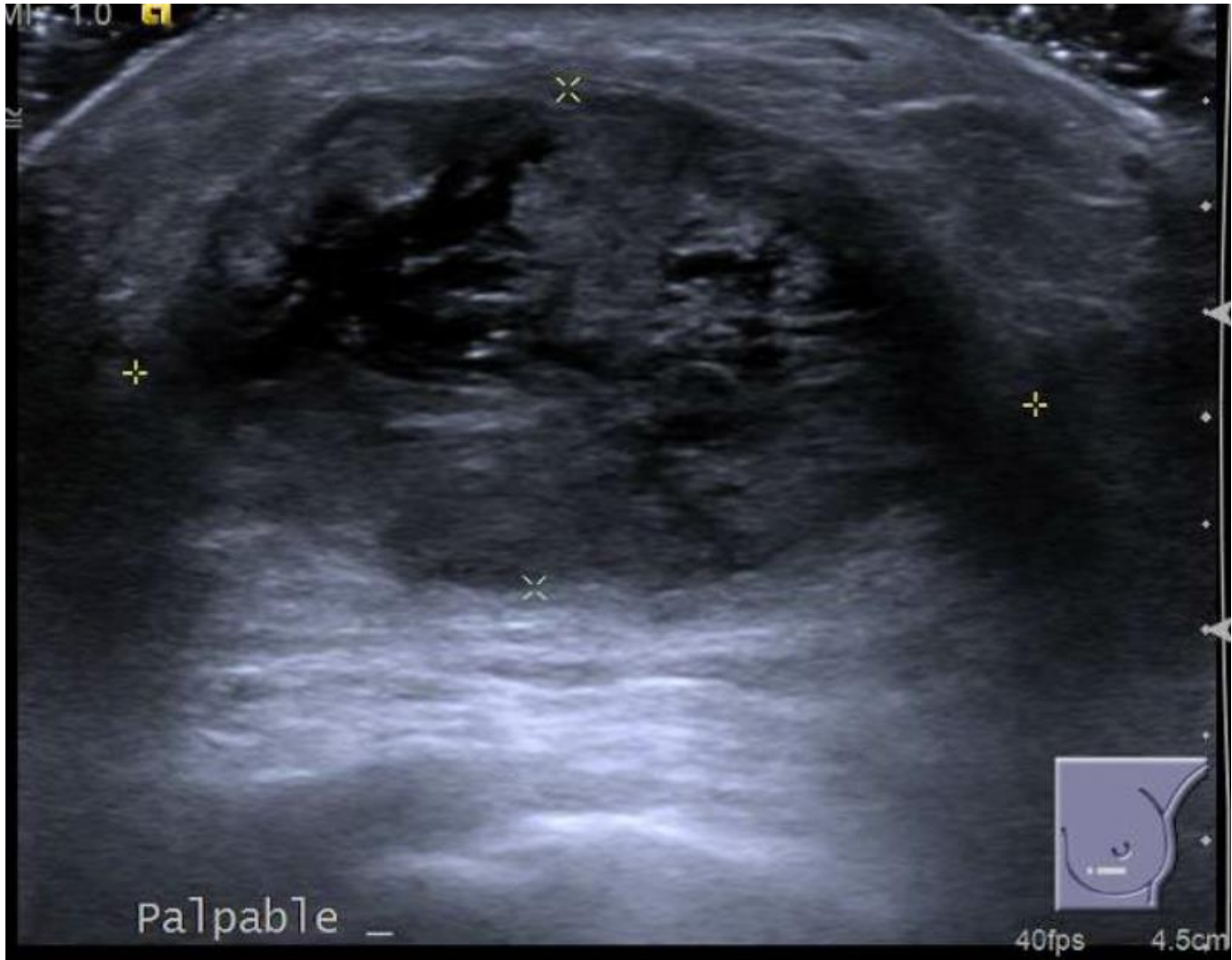
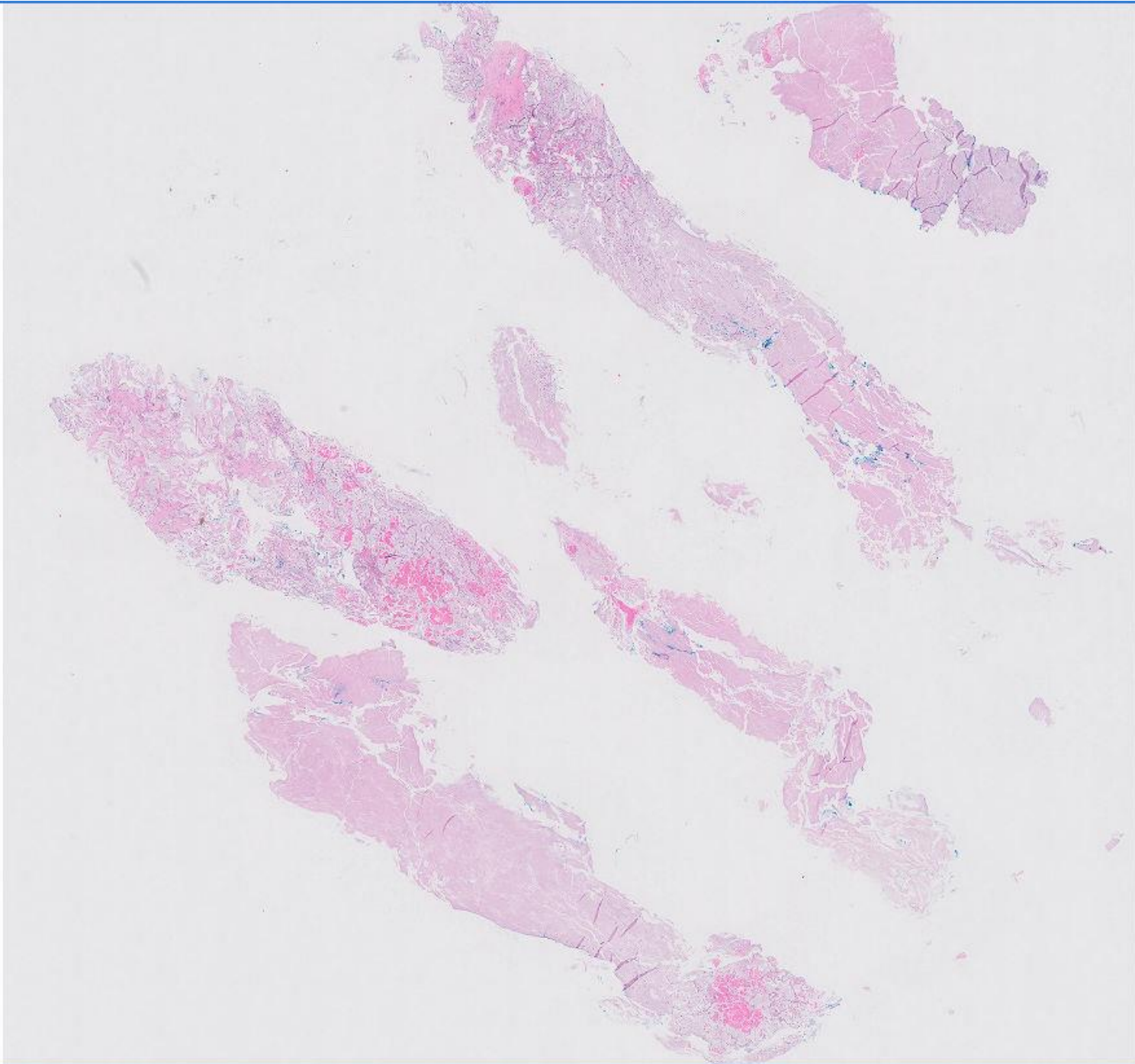


