Case 22

31 year old lady complained of a persistent discolouration over the left breast.

Sections A and B are from different parts of the lesion.

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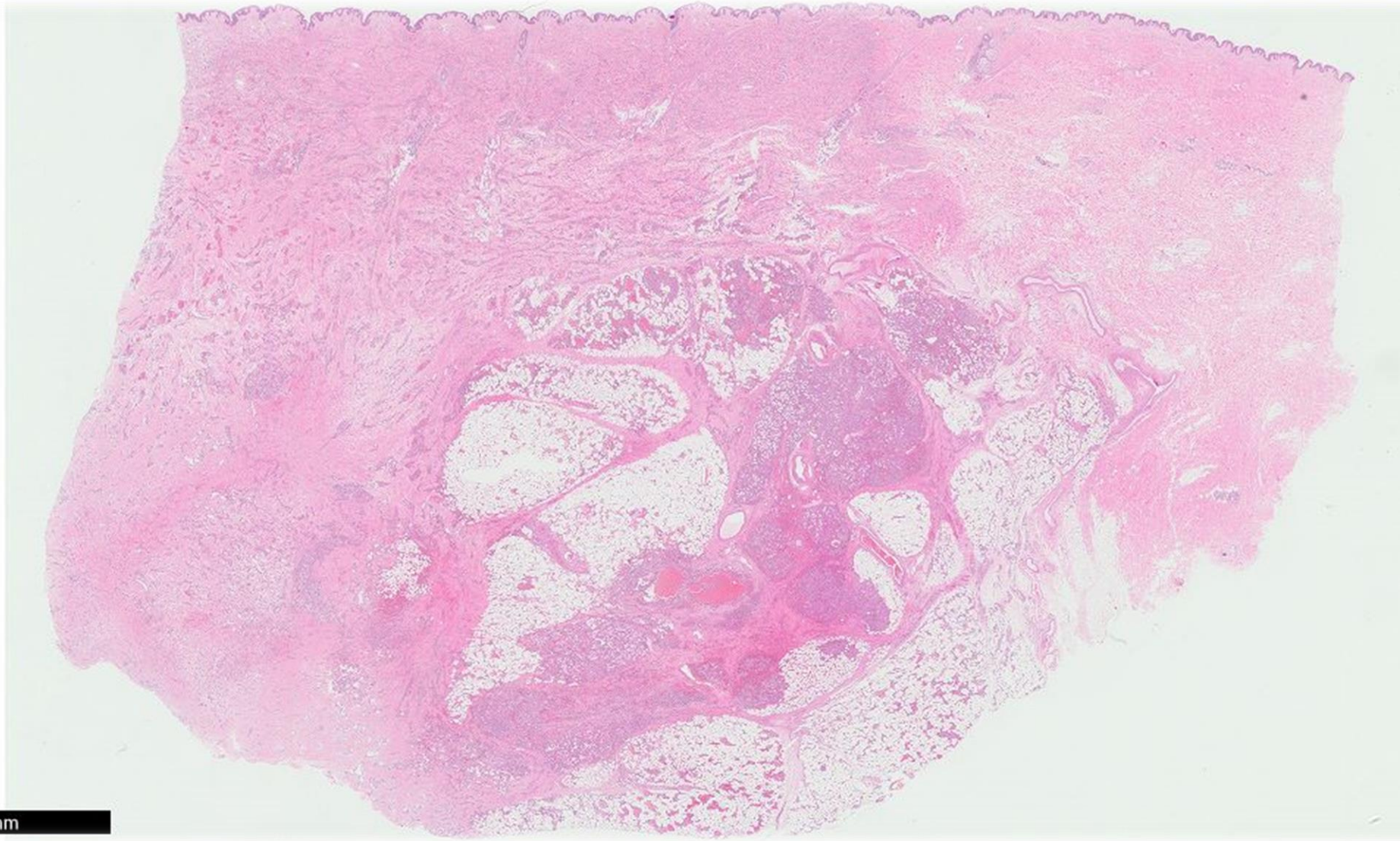
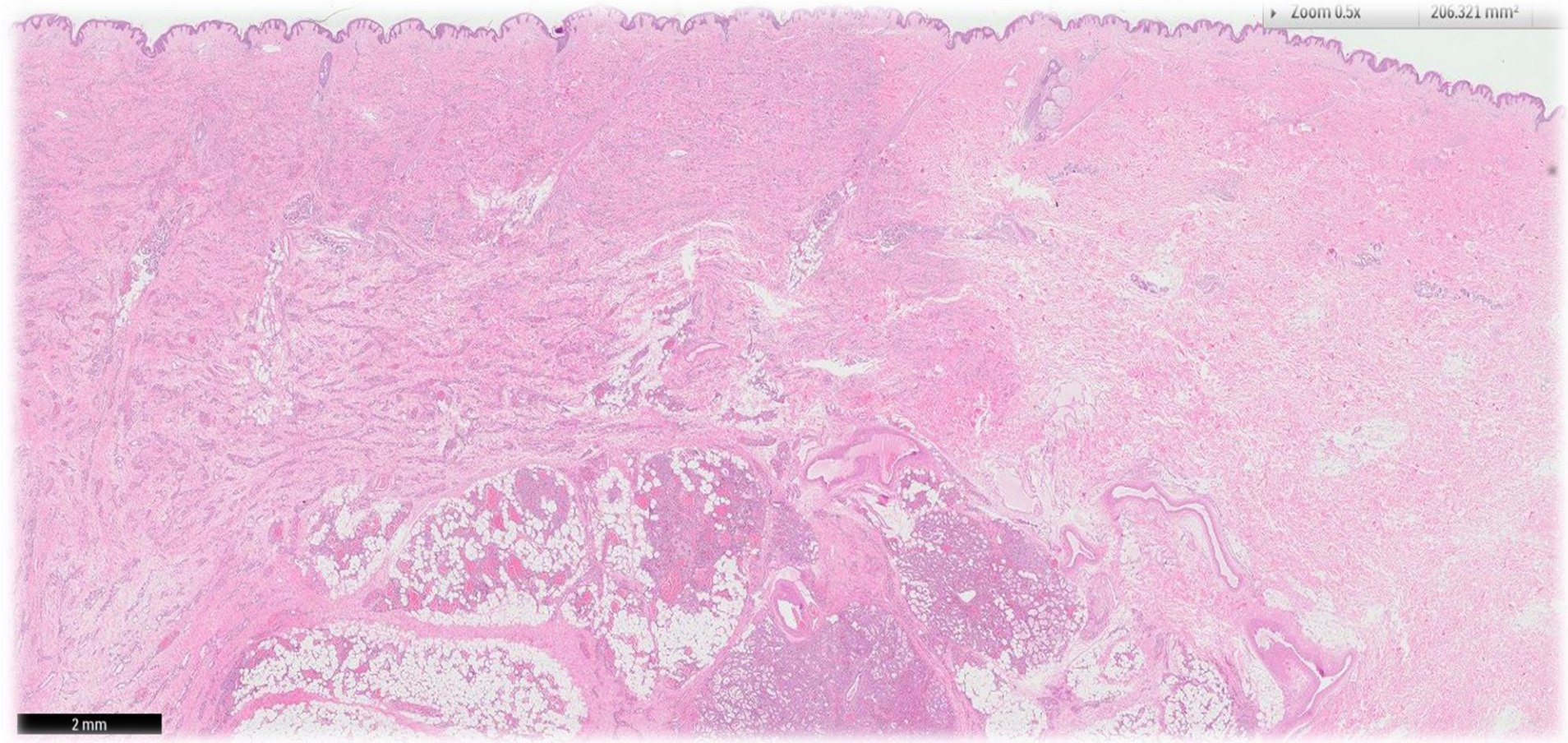
