

National Liver EQA Scheme Circulation X

Pathological Society Meeting
Leeds, July 2008

Business Meeting

The meeting was attended by 13 members and 5 guests.

1. Open meeting, circulation X. 59 responses.
2. If you don't receive your slides when expected, please let us know a.s.a.p
3. Next round, circulation Y, discuss at open meeting during BSG, March 2009. Will start in October. Please send in any cases you have to Anne.
4. Change in administration – Anne retires after this circulation.
5. Staff of QARC (Mandy Winterbottom and Stella Myhill) will support the next round. Caroline Burnley is the quality manager; will apply for CPA accreditation in 2009. There may be an adjustment to the annual registration fee for the scheme.
6. Web site – is being re-designed to have separate pages for liver EQA, other CPD, and other liver-related matters. Link from the RCPATH web site, or type virtualpathology into Google.
7. Questionnaires to all histopathologists about liver histopathology and cholecystectomies – will come from RCPATH next week.

Case 290

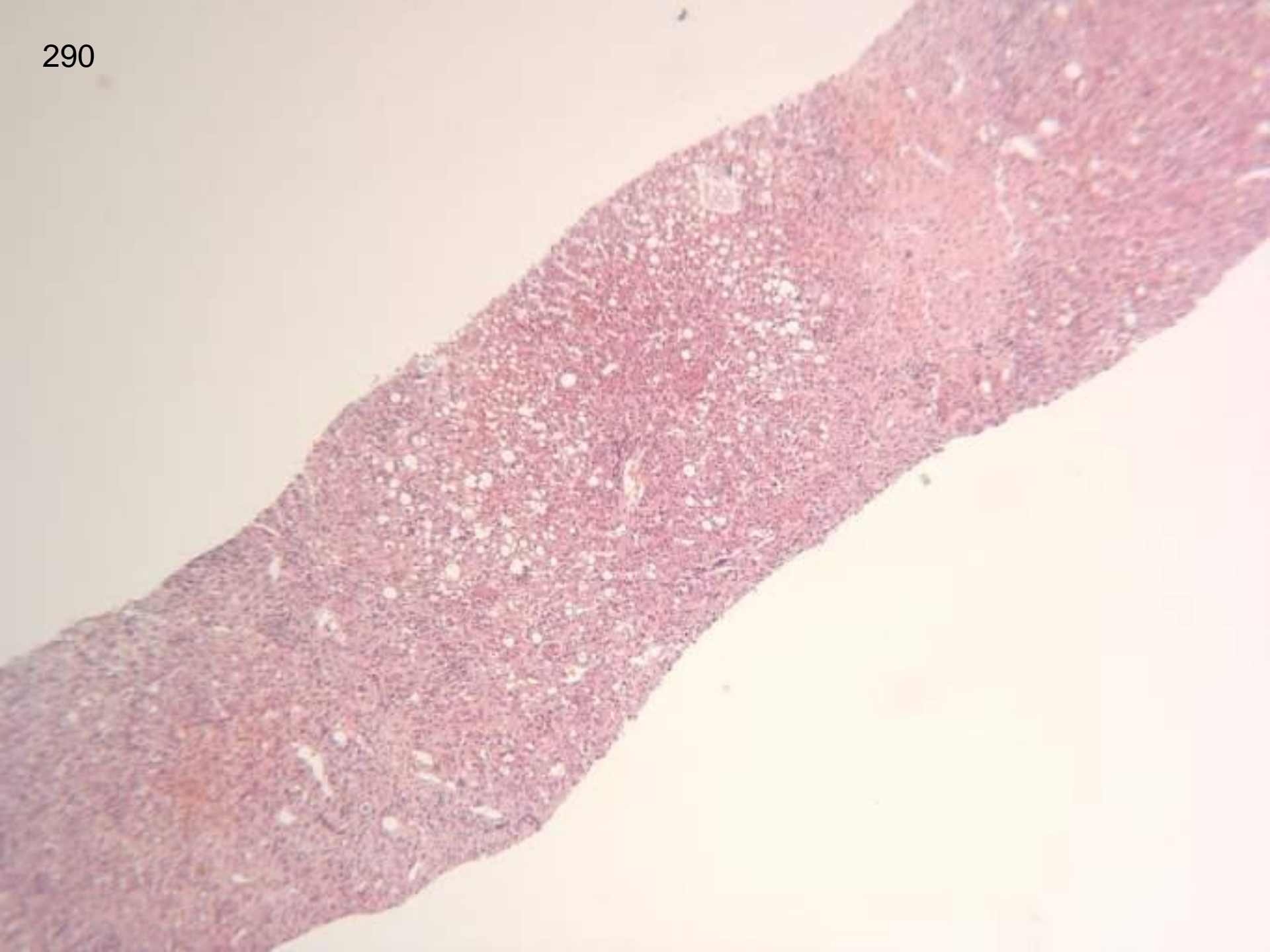
- 44/F
- Hypercholesterolaemia, hyperthyroidism.
- ? steatohepatitis, biopsy to exclude autoimmune hepatitis

17mm liver biopsy

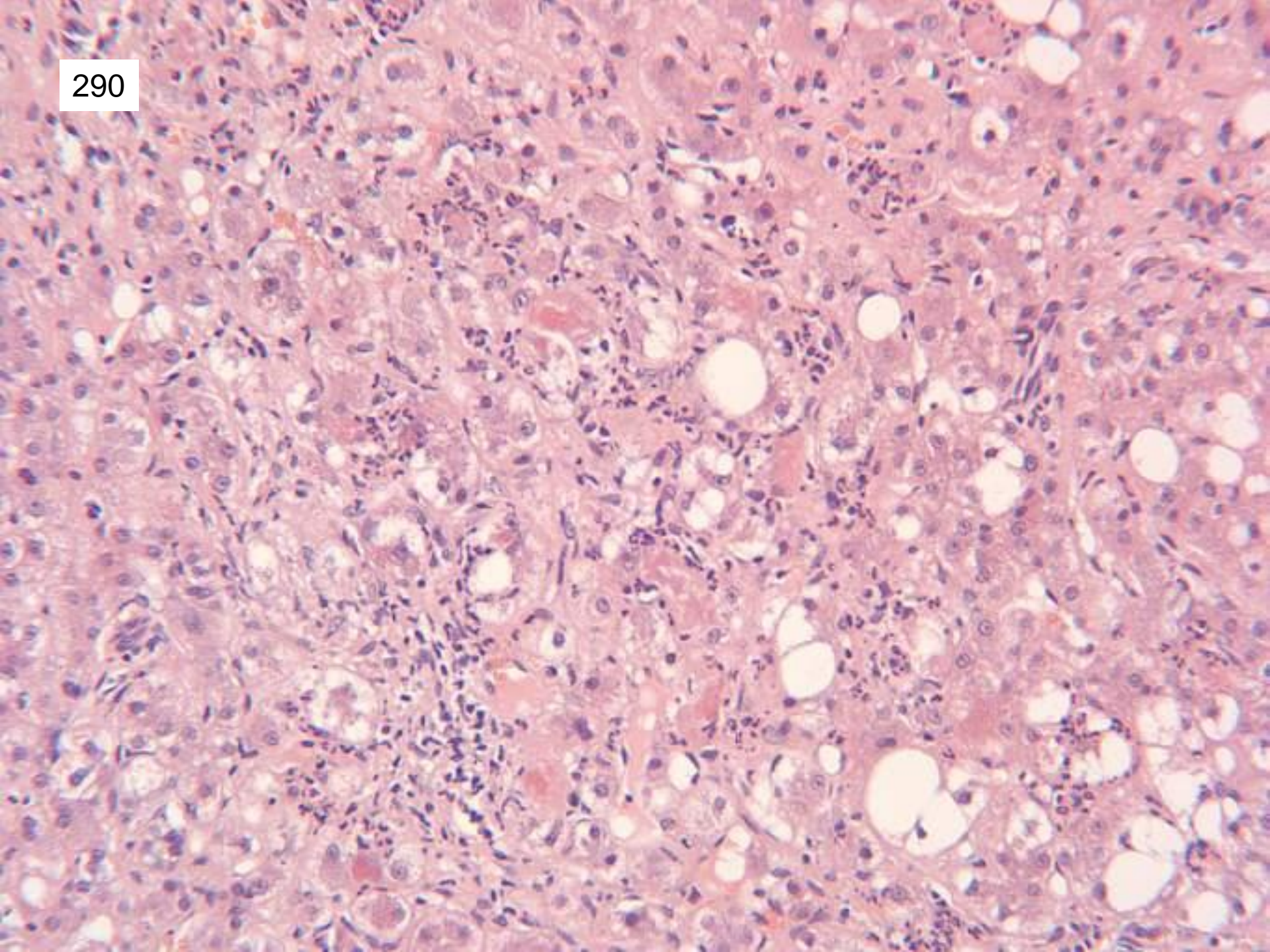
290



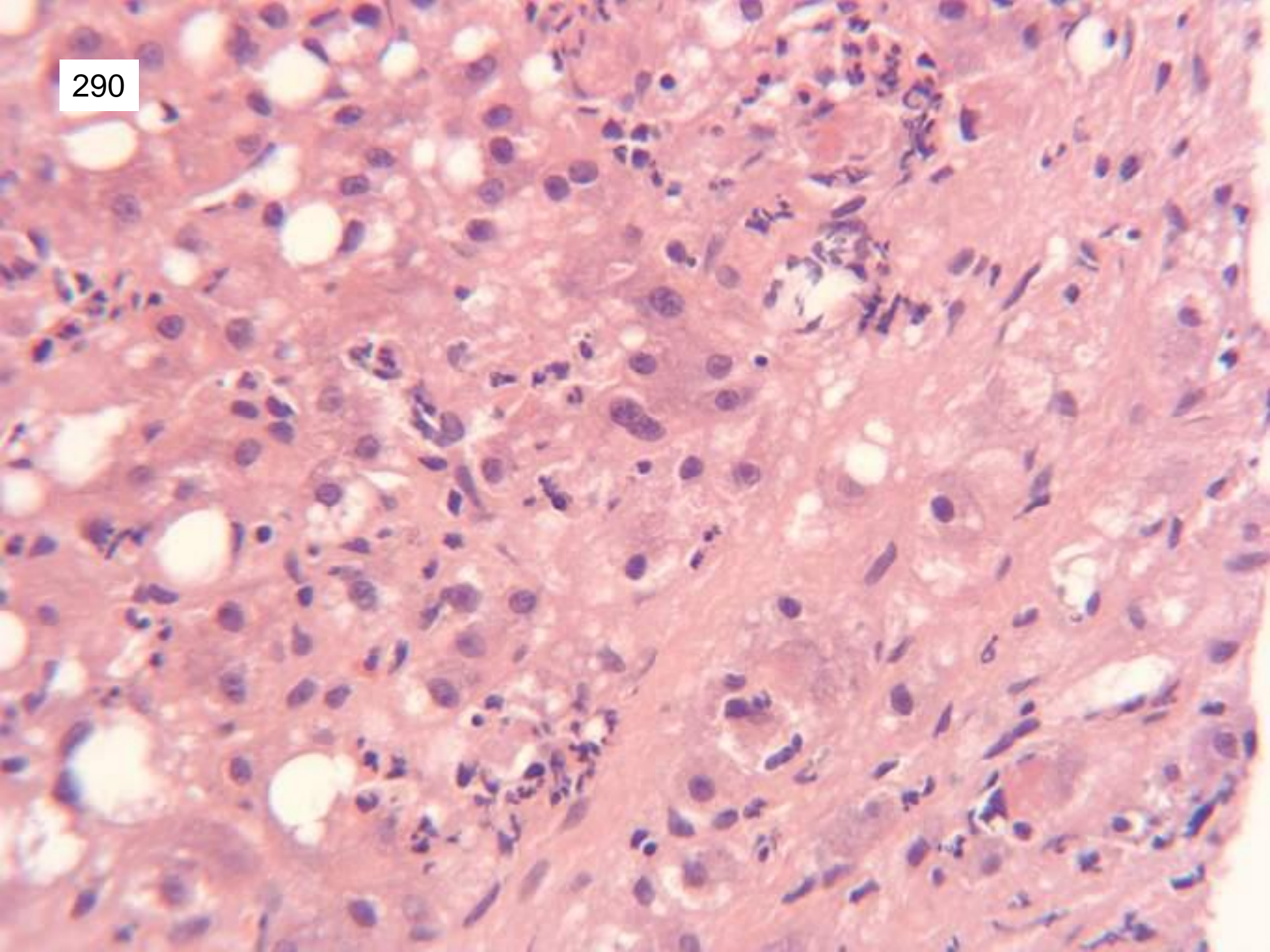
H



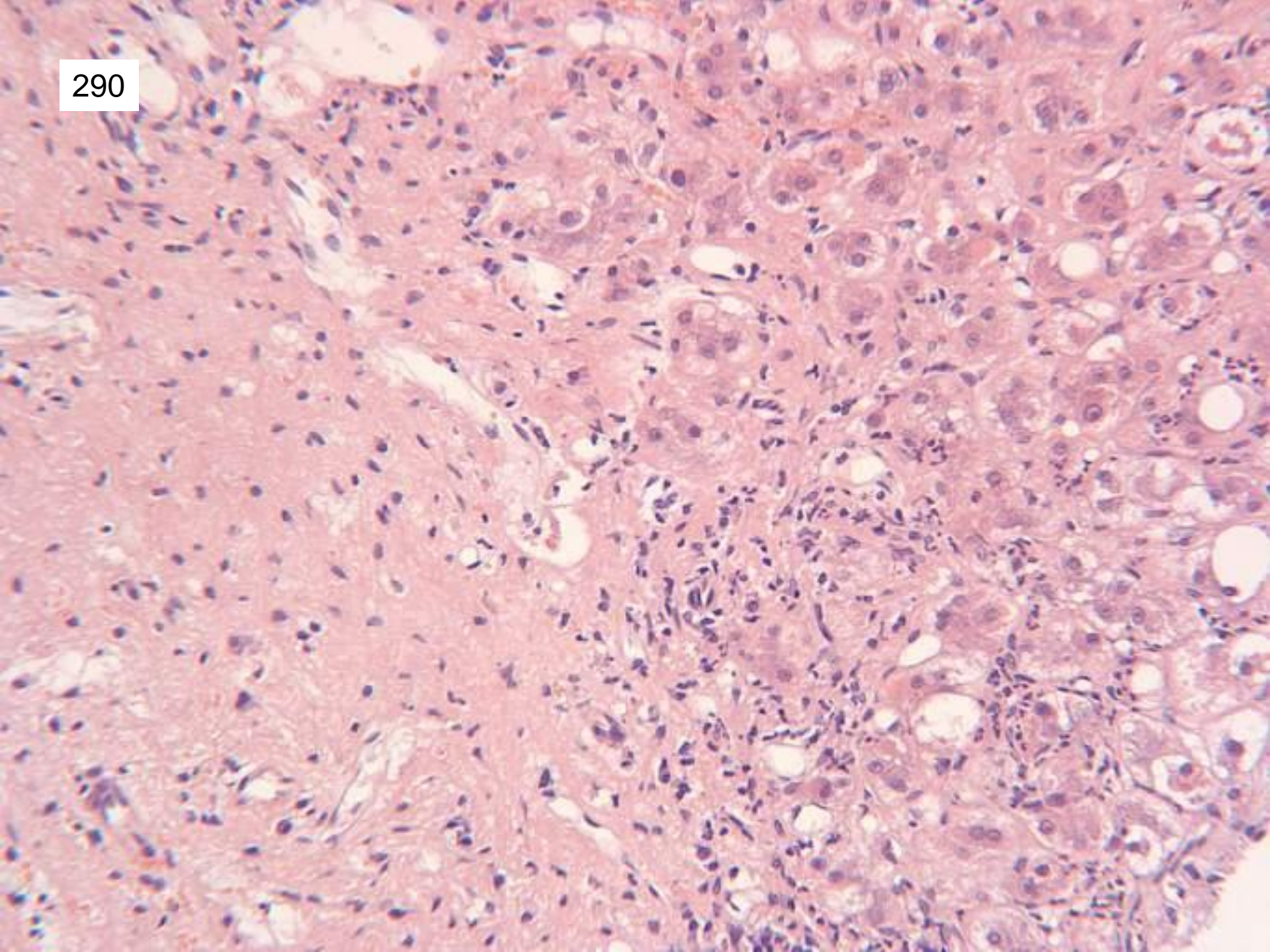
290



290



290



Case 290

Responses:

Morphology:

- 20 Steatohepatitis
- 20 Steatohepatitis with probable/definite cirrhosis
- 16 steatohepatitis with fibrosis
- 1 Fatty liver hepatitis with developing cirrhosis
- 1 Acute hepatitis with confluent necrosis, fatty change*
- 1 Alcohol type hepatitis (only answer)

Aetiology:

- 34 Alcohol only/strongly favoured
- 15 ASH or NASH
- 2 NASH
- 10 No mention of alcohol*
- 23 Not AIH
- 2 Could be AIH

CASE 290

Scoring:

For full marks, answers must include morphology that includes steatohepatitis or equivalent terminology and some mention of alcohol aetiology.

0 points for acute hepatitis with confluent necrosis.

5 points where alcohol is not included in aetiological differential.

Discussion

Distinction of ASH from NASH – extensive fibrosis and frequent Mallory bodies as in this case – pattern of central sclerosing hyaline necrosis – not seen in NASH associated with metabolic syndrome, and very suggestive of alcohol.

Clinical question was to exclude autoimmune hepatitis – no histological features to suggest that autoimmune hepatitis had contributed to liver injury. A good report should include this comment, although not incorporated in EQA scoring.

Case 290

Original diagnosis: steatohepatitis strongly suggestive of alcoholic aetiology

No history of high alcohol intake. Not obese/diabetic.

Liver transplant 9 months later – histology much the same, but more fibrosis.

Very well now - 6 months later – alcohol suspected but never confirmed by patient

Case 291

- 71/F
- Cirrhosis. ? Cause. Hepatitis serology negative, autoimmune profile negative

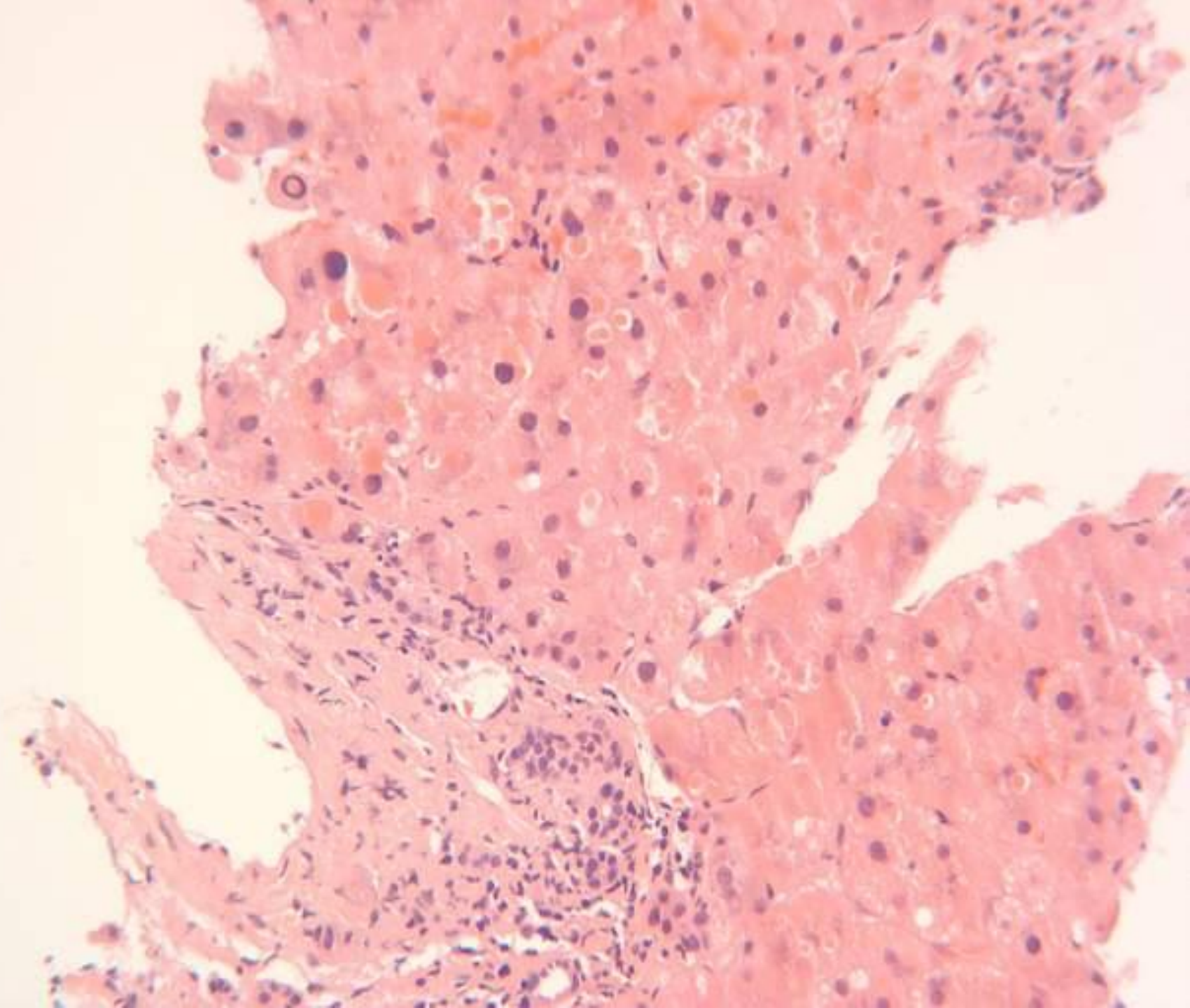
Liver biopsy – 4 cores

H&E slide + 2 photo images PASD

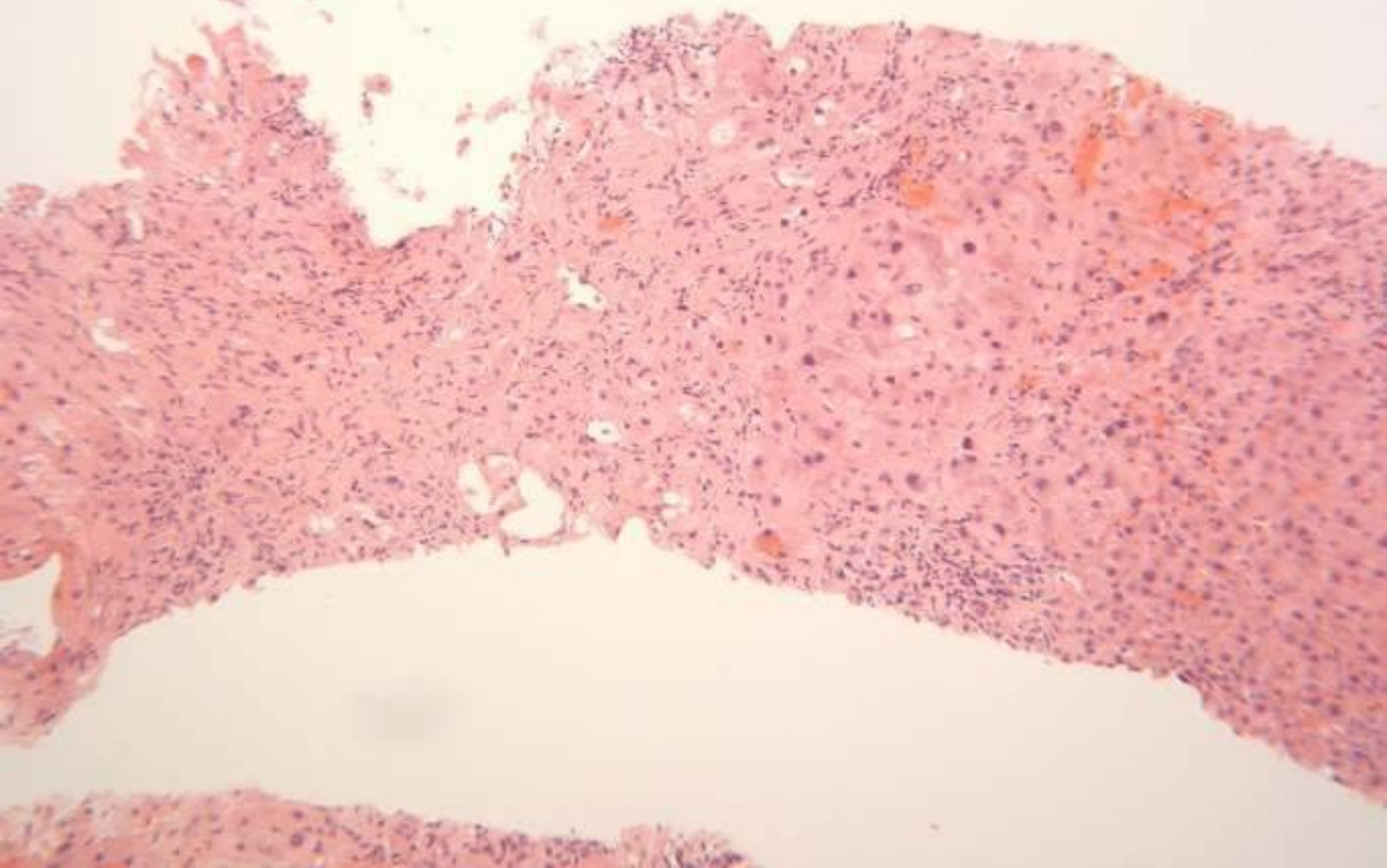
291

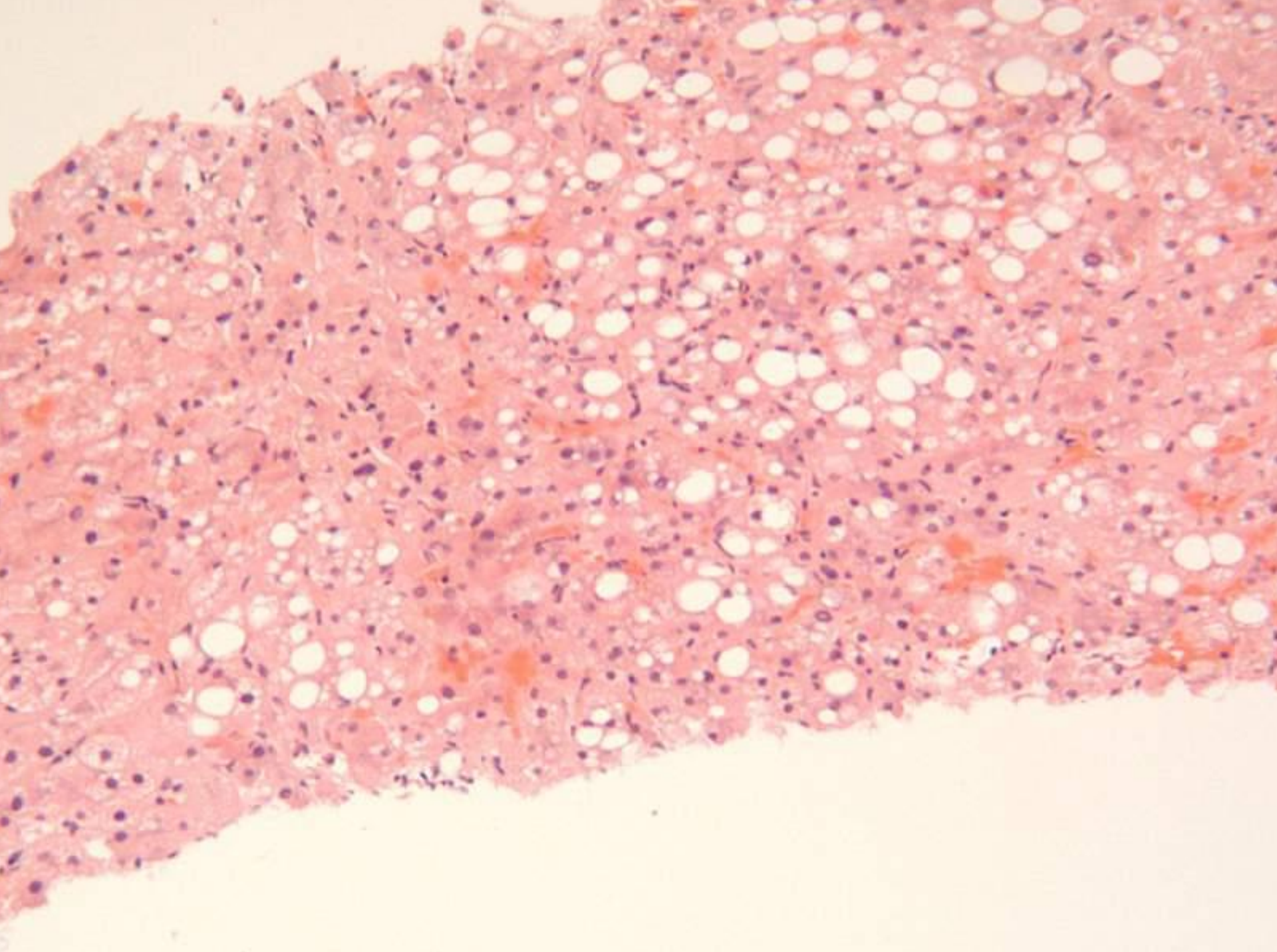


291

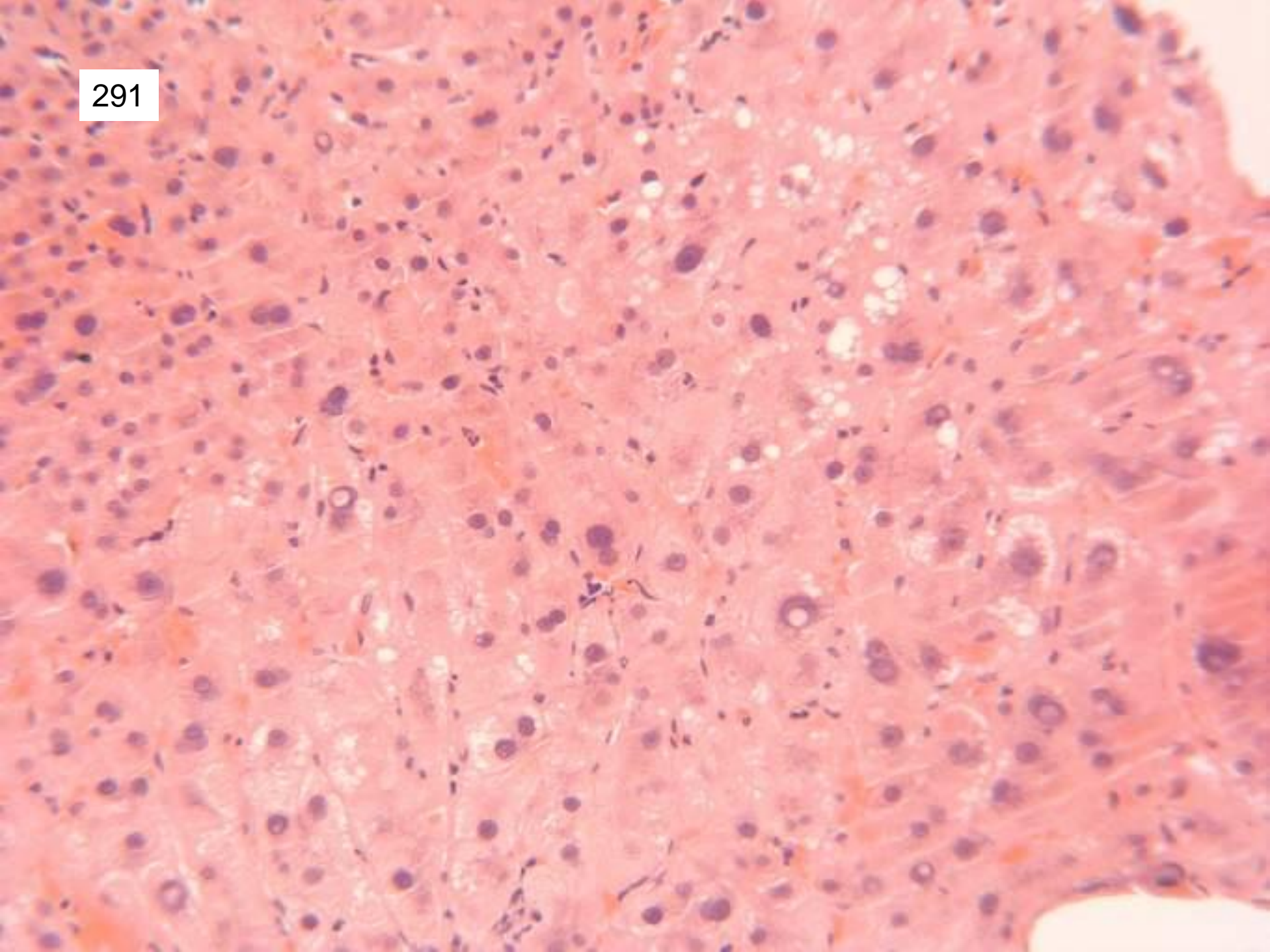


291

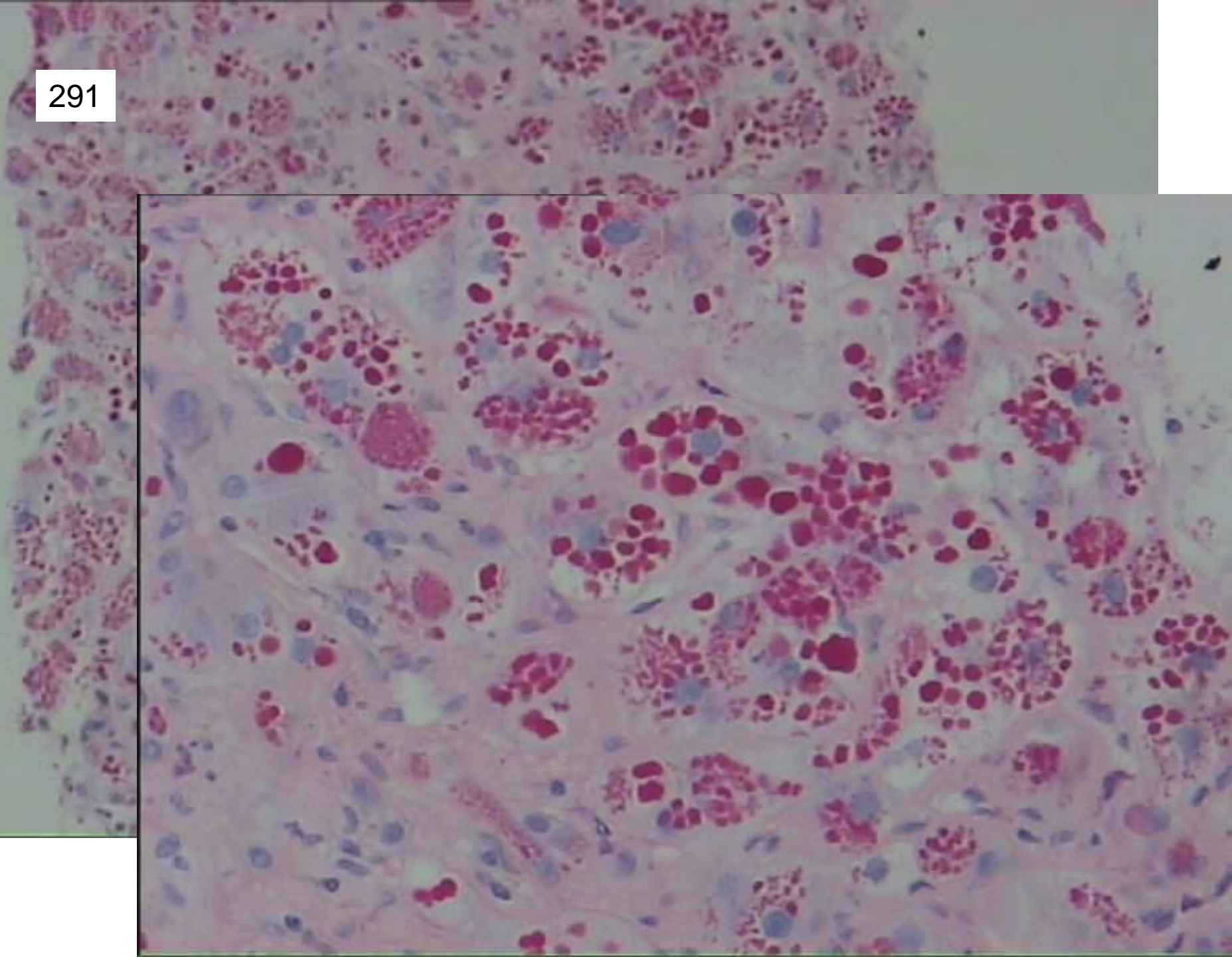




291



291



Case 291

Responses:

50 alpha 1 antitrypsin deficiency and
cirrhosis/developing cirrhosis

6 A1AT and fibrosis

3 *A1ATD, no comment on stage*

9 Also large cell dysplasia/change

7 Also steatosis/steatohepatitis

24 needs genetics for A1ATD

CASE 291

Scoring:

10 points for alpha-1 antitrypsin deficiency with comment on fibrosis/ cirrhosis.

