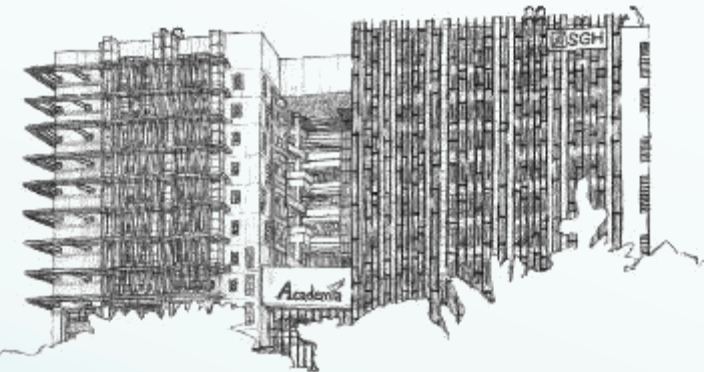
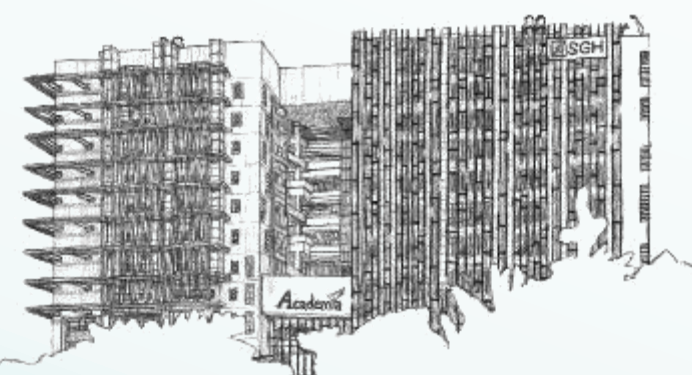


- 42 year old, Female
- Referred from private GP for left breast tender lump after being elbowed by son
- Trauma occurred 1 week ago
- Pain started few days later associated with tenderness and swelling
- No nipple discharge

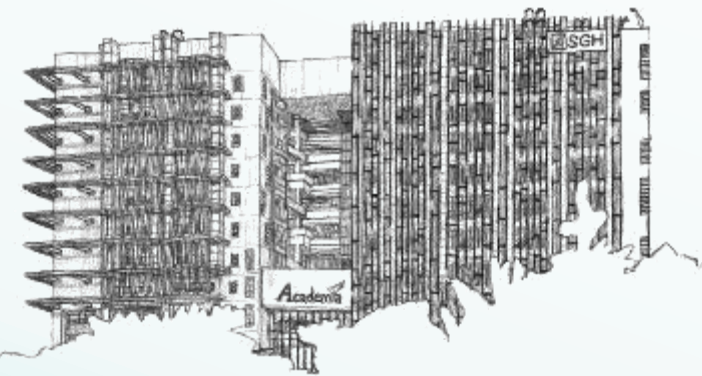


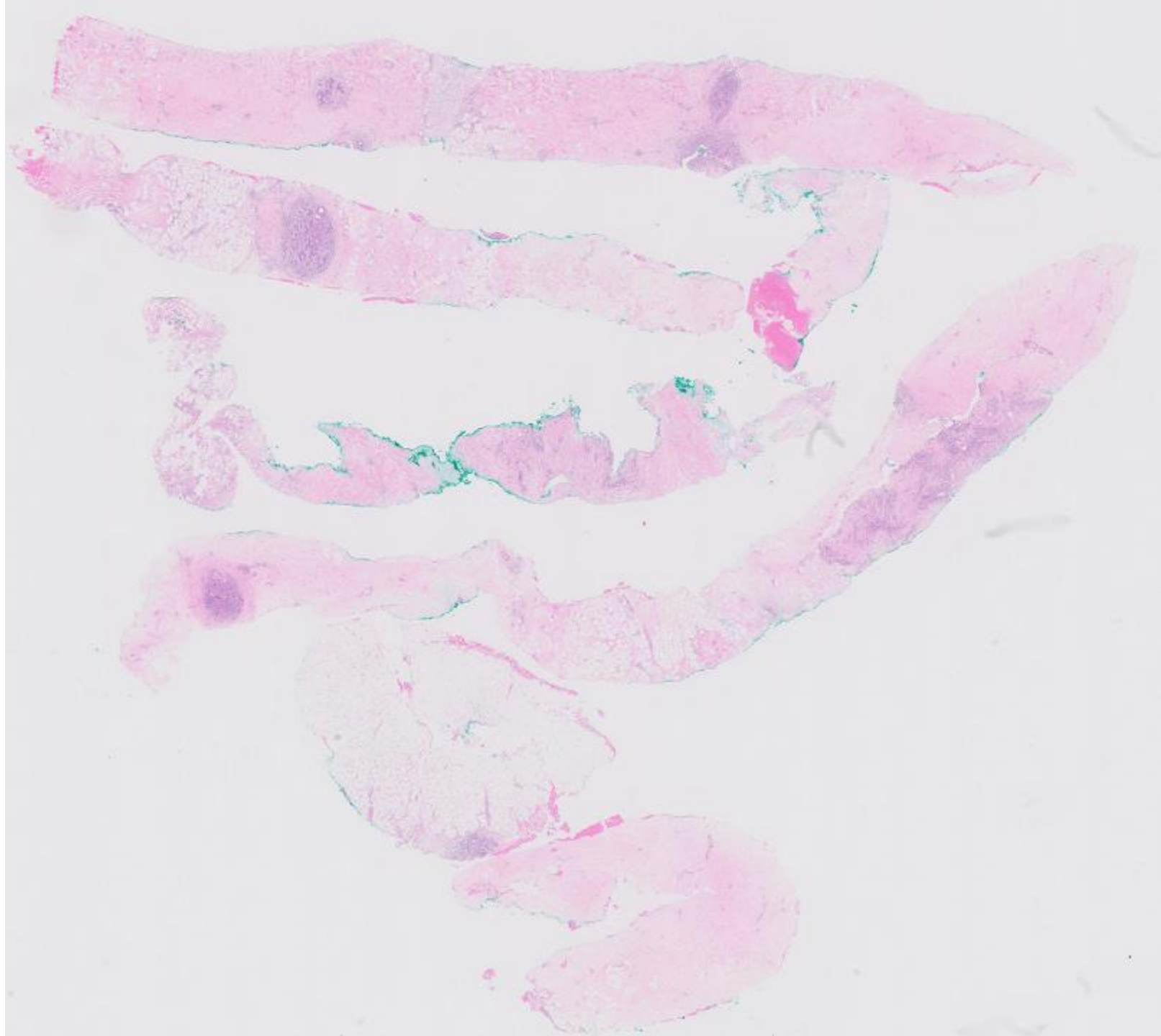
Physical examination:

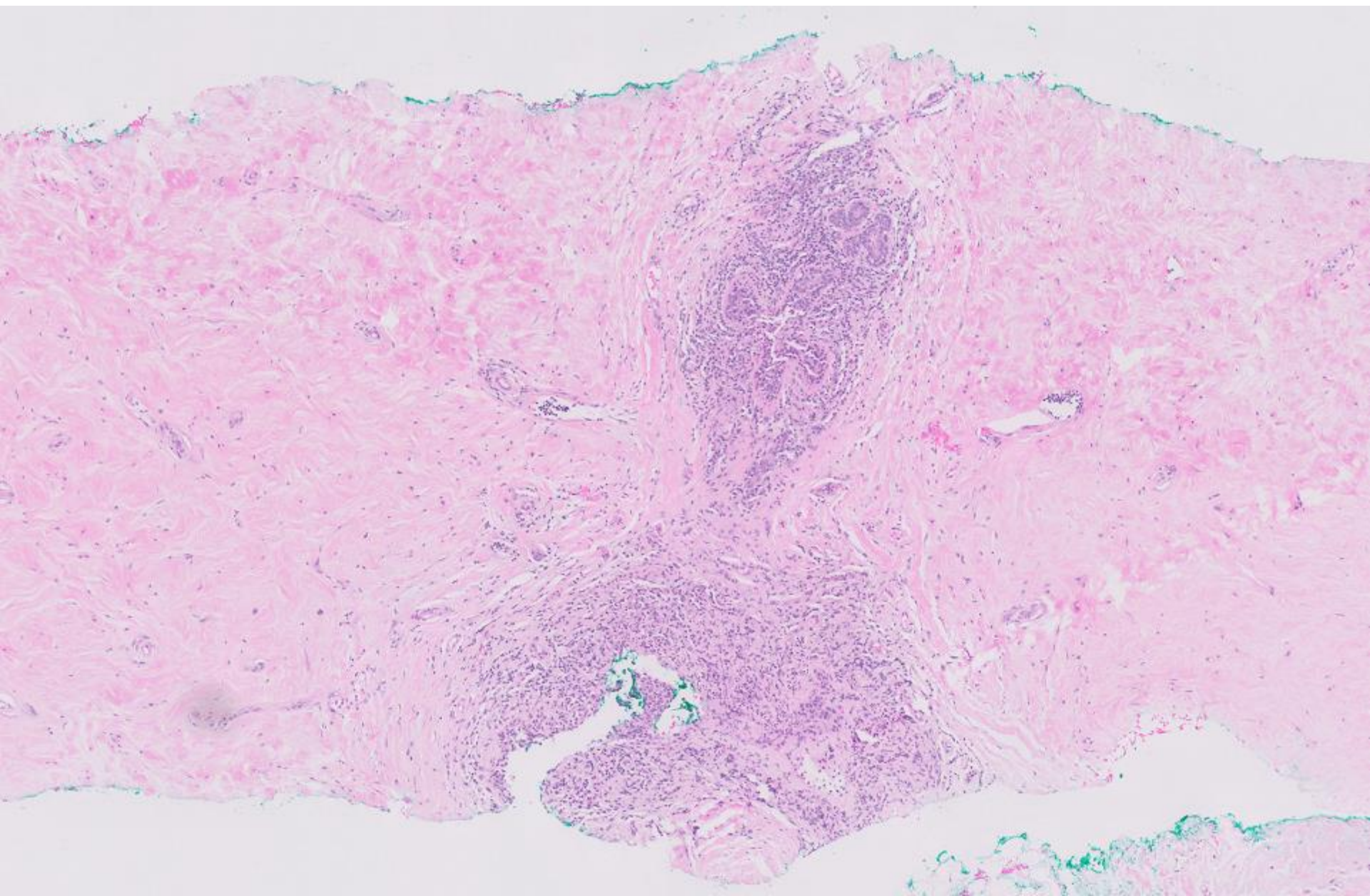
- Left breast ill-defined lumpy mass from 9 to 12 o'clock
- No palpable axillary lymph nodes
- Contralateral breast normal

