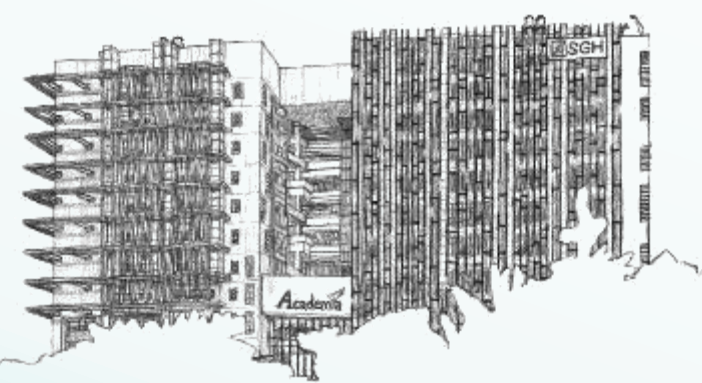
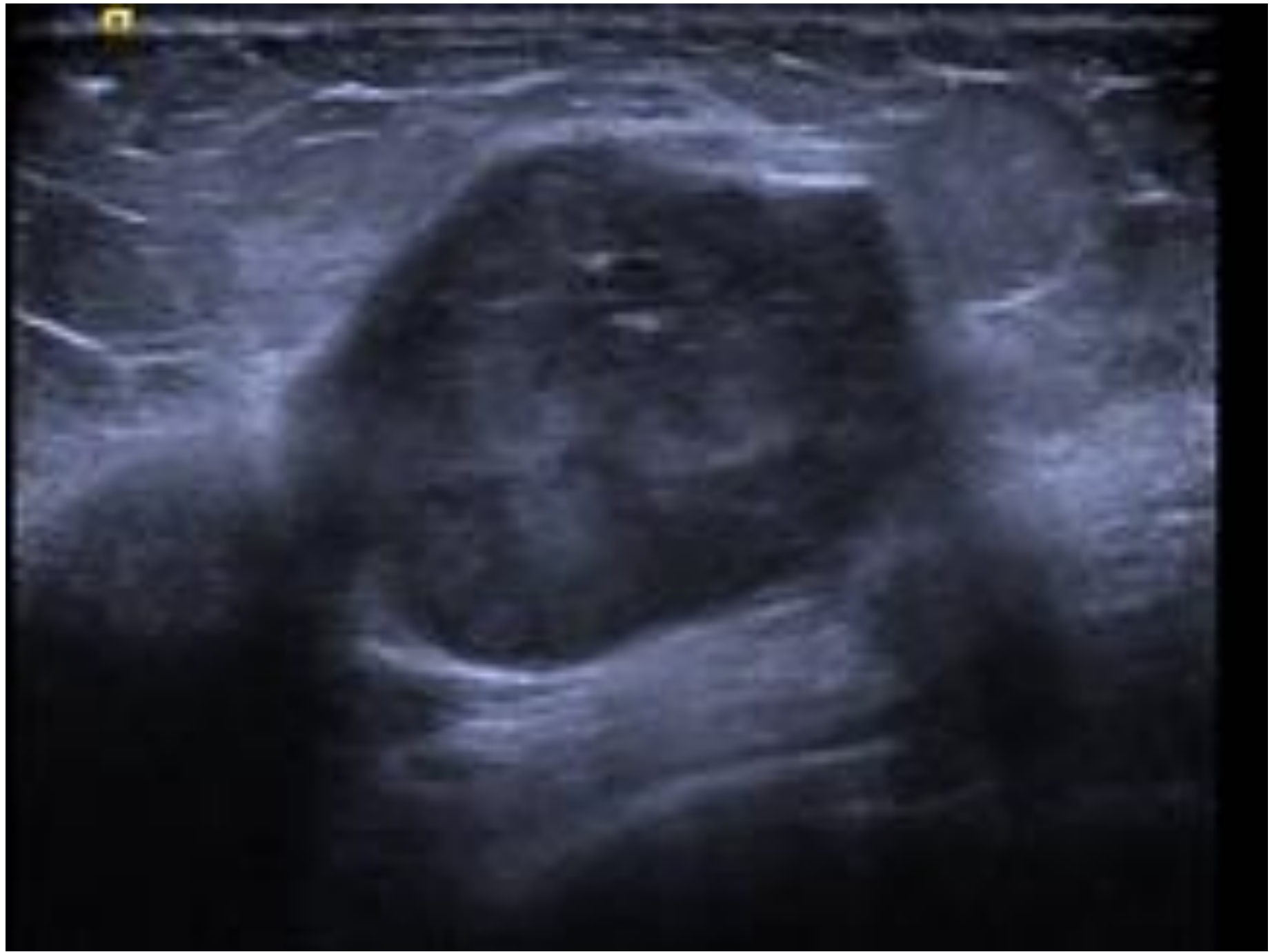


- 53 yo Female
- left breast palpable lump x 3 years
- Interval increase in size (or recurrence) of a lobulated and vascular mass at the 1-2 o'clock position of the left breast
- Surgical excision is suggested to exclude a phyllodes tumour

