

## Case 31

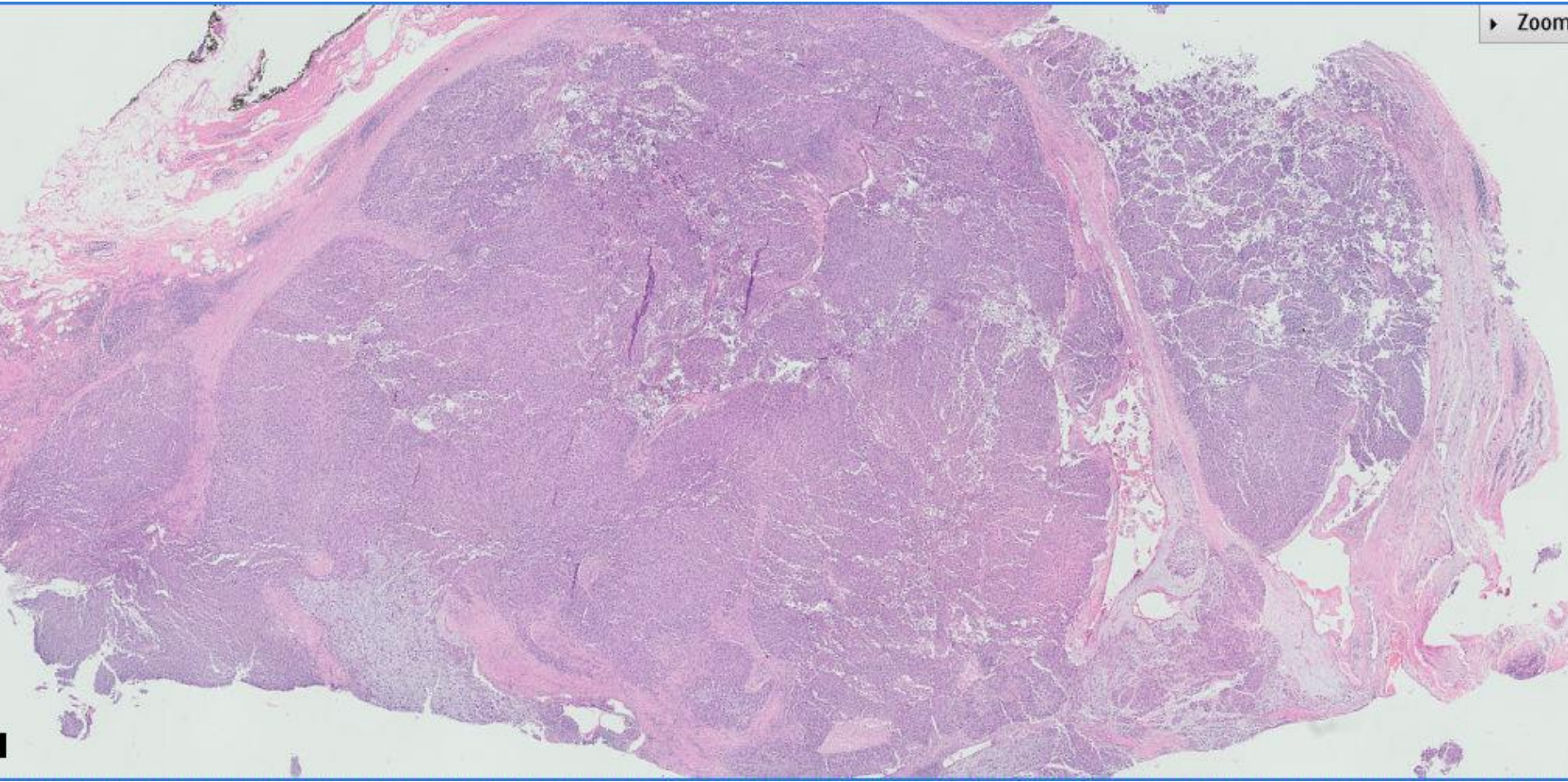
46 year old woman with a left breast lesion.

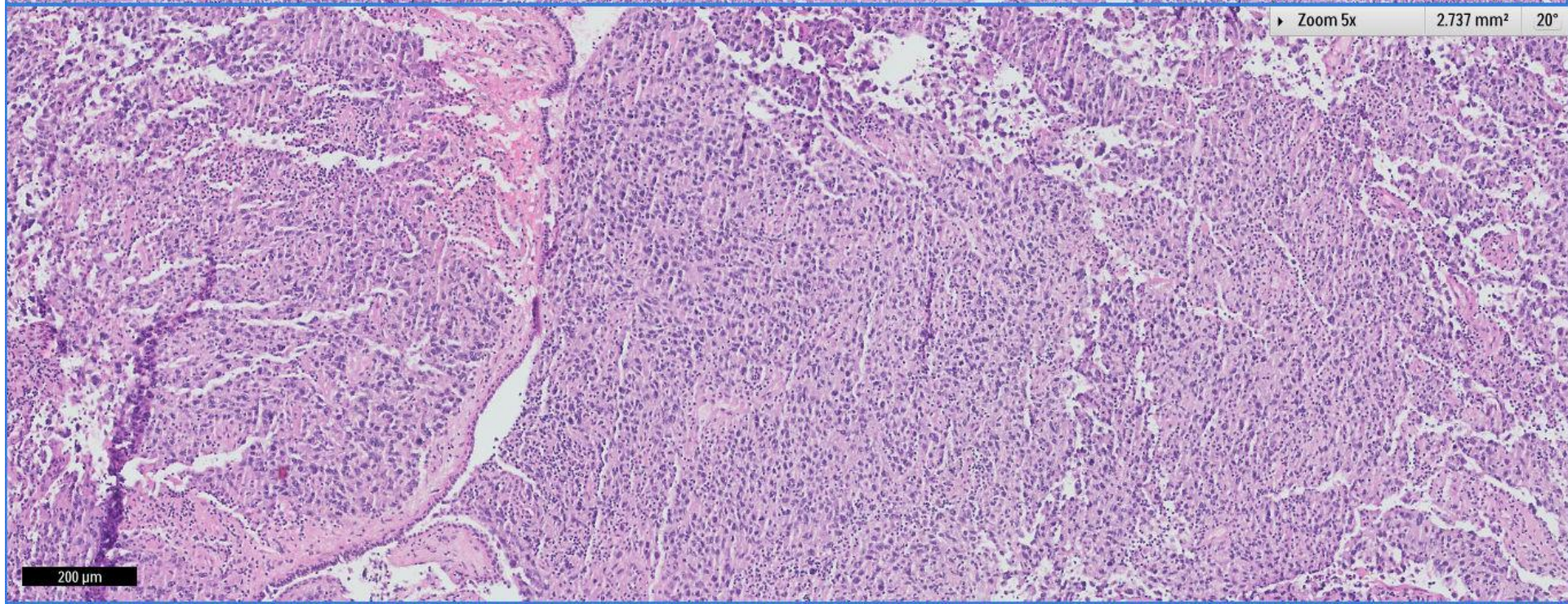
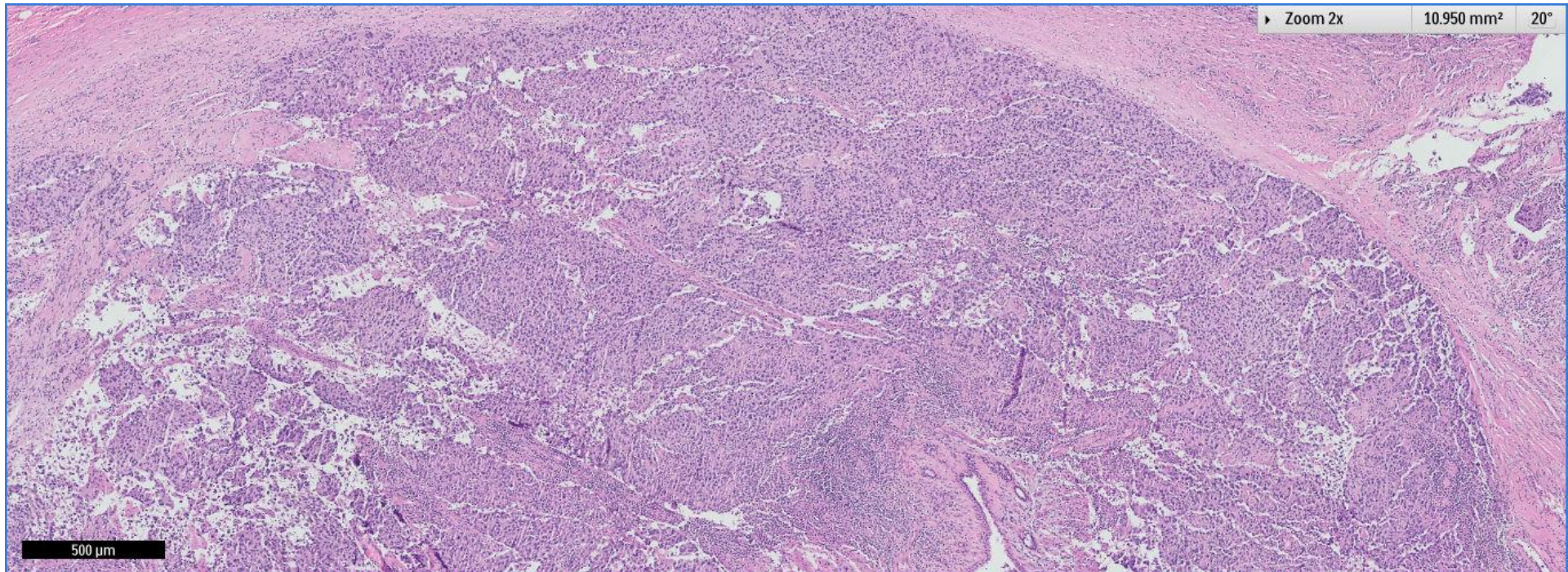
An ultrasound guided core biopsy was diagnosed as an invasive carcinoma with medullary features.

