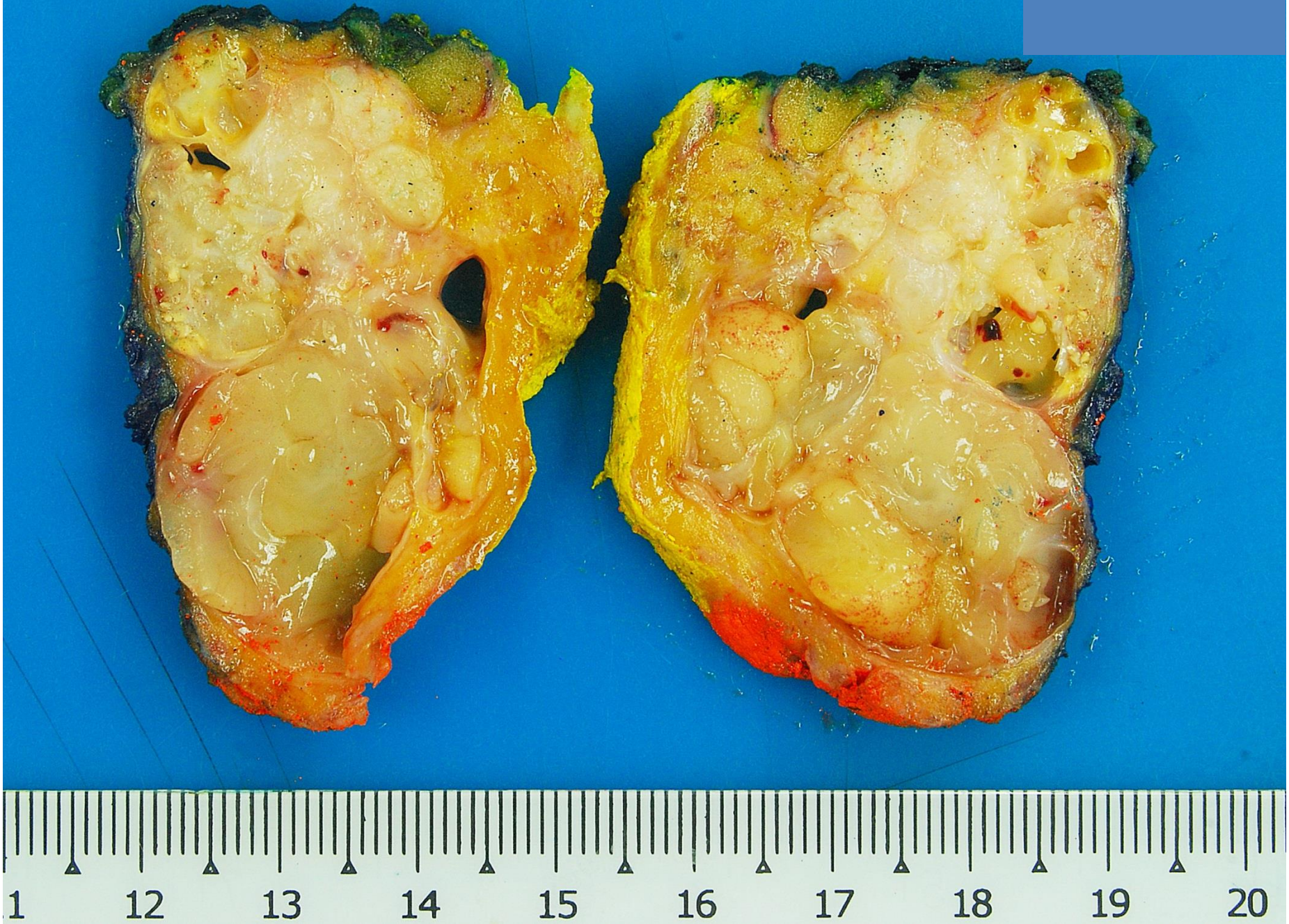
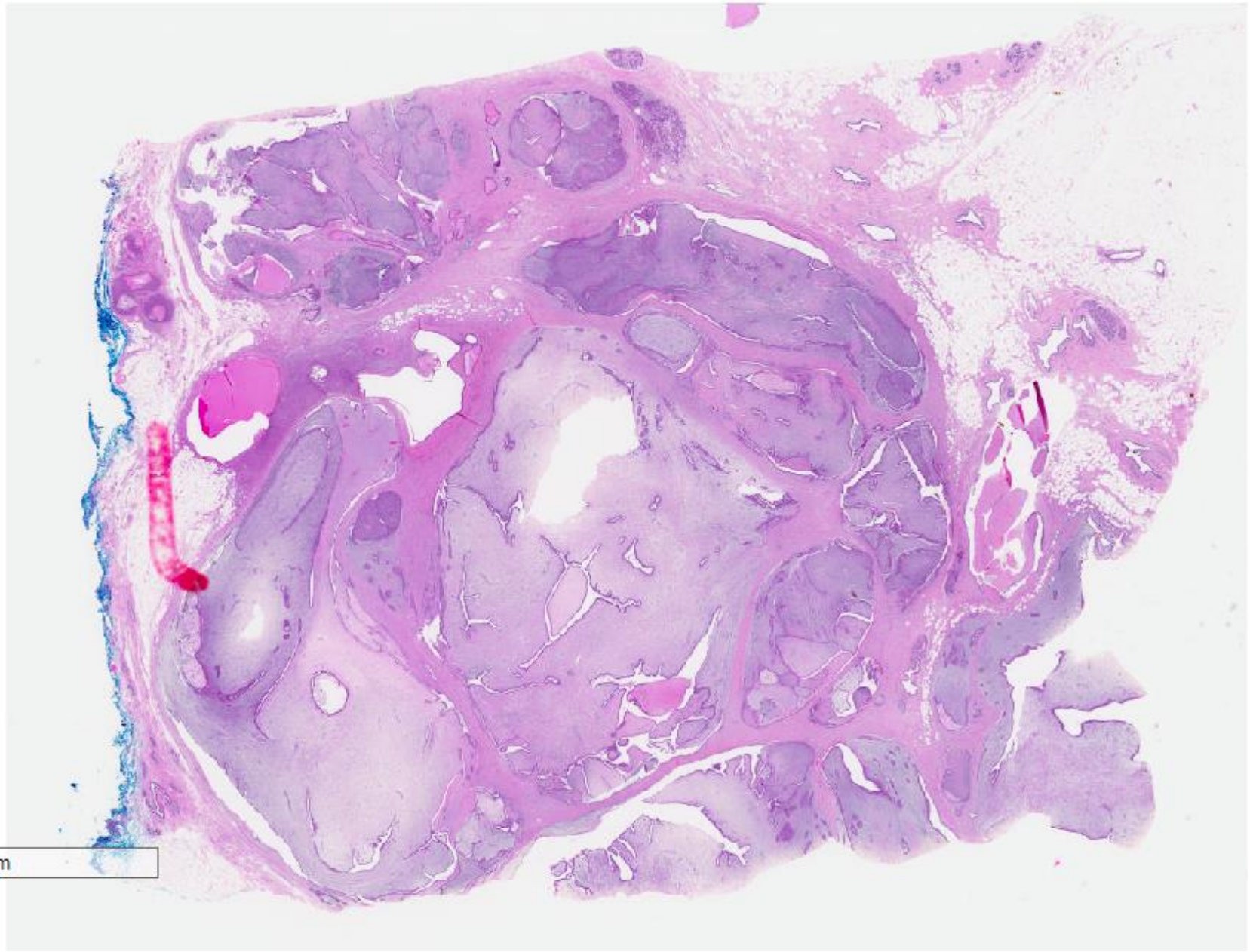
