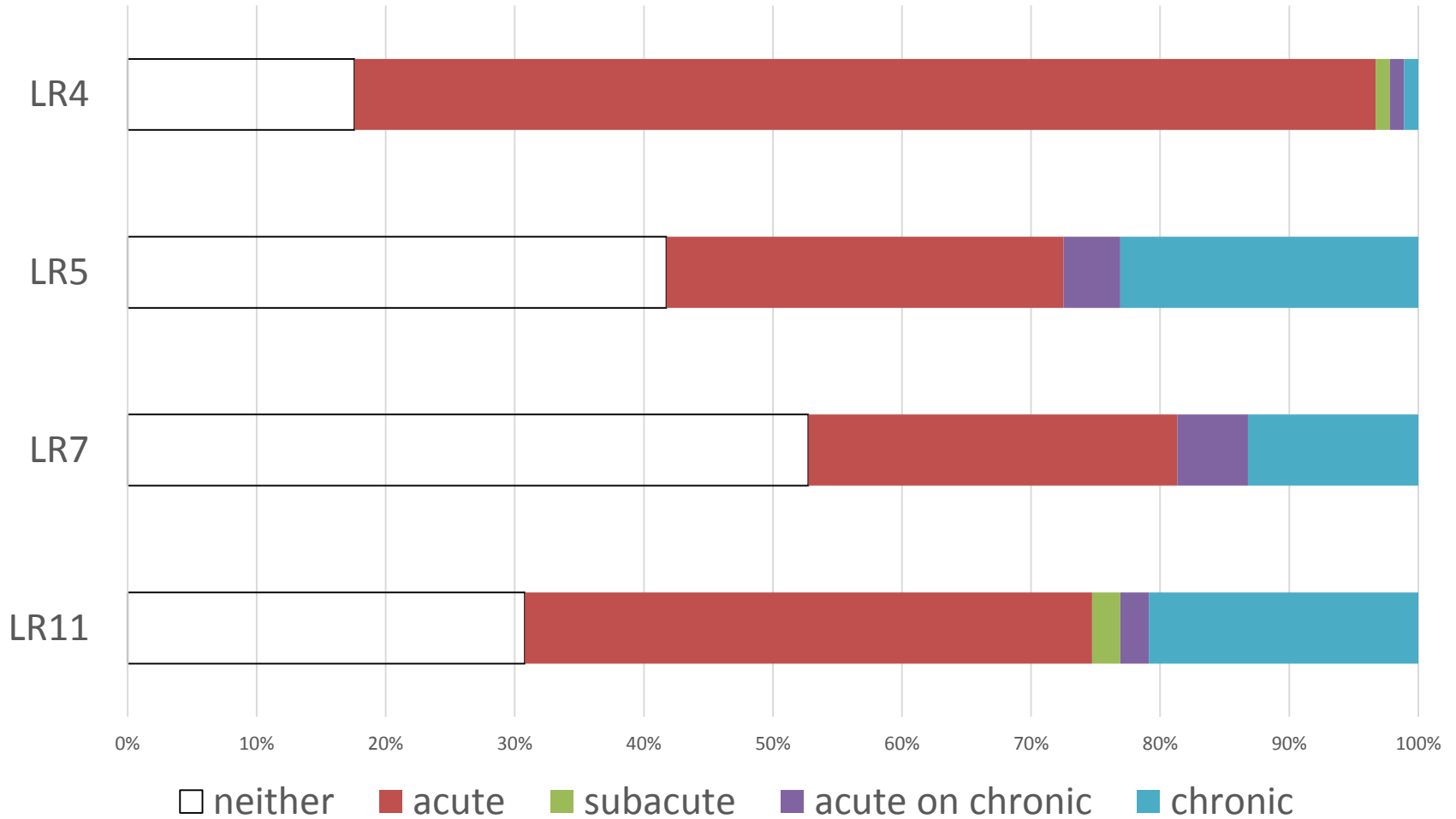


Can we distinguish acute and chronic hepatitis?

Judy Wyatt

What words did we use?

Description of hepatitis - acute, chronic



LR cases 4,5,7,11

all histologically hepatitis with suggestion of AIH
spread of opinion about acute v chronic

Chronic hepatitis originally classified **morphologically**,
1960's Gnomes:

- Chronic active hepatitis,
- chronic persistent hepatitis
- chronic lobular hepatitis

1984 – central necrosis in 2 patients with recent chronic hepatitis -
Lefkowitz

1990's: change to **aetiological** classification

– chronic viral hepatitis B, C, autoimmune hepatitis,
also drugs, Wilson's, A1ATD,

morphology to indicate the severity

Autoimmune hepatitis was originally defined as an autoimmune mediated chronic disease

– abnormal LFTs for >6 months

but may have been clinically silent.

