



# SGH Breast Course Nov 2019



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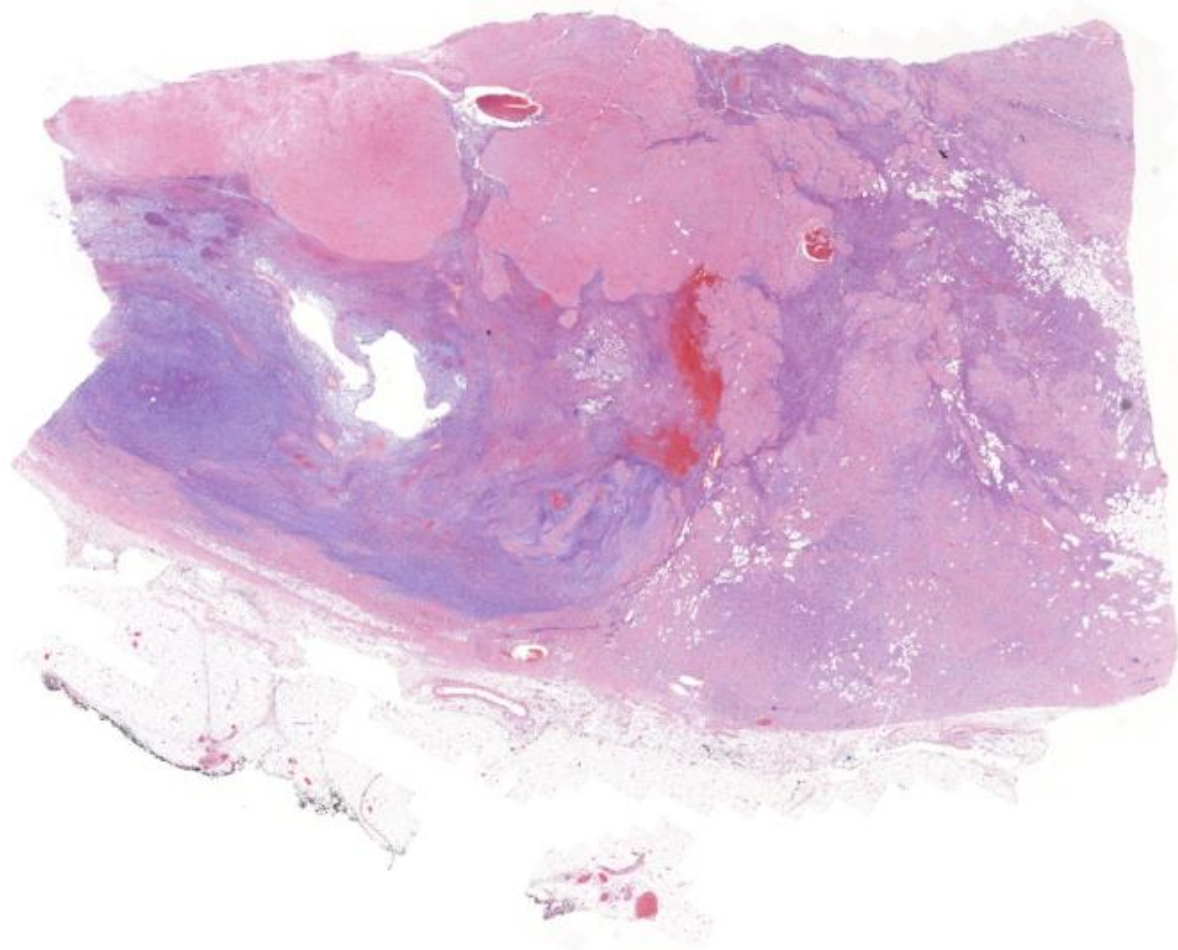
Conjoint Professor, Faculty of Medicine, University of New South Wales



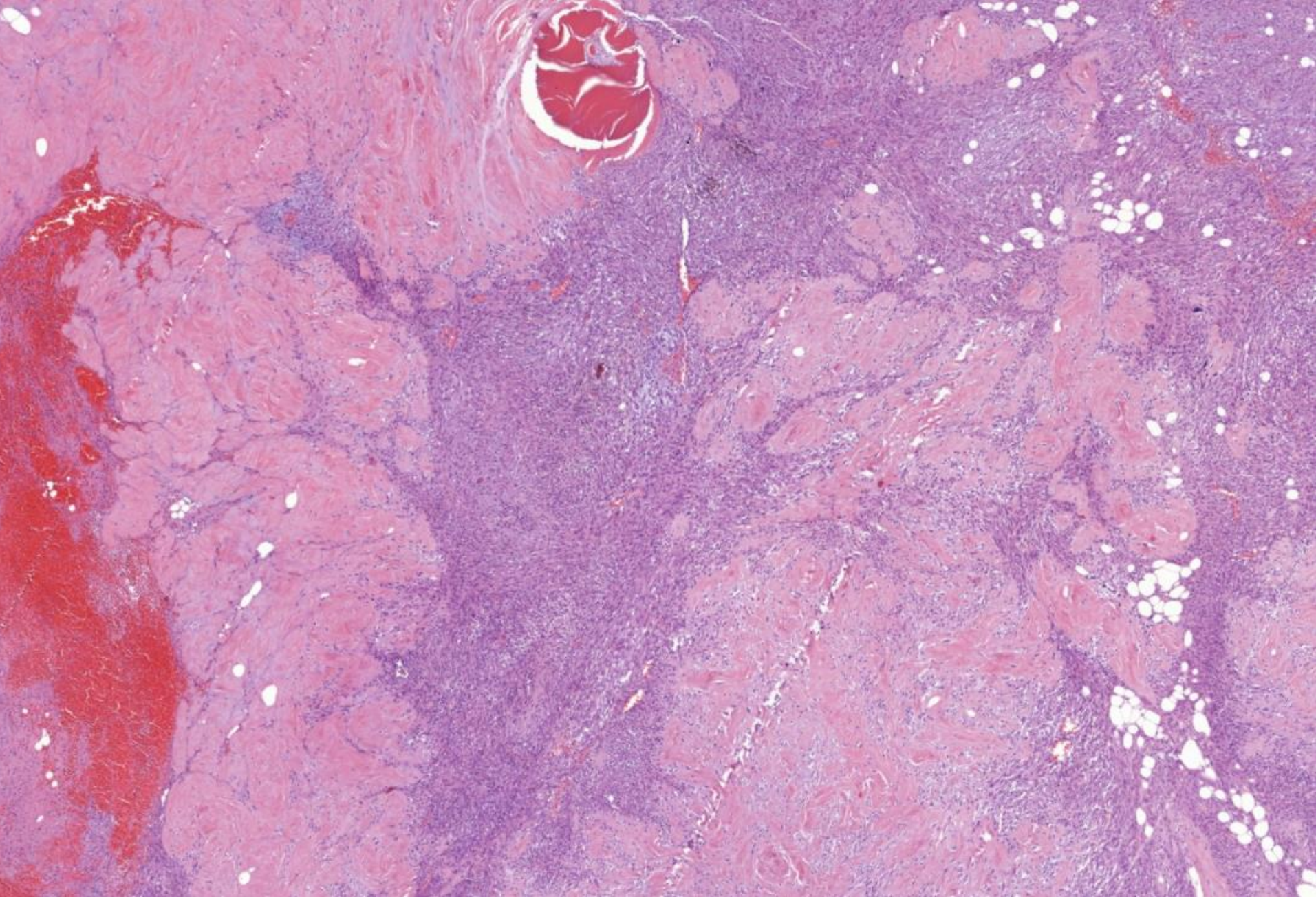


# Case 1

- 66 y.o female with right breast lump. Right mastectomy.
- Macroscopic appearance: 50mm solid cream mass with infiltrative margins, variegated necrotic, myxoid and haemorrhagic areas