- 78 yo Female
- Left breast US: there is a predominantly solid oval mass with slightly ill-defined margins noted at the 7-8 o'clock position measuring 43 x 24 x 23 mm
- Multiple other nodules noted
- Multicentric tumours cannot be excluded

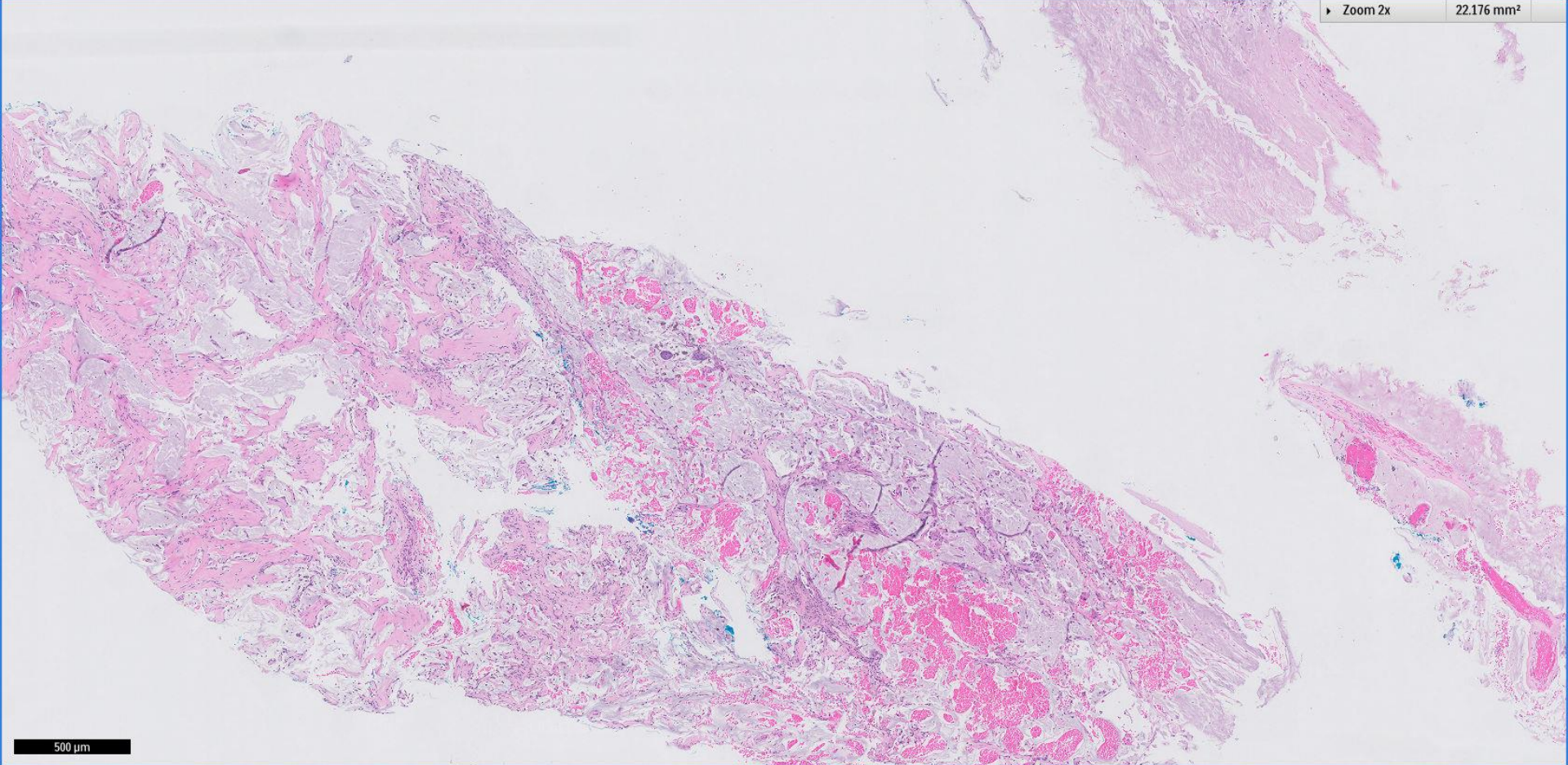






Zoom 2x

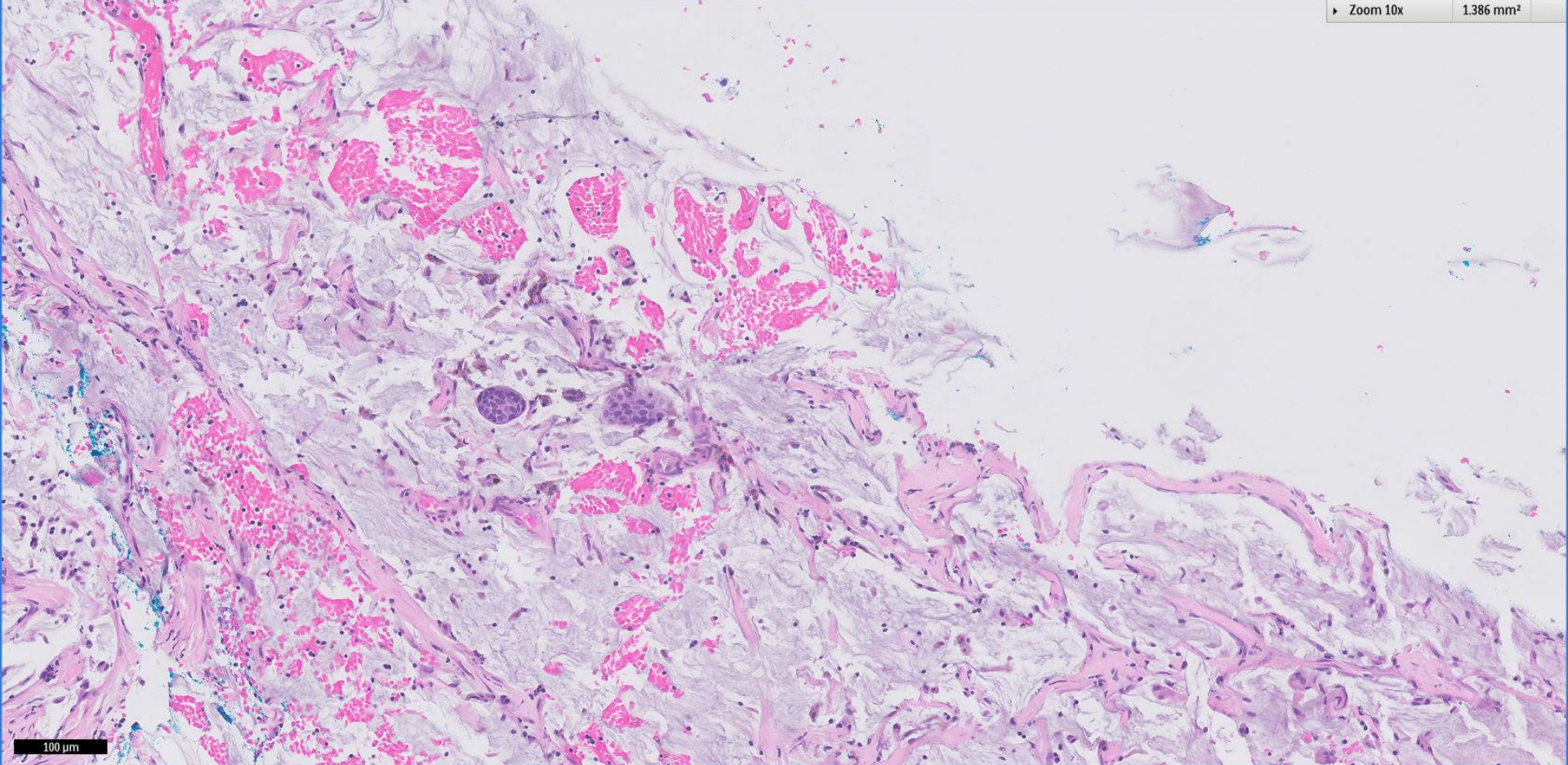
22.176 mm²



500 μ m

▶ Zoom 10x

1.386 mm²



100 μ m

Question 8.1

What is your diagnosis?

