Scotland and Northern Ireland EQA Scheme

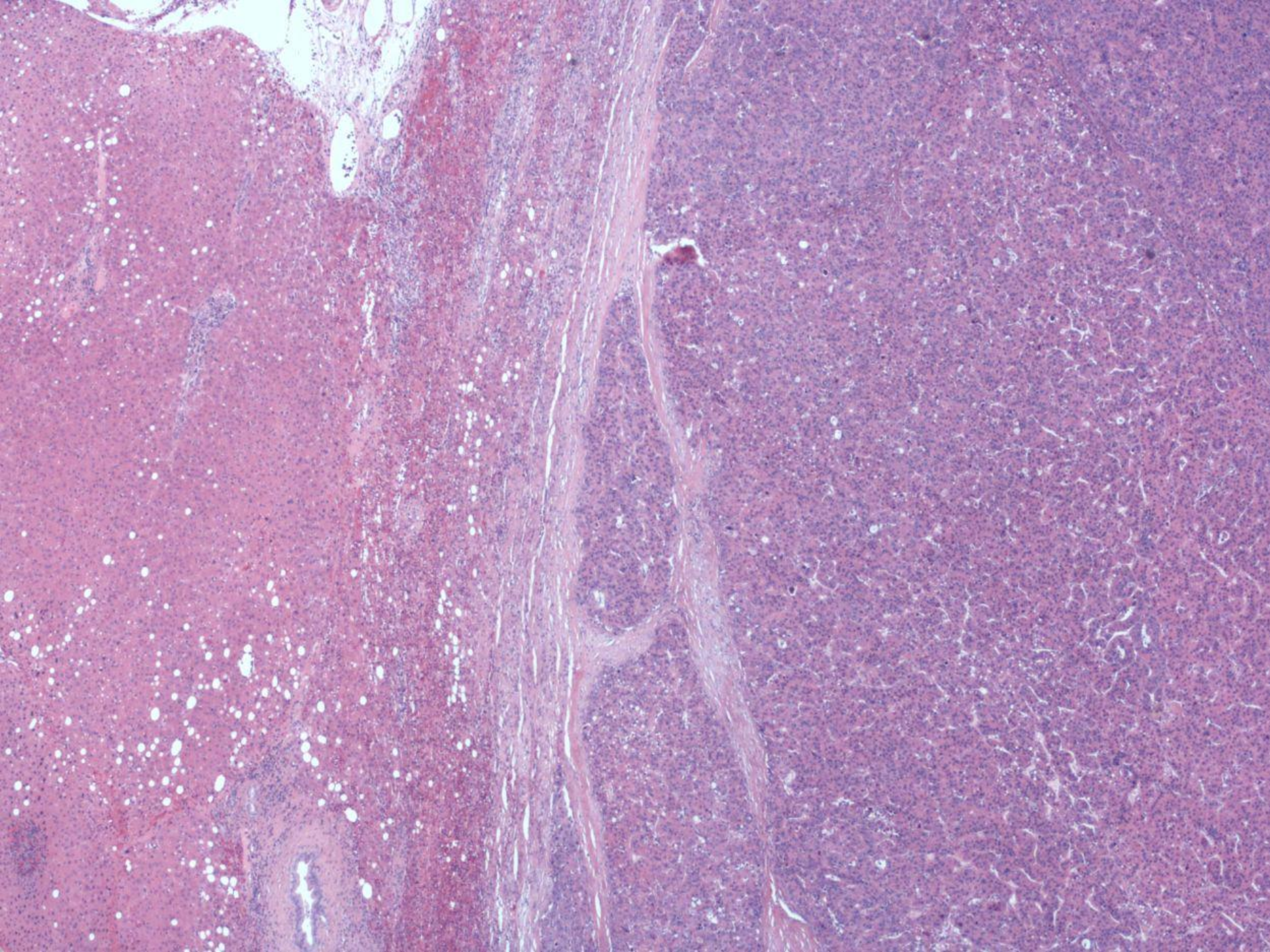
Educational Cases Circulation 47

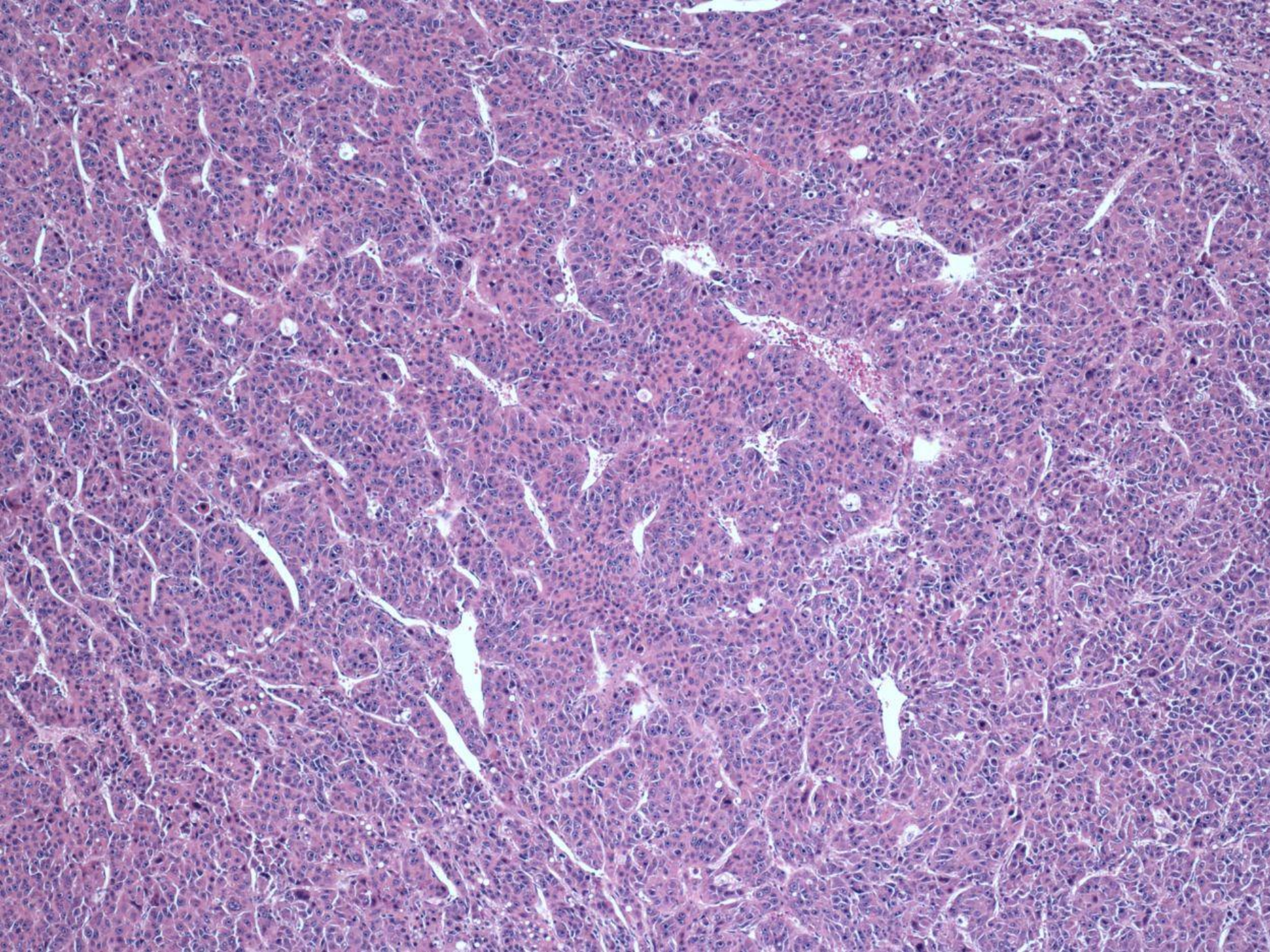
Cases E1 and E2

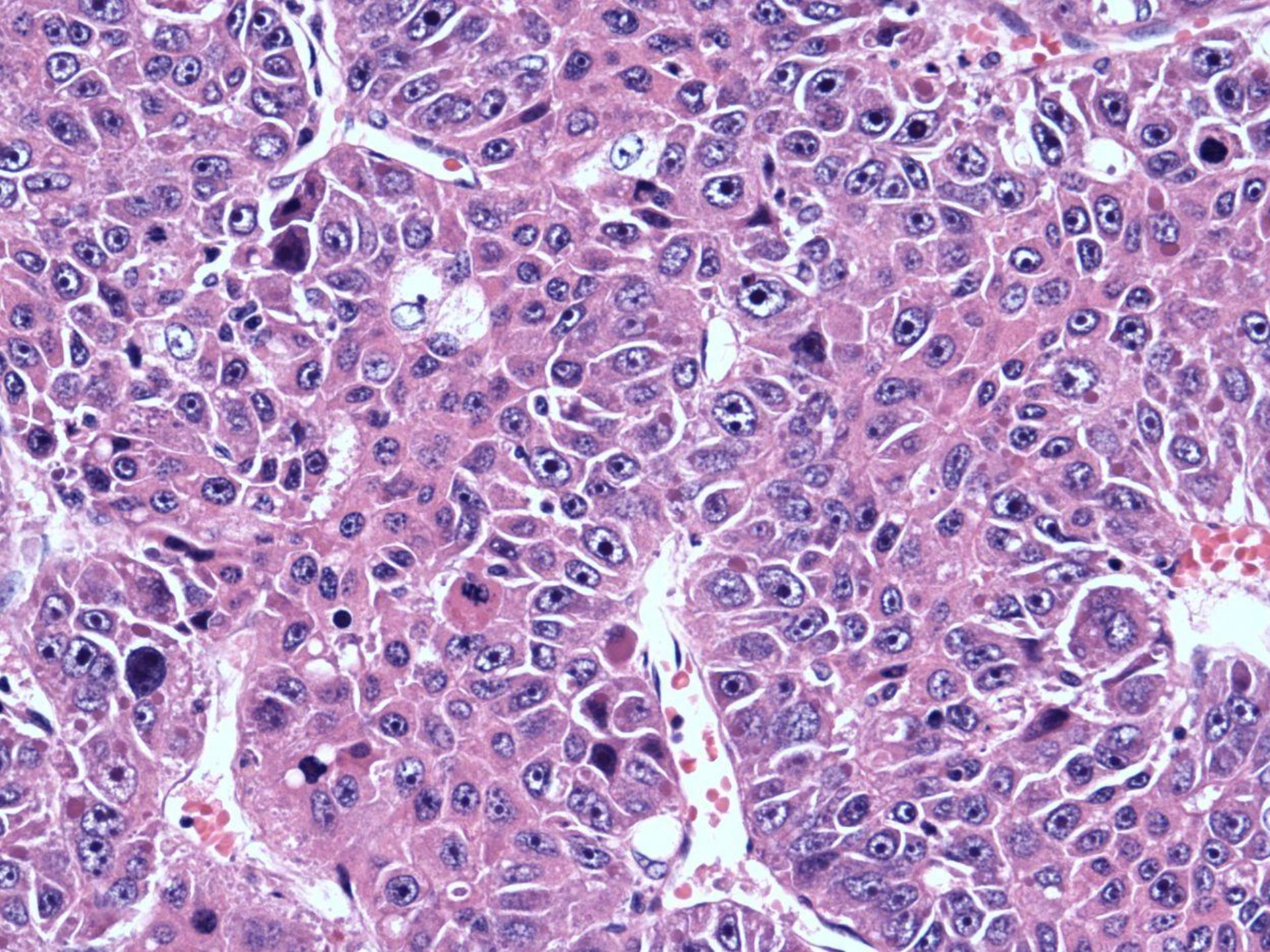
Presented by Dr G Stenhouse

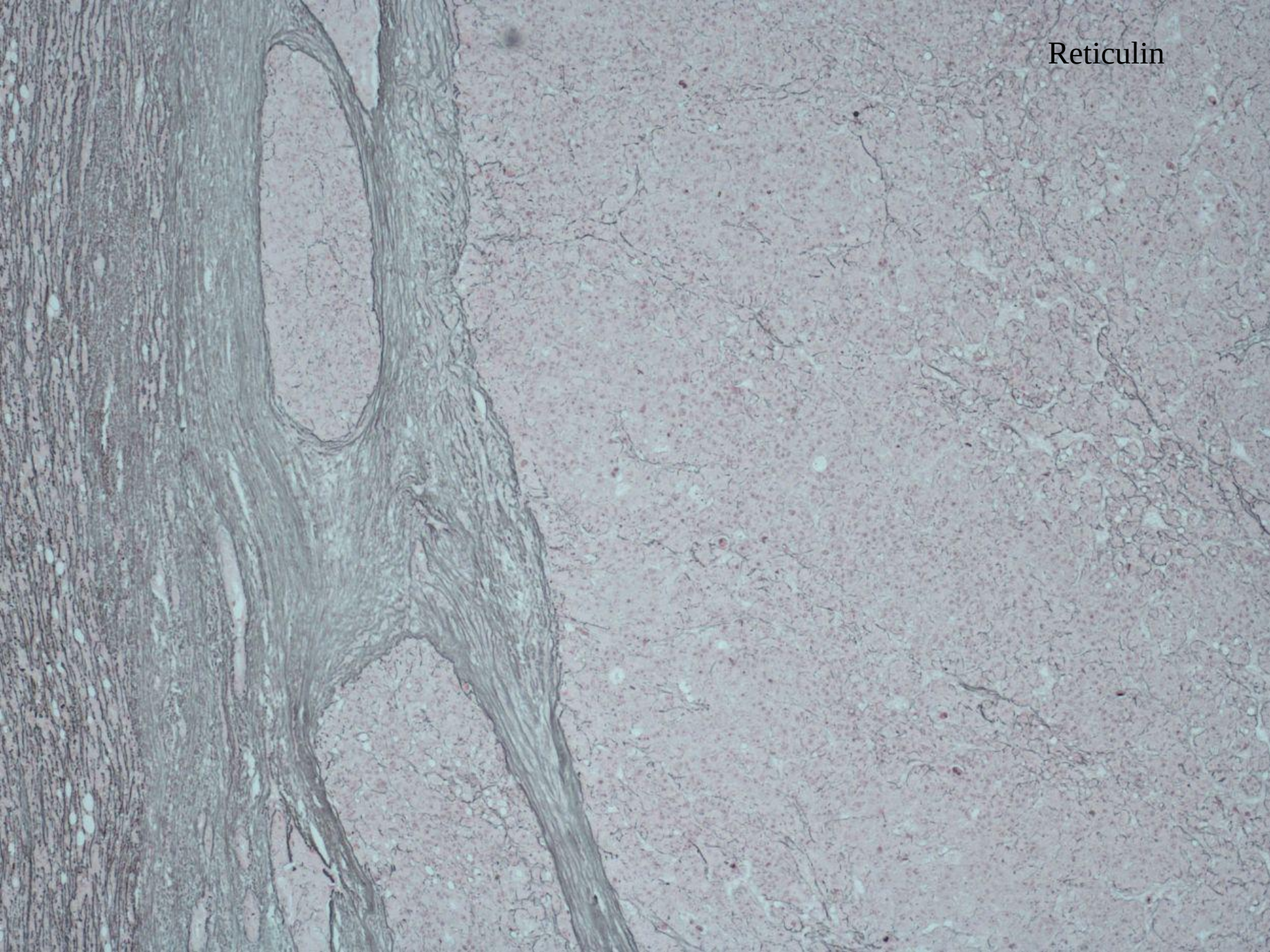
Case E1

- 75 year old male
  - Lesion in Liver
  - Segmentectomy








Reticulin

Case E1

- Diagnosis:
