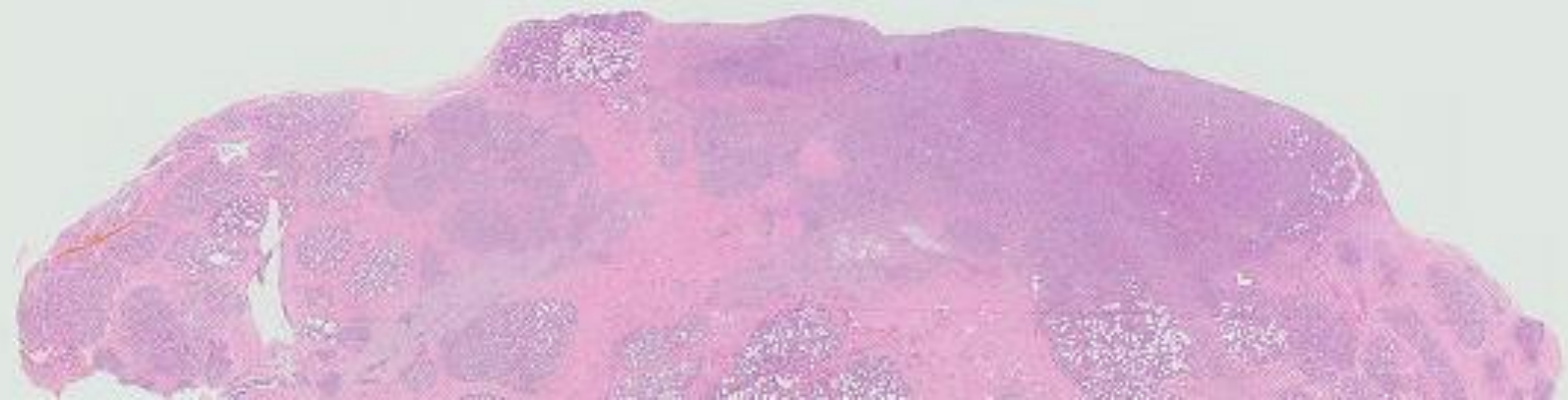
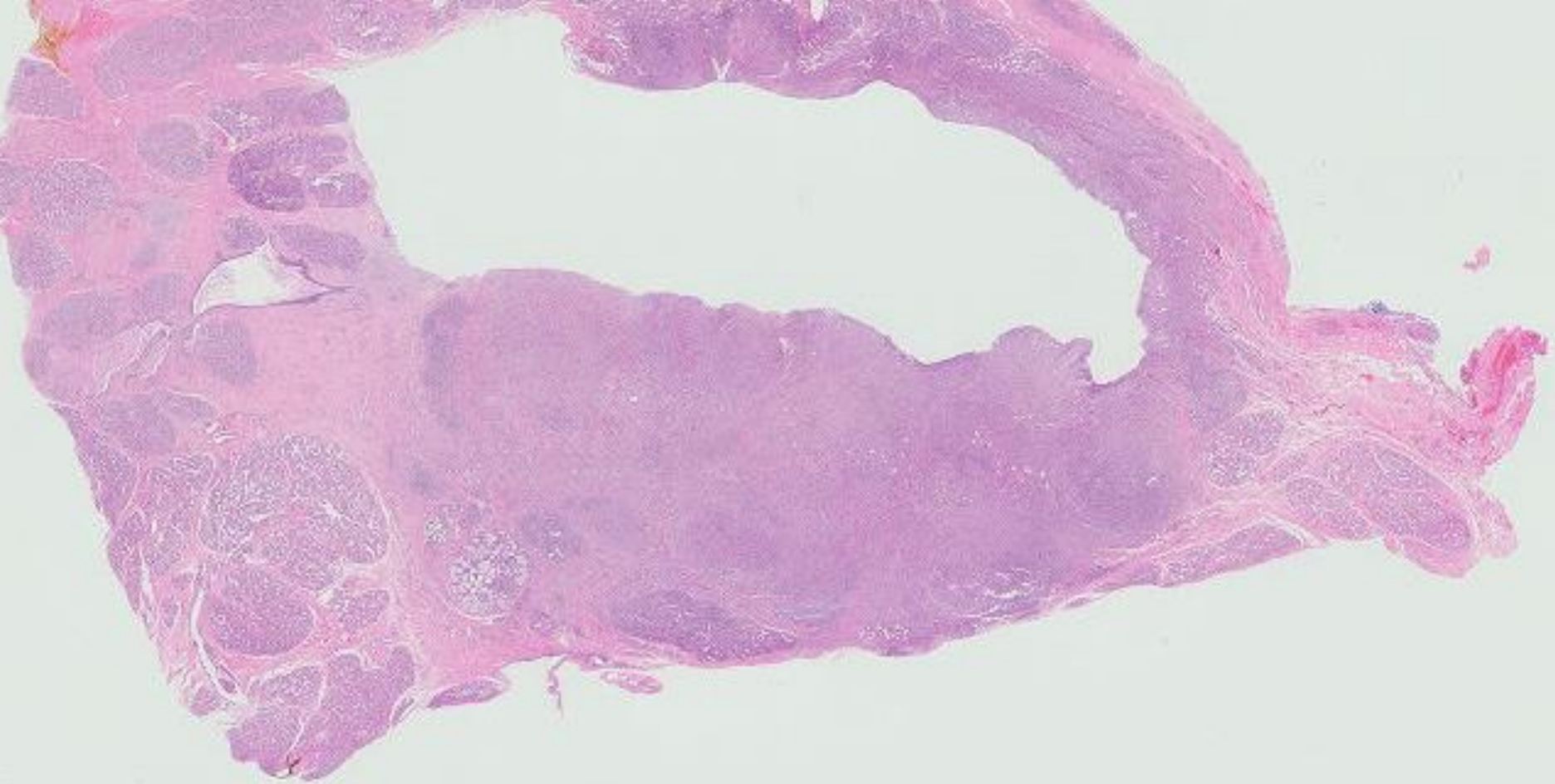
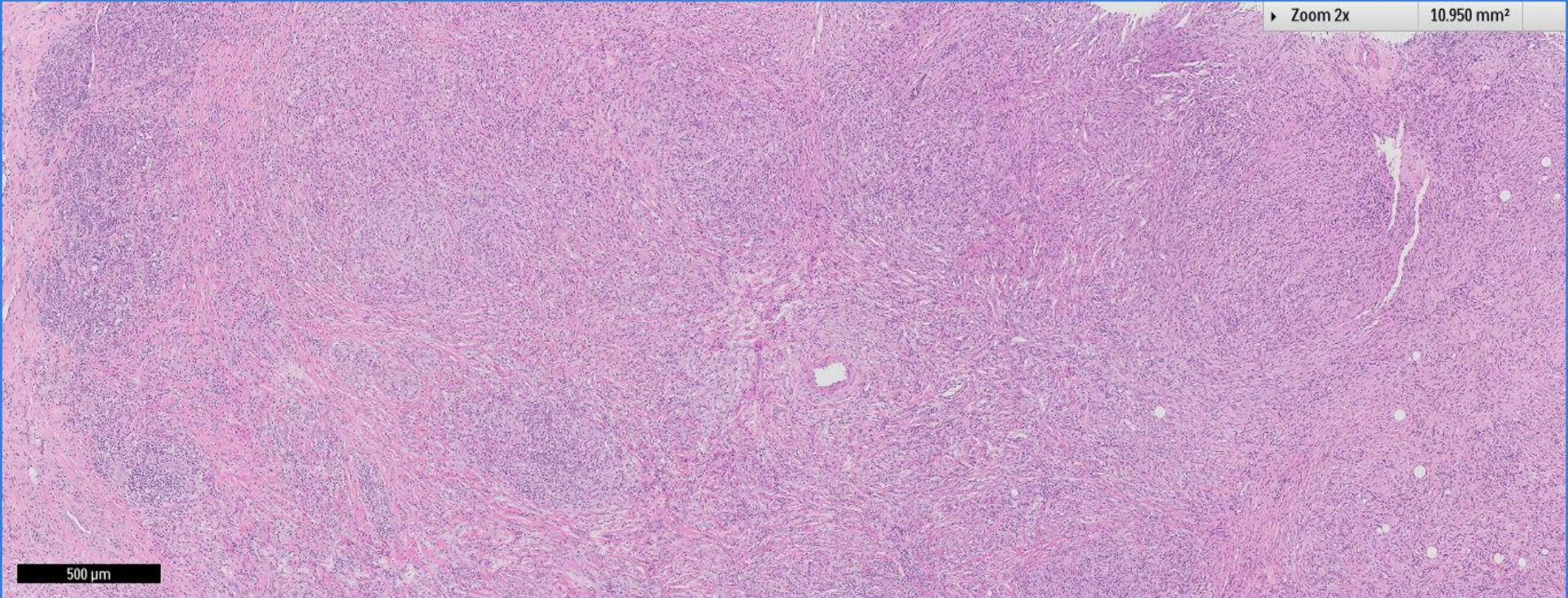