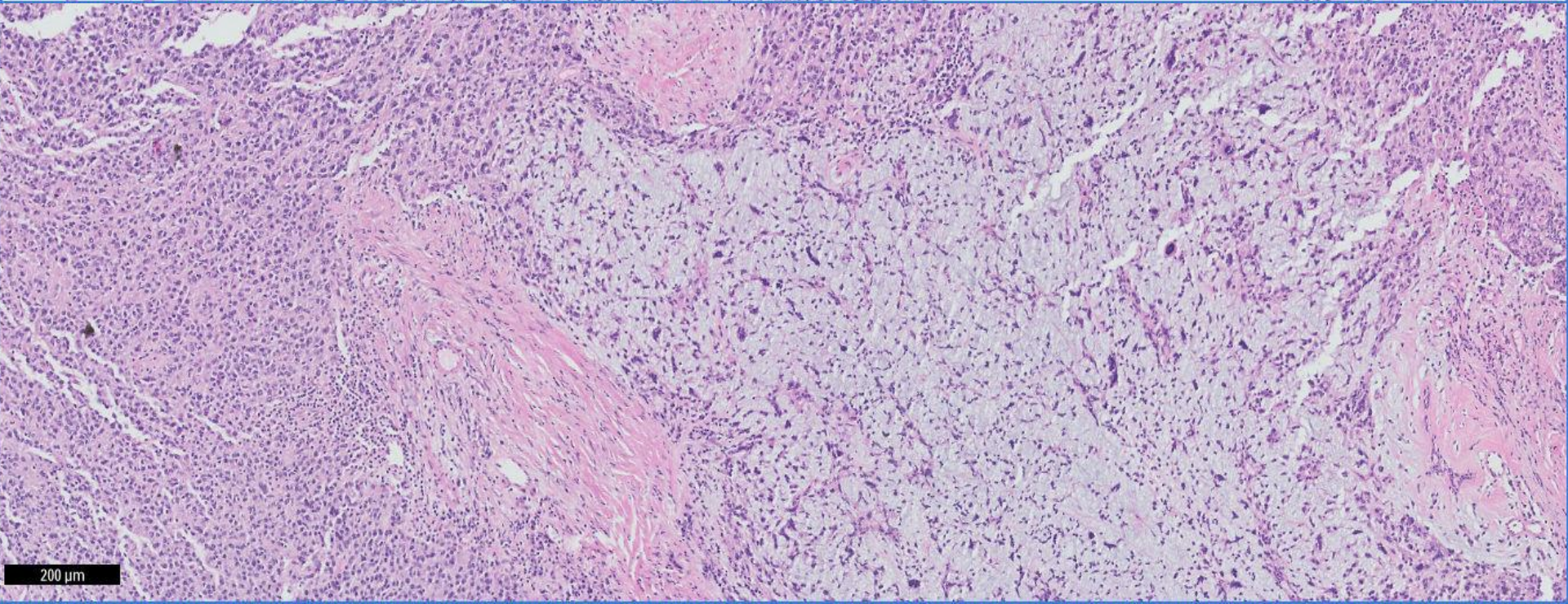
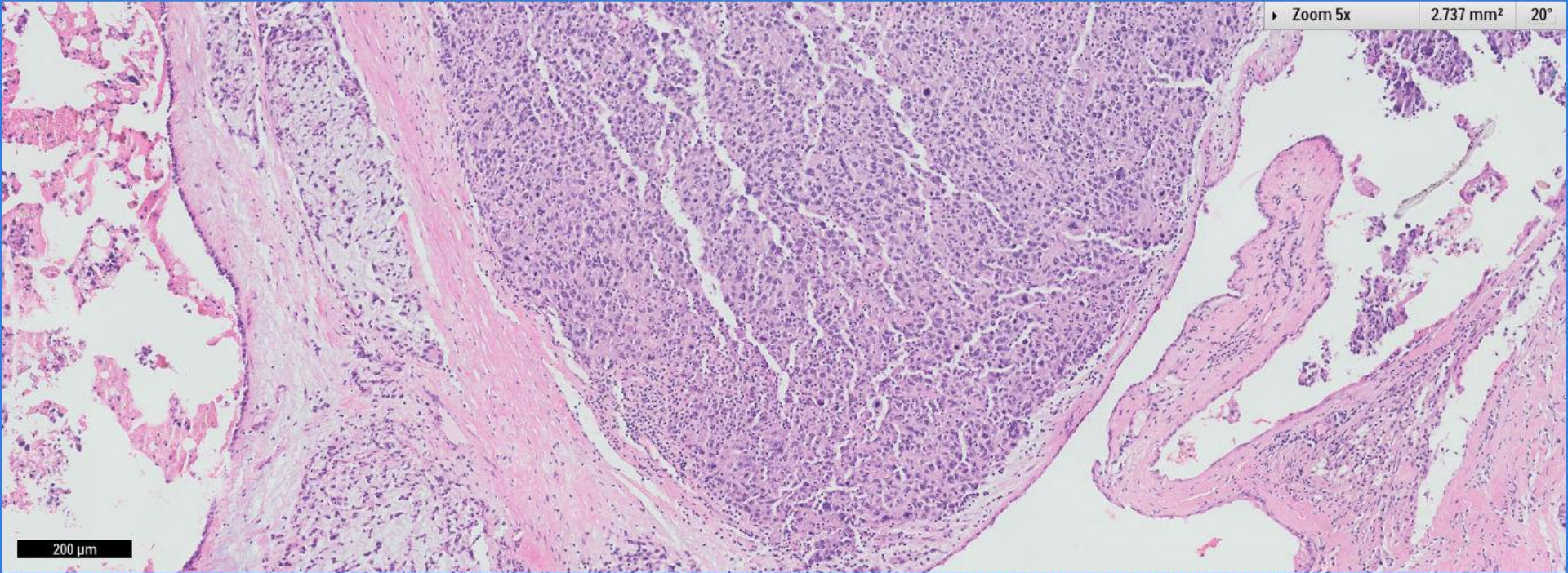
She consulted another surgeon who carried out a frozen section and wide excision of the breast lesion, intraoperatively reported as a malignant phyllodes tumour. Current slide is from the wide excision.

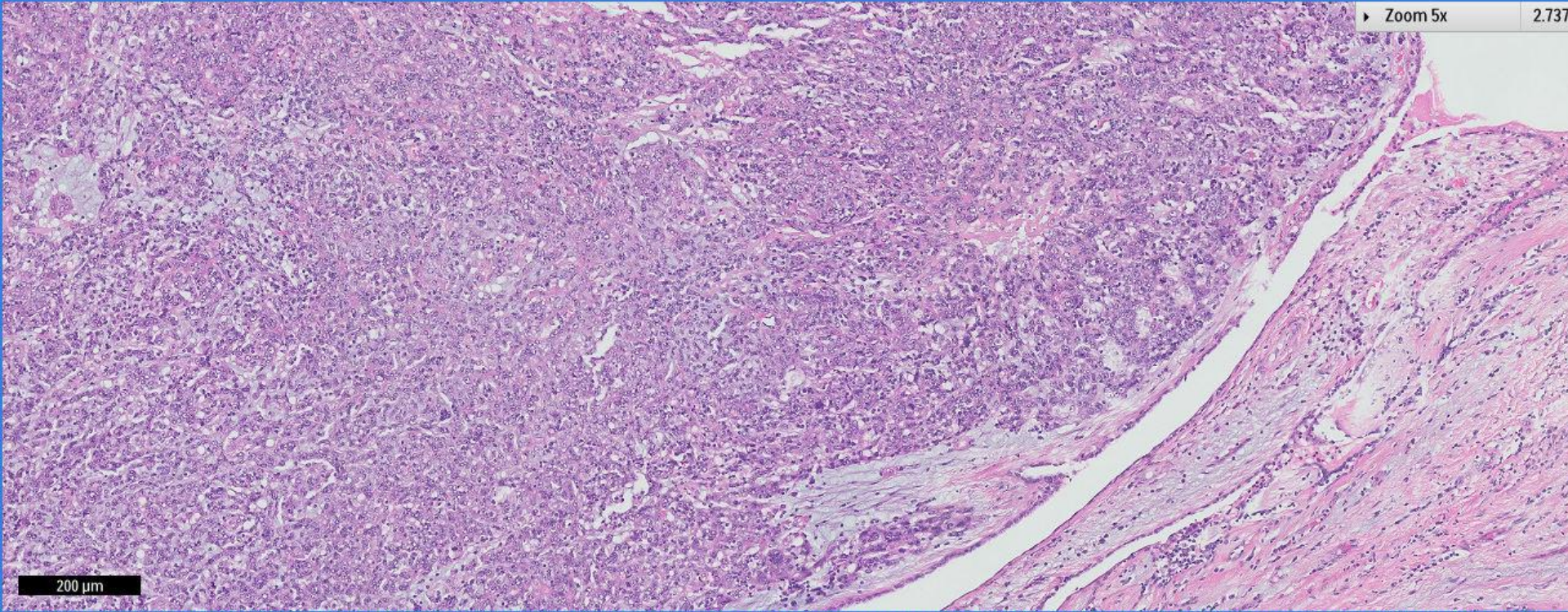
*(Case contributed by Dr Anjula Thomas, Parkway Laboratories)*

