

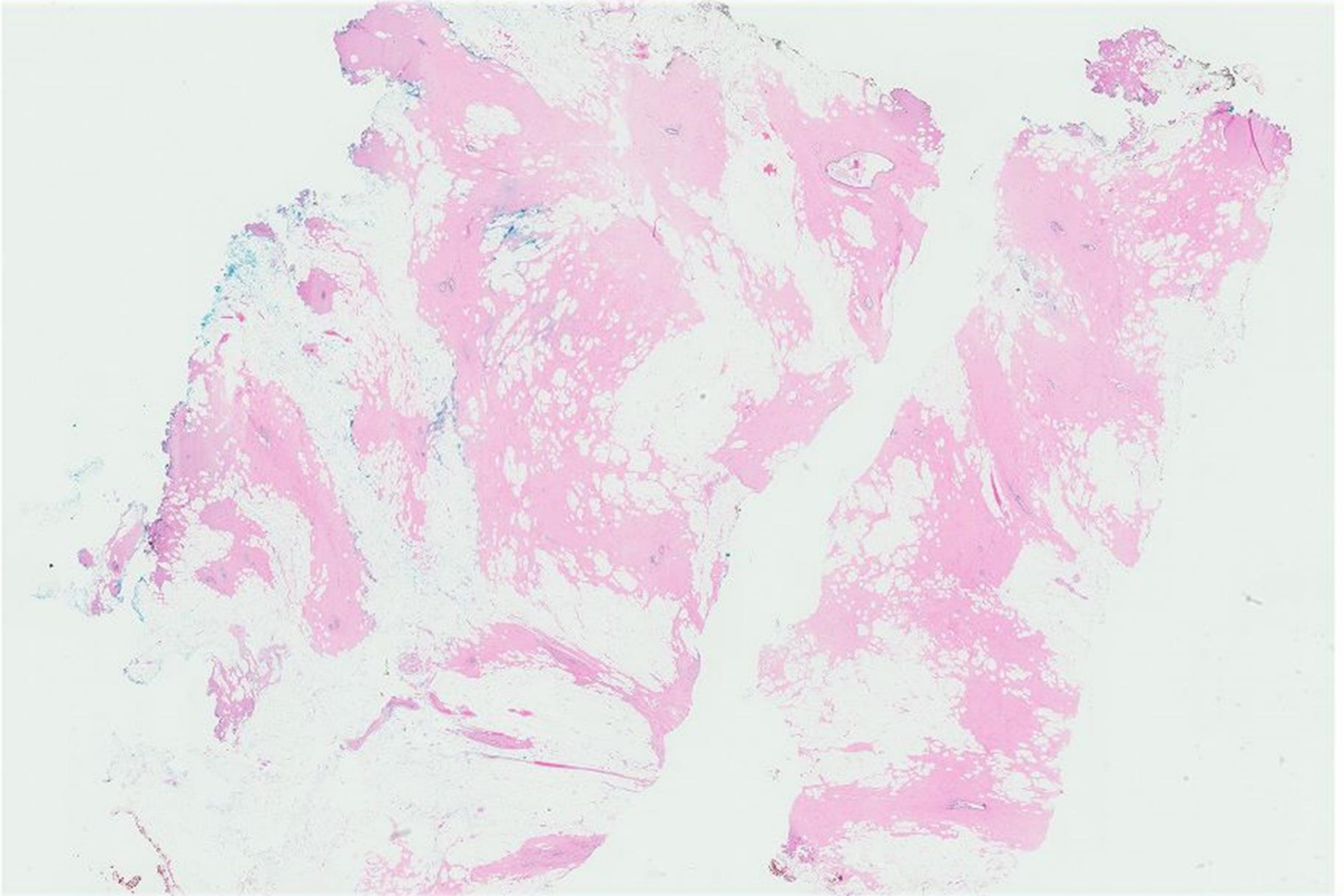
# Case 11

53 year old Chinese lady underwent a core biopsy for a radiologically stellate lesion in the right breast that disclosed only fibrous tissue (A).

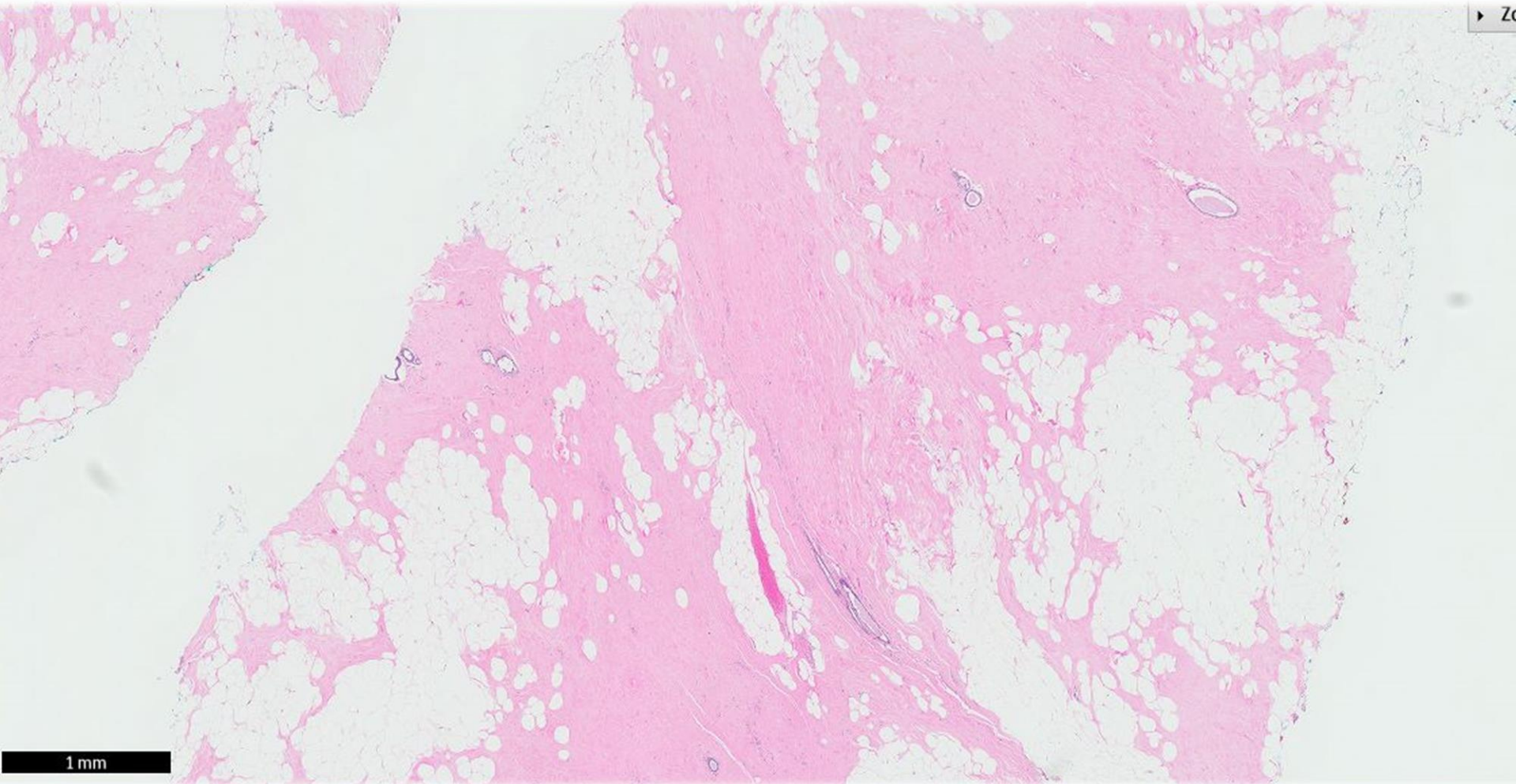
A hookwire localisation excision biopsy was performed (B).



