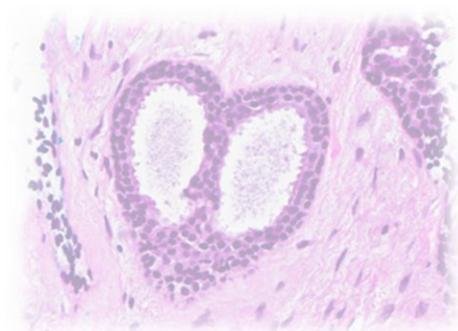
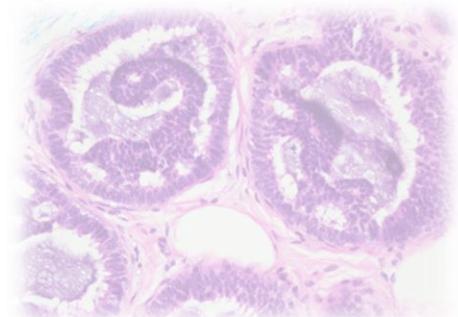
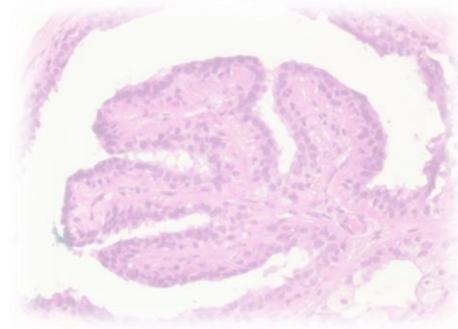
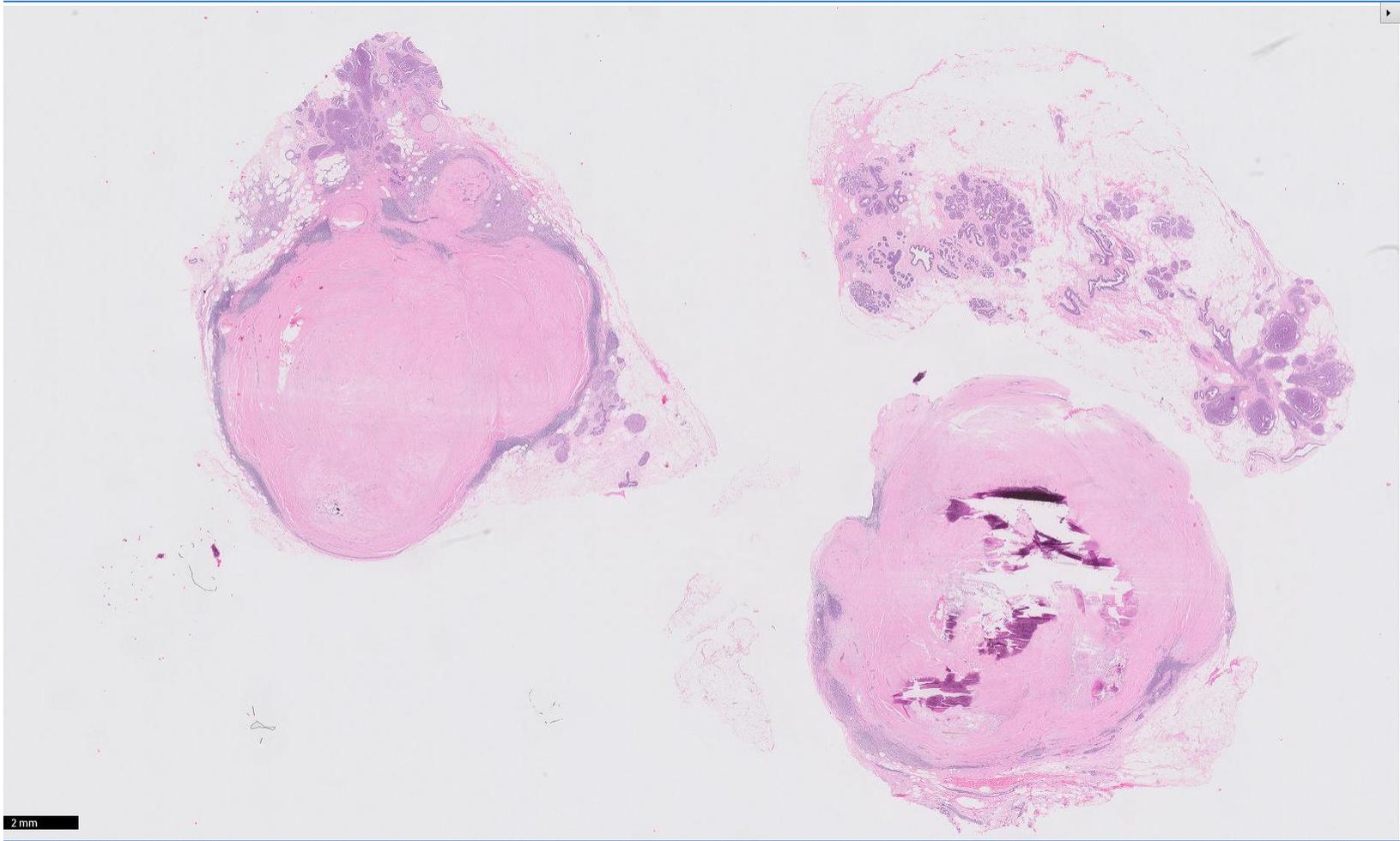


