Breast Pathology Course 2020@21

Case 21

48 year old female with a solitary nodule, 2.7cm, in the left breast at the 2-3 o'clock position.

Division of Pathology
Singapore General Hospital

SingHealth DukeNUS ACADEMIC MEDICAL CENTRE
PATHOLOGY

IAP International Academy of Pathology Singapore Division

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48 year old with solitary nodule
in the left breast at 2-3:00 position 2.7 cm in size,
? cellular fibroadenoma/Phyllodes ? mucinous neoplasm

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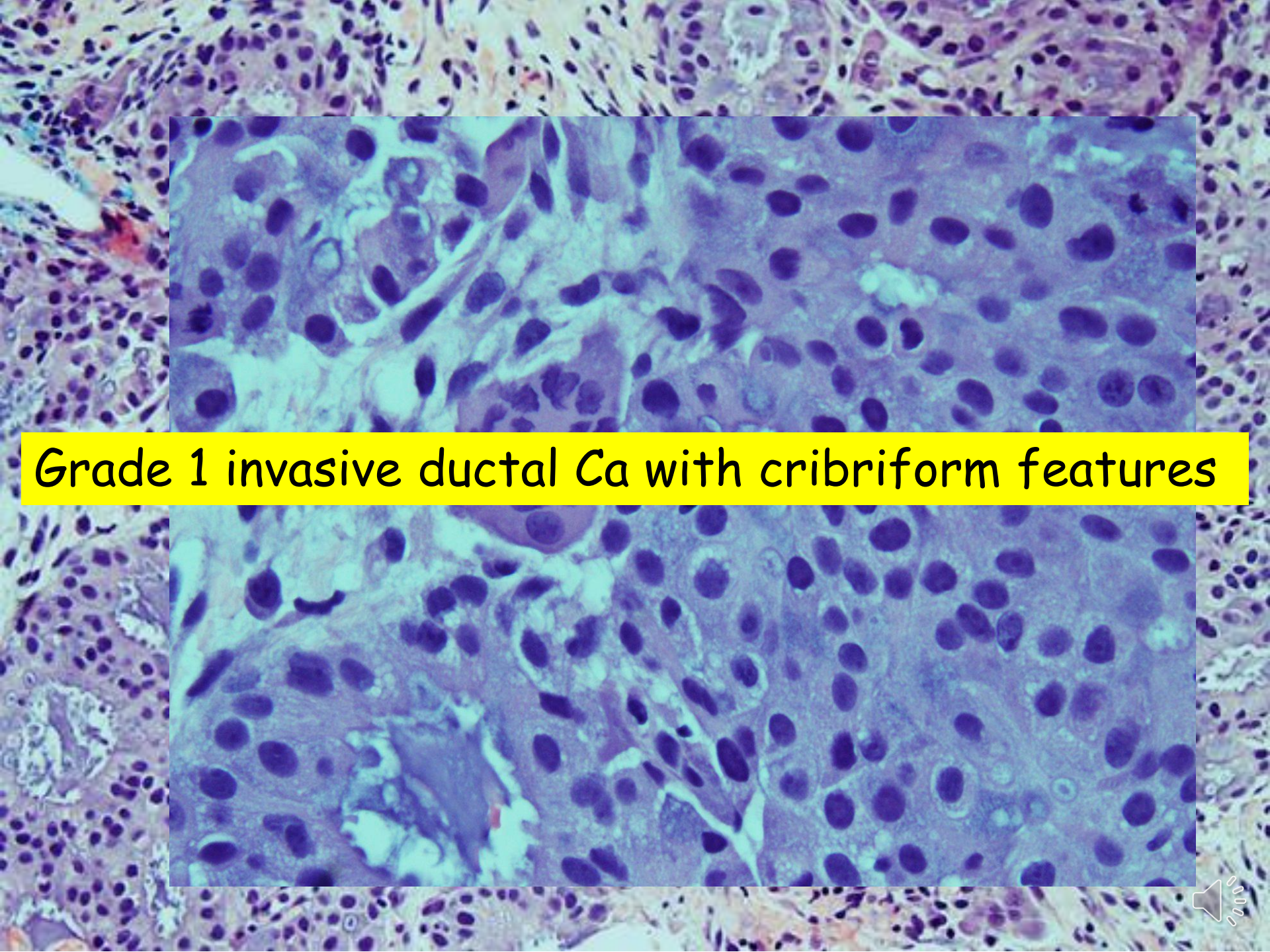
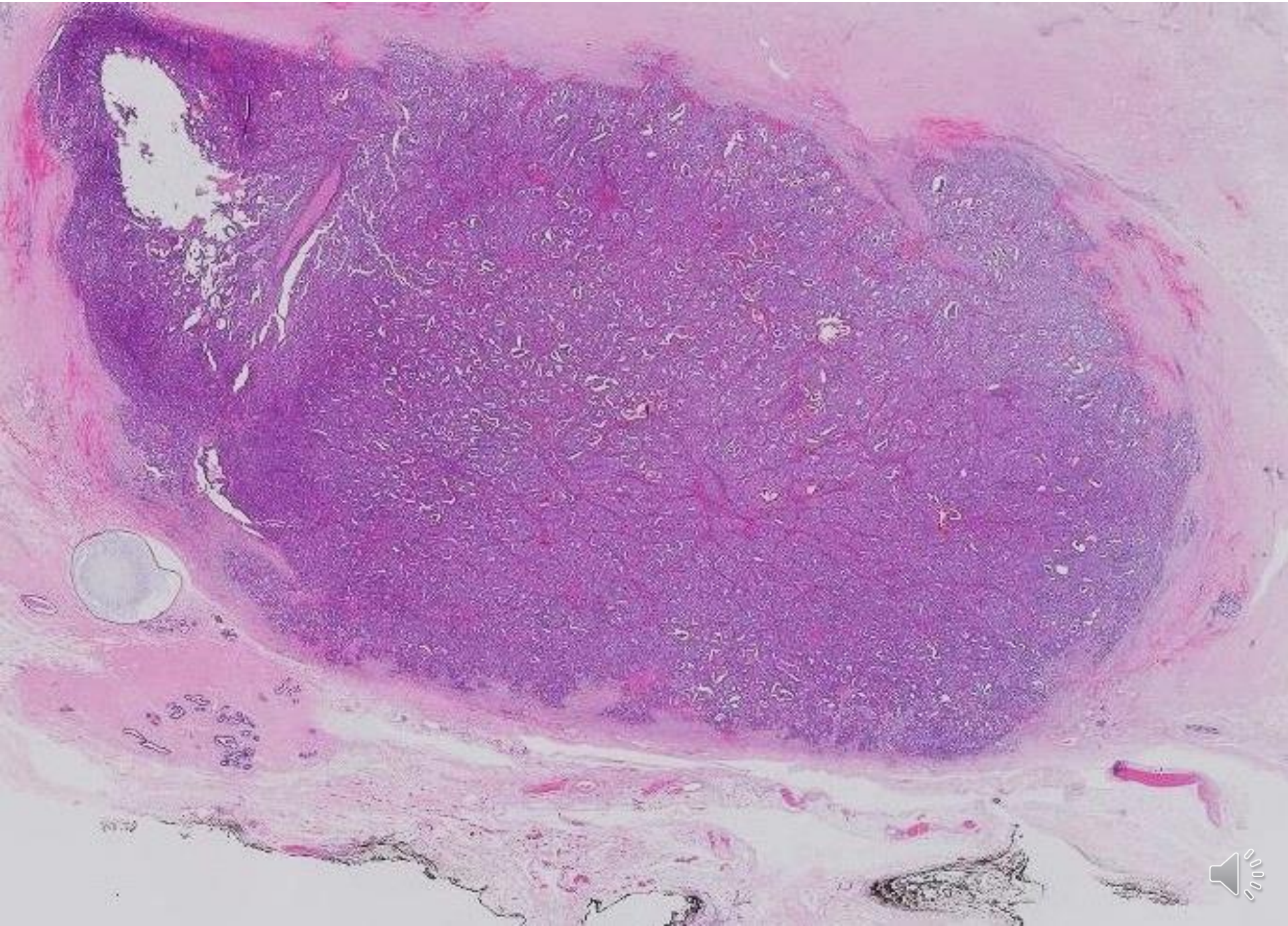
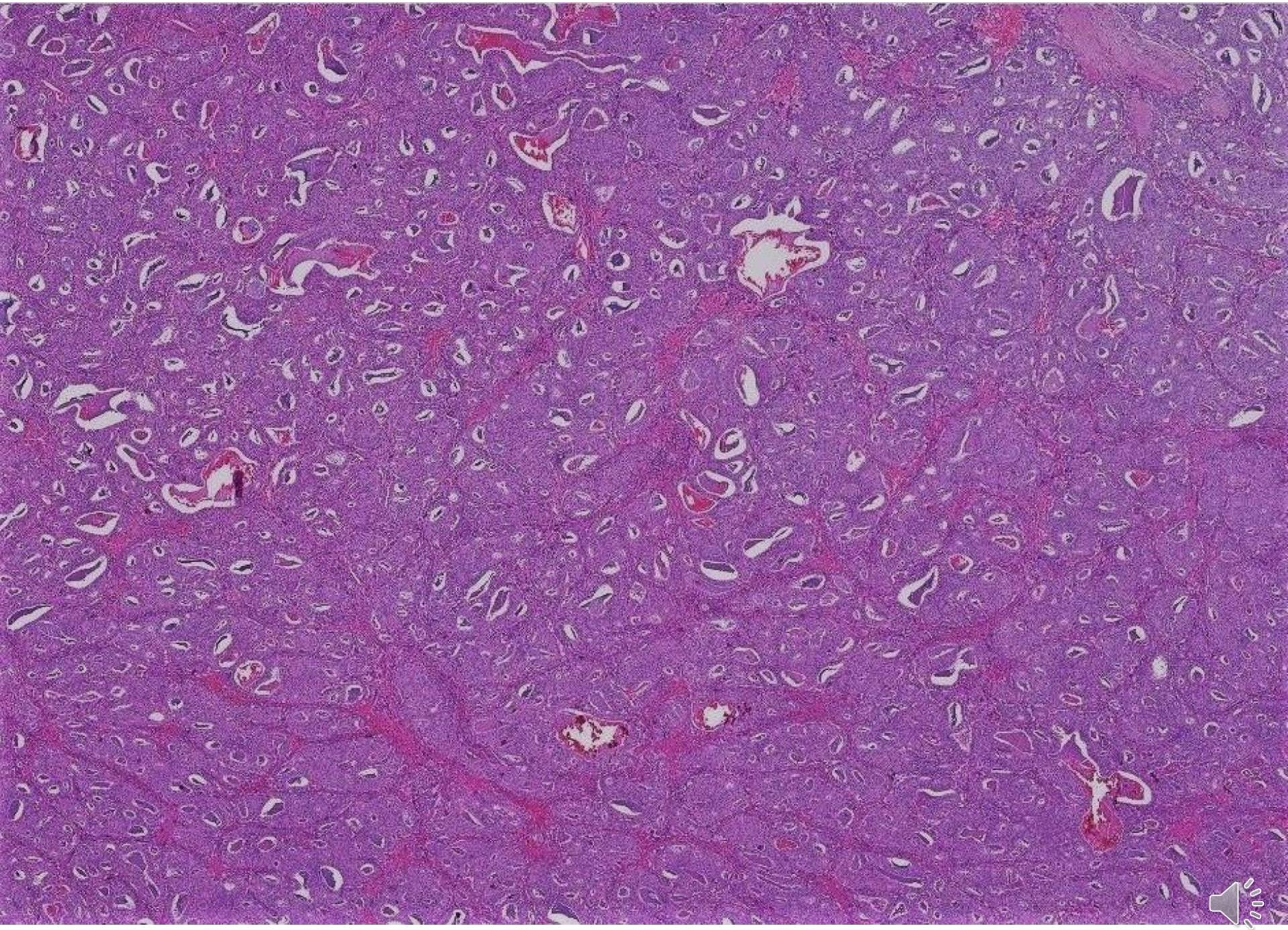
SAL/TSY
LEFT BREAST
2-3:00 2 CM FN
CORE BIOPSY

