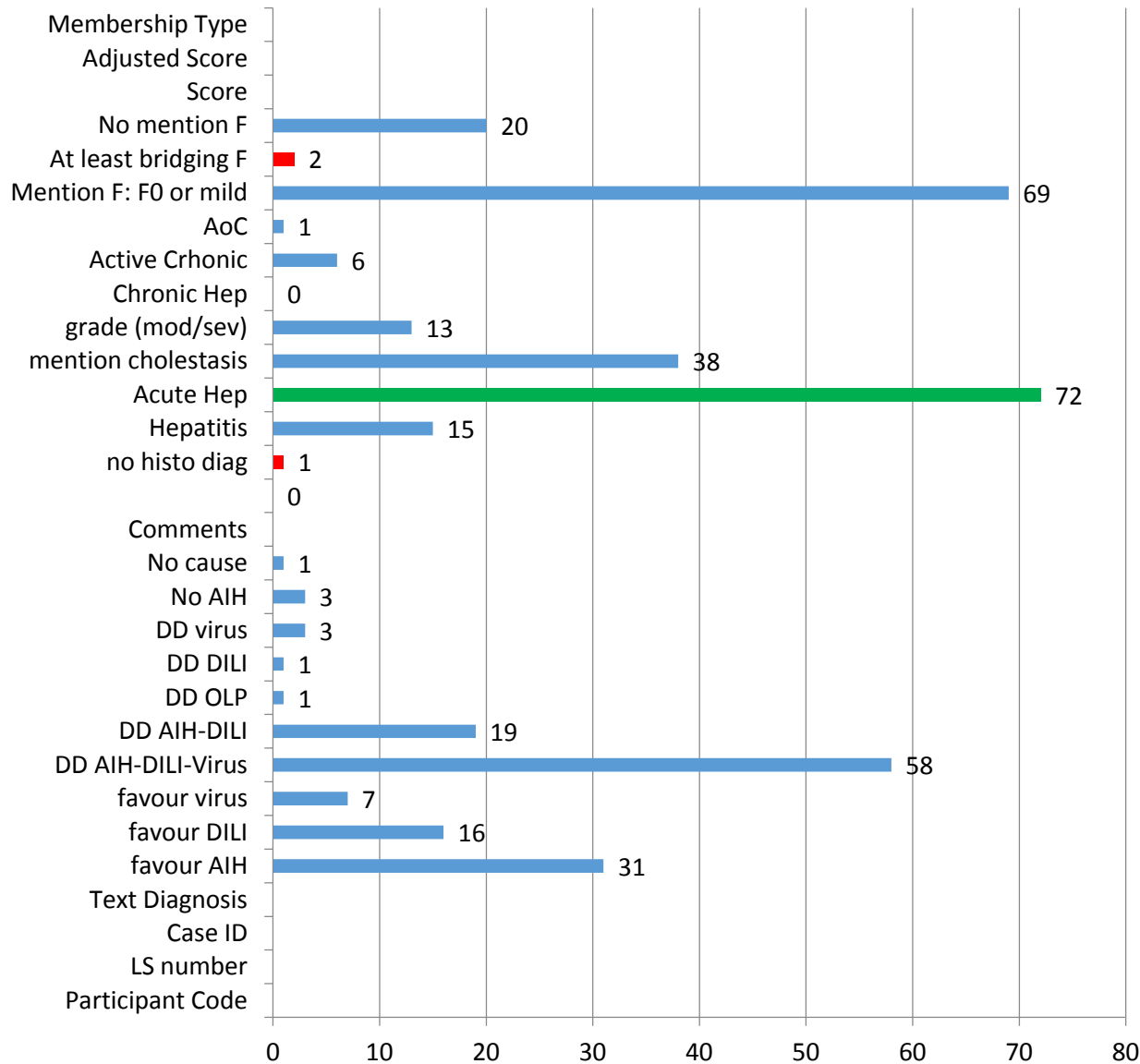


LR4 van Gieson



Case LR4 72 F

Acute hepatitis, cause? seronegative autoimmune hepatitis?. Liver biopsy. Tan core 19mm.
Additional stains: van Gieson.



Consensus complete responses would include

Acute hepatitis (70)

Most of the responses say no fibrosis or early fibrosis (67), but do not reach the 70 (suboptimal van Gieson)

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Acute hepatitis (70)

Most of the responses say no fibrosis or early fibrosis (67), but do not reach the 70 (suboptimal van Gieson)

Suggested scoring: for 10 points Acute hepatitis agreed

? Lose 5 marks if

- i) active chronic hepatitis (6) no
- ii) acute on chronic (1) no
- iii) no histologic diagnosis (e.g: autoimmune hepatitis only) (1) yes
- iv) overlap disease 1 yes, check if said acute hepatitis

? Lose 5 marks if

- v) no mention fibrosis (19) – suboptimal stain no

? Lose 5 marks if

- vi) no mention any cause (1) no
- vii) **Say this is not AIH** (3) no or ?? lose 5 will need to ask members, re look at response after scoring principles decided at meeting

? Lose 10 marks (score 0) if

- Advanced fibrosis (bridging, cirrhosis) (2) – suboptimal stain 5 if said acute hepatitis

Case LR4 72F

Acute hepatitis, cause? seronegative autoimmune hepatitis?

Also Van Gieson

Scoring summary agreed at meeting:

For full marks – acute hepatitis, or hepatitis with no indication that there is chronic disease.

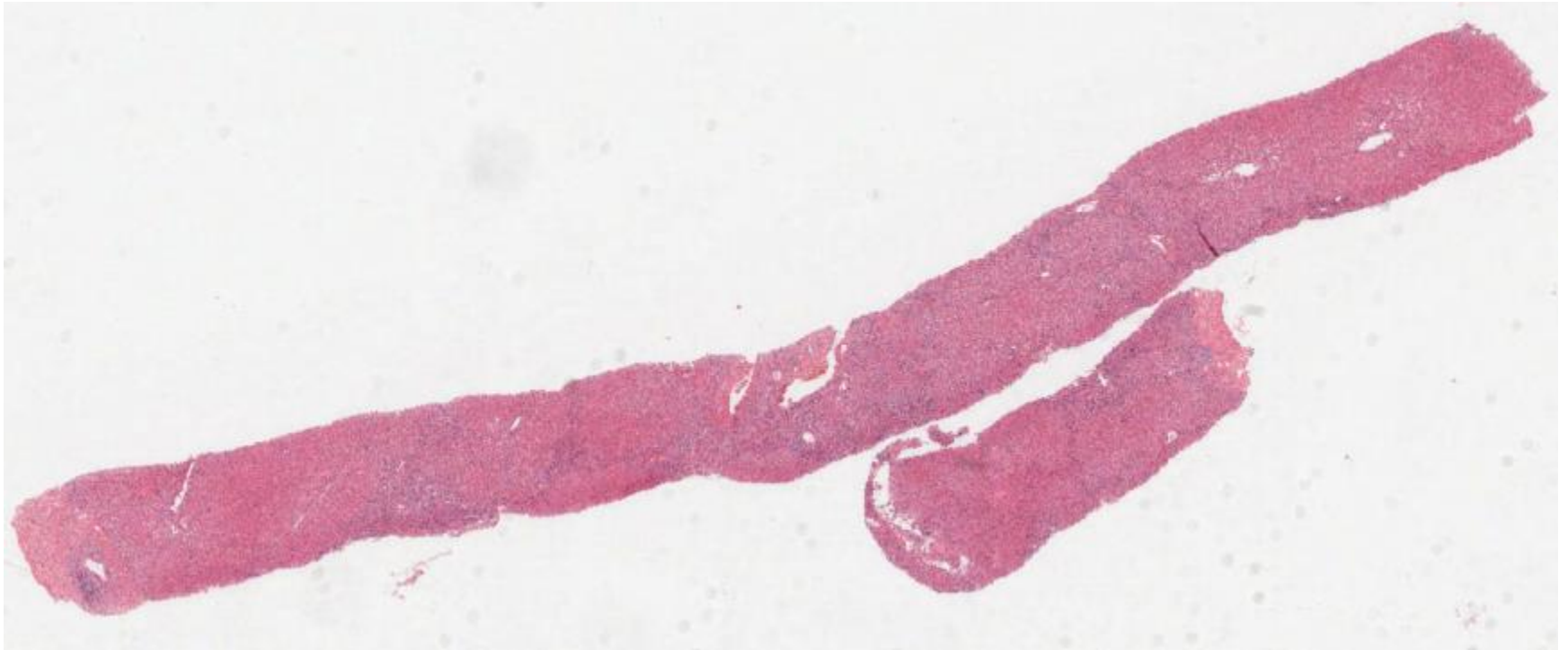
Lose 5 marks if - Description but the diagnosis 'hepatitis' is not included

Lose 5 marks if - Autoimmune hepatitis is the only diagnosis, without reference to alternative aetiologies

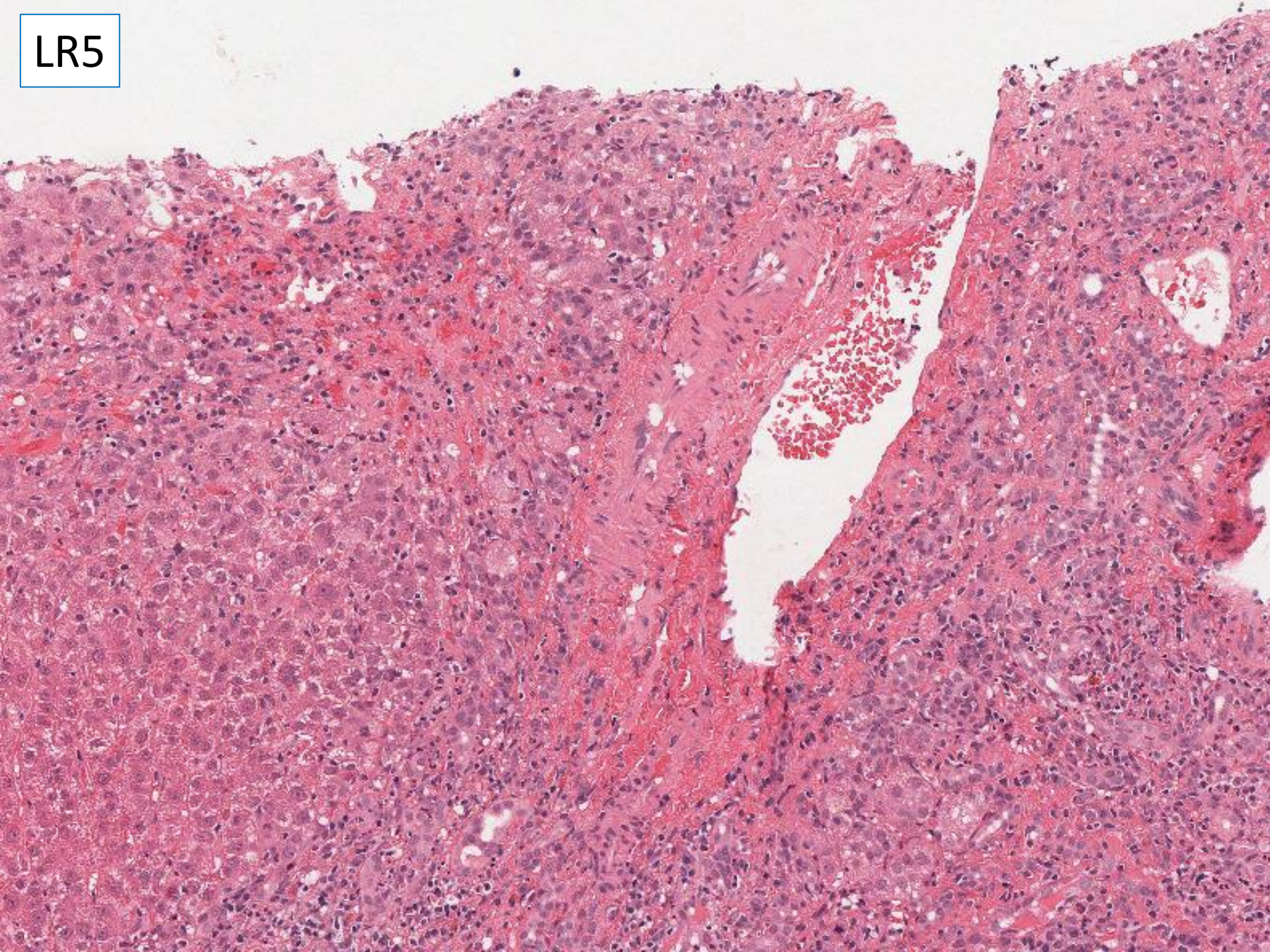
Lose 5 marks if - A clear indication that there is chronic disease with fibrosis.

Case LR5 65F

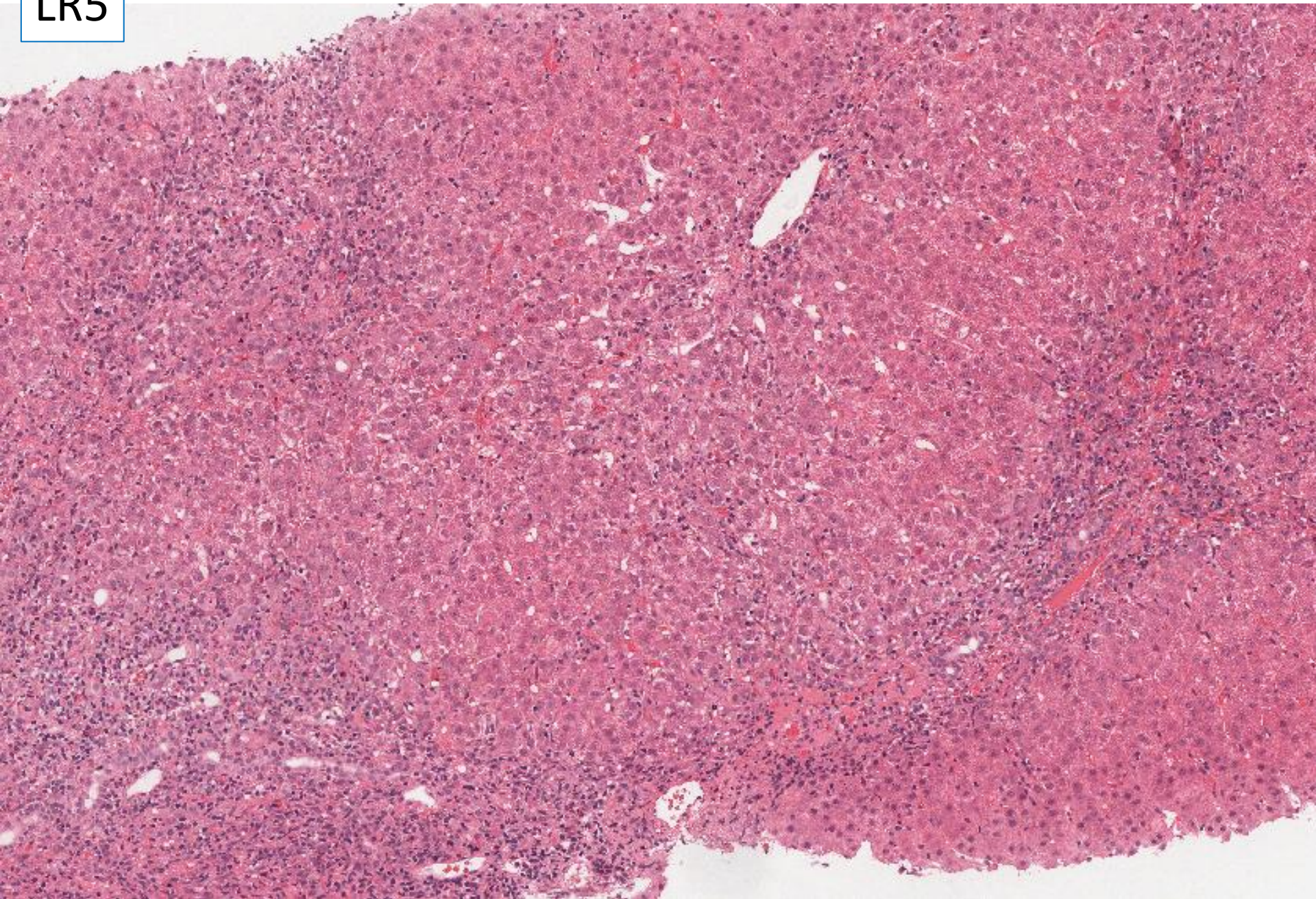
Heptatitic picture, autoimmune, AIH? IgG 19.67g/l, ANA+ (1:100) f actin+ and SMA+. AMA-. Bili 73, ALT 946 ALP 256. Also retic, Shikata, van Gieson