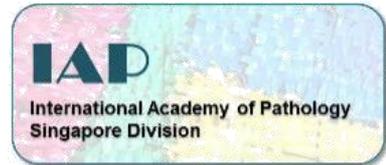
Case 7

59 year old Chinese female.
Right mastectomy and axillary clearance
showed an invasive ductal carcinoma
grade 3, 3.5cm, at 10-11 o'clock, with
nodal metastases.
Separate lesion at 9 o'clock, section
provided.



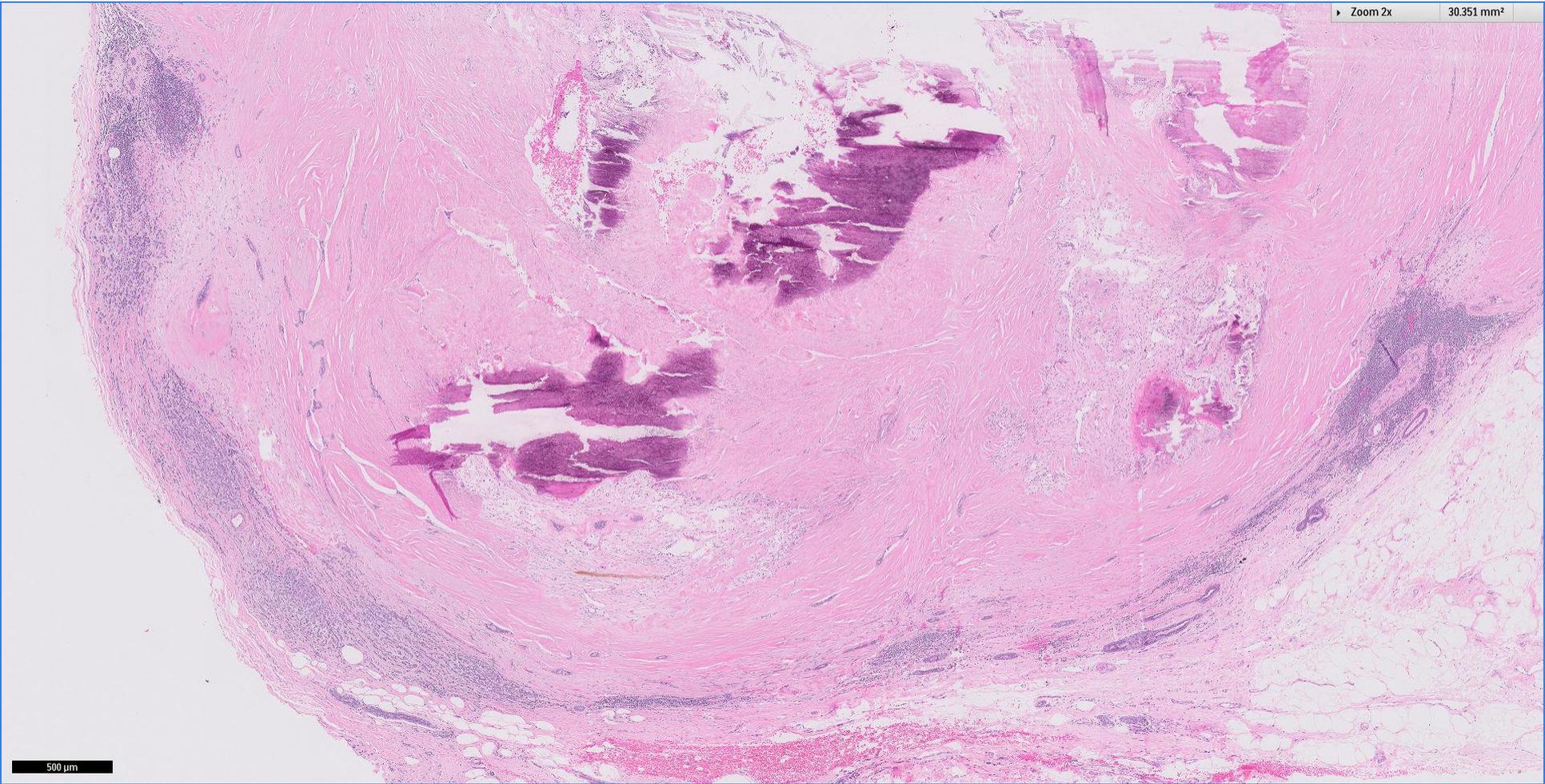


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Zoom 2x

30.351 mm²



500 μ m

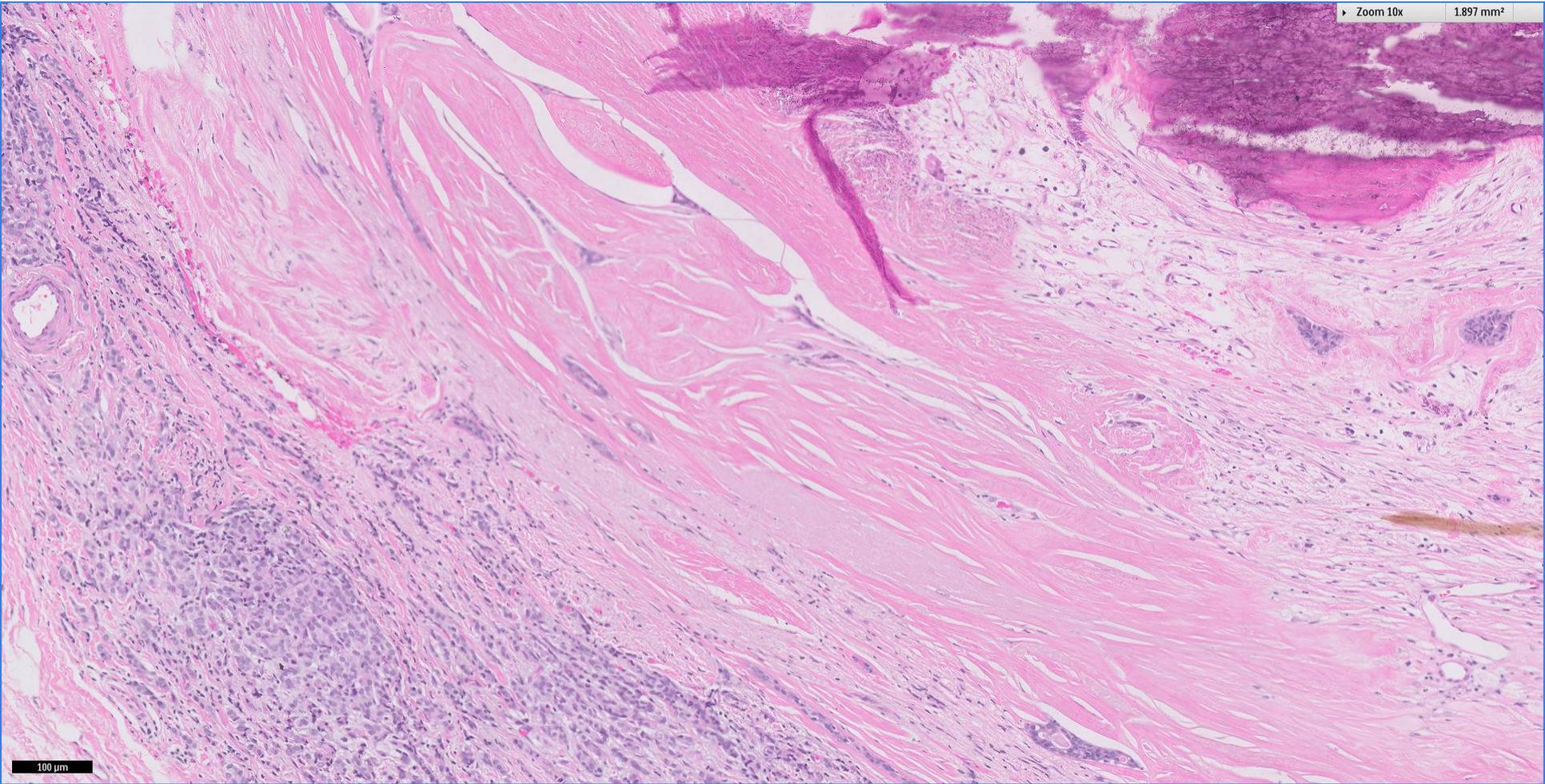


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ACADEMIC MEDICAL CENTRE
PATHOLOGY

