

Case 32

39 year old woman presented with a right breast lesion at the 2 o'clock position, located next to a breast implant which was otherwise intact.



Singapore
General Hospital

SingHealth

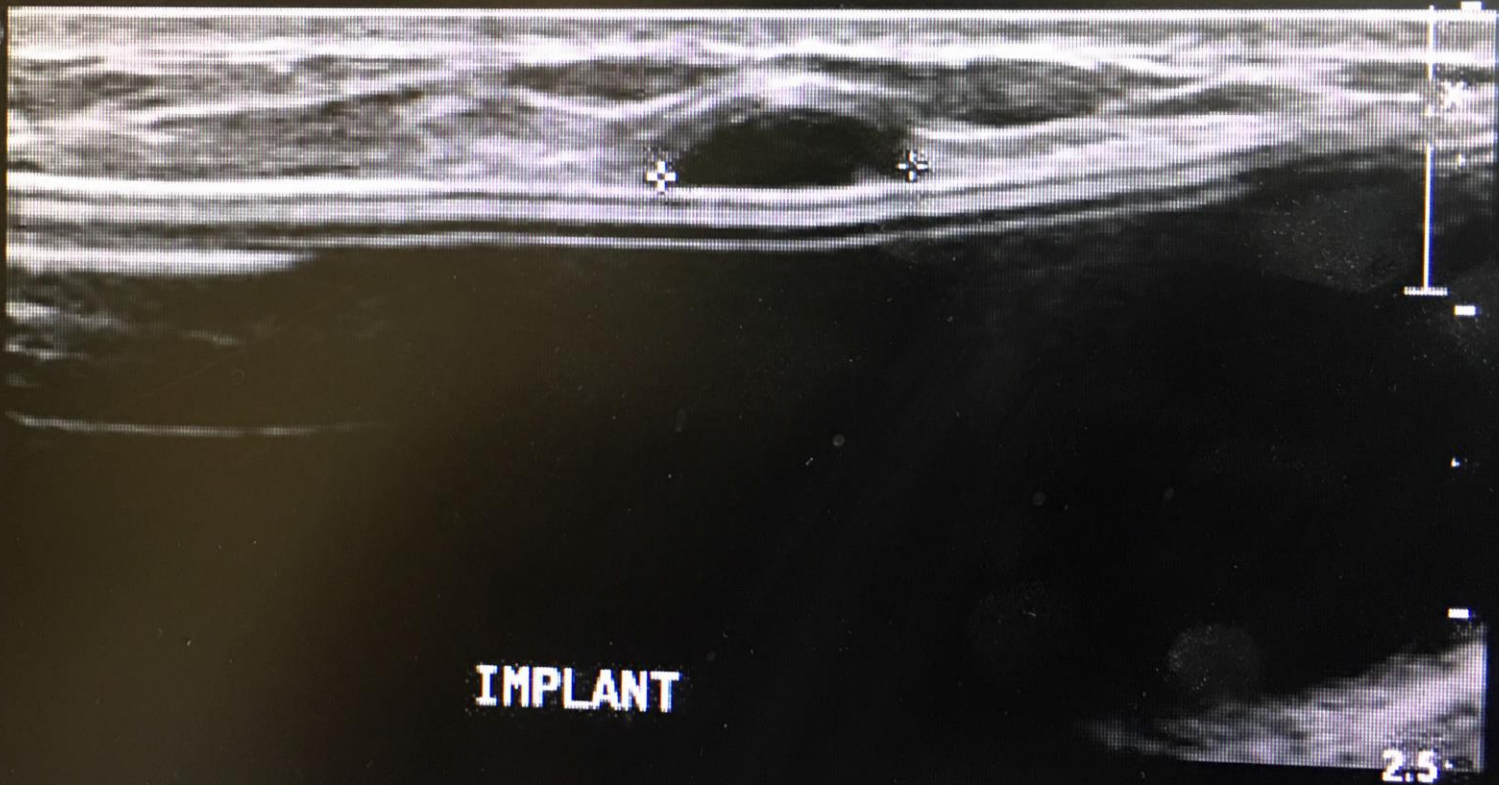
Division of Pathology



PATHOLOGY



1043907 (01.11)
RS
2D
52%
C 67
P Med
Res

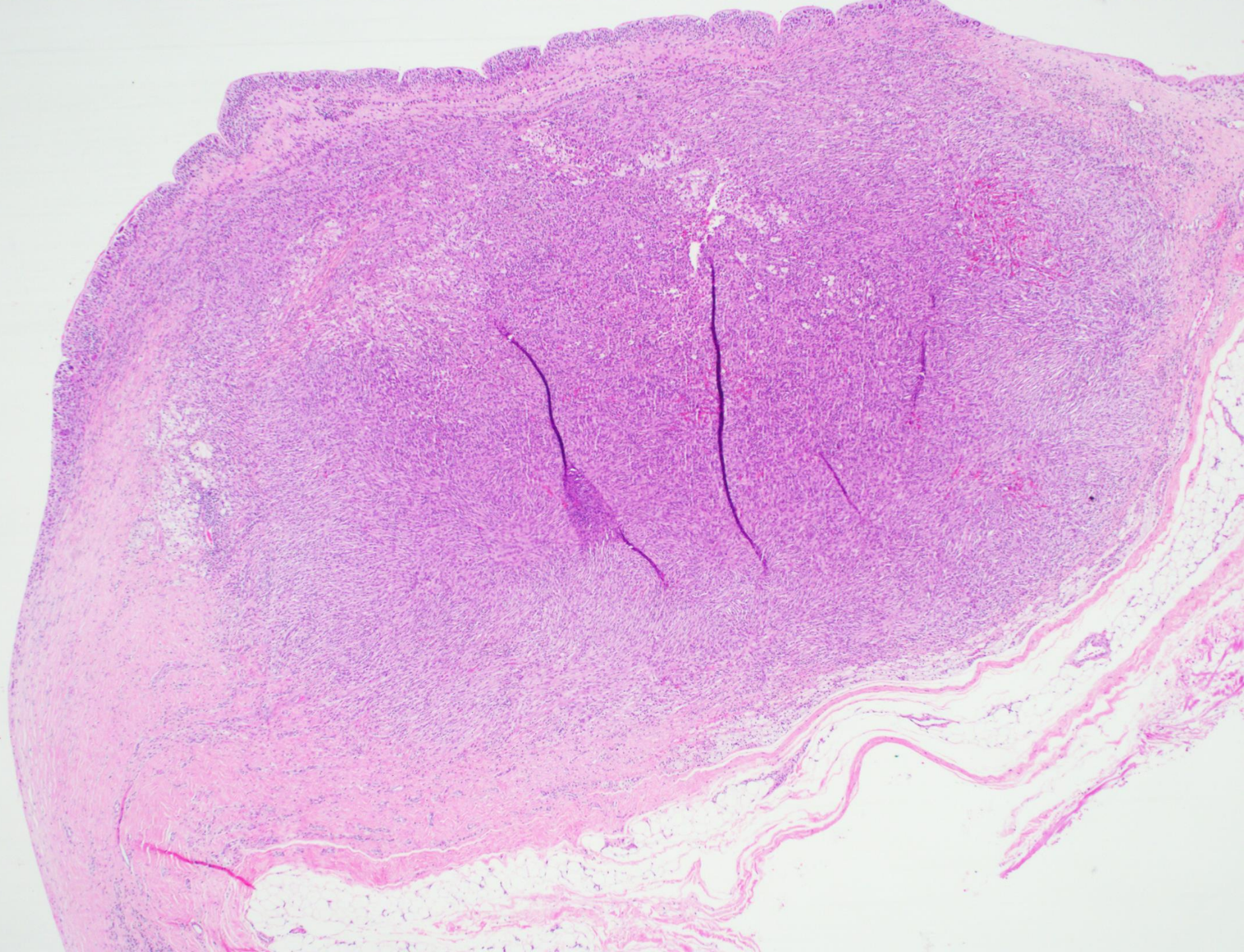


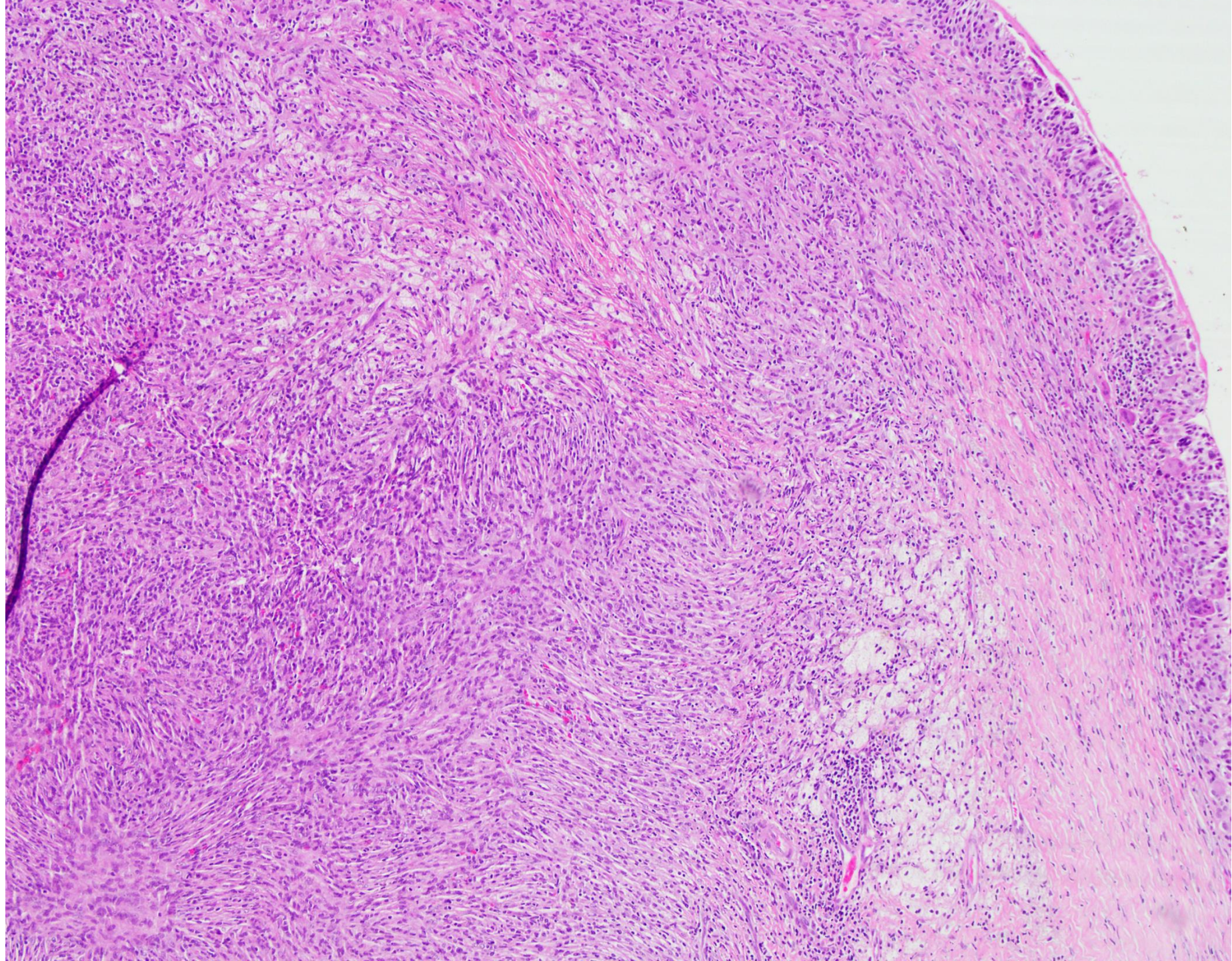
IMPLANT

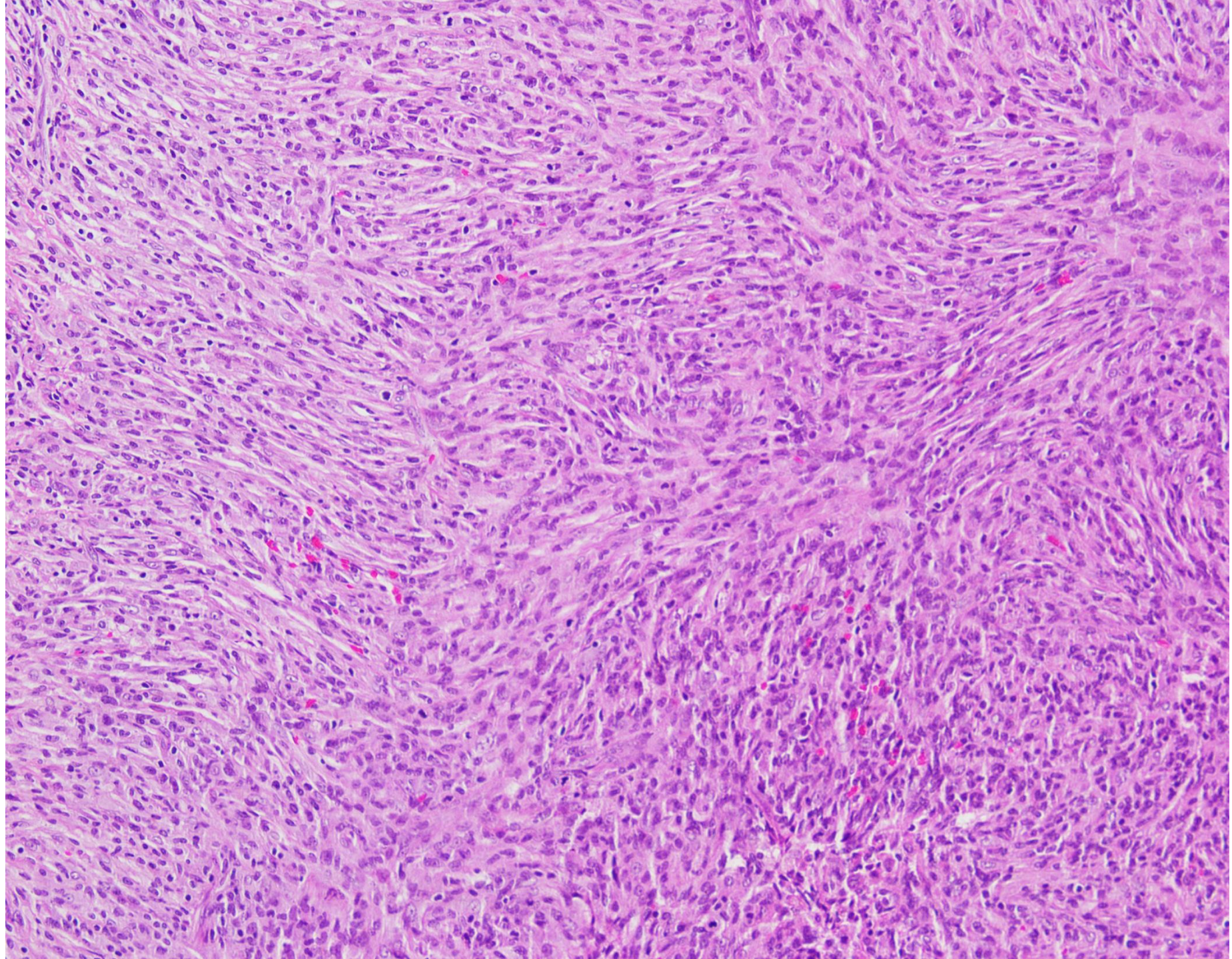
Right Breast
2:00 4CMFN

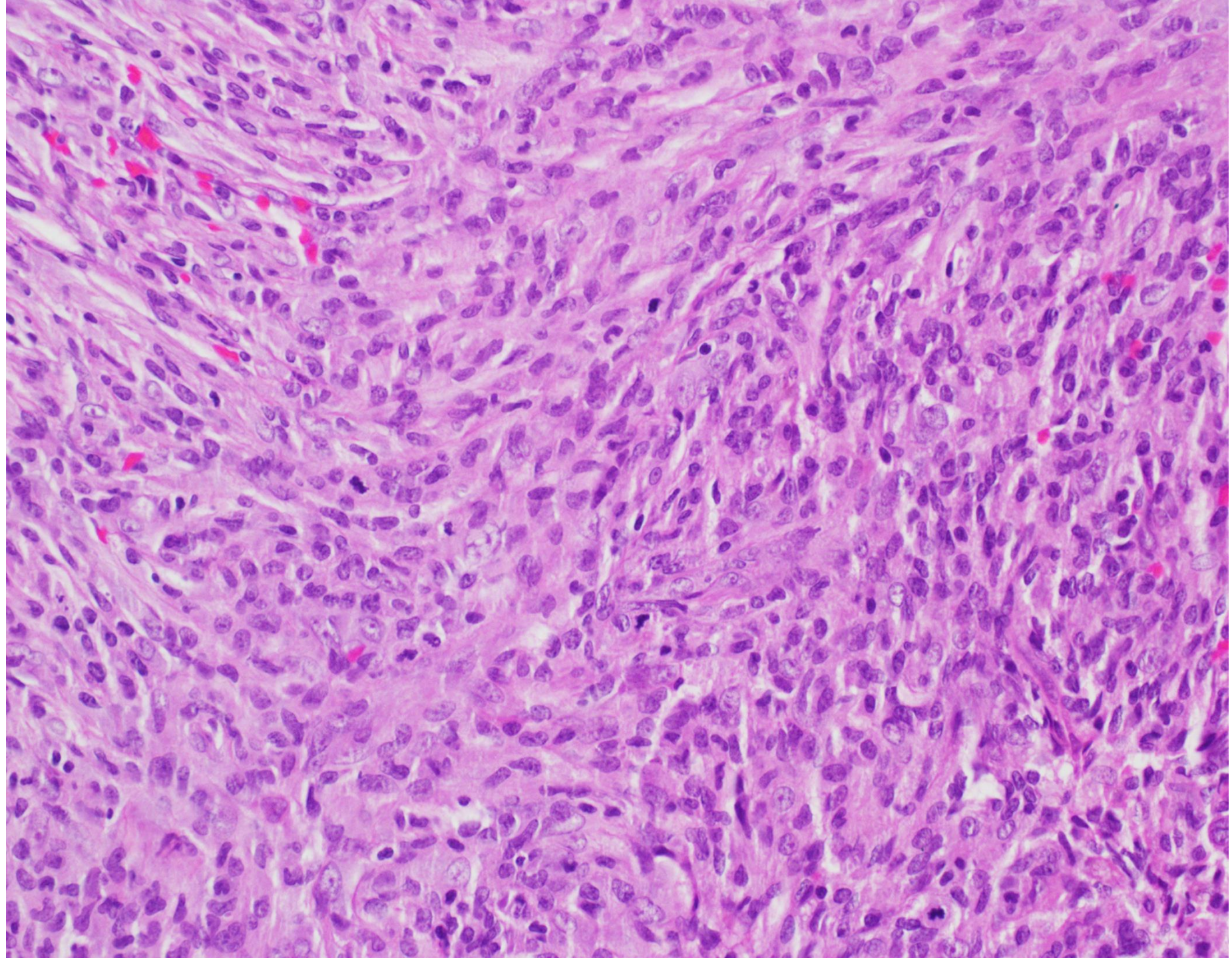