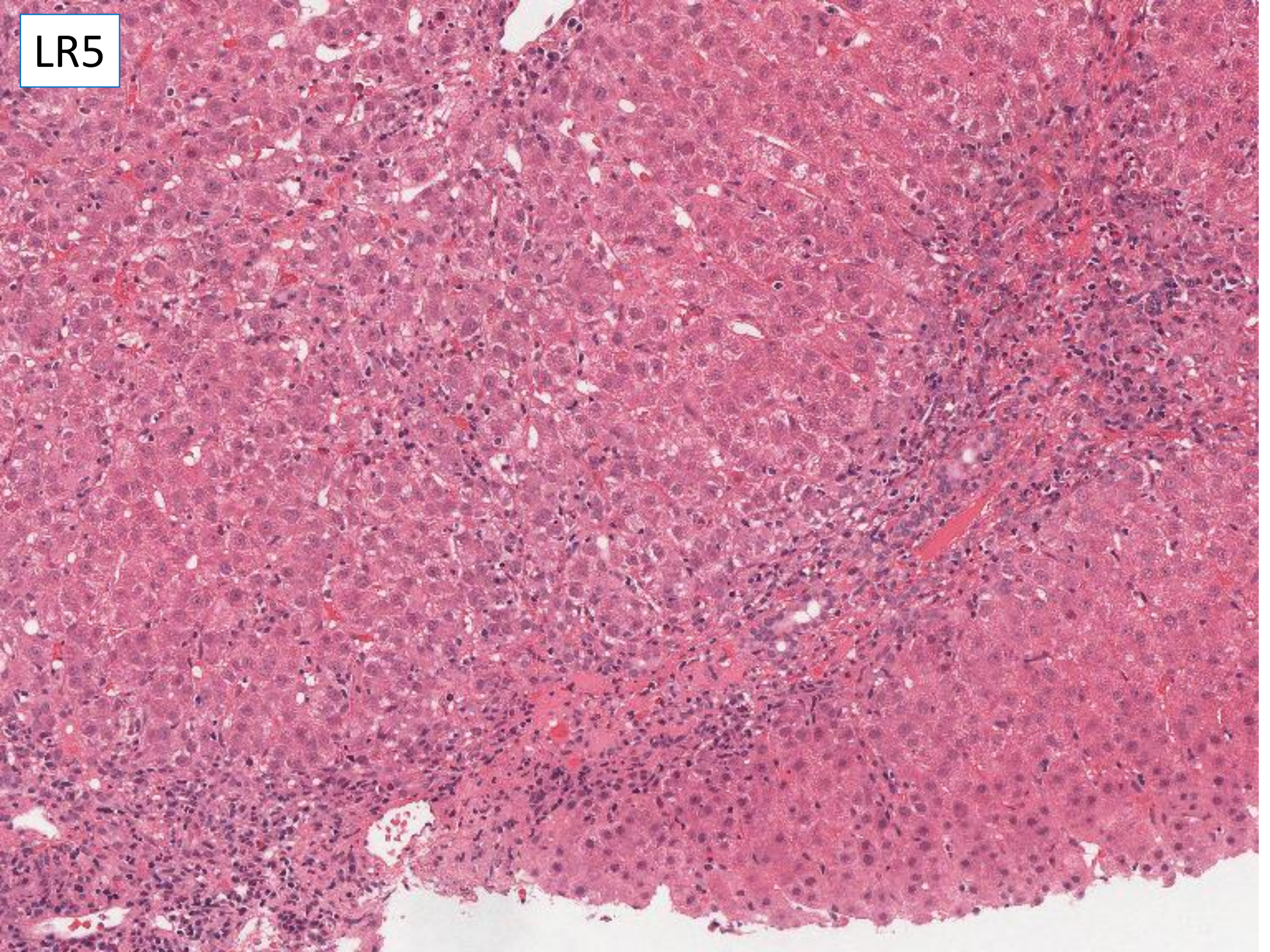
LR5



LR5



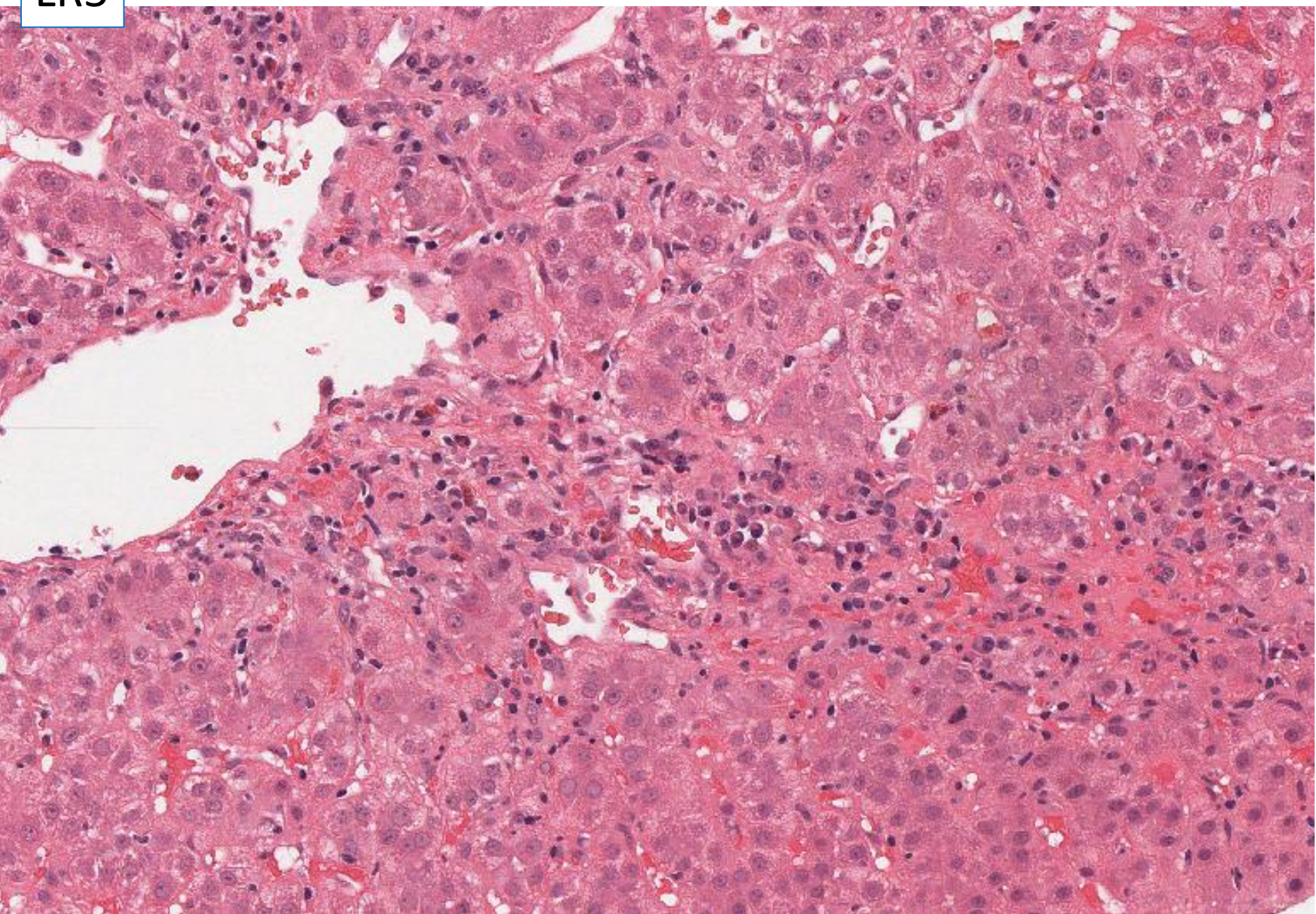
LR5



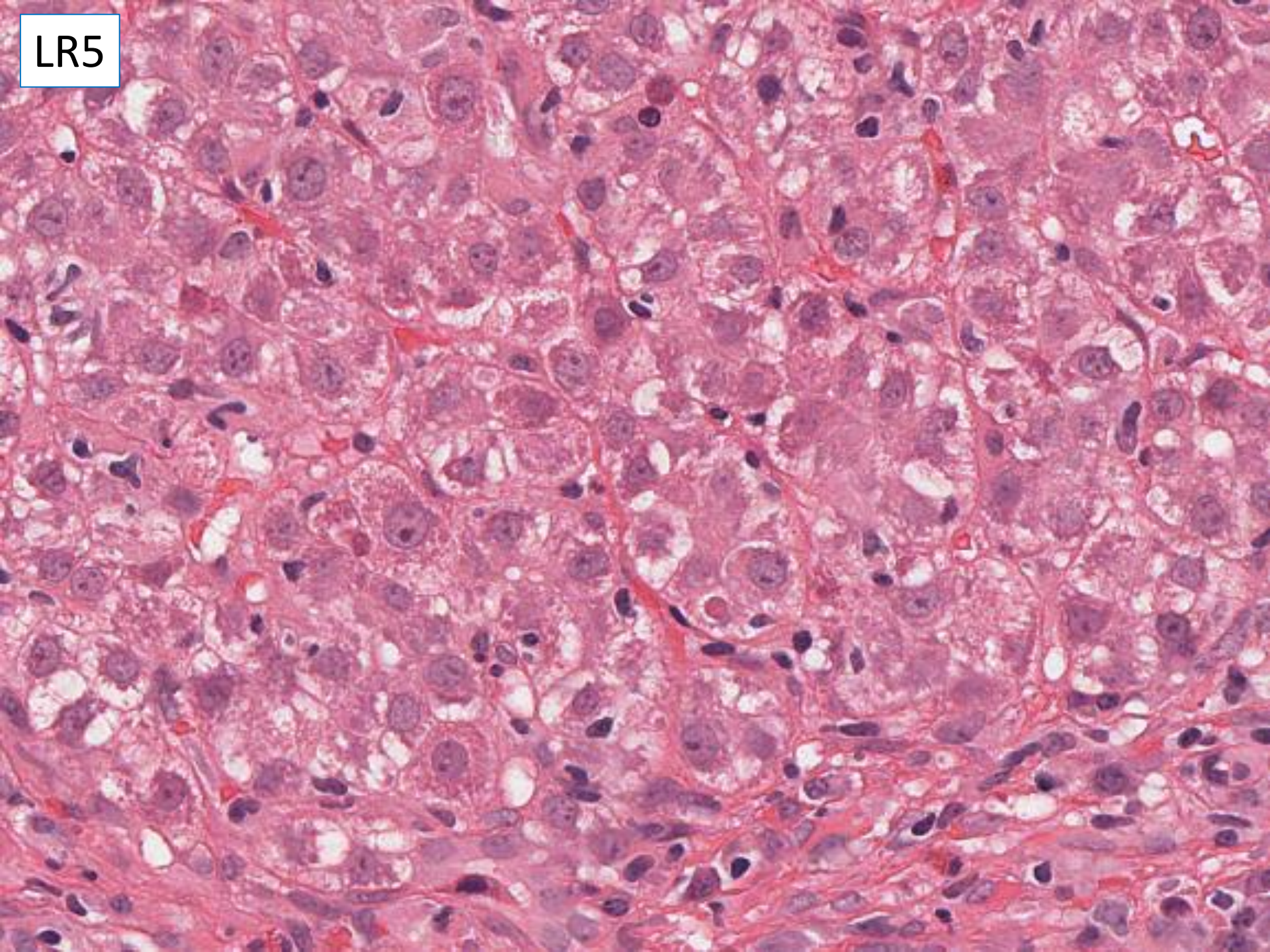
LR5



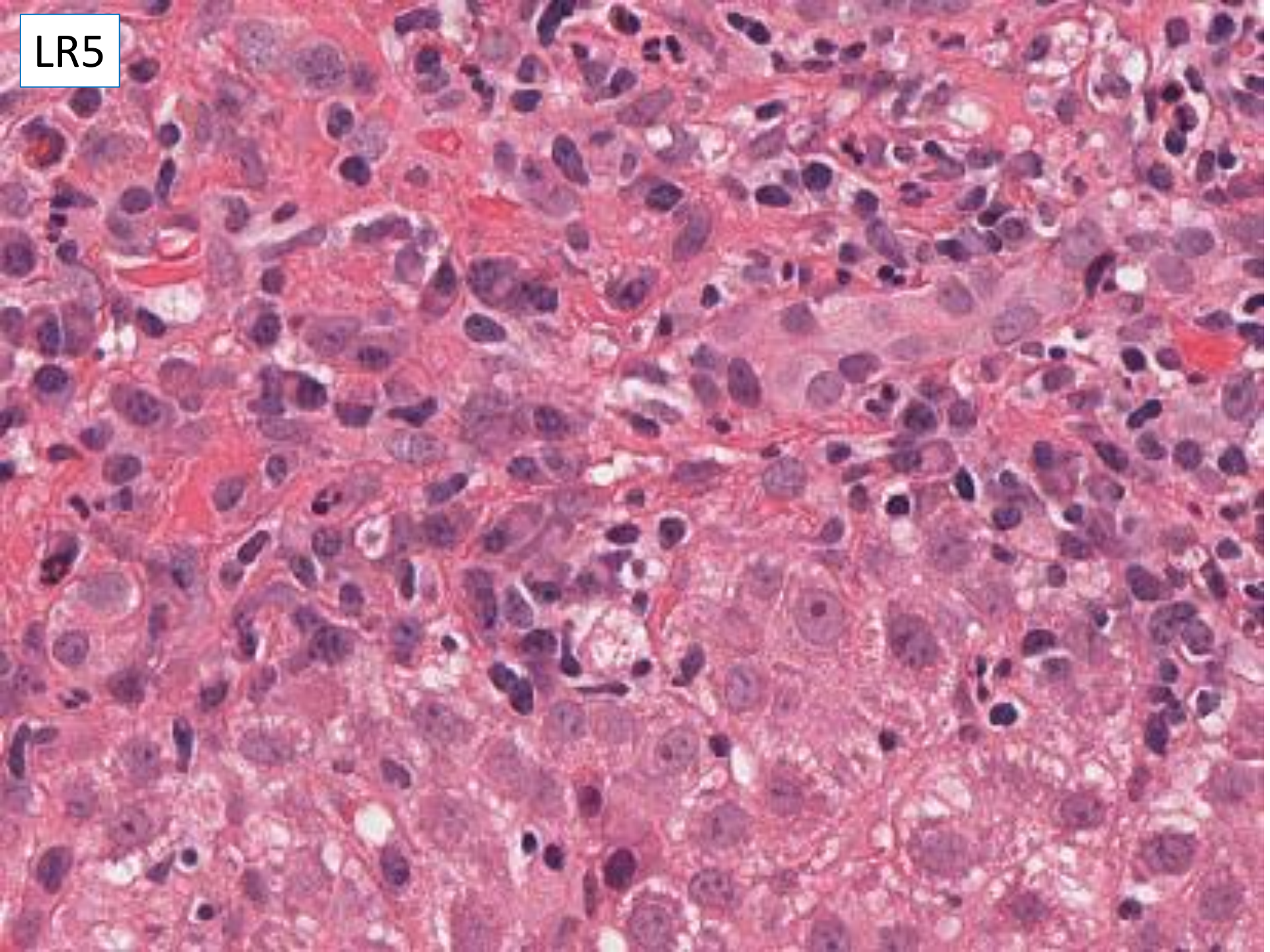
LR5



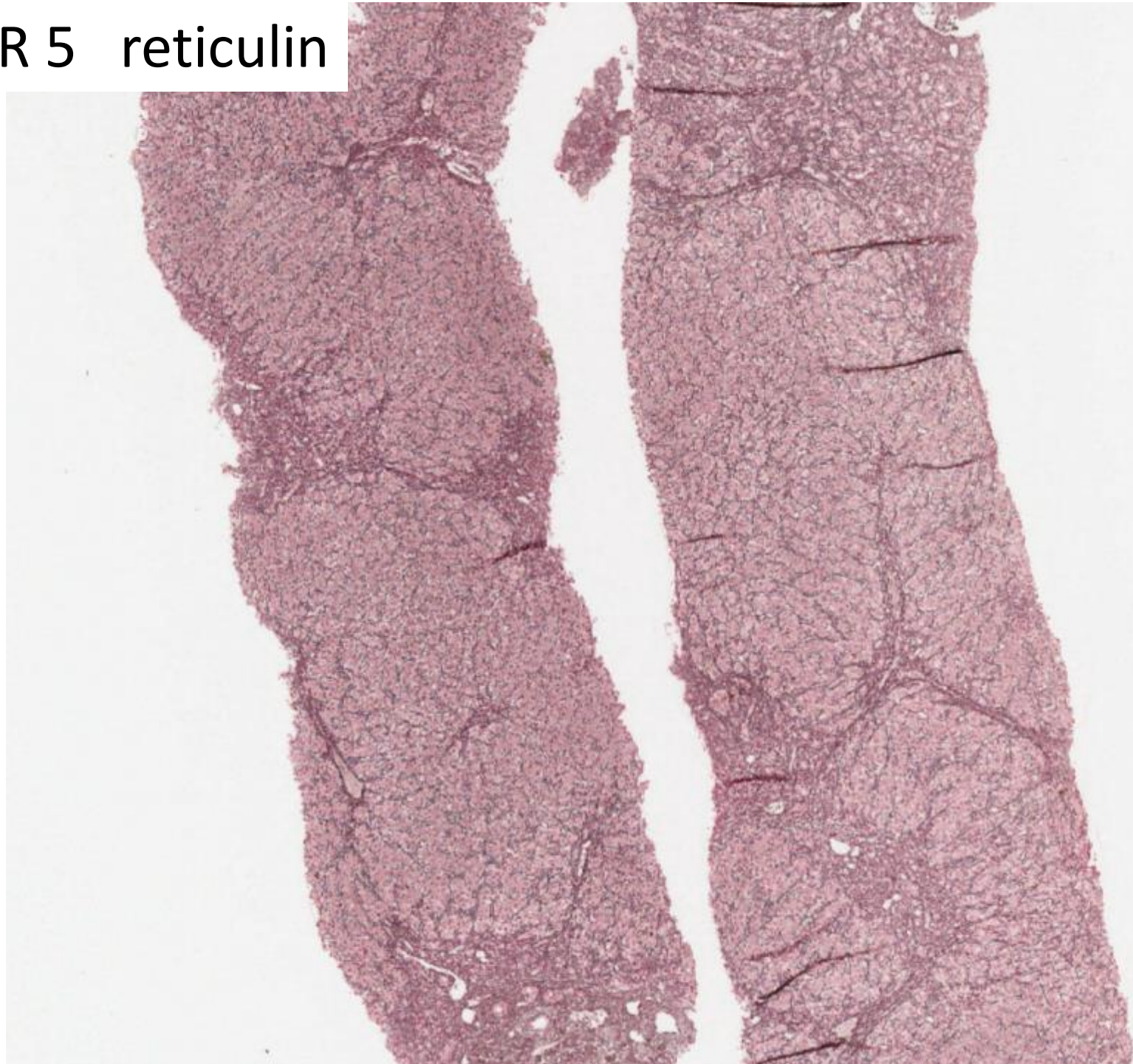
LR5



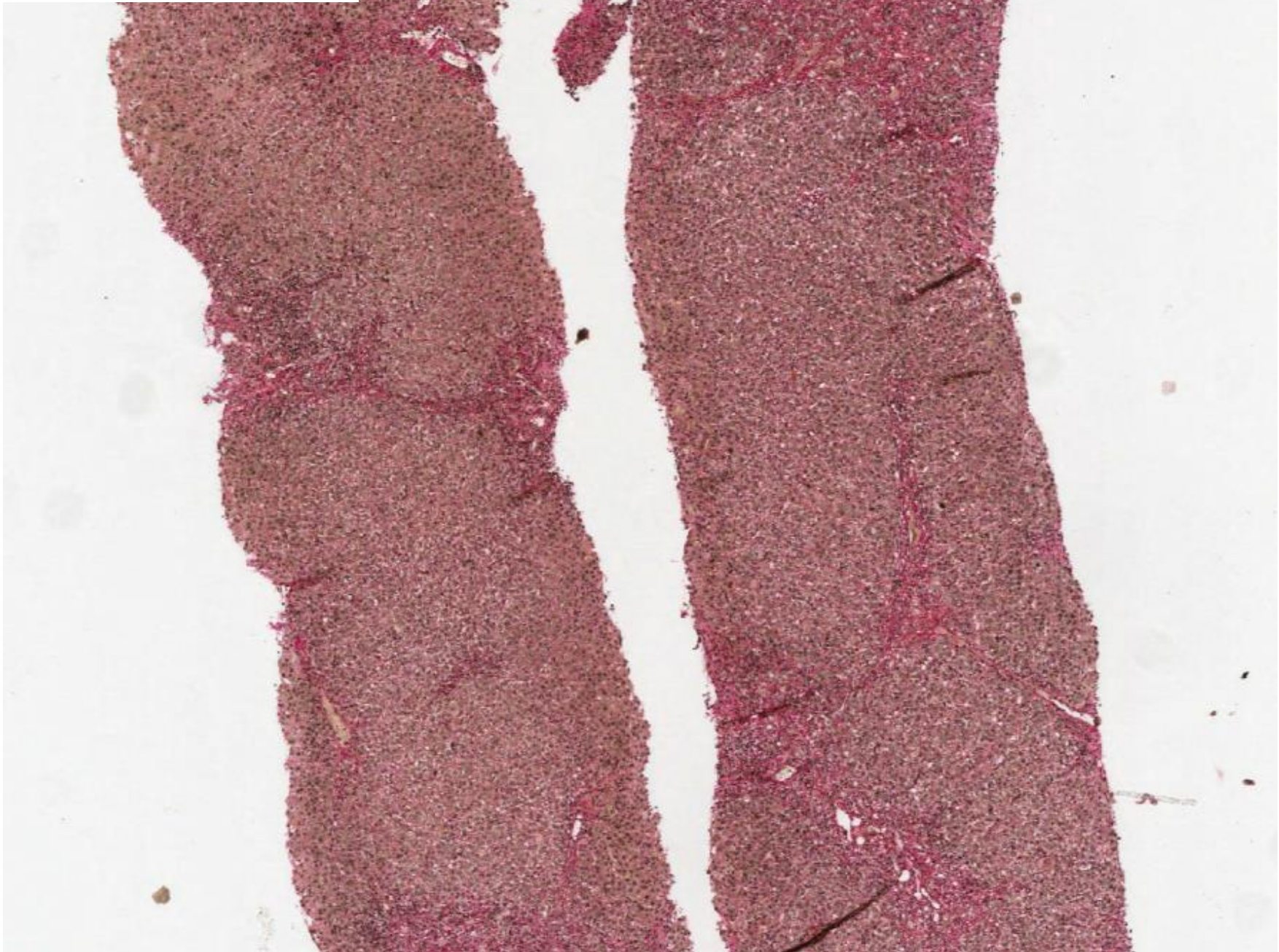
LR5



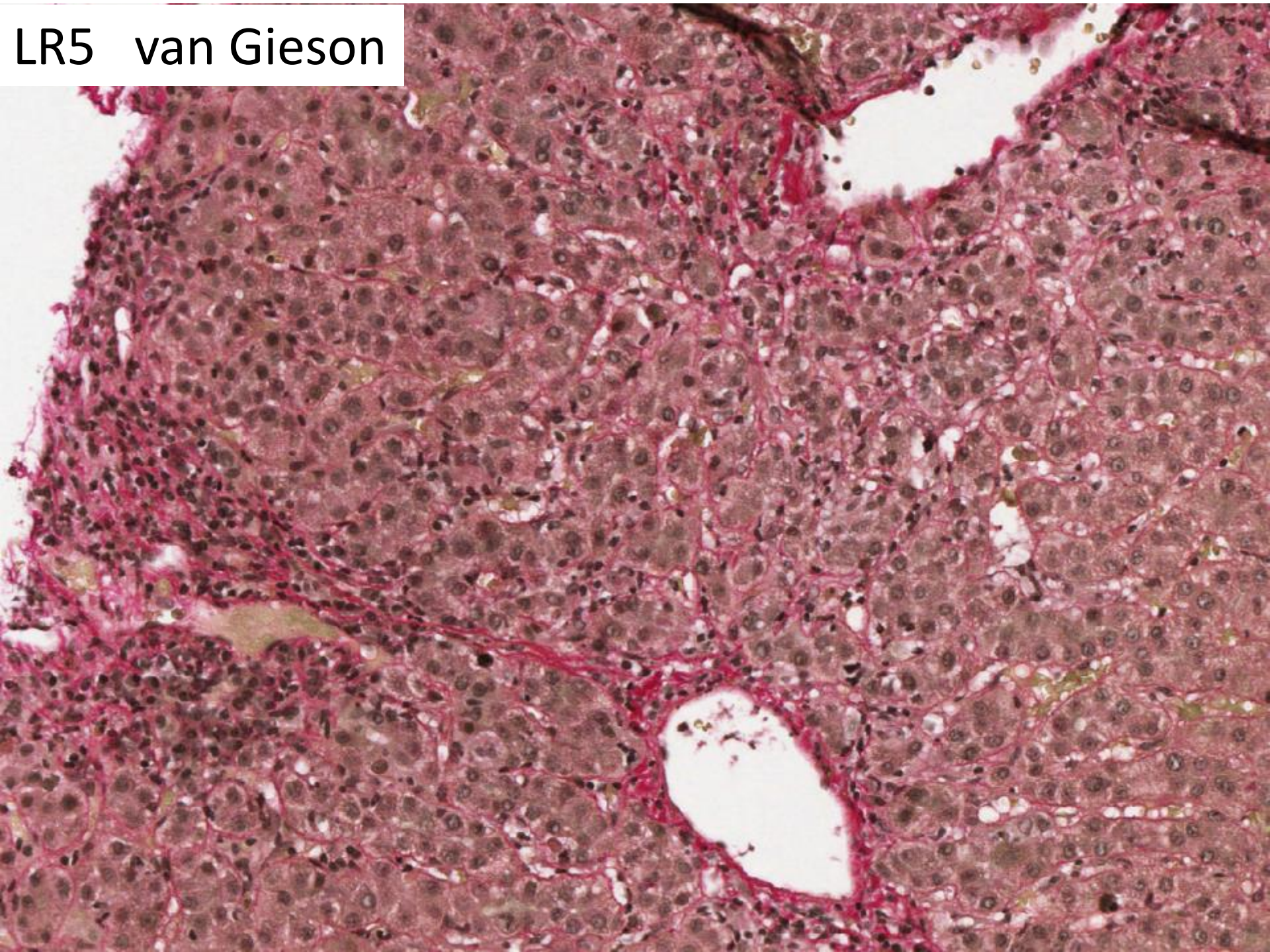
LR 5 reticulin



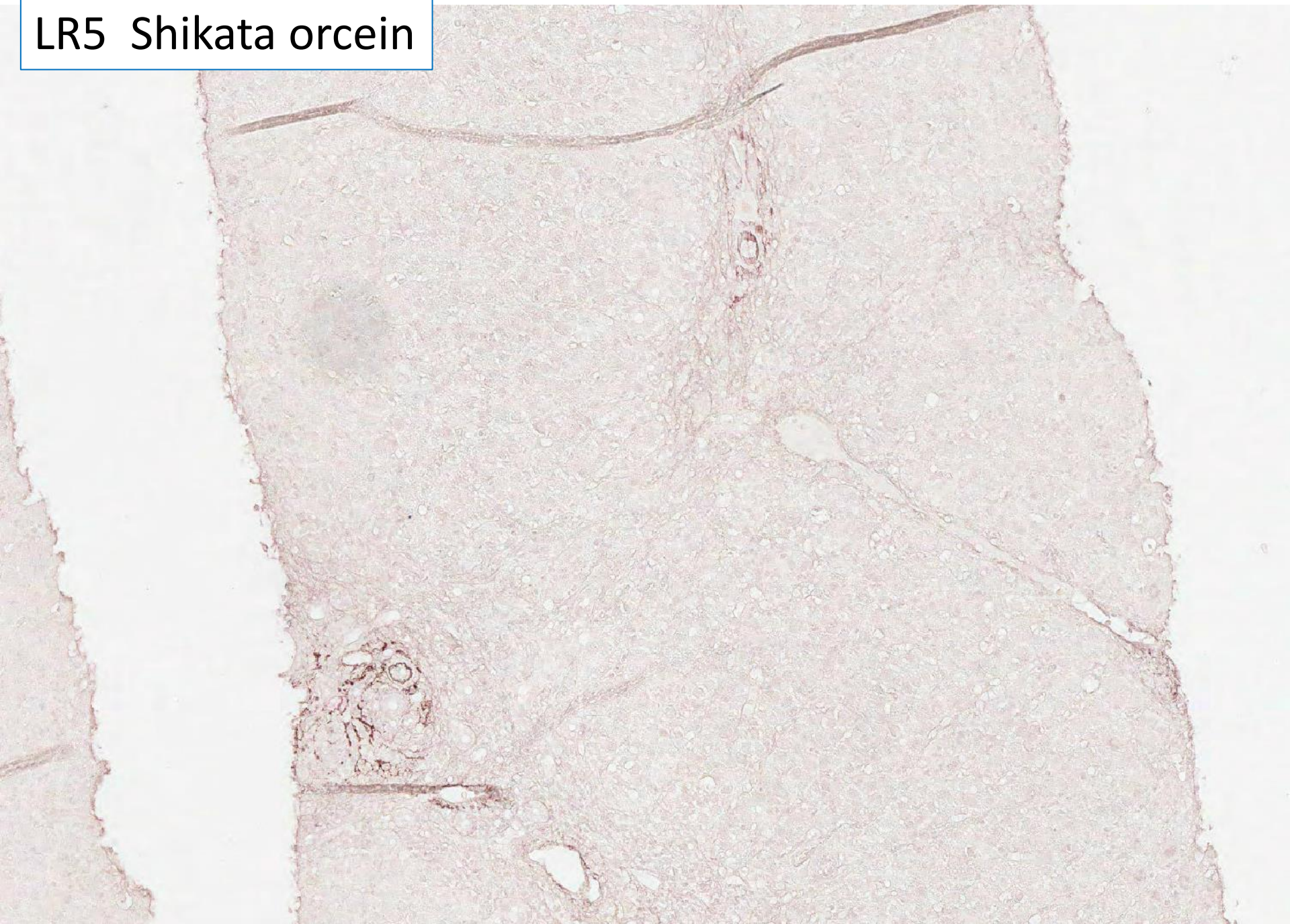
LR 5 van Gieson



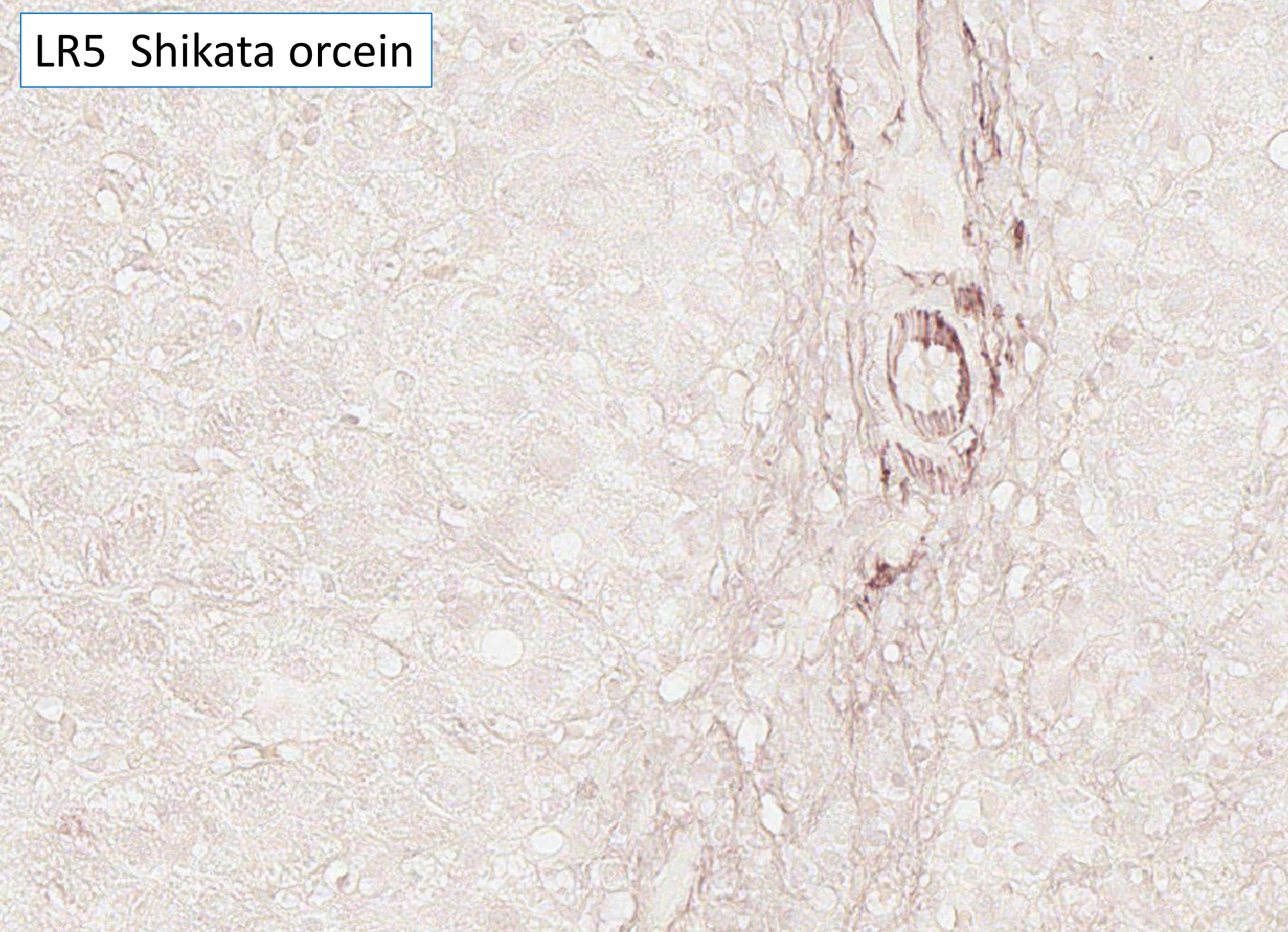
LR5 van Gieson



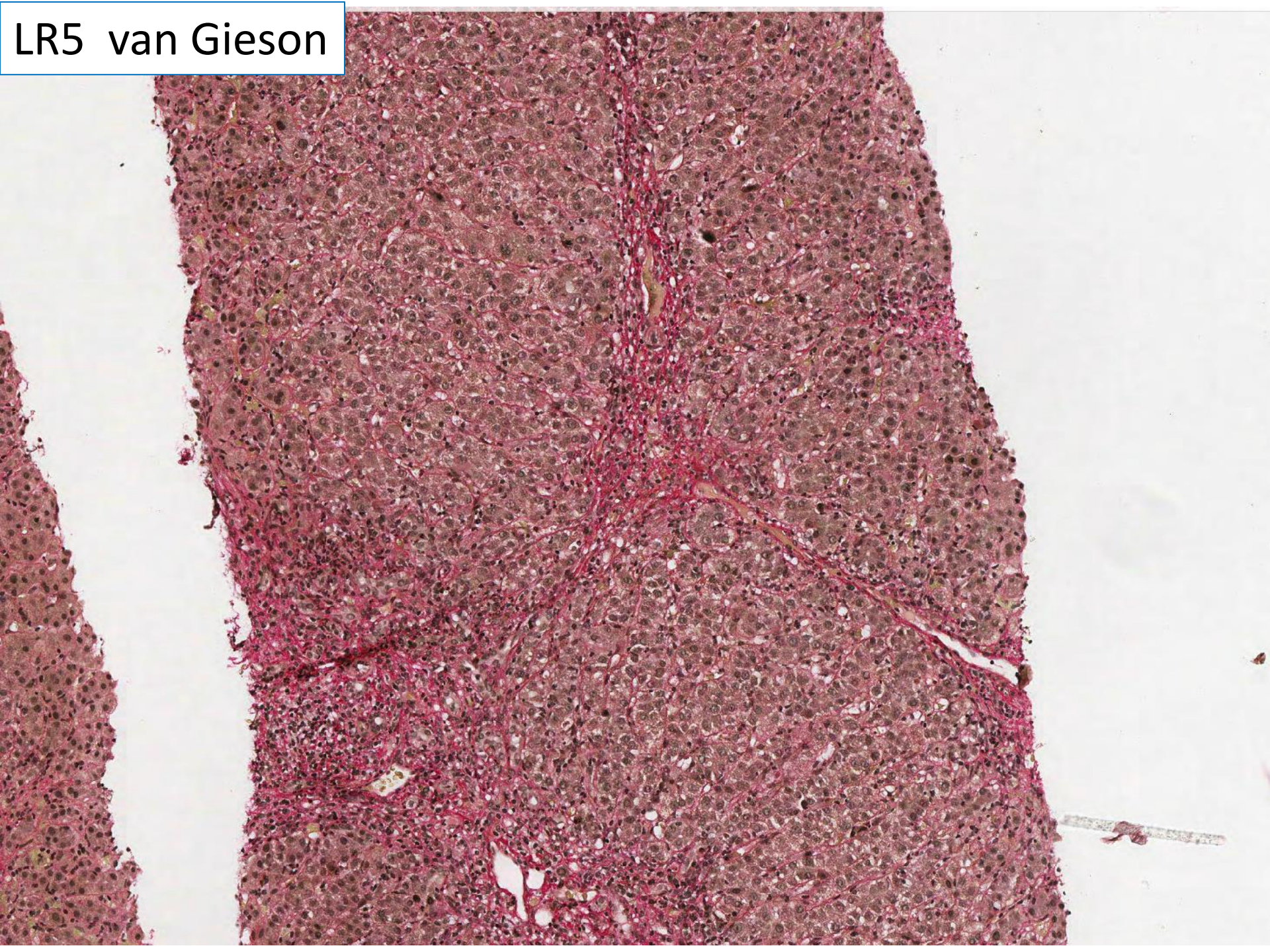
LR5 Shikata orcein



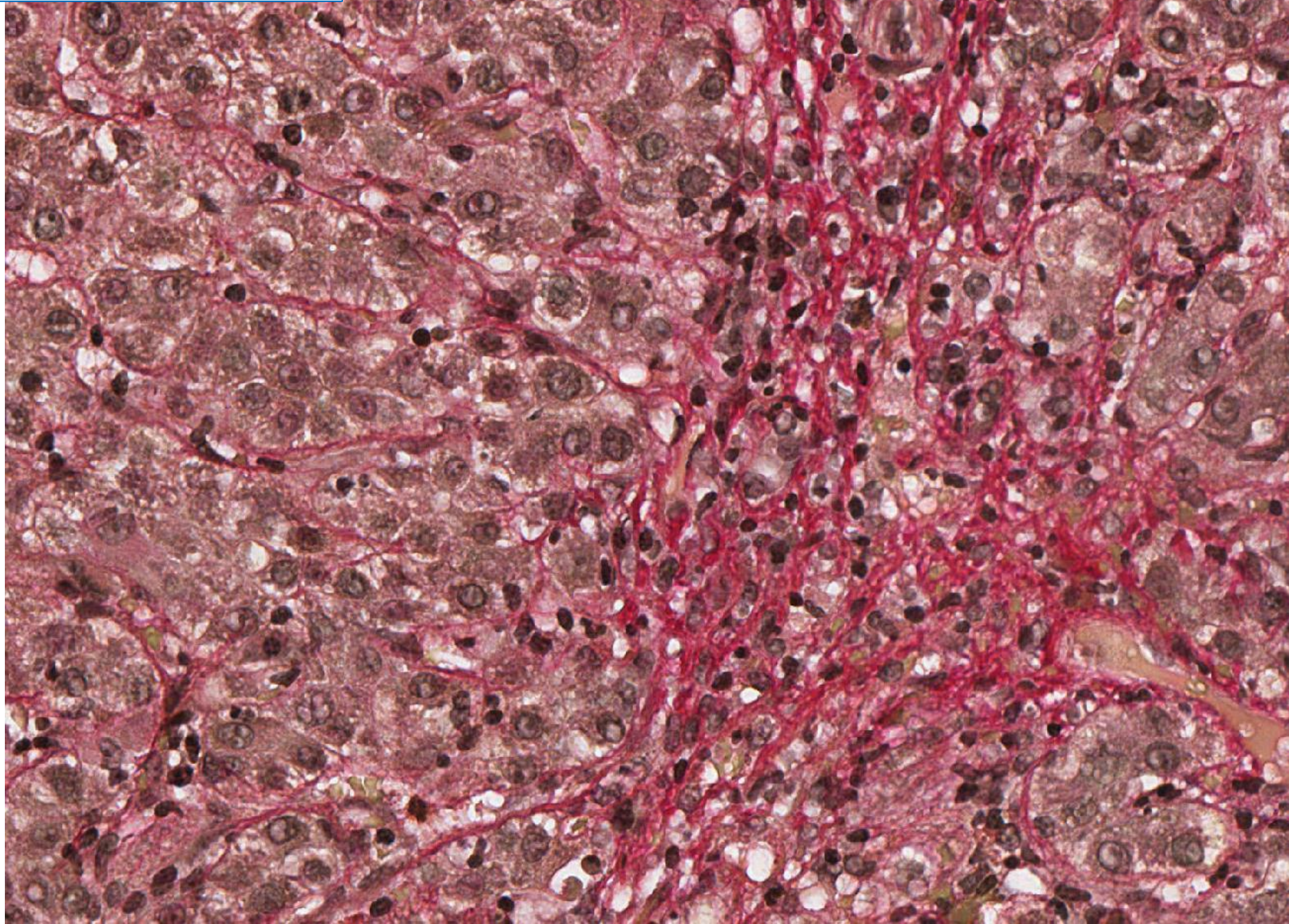
LR5 Shikata orcein



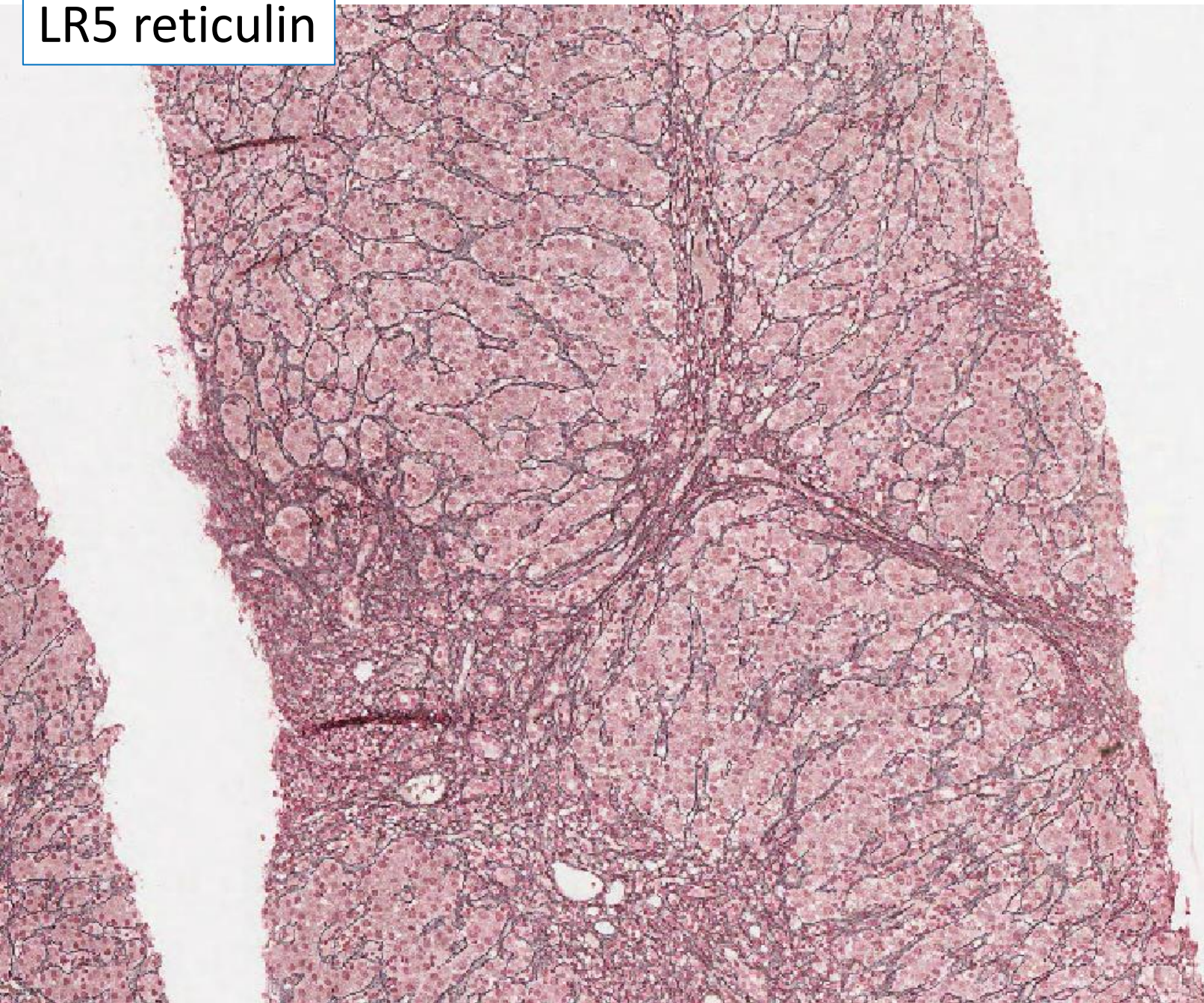
LR5 van Gieson



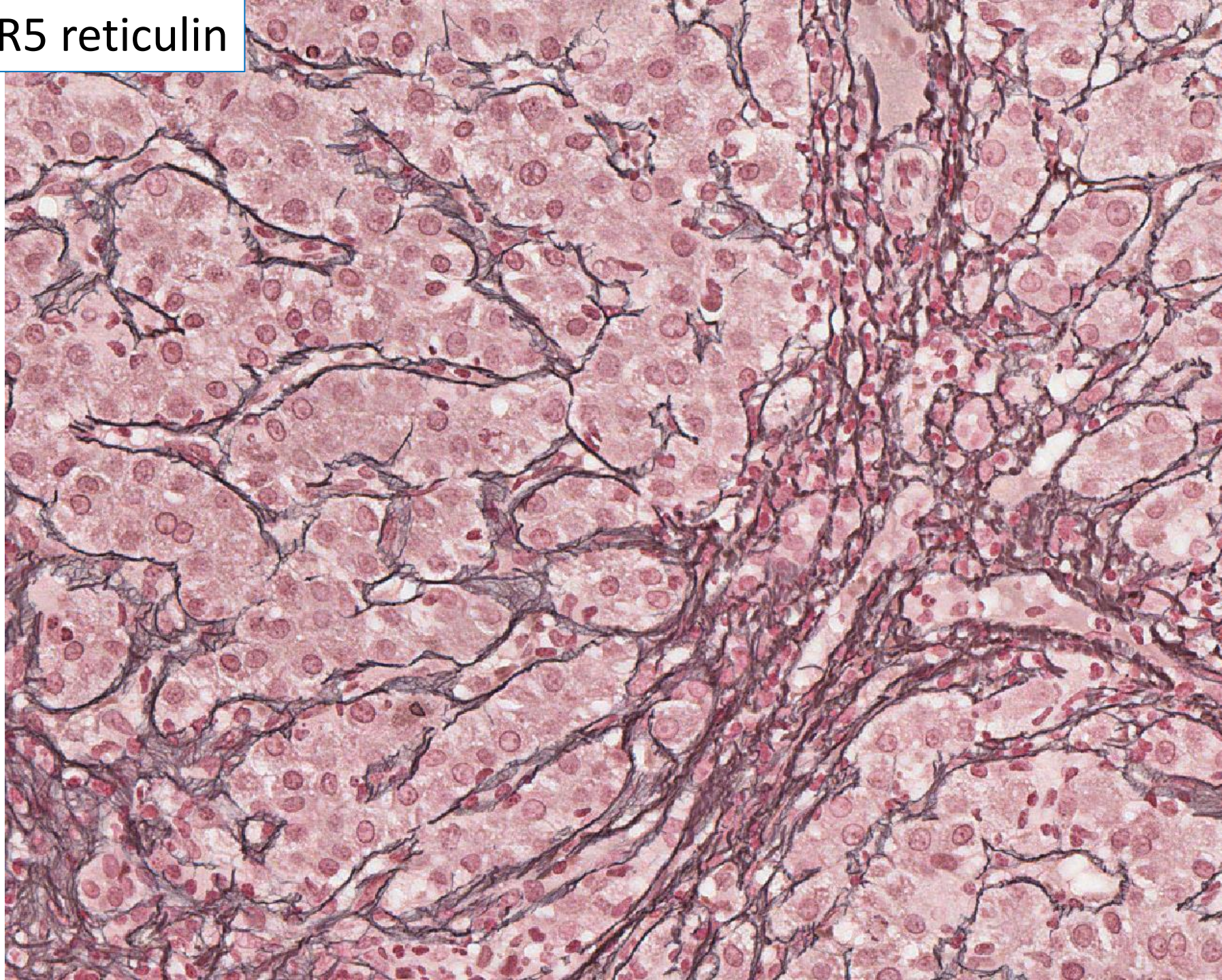
LR5 van Gieson



LR5 reticulin



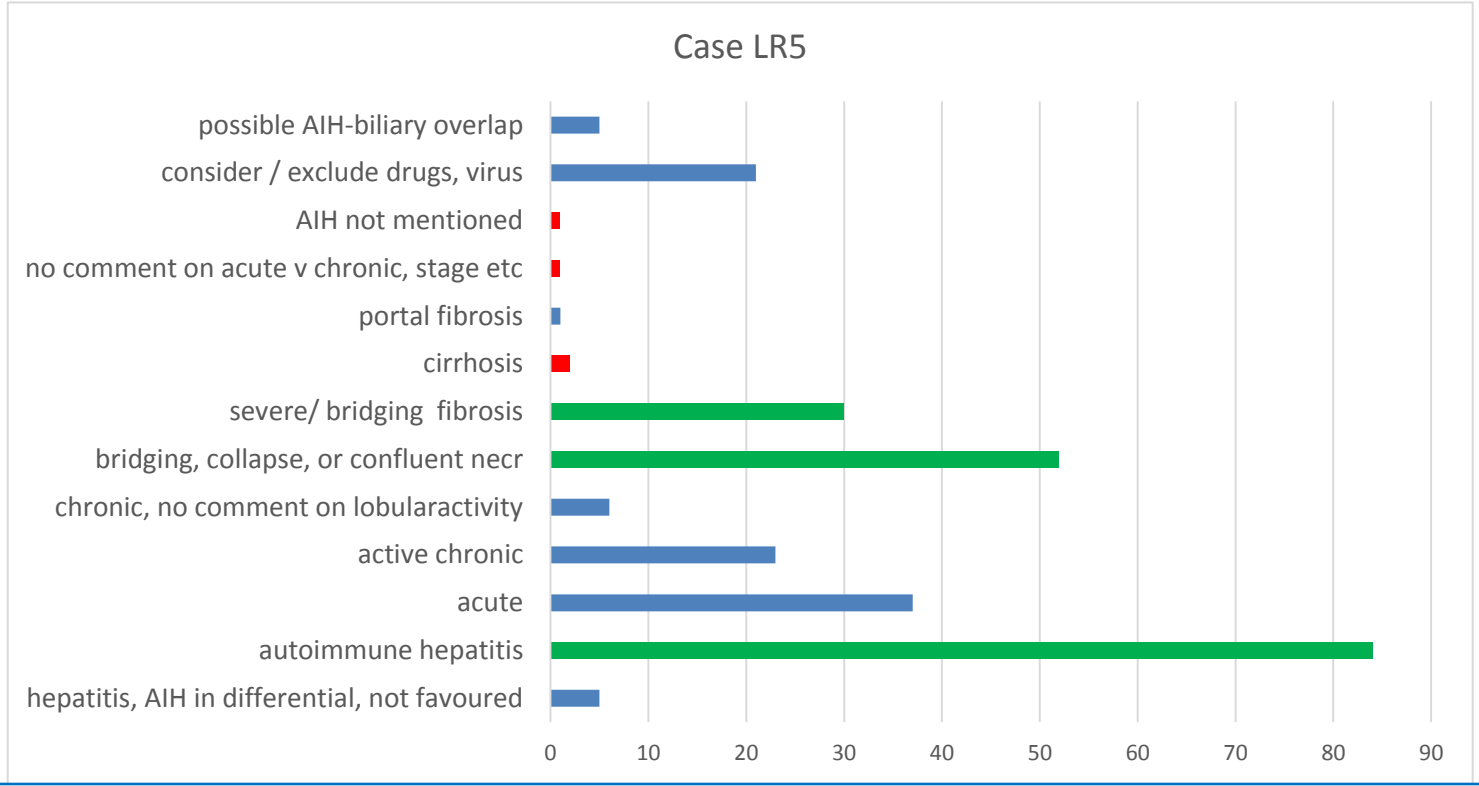
LR5 reticulin



Case LR5 20 M

Hepatic picture, autoimmune, AIH? IgG 19.67g/l, ANA+ (1:100) f actin+ and SMA+. AMA-. Bili 73, ALT 946 ALP 256.

Also: Retic, Shikata, van Gieson



Consensus complete responses would include

Features consistent with the clinical picture of autoimmune hepatitis, with a comment on severity.

There was a sizable minority favouring acute hepatitis with bridging necrosis, but a spread of interpretations of architecture – whether this is bridging necrosis with collapse, or bridging fibrosis or both processes are present. There was no consensus for acute v chronic disease.

21 suggested checking for drugs and/or virus in the context of a main diagnosis of AIH, 5 possible overlap with biliary disease.

Some just gave a differential for acute hepatitis of drugs/autoimmune/virus with none favoured and no reference to the clinical evidence for autoimmune.

Suggested scoring: for 10 points Hepatic process, in keeping with autoimmune hepatitis, and some comment on severity.

? **Lose 5 marks** description of hepatitis but no mention of autoimmune hepatitis [RMB 2.11.18 agreed as clinical question is clear '?AIH'](#)

? **Lose 5 marks** clear diagnosis of cirrhosis – even though the distinction of bridging necrosis v fibrosis is not otherwise included in scoring. [Agreed as everyone else is saying something 'less than cirrhosis' even if a spectrum of responses](#)

? **Lose 5 marks** autoimmune included among a differential for acute hepatitis (drugs, virus), but not favoured. [May be harsh to score this the same as those who didn't mention AIH at all. Favour full marks.](#)

? **Lose 5 marks** no comment on acute v chronic, stage etc. for example, “severe portal tract inflammation with occasional eosinophils. Cholestasis is not prominent. Focal necrosis, Plasma cell are prominent. Occasional mitoses are seen in hepatocytes. Diagnosis: Auto Immune Hepatitis. An associated EBV infection should be excluded” - I think as long as there is some comment on severity as here, this should score full marks. [Agreed.](#)

Lose 10 marks (score 0) if -

Discussion points.

What is the role of histology in a case like this?

Can we improve recognition of acute, subacute and chronic hepatitis? [Hopefully yes! With a masterclass! It is difficult but I feel we should be trying as clinically important.](#)

Case LR5 20 M

Hepatic picture, autoimmune, AIH? IgG 19.67g/l, ANA+ (1:100) f actin+ and SMA+.

AMA-. Bili 73, ALT 946 ALP 256.