IAP

International Academy of Pathology
Singapore Division

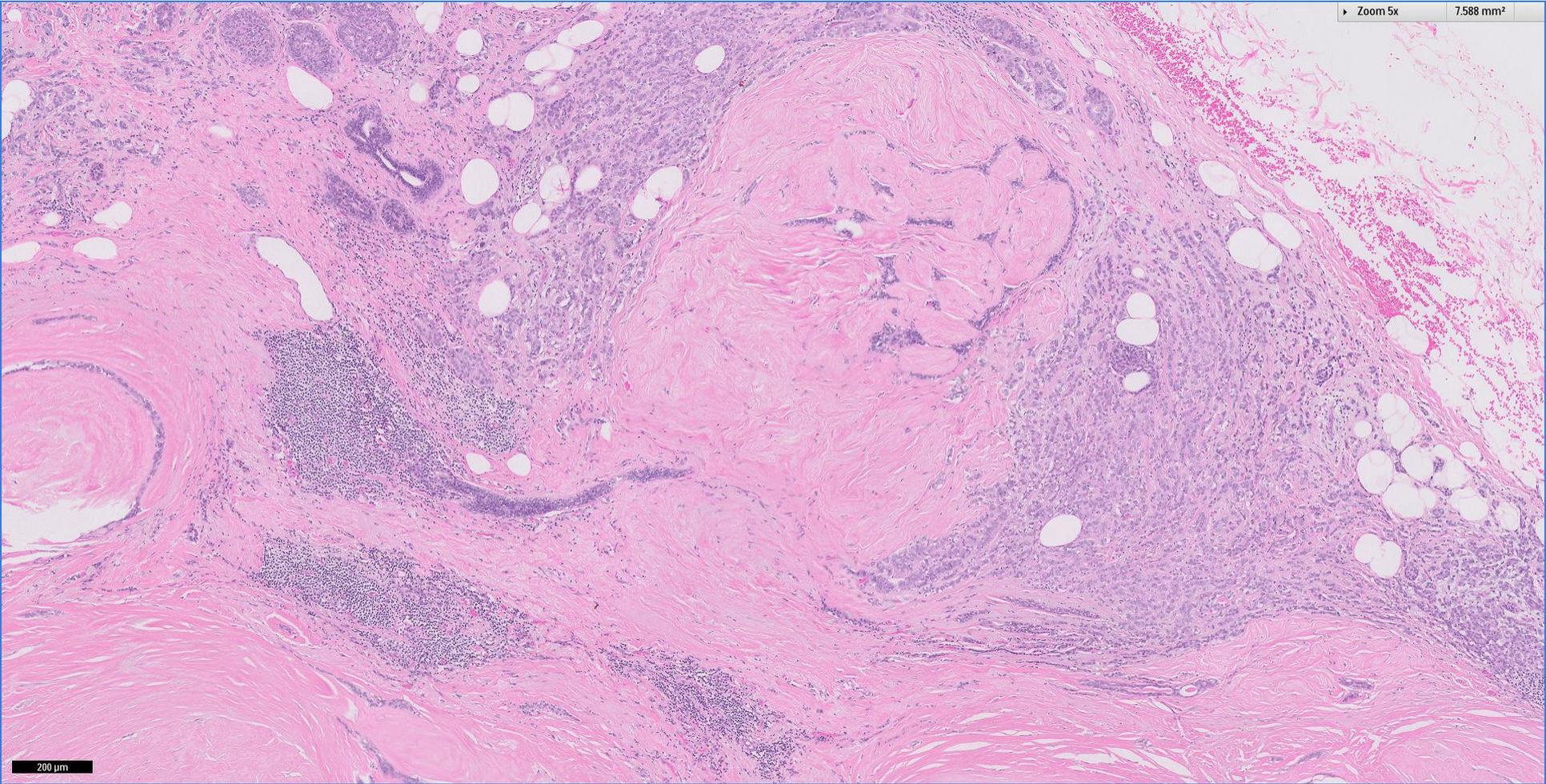


100 µm



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