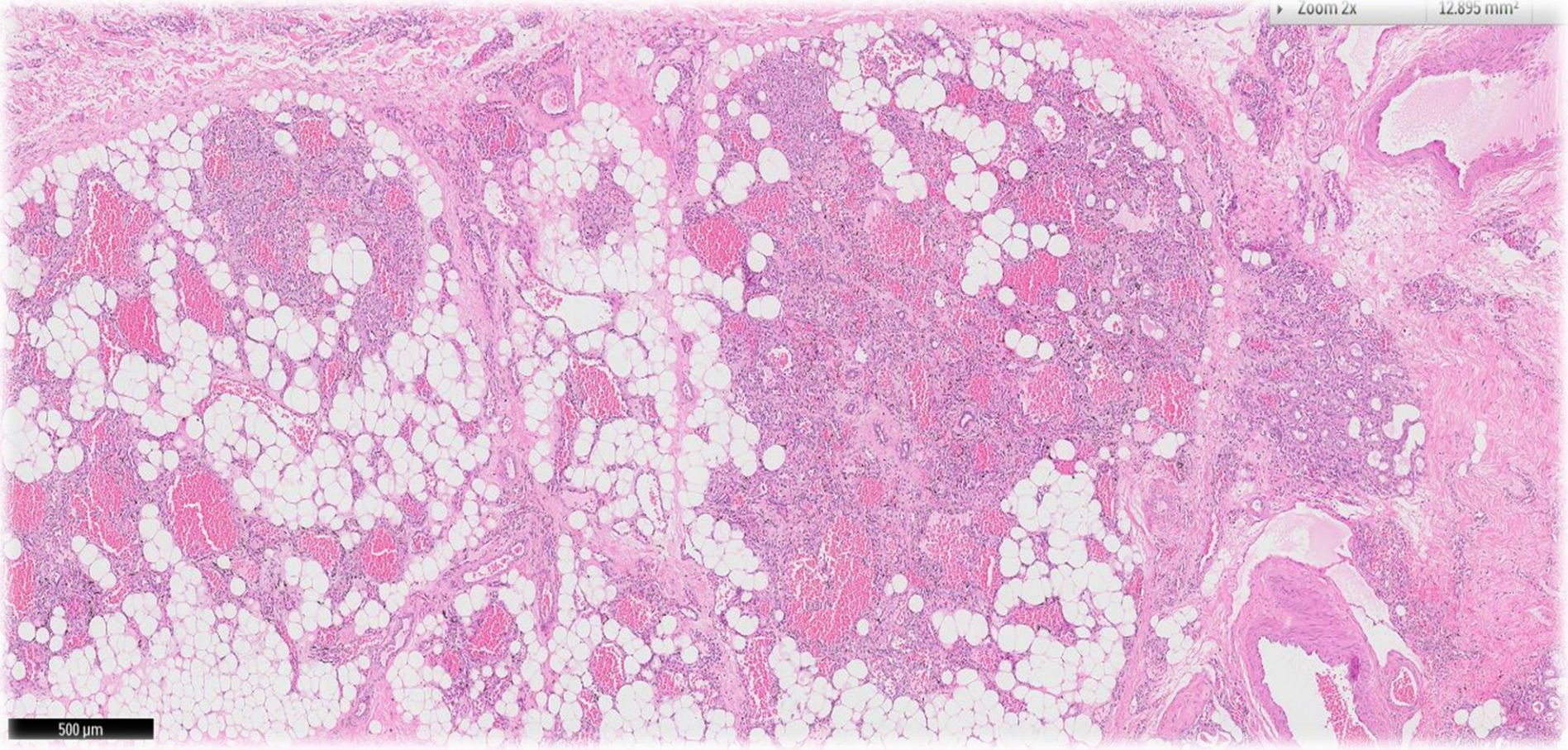
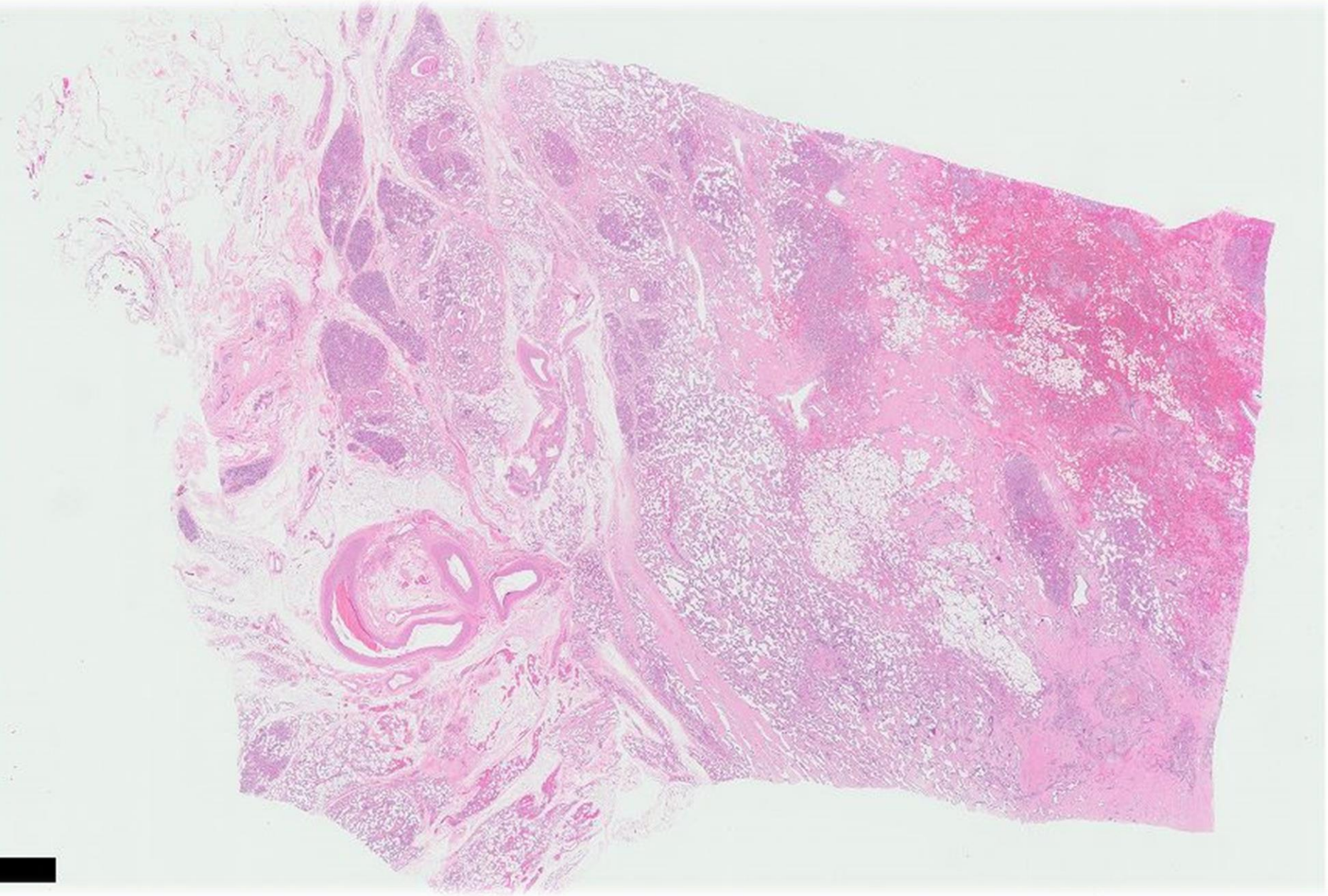
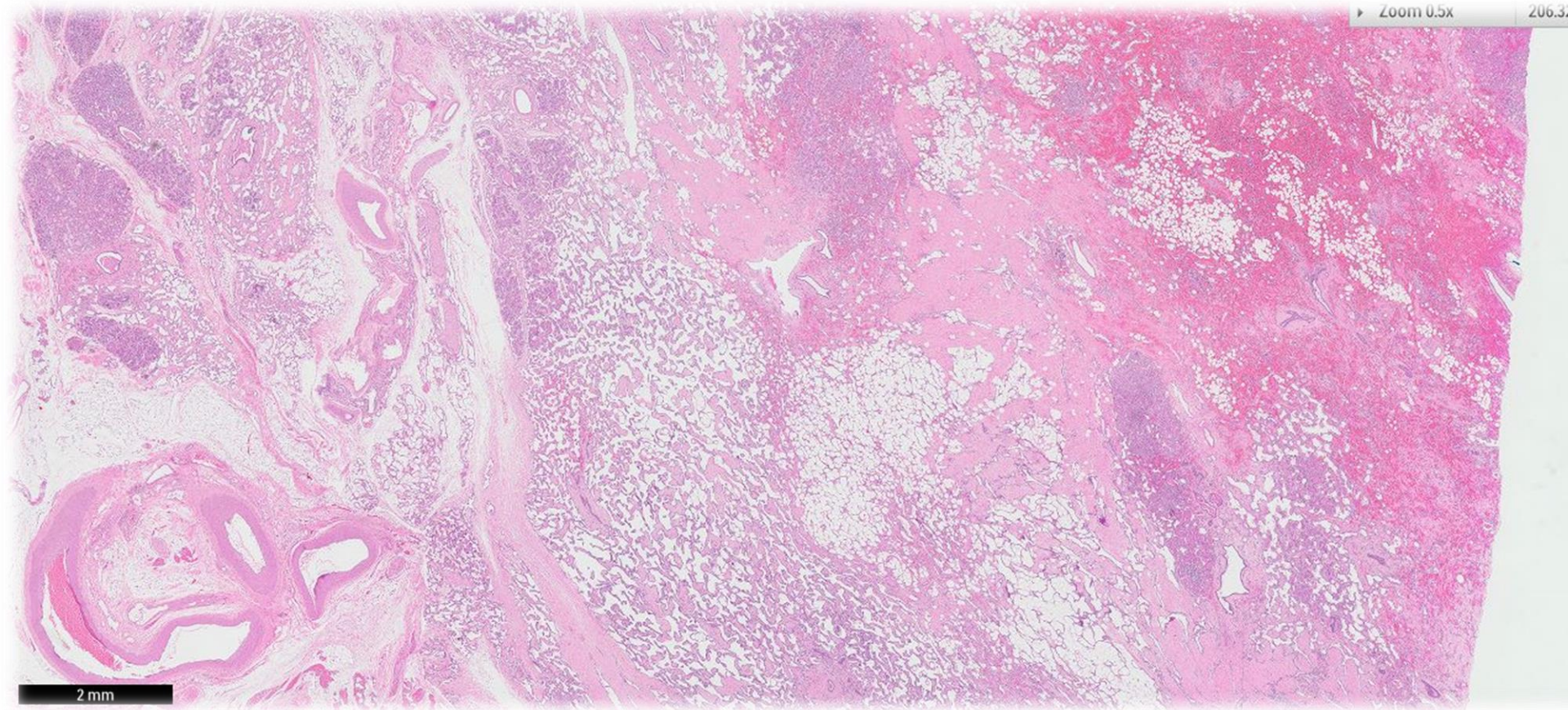
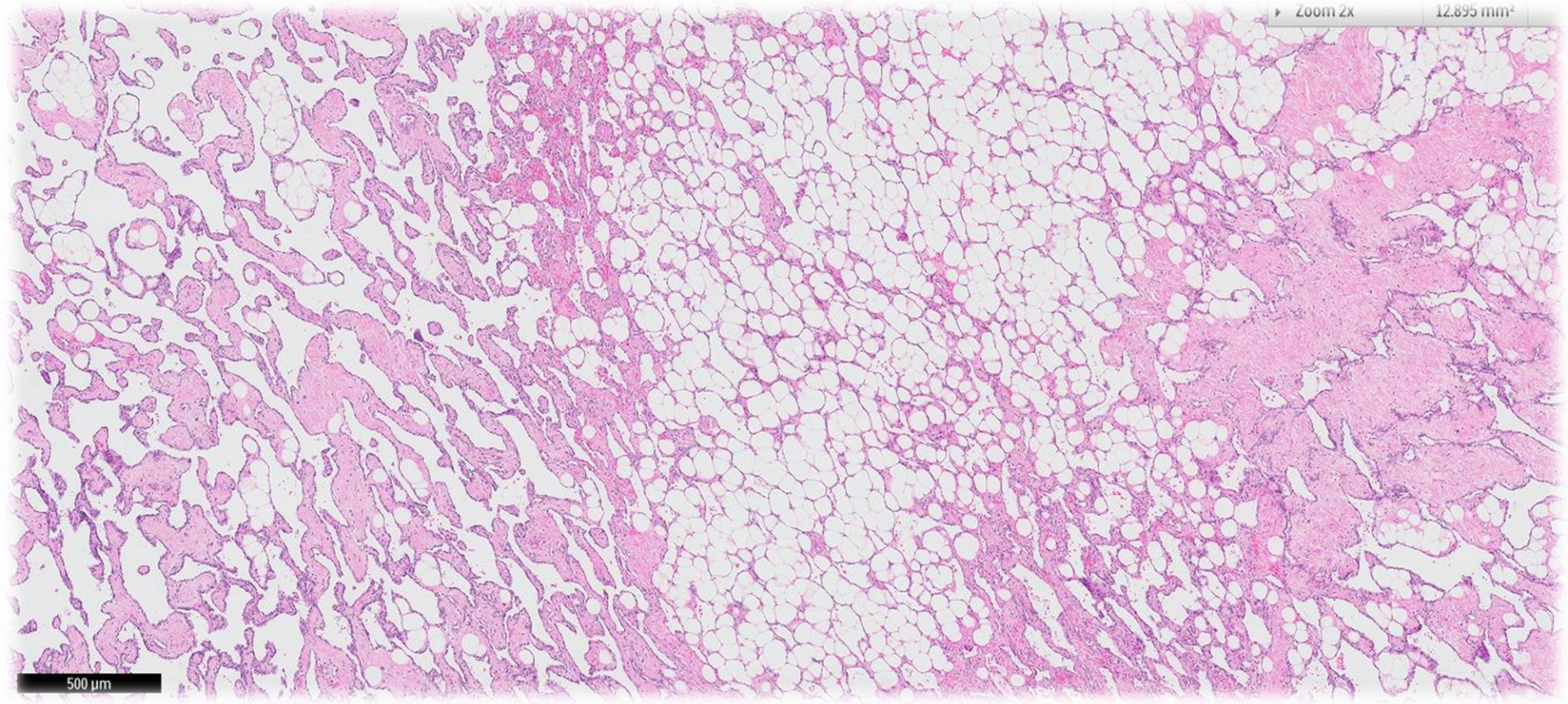