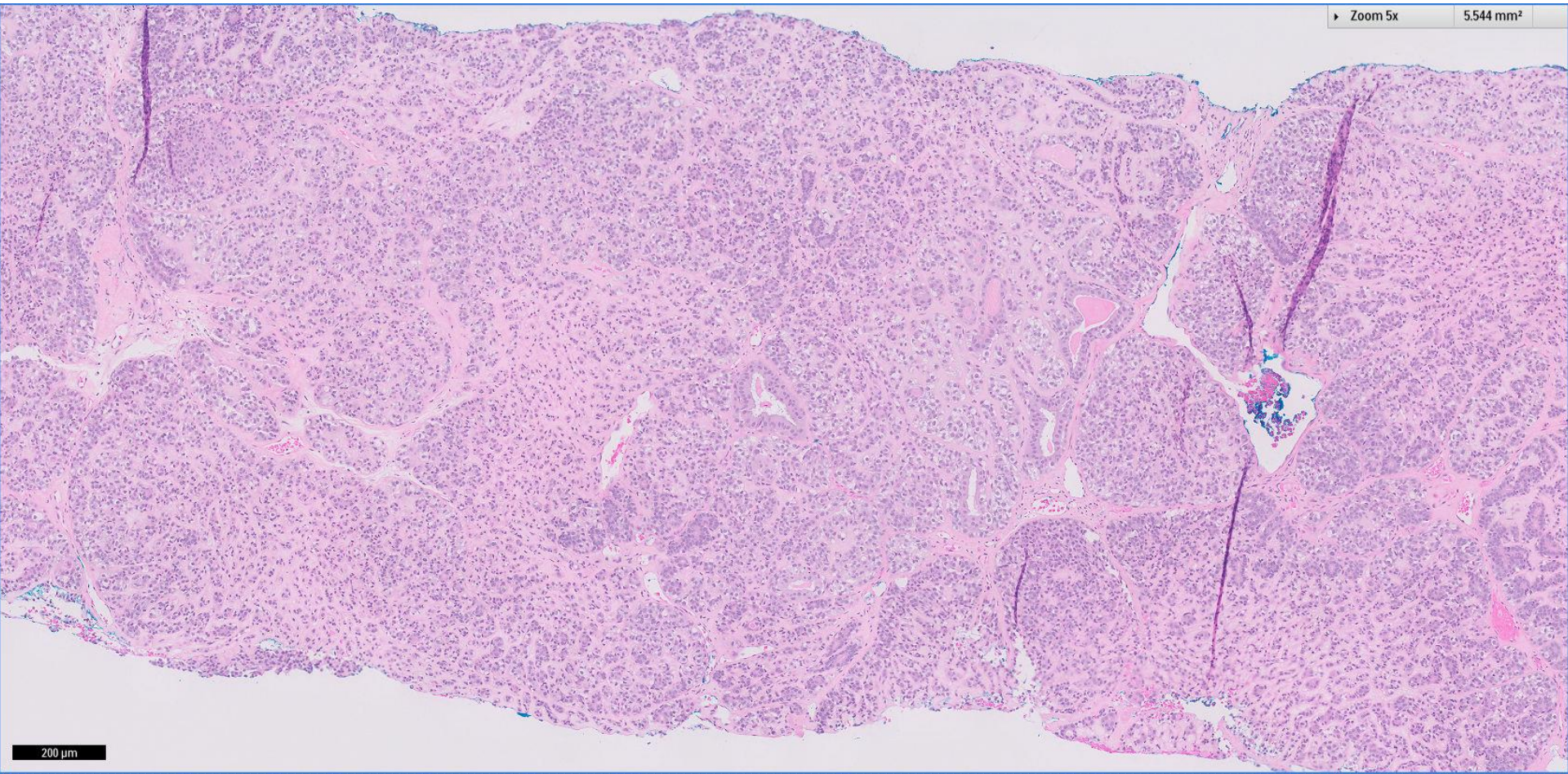






► Zoom 5x

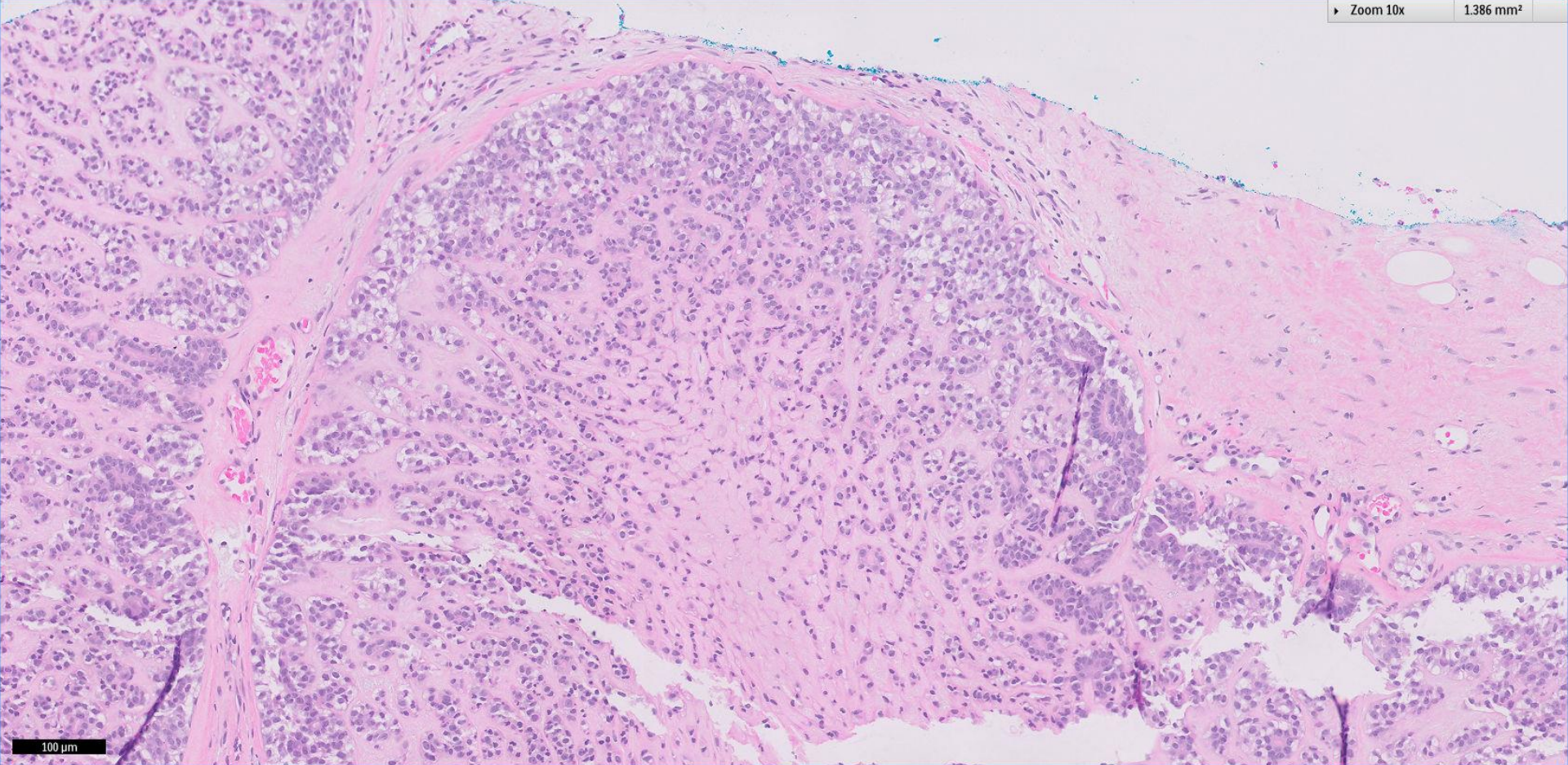
5.544 mm²



200 μ m

► Zoom 10x

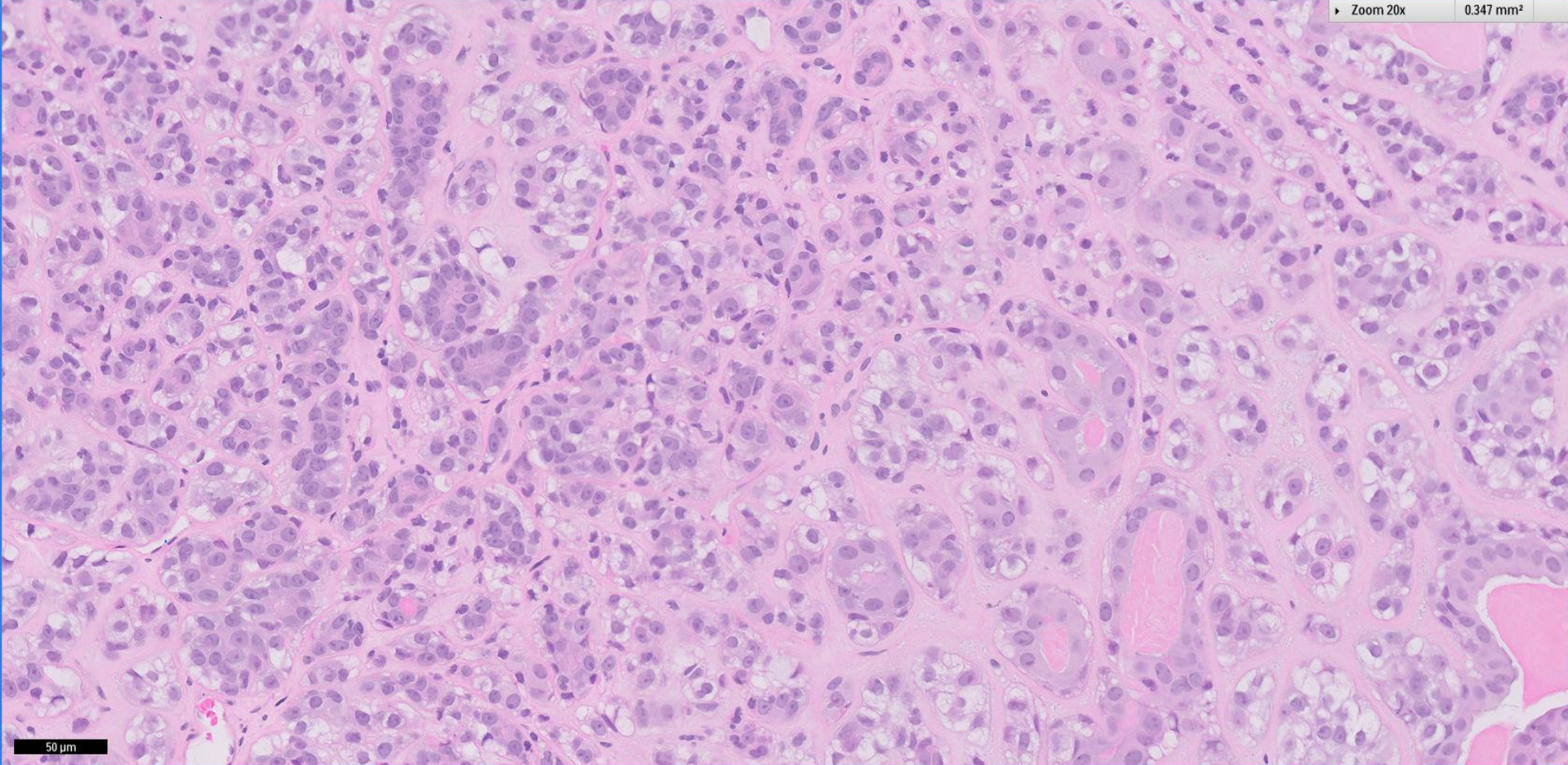
1.386 mm²



100 μ m

Zoom 20x

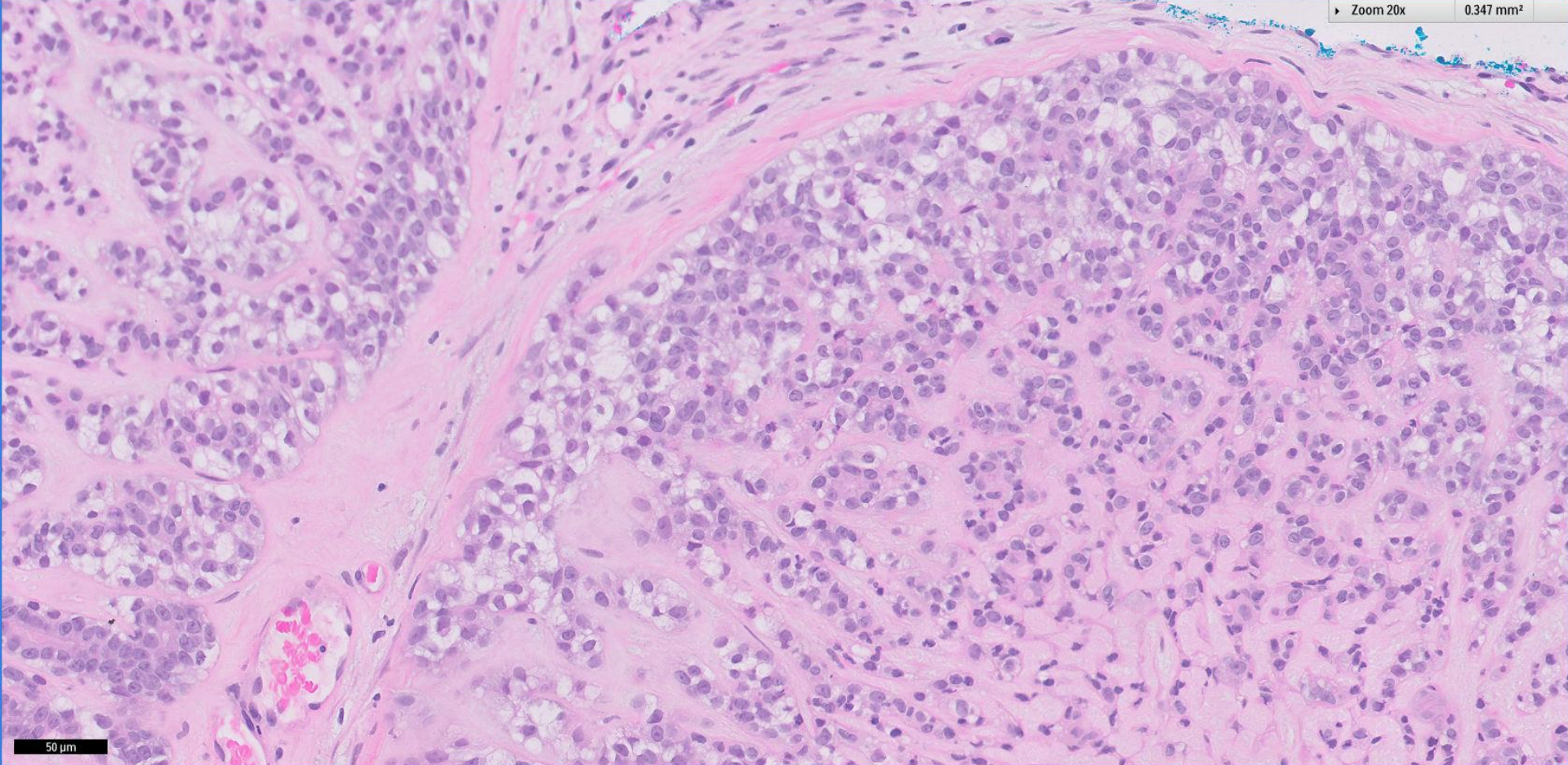
0.347 mm²



50 μm

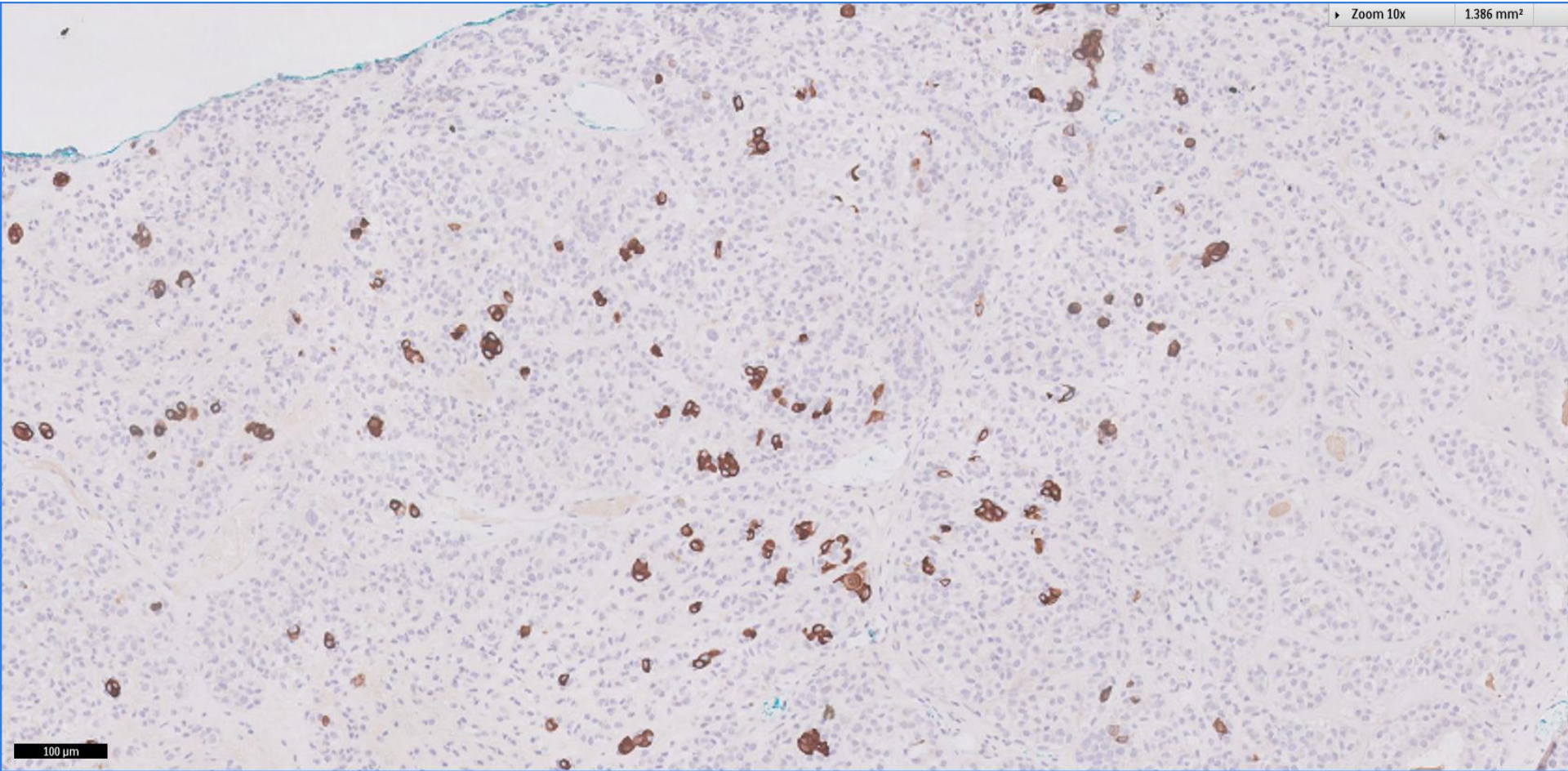
Zoom 20x