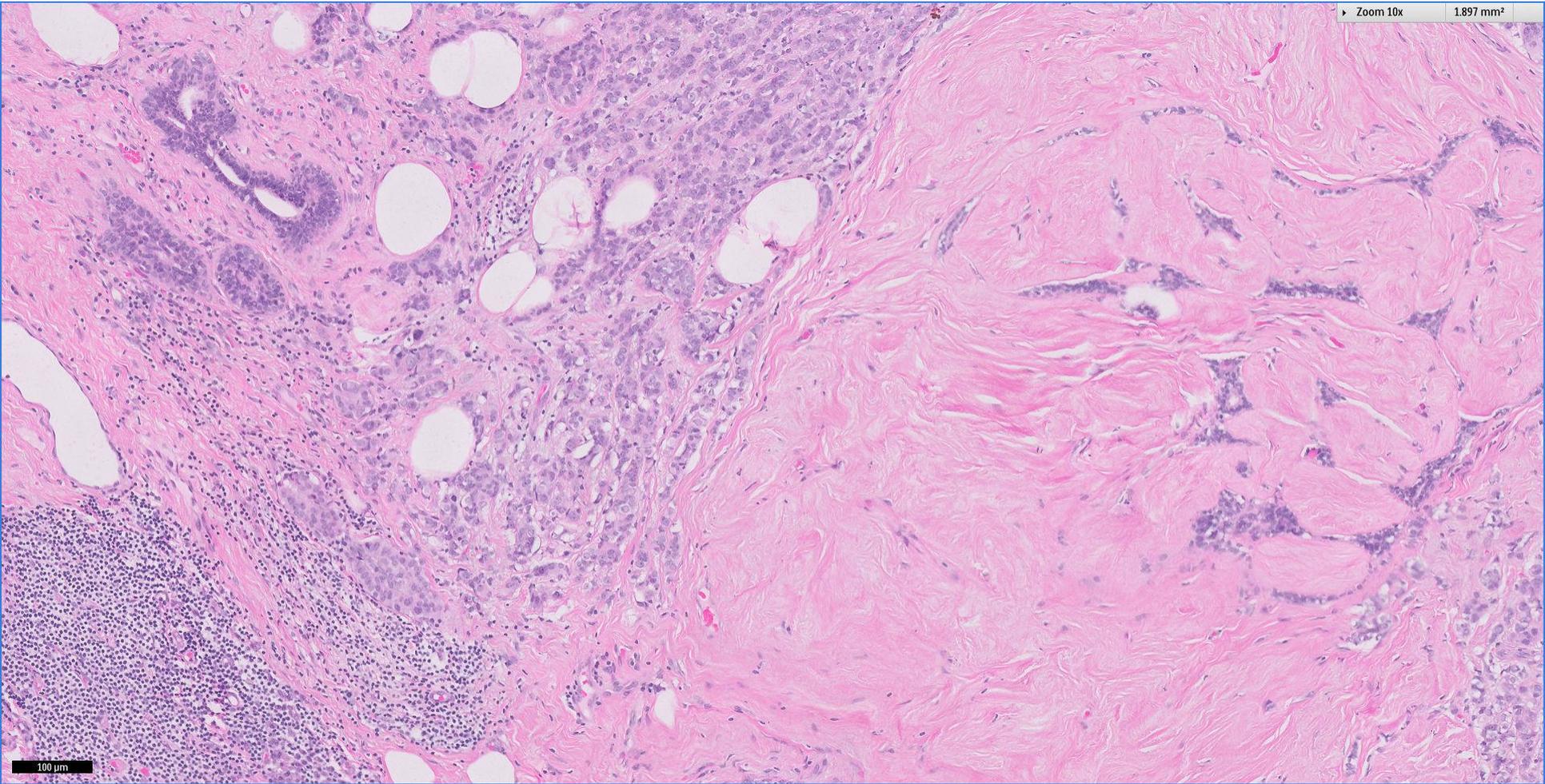


200 µm



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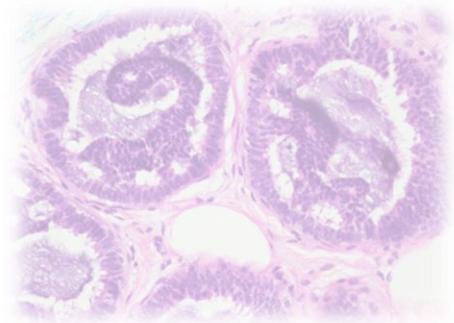
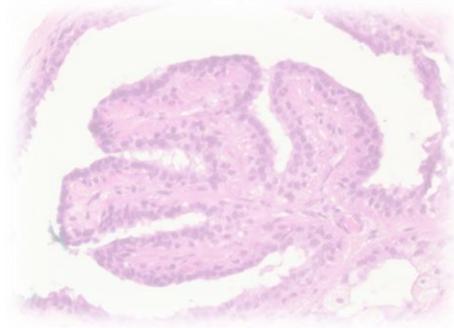