5 mm


Zoom 0.5x
206.321 mm²
2 mm

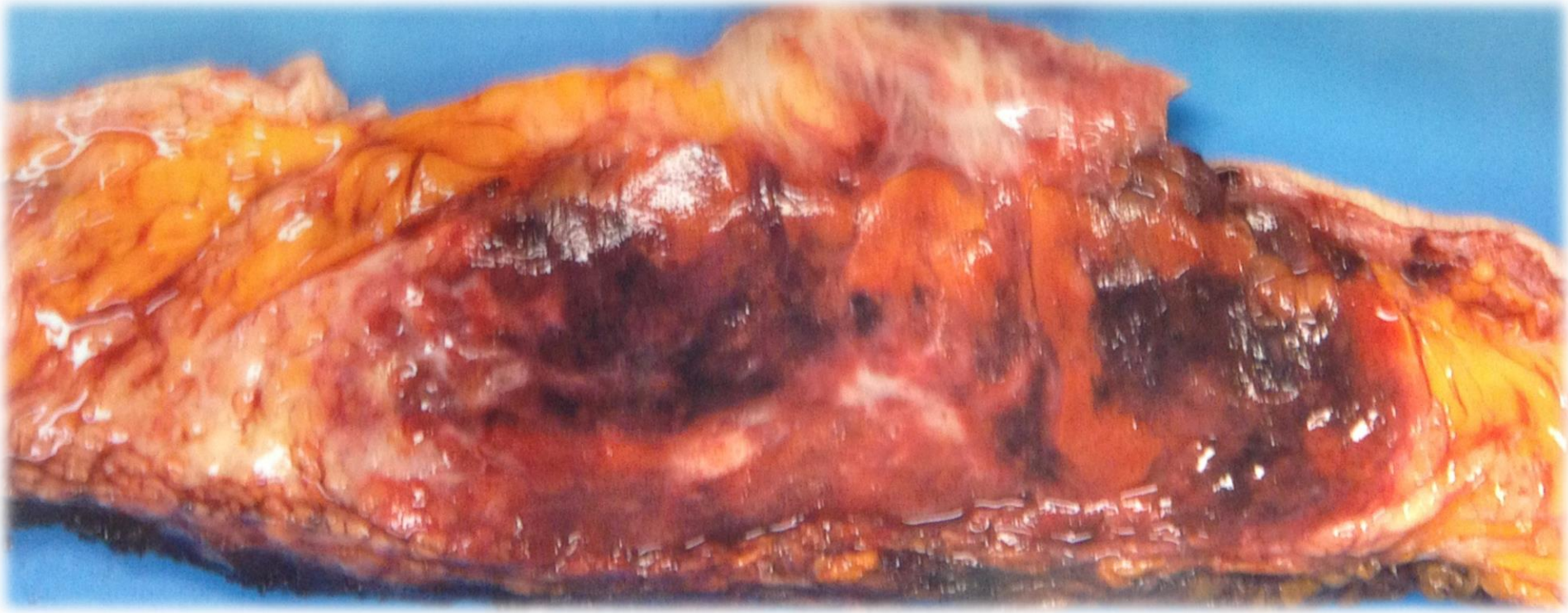

Zoom 2x
12.895 mm²
500 µm

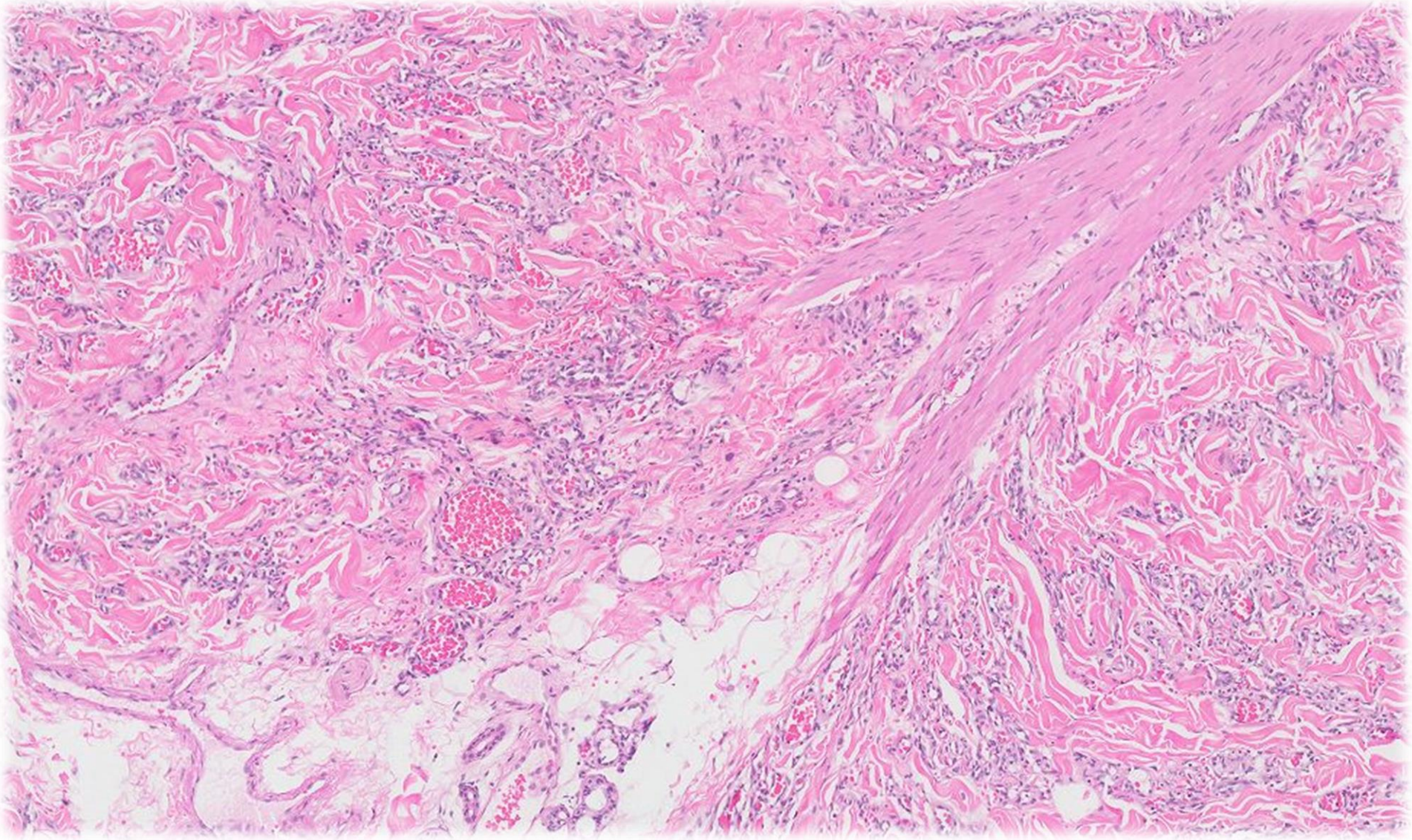