Also: Retic, Shikata, van Gieson

Scoring summary agreed at meeting:

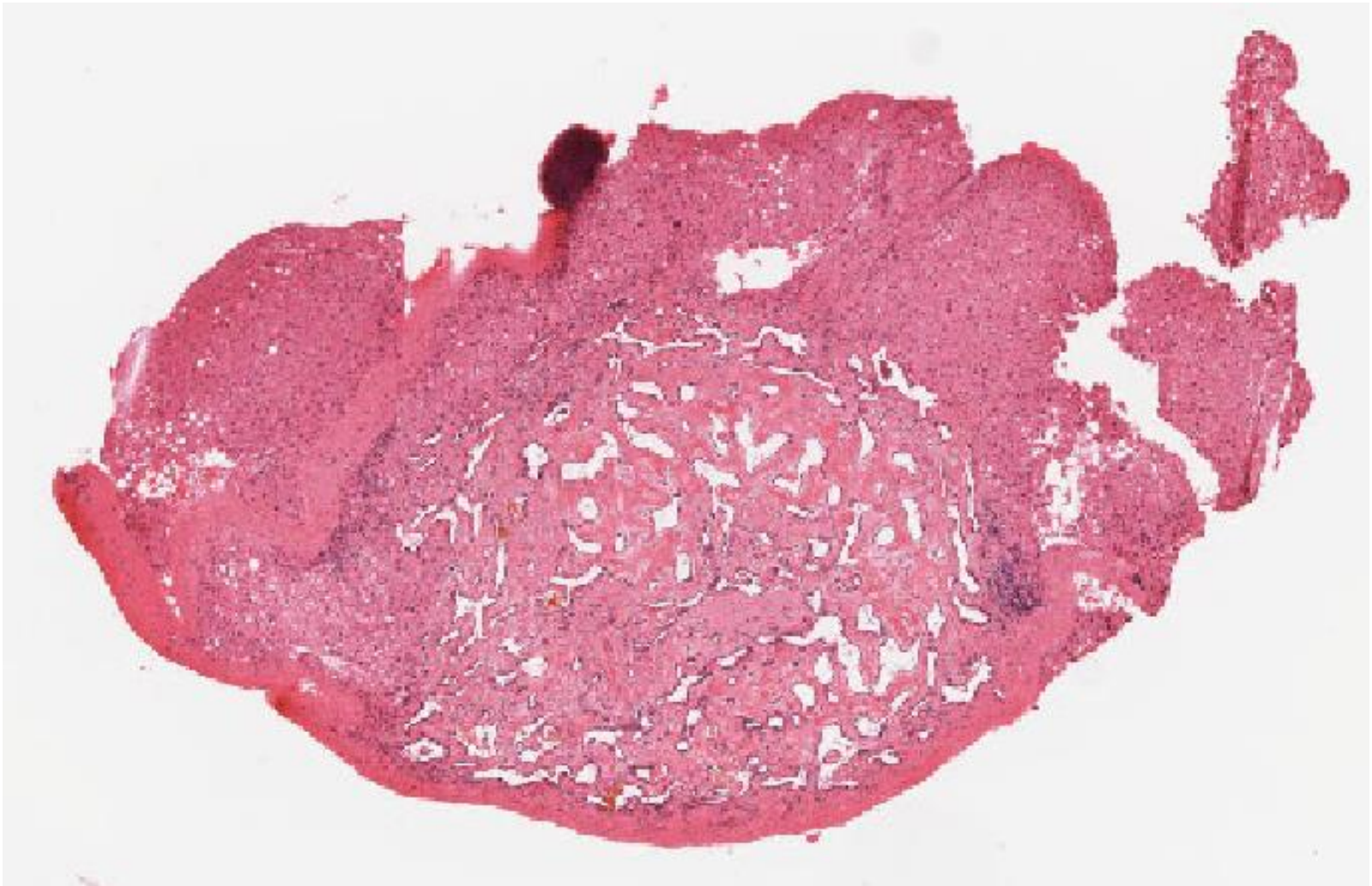
For full marks – hepatitis, consistent with the clinical picture of autoimmune hepatitis and with comment on severity

Lose 5 marks if – differential includes autoimmune hepatitis, but not favoured over drugs, virus – and there is no reference in the response to the clinical information provided with the case.

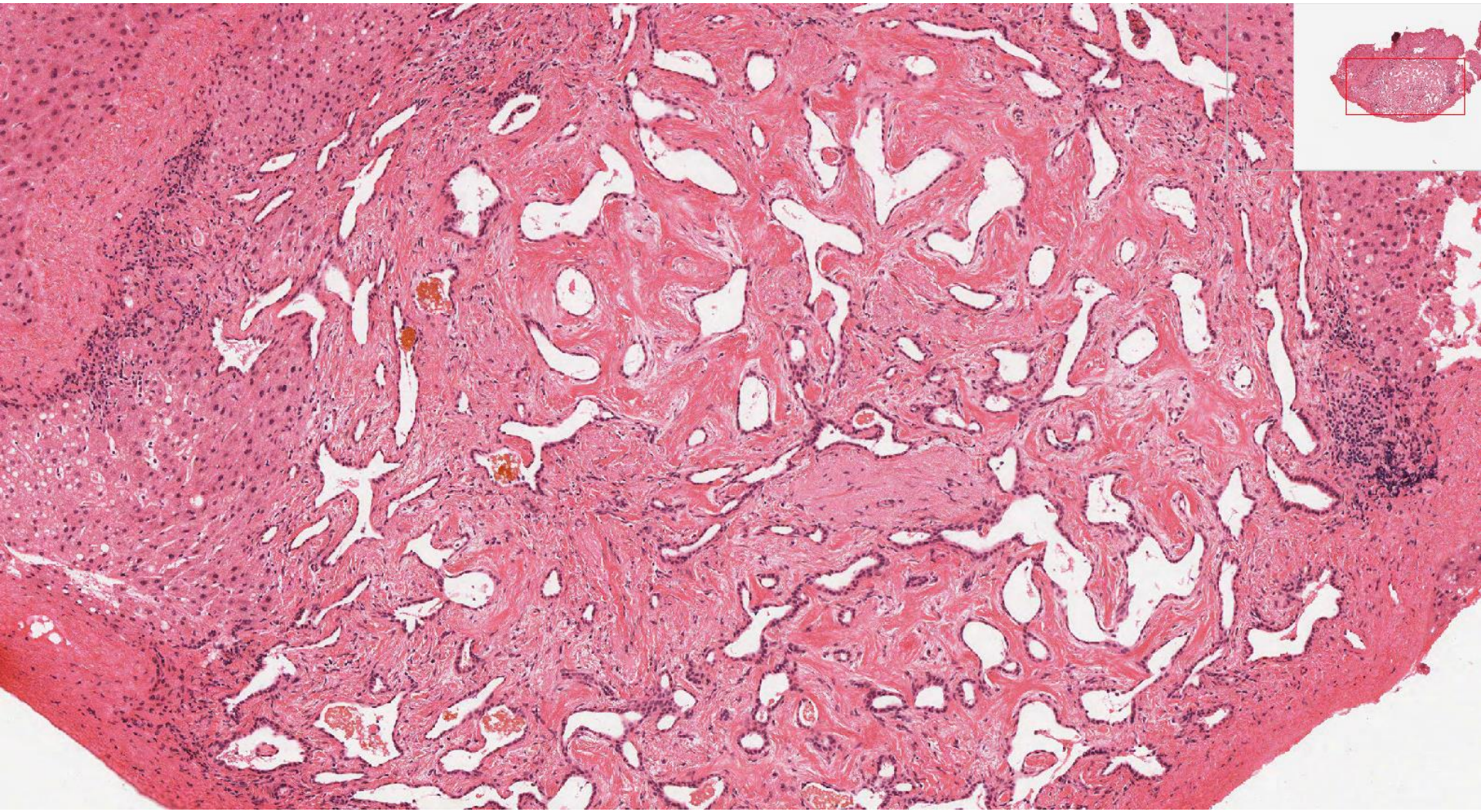
Lose 5 marks if – clear diagnosis of cirrhosis

Case LR6. 73M

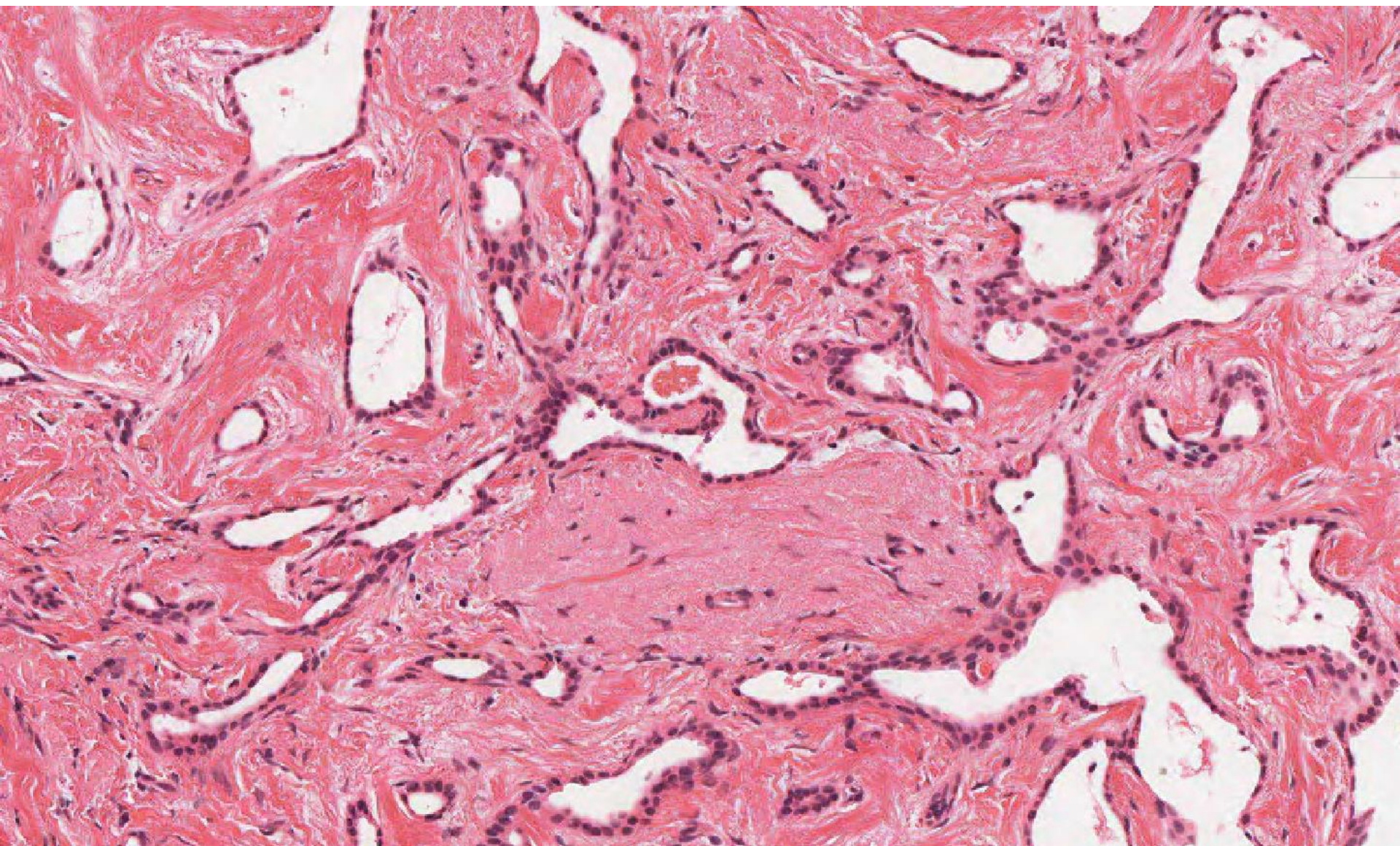
Liver resection for HCC. Additional nodule visualised on liver. Subcapular liver resection. No special stains.



LR6

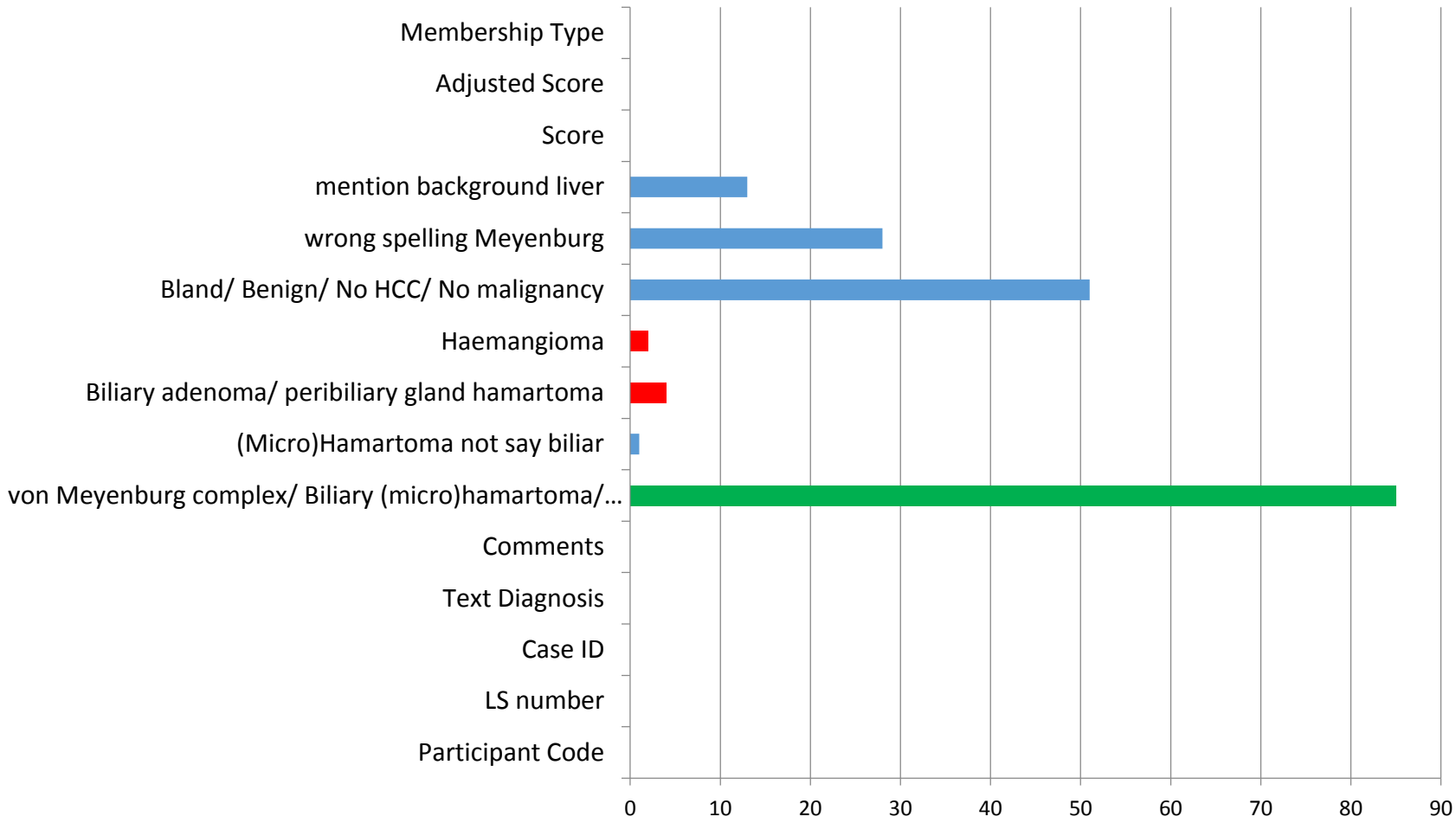


LR6



Case LR6 73 M

Liver resection for HCC. Additional nodule visualised on liver. Specimen: Subcapular liver resection. Liver biopsy 4mm fragment of liver. Immunohistochemistry: None.



Consensus complete responses would include
Von Meyenburg complex/ bile duct hamartoma/ biliary microhamartoma/ ductal plate malformation

Case LR6. 73M

Liver resection for HCC. Additional nodule visualised on liver. Subcapular liver resection. No special stains.

Scoring summary agreed at meeting:

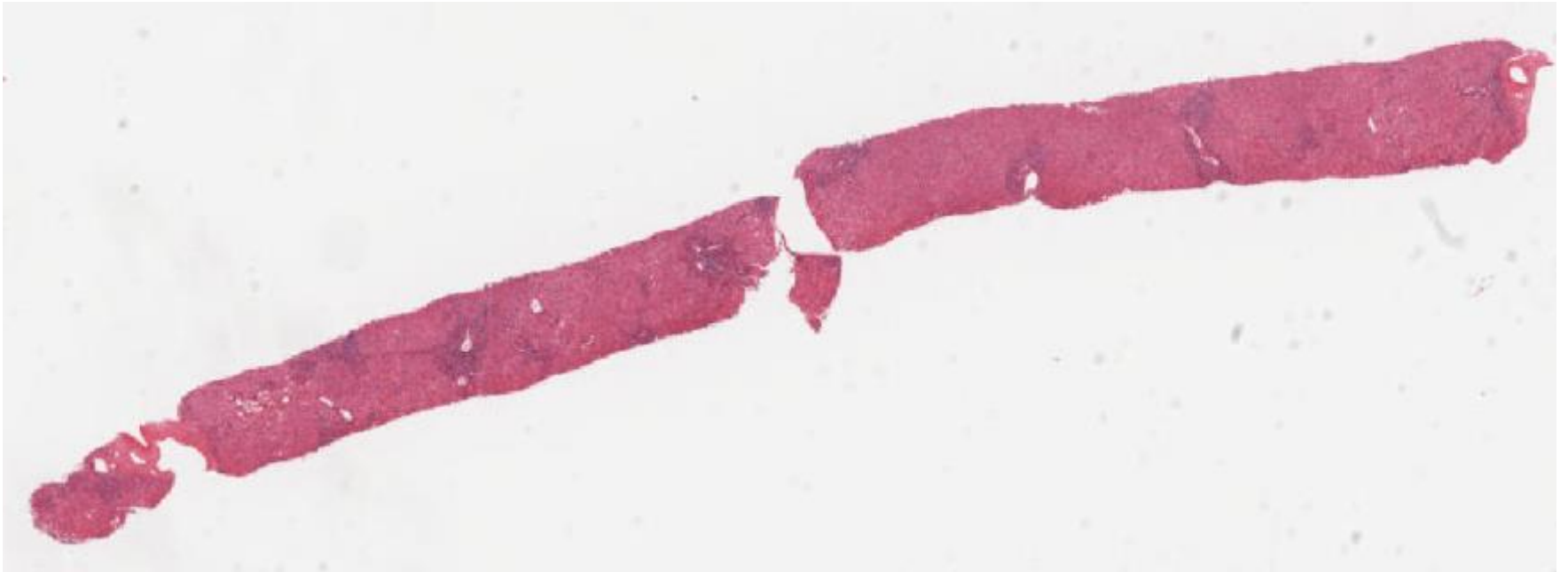
For full marks – diagnosis of von Meyenberg complex

Lose 5 marks for – bile duct adenoma or peribiliary gland hamartoma

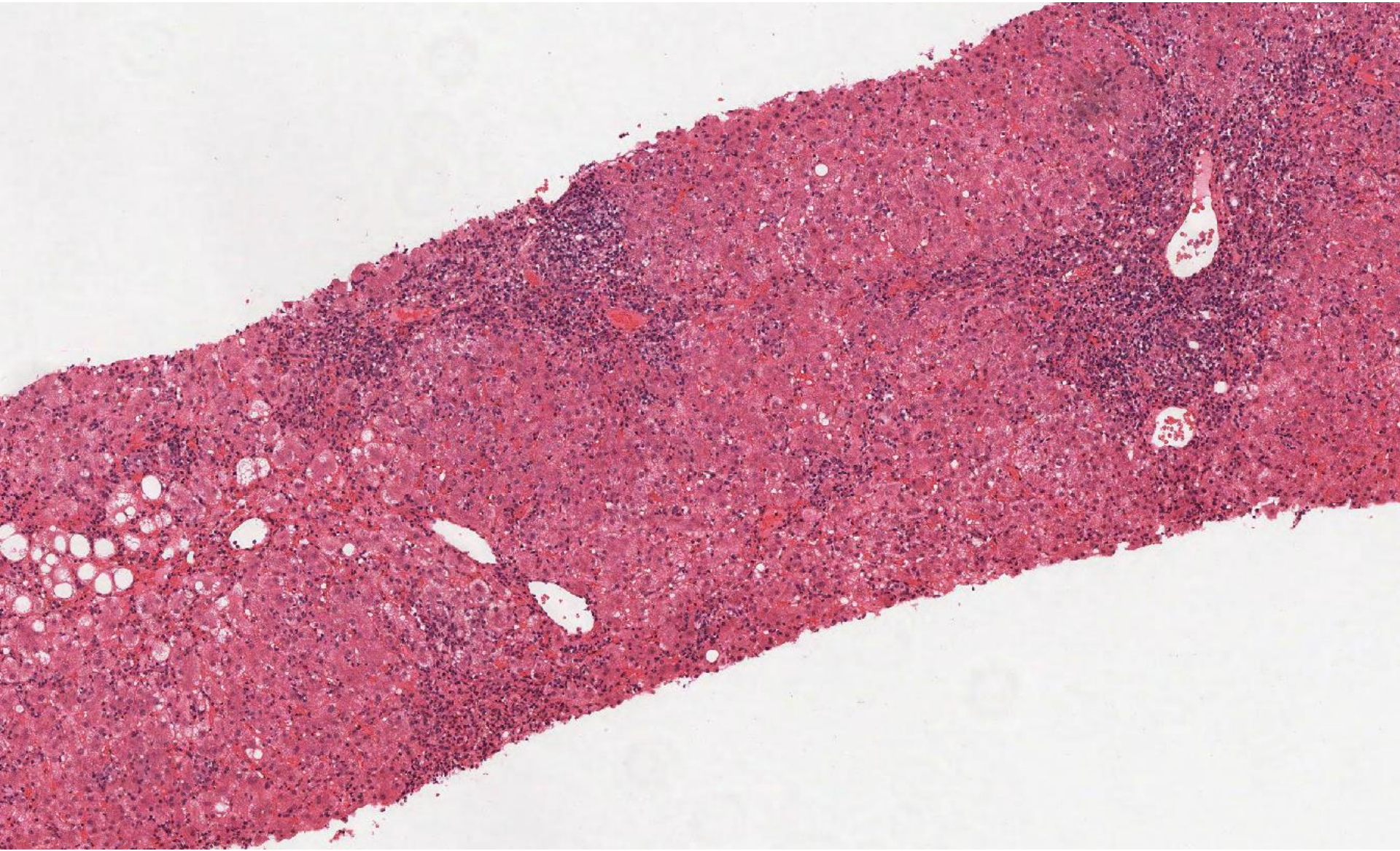
Lost 10 marks for - haemangioma

Case LR7 69F

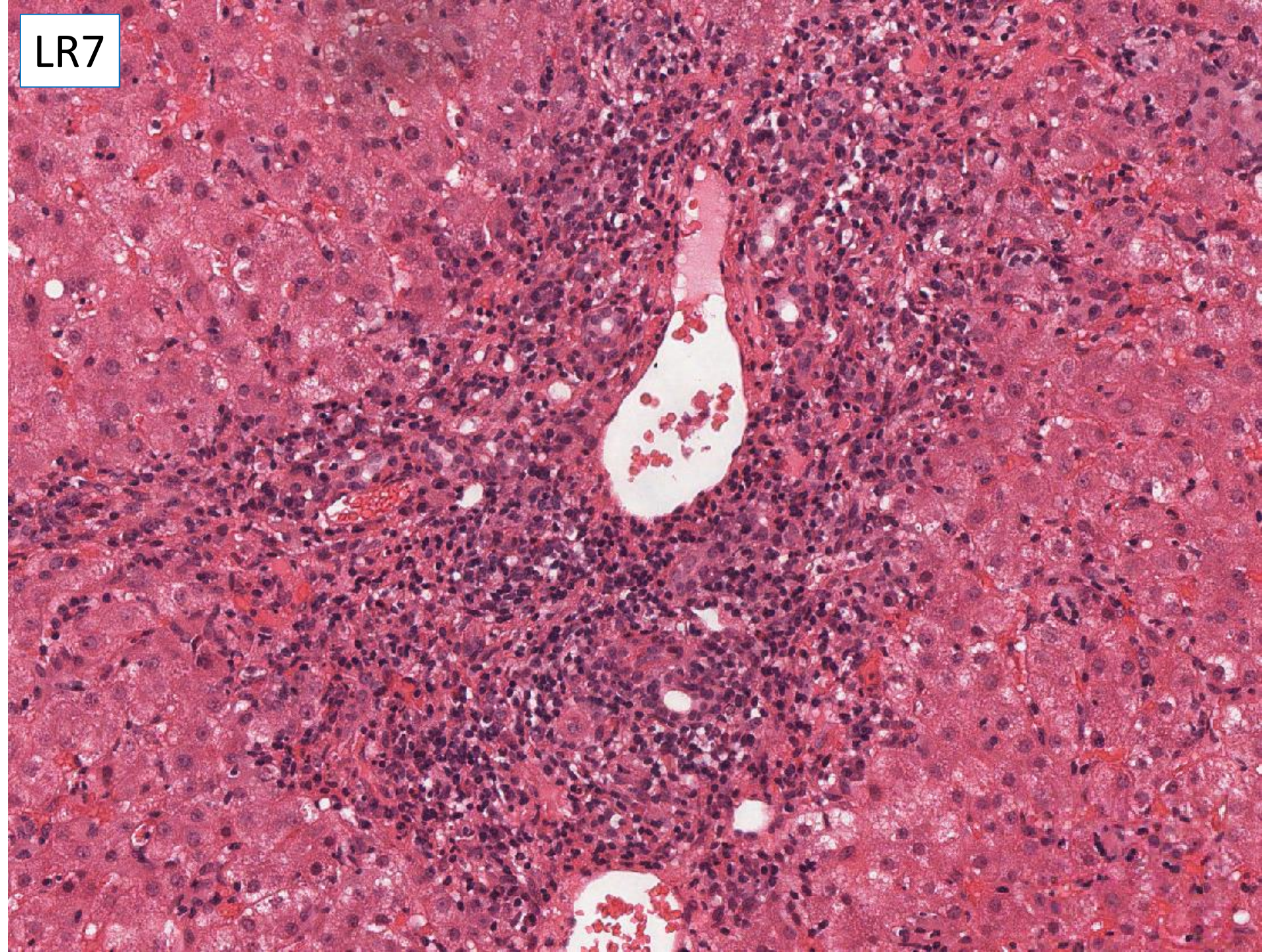
Deranged LFT's AST/ALT > 800. IgG increased,
?autoimmune hepatitis Also Reticulin and sirius red



