

## Case 16

59 year old Indian lady was discovered on mammographic screening to have a spiculated mass in the left breast.  
A wide excision was performed.

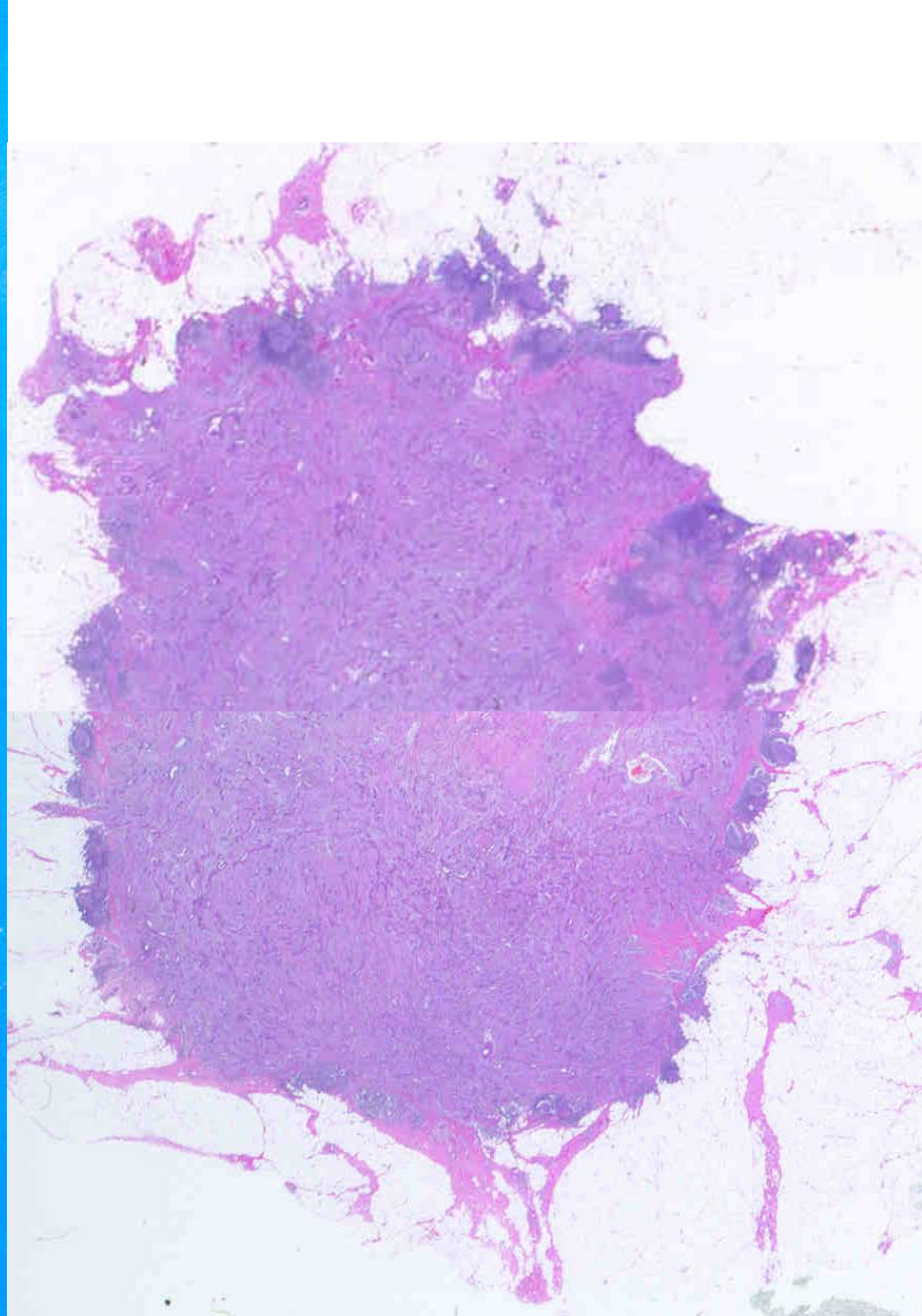
Left CC

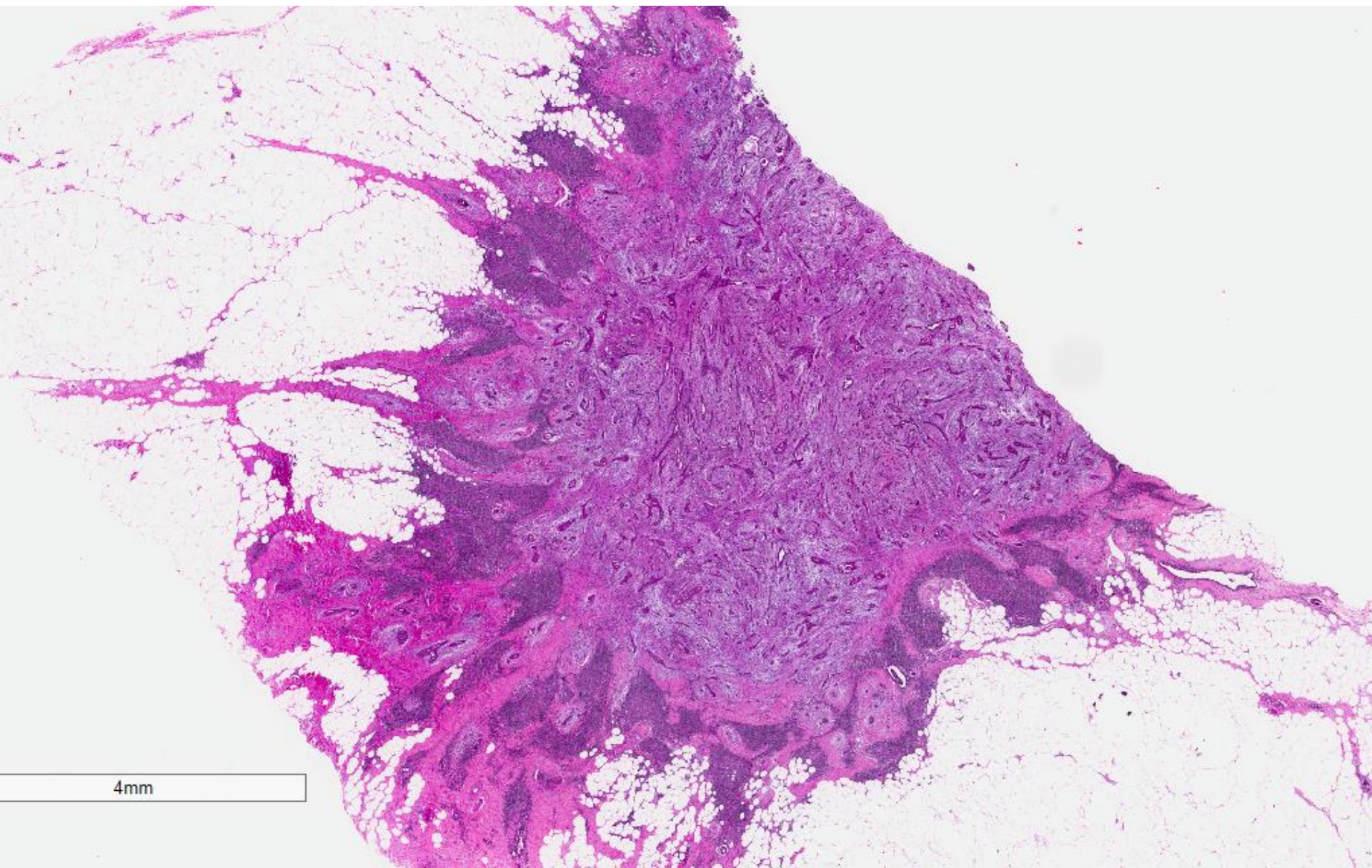


Left MLO

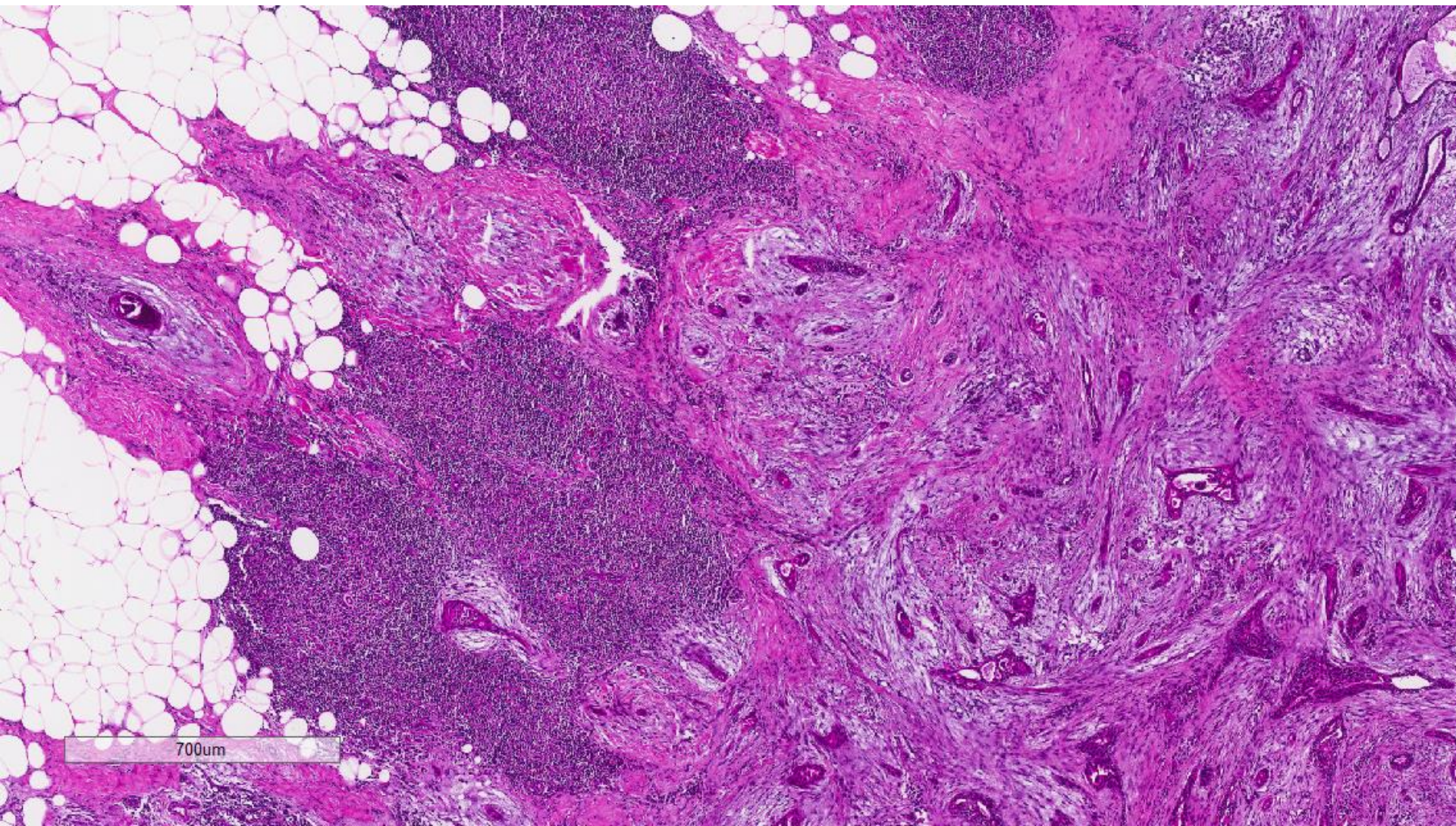


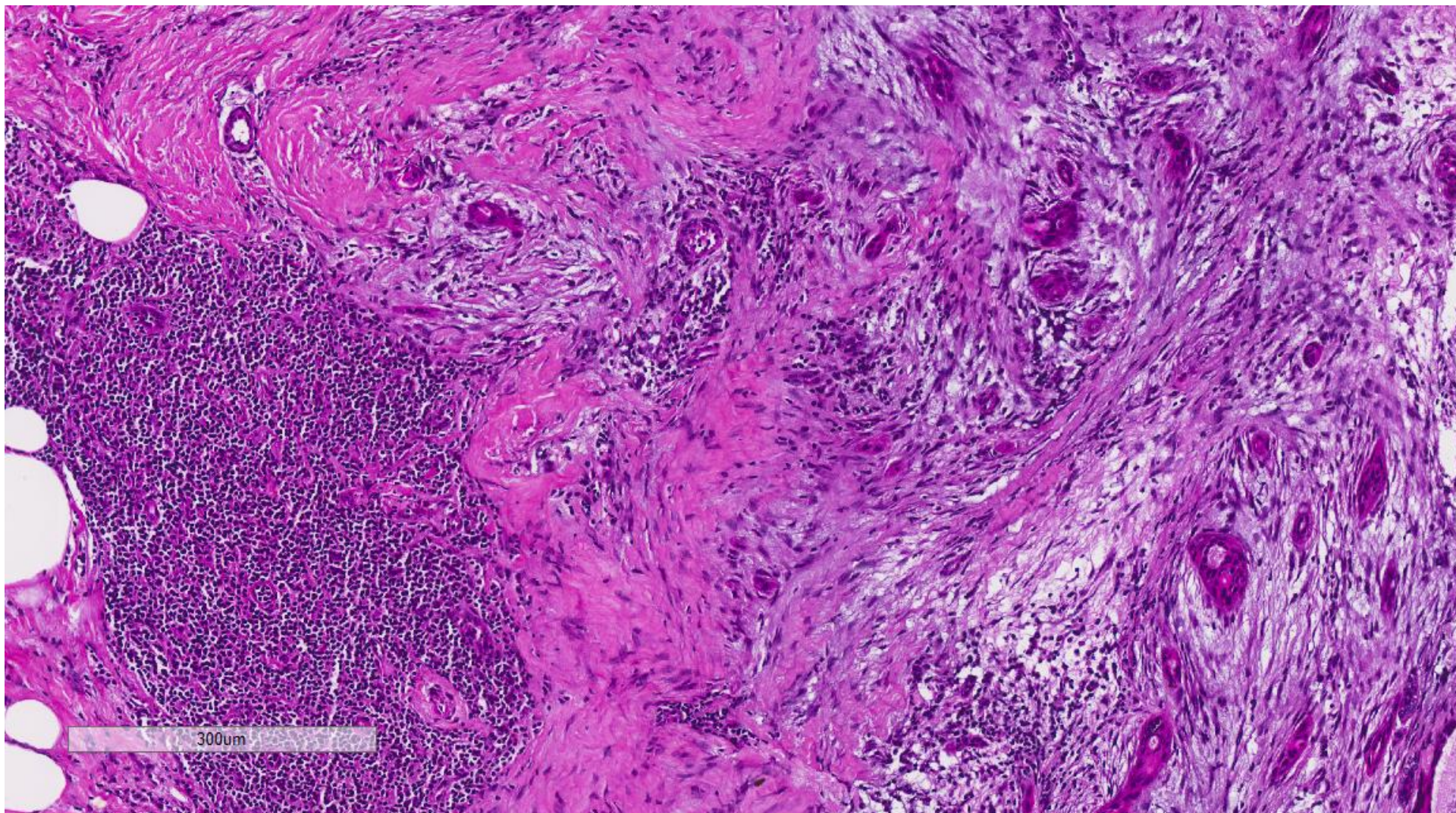
Mammograms

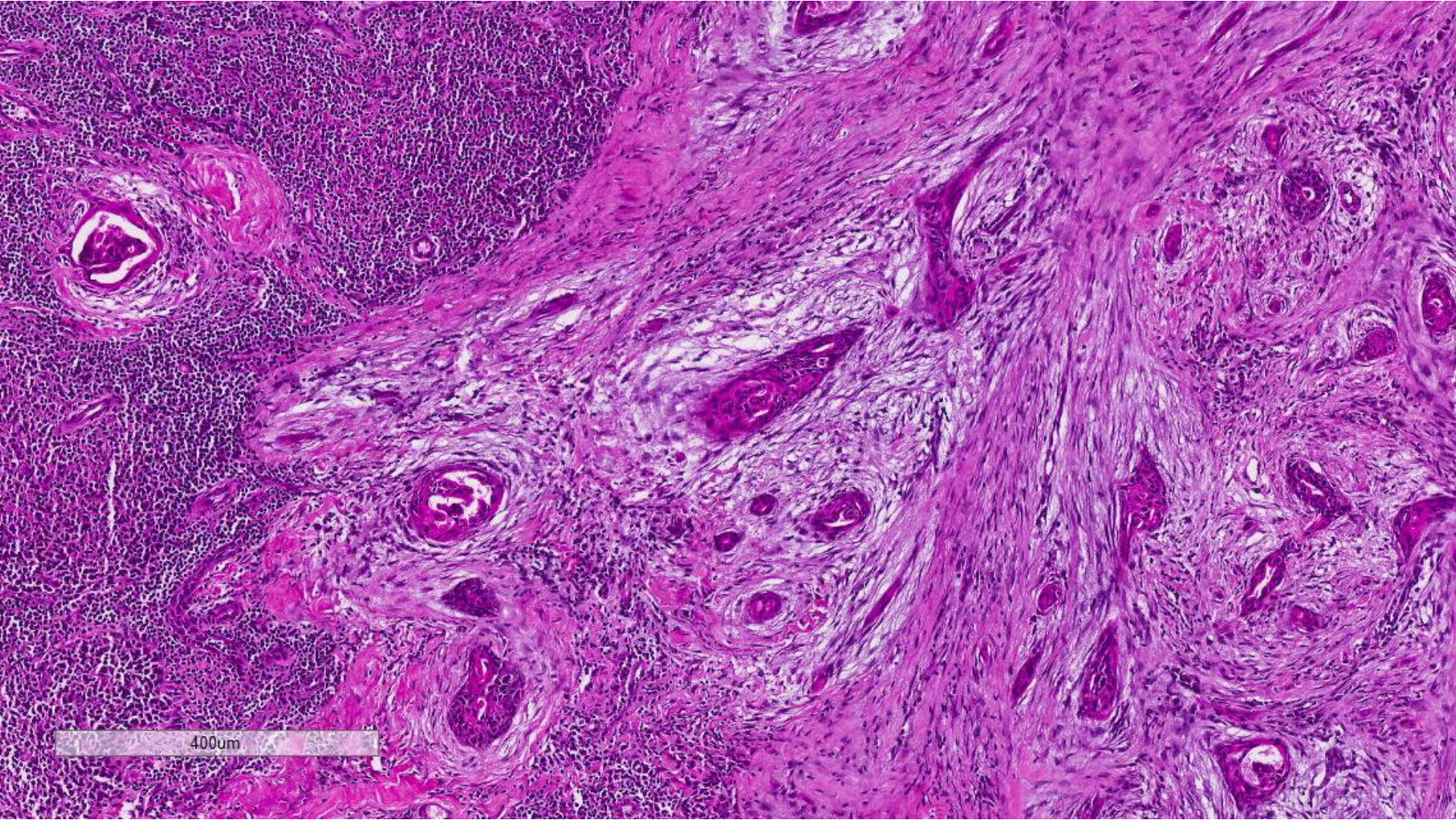