# Mammotome biopsy

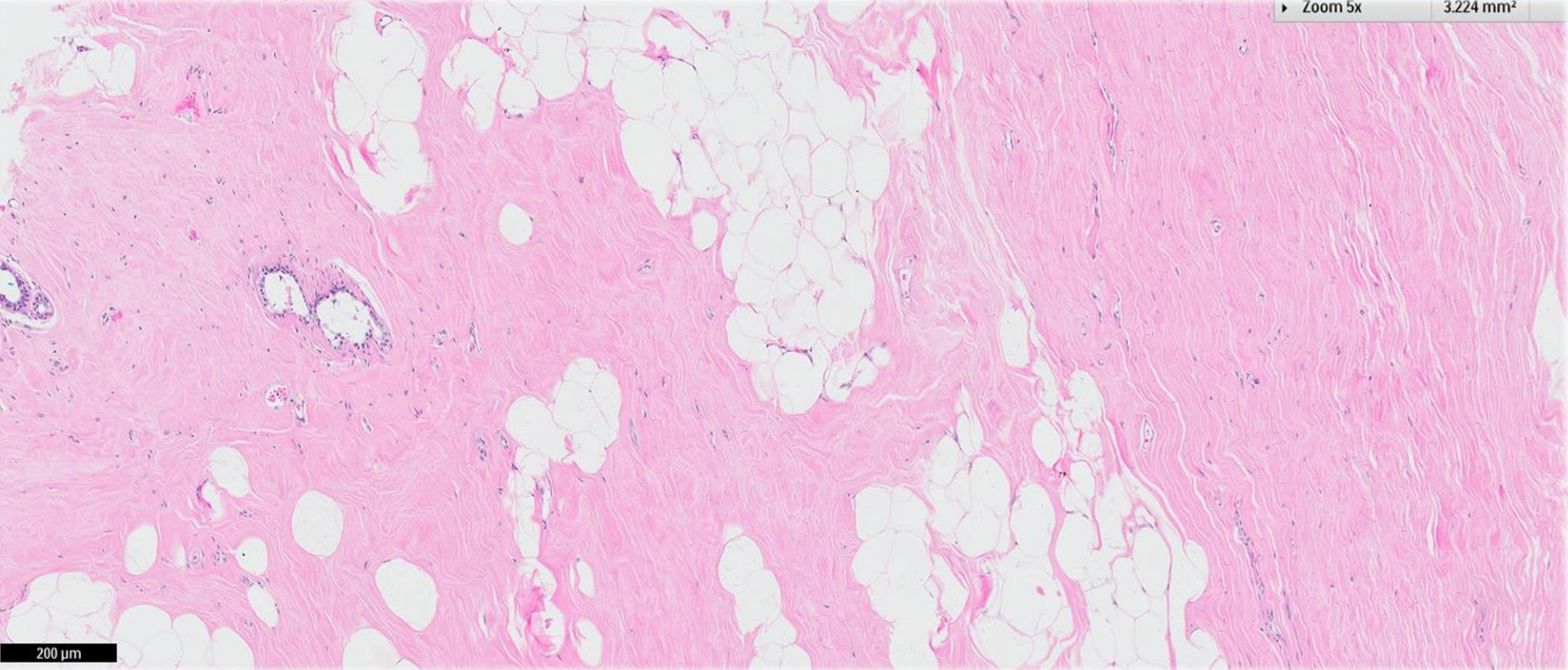


# Mammotome biopsy

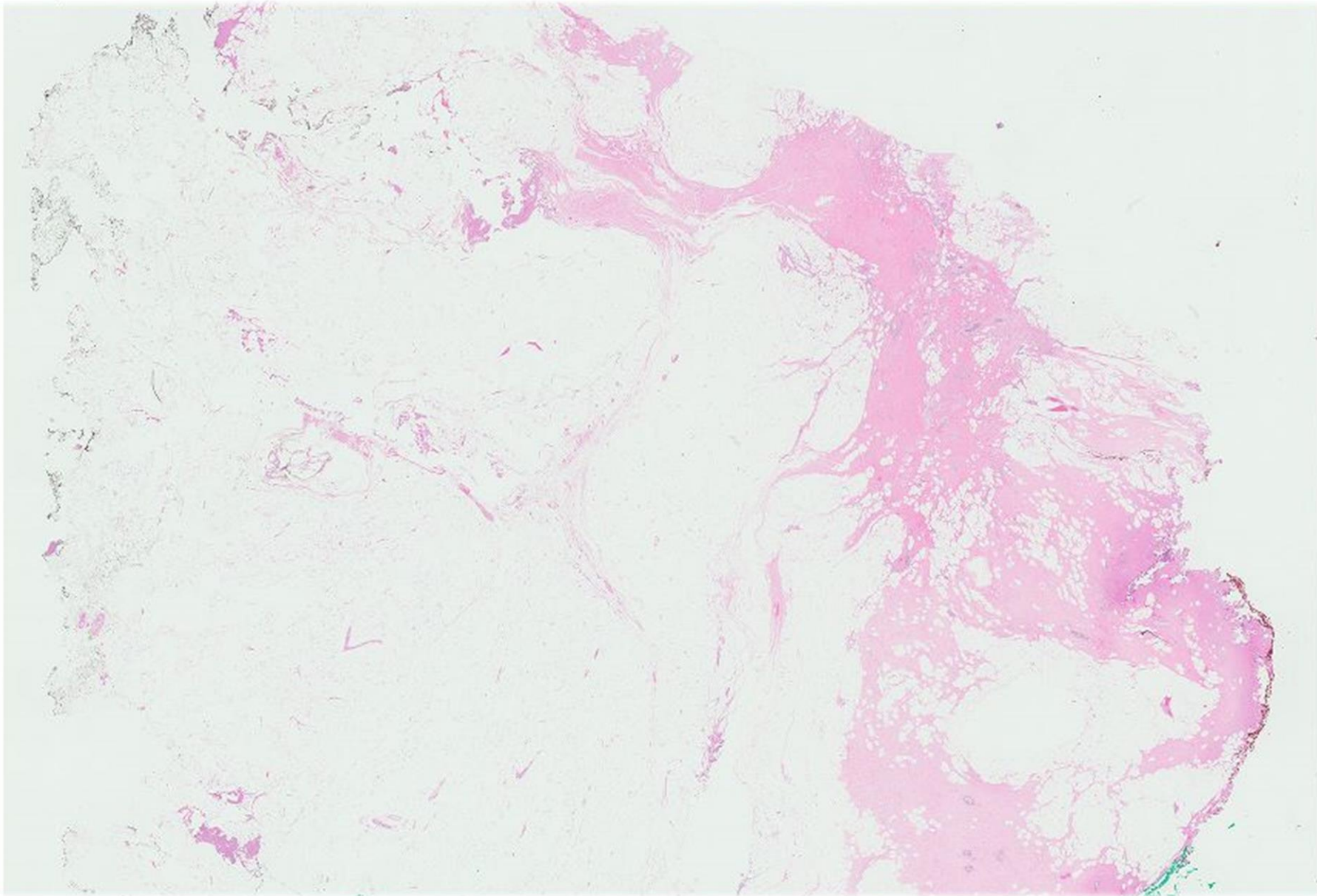




# Mammotome biopsy