Dist 0.856 cm

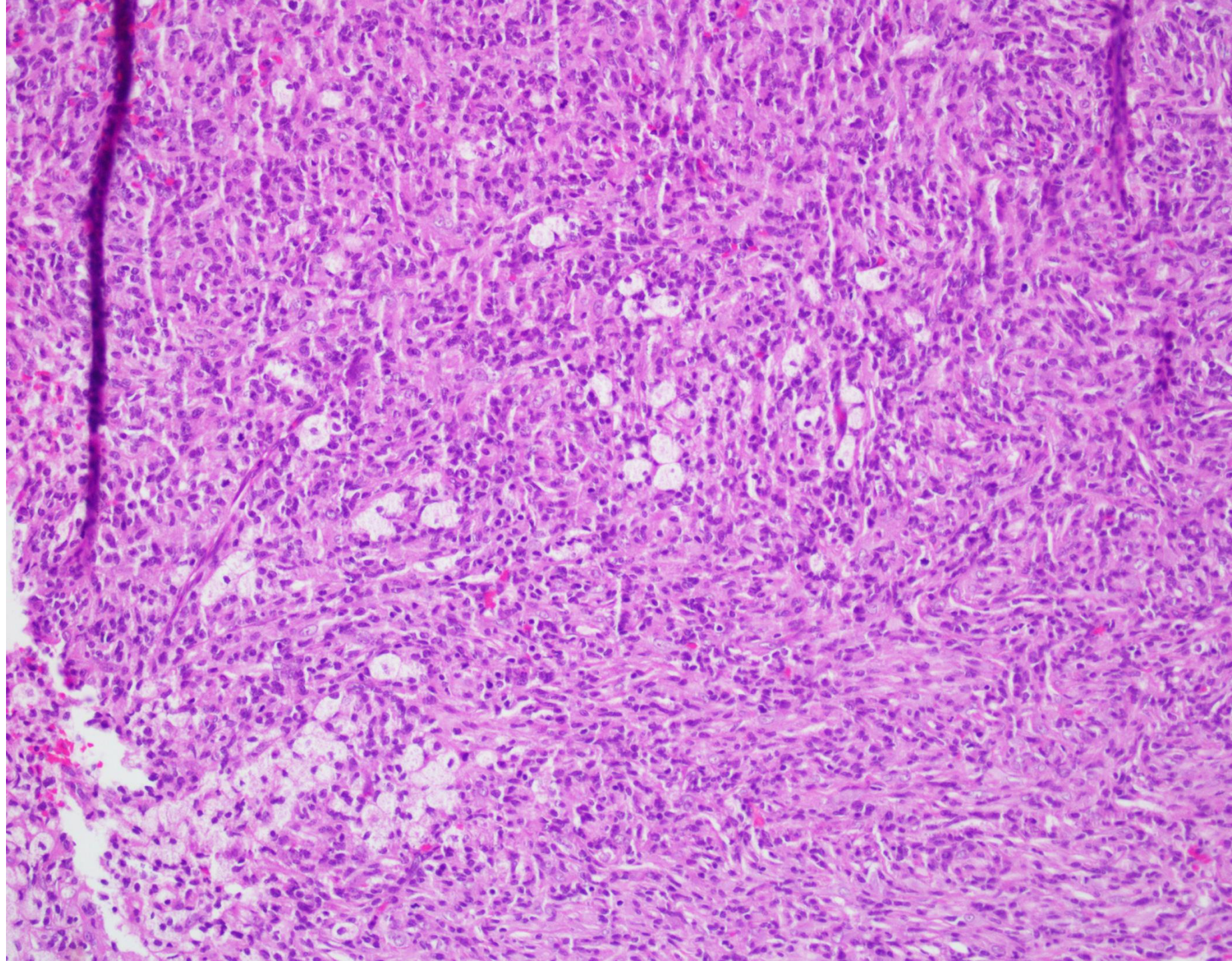
Courtesy of Dr Mihir Gudi

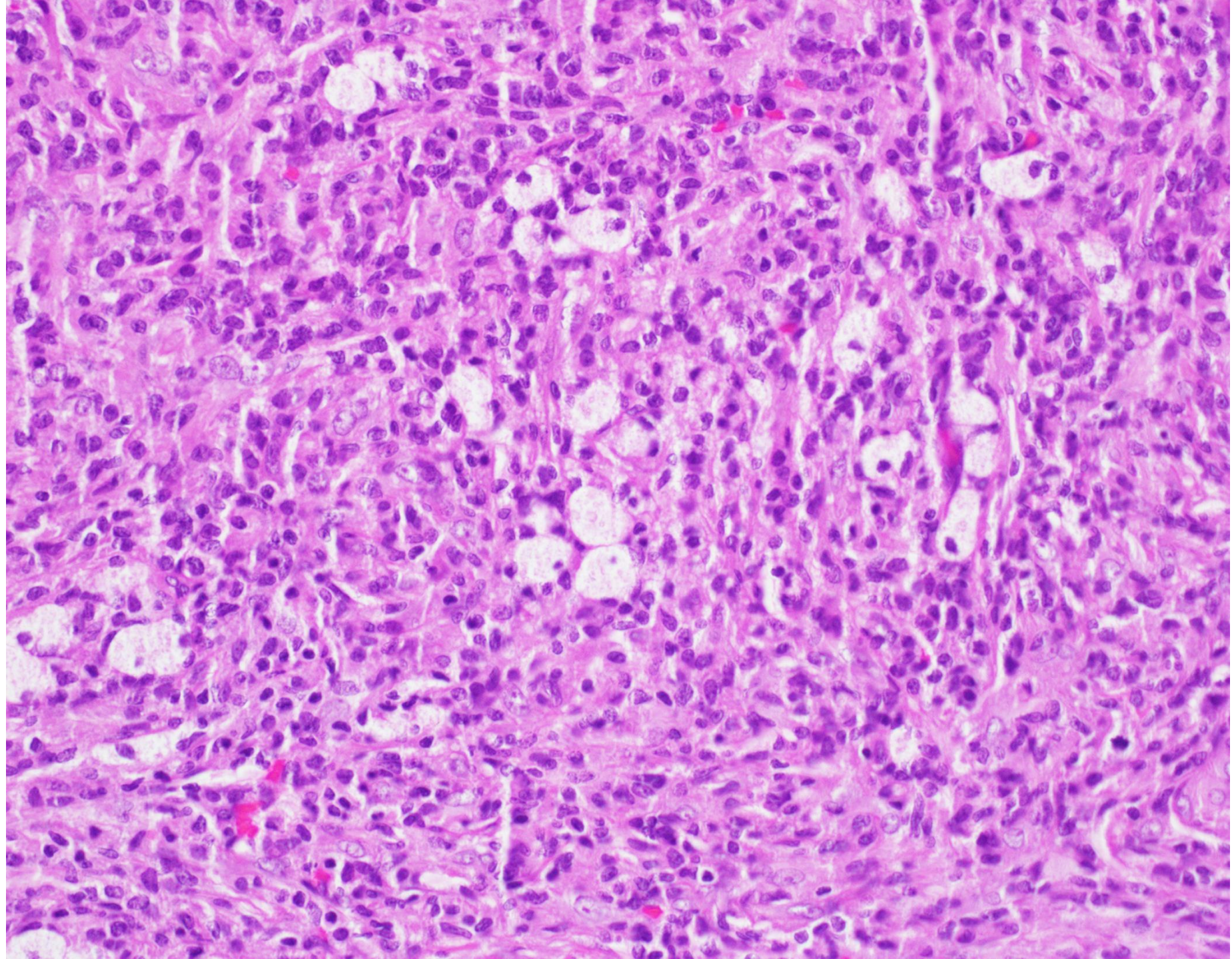




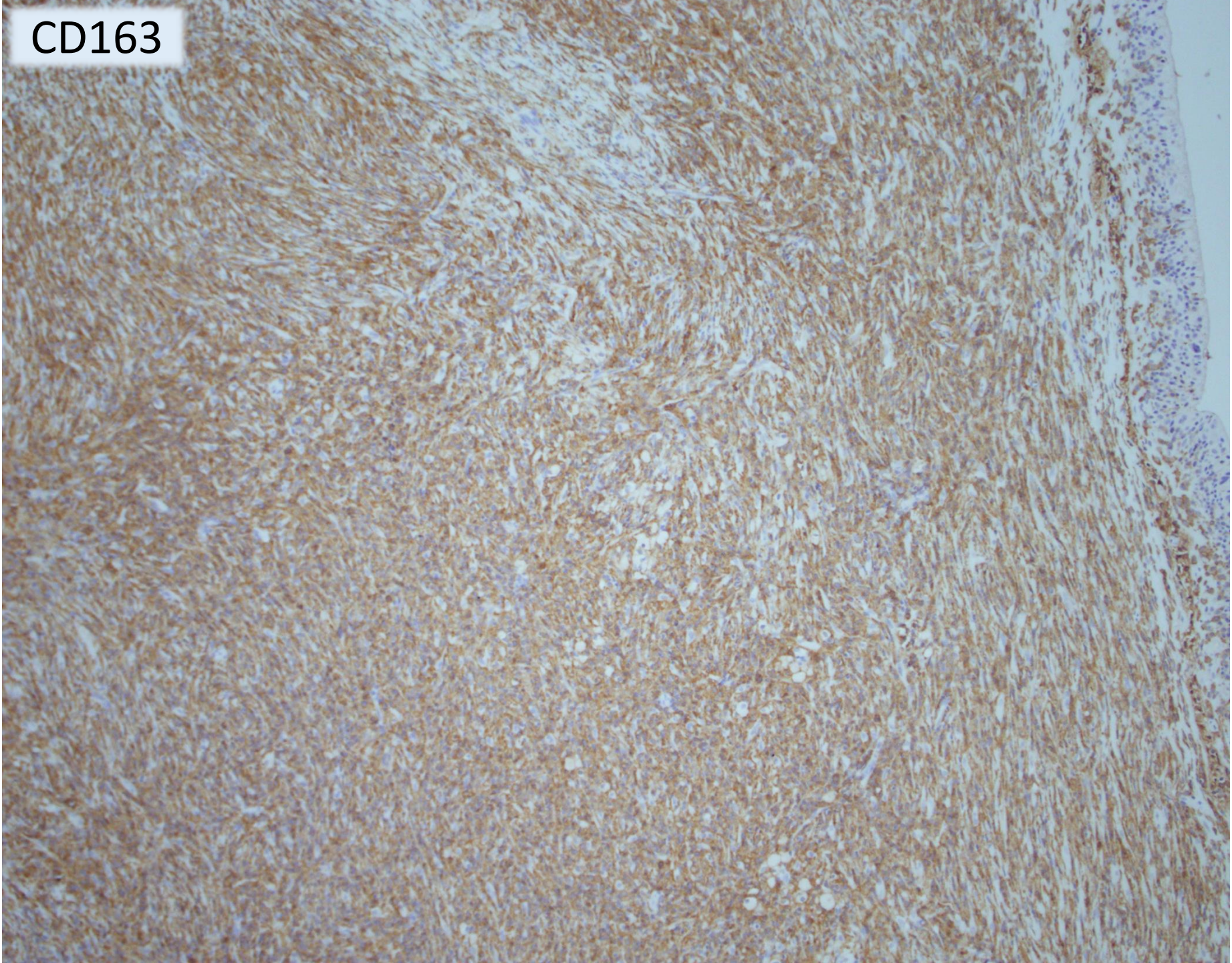




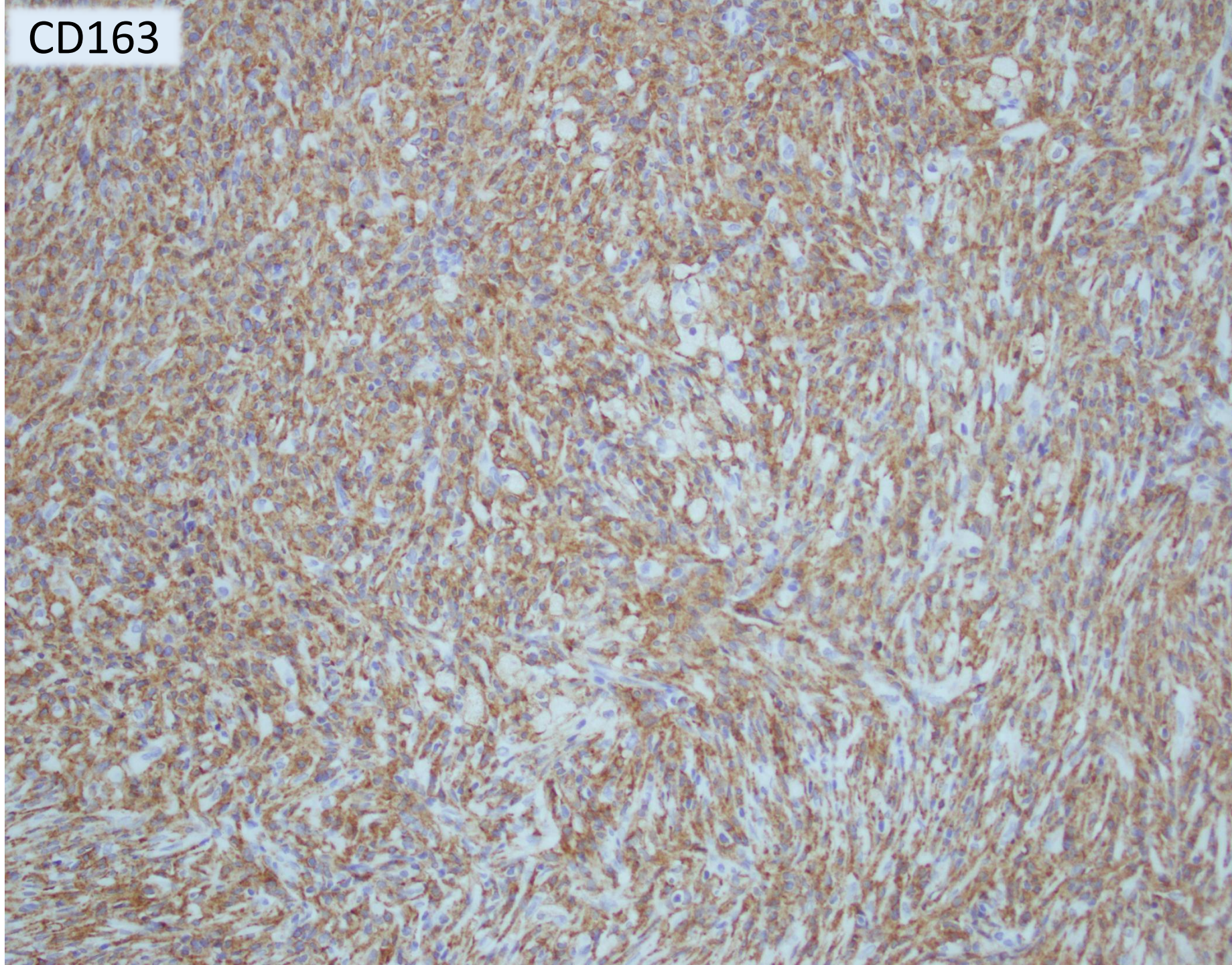




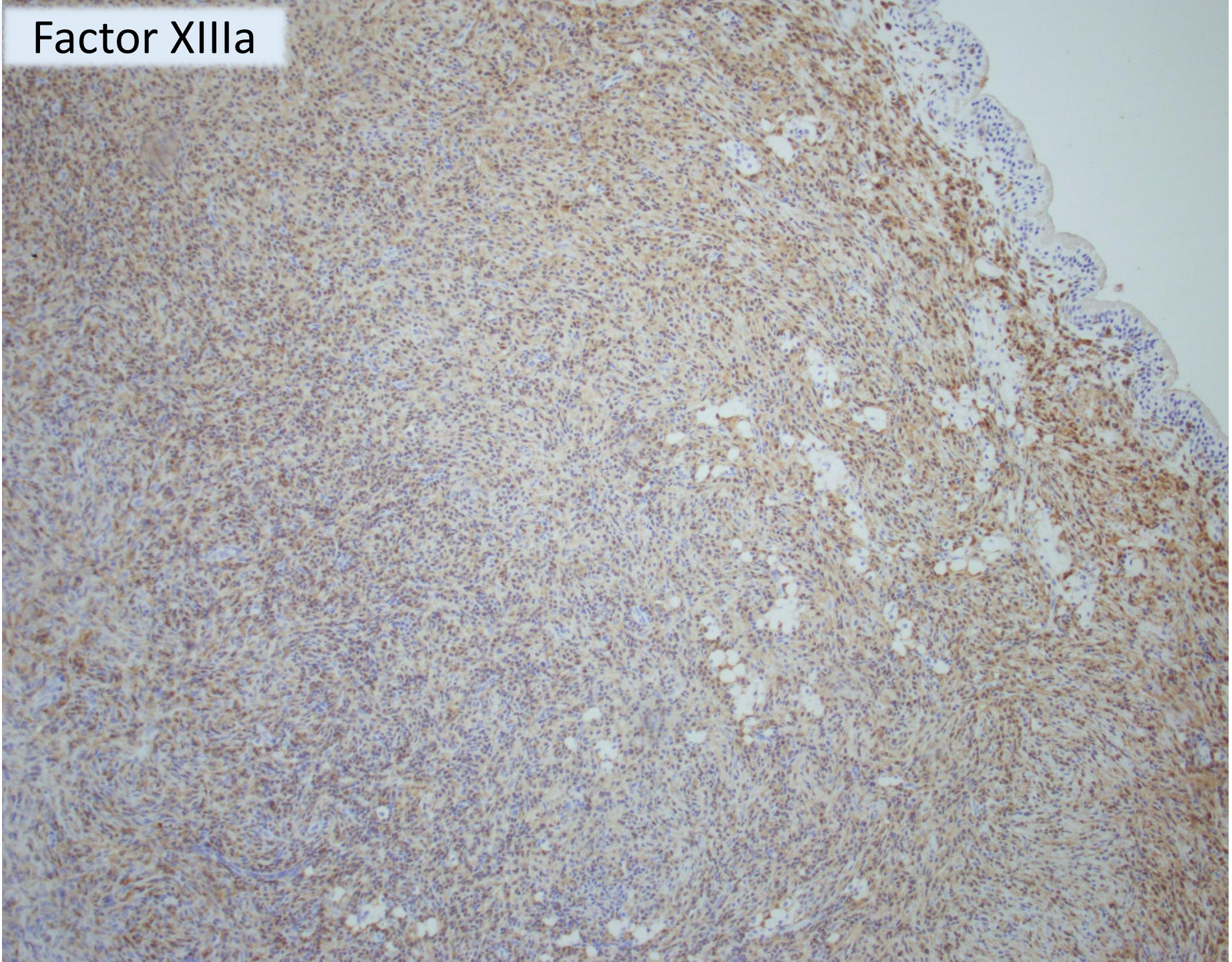
CD163



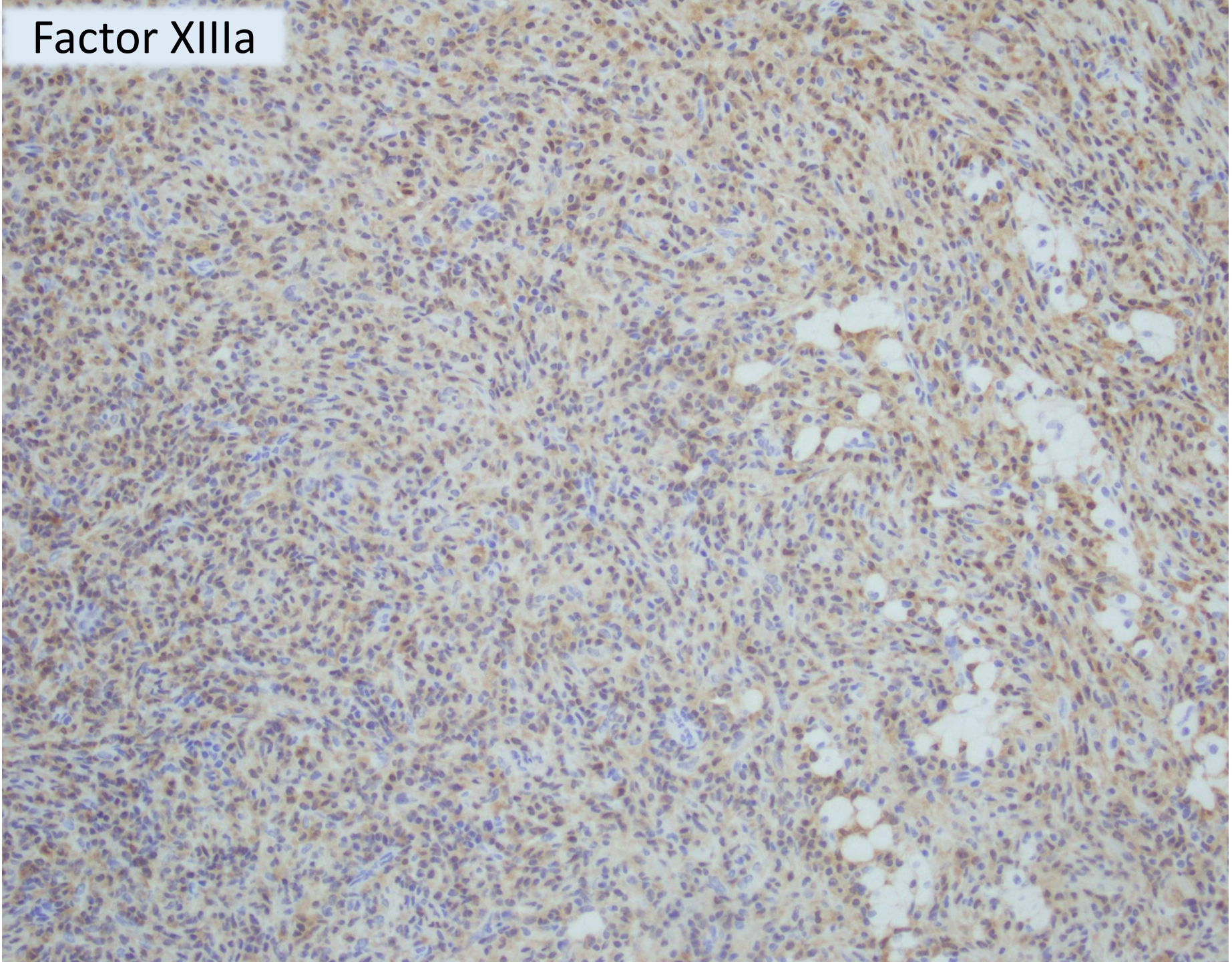
CD163



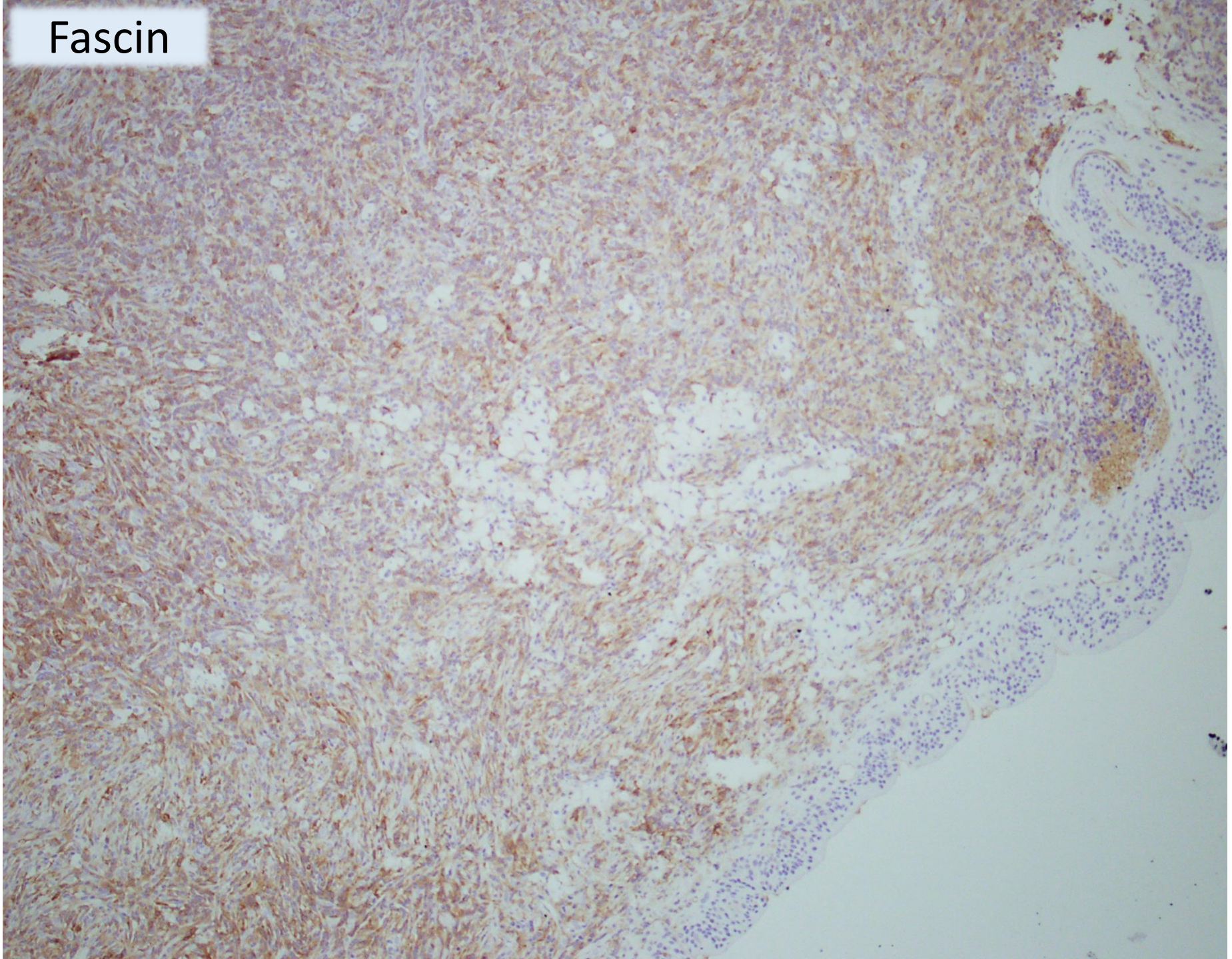
Factor XIIIa



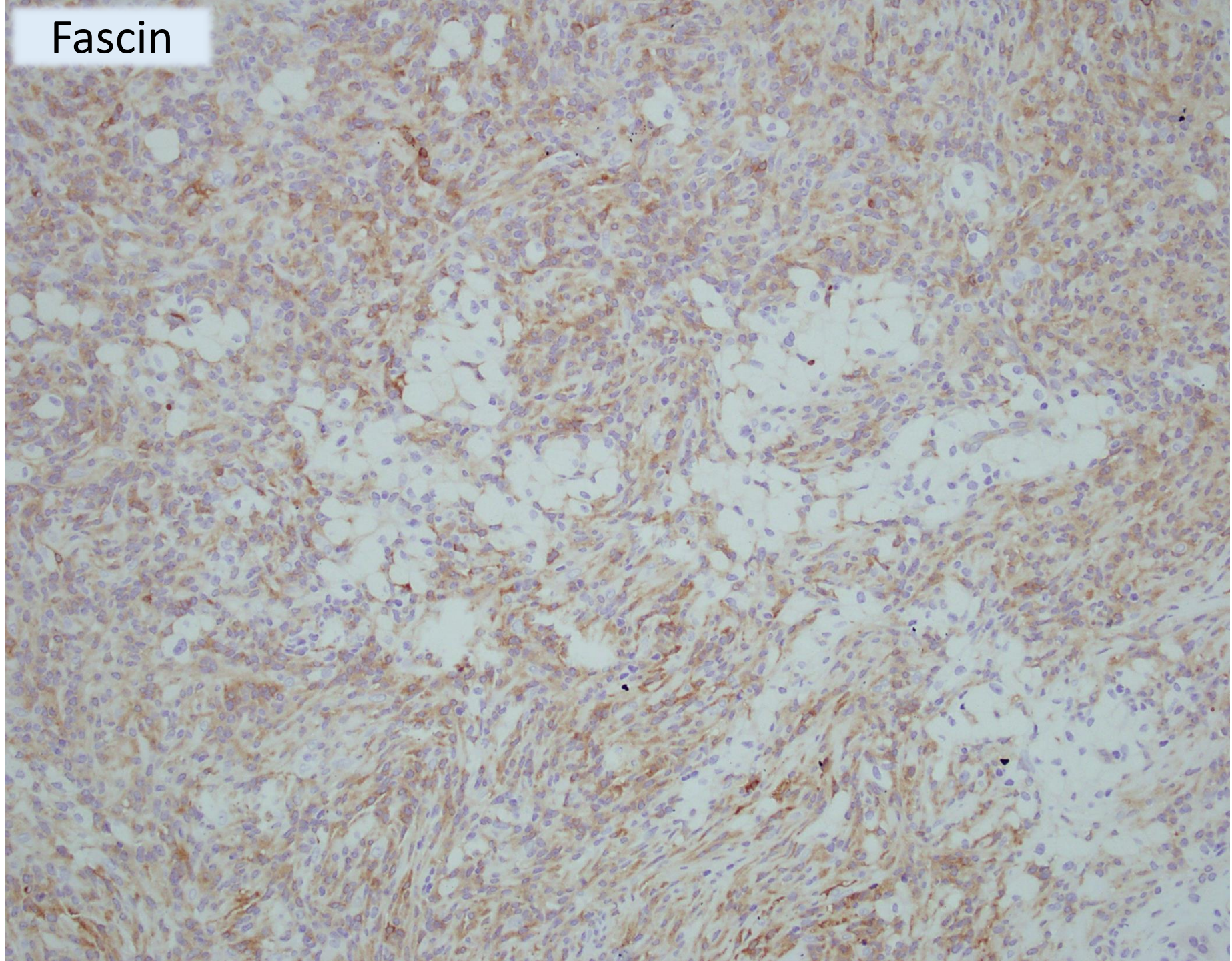
Factor XIIIa



Fascin



Fascin



Other stains