  - Hepatocellular Carcinoma

Case E1

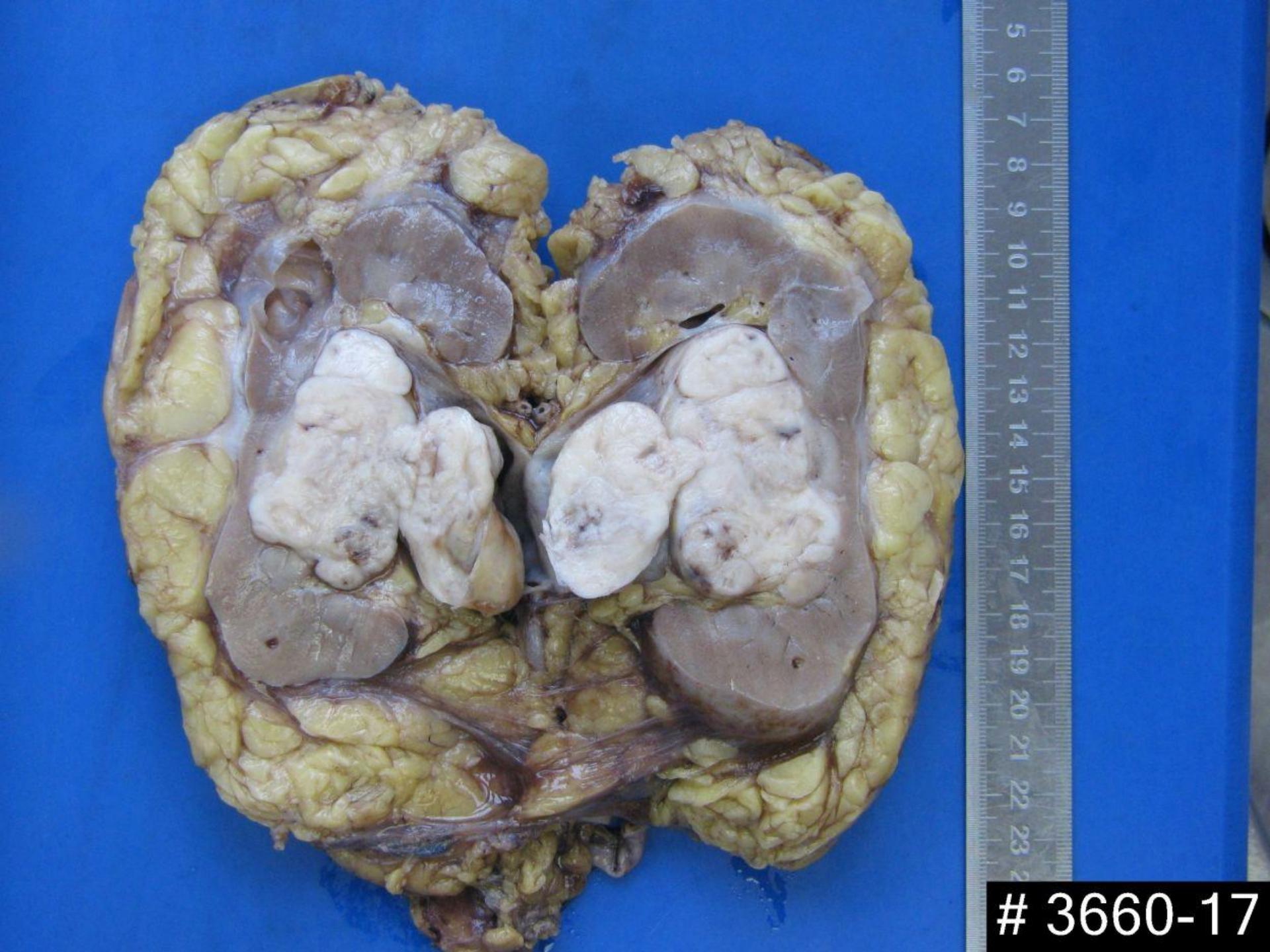
- Responses:96
  - 86 HCC
  - 2 each of Focal Nodular Hyperplasia, Met NET, Hepatoblastoma, Cholangiocarcinoma, Adenocarcinoma.

Hepatocellular Carcinoma

- Diagnosis used to be relatively straightforward....but
- Precursor lesions can look similar on core bx
- Glypican 3 and Gluthamine-Synthetase
- Portal invasion and vascular invasion