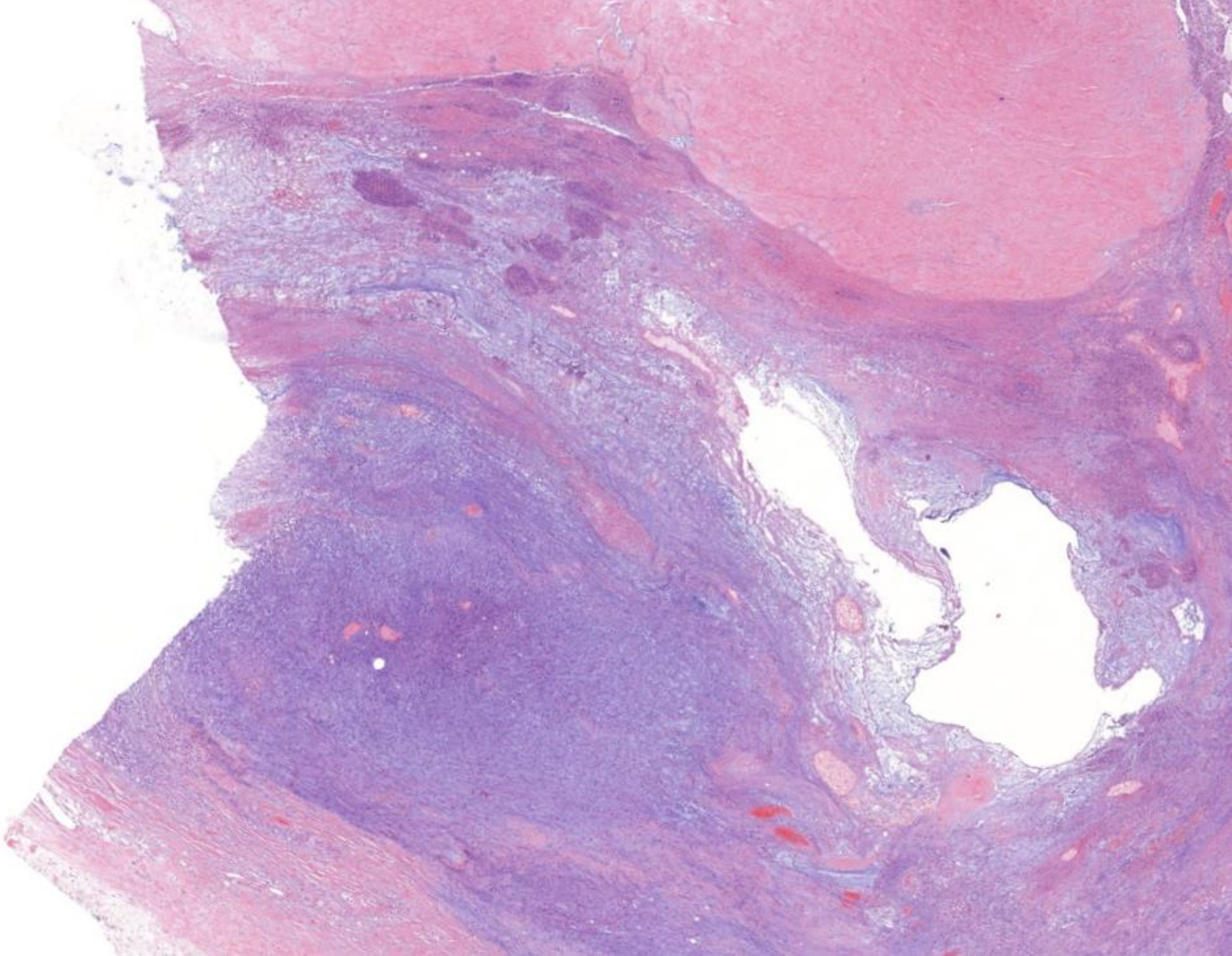






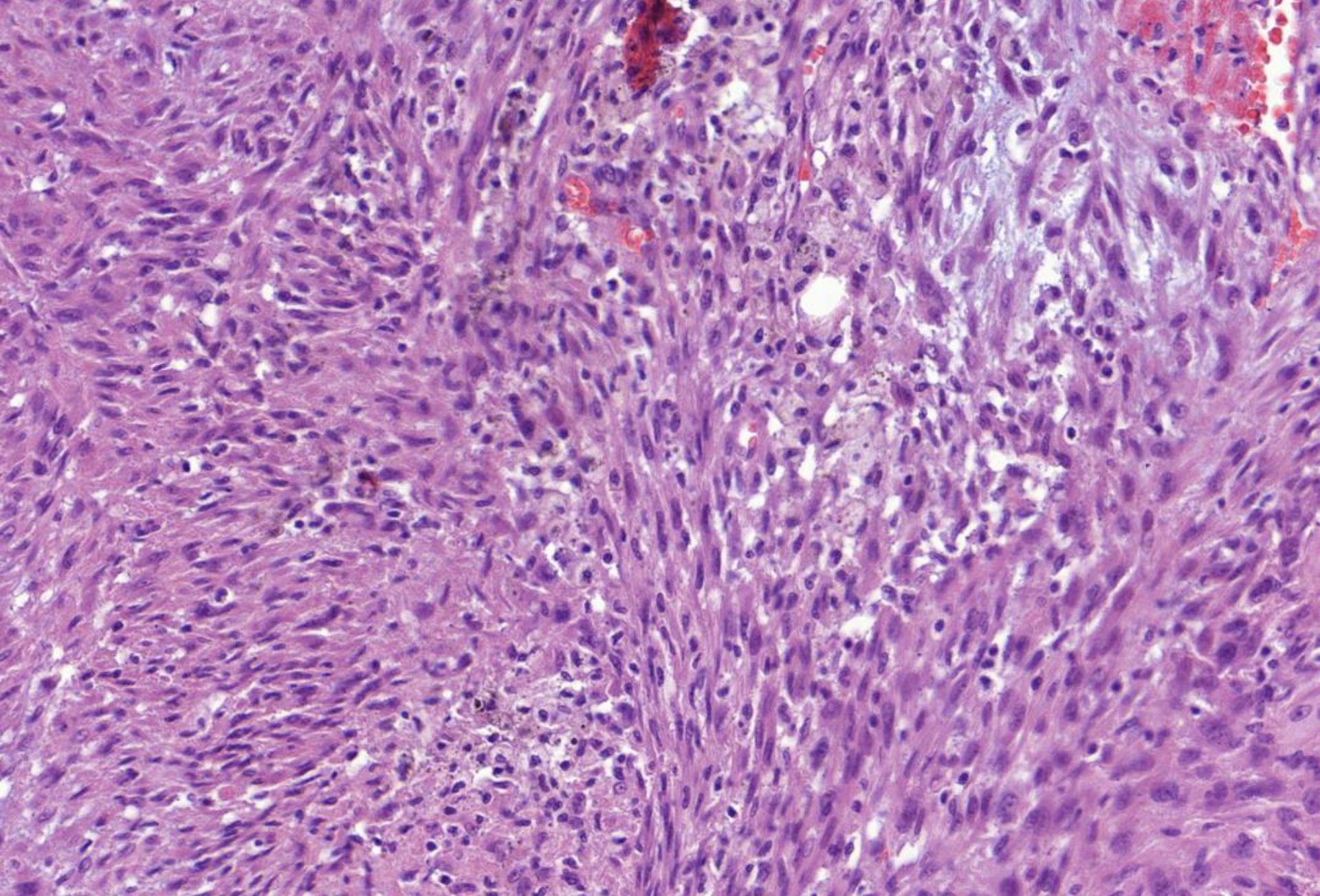
Variegated appearance





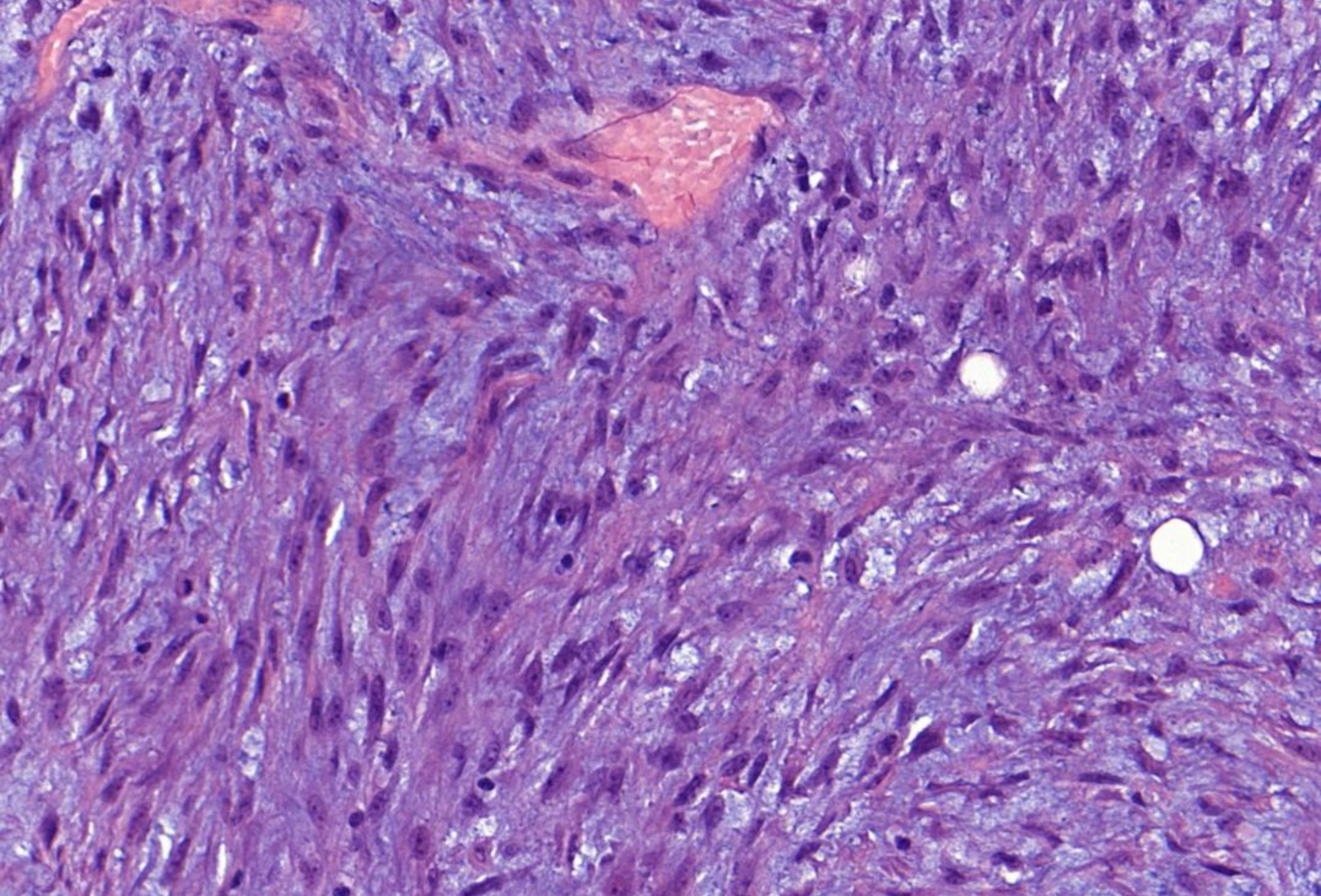
Myxoid and necrotic areas





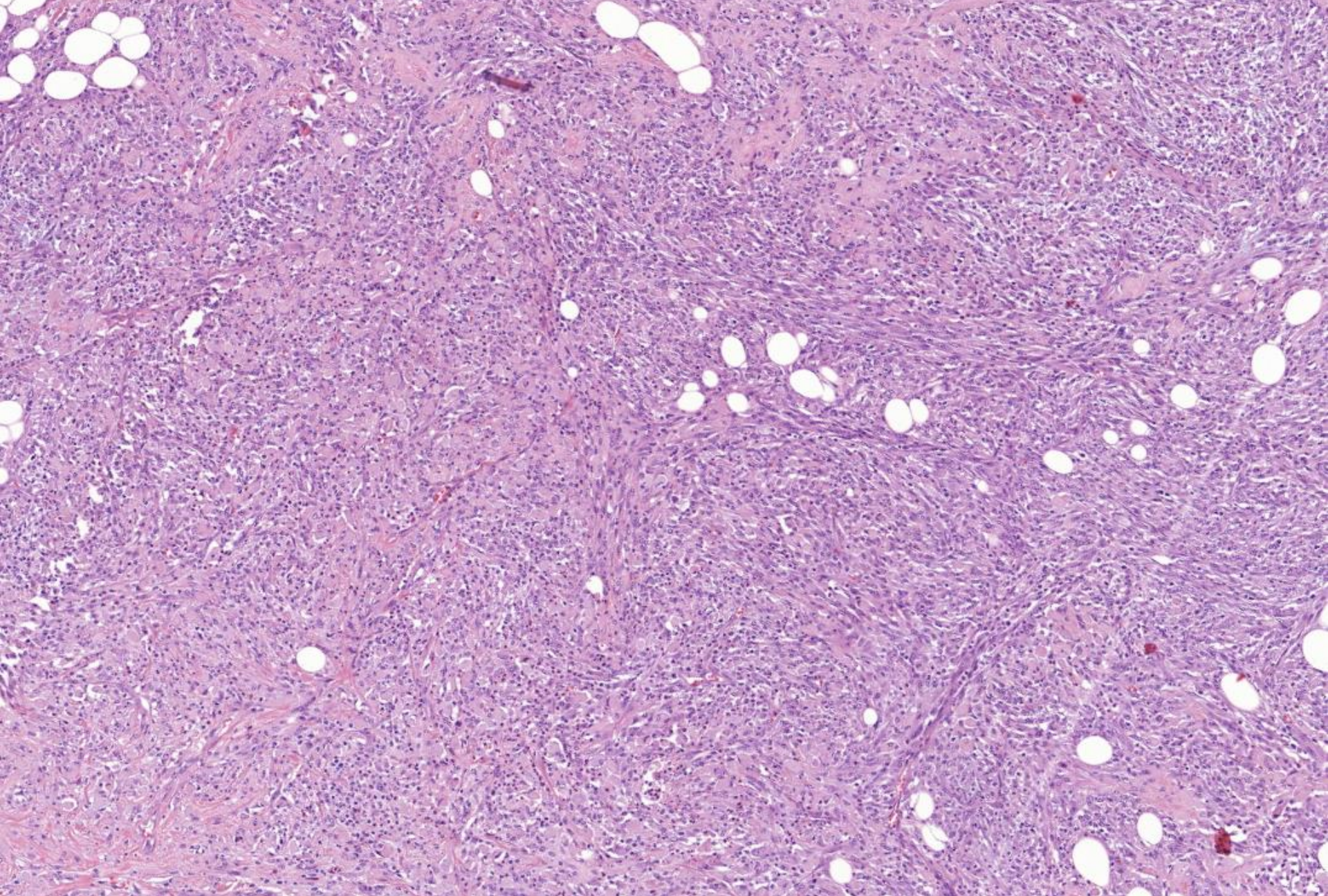
Cellular spindled cell area in irregular broad fascicles





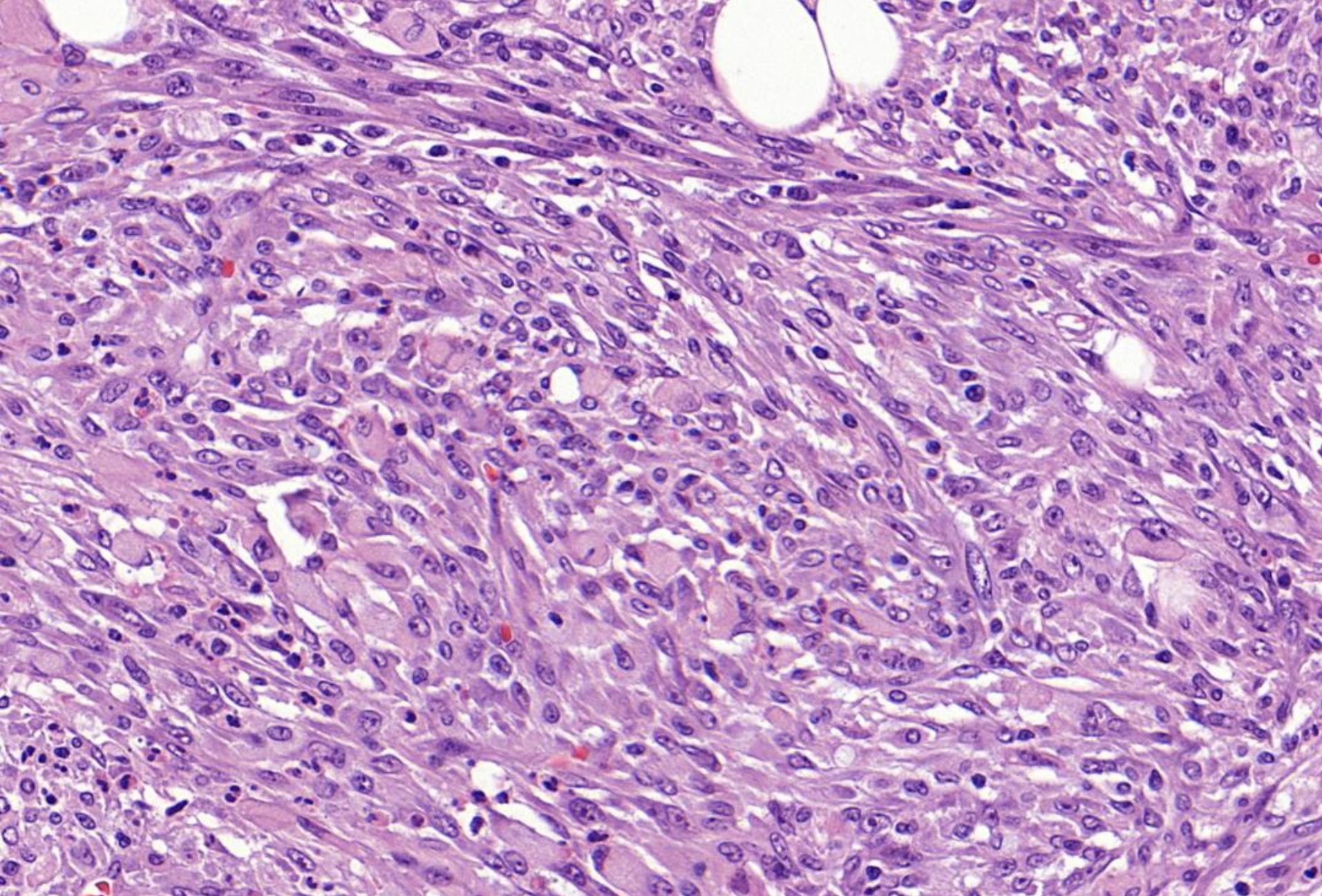
Spindle cells in myxoid area (with “tissue culture” appearance)





Infiltration of fat





Tumour cells have plump to oval nuclei with a few mitoses (9/10 hpf) .  
Scattered lymphocytes.