- D2-40 diffusely positive
 - CD34 decorates blood vessels but spindle cells are negative
- SMMS highlights a few blood vessels but spindle cells are negative
 - LCA negative
- Ki67 proliferation of about 40%

Negative immunohistochemical stains

- S100
- MNF116, CK14, EMA
- CD30
- ALK-1
- Clusterin



Singapore
General Hospital

SingHealth
Division of Pathology



SingHealth **DukeNUS**
ACADEMIC MEDICAL CENTRE

PATHOLOGY



IAP

International Academy of Pathology
Singapore Division

Diagnosis

Spindle cell xanthogranuloma



Singapore
General Hospital

SingHealth

Division of Pathology



PATHOLOGY

IAP

International Academy of Pathology
Singapore Division



Spindle cell xanthogranuloma

- Spectrum of xanthogranulomatous reactions in tissue.
- Predominance (> 90%) of spindle-shaped histiocytes arranged in a storiform pattern.
- Other mononuclear (vacuolated, xanthomatous) and multinucleate (Touton) histiocytes are also regularly seen.
- Positive immunohistochemical staining for ~
 - Vimentin
 - CD68
 - Factor XIIIa
- Negative immunohistochemical staining for ~
 - S-100 protein
 - CD1a



Singapore
General Hospital

SingHealth

Division of Pathology



PATHOLOGY



Spindle cell xanthogranuloma

- Cases of xanthogranuloma in the breast are rare.
- Report of a case presenting in the breast ~

Mammary presentation of adult-type "juvenile" xanthogranuloma. *Am J Surg Pathol* 2005 Jun;29(6):827-31.

- Adult xanthogranuloma in a 74-year-old woman who presented with ipsilateral breast masses and also found to have prior cutaneous lesions.