► Zoom

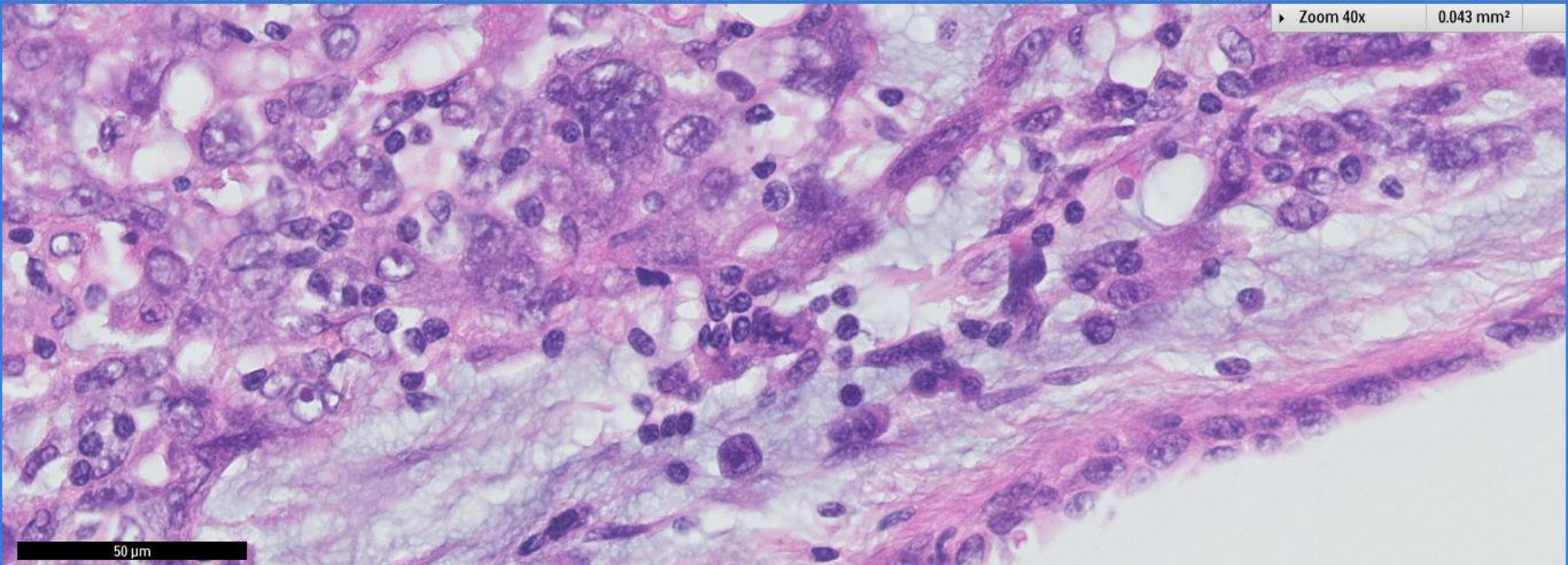








200 μm

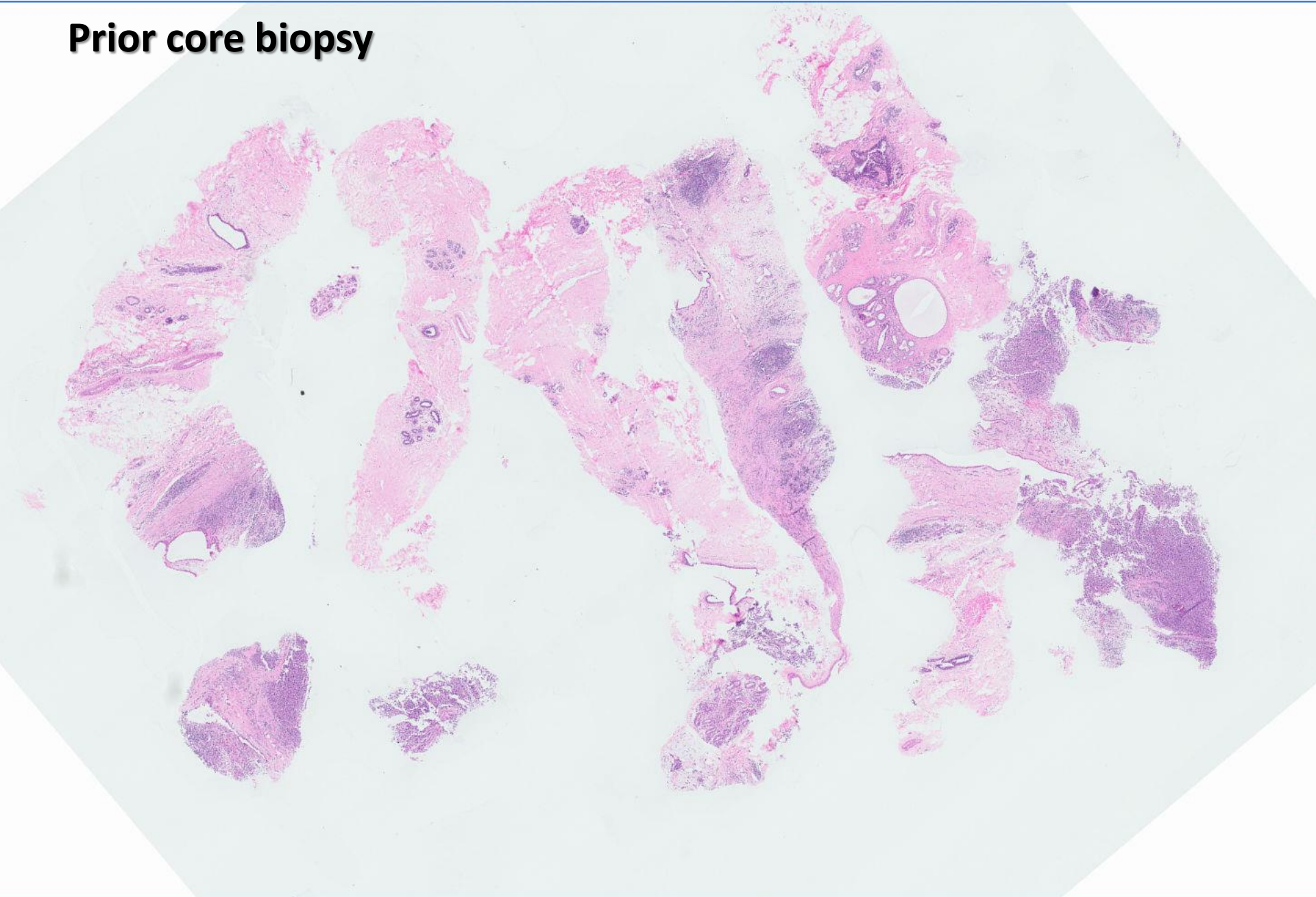


50 μm



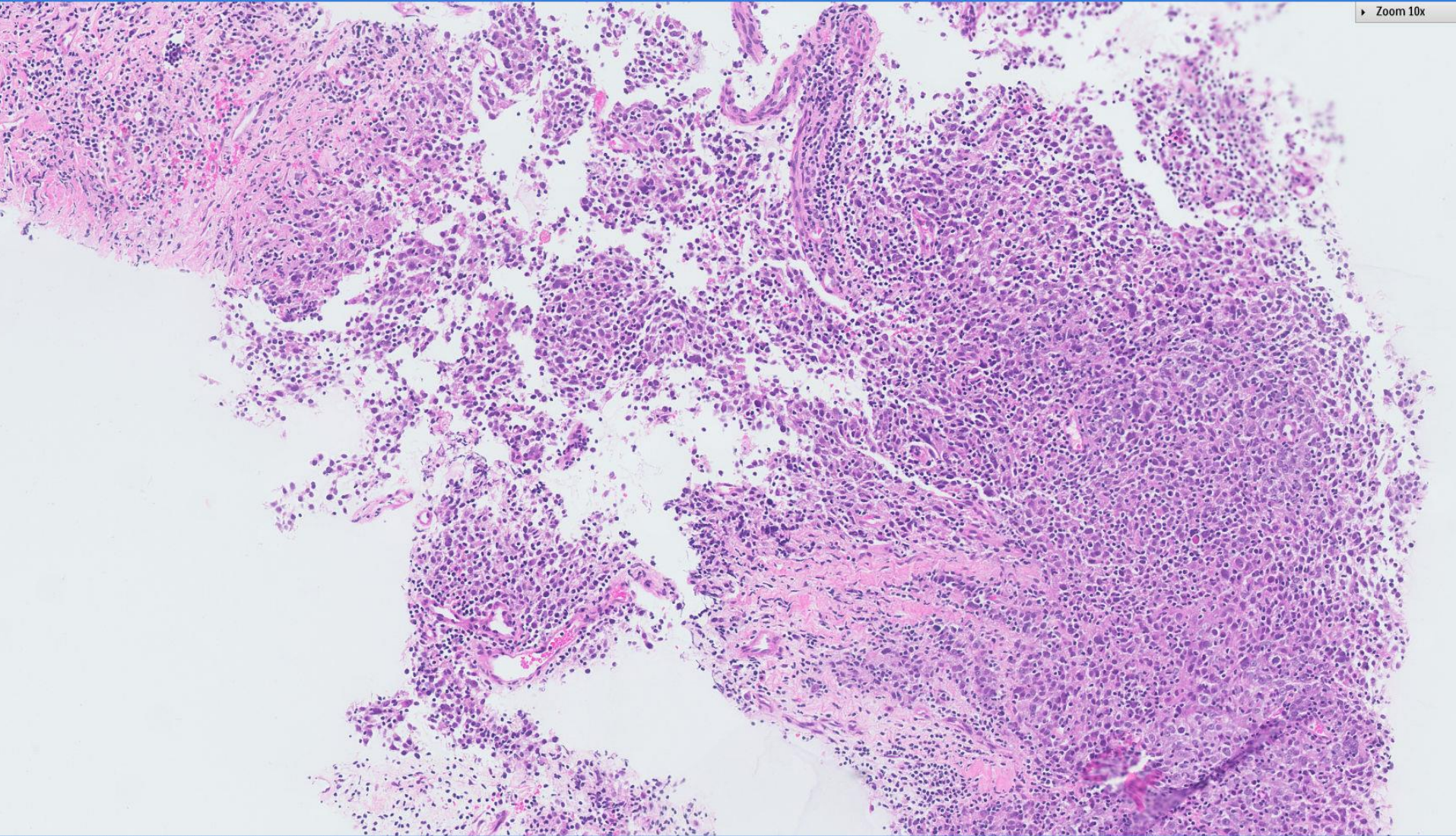
*Singapore  
Botanic  
Gardens*

