

Case 30

60 year old Indian woman was found to have an echogenic mass with calcifications in the right breast on screening mammography.

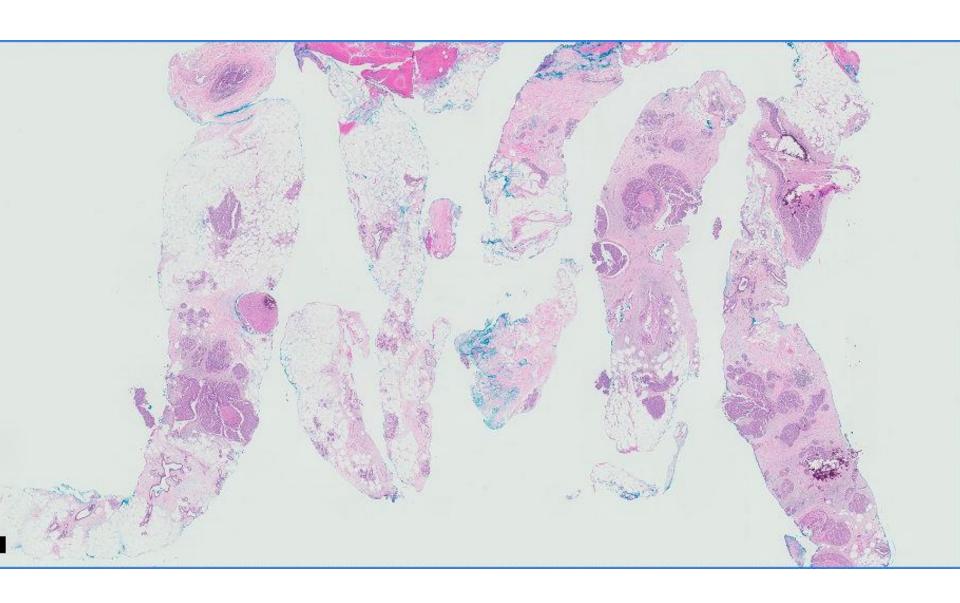
Ultrasound guided trucut biopsy performed.