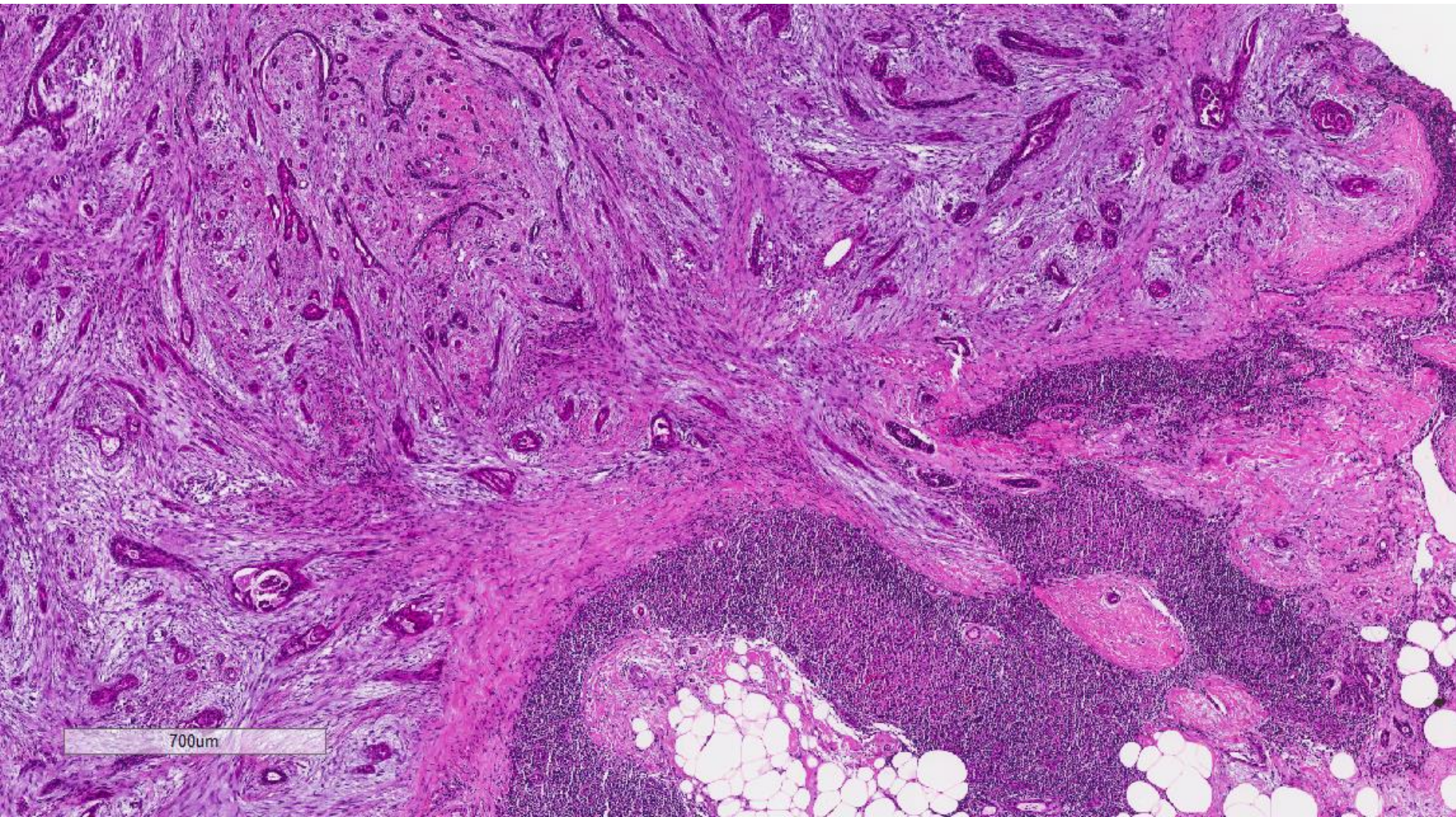


4mm



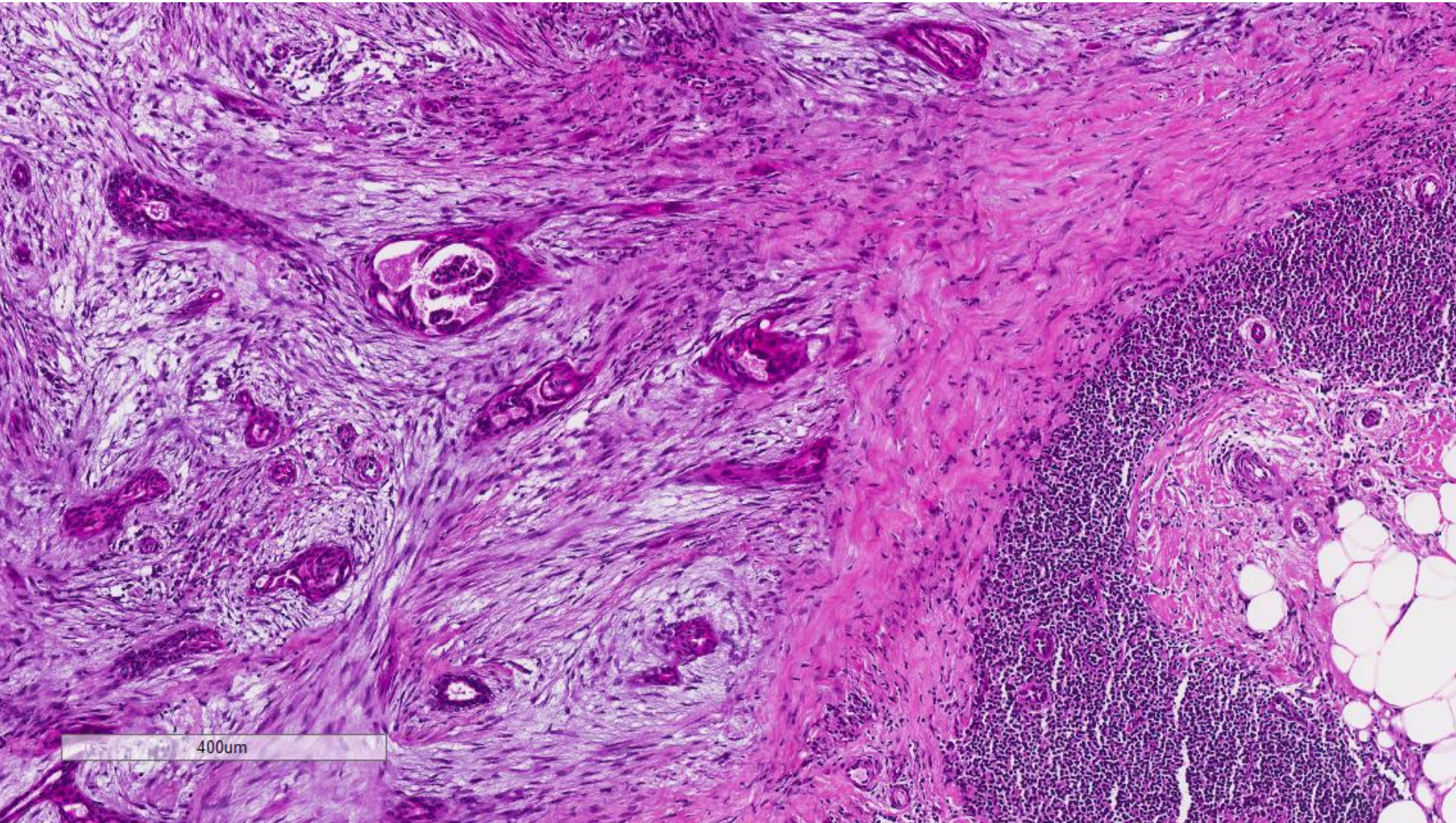


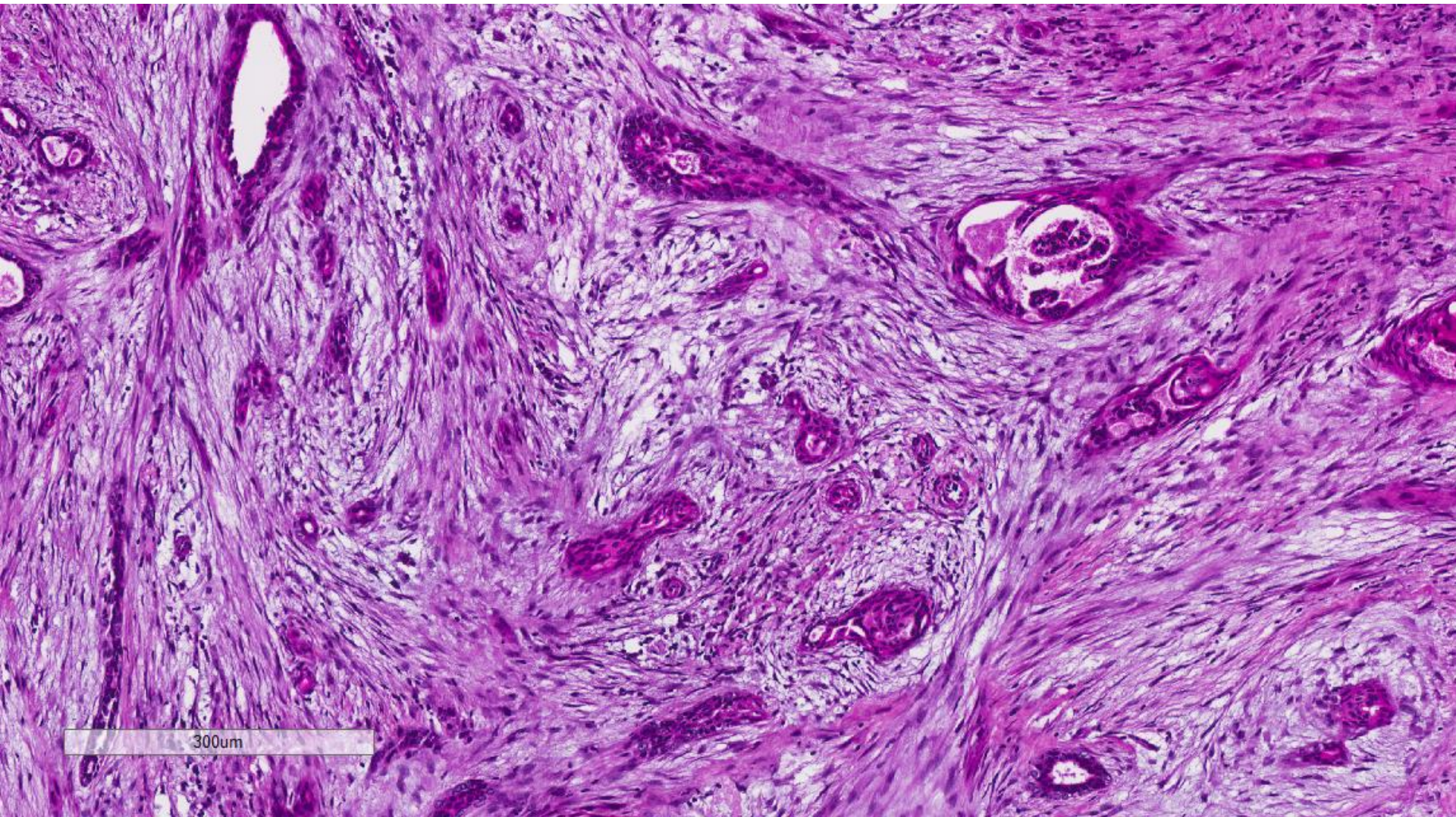




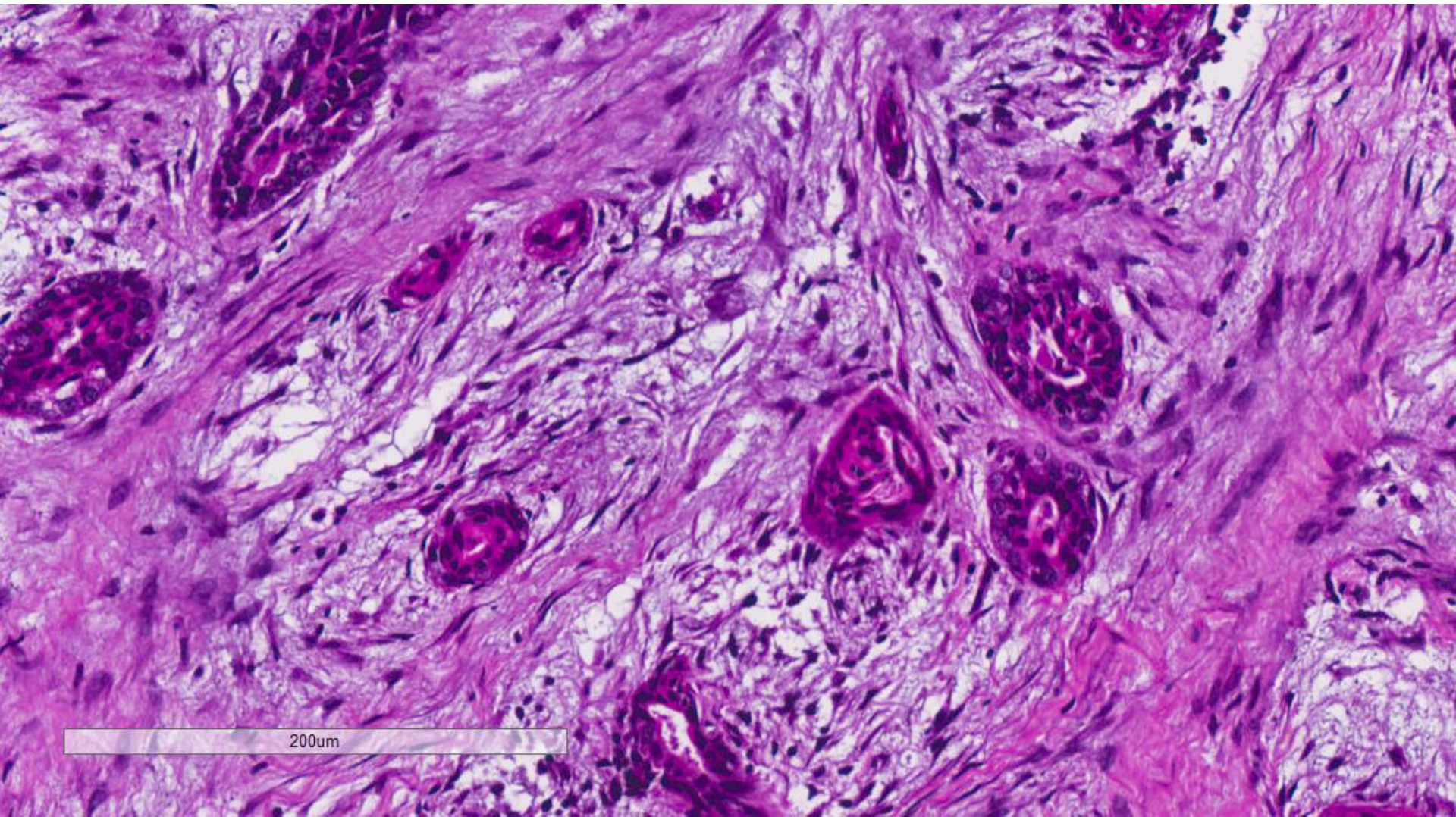
700µm



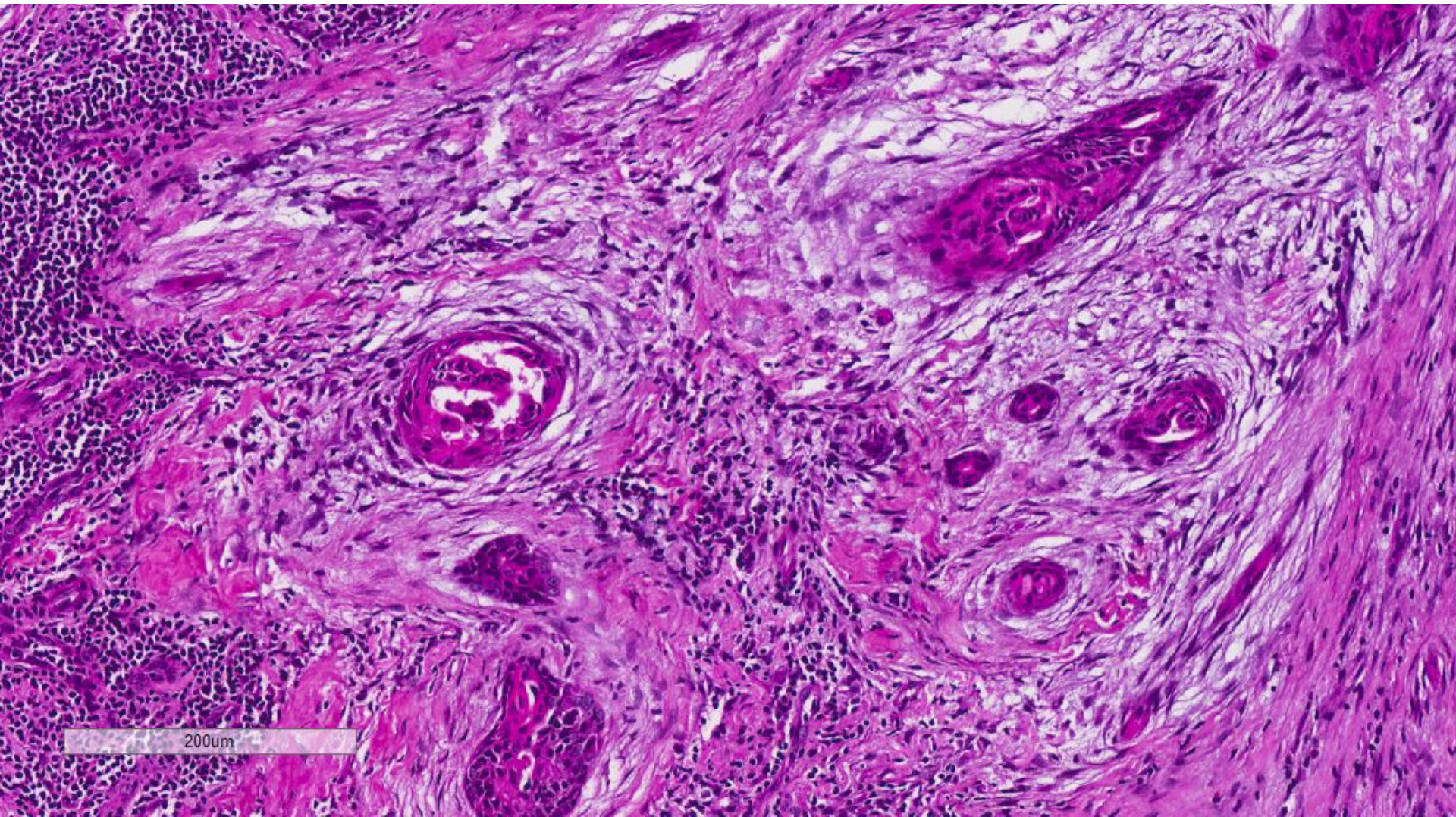


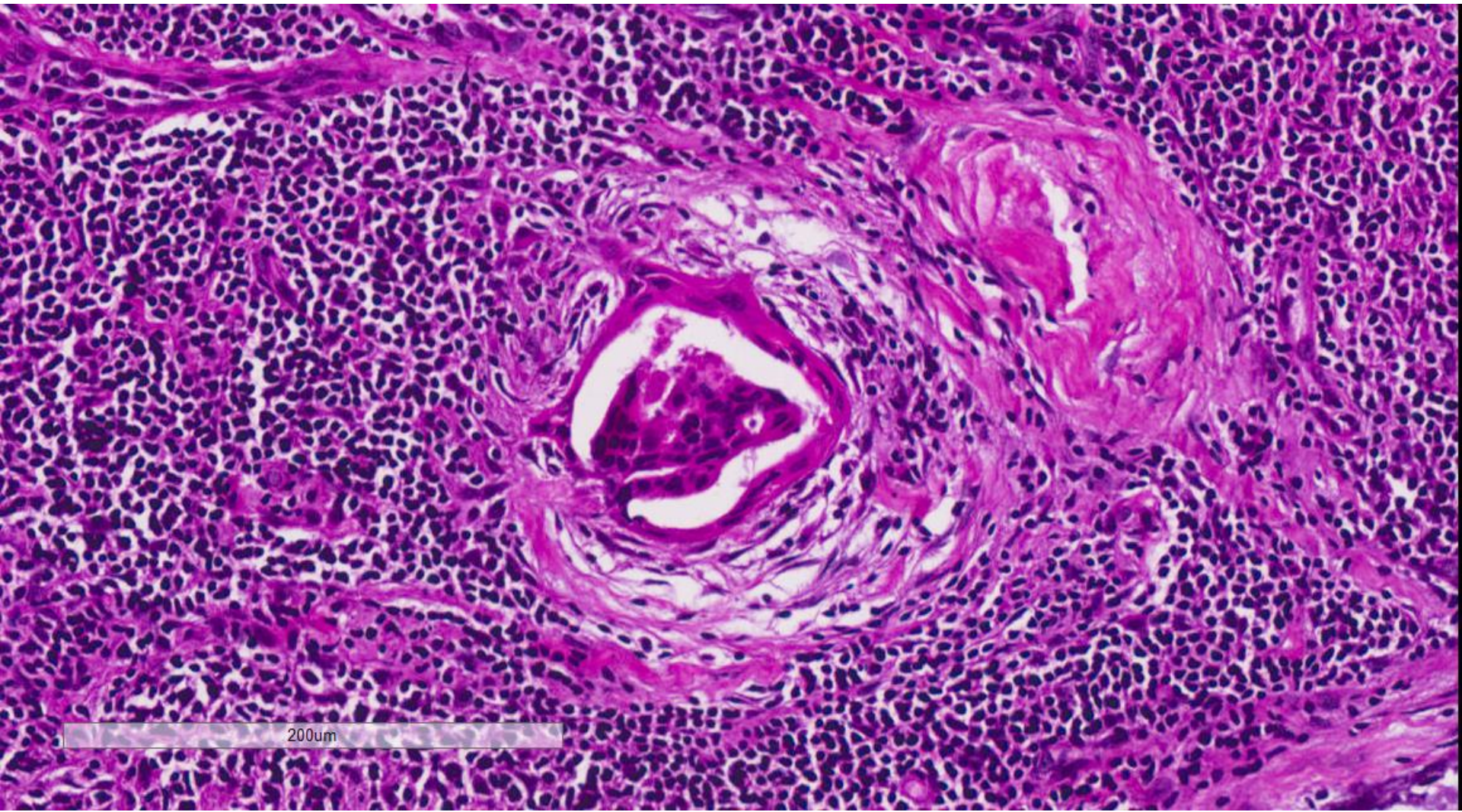


300um

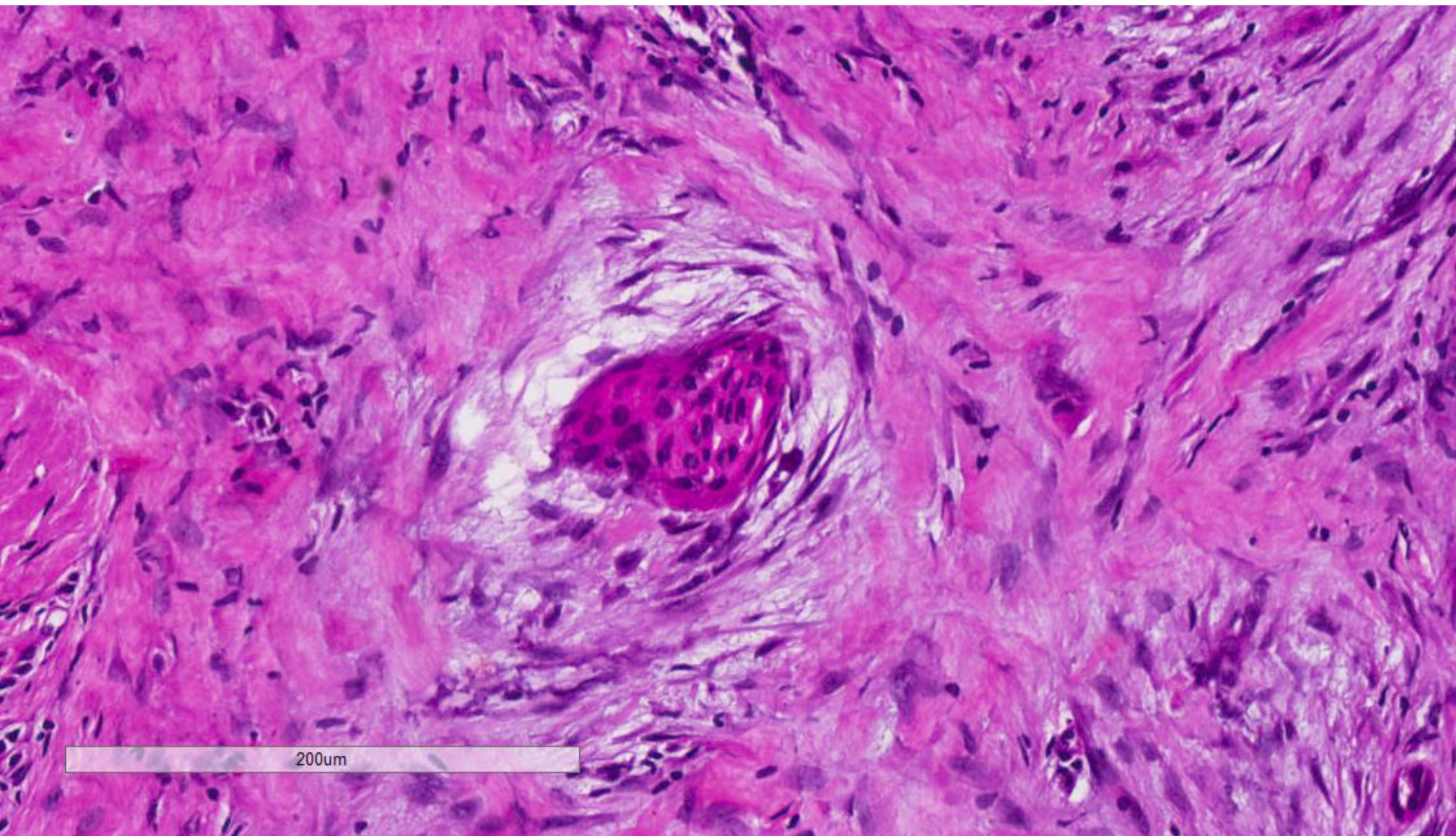


200um





200µm



200um

# Low grade adenosquamous carcinoma

# Low grade adenosquamous carcinoma

- Categorized as