5 points if no comment at all on fibrosis/ stage.

Discussion:

Histological features characteristic of alpha-1 antitrypsin deficiency – should prompt further investigation for this disorder. Similar changes rarely seen e.g. in alcoholic cirrhosis.

Potential differential diagnosis of other endoplasmic reticulum storage disorders, but members present had not encountered these in practice.

Case 291

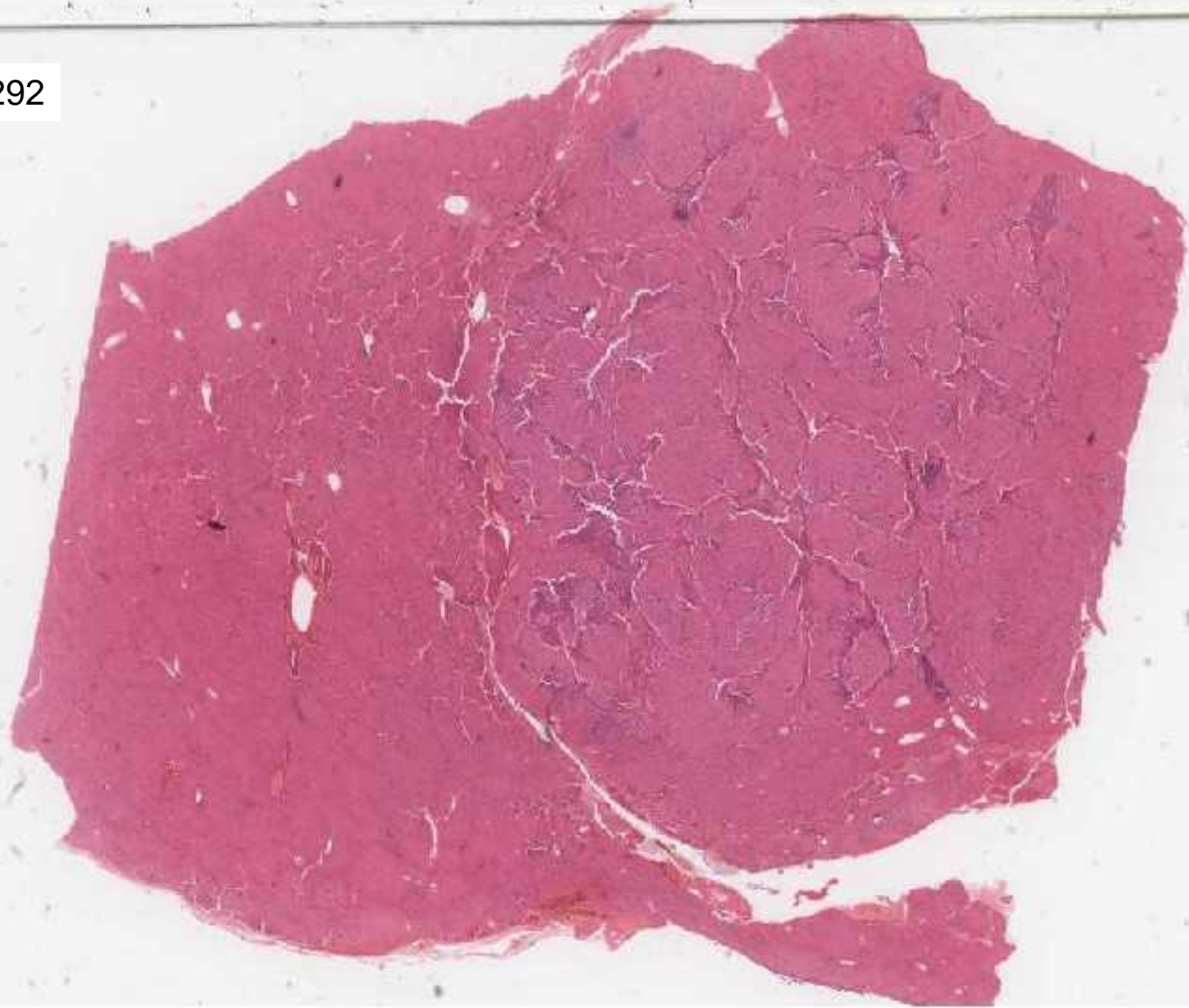
Original diagnosis: alpha 1 antitrypsin deficiency, with cirrhosis

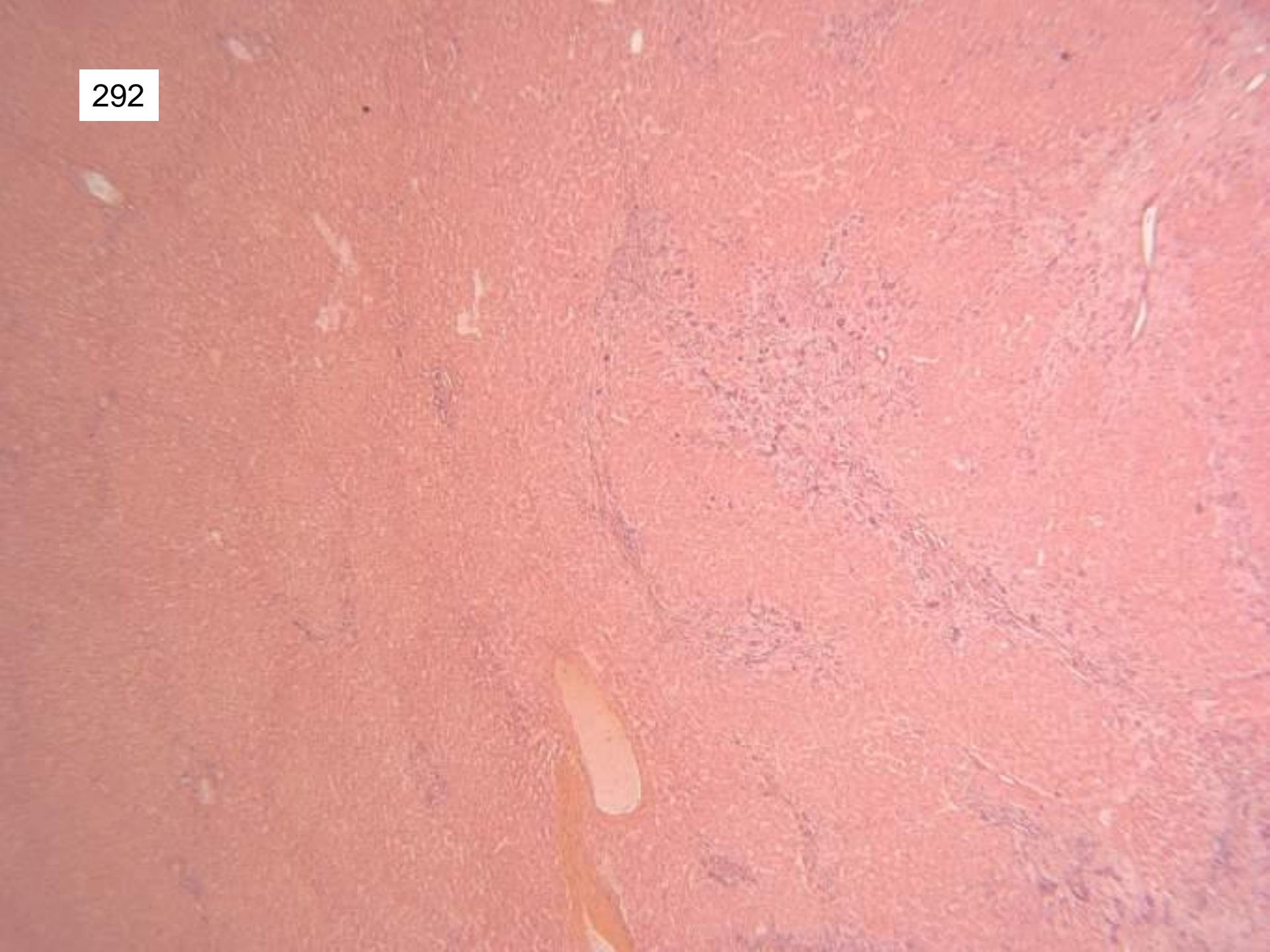
Heterozygous PiMZ, low A1AT levels

Case 292

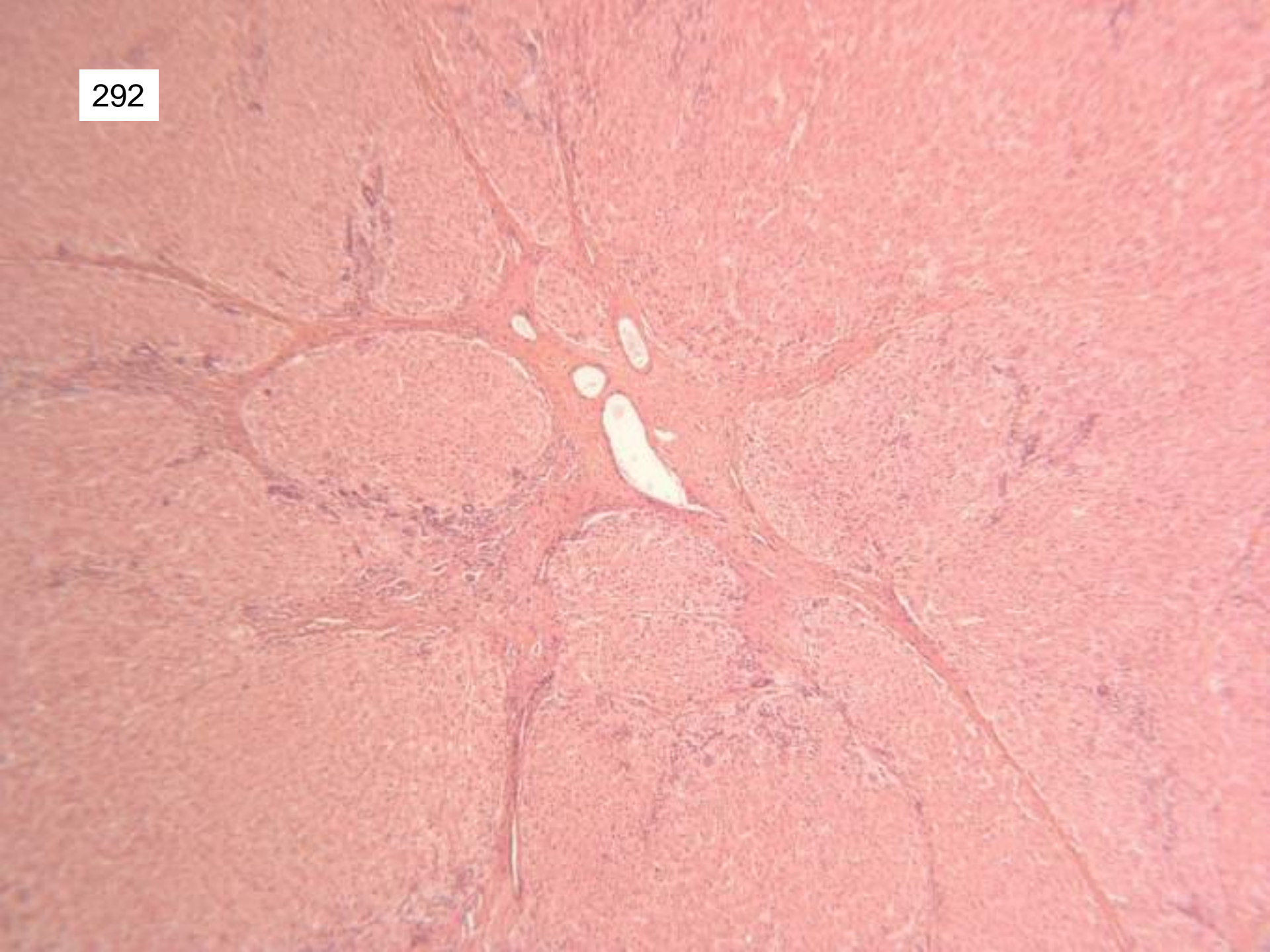
- 35/F
- Small adenoma, increasing in size, risk of HCC transformation. No cirrhosis, no hepatitis
- Right hepatectomy – lobe of liver 405g. On slicing: spherical white lesion 20mm diameter, close to resection margin

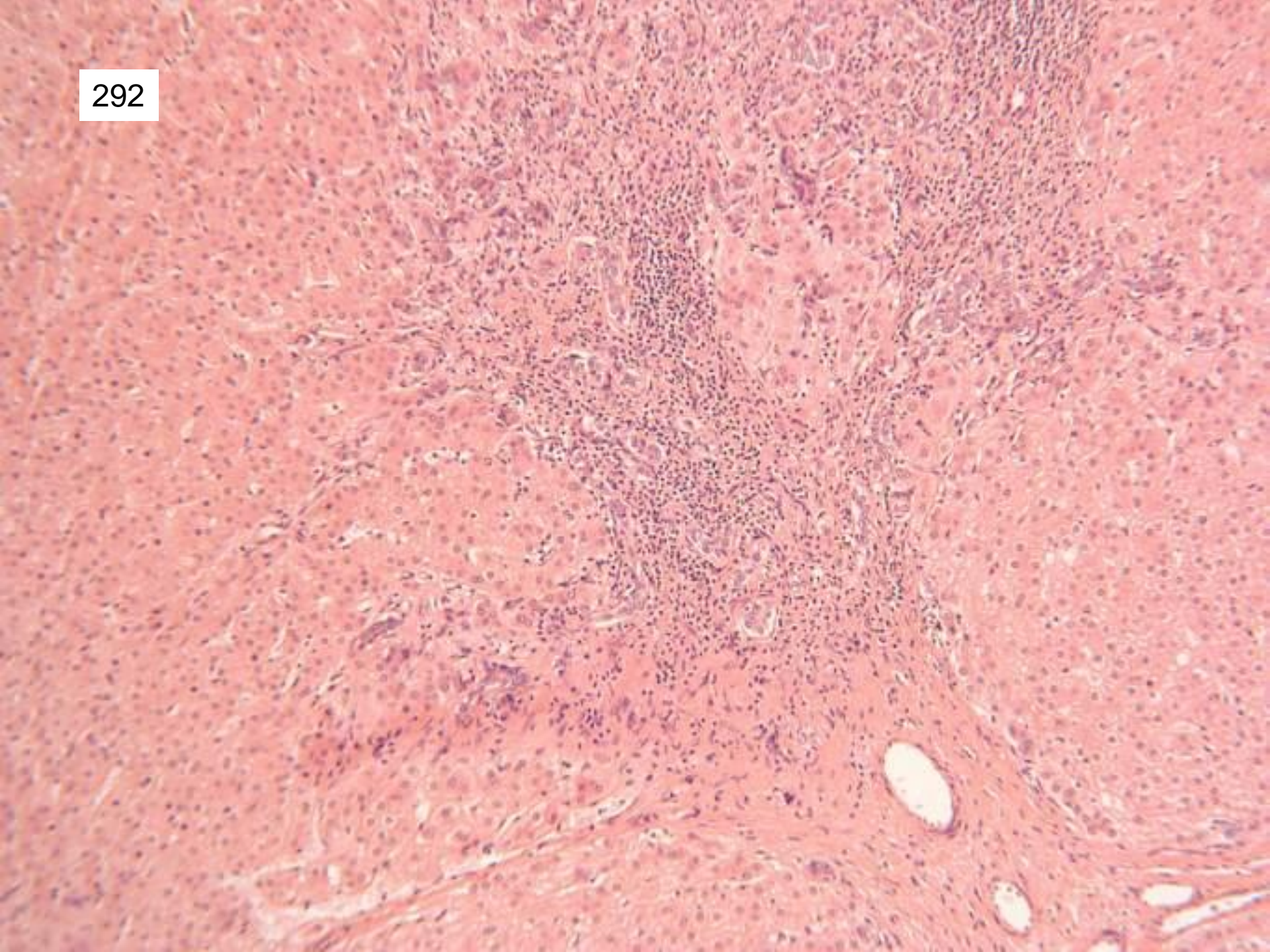
292





292





Case 292

Responses

57 Focal nodular hyperplasia

1 Adenoma

1 Hepatocellular carcinoma

Original diagnosis: focal nodular hyperplasia

CASE 292

Scoring:

Score 10 points for focal nodular hyperplasia, and 0 points for other diagnoses.

Discussion:

This case has the characteristic features of FNH, including central stellate scar, with focal ductular reaction, absence of main bile ducts, patchy chronic inflammation.

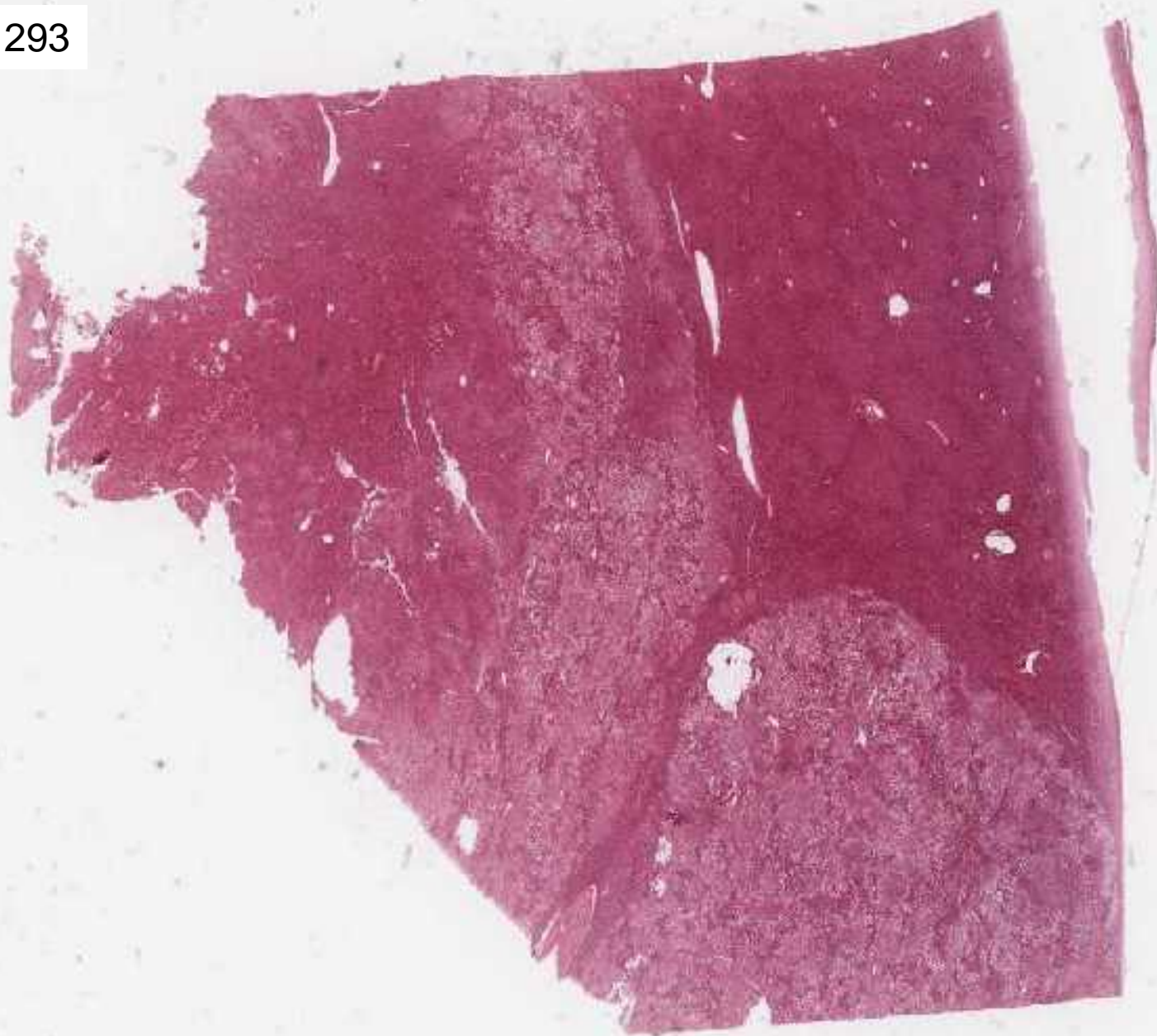
Case 293

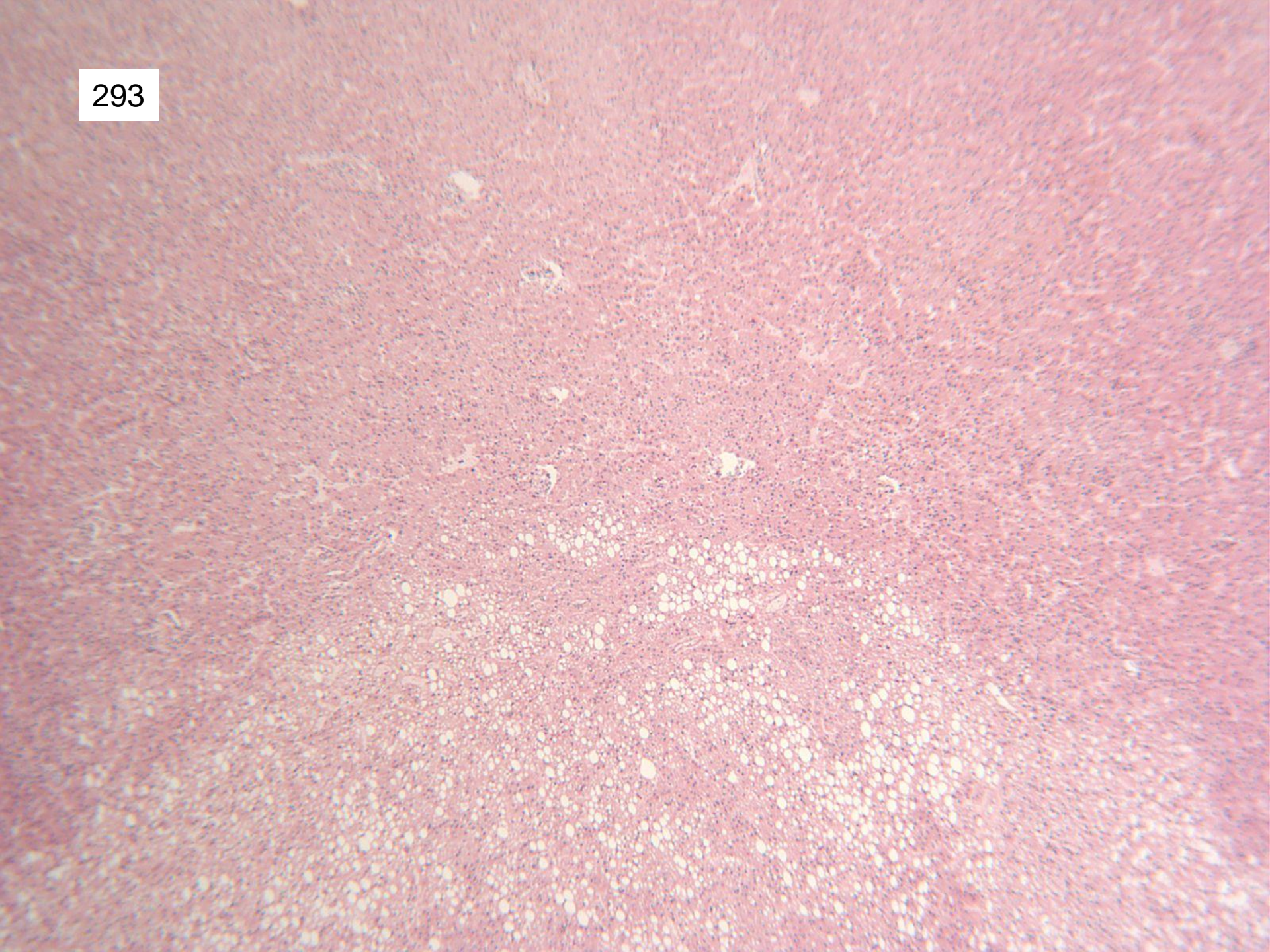
- 60/F
- Patient complained of mild upper right quadrant discomfort. CT scan showed a few nodules ? HCC resulting in a partial hepatectomy

Left hepatectomy weighing 354g. Cut surface shows four well defined yellow/brown nodules, max. 4cm.

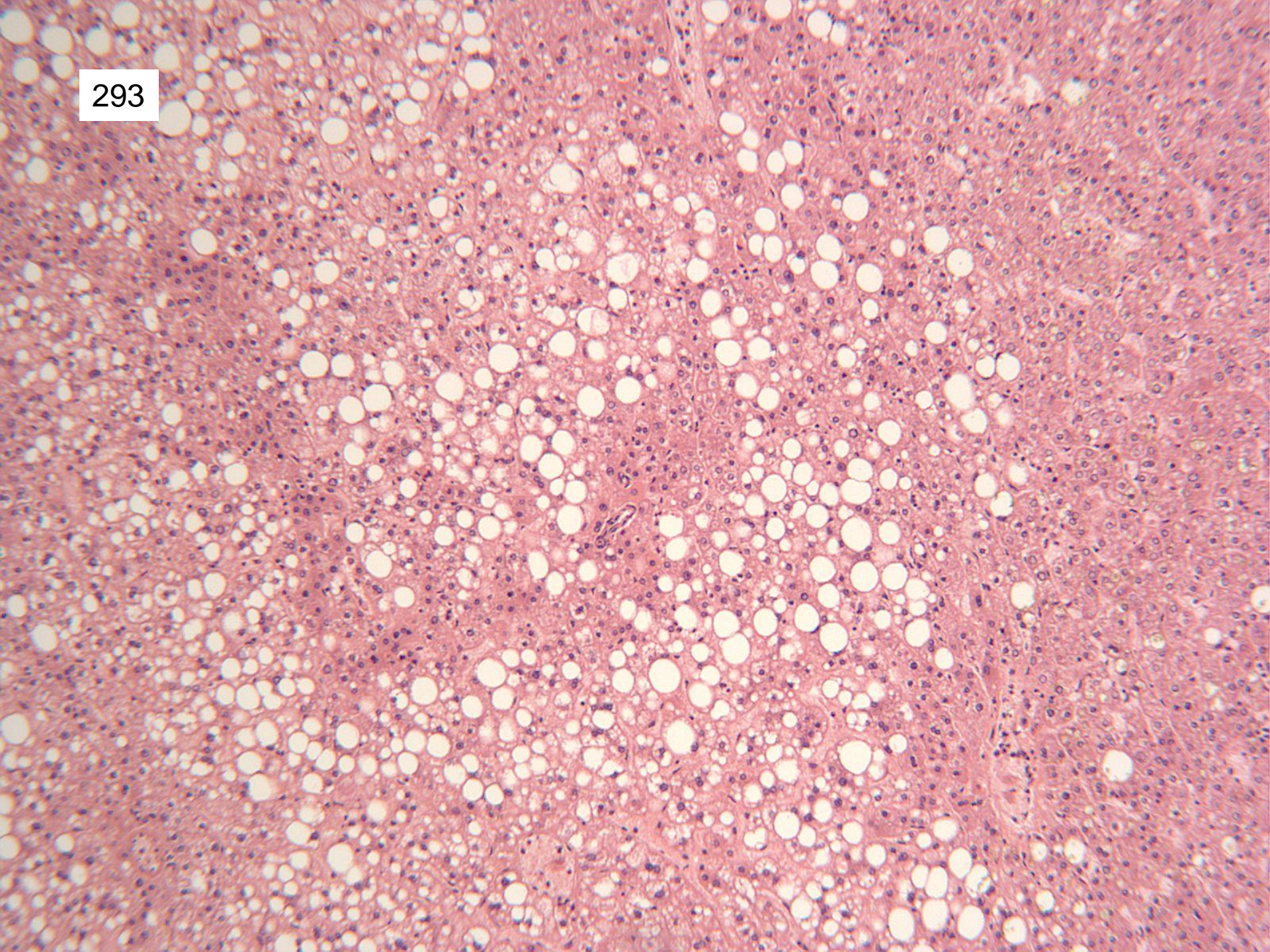
Microscopically all nodules had similar features to that included.