Case E2

- 84 year old female
  - Right renal mass
  - Nephrectomy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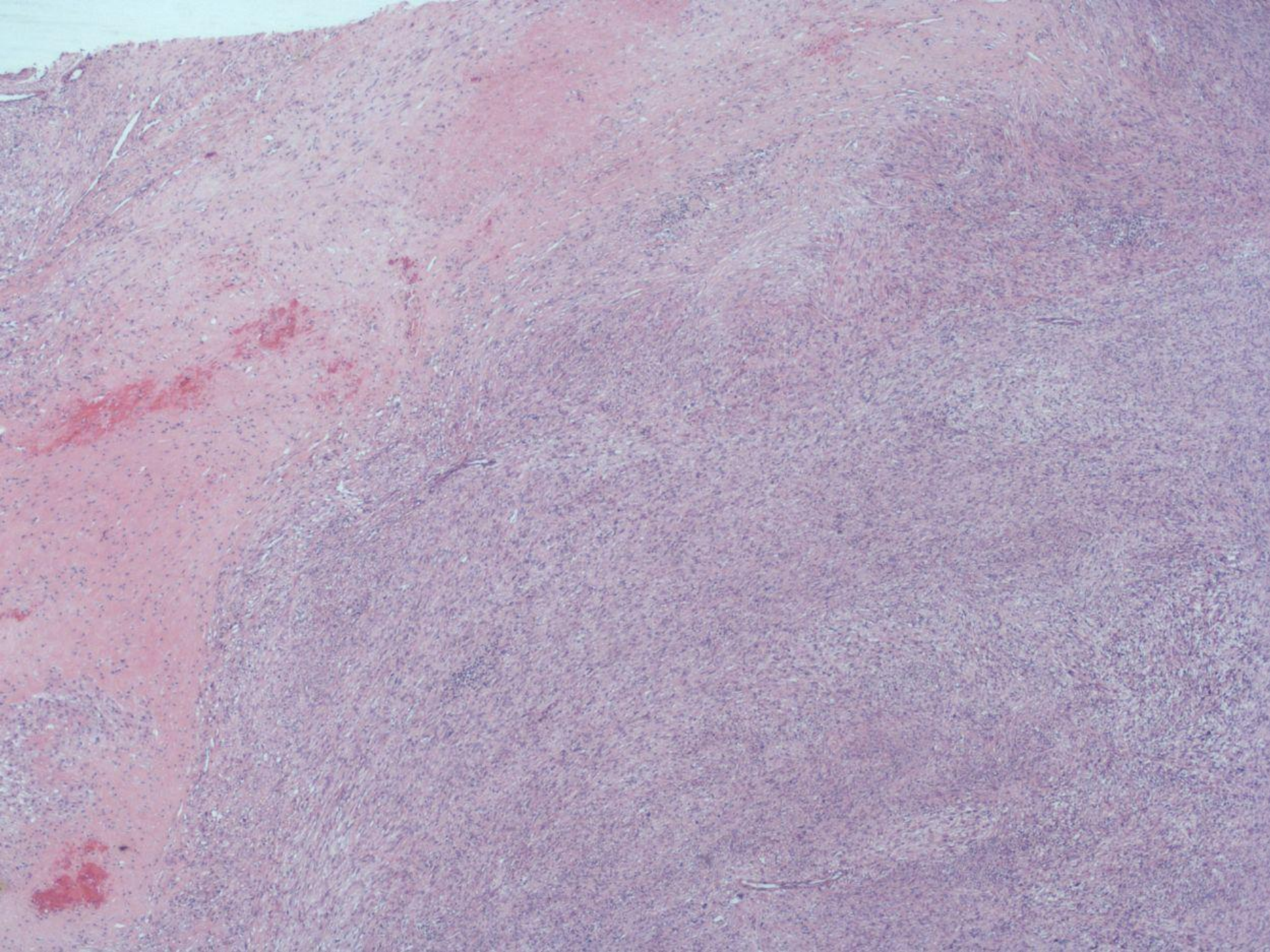
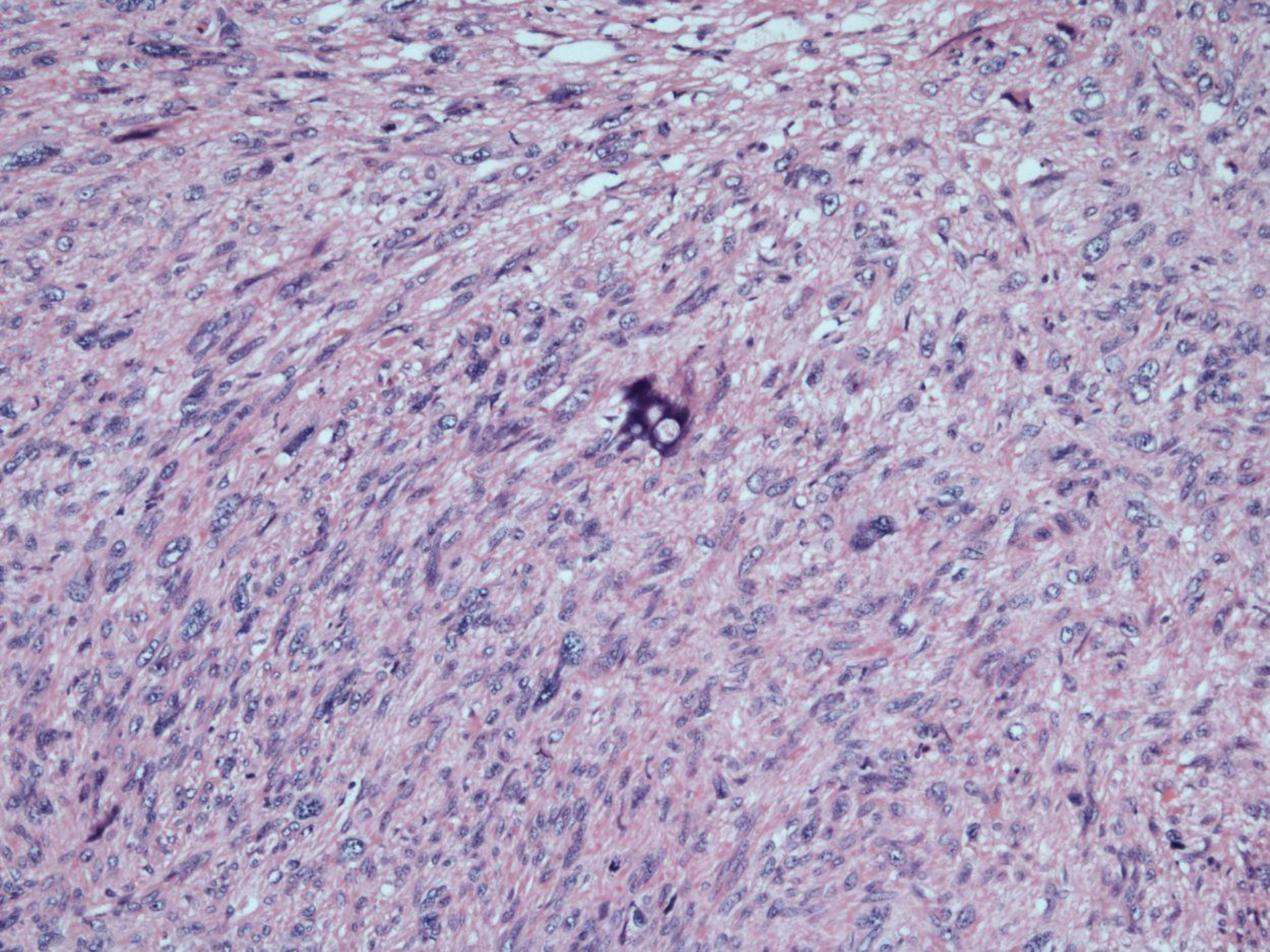
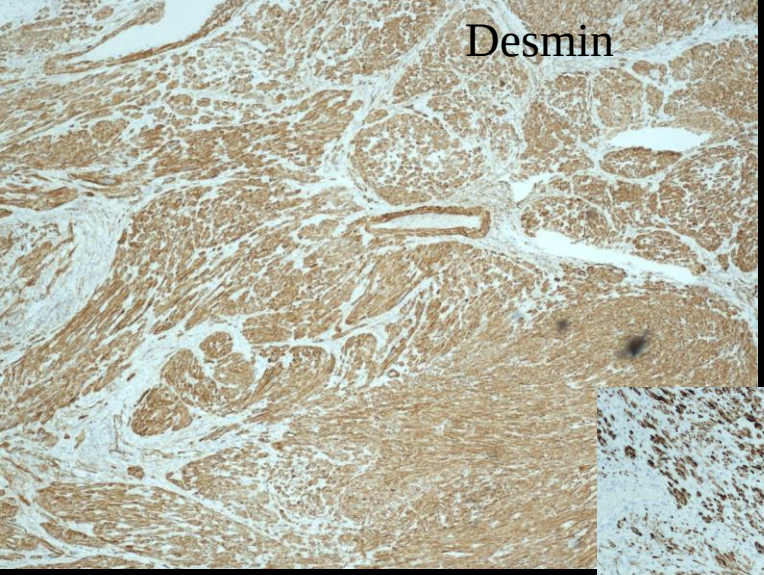
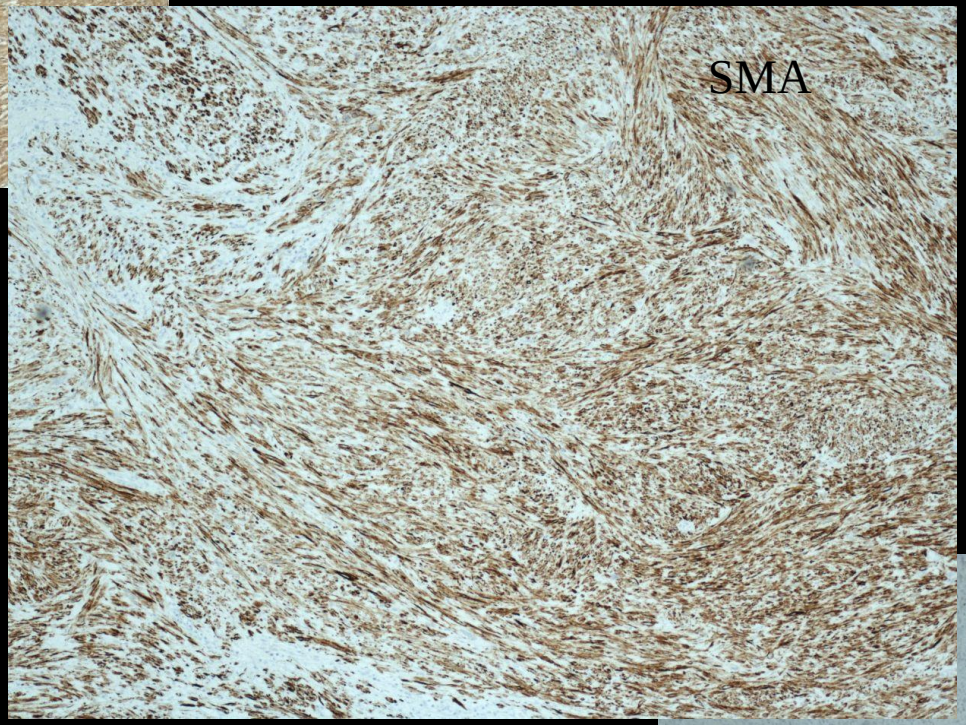
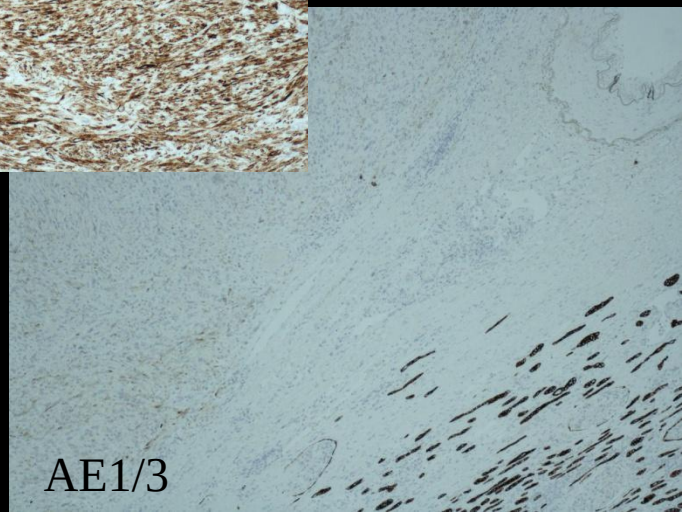





Desmin


SMA


AE1/3

Case E2

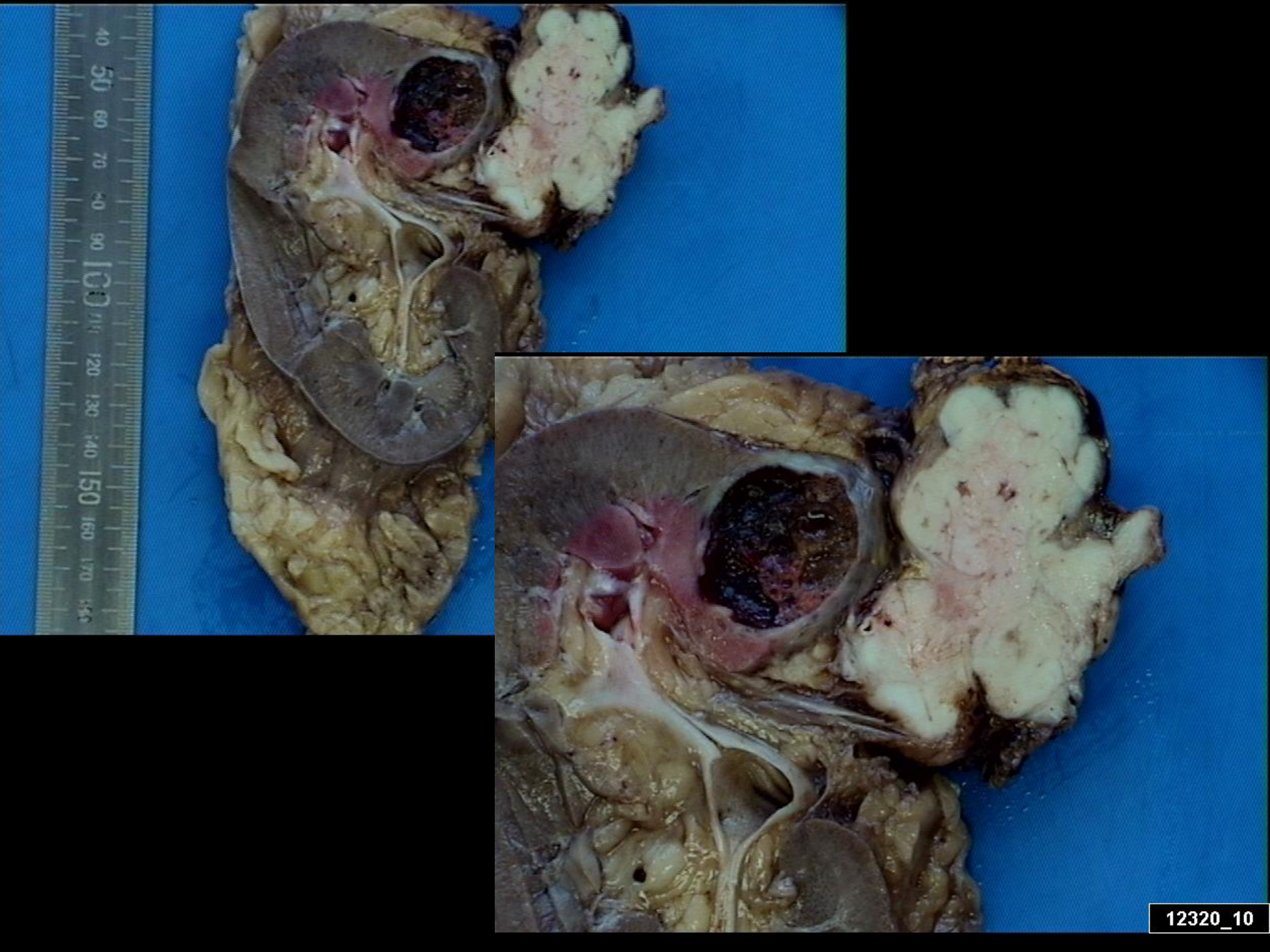
- Diagnosis:
  - Leiomyosarcoma

Case E2

- Responses: 96
  - 34 Leiomyosarcoma
  - 30 Sarcomatoid RCC
  - 7 gave differential of both of the above
  - 20 Sarcoma NOS
  - 2 Angiomylolipoma
  - 1 PECOMA, Pleomorphic sarcoma, Metastases

Case E2

- Most common renal sarcoma
- Accounts for just over half of renal sarcoma
- Presenting features similar to RCC
- Aggressive course – 5 year survival of ~30%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Case E3

Right orchidectomy for suspicious nodule on ultrasound. Enlarged para-aortic lymph nodes

50 year-old male

Bilateral orchidectomy

Undescended/atrophic testis on left
Suspicious nodule on ultrasound on right
No other information provided to pathologist