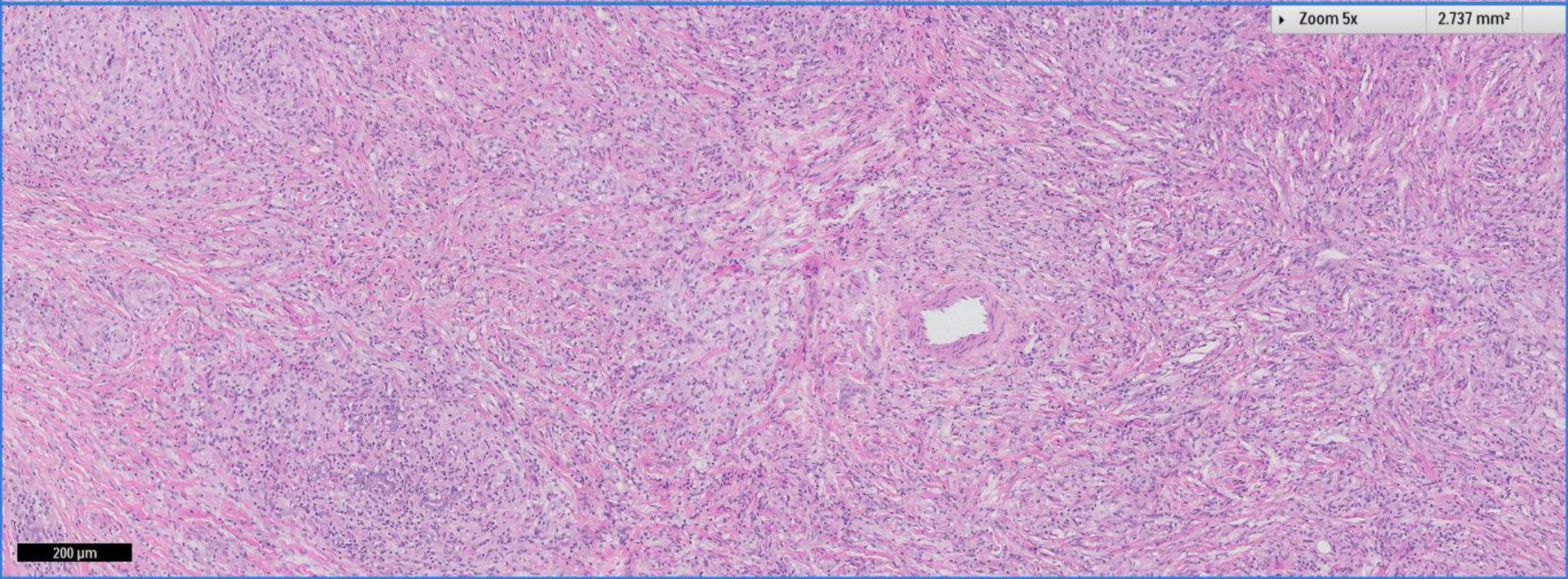
## *Case 16*

30 year old woman with a left breast lump.  
Excision biopsy.