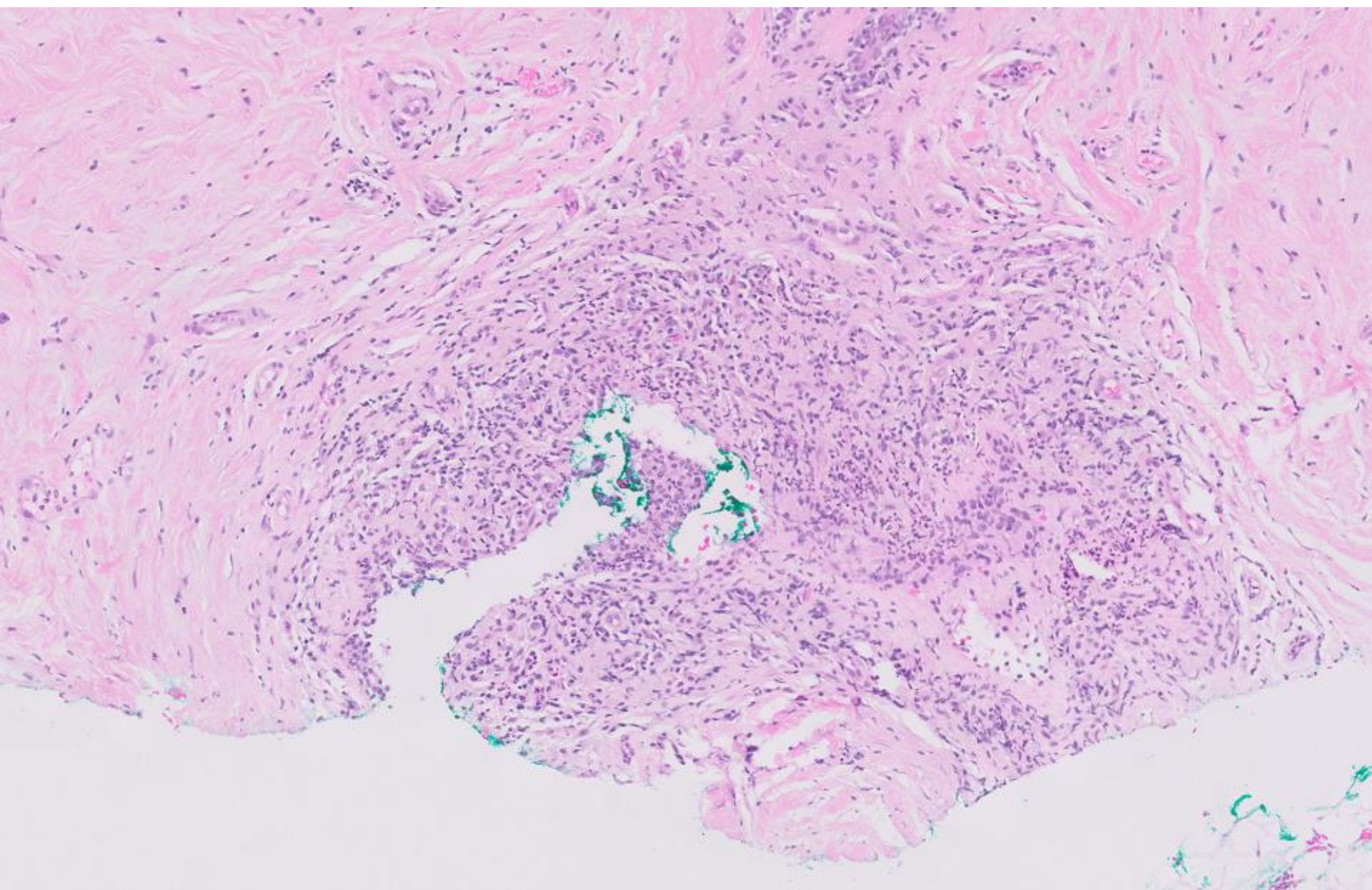


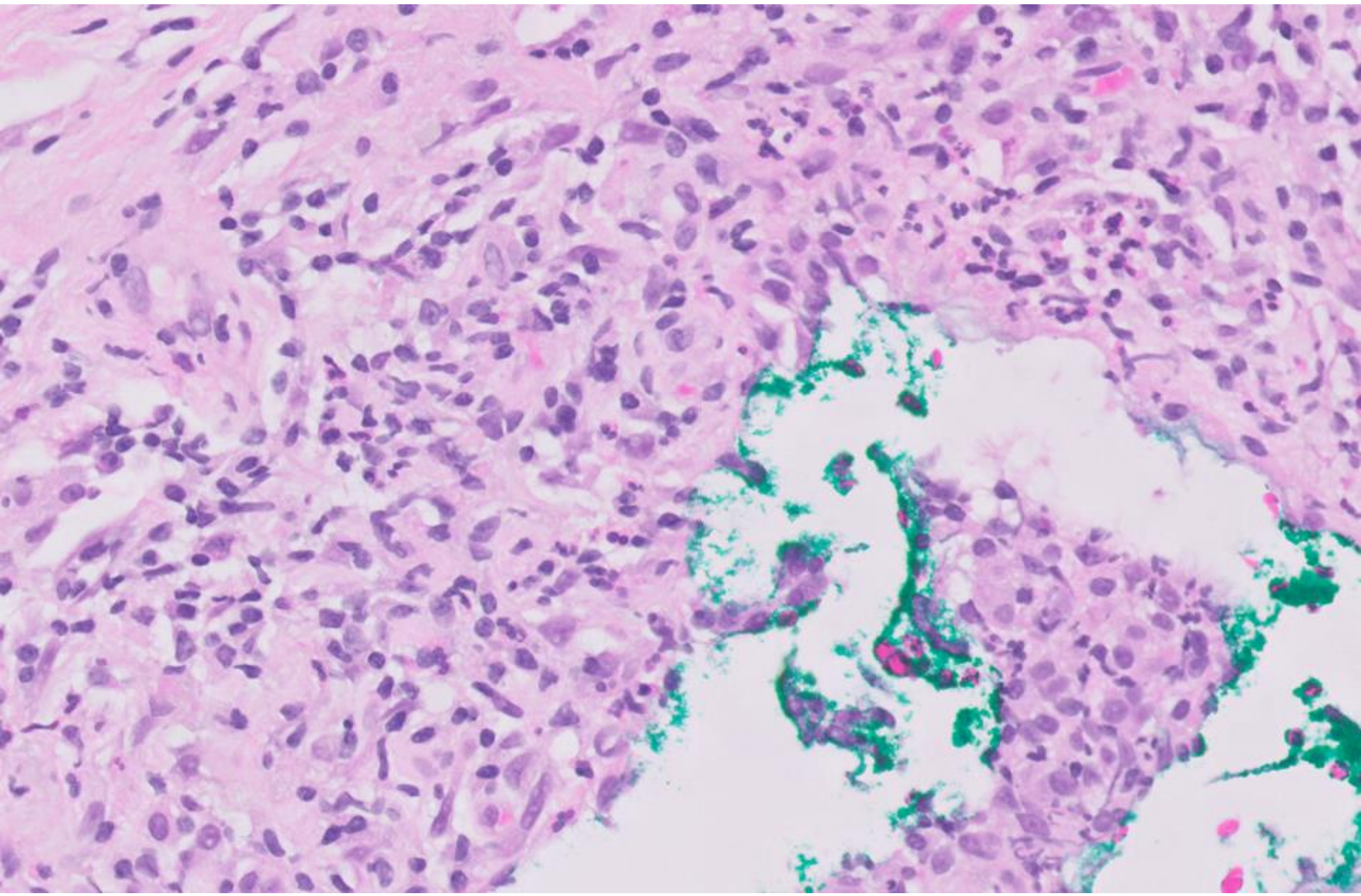
- Patient had US done in private
- Doppler US shows increased vascularity and heterogenous hyperechoic lesion in left breast.
- Trucut biopsy done in clinic