# Hookwire localisation biopsy

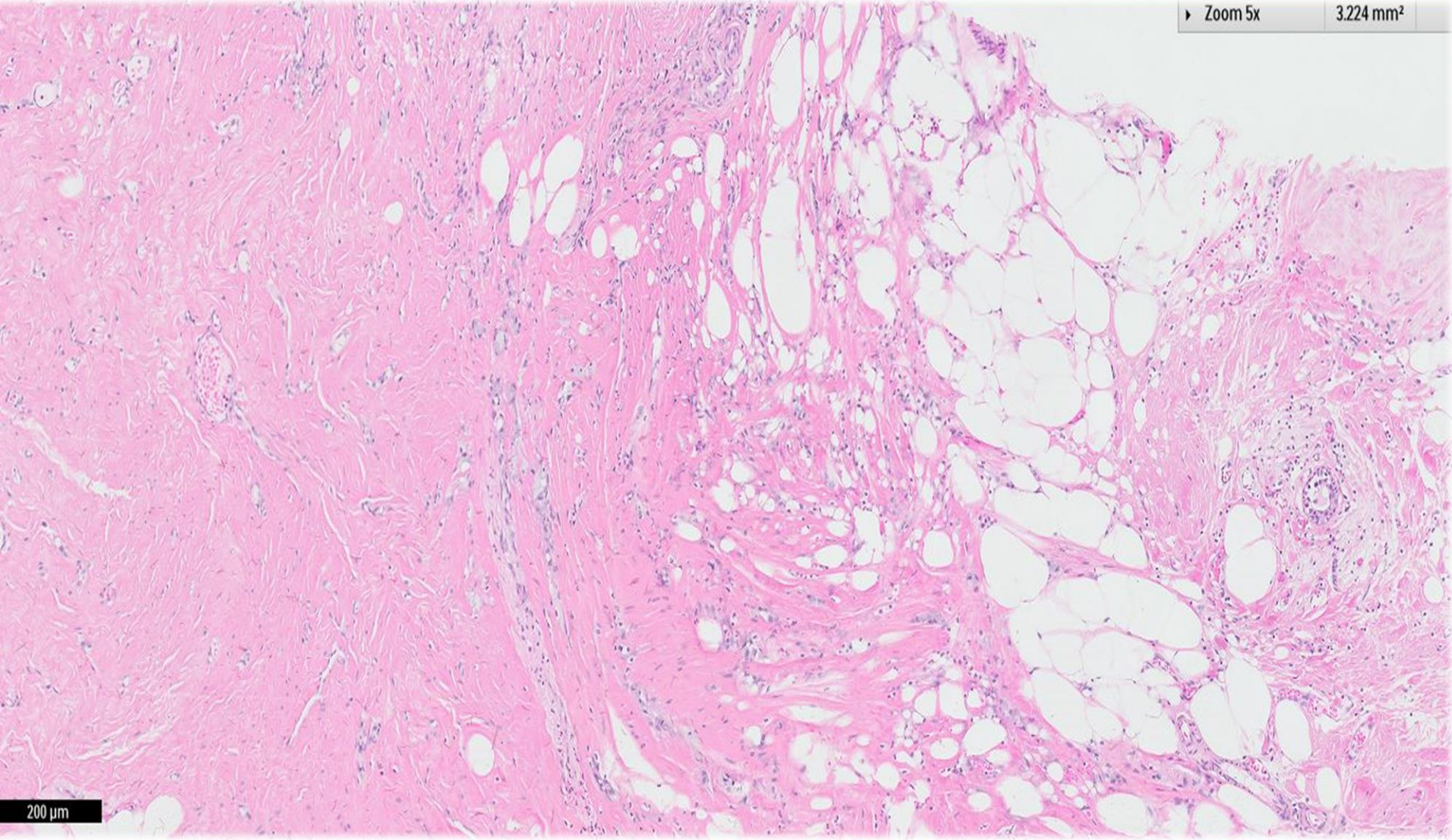




# Hookwire localisation biopsy

Zoom 5x

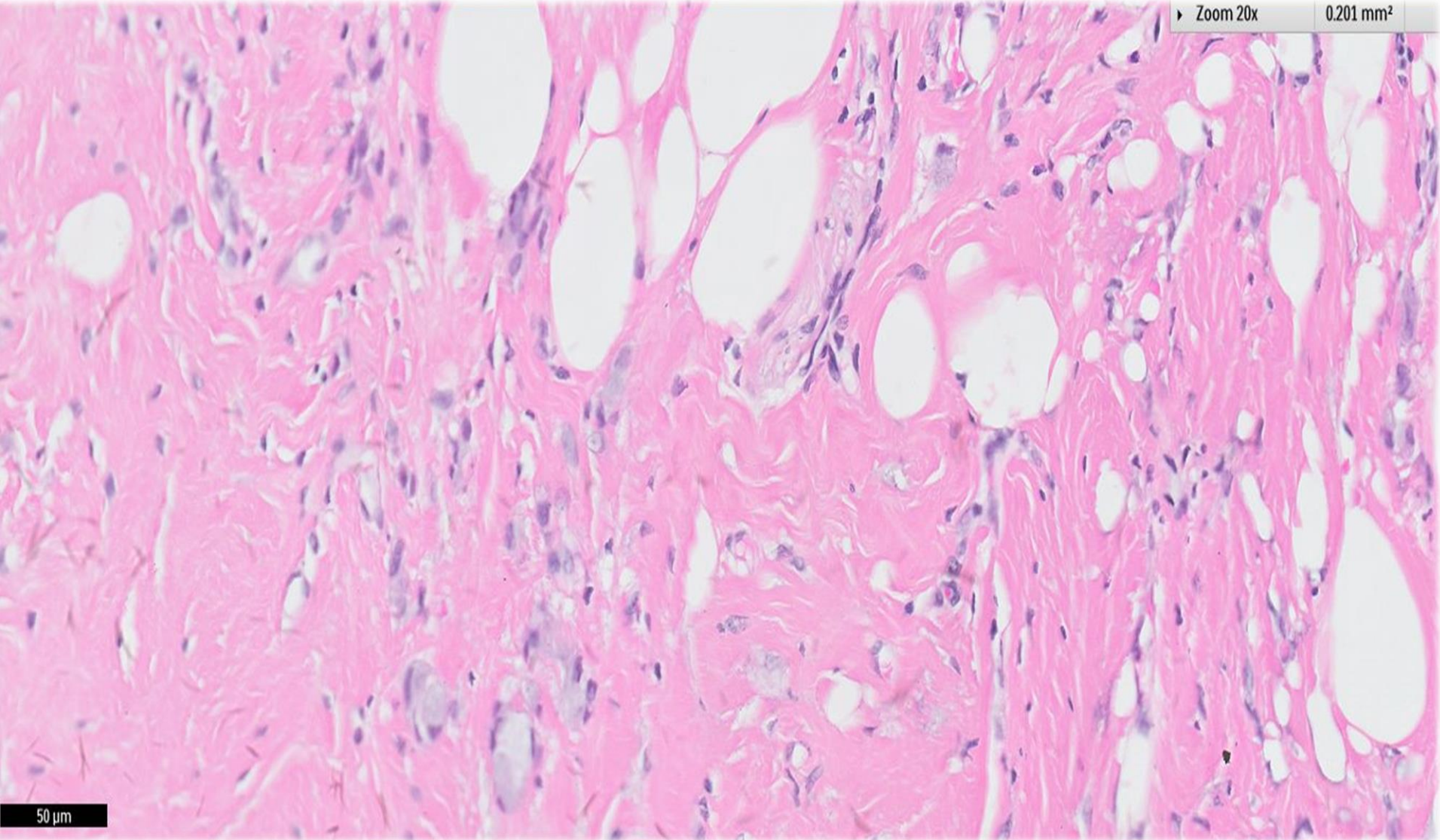