0.347 mm²



50 μm

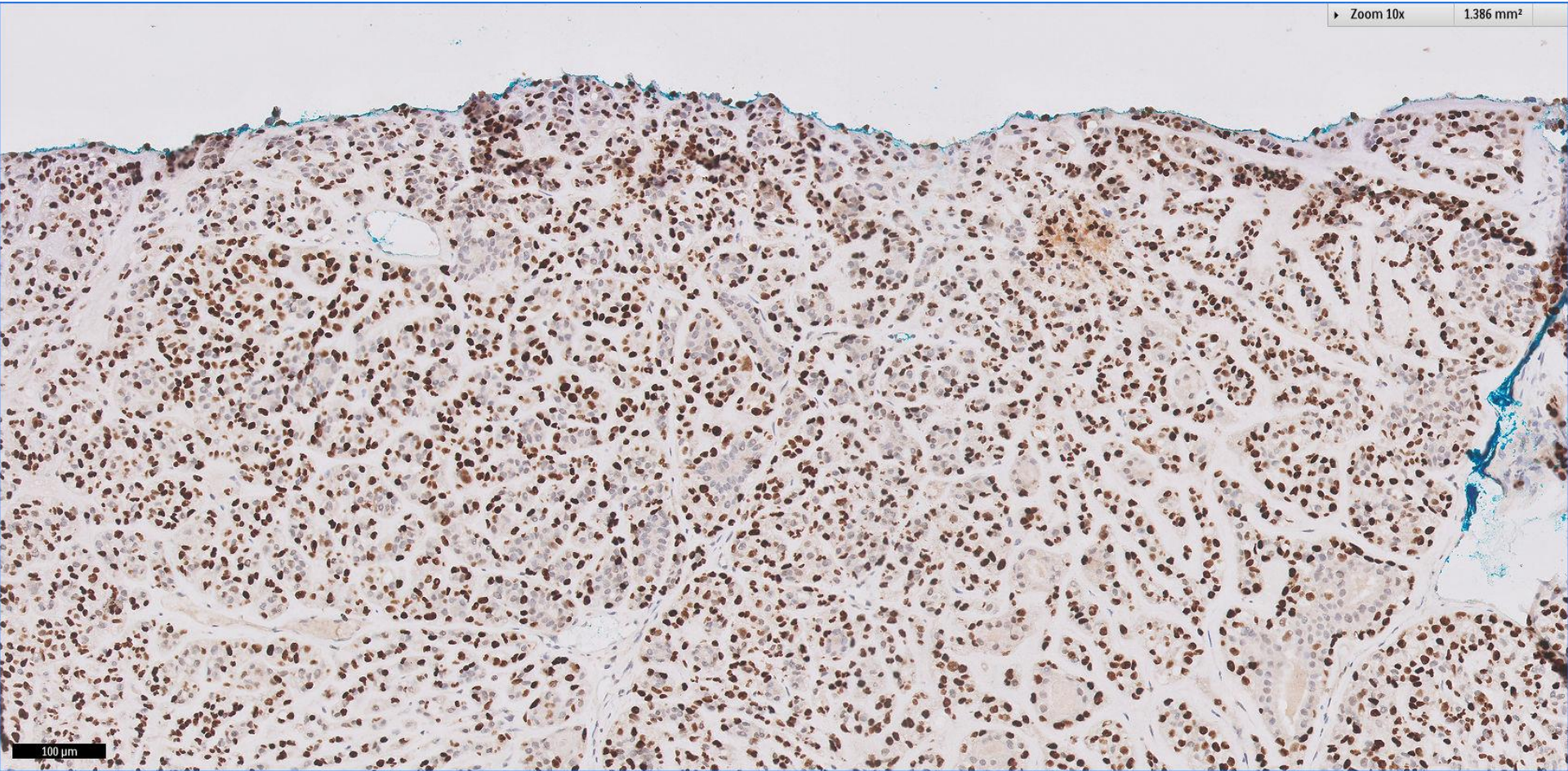
CK14



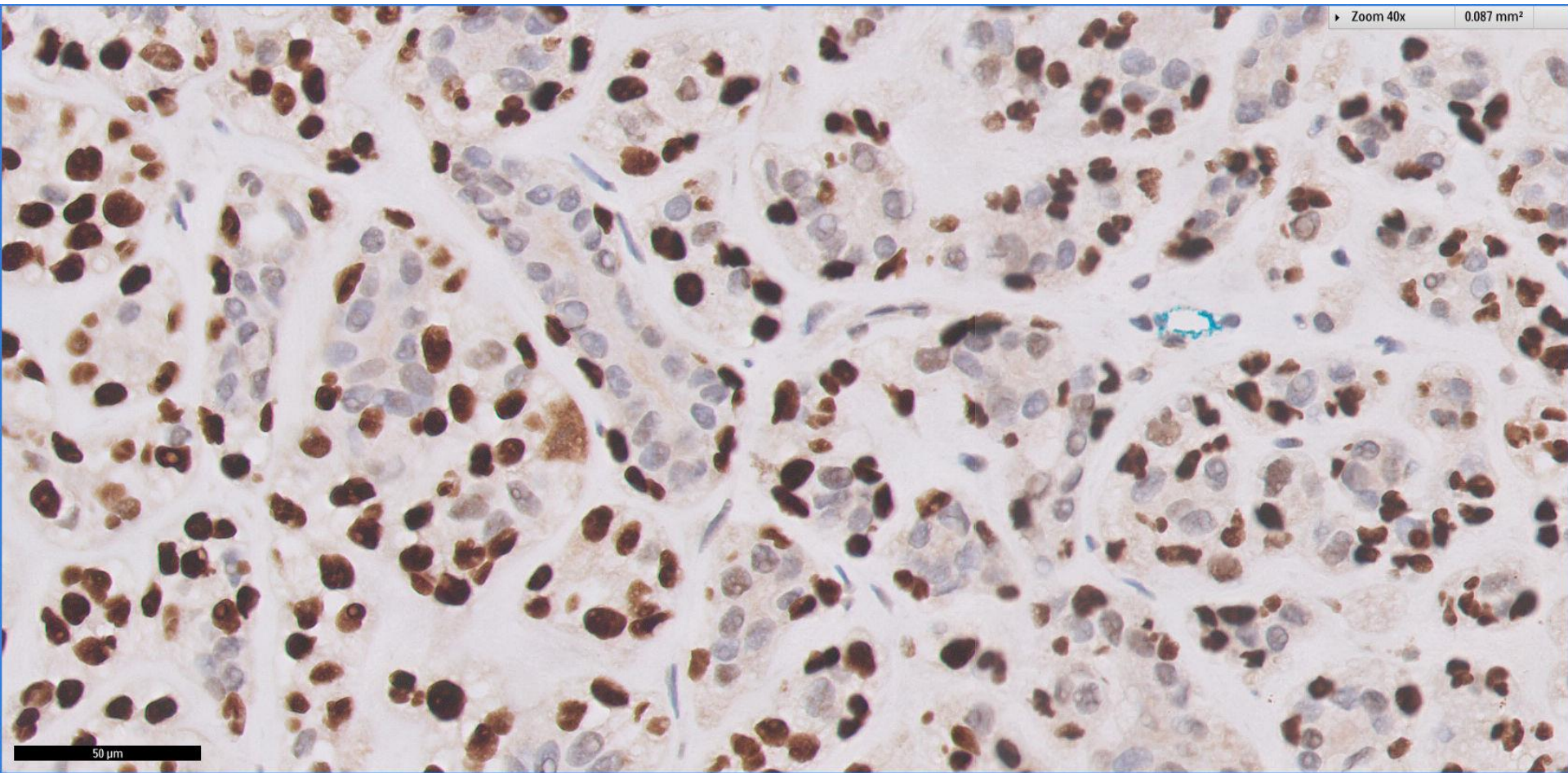
p63

Zoom 10x

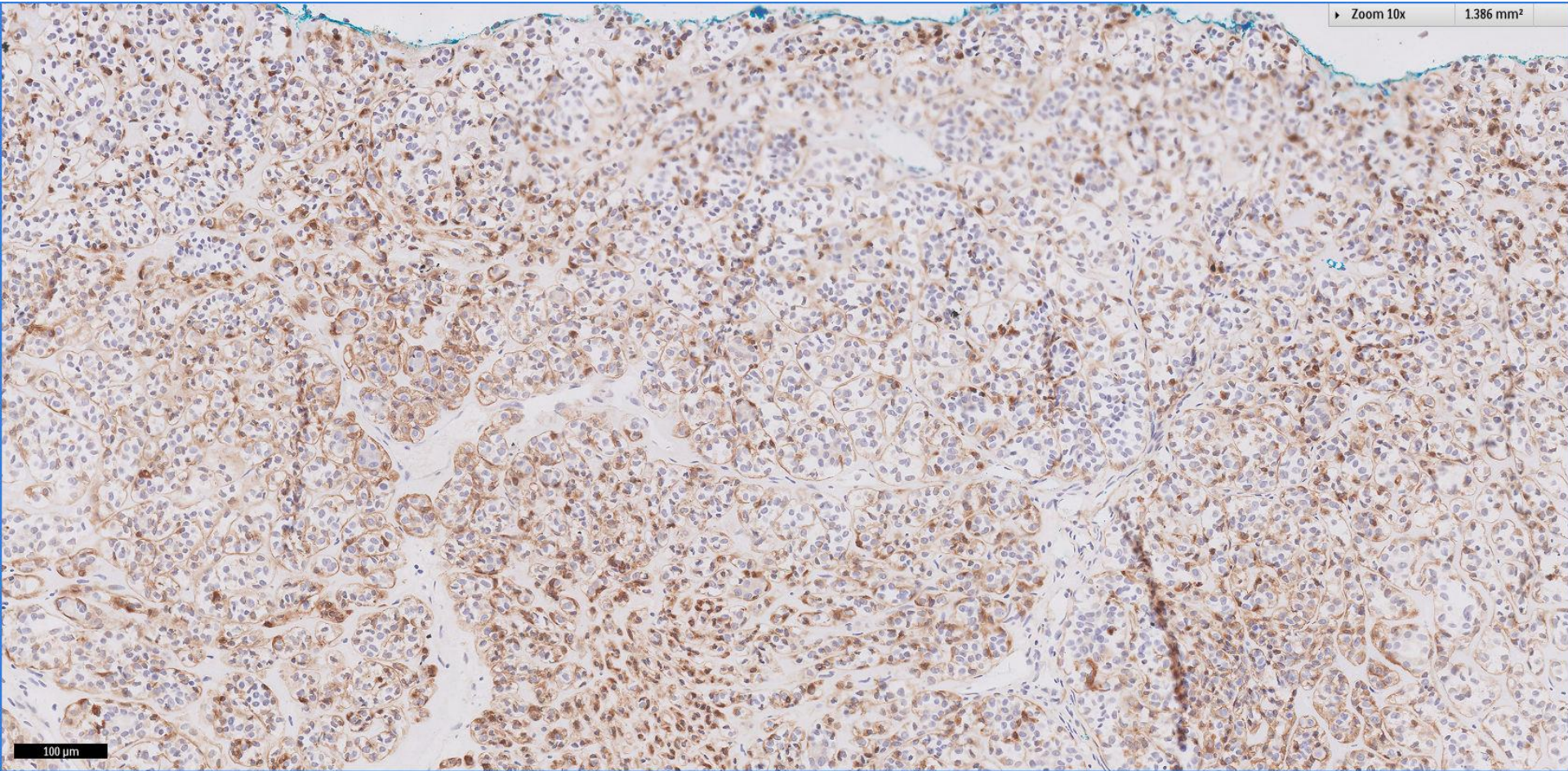
1.386 mm²



p63



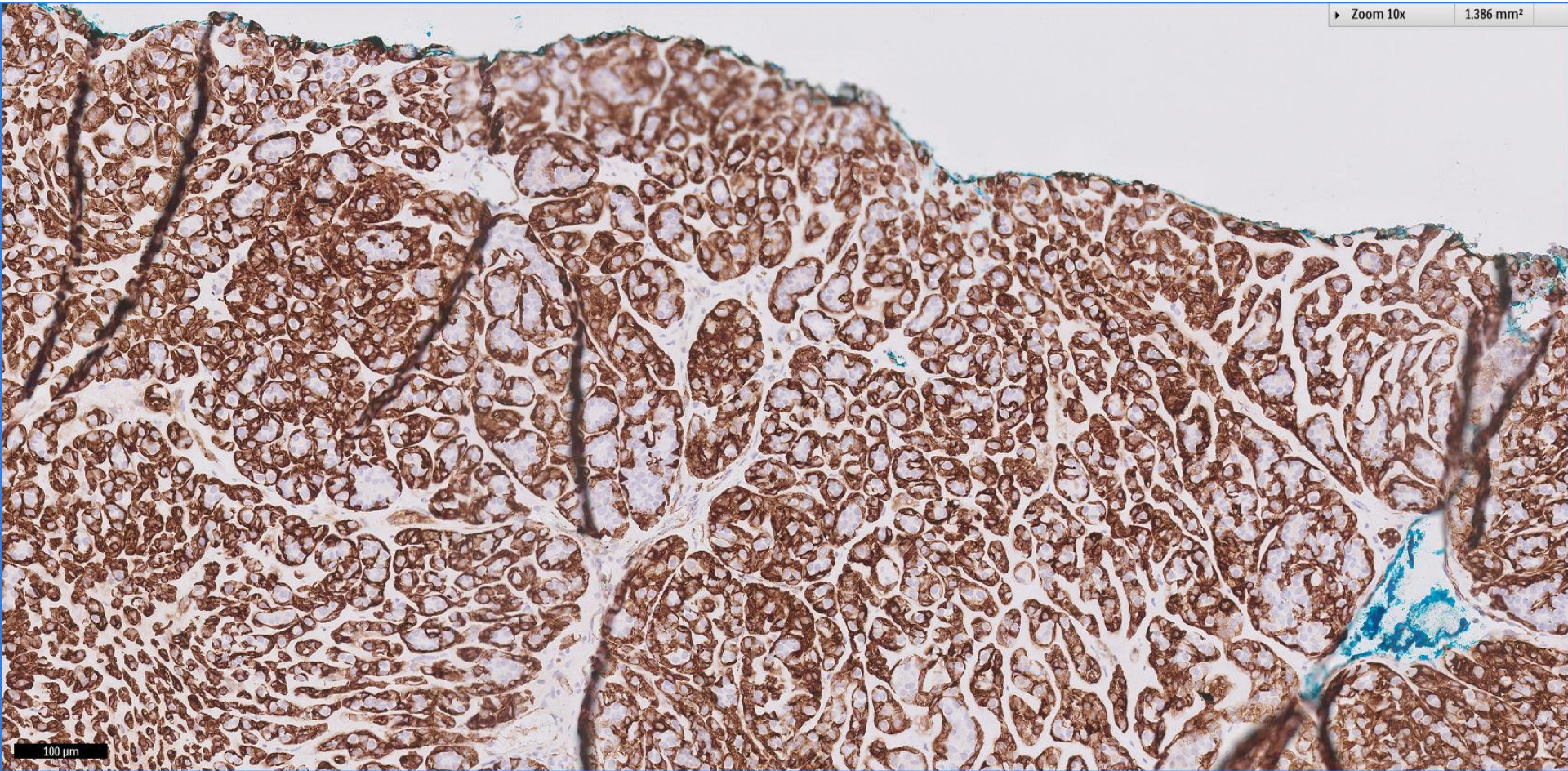
Calponin



SMMS

Zoom 10x

1.386 mm²

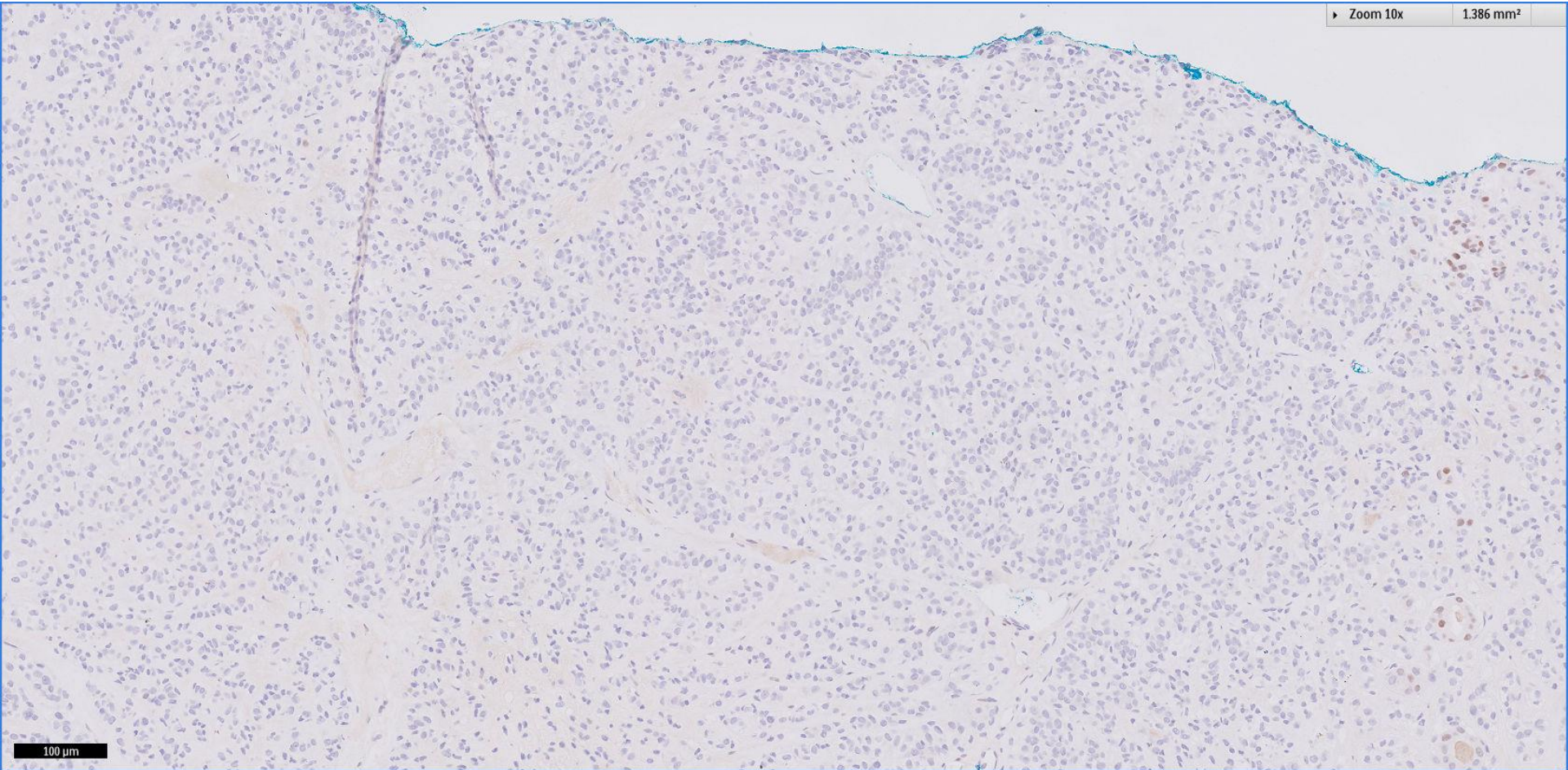


100 μ m

ER

► Zoom 10x