# Prior core biopsy



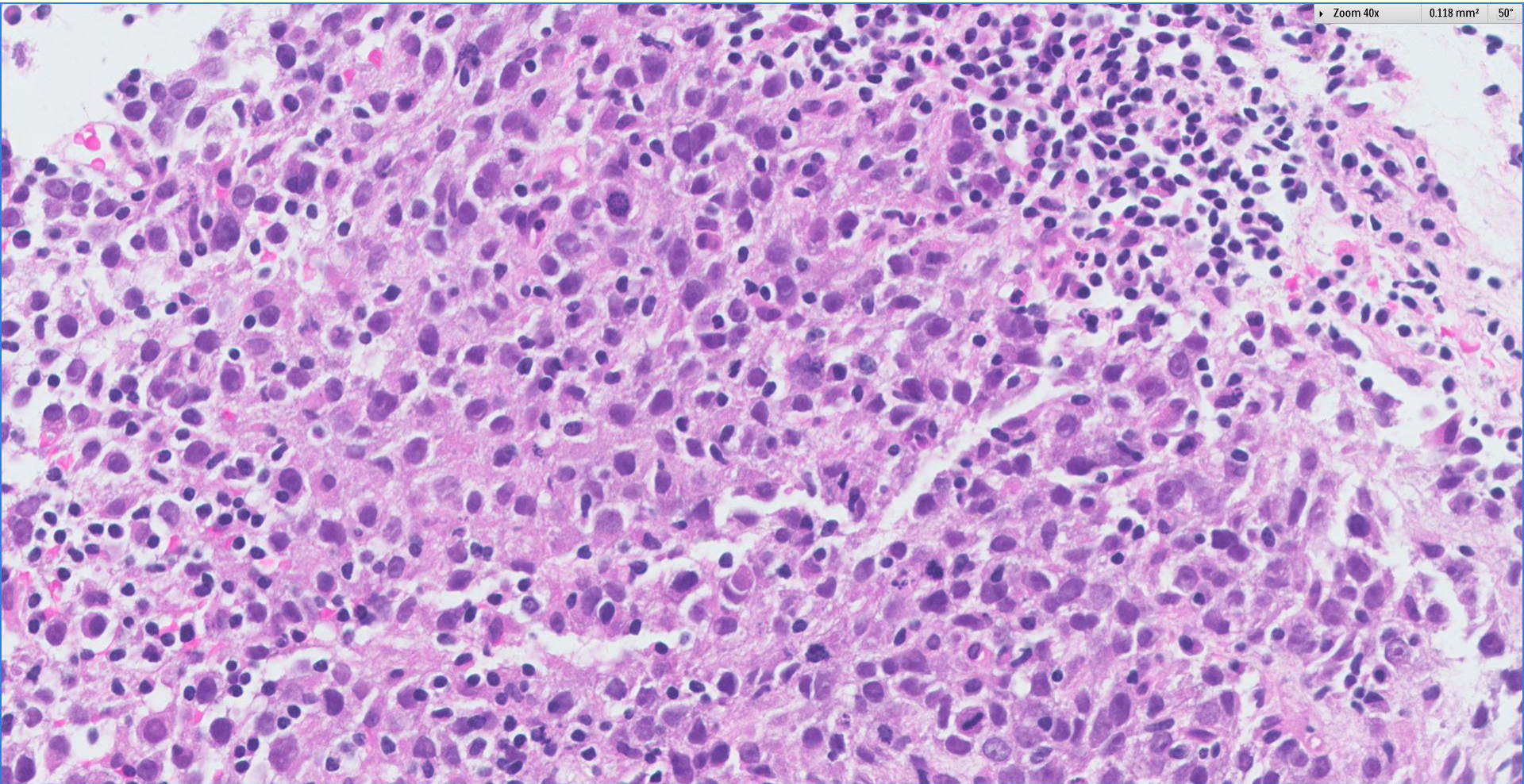
# Prior core biopsy

► Zoom 10x

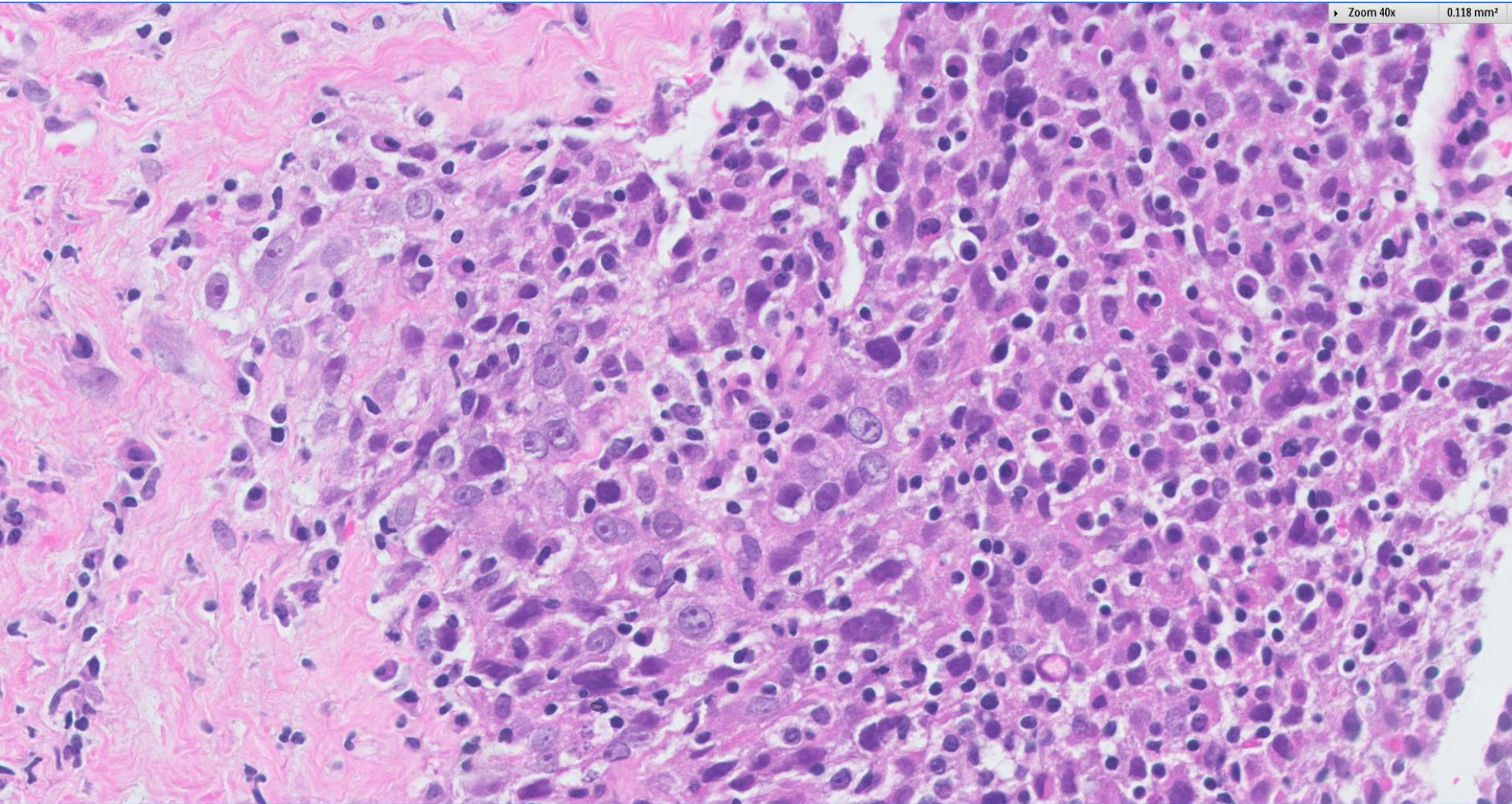




# Prior core biopsy

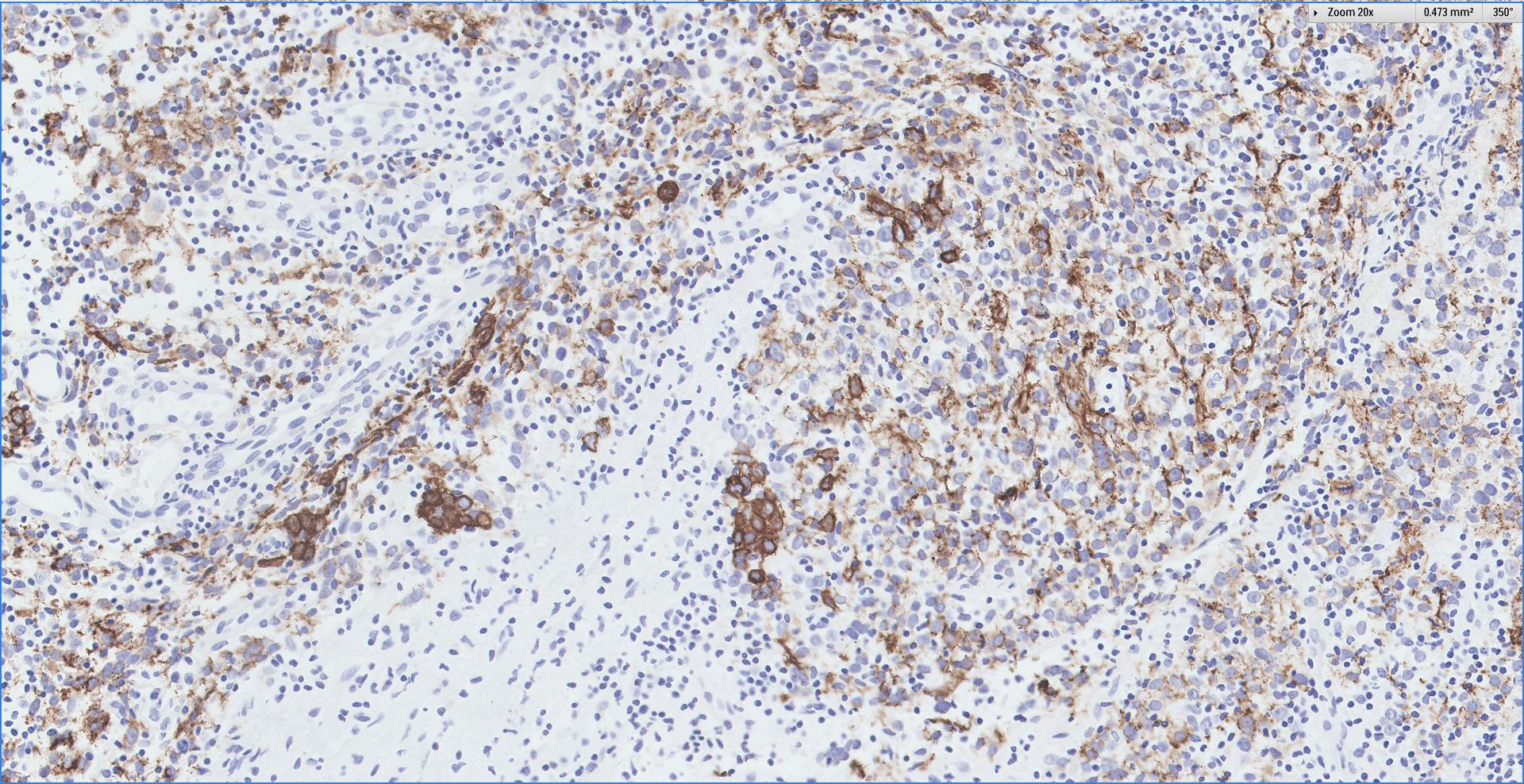


# Prior core biopsy



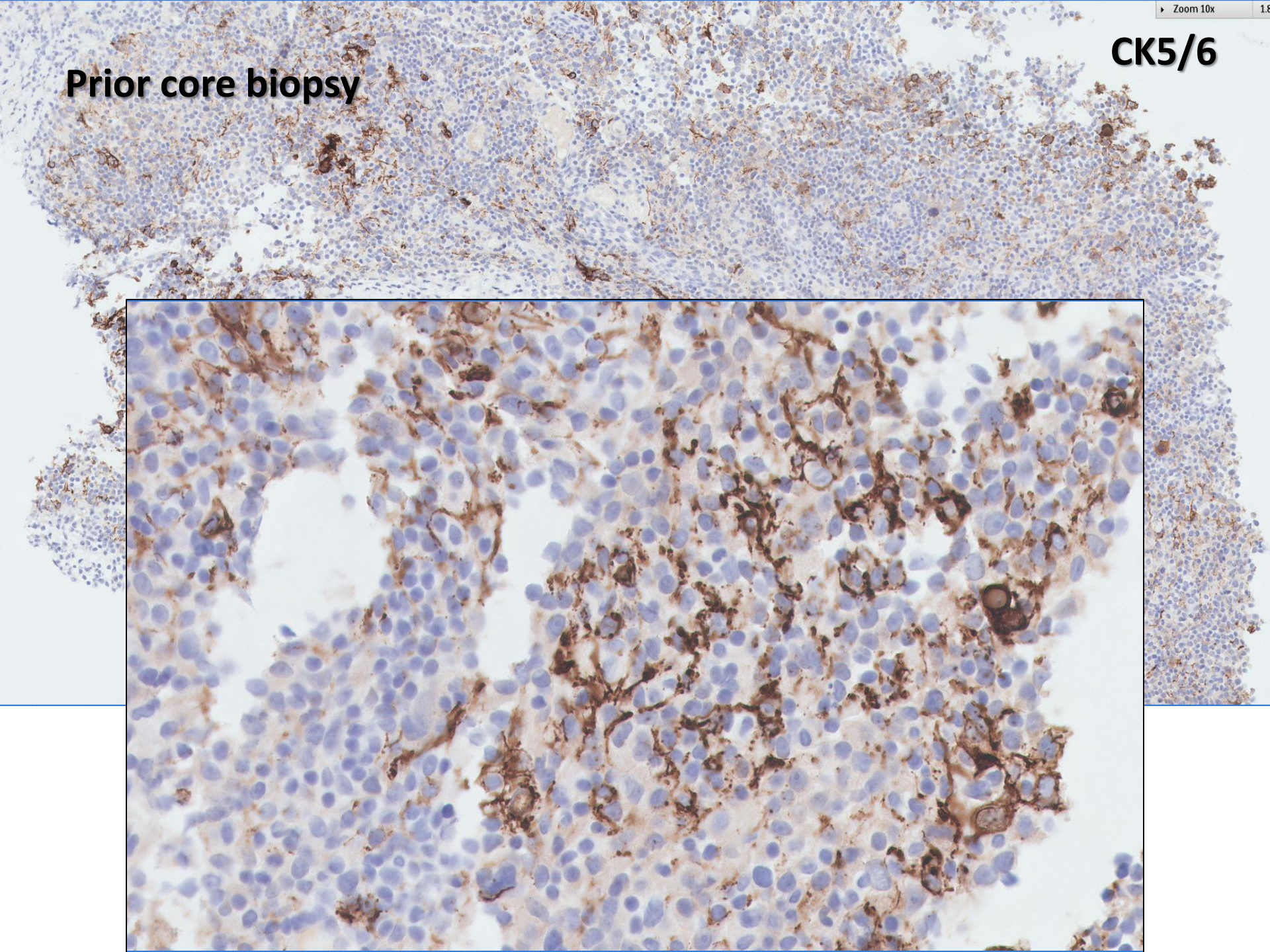