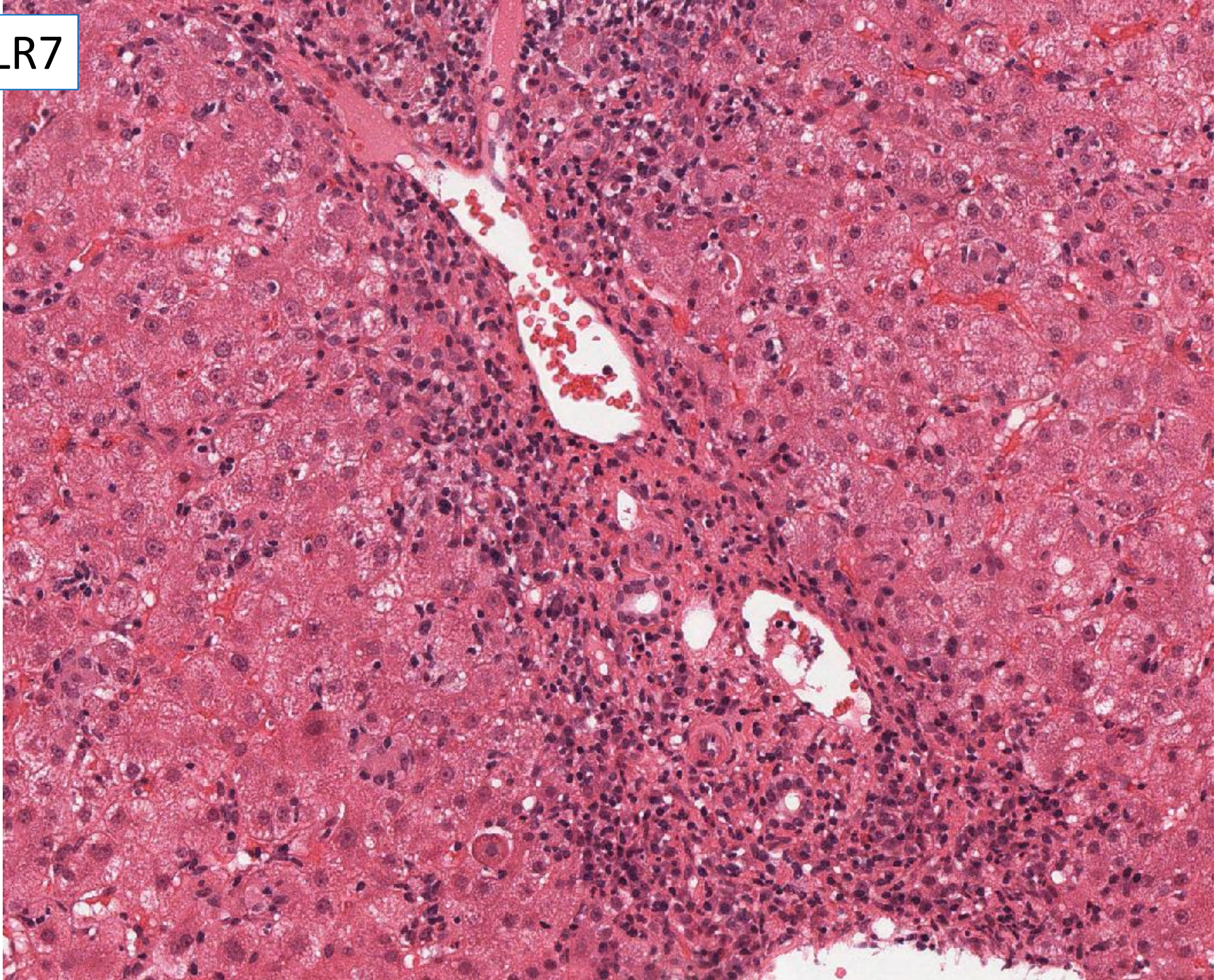
LR7



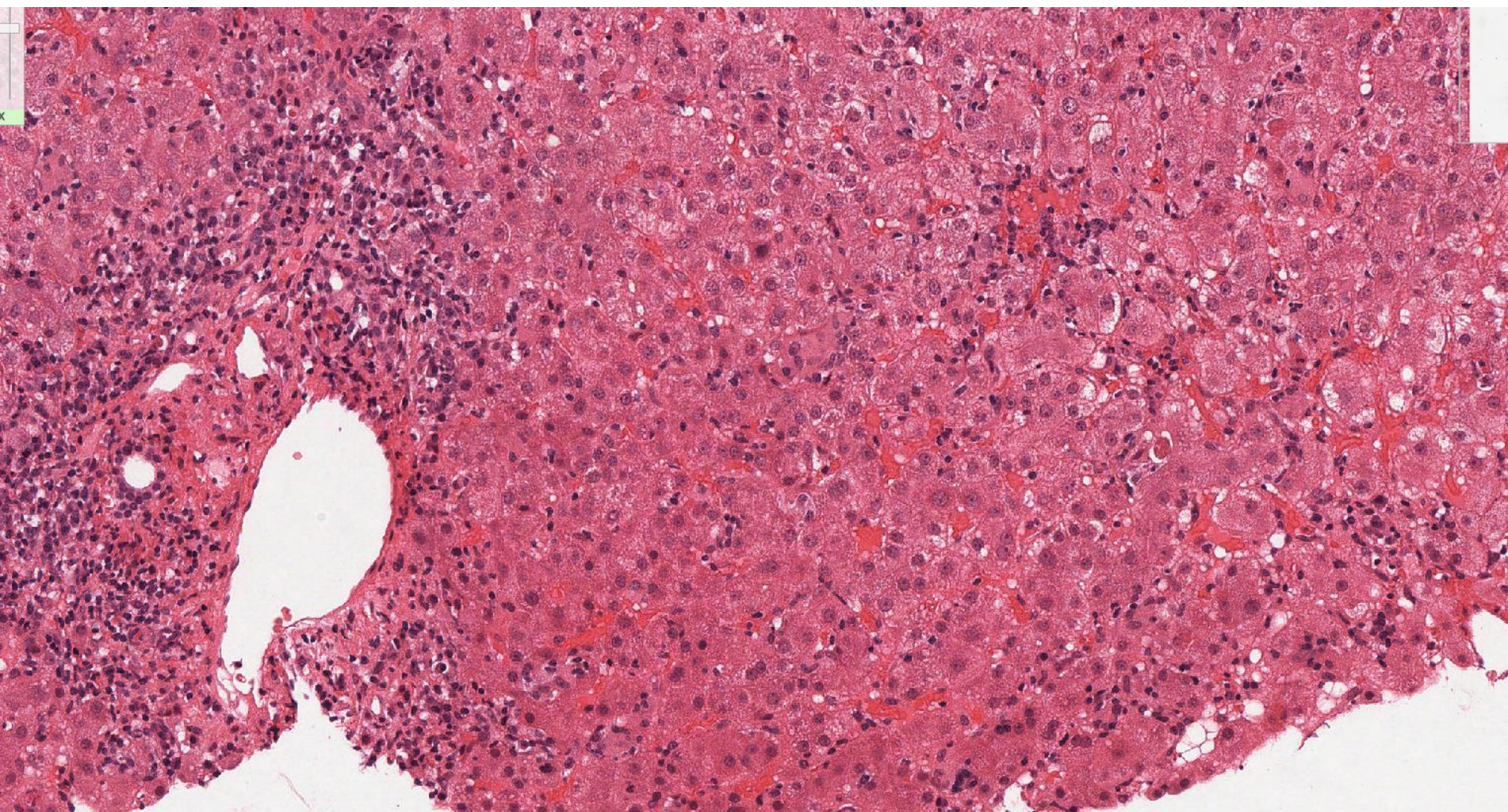
LR7



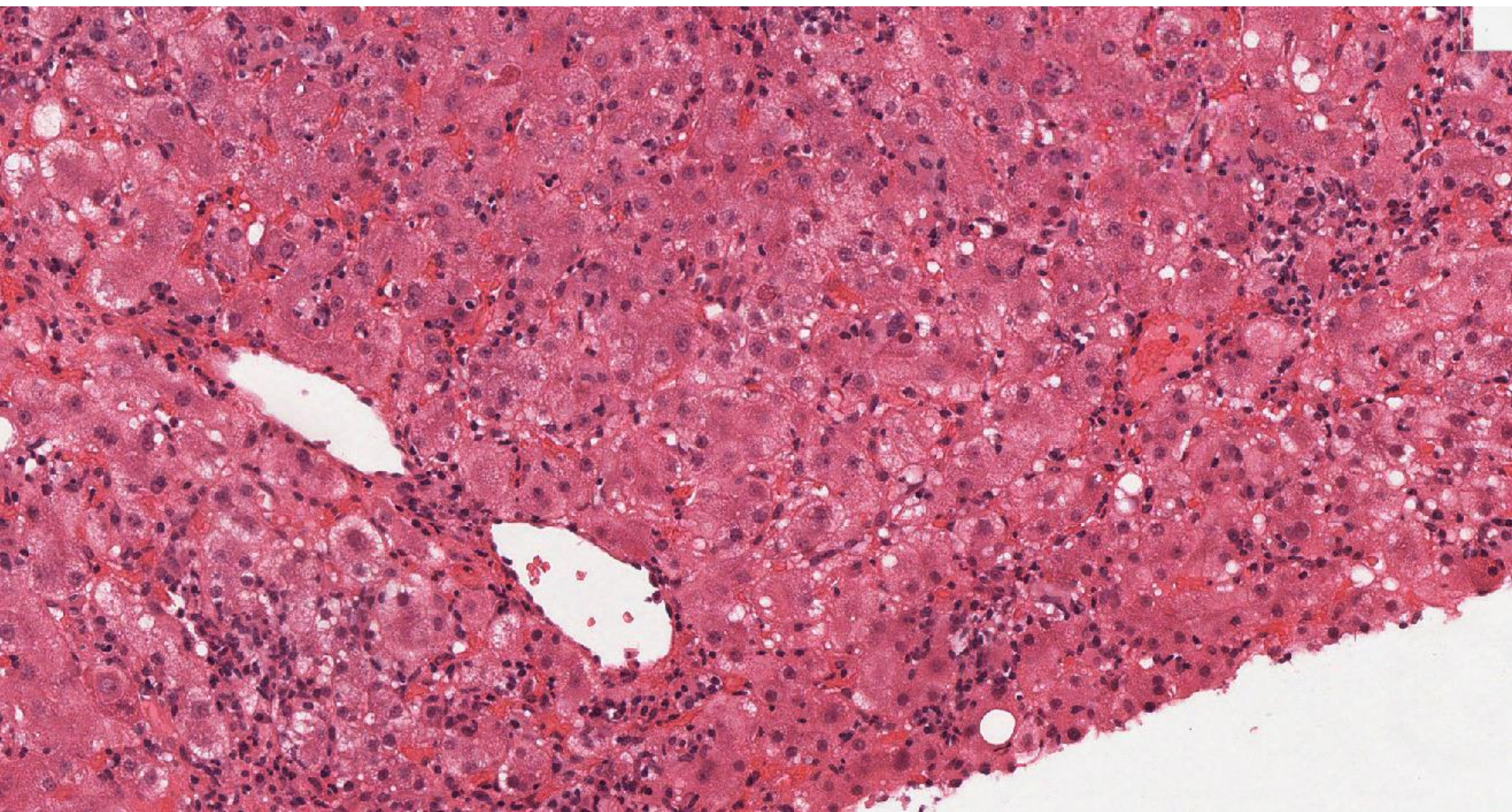
LR7



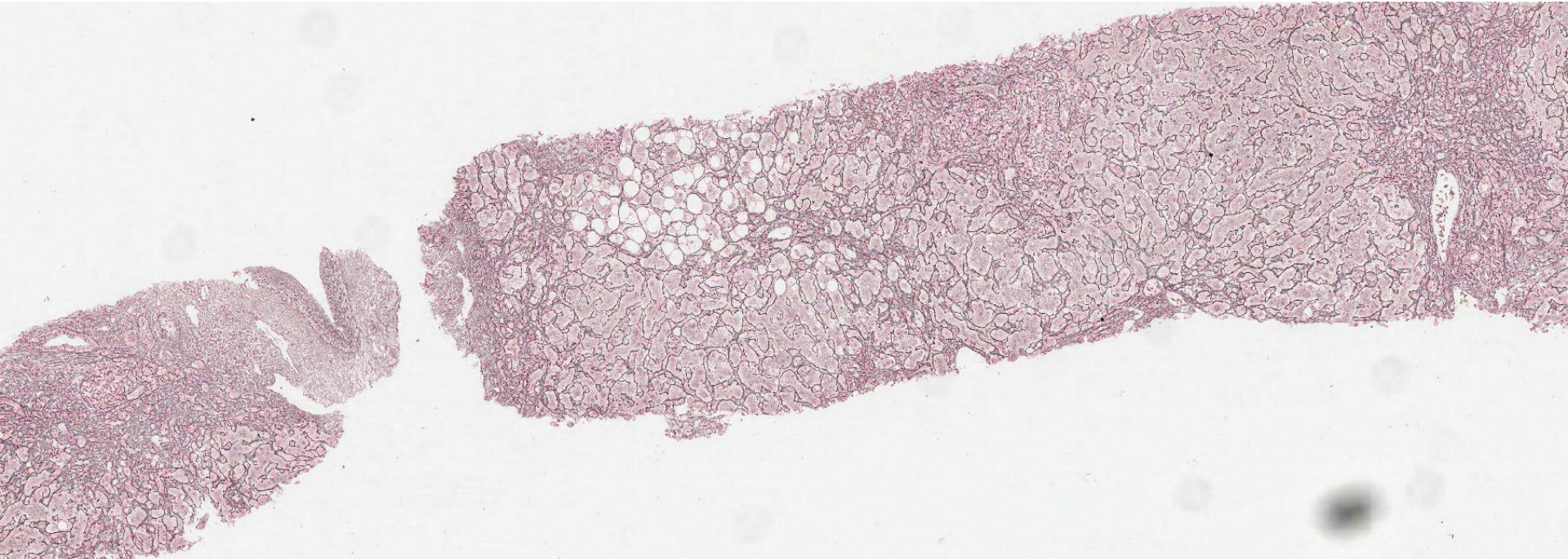
LR7



LR7



LR7 reticulin

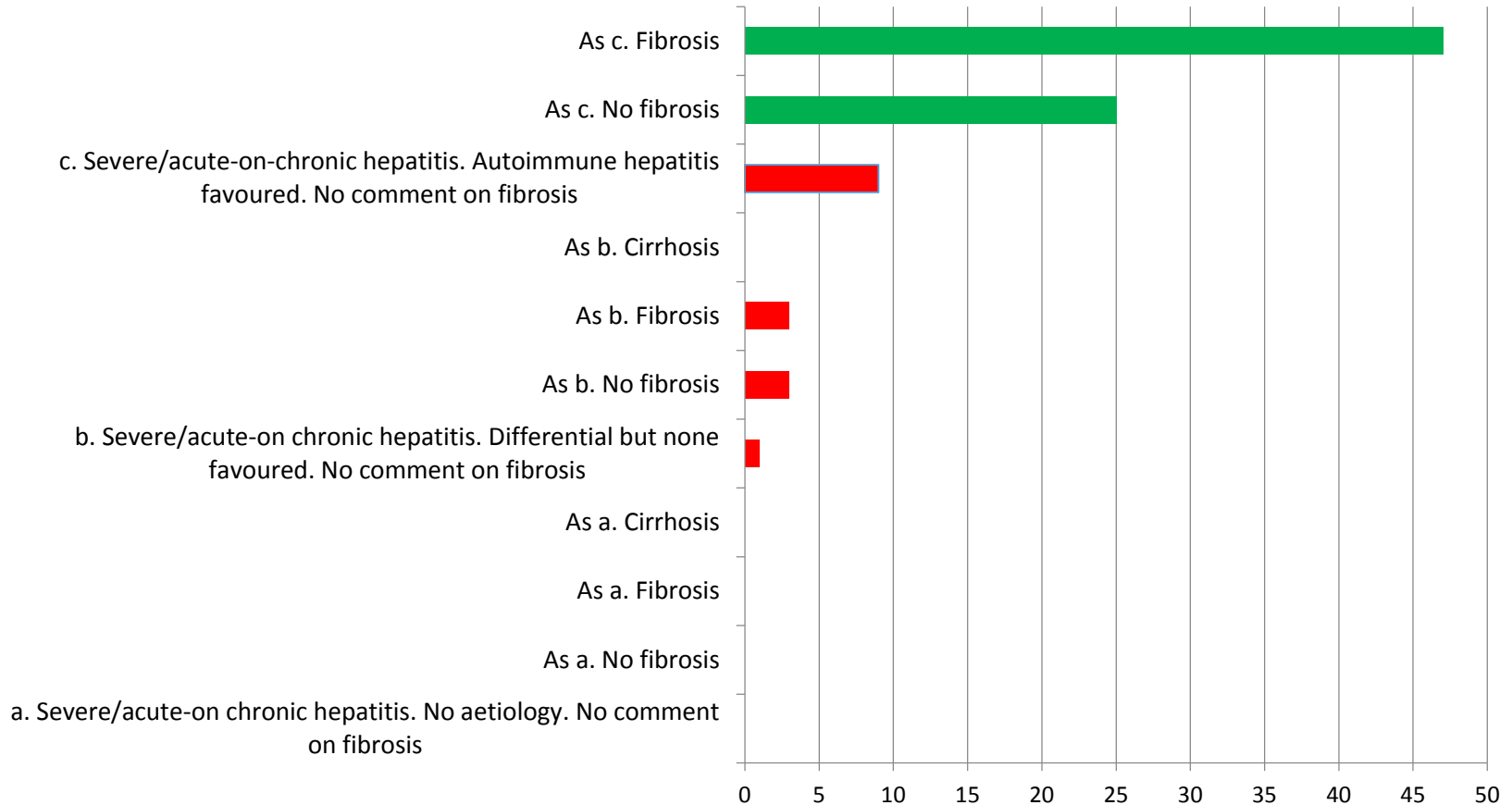


LR7 sirius red



Case LR7 69F

Deranged LFTs AST/ALT>800. IgG increased, ? autoimmune hepatitis.



Consensus complete responses would include - hepatitis favouring autoimmune aetiology, some comment on architecture (but no one comment regarding architecture is over 70 [80%]).

Case LR7 69F

Deranged LFTs AST/ALT>800. IgG increased, ? autoimmune hepatitis.

Consensus complete responses would include - hepatitis favouring autoimmune aetiology, some comment on architecture (but no one comment regarding architecture is over 70 [80%]).

- **Suggested scoring: for 10 points** include – hepatitis; autoimmune aetiology favoured, comment on architecture e.g. presence of fibrosis/cirrhosis a
- **Lose 5 marks if** hepatitis but autoimmune aetiology not favoured
- **Lose 5 marks if** no comment on architecture – in previous circulations, we have required a comment on the disease stage when the special stains are included, even though there may be little agreement on what the stage actually is.
- **Lose 5 marks if** autoimmune hepatitis not included in the differential – but all responses included autoimmune hepatitis
- **Lose 10 marks (score 0) if** n/a

Case LR7 69F

Deranged LFT's AST/ALT>800. IgG increased, ?autoimmune hepatitis
Also Reticulin and sirius red

Scoring summary agreed at meeting:

For full marks – diagnosis of hepatitis with AIH in differential, referring to clinical information, and comment on architecture/stage.

This comment could be portal expansion, fibrosis, bridging necrosis or fibrosis – no consensus on this aspect, but the result is incomplete without some consideration of disease severity.

Lose 5 marks for – aetiology includes AIH, but not favoured above other causes of drugs or virus, no reference made to clinical information.

Lose 5 marks for – no comment about architecture.

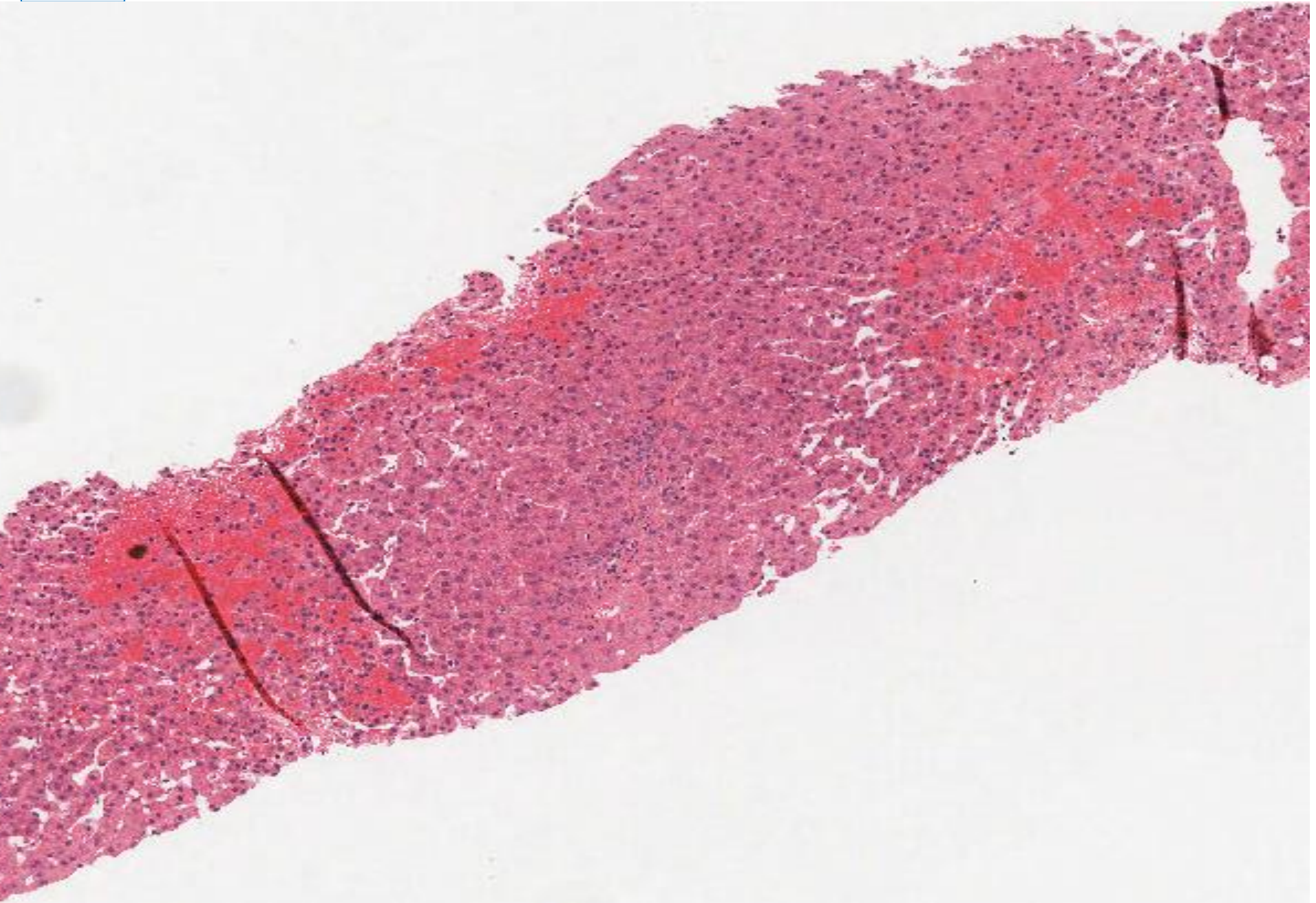
Case LR8 26M

Cryptogenic liver cirrhosis. Chronic Budd Chiari?

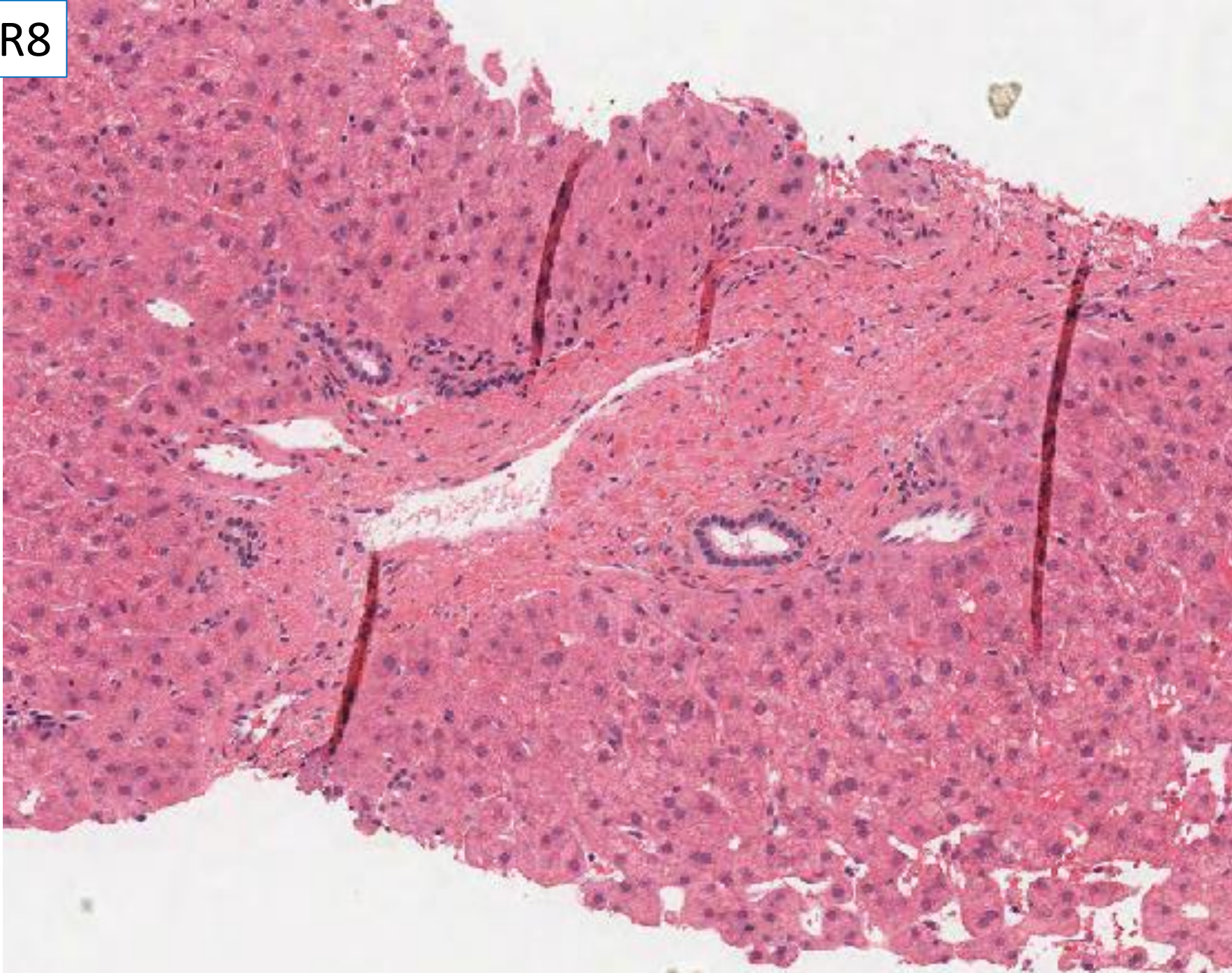
No additional stains



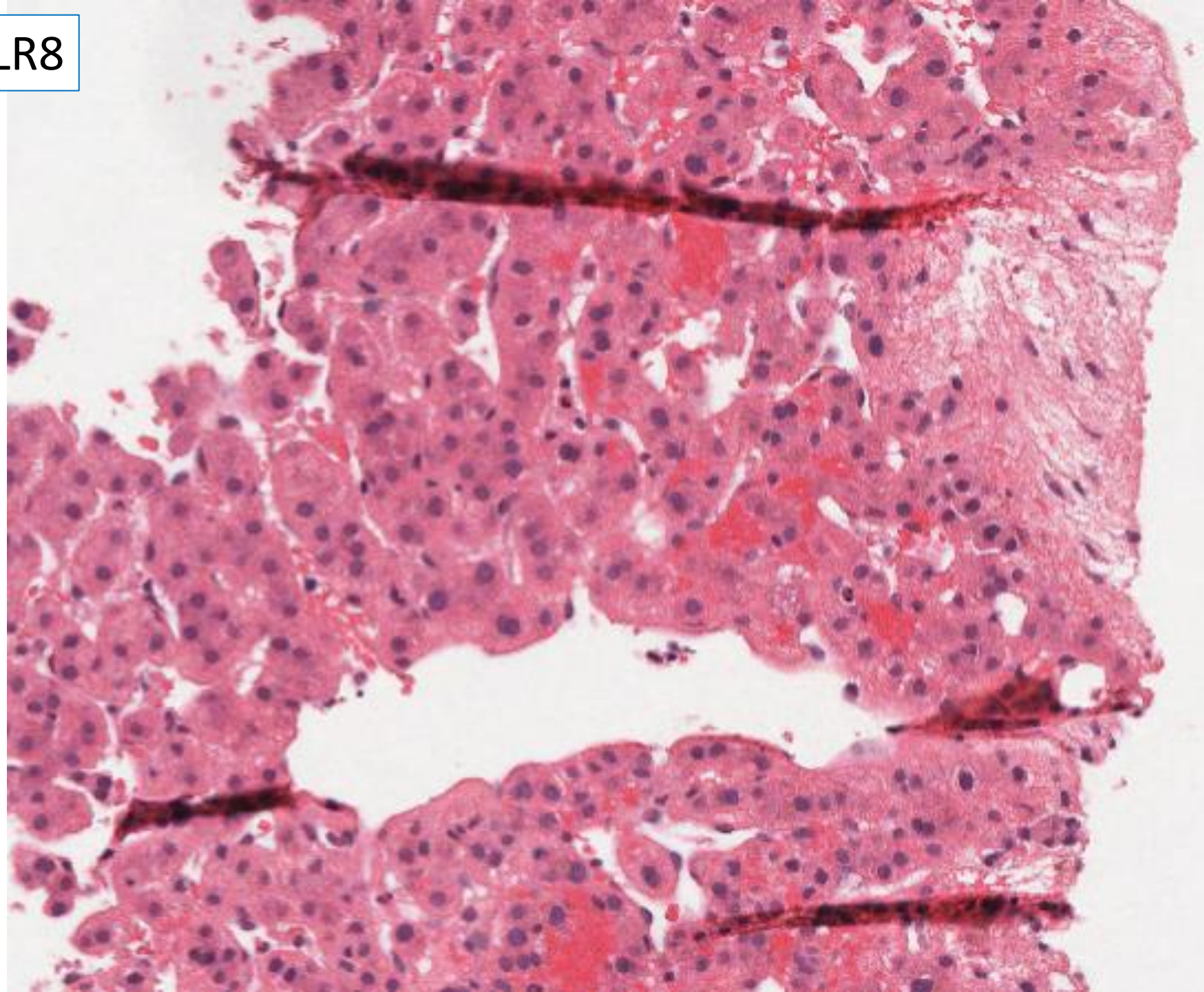
LR8



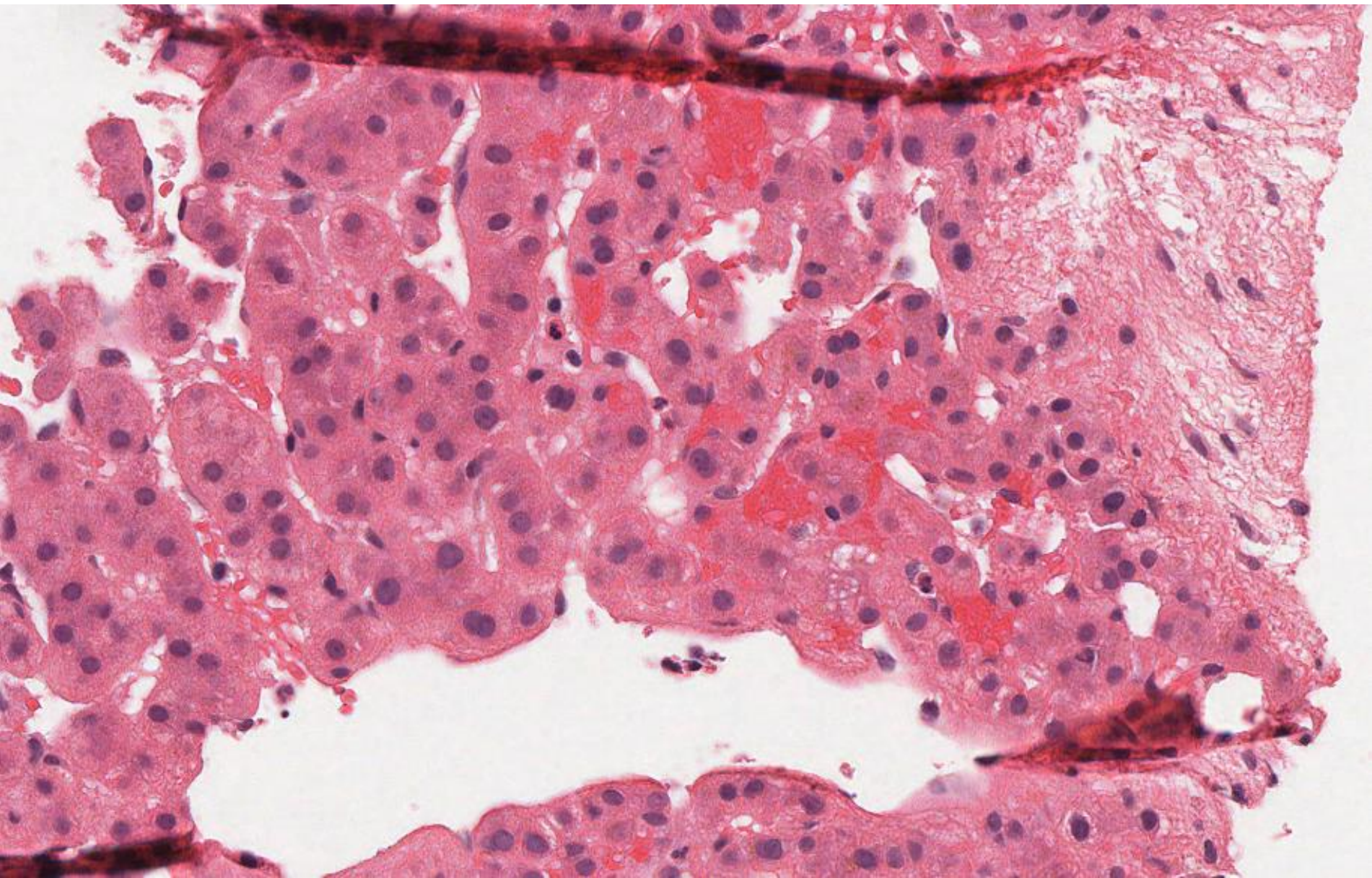
LR8



LR8

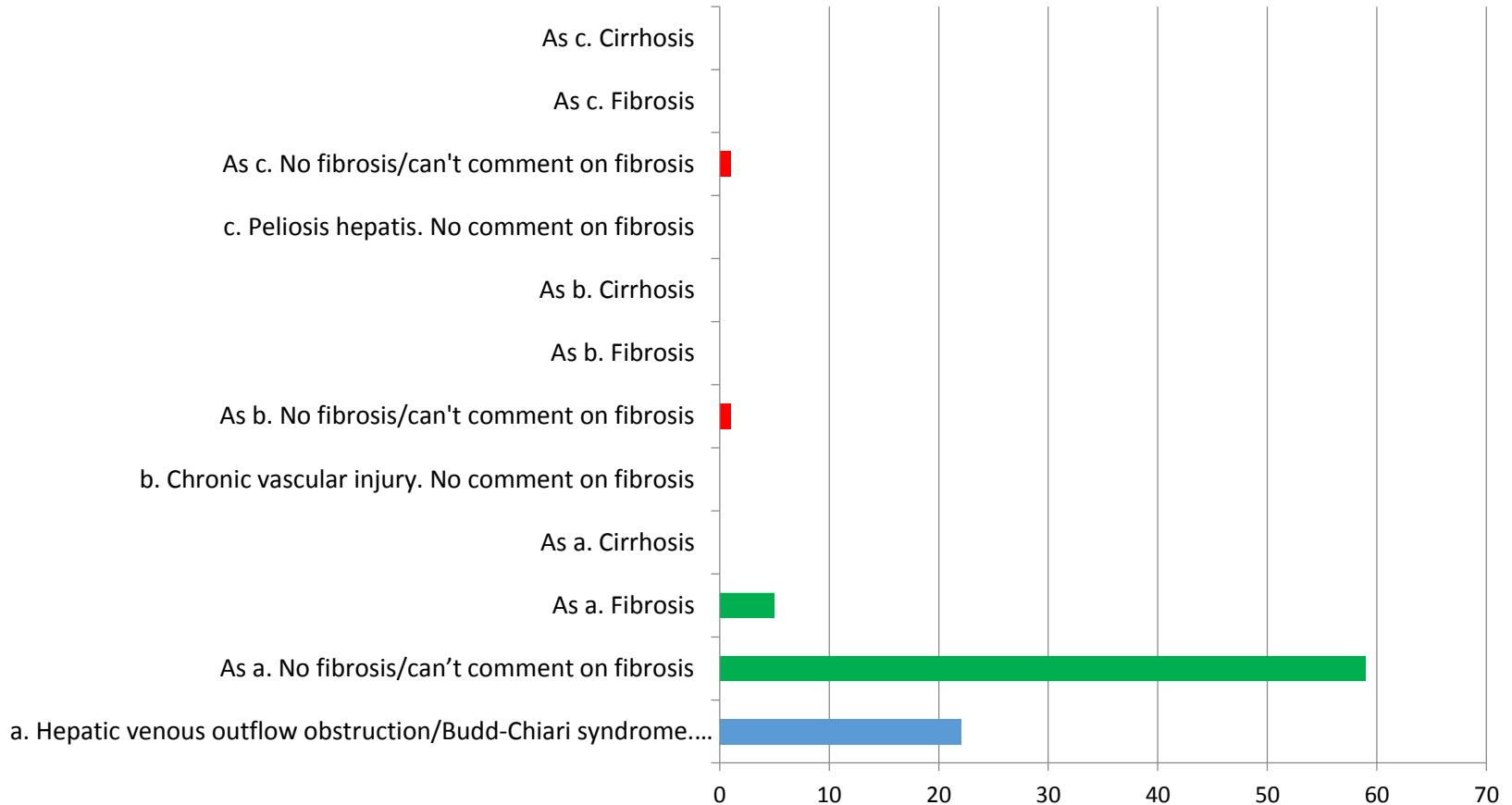


LR8



Case LR8 26M

Cryptogenic liver cirrhosis. Chronic Budd Chiari?



Consensus complete responses would include - venous outflow obstruction/Budd-Chiari syndrome with comment on architecture (but no one comment regarding architecture is over 70 [80%]).

Case LR8 26M

Cryptogenic liver cirrhosis. Chronic Budd Chiari?

- **Suggested scoring: for 10 points** include – venous outflow obstruction/Budd-Chiari syndrome with comment on architecture
- **Lose 5 marks** if venous outflow obstruction/Budd-Chiari syndrome but no comment on architecture
- **Lose 10 marks (score 0) if don't include venous outflow obstruction/Budd-Chiari syndrome**
 - diagnoses = peliosis hepatis
 - chronic vascular injury

Case LR8 26M

Cryptogenic liver cirrhosis. Chronic Budd Chiari?

No additional stains

Scoring summary agreed at meeting:

For full marks: Any diagnosis including Budd Chiari syndrome/ venous outflow obstruction.

Preferably includes a comment on chronicity/fibrosis – but since there was no connective tissue stain included and no consensus on this point, this aspect was not suitable for scoring.

Lost 10 marks for – no diagnosis of venous outflow obstruction

– ‘chronic vascular injury’ or ‘peliosis hepatis’

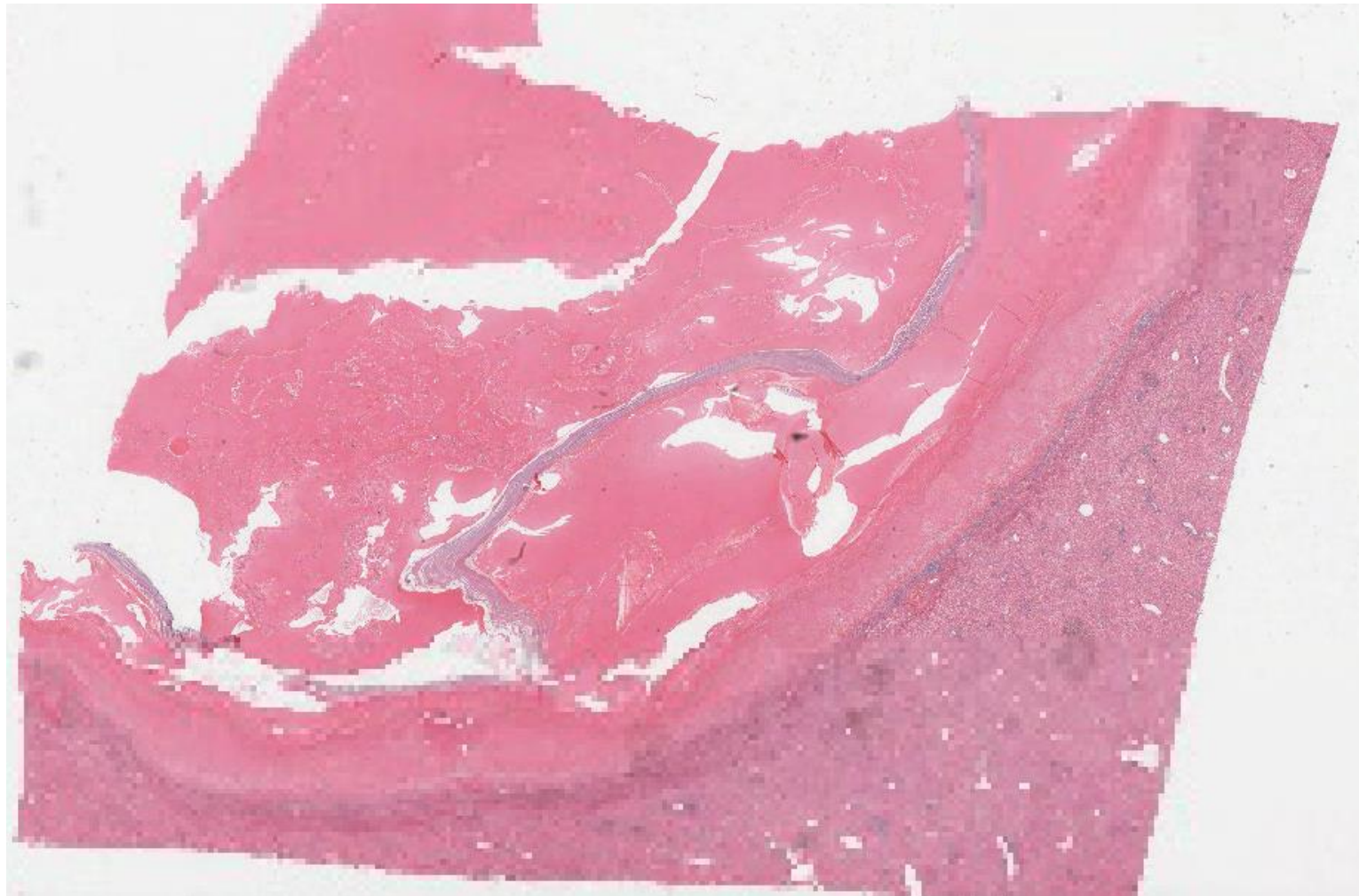
LR8 Follow up clinical info (RMB) venous outflow obstruction

- Clinic August 2018
- **DIAGNOSIS:**
- 1. Budd-Chiari syndrome - hepatic vein obstruction.
- 2. TIPSS - June 2018
- Possible symptoms of encephalopathy

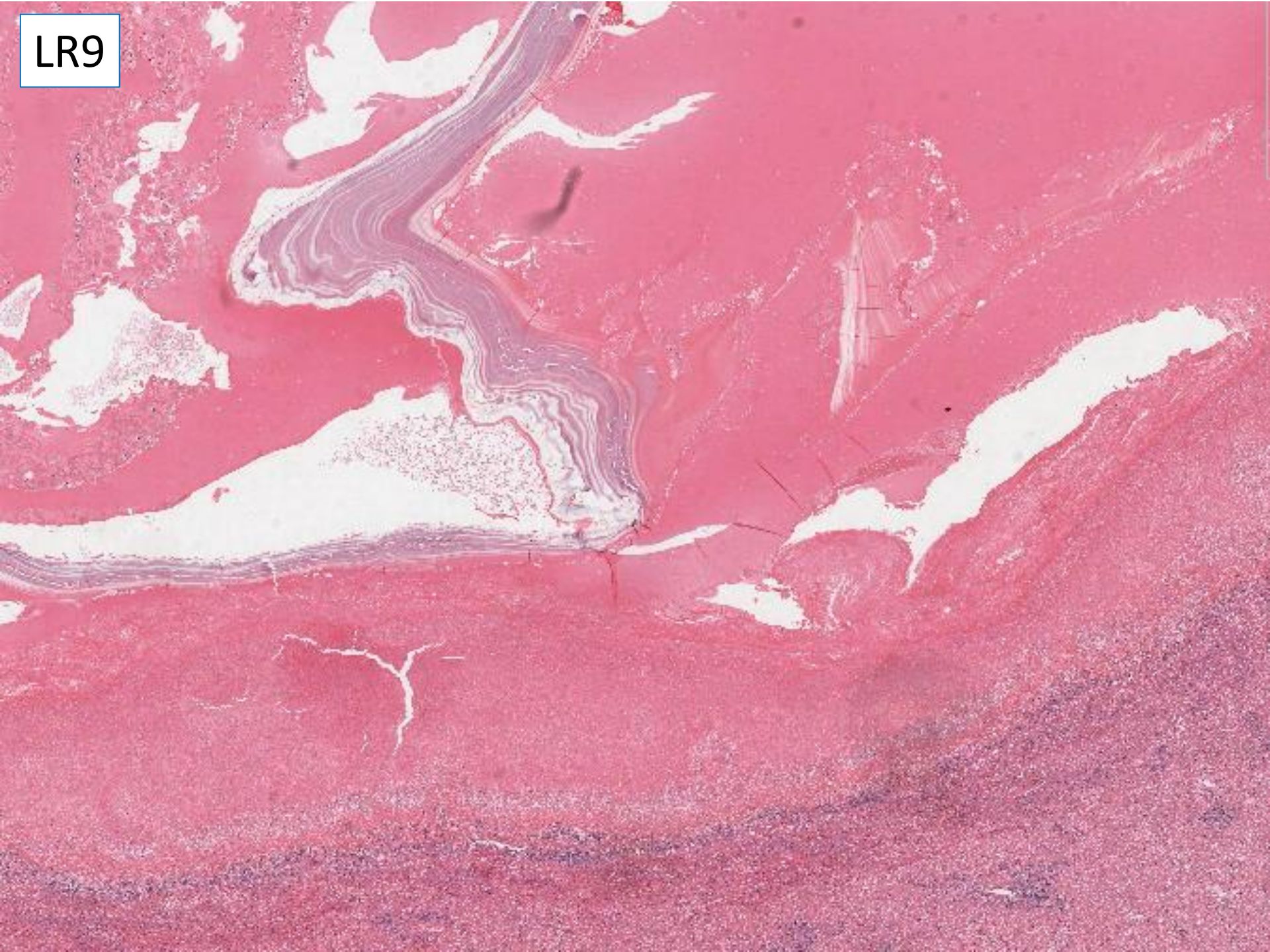
Case LR9 29F

Hydatid cyst resection. Segment of liver 85 x 70 x 70 mm with a cyst 68 x 50 x 30 mm.