293

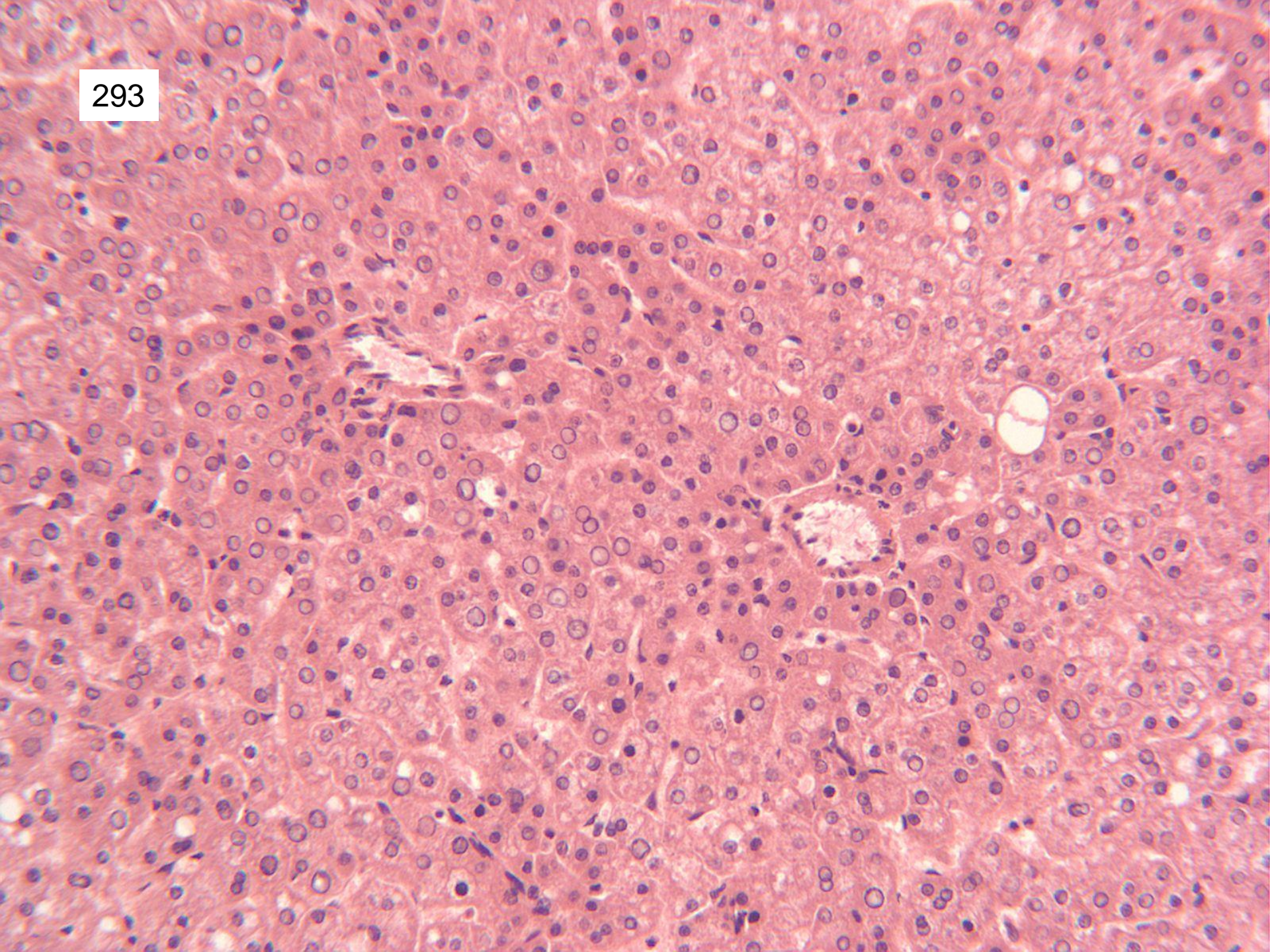




293



293



Case 293

Responses:

48 Adenoma (+/- comment on multiple or steatosis)

1 focal nodular hyperplasia

1 adenoma/low grade dysplastic nodule

1 Steatohepatitic nodule with dysplasia

4 (focal) fatty infiltration of liver

1 Likely HCC, can't exclude adenoma

2 HCC, no differential included

Original diagnosis: Liver adenomatosis

CASE 293

Scoring:

Score 10 points for adenoma.

Score 5 points for adenoma/ low grade dysplastic nodule – terminology of ‘dysplastic nodule’ is appropriate for nodules in cirrhotic livers but not nodules against background normal liver.

Score 0 for remaining diagnoses – this was a focal nodular lesion containing unaccompanied arteries. There are no fibrous septa or ductular reaction therefore not FNH. There are no portal tracts in the lesion, therefore not focal fatty change.

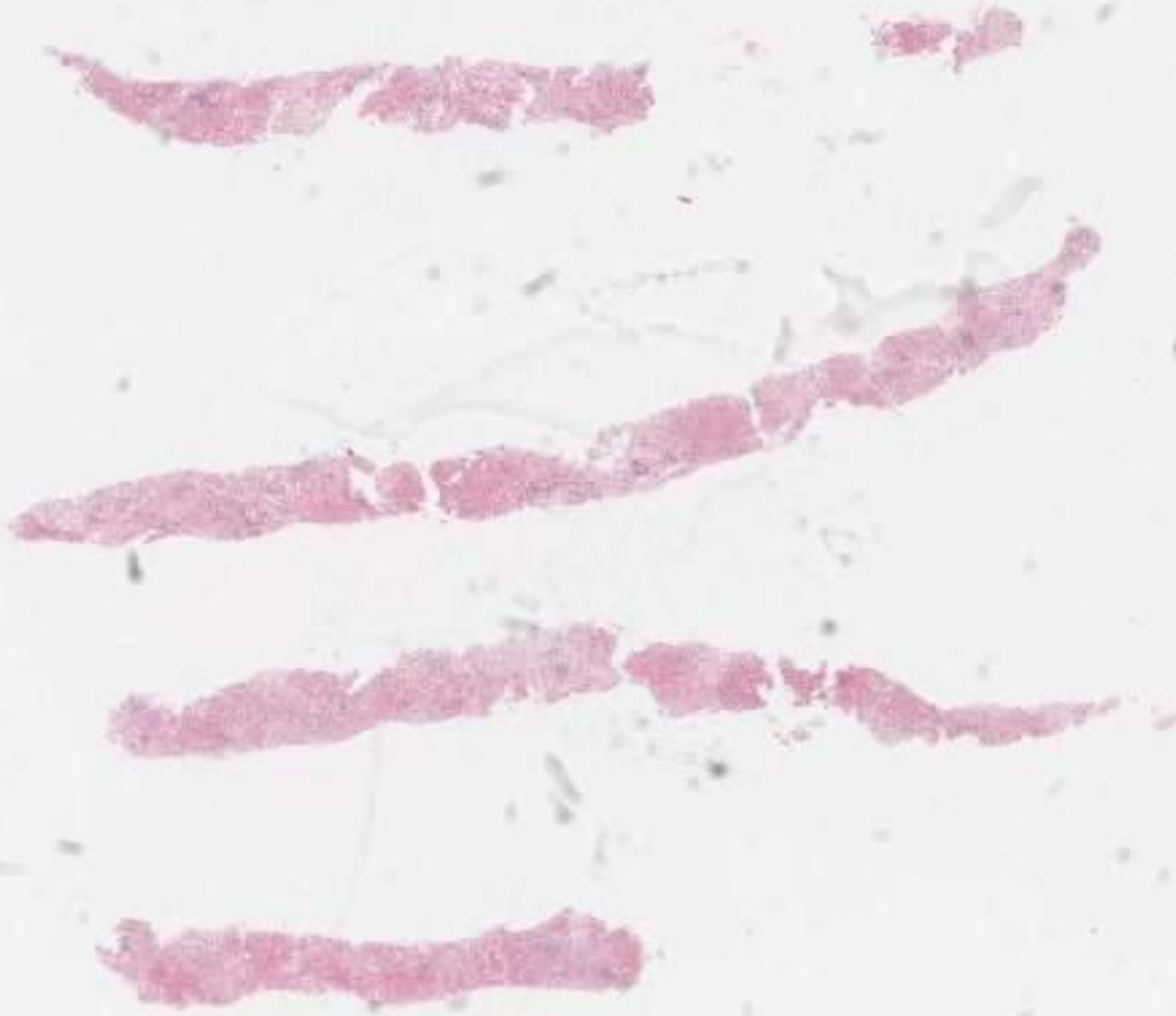
Discussion:

Some discussion on sub-classification of liver cell adenomas, see reference ... Multiple lesions in this case, consistent with adenomatosis – ADD COMMENT ON DIFFERENT TYPES OF ADENOMA.

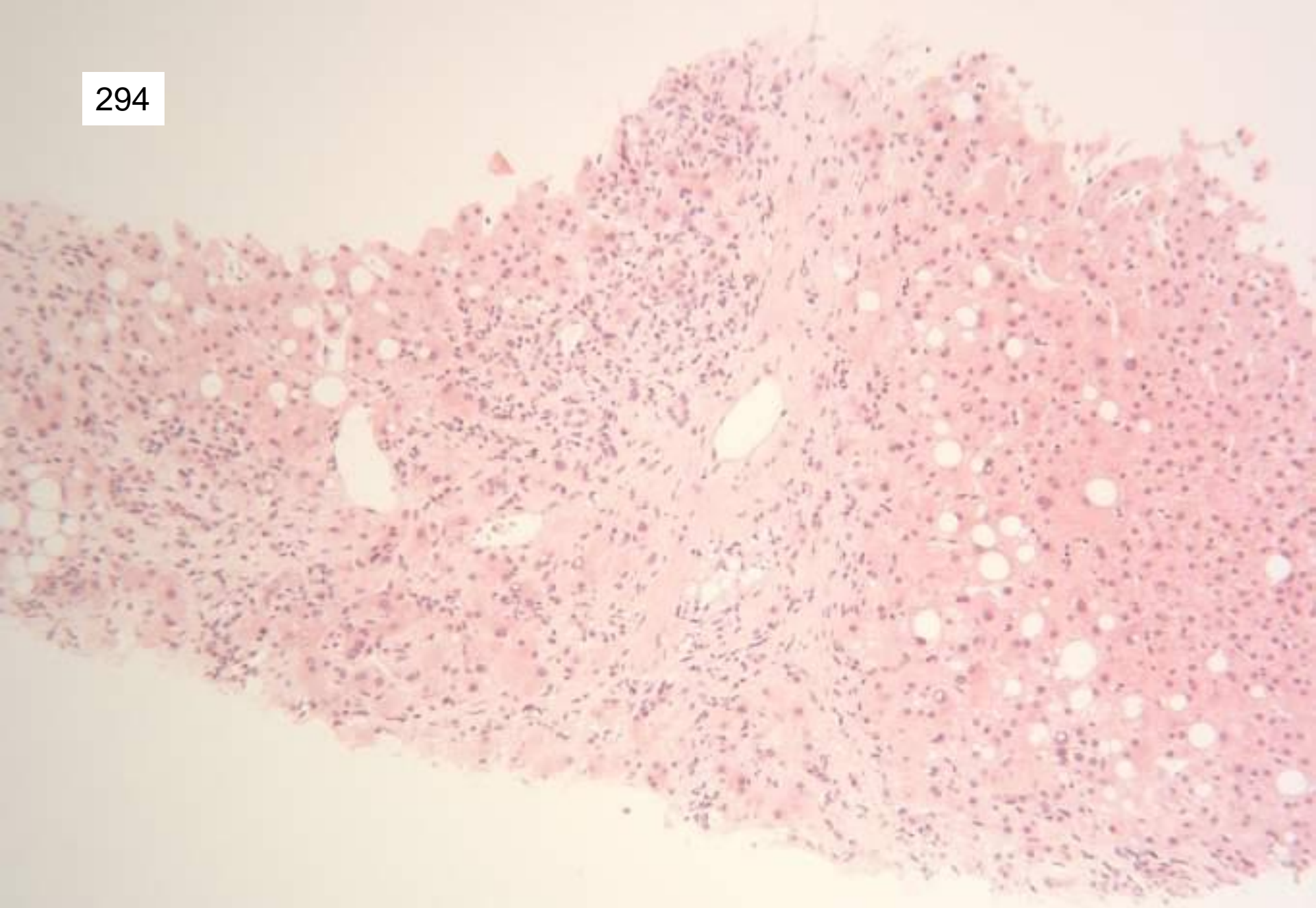
Case 294

- 73/F
- Cirrhosis suggested on CT scan, ascites and decreased albumin but coagulation normal. Metabolic/viral/genetic screens negative. No alcohol excess. Masson stain: severe fibrosis with many fibrous septa
- Liver biopsy – 4 cores 3-9mm long

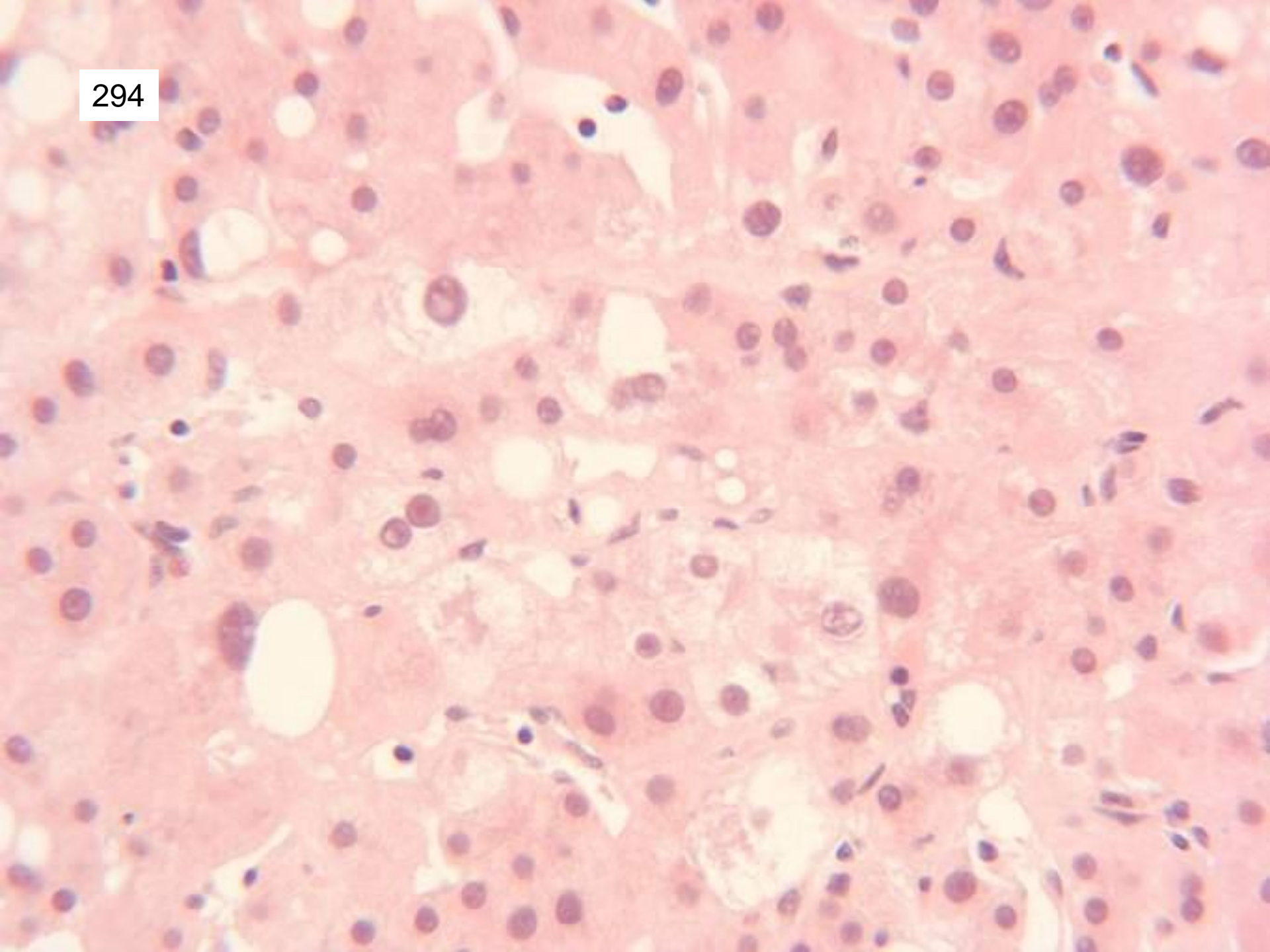
294



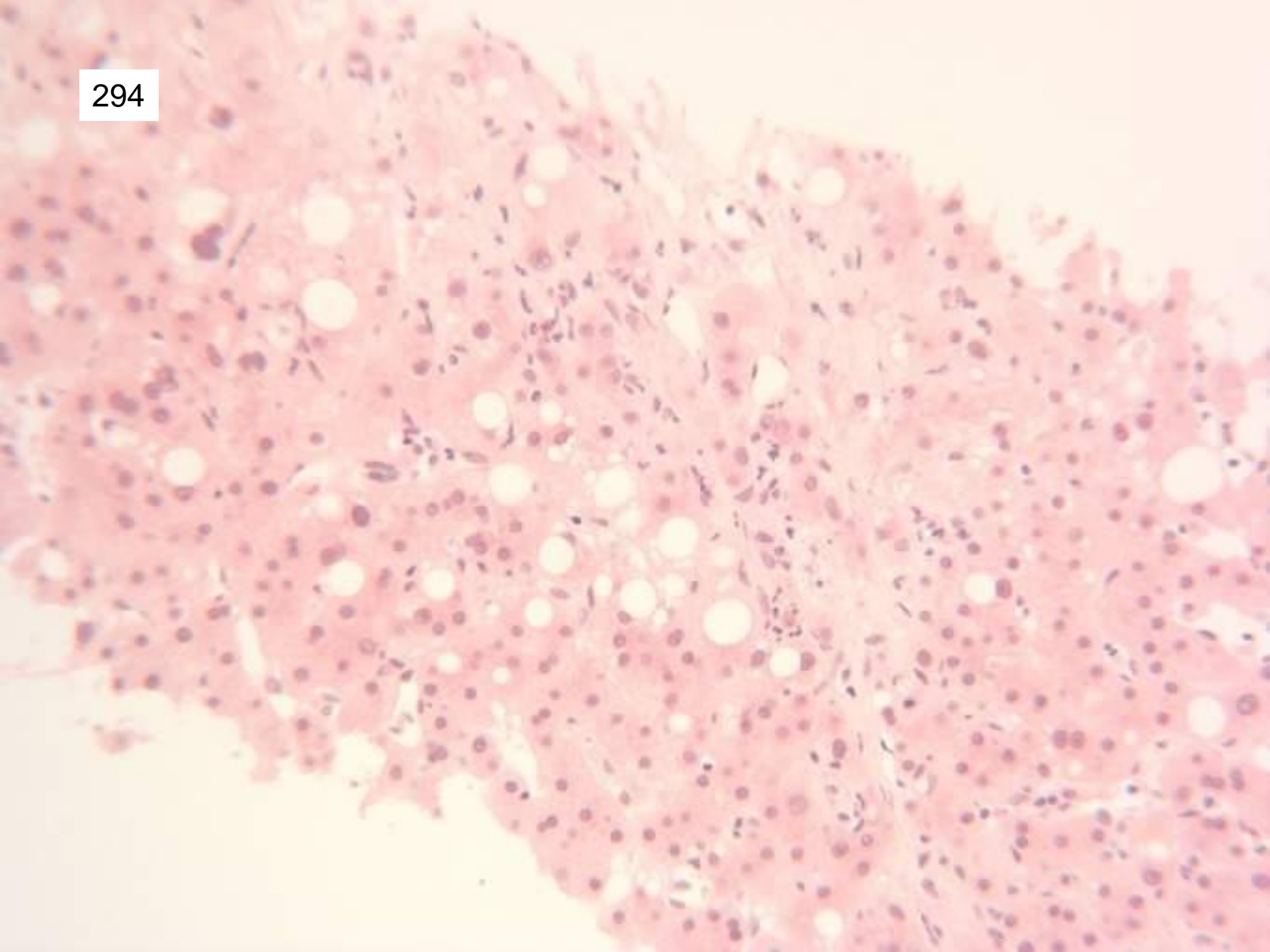
294



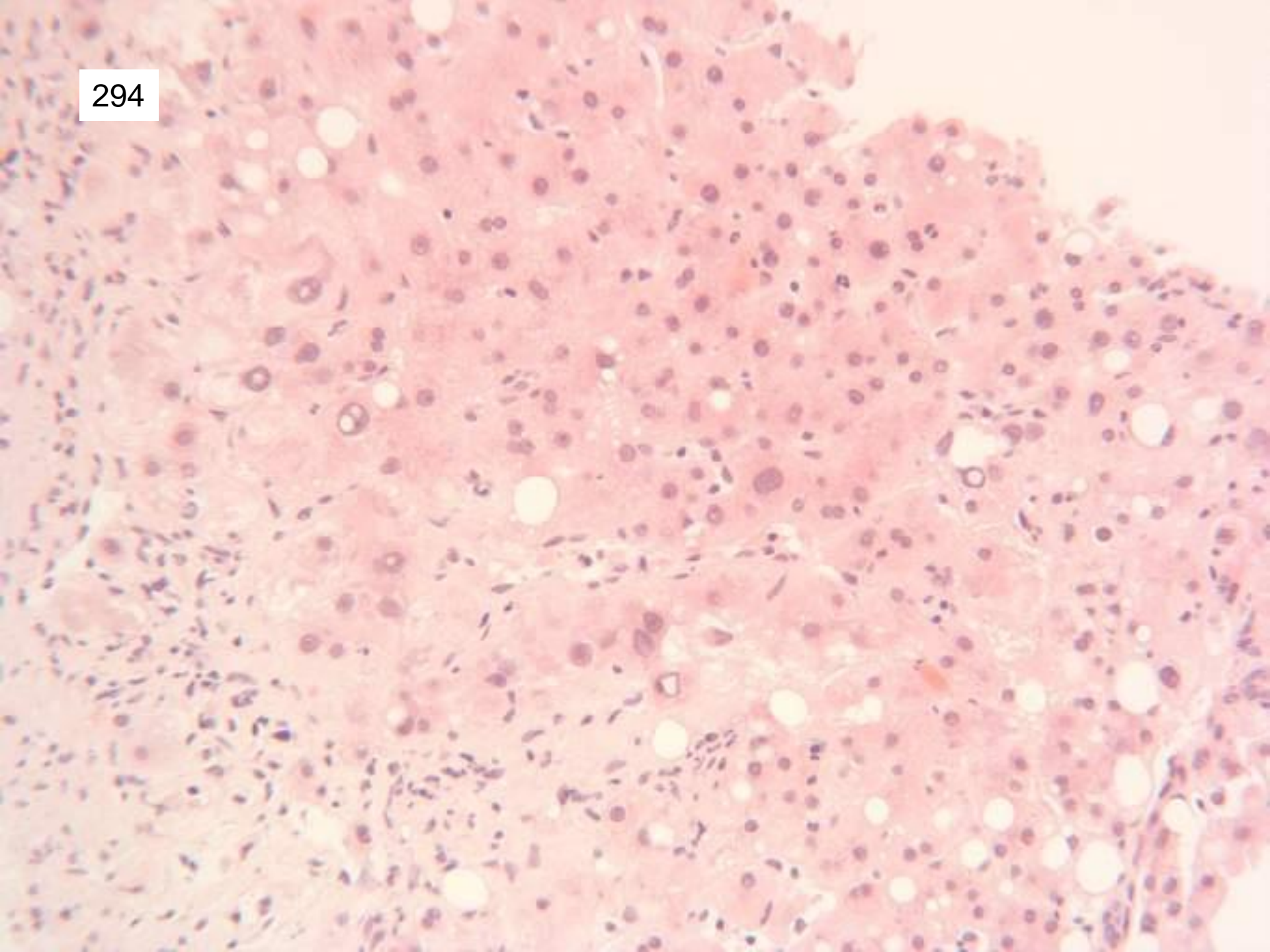
294



294



294





Case 294

Responses

Morphology

- 49 cirrhosis,
steatohepatitis
- 7 Steatohepatitis with
fibrosis
- 1 cirrhosis, NOS*

Aetiology

- 31 NASH
- 17 ASH or NASH
- 1 Iron overload as only
aetiology*
- 6 No comment on
aetiology*

Original diagnosis: established cirrhosis
with (moderate) steatohepatitis

CASE 294

Scoring:

Score 10 for answers that include steatohepatitis and a comment on fibrosis/cirrhosis.

Comment on aetiology is necessary for full marks; lose 5 points if no mention of NASH.

Iron overload assumed to be a transcription error – no increase iron is apparent in the section.

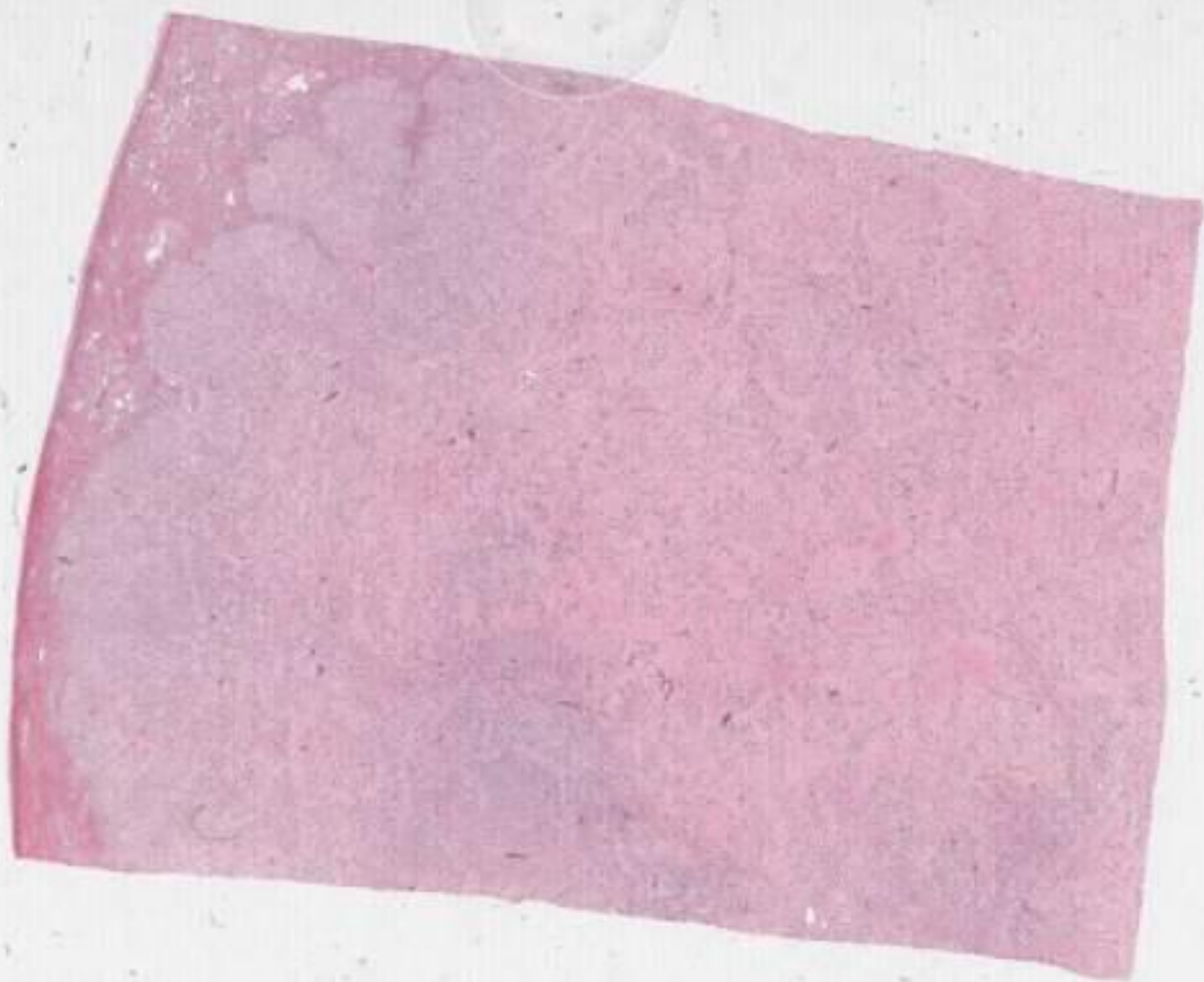
Case 295

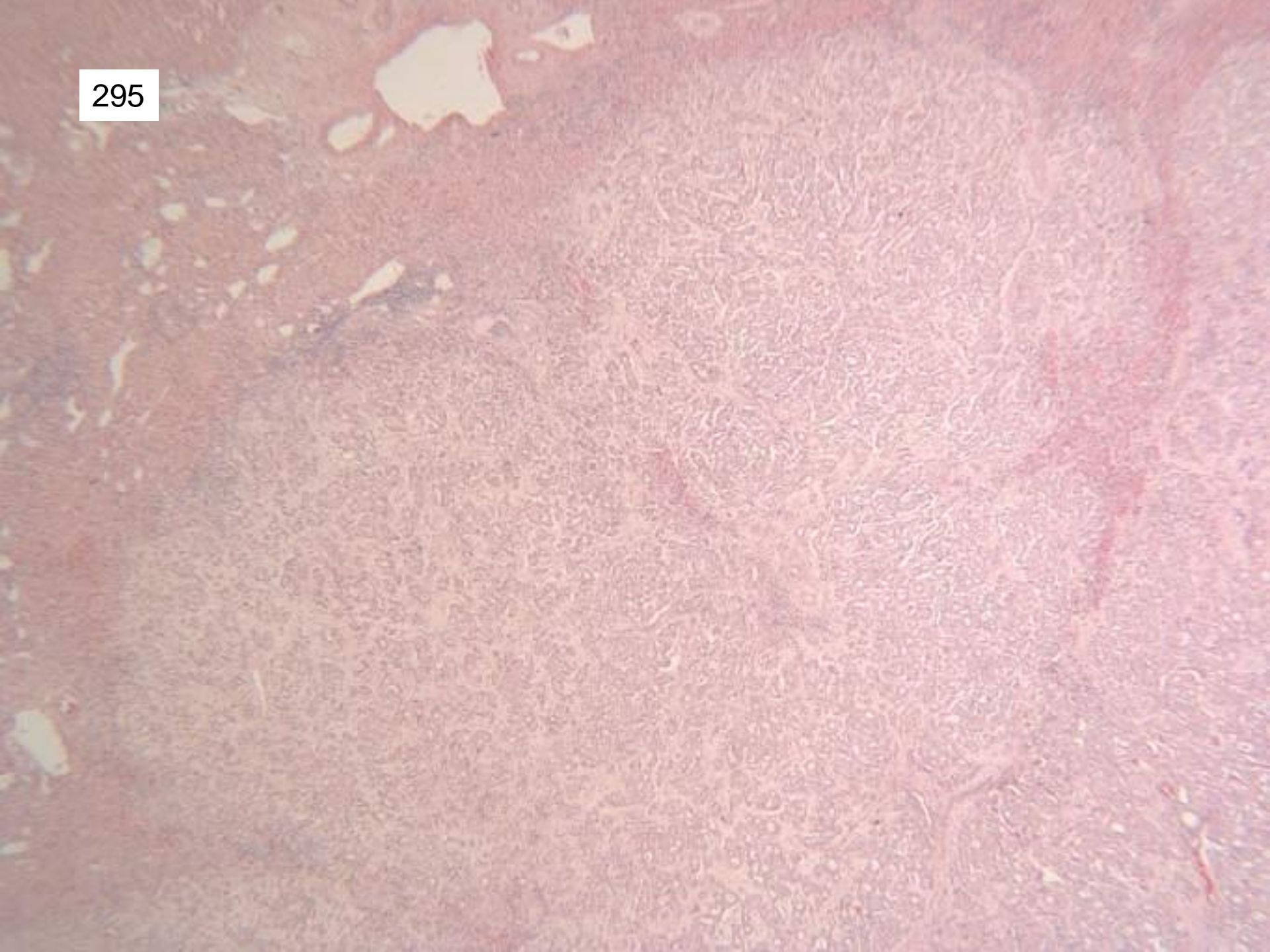
- 76/F
- CT showed large hepatic mass. No other tumour. Presumed primary hepatoma.
- IHC - +ve for CK7, CK18, CK19, CD56
- -ve for CK20, CDX2, CD10, CD13
- Gall bladder – no tumour