**MNF116**

**Prior core biopsy**



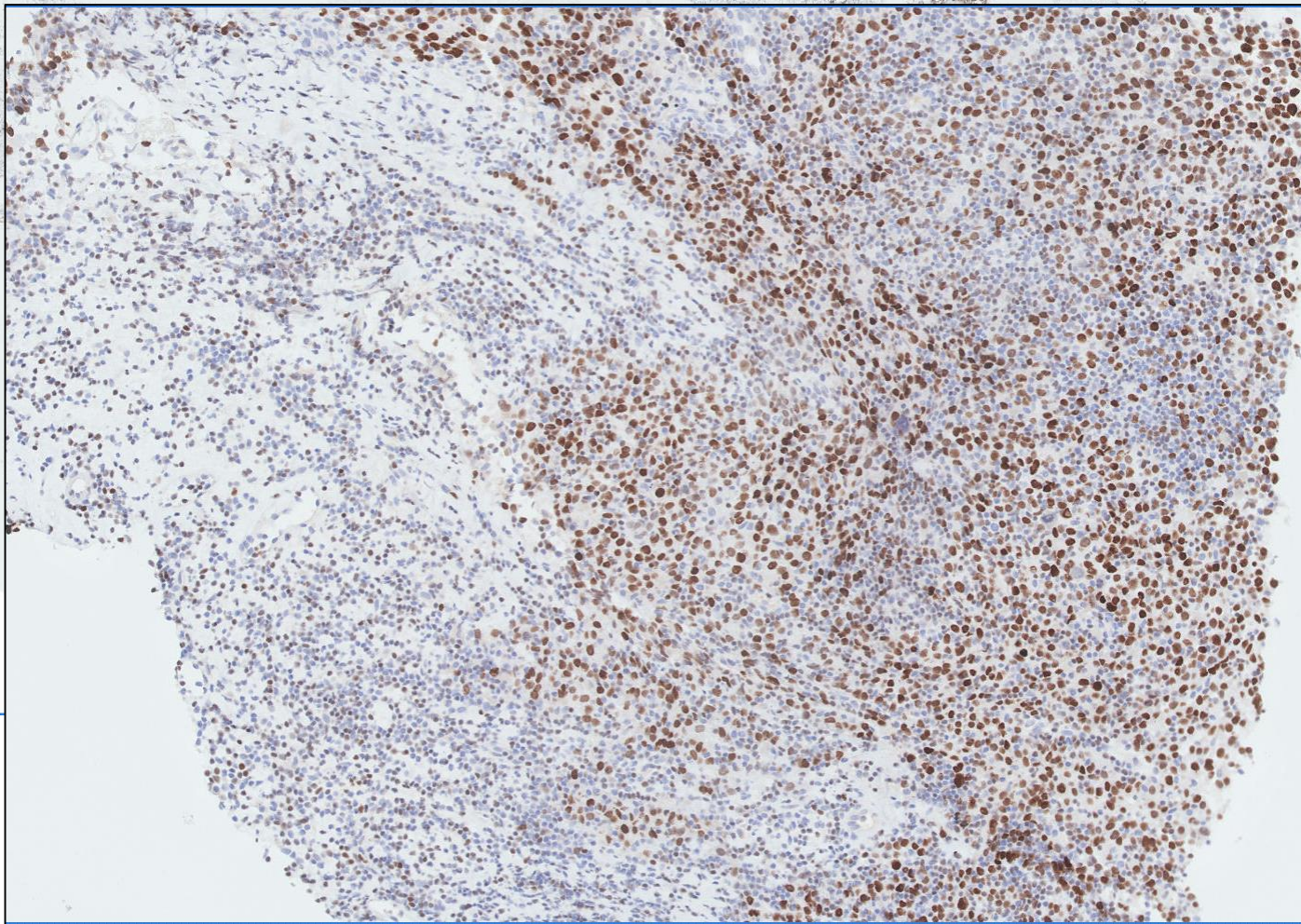
CK5/6

Prior core biopsy

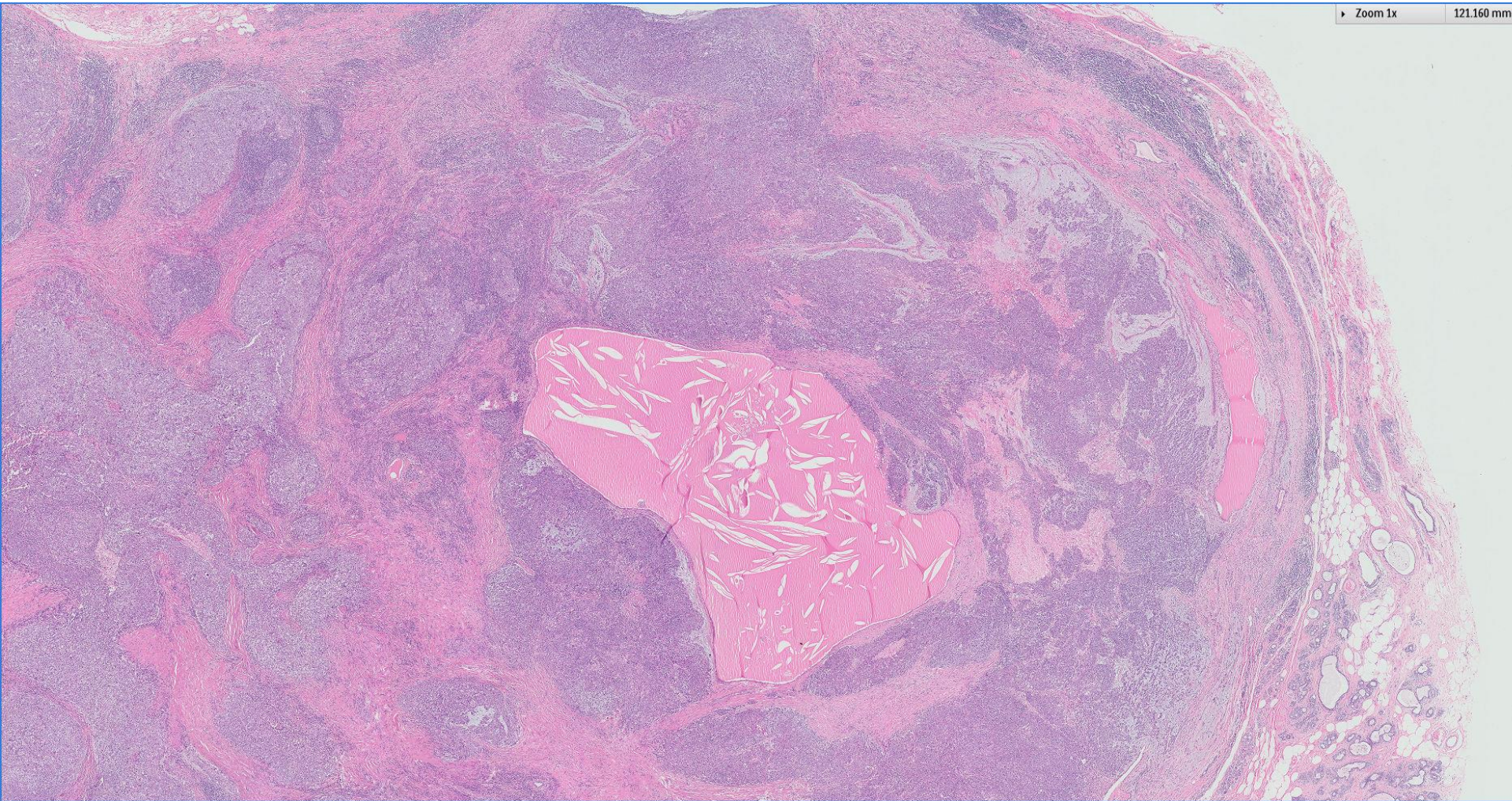


**Prior core biopsy**

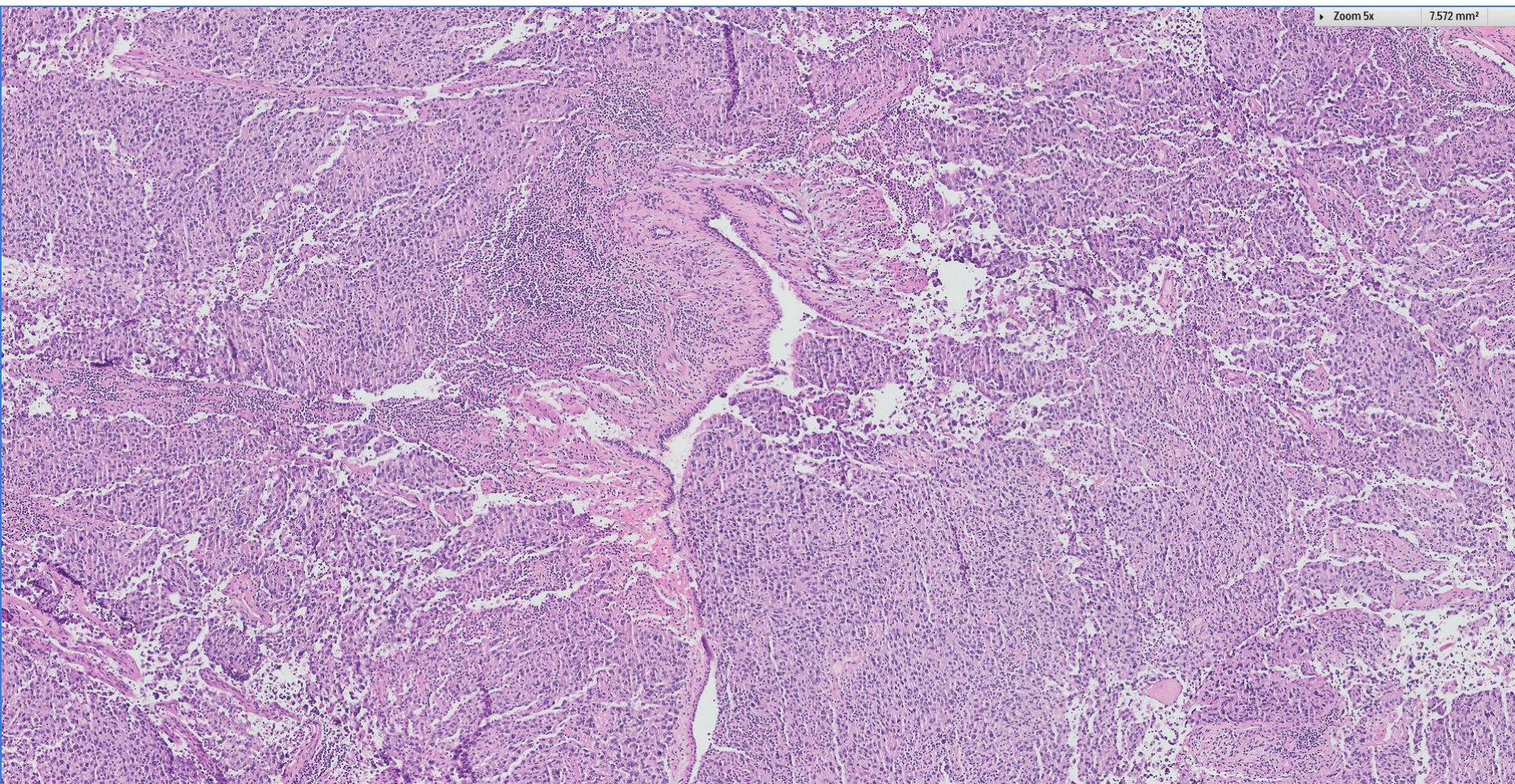