- A. Benign
- B. Malignant
- C. Indeterminate

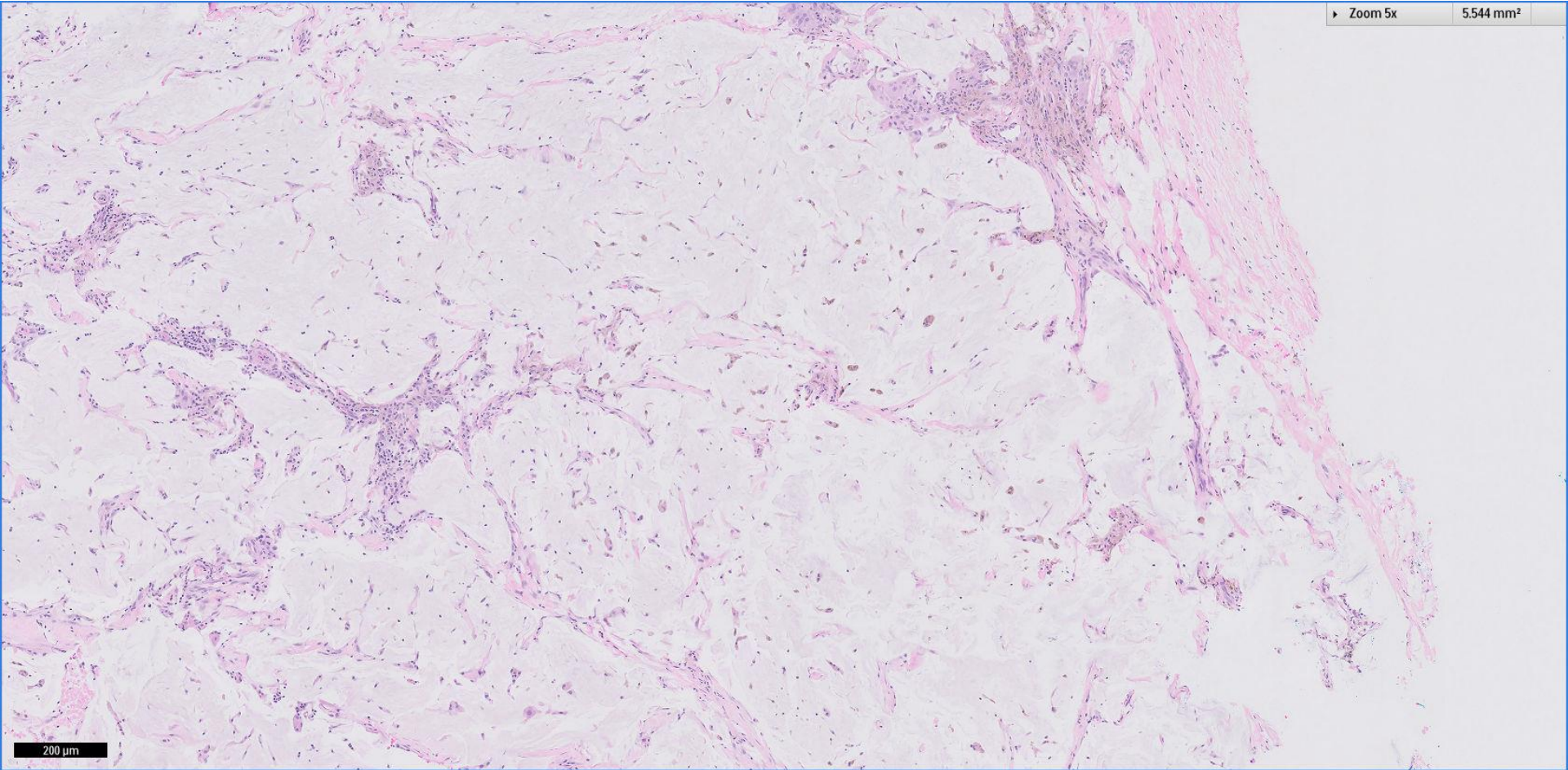
Diagnosis

Left breast 7-8 o'clock mass: core biopsy:

- Mucin with rare epithelial cells

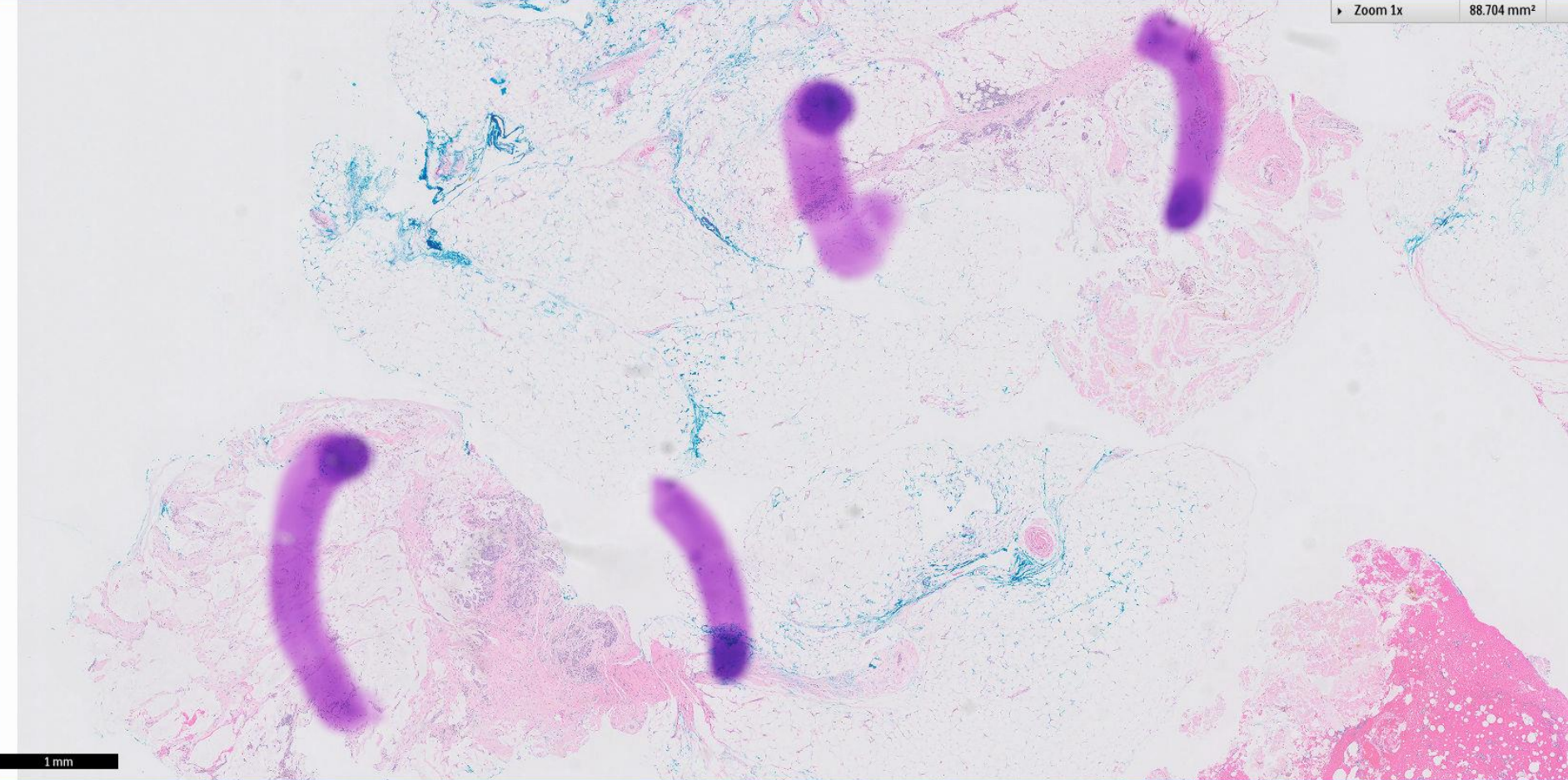
Comment: The clinical information of 43mm mass and multiple smaller nodules is noted. Repeat biopsy suggested for further assessment.