Macroscopic

Right

37 g testis
45 x 35 x 25 mm
29 mm pale nodule in parenchyma

Left

27 g testis
30 x 40 x 23 mm
no focal abnormality

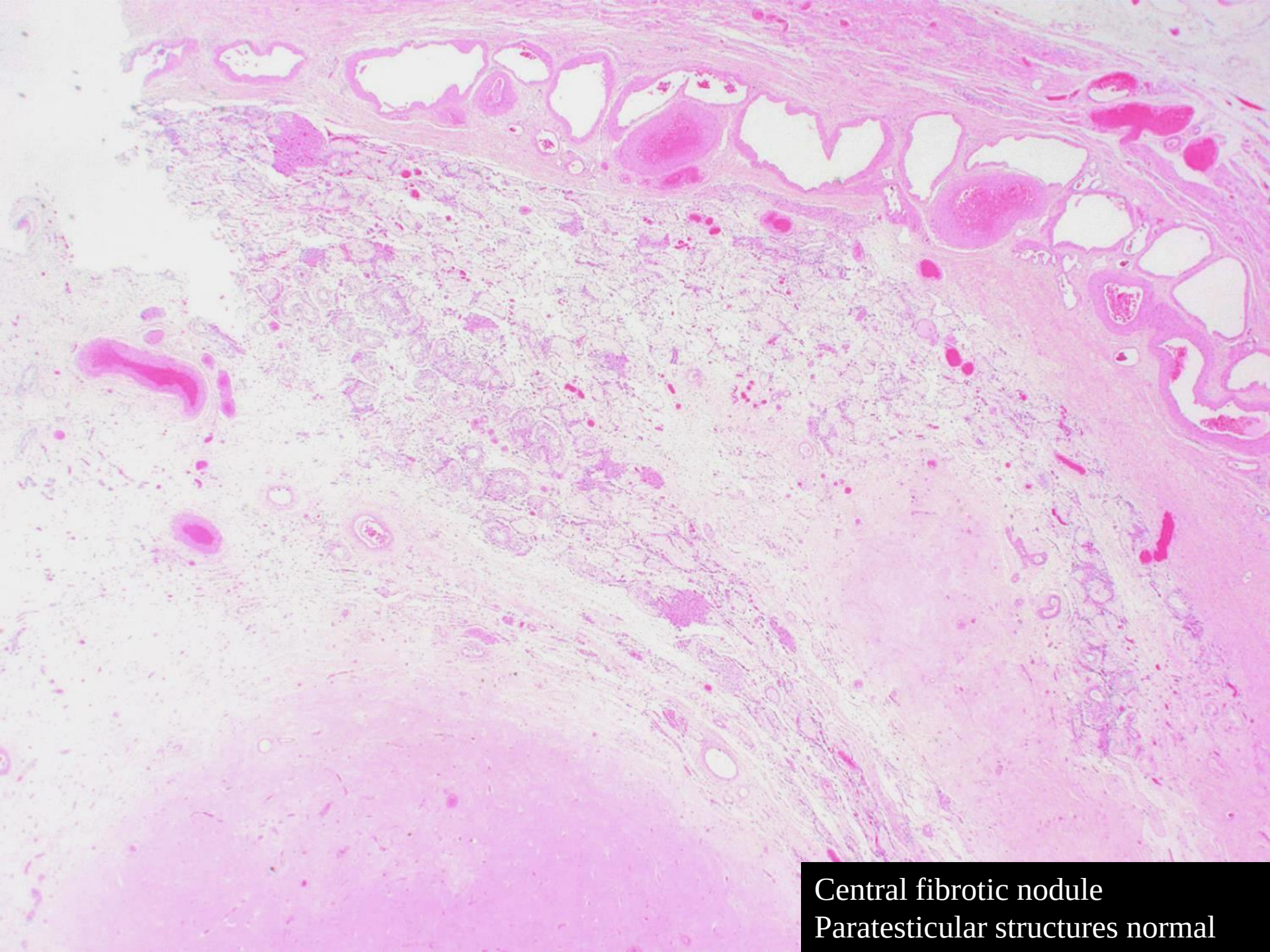
Histology

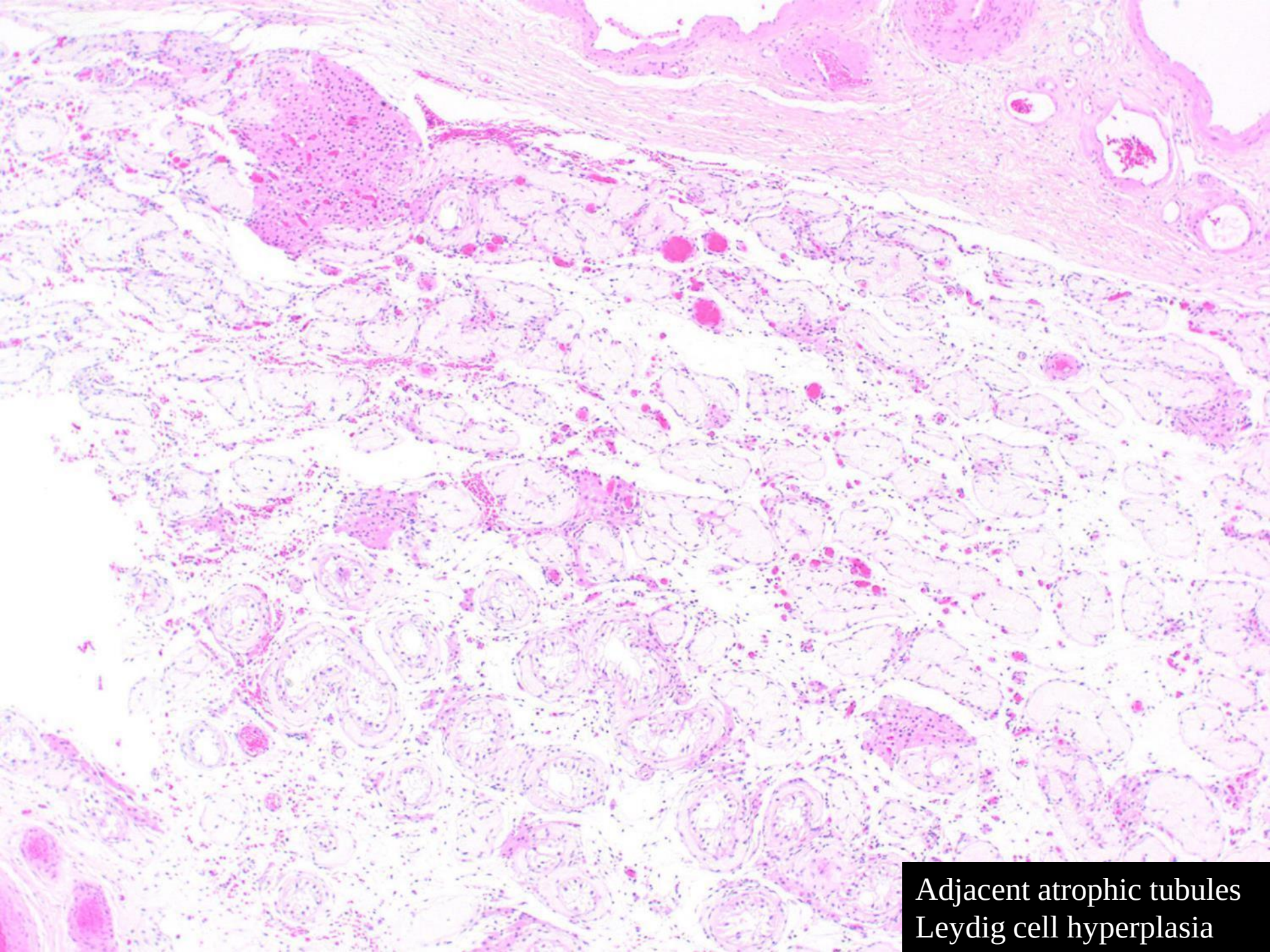
Right

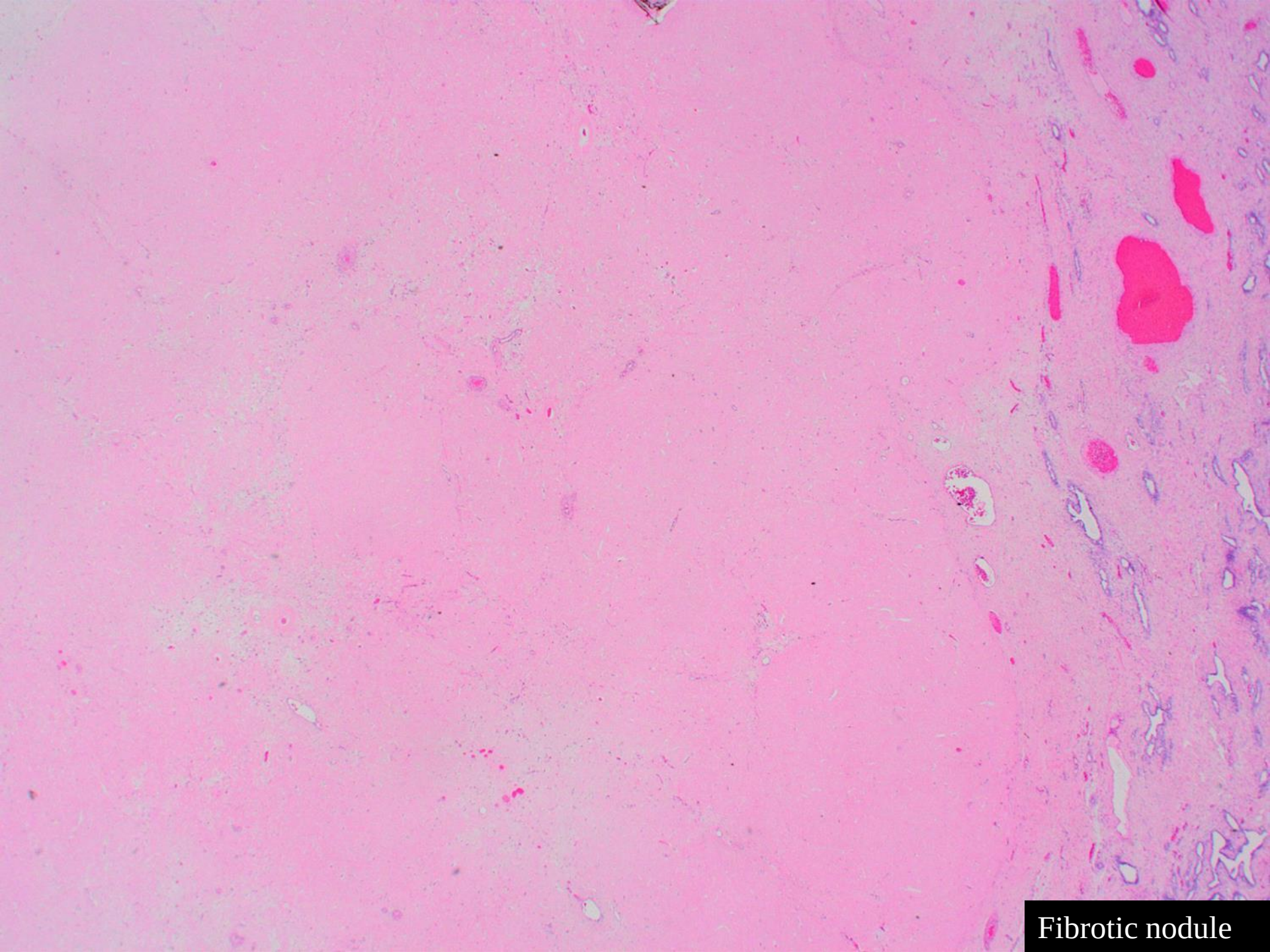
- Central fibrosis/hyalinisation
  - Congo red negative
- Background tubular atrophy
- Leydig cell hyperplasia
- No GCNIS