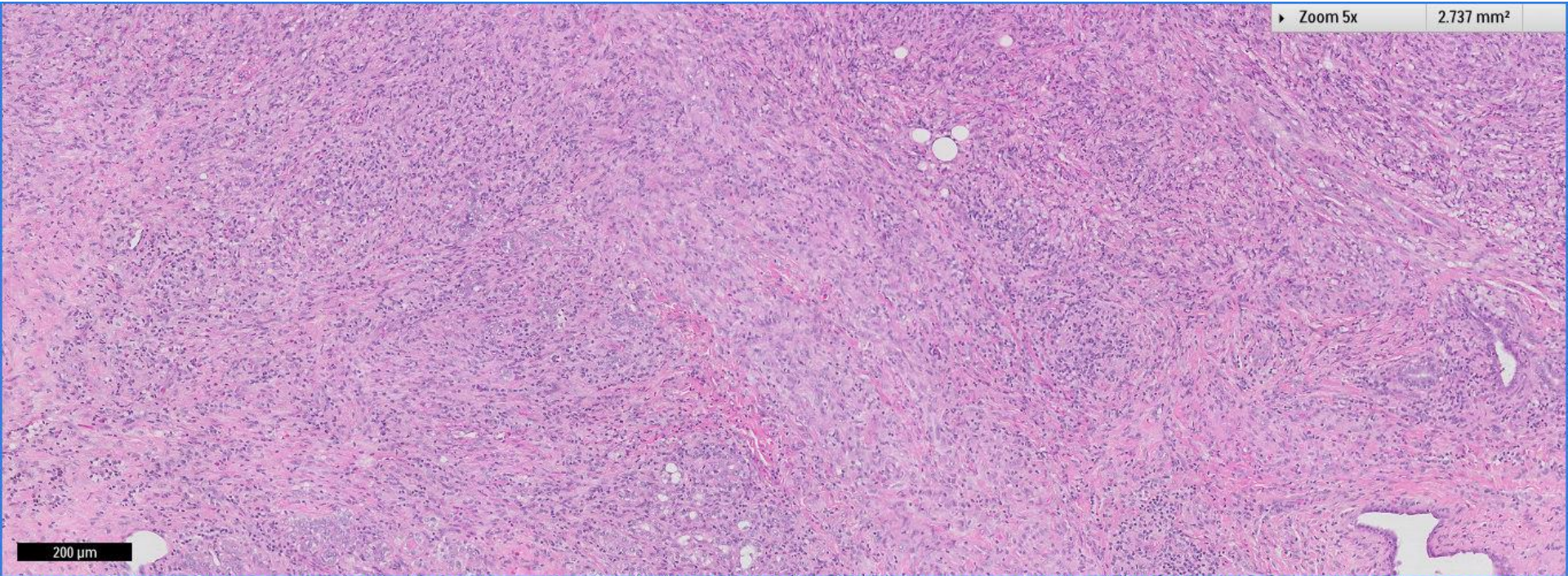




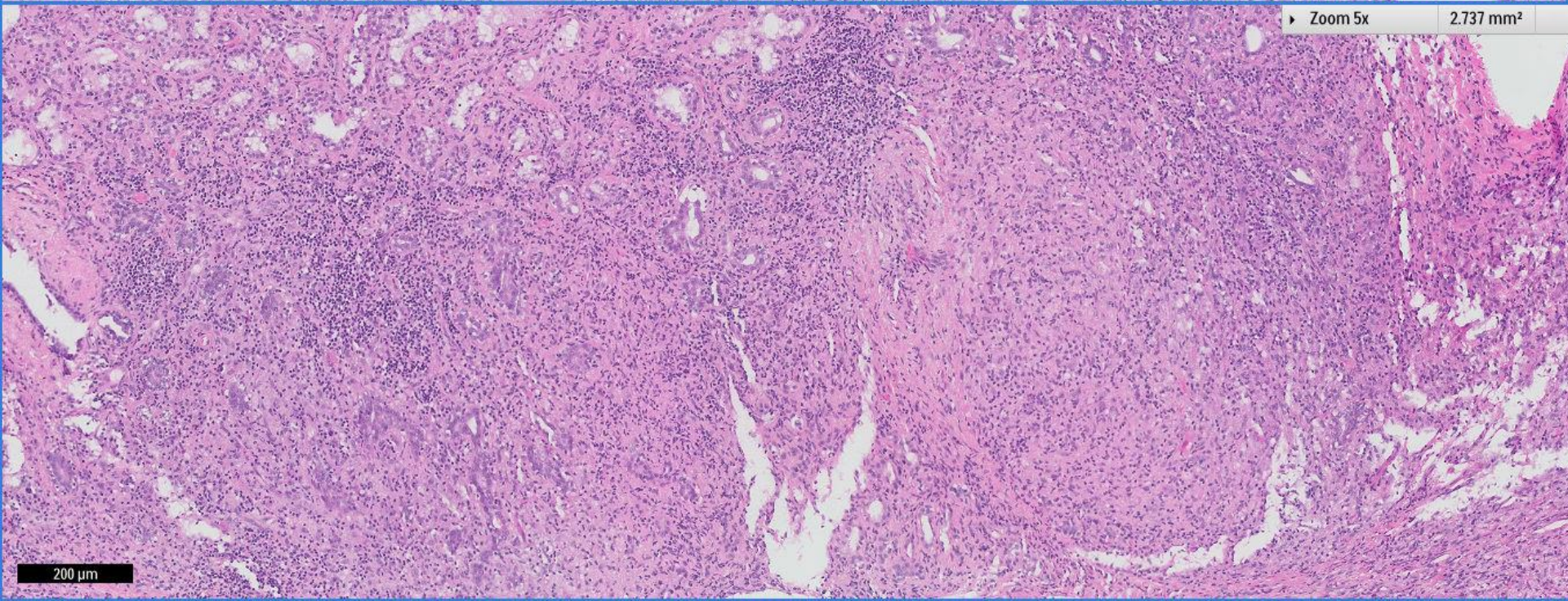
500 μm



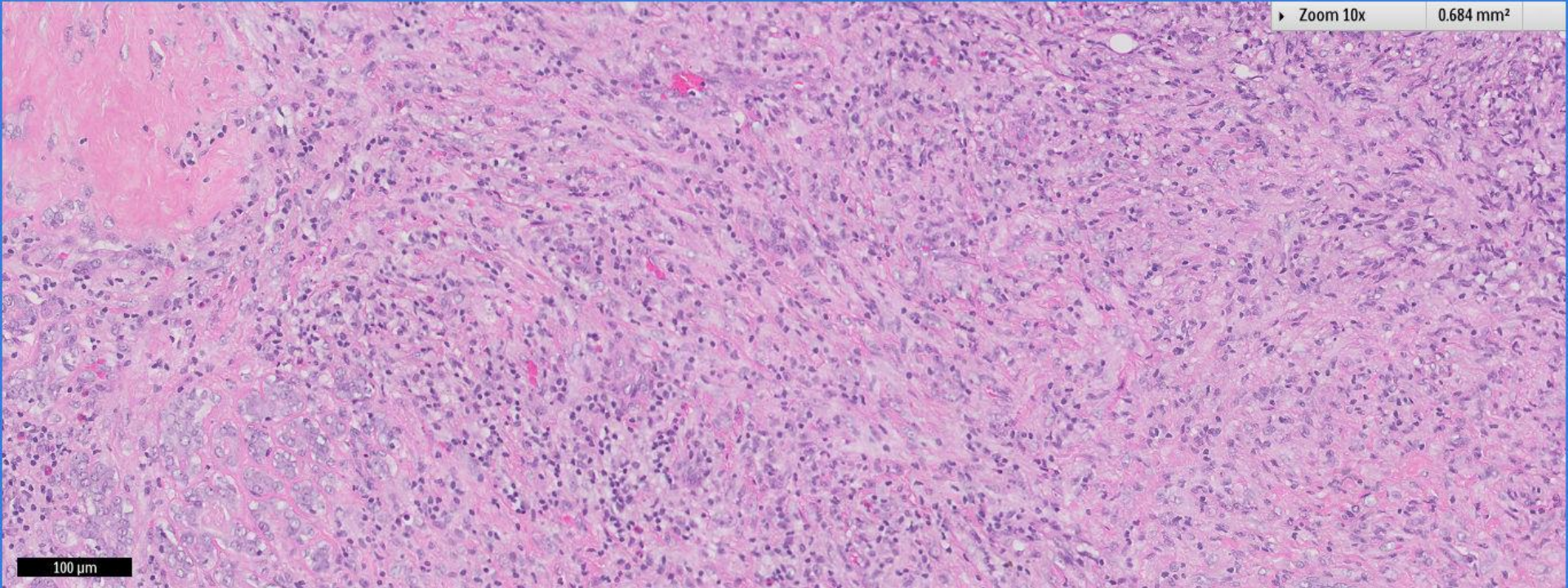
200 μm



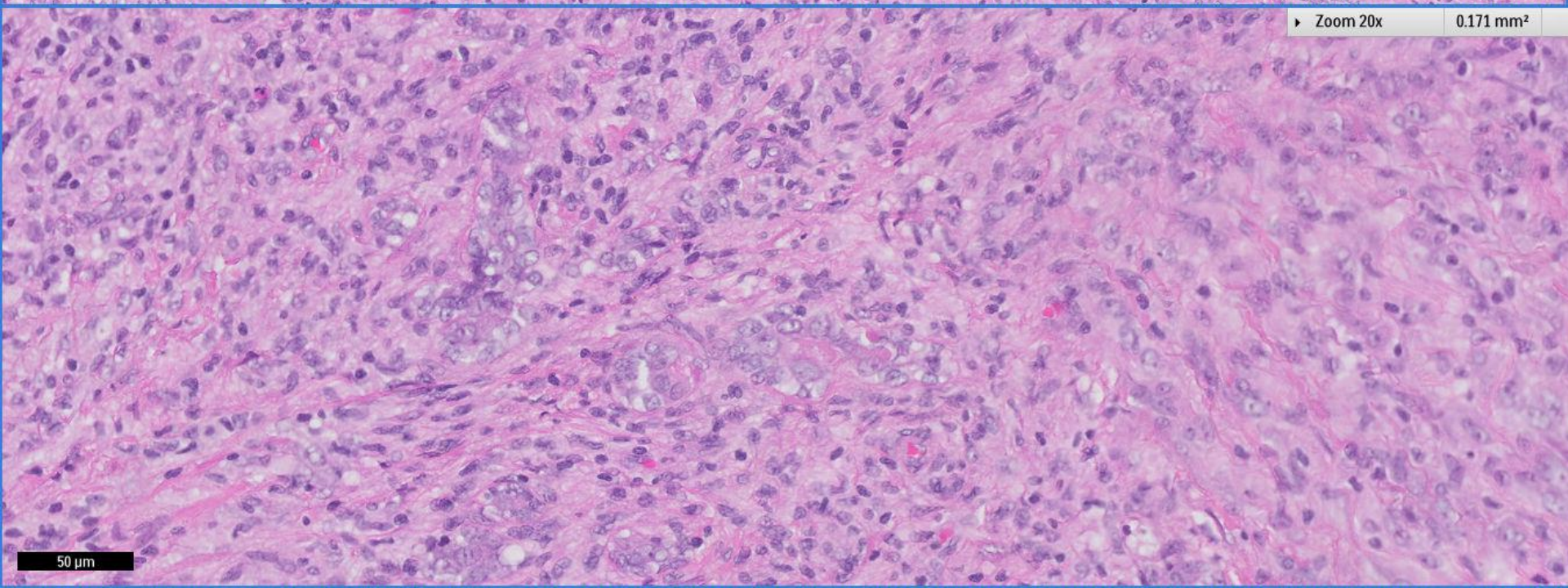
200 μm



200 μm

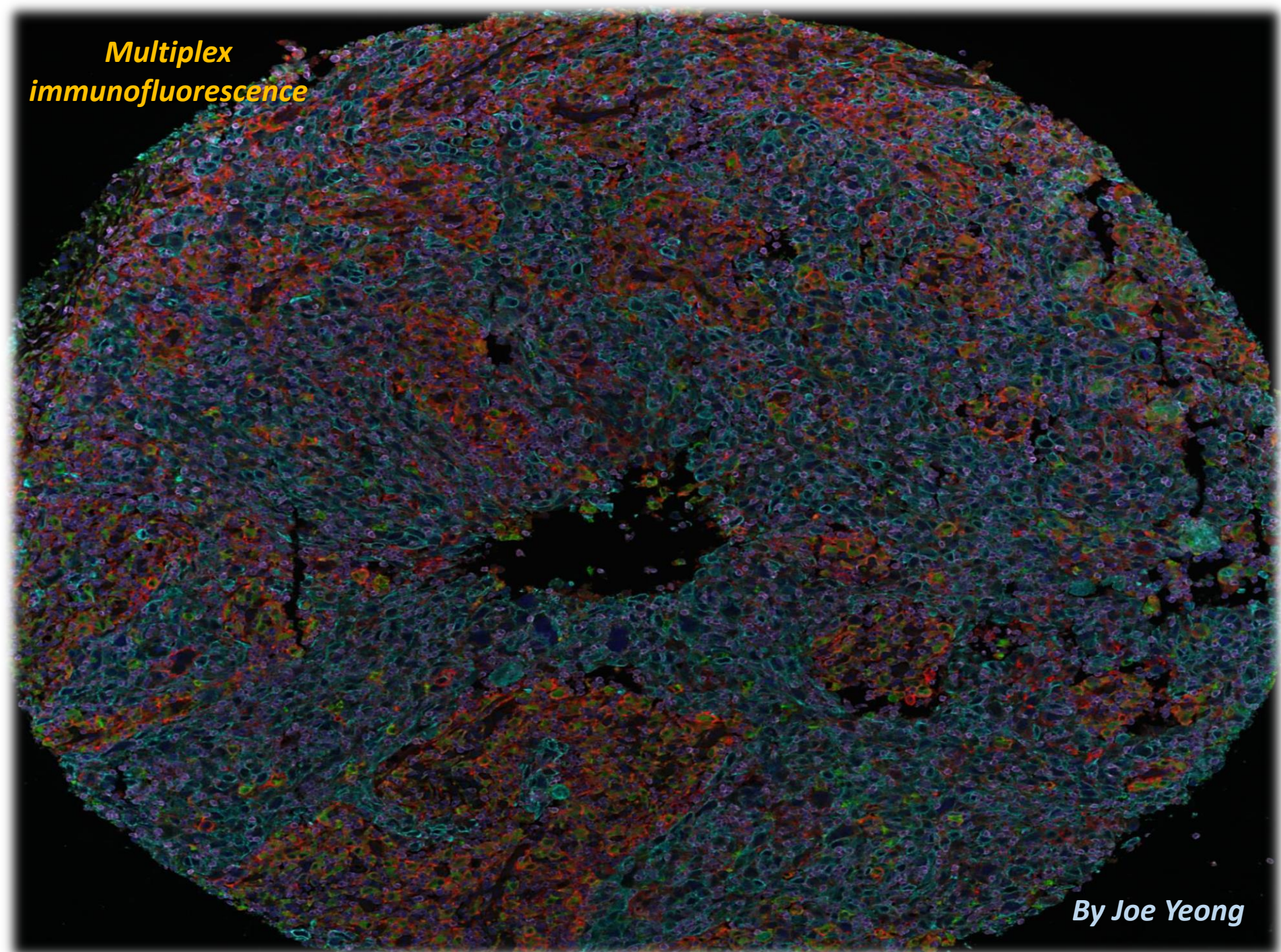


100  $\mu$ m



50  $\mu$ m

**Multiplex  
immunofluorescence**



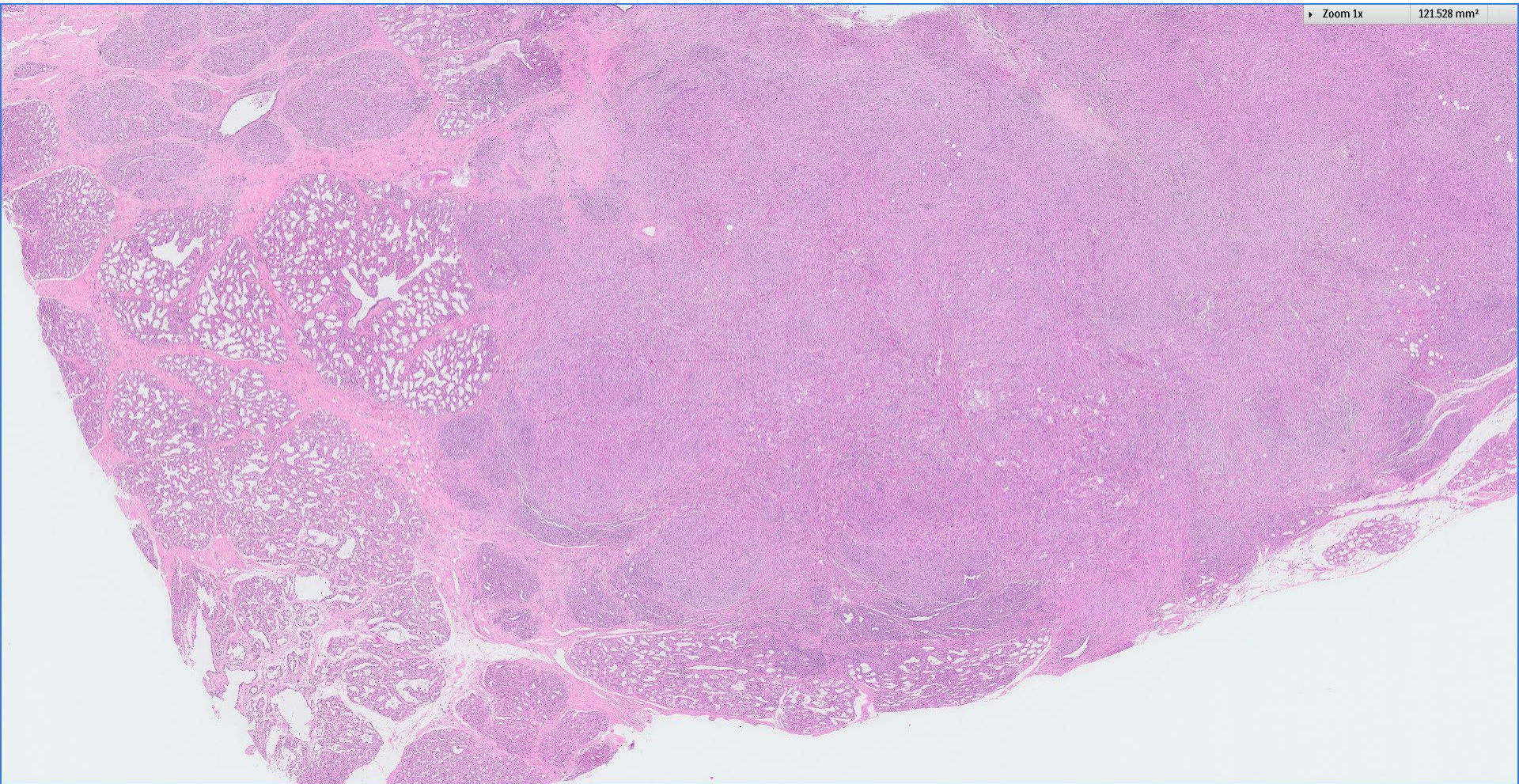
**By Joe Yeong**



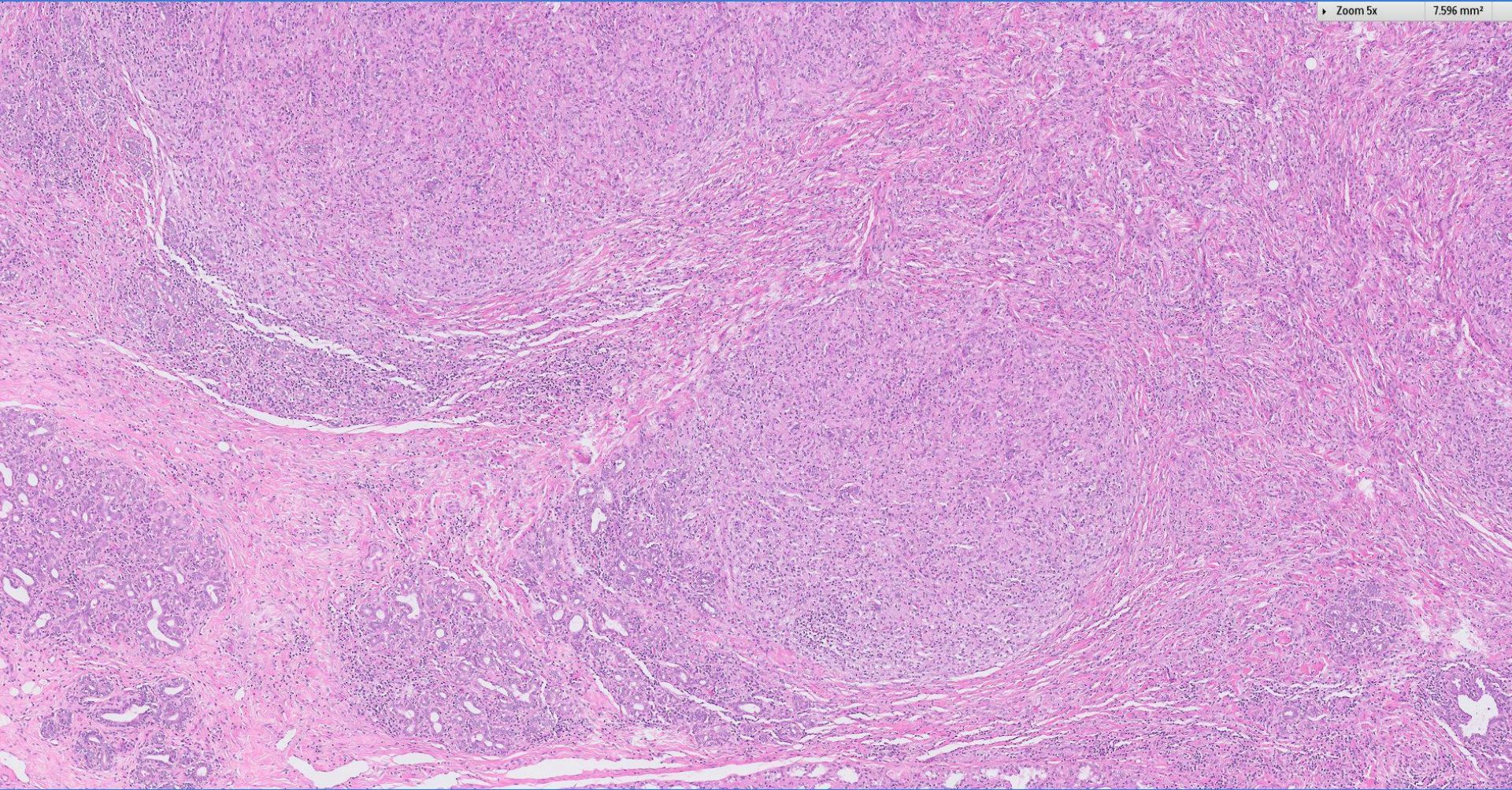