US VAB



Zoom 1x

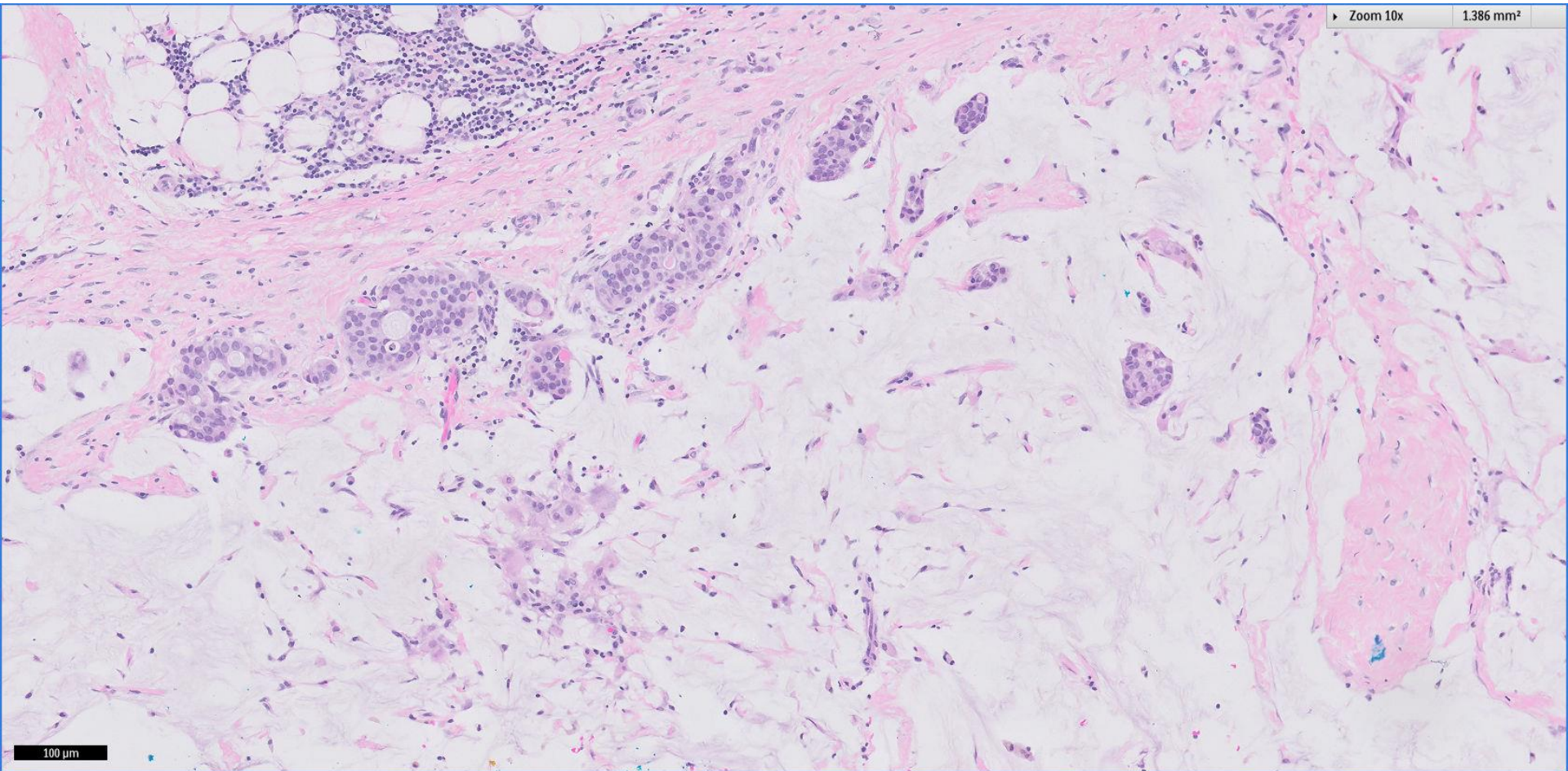
88.704 mm²



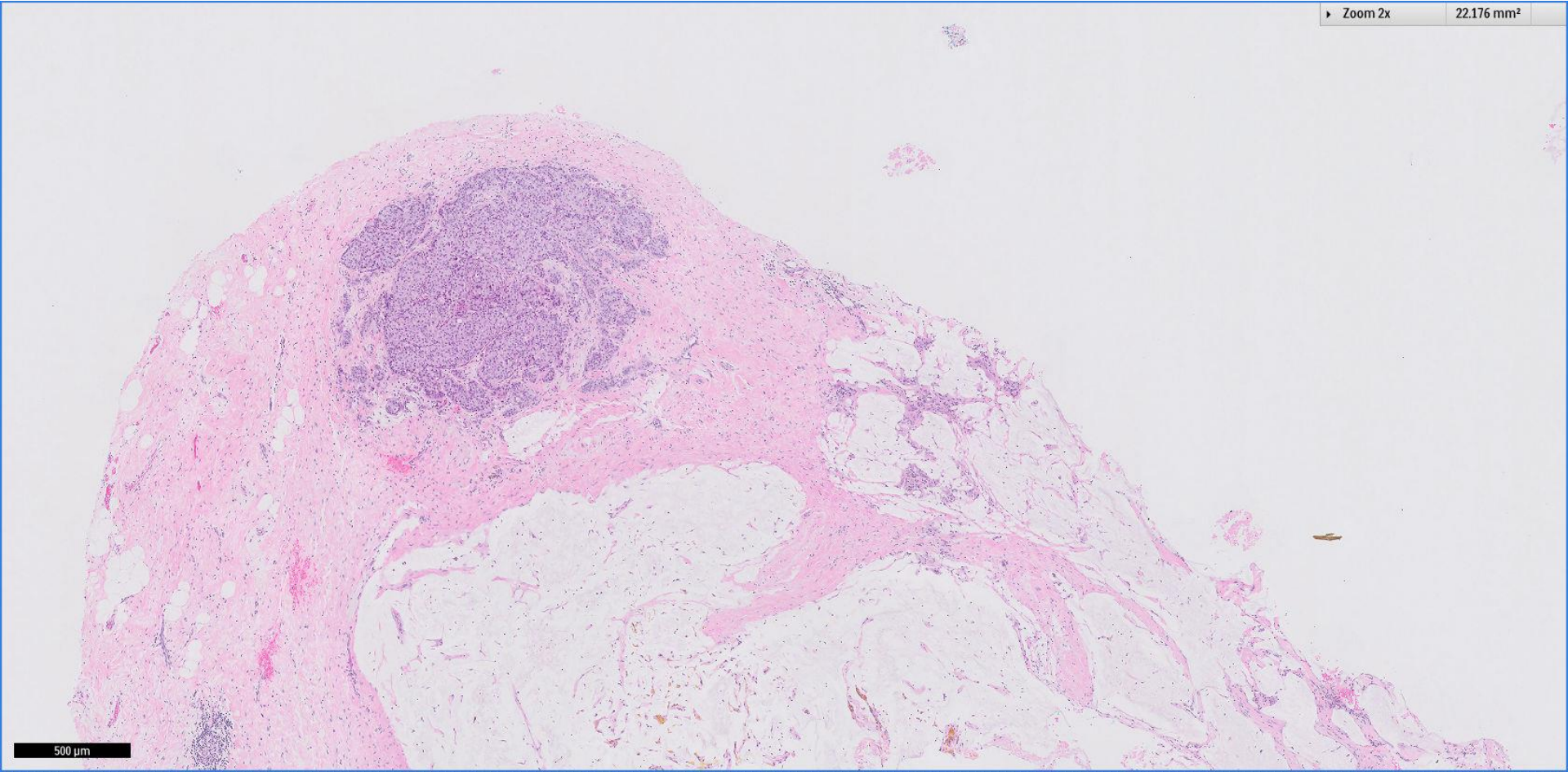
1 mm

▶ Zoom 10x

1.386 mm²



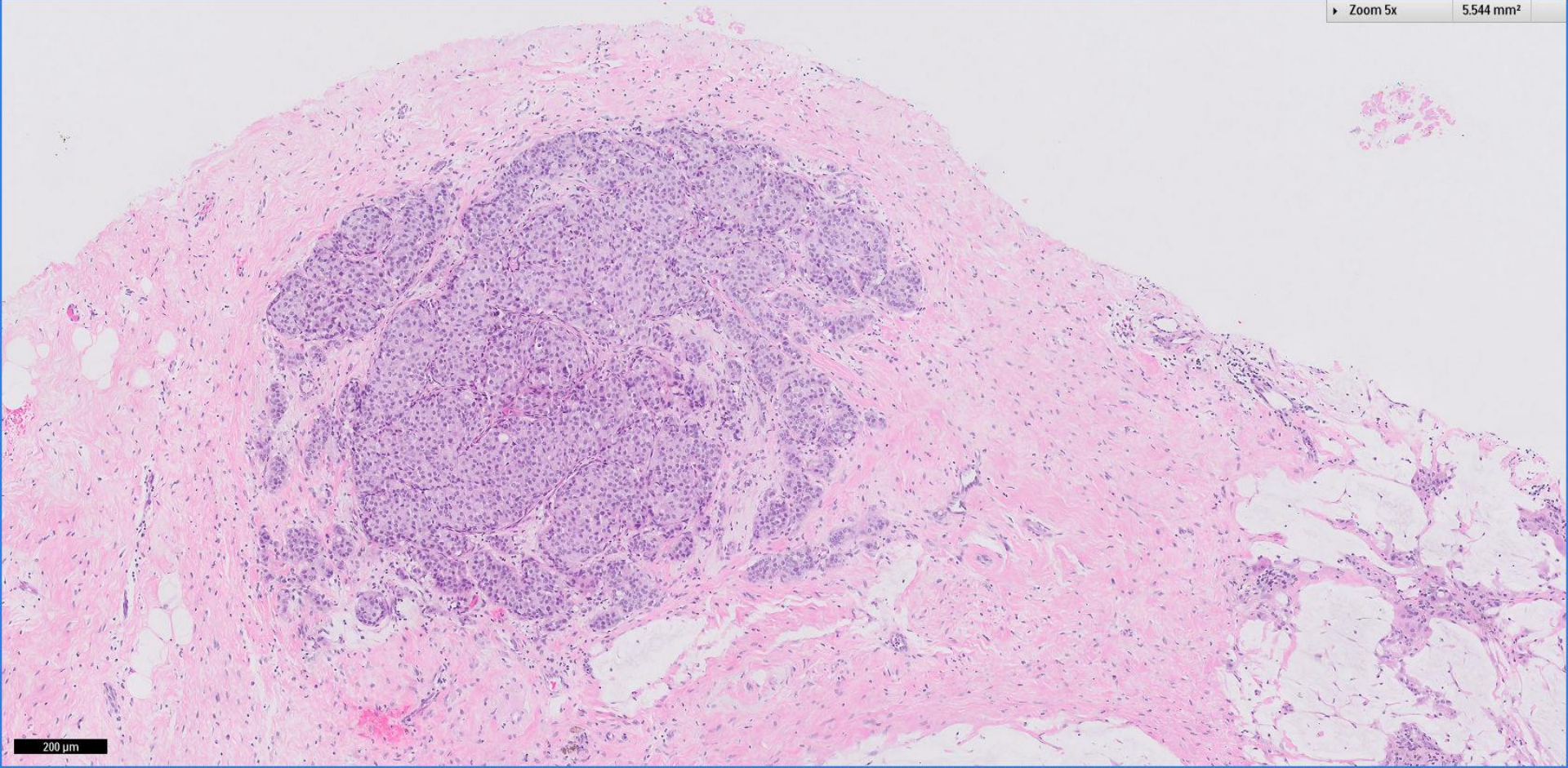
100 μm



500 μ m

► Zoom 5x

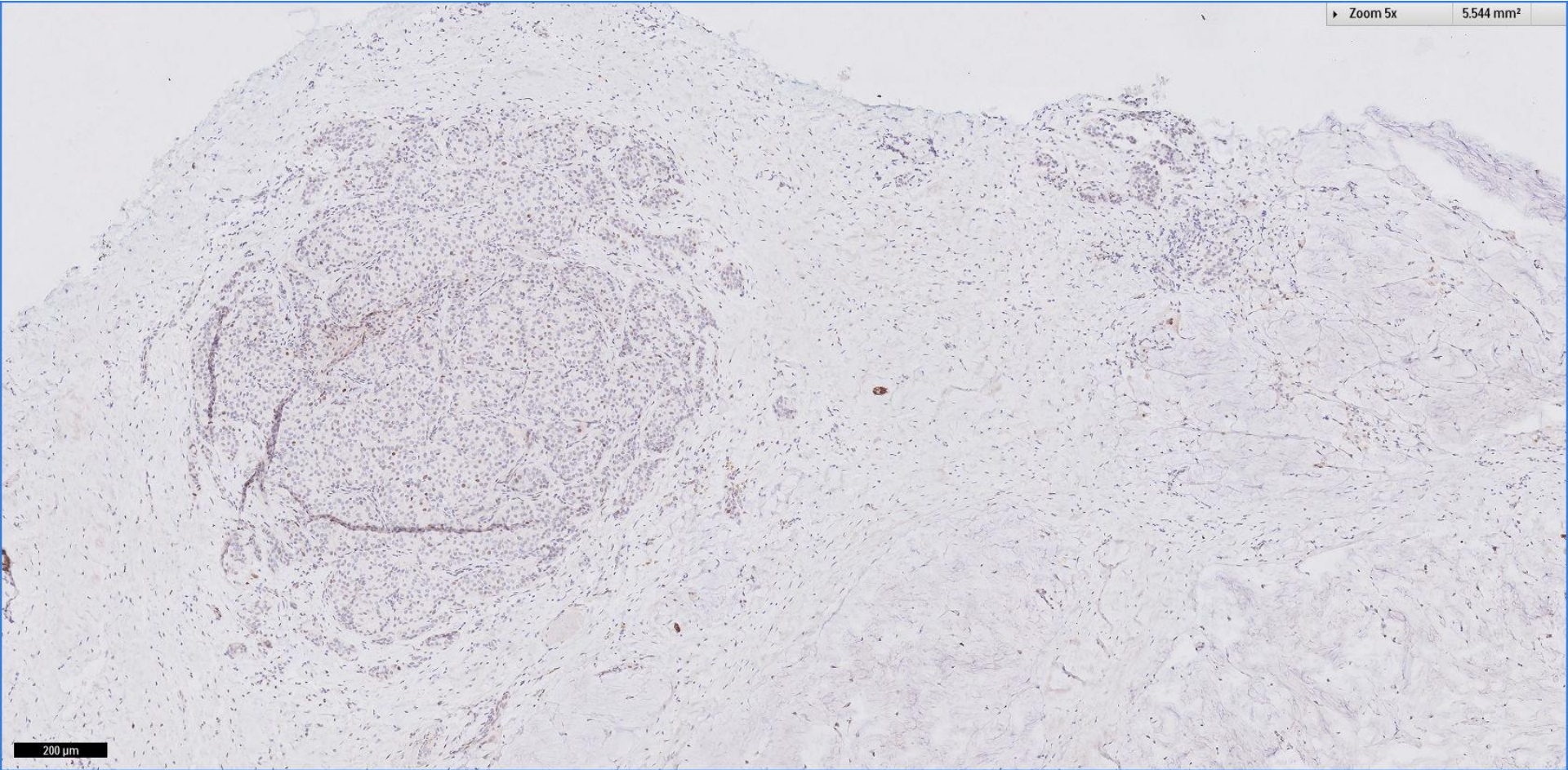
5,544 mm²



200 μ m

p63

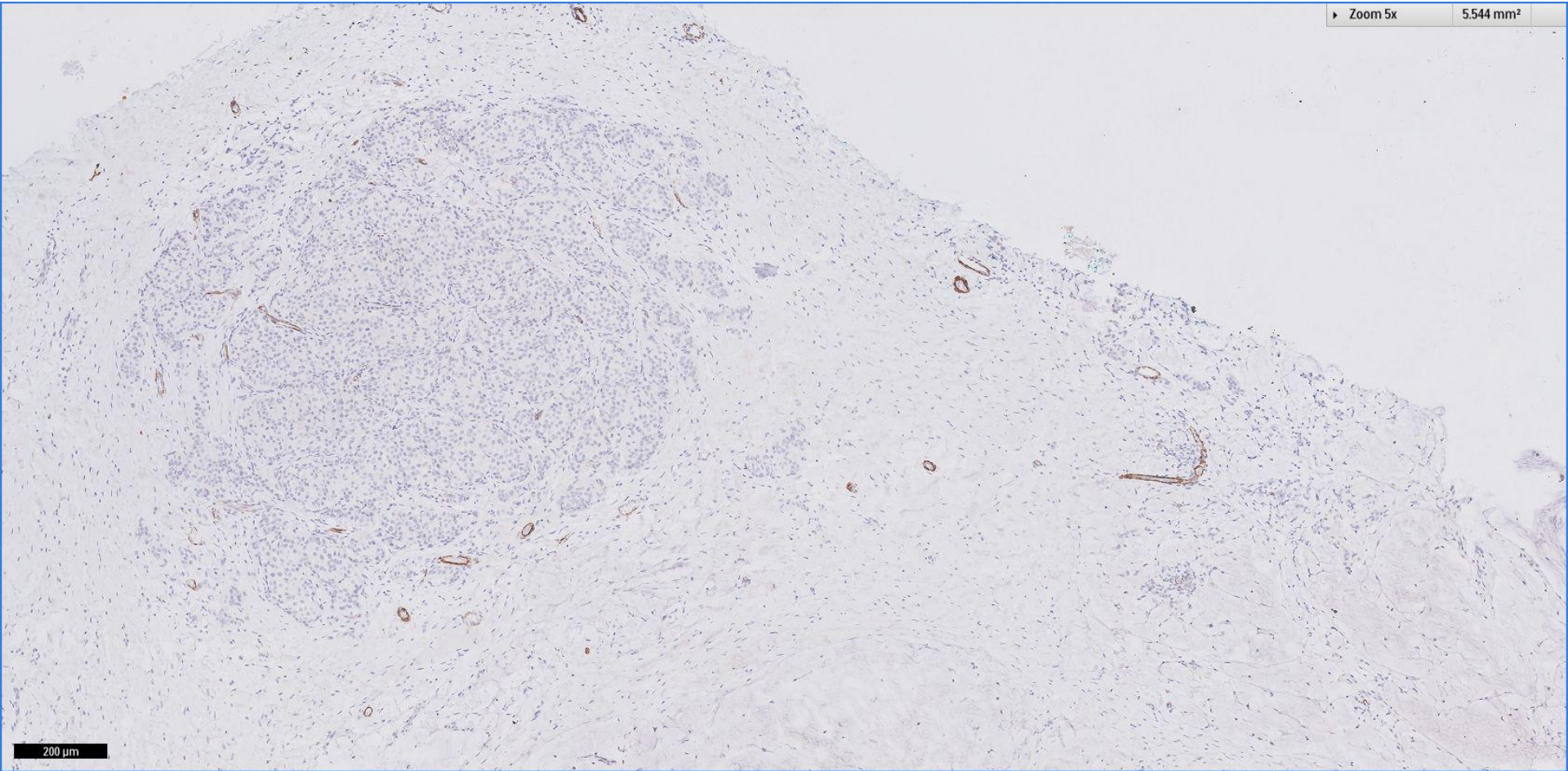
▶ Zoom 5x 5,544 mm²



200 μm

SMMS

► Zoom 5x 5,544 mm²

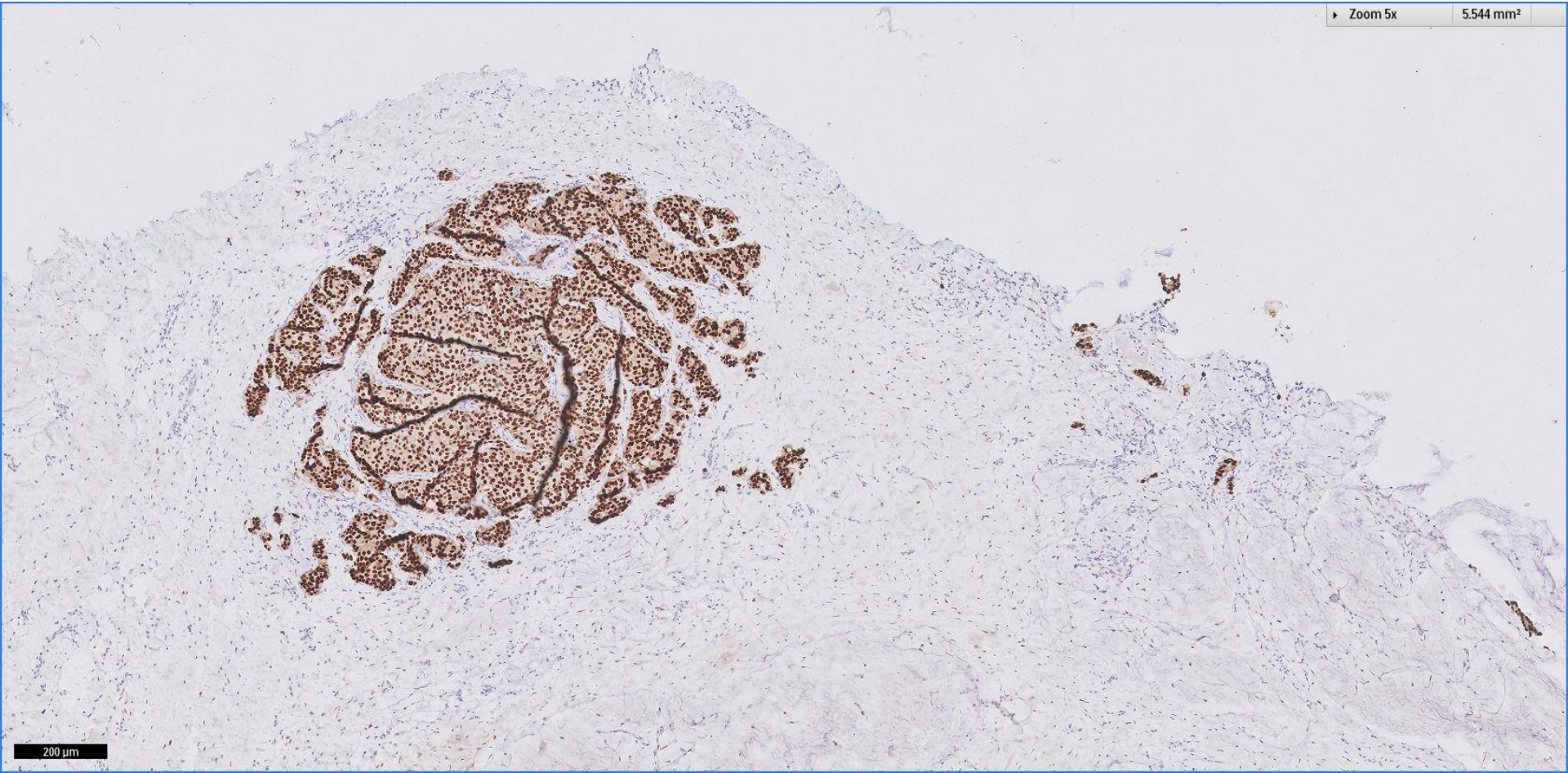


200 μm

ER

Zoom 5x