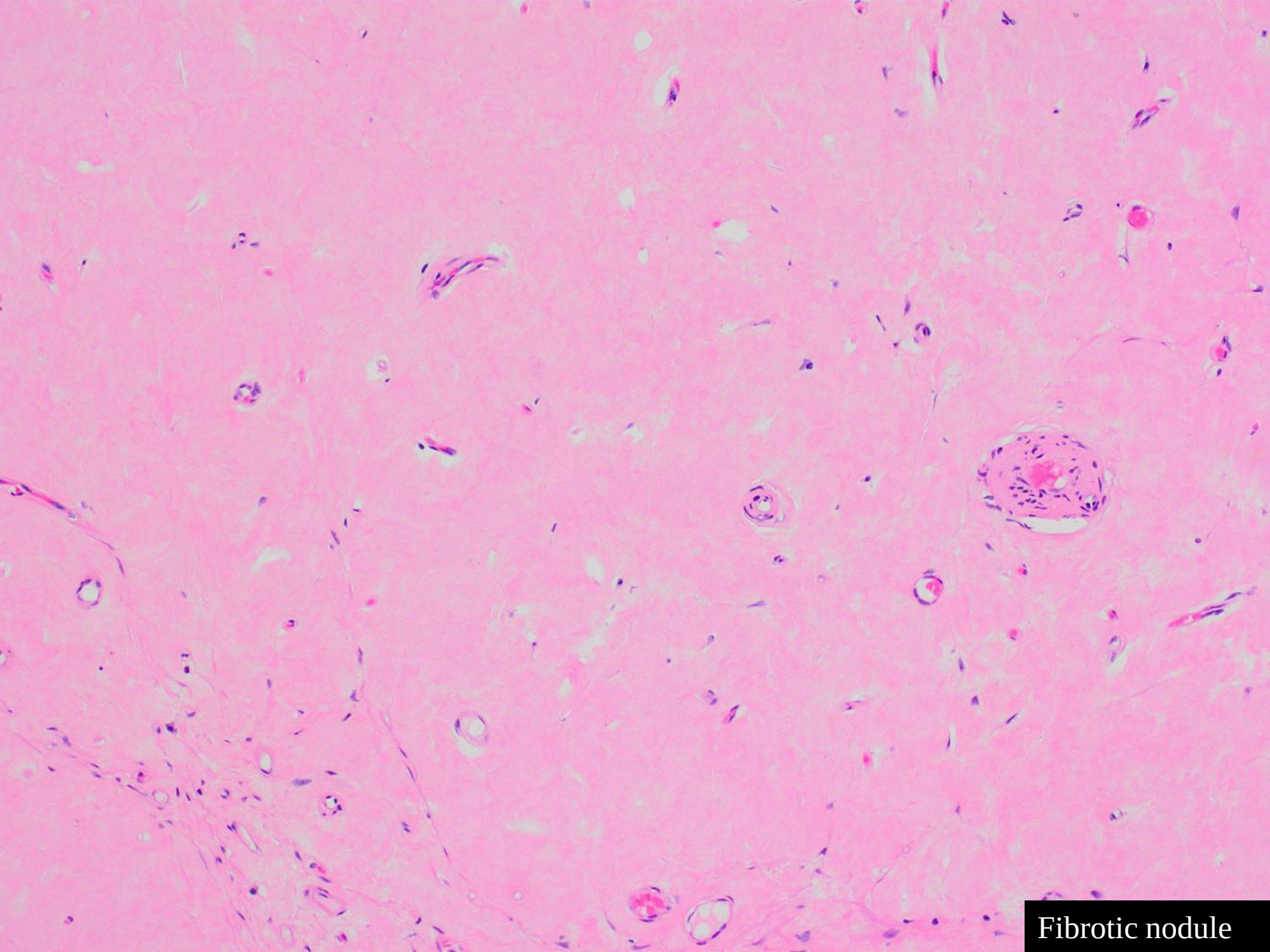
Left

- Atrophy only
- No GCNIS


Central fibrotic nodule
Paratesticular structures normal


Adjacent atrophic tubules
Leydig cell hyperplasia


Fibrotic nodule


Fibrotic nodule

94 responses

Amyloid	40
Regressed germ cell tumour	31
Testicular hyalinisation/atrophy	7
Amyloid vs regressed tumour	4
Infarcted tumour	1
Intratubular germ cell neoplasia	1
Benign hyalinised lesion	2
Testicular infarct/degenaration	4
Yolk sac tumour	1
Nodular periorchitis	2
Chondroid like change	1

Further developments

CT scan two weeks prior to the biopsy showed a para-aortic nodal mass – but nobody told the pathologist

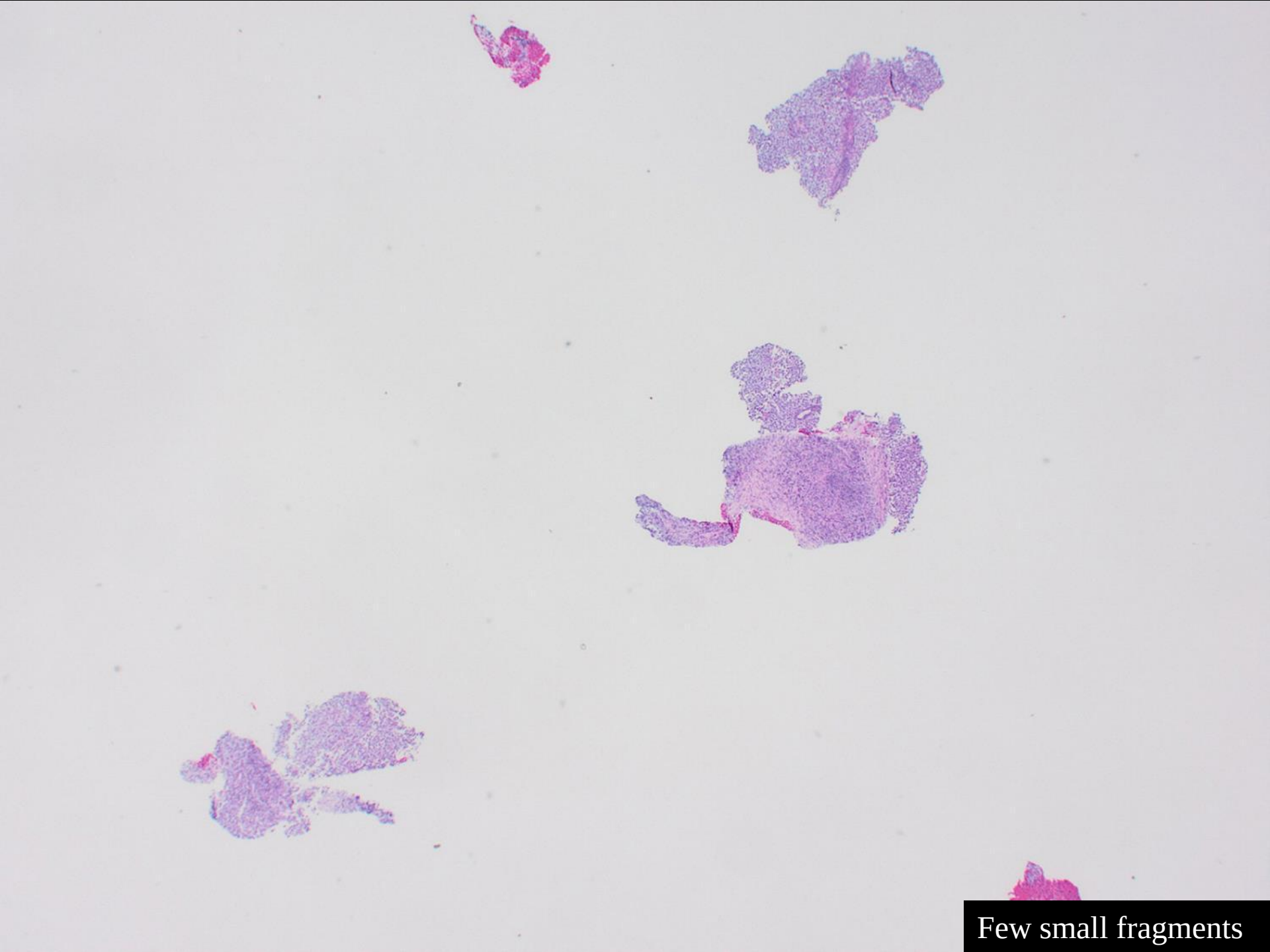
3 weeks pass…

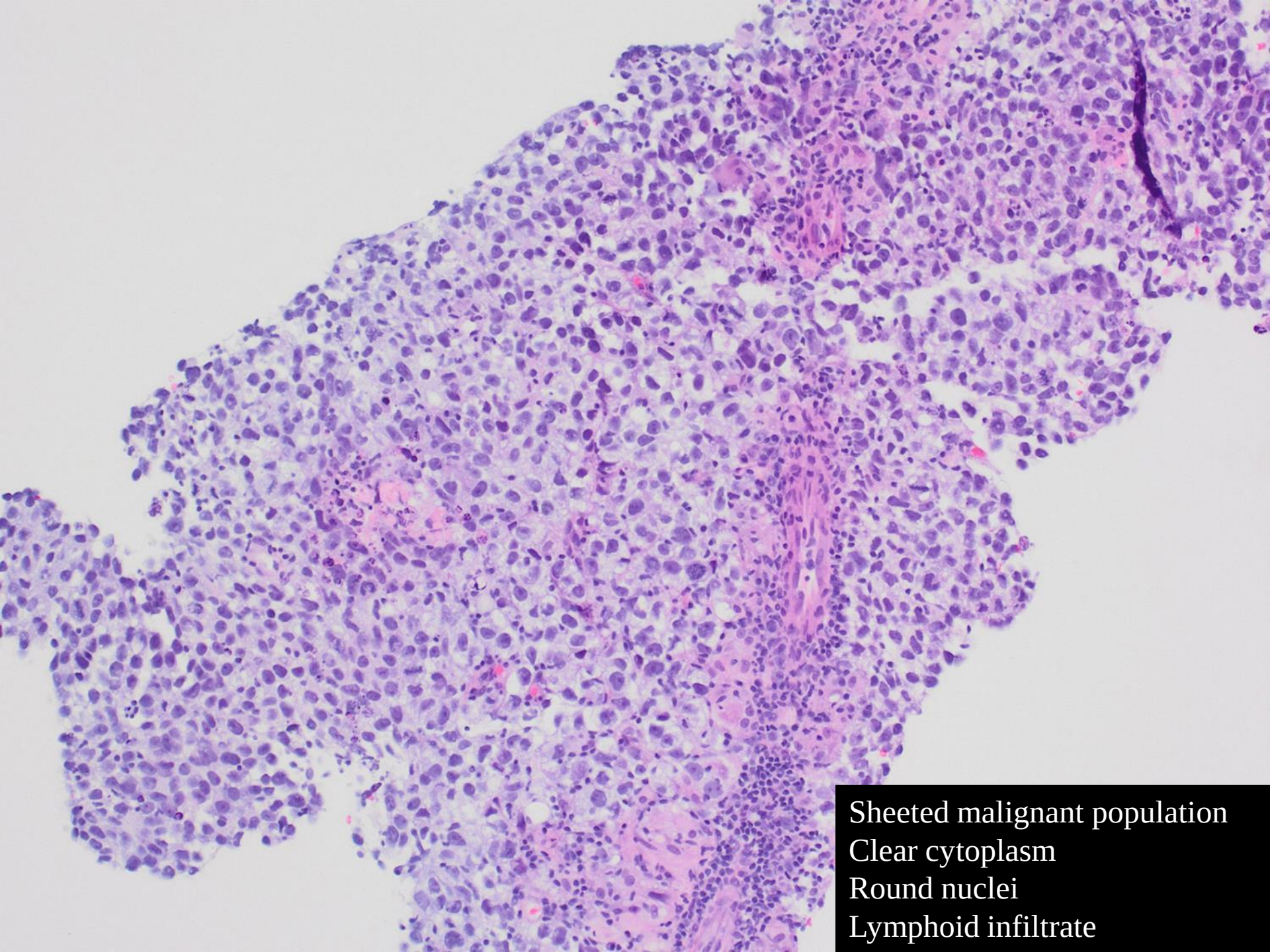
Then presented at urology MDT and decision taken to biopsy a lymph node

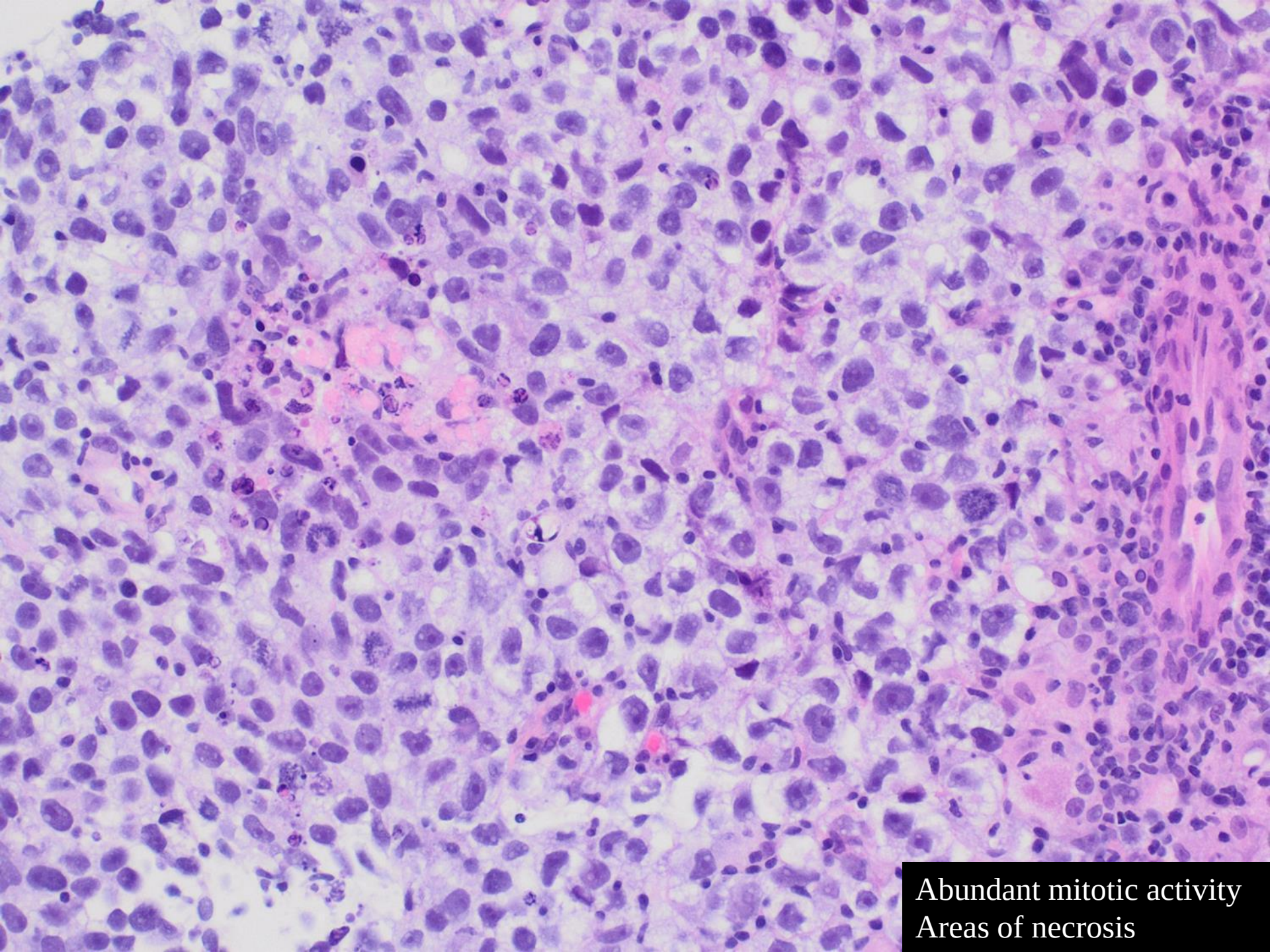
First core – tiny lymphoid fragments only