# Differential Dx

- Sarcoma
- Malignant phyllodes tumour
- Fibromatosis/nodular fasciitis
- Melanoma





# Immunohistochemistry

- Positive for MNF116, AE1/3, CK14, 34BE12, and p63
- Negative for ER, PR and HER2





# Diagnosis

- Metaplastic carcinoma, fibromatosis subtype

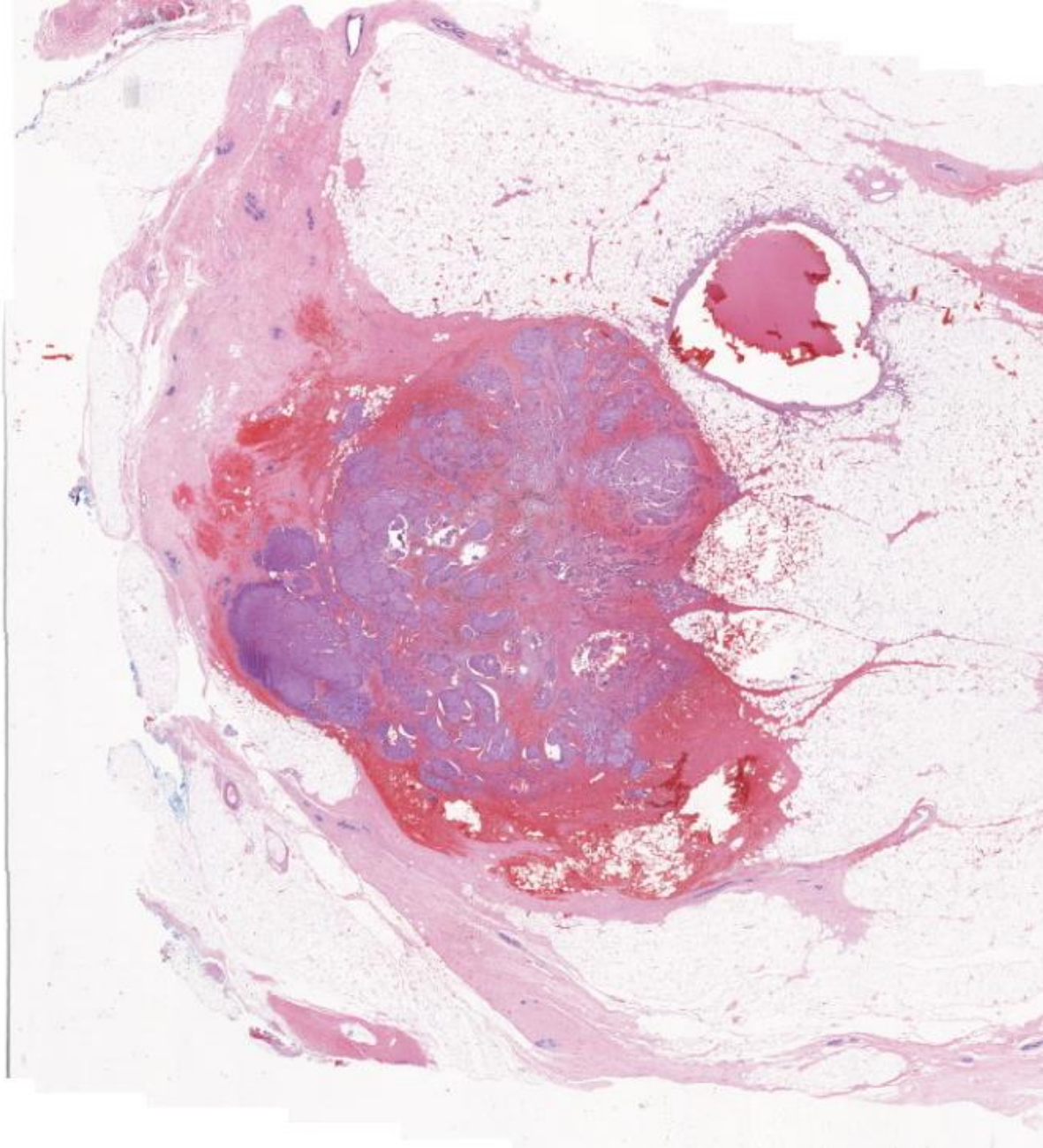




## Case 2

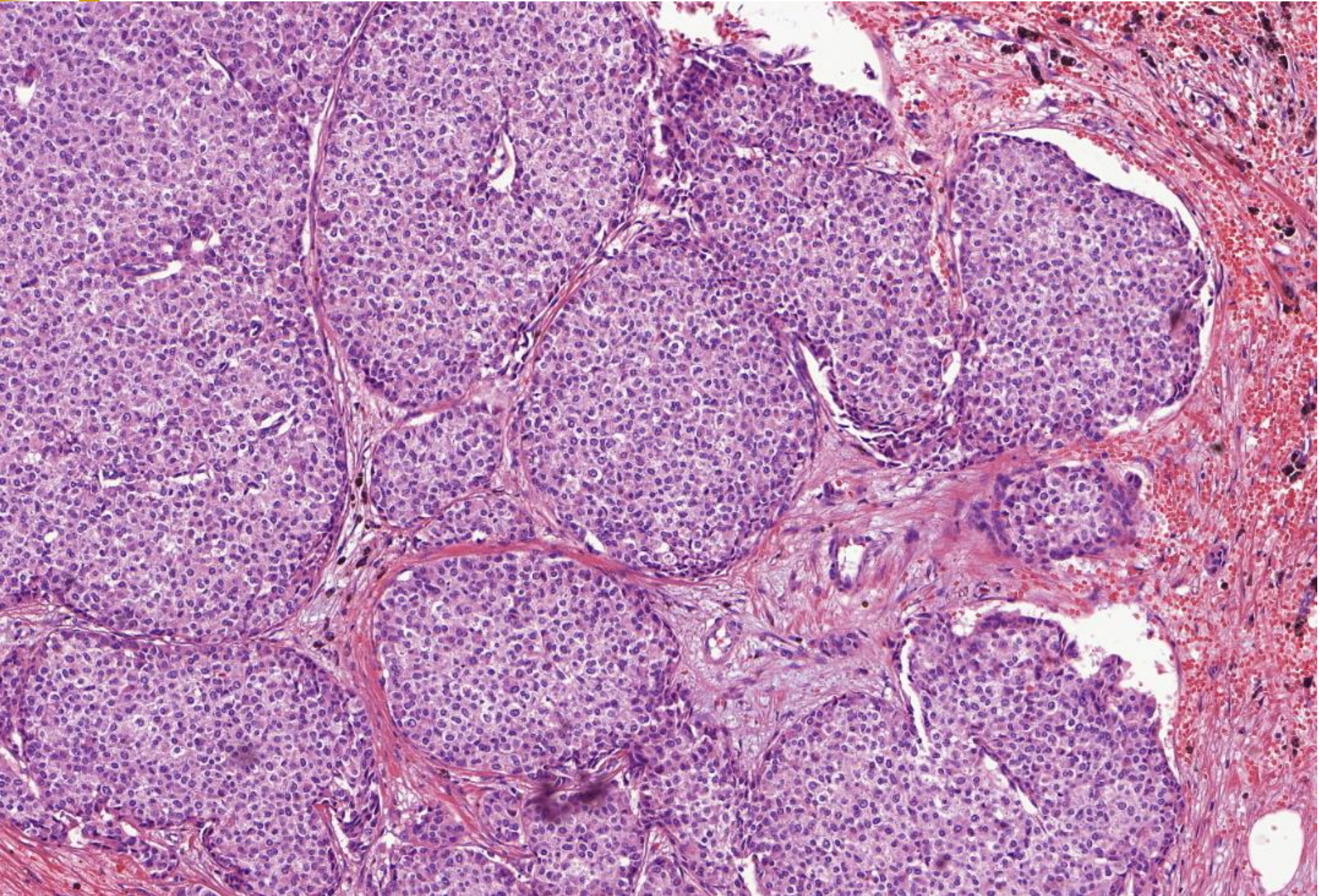
- 67F with right breast lump. WLE.
- Macro: Well-circumscribed haemorrhagic nodule, 25mm across