a metaplastic carcinoma in the WHO classification of breast tumours.
- Characterized histologically by the presence of well developed glandular structures with solid squamous nests within a spindle cell background.
- Lymphoid clusters may be observed at the periphery, sometimes described as being arranged in a 'cannon-ball' fashion.
- An association with sclerosing papillary lesions as well as adenomyoepithelioma has been reported.



# Low grade adenosquamous carcinoma

- Term 'low grade adenosquamous carcinoma' was first used by Rosen and Ernsberger when they described 11 cases in 1987.
- Generally indolent behaviour, reflected also in its low grade histological appearances that may mimic benignity.
- Diagnostic challenges:
  - FNAC:
    - Differentials of fibroadenoma and papillary lesion.
  - Core biopsy:
    - Benign sclerosing processes including radial sclerosing lesion, sclerosing adenosis and sclerosing papillomas
  - Intraoperative frozen section.

# Low grade adenosquamous carcinoma

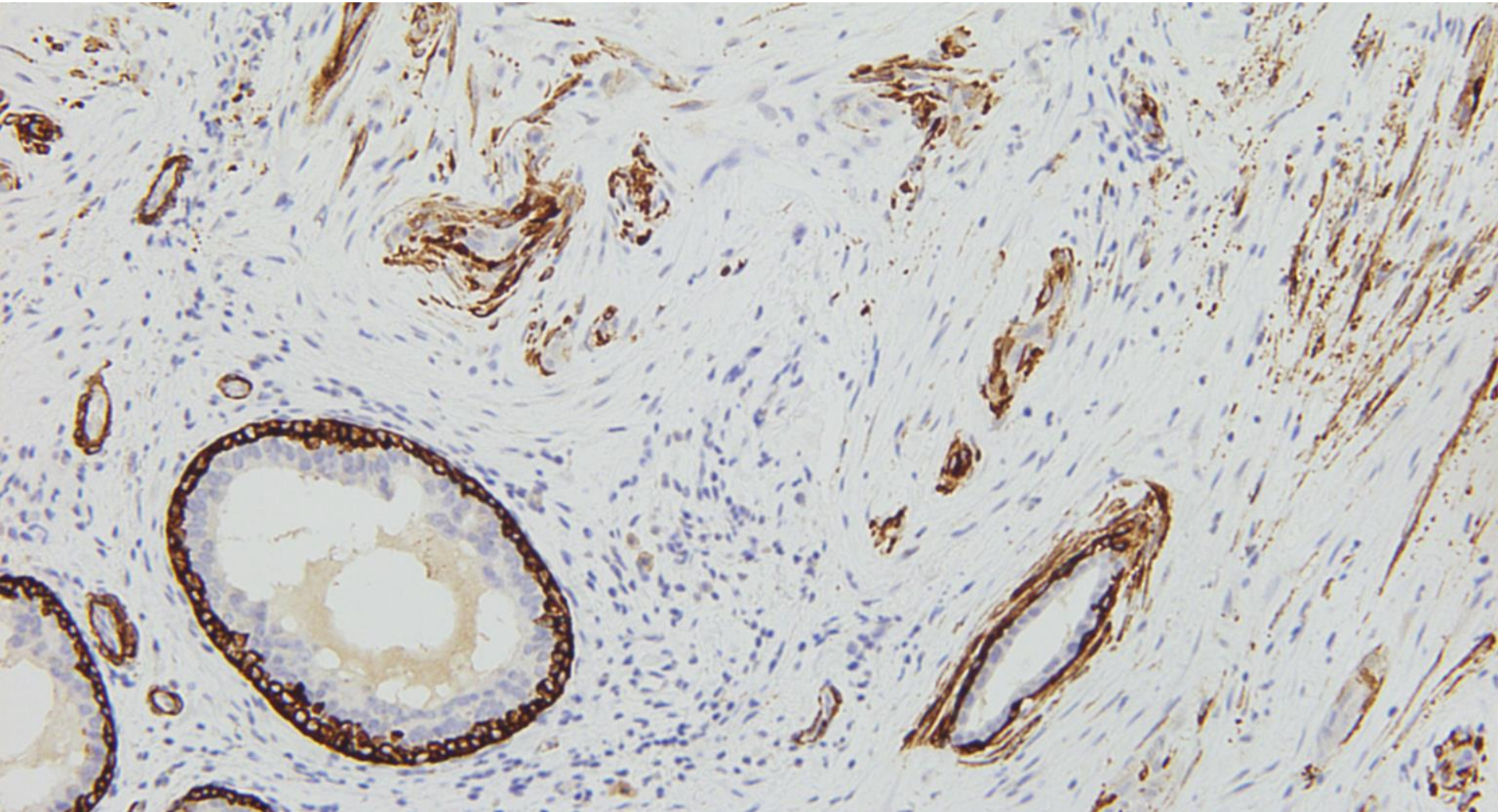
- Important not to be drawn into overdiagnosis.
- Squamoid foci seen in:
  - Sclerotic portions of intraductal papilloma.
  - Fibroepithelial neoplasms.
  - Reparative fibrosis.
  - Radial sclerosing lesions.