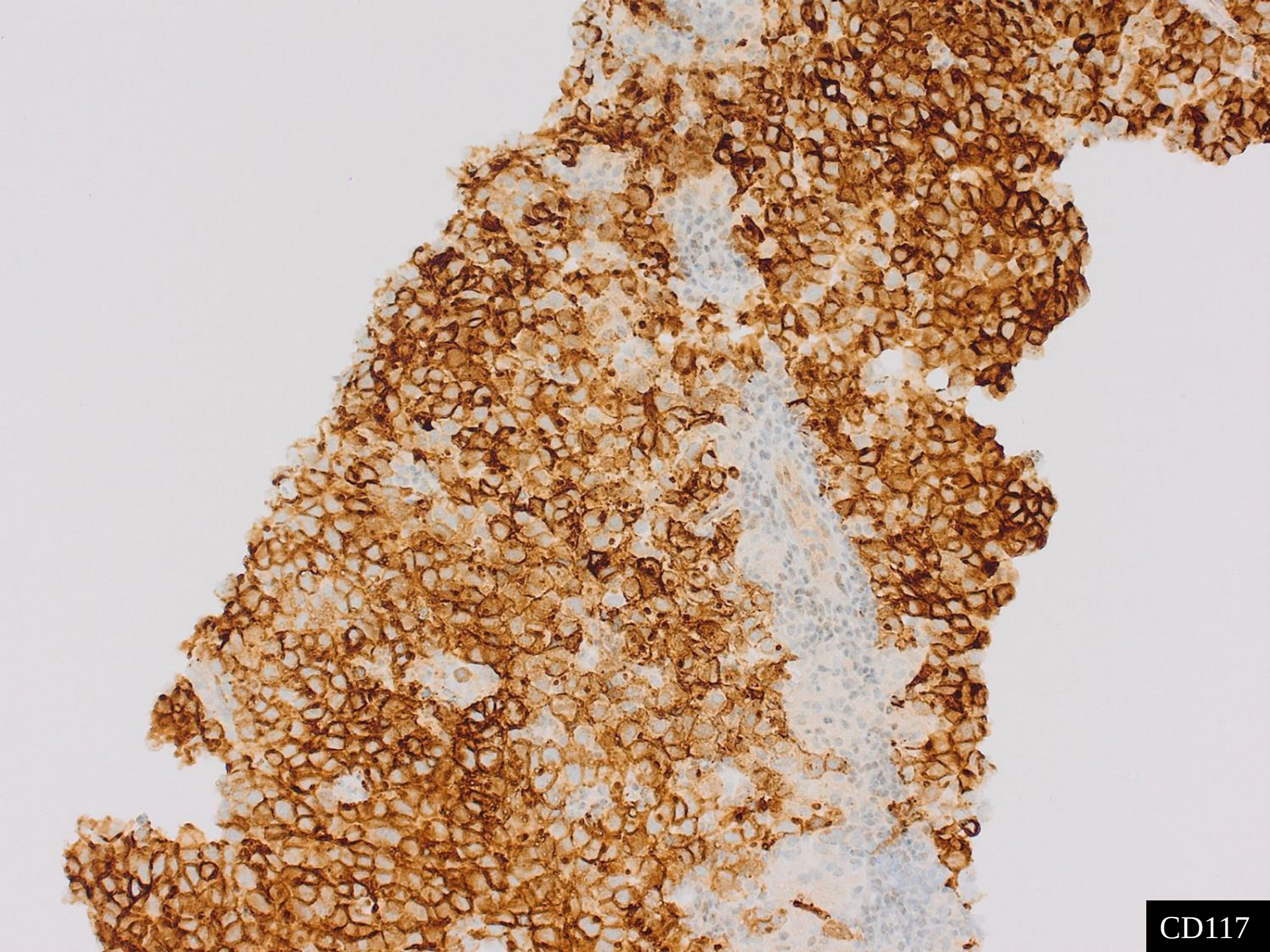
A month passes…

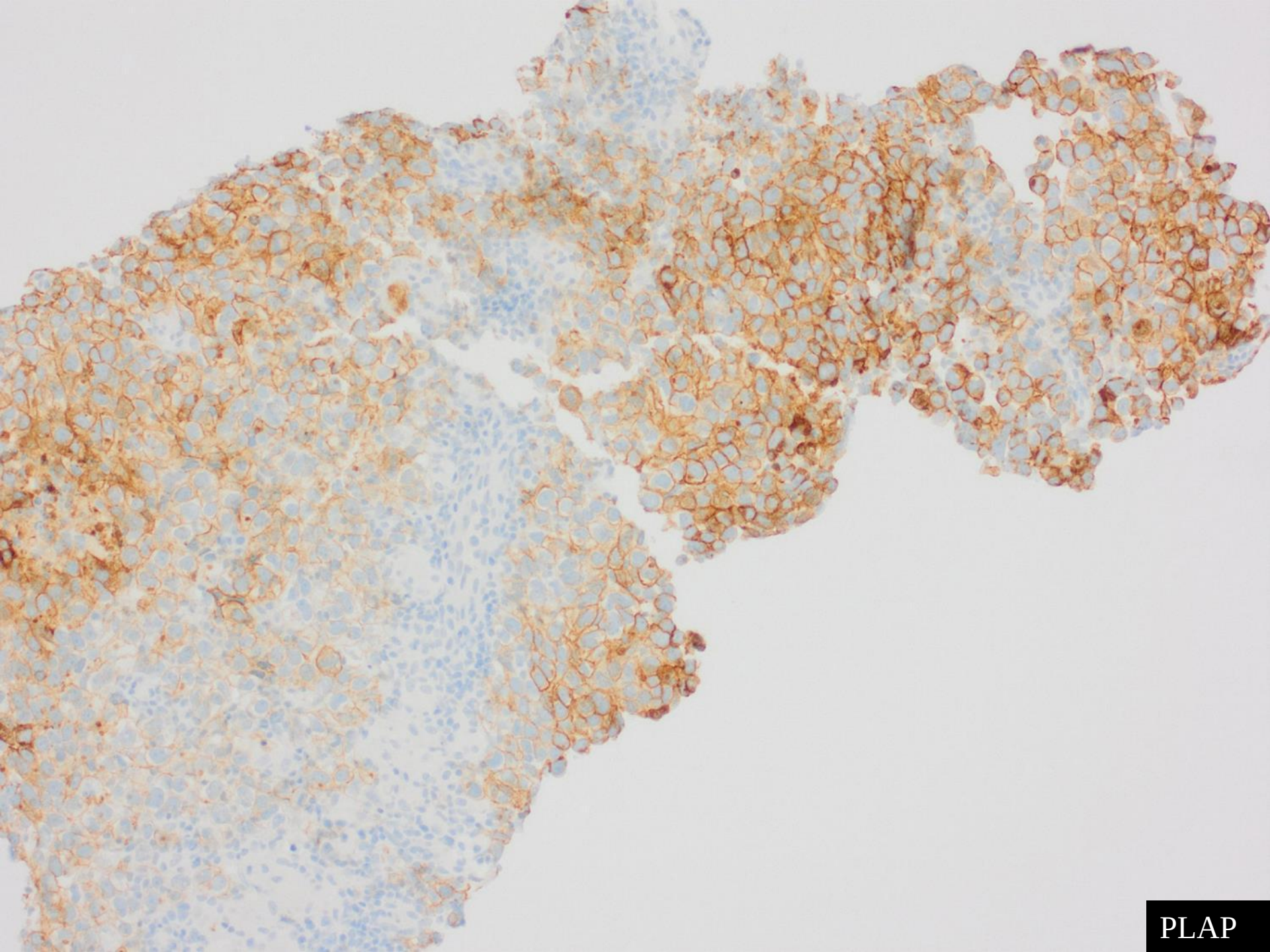
Then a further core was sent

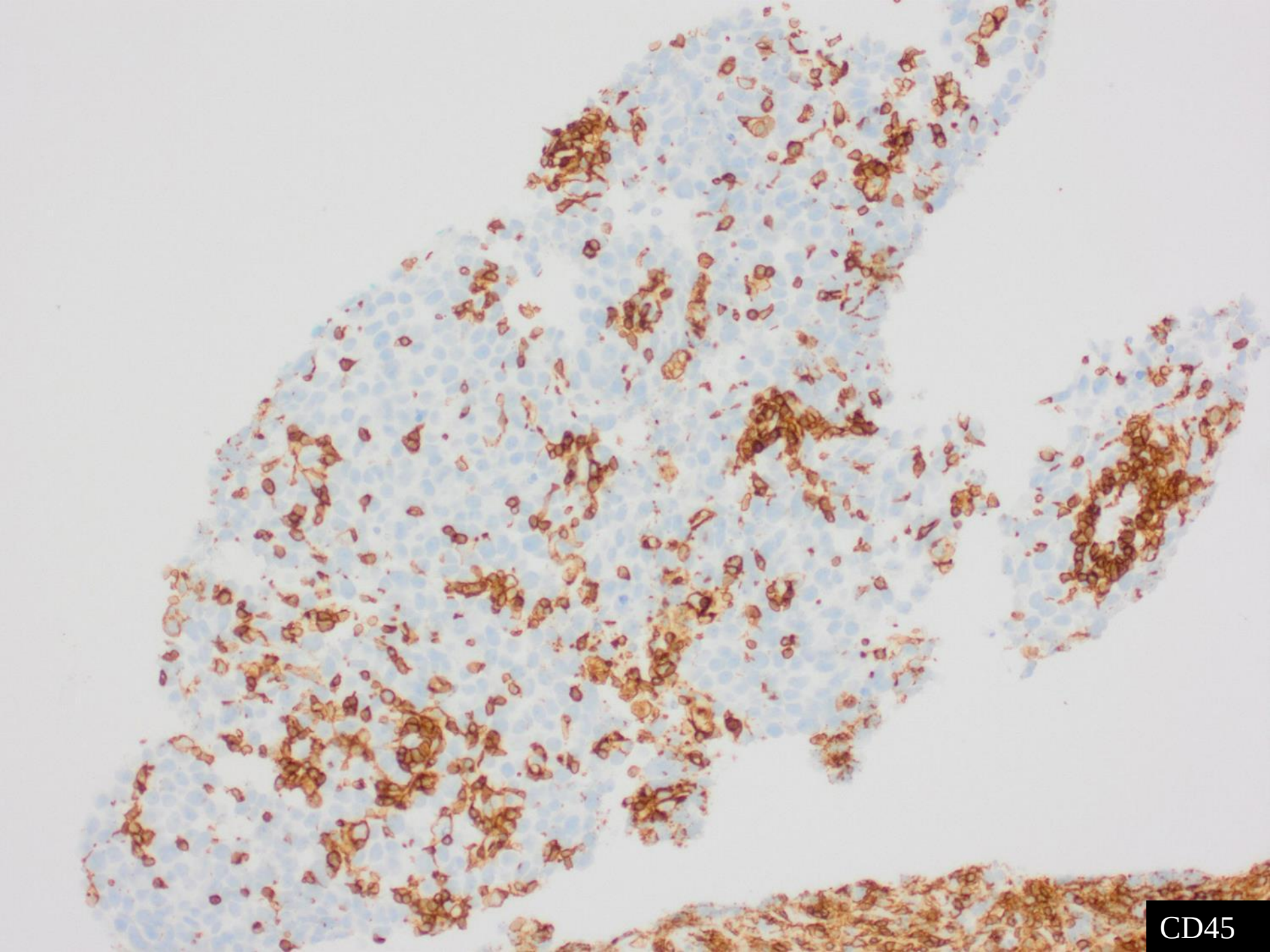

Few small fragments


Sheeted malignant population
Clear cytoplasm
Round nuclei
Lymphoid infiltrate


Abundant mitotic activity
Areas of necrosis


CD117


PLAP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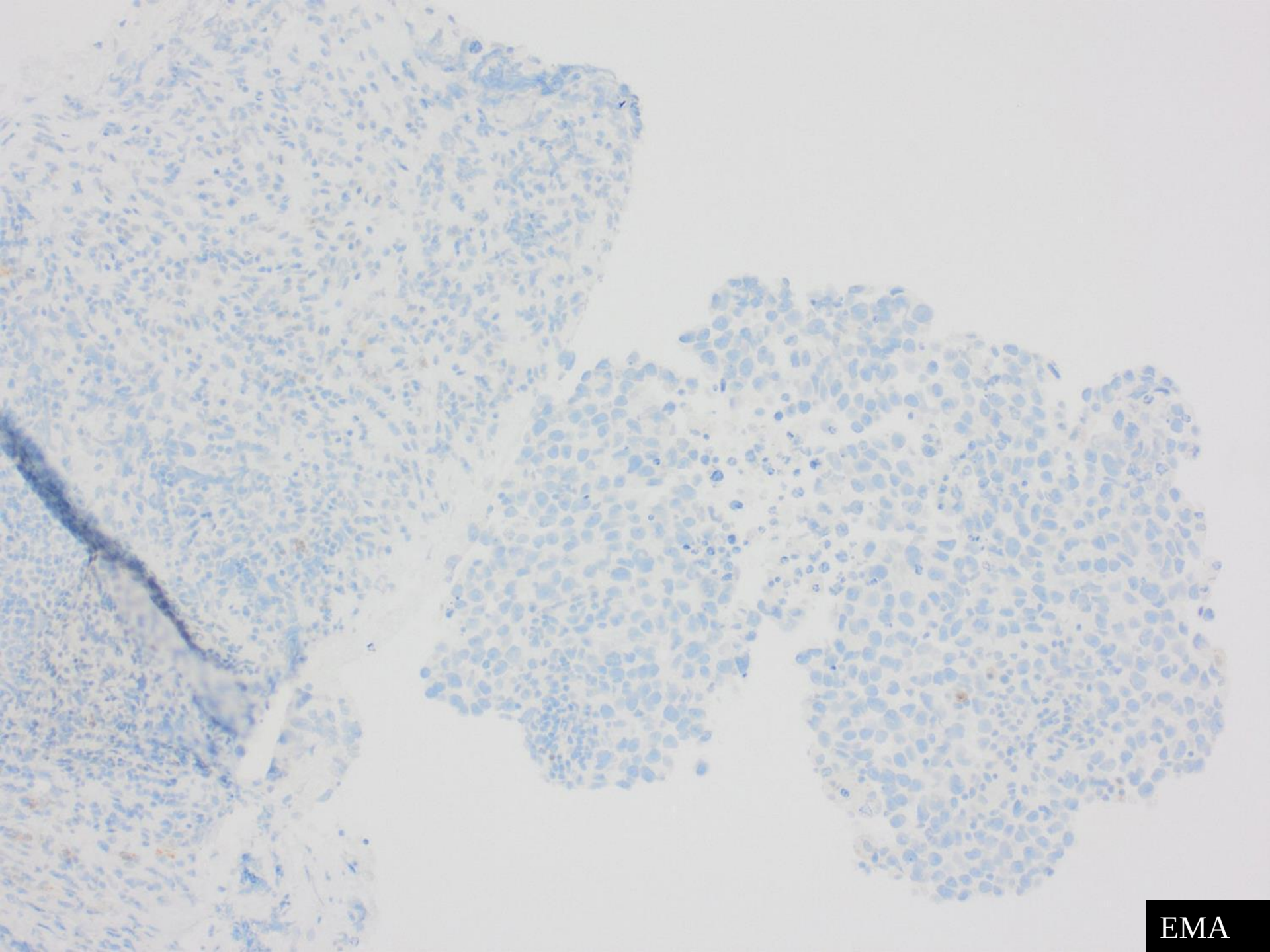

EMA

Diagnosis

Spontaneous regression of seminoma

3% of testicular tumours
10% of retroperitoneal germ cell tumours have a regressed primary

Regression possibly immune-mediated or due to ischaemia

Helpful pointers