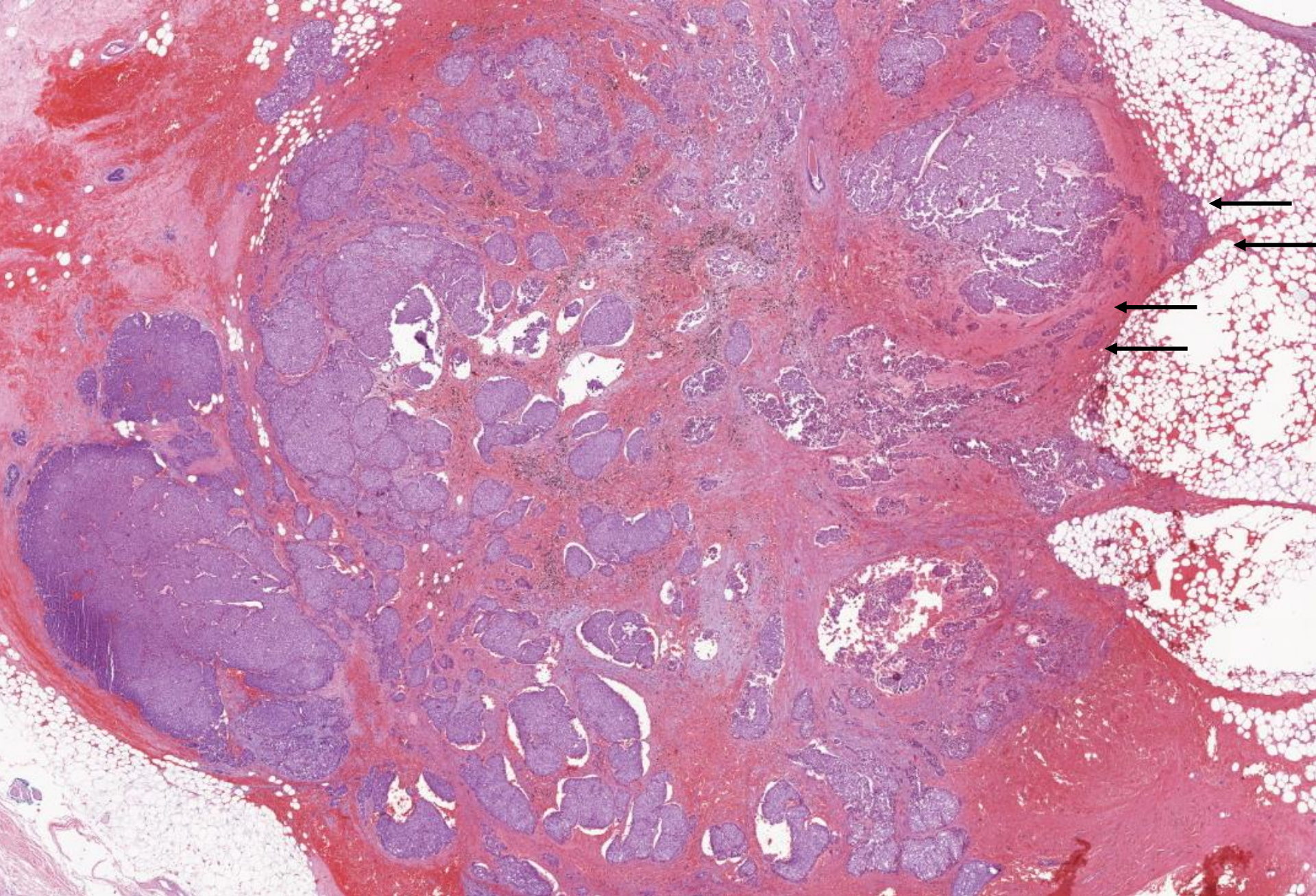
Circumscribed cellular tumour





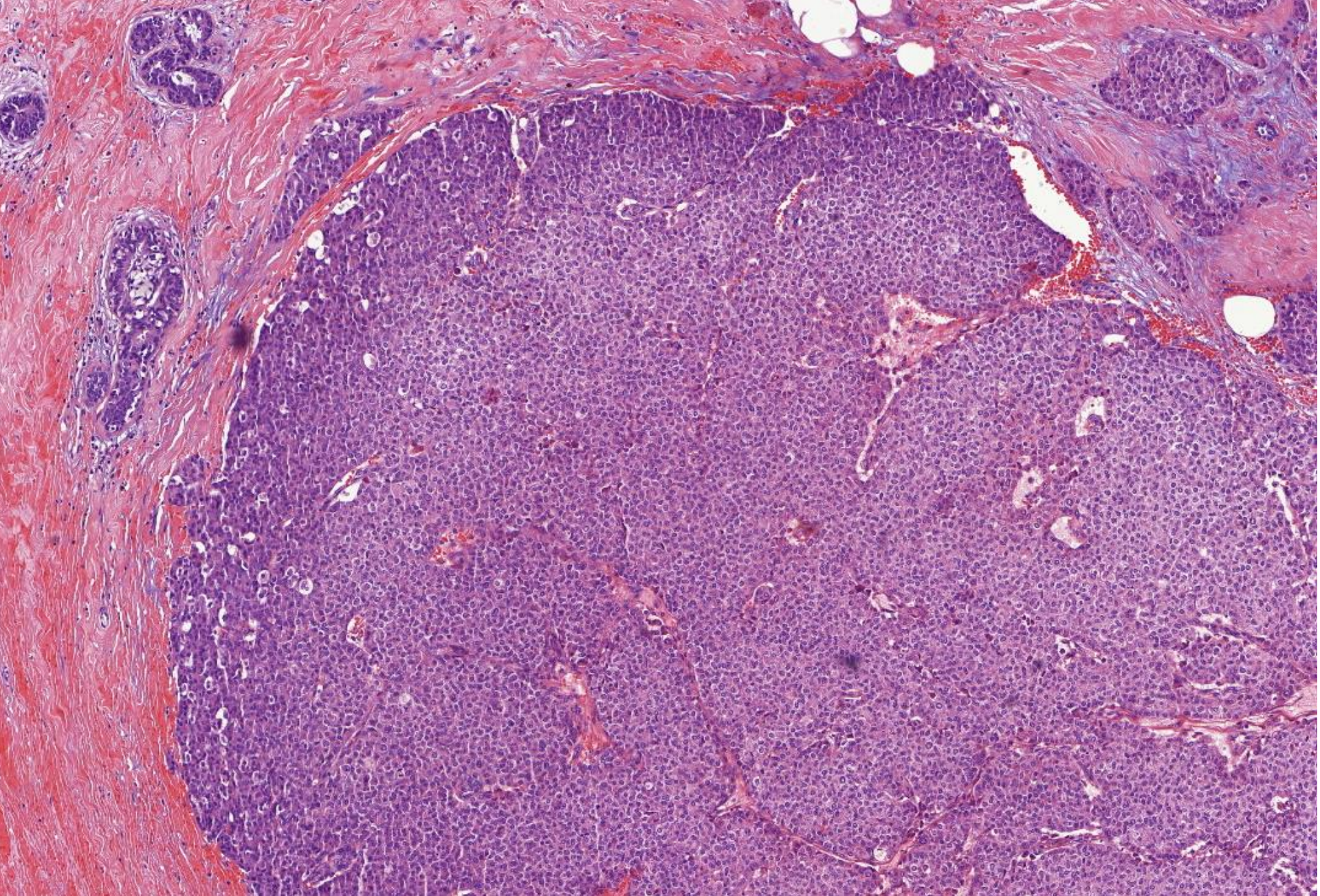
Nested/lobulated growth pattern.





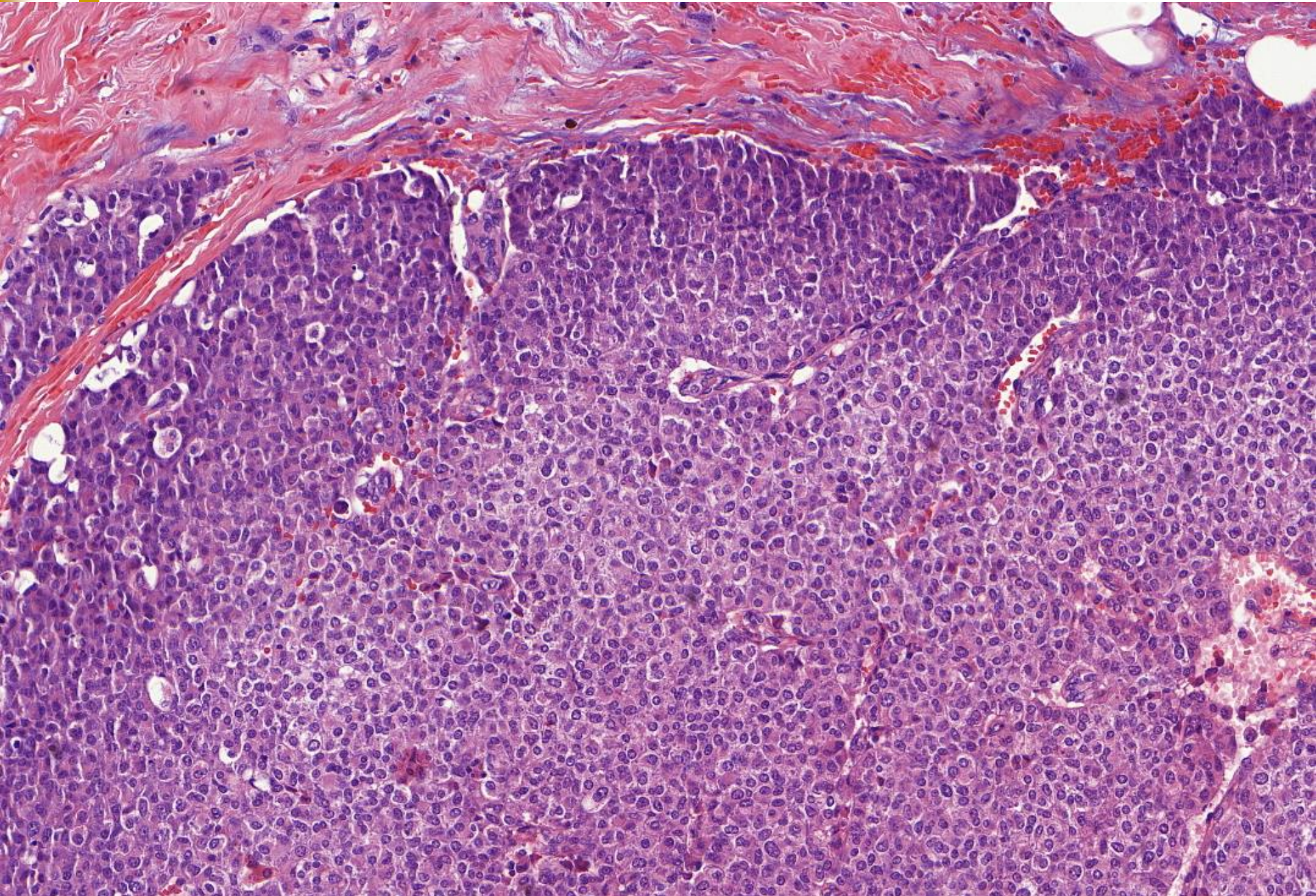
Lobules of epithelial cells. Small cell clusters infiltrating adjacent fat (arrows)





Solid area with tumour cells surrounding delicate fibrovascular cores.





Tumour cells have moderate amphophilic cytoplasm, round to oval nuclei and fine granular chromatin.





# Differential Dx

- LCIS – No fibrovascular cores
- Carcinoid tumour – ER negative
- Papilloma



# Immunohistochemistry

## ■ Positive:

- ER, PR, chromogranin, synaptophysin
- Ki67 <10%

## ■ Negative:

- HER2
- P63, CD10, CK5/6 (ie no myoepithelial cells)





# Diagnosis

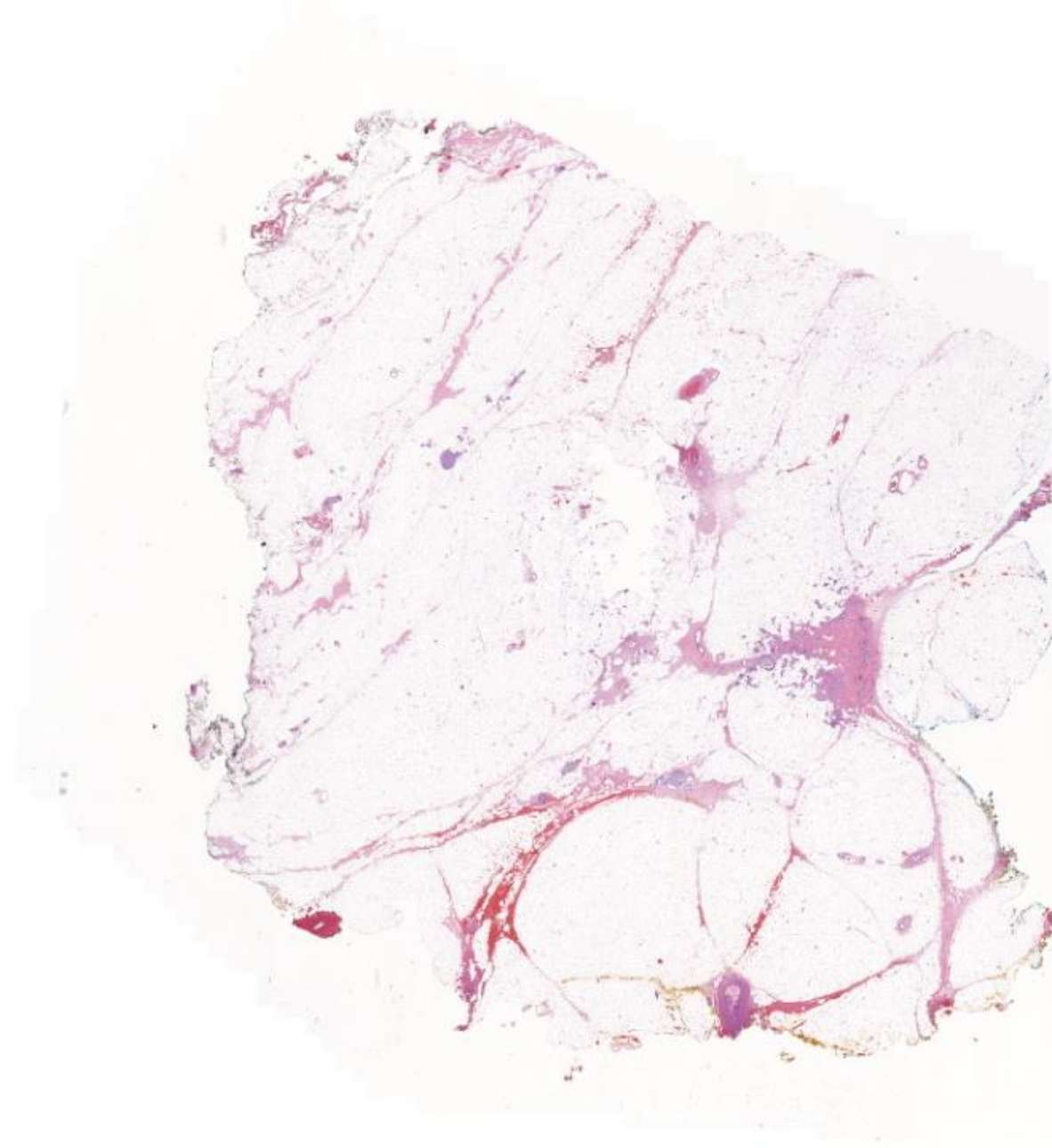
Solid papillary carcinoma (with <5% component of invasive carcinoma of no special type).