1.386 mm²



100 μm

Question 20.1

What is your diagnosis?

- A. Fibroepithelial lesion
- B. Myoepithelioma
- C. Infiltrating epitheliosis
- D. Adenomyoepithelioma
- E. Other

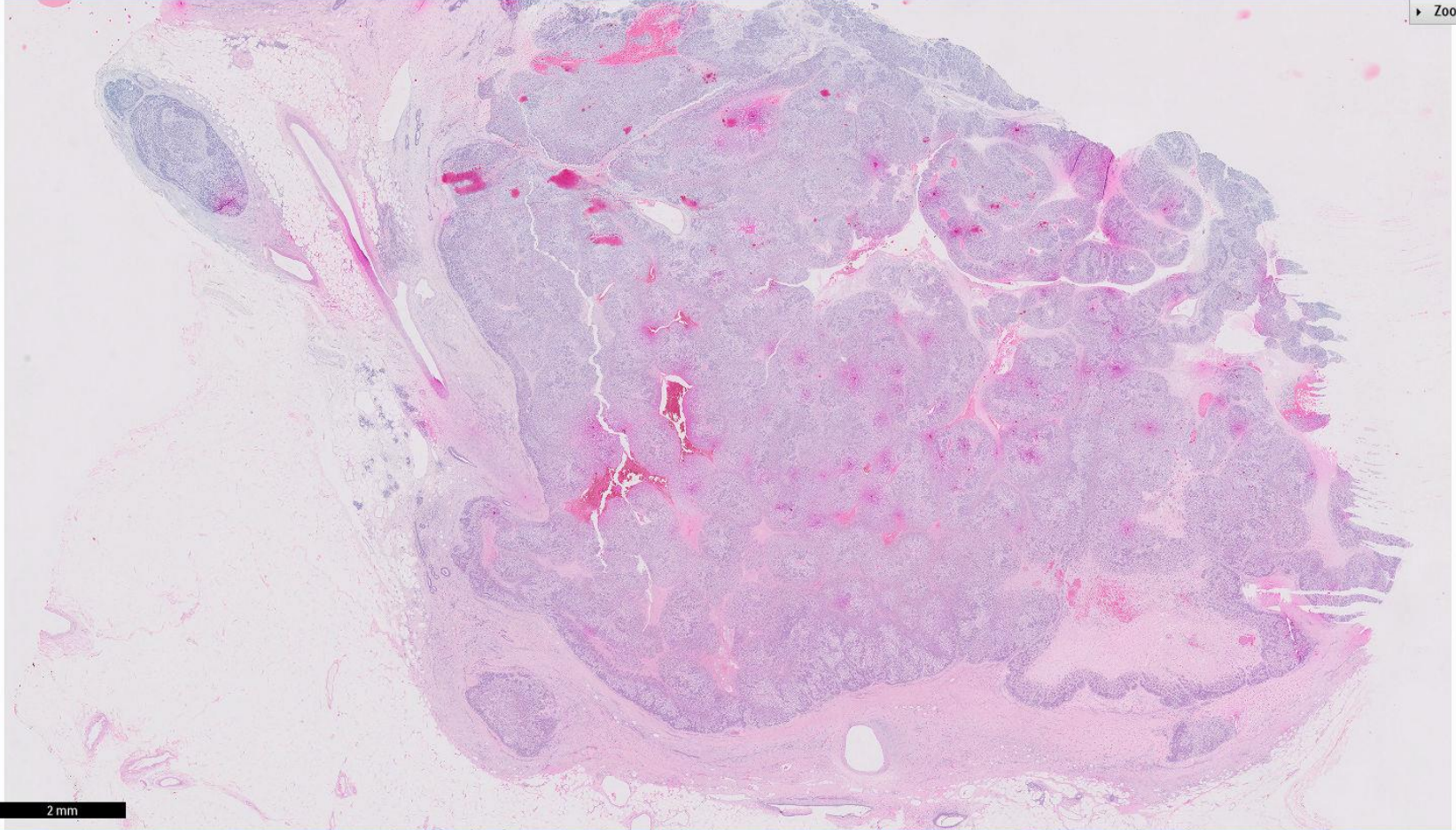
Left breast 1:00-2:00 nodule; Core biopsy:

- Epithelial-myoepithelial proliferation (see comment).