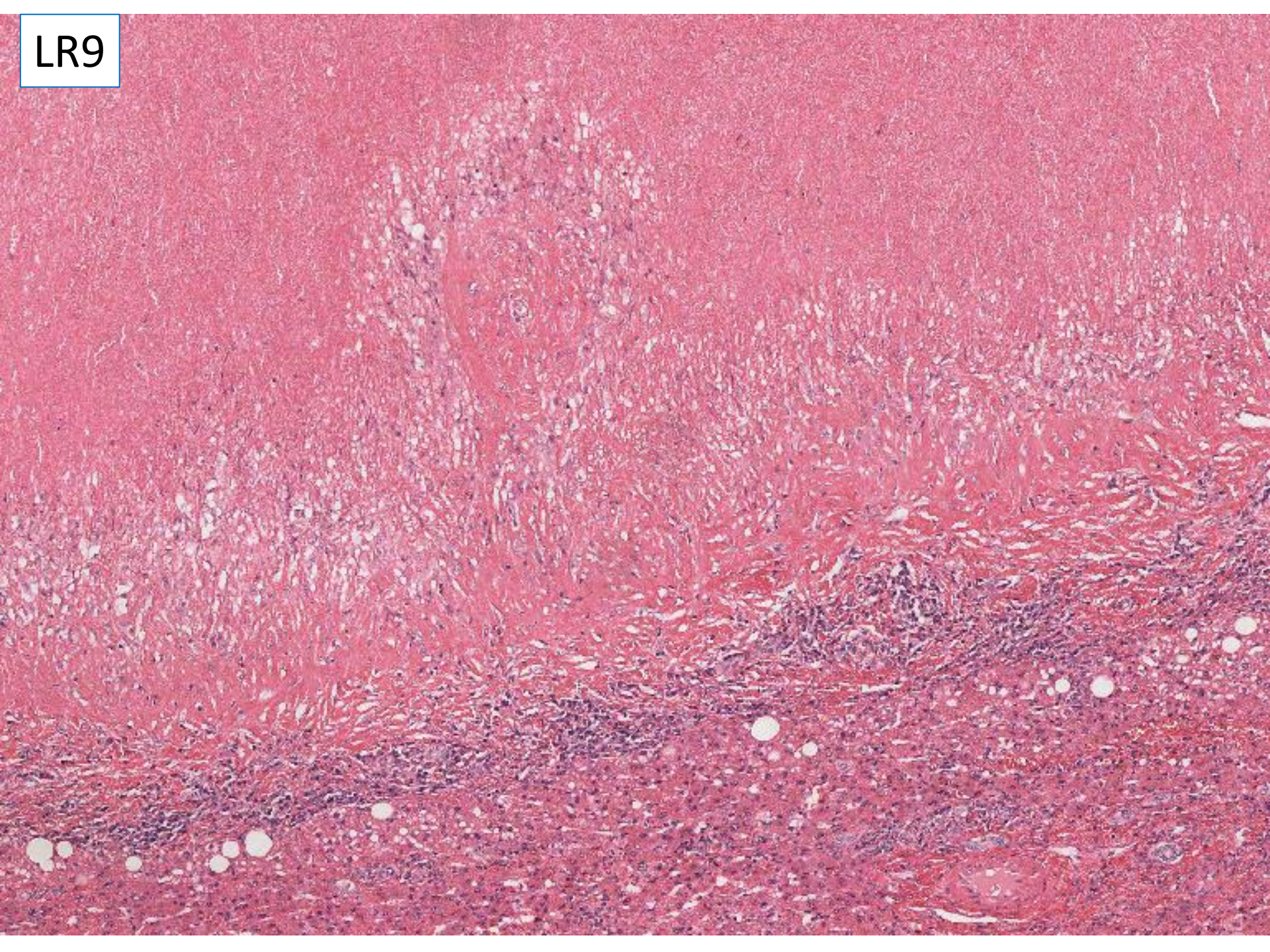
No additional stains



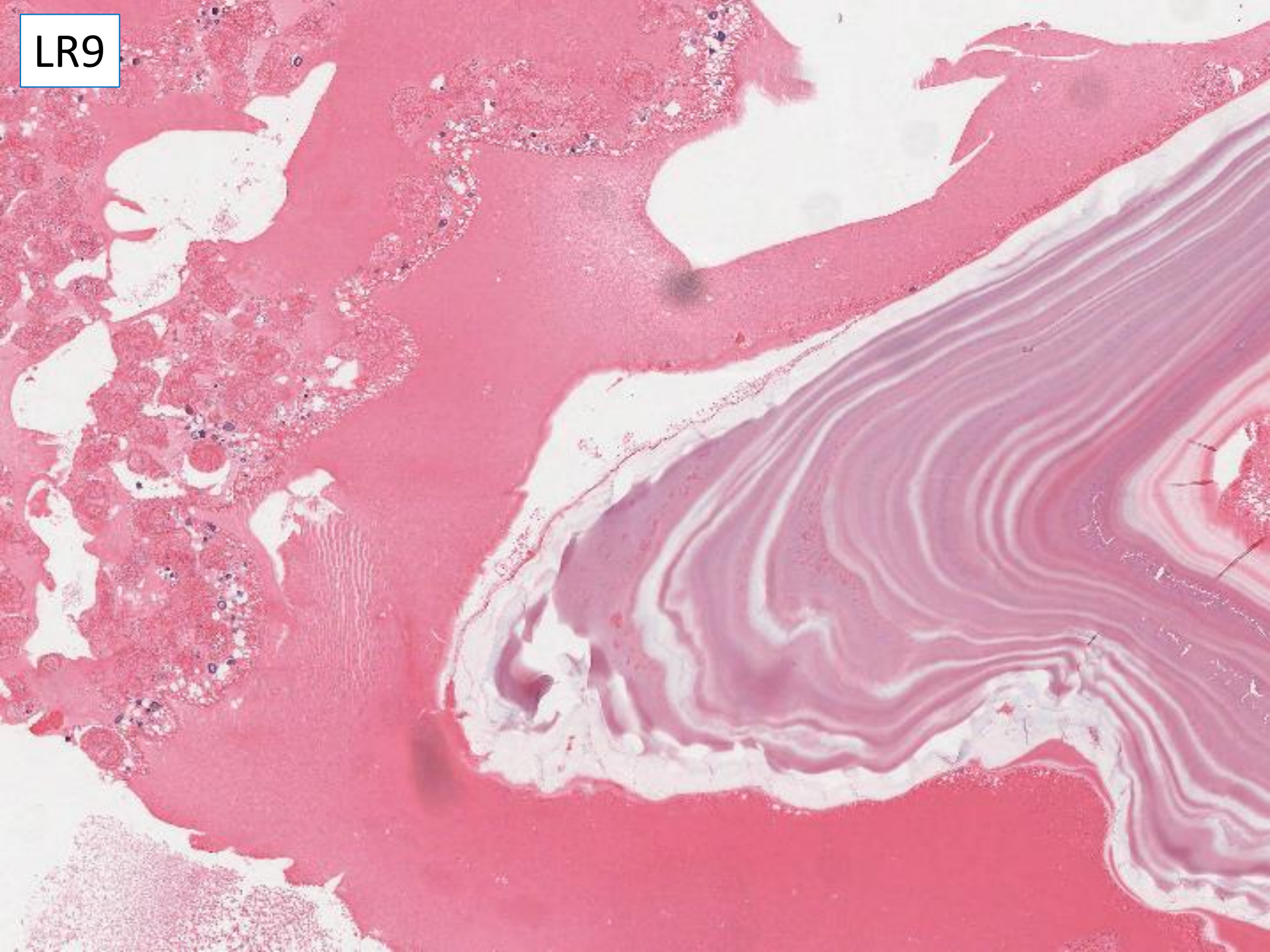
LR9



LR9

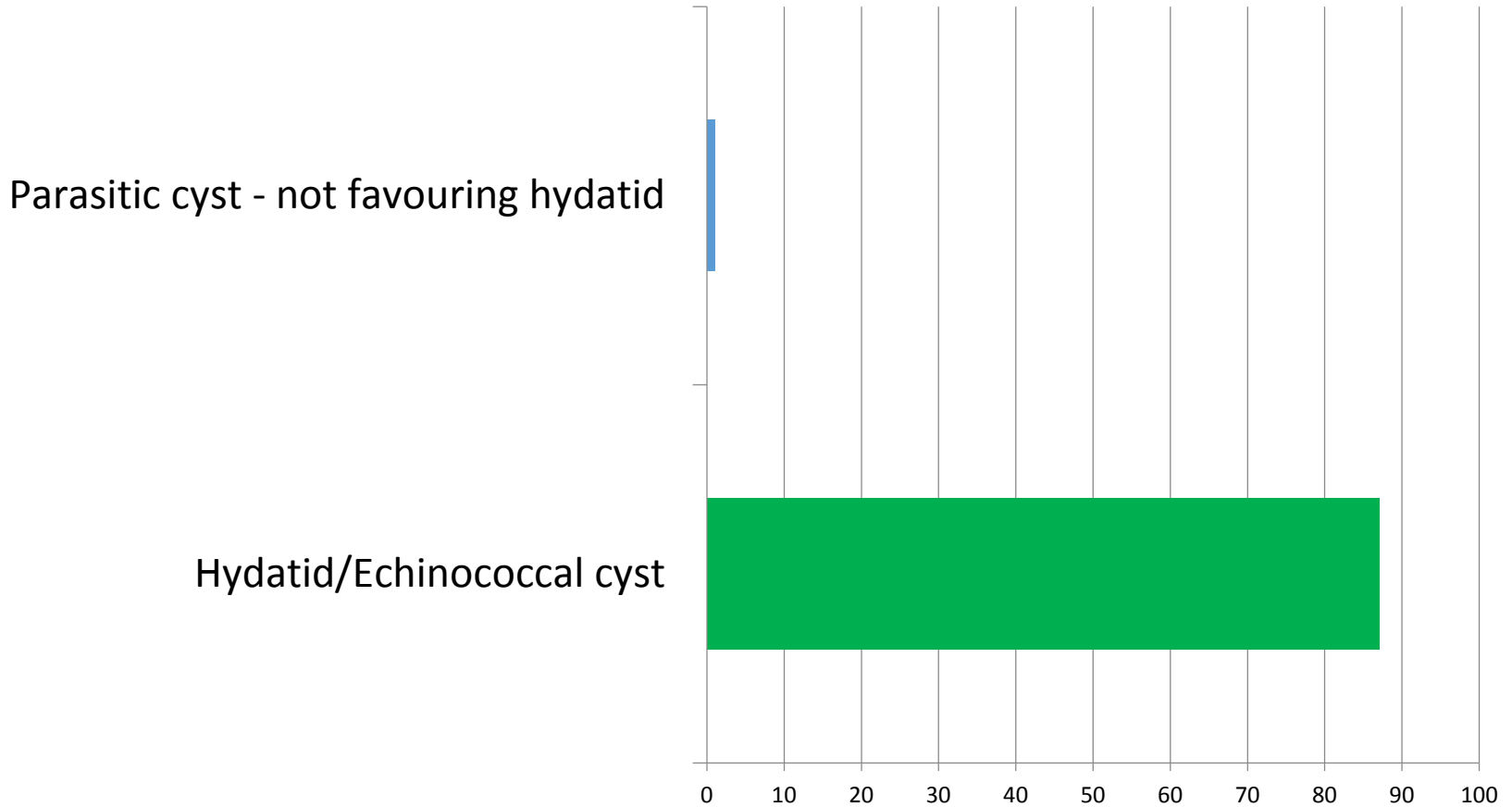


LR9



Case LR9 29F

Hydatid cyst resection



Consensus complete responses would include – parasitic cyst with features consistent with hydatid disease/Echinococcal cyst

Case LR9 29F

Hydatid cyst resection

- **Suggested scoring: for 10 points** include – parasitic cyst with features consistent with hydatid disease/Echinococcal cyst
- **Lose 5 marks if** parasitic cyst but does not favour hydatid disease

Case LR9 29F

Hydatid cyst resection

Scoring summary agreed at meeting:

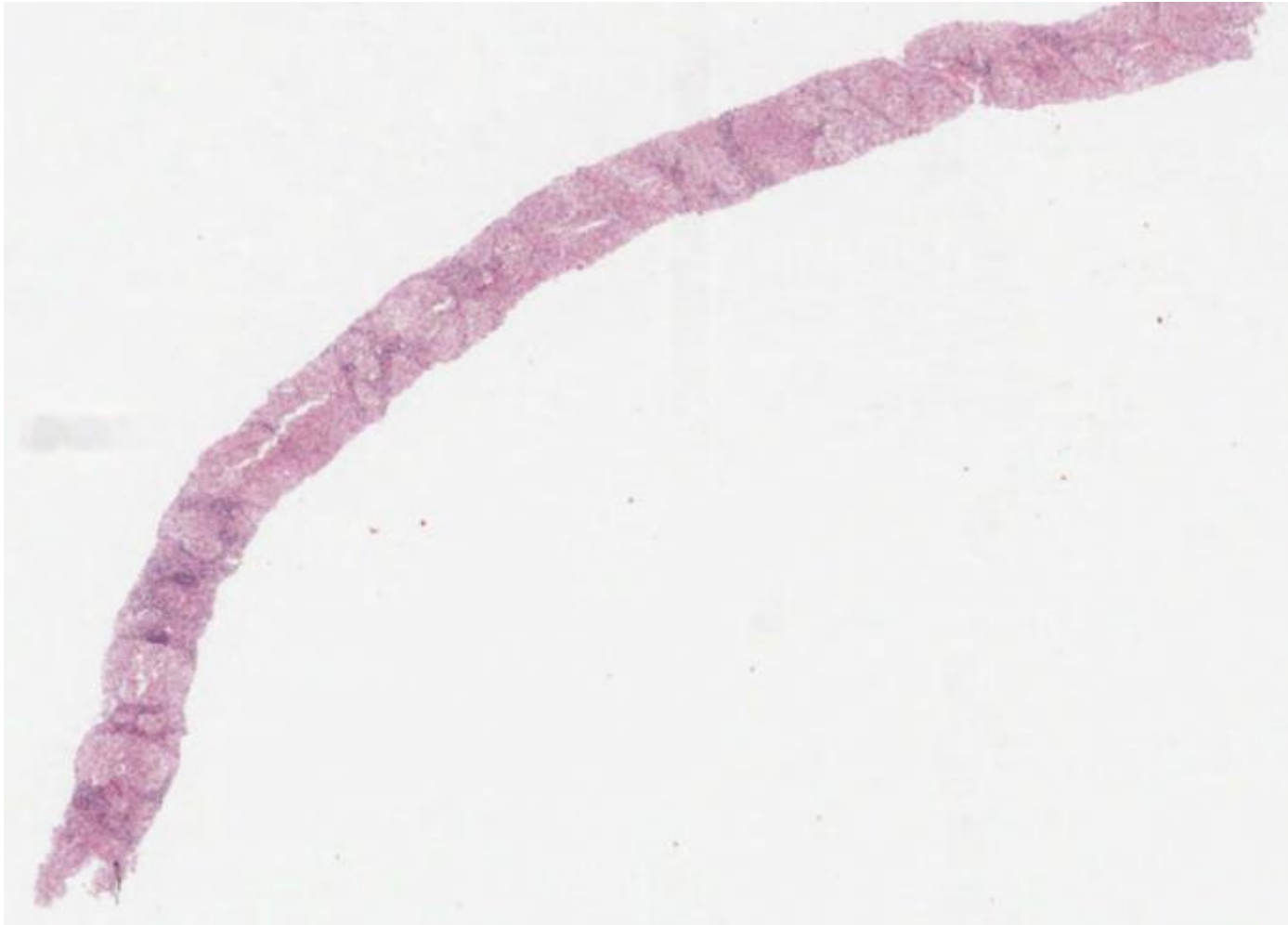
For full marks – diagnosis hydatid disease/ echinococcal cyst

Lost 10 marks for – parasitic cyst, not suggestive of hydatid

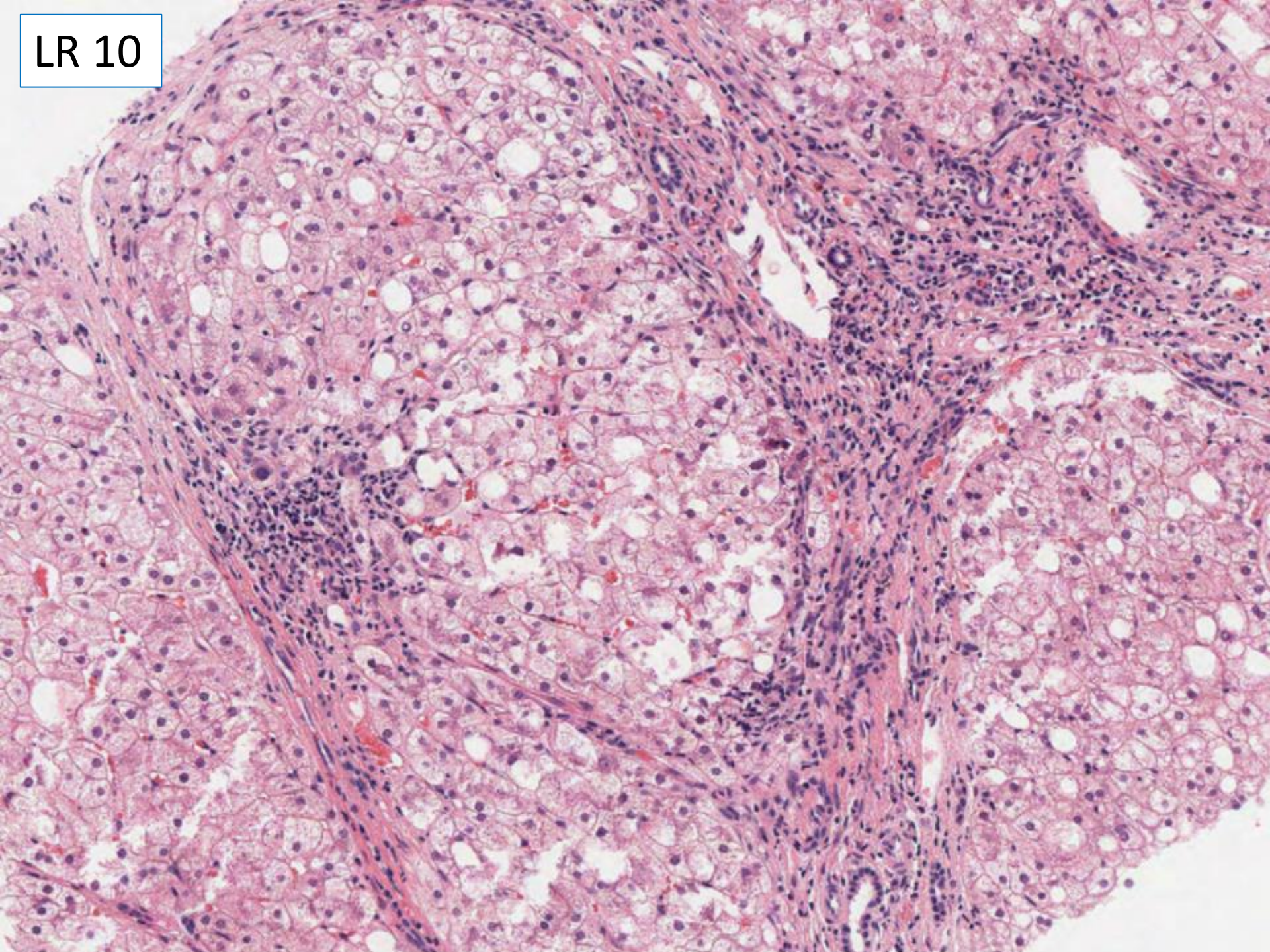
Case LR10 57F

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

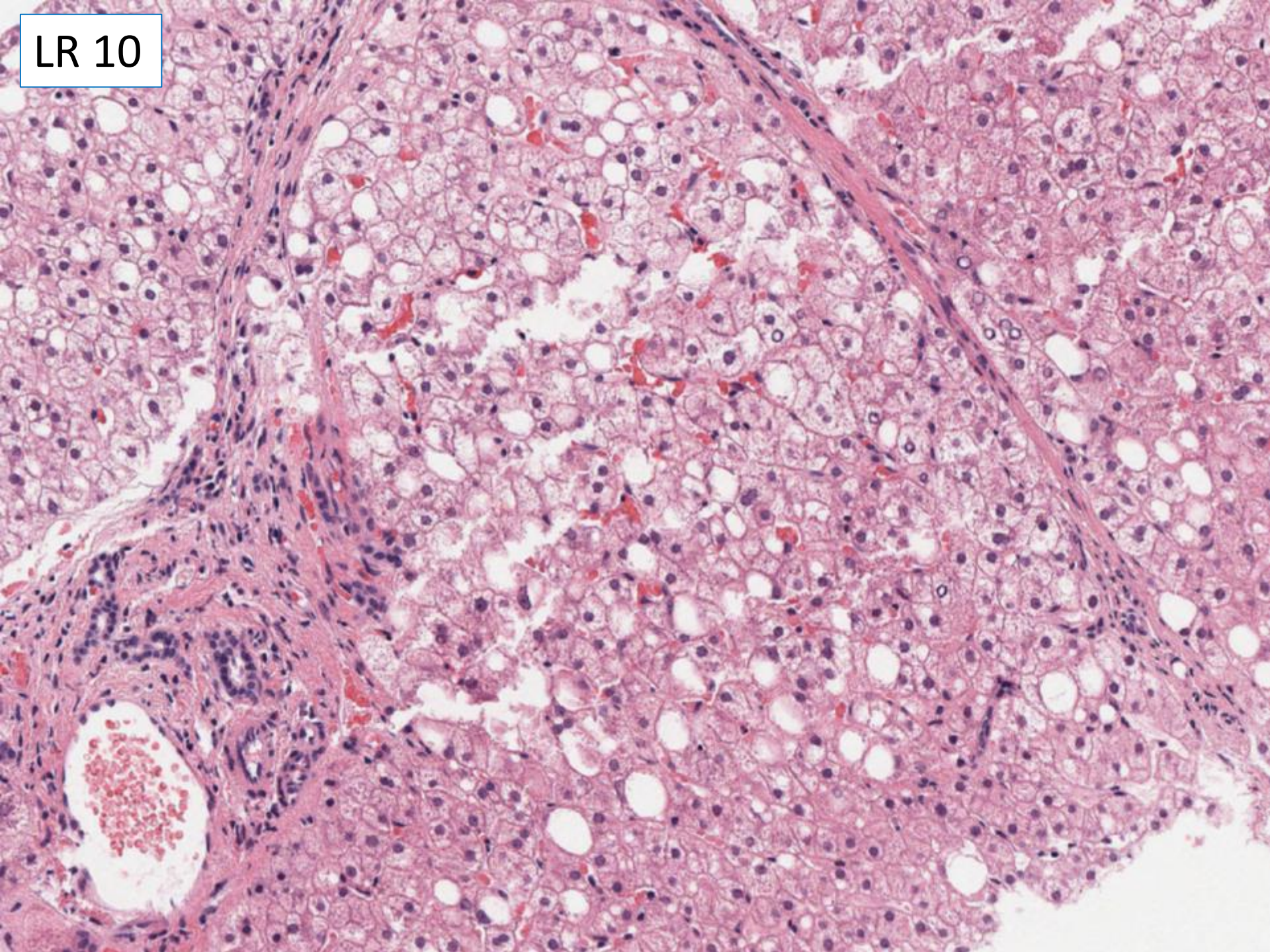
Additional stains: van Gieson, retic, Shikata, Cam 5.2