Then - acute presentation recognised increasingly – 8-75%

biopsy has central (zone 3) necrosis

diffuse lobular inflammation

no longstanding fibrosis (elastic)

Clinicopathological diagnosis of AIH

International Autoimmune Hepatitis Group criteria

clinical – hepatitis, no other aetiology

serological – raised IgG, autoantibodies,

biochemical high ALT,

histological – interface hepatitis

2 points: with PCs, rosettes, emperipolesis

1 point – just portal inflammation

Hepatitis with acute features
diffuse lobular activity
confluent necrosis – bridging, zonal, panacinar

Morphological pattern that can be due to AIH, drugs, viruses –
often don't know the cause

May have AIH characteristics

For AIH – can we distinguish a flare of chronic disease from first presentation with acute disease?

- and does it really matter? – treat in the same way
 - may influence decision re transplant

Recent onset

v

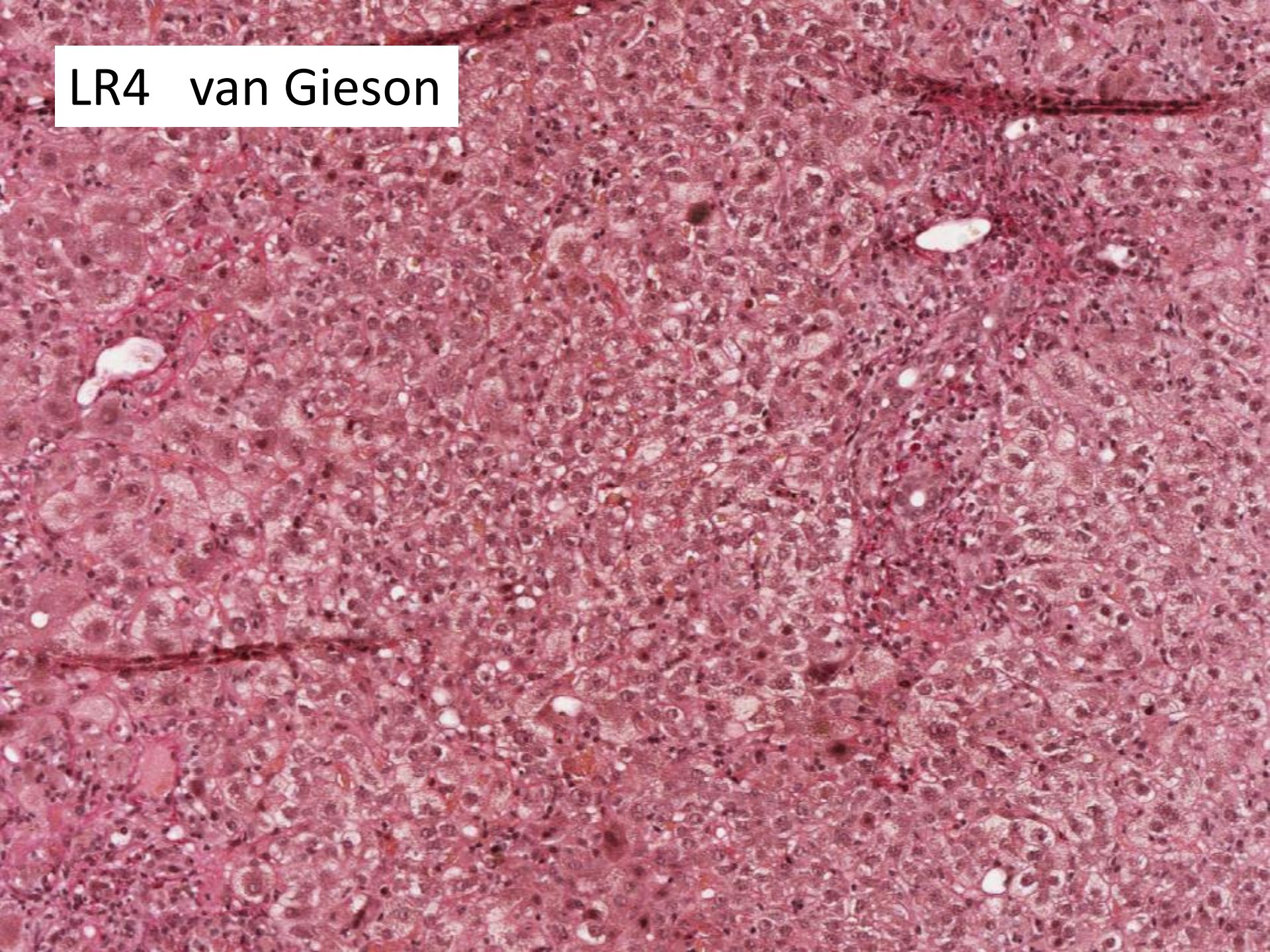
flare of chronic disease?