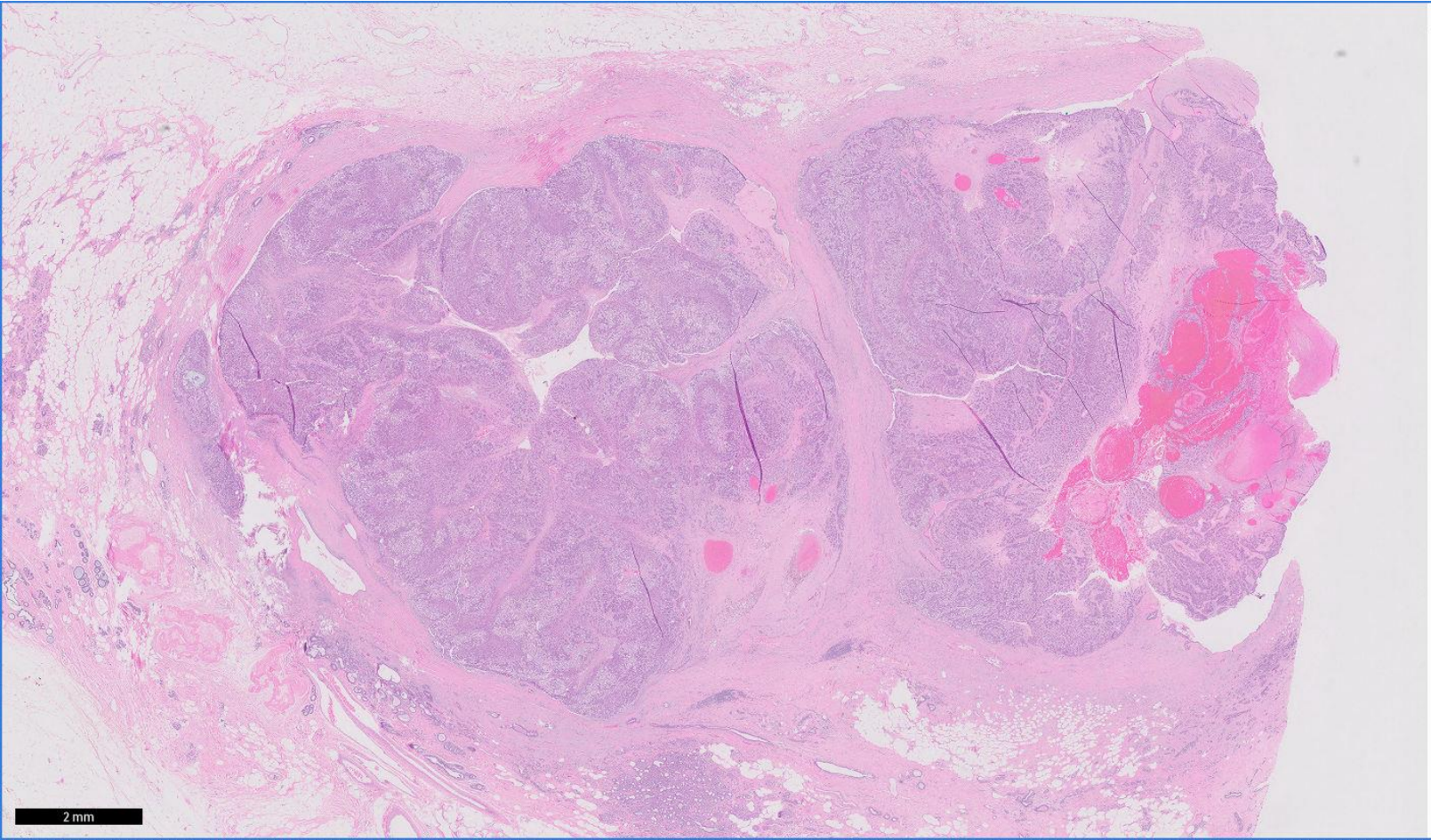
Comment: The features here are suggestive of an adenomyoepithelioma. Definite histologic subtyping may be better performed on an excision specimen where the tumour can be examined in its entirety.