3.224 mm<sup>2</sup>



200 μm



# Hookwire localisation biopsy

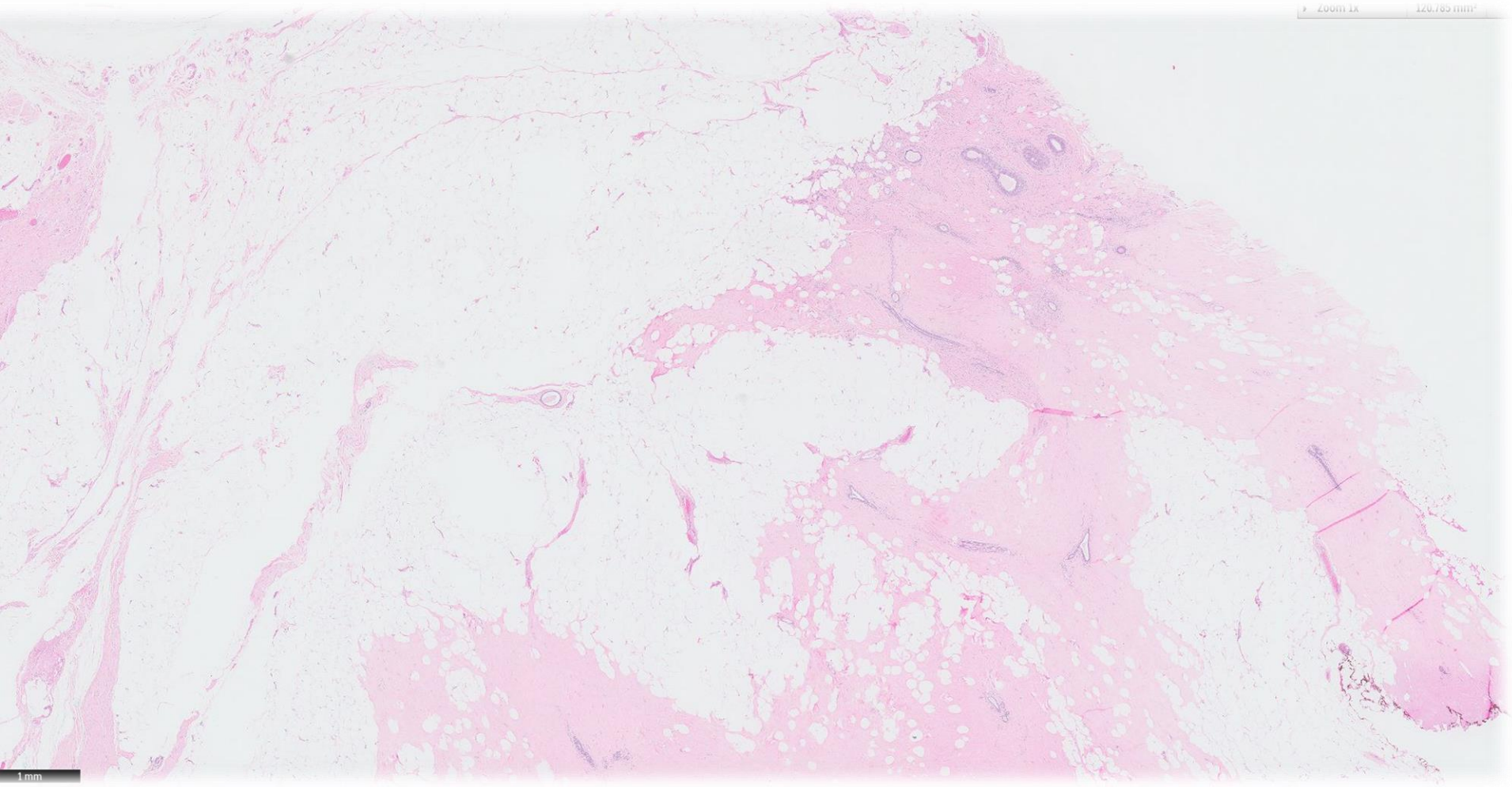


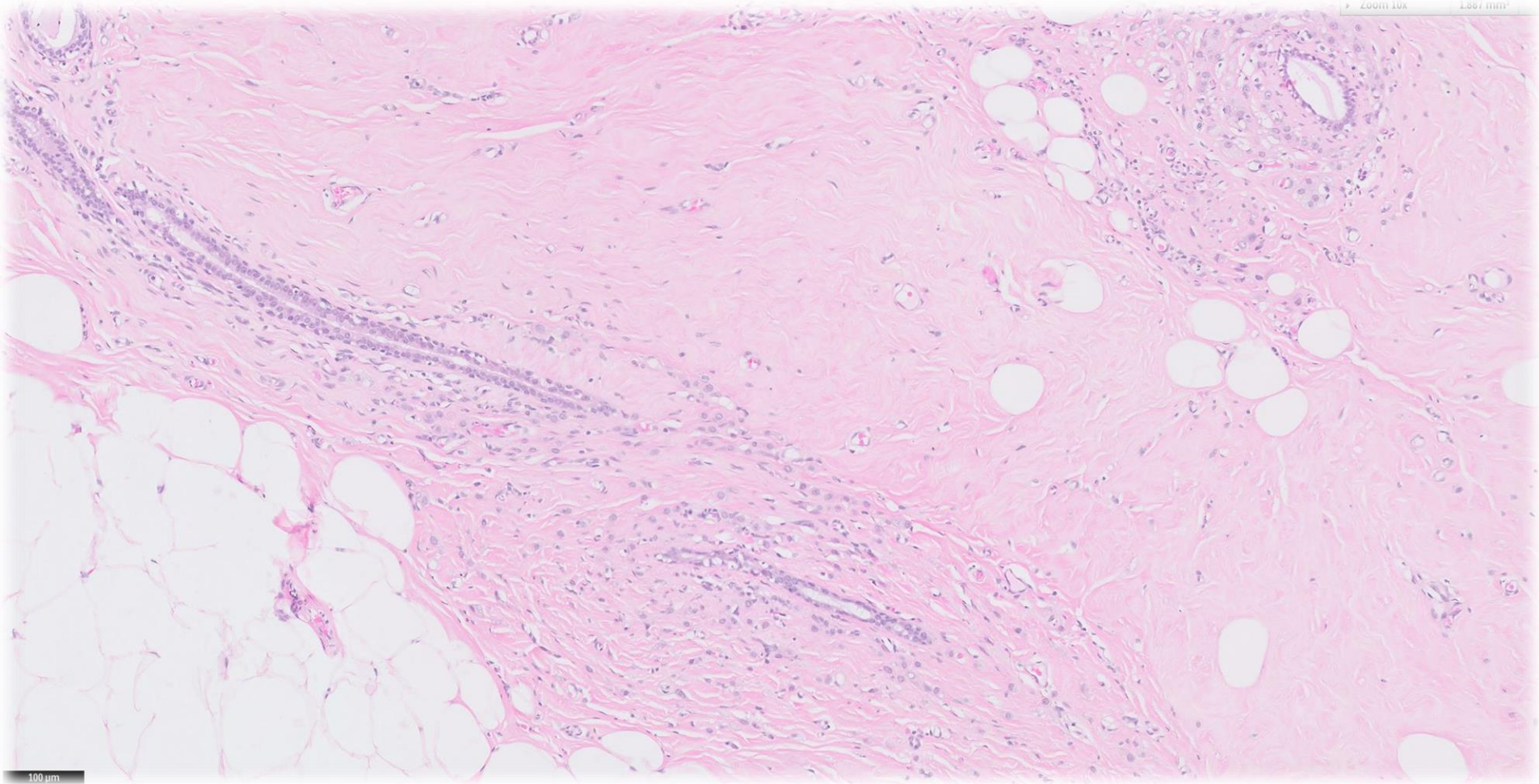