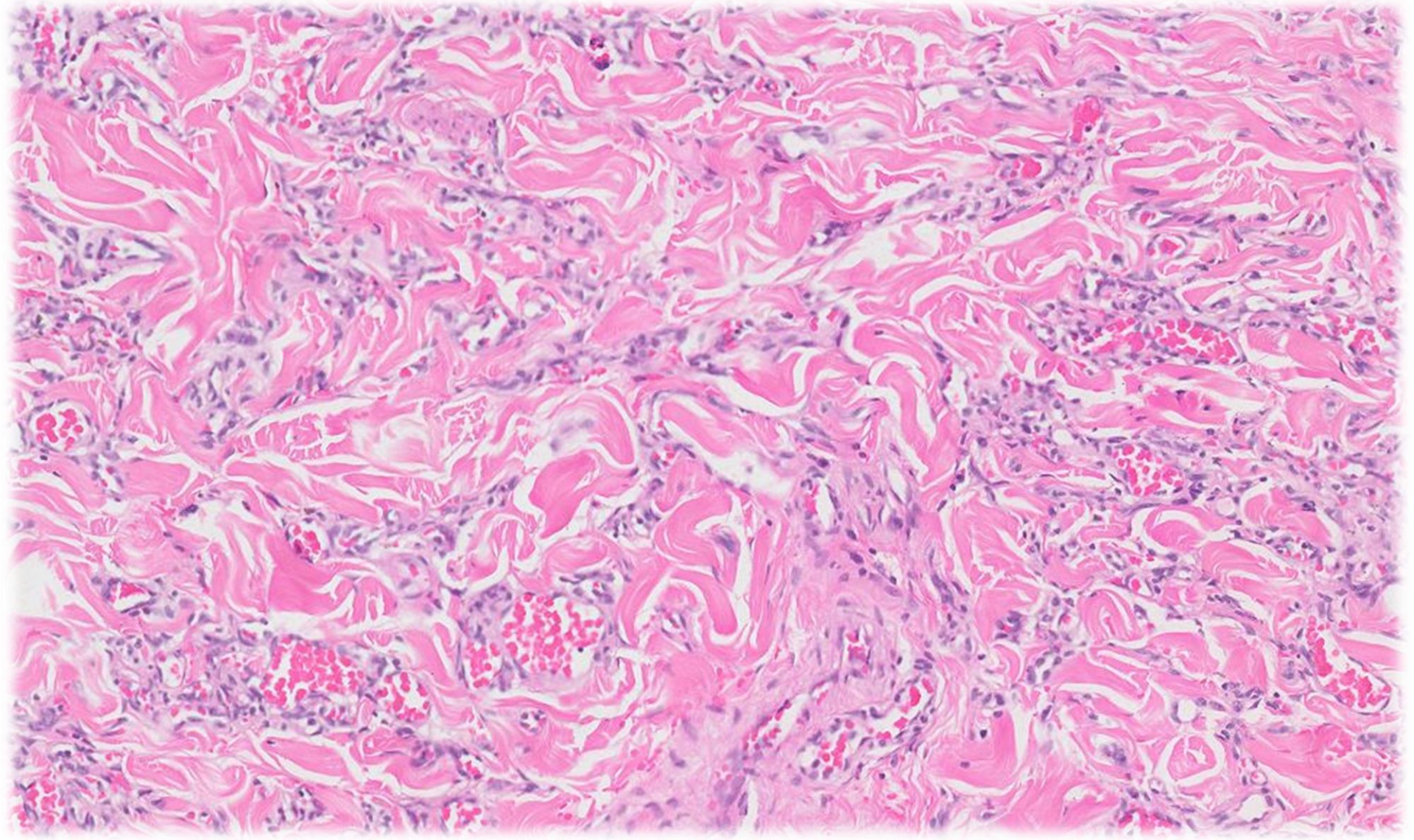

Zoom 0.5x
2 mm

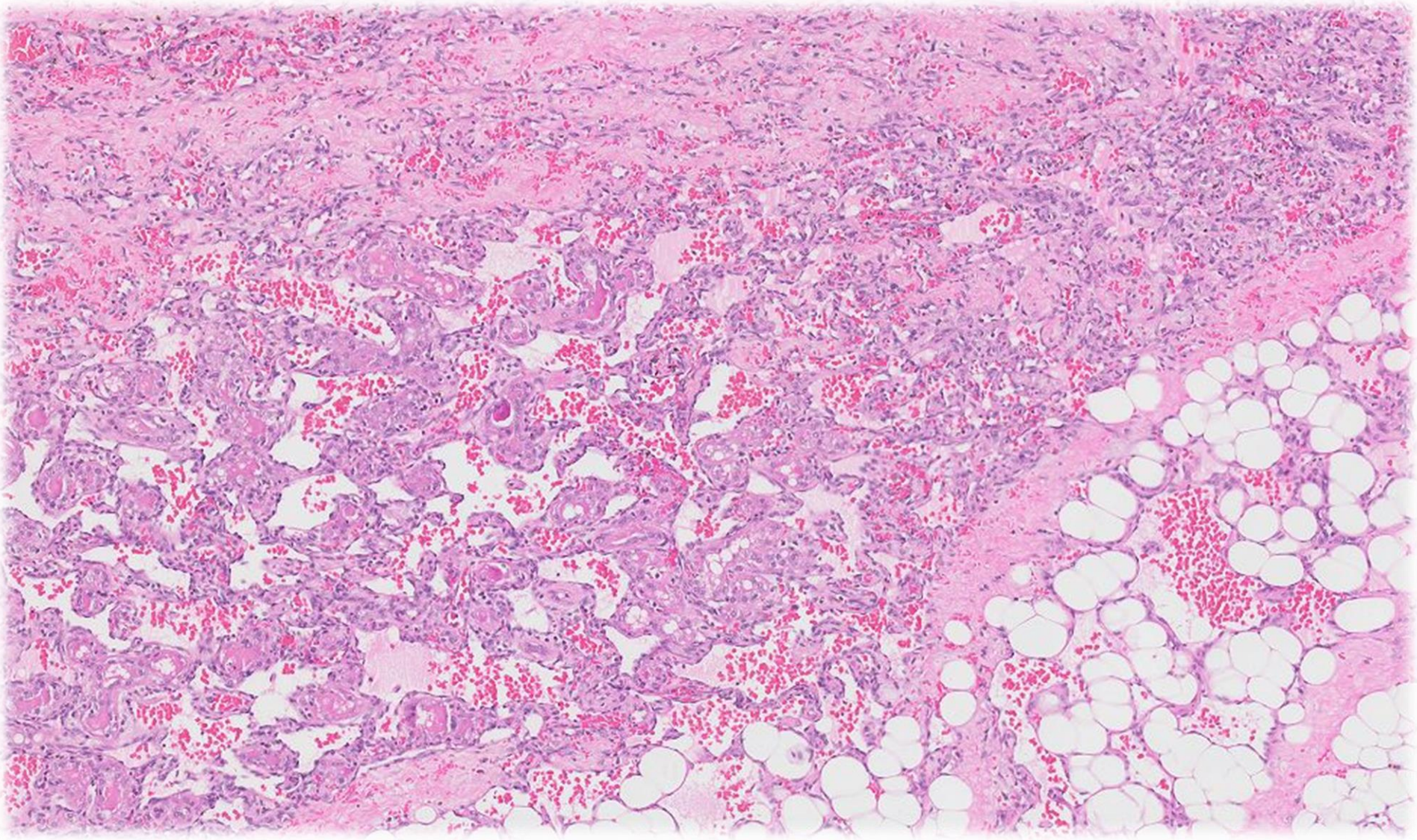

Zoom 2x
12.895 mm²
500 µm