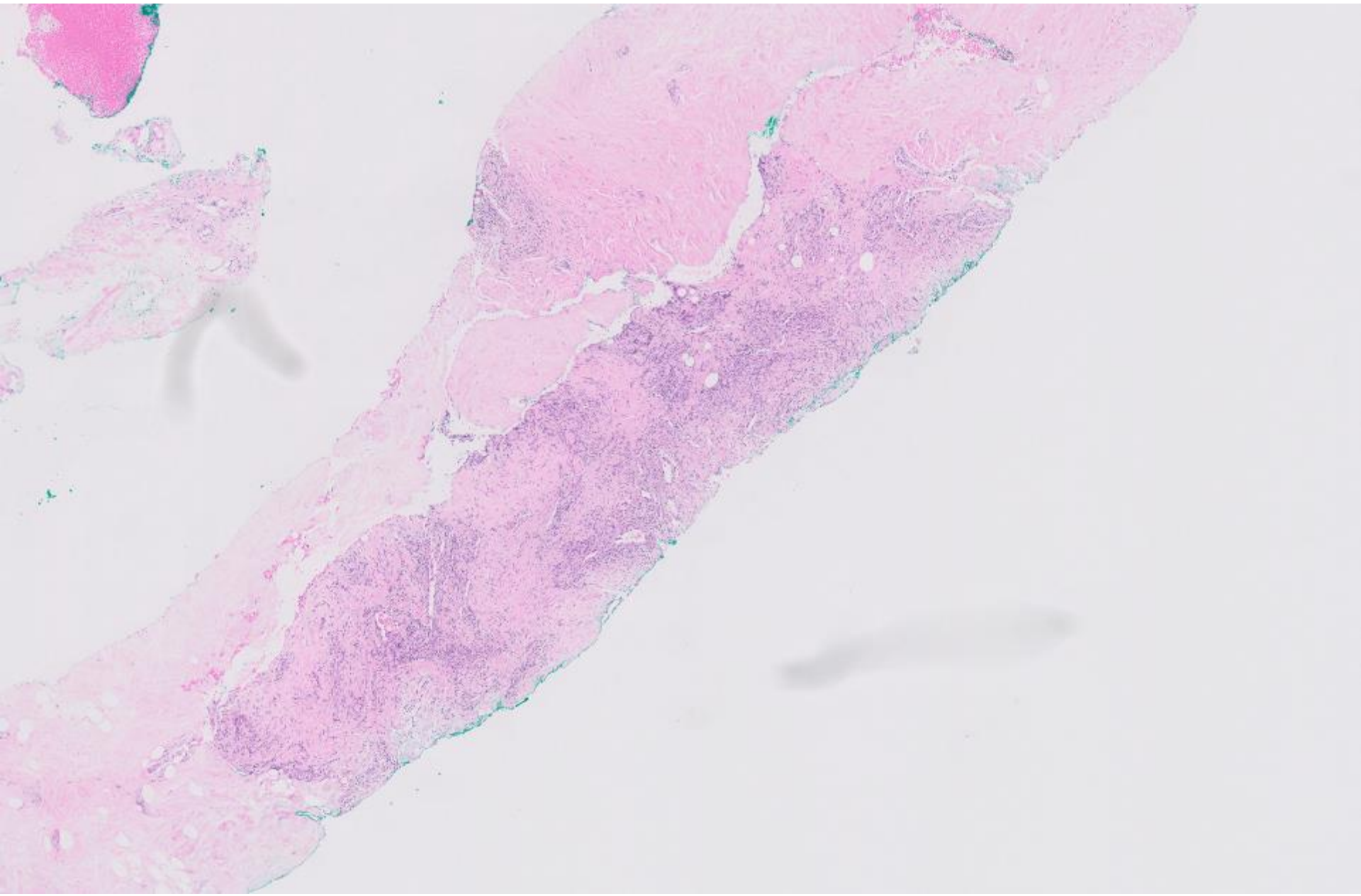


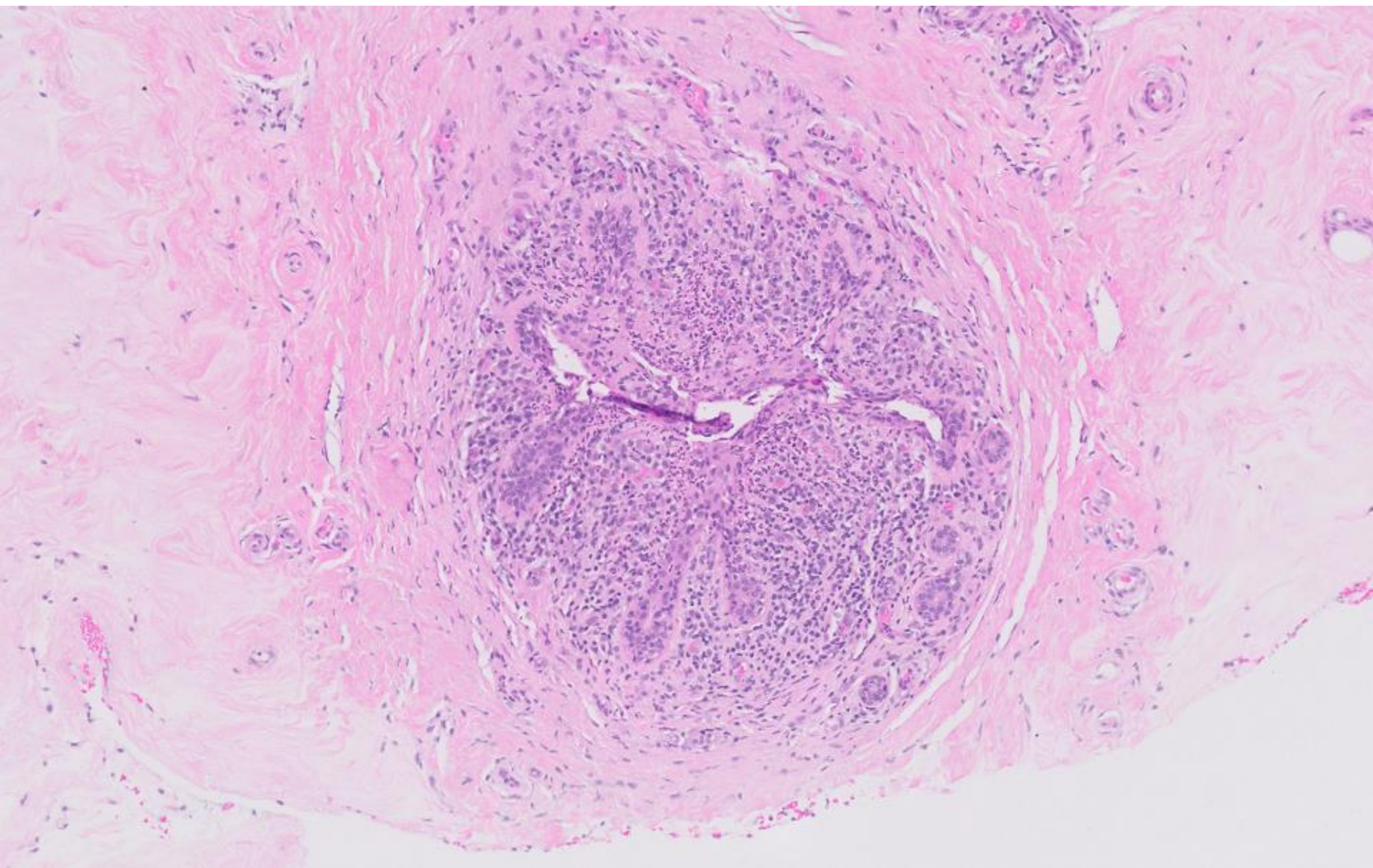


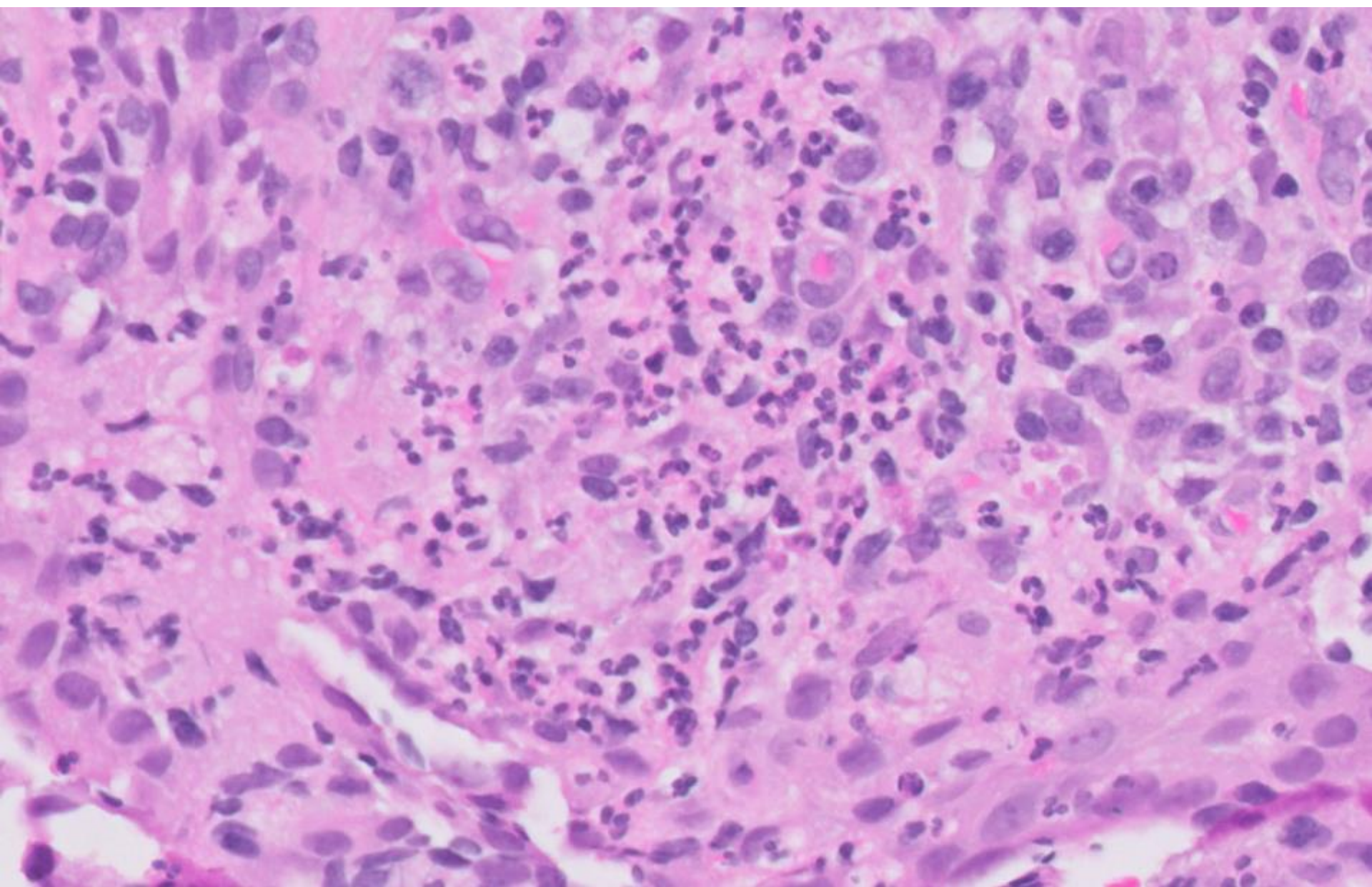


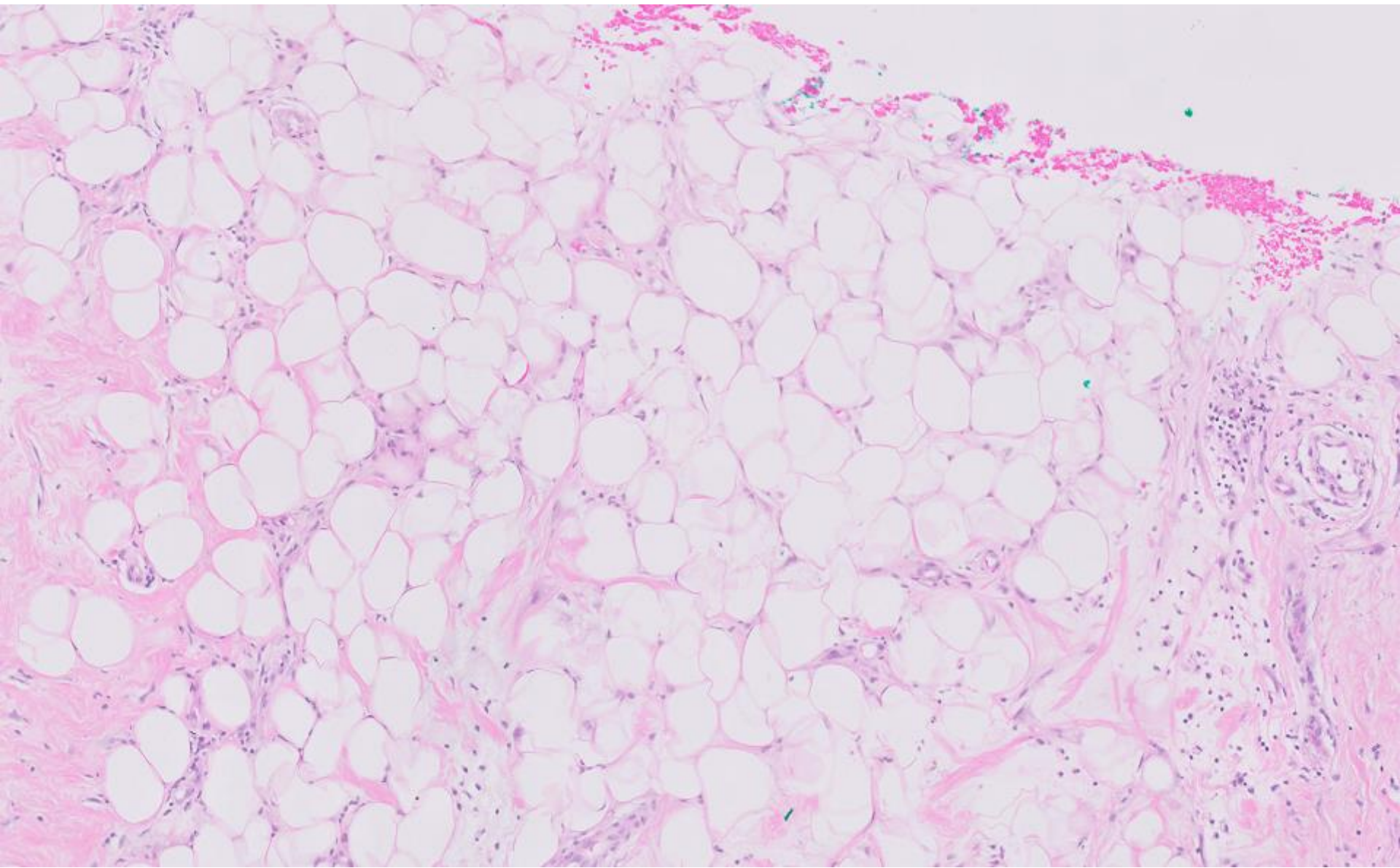












Question 1.1

What is your diagnosis?

- A. Periductal mastitis
(Duct ectasia) with fat necrosis