Right hepatectomy – subcapsular tumour 15x9x7cm, white, close to cut margin

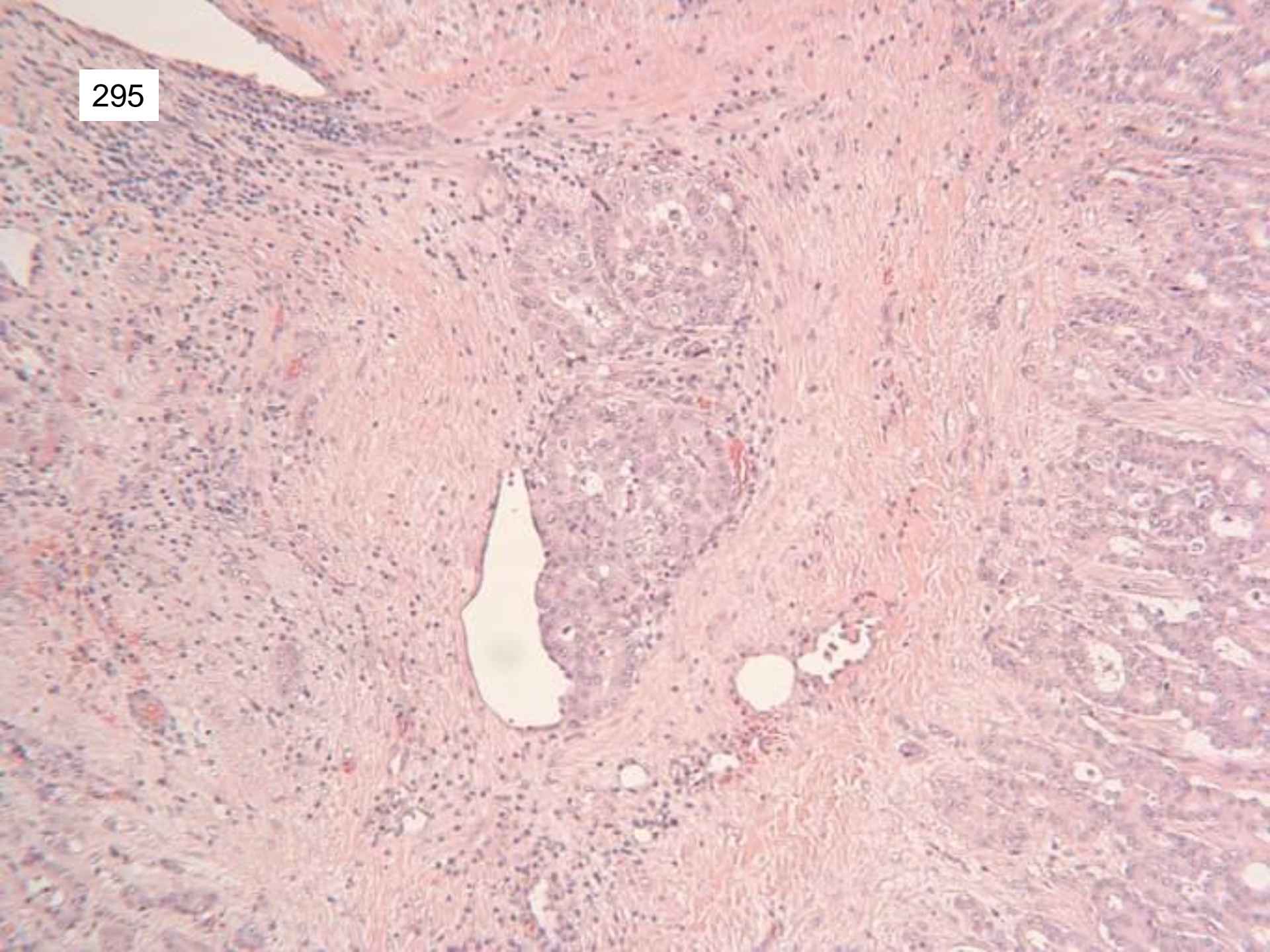
19 um
E

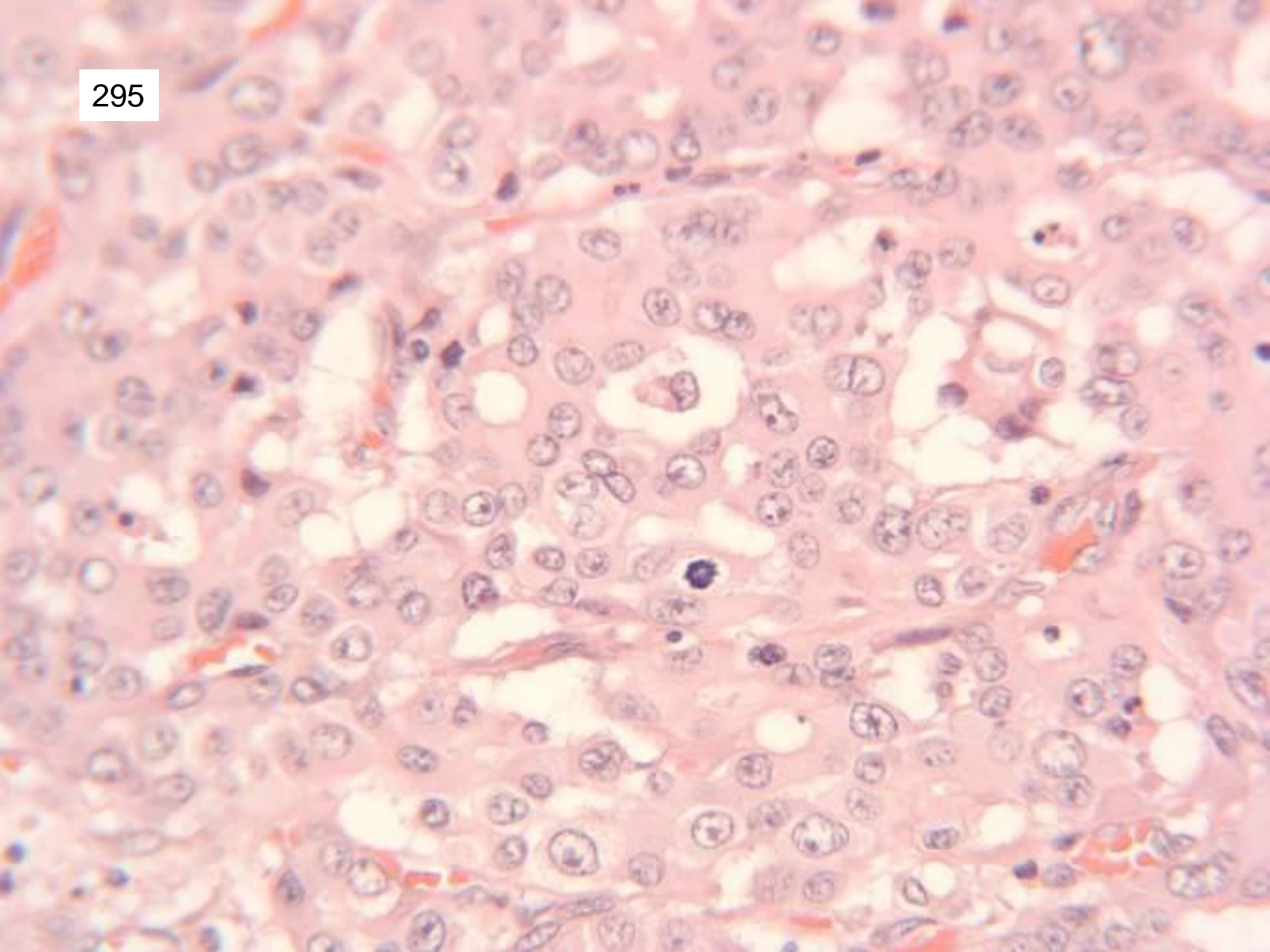
295



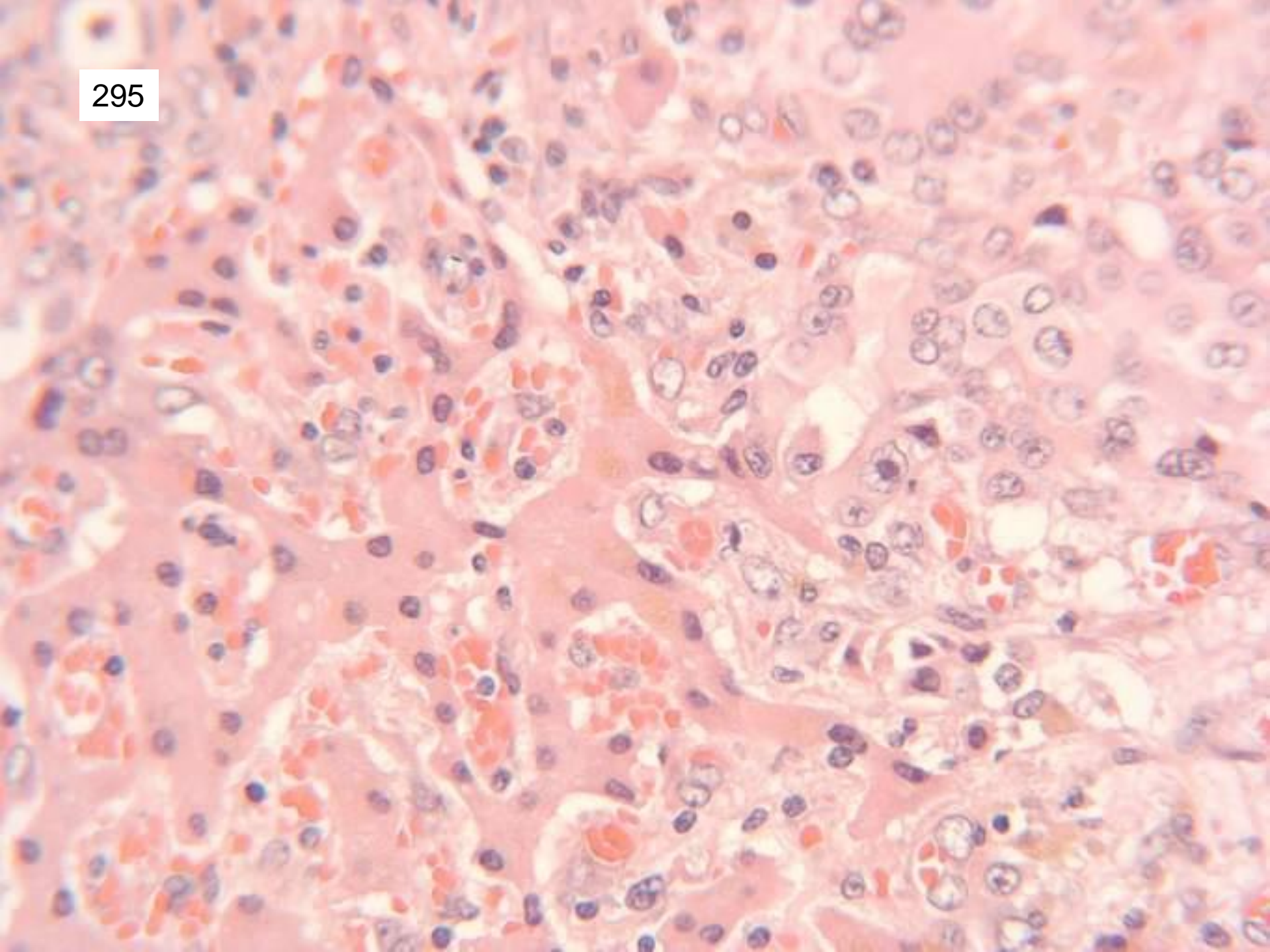


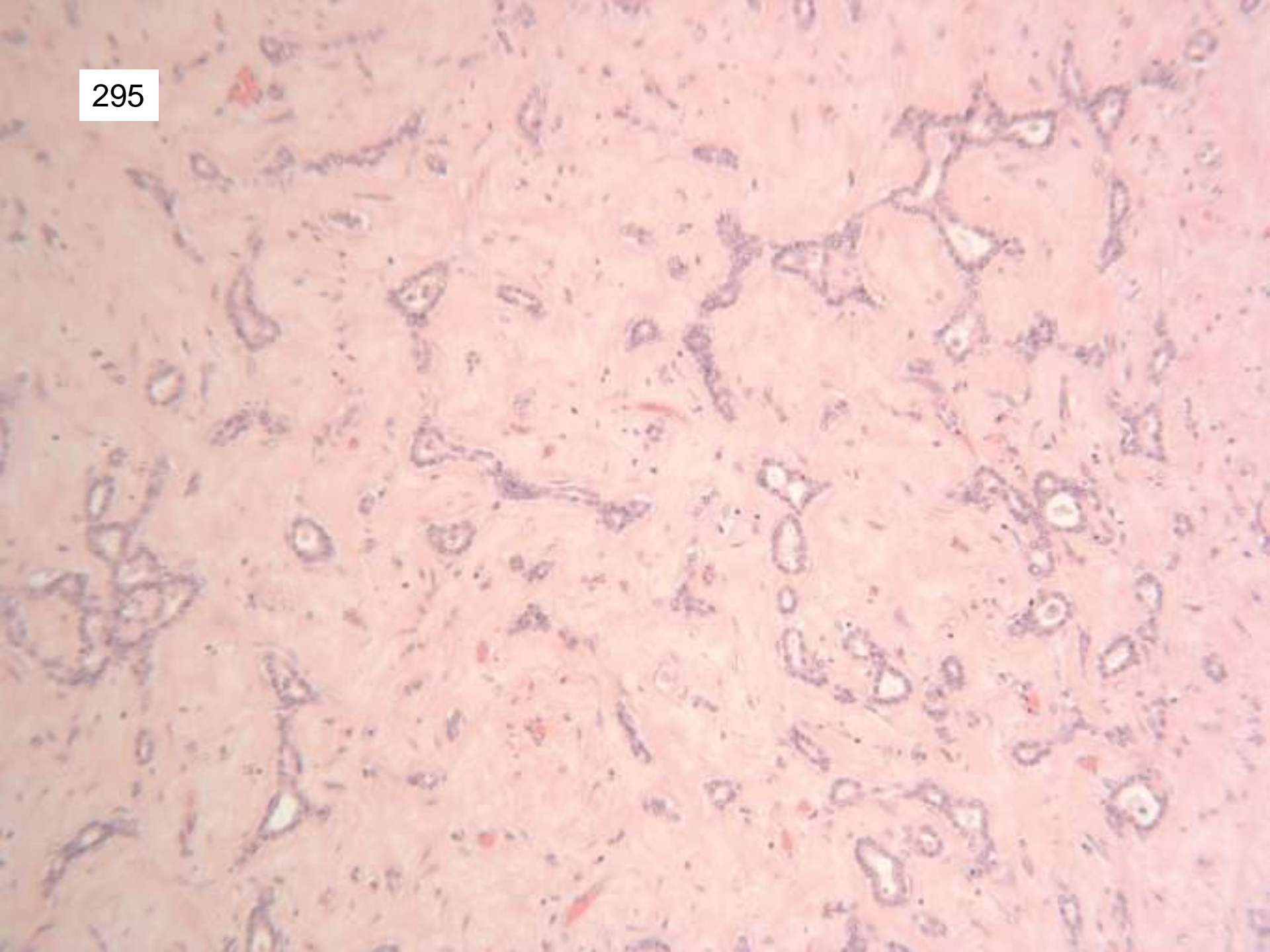
295



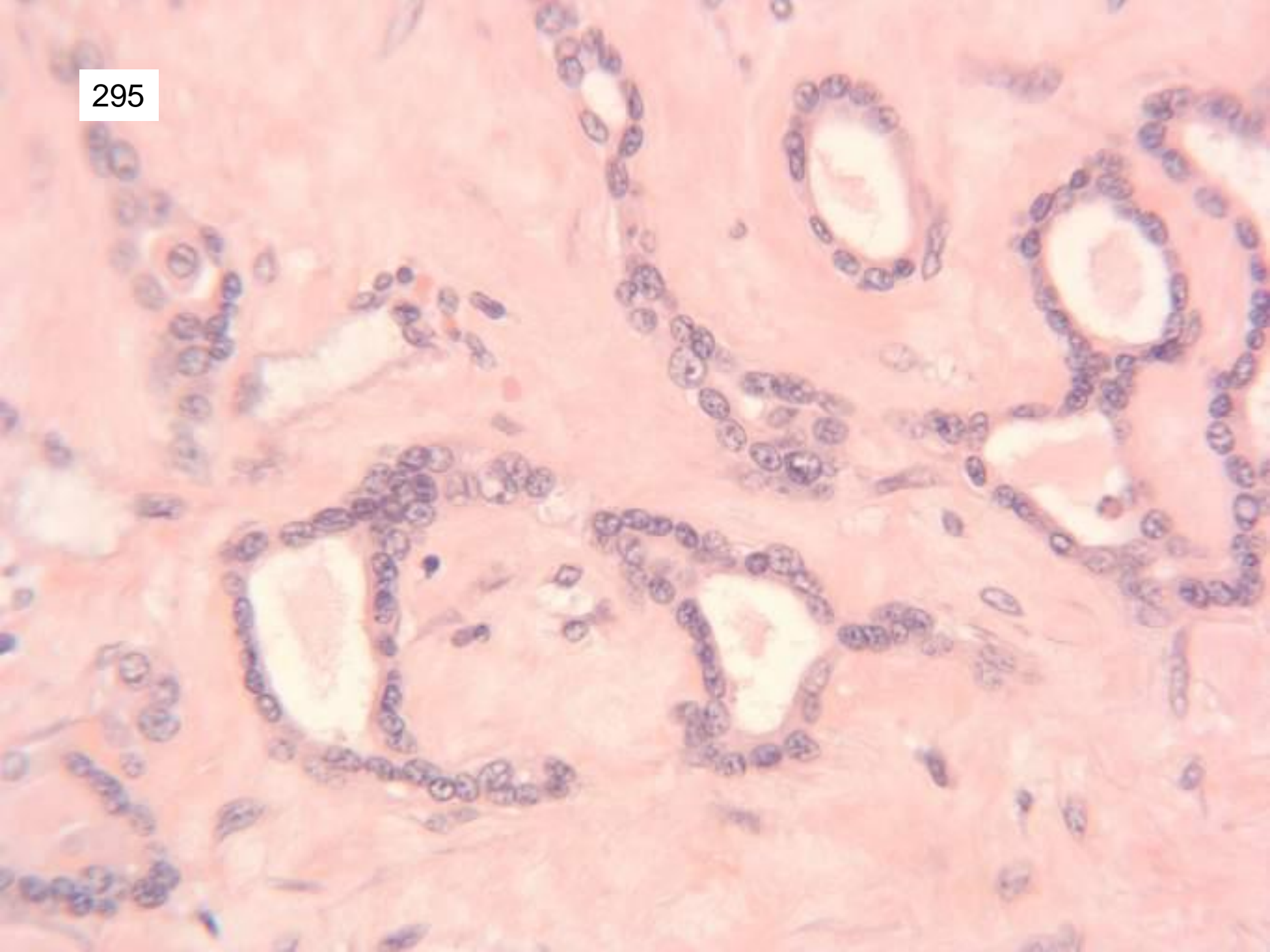


295

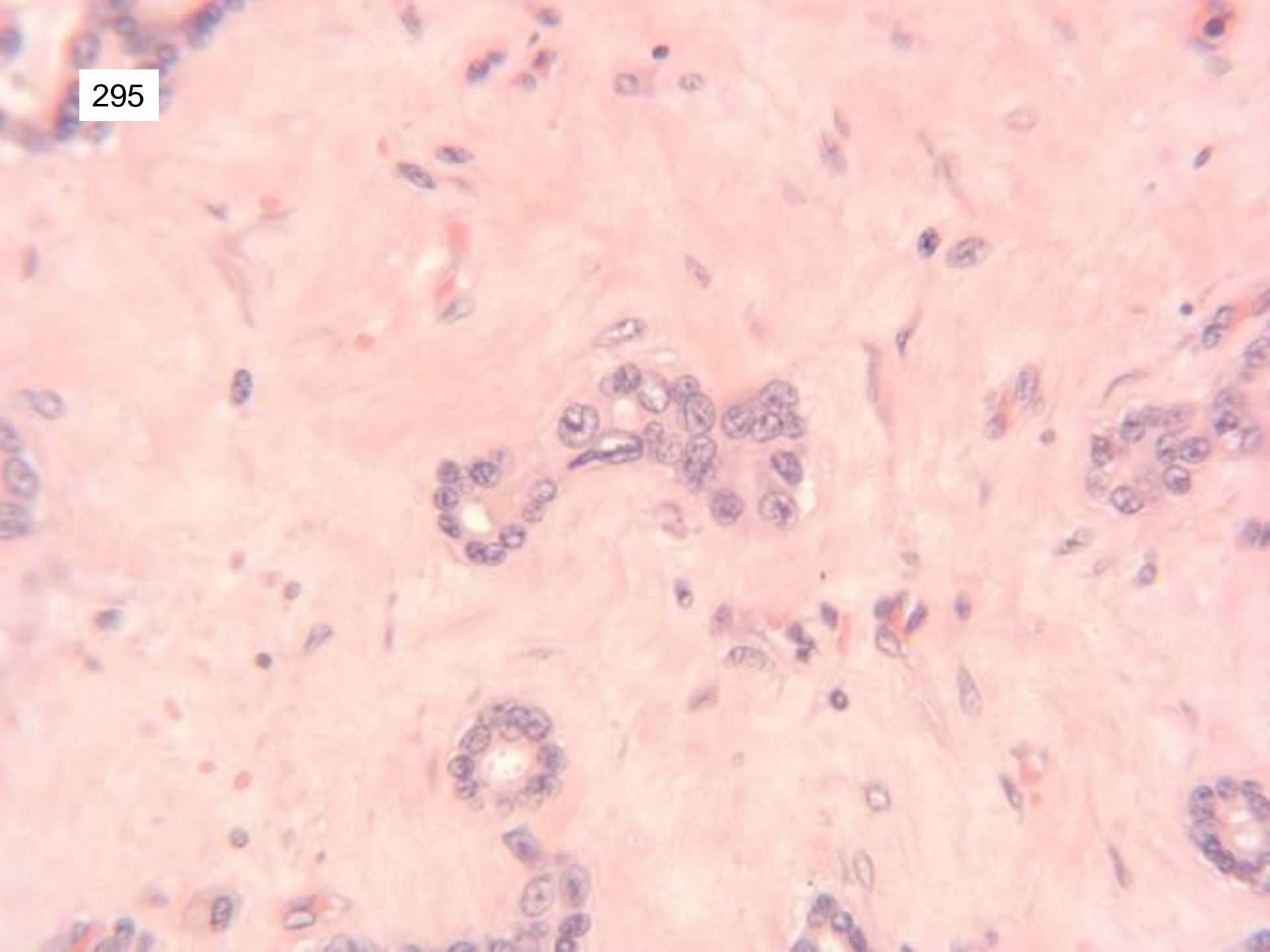




295



295



Case 295

Responses:

49 Cholangiocarcinoma

3 cholangiocarcinoma, ? Arising in biliary adenofibroma

2 *Biliary adenofibroma (+/-cholangioCa unlikely)*

1 *Bile duct adenoma*

2 *Metastatic adenocarcinoma favoured over cholangiocarcinoma*

2 *metastatic adenocarcinoma, exclude neuroendocrine*

1 *metastasis, ? Thyroid papillary carcinoma*

1 *carcinoid/islet cell tumour*

1 *malignant mesothelioma, no mention of adenocarcinoma*

Original diagnosis: primary intrahepatic cholangiocarcinoma

CASE 295

Scoring:

10 points for cholangiocarcinoma.

5 points for answers that included cholangiocarcinoma as lesser differential diagnosis,

0 points for answers of metastatic adenocarcinoma etc.

Discussion:

Central part of this lesion does show features of rare biliary adenofibroma. However features at the margin include infiltrative growth pattern, mitotic activity and vascular invasion indicating that this is a malignant tumour.

Case 296

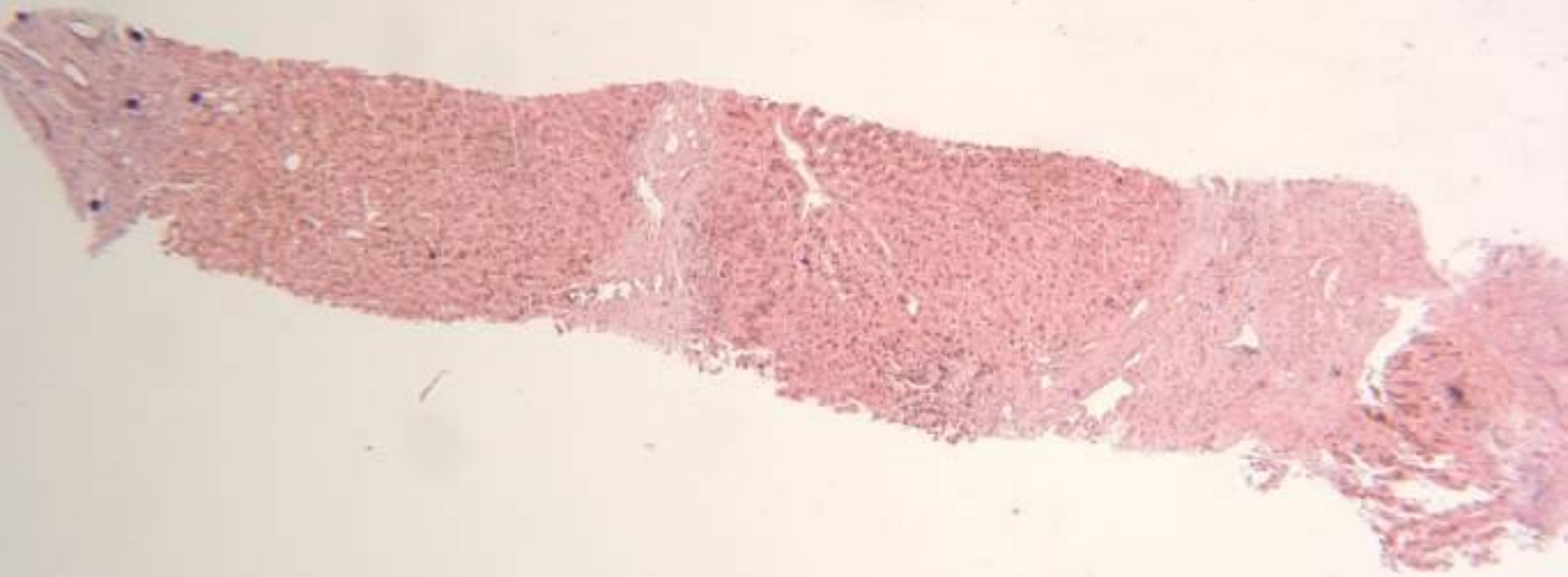
- 69/M
- Haemochromatosis, raised LFTs

Liver biopsy – 3 cores

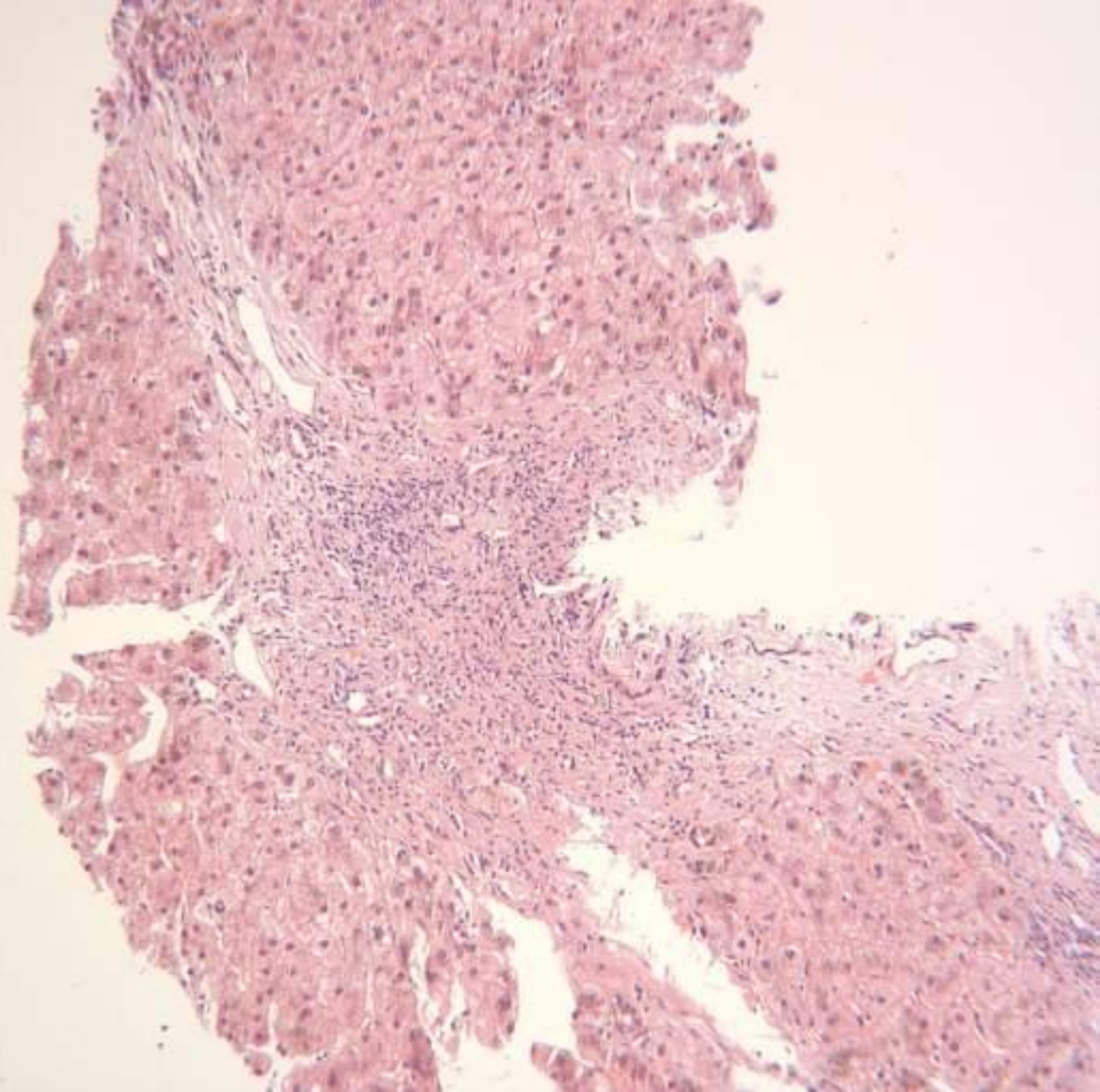
296



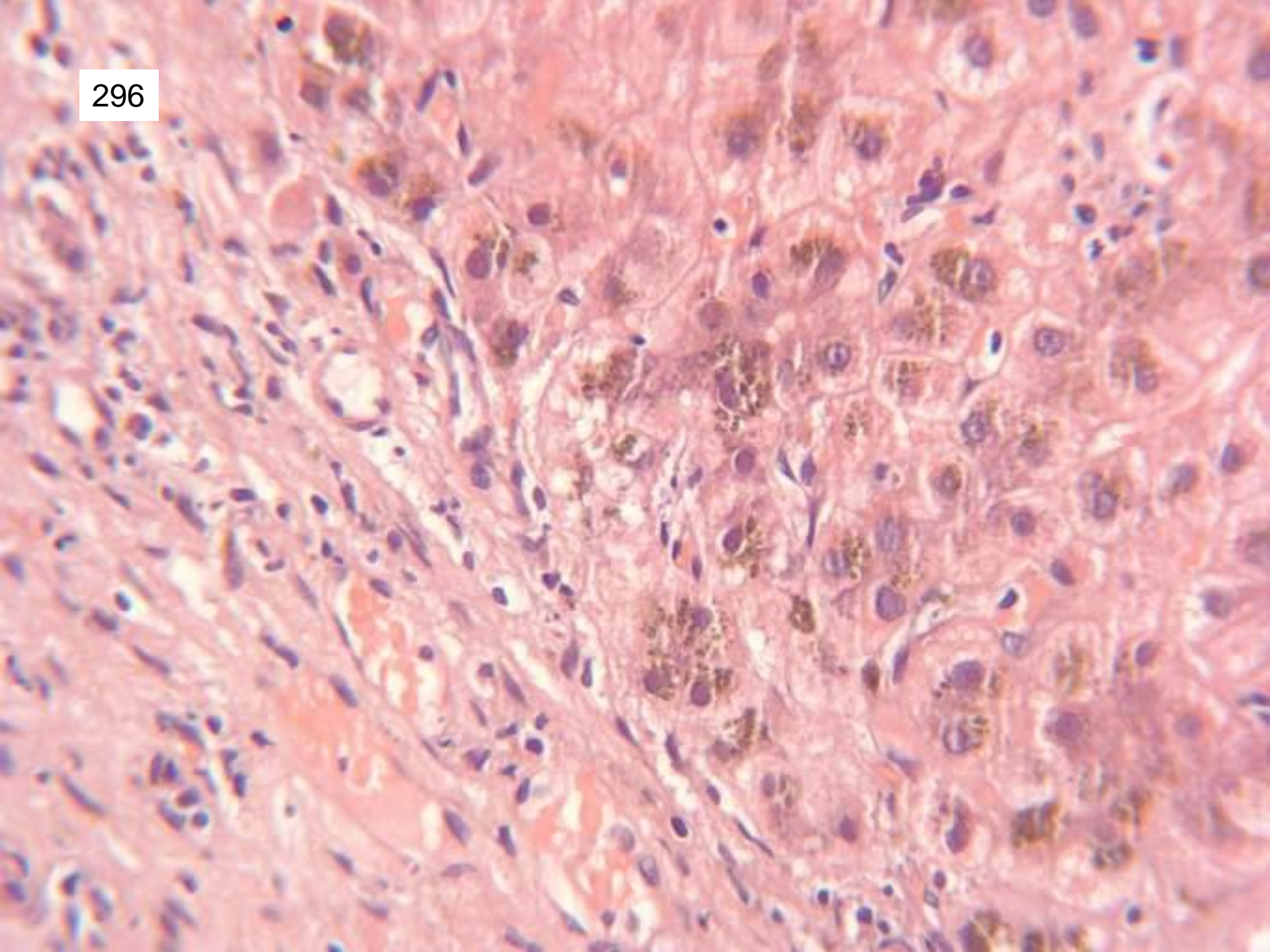
296



296



296



Case 296

Responses:

58 probable/definite cirrhosis, haemochromatosis

1 cirrhosis, haemochromatosis,
also chronic hepatitis autoimmune/viral

Scoring:

All responses score 10.