100 µm



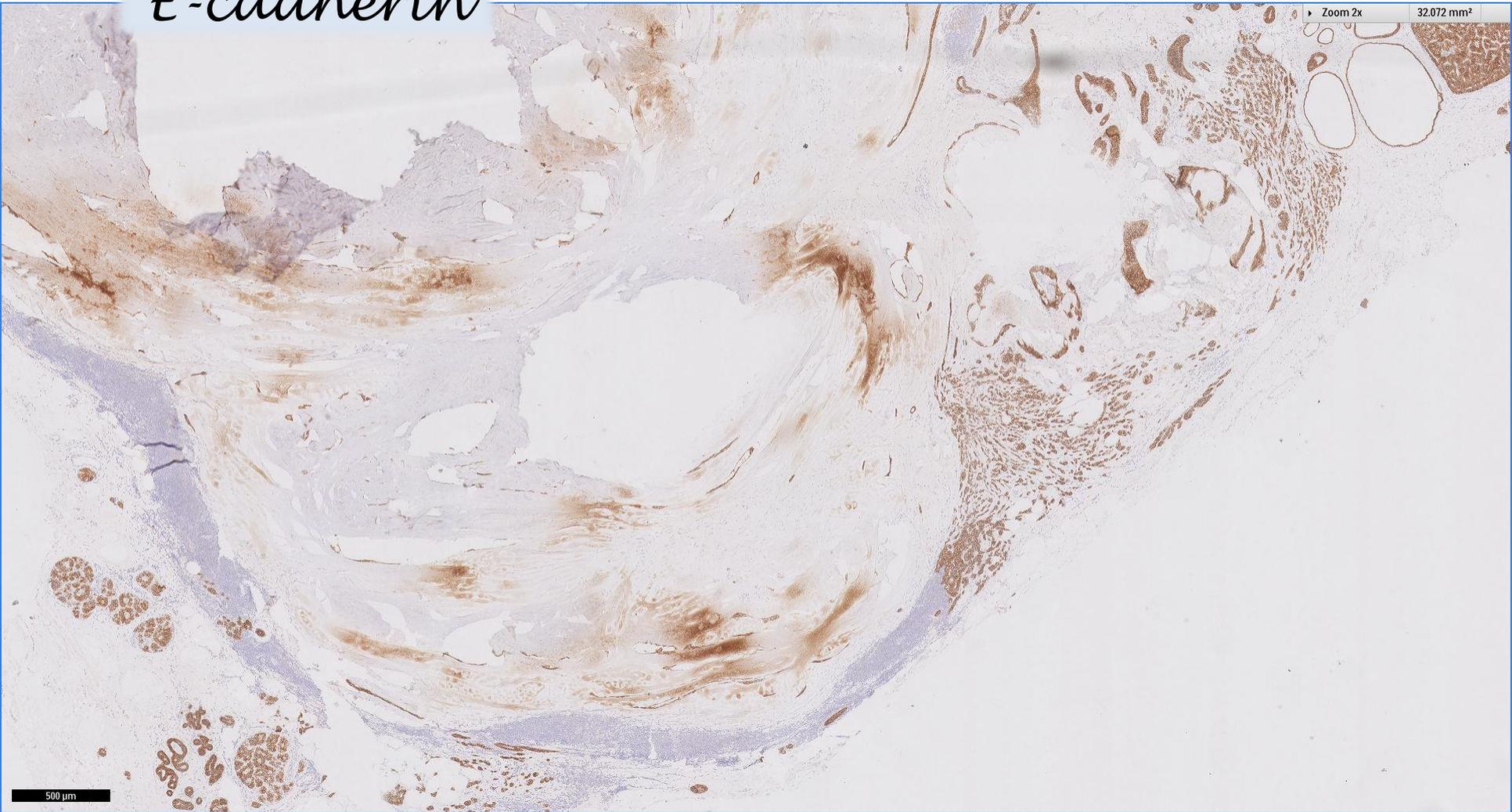
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Additional pictures