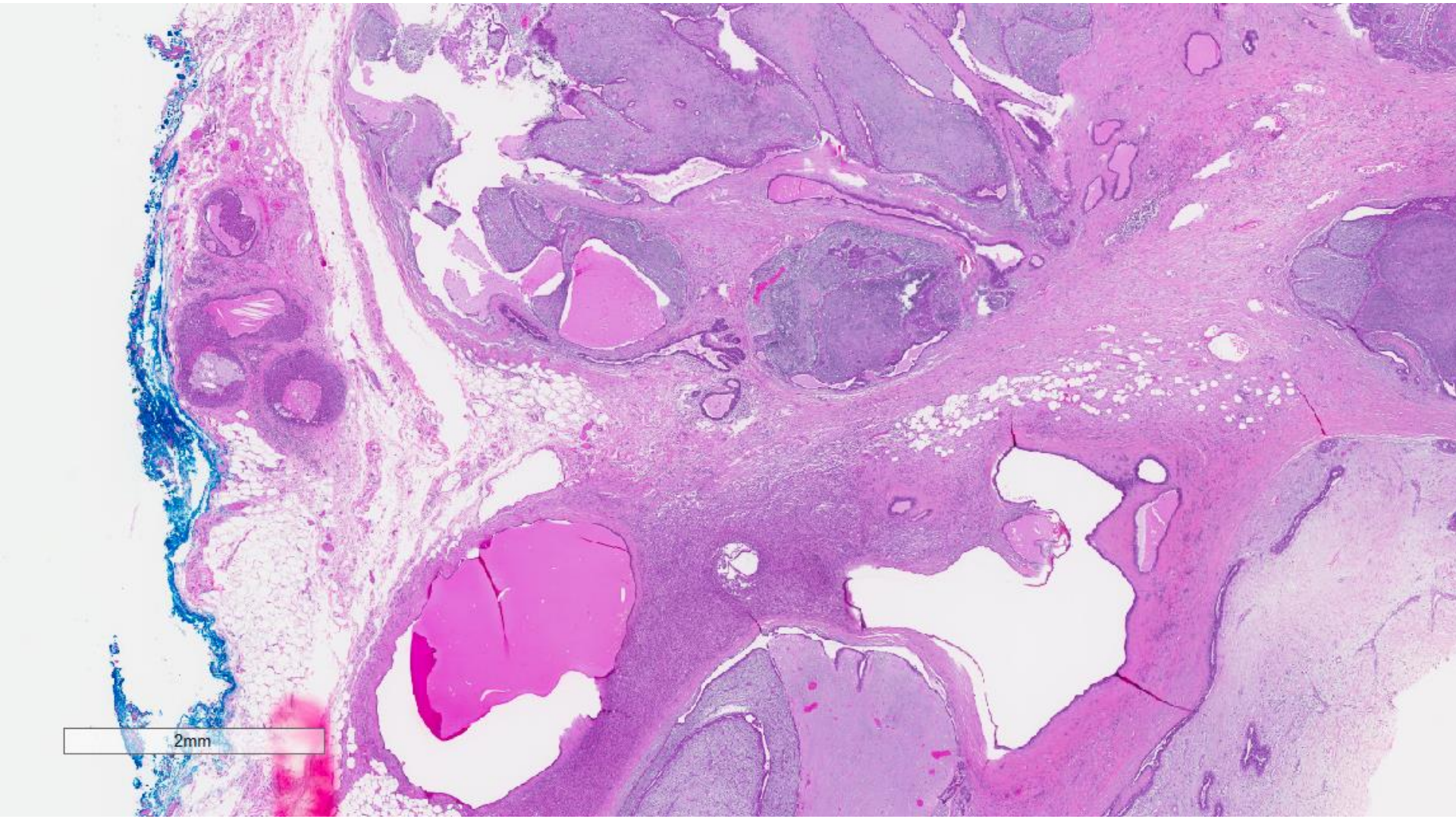
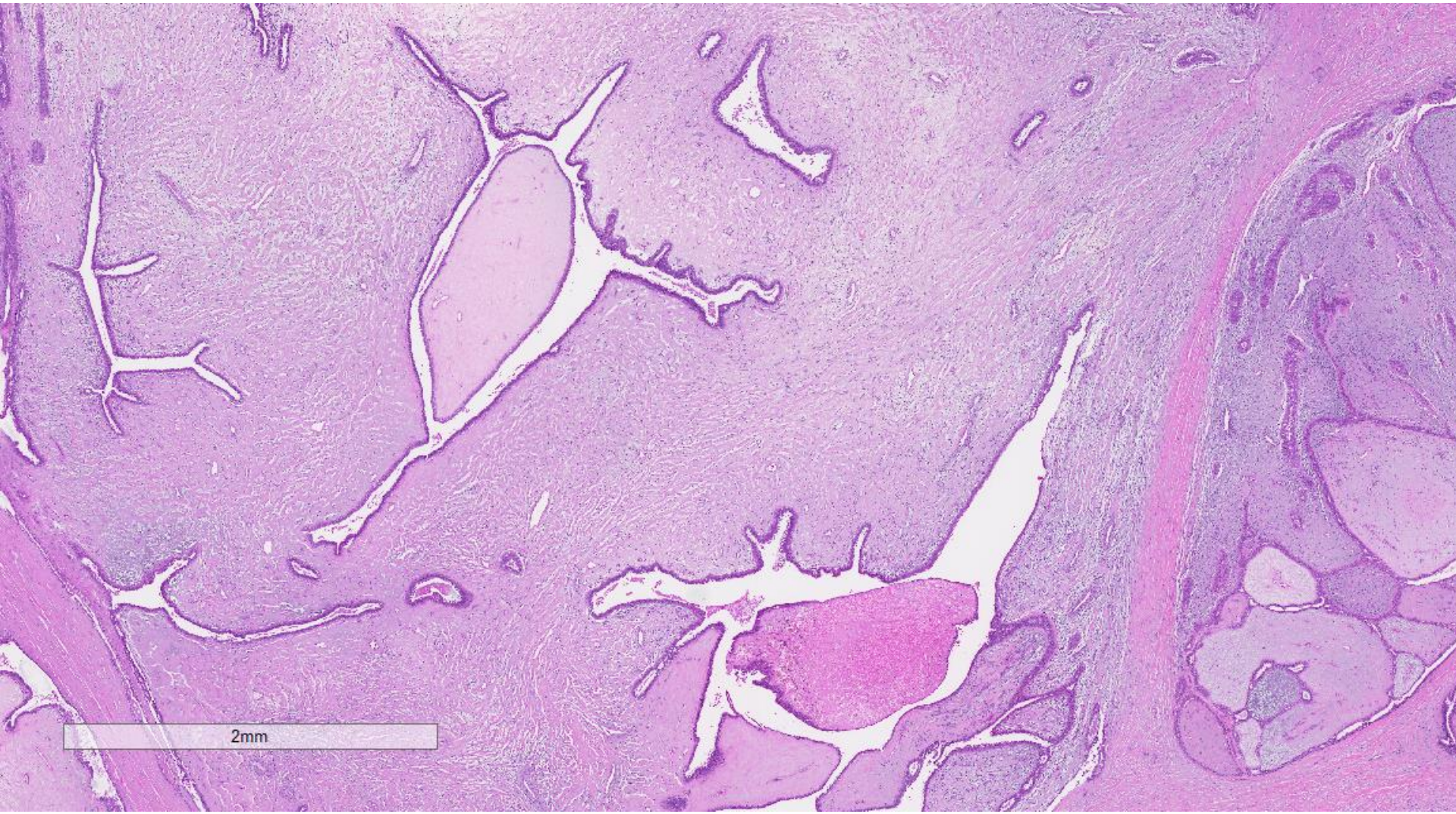
Case 19