*Merlion at One Fullerton*

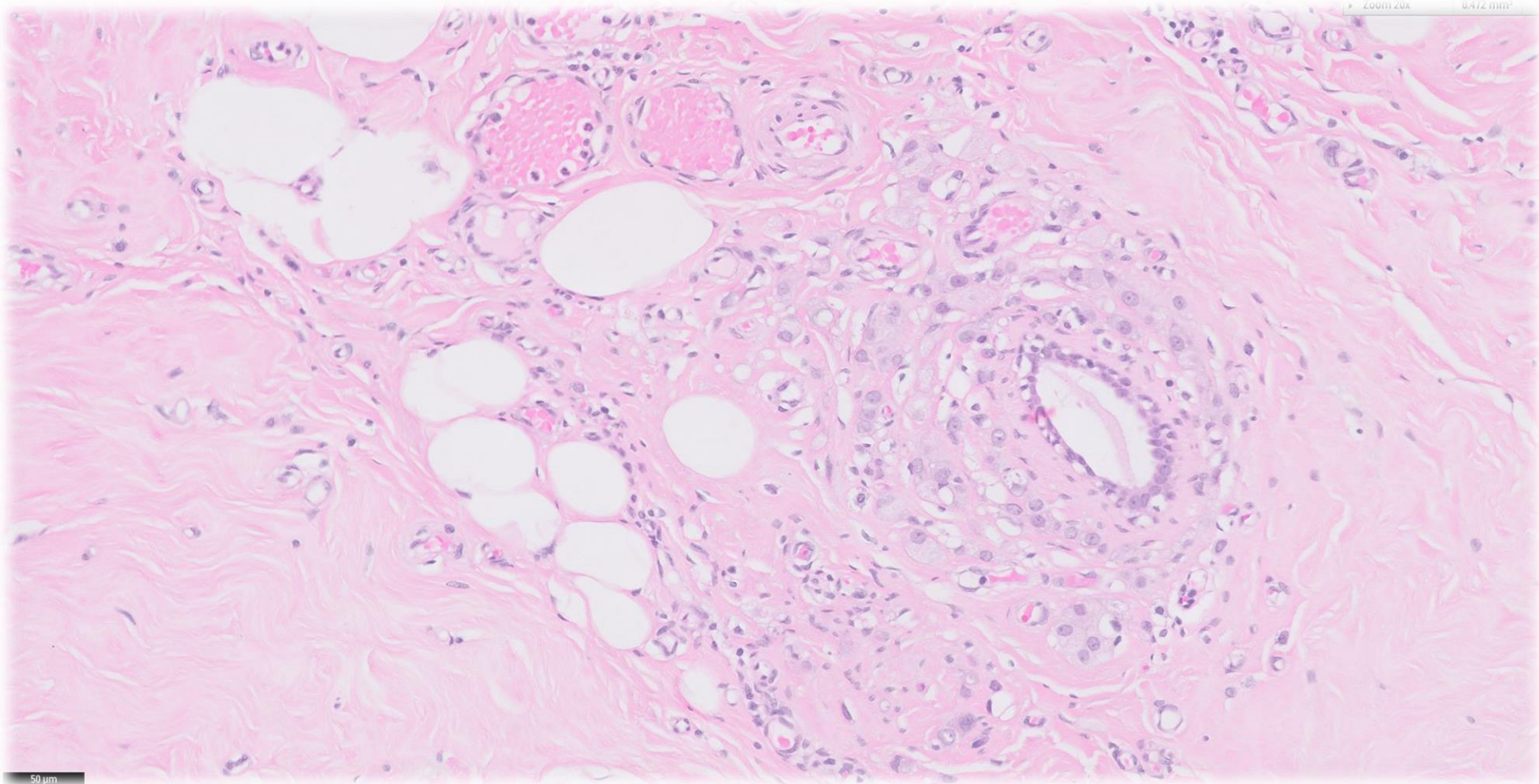




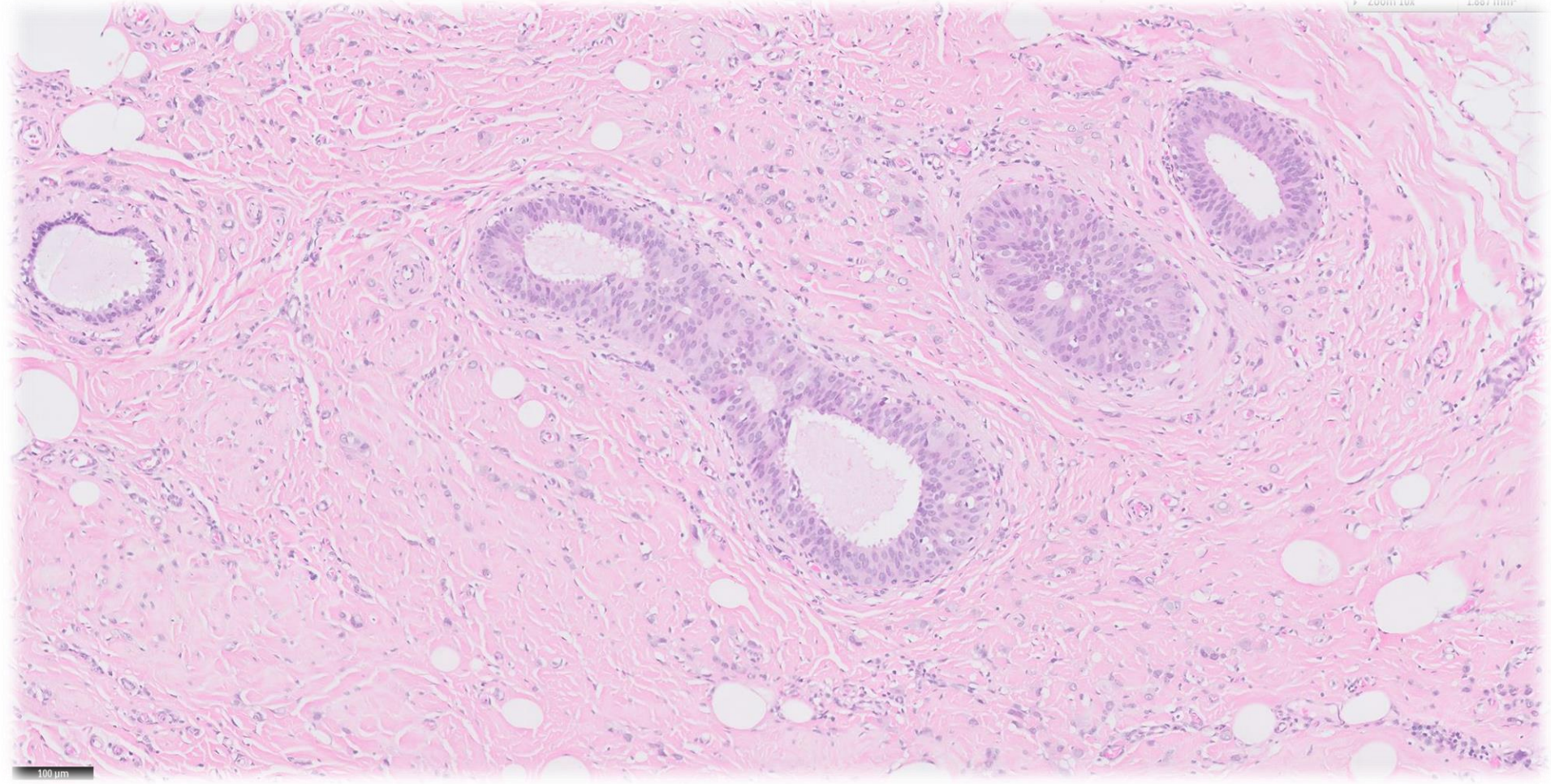




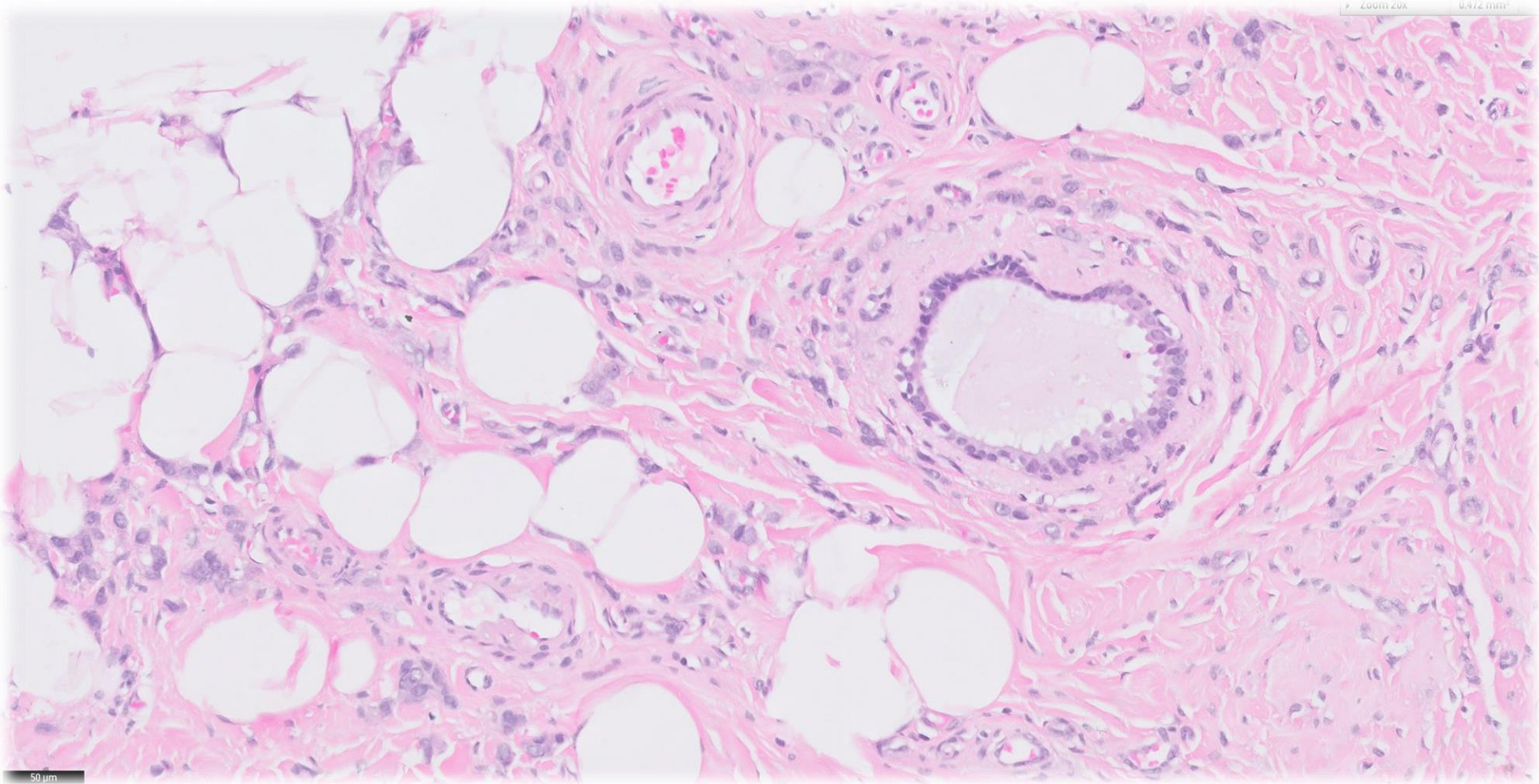