Zoom 0.5x

354.816 mm²



2 mm



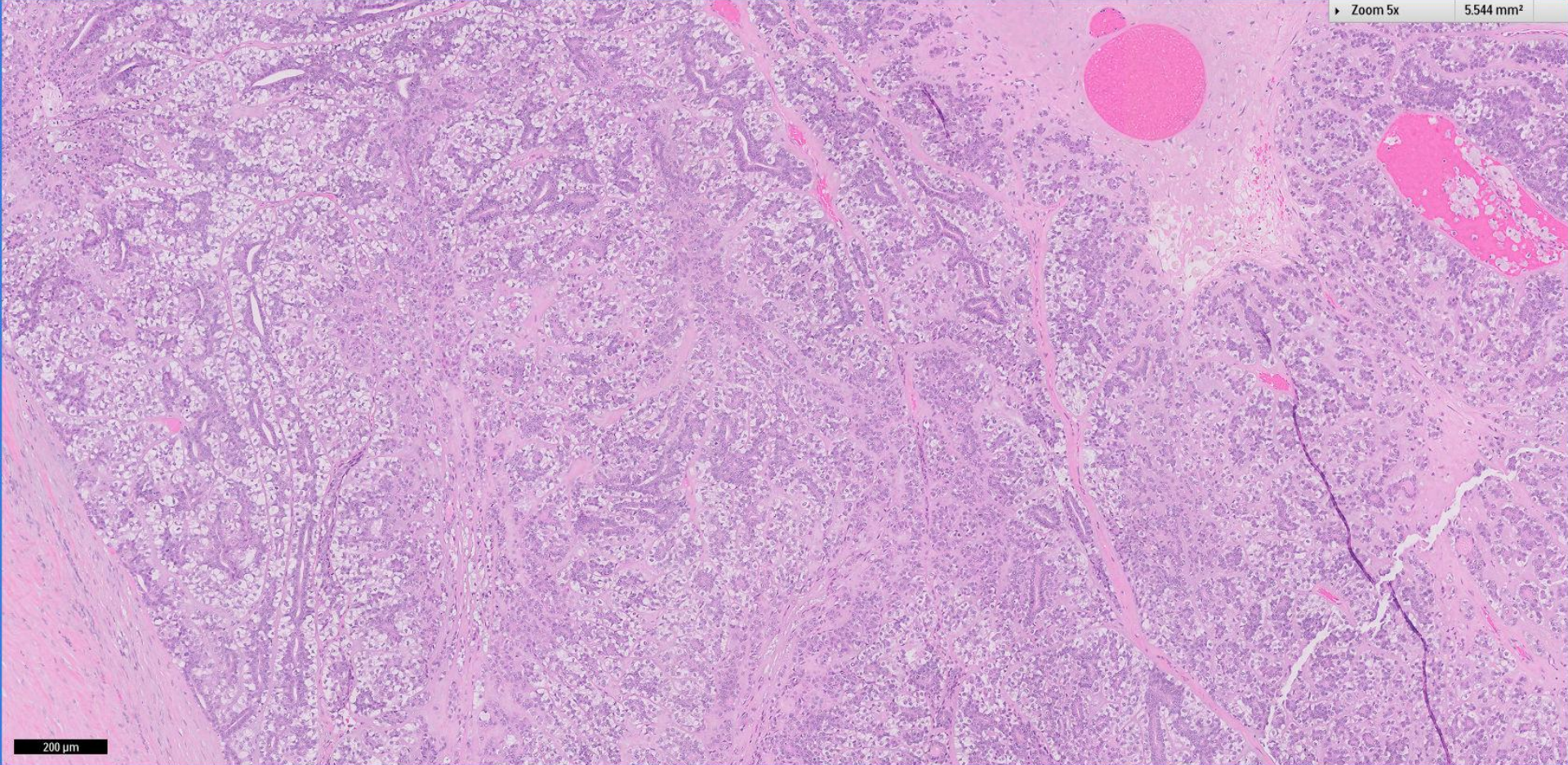
Zoom 0.5x

354.816 mm²

2 mm

▶ Zoom 5x

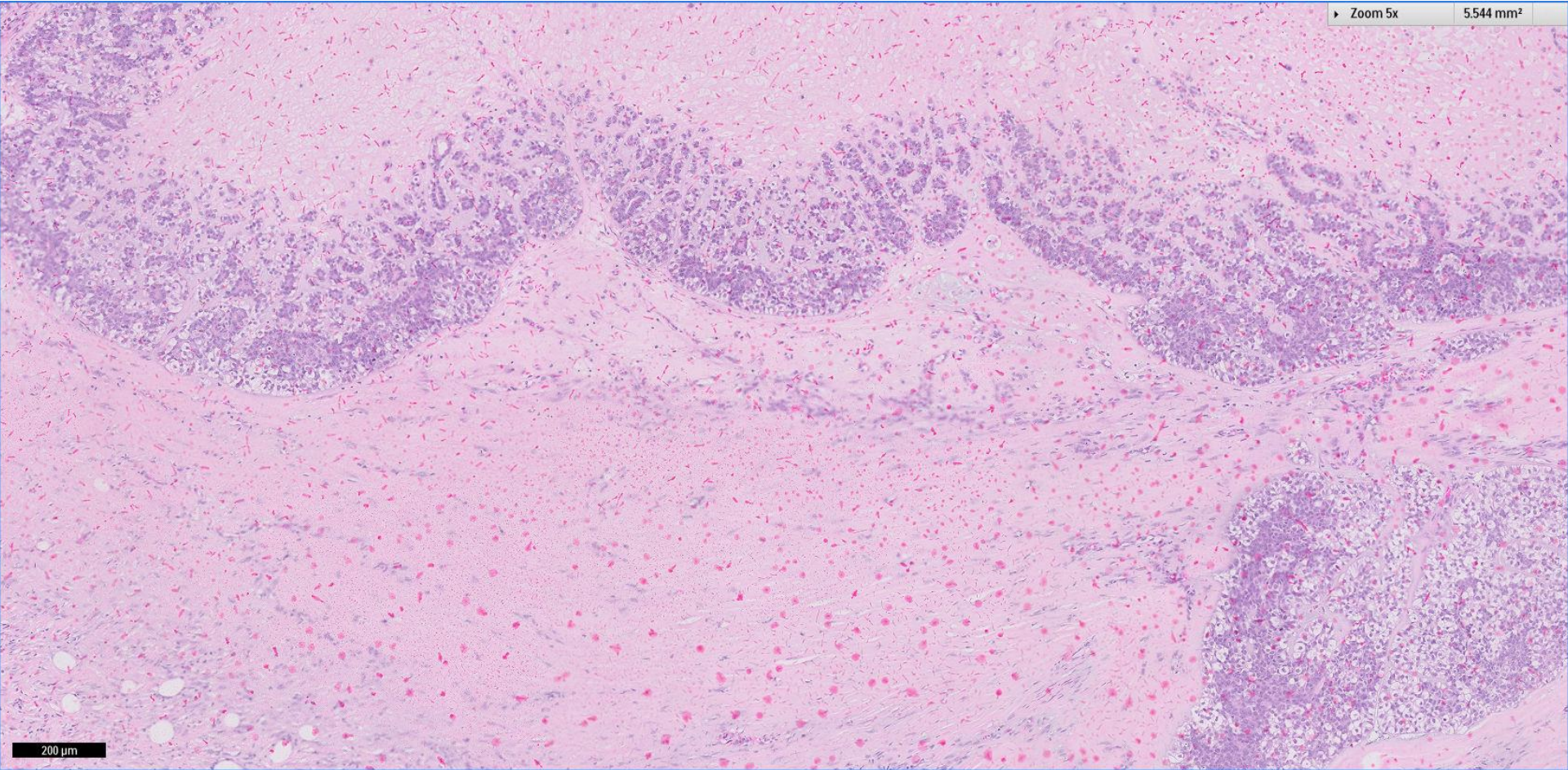
5.544 mm²



200 μm

► Zoom 5x

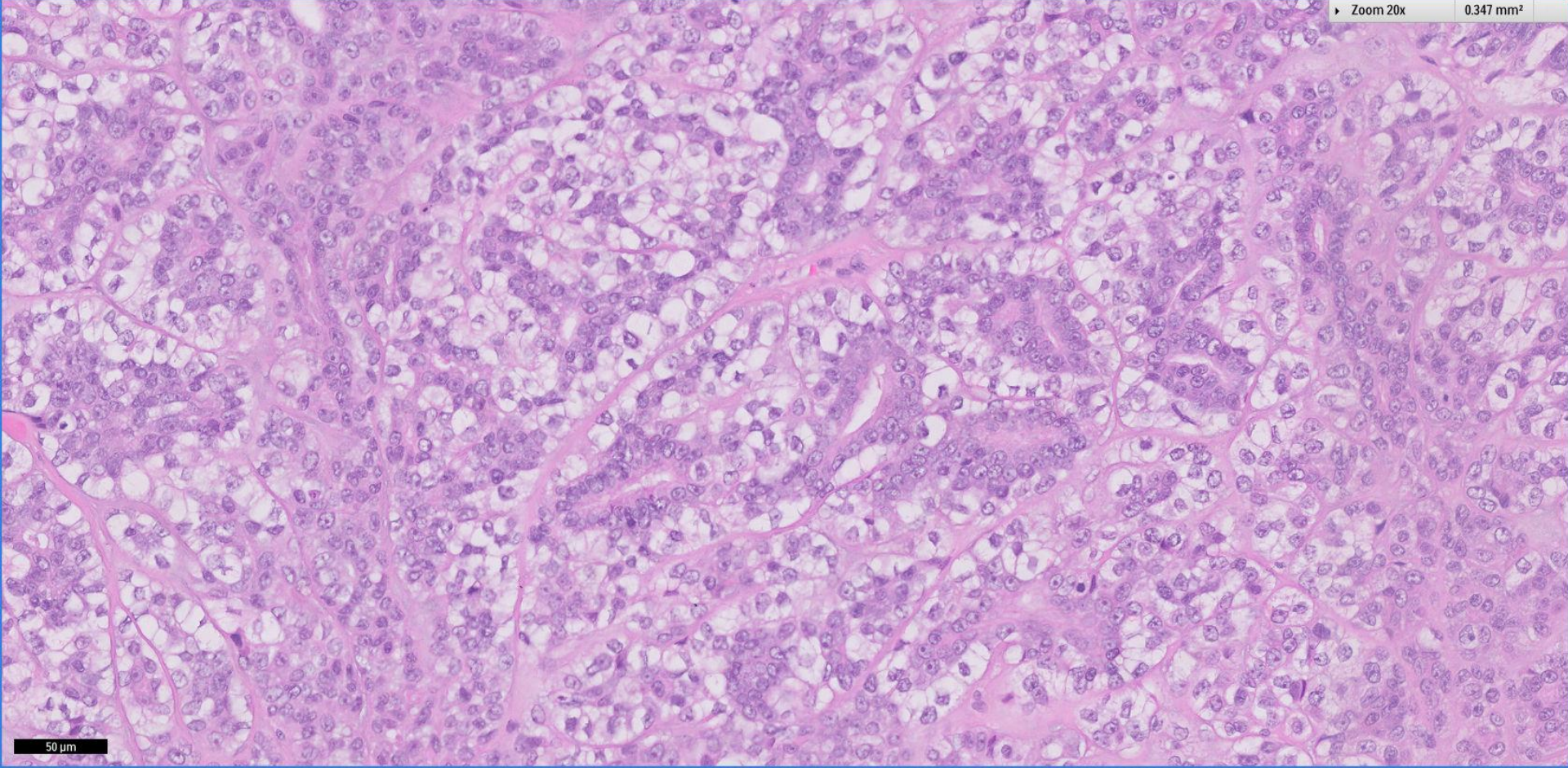
5.544 mm²



200 μ m

▶ Zoom 20x

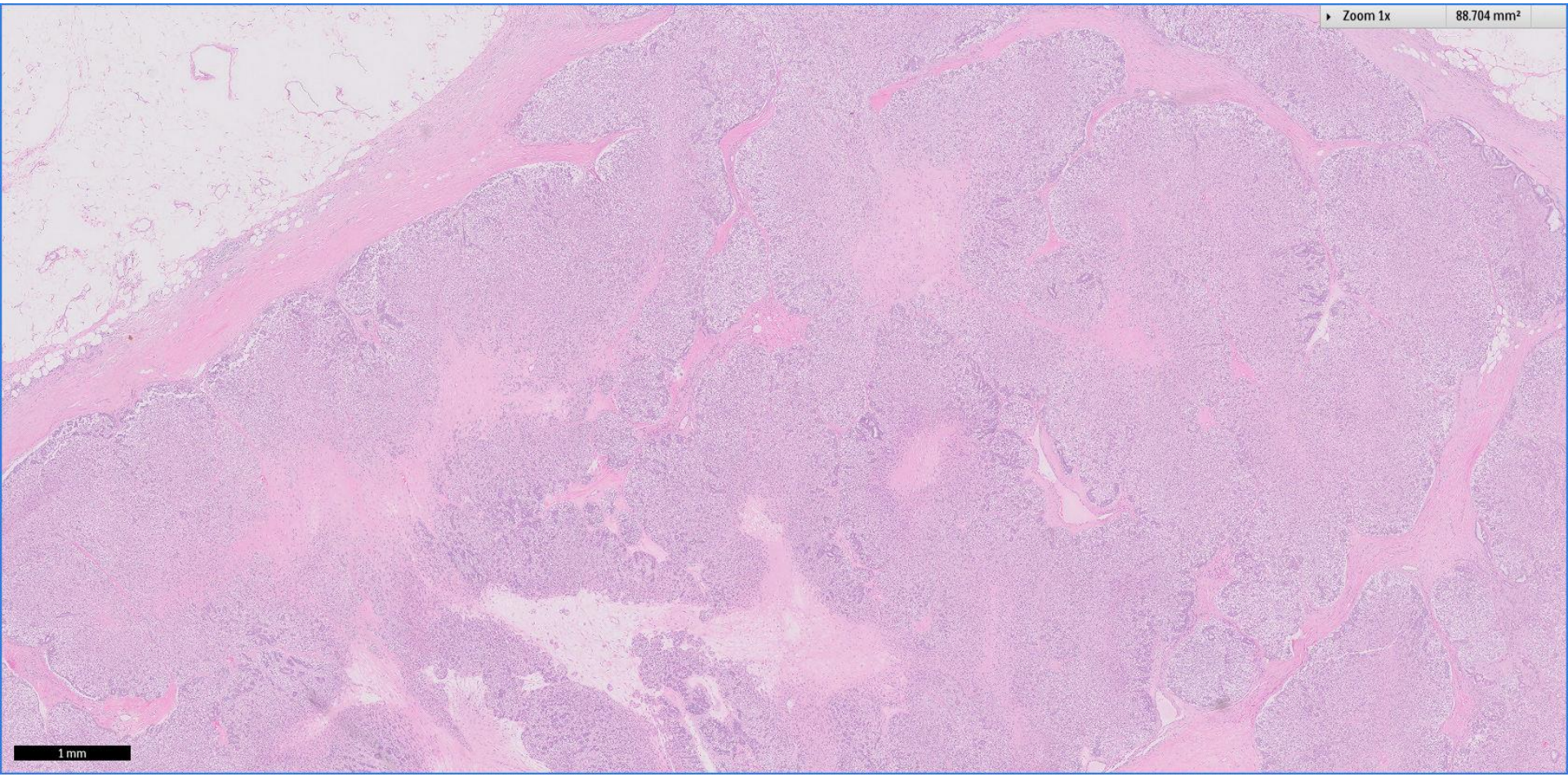
0.347 mm²



50 μm

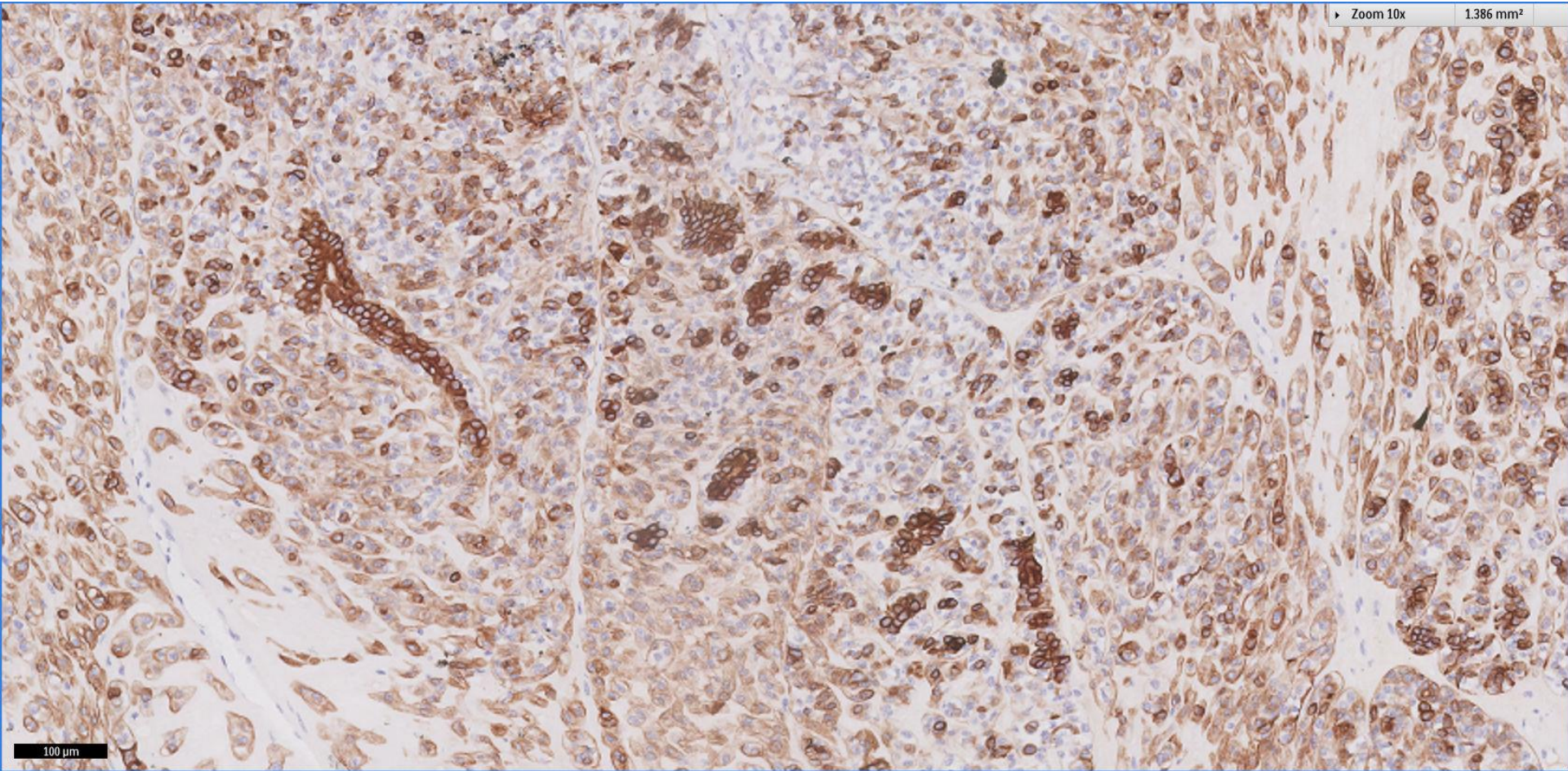
► Zoom 1x

88.704 mm²

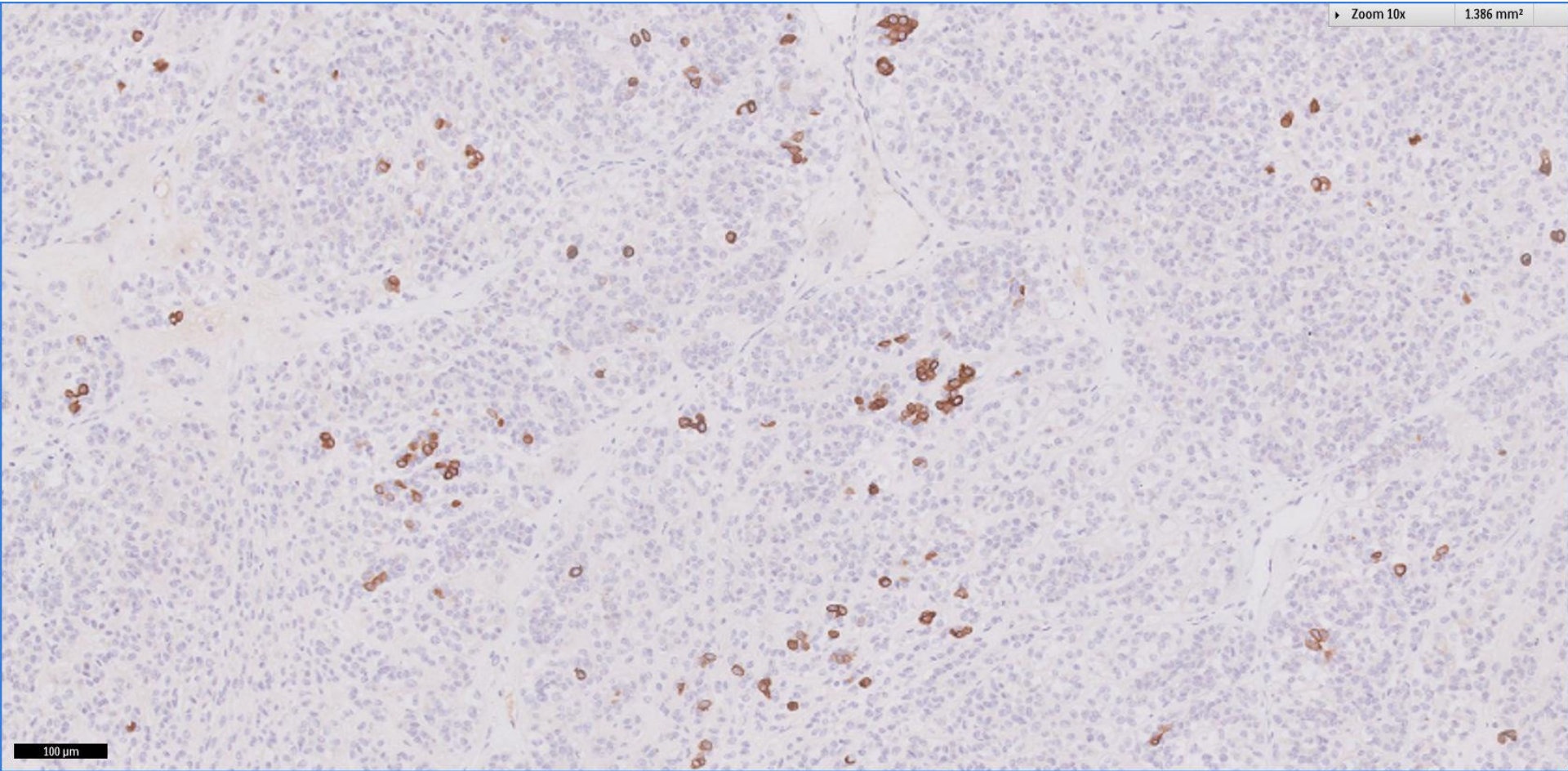


1 mm

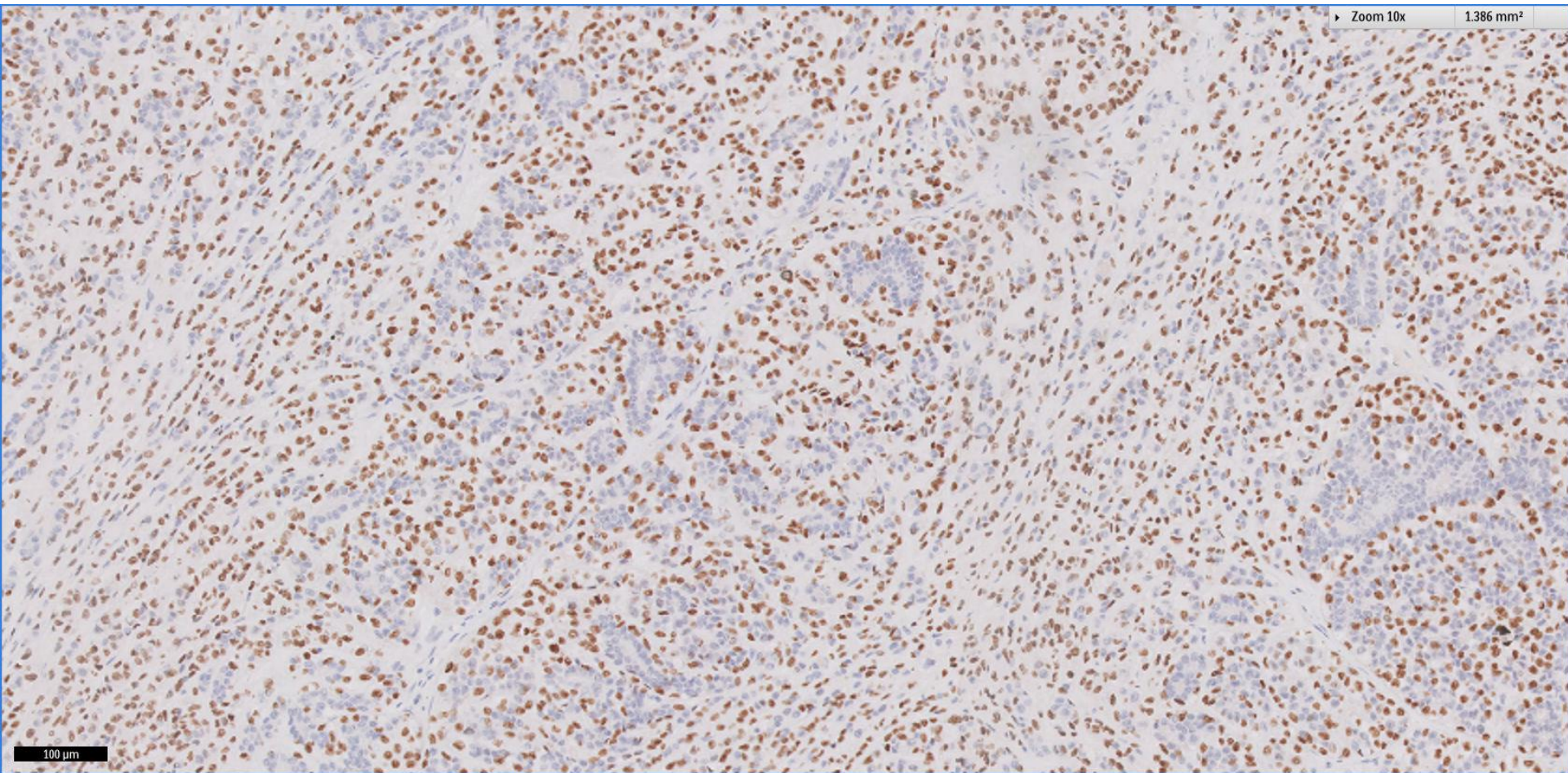
CK7



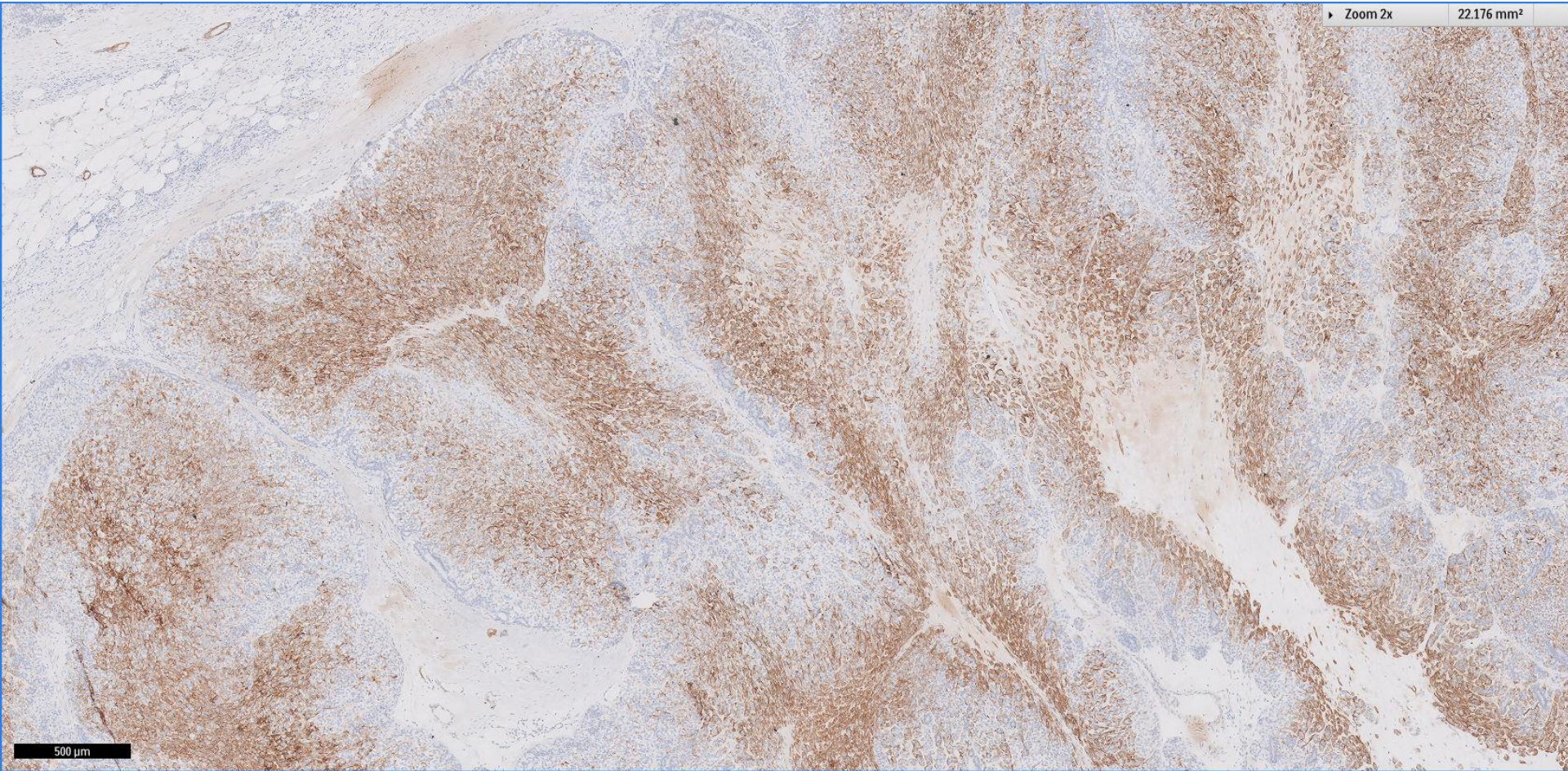
CK14



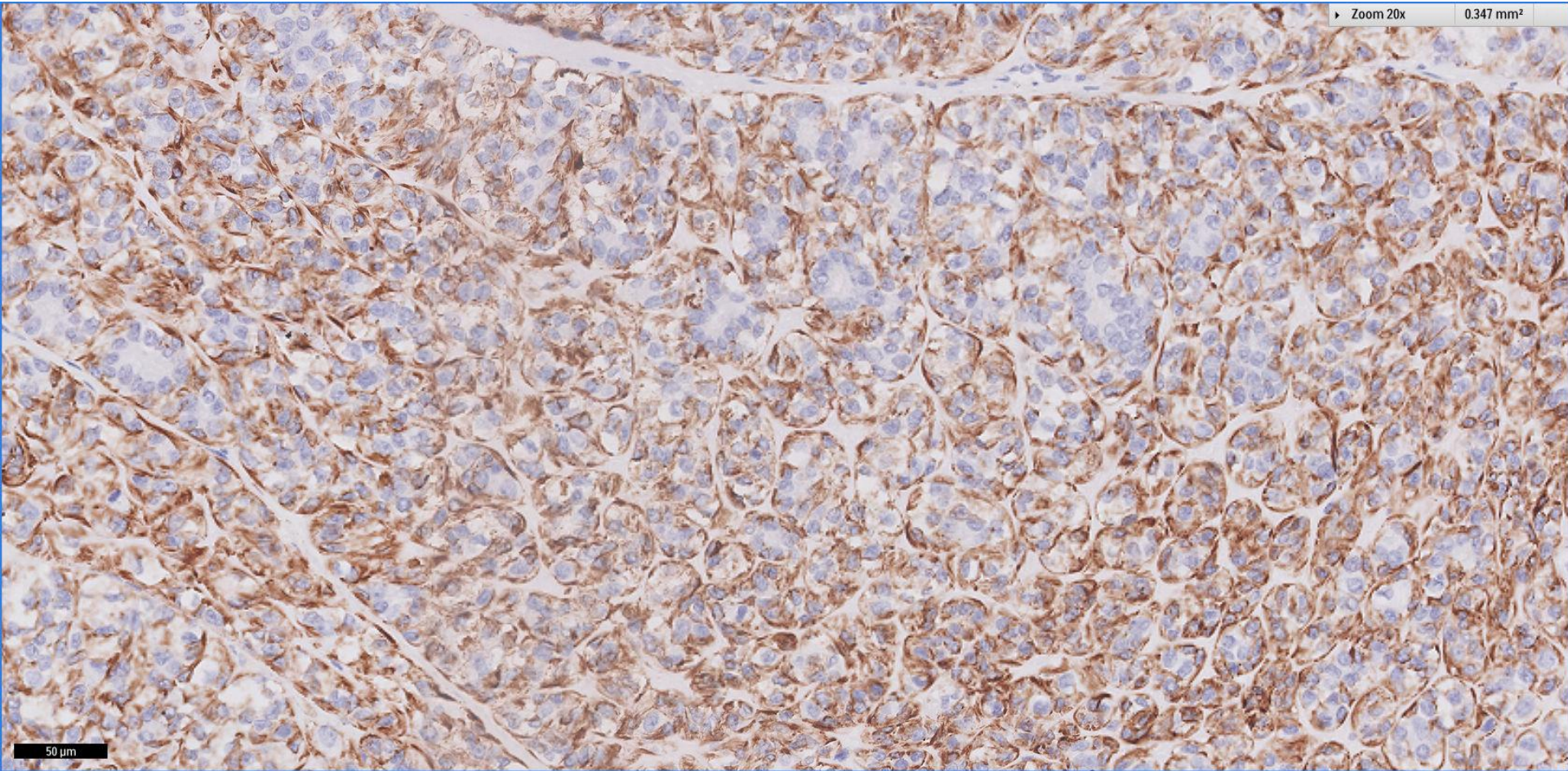
p63



Caldesmon

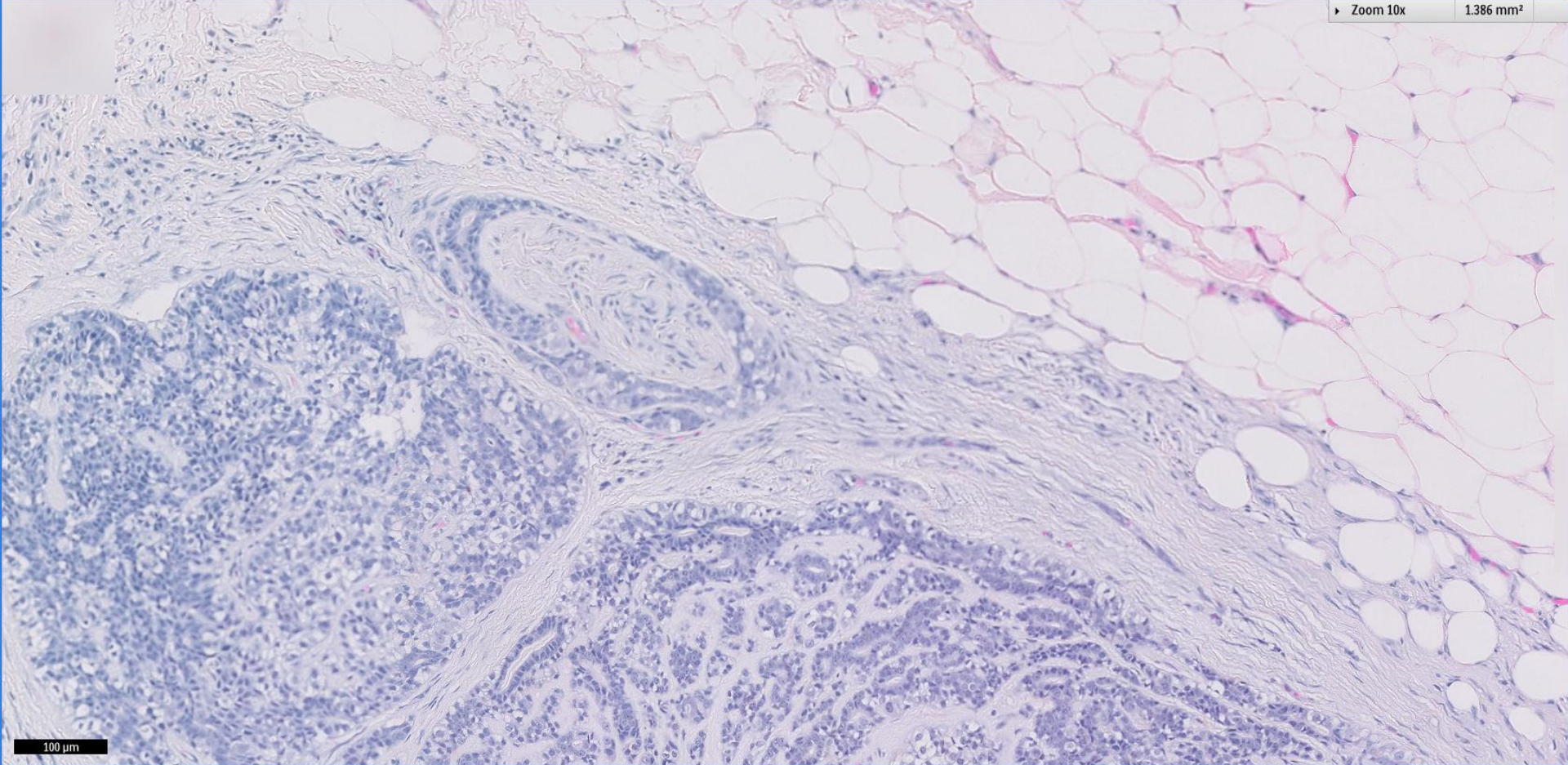


SMMS



▶ Zoom 10x

1.386 mm²



100 μ m

Left breast 1-2 o'clock mass; Excision:

- Adenomyoepithelioma (see comment).
- Margins free of the tumour with the nearest radial margin (superior) located 5mm away and the posterior margin located 10mm away