- B. Granulomatous mastitis
- C. Trauma associated fat necrosis
and inflammation

Diagnosis

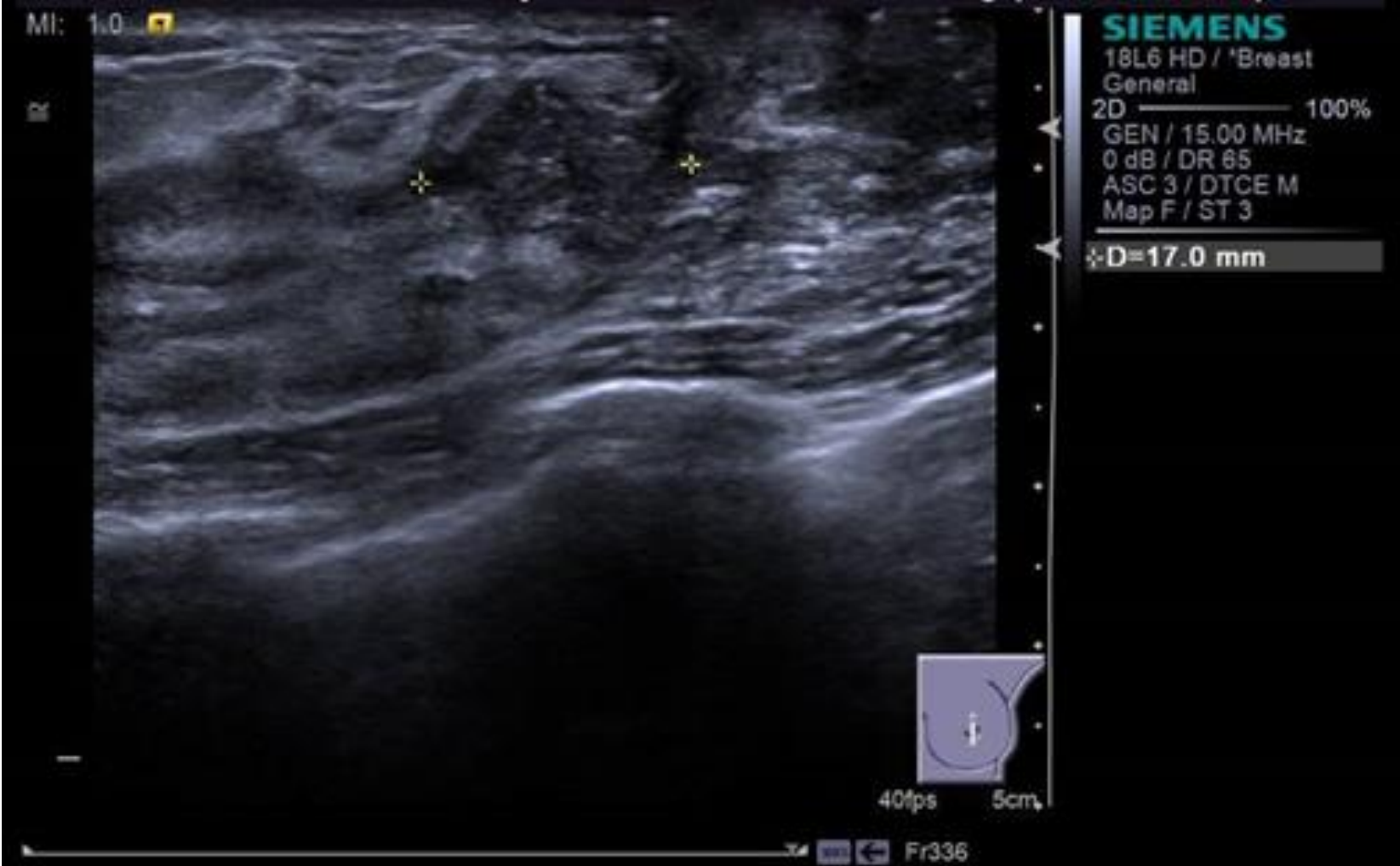
Left breast, trucut biopsy:

- Benign breast tissue with periductal mastitis and features suggestive of fat necrosis
- Negative for malignancy