# Low grade adenosquamous carcinoma

- Immunohistochemistry:
  - Lamellar cuffing of stromal cells around lesional glands, highlighted by calponin and smooth muscle myosin (SMM).
  - Stronger cytokeratin staining of luminal epithelial cells relative to their basally located counterparts, may be of diagnostic utility.
  - Triple negative (estrogen receptor, progesterone receptor and HER2 negative).
  - Expresses basal markers in keeping with a basal phenotype.
- Compared to most metaplastic cancers, low grade adenosquamous carcinoma has a better clinical outcome.

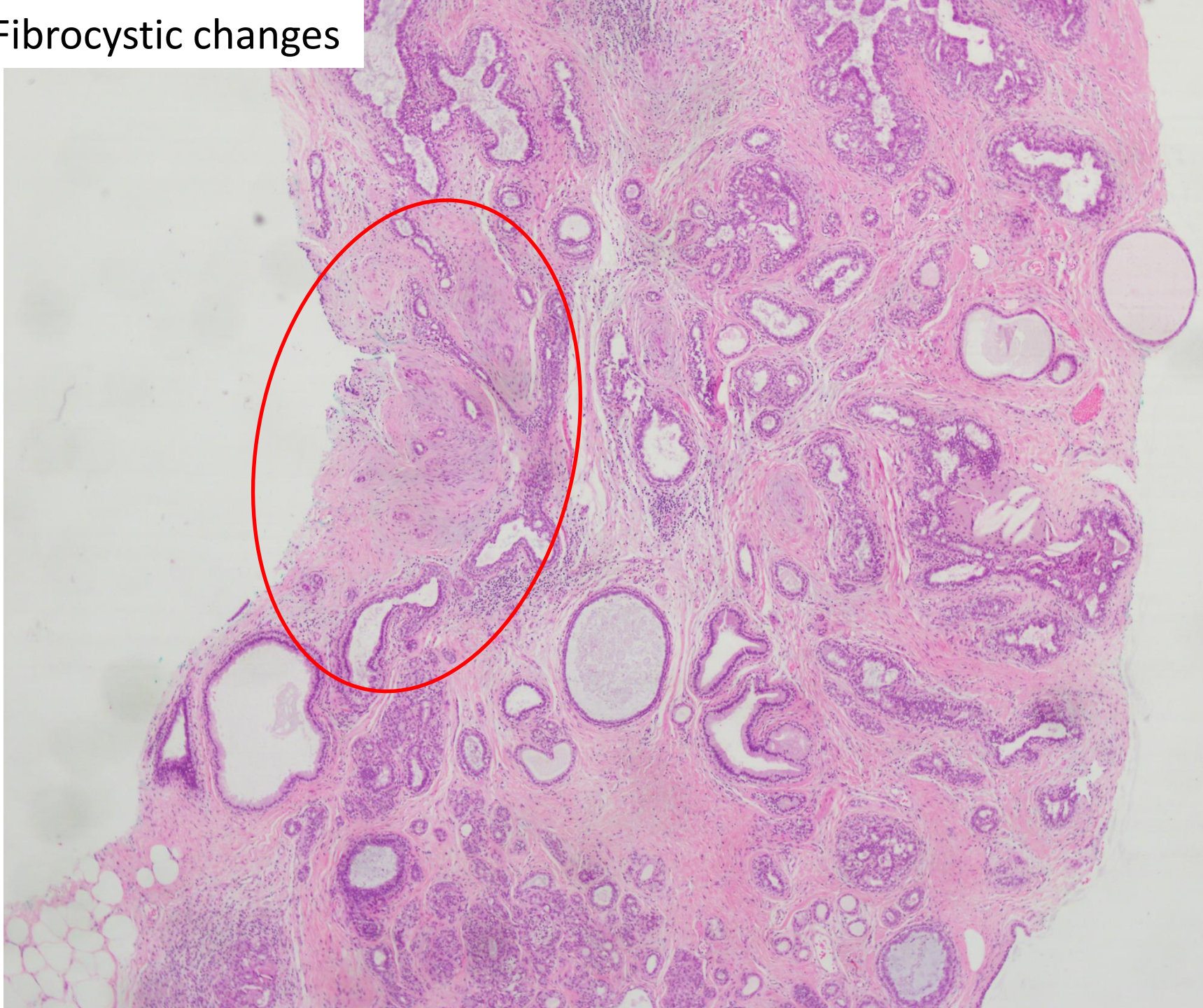
# Immunohistochemistry

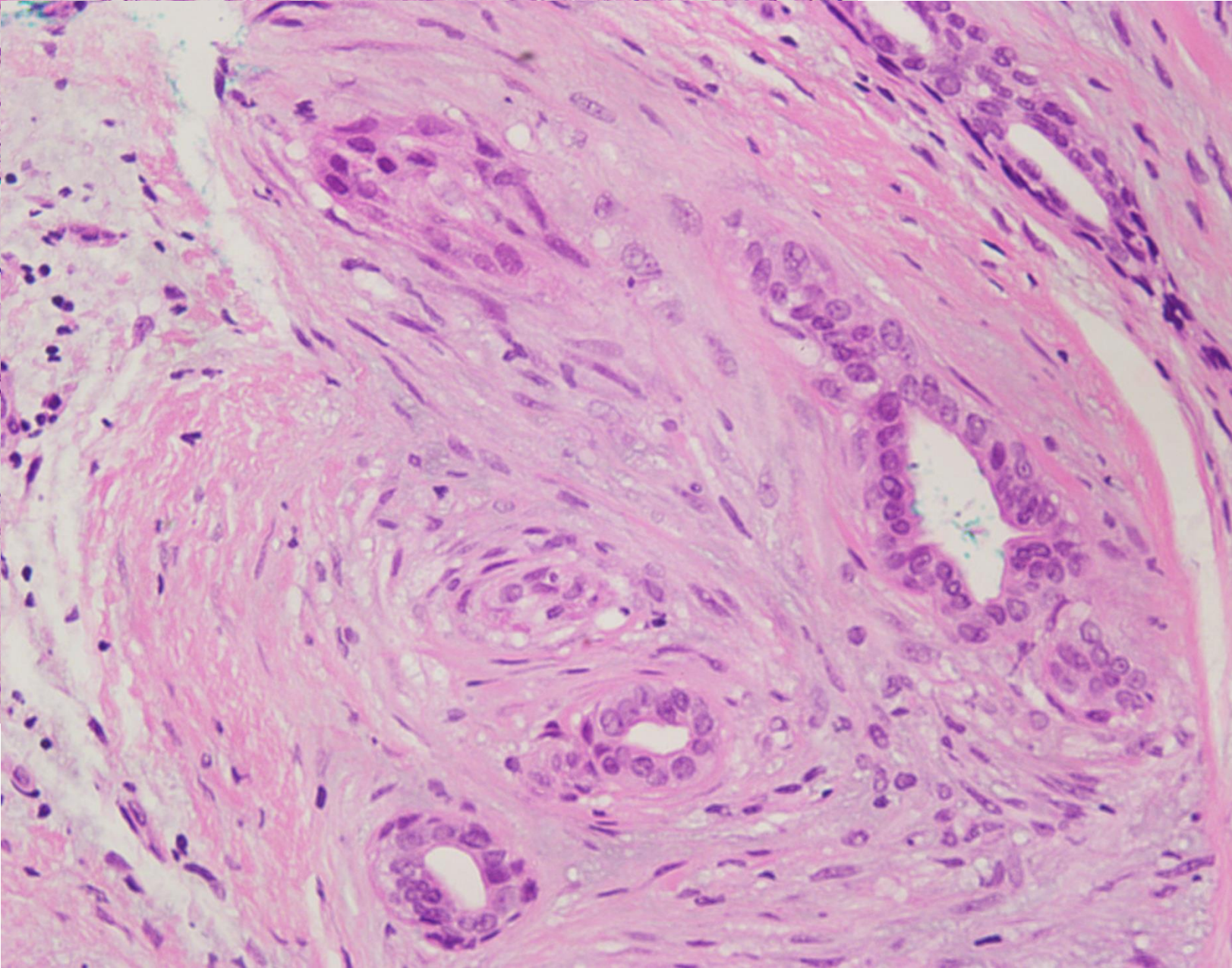
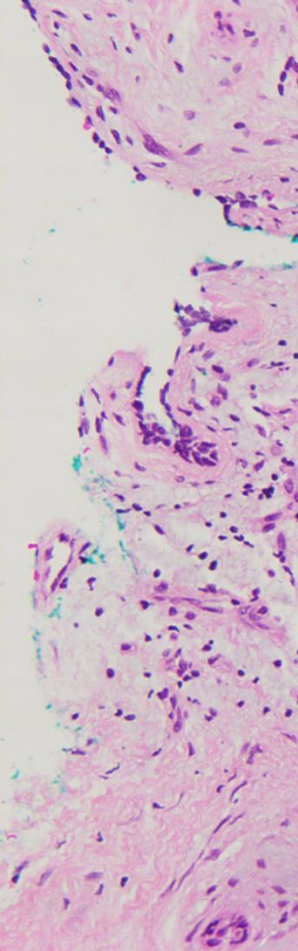
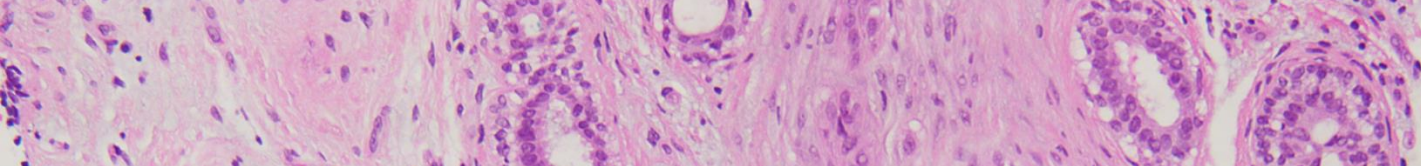
## SMMHC – lamellar cuffing of stromal cells