Original diagnosis: cirrhosis associated with haemochromatosis

Homozygous for C282Y

Ferritin 1504ug/l (normal range 30-284)

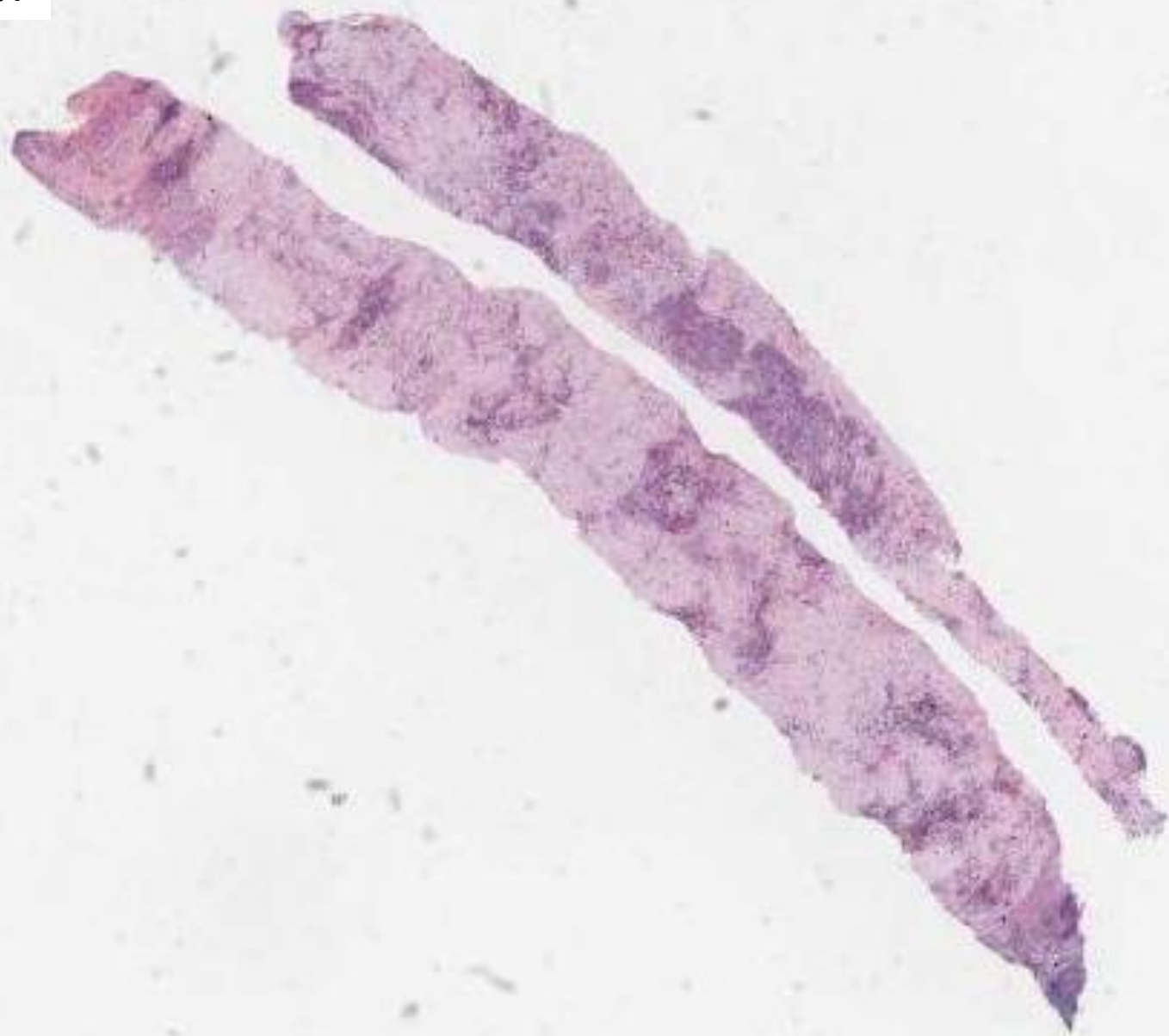
Saturation 100%

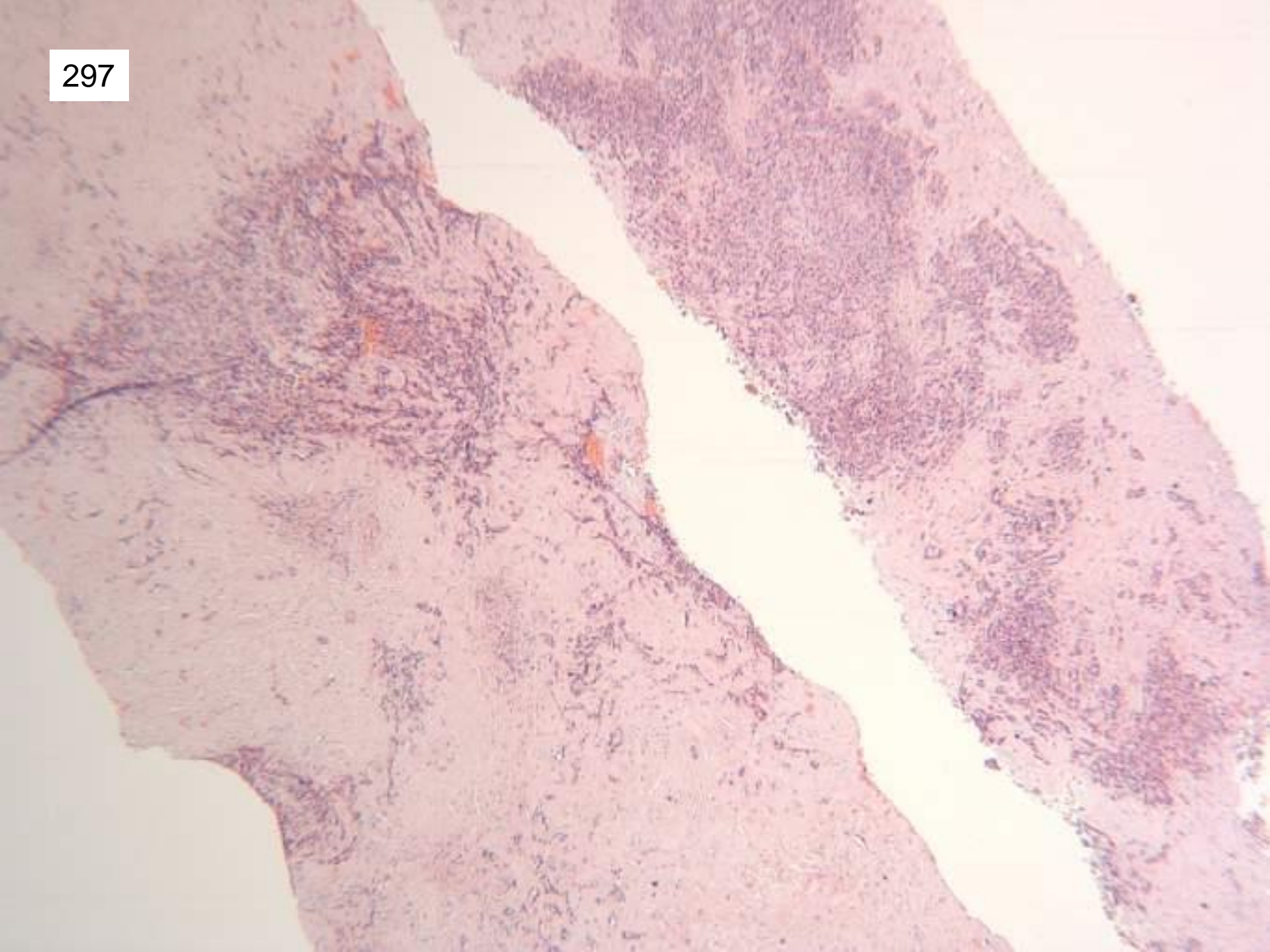
Case 297

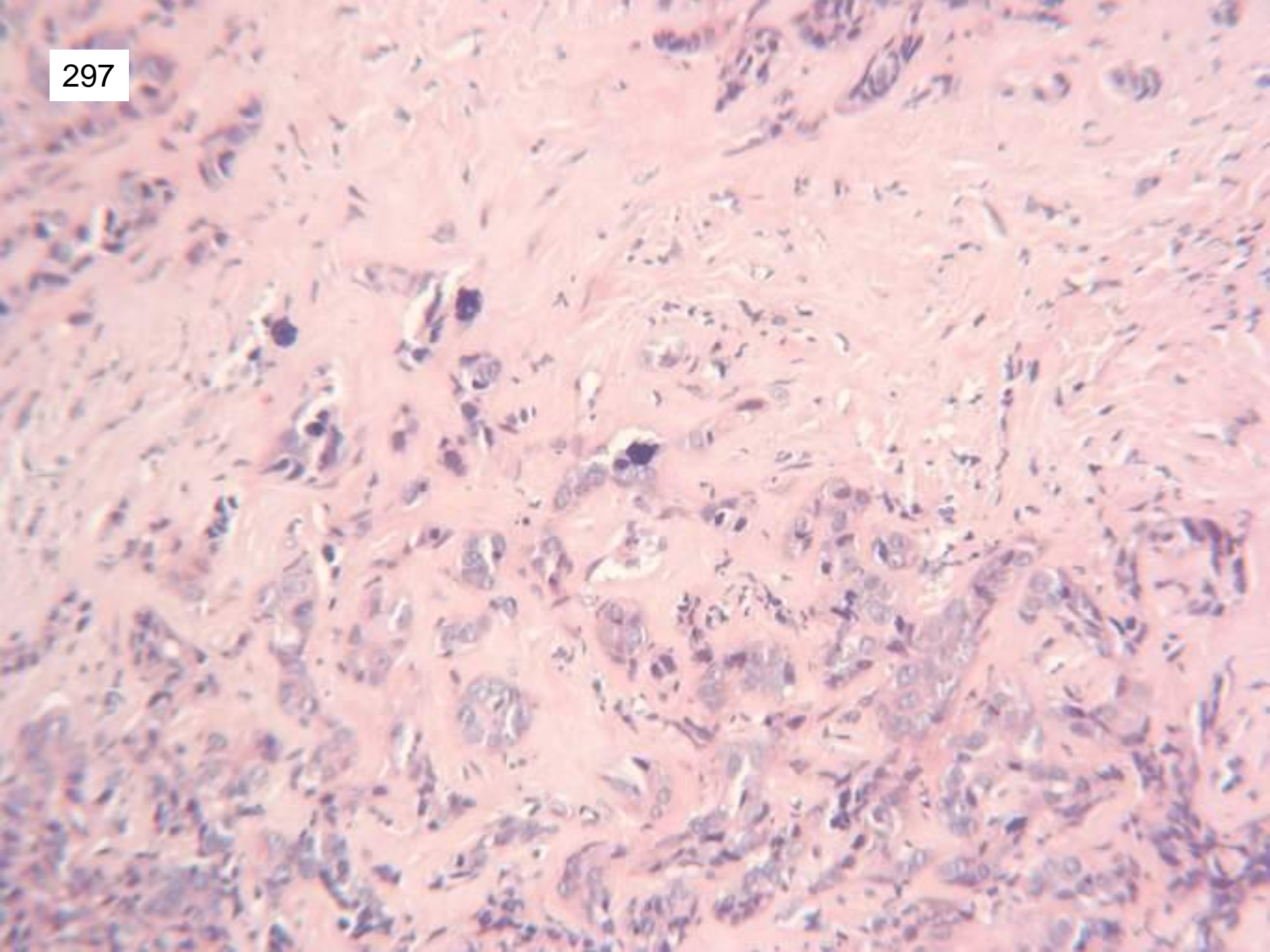
- 68/F
- Renal carcinoma, nodules on the liver surface.
- CK7 and Cam 5.2+ve
- CK20, mCEA, CD10, TTF-1 –ve
- Ca19.9 and pCEA variable

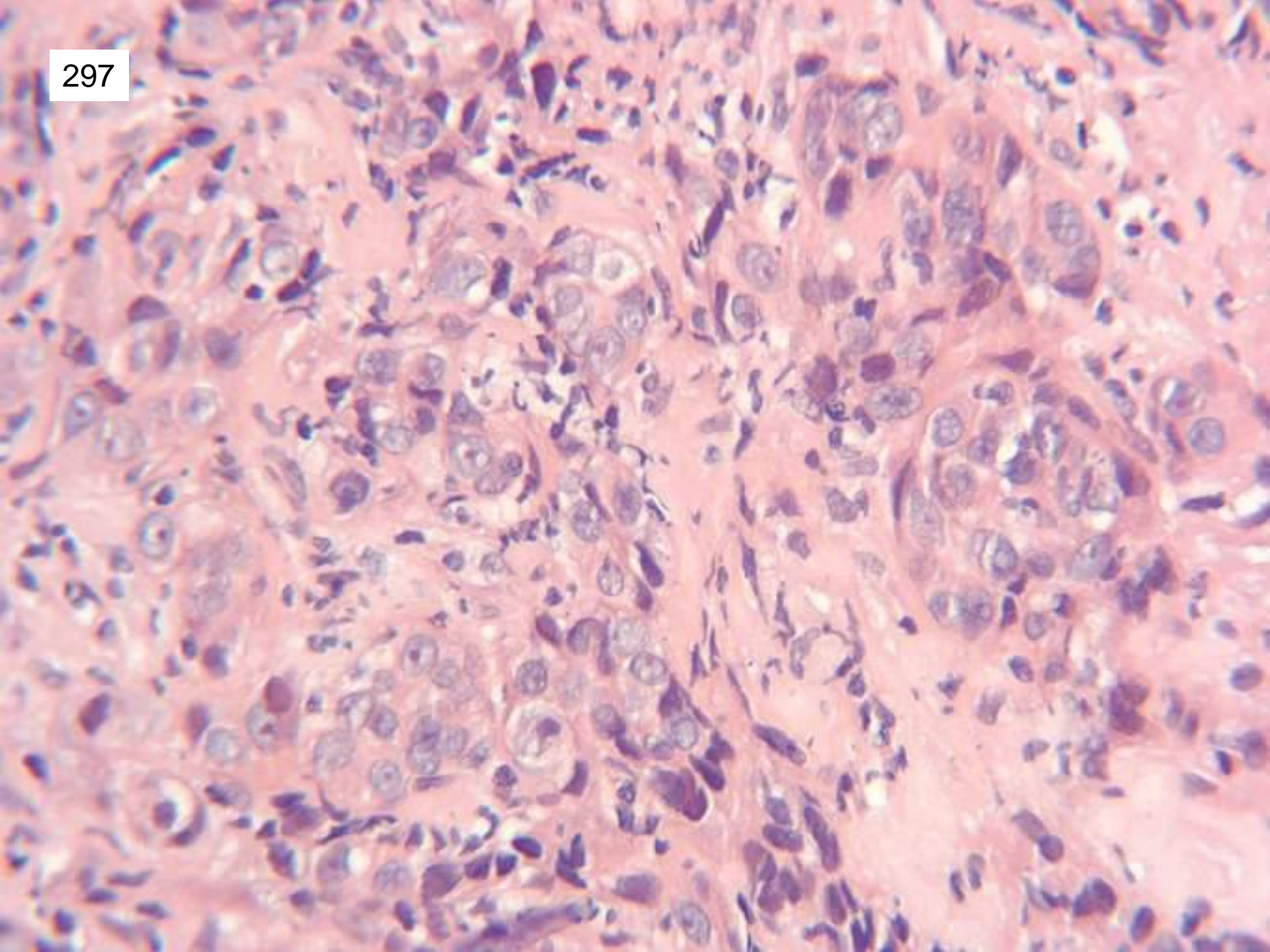
Liver biopsies – 2 cores whitish tissue, each 10mm

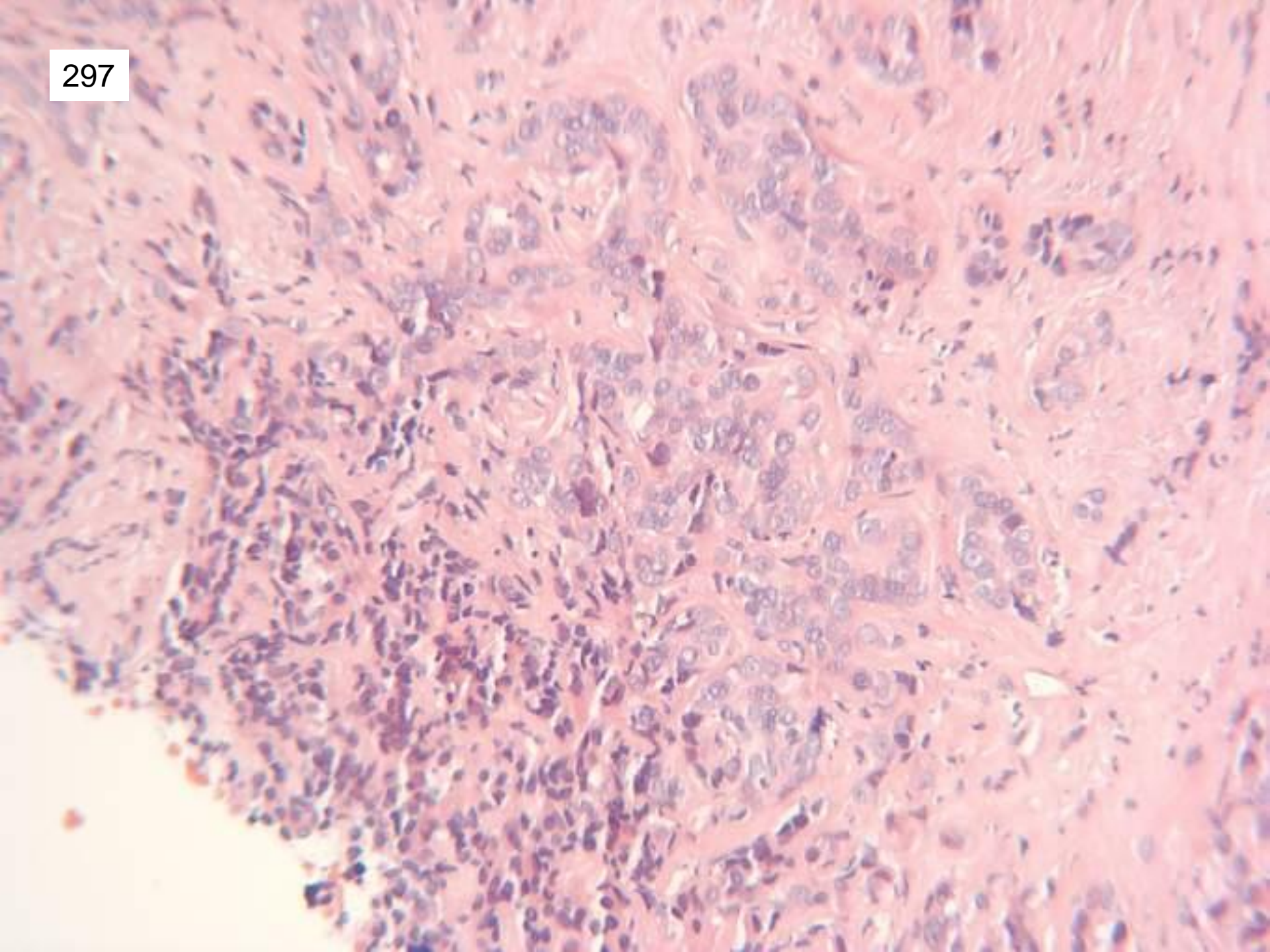
297











Case 297

Responses:

23 Metastatic adenocarcinoma,
with suggested primary

5 Metastatic adenocarcinoma,
no suggested primary

16 adenocarcinoma, primary or metastatic

4 *cholangiocarcinoma, no mention of metastases*

3 *Unsure if benign/malignant*

5 *Benign bile duct lesion – adenoma or hamartoma*

1 *Insufficient for diagnosis – fibrosis and reactive mesothelial tissue*

Suggested primary sites:

12 Breast

14 Pancreas

9 Bile duct

16 Ovarian

5 Upper GIT

9 Renal possible

14 unlikely/not renal

CASE 297

Scoring:

Score 10 marks for responses that include metastatic adenocarcinoma and 0 for remaining diagnoses.

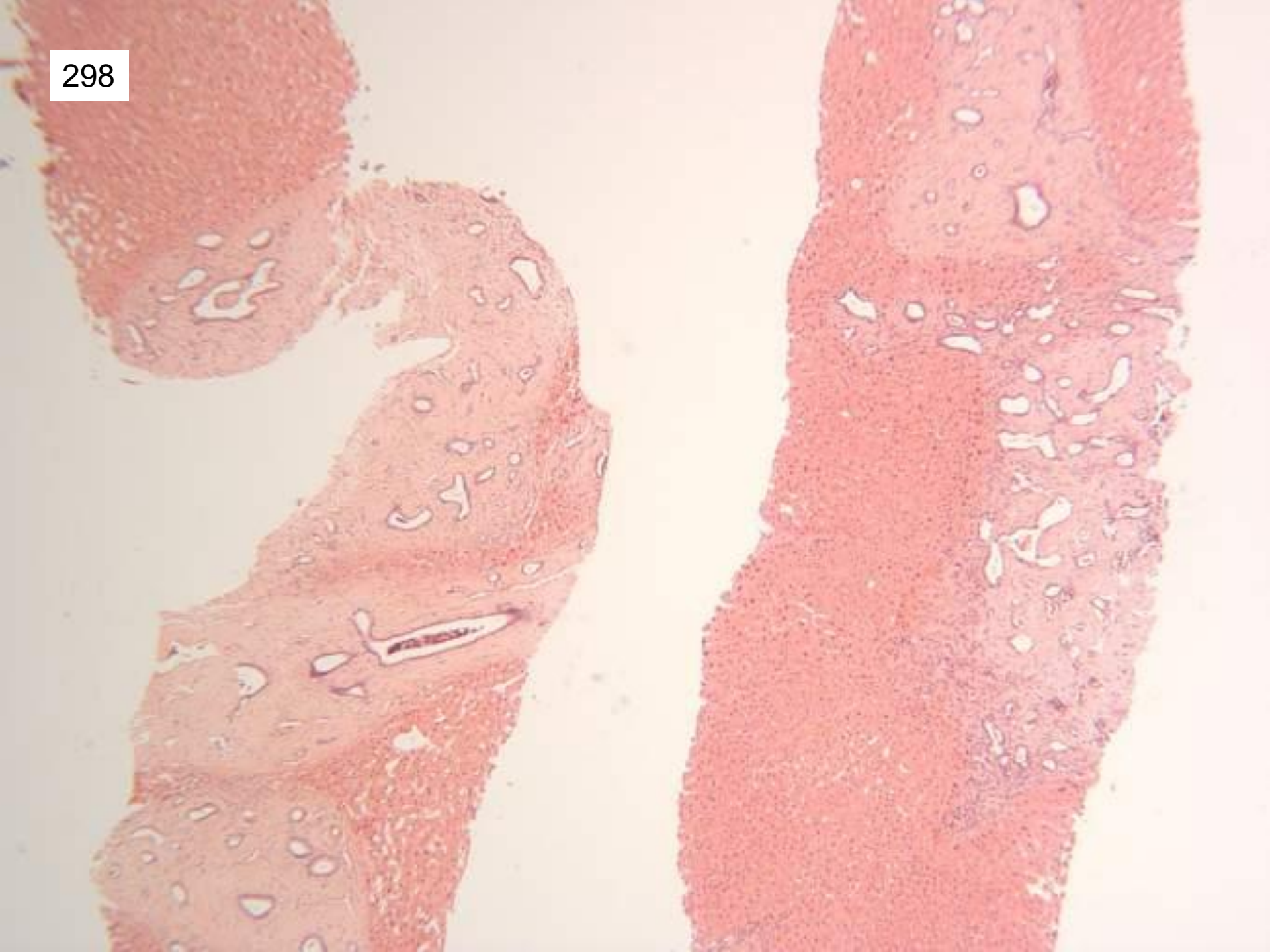
Original diagnosis: adenocarcinoma from pancreaticobiliary tree

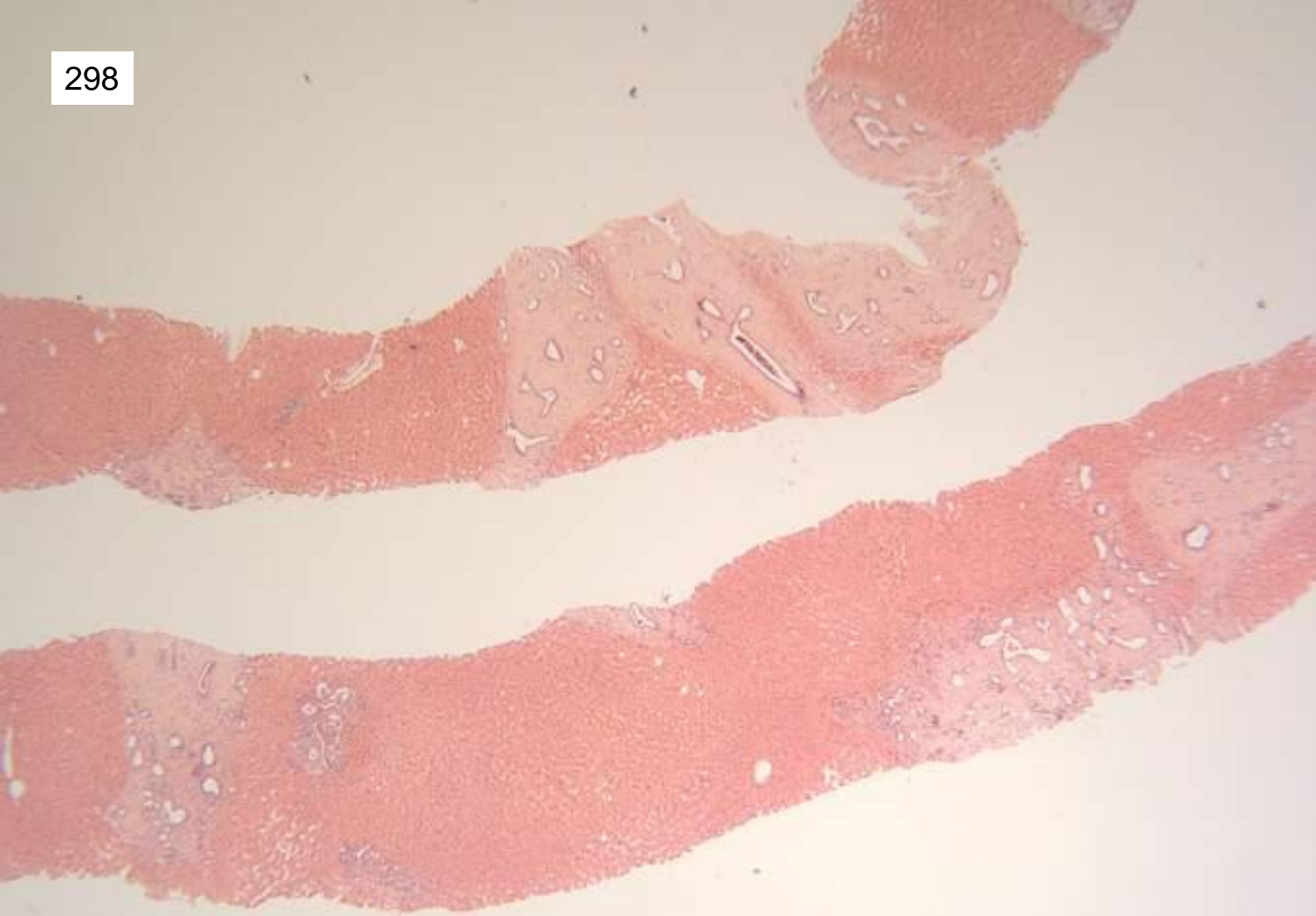
Case 298

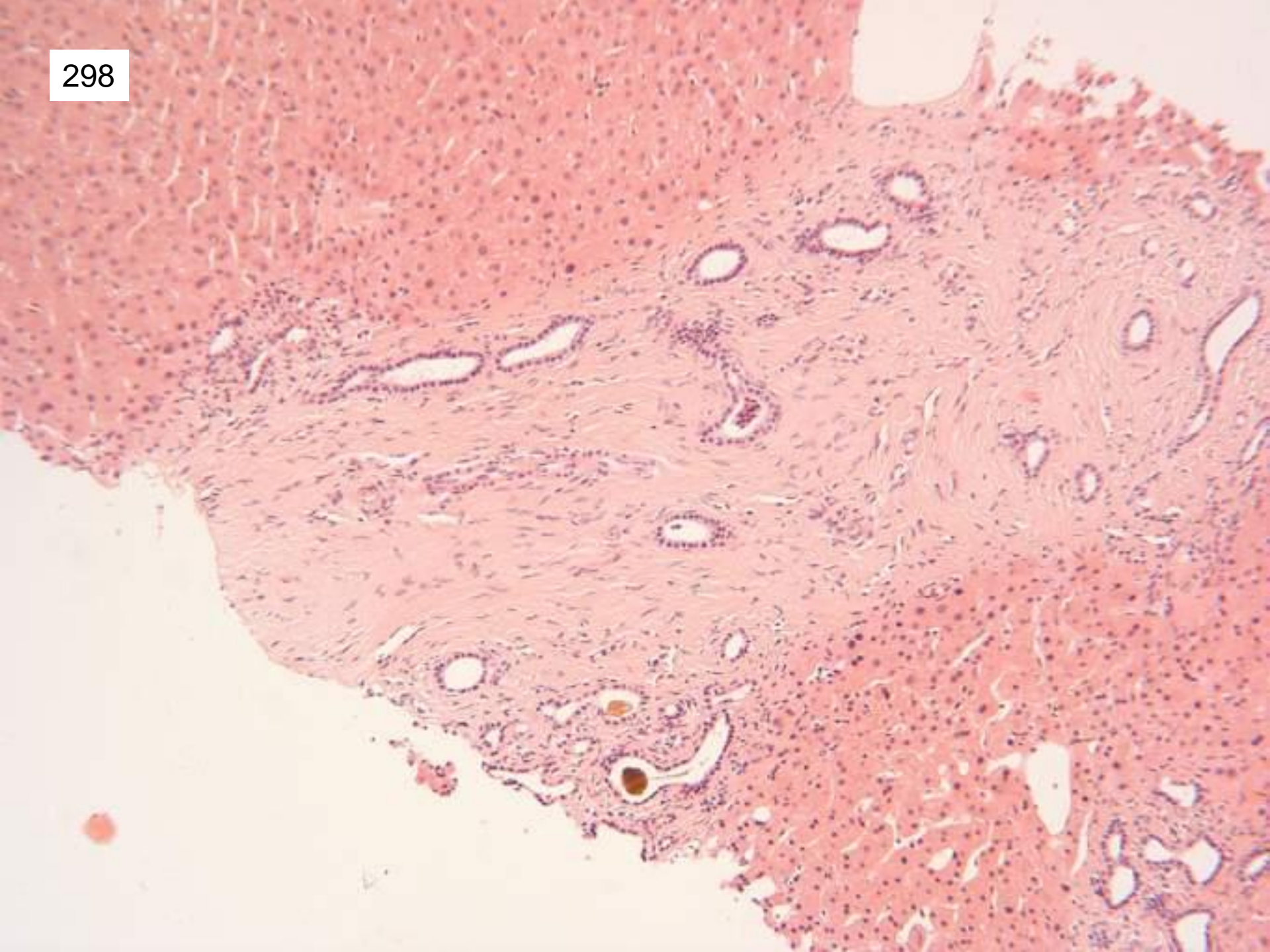
- 49/M
- ALT 120, alcohol – nil for 4 months