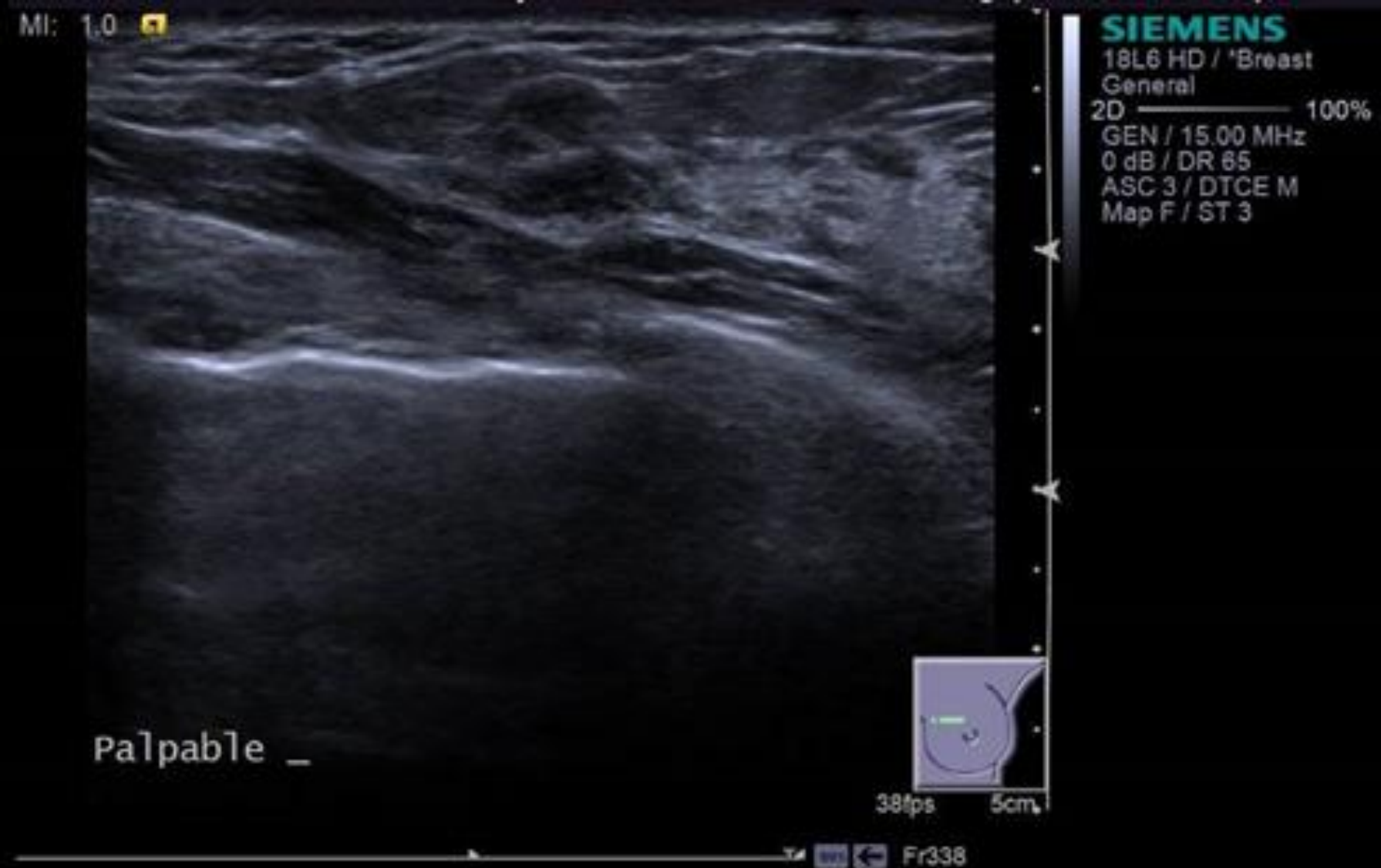
Follow up

- Follow up ultrasound 3 months later
- Also developed new 10 o'clock lump in the interim

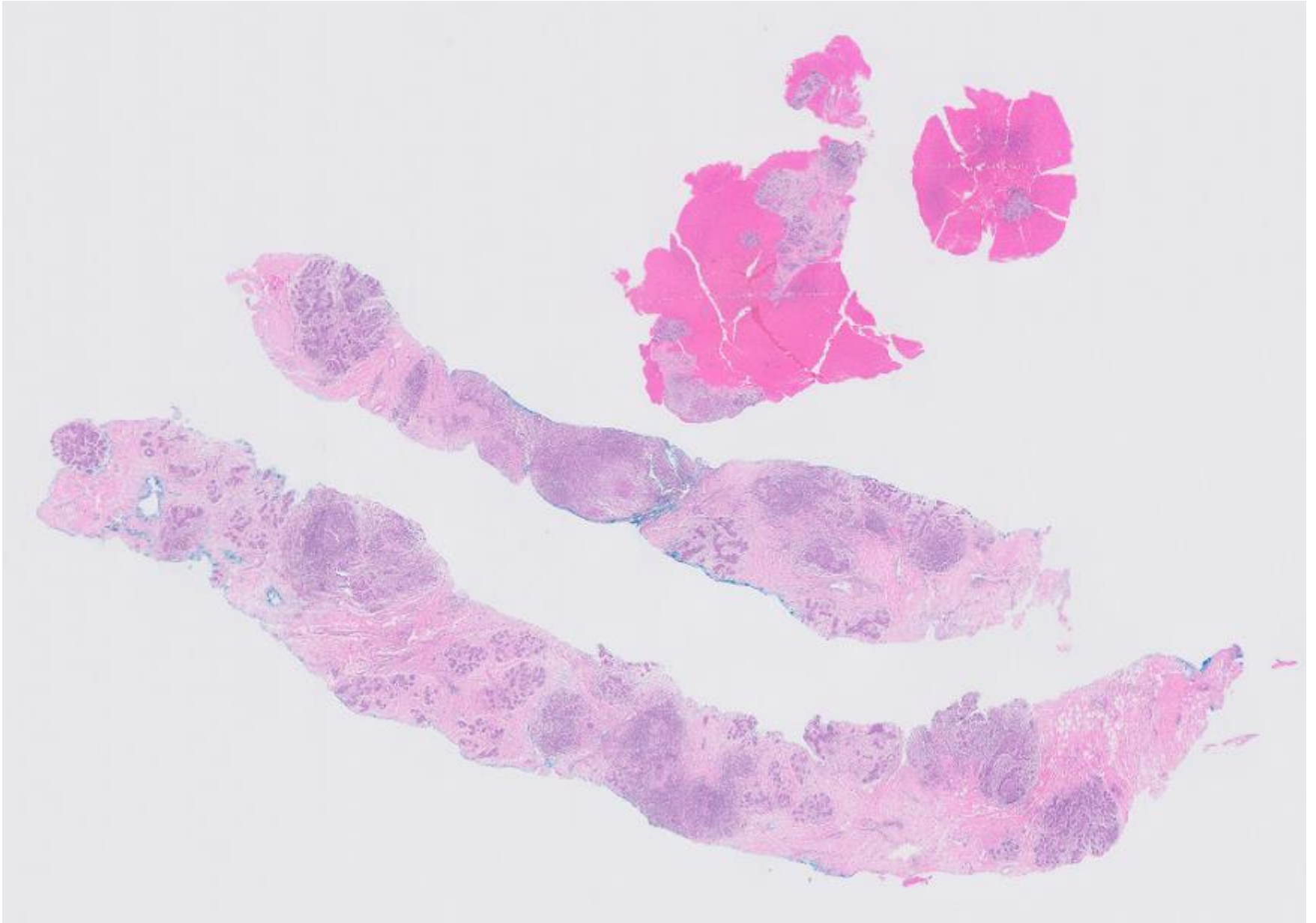
US (13/11/2018): Ill defined 17mm area at the left sub-periareolar 8 OC position that appears smaller compared to the previous ultrasound study in September 2018. This was the area previously biopsied and it remains indeterminate with no typical features for fat necrosis. Repeat US biopsy suggested.

