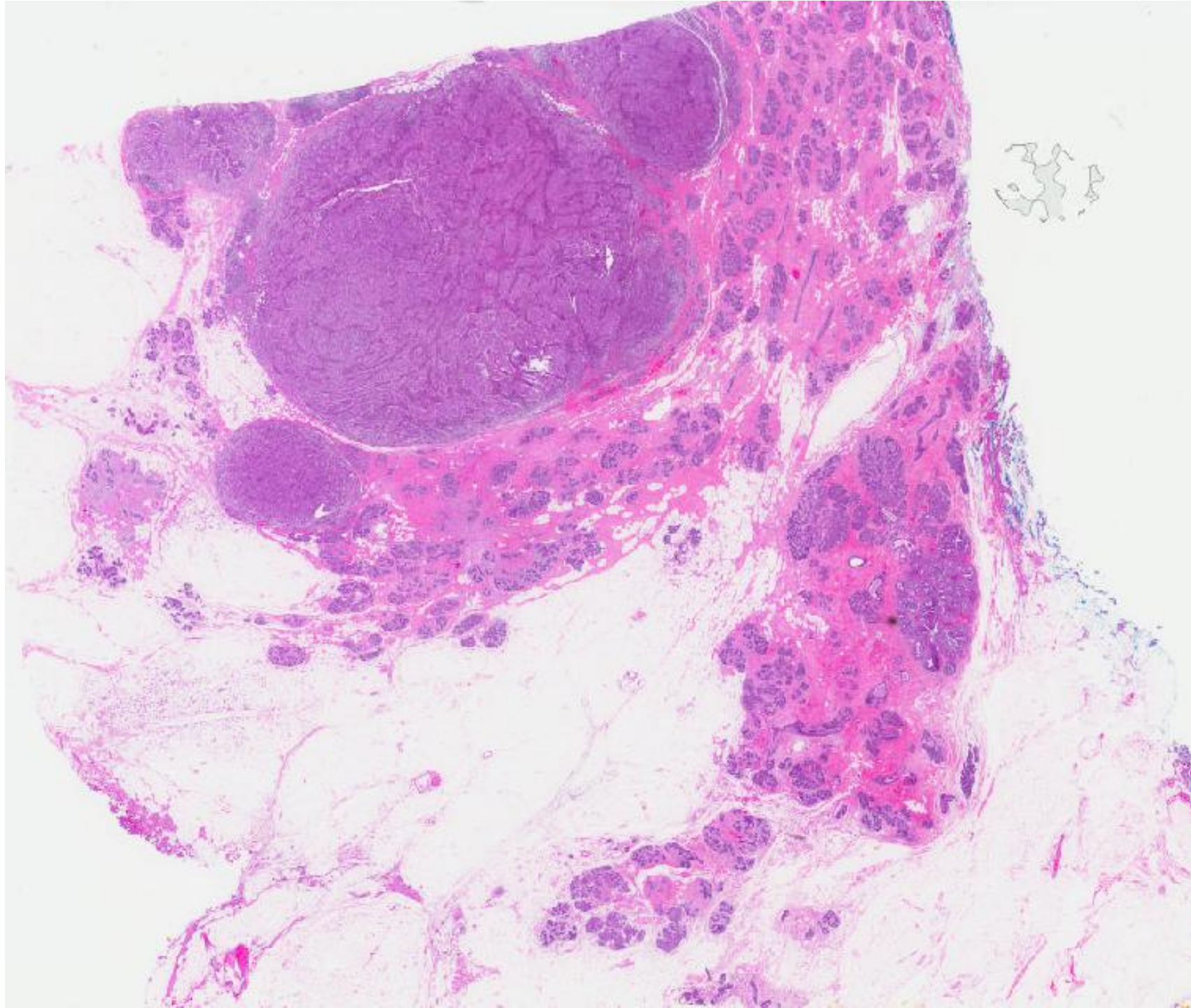