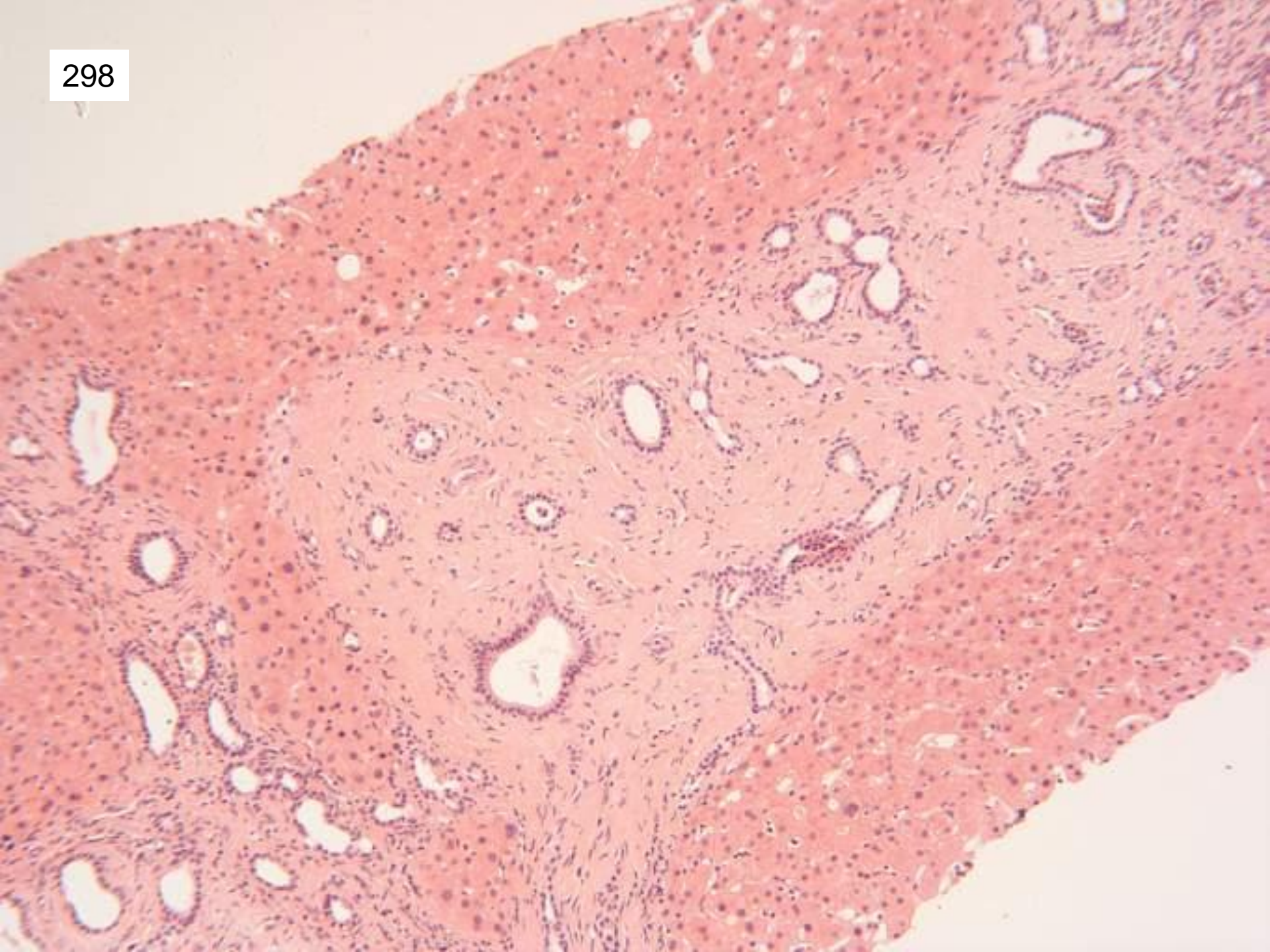
Liver biopsy – 2 photos of Orcein

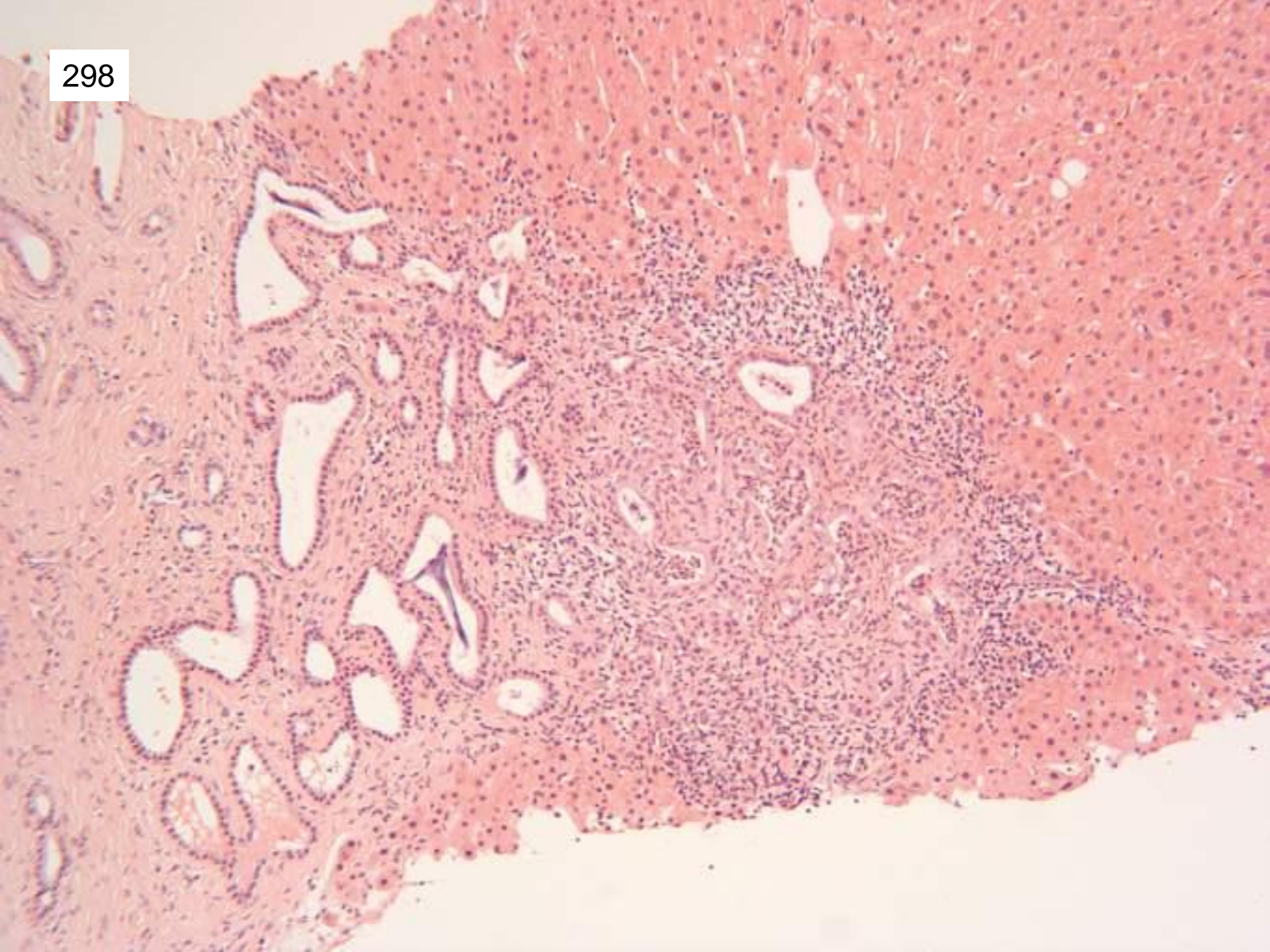


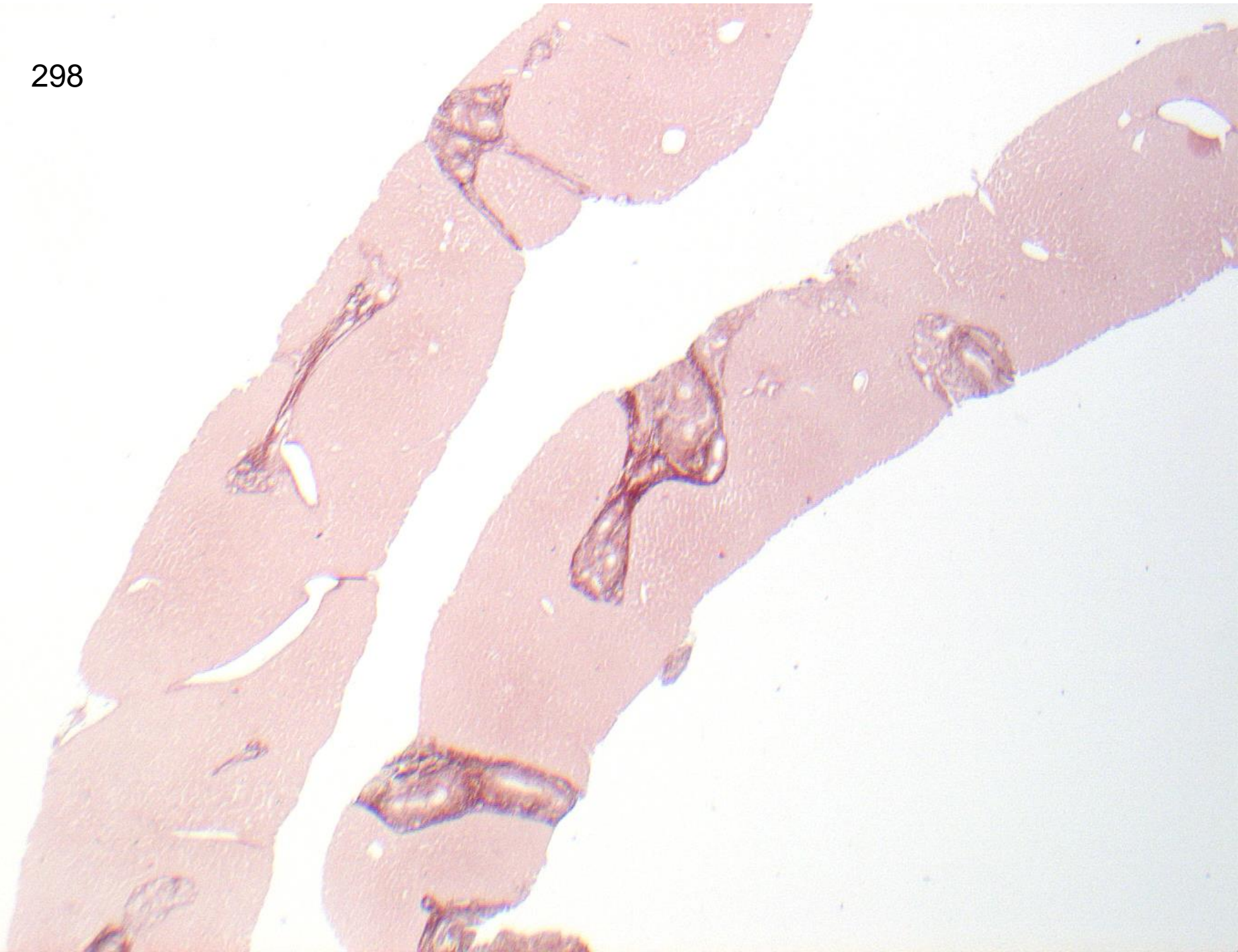


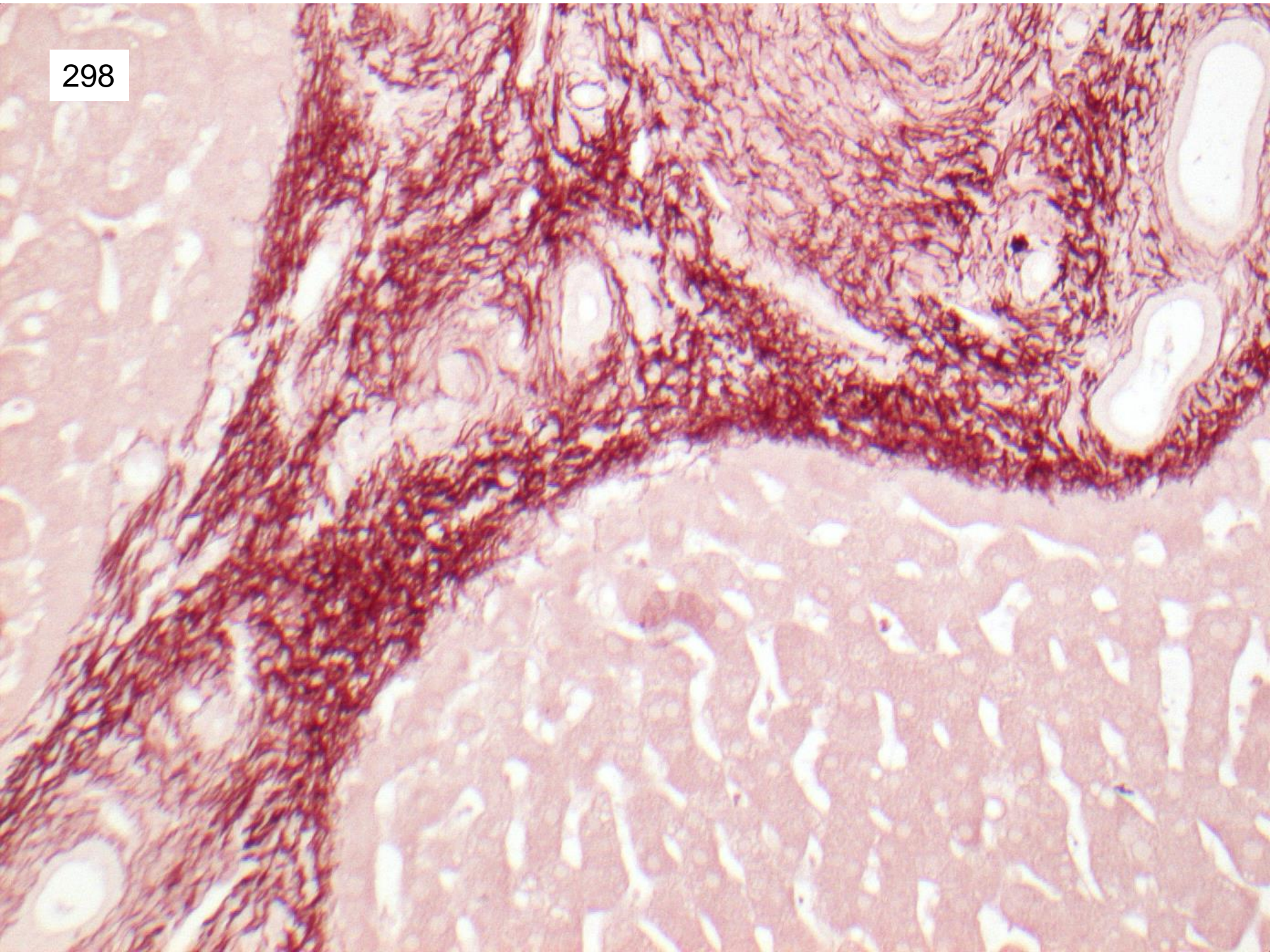












Case 298

Responses:

- 31 Congenital hepatic fibrosis with cholangitis/ Caroli's
- 5 Congenital hepatic fibrosis, cholangitis not mentioned
- 9 Polycystic spectrum
- 1 Caroli's or PSC

Responses with no mention of diffuse congenital/polycystic disorder:

- 9 Von Meyenberg complex, cholangitis*
- 1 Portal tract malformation*
- 1 Sclerosing cholangitis*
- 1 Acute cholangiolitis, early large duct obstruction*
- 1 illegible*

CASE 298

Scoring:

Score 10 for responses indicating that this is part of a polycystic spectrum; congenital hepatic fibrosis is the most appropriate in this case. The broad bands of fibrosis with ductal plate malformation are characteristic.

Discussion:

Presentation of congenital hepatic fibrosis for the first time in adults can occur but is unusual.

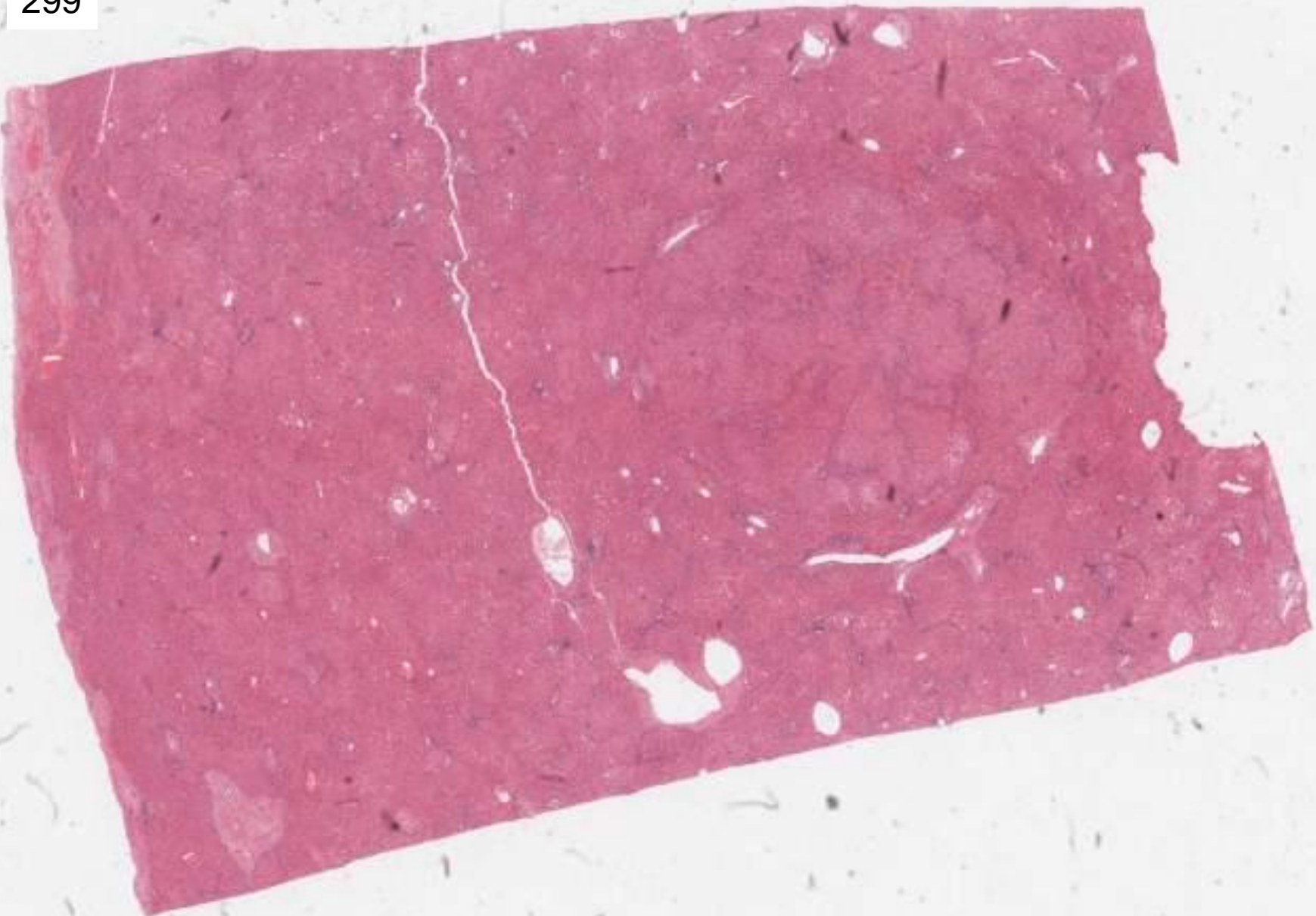
Original diagnosis: congenital hepatic fibrosis.
No alcohol change.

Case 299

- 66/M
- ?HCC, ? Alcohol related liver disease

Liver resection – 165g wedge of liver with a 10mm irregularly contoured tan nodule