Radiology, if it is disclosed or accessible
Serology – AFP, HCG, LDH

Adjacent GCNIS (although none in this case)
Look for residual viable germ cell tumour
Necrosis
Intratubular calcification said to be more common

Can be nonspecific – have a high index of suspicion

Case E4

Lump excised from left temple, clinically lipoma

59 year-old male

Lump on left temple, clinical lipoma

No other medical history

Macroscopic

14 x 7 mm skin ellipse, 8 mm thick

10 x 8 x 4 mm nodule on surface

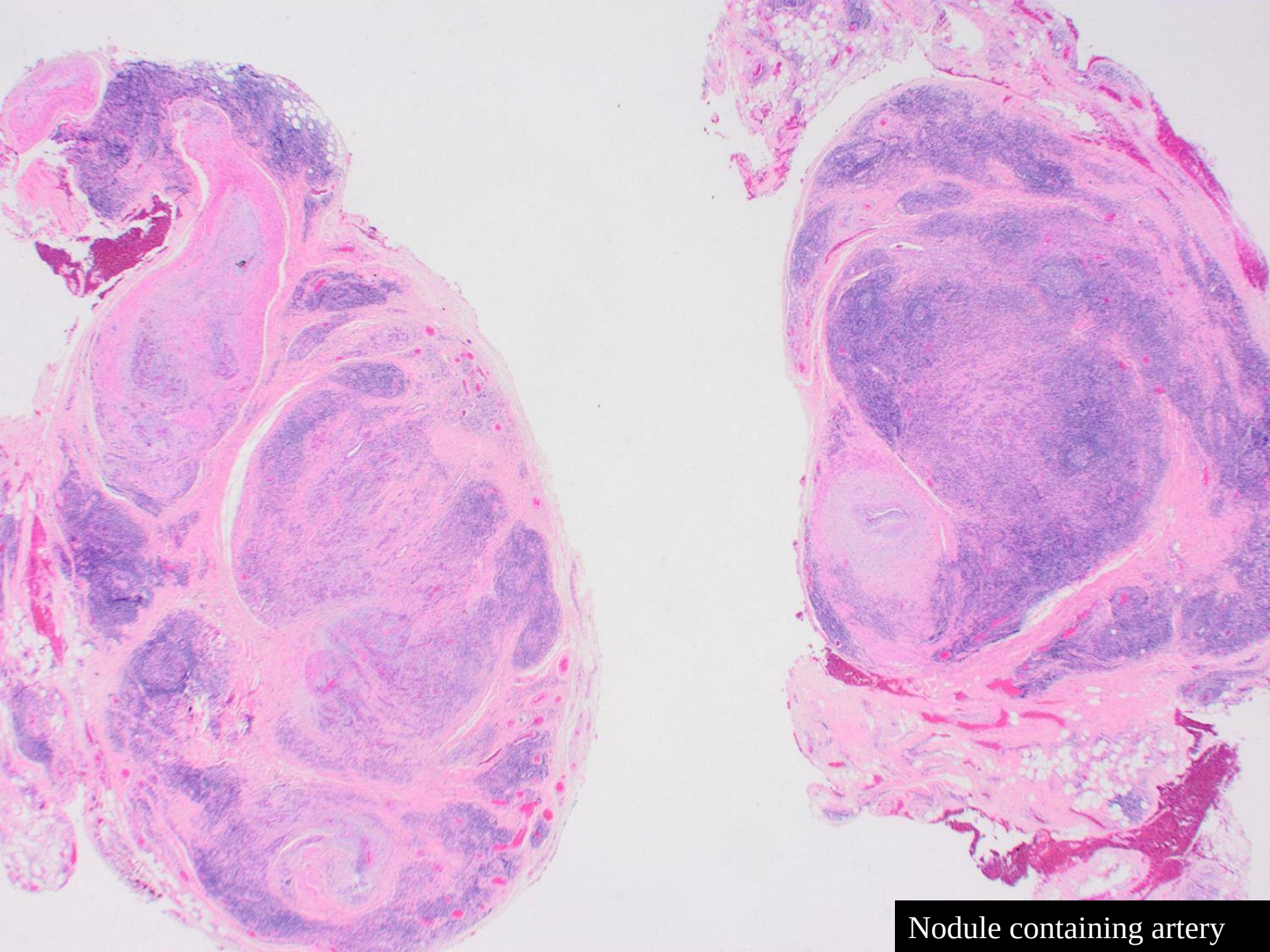
Histology

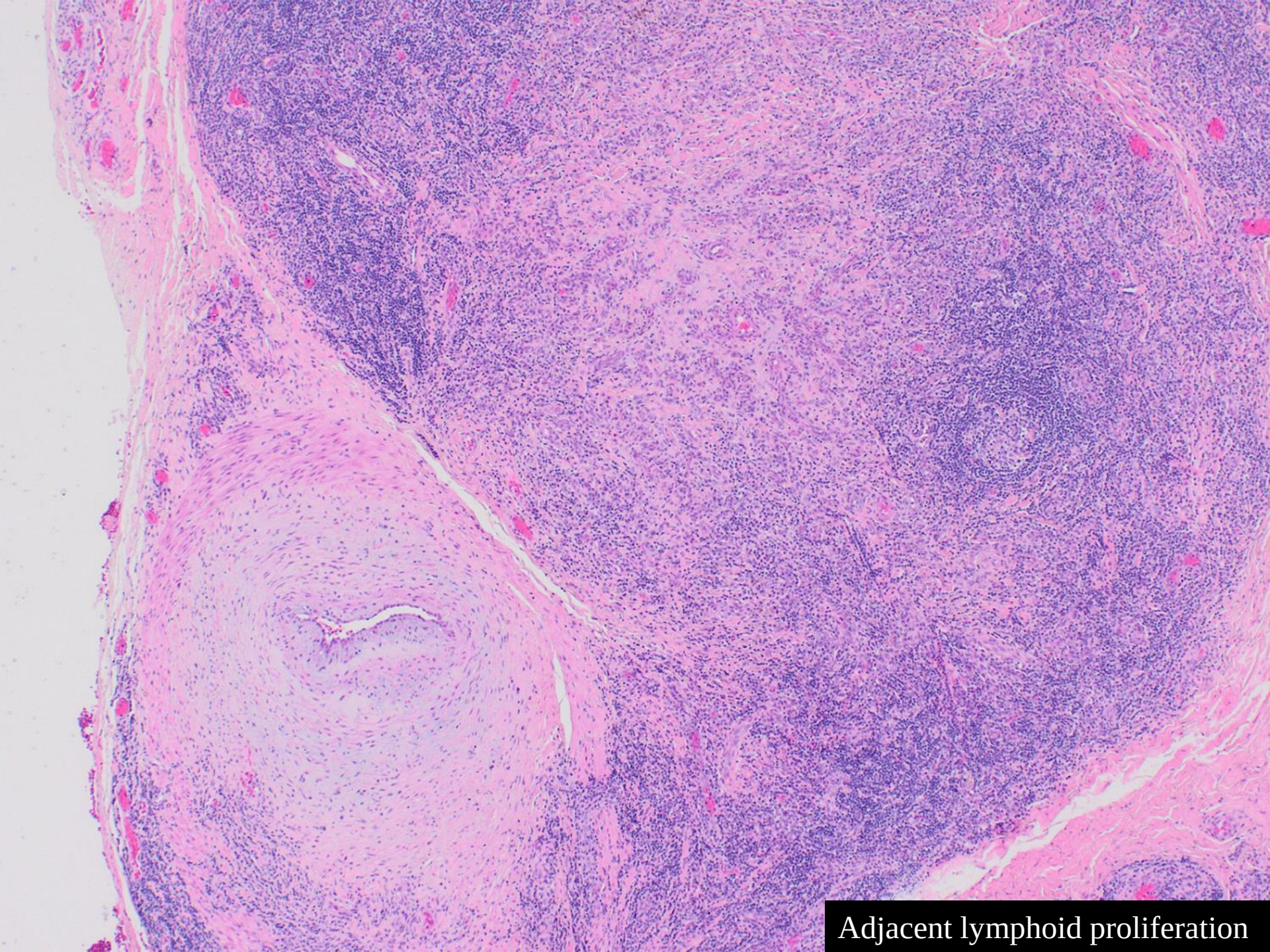
Artery adjacent to proliferation of small vessels