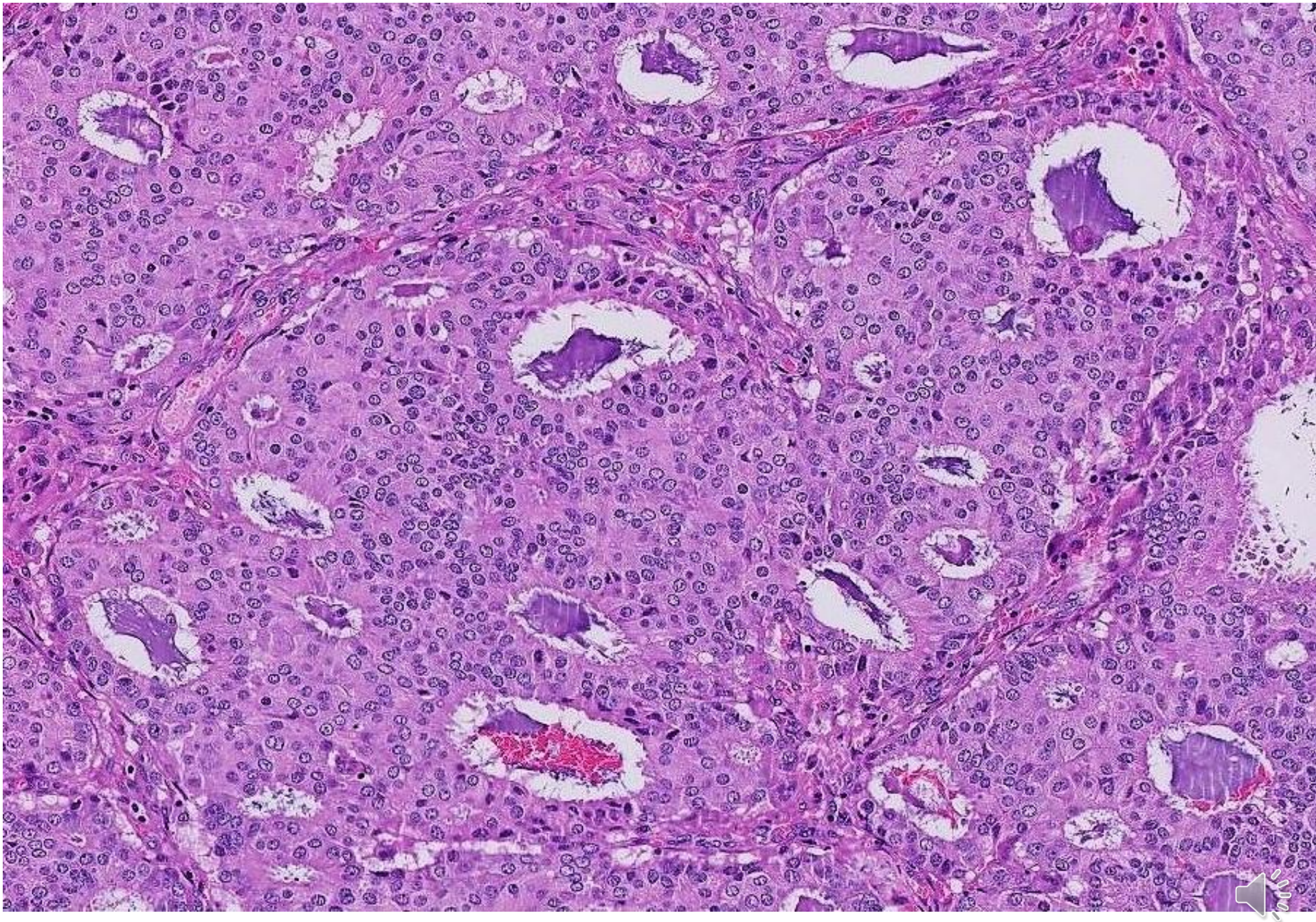

Grade 1 invasive ductal Ca with cribriform features

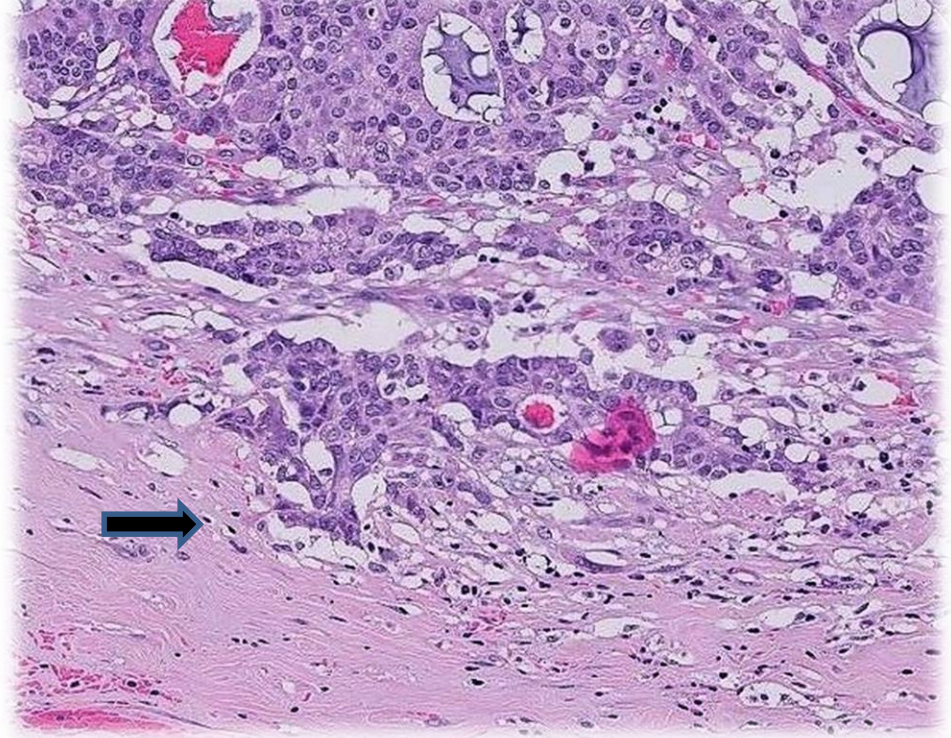

25 mm

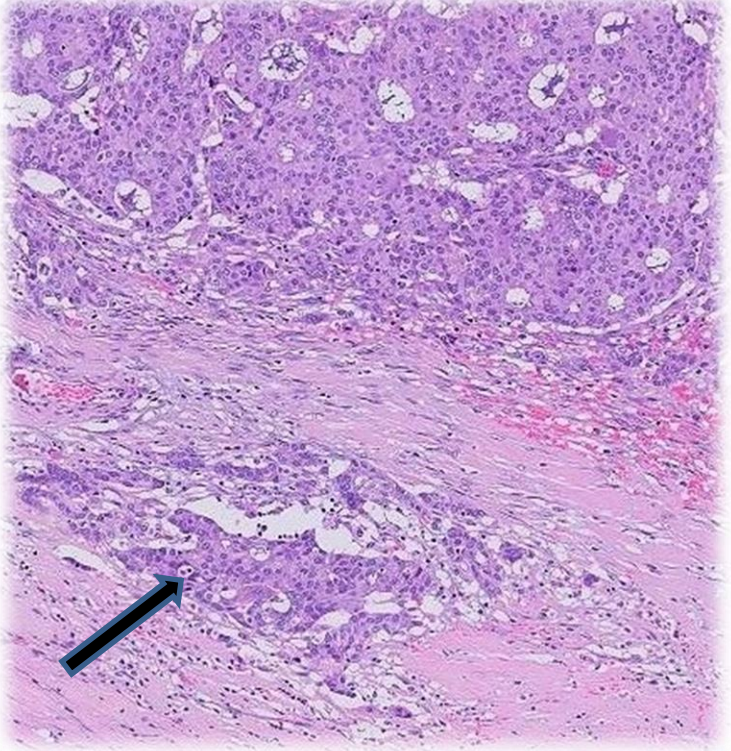
A

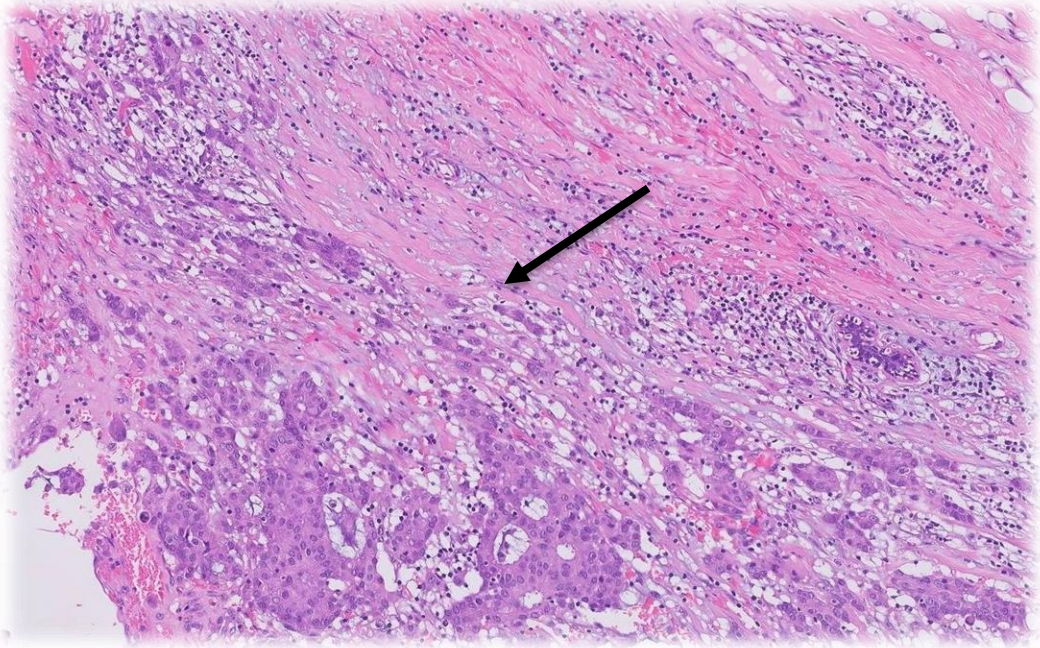


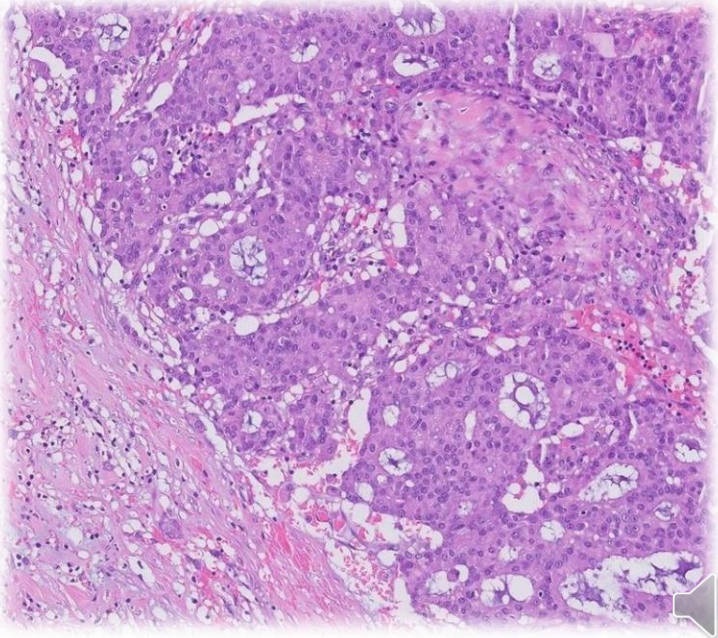


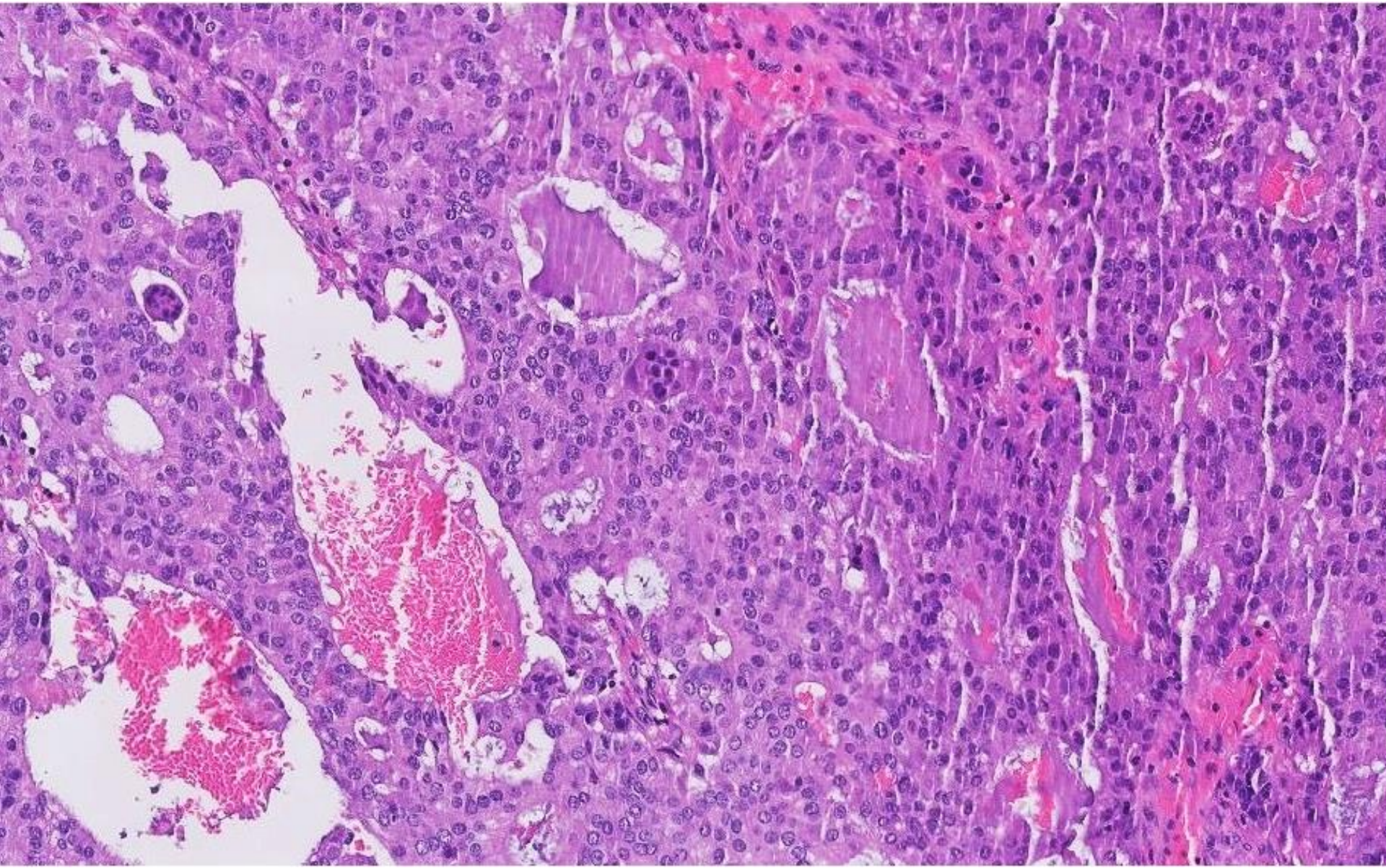


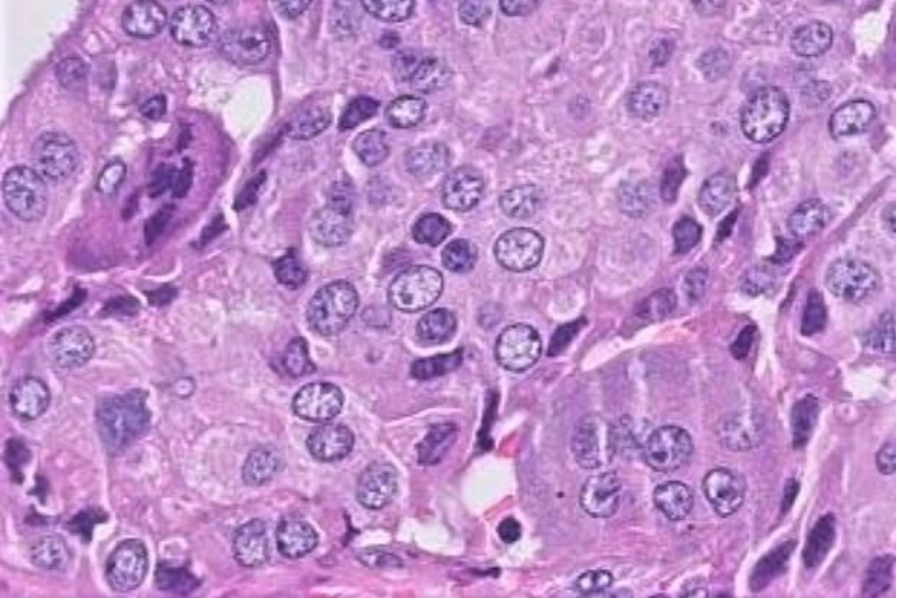