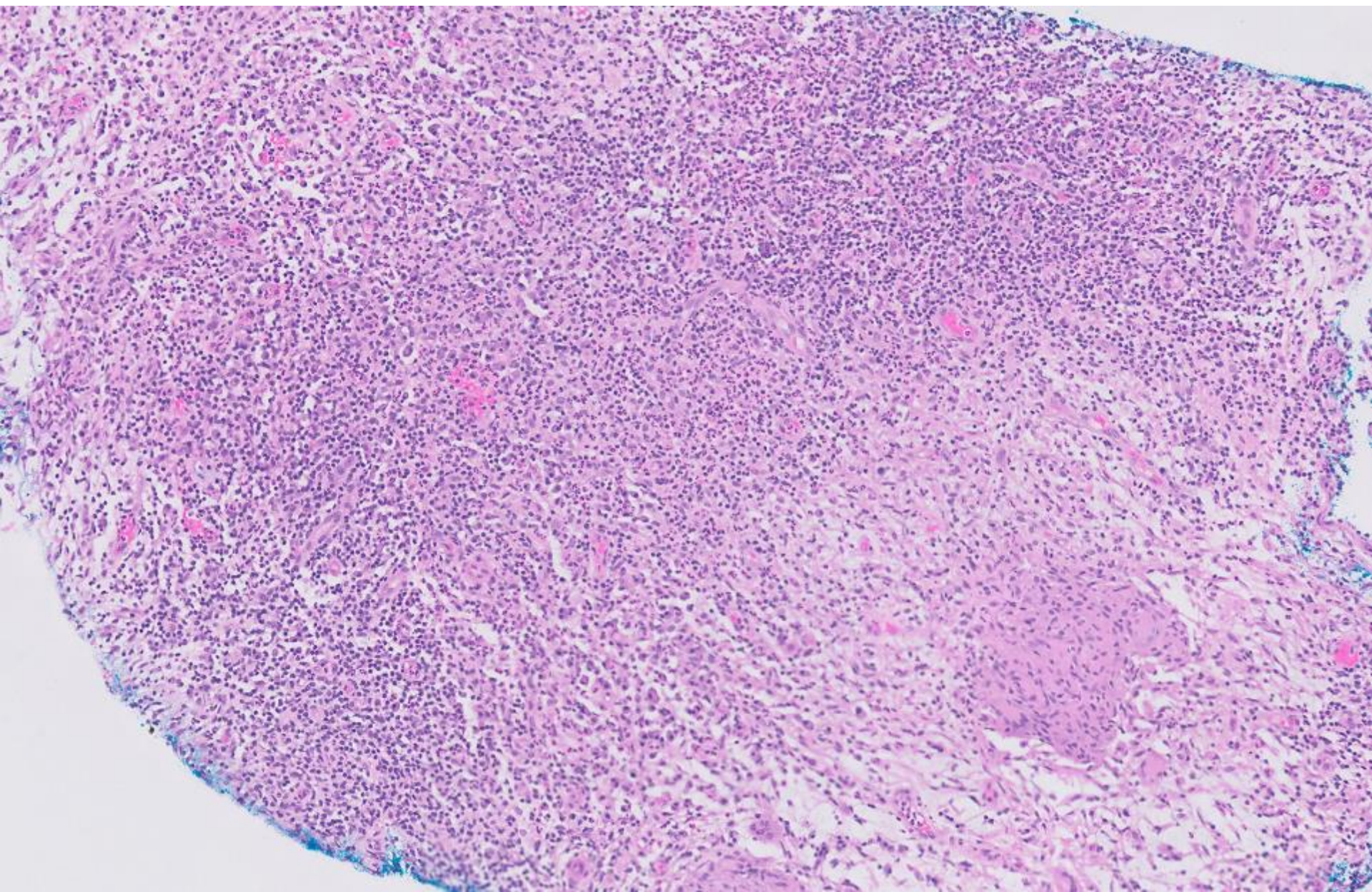


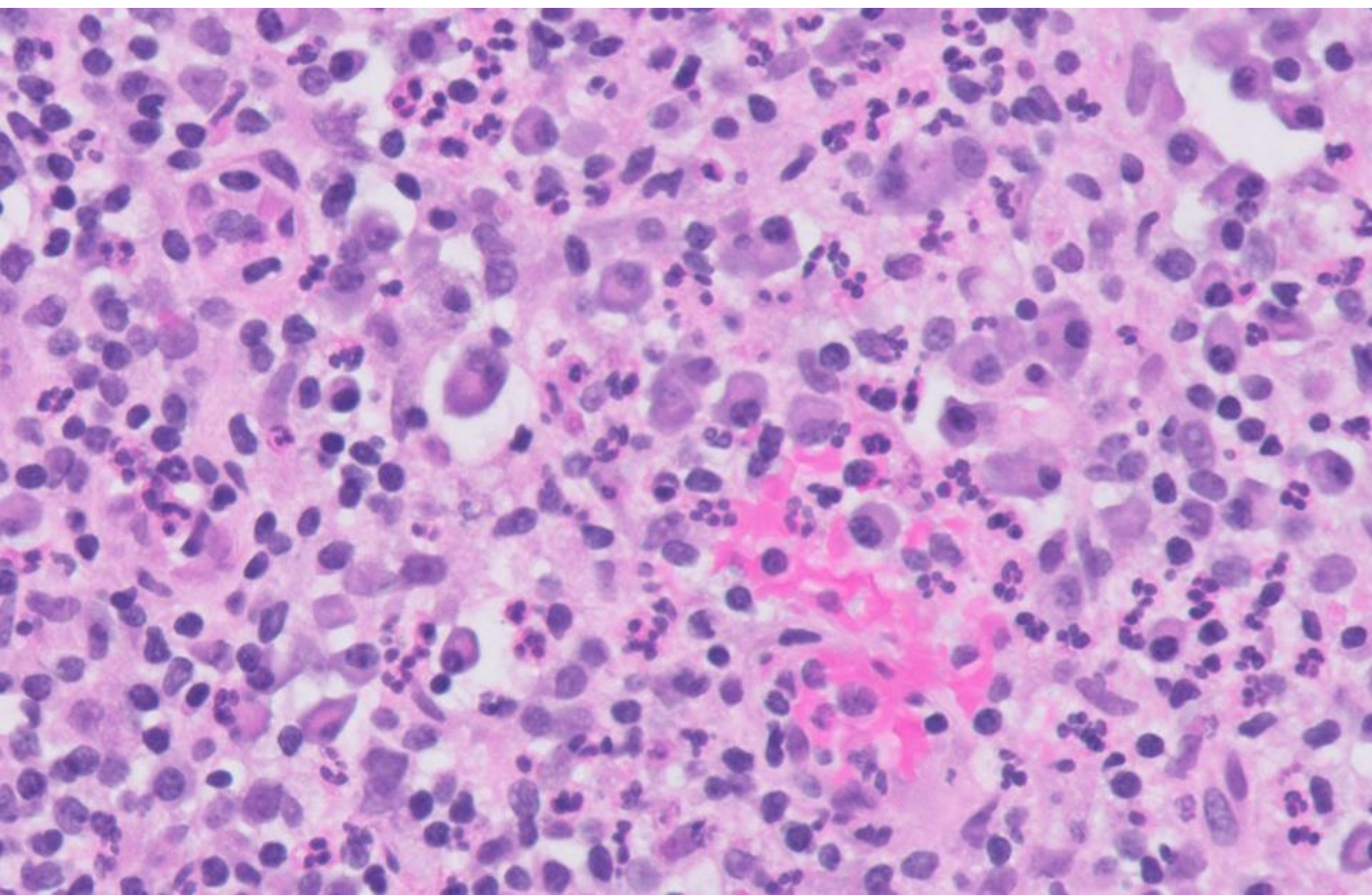
There is also a vague 13mm heterogeneously hypoechoic nodule at the left 10 OC position.