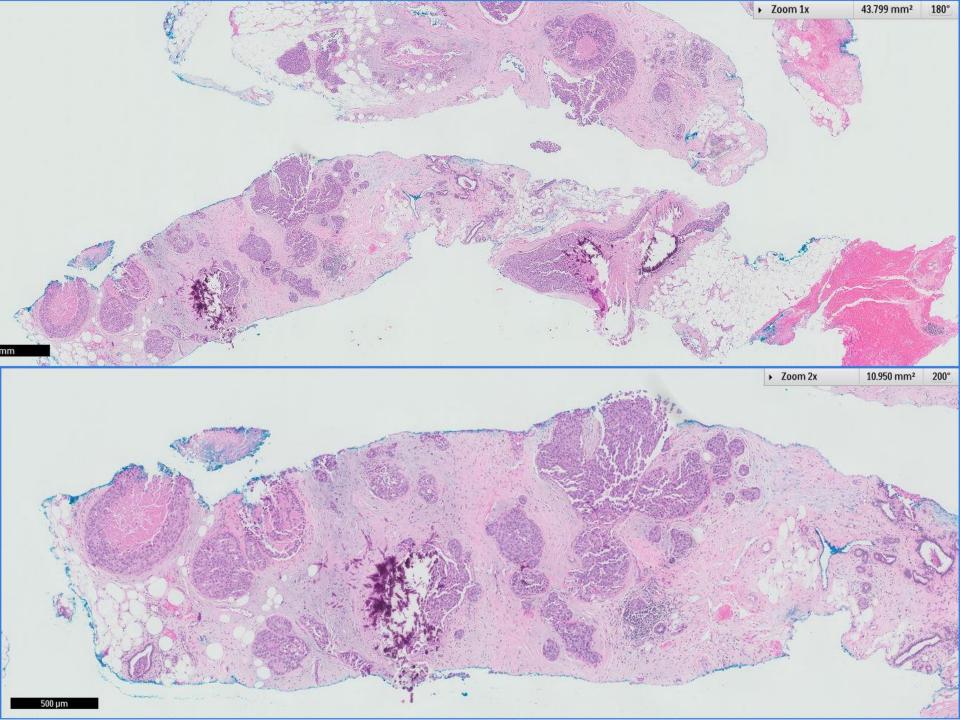


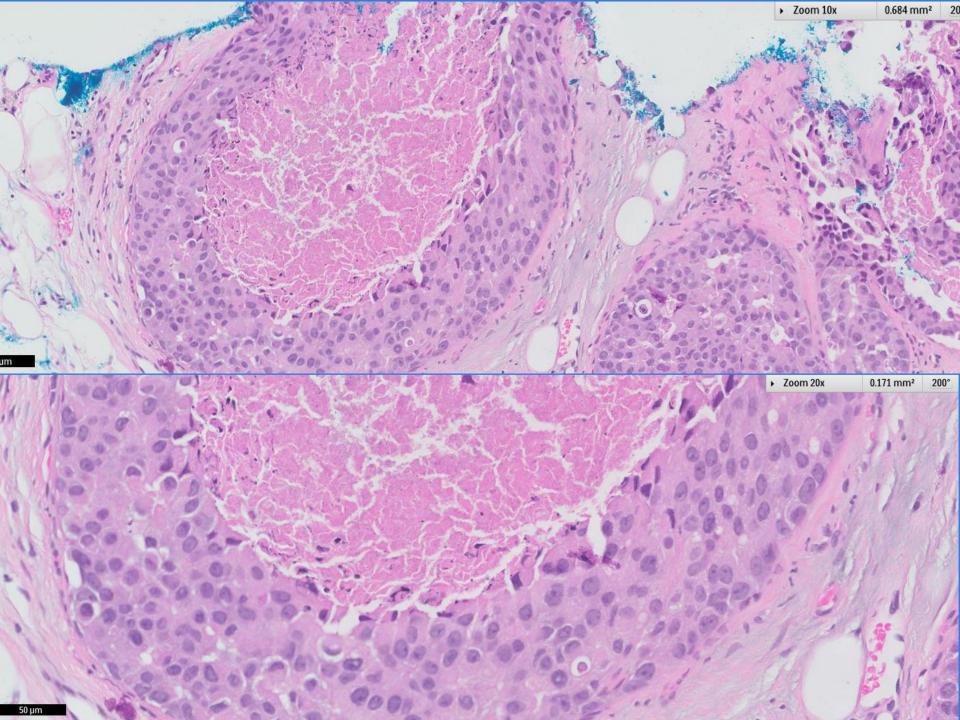


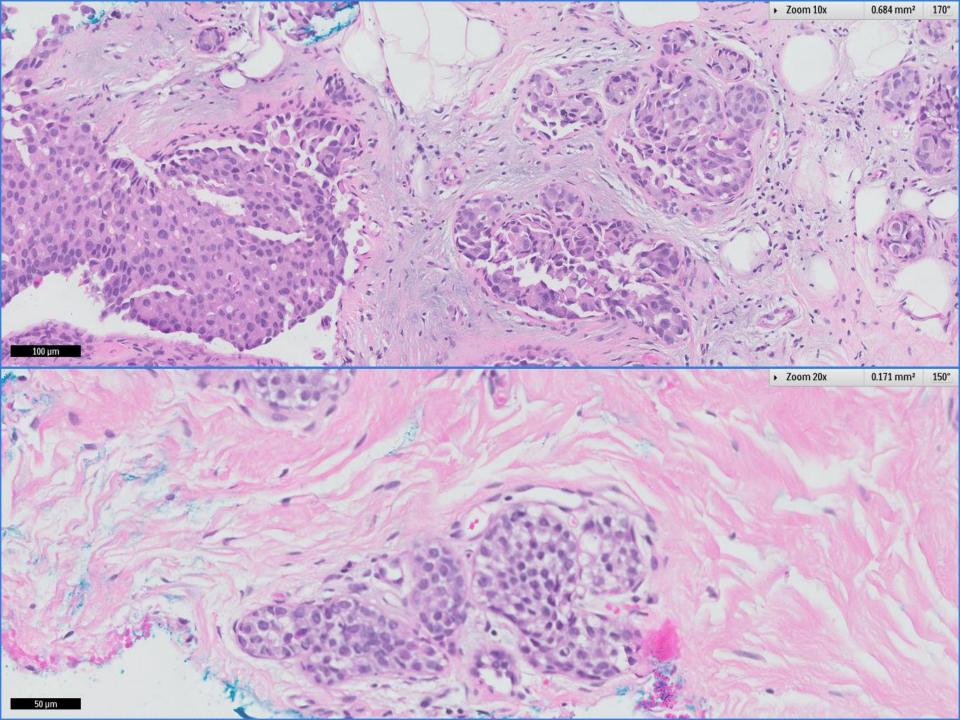