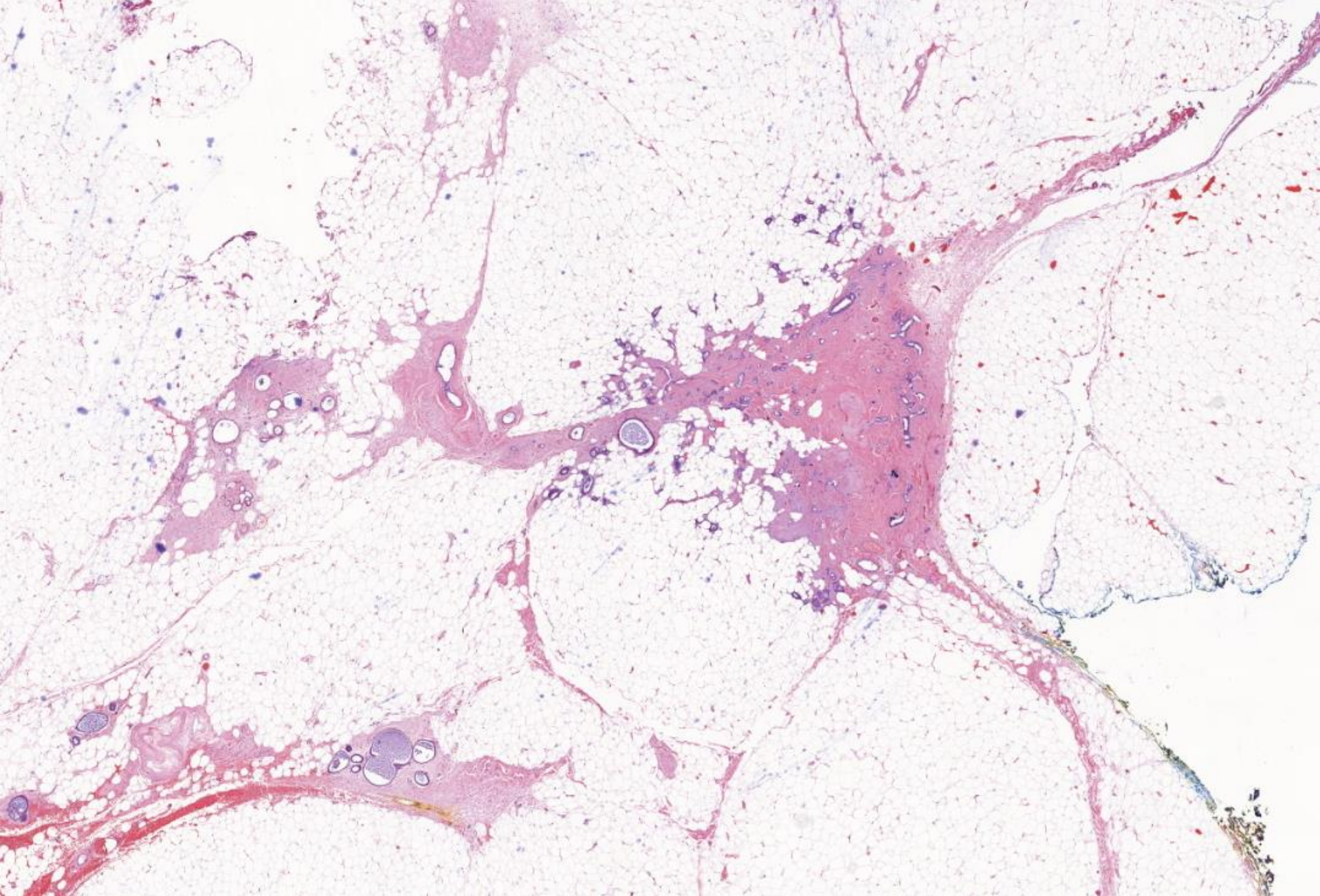
# Case 3

- 79 F Right breast lesion at 11 o'clock 7cm from nipple
- Macro: 8mm haemorrhagic lesion.



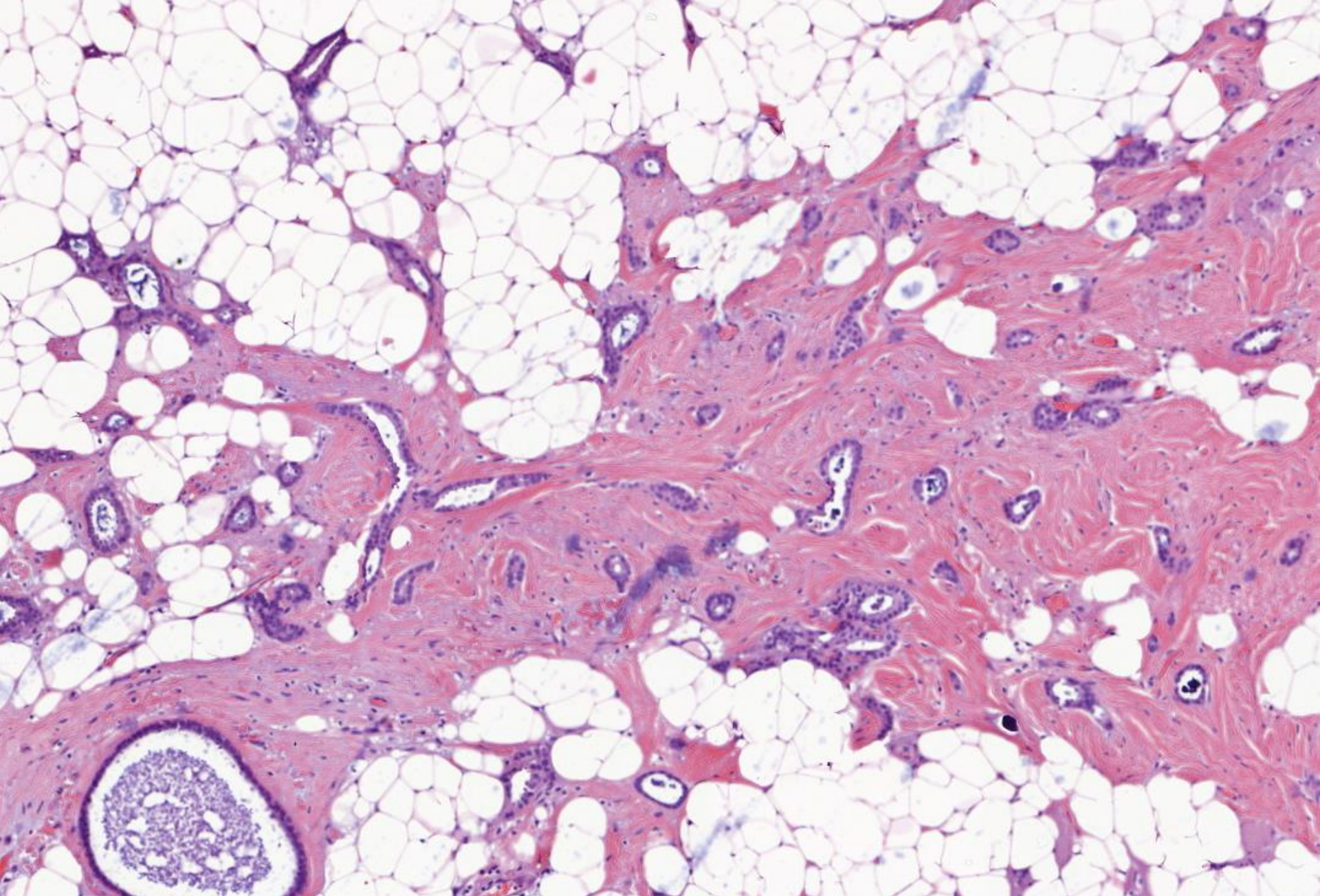


Focal sclerotic area



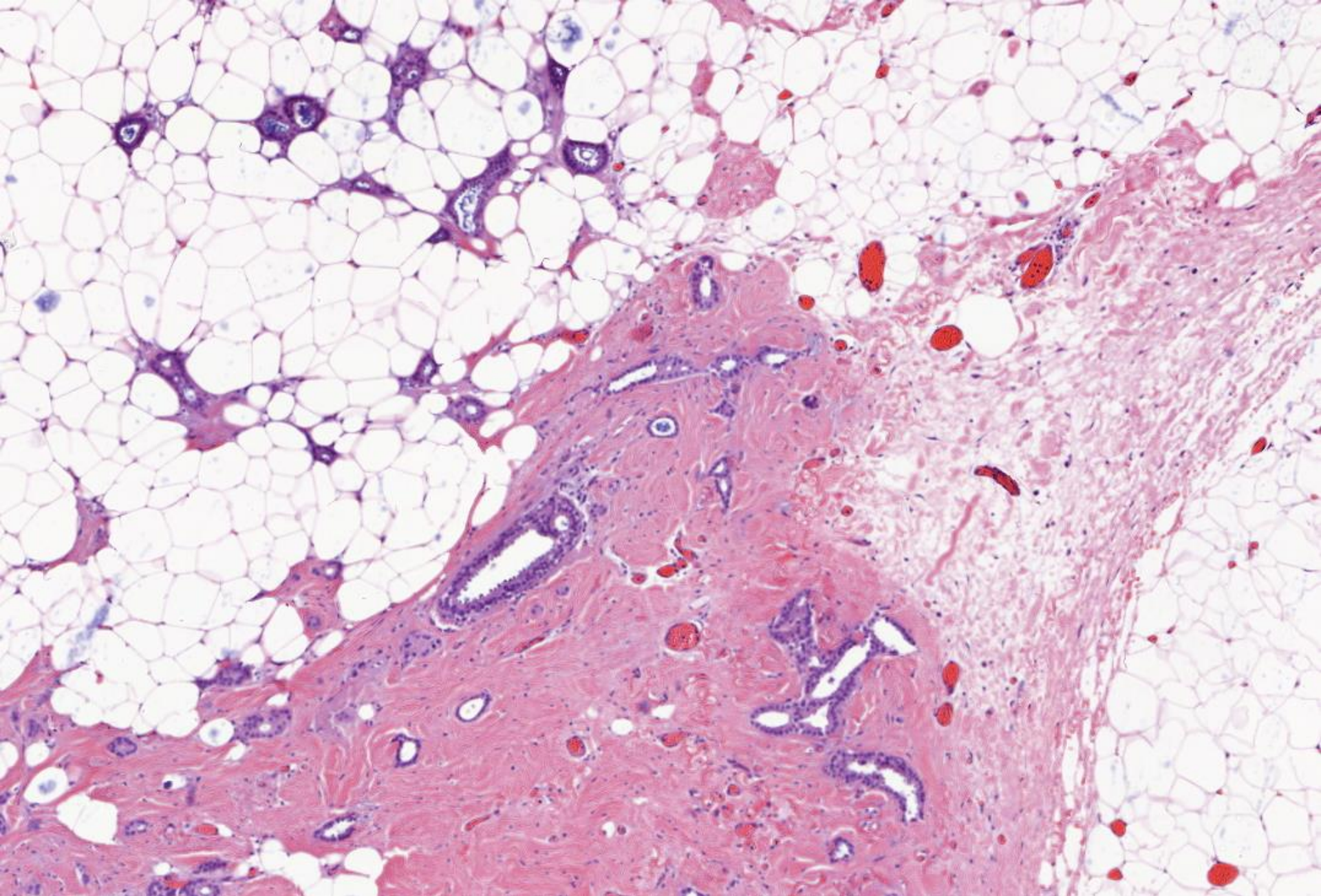
Sclerotic area with radiating fibrous septa





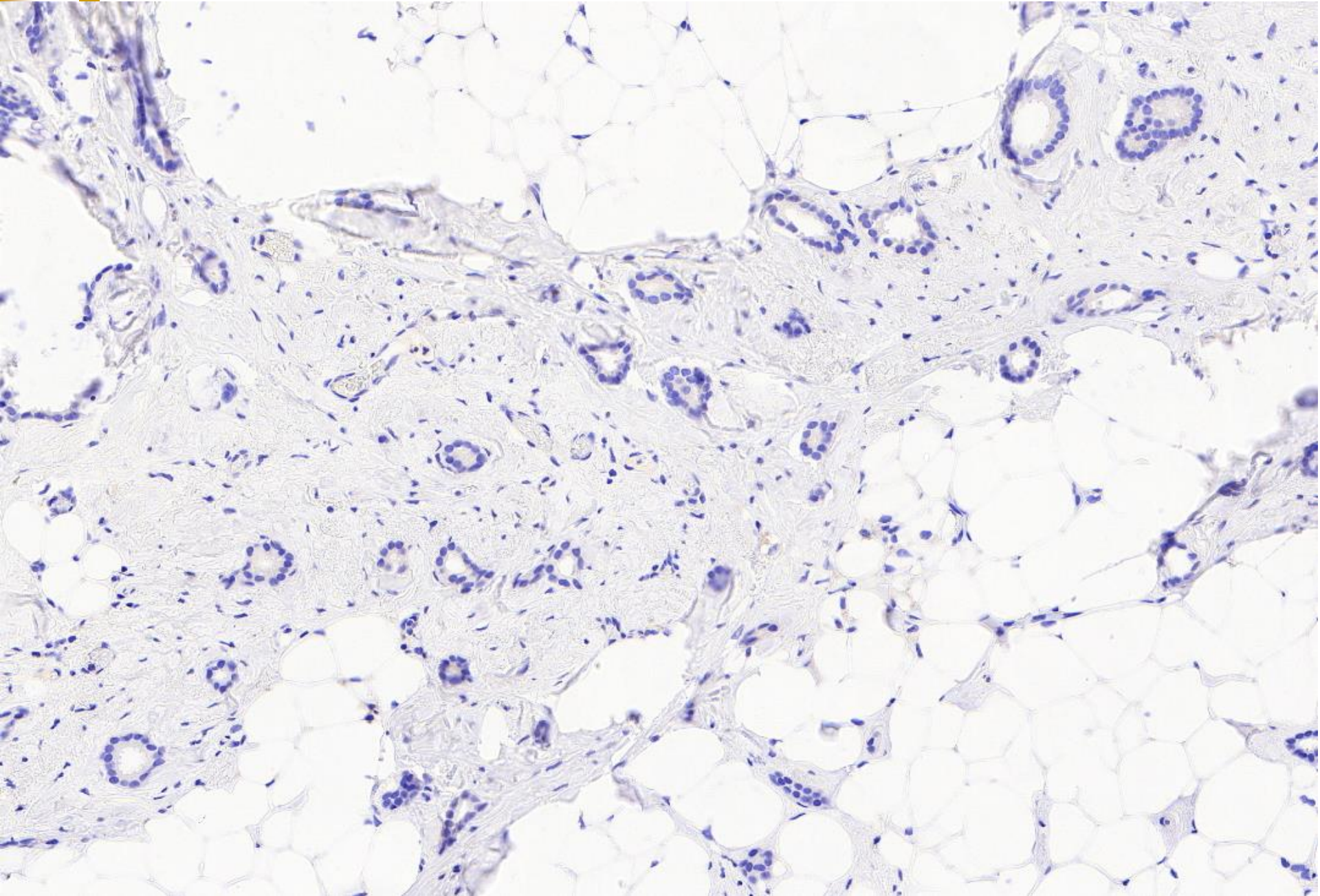
Tubular structures within sclerotic area, some are infiltrating fat.