- Difficult – only really know if elastic +ve septa
 - Beware of reticulin +ve septa in ‘collapse’ – pitfall
 - Increasing collagen in scar, elastic in long standing scar
-

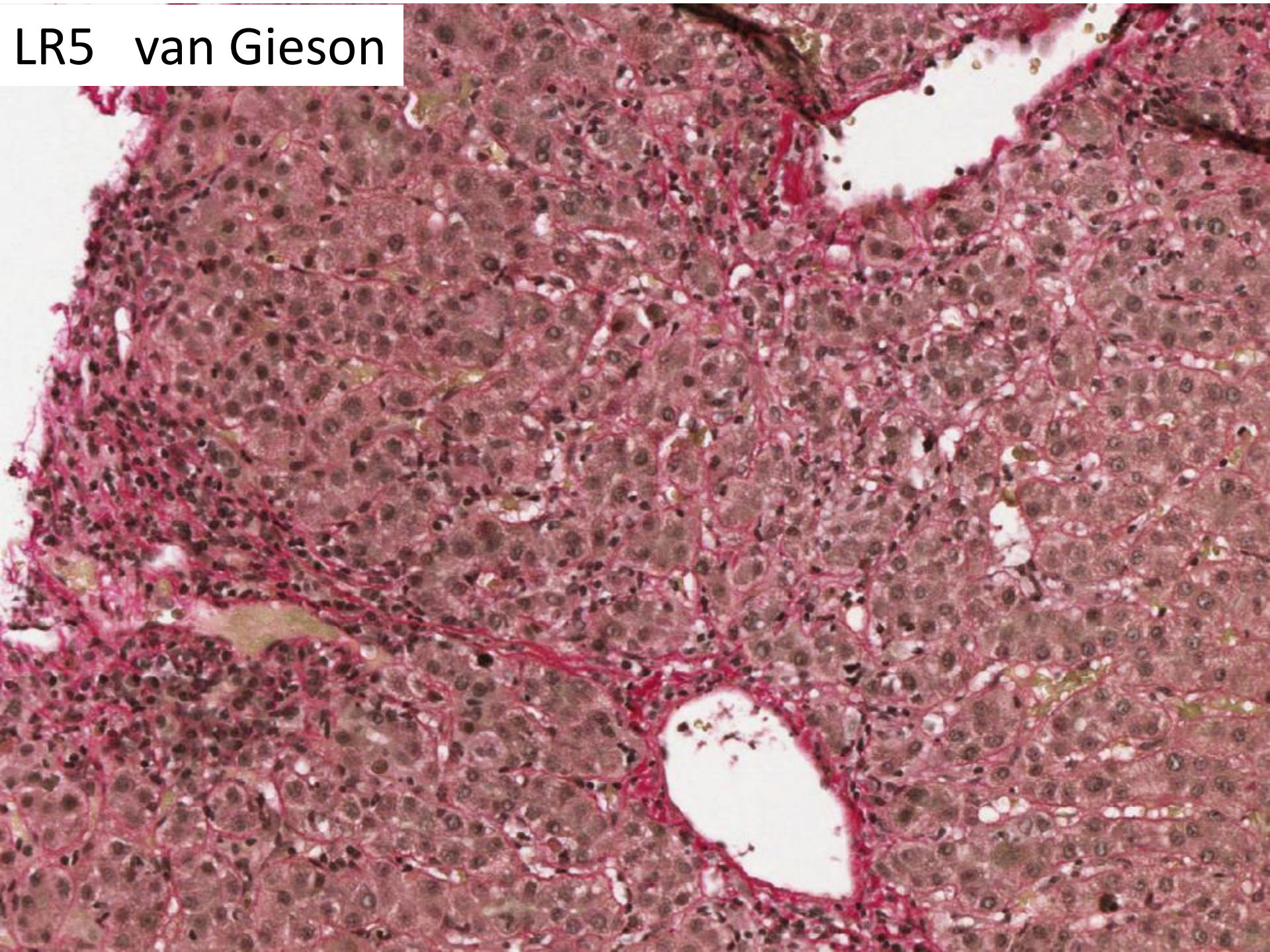
- Hyperacute v acute v subacute v chronic liver failure
 - are clinical categories,
 - time between presentation and encephalopathy
 - initial severity v regenerative capacity.