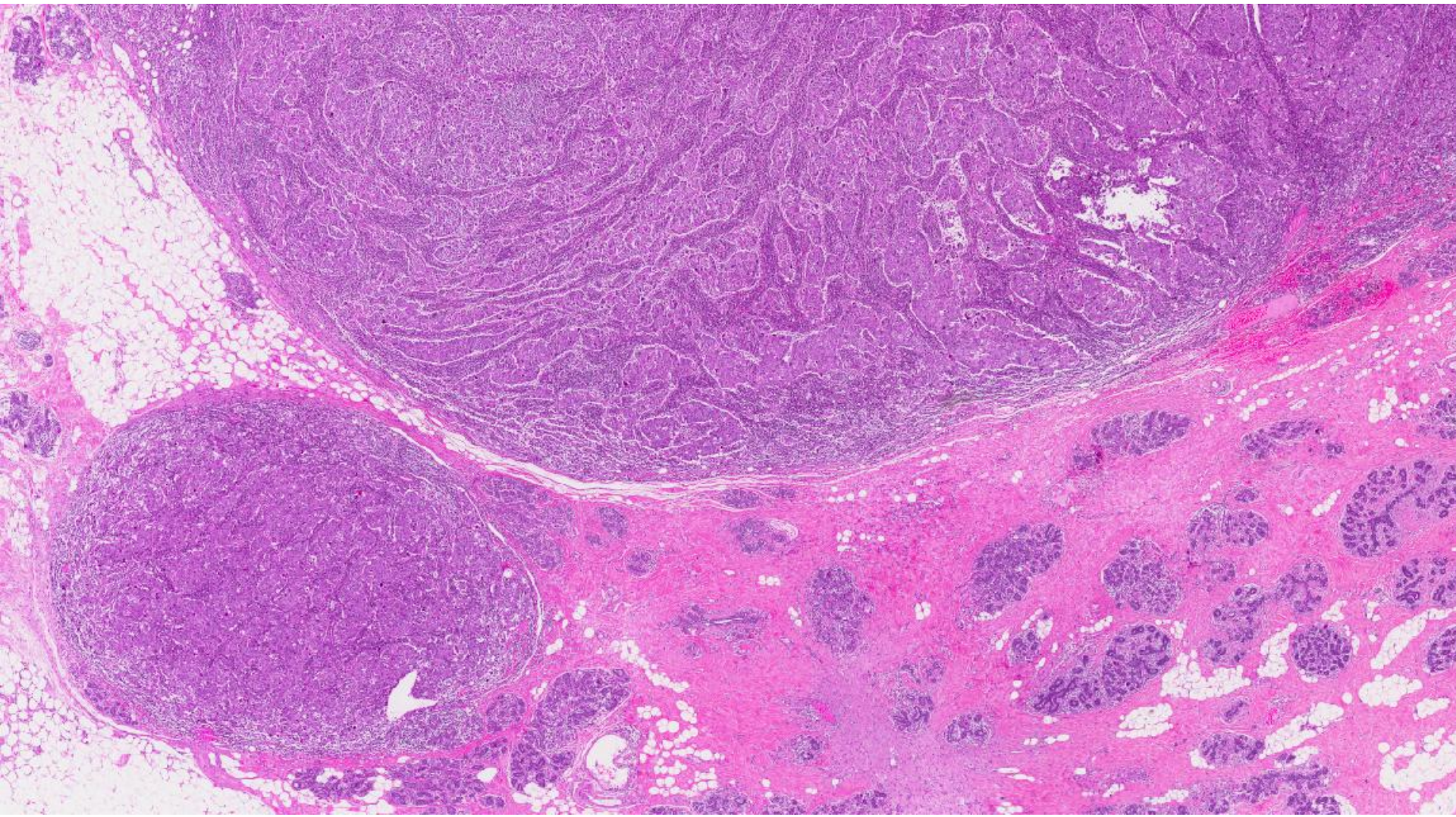