Comment: Microscopically, the tumour cells are seen infiltrating around a small nerve bundle focally, suspicious for perineural invasion. Close clinical follow up is advised.

Adenomyoepithelioma

- Rare lesion of luminal-like and myoepithelial-like cells
- Myoepithelial cells surround small epithelium-lined spaces
- Forms well-circumscribed masses; multilobulated architecture on low-power examination
- Usually minimal matrix formation; sclerosis may be present
- Luminal-like cells: may exhibit apocrine, squamous or sebaceous morphology
- Myoepithelial-like cells: spindled, myoid, plasmacytoid
- Microscopic extension into adjacent normal breast tissue may be seen

Adenomyoepithelioma with Carcinoma

- Epithelial component of AME may give rise to invasive carcinoma (NST) or metaplastic carcinoma
- Malignant component: Infiltrative growth, marked atypia, high mitotic rate, necrosis, lymphovascular/perineural invasion
- When both epithelial and myoepithelial components are malignant, the tumour can resemble epithelial-myoepithelial carcinoma of the salivary gland
- If only the myoepithelial component is malignant, demonstration of a component of AME is necessary to differentiate it from myoepithelial carcinoma

IHC

- Myoepithelial cells: CK5/6, CK14, p63, SMA, SMMS, calponin, S100, caldesmon
- Epithelial cells: low-molecular weight keratins
- Usually negative/ weakly positive for ER and PR; HER2 is usually negative

Prognosis

- Complete excision is curative for AMEs
- Local recurrence may be due to multinodular growth
- AME with carcinoma has greater potential for local recurrence and metastasis
- Axillary dissection is not indicated unless lymphadenopathy is present
- Little evidence to support radiotherapy/chemotherapy