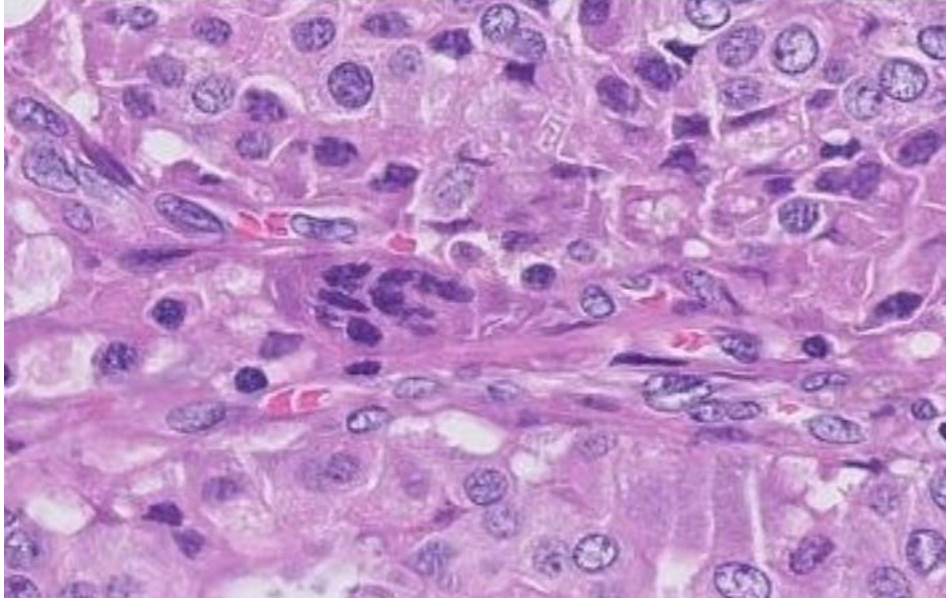


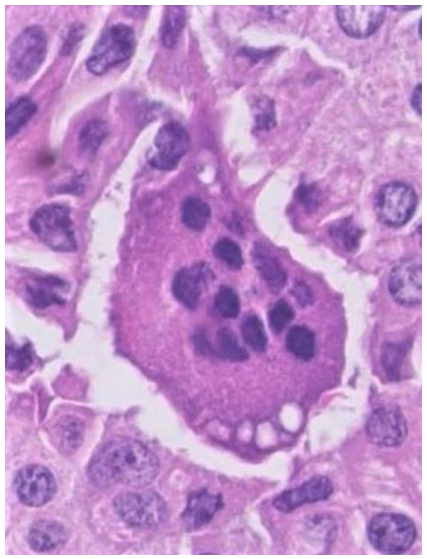


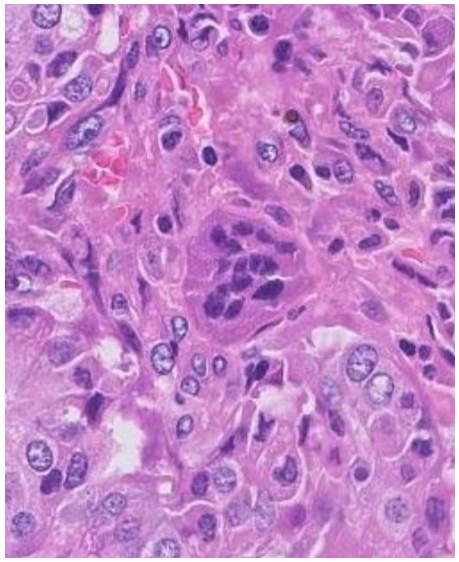


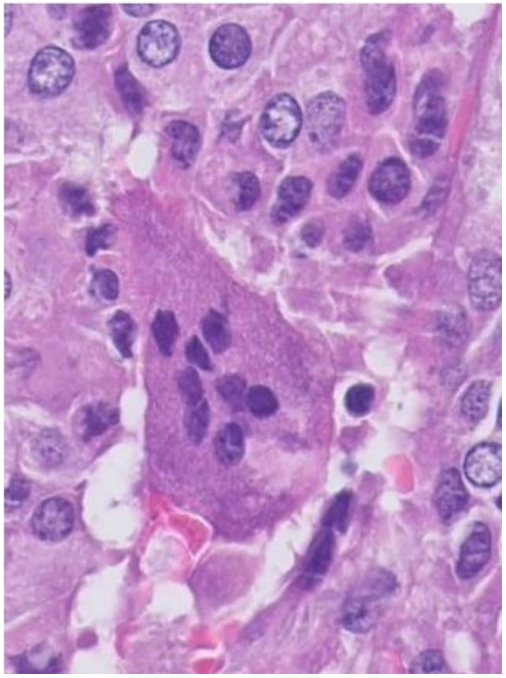


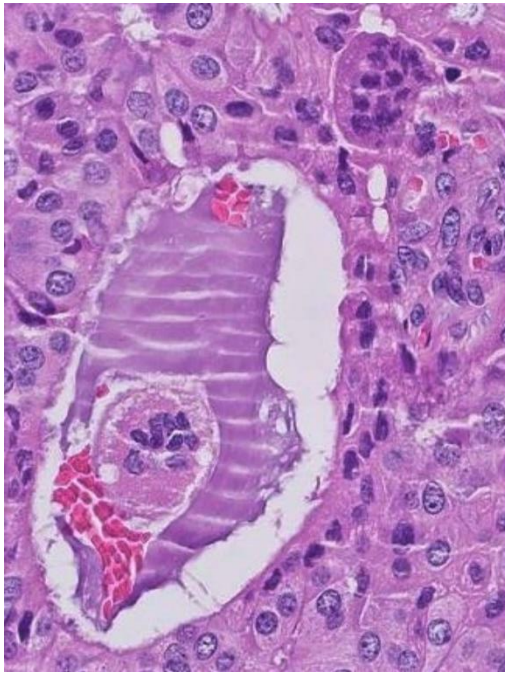












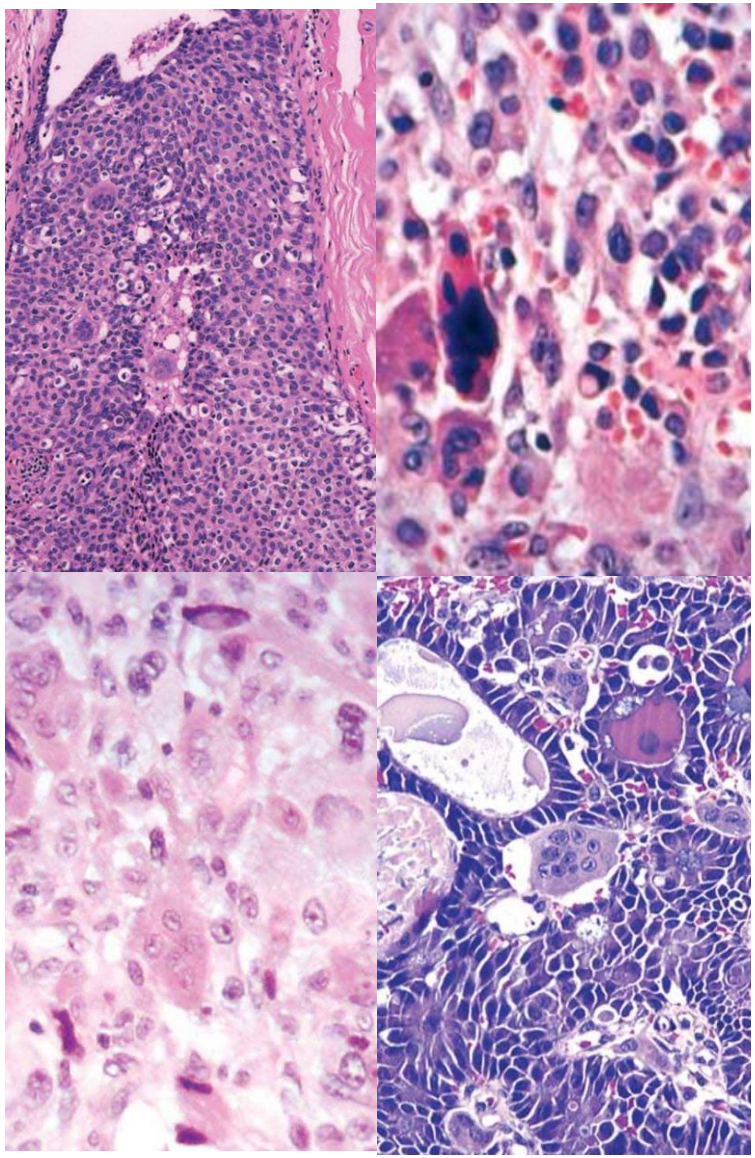
Osteoclastic giant cells

Diagnosis

Cribriform carcinoma with osteoclastic giant cells