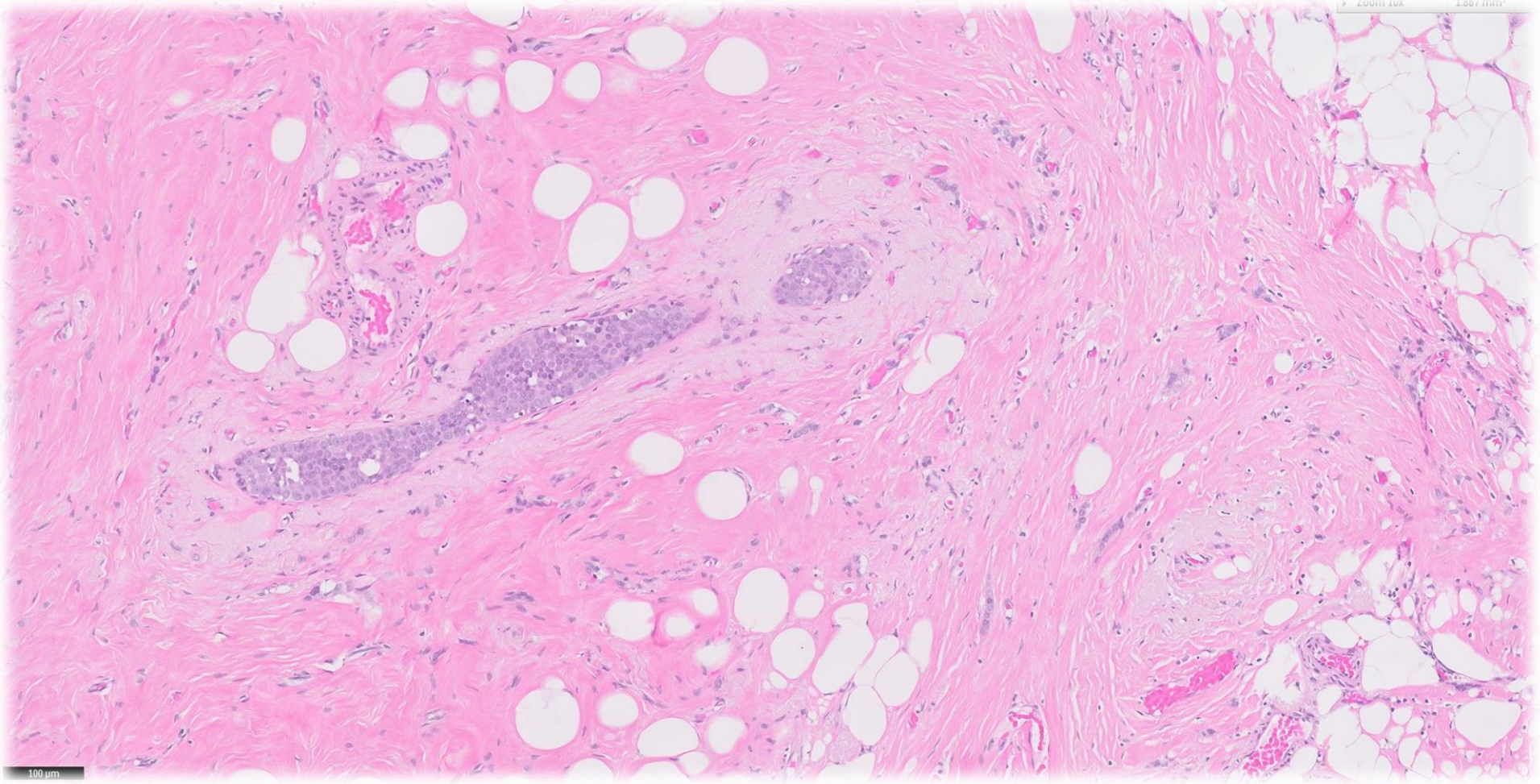




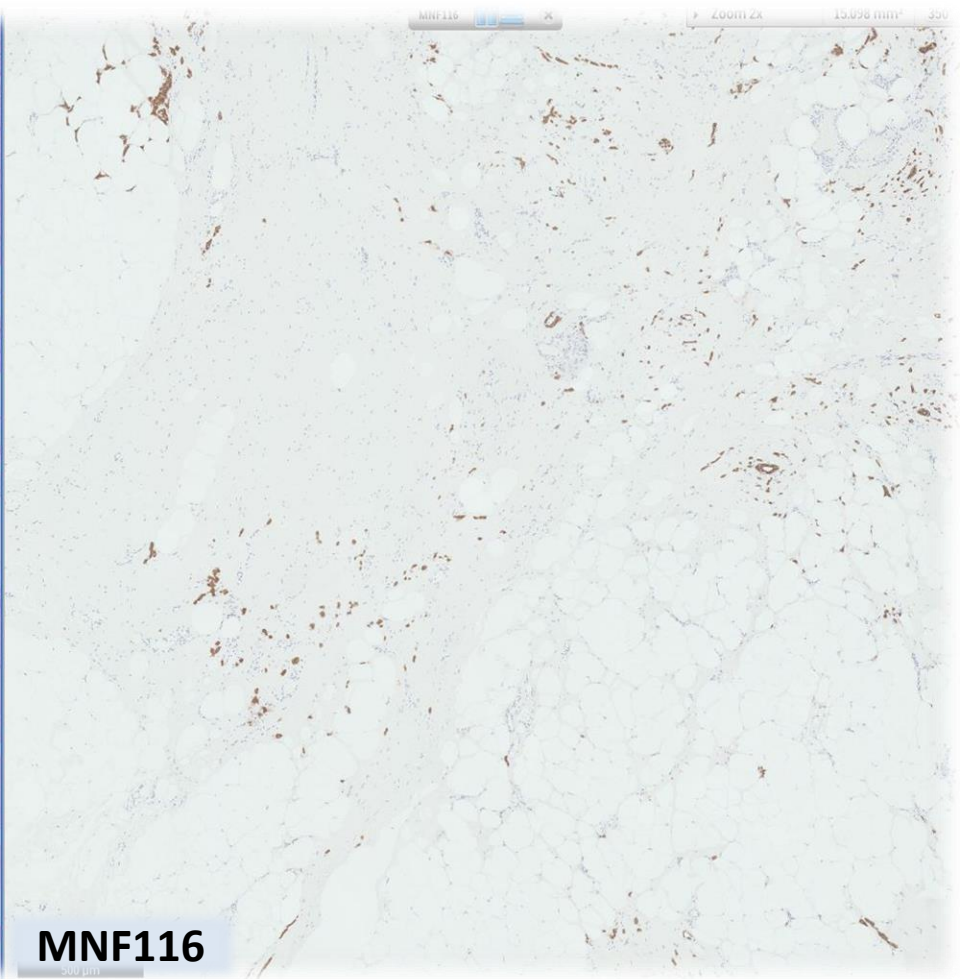
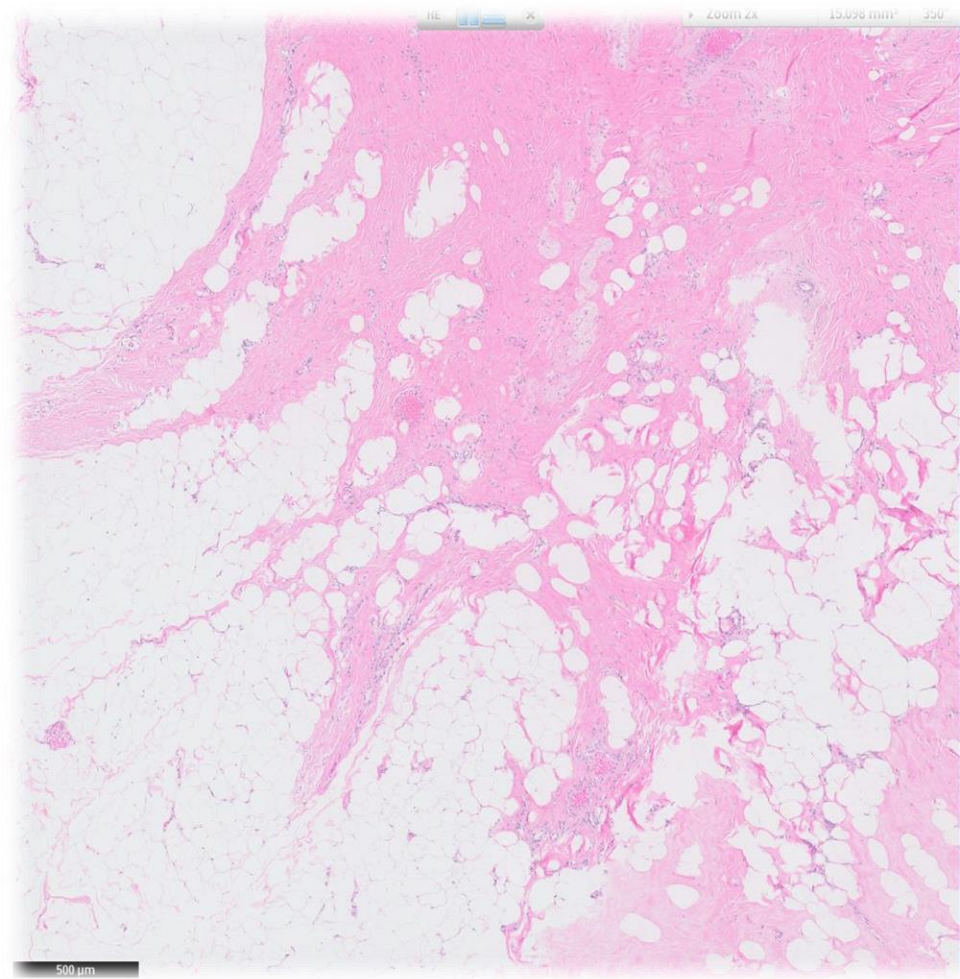