Tubules infiltrating fat.





p63 negative ie no myoepithelial cells



# Differential Dx

- Sclerosing adenosis
- Microglandular adenosis





# Immunohistochemistry

- Positive:

- ER, PR
- Ki67 <5%

- Negative:

- HER2
- p63 (ie no myoepithelial cells)



# Diagnosis

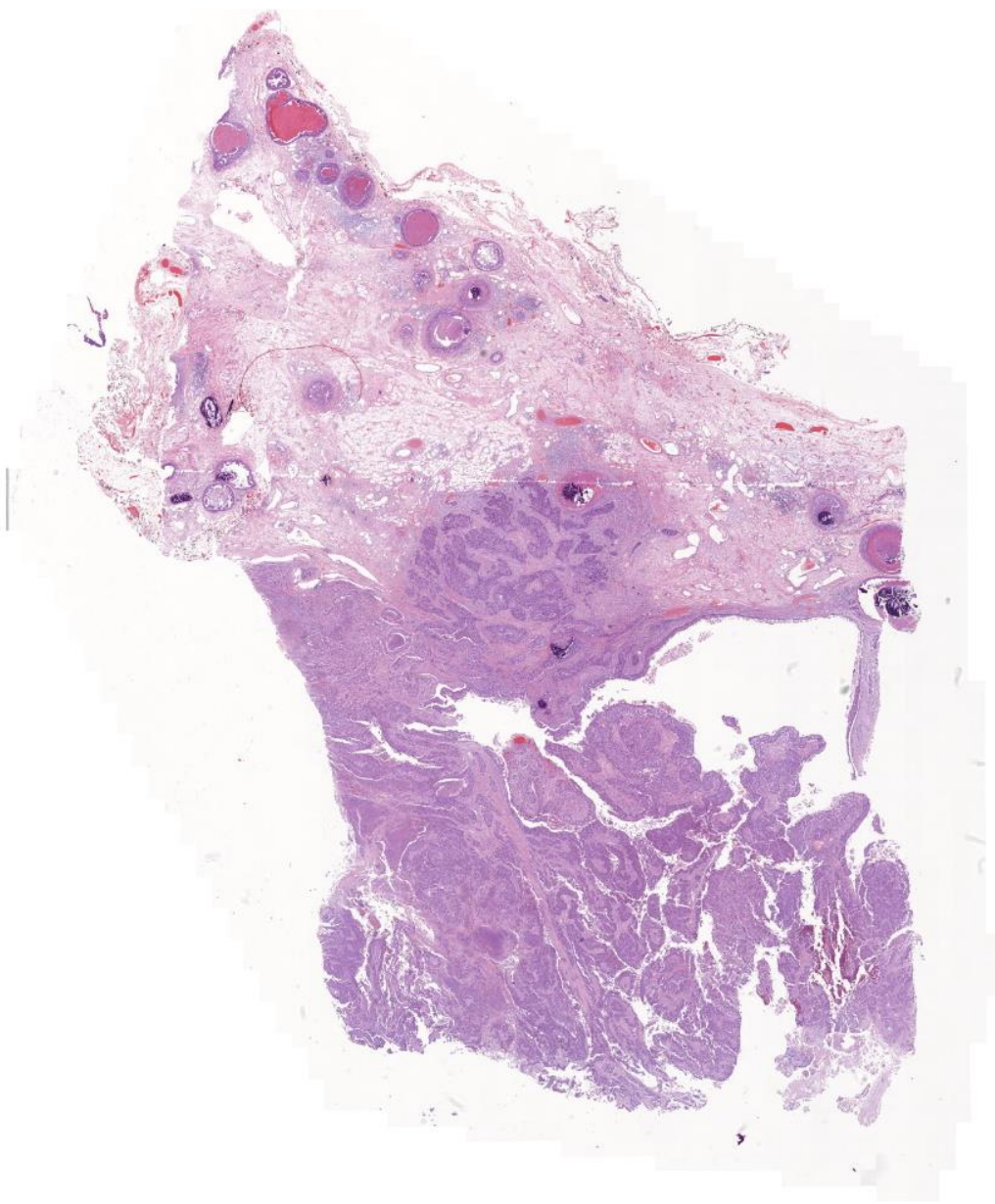
Tubular carcinoma





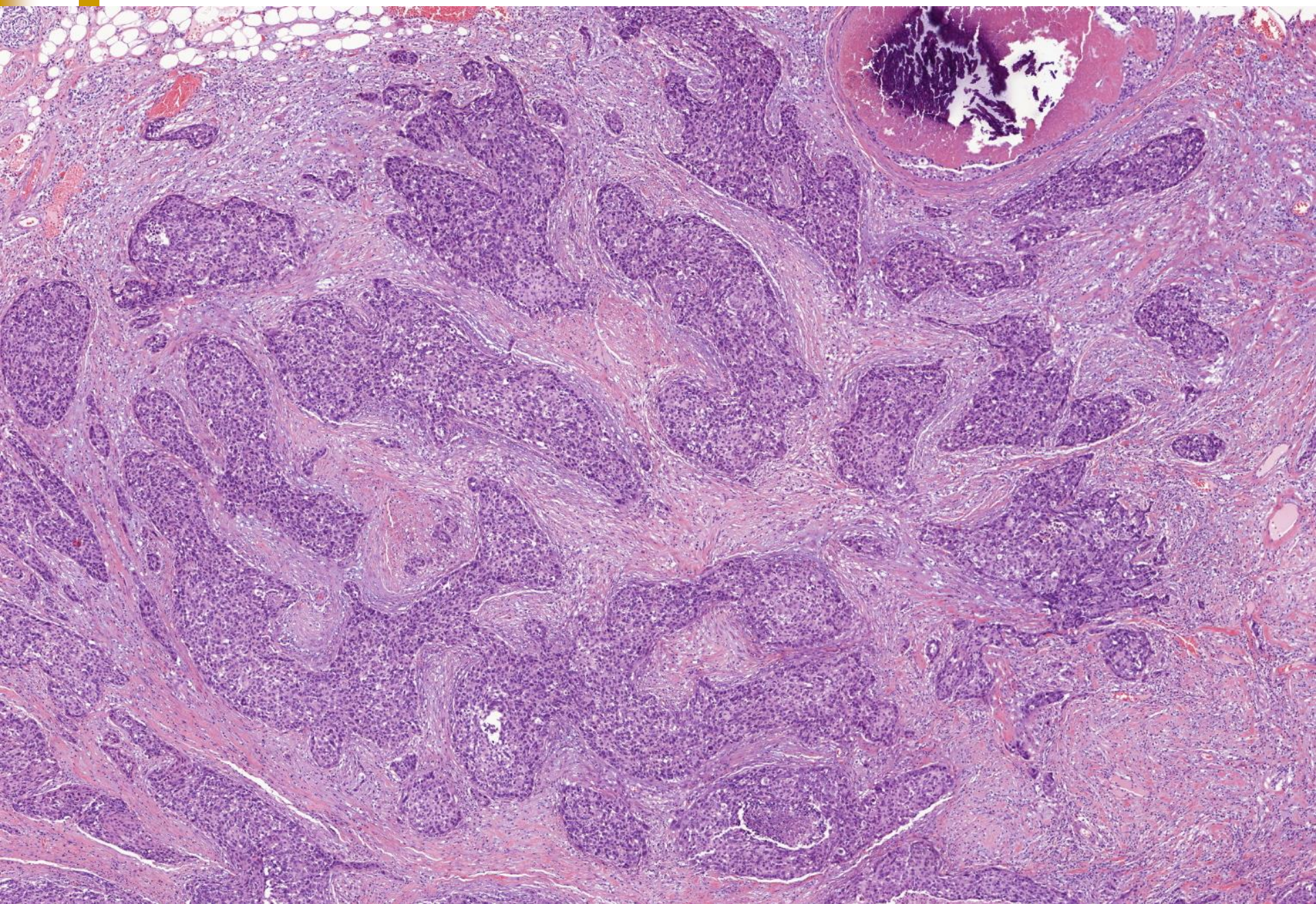
# Case 4

- 30 F Left breast lump. Mastectomy
- Macro: 90mm mass with central necrosis and irregular infiltrative margin.