Reflected in histology – but different use of acute terminology

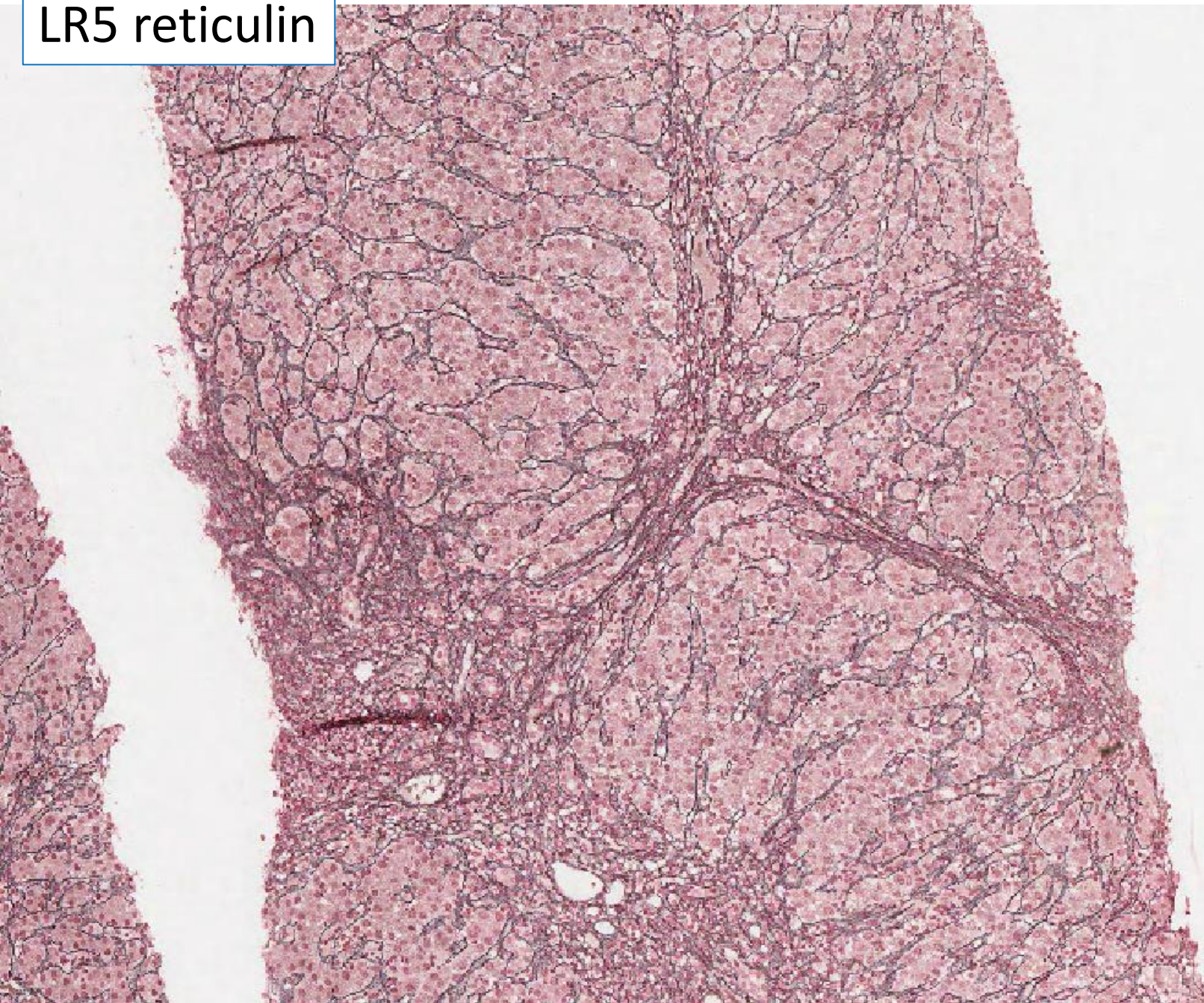
LR4 van Gieson



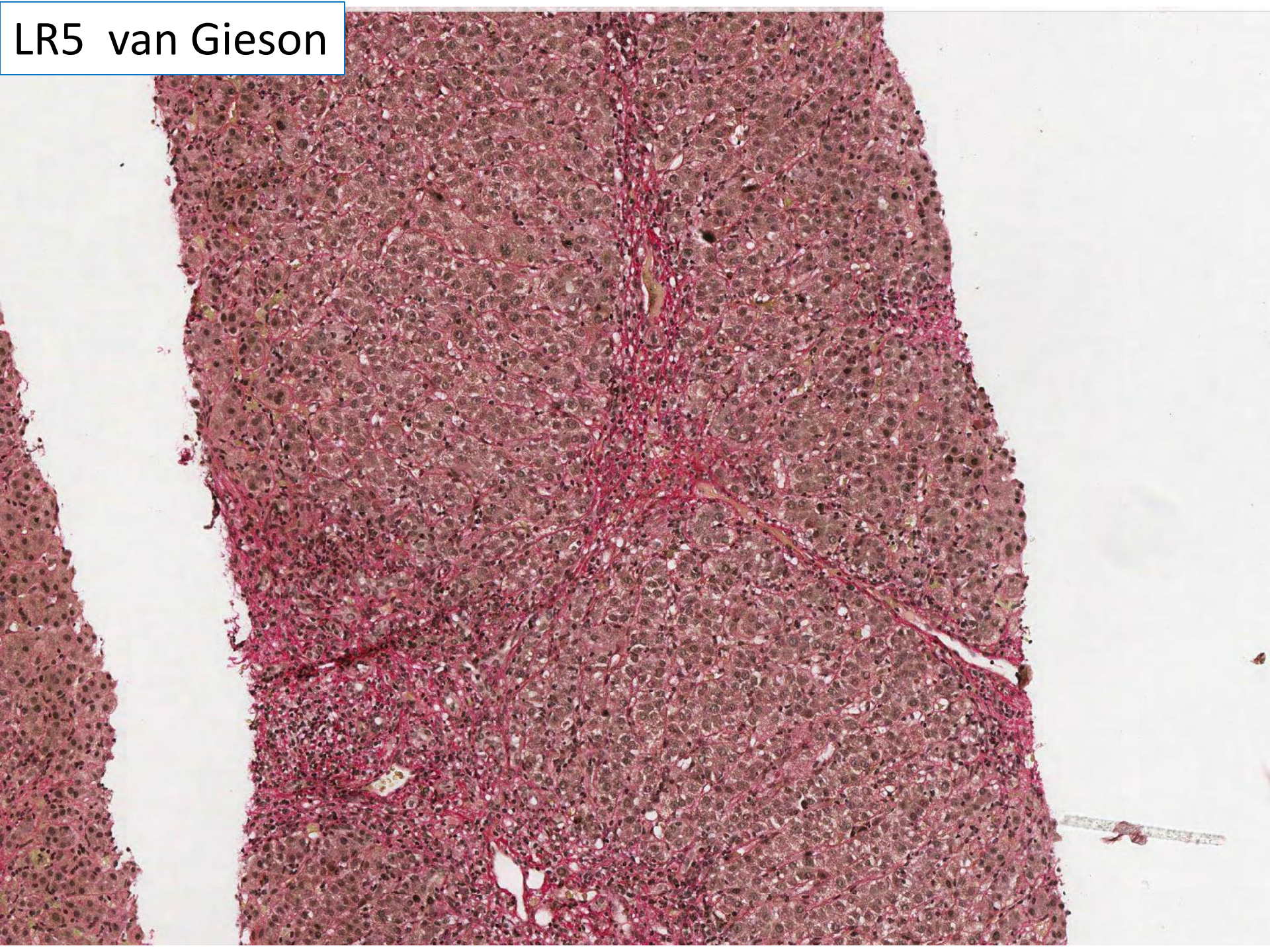
LR5 van Gieson



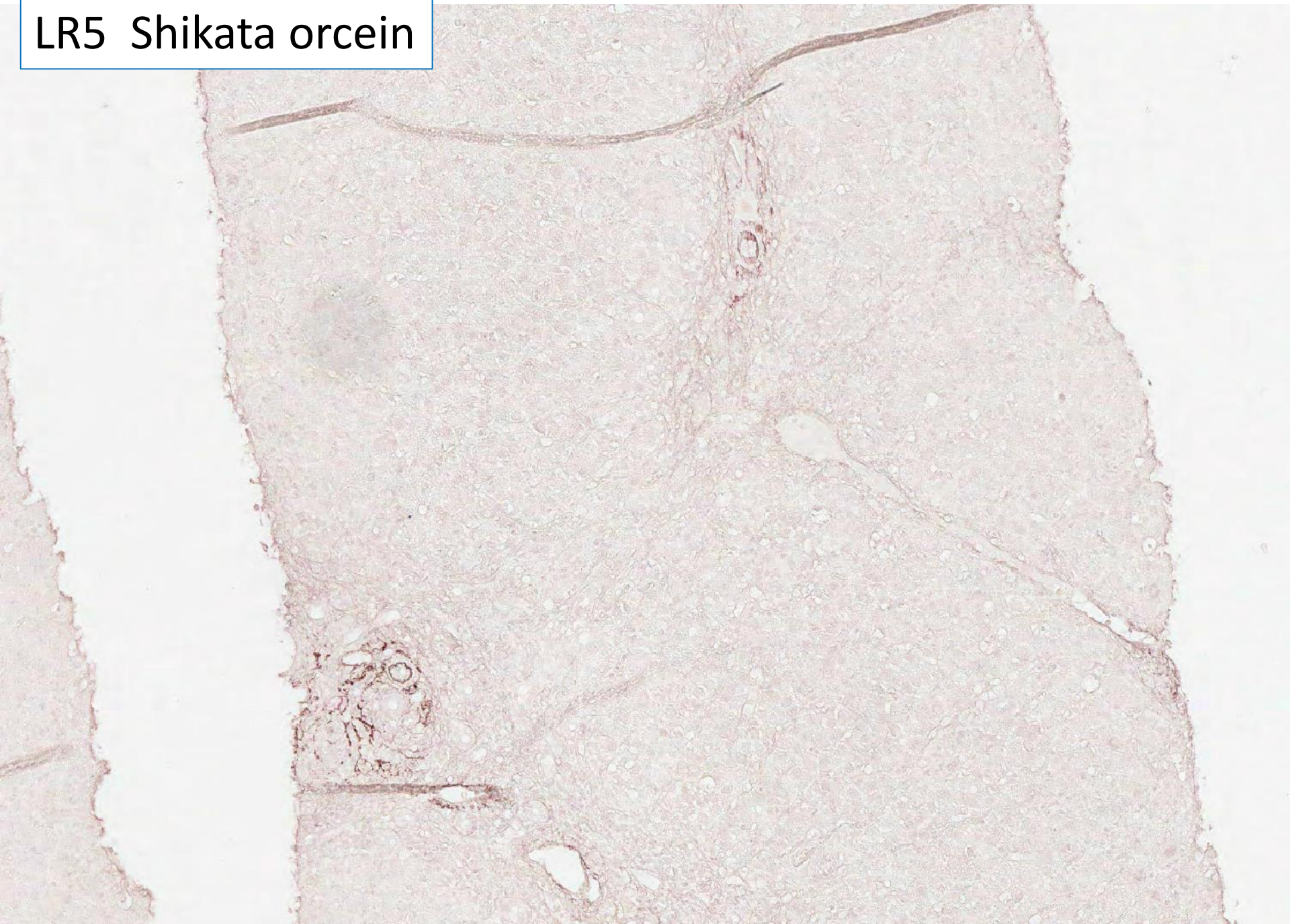
LR5 reticulin



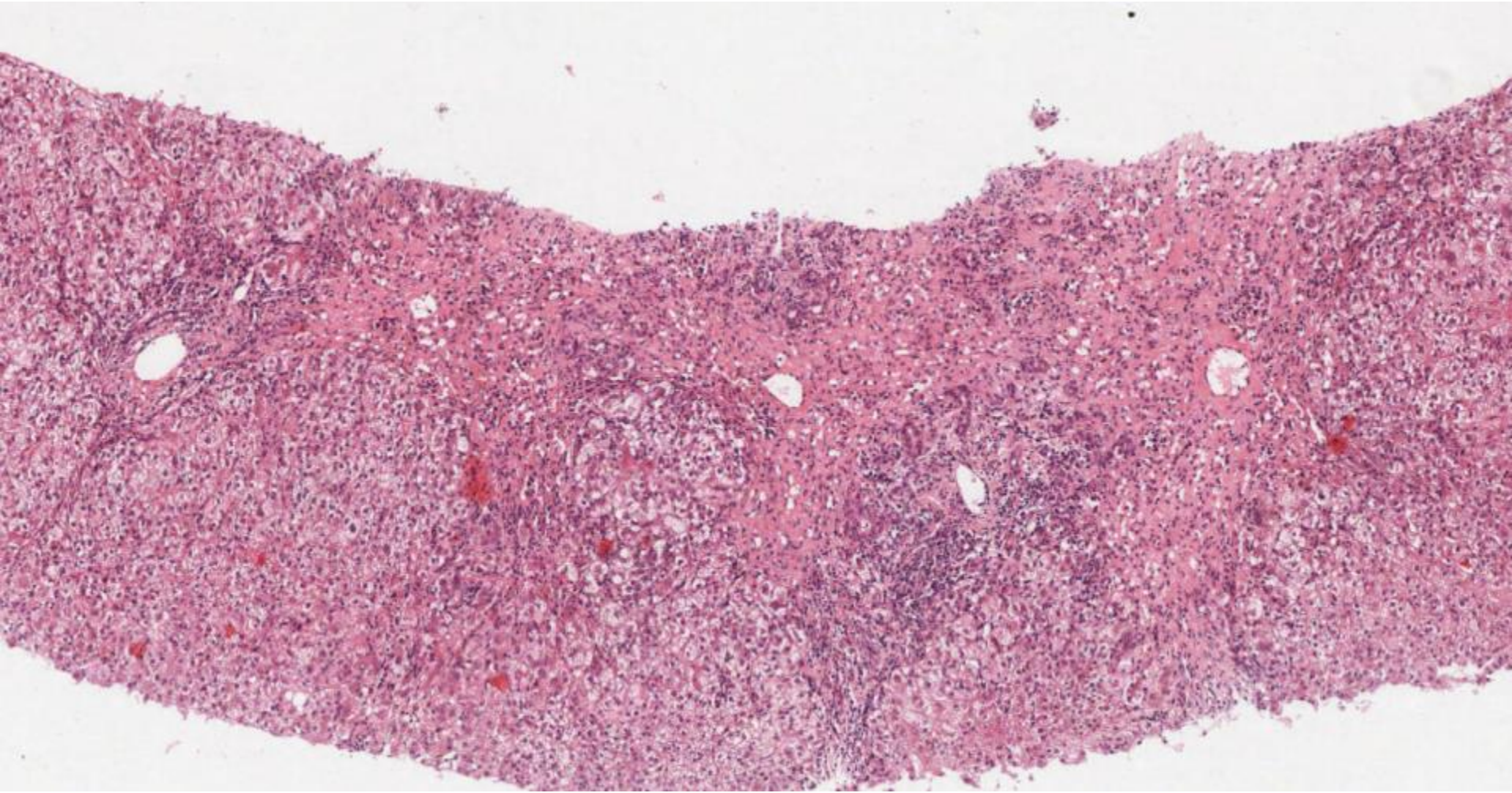
LR5 van Gieson



LR5 Shikata orcein



LR 11