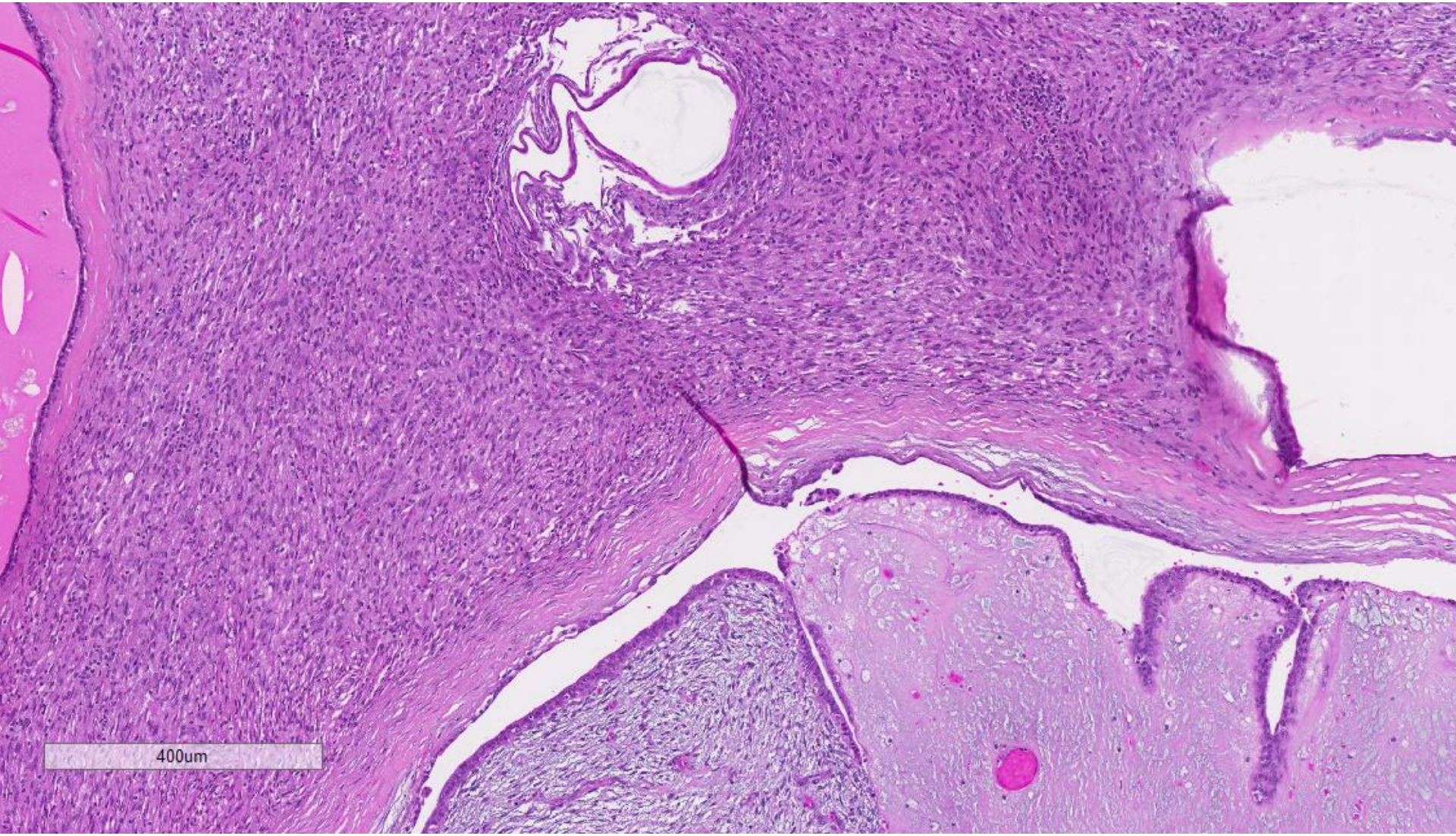
49 year old lady underwent resection of a right breast 5 cm mass.