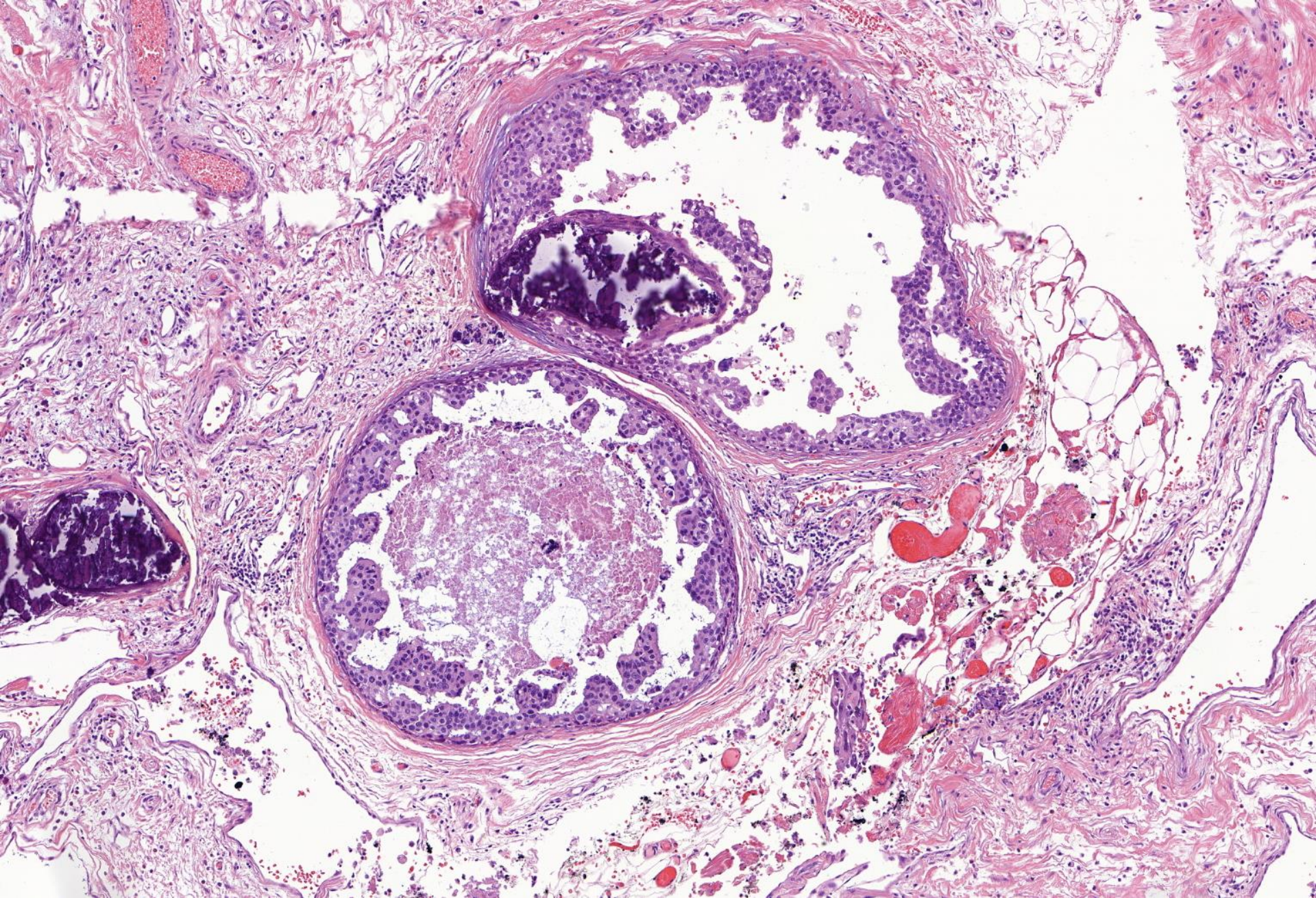
Infiltrating tumour mass





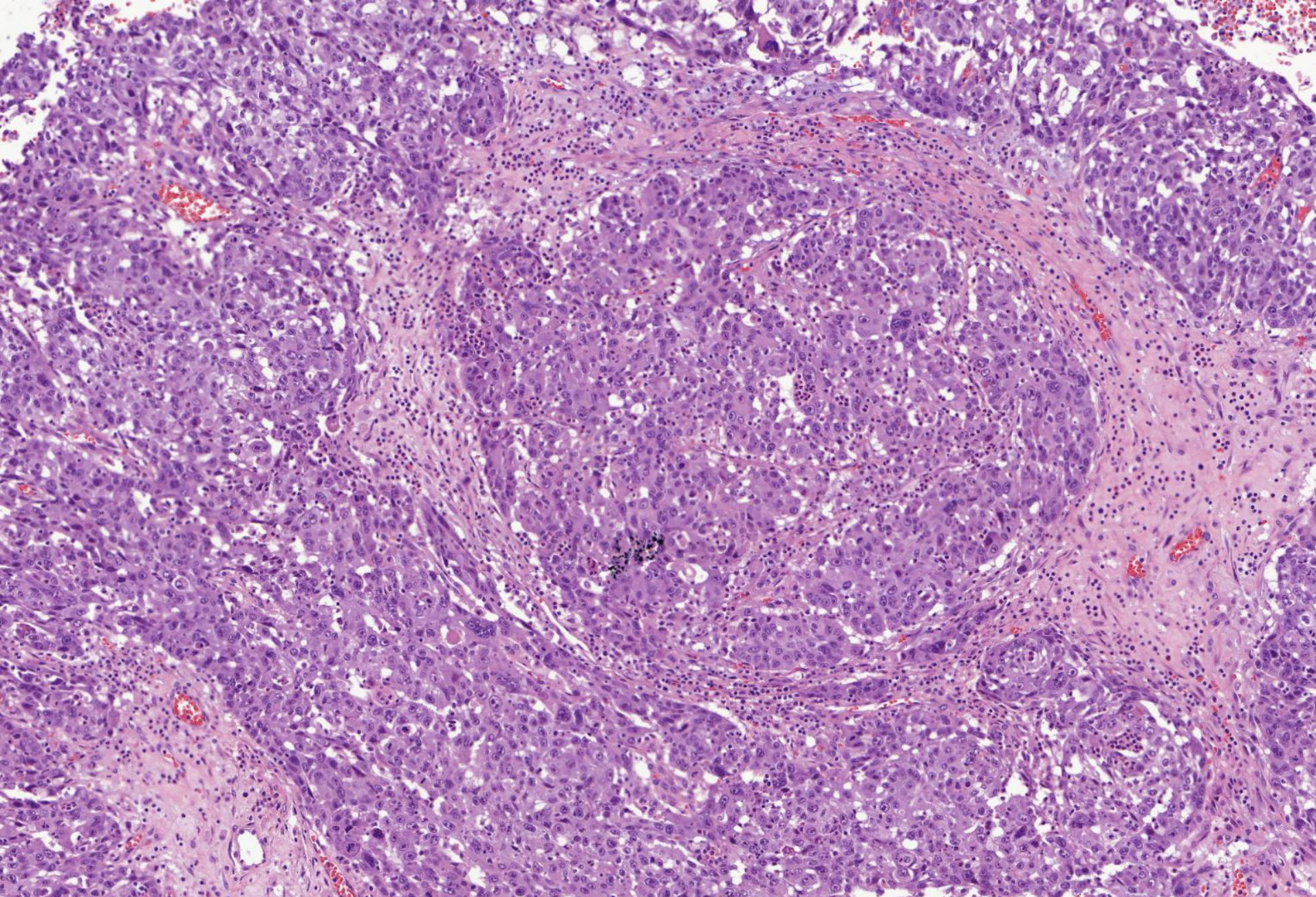
Nested growth pattern





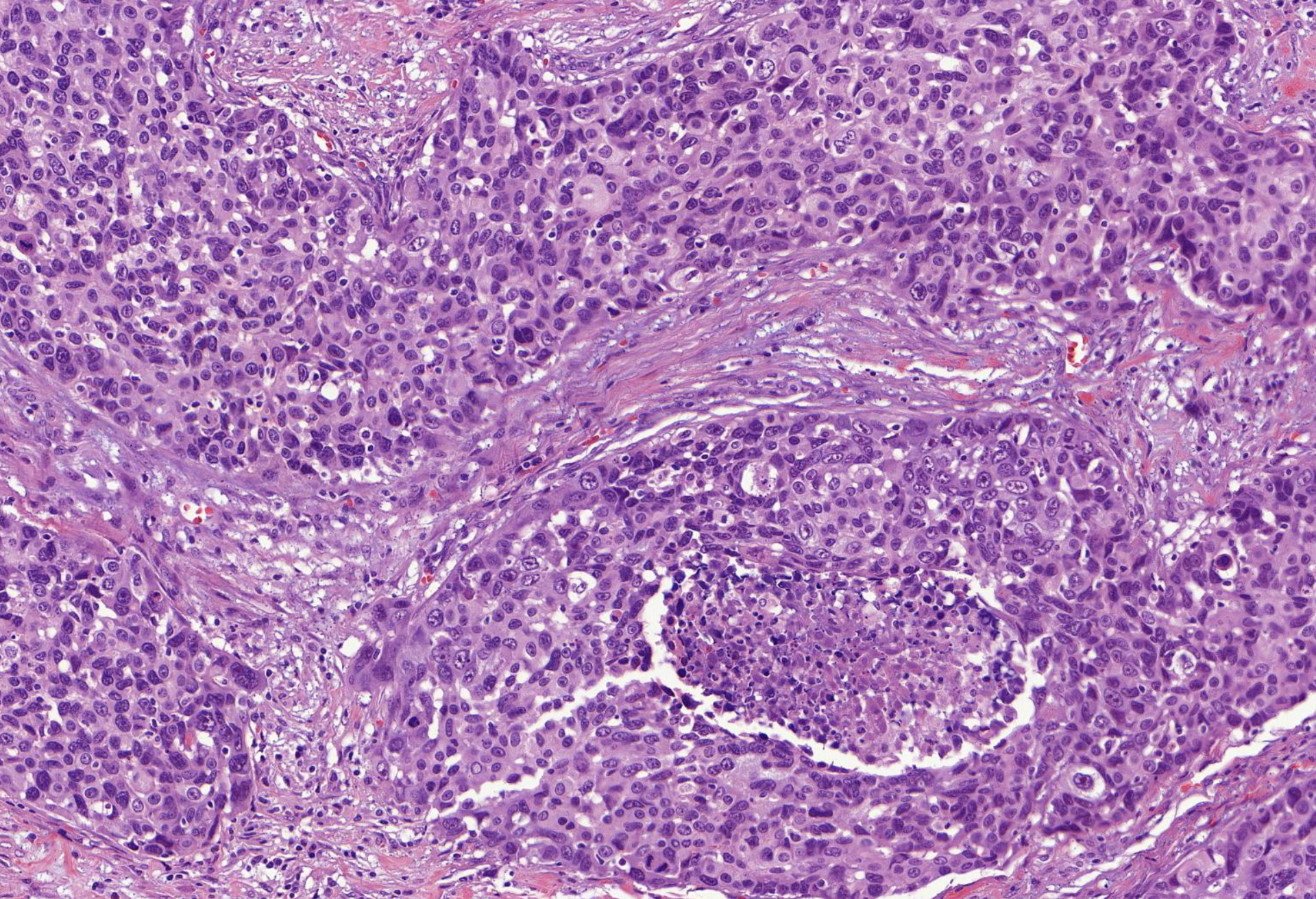
DCIS





Poorly differentiated areas





Solid growth with central necrosis. Large pleomorphic polygonal cells.





# Differential Dx

- Poorly differentiated carcinoma - ? SCC
- Metastatic carcinoma
- Melanoma



# Immunohistochemistry

## ■ Positive:

- HER2
- CK7, CK5/6, p40 (squamoid areas)
- Ki67 >70%

## ■ Negative:

- ER, PR





# Diagnosis

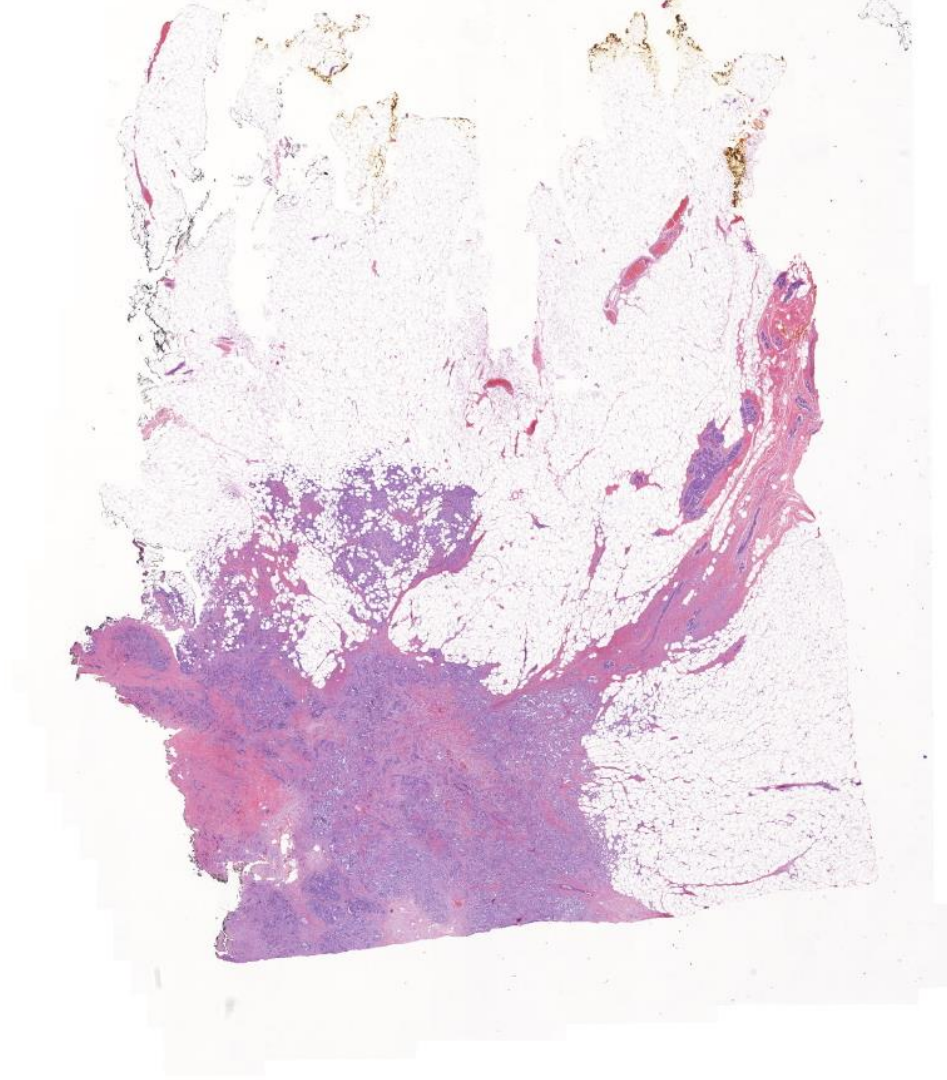
Metaplastic carcinoma with squamous differentiation and high grade DCIS



# Case 5

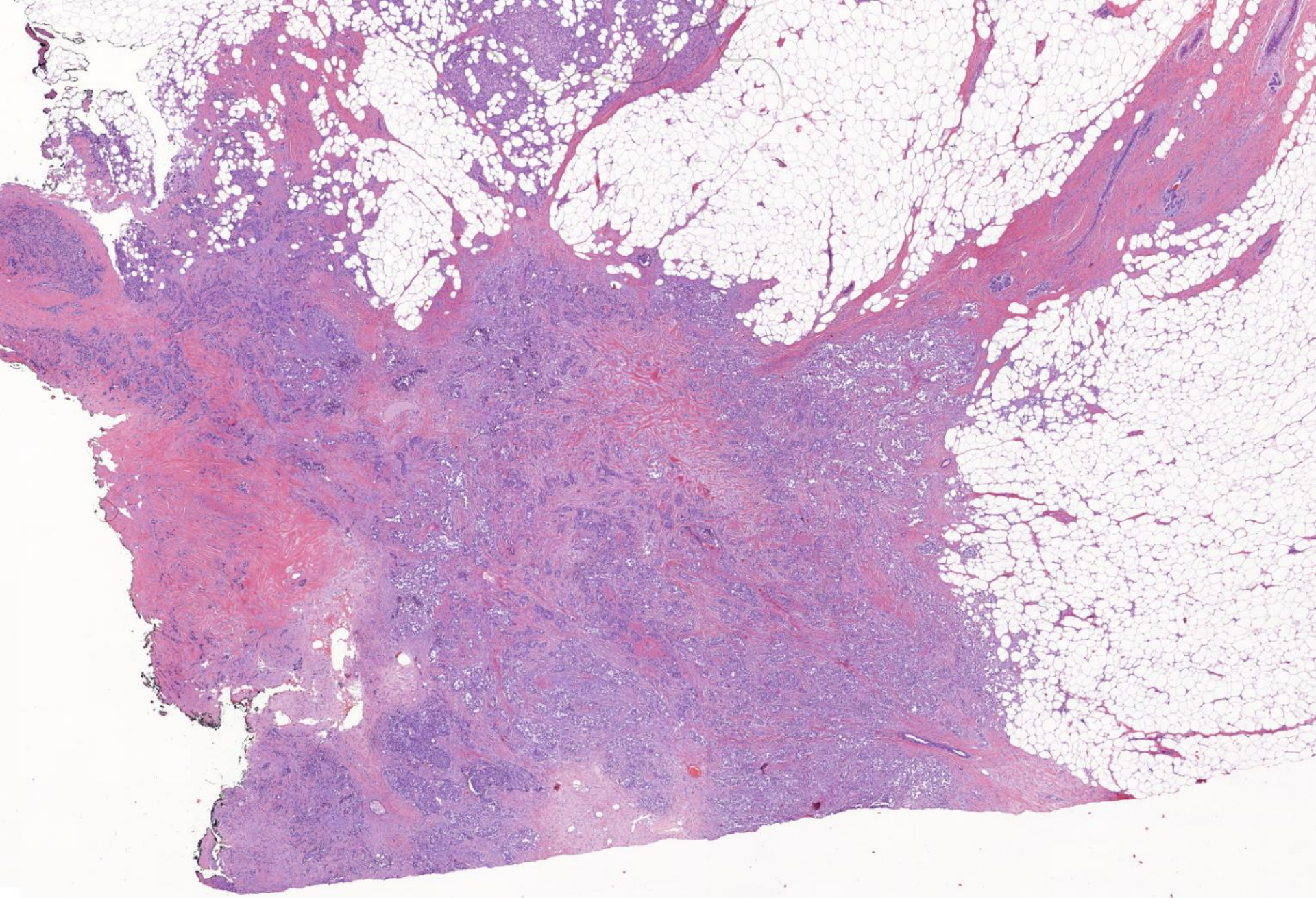
- 61 F Left breast lump. WLE.
- Macro: 18mm firm to hard pale cream tumour mass with infiltrative margin