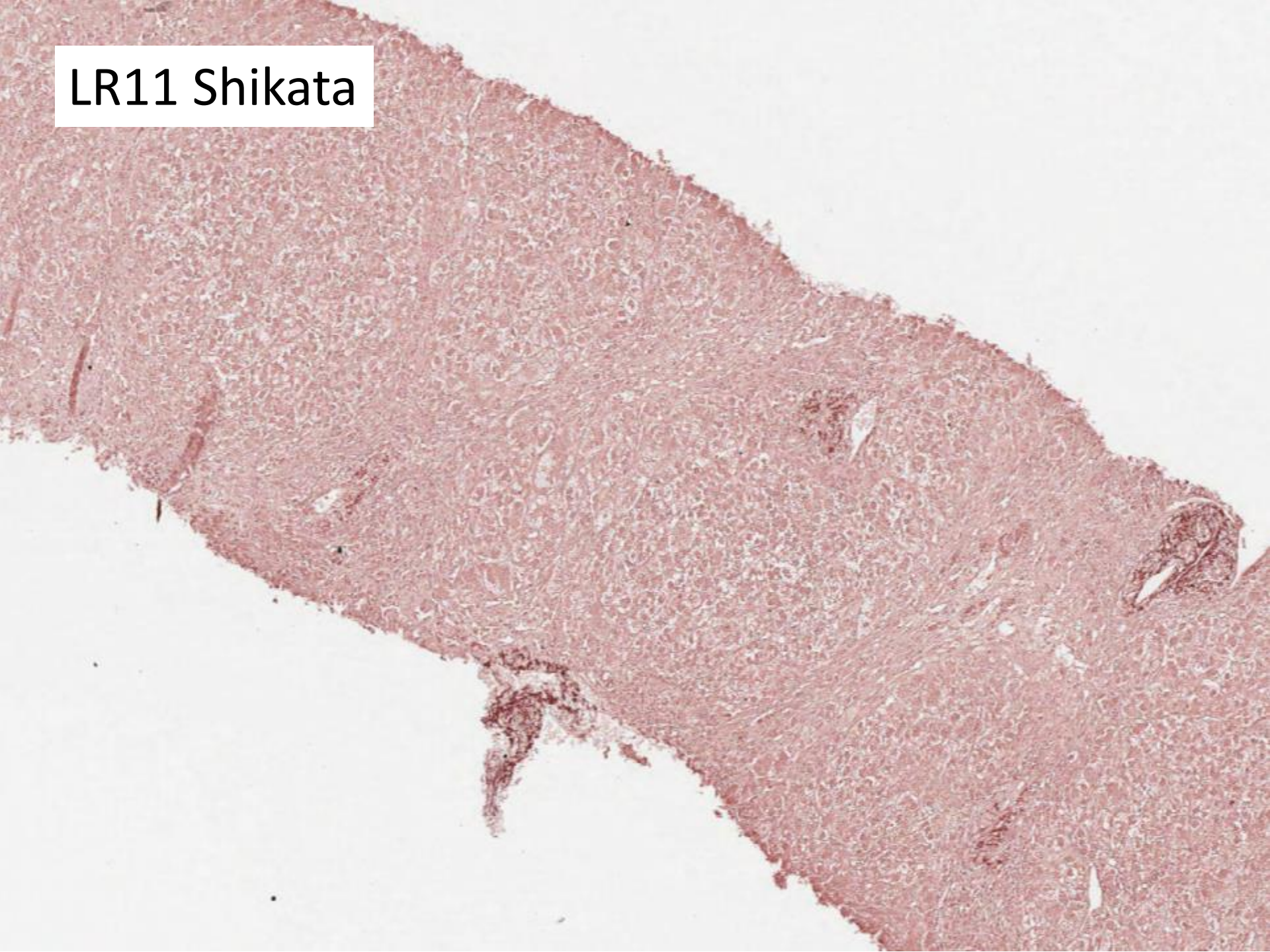
LR11 reticulin



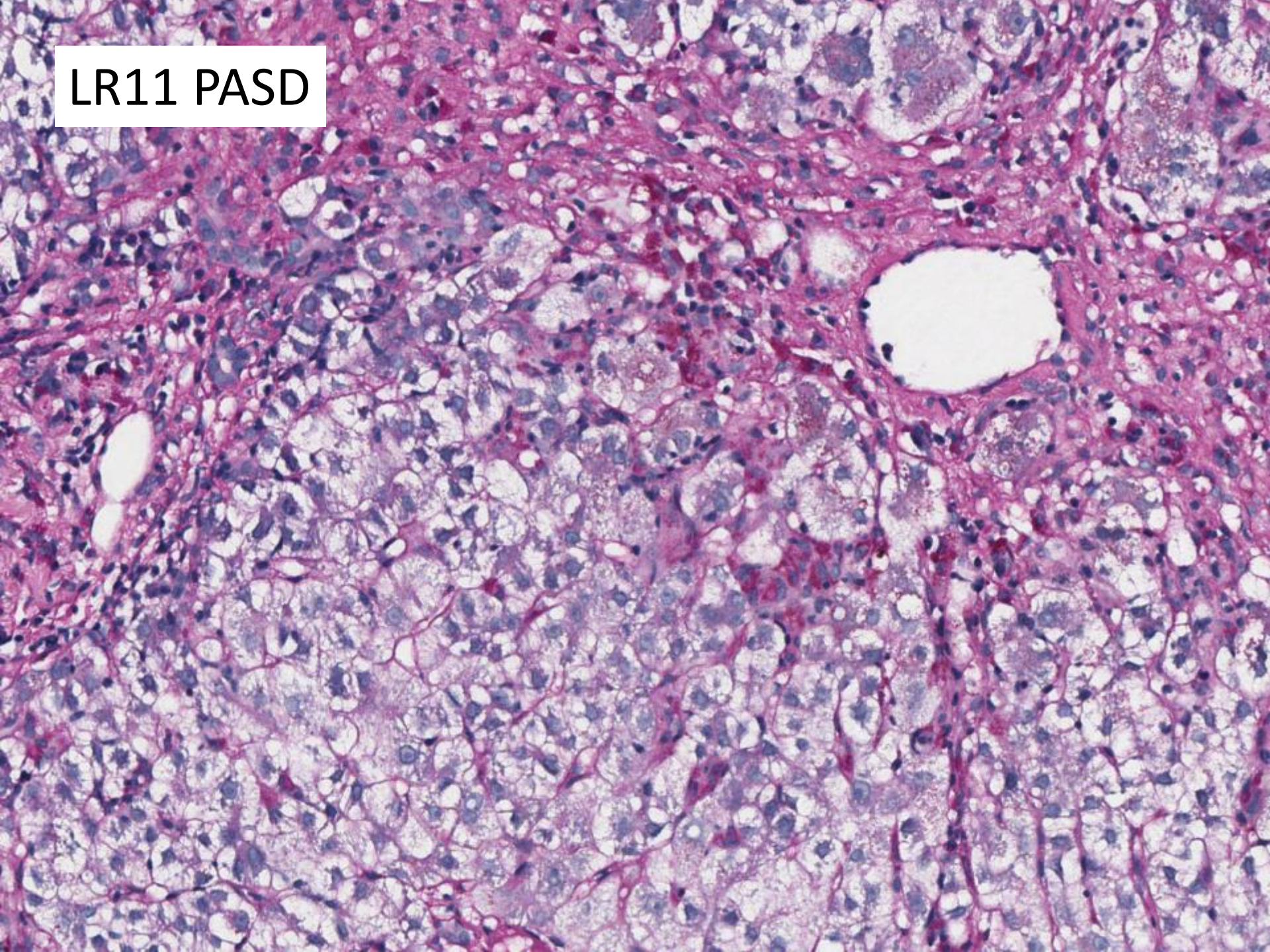
LR11 van Gieson



LR11 Shikata



LR11 PASD



Have you been having any problems with your Shikata orcein stain?

- Yes – 19/43 (44%)
- Mainly with CAP – some with elastin

“We had problems previously but now working beautifully, using temperature control method”

Reasons for variation in acute v chronic

- It's a continuum – with grey area in the middle
- Clinical v morphological terminology
 - Acute presentation can have acute or chronic histology
 - Acute histology can have various aetiologies,
 - Drug, autoimmune, viral
- Choice of stains
- Interpretation of stains
- In autoimmune hepatitis – OK to just say 'hepatitis'?

Autoimmune hepatitis: review of histological features included in the simplified criteria proposed by the international autoimmune hepatitis group and proposal for new histological criteria

- Interface hepatitis, emperipolesis and rosetting
 - poor reproducibility and not specific (acute hepatitis, PBC)
- New criteria
 - interface/lobular activity (more than mild)
 - abundant plasma cells,
 - absence of biliary features (Keratin 7, rhodamine)

Increased sensitivity and specificity, especially for acute presentation

Balitzer D *et al*, *Modern Pathology* 2017;30;773-783