**GATA3**



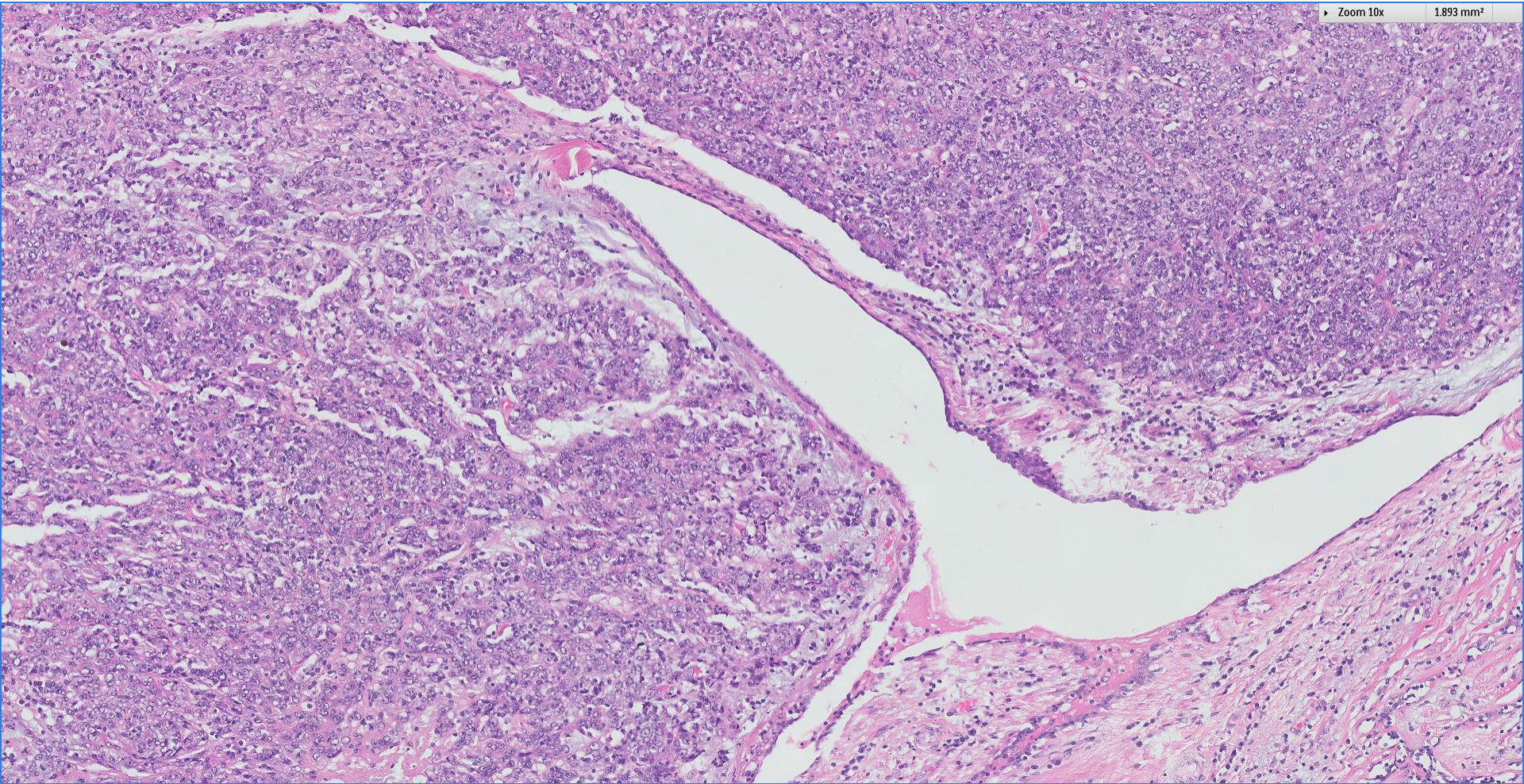
# Wide excision



# Wide excision

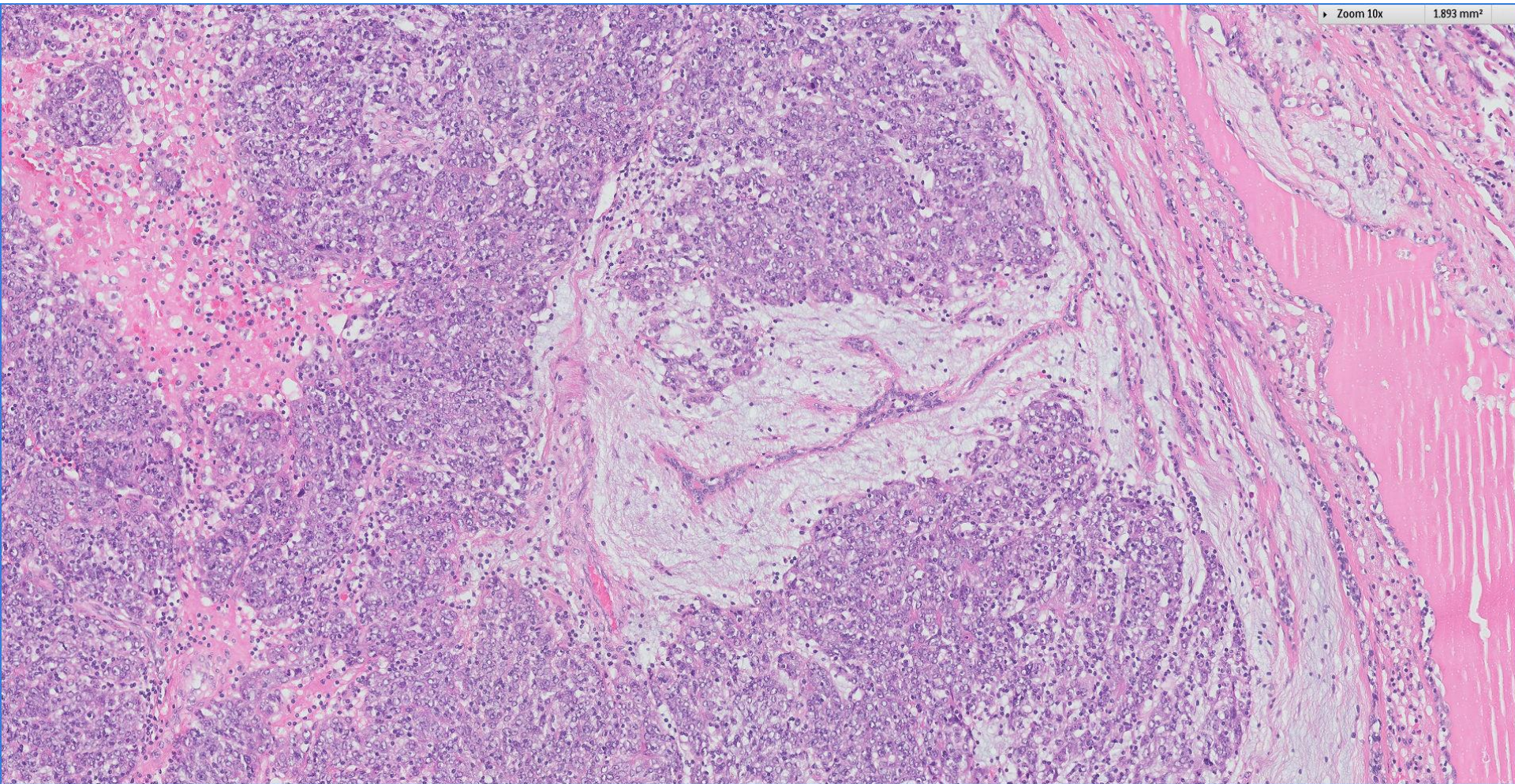


# Wide excision

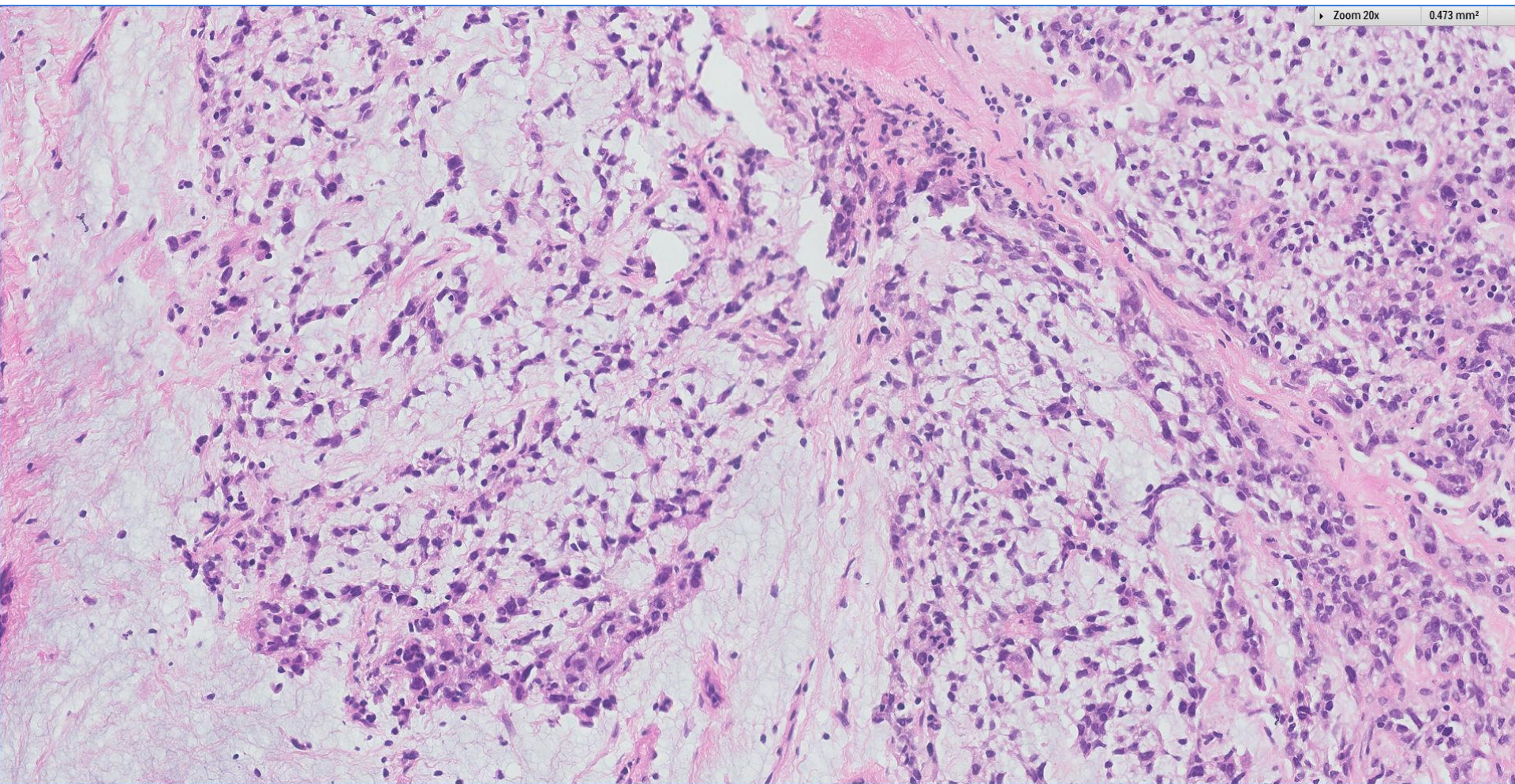