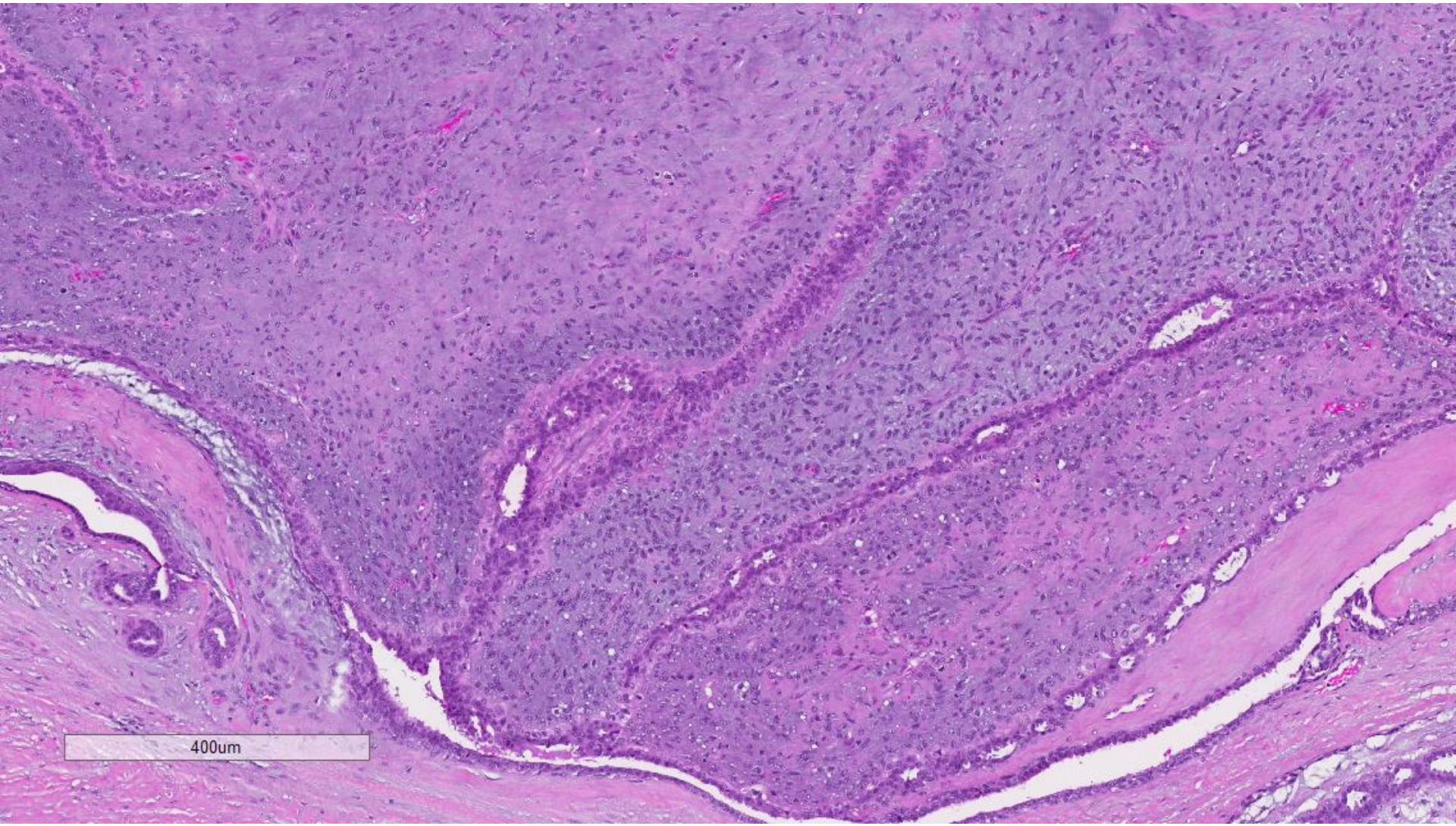

1
12
13
14
15
16
17
18
19
20

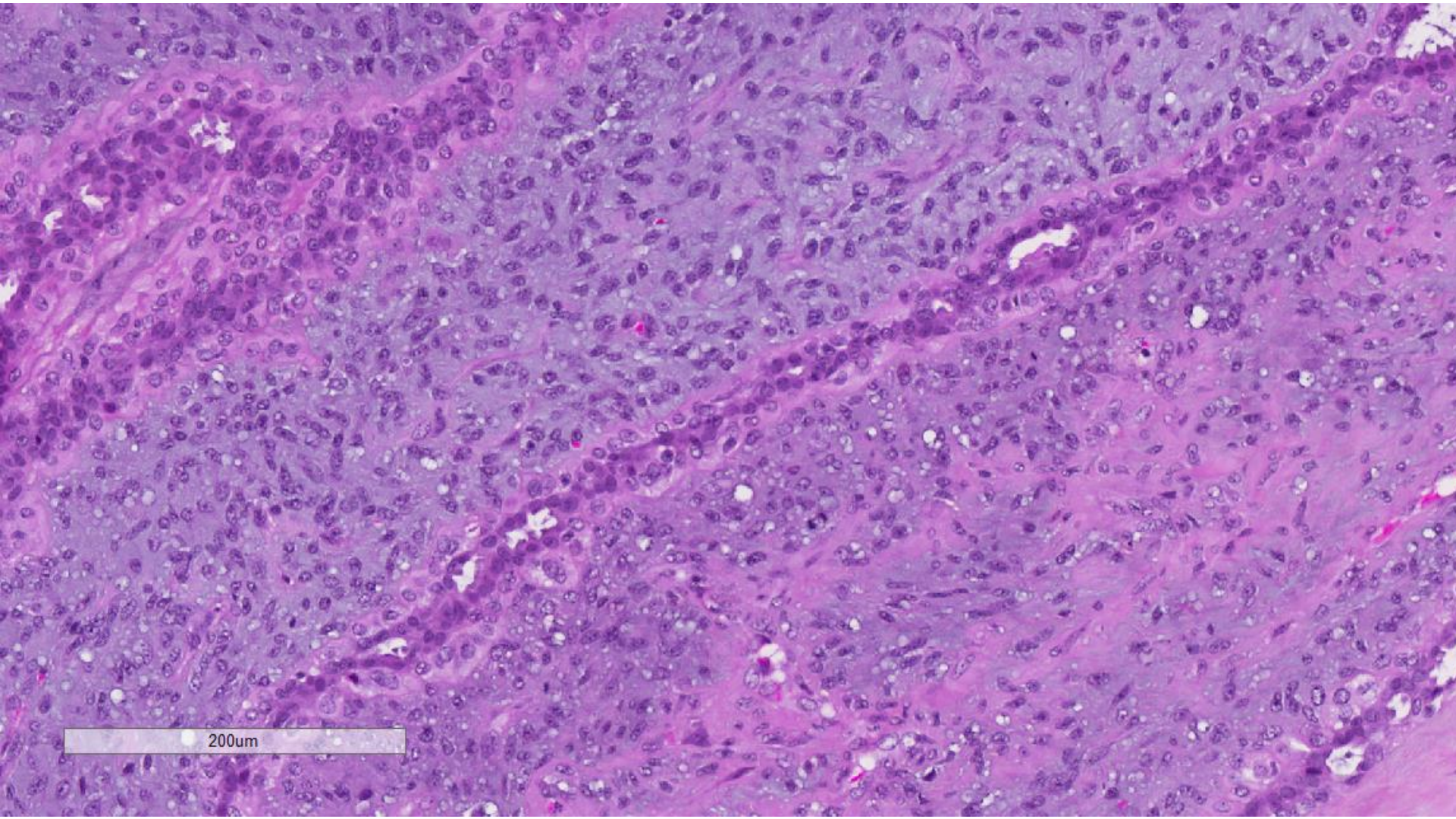

7mm

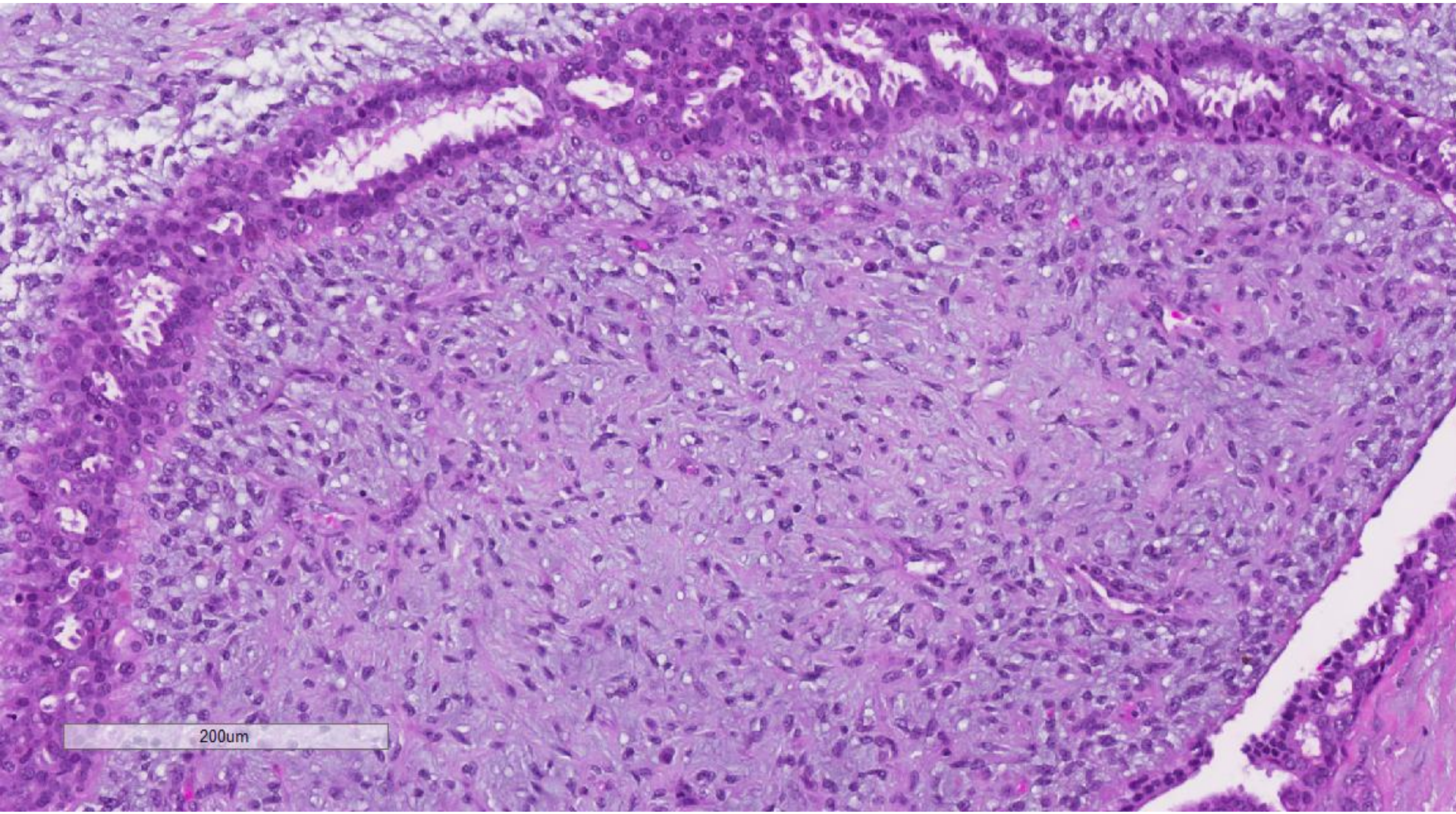

2mm

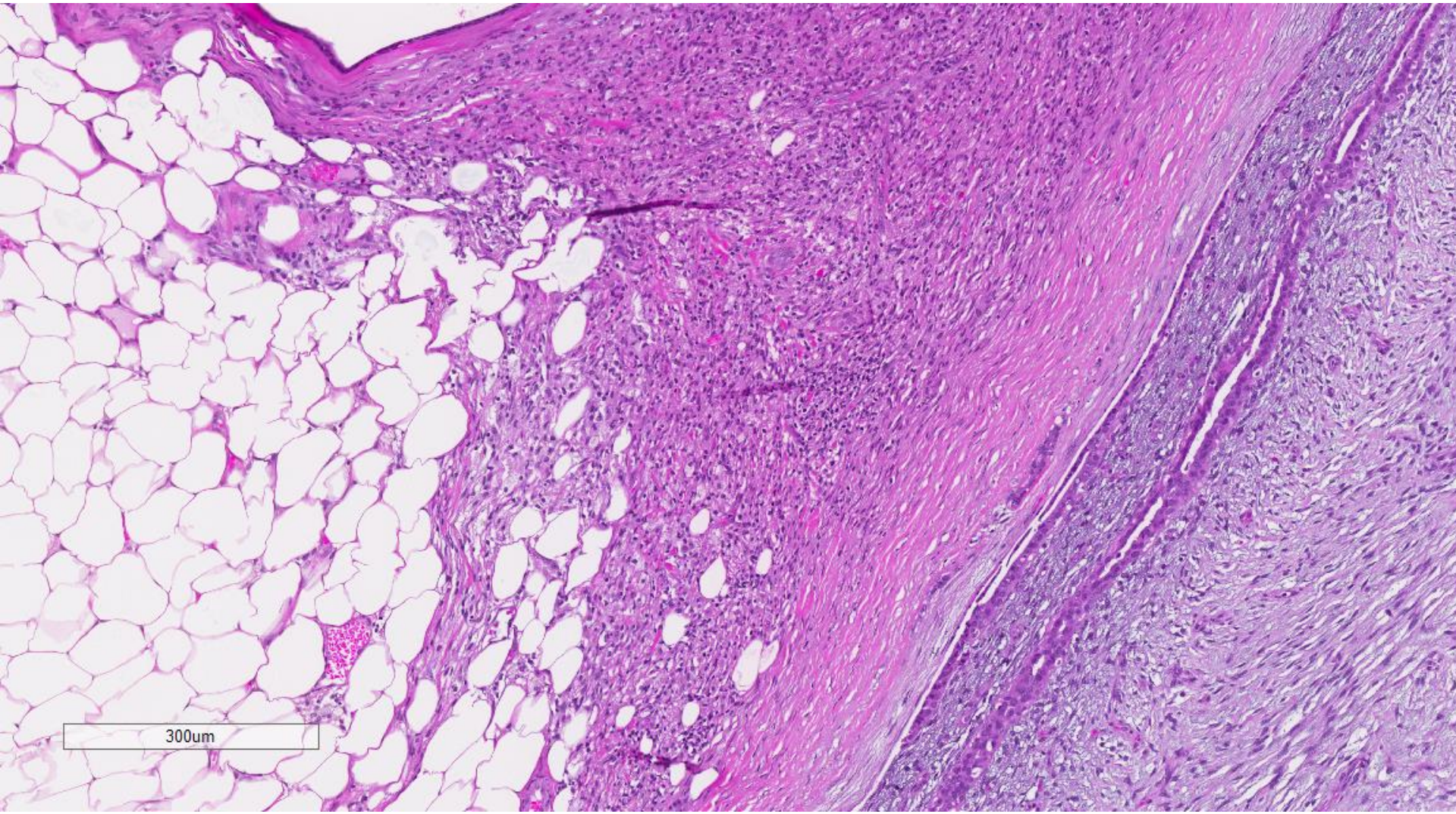

2mm

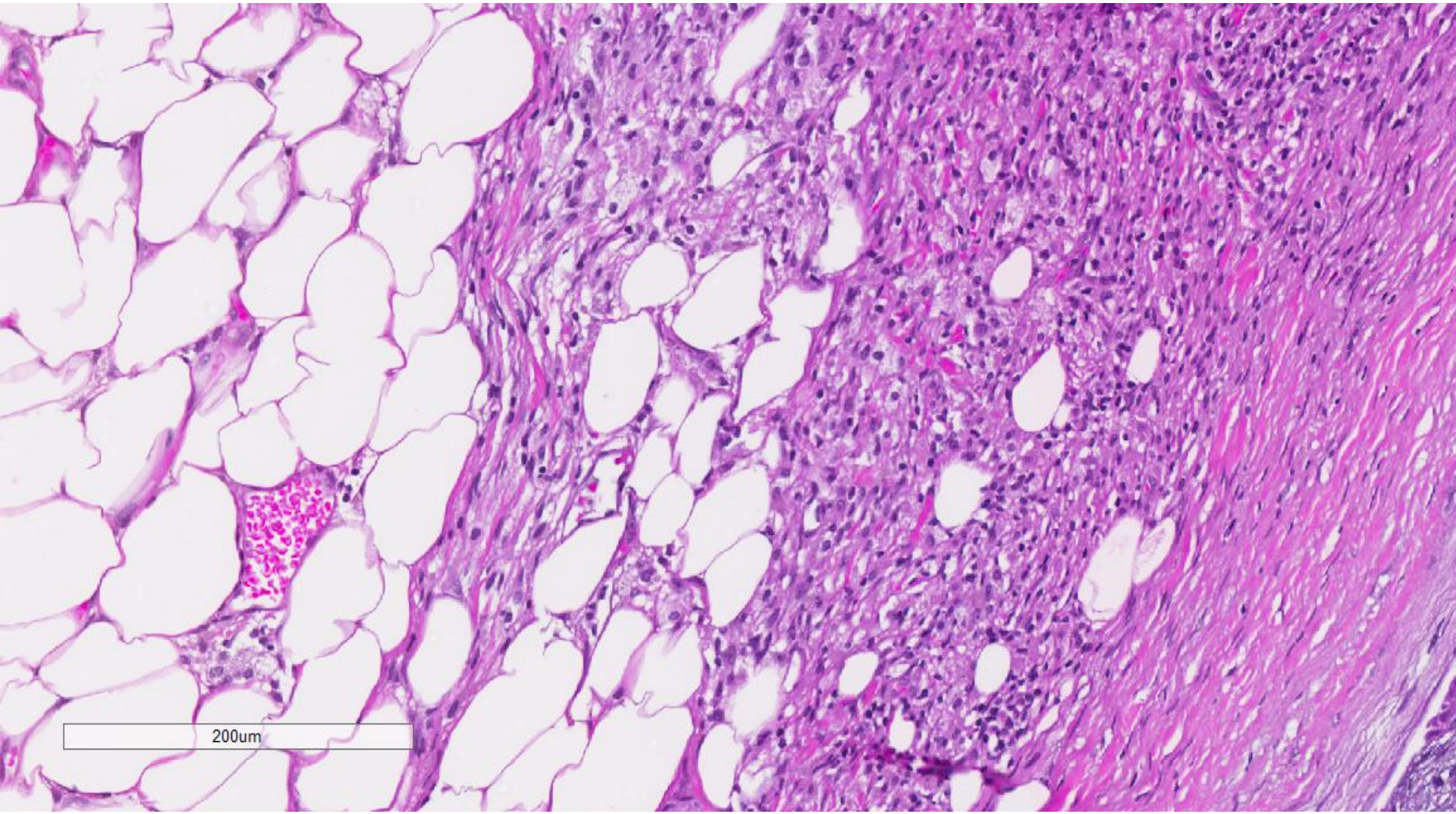

400um

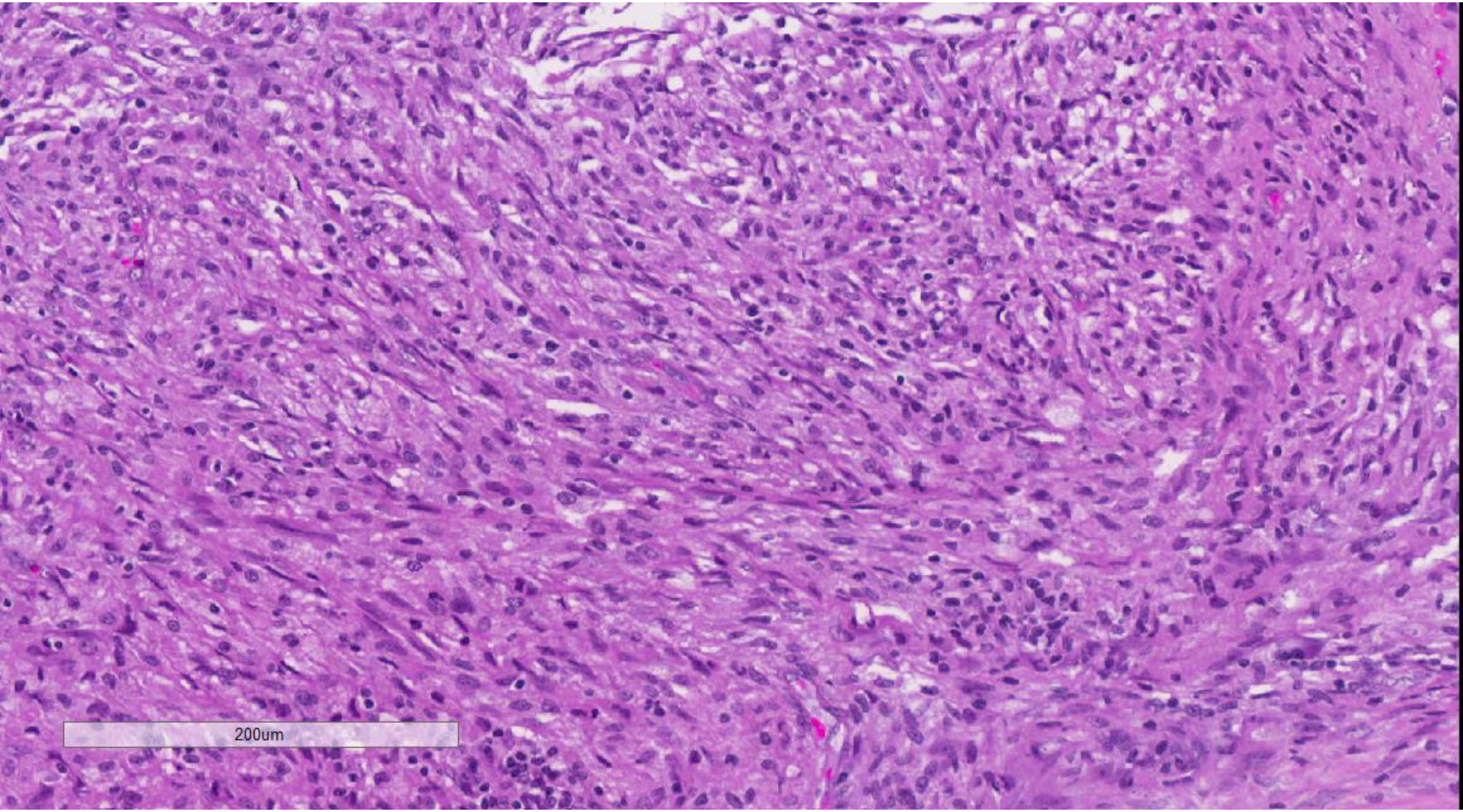

400um

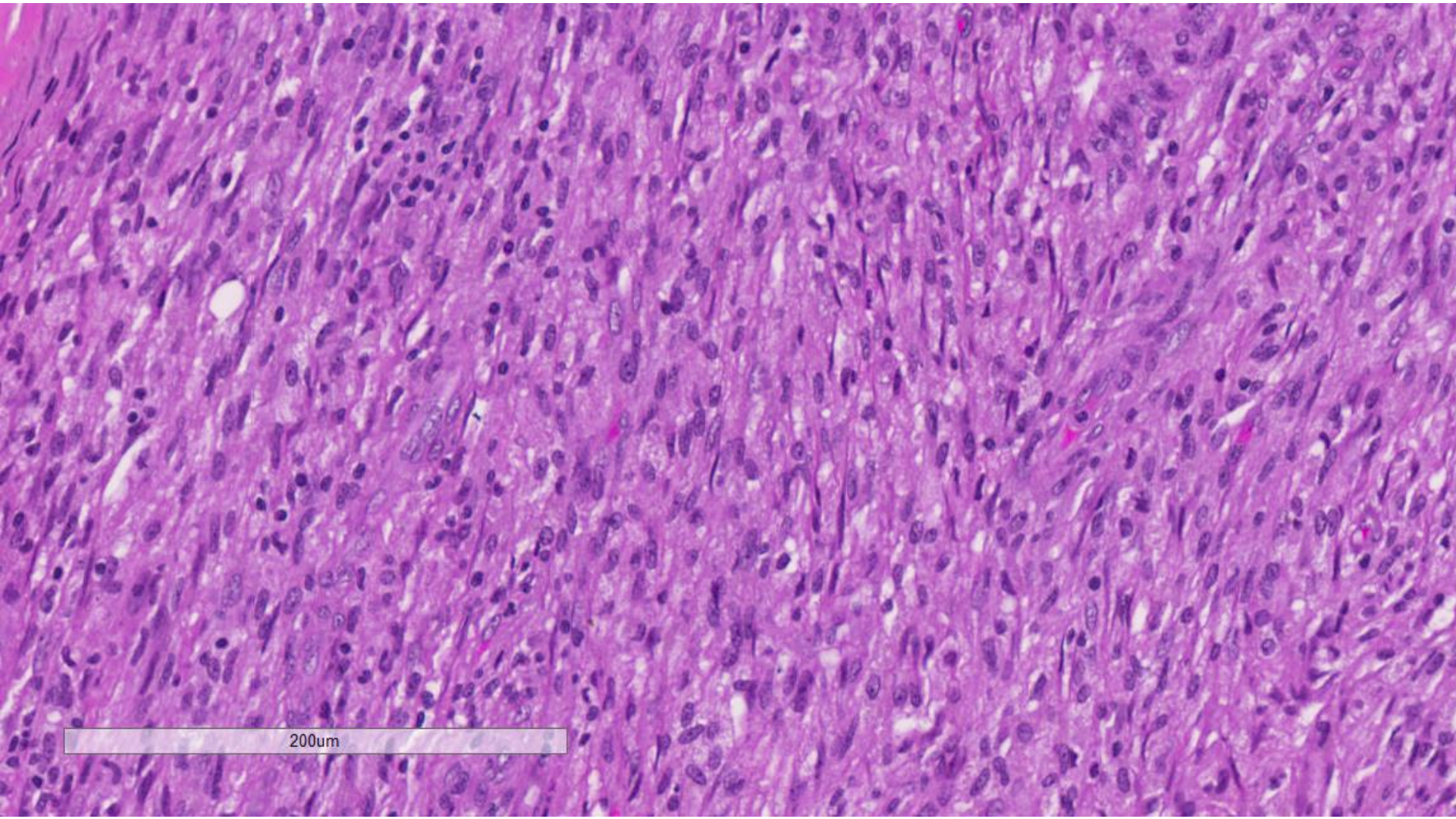

200um


200um


300um


200um


200um


200um

Phyllodes tumour, borderline