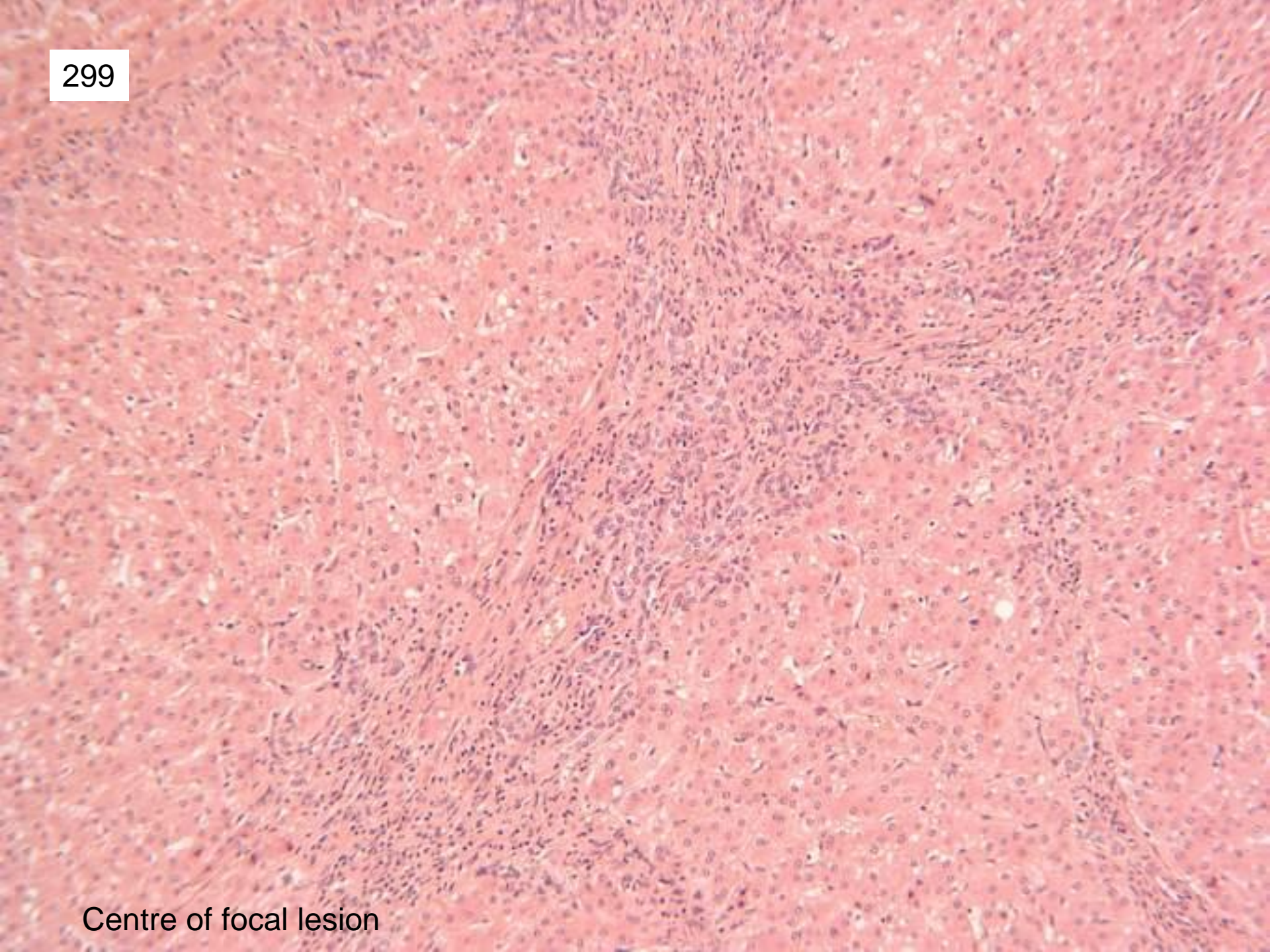
299





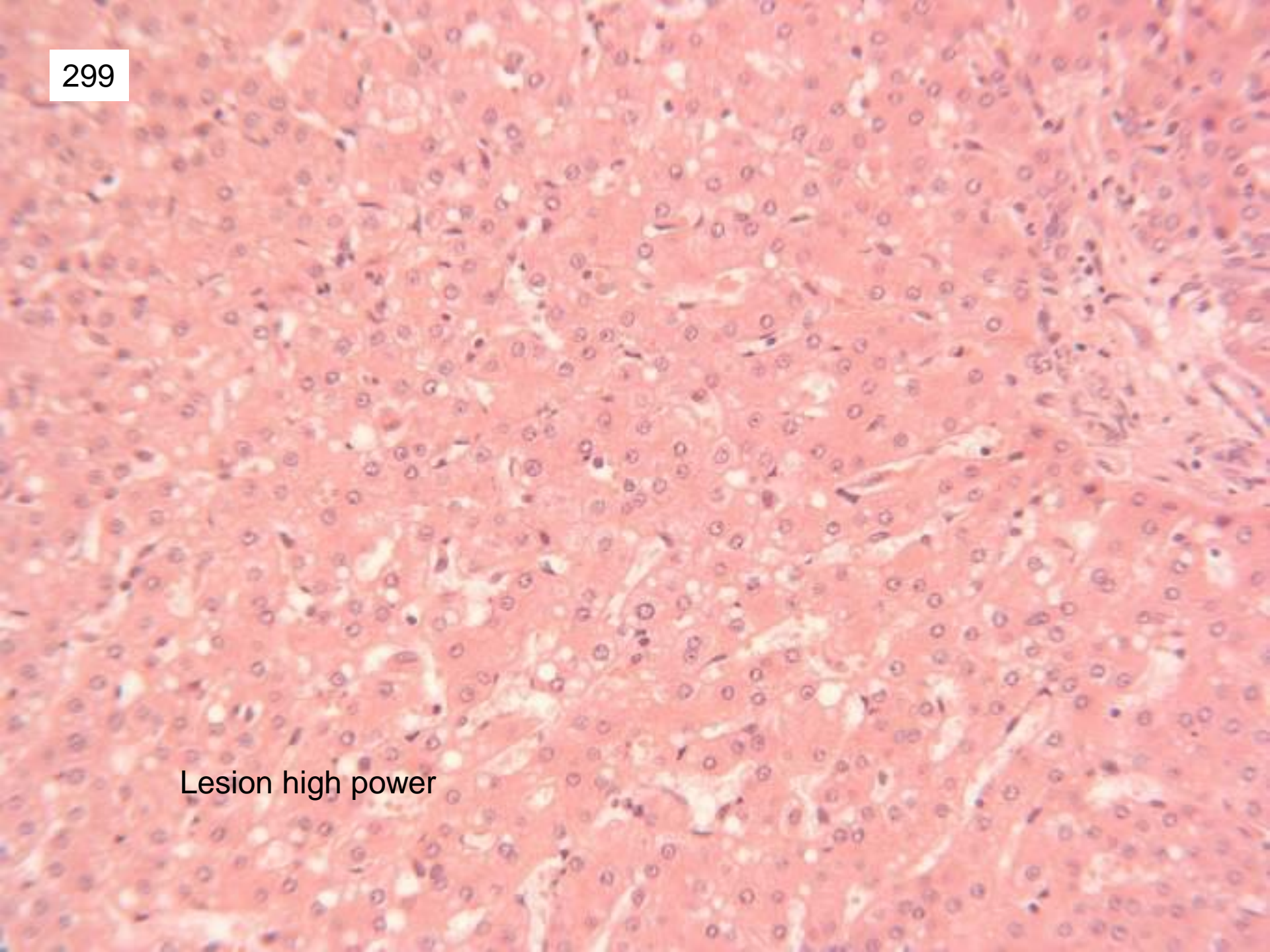
Edge of focal lesion

299



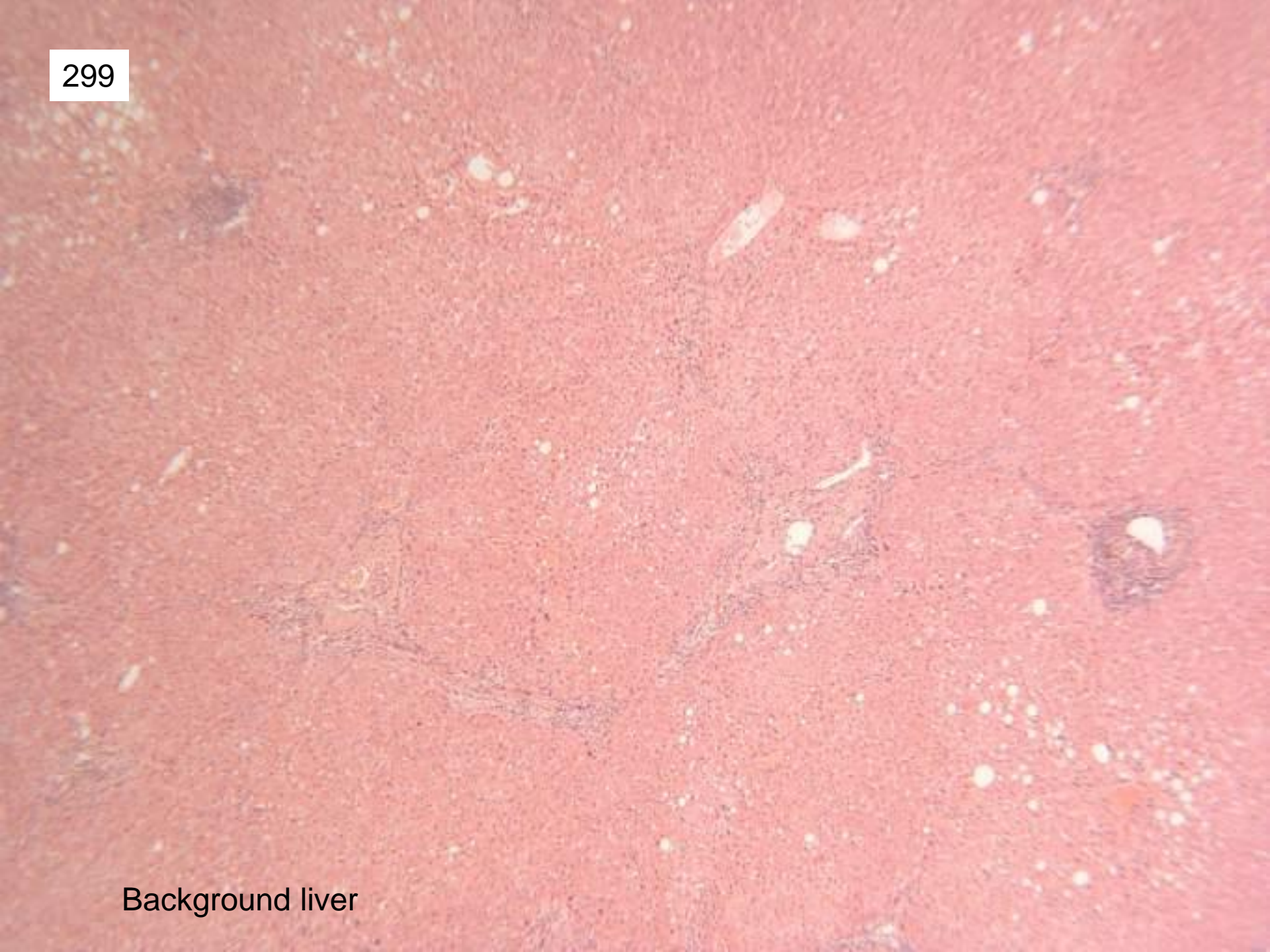
Centre of focal lesion

299



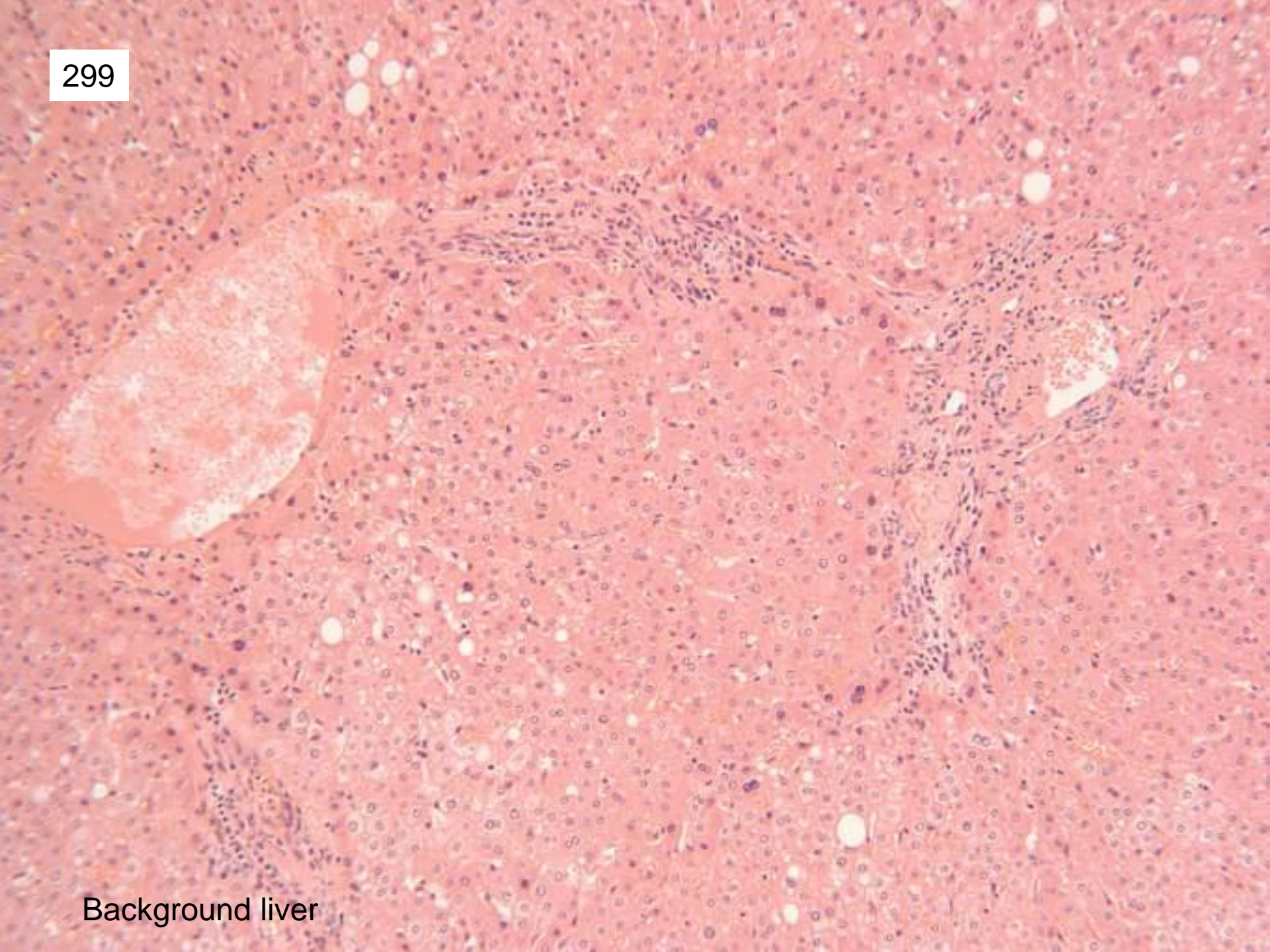
Lesion high power

299



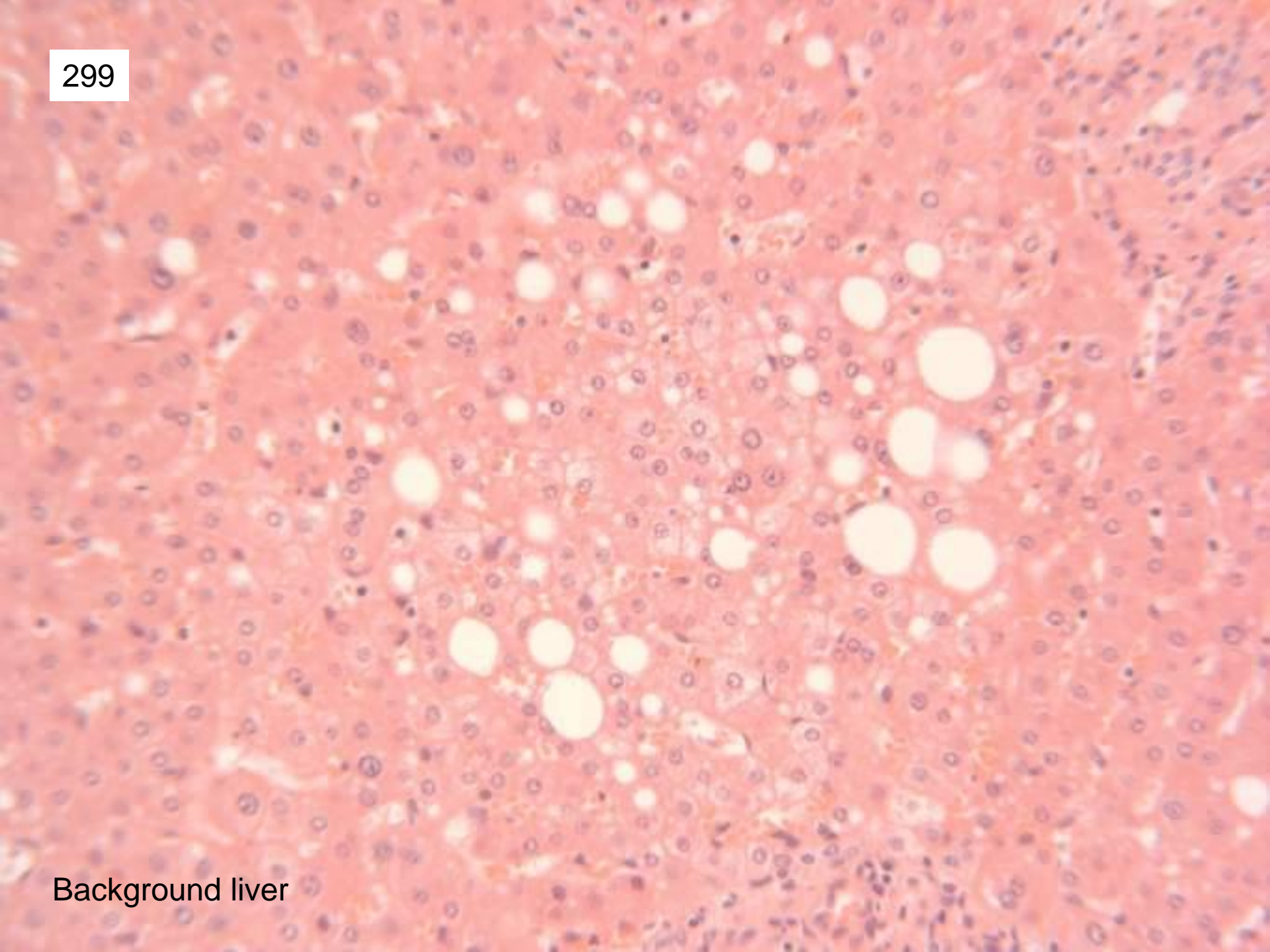
Background liver

299



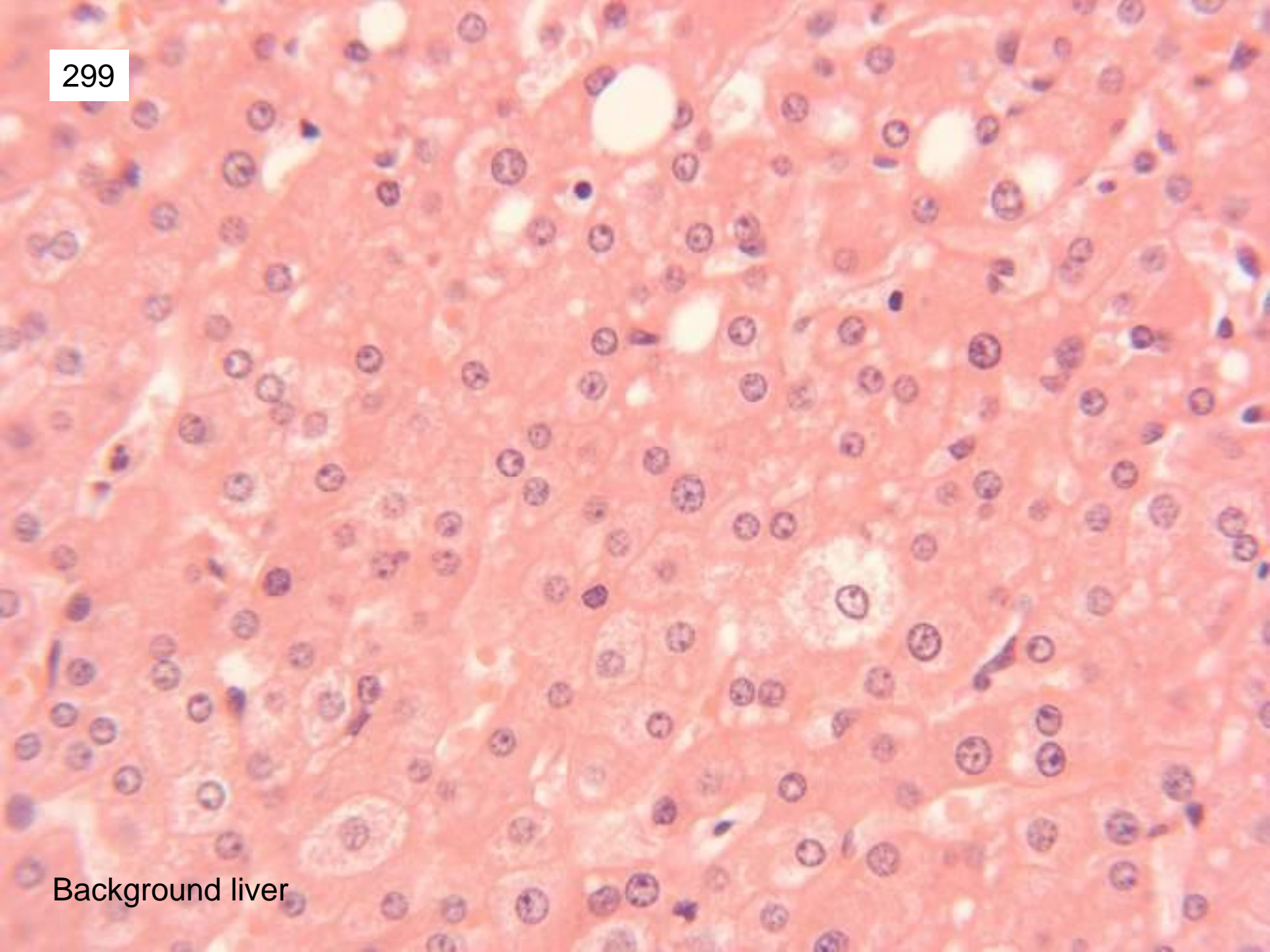
Background liver

299



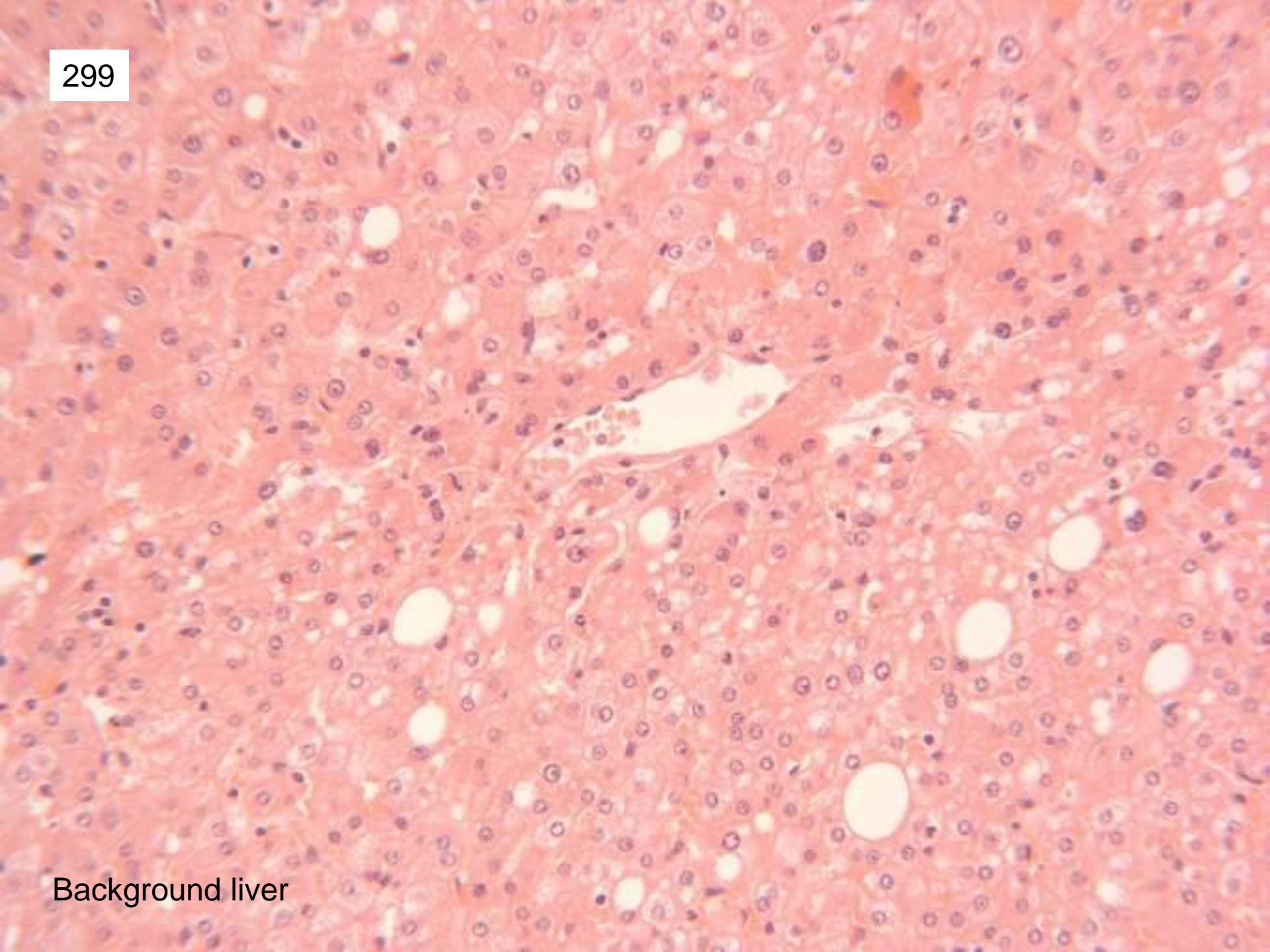
Background liver

299



Background liver

299



Background liver

Case 299

Responses:

48 Focal nodular hyperplasia

3 *Nodular regenerative hyperplasia*

4 *macro-regenerative nodule*

1 *Incipient cirrhosis, macro-regenerative nodule*

1 *Highly suspicious of HCC*

1 *HHT, no mention of focal lesion
(?transcription error)*

Background liver:

10 No comment

27 Steatosis +/- portal fibrosis

3 Steatohepatitis

2 Normal

3 Hepatitis

1 Chronic hepatitis with biliary features

CASE 299

Scoring:

Score 10 for focal nodular hyperplasia, and 0 for remaining alternatives.

Responses should include a comment on the background liver, although there is insufficient consensus to include this aspect in the scoring of this case.

Discussion:

Nodular regenerative hyperplasia is a diffuse condition, where as this is clearly a focal lesion.

Macro-regenerative nodule is terminology appropriate for cirrhotic liver rather than a focal lesion in a liver with normal architecture or mild fibrosis in background liver as seen here.

Original diagnosis: focal nodular hyperplasia.

Background = mild portal fibrosis and steatosis. No steatohepatitis..

Case 300

- 53/F
- Feb 2006 – nausea, anorexia, jaundice, pale stool and dark urine. ALT 468, GGT 1827, Bil 97, alk phos 517, ferritin 1660.
- Heterogeneous liver on USS.
- Drugs – black cohosh. Hep A,B,C negative.
- Alcohol 10-12 units/week.

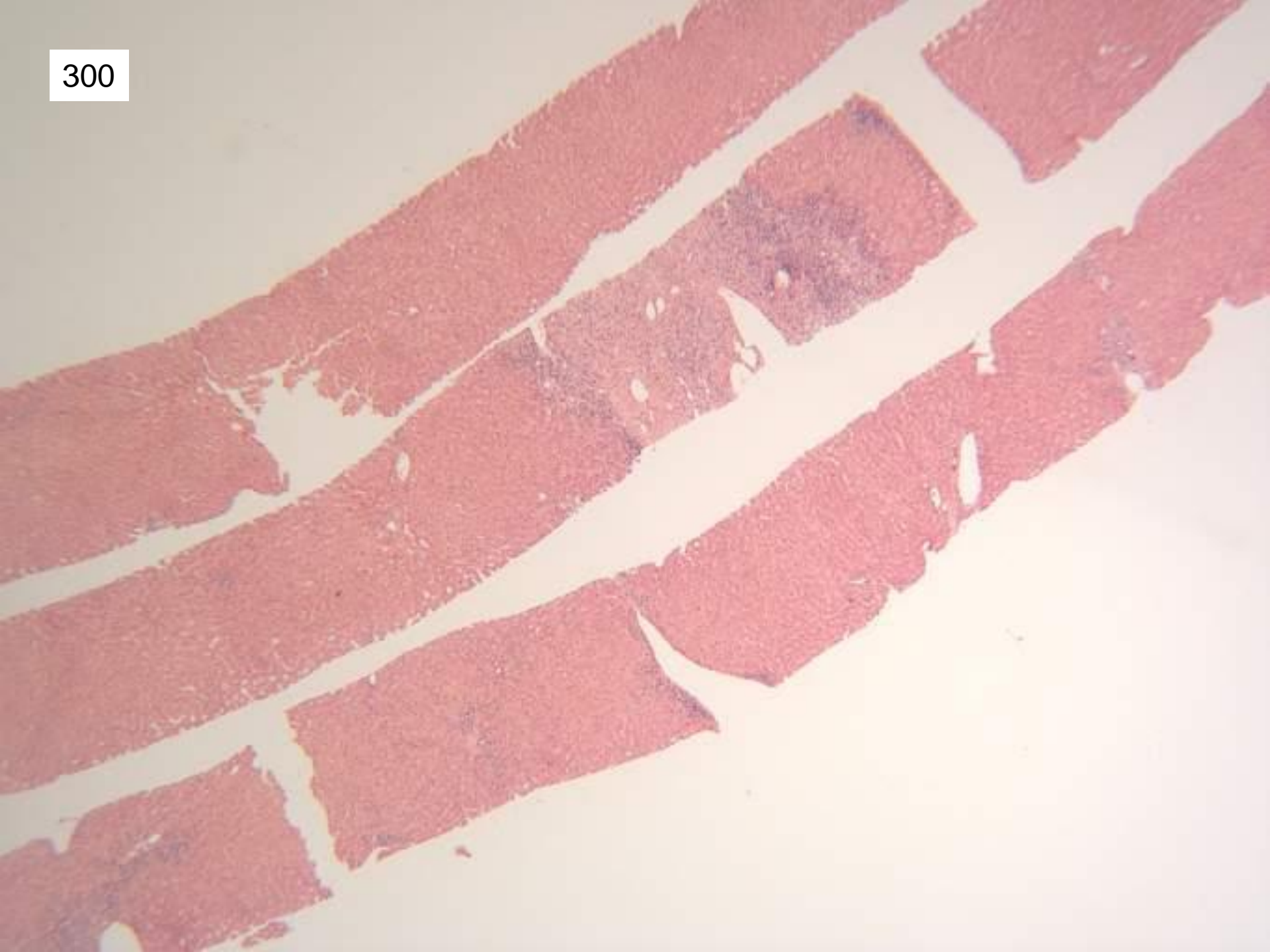
- Stopped black cohosh April/May 06.
- Autoimmune profile: negative, becoming +ve ANA (1:80) in Feb 2007.
- Liver biopsy December 2006.
- LFTs now improving – no treatment given

Liver biopsy – 3 cores.

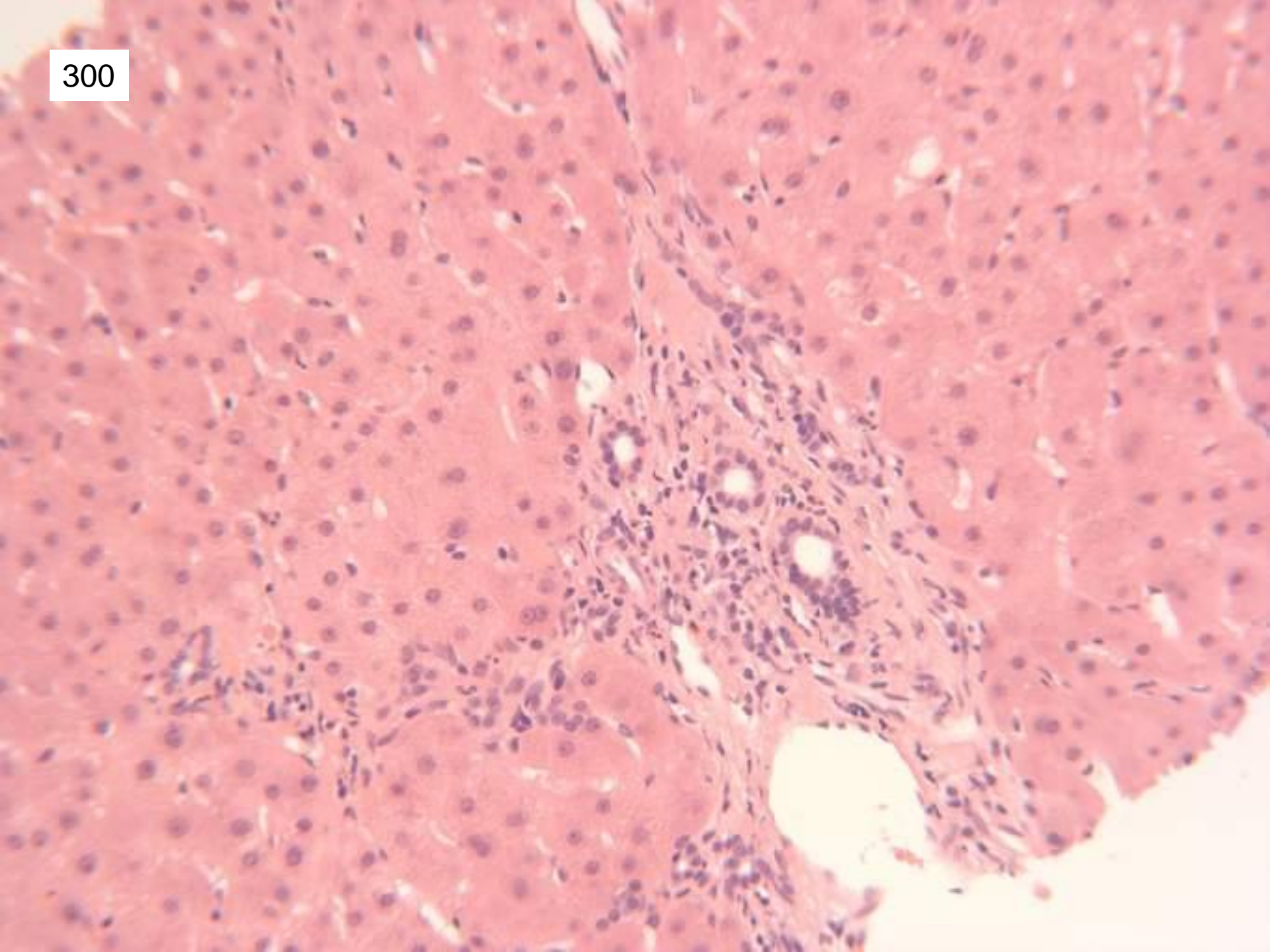
300



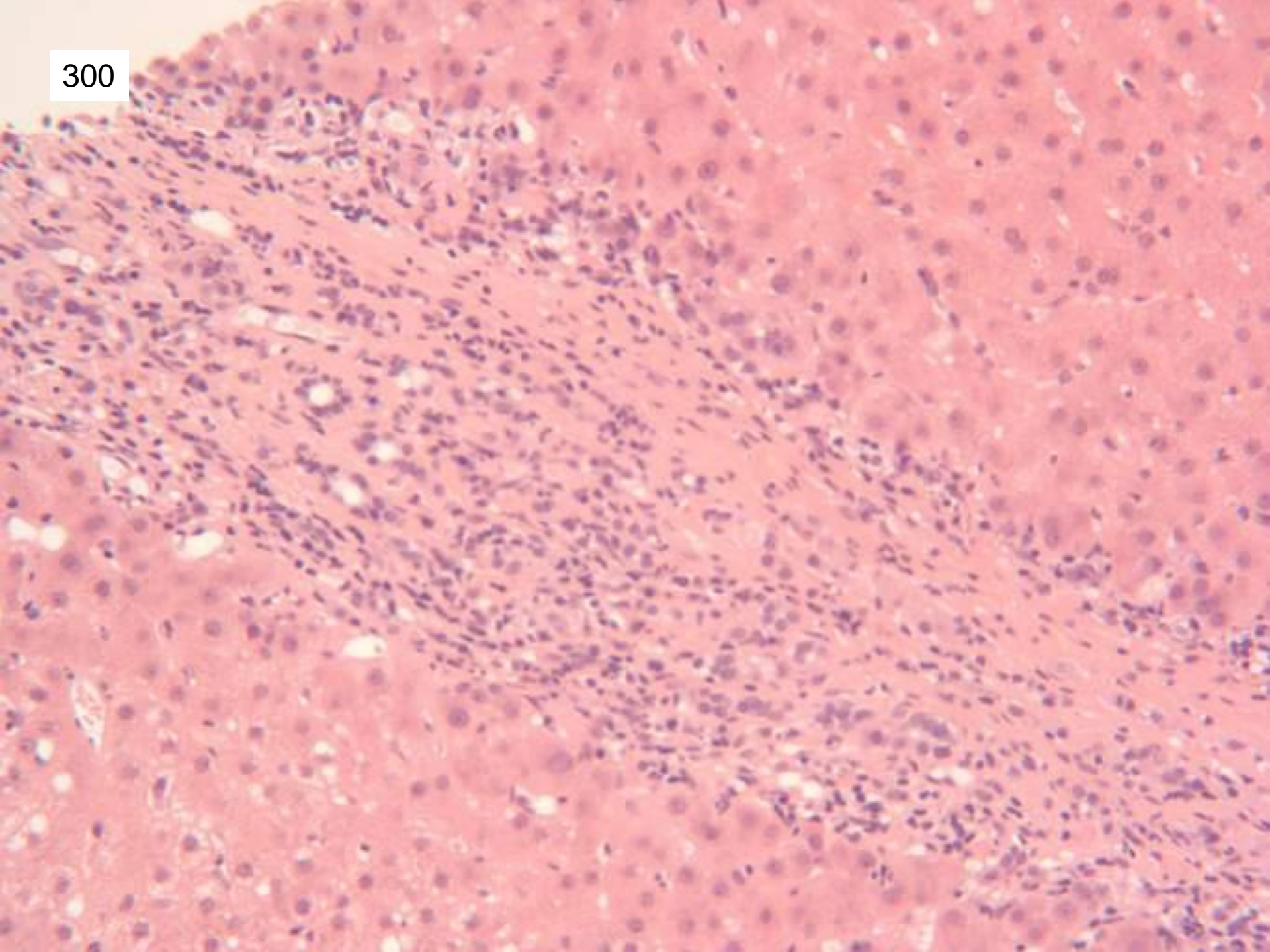
300



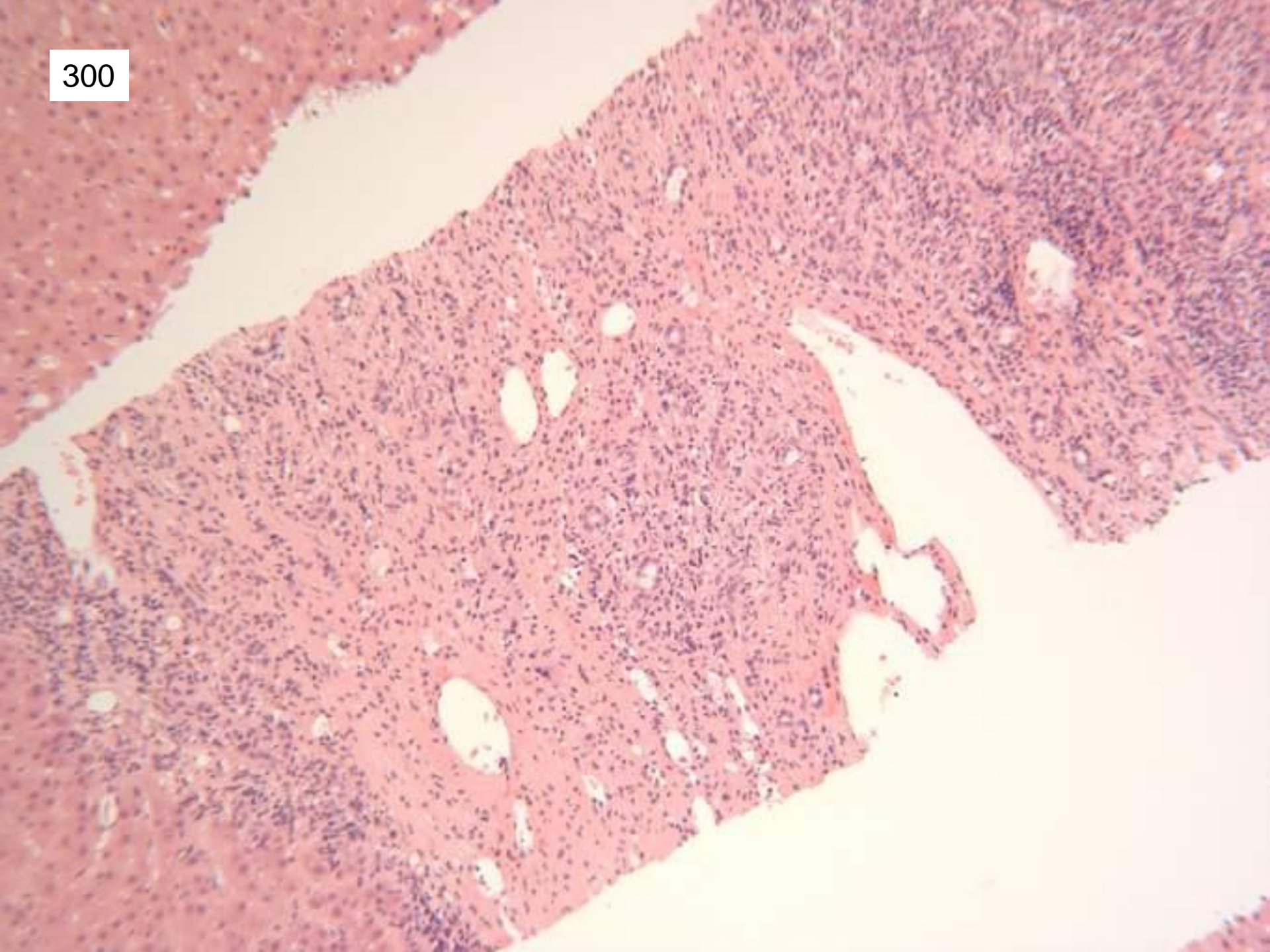
300



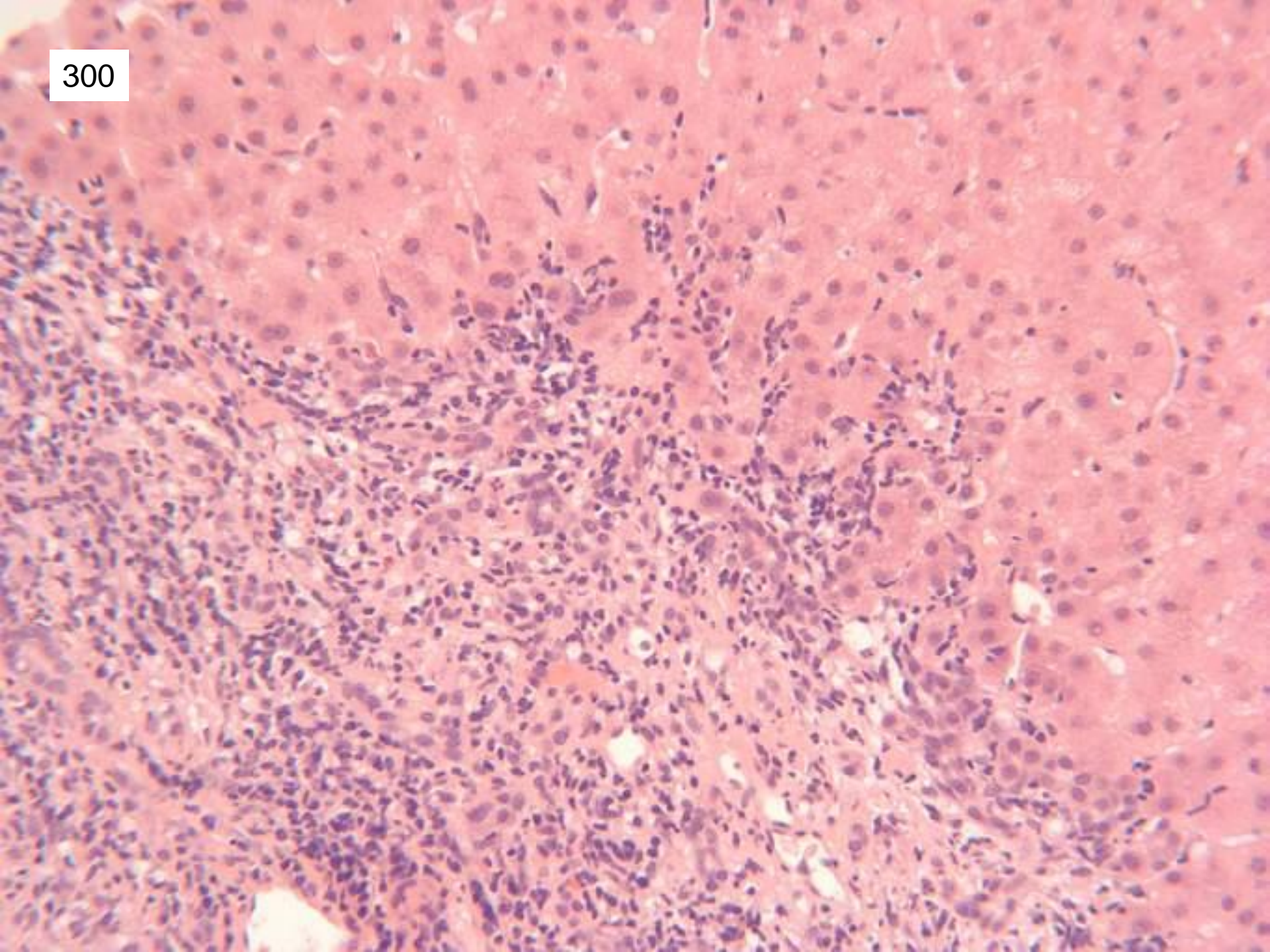
300



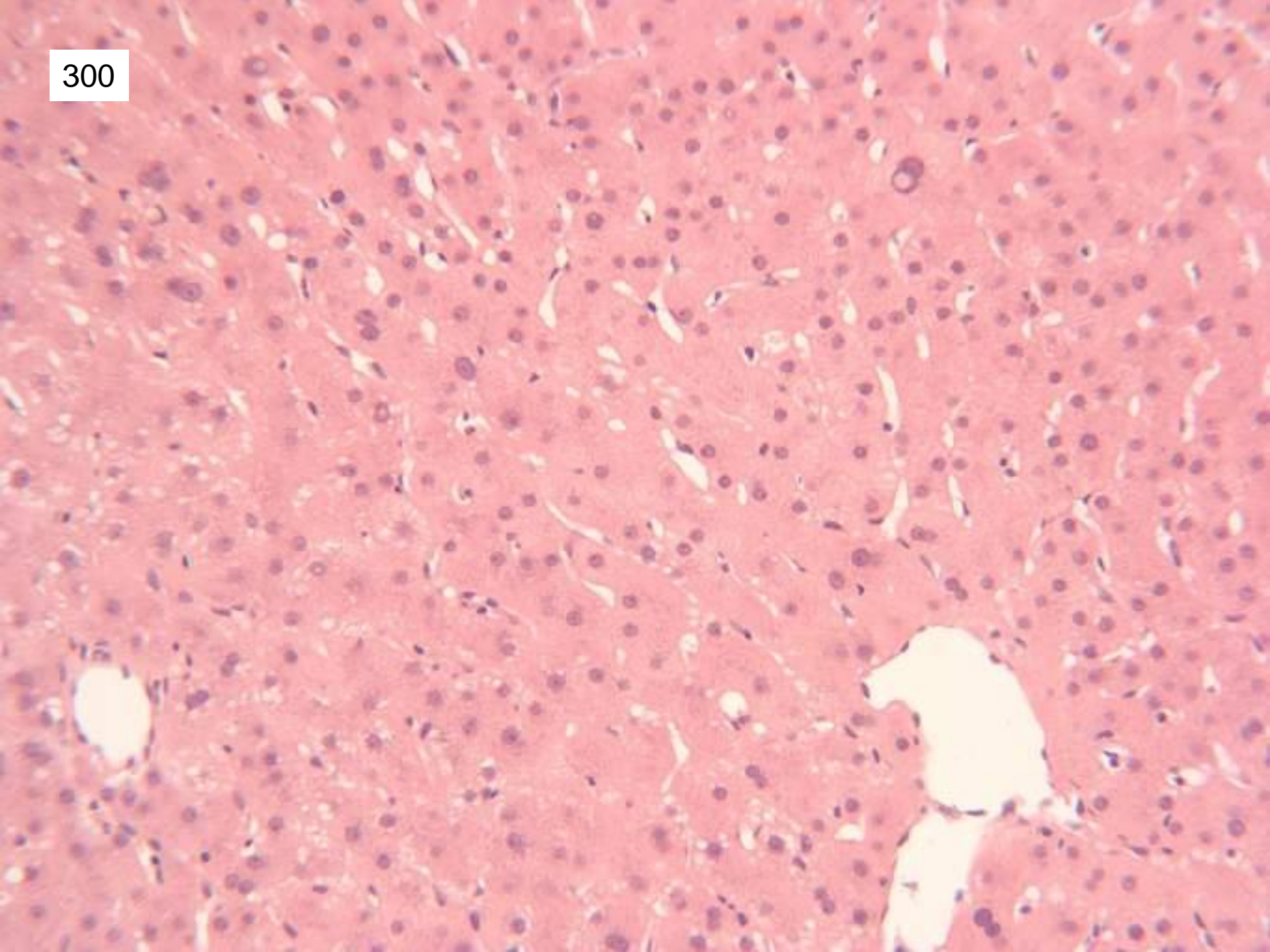
300



300



300



Case 300

Responses:

Morphology:

23 Hepatitis (incl. 6 with confluent necrosis)

24 chronic hepatitis

2 acute hepatitis

1 Fibrous scarring

1 Overlap syndrome, NOS

1 Mixed autoimmune/bile duct damage

2 Chronic biliary disease

3 Previous biliary obstruction

Aetiology:

48 Consistent with drugs
+/- autoimmune component

2 Drugs or biliary obstruction

2 not drugs

3 Drugs not mentioned

CASE 300

Scoring:

Consensus diagnosis was hepatitis/chronic hepatitis, with potential to be caused by drugs.