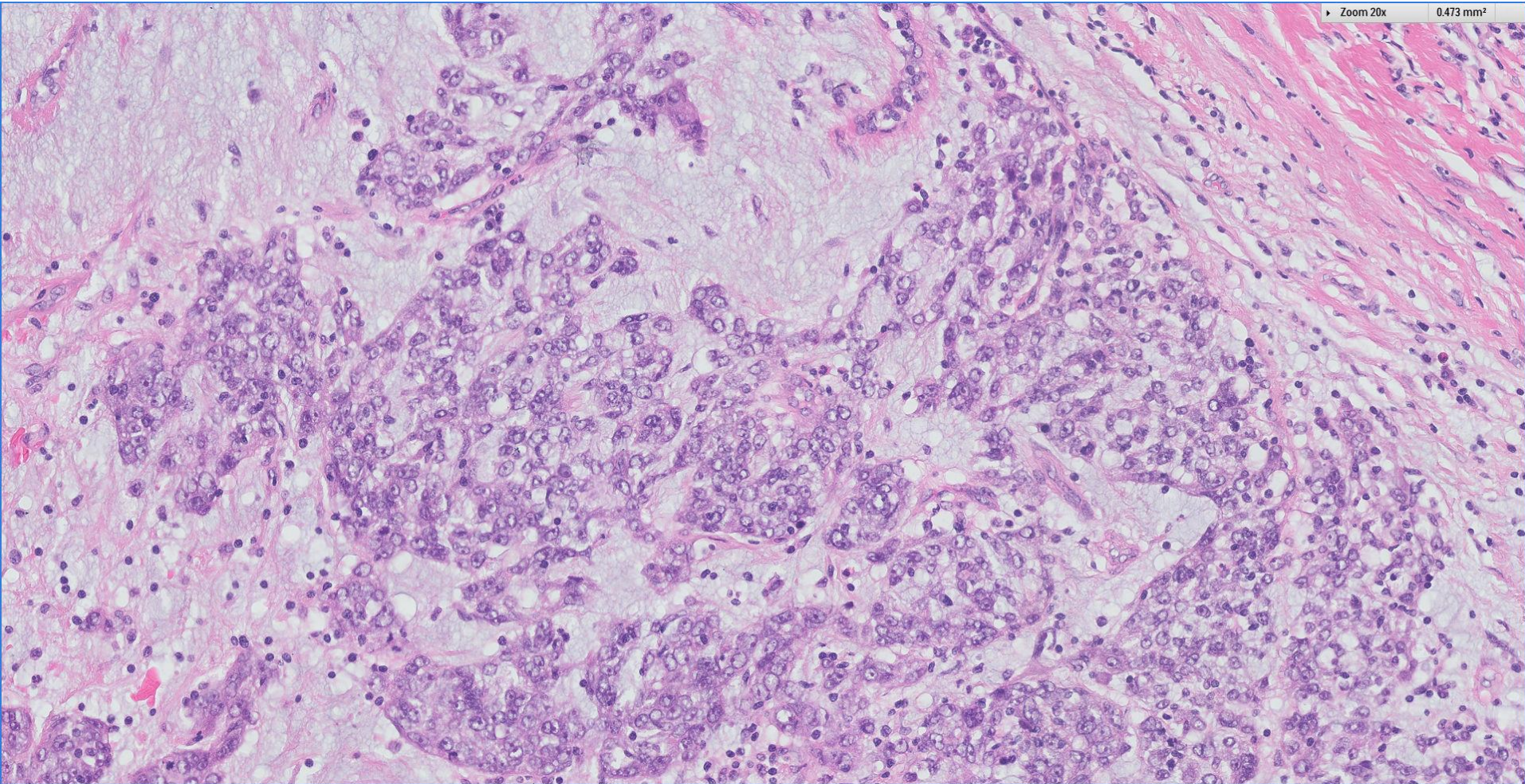
# Wide excision



# Wide excision



# Wide excision



**Immunohistochemistry shows positive staining of tumour cells for CK7, Cam5.2  
ER negative, PR negative, cerbB2 negative**