lDist: 1.81cm lDist: 1.05cm

Zoom 1x

121.528 mm<sup>2</sup>

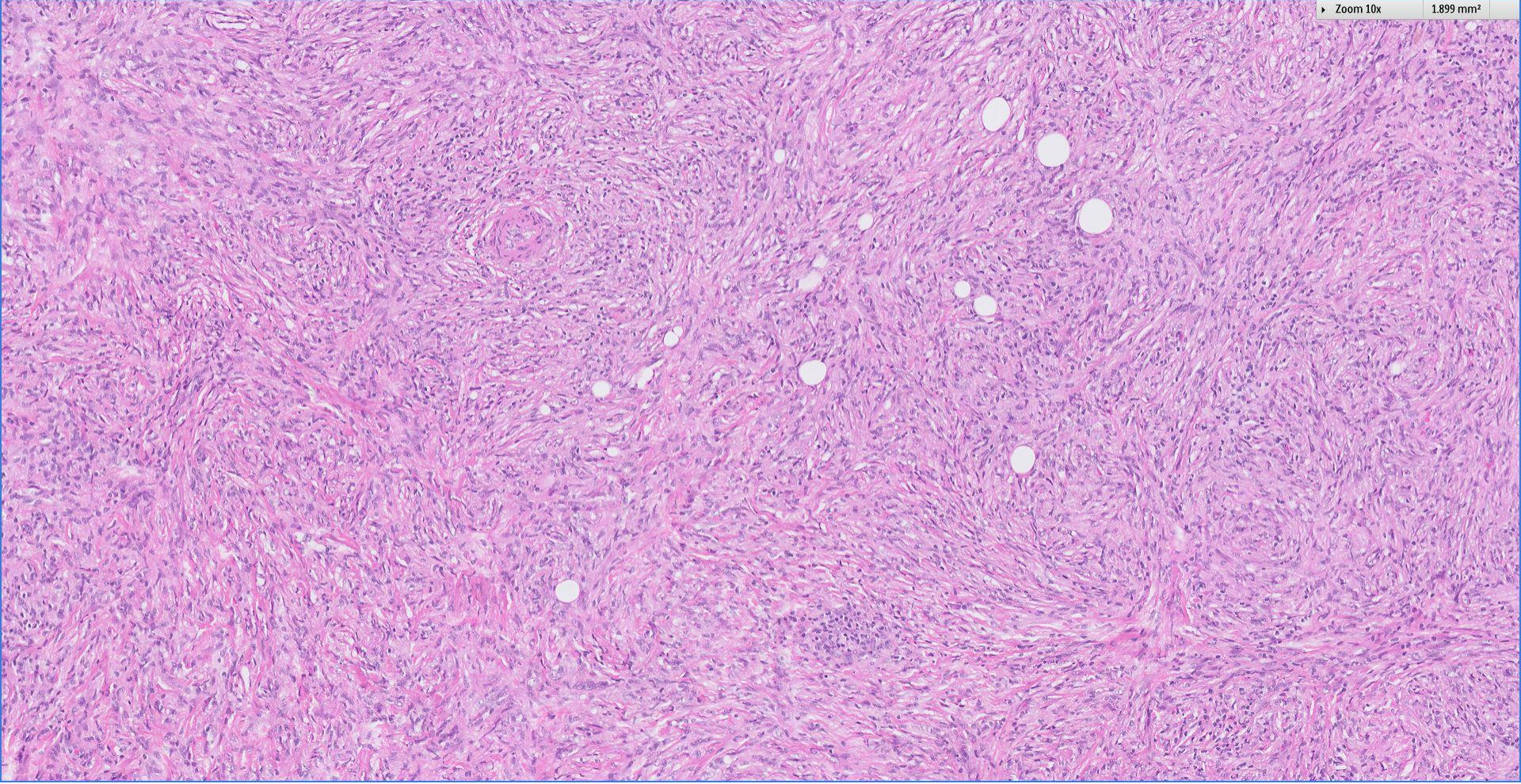


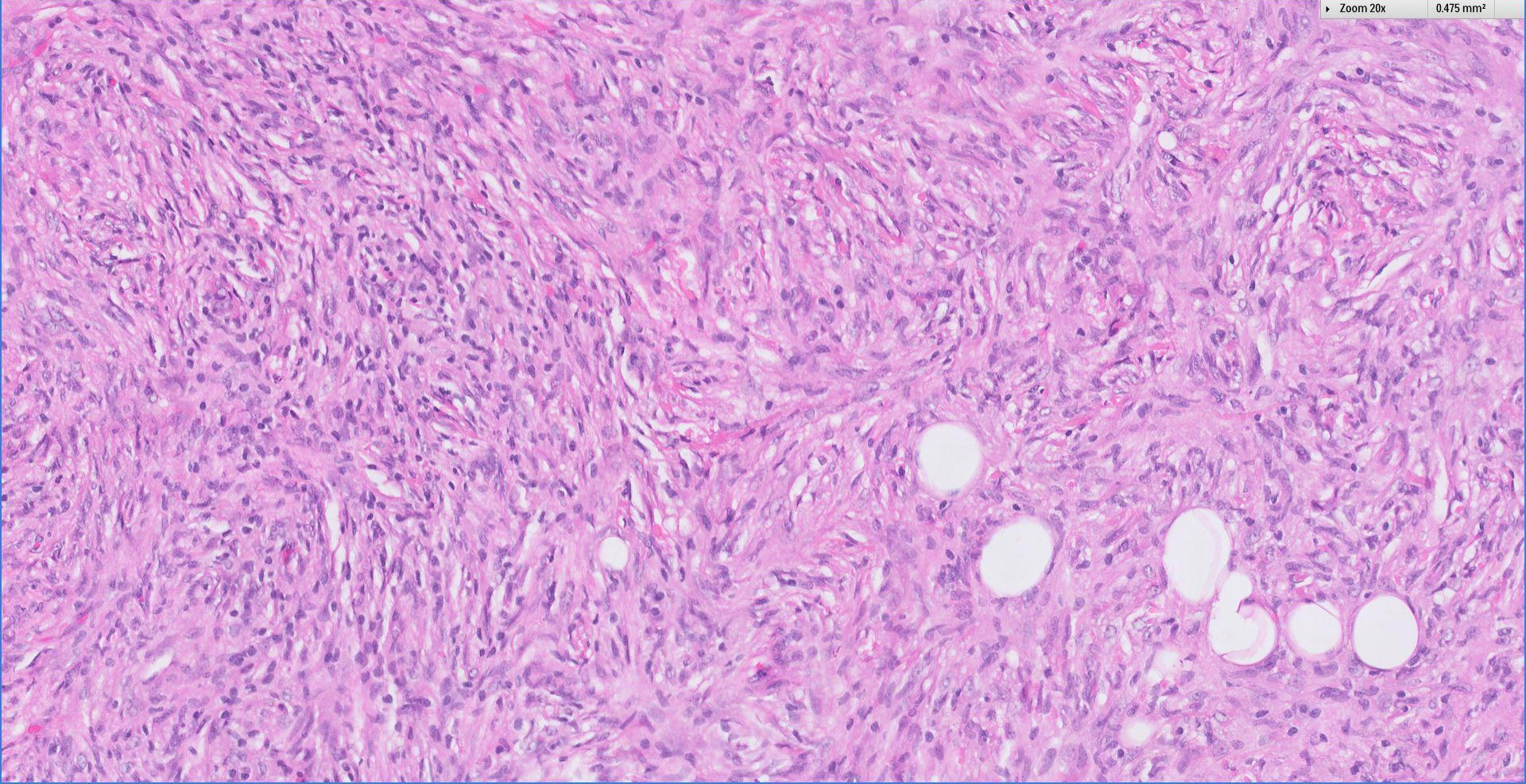




Zoom 10x

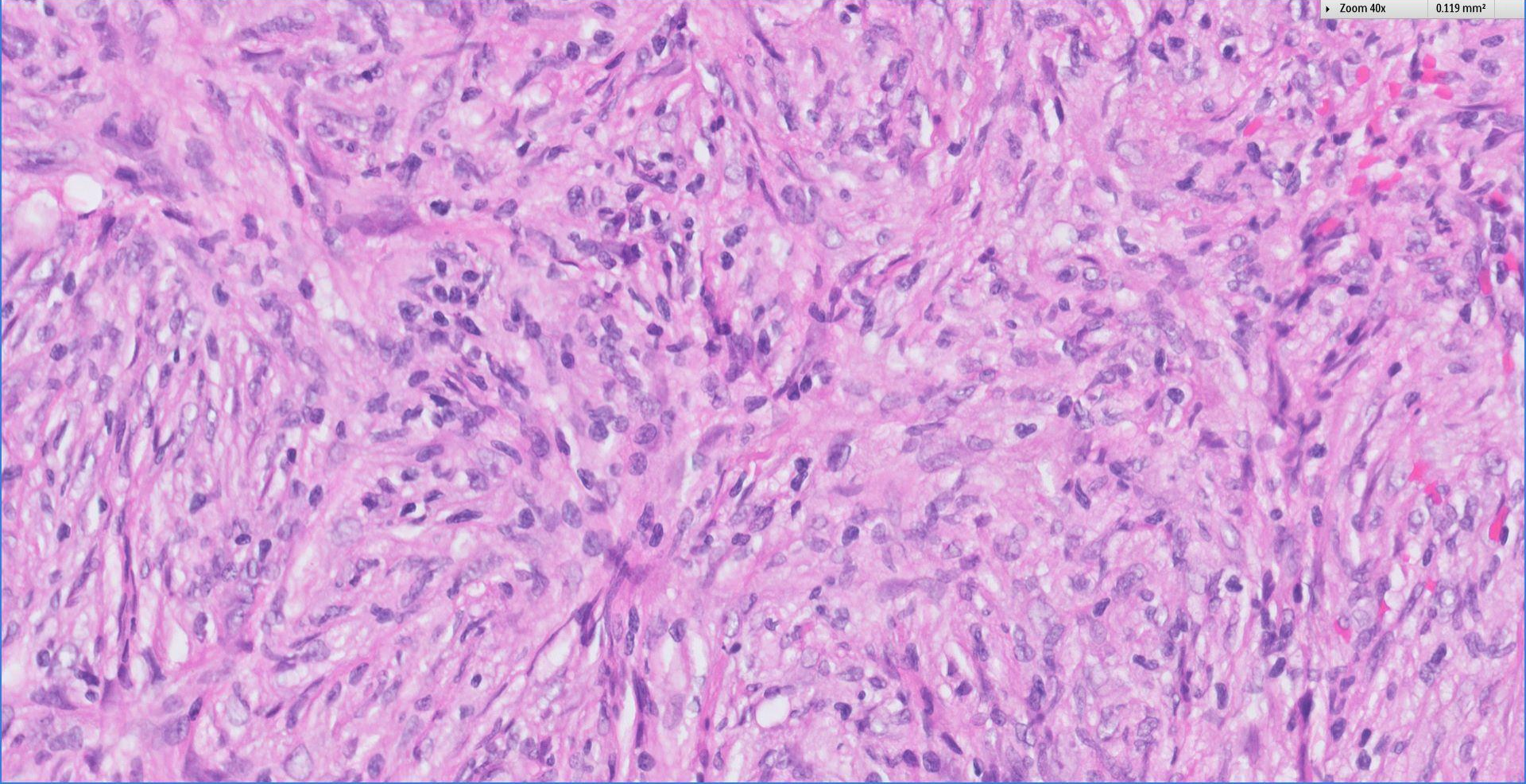
1.899 mm<sup>2</sup>



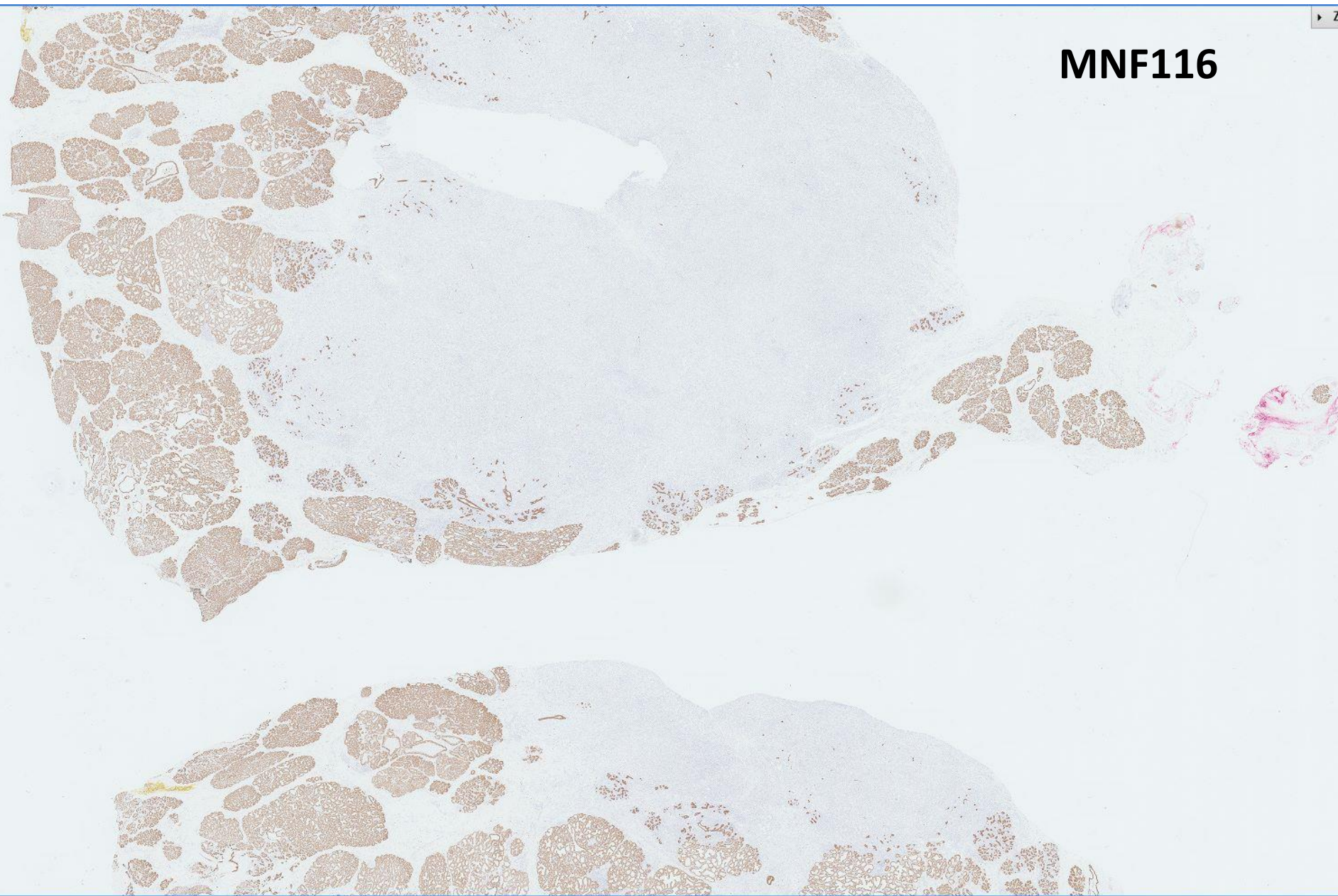


Zoom 40x

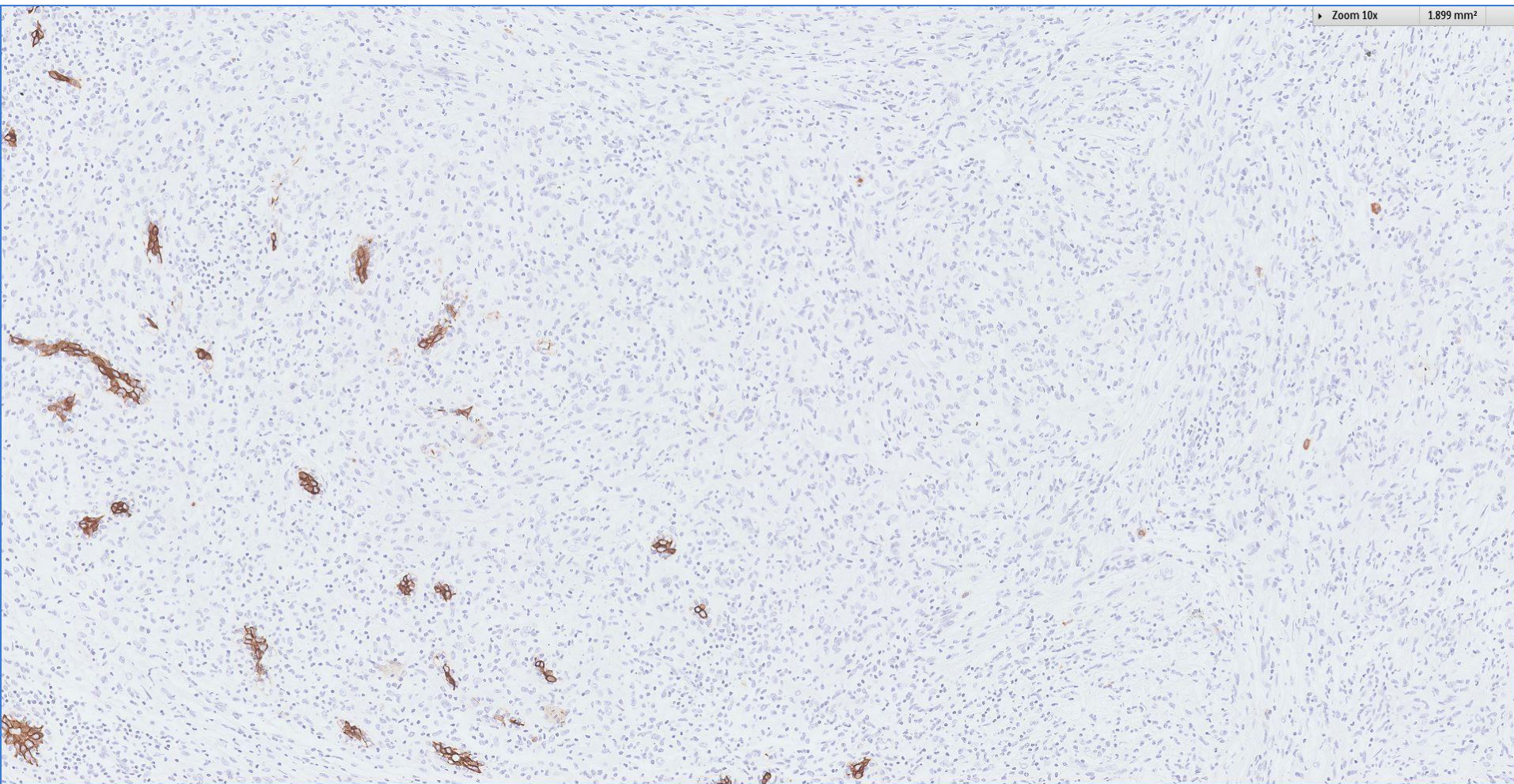
0.119 mm<sup>2</sup>