- First reported case of cutaneous and extracutaneous adult JXG where the latter manifested in the breast as a **spindle cell xanthogranuloma**.
- Lesion composed predominantly of spindle cells with associated multinucleated giant cells and a chronic inflammatory cell infiltrate.
- Spindle cells immunoreactive for various histiocytic markers and negative for cytokeratins, S-100, CD34, factor XIIIa, and CD1a.
- In the breast, morphologic features of JXG evoked differential diagnoses of spindle cell metaplastic carcinoma, inflammatory pseudotumour, fibromatosis, myofibroblastoma, and phyllodes tumour.



Singapore
General Hospital

SingHealth

Division of Pathology



SingHealth DukeNUS
ACADEMIC MEDICAL CENTRE

PATHOLOGY



IAP

International Academy of Pathology
Singapore Division

Mitotic activity in spindle cell xanthogranuloma

- This case (case 32) has brisk mitotic activity.
- ‘mitotically active xanthogranuloma’.

Mitotically active deep juvenile xanthogranuloma. *Annals of Diagnostic Pathology* 14 (2010) 36–40.

~ mitotically active intramuscular juvenile xanthogranuloma of the upper arm in a 28-year-old woman; mitotic rate varied from 15 to 20 typical mitotic figures per 10 high-power field (HPF).



Singapore
General Hospital

SingHealth
Division of Pathology



SingHealth DukeNUS
ACADEMIC MEDICAL CENTRE

PATHOLOGY



IAP

International Academy of Pathology
Singapore Division

 Breast
Pathology
Course 2017