Mammary Ca with osteoclastic giant cells

- First described in 1979 Rosen .
- Clinically show no specific features.
- Macroscopically can typically have a brown/ reddish brown appearance with discrete margins.
- Cribriform pattern of the Ca is relatively common.
- There may be associated low grade DCIS.
- Can be seen in the metastatic deposits.



Carcinomas with accompanying osteoclastic giant cells

- Tubular.
- Papillary.
- Lobular.
- Neuroendocrine.
- Apocrine.
- Mucinous.
- Metaplastic Ca with areas of osseous and cartilagenous differentiation.

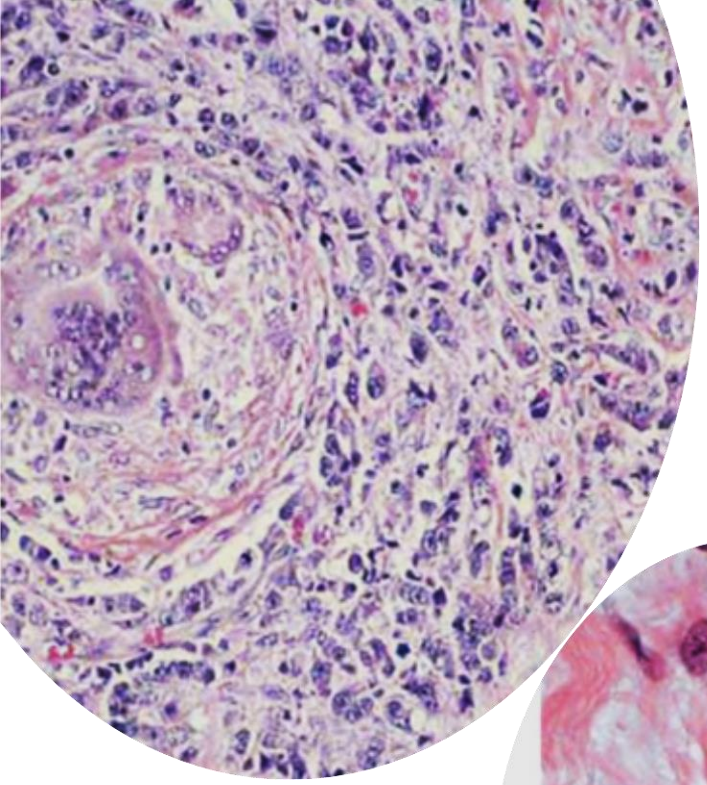
Osteoclastic giant cells

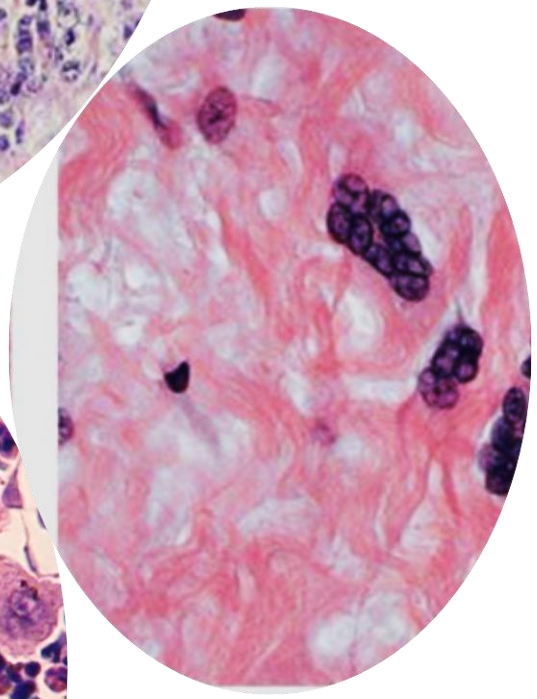
- 20-180 um with abundant cytoplasm, many evenly distributed centrally located oval nuclei some with tiny nucleoli.
- Edge of the carcinomatous glands, intervening stroma or in the glandular lumina.
- Stroma shows histiocytes and extravasated RBC's and hemosiderin Recurrent → haemmorhage.
- Fibroblastic proliferation, angiogenesis and lymphocytes in the stroma.