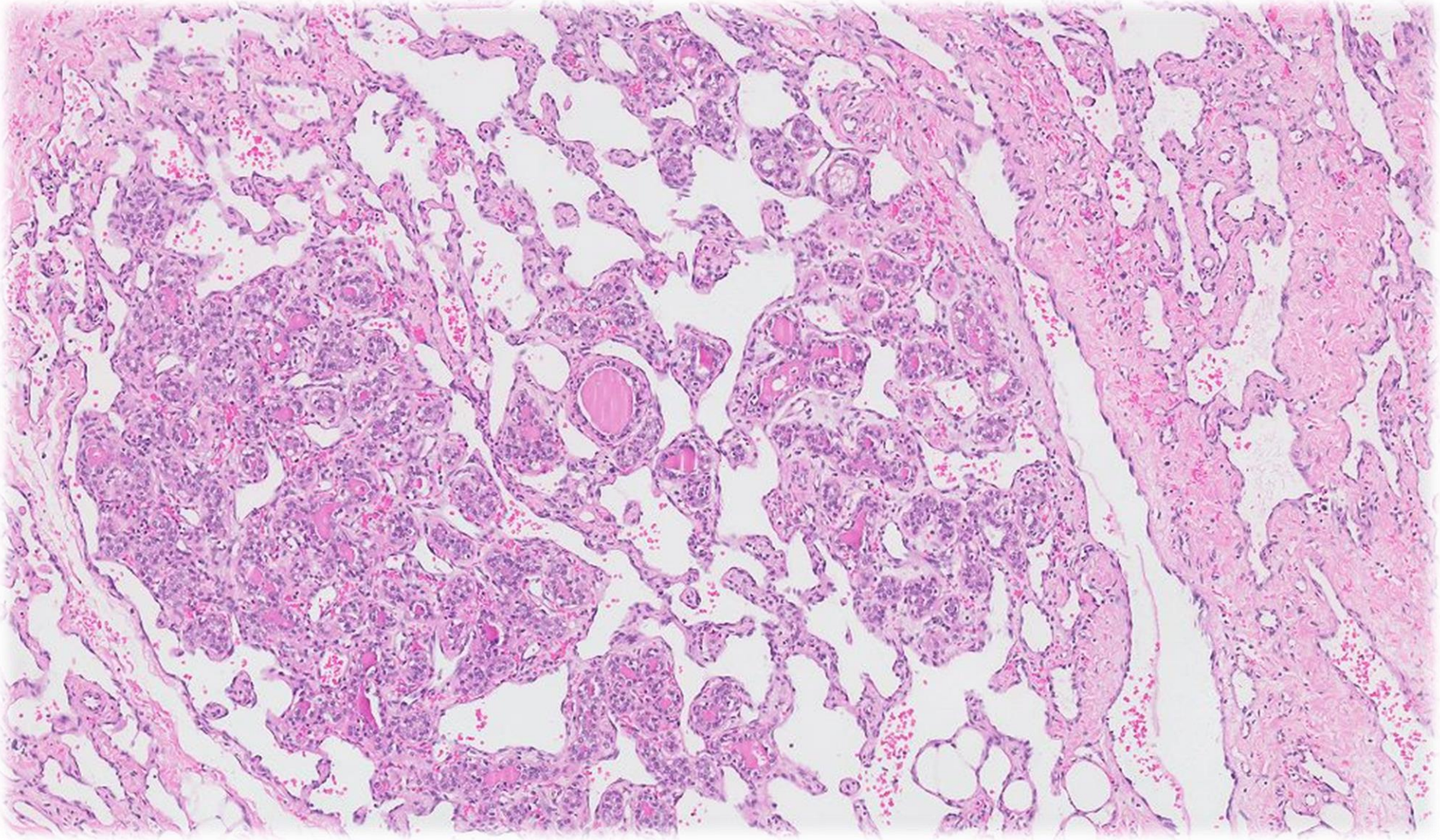
View of Singapore General Hospital, Ministry of Health, Duke-NUS Graduate Medical School from Academia