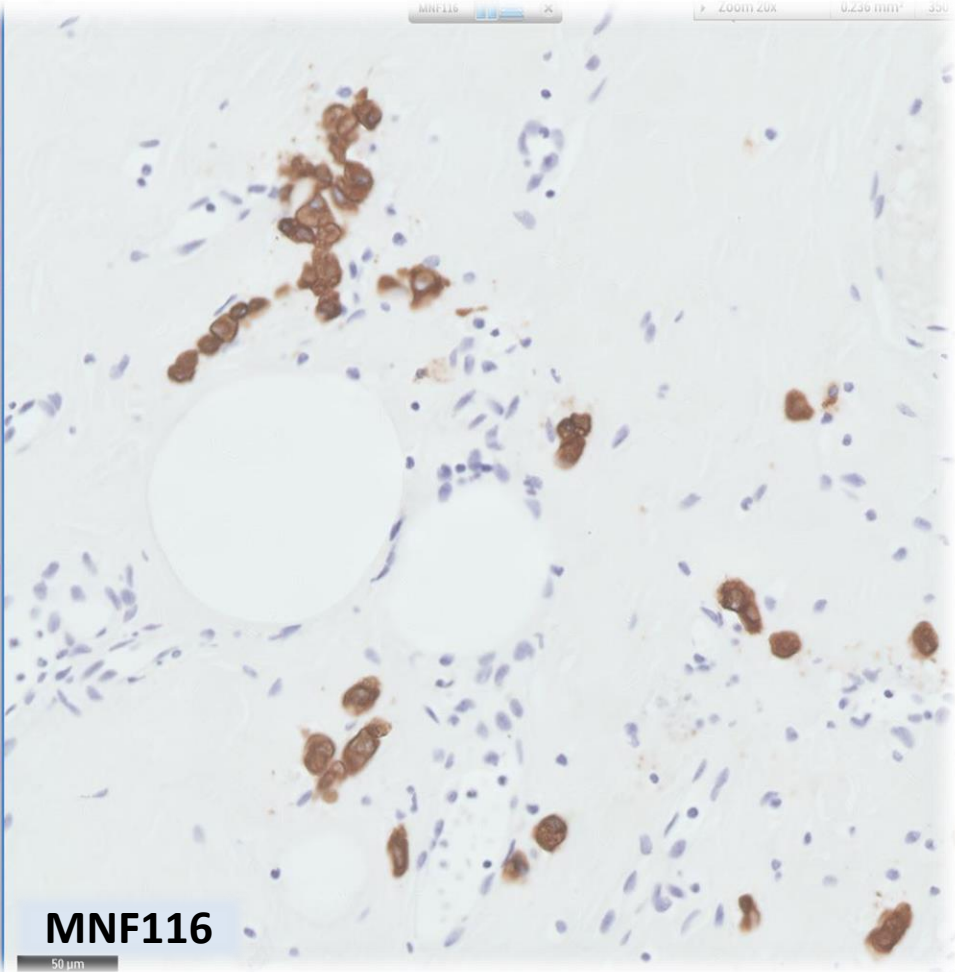
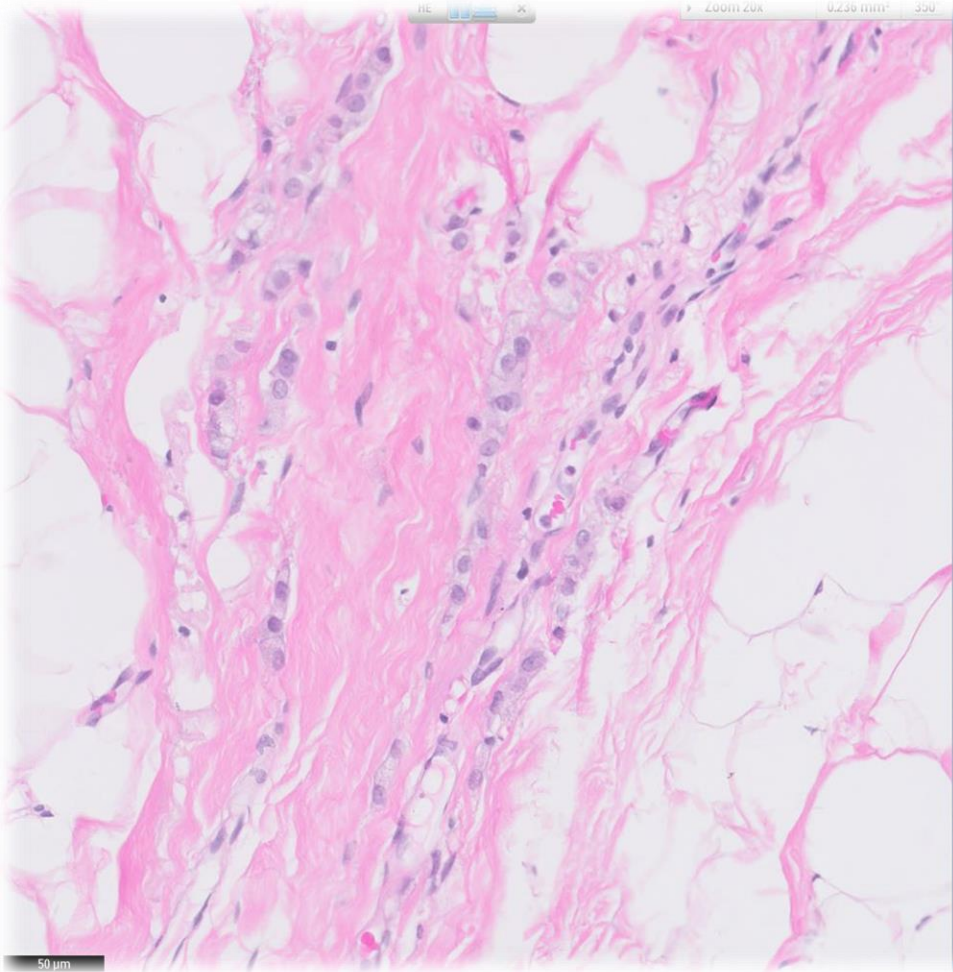