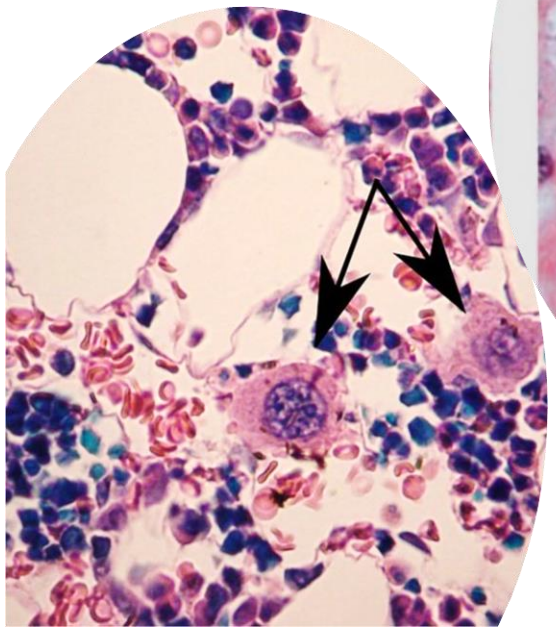
Pathogenesis

- Factors released by Ca cells induce formation of giant cells , haemmorhage and angiogenesis (Interleukin-1; VEGF).
- CD68 (histiocytic origin) not epithelial.

Differential Diagnosis







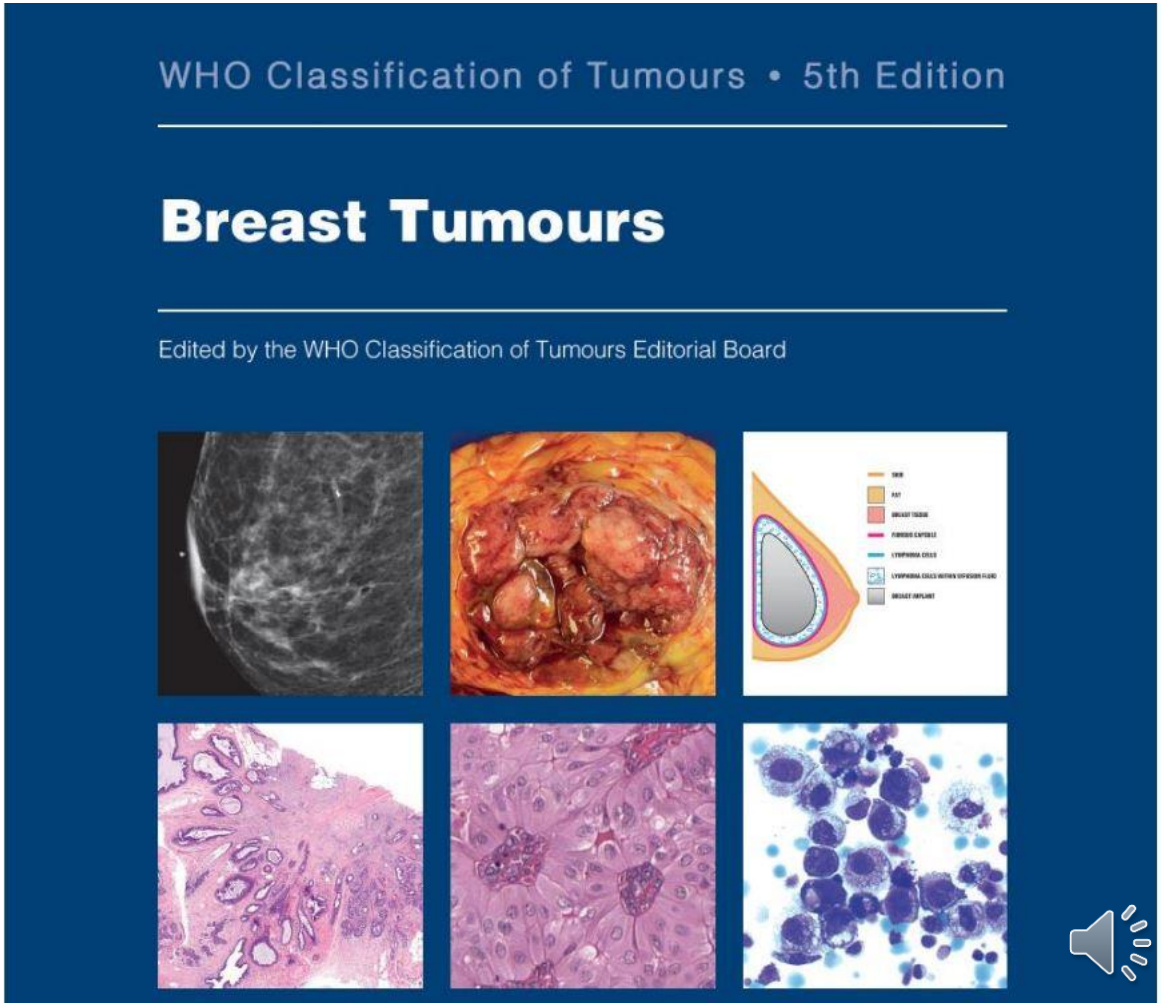
1. Megakaryocytes (myeloid metaplasia).

2. Giant cells seen in Granulomatous inflammation
   - GM
   - Sarcoid

3. FEL'S (Multinuleate stromal giant cells).

References

Hoda, Syed A. *Rosen's Breast Pathology*. Wolters Kluwer Health, 2014. [VitalSource Bookshelf].



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Thank You

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