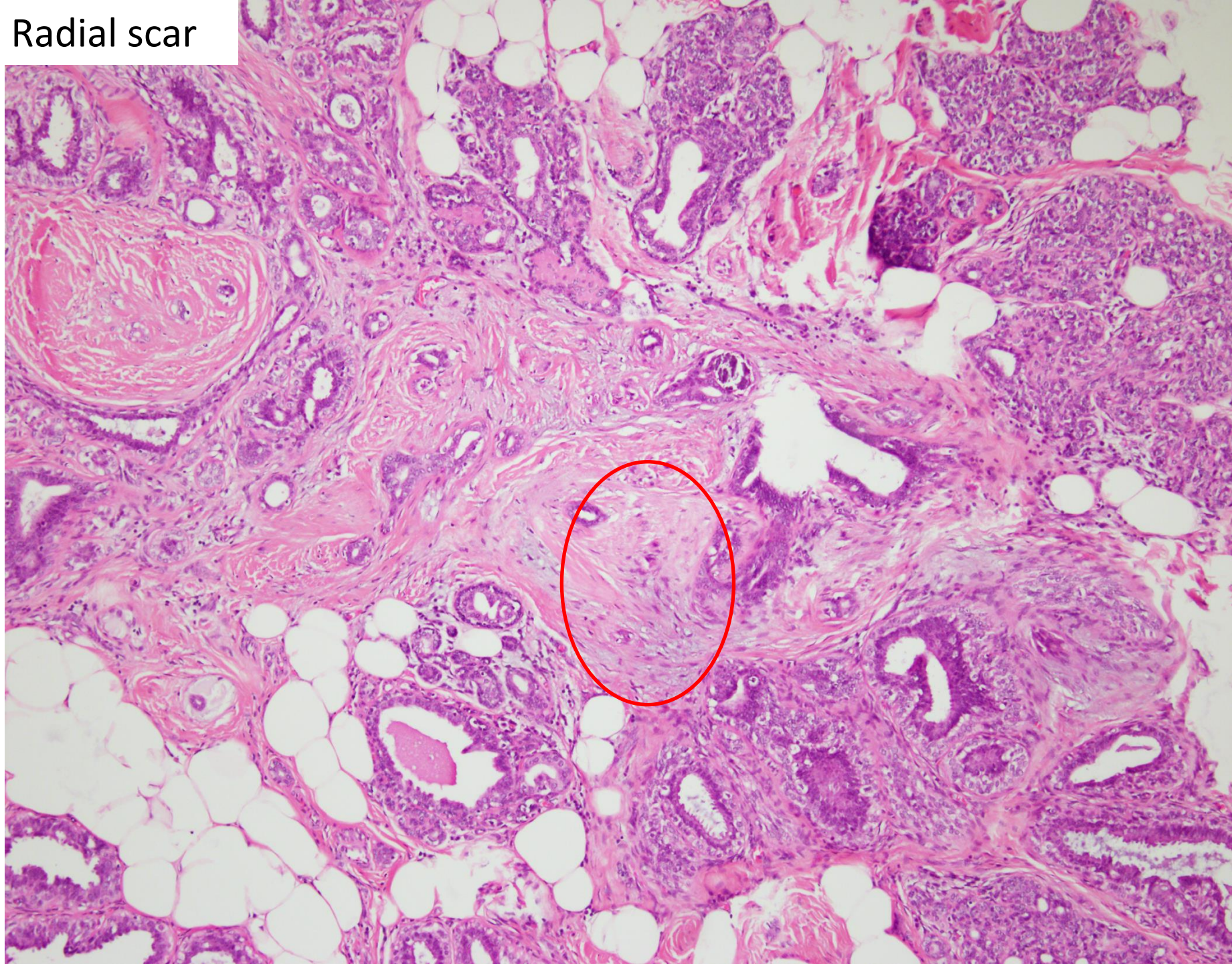
# *Squamoid nests*

Fibrocystic changes

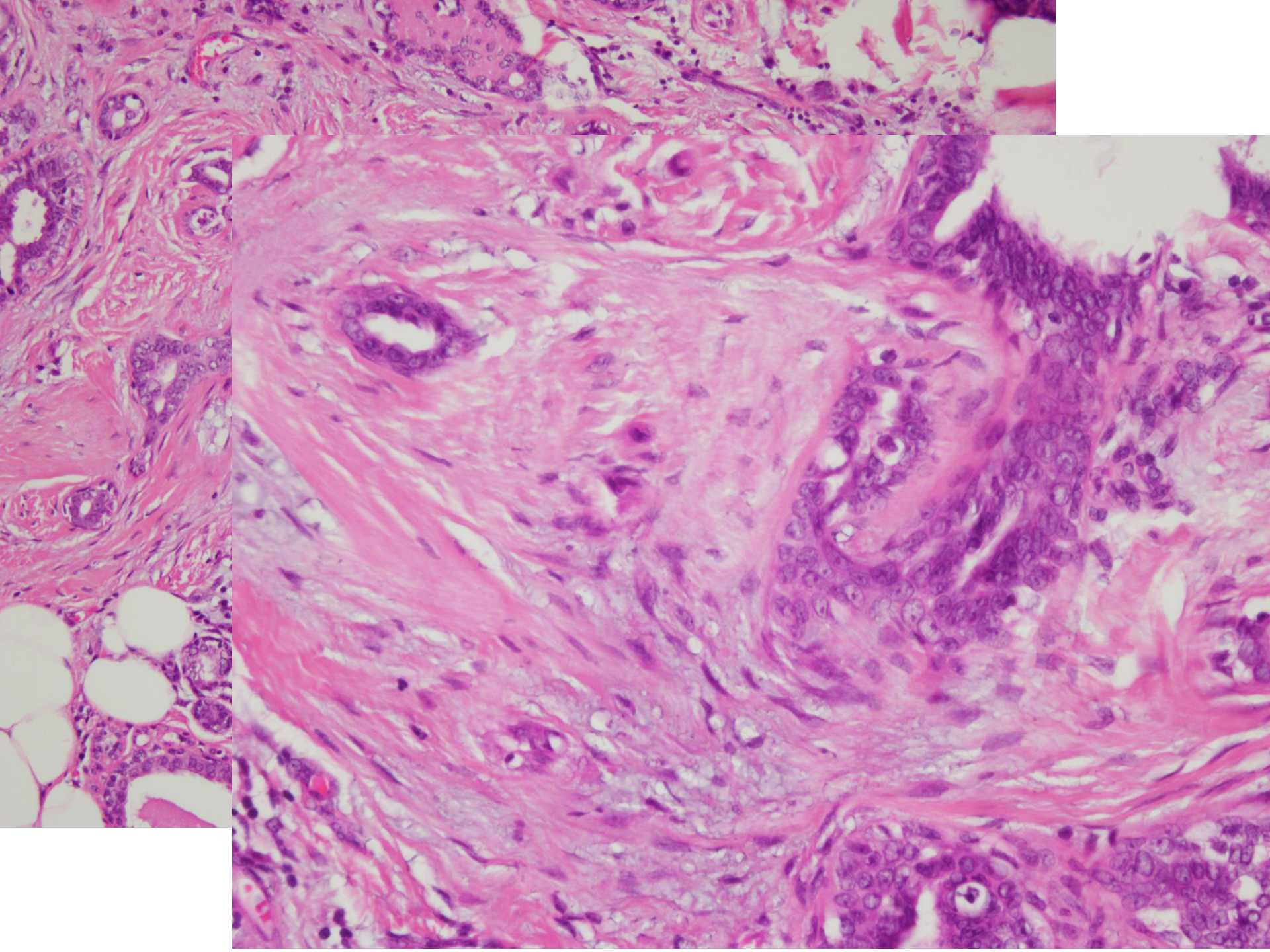




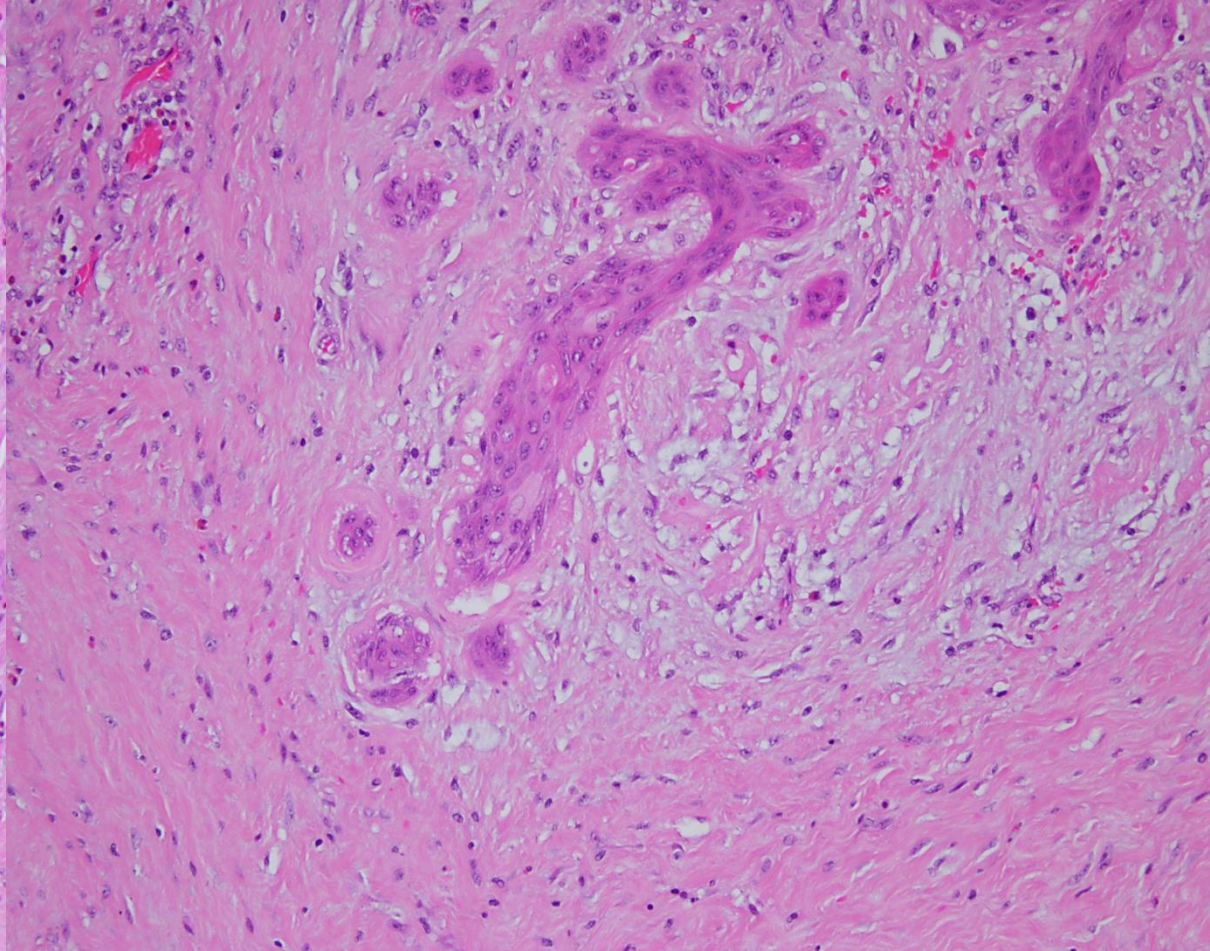
Radial scar



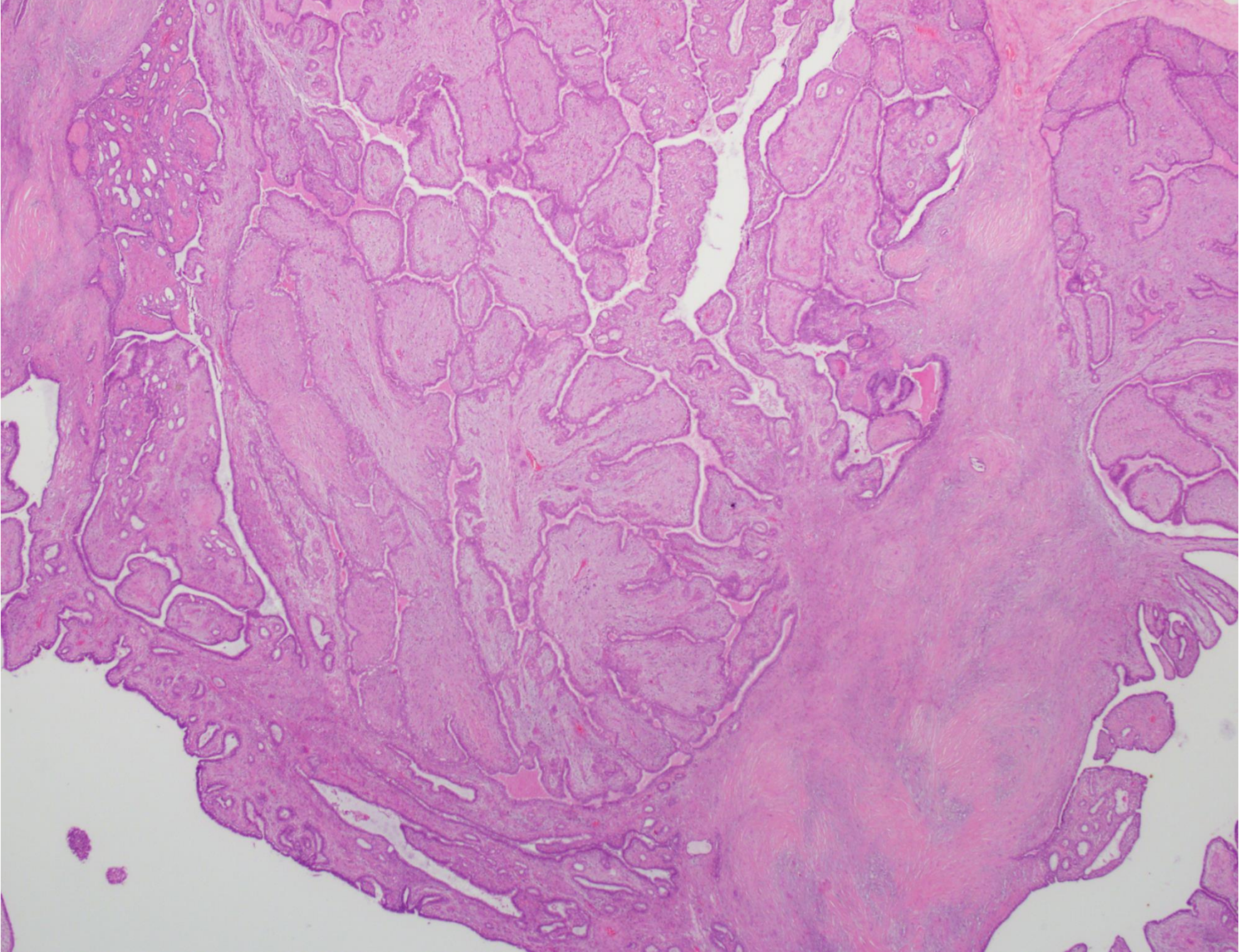


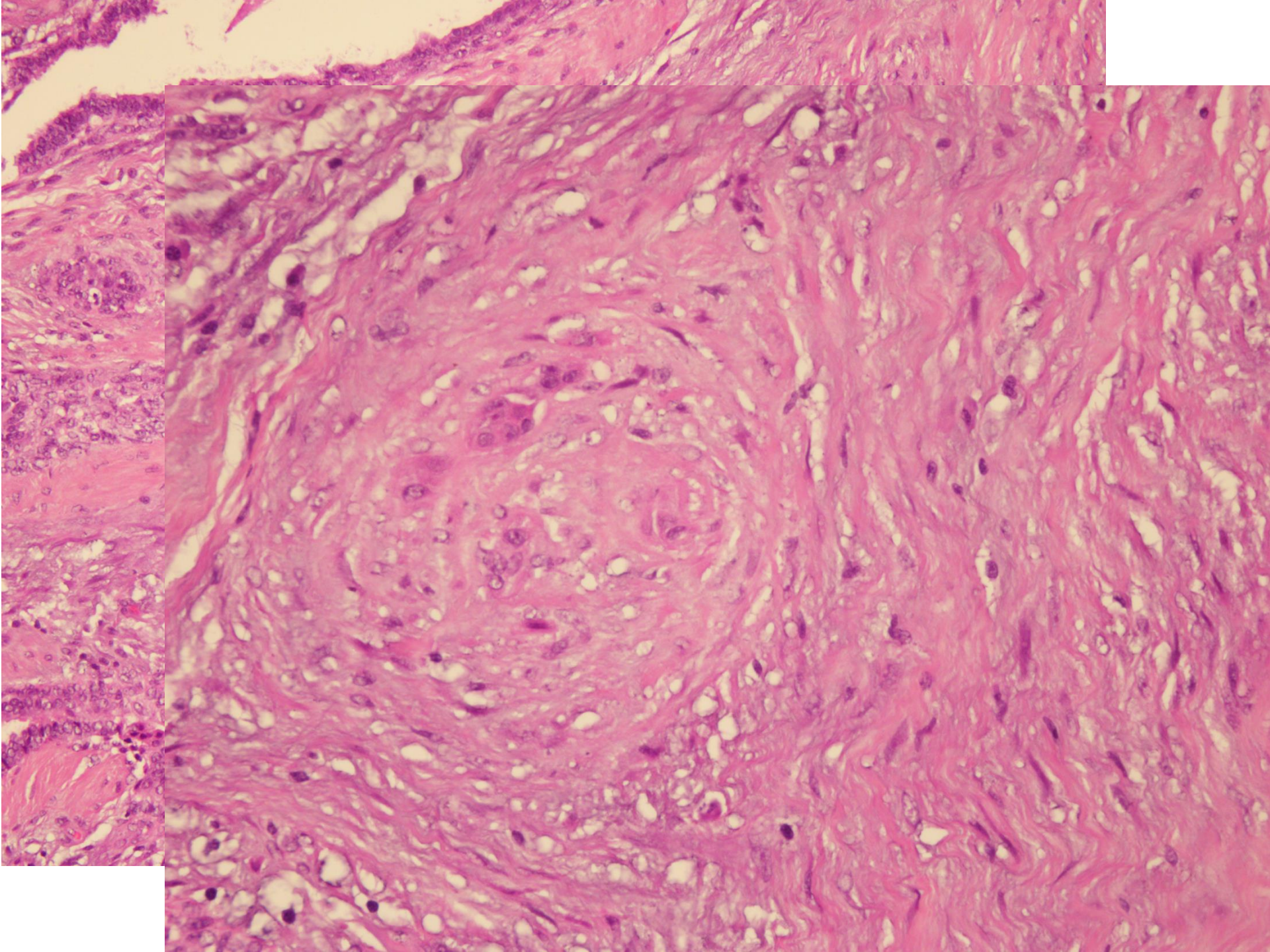


# Surgical biopsy cavity wall



Benign phyllodes tumour





# Squamoid nests

- Seen in a variety of benign breast conditions.
  - Focal alteration.
  - Usually confined within the lesion.

# Follow-up

- Surgical margins were clear of tumor.
- Axillary lymph nodes harvested were negative for malignancy.
- No radiation treatment was administered.
- The patient was followed up for 6 years during which she remained well without evidence of recurrent disease.

# References

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