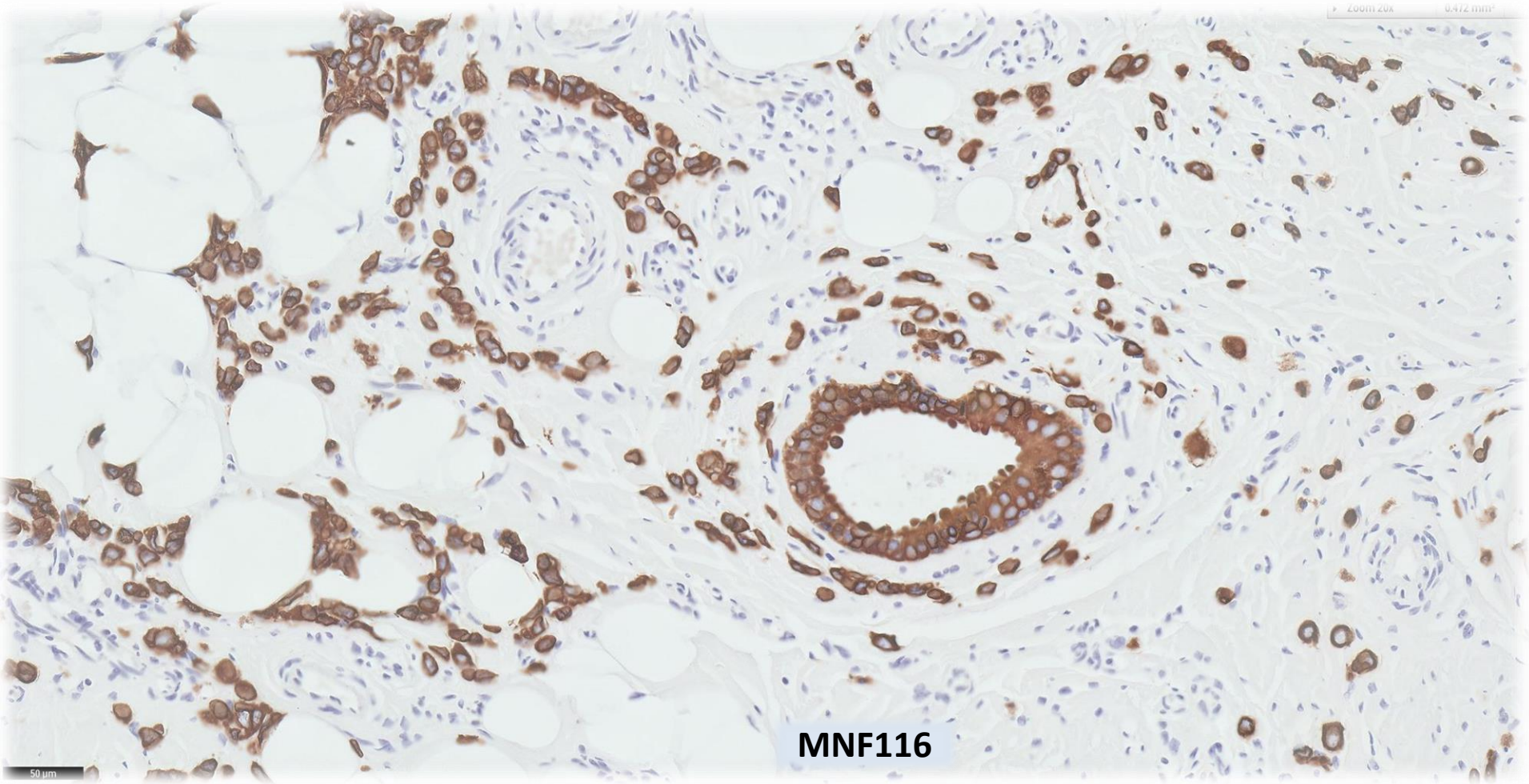






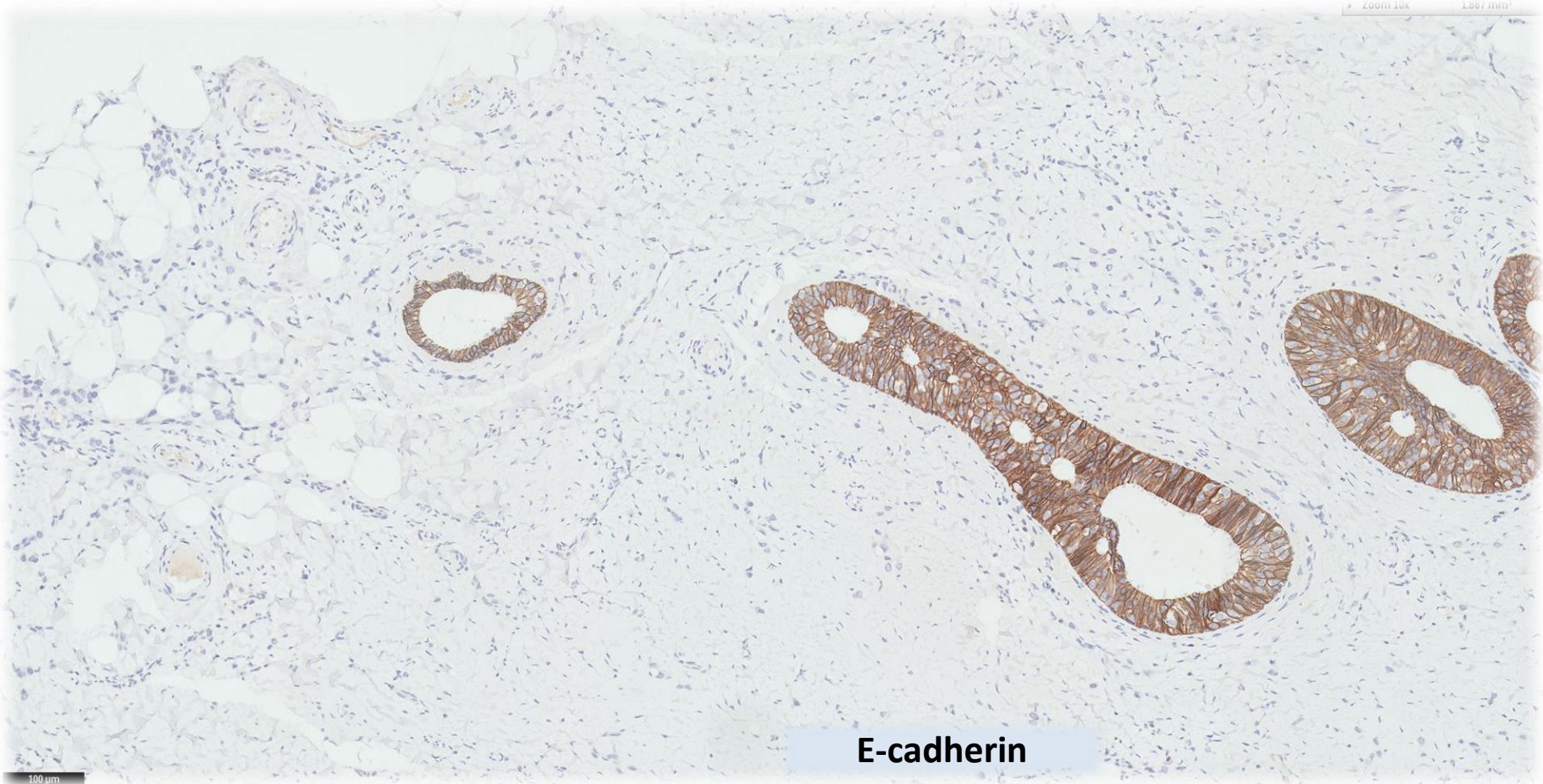






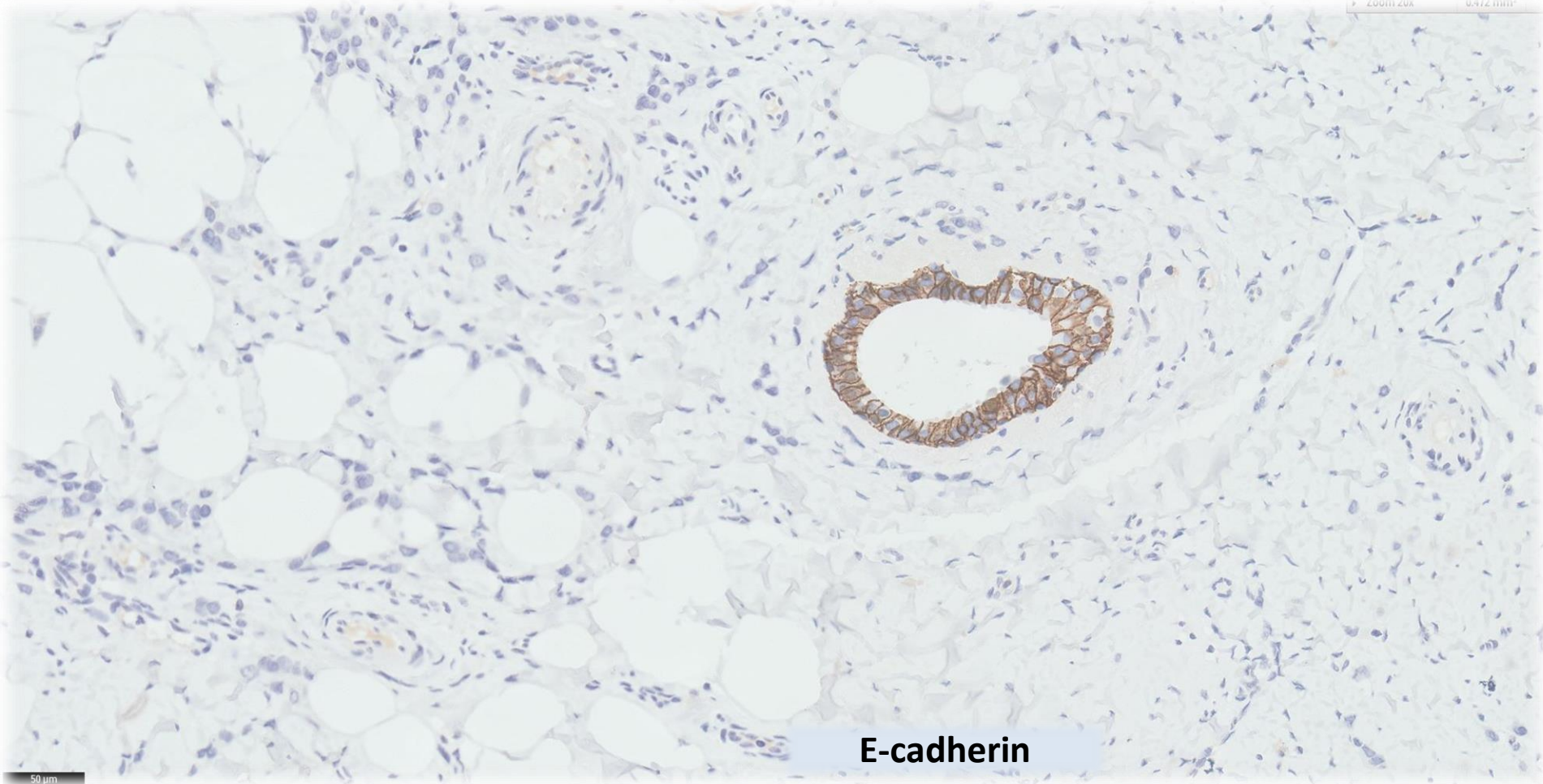
50 µm

**MNF116**



**E-cadherin**





**E-cadherin**

# Diagnosis

- Right breast, hookwire localisation excision biopsy:

Invasive lobular carcinoma with histiocytoid features, 13mm.

ER positive, PR negative, cerbB2 negative.





# Histiocytoid breast carcinoma

- 1<sup>st</sup> described by Hood et al in 1973:
  - 13 cases of metastatic breast cancer to eyelid.
  - 8 featured histiocytoid appearances.
- Variant of:
  - Invasive lobular carcinoma.
  - Invasive apocrine ductal carcinoma.
  - Apocrine variant of invasive lobular carcinoma.

# Histiocytoid breast carcinoma

- Association of histiocytoid invasive carcinoma with apocrine LCIS.
- Histiocytoid cells noted in 5 of 10 cases of aggressive pleomorphic lobular carcinomas.
- Apocrine differentiation in 13 histiocytoid breast carcinomas.
  - *Eusebi et al. Hum Pathol 1984; 15: 134-40. Hum Pathol 1992; 23: 655-62. Am J Surg Pathol 1995; 19: 553-62.*
- 11 histiocytoid breast cancers with an invasive lobular pattern:
  - 8 with LCIS.
  - 8 were negative for E-cadherin.
  - Both lobular and ductal origins possible.
  - *Gupta et al. Ann Diagn Pathol 2002; 6: 141-7.*



# Histiocytoid breast carcinoma

- Lobular phenotype.
  - Association with lobular neoplasia (LCIS/ALH).
  - Lobular pattern of infiltration with single files and targetoid arrangement.
  - Accompanied by conventional invasive lobular carcinoma.
  - E-cadherin negativity.
- Apocrine differentiation.
- Impact on prognosis is uncertain.

# Histiocytoid breast carcinoma

- Mimics benign and other conditions:
  - Bland cytomorphology.
  - Limited material on core biopsies.
  - Metastasis to lymph node and skin can resemble sinus histiocytes and benign xanthomatous skin lesions.



# Histiocytoid breast carcinoma

- Clues to correct diagnosis:
  - Tumour cells that are more pleomorphic and mitotically active.
  - Cells with cytoplasmic vacuoles and targetoid secretions.
  - Architectural patterns of invasive lobular carcinoma eg linear files and targetoid infiltration.
  - Immunohistochemistry – cytokeratin positivity.
  - Correlation with clinicoradiological findings.