Table 11.01 Histological features of fibroadenoma, benign, borderline and malignant phyllodes tumours

Histological feature	Fibroadenoma	Phyllodes tumour		
		Benign	Borderline	Malignant[a]
Tumour border	Well-defined	Well-defined	Well-defined, may be focally permeative	Permeative
Stromal cellularity	Variable, scanty to uncommonly cellular, usually uniform	Cellular, usually mild, may be non-uniform or diffuse	Cellular, usually moderate, may be non-uniform or diffuse	Cellular, usually marked and diffuse
Stromal atypia	None	Mild or none	Mild or moderate	Marked
Mitotic activity	Usually none, rarely low	Usually few (< 5 per 10 HPF)	Usually frequent (5–9 per 10 HPF)	Usually abundant (≥ 10 per 10 HPF)
Stromal overgrowth	Absent	Absent	Absent, or very focal	Often present
Malignant heterologous elements	Absent	Absent	Absent	May be present
Distribution relative to all breast tumours	Common	Uncommon	Rare	Rare
Relative proportion of all phyllodes tumours	—	60–75%	15–20%	10–20%

HPF, high-power fields.

[a] While these features are often observed in combination, they may not always be present simultaneously. Presence of a malignant heterologous element qualifies designation as a malignant phyllodes tumour, without requirement for other histological criteria.

WHO Classification of Tumours of the Breast 4th edition 2012

Phyllodes tumour

- Fibroepithelial neoplasm with benign, borderline and malignant categories.
- Borderline grade is based on moderate stromal hypercellularity and the permeative borders.

(need to distinguish truly permeative borders from reparative/reactive fibroblastic and granulation tissue resulting from prior core biopsy)


Core biopsy site mimicking
a permeative border

Core biopsy site

- Fat necrosis.
- Granulation tissue.
- Haemorrhage.
- Haemosiderin deposits.
- Inflammatory cells
- Fibrous scarring.