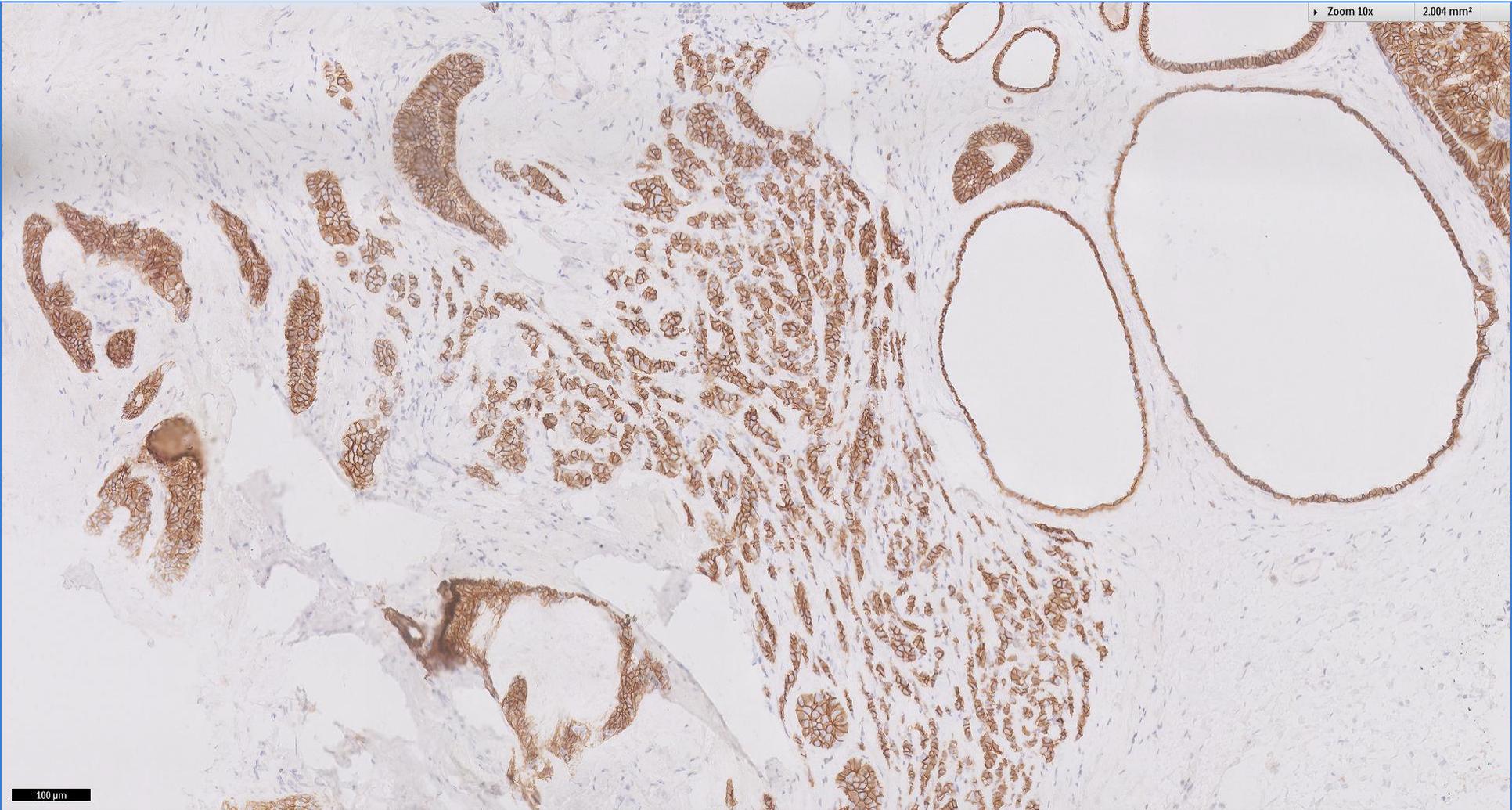
E-cadherin



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E-cadherin



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ACADEMIC MEDICAL CENTRE

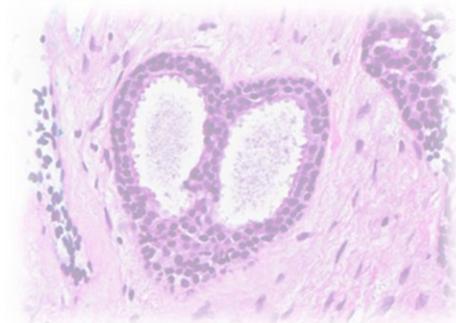
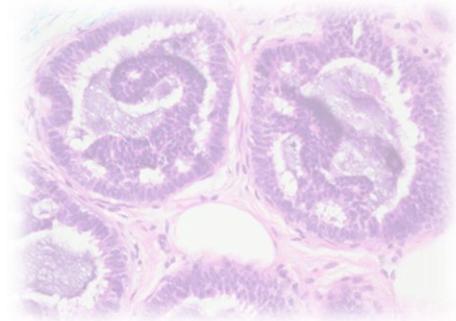
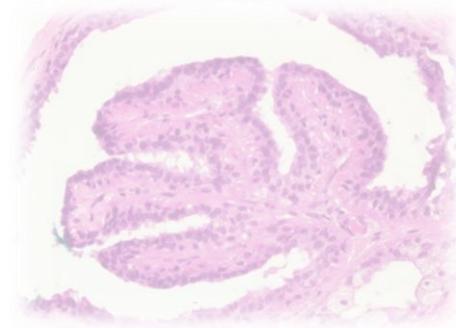
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Diagnosis, case 7