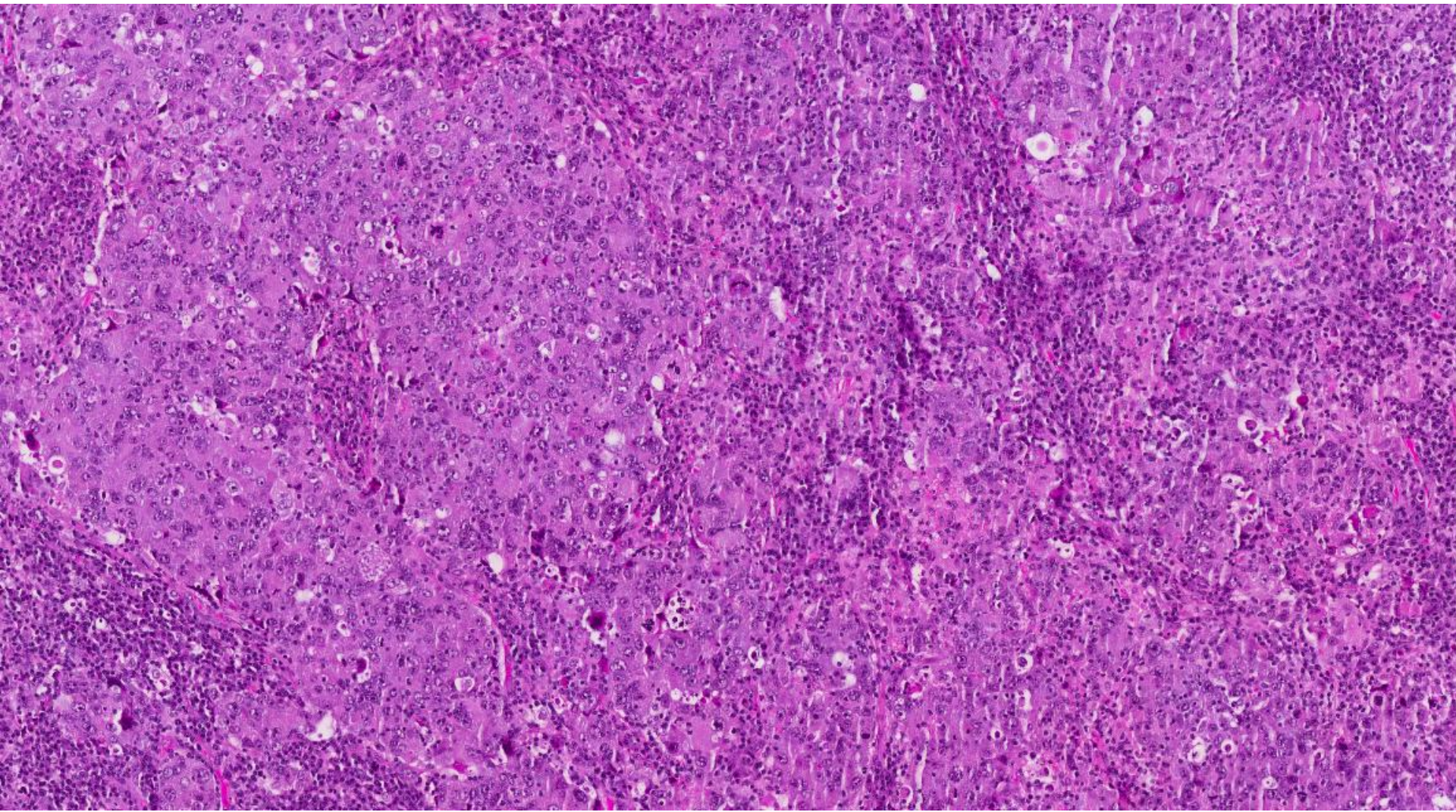
## Case 23

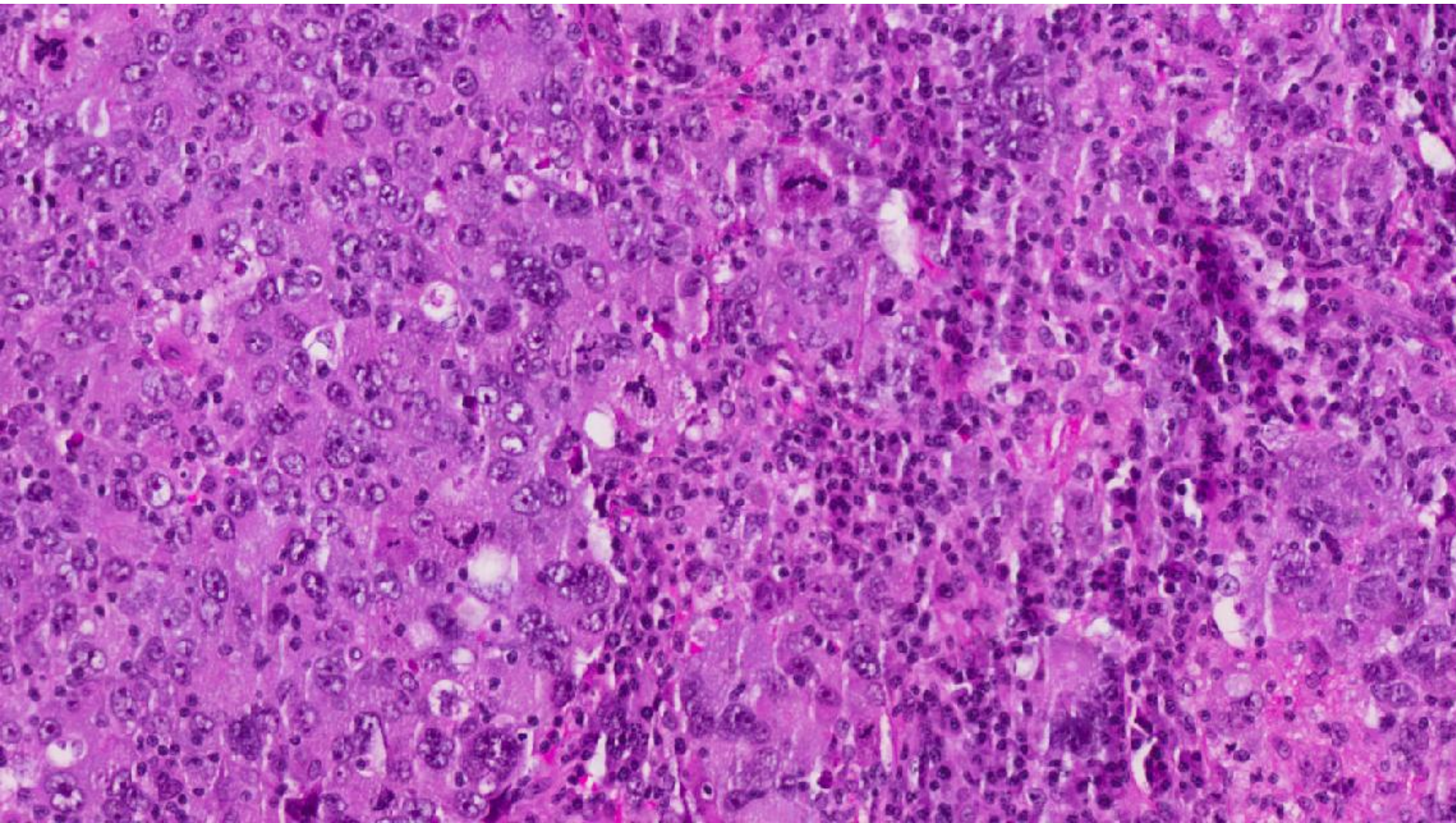
42 year old Chinese lady was discovered to have left breast mass at 1-2 o'clock.