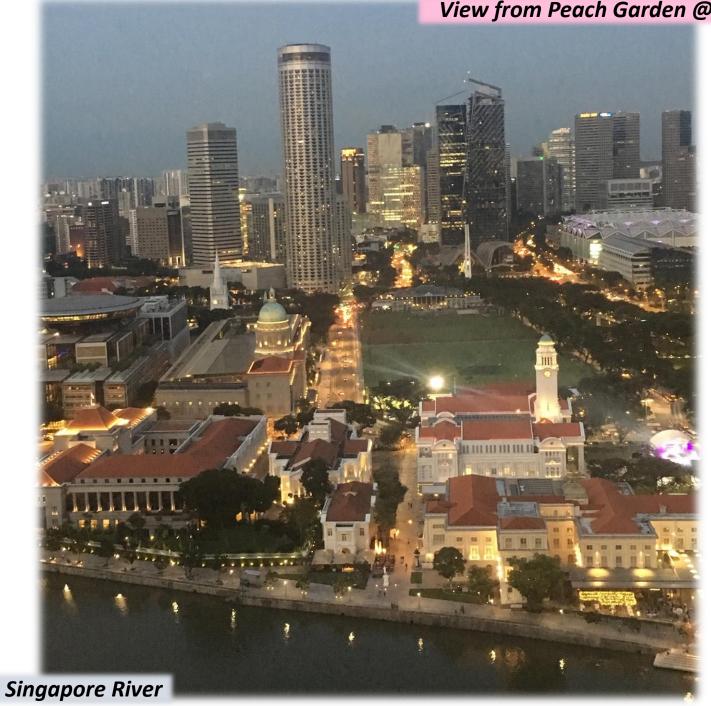


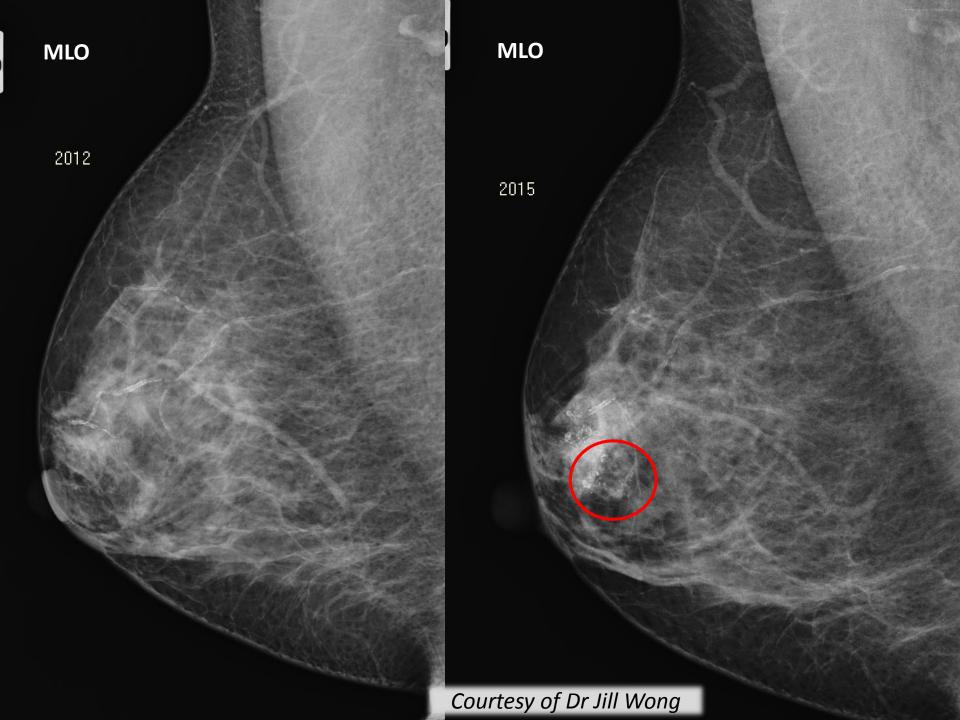


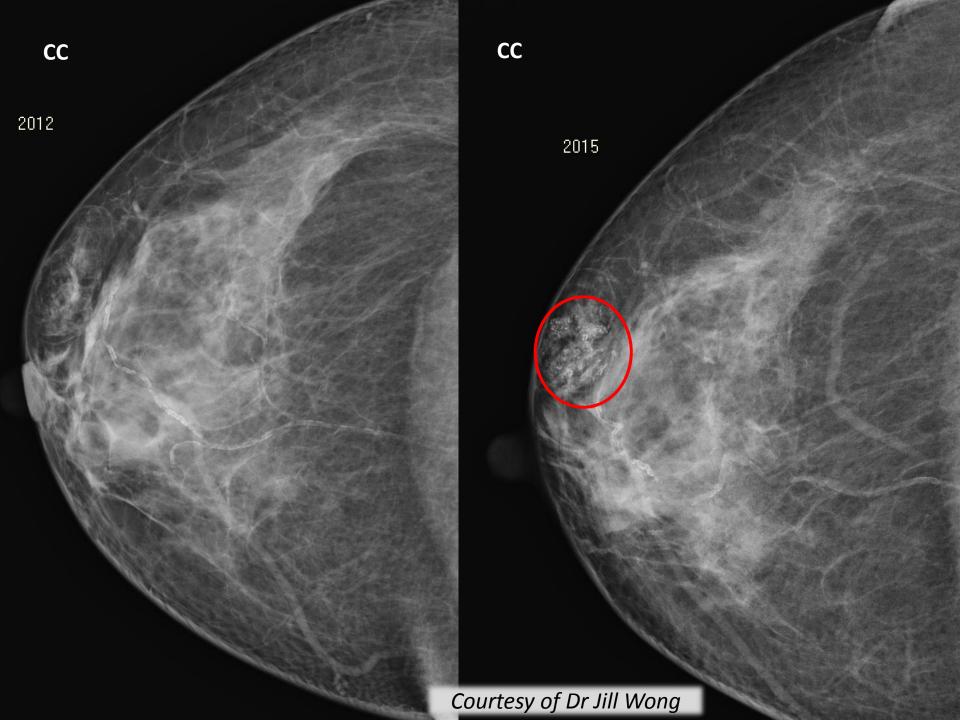