5,544 mm²



200 μm

Diagnosis

Left 7-8oc breast mass: US VAB:

- Invasive carcinoma with mucinous features
- ER positive, PR positive, c-erb-B2 negative

Mucocele-like Lesions (MLL)

- Mucin-containing cysts with extravasated mucin resulting from rupture
- ~50% associated with ADH/ DCIS/ invasive carcinoma
- Cysts and dilated ducts contain luminal mucin; lined by attenuated to cuboidal epithelium
- Epithelium may show spectrum of proliferative changes e.g. UDH, ADH, DCIS

MLL

- Extravasated mucin in stroma resulting from rupture
- Calcifications may be present within mucin
- Strips/ clusters of epithelial cells may become detached and float freely
 - Important not to overinterpret as carcinoma
 - Multiple levels may be required
- Features favouring MLL with detached epithelium
 - Linear configuration of epithelial cells
 - No nuclear atypia
 - Presence of associated myoepithelial cells (may need IHC to demonstrate)

MLL

- Distinction of MLL and mucinous carcinoma is often not possible on core needle biopsy
- Presence of epithelial atypia would warrant excision
- If extravasated mucin is extensive, and imaging shows a mass, excision should be considered
- MLL with areas of mucinous carcinoma have been reported > excision + histological examination of entire lesion is necessary for final classification in many cases