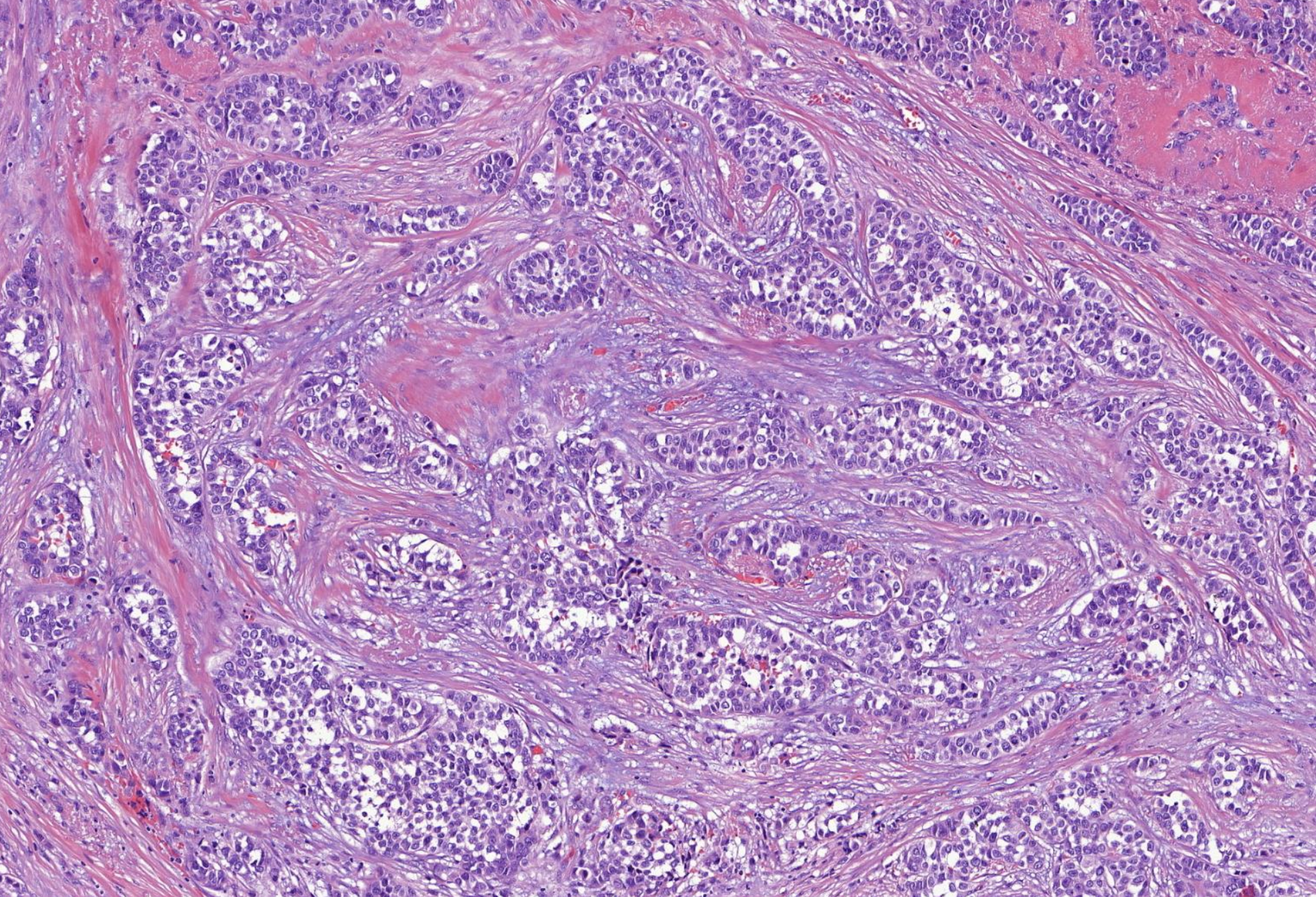
Infiltrating tumour mass





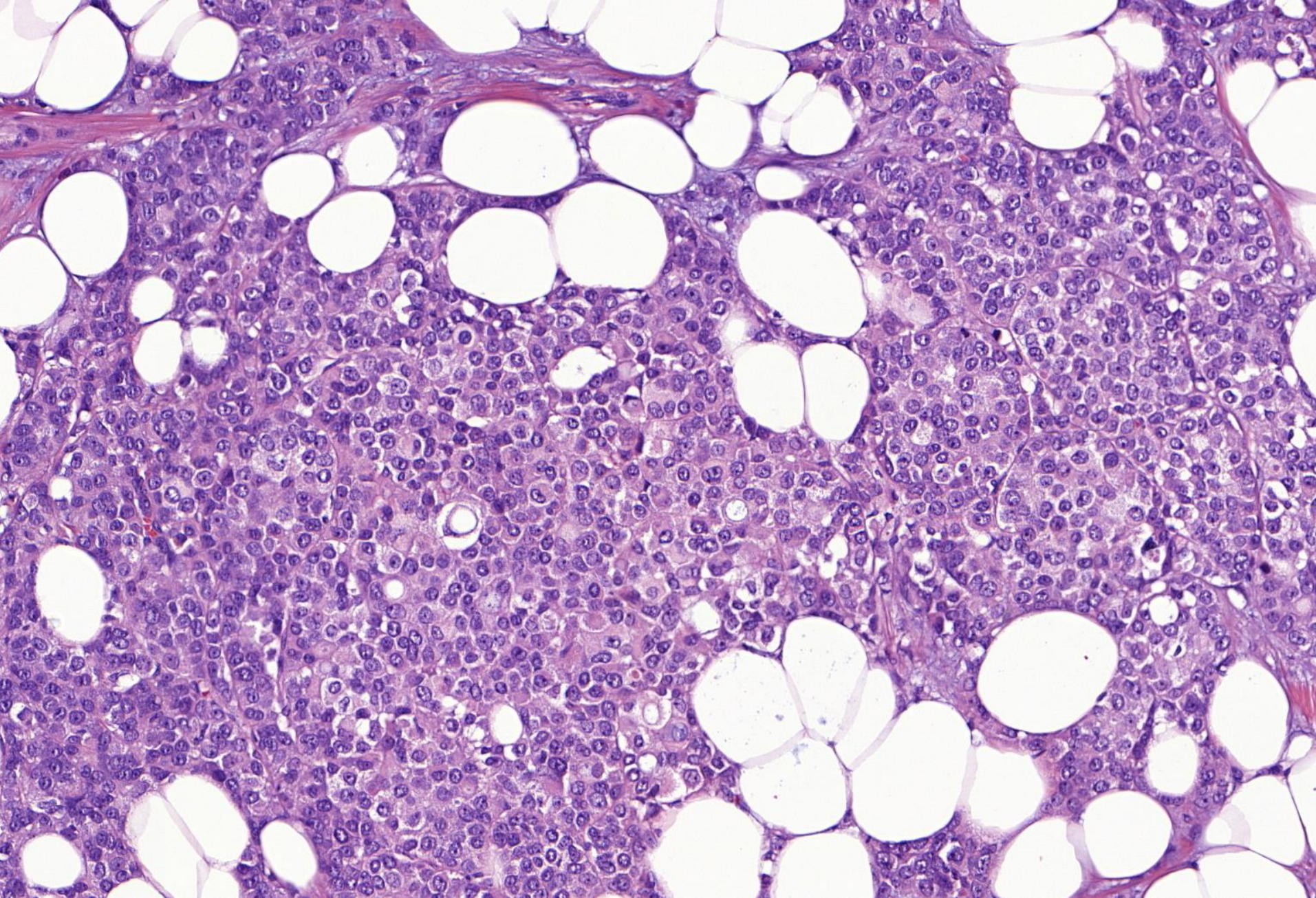
Infiltrating tumour mass





Nests, trabeculae and cords of vaguely discohesive cells.

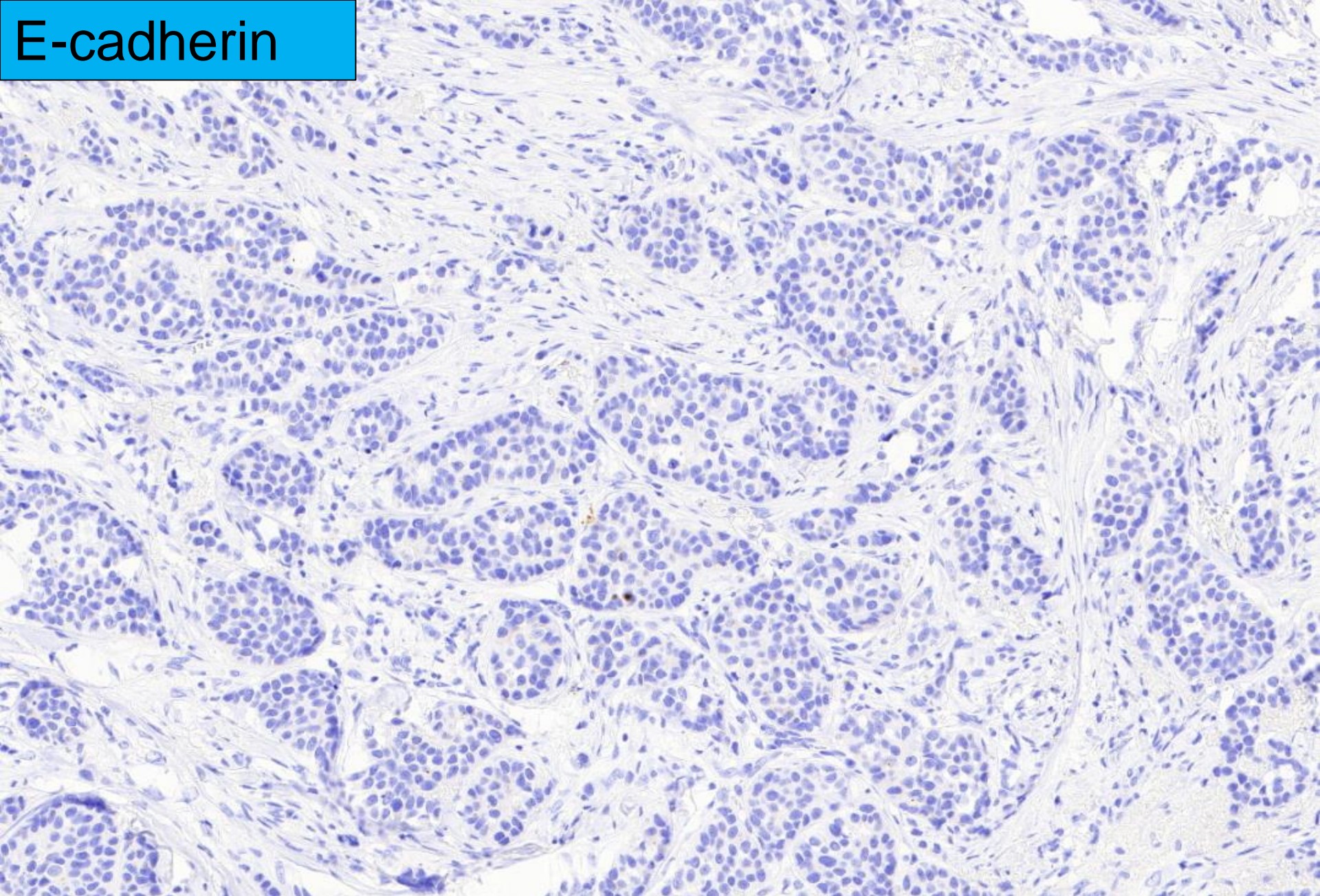




Tumour cells have moderately pleomorphic nuclei



# E-cadherin



Tumour cells show loss of E-cadherin immunostaining





# Differential Dx

- Invasive carcinoma NST
- Melanoma
- ALCL





# Immunohistochemistry

- Positive:

- ER, PR
- Ki67 ~20%

- Negative:

- HER2
- E-cadherin





# Diagnosis

- Pleomorphic lobular carcinoma, grade 3.



Thank you for your attention