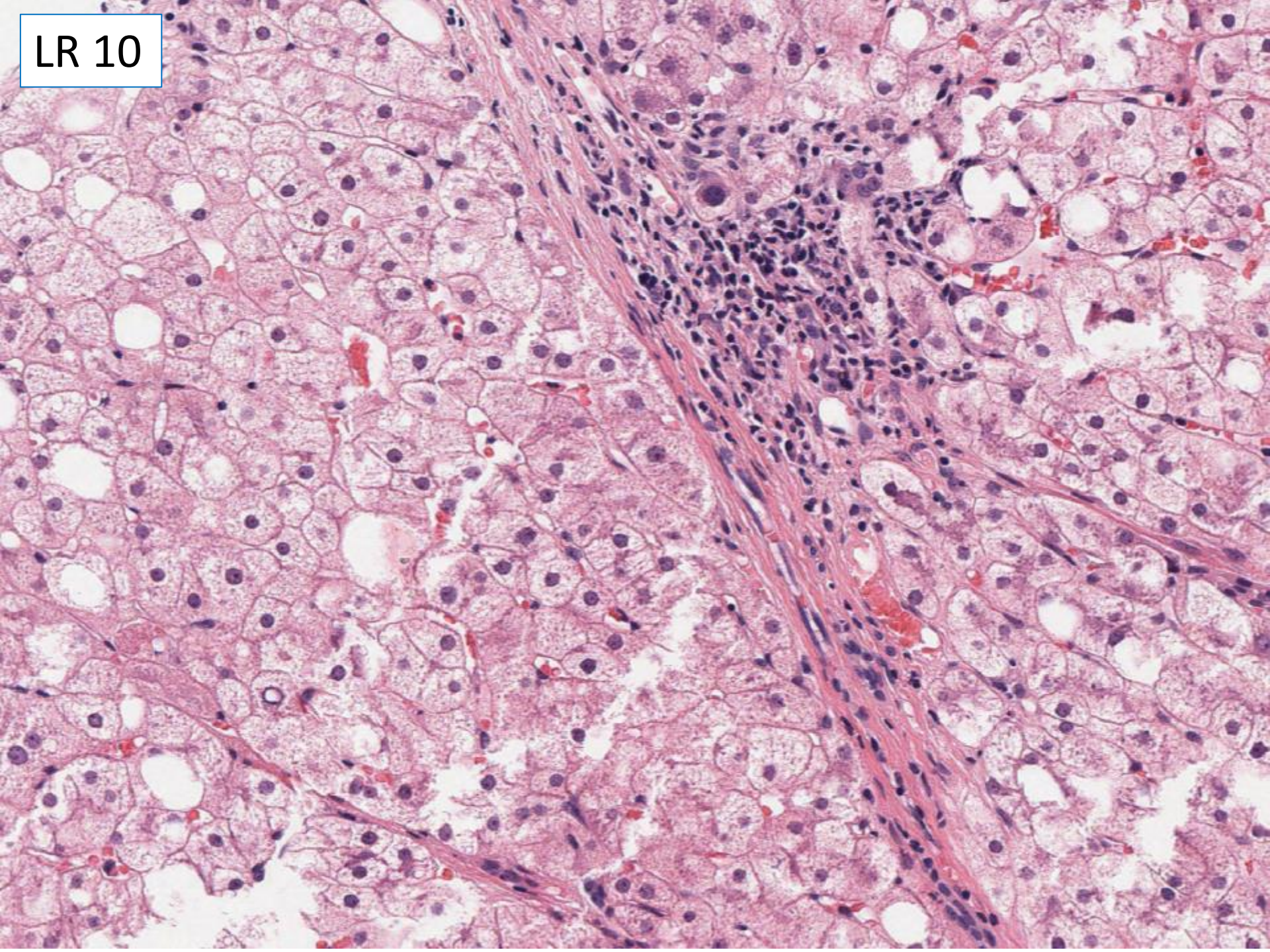
LR 10



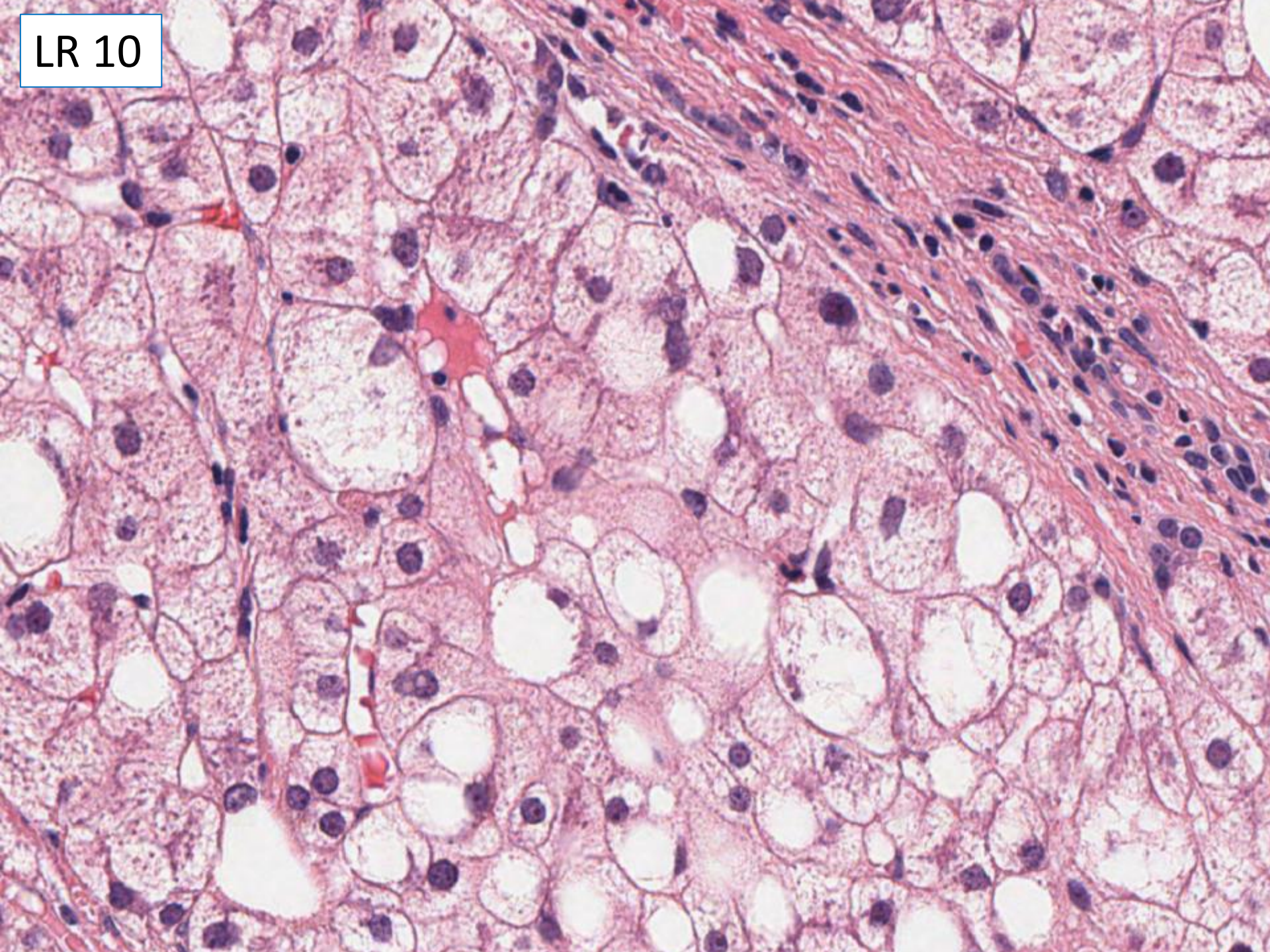
LR 10



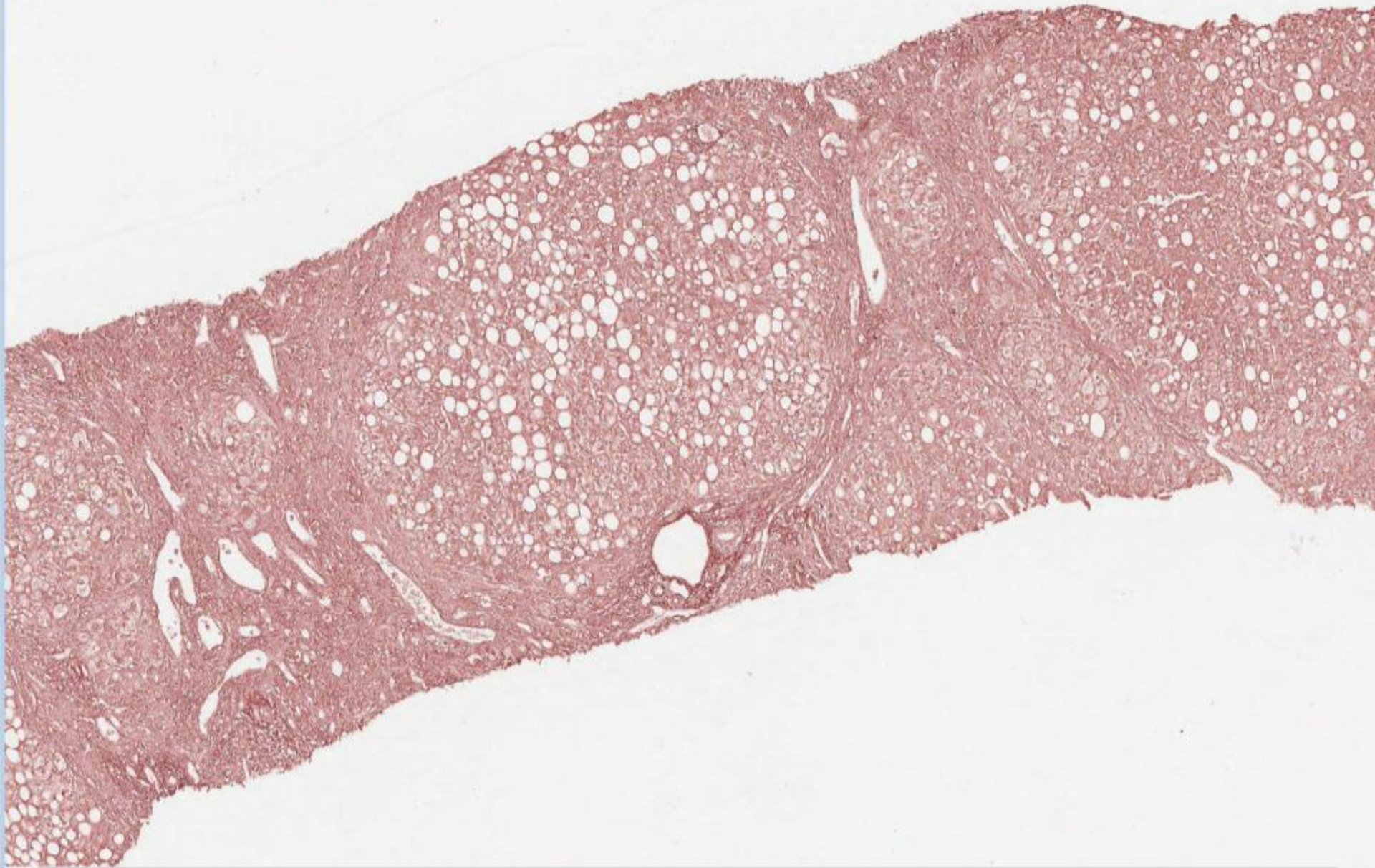
LR 10



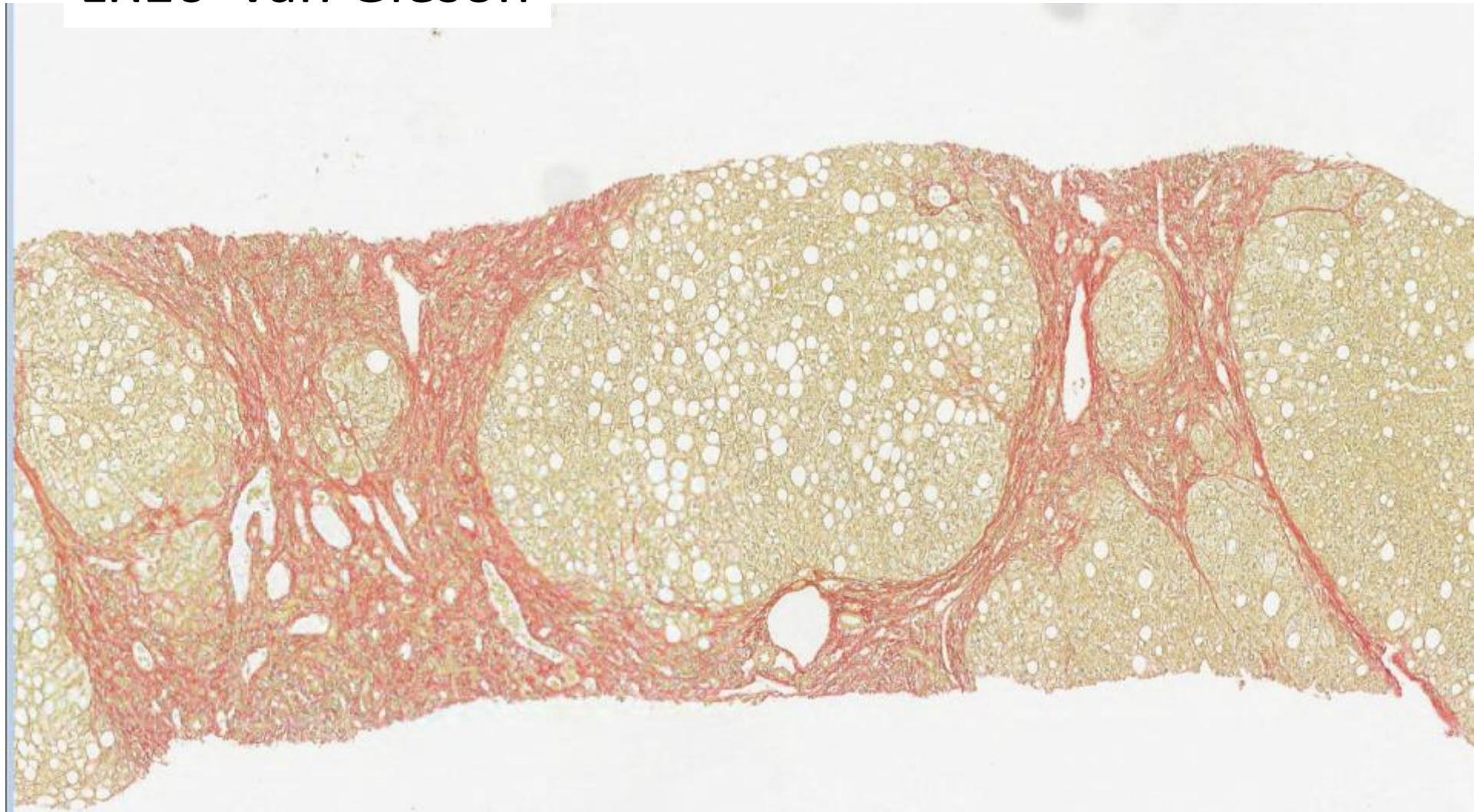
LR 10



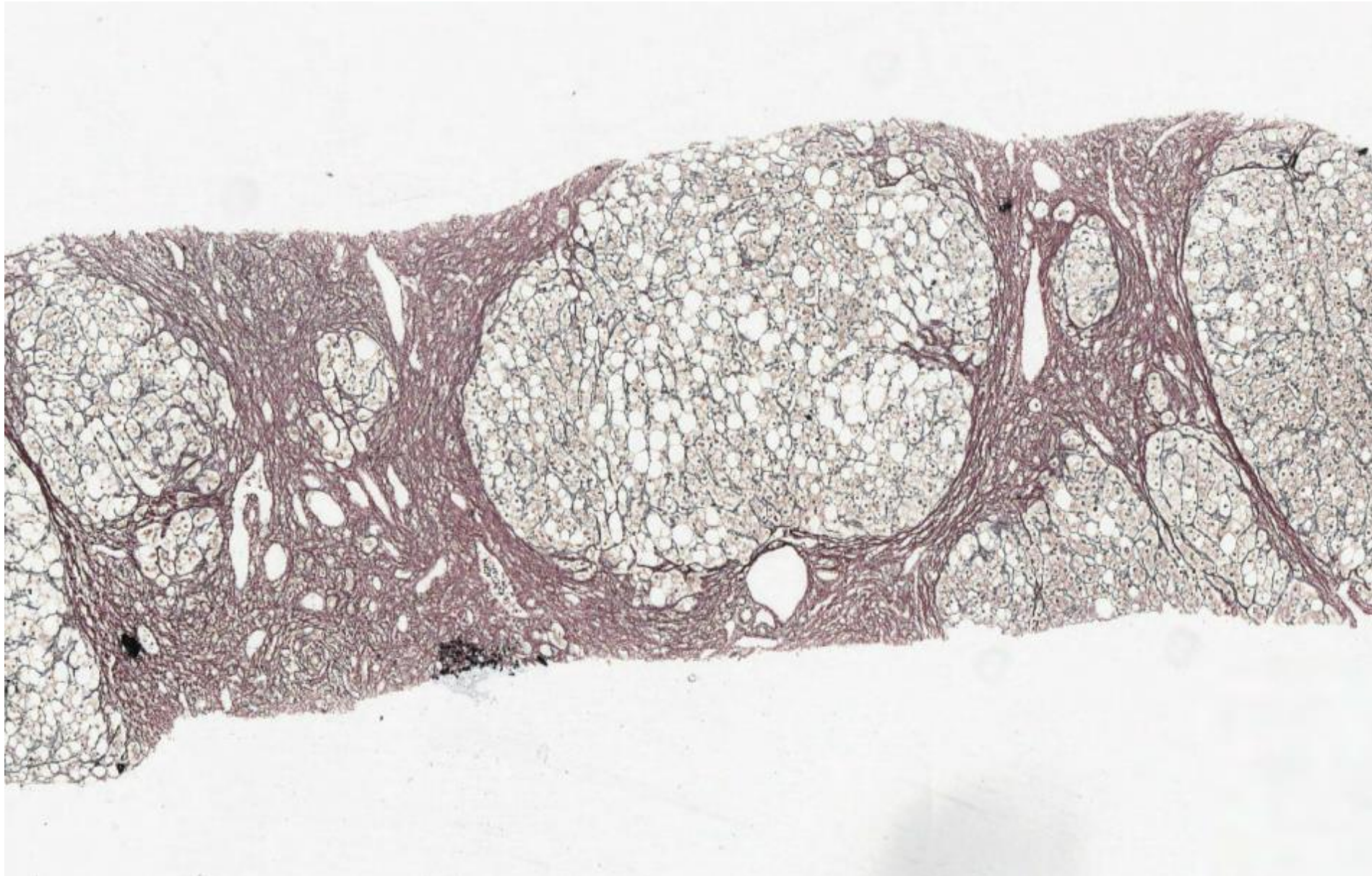
LR10 Shikata



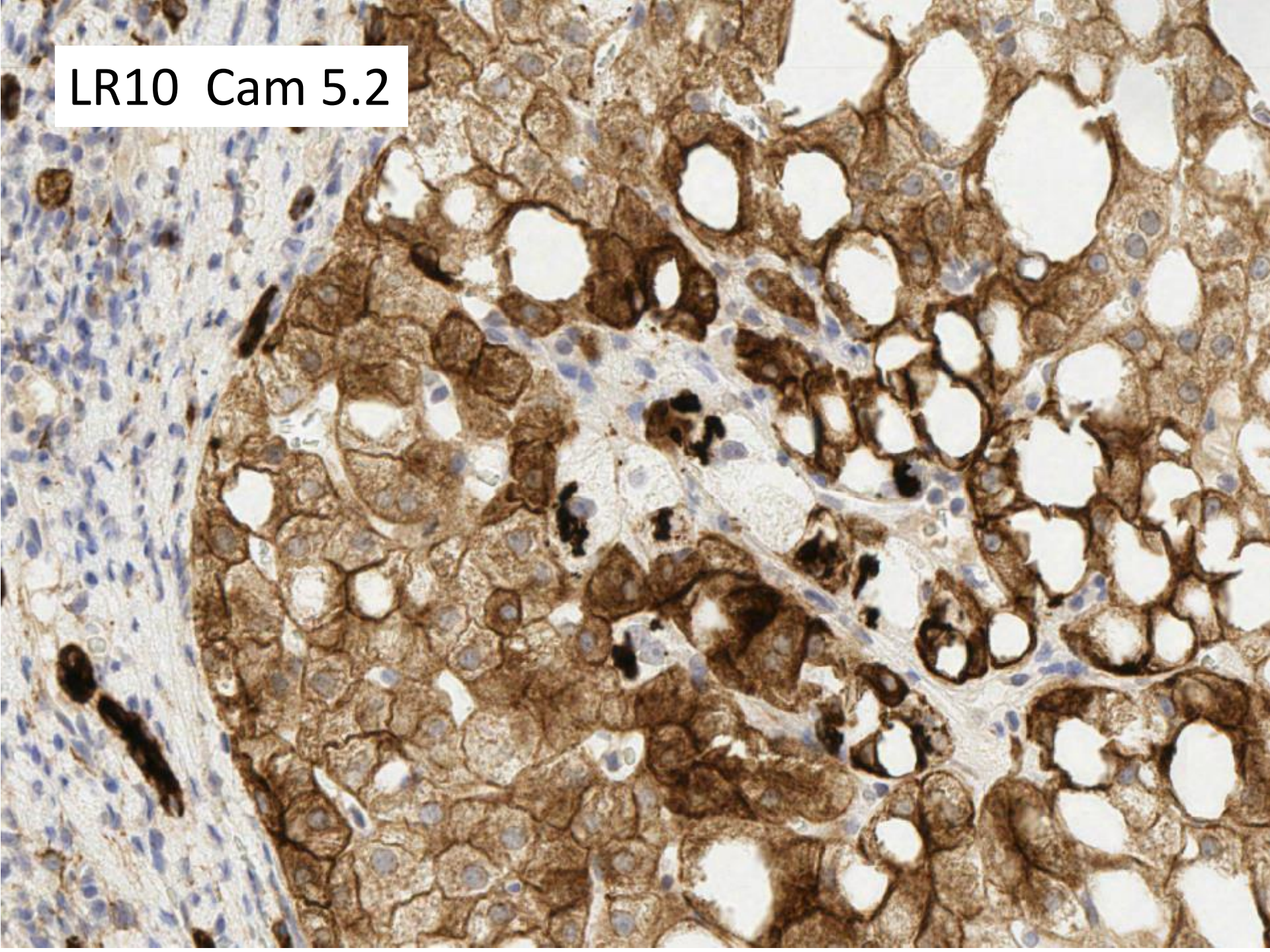
LR10 van Gieson



LR10 Reticulin

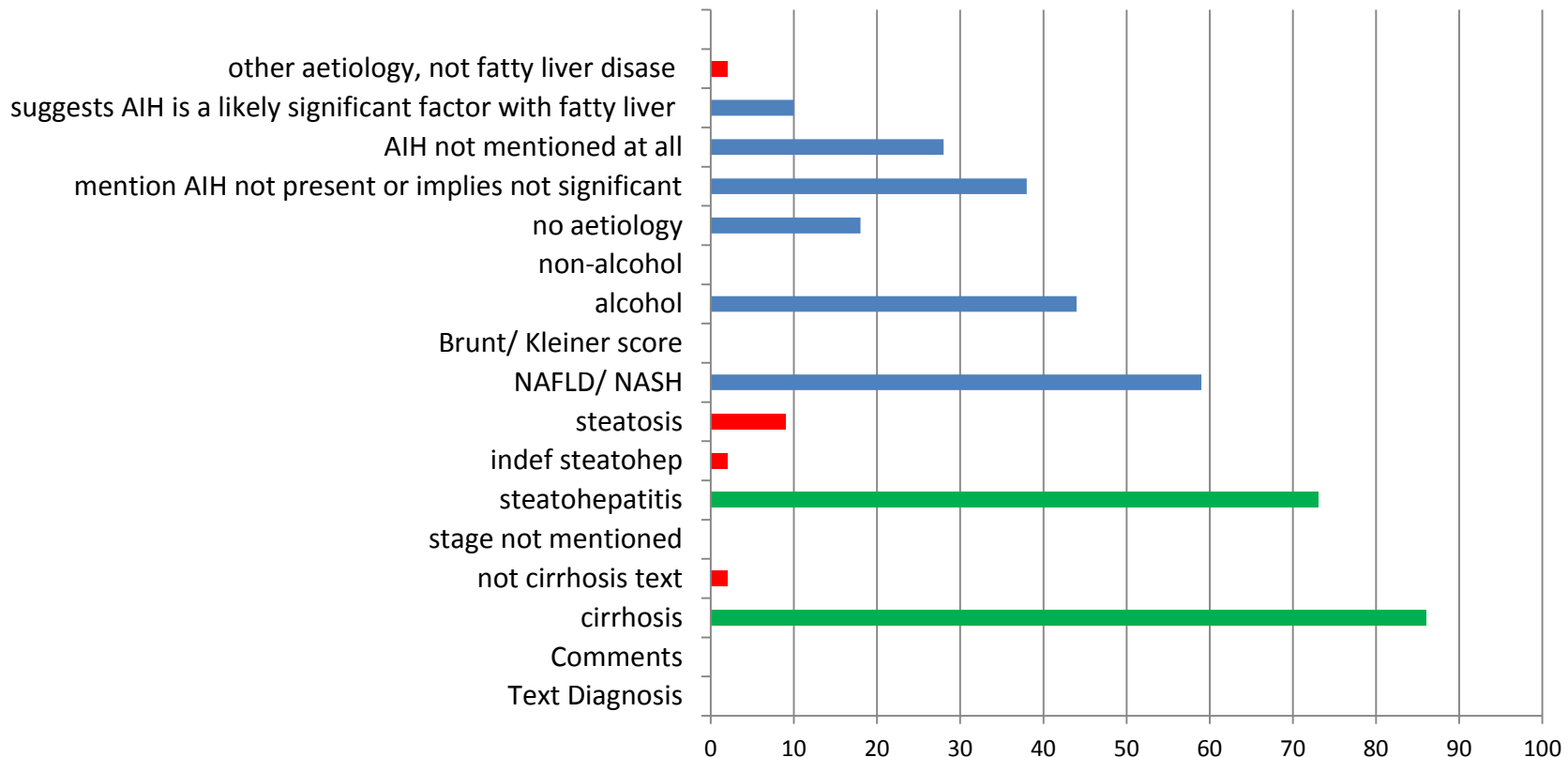


LR10 Cam 5.2



Case LR10 57F

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



Consensus complete responses would include - cirrhosis, steatohepatitis, either non-alcohol or alcohol related.
Comment that histology is not suggestive of AIH - or only a minor component, not dominant AIH

Case LR10 57F

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

Suggested scoring: for 10 points include cirrhosis, steatohepatitis,

Lose 5 marks if - stage less than cirrhosis - connective tissue stains provided so expect a stage. All responses included stage, all but 2 stated cirrhosis.

Lose 5 marks if describe steatohepatitis (Ballooning, Mallory's) but don't use the word - see previous comment in case LR2.

Lose 5 marks if steatosis but not steatohepatitis

Lose 5 marks if responses suggest that AIH is a significant factor - more than just a possible minor component - but tricky since 28 (32%) didn't mention AIH at all. So probably can't score on the AIH aspect -.

I think everyone who said SH is implying FLD as the aetiology so alternative aetiologies are outside consensus.

At phone conference agreement that AIH as a significant factor is potentially clinically misleading – inappropriate immunosuppression possible

Lose 10 marks (score 0) if the main aetiology is not fatty liver disease. agreed

Case LR10 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 – cirrhosis and steatohepatitis or an indication that cirrhosis is due to fatty liver disease.

Lose 5 marks for disease stage less than cirrhosis,

Lose 5 marks if the response suggests that autoimmune hepatitis is a likely co-factor in the disease (agreed on show of hands at the meeting).

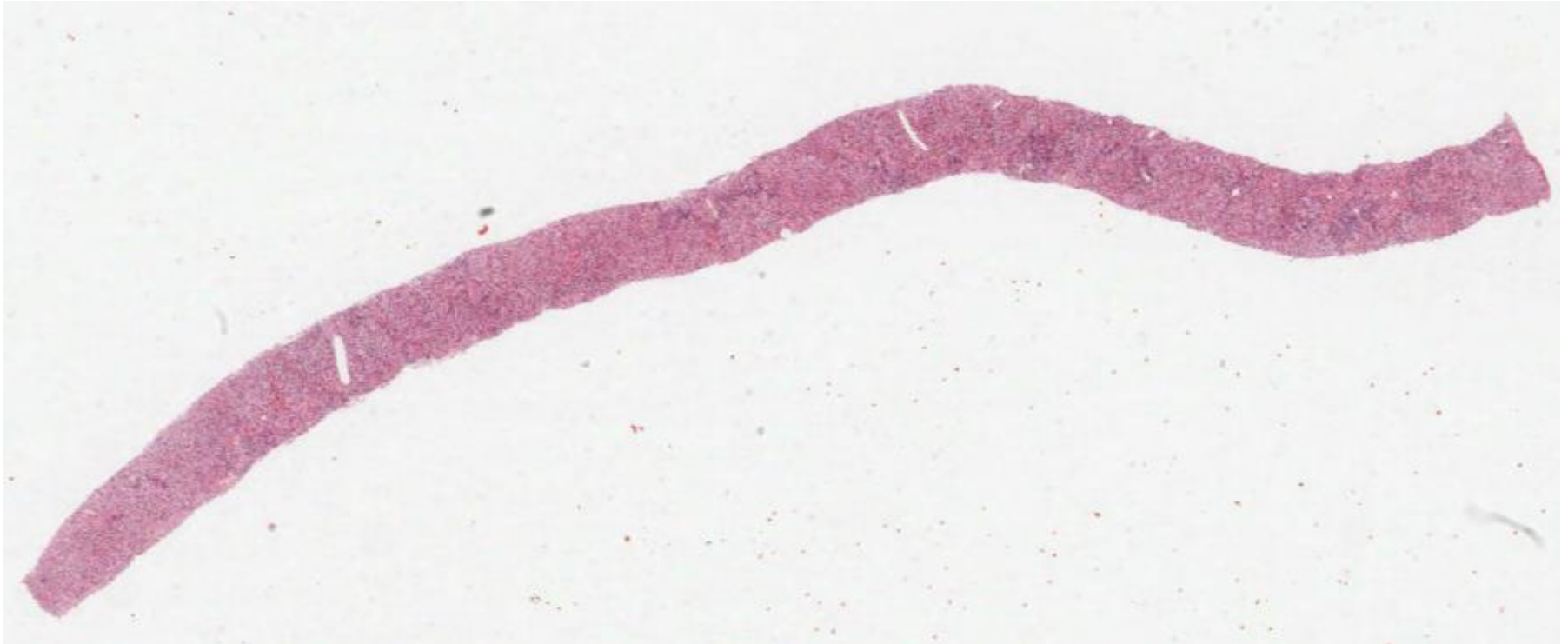
Lose 5 marks if it is not clear that cirrhosis is due to fatty liver disease (ie mentions steatosis but not steatohepatitis or fatty liver disease)

Lose 10 marks if – no mention of steatohepatitis or fatty liver disease at all ('liver cirrhosis ? Alcohol, ? AIH, ? hep B).

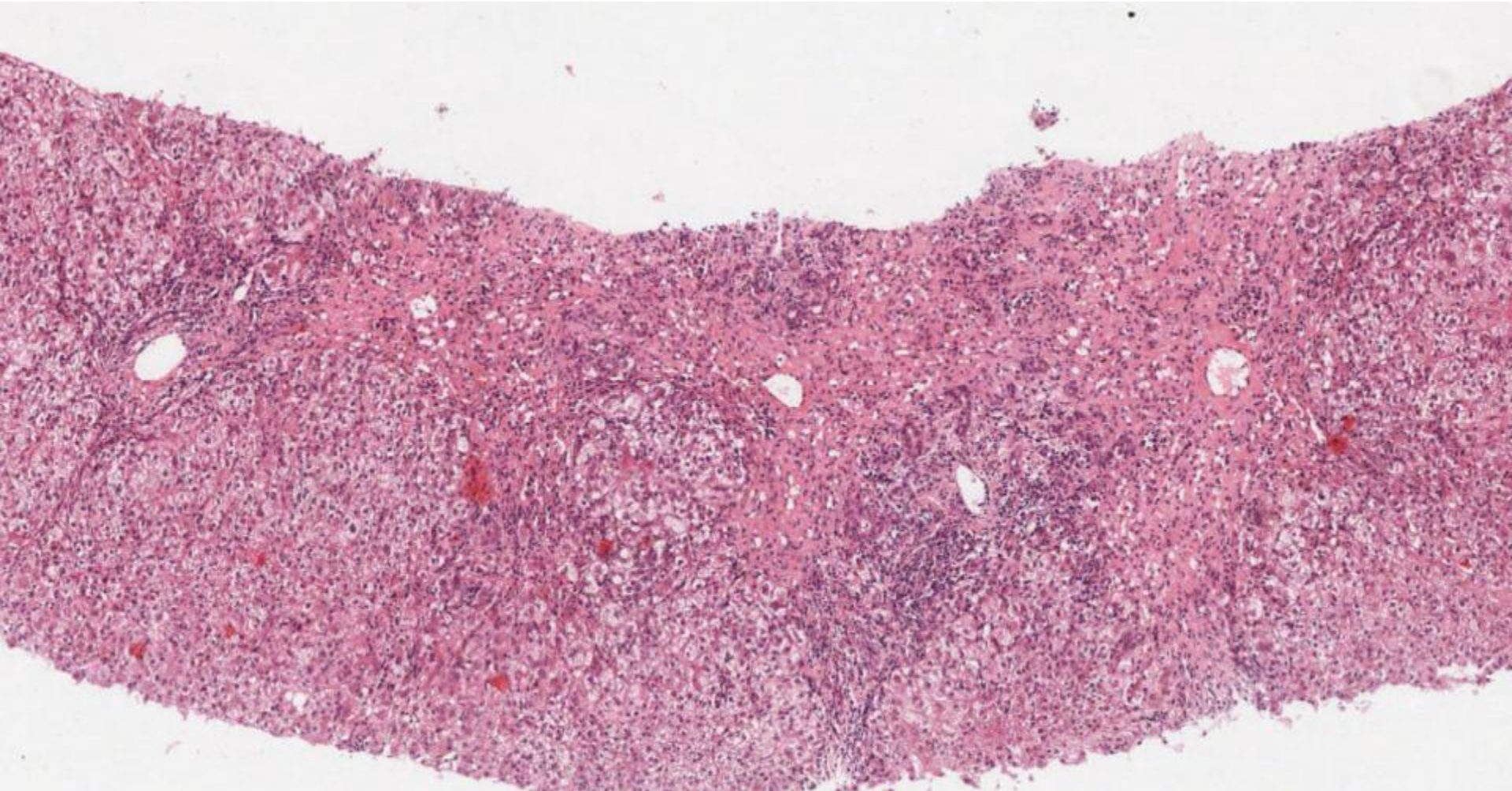
Case LR11 75F

Abnormal LFTs and jaundice.