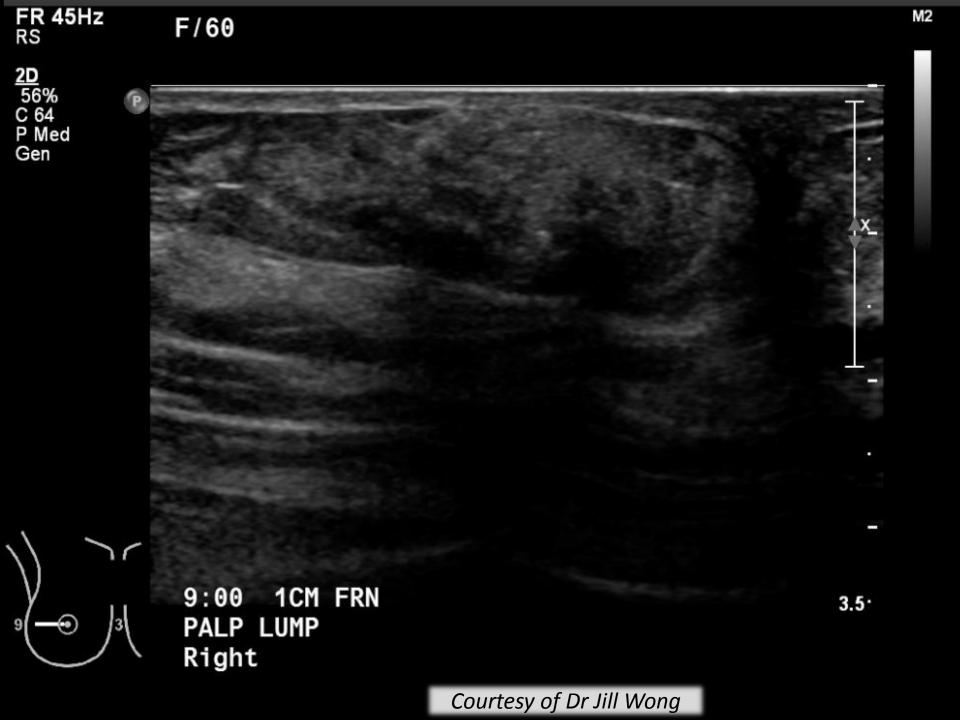
View from Peach Garden @ OCBC Centre

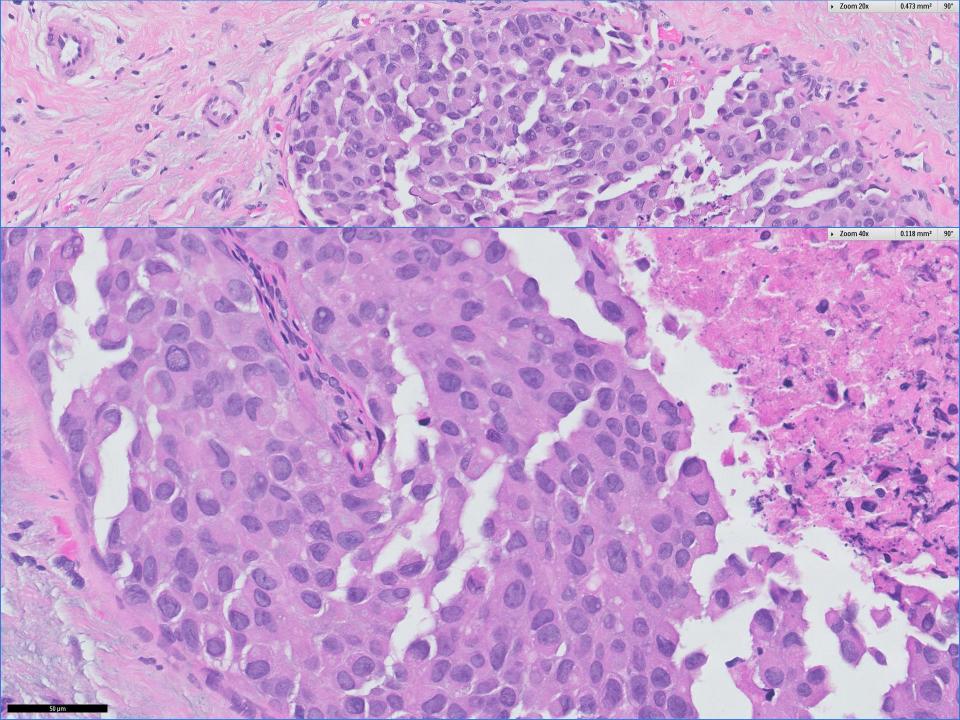