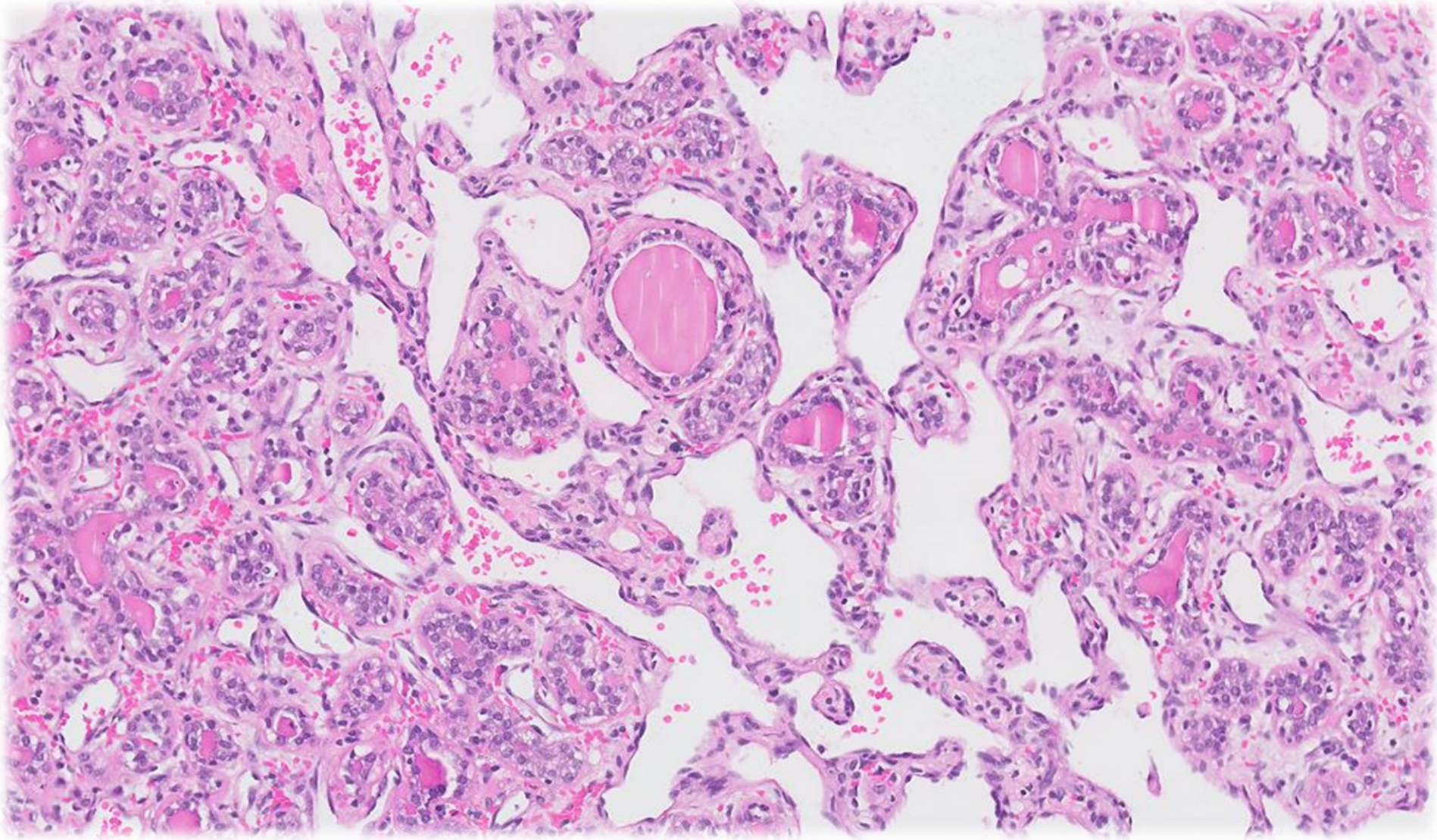


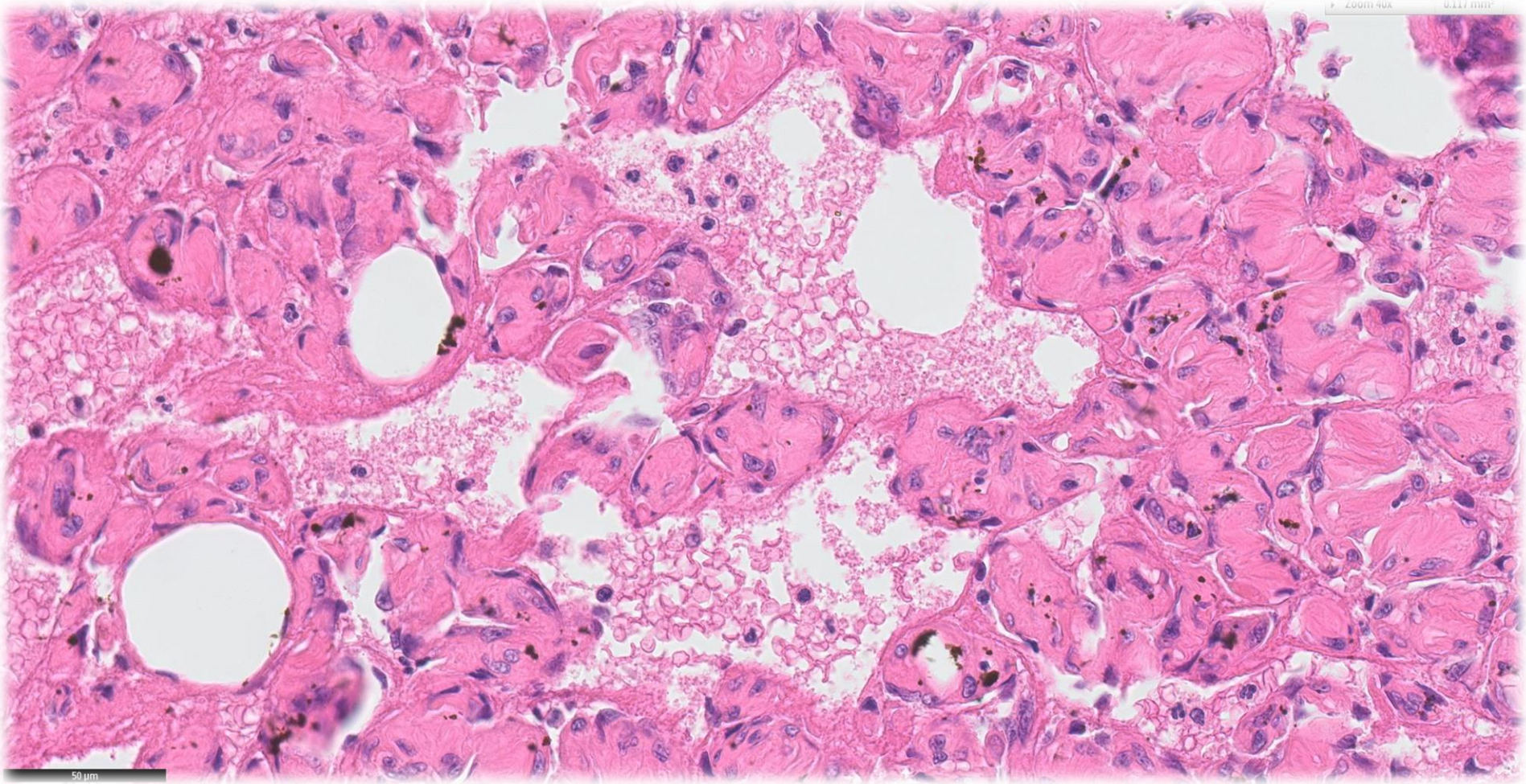


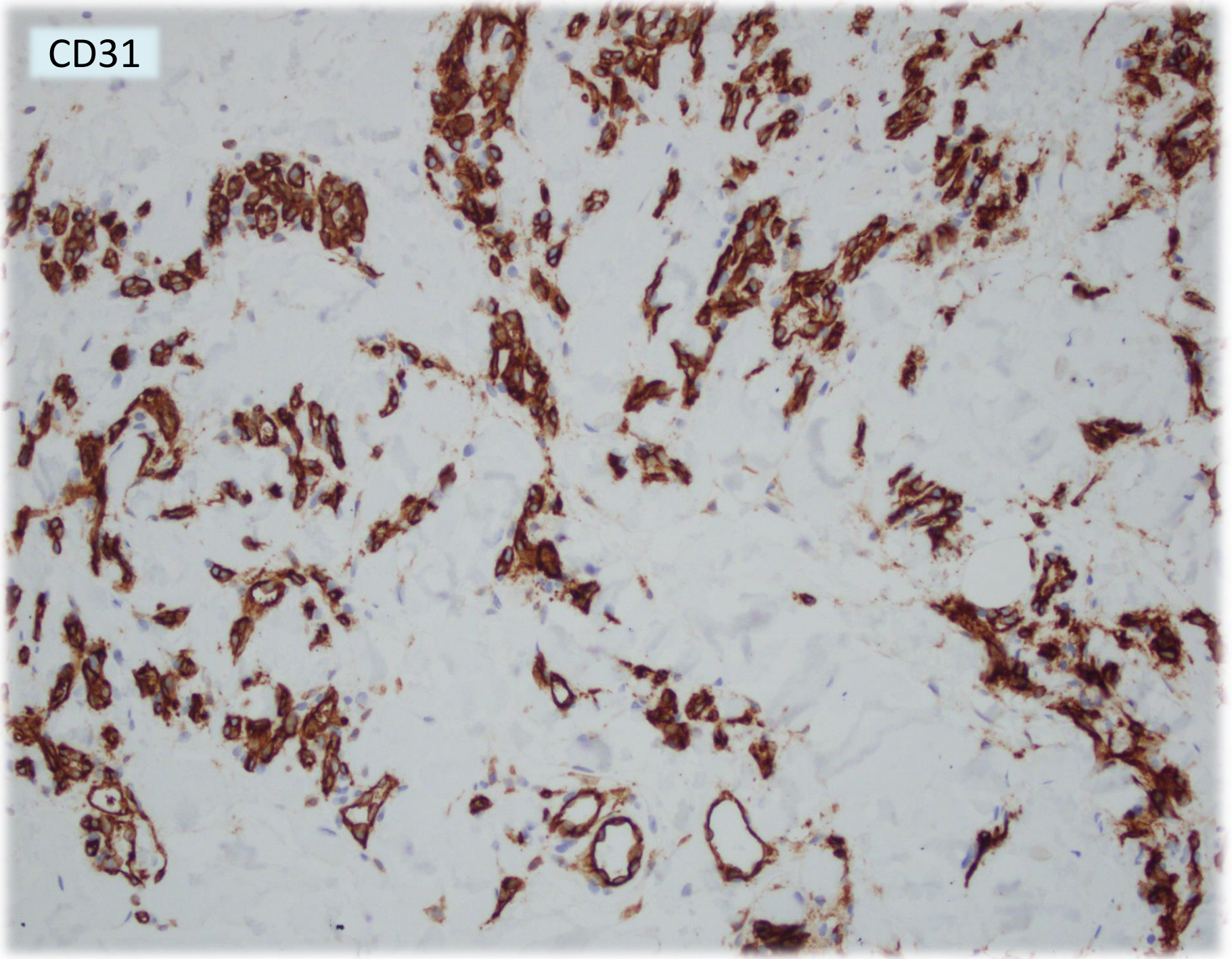


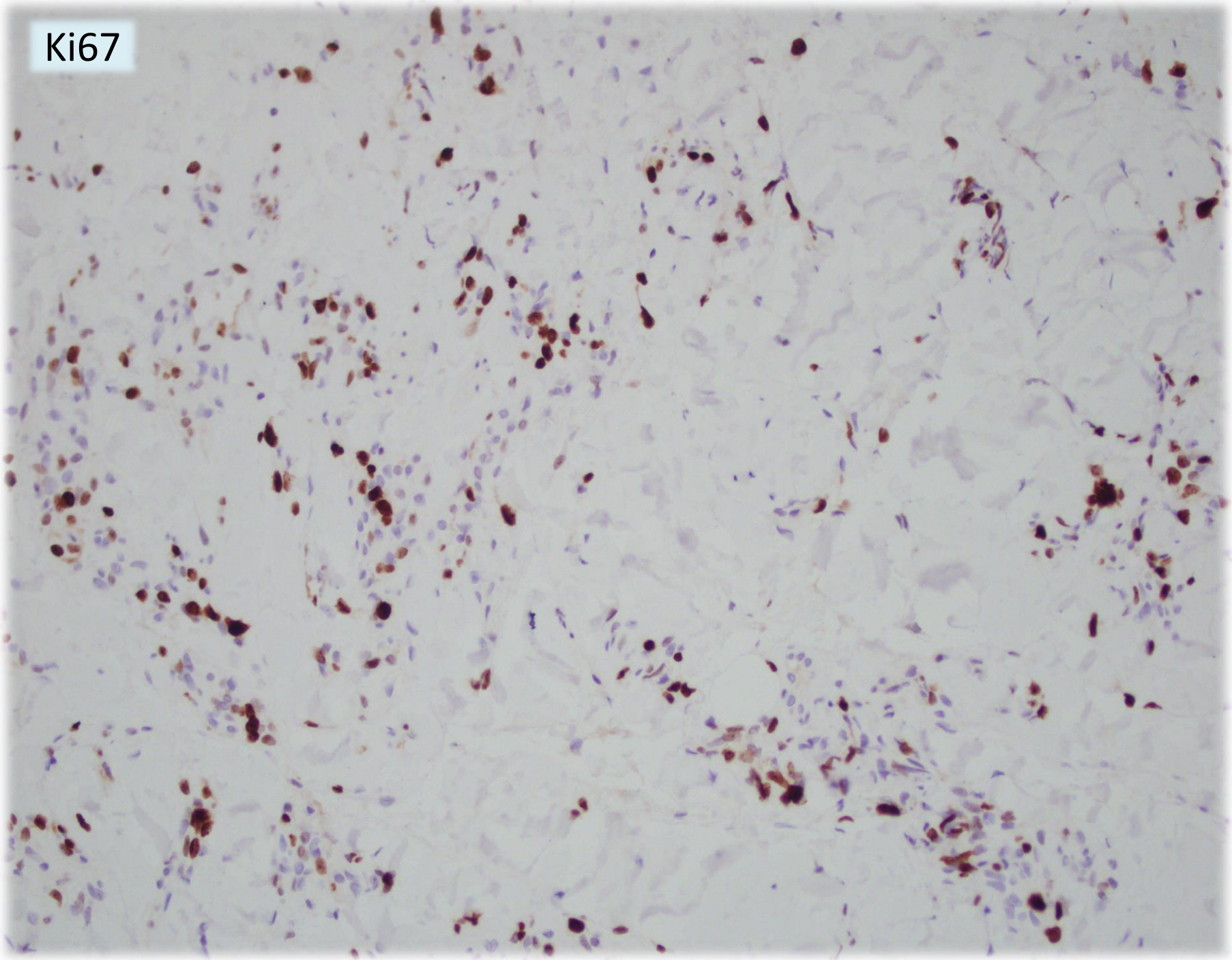







50 µm


CD31


Ki67

Diagnosis

- Angiosarcoma, 8cm, involving the overlying skin.
- Predominantly low grade features, with focally more solid areas raising possibility of an intermediate grade component.

Angiosarcoma

- Commonest primary sarcoma in the breast, after malignant phyllodes tumour.
- Accounts for 0.05% of all primary breast malignancies.
- Classification:
  - Primary: arises in breast parenchyma.
  - Secondary: develops in the skin, chest wall or breast parenchyma after surgery and postoperative radiation for breast cancer (commonest radiation associated sarcoma).

Angiosarcoma

Primary

- Almost exclusively female.
- Median age 40 years.
- Clinical features:
  - Painless mass.
  - Diffuse breast enlargement.
  - May be bilateral.

Secondary

- 2 clinical settings:
  - Chest wall post-mastectomy and radiotherapy (latent period 7-10 years), older patients (60-80 years).
  - Tumour within the breast post lumpectomy and radiotherapy (latent period 5-6 years), broad age range.
- Usually involves skin, may occur in breast parenchyma.
- Often multifocal.
- Preceding or concurrent atypical vascular lesions.

Angiosarcoma

- Histopathology:
  - Well, intermediate and poorly differentiated.

  (*based on size of vascular channels, endothelial atypia, mitoses, multilayering*)
- Differential diagnosis:
  - PASH, angiolipoma, benign vascular lesions, papillary endothelial hyperplasia, spindle cell carcinoma, other sarcomas.
  - Panel immunohistochemistry.
- Genetics:
  - Activating mutations in tyrosine kinase receptor.
  - Myc amplification in radiation induced angiosarcoma.
- ***Grade is of no prognostic value*** (*AJSP 2008;32:1896-1904).*
- OS < 6 years.


SGH
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