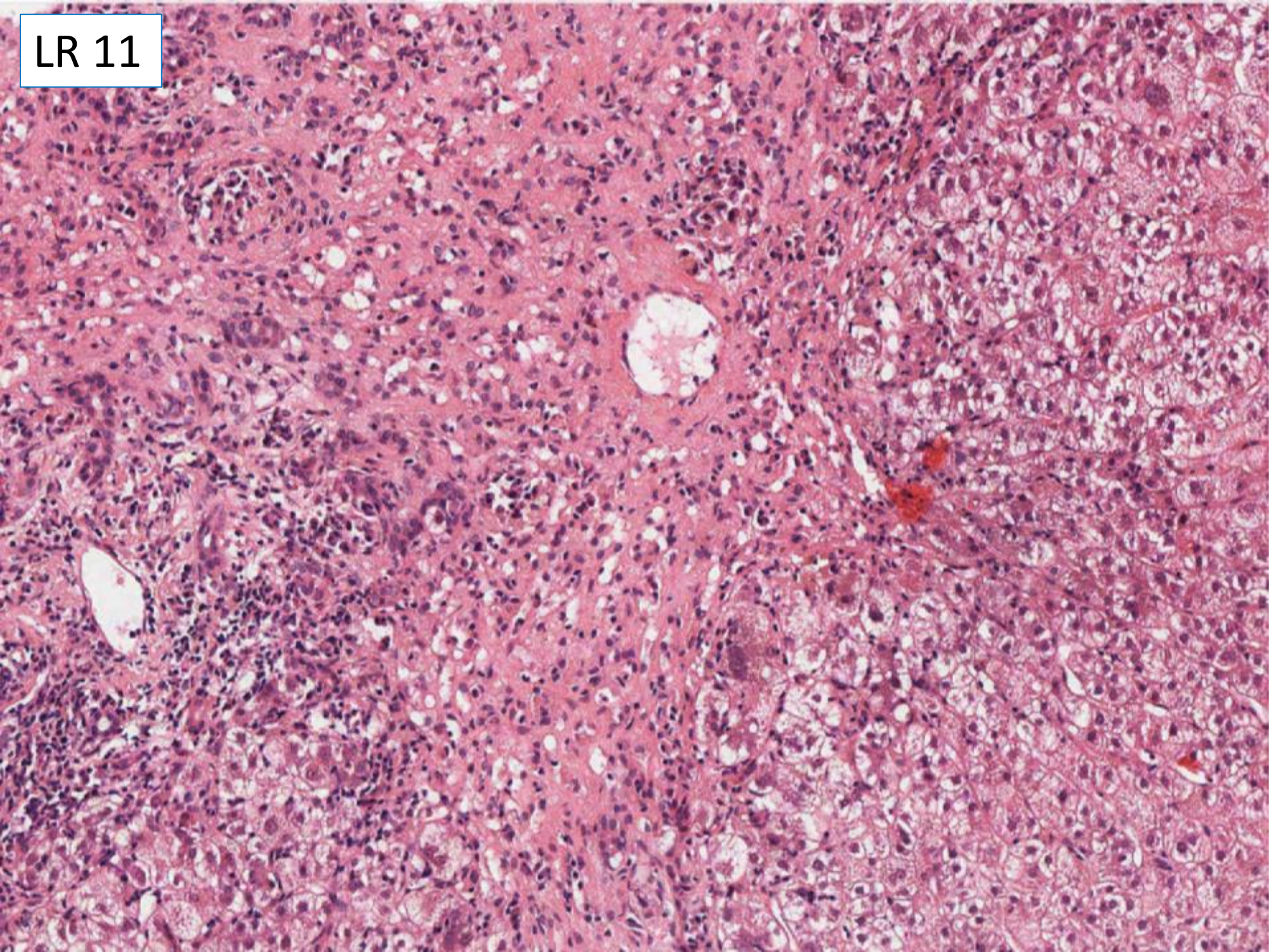
Extra stains: vG, retic, PASD, shikata



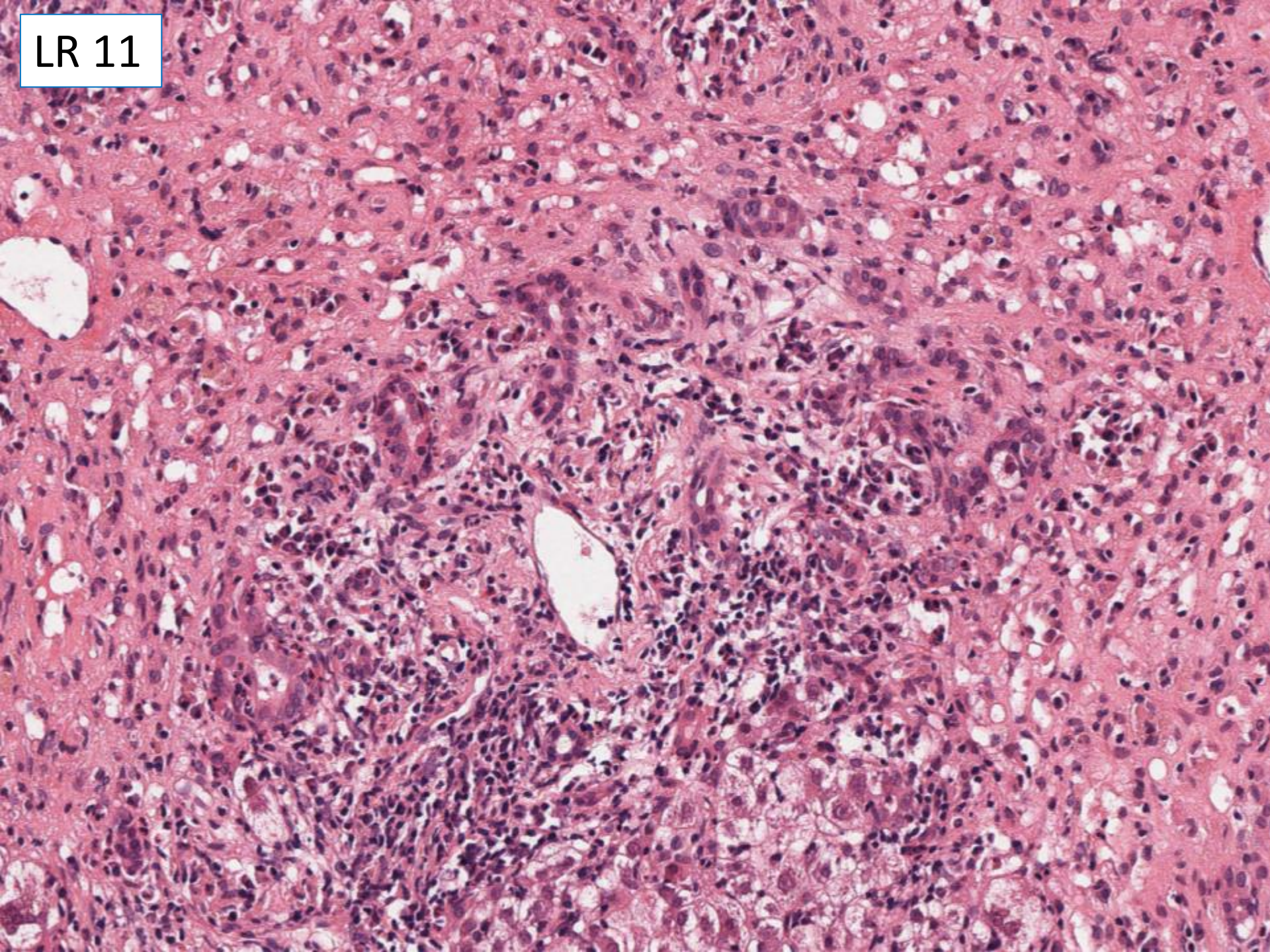
LR 11



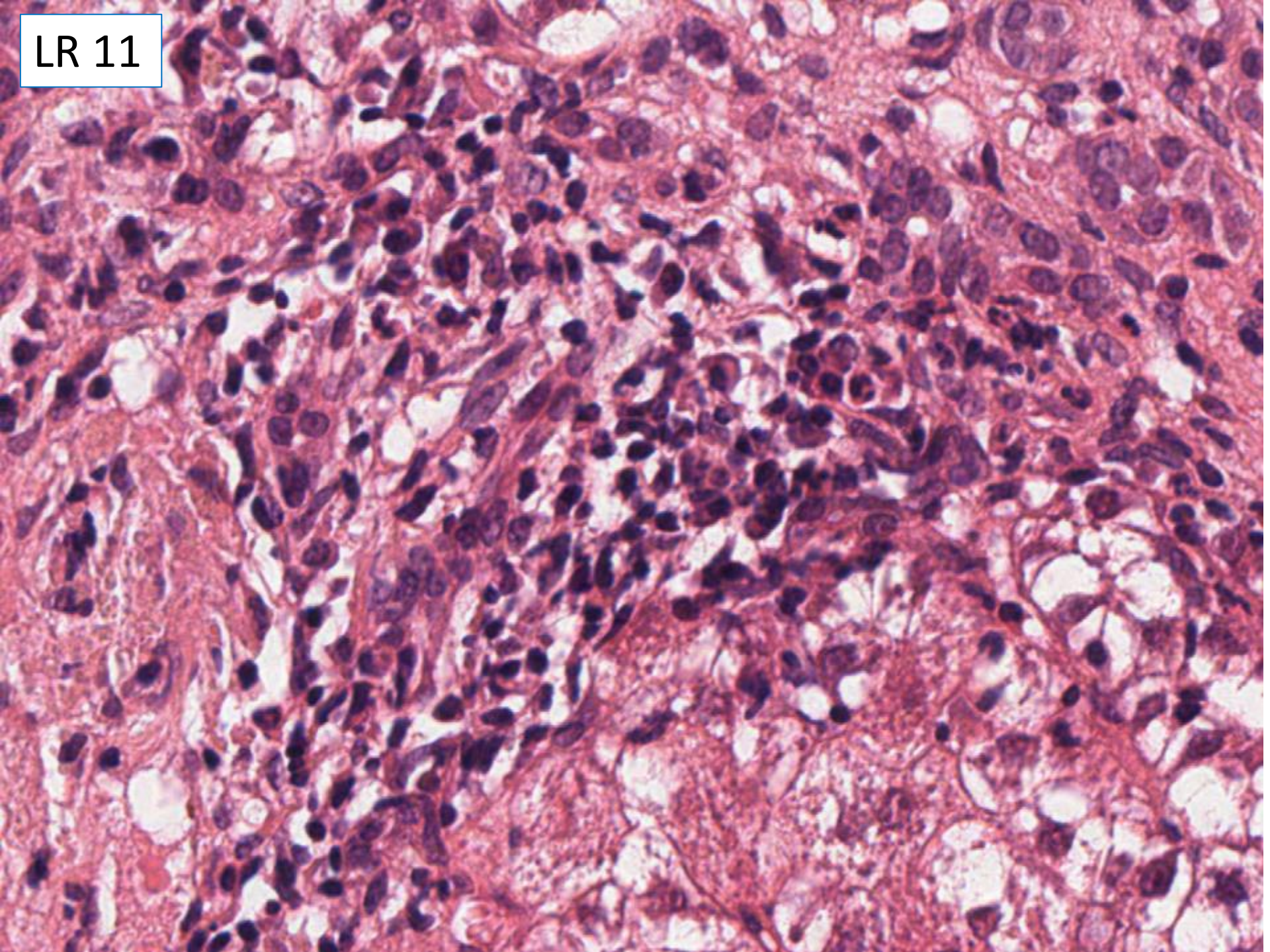
LR 11



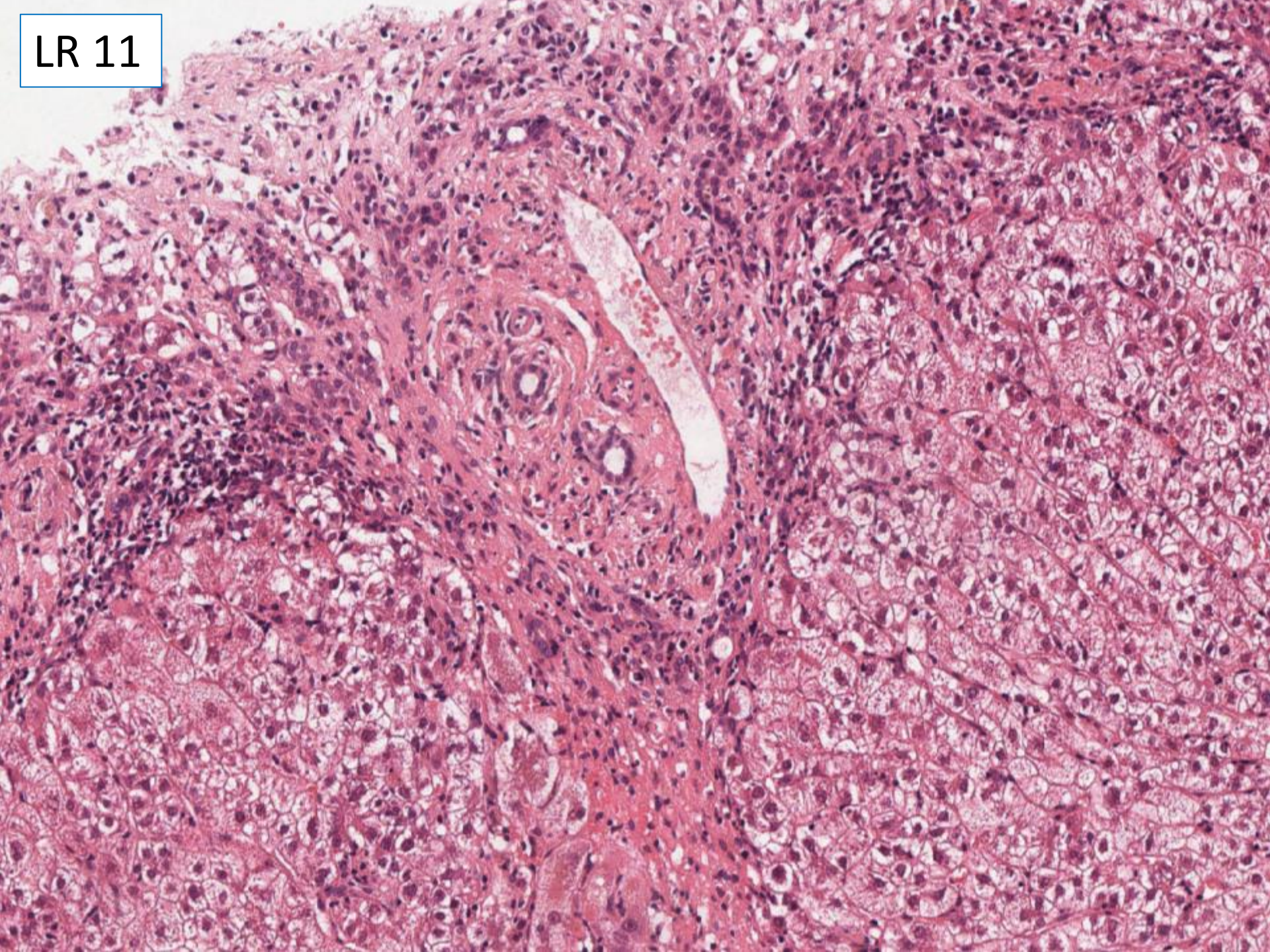
LR 11



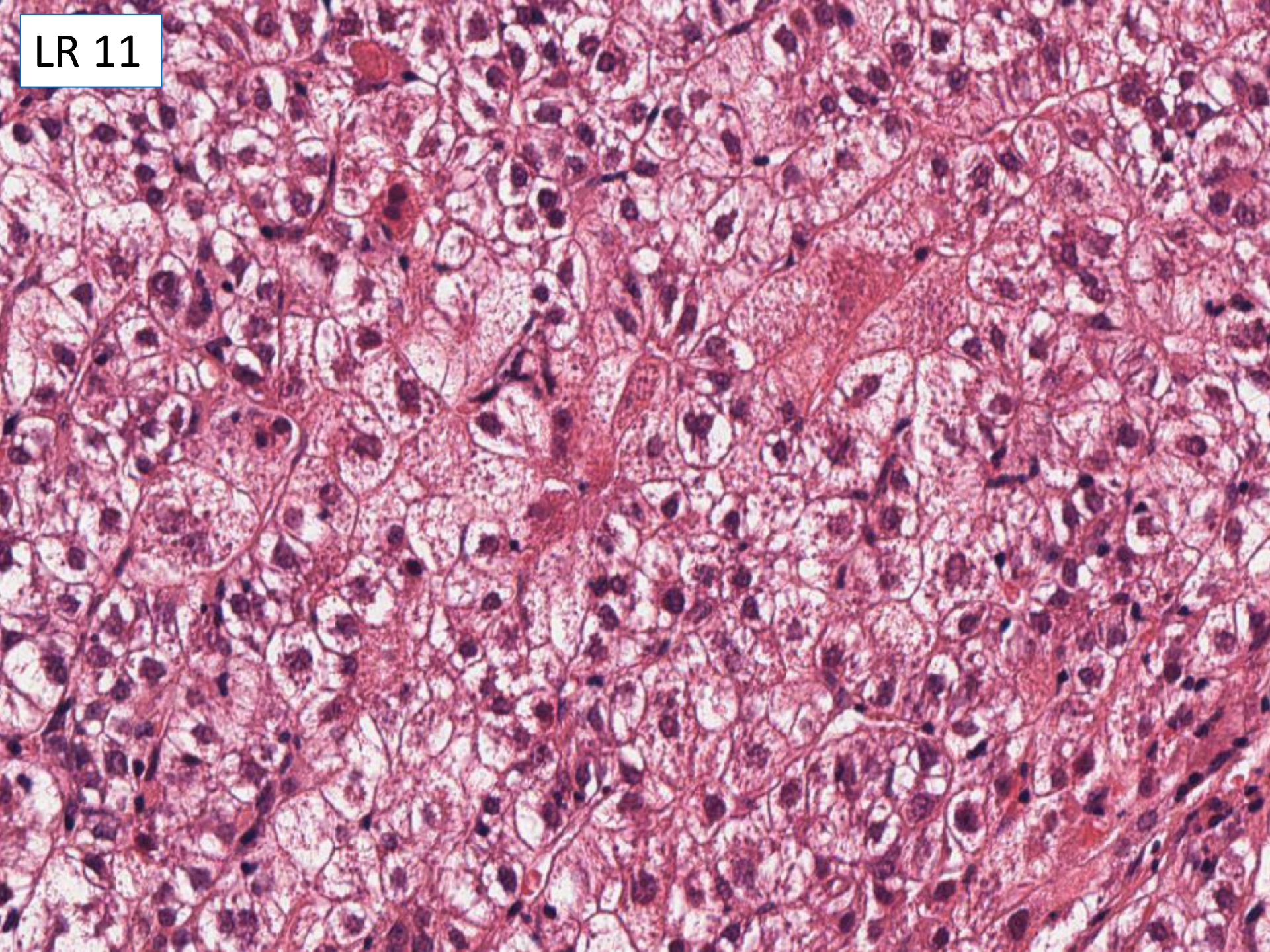
LR 11



LR 11



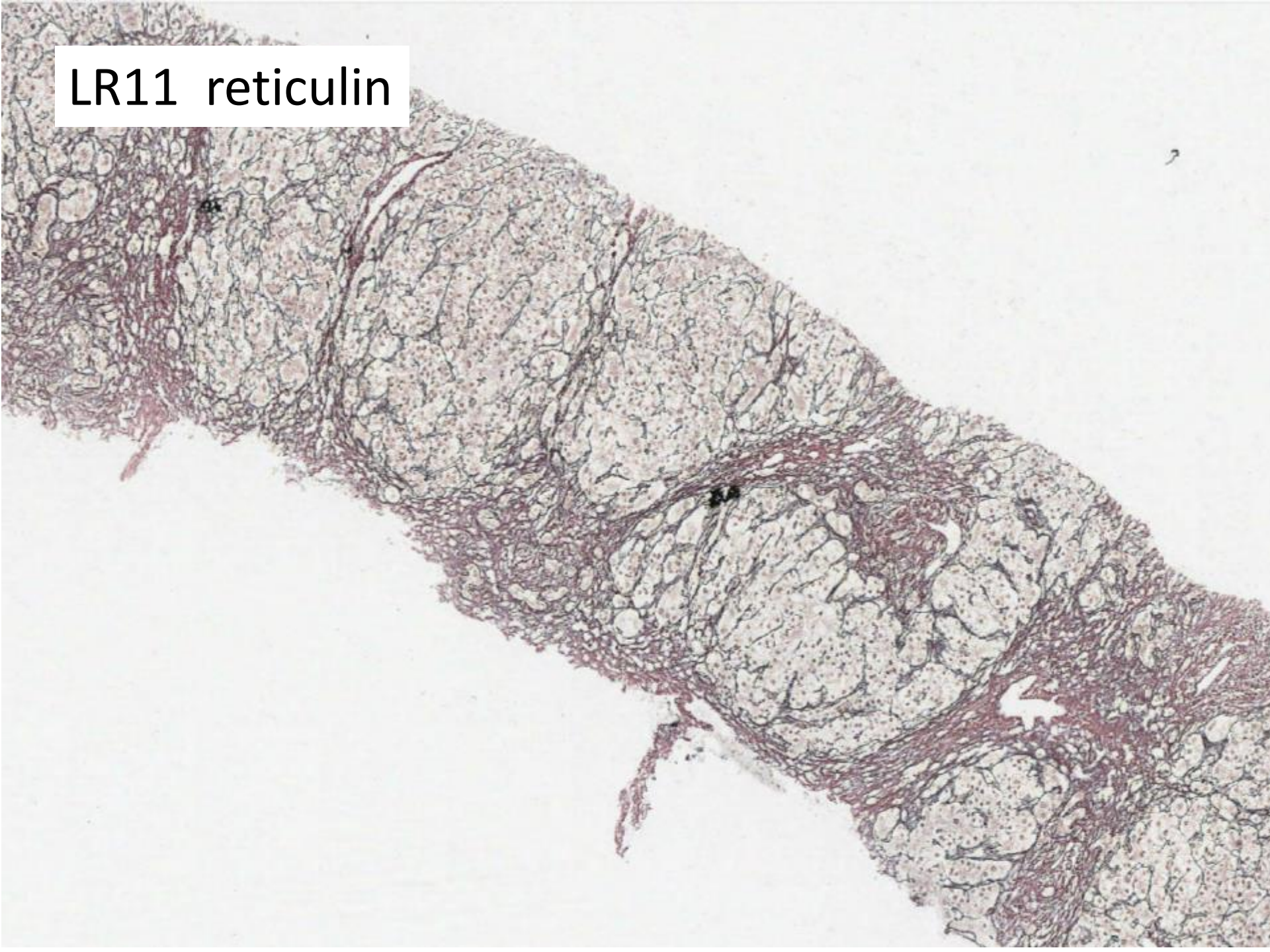
LR 11



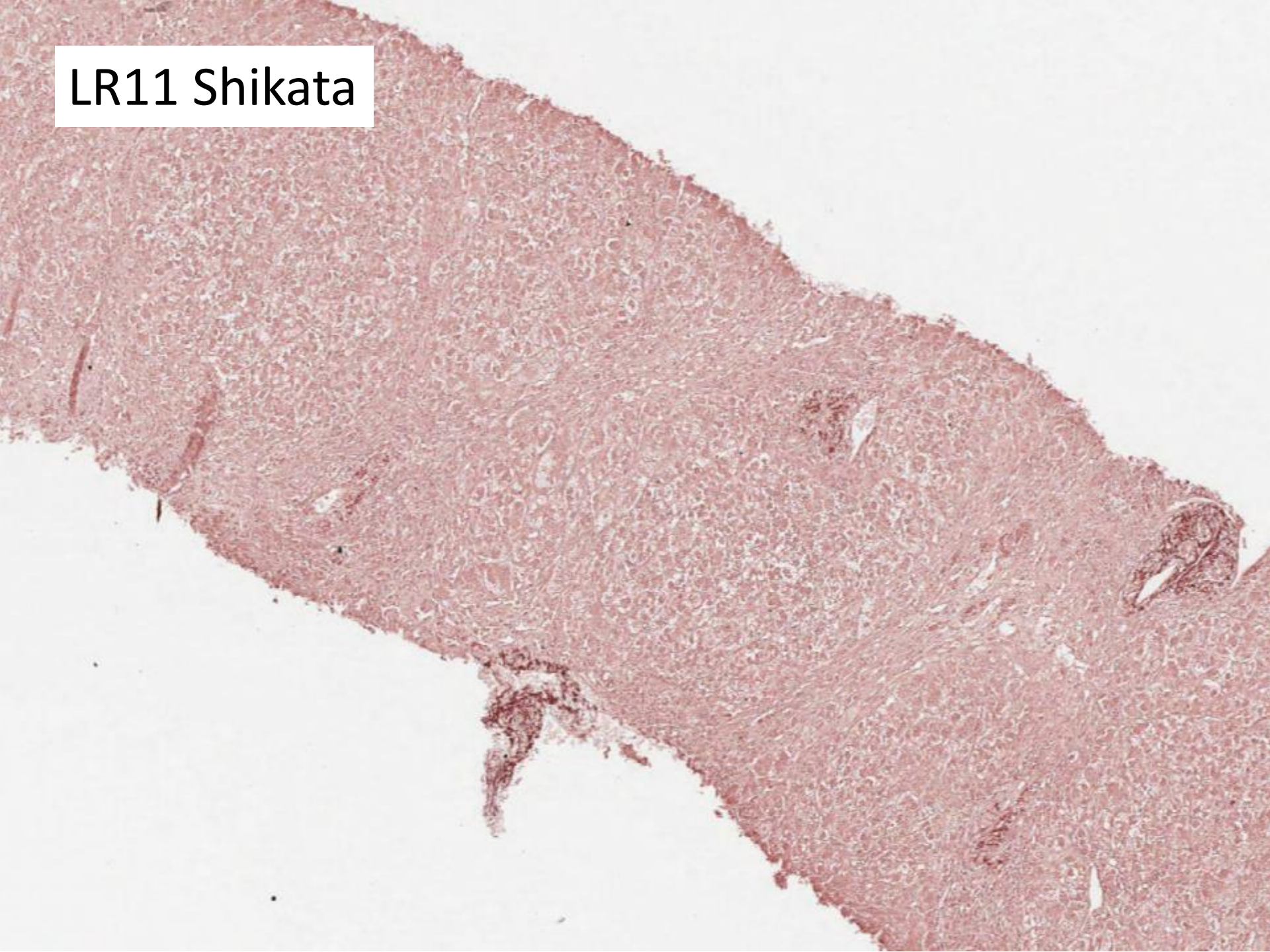
LR11 van Gieson



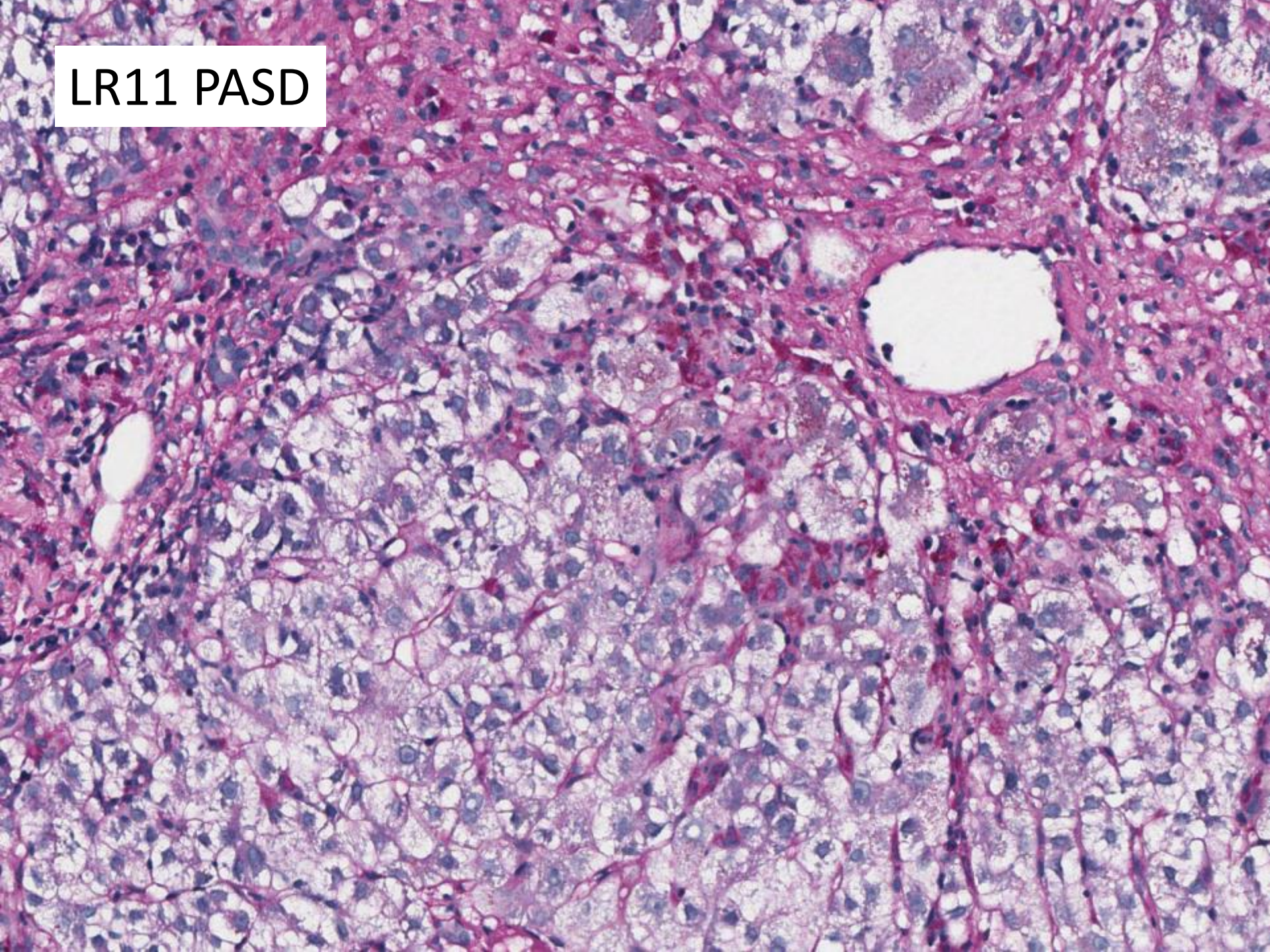
LR11 reticulin



LR11 Shikata



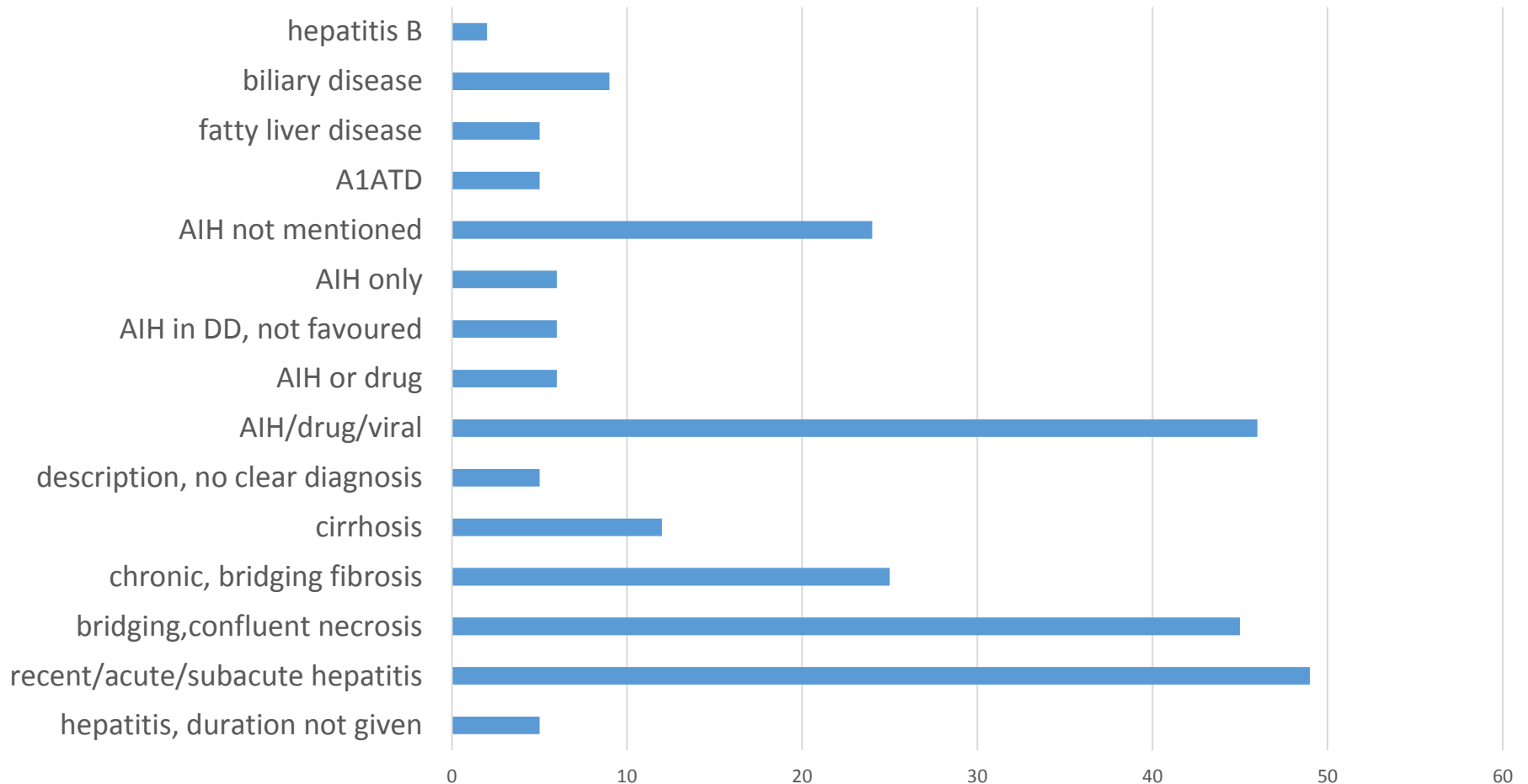
LR11 PASD



Case LR11 75F

Abnormal LFTs and jaundice.

Extra stains: vG, retic, PASD, shikata



Consensus complete responses would include -

There is a majority opinion for acute hepatitis with bridging necrosis, differential includes AIH, drug, virus - but not reaching 80% so not suitable for scoring. This is the preferred diagnosis, there are lots of learning points.

Case LR11 75F

Abnormal LFTs and jaundice.

Extra stains: vG, retic, PASD, shikata

Suggested scoring: for 10 points include - not suitable for scoring.

Comments:

- Chronic bridging fibrosis, or cirrhosis by a substantial minority.
- AIH not mentioned/ included in differential diagnosis by 24 - so can't score on this either.
- Other diagnoses included: biliary disease PSC PBC, large duct obstruction, fatty liver disease - alcohol and NAFLD, A1ATD, hepatitis B - almost the whole spectrum of liver diseases.
- acute liver injury - indicated by cytopathic changes and Kupffer cell hyperplasia - 'ballooned' hepatocytes in the context of acute hepatitis, rather than fatty liver disease - no steatosis and no Mallory bodies.
- ductular reaction as a component of acute liver injury - not in indication that this is cholestatic disease, either LBDO or PSC/PBC.
- AIATD and hepatitis B perhaps suggested because features on these special stains are difficult to see on digital slides.

Case LR11 75F

Abnormal LFTs and jaundice.

Extra stains: vG, retic, PASD, shikata

Scoring summary agreed at meeting:

No consensus diagnosis – not suitable for scoring.

Further clinical information – this was an example of nitrofurantoin induced hepatitis with some autoimmune features on histology.

Biopsy 1 month after abnormal LFTs detected – ALT was 1411, already falling by the time of the biopsy. IgG 23.9 but no autoantibodies.

Treated with steroids, ALT continued to fall steadily, and was normal 4 months after biopsy.

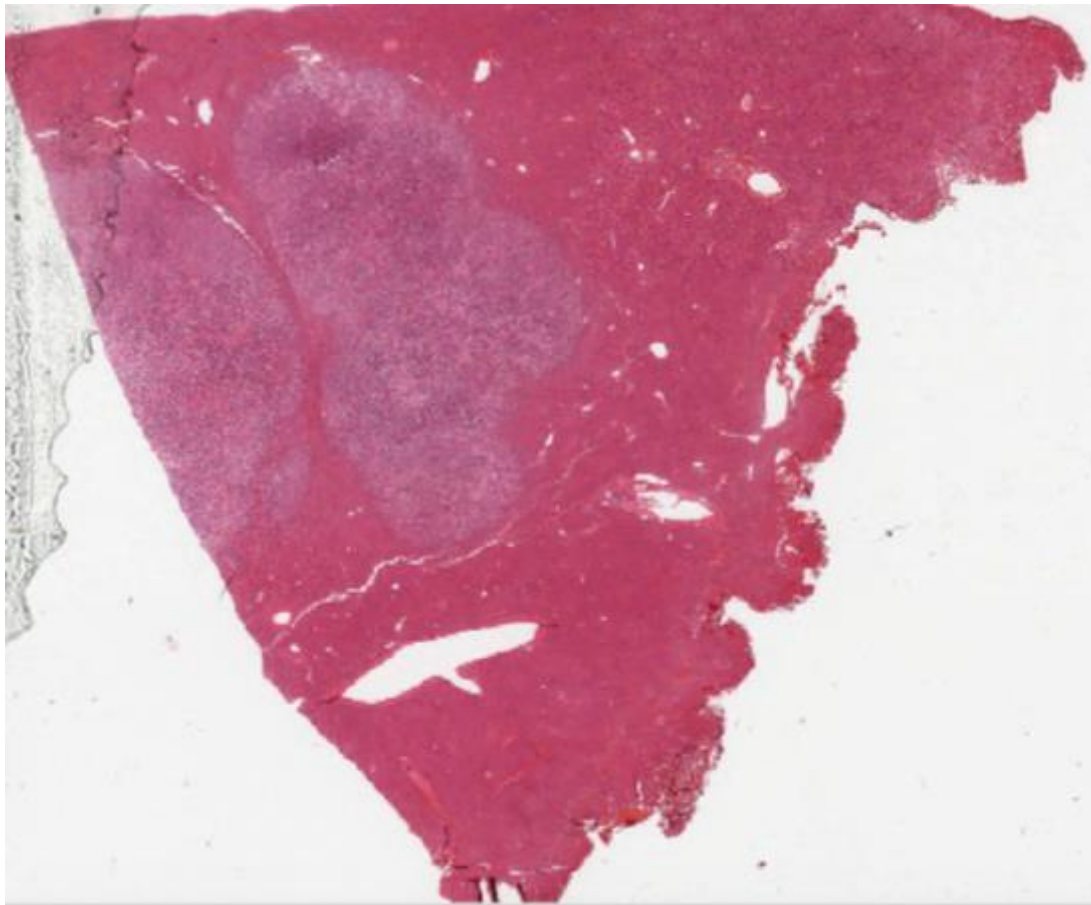
Steroids discontinued with no recurrence after 1 year.

Case LR12 67M

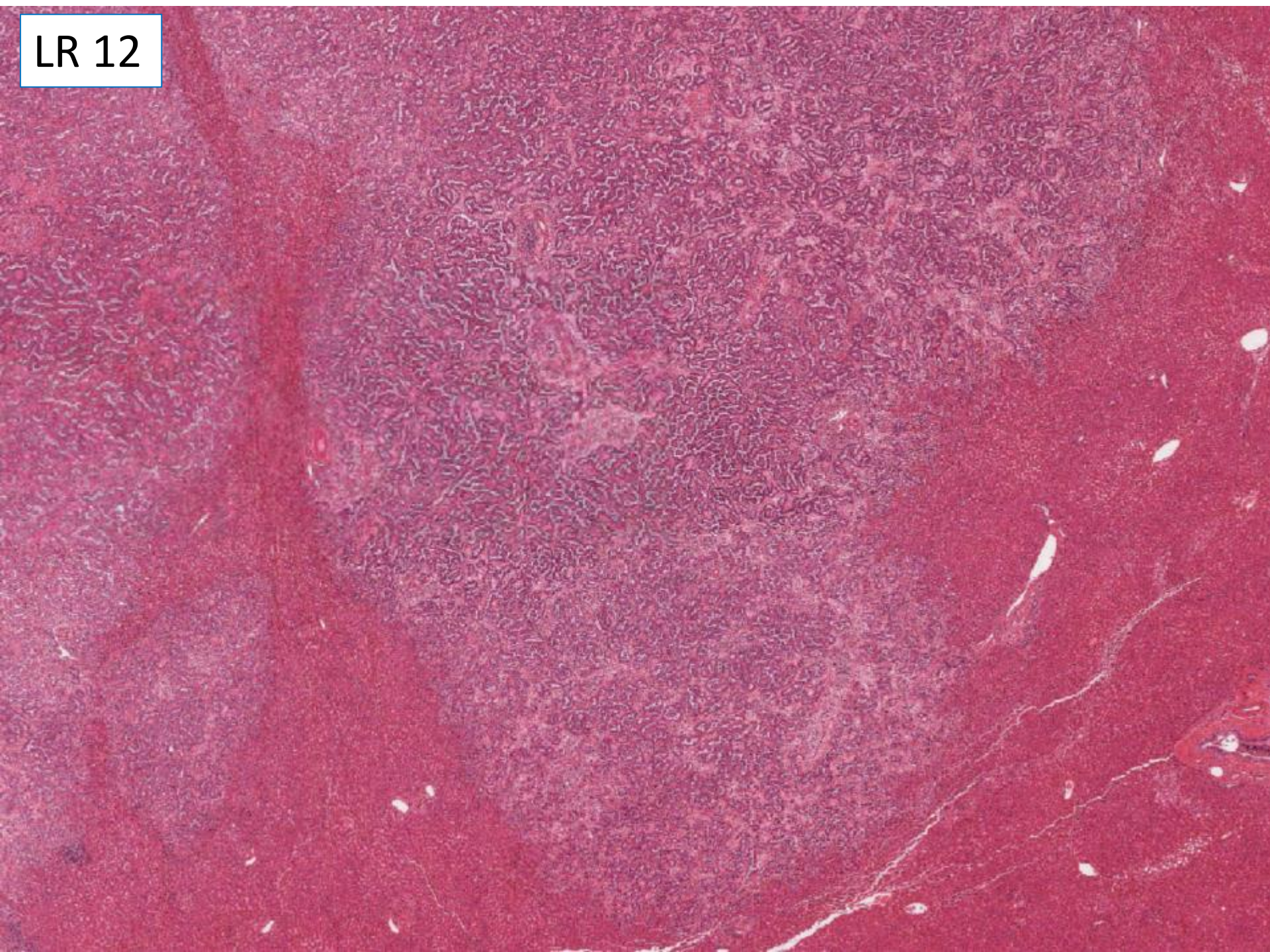
History of primary carcinoid lung tumour with solitary liver metastasis. Metastasectomy performed.

Liver disc 7.8cm diameter x 3.3cm deep. Nodule measuring 2.2cm, 0.6cm from the deep margin.