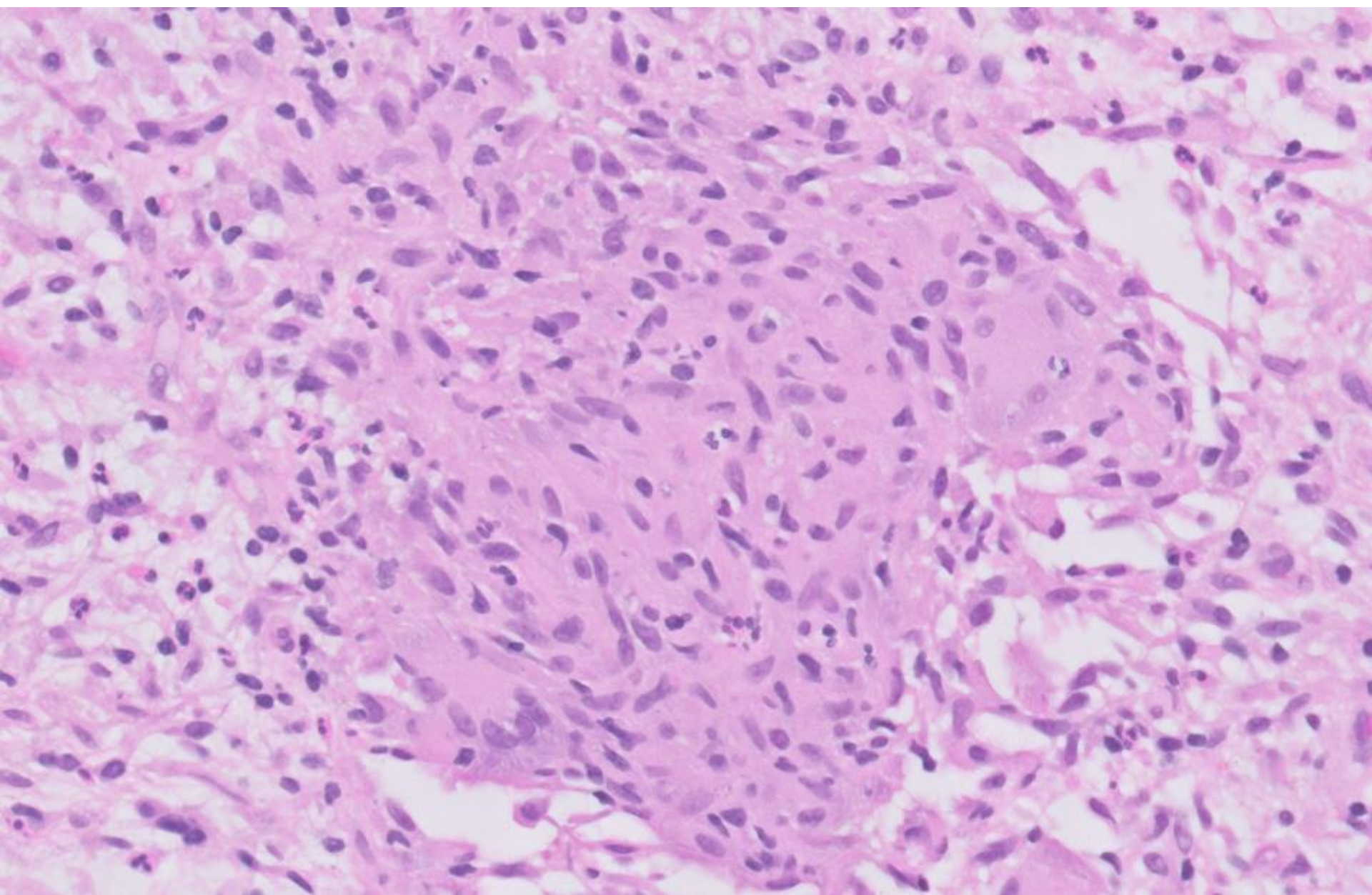


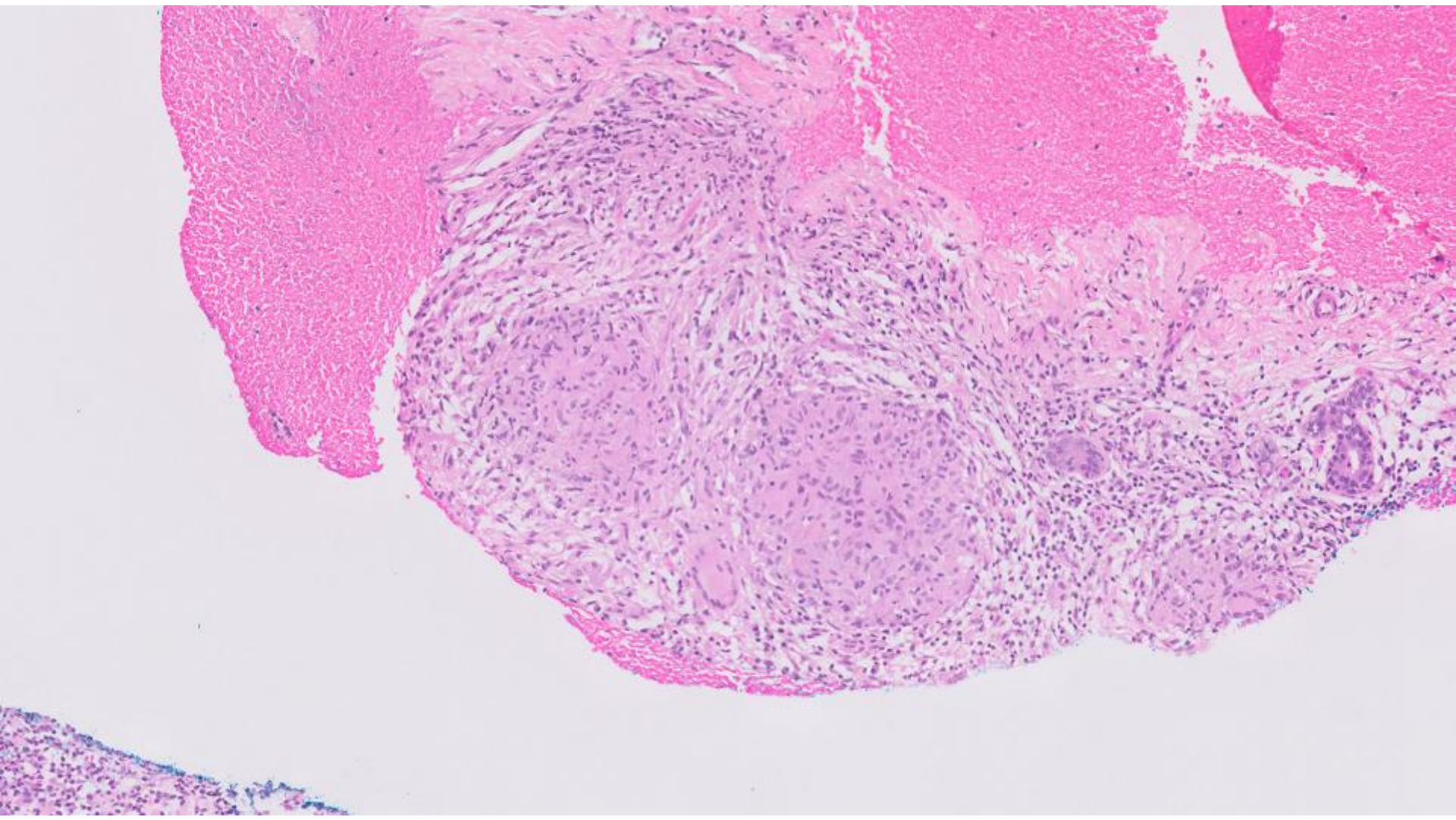
Left breast 8 o'clock mass



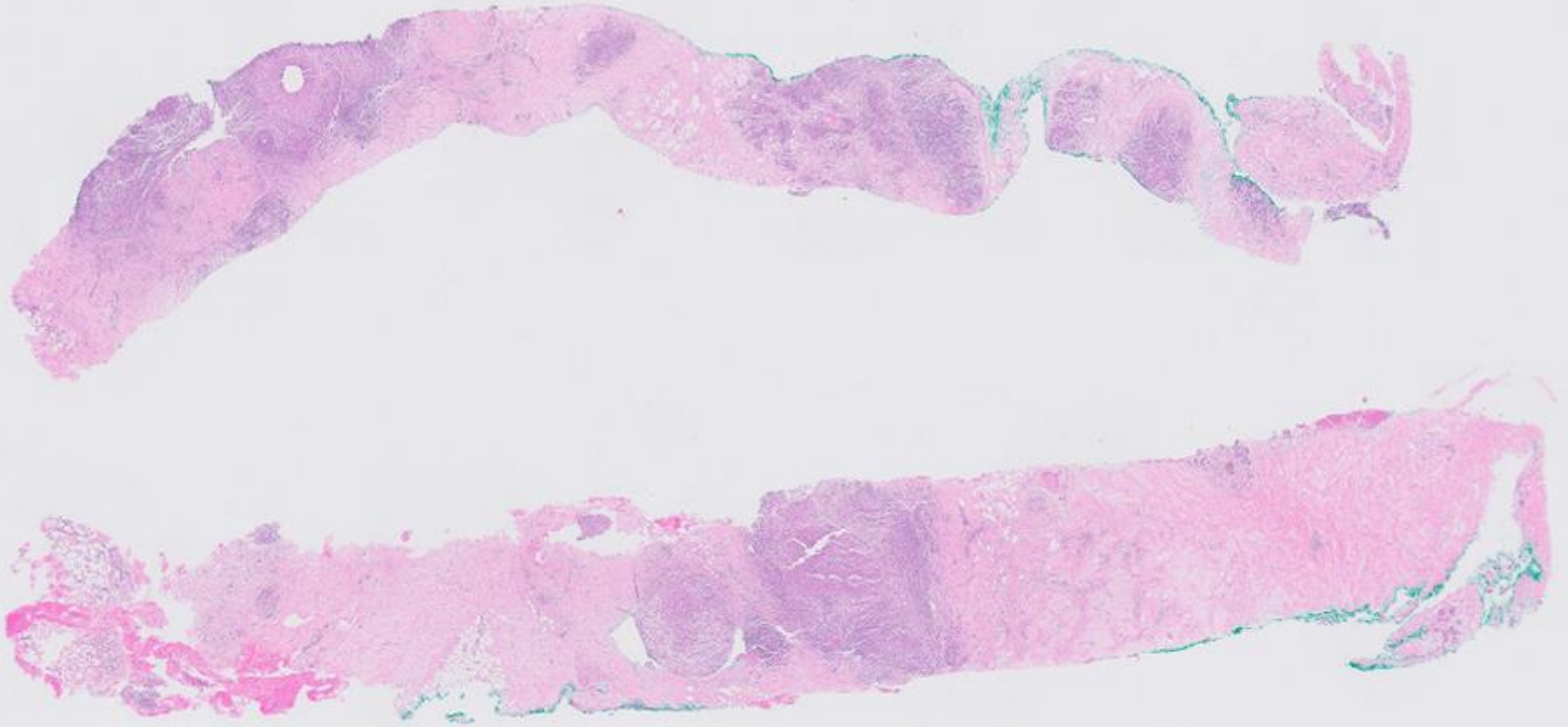


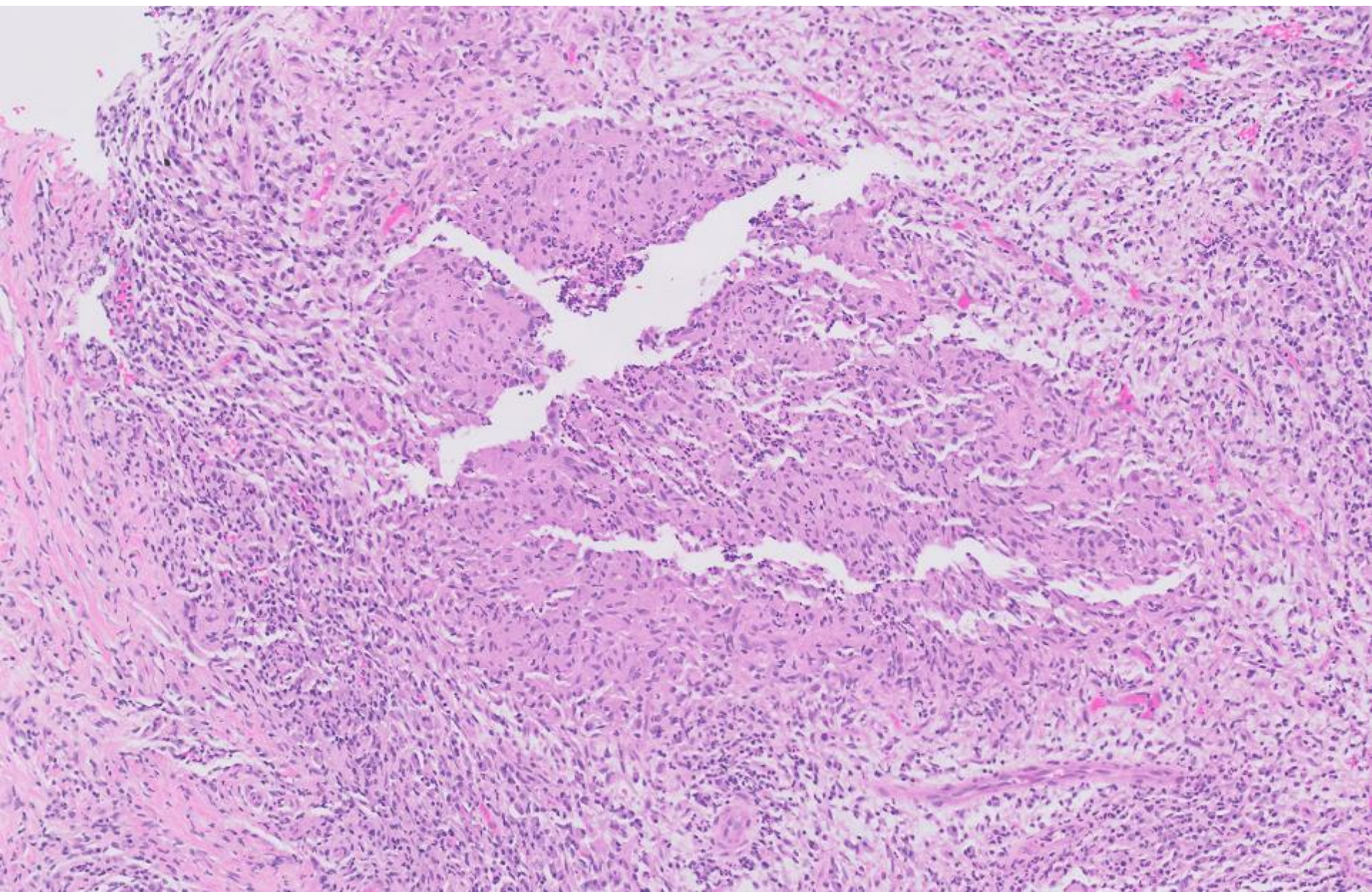


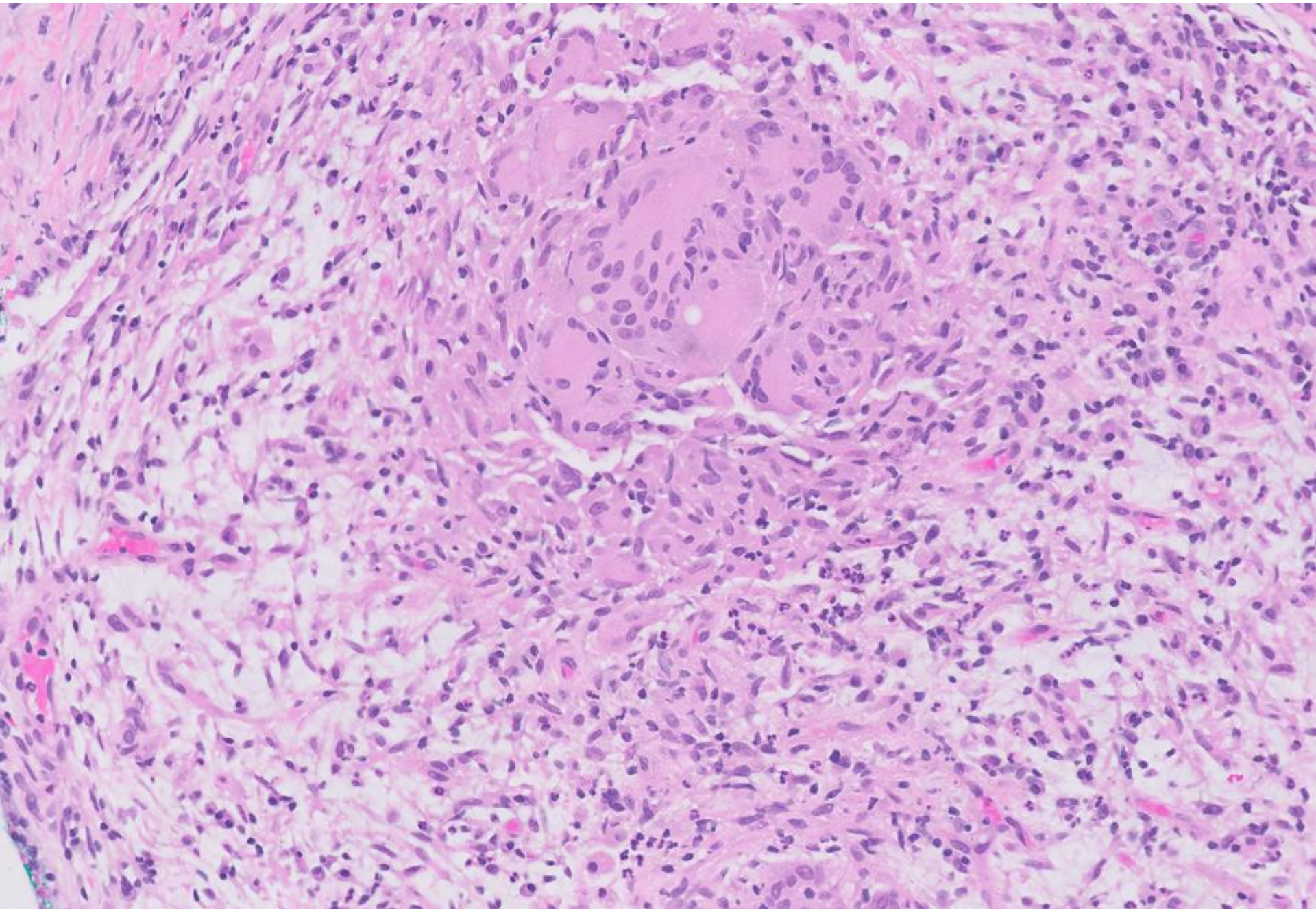


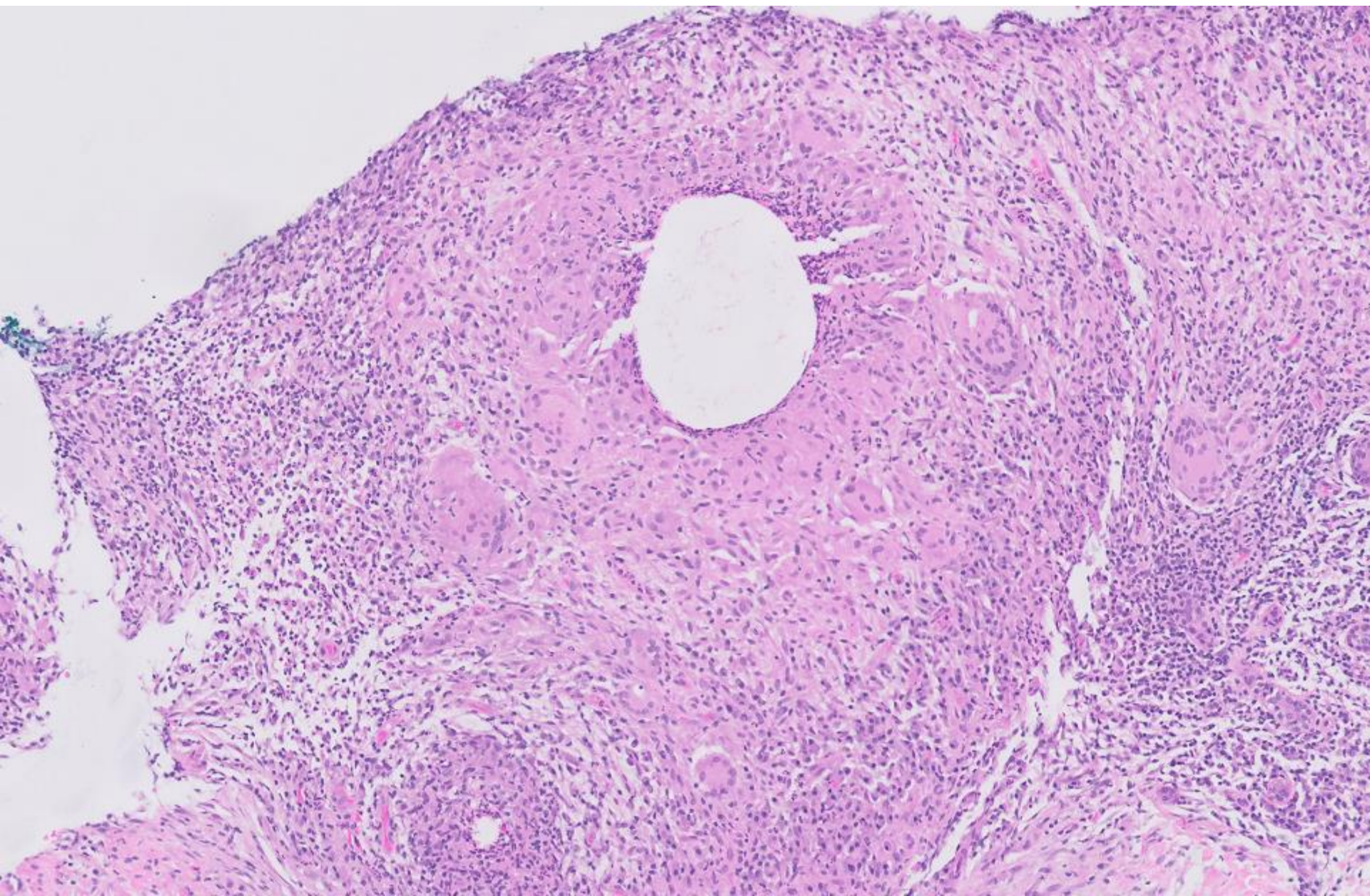


Left breast 10 o'clock mass









Question 1.2

Would you order special stains?

- A. Yes
- B. No

Question 1.3

Which stains would you order?

- A. PAS, GMS
- B. PAS, GMS, ZN
- C. PAS, GMS, ZN, Gram stain
- D. Gram stain only

- Special stains did not highlight any organisms.

Question 1.4

What is the diagnosis?

- A. Idiopathic granulomatous mastitis
- B. Cystic neutrophilic granulomatous mastitis
- C. Granulomatous mastitis
– to exclude infectious causes clinically
- D. Periductal mastitis
- E. Sarcoidosis

Diagnosis

- (A) Left breast 8 o'clock mass:
- Granulomatous inflammation / mastitis.
- Please correlate with microbiology findings.

- (B) Left breast 10 o'clock mass:}
- Granulomatous inflammation / mastitis.

- Comment: Granulomatous mastitis may be infectious or non-infectious in aetiology. If an infectious agent is excluded, the reaction may be a response to extruded duct contents or other intrinsic antigenic stimulus.