# Diagnosis

Left breast lump, wide excision ~

***Infiltrative ductal carcinoma, grade 3, 3cm***

***Involving a fibroepithelial lesion.***

***Focal matrix producing areas suggesting a metaplastic component.***



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# Carcinoma in fibroepithelial lesions

- In situ and invasive carcinoma can be encountered in fibroadenomas and phyllodes tumours.
- Carcinoma may arise in adjacent tissue and extend into the fibroepithelial lesions, or originate within the epithelial compartment of the fibroepithelial neoplasms.
- Both ductal and lobular subtypes may be seen.

# Breast carcinoma and phyllodes tumour: a case series

*J Clin Pathol 2016; 69:364-9*

**Table 1** Characteristics of patients in our cohort

No.	Age	Clinical presentation	History	Radiological findings	Core biopsy	Histology on biopsy or initial surgery	PT type	Size of PT (mm)	Associated carcinoma	Surgery	Adjuvant therapy
<i>Carcinoma within the PT</i>											
1	43	Right breast lump of 1 month	Nil	Not available	Yes	Fibroepithelial lesion with epithelial hyperplasia	Borderline	50	DCIS with a small focus of IDC (4 mm in total)	Mastectomy and axillary clearance	Tamoxifen
2	45	Recurrent left breast lump of 1 month	Right breast IDC at age 32 Left BDPT at age 42	Well-defined and lobulated mass at previous scar	No	Recurrent BDPT with DCIS	Borderline	50	DCIS (5 mm)	Mastectomy, axillary sampling with breast reconstruction	None
3	46	Recurrent left breast lump at old scar for 1 year	Left breast BPT at age 39	Lobulated mass with increased vascularity at previous scar	No	Recurrent BDPT with IDC, DCIS and LCIS	Borderline	70	Multiple foci of IDC (largest 3 mm) Multiple foci of DCIS and LCIS (figure 3)	Mastectomy and sentinel lymph node biopsy	Tamoxifen
4	44	Left breast lump of 1 month	Nil	Ill-defined opacity with spiculated posterior margin	Yes	Fibroepithelial lesion favouring a fibroadenoma	Borderline	30	LCIS and ADH	Excision biopsy*	None
5	45	Increase in size of a left breast lump of 23 years	Nil	Not available	No	–	Malignant	120	DCIS (6 mm)	Mastectomy	None
6	48	Left breast lump of 3 months	Nil	Well defined nodule with increased vascularity	No	MPT with LCIS	Malignant	50	LCIS	Wide excision	None
<i>Carcinoma and PT coexisting as separate lesions</i>											
7	63	Right breast lump of 1 month	Nil	Well-marginated heterogeneous mass with calcifications Two incidental irregular solid masses with ill-defined margins	Yes	Fibroepithelial lesion favouring BPT DCIS	Benign	30	DCIS (30 mm)	Mastectomy and sentinel lymph node biopsy	None
8	53	Left breast lump of 2 months	Nil	Two nodular masses and a separate cluster of micro-calcifications (figures 1 and 2)	Yes	Fibroepithelial lesion and lobular neoplasia	Benign	23	Pleomorphic LCIS (figure 4)	Mastectomy and sentinel lymph node biopsy	None
9	72	Right: Increase in size of a lump of 10 years Left: bloody nipple discharge	Nil	Right: large ill-defined mass occupying entire breast with dystrophic calcification Left: Small spiculated nodules	Yes	Right: breast tissue with cellular stroma Left: IDC	Borderline	100	ILC (1 mm) associated with a FA; LCIS (3 mm) Left: IDC (15 mm)	Bilateral mastectomy and sentinel lymph node biopsy	None
10	65	Left breast lump of 2 months	Nil	Macrolobulated and heterogeneous mass with ill-defined margins; enlarged axillary lymph nodes	Yes	Breast: Fibroepithelial lesion Axilla: Atypical apocrine cells	Borderline	50	Axillary apocrine carcinoma	Breast wide excision axillary clearance	None

\*Patient declined further surgery.

ADH, atypical ductal hyperplasia; BDPT, borderline phyllodes tumour; BPT, benign phyllodes tumour; DCIS, ductal carcinoma in situ; FA, fibroadenoma; IDC, invasive ductal carcinoma; ILC, invasive lobular carcinoma; LCIS, lobular carcinoma in situ; MPT, malignant phyllodes tumour; PT, phyllodes tumour.

# Breast carcinoma and phyllodes tumour: a case series

*J Clin Pathol 2016; 69:364-9*

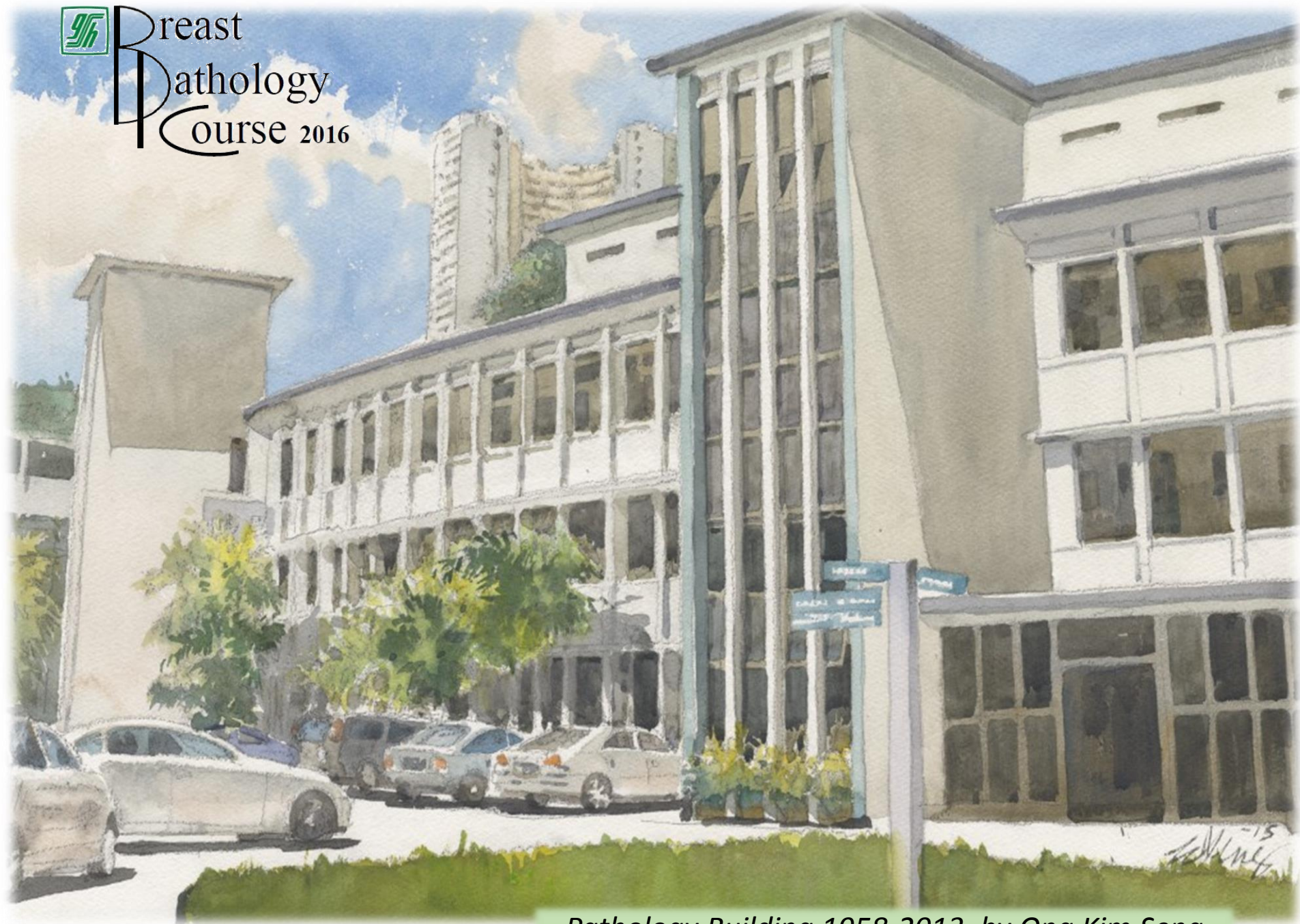
- ▶ Current approaches advocate the tailoring of treatment options to address the PT and carcinoma separately.
- ▶ Close examination of resected PT specimens must be carried out to determine the presence of concomitant carcinoma so that timely treatment can be undertaken.

# Spindle cell metaplastic carcinoma in fibroepithelial lesions

- May mimic malignant phyllodes tumour with the spindled metaplastic carcinoma cells resembling malignant stromal cells.
- Keratin immunohistochemistry can arbitrate, but need to be aware of focal keratin staining of the stromal component of some malignant phyllodes tumours.
- A wide panel of immunostains including high molecular keratins is advocated.



 Breast  
Pathology  
Course 2016



*Pathology Building 1958-2013, by Ong Kim Seng*