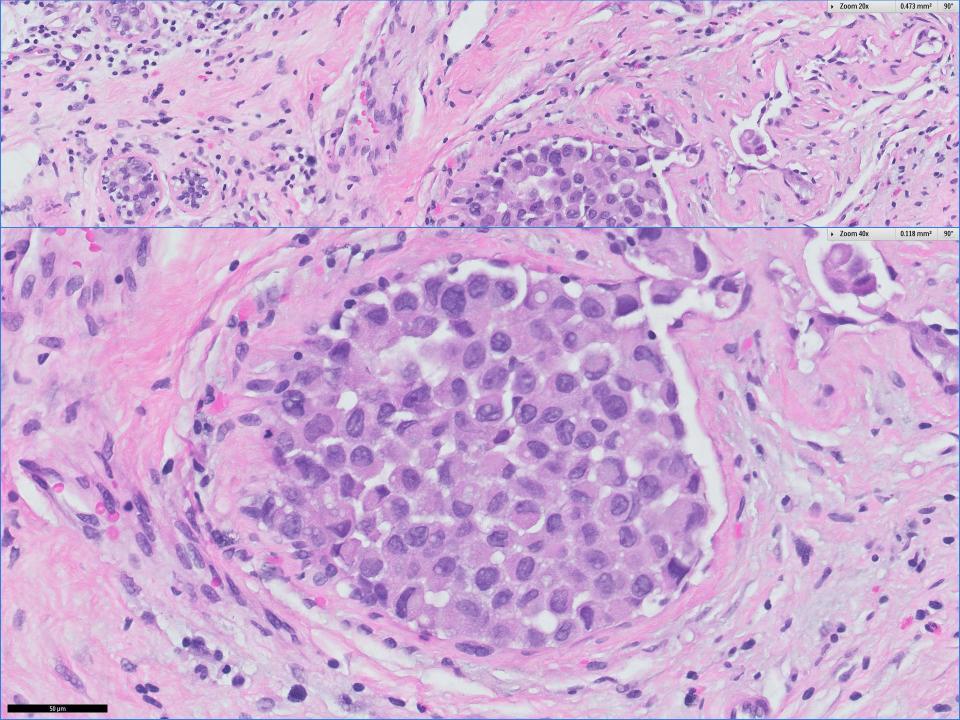


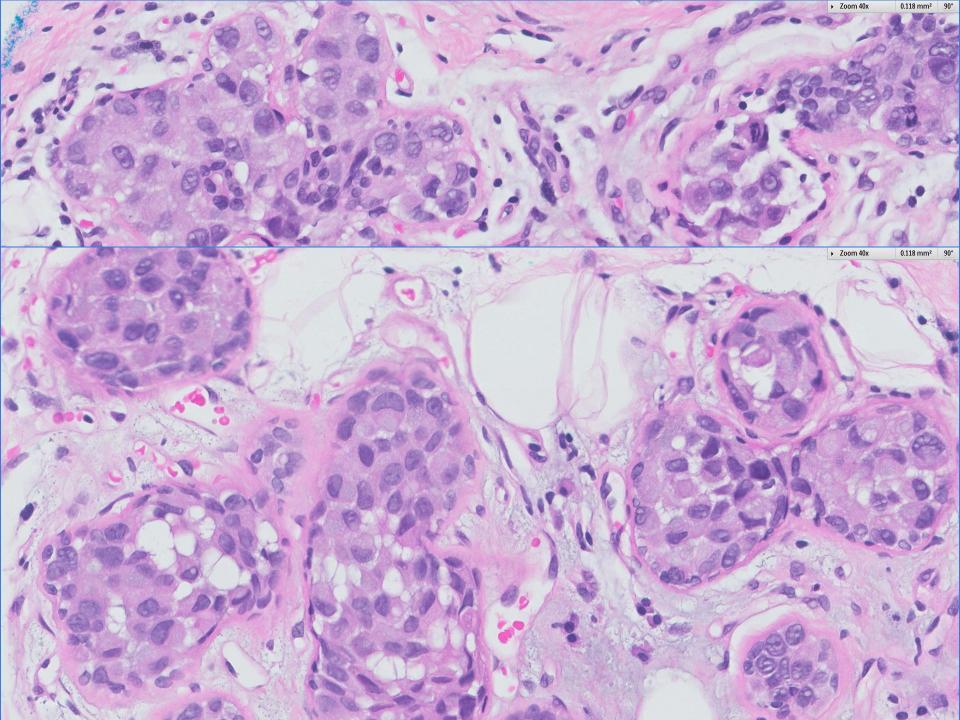