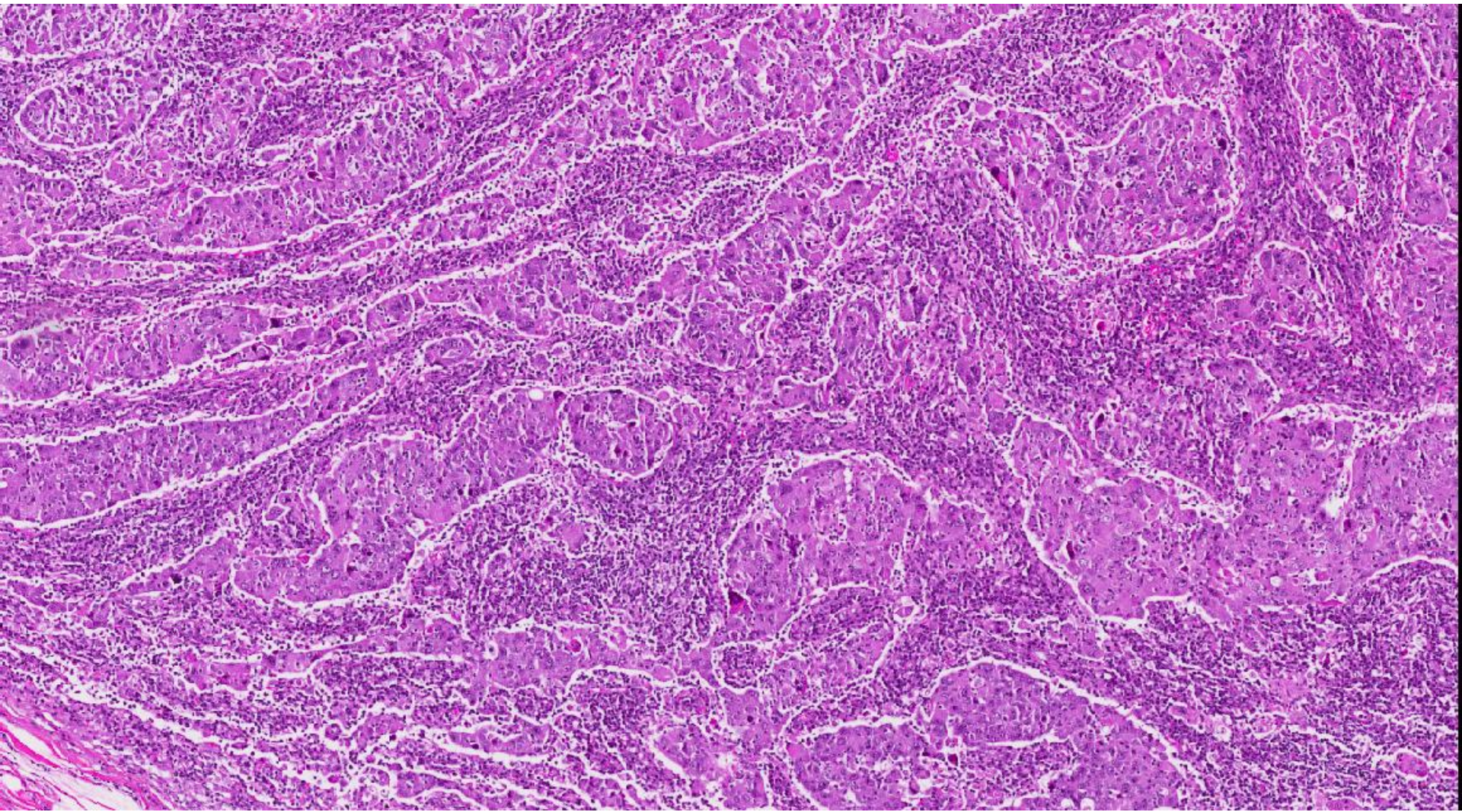
Ultrasound guided trucut biopsy was performed, followed by left mastectomy and axillary clearance. The section is from the mass in the left mastectomy.