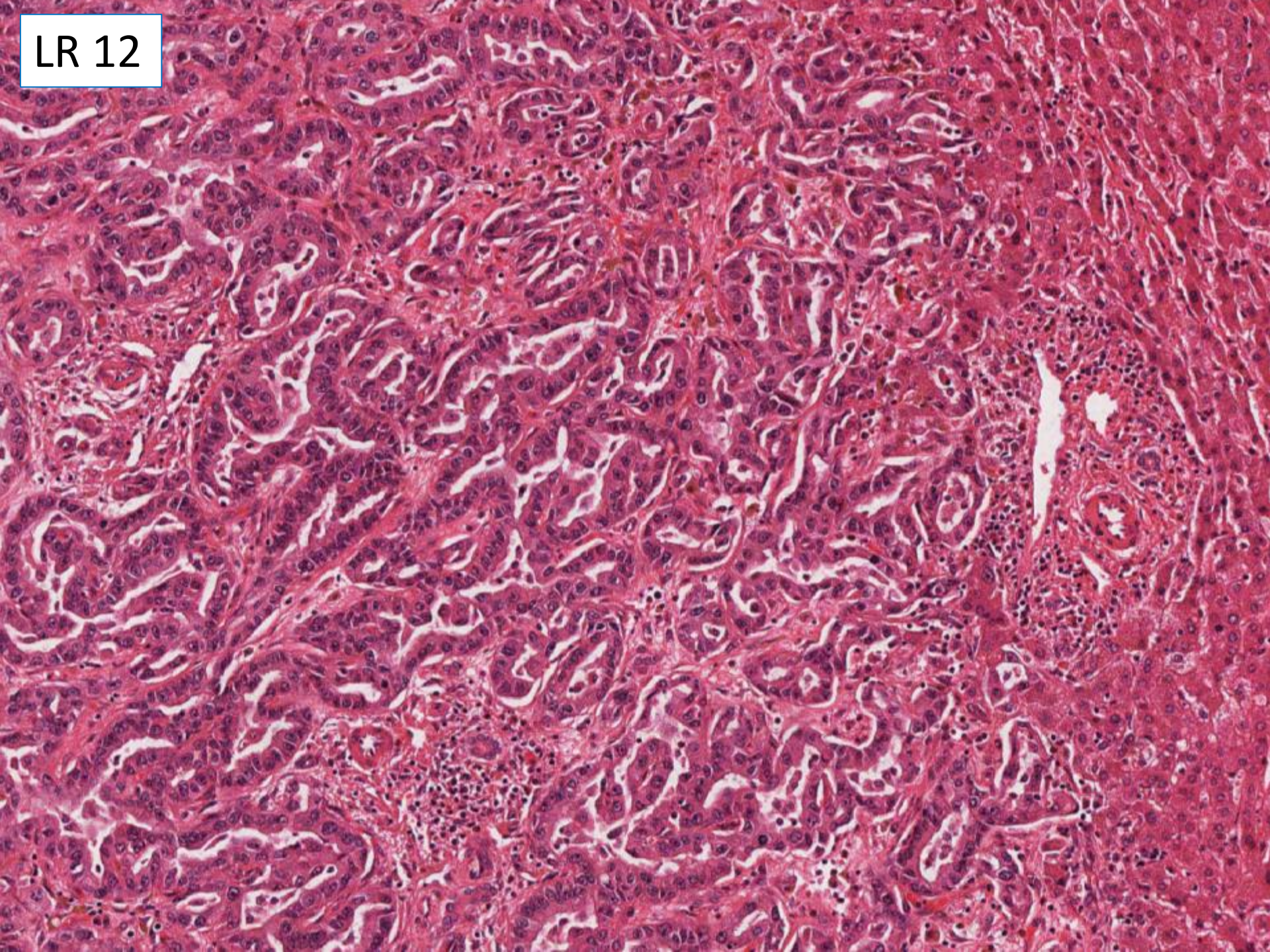
Also chromogranin, PSA, CK20, CK7, TTF, S100, synapto

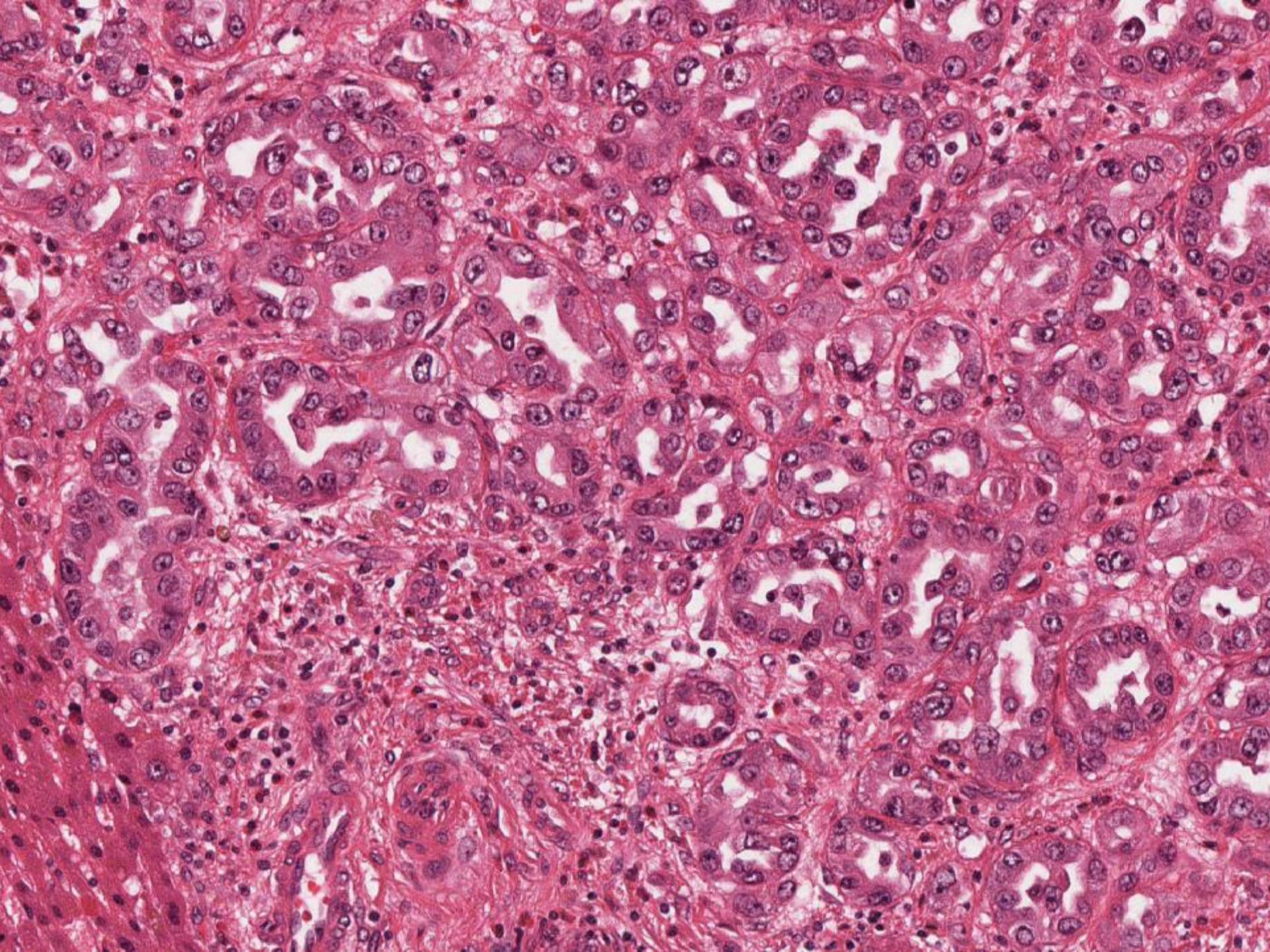


LR 12

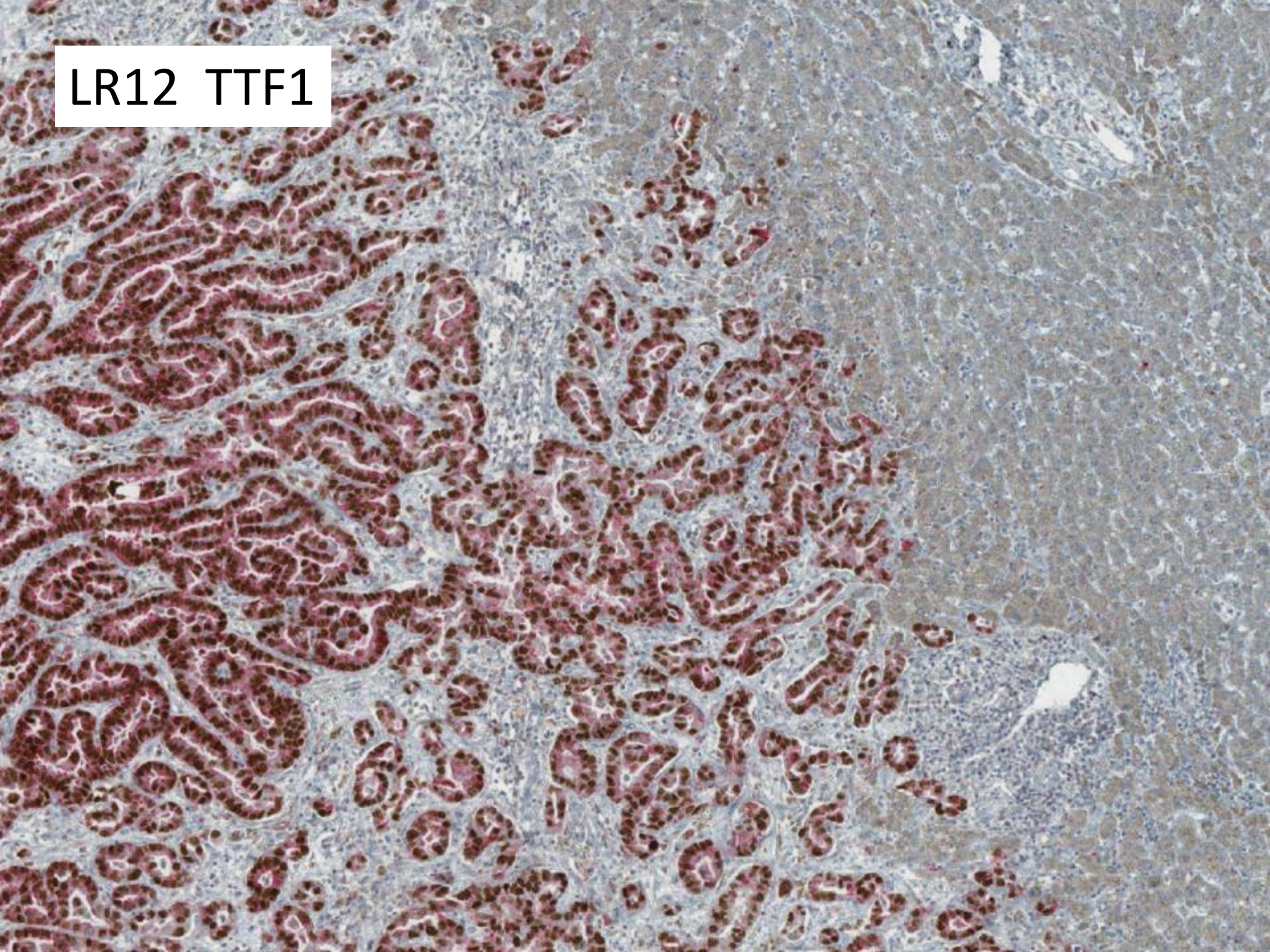


LR 12

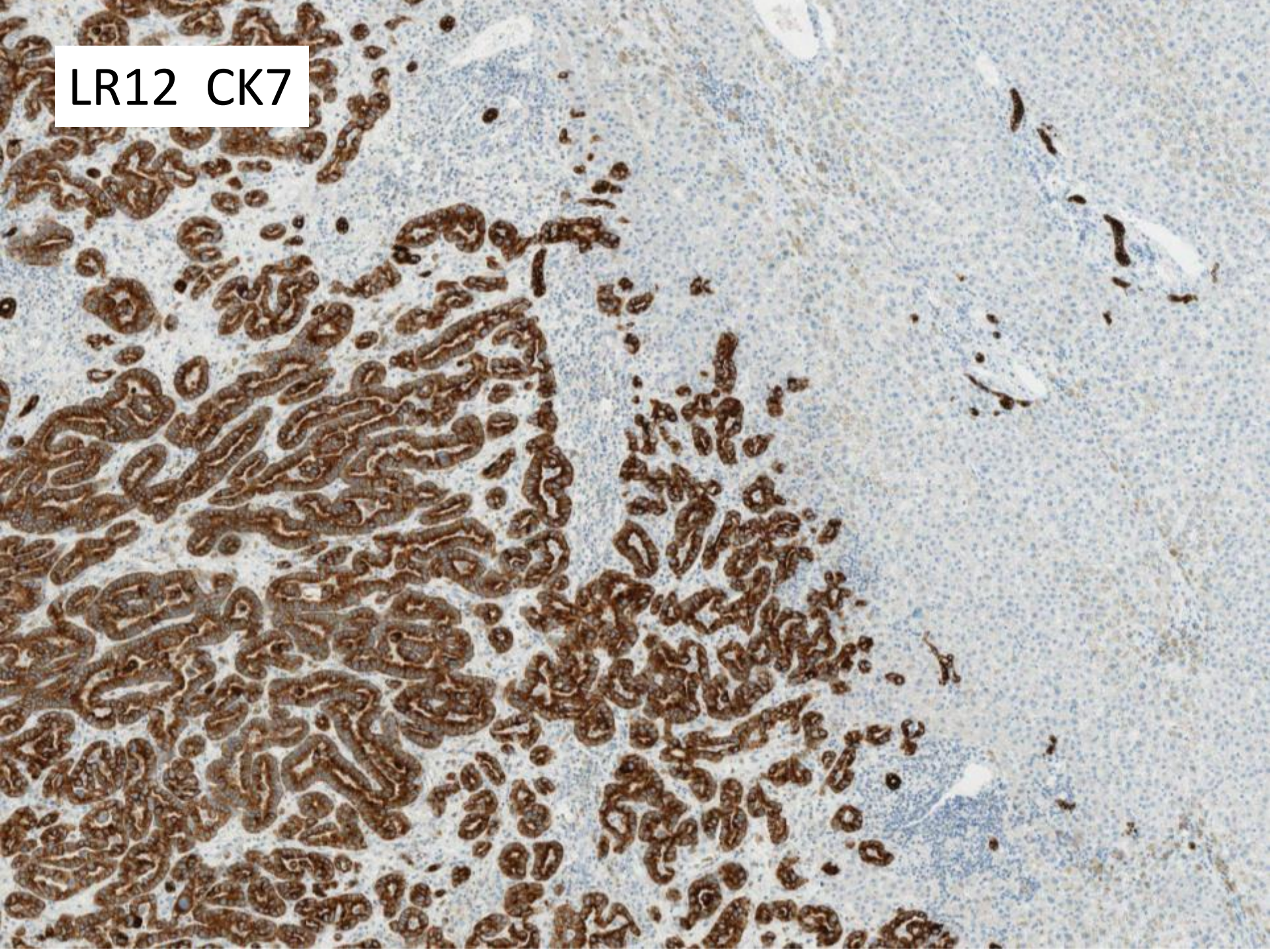




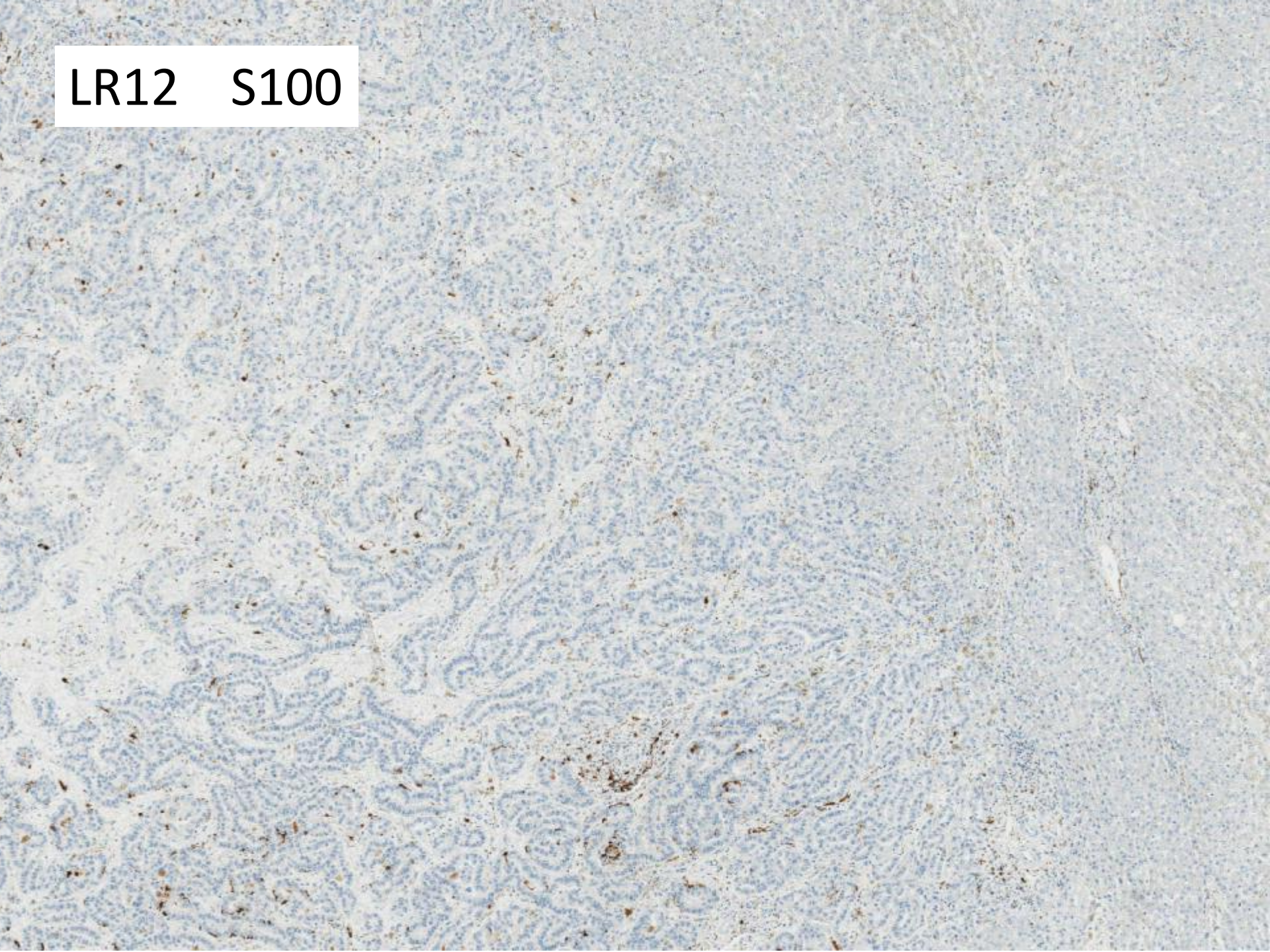
LR12 TTF1



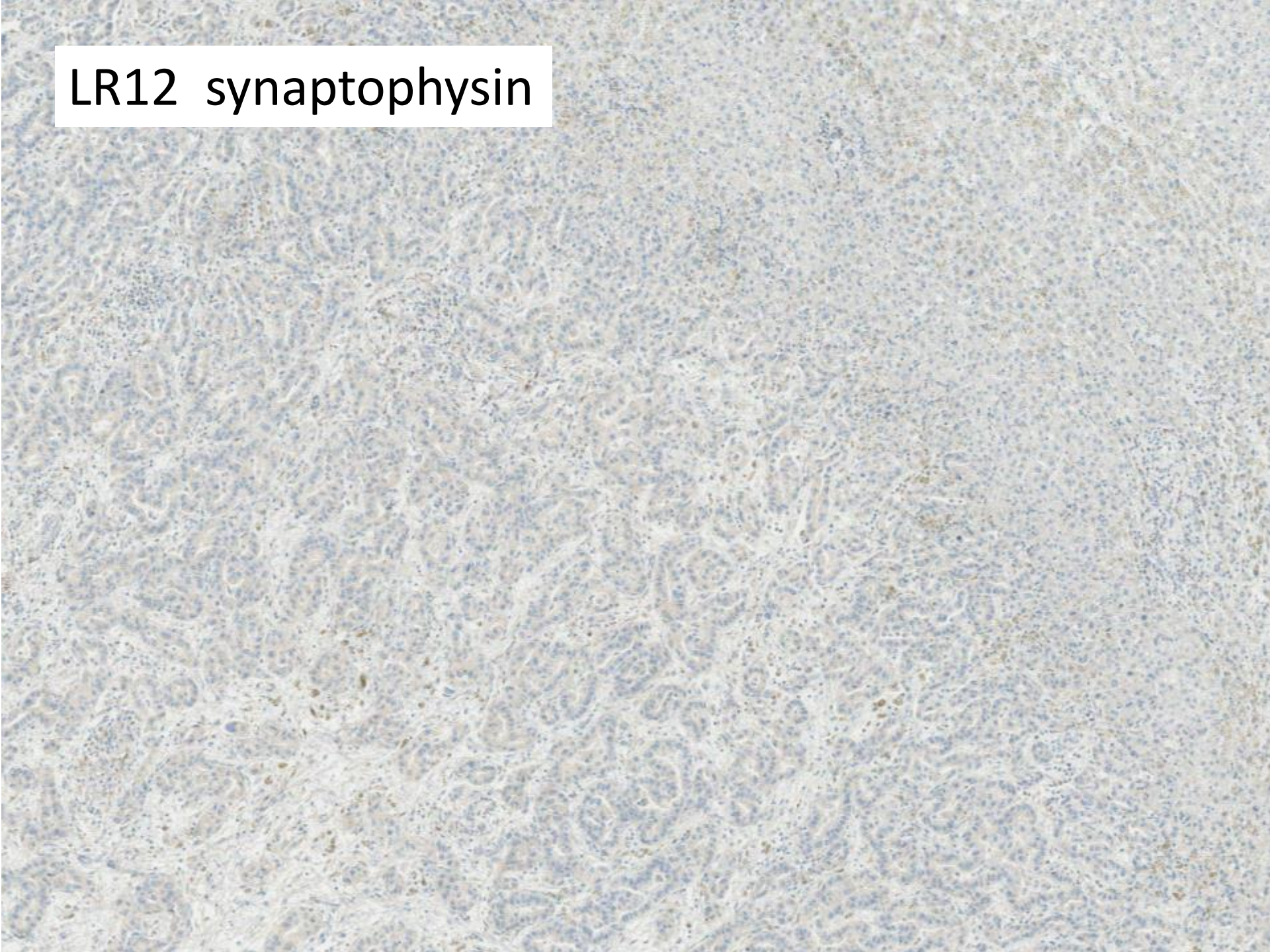
LR12 CK7



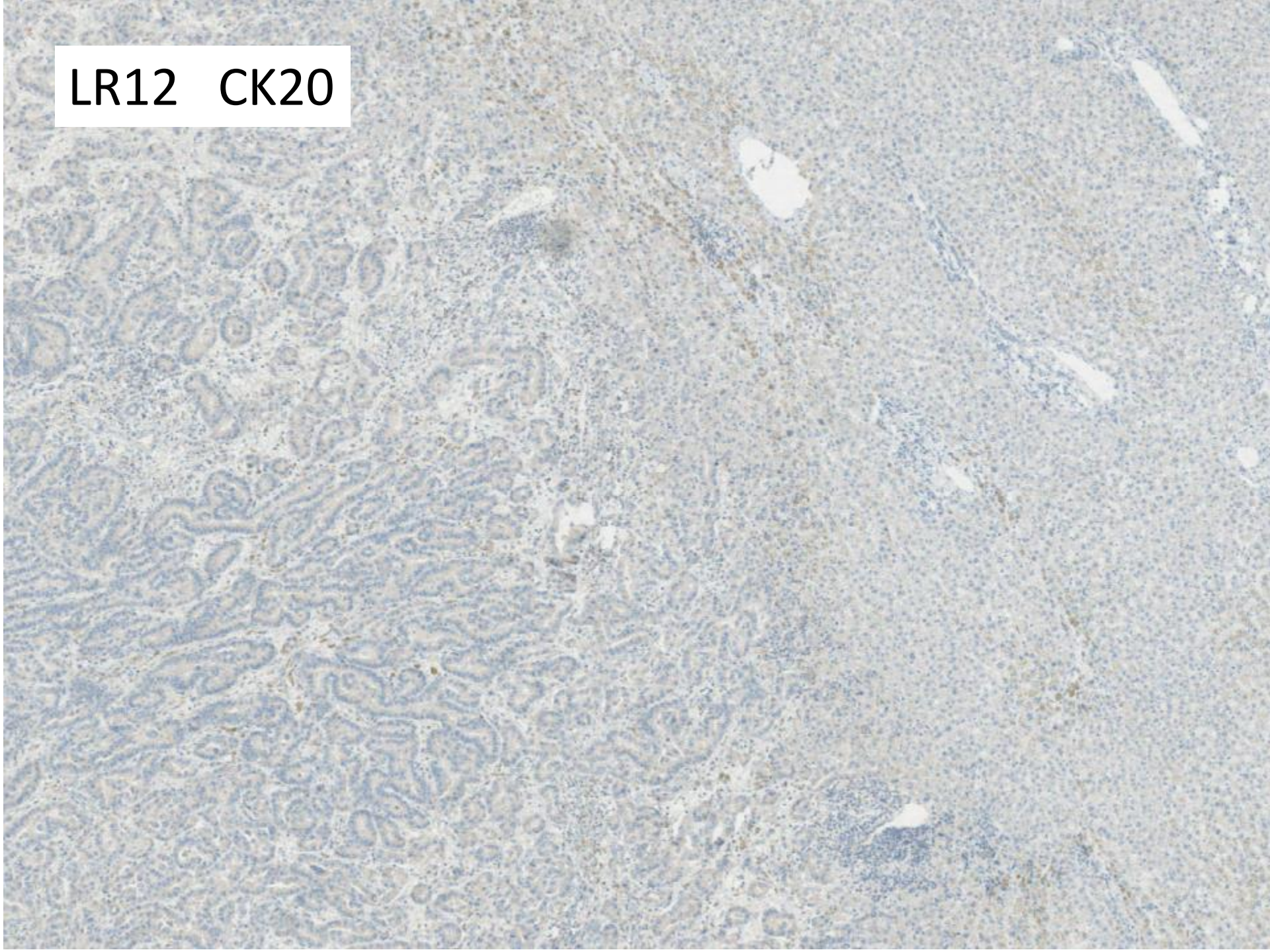
LR12 S100



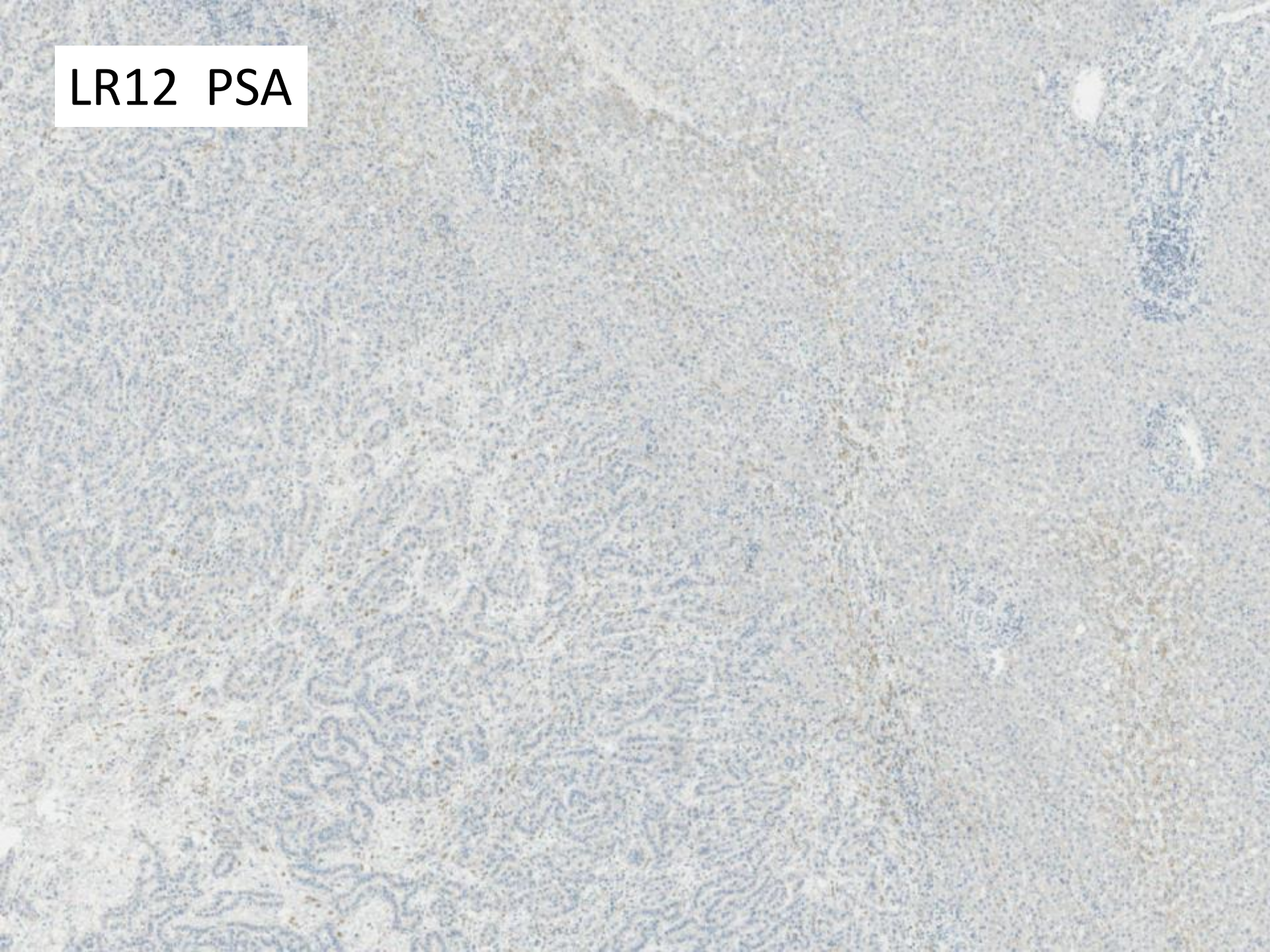
LR12 synaptophysin



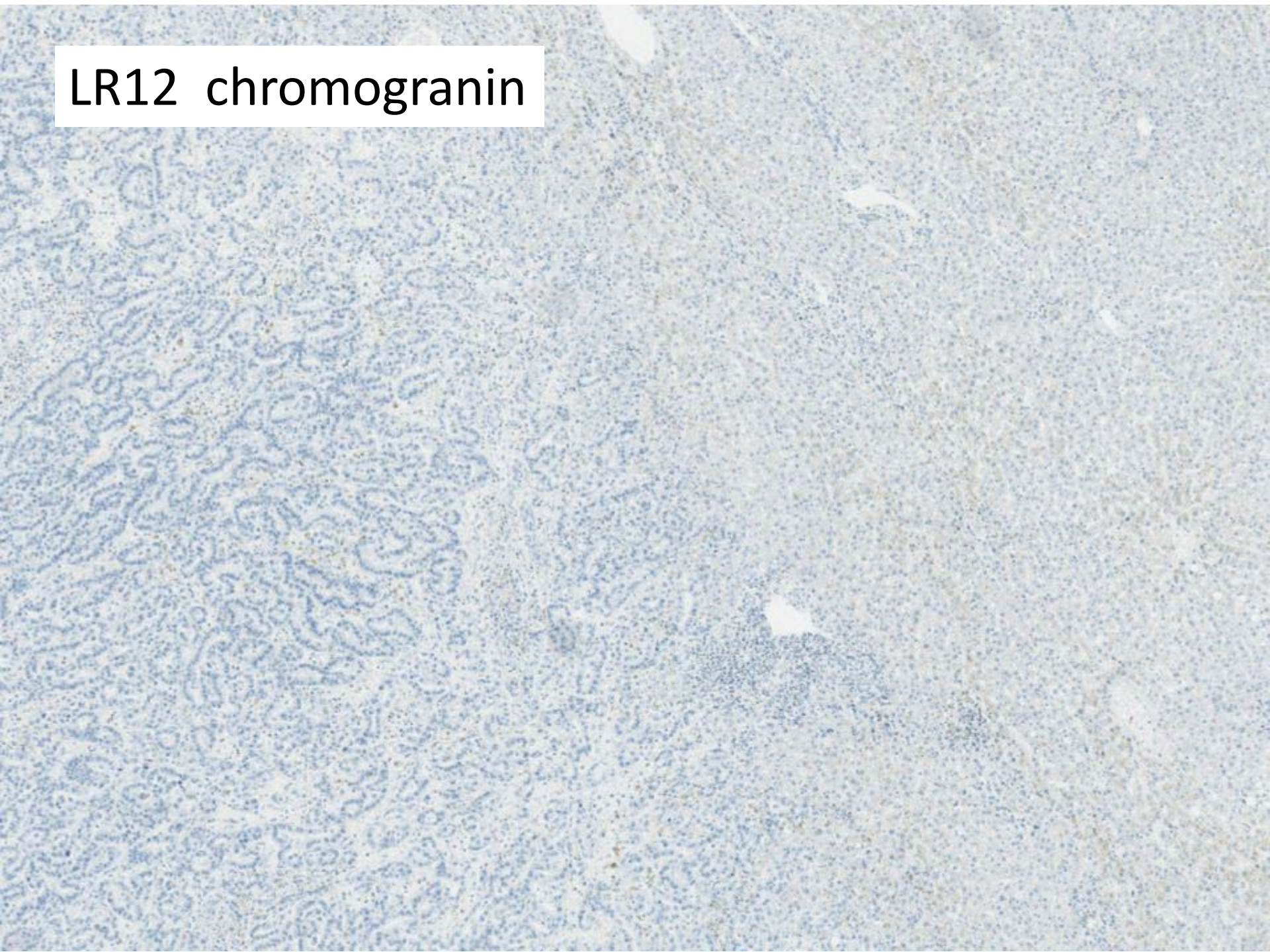
LR12 CK20



LR12 PSA



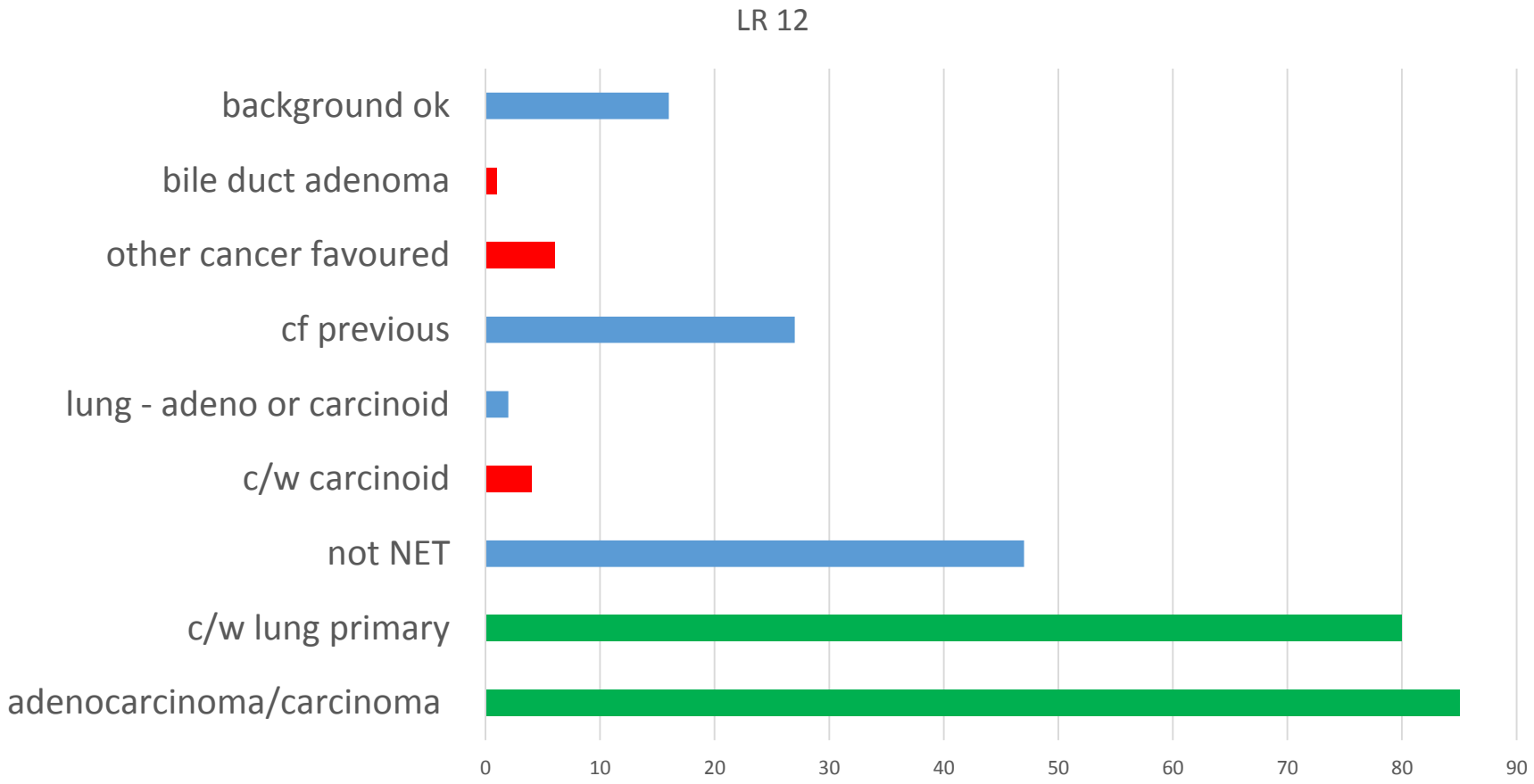
LR12 chromogranin



Case LR12 67M

History of primary carcinoid lung tumour with solitary liver metastasis. Metastasectomy performed.

Also chromogranin, PSA, CK20, CK7, TTF, S100, synapto



Consensus complete responses would include -

metastatic adenocarcinoma/carcinoma, c/w lung or lung included in differential diagnosis

Case LR12 67M

History of primary carcinoid lung tumour with solitary liver metastasis. Metastasectomy performed.

Also chromogranin, PSA, CK20, CK7, TTF, S100, synapto

Suggested scoring: for 10 points include

metastatic adenocarcinoma/carcinoma, and state that this is consistent with a primary in the lung or lung included in differential diagnosis, or would compare with previous histology.

Accepted responses where a different primary was favoured (mainly thyroid, cholangiocarcinoma) as long as there was a mention to compare with the previous histology.

Also accept diagnosis of - metastatic neuroendocrine tumour/metastatic carcinoid?

- all of them mention comparison with the previous histology, or need for more neuroendocrine immunohistochemistry.

Discussion of whether comparing with previous in this case would potentially just compound incorrect diagnosis – it's not neuroendocrine - should lose 10 (score 0) – all indicate that more work is needed – so score 5?

Lose 5 marks if - favours metastatic thyroid carcinoma - lung not mentioned nor compare with previous (2 responses). *agreed*

Lose 10 marks (score 0) if - bile duct adenoma,

no response. *agreed*

Case LR12 67M

History of primary carcinoid lung tumour with solitary liver metastasis. Metastasectomy performed.

Liver disc 7.8cm diameter x 3.3cm deep. Nodule measuring 2.2cm, 0.6cm from the deep margin.

Also chromogranin, PSA, CK20, CK7, TTF, S100, synapto

Scoring summary agreed at meeting:

For full marks - metastatic adenocarcinoma/carcinoma, and state that this is consistent with a primary in the lung or lung included in differential diagnosis, and would compare with previous histology.

Lose 5 marks for – metastatic neuroendocrine carcinoma, clear diagnosis based on morphology

Lose 5 marks for - Metastatic carcinoma from thyroid, as only diagnosis without differential

Lose 5 marks for – primary cholangiocarcinoma

Lose 10 marks for – bile duct adenoma or no answer.

The end