Differential diagnosis

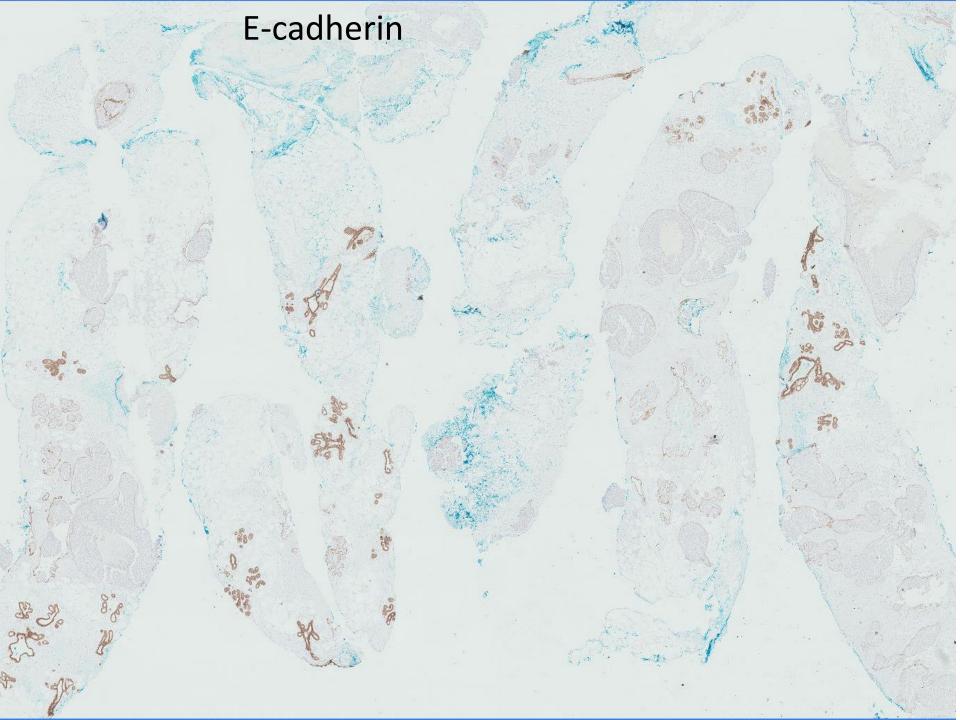
- High nuclear grade DCIS
- Pleomorphic LCIS
- Invasive carcinoma