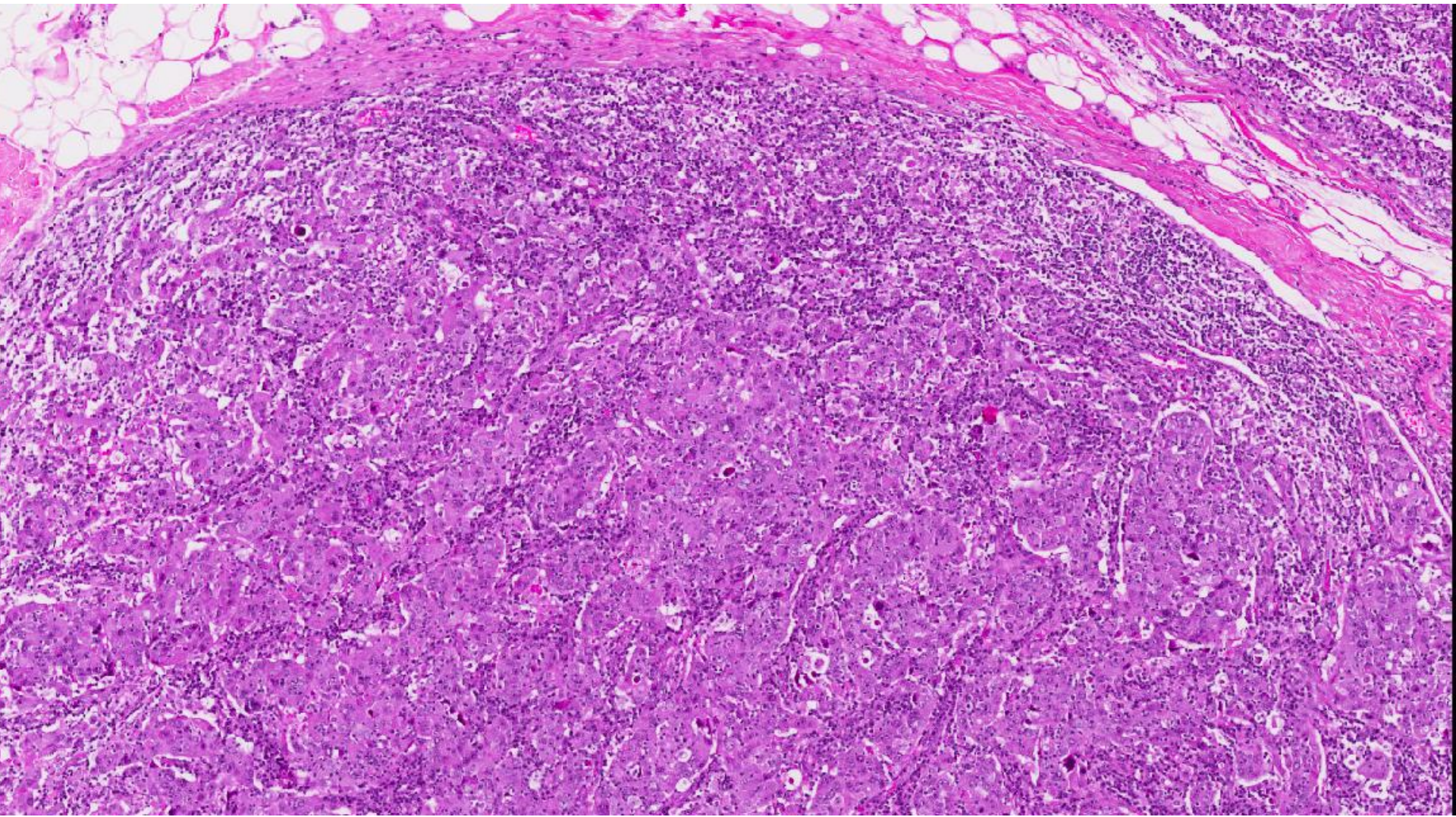


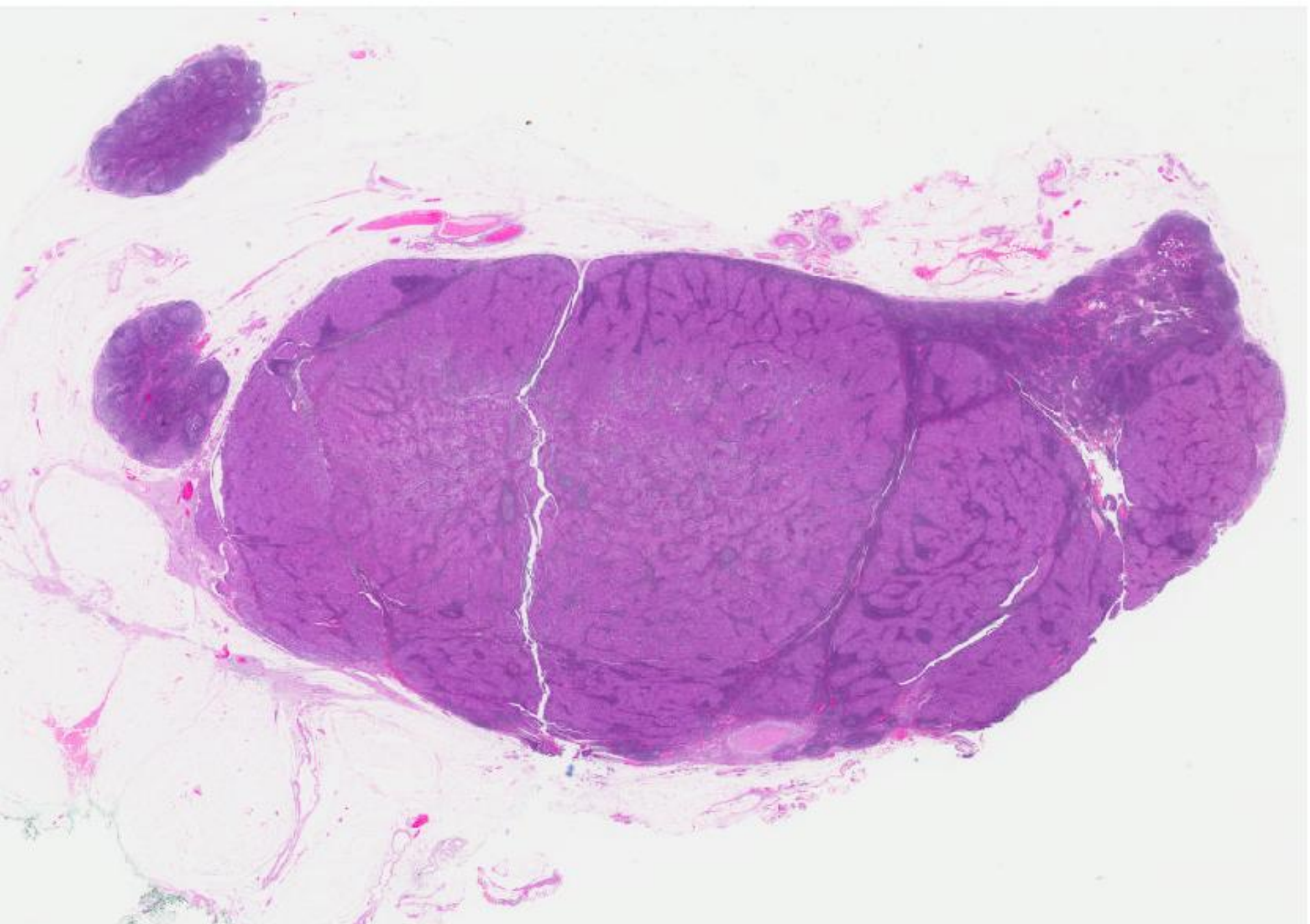






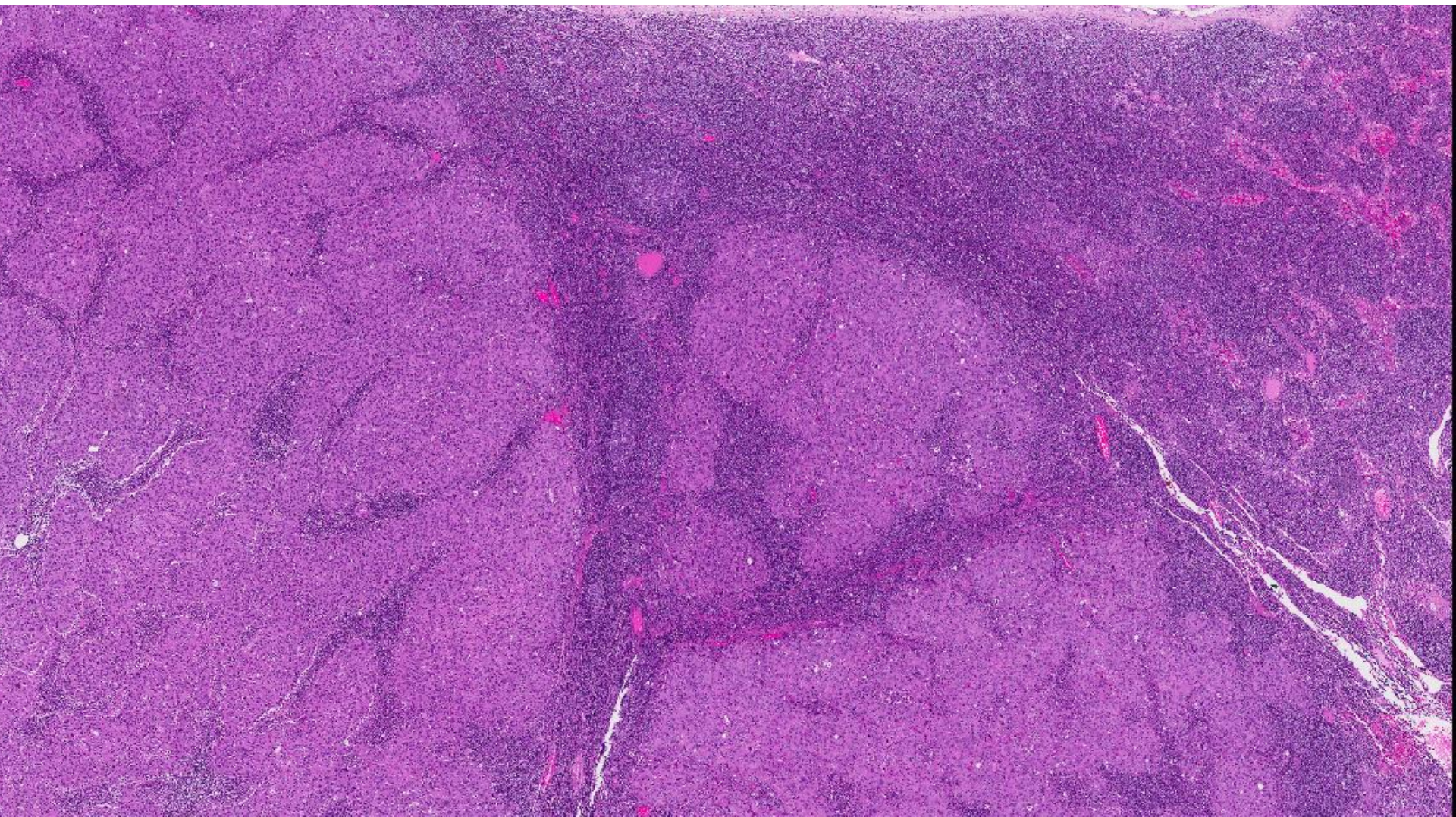




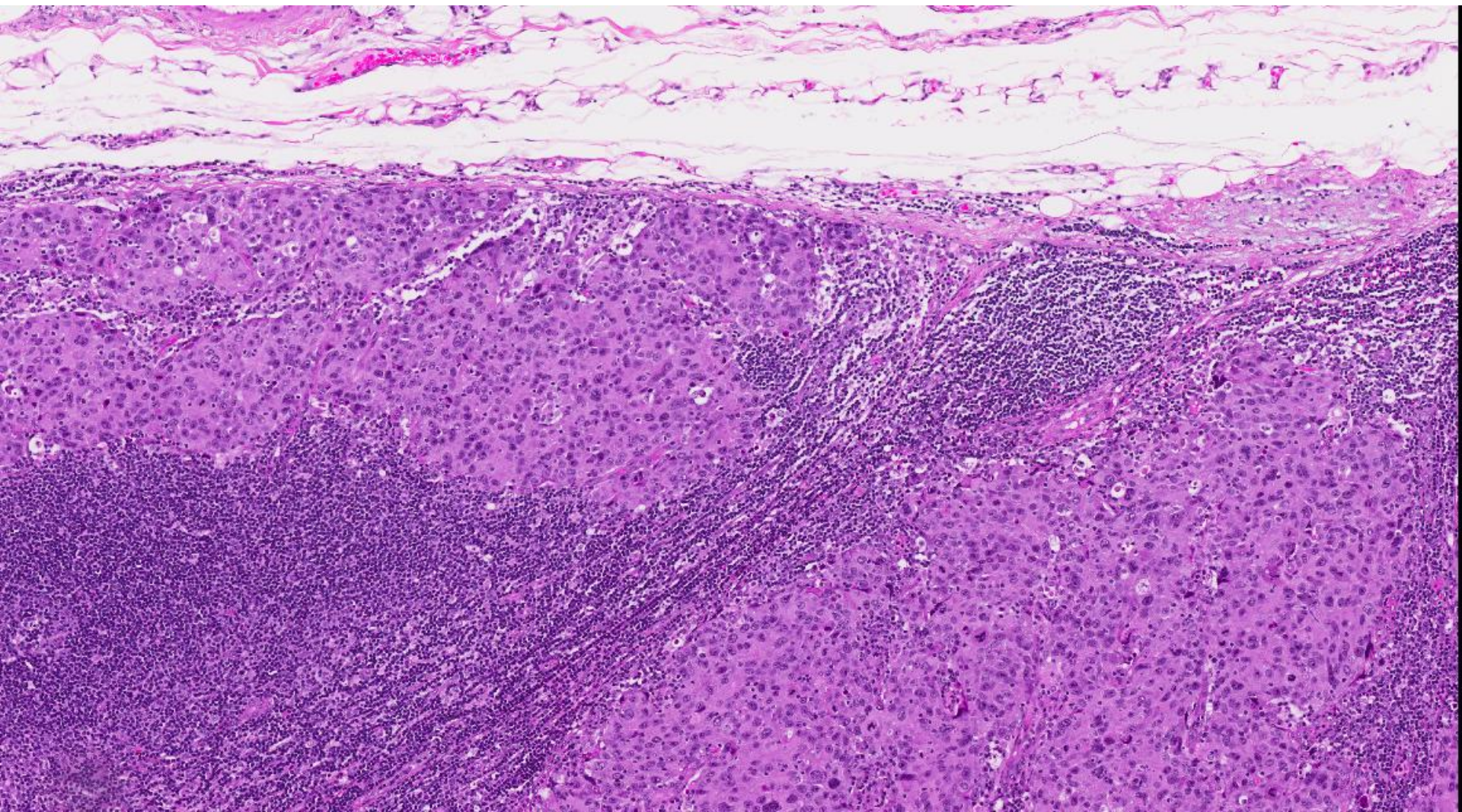


Axillary lymph node





Axillary lymph node



Axillary lymph node

# Diagnosis

Invasive carcinoma no special type with medullary features, 25mm

Metastatic carcinoma to the axillary lymph node

# Carcinomas with medullary features

- Medullary carcinoma
- Atypical medullary carcinoma
- Invasive carcinoma no special type with medullary features

*Circumscribed or pushing borders*