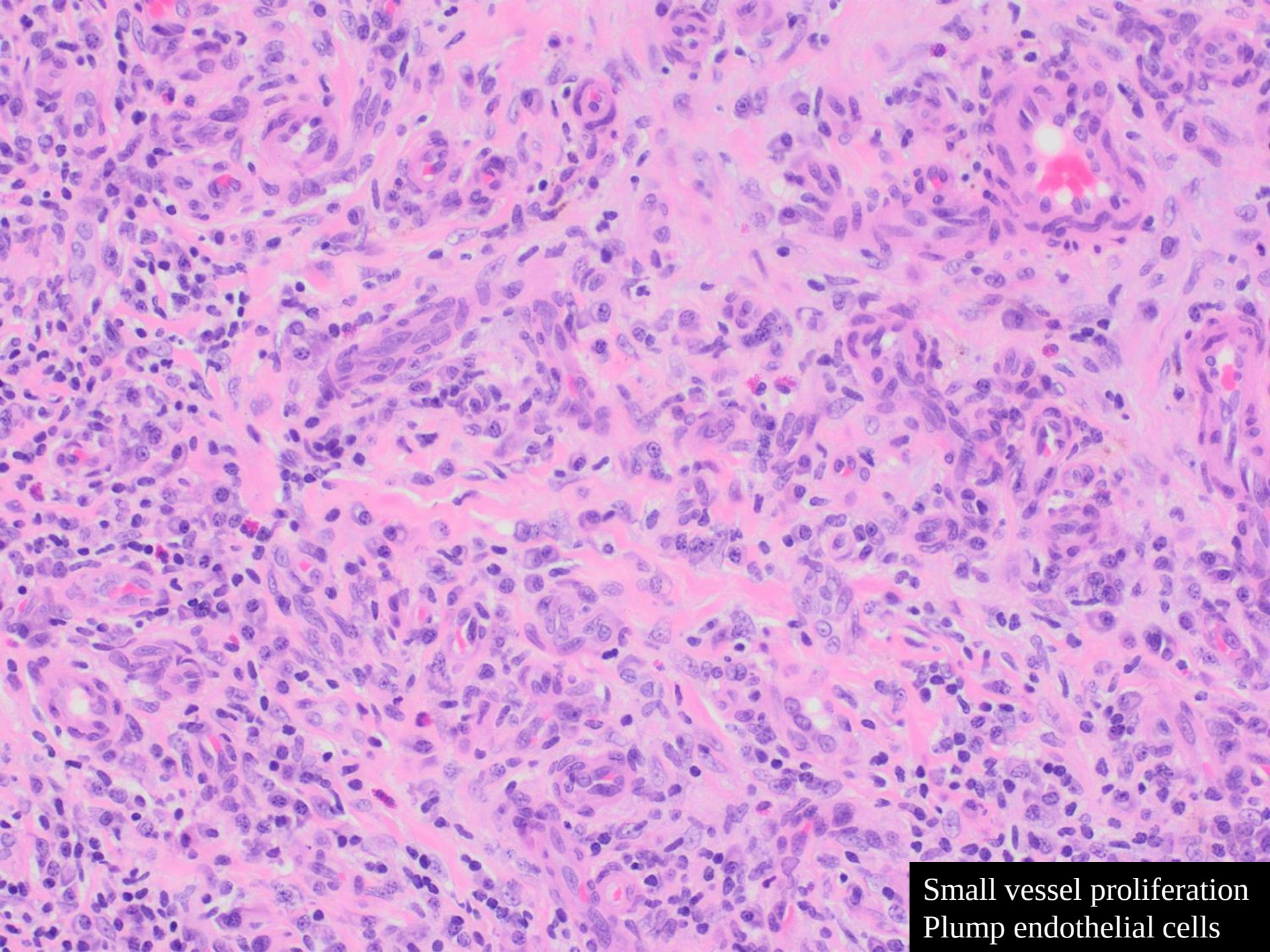
Plump endothelial cells

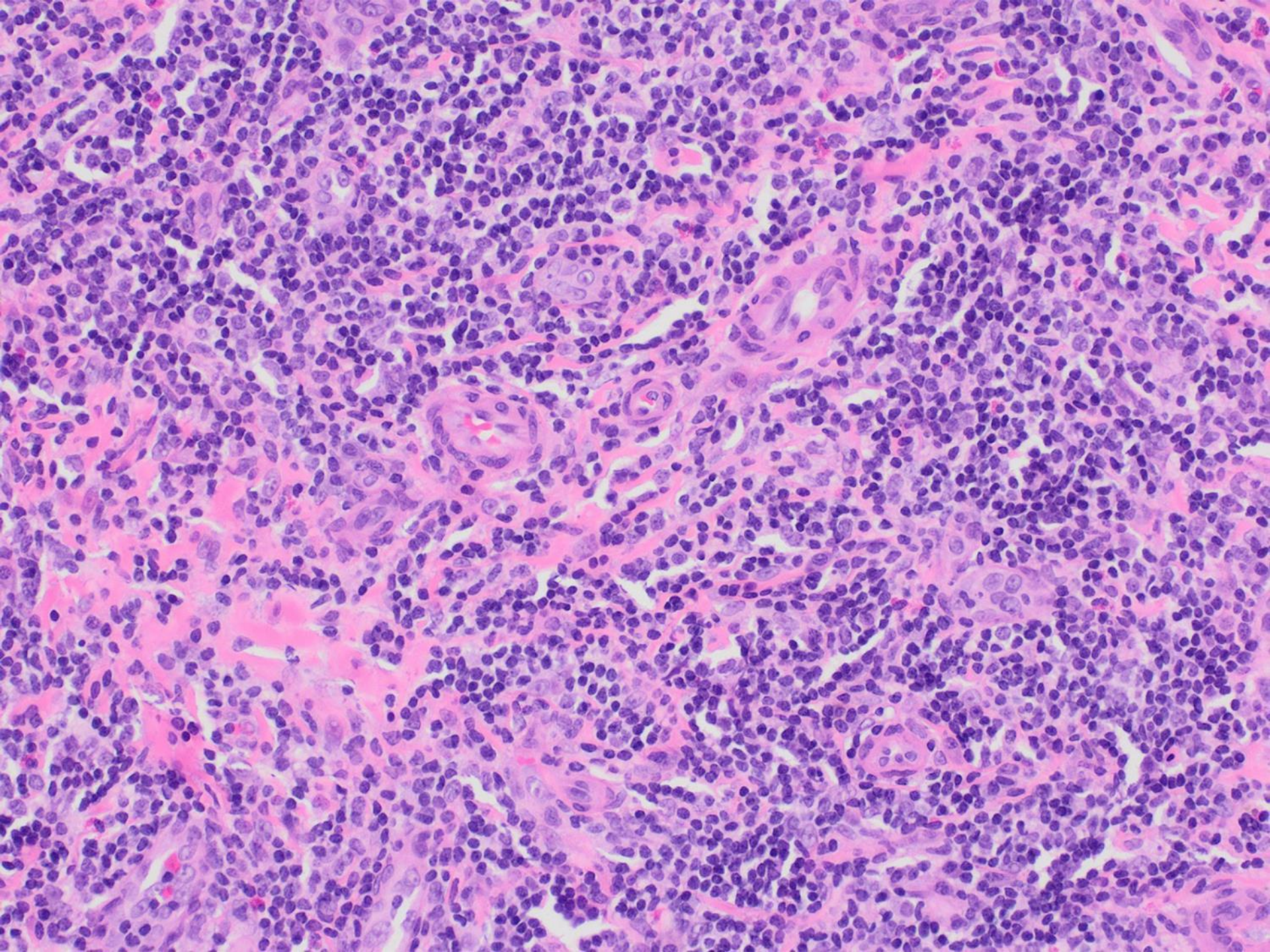
Lymphoid hyperplasia

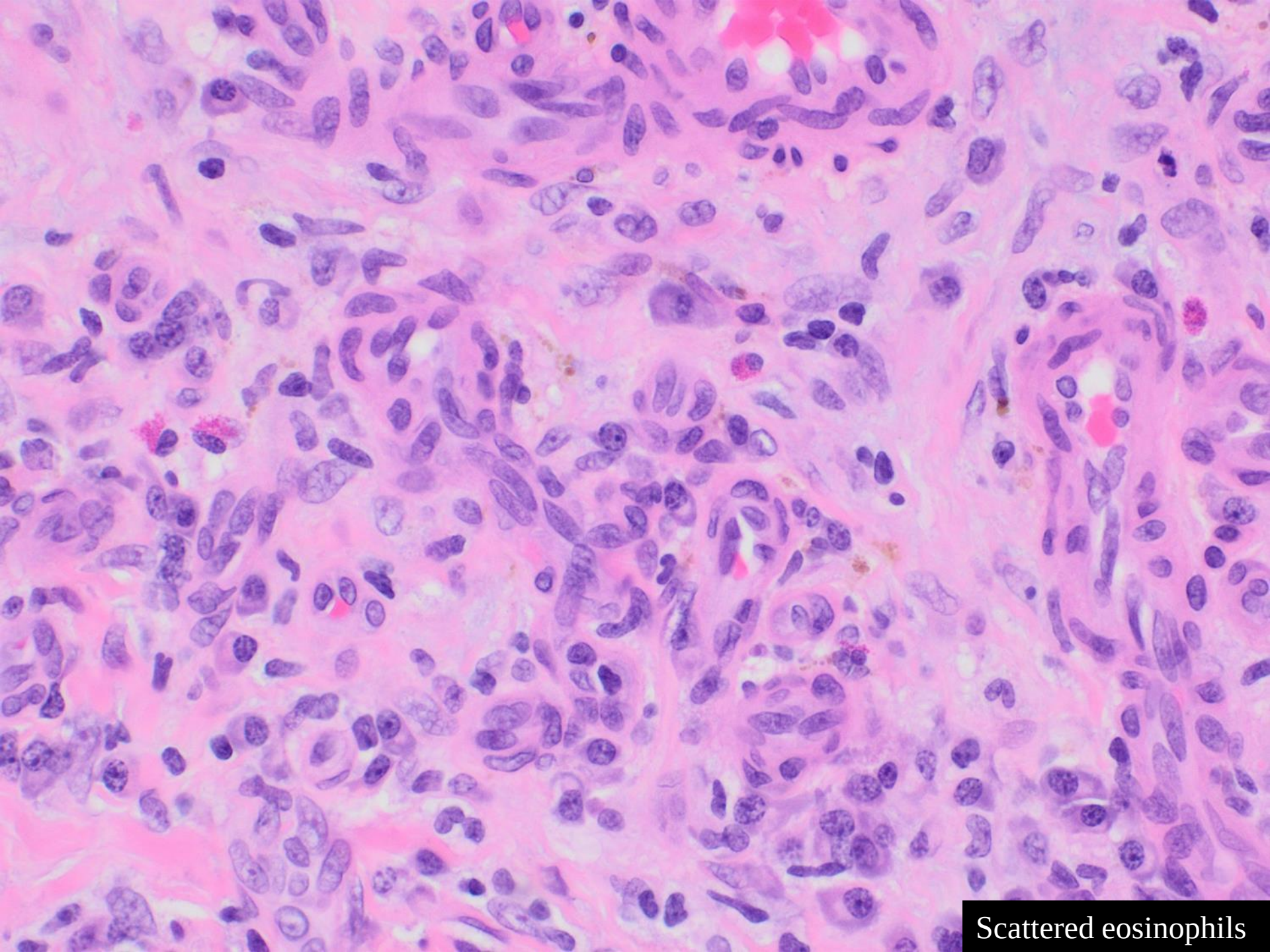
Eosinophils


Nodule containing artery


Adjacent lymphoid proliferation


Small vessel proliferation
Plump endothelial cells




Scattered eosinophils

92 responses

Angiolymphoid hyperplasia with eosinophilia	70
Angiolymphoid hyperplasia	6
Angiolymphoid lesion	1
Vascular lesion/haemangioma/angiomatosis	4
Hamartoma	3
Giant cell arteritis	2
?form of angiolymphoid hyperplasia	1
?lymphoproliferative disease	1
Castleman v Kimura disease	1
Ectopic salivary gland with obstruction	1
Benign mixed tumour of skin	1
Very wide differential	1

Diagnosis

Angiolymphoid hyperplasia with eosinophilia

Benign vascular tumour

Usually painless red nodule head & neck
Can be single or multiple

Intradermal, ill-defined, lobulated

Can be entirely intravascular

HHV-8 negative