# MNF116

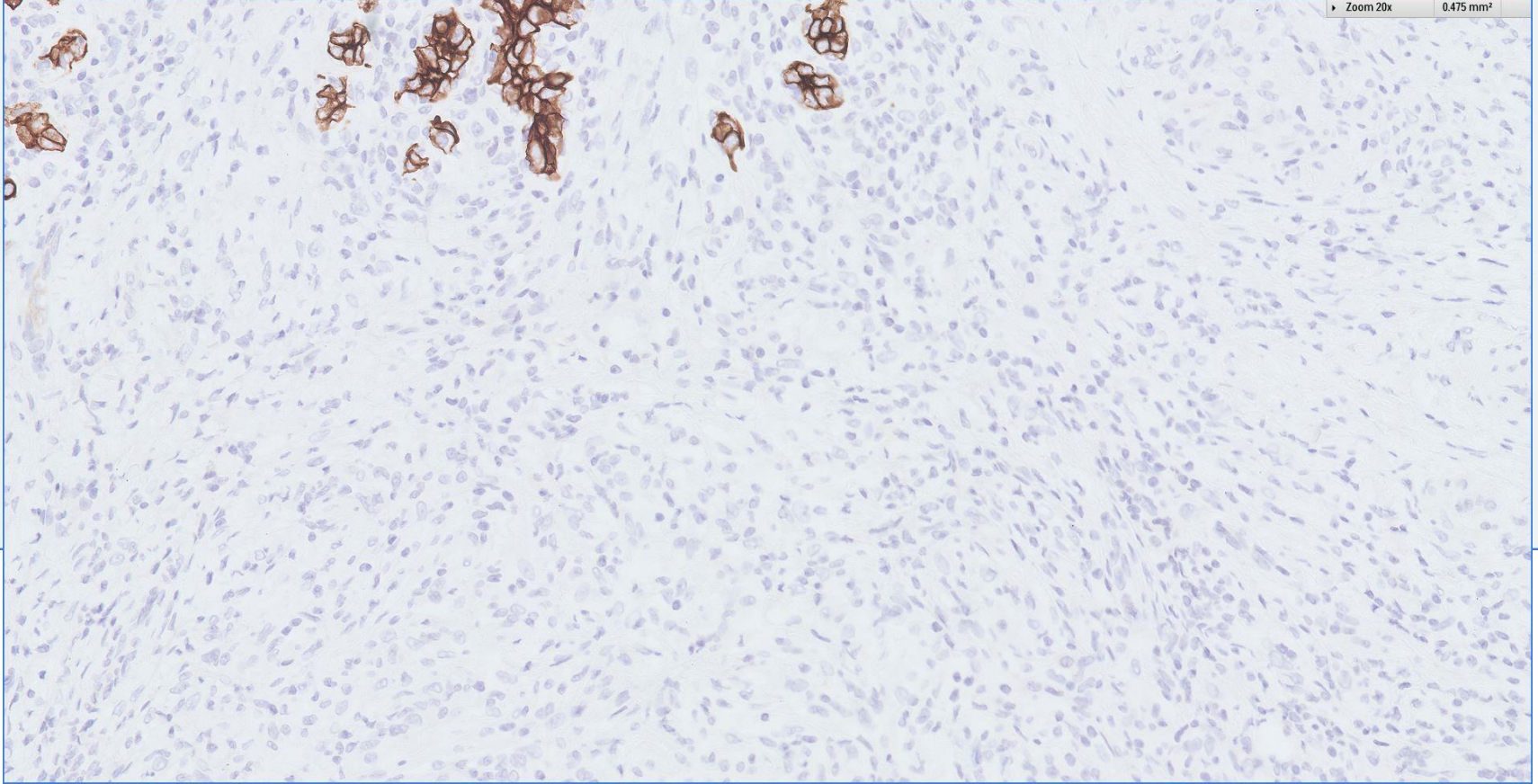


# MNF116



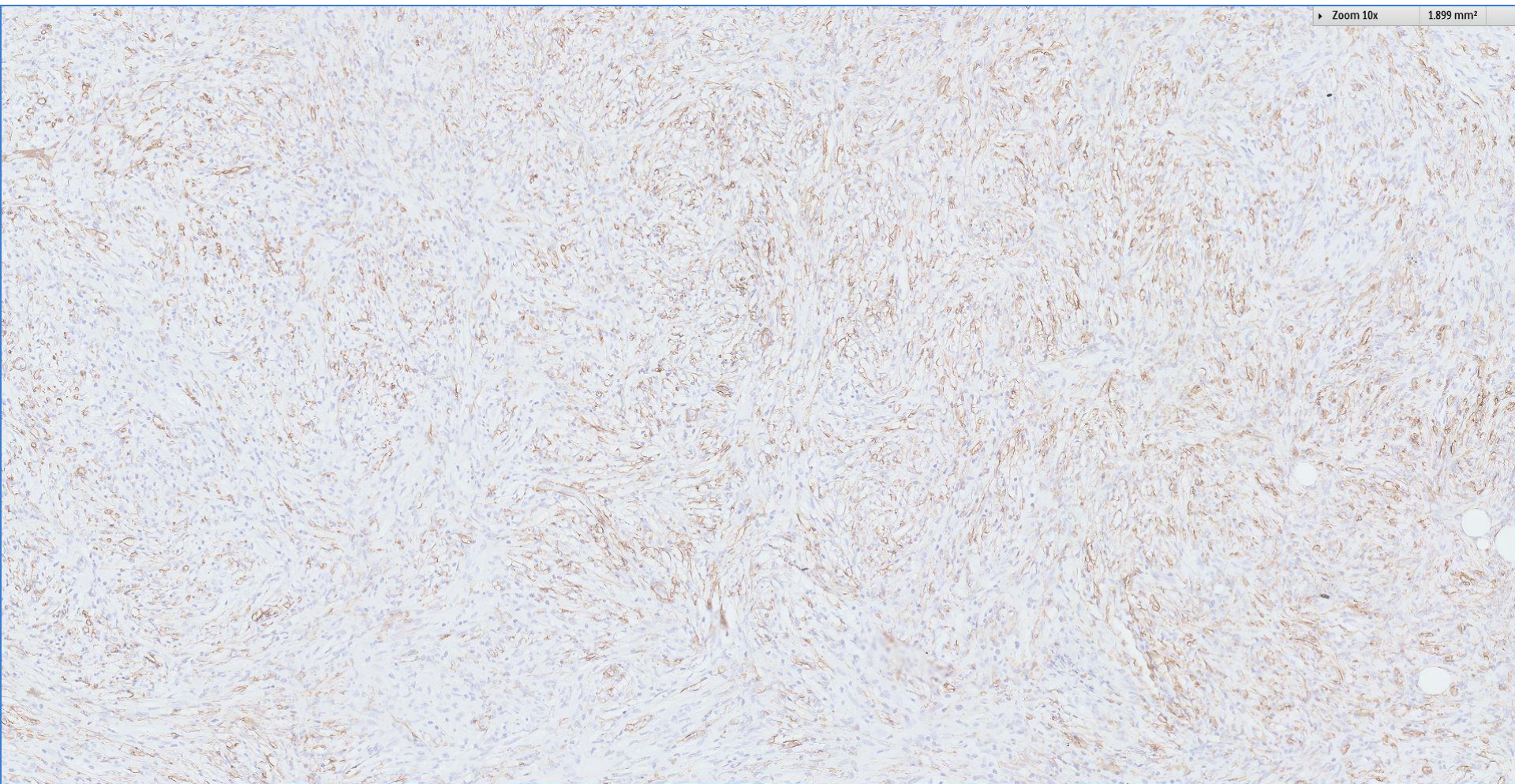


CK7



Zoom 20x 0.475 mm²

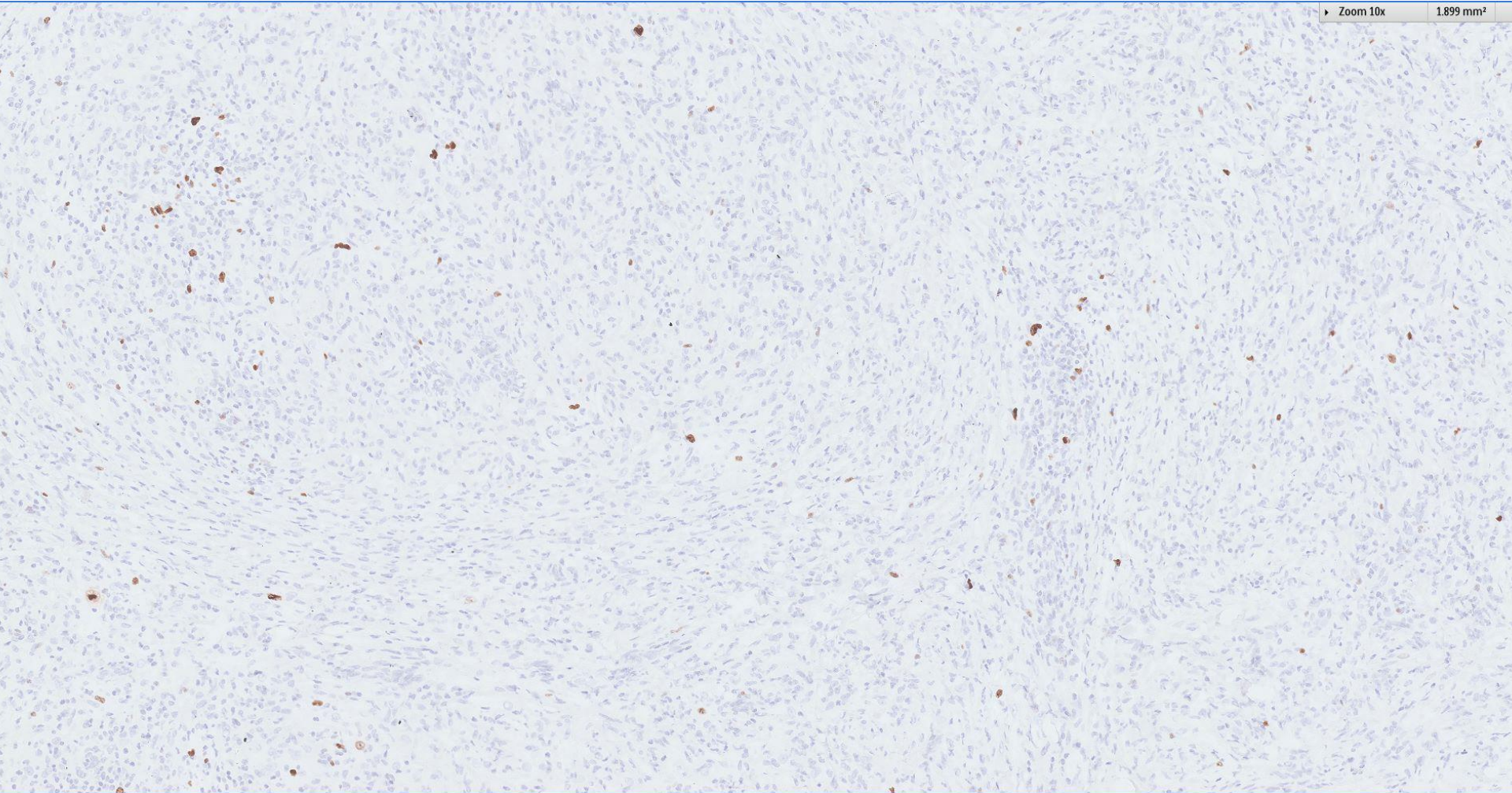
# SMA



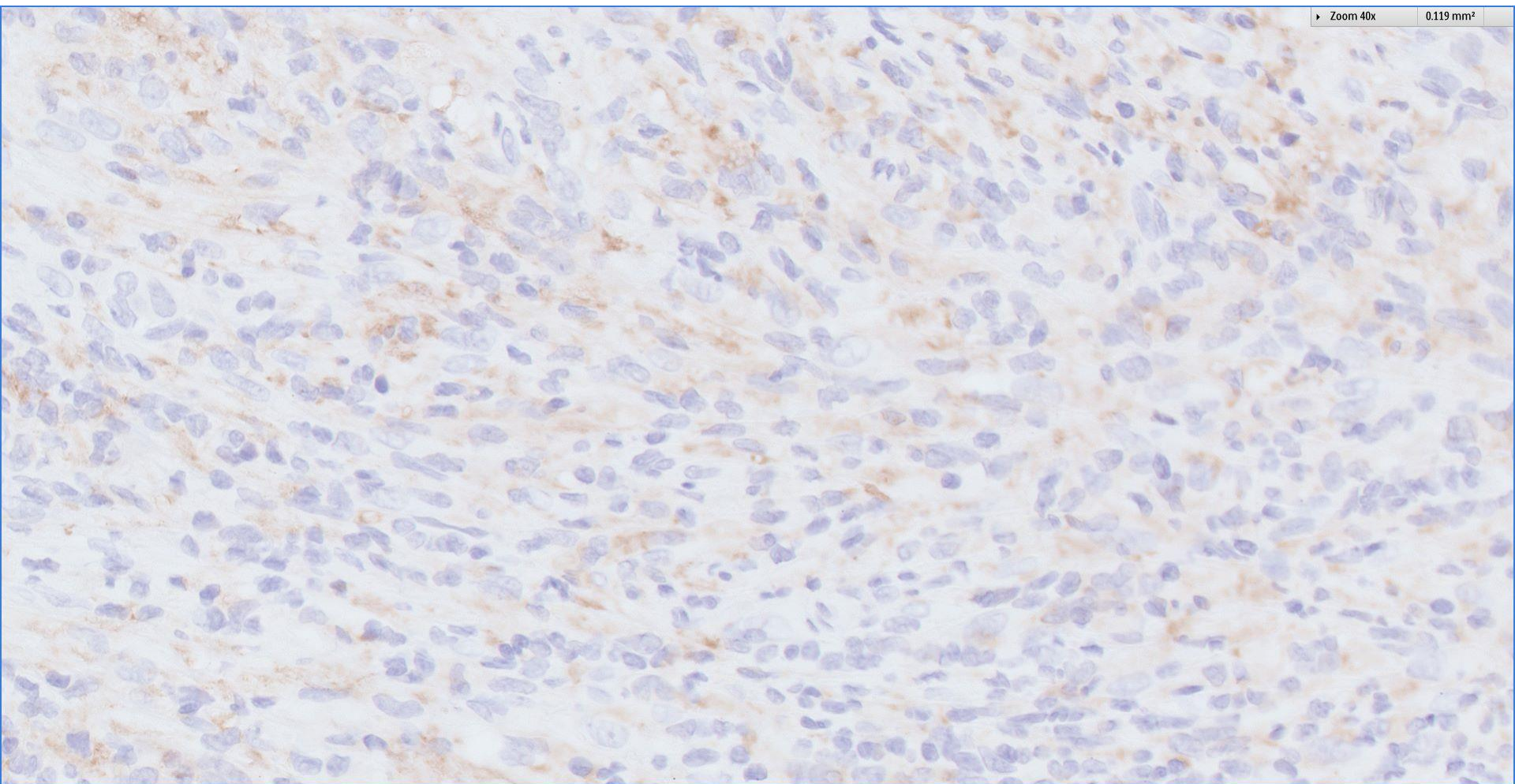


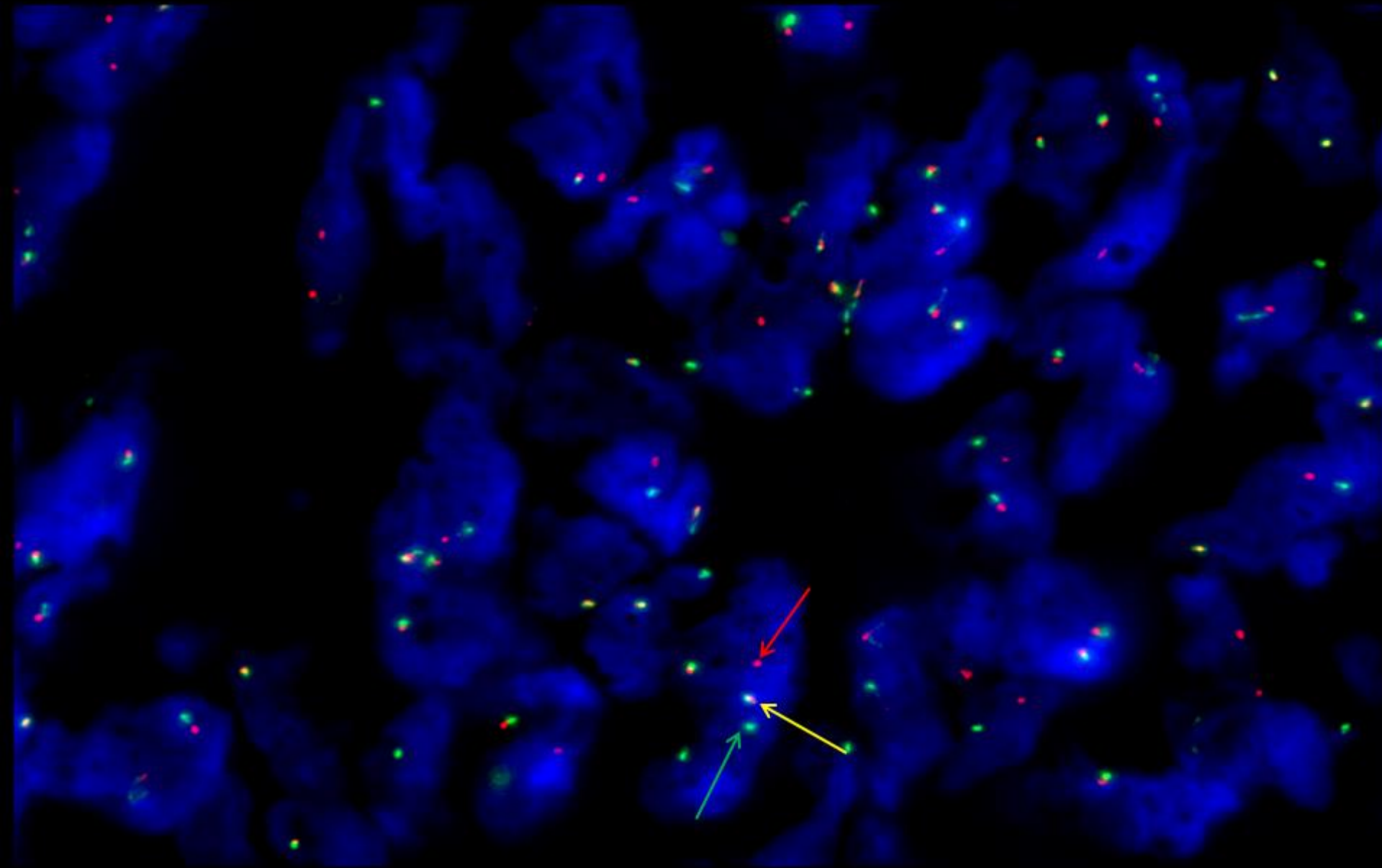
# Ki67

Zoom 10x 1.899 mm<sup>2</sup>



# ALK1





Interphase nuclei showing rearrangement of the ALK break apart probe using fluorescence in-situ hybridization. The signal pattern consists of one fusion (yellow arrow), one red (3' ALK gene) and one green (5' ALK gene) signals, indicating disruption of the ALK gene at 2p23.

# Diagnosis

## *Inflammatory spindle cell lesion*

### Differentials:

Inflammatory myofibroblastic tumour (favoured diagnosis in view of the ALK translocation)

Cellular spindled histiocytic tumour

# Inflammatory myofibroblastic tumour

- A usually low-grade neoplasm composed of myofibroblastic spindle cells with prominent admixed inflammatory cells, usually plasma cells.
- Synonyms ~ inflammatory pseudotumour, plasma cell granuloma.
- Rare occurrence in the breast, presents as a painless circumscribed mass.
- Immunohistochemical expression for SMA, sometimes desmin and keratin.
- 50% positive for ALK rearrangements, especially in younger patients.
- Prognosis is usually indolent and cannot be predicted on morphological grounds, though metastasis is seen more frequently in ALK negative cases (described for tumours arising in visceral and soft tissue locations).

 Breast  
Pathology  
Course 2016



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