*Syncytial growth pattern*

*Cells with high-grade nuclei*

*Prominent lymphocytic infiltration*

# Carcinomas with medullary features

- Classic medullary carcinoma is rare, constituting less than 1% of all breast carcinomas.
- Studies with higher prevalence likely included atypical medullary carcinoma and/or invasive carcinoma with medullary features.
- Average age of patients ranges from 45-52 years, with 26% of diagnoses at < 35 years.

# Carcinomas with medullary features

- Radiologically and clinically well defined.
- Macroscopy:
  - Well circumscribed, soft to moderately firm.
  - Foci of necrosis or haemorrhage are frequent.
  - Cystic degeneration can occur.
  - Median diameter 2 to 2.9 cm.

# Carcinomas with medullary features

- Histopathology:
  - Criteria to define medullary carcinoma:
    - Syncytical architecture in > 75% of the tumour mass.
    - Histological circumscription with pushing margins.
    - Absence of tubules.
    - Prominent and diffuse lymphoplasmacytic infiltrate.
    - High-grade tumour cells.
  - Tumours that do not fulfil criteria:
    - Atypical medullary carcinoma.
    - Carcinoma no special type with medullary features.

# Carcinomas with medullary features

- Often triple negative.
- Basal marker expression.
- Lymphoid cells are CD3+ T lymphocytes with increased numbers of CD8+ cytotoxic T-lymphocytes.
- 13% of patients with carcinomas with medullary features show BRCA1 germline mutations.



# Medullary carcinoma

- Traditionally associated with a relatively favourable prognosis compared with grade-matched invasive ductal carcinoma.
- Better outcome may be related to prominent lymphoplasmacytic infiltrate.
- Low level of reproducibility in the diagnosis.