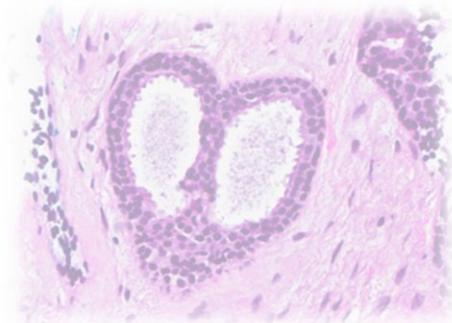
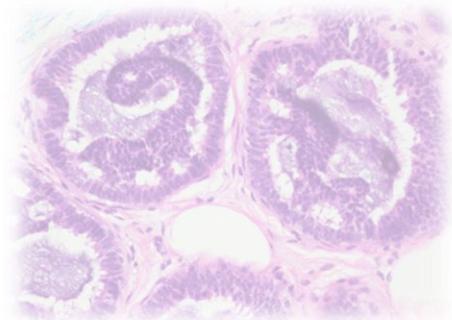
- Right breast, mastectomy and axillary clearance:
9 o'clock lesion shows a sclerotic fibroadenoma (9mm) infiltrated by invasive ductal carcinoma (6mm).



Fibroadenoma

- Common benign tumour.
- Balanced, biphasic proliferation of glands and stroma.
- Circumscribed and pushing borders.
- Infarction may occur, especially in pregnant patients.
- Stroma ~
 - Usually of low cellularity, may be myxoid or hyalinised, with stromal multinucleated giant cells.
 - Calcifications, ossification, PASH.
- **Epithelium** ~
 - Pericanalicular, intracanalicular patterns.
 - UDH, apocrine metaplasia, sclerosing adenosis.
 - ADH, ALH, **DCIS, LCIS, invasive carcinoma.**

Recent publications ~ fibroadenoma & invasive carcinoma



A clinicopathological study of fibroadenomas with epithelial proliferation including lobular carcinoma in-situ, atypical ductal hyperplasia, DCIS and invasive carcinoma.

- In a total of 1523 consecutive cases of fibroadenomas, thirty cases had epithelial proliferations with an overall prevalence of **1.97%**.
- Eight cases had fibroadenoma with lobular carcinoma in-situ, six cases had atypical ductal hyperplasia, ten cases had DCIS and six cases had invasive carcinoma.
- In cases of fibroadenomas with lobular carcinoma in-situ, 62.5% of the cases the neoplasia was confined to the fibroadenoma whereas only 10% of the cases with DCIS showed confinement to the fibroadenoma ($p = 0.036$).
- Most common radiological finding was the presence of a mass.
- BI-RADS scores were 4 and above in all cases ($p > 0.05$).
- **Most common type of carcinoma arising in fibroadenomas was DCIS, followed by lobular carcinoma in-situ.**
- **Lobular carcinoma in-situ was more likely to be confined to the fibroadenoma while most DCIS involved surrounding breast tissue.**

Diagnosis, characteristics, and treatment of breast carcinomas within benign fibroepithelial tumors.

- Seven women, aged 21-64 years, complained of a breast mass detected by self-checking or screening examination.
- All patients had well-demarcated movable breast masses.
- Ultrasonography showed circumscribed masses suggesting benign tumors in all cases, and mammography revealed well-defined, high-density masses, with or without calcification.
- The masses progressed in two patients.
- A preoperative histological diagnosis of carcinoma was made following needle biopsy in four patients.
- Tumorectomy, breast-conserving surgery, and mastectomy were performed in three, two, and two patients, respectively.
- One patient underwent lymph node dissection and another underwent sentinel node biopsy.
- Histologically, the masses were diagnosed as ***invasive ductal carcinoma, ductal carcinoma in situ or lobular carcinoma in situ, arising in a benign phyllodes tumor, fibroadenoma, or fibroadenomatoid mastopathy.***
- Lymph node metastasis was detected in two patients.
- There was no recurrence in any of the patients.
- Although a carcinoma within a preexisting benign fibroepithelial tumor is extremely rare, it is important to be aware of the possibility of invasive and metastatic disease.

Thank You