Score 0 points for other morphologies. Acute hepatitis is a predominantly lobular process and is not appropriate for this case. Members did not feel there was evidence of biliary disease in this section.

5 points deducted if no mention of drugs as possible aetiology.

Discussion:

Black cohosh is a herbal remedy for menopausal symptoms. It has been reported as causing acute and chronic hepatitis sometimes with autoimmune features. Recognition of liver injury attributable to herbal remedies should be reported with a yellow card in the same way as other drug reactions.

Discussion over whether clinicians treat such a case with steroids – this would often be the case, although there seems no clinical consensus on the point.

Case 300

- Original diagnosis: Chronic hepatitis.
? drug reaction, ? AIH

Circumstantial evidence for drug.

LFTs slowly improving, still not normal.

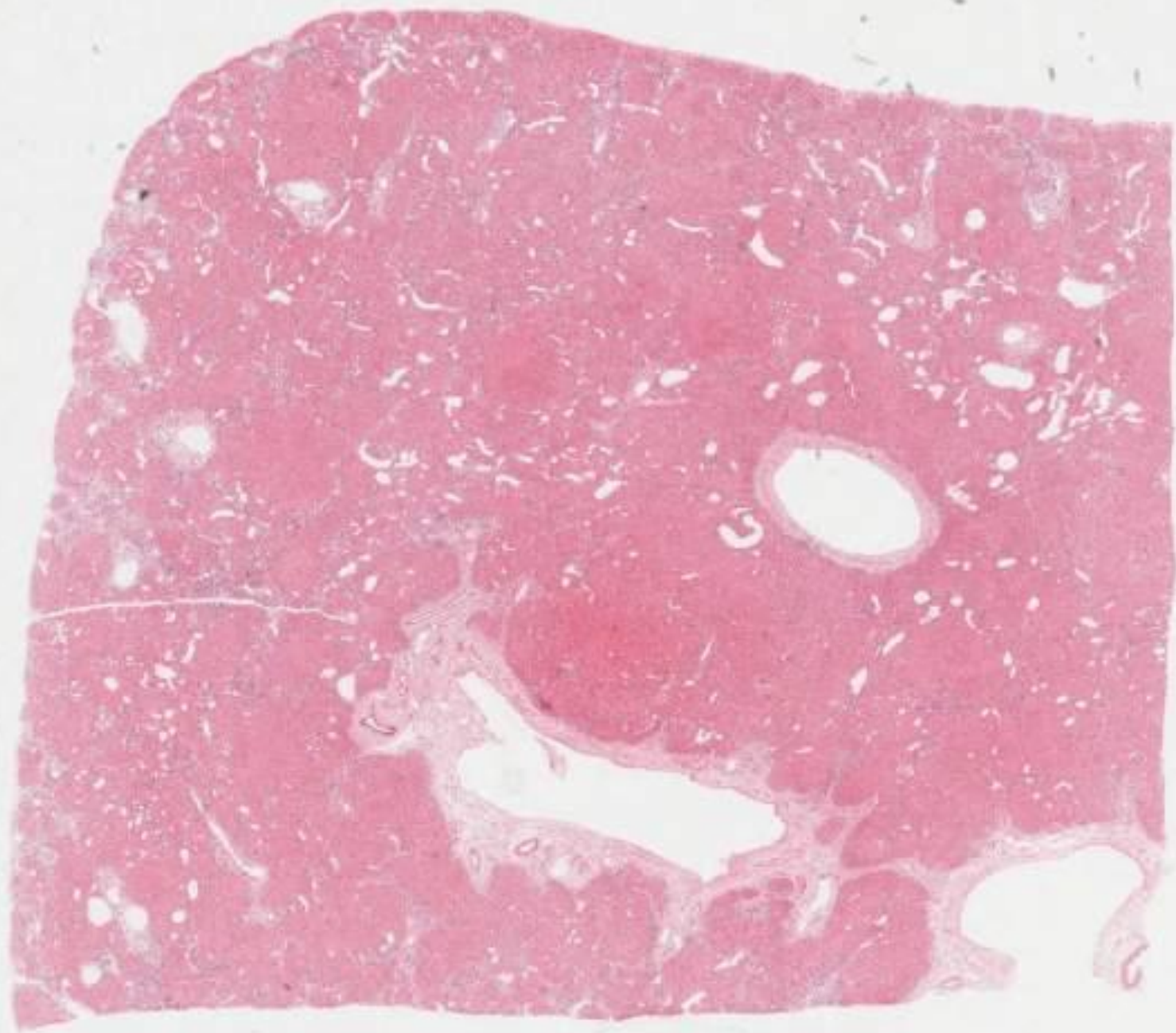
Now slightly raised ALT, alk phos, GGT.

Case 301

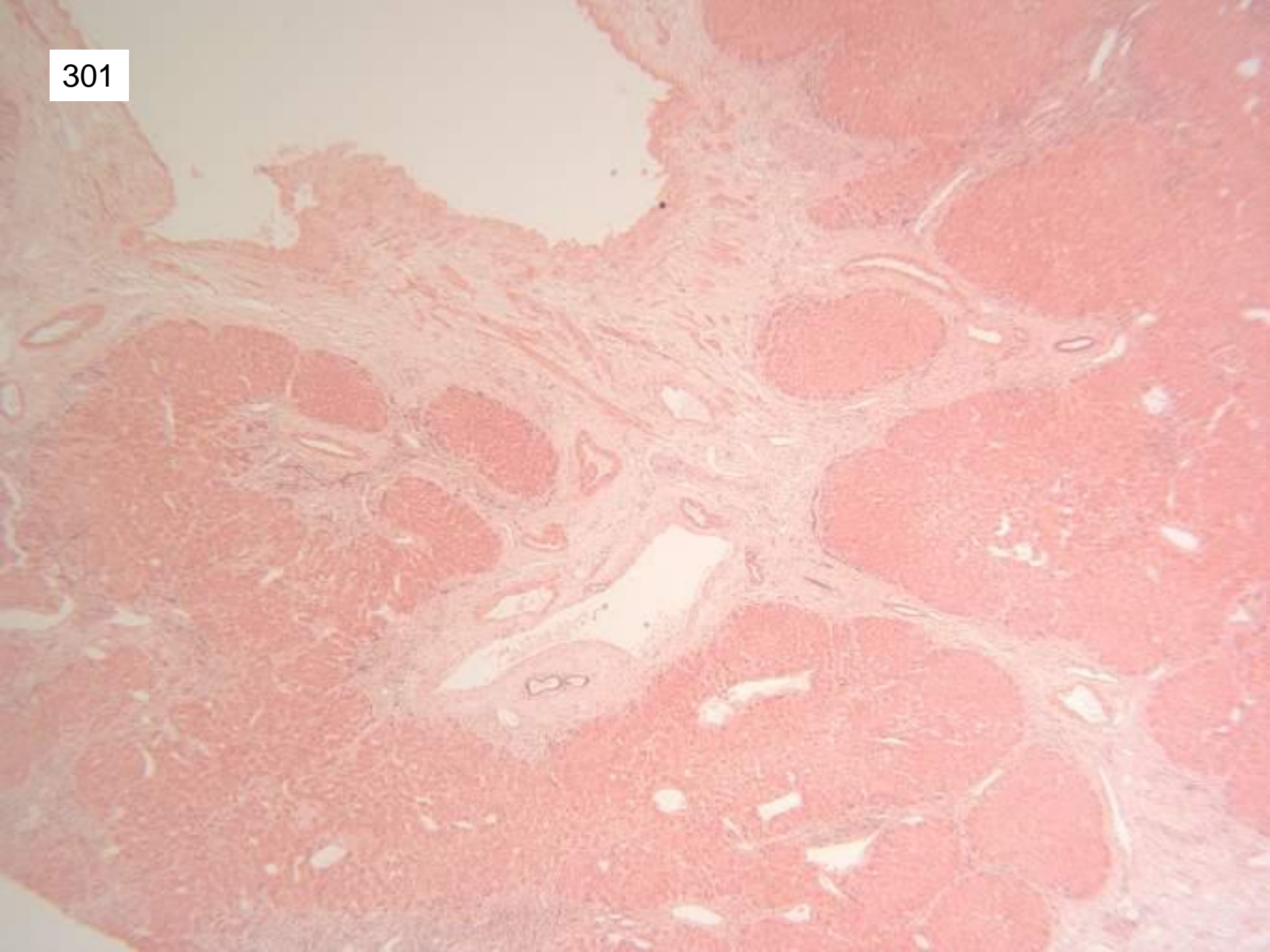
- 51/M
- Cryptogenic cirrhosis

Explant liver – weight 1054g, partial nodularity (1-6mm nodules) alternating with areas of parenchymal collapse.

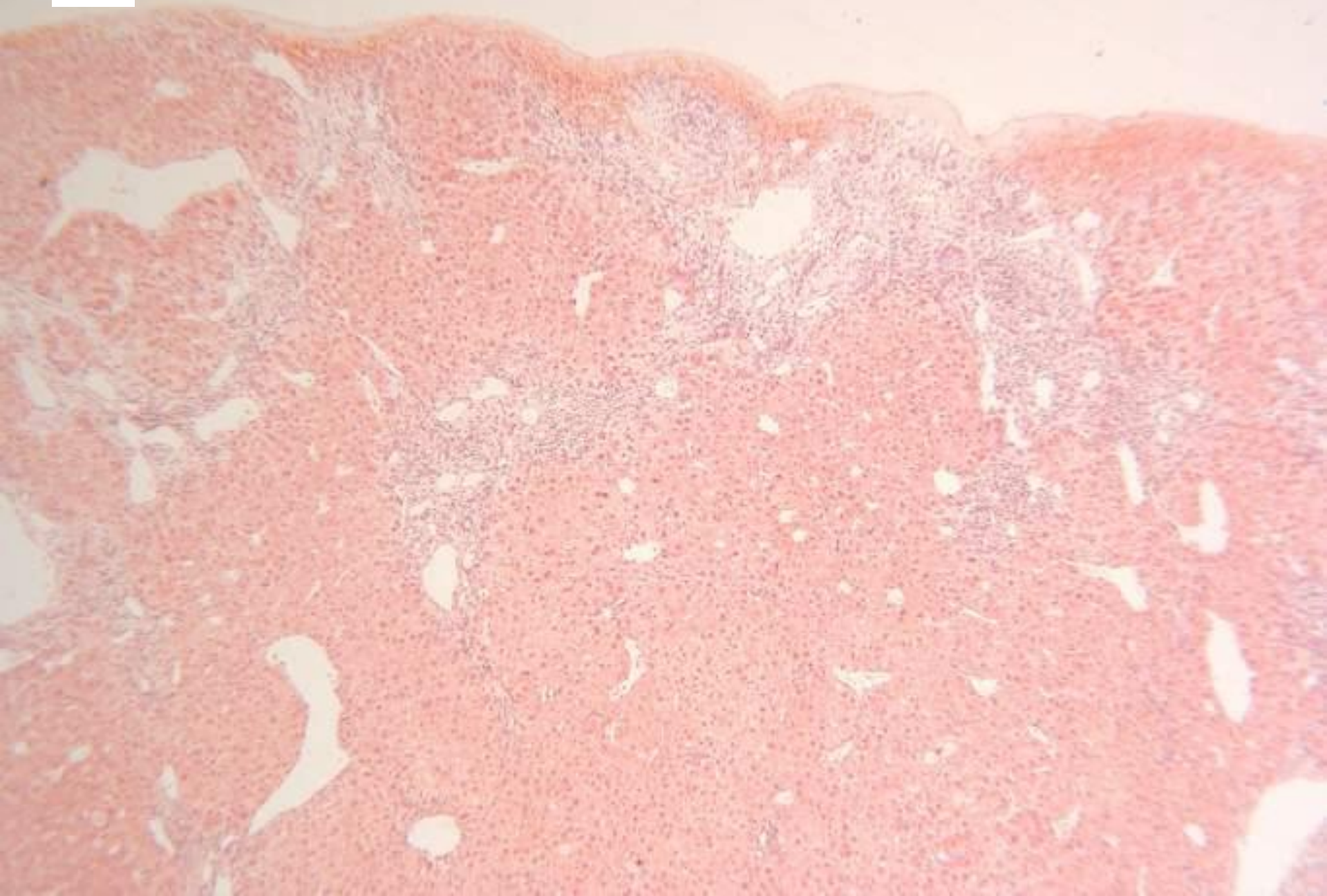
301



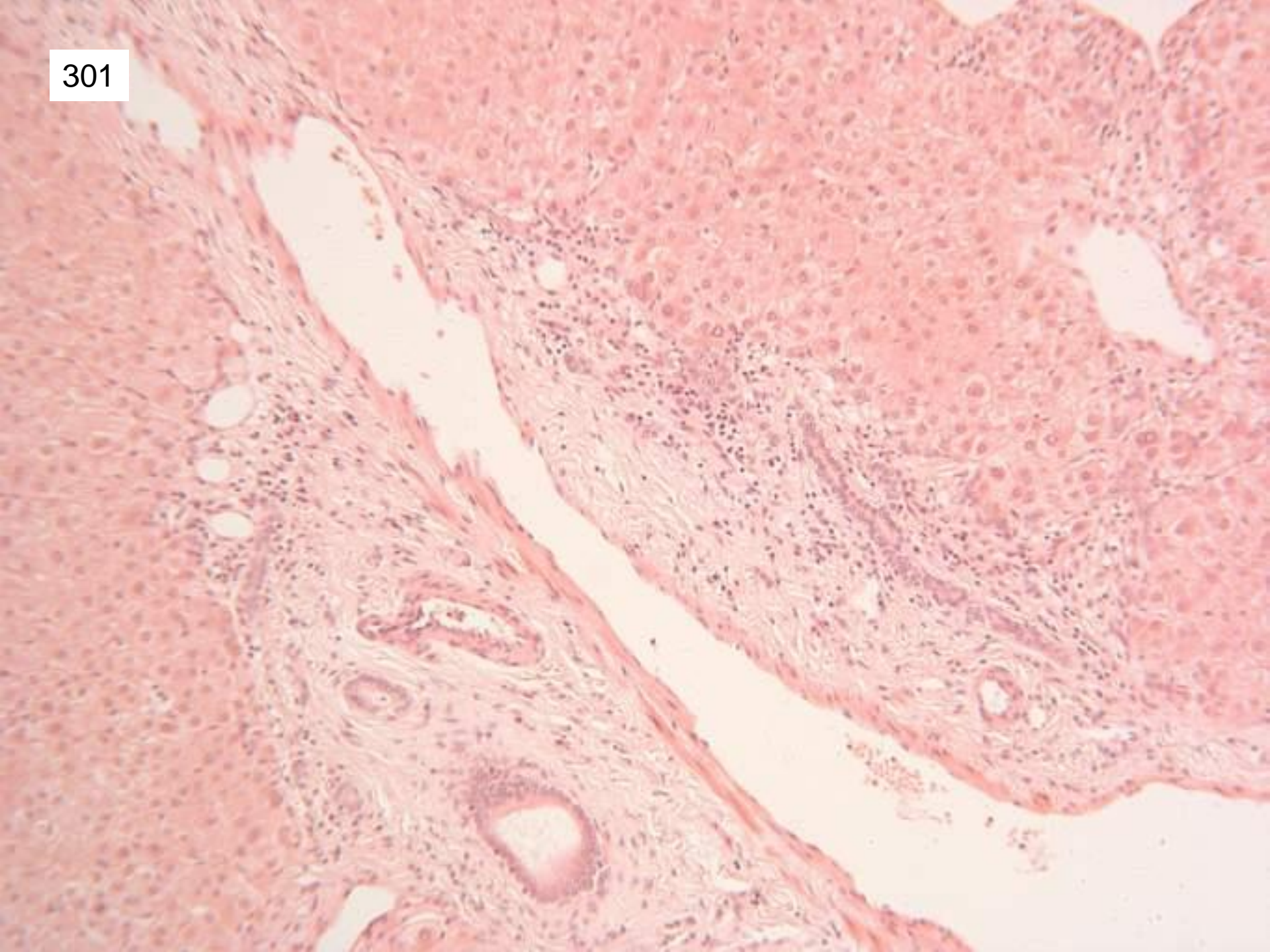
301



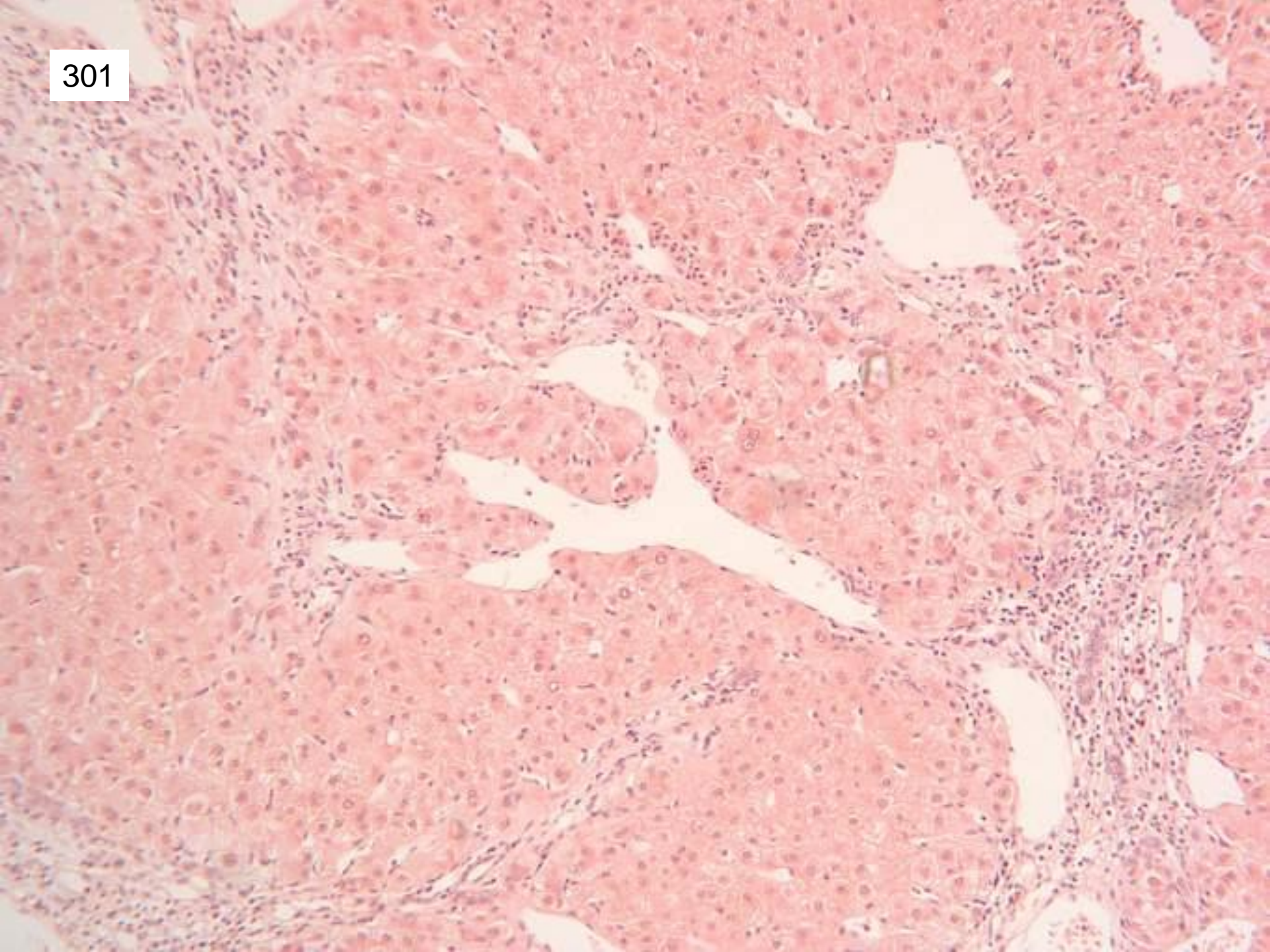
301



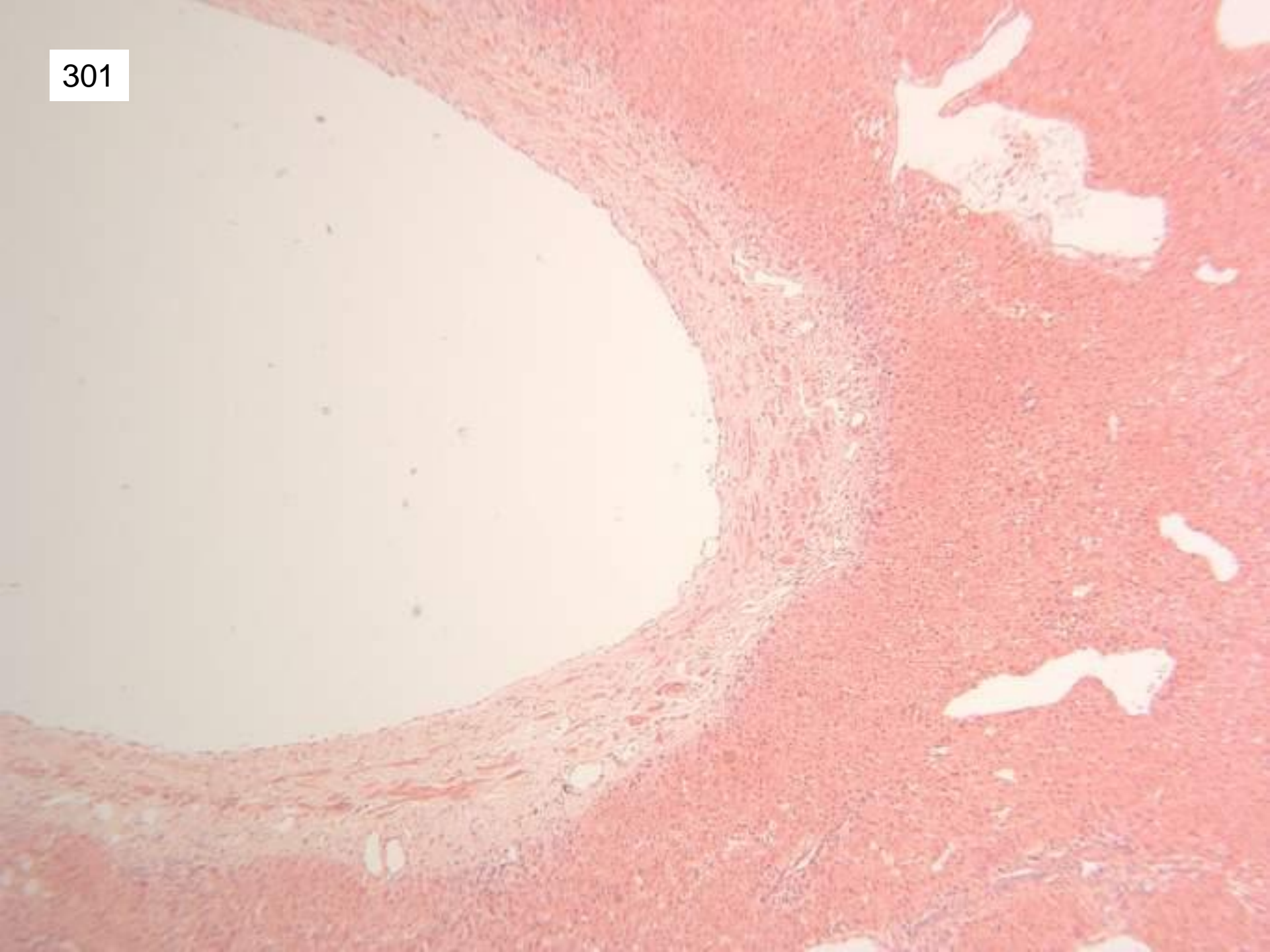
301



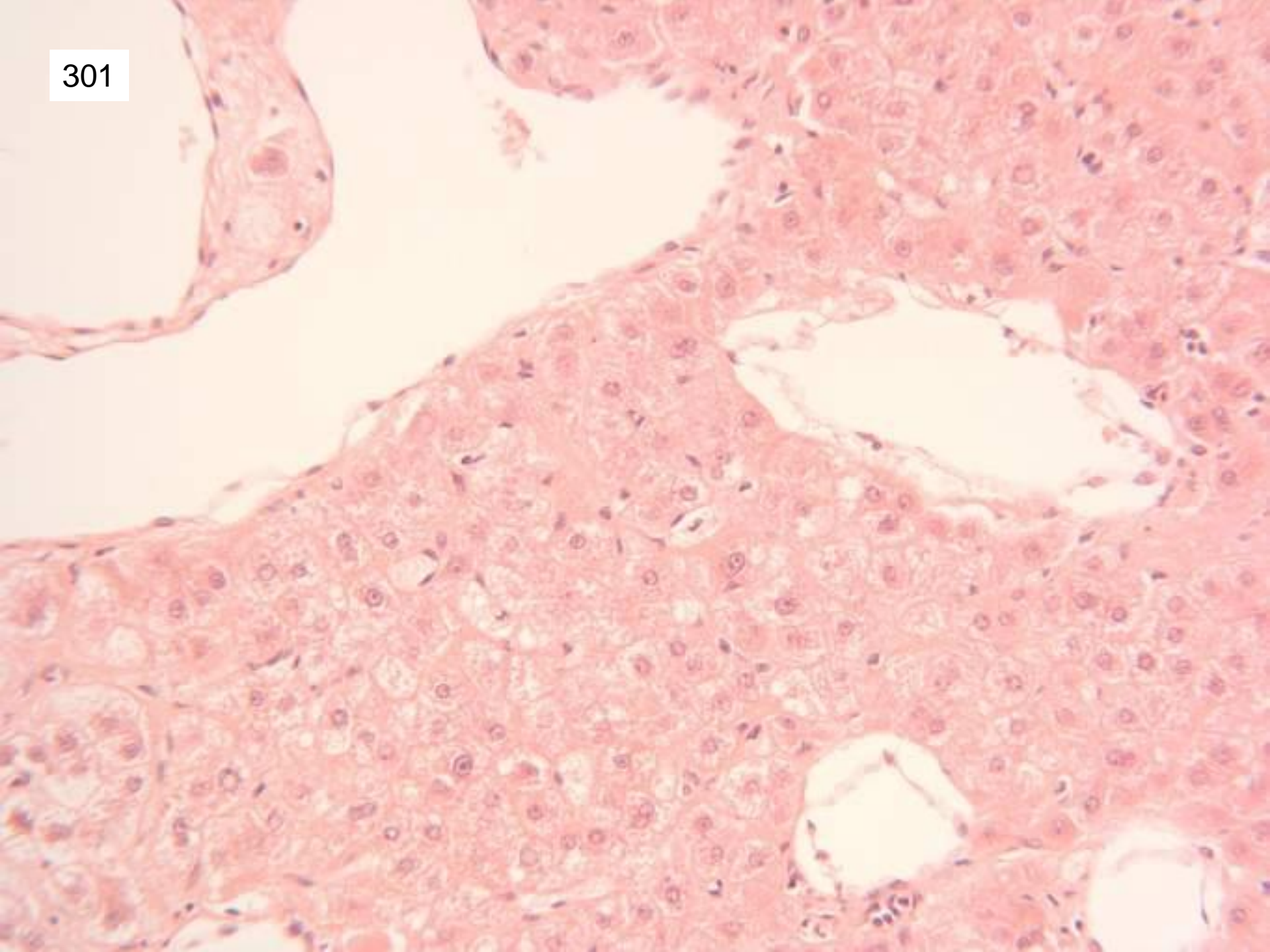
301



301



301



Case 301

Responses:

15 Cirrhosis

15 NCPHT

8 Hereditary haemorrhagic telangiectasia

4 Budd-Chiari/hepatic vein thrombosis

4 Portal venous outflow obstruction

2 Nodular regenerative hyperplasia

3 Biliary fibrosis/cirrhosis/PSC

1 Incomplete septal cirrhosis

2 Hepatoportal cirrhosis

1 Vascular malformation/focal hyperplasia

8 description, no specific diagnosis

CASE 301

Not suitable for scoring – no consensus in terminology.

Original diagnosis: end stage non-cirrhotic portal hypertension.

Thank you to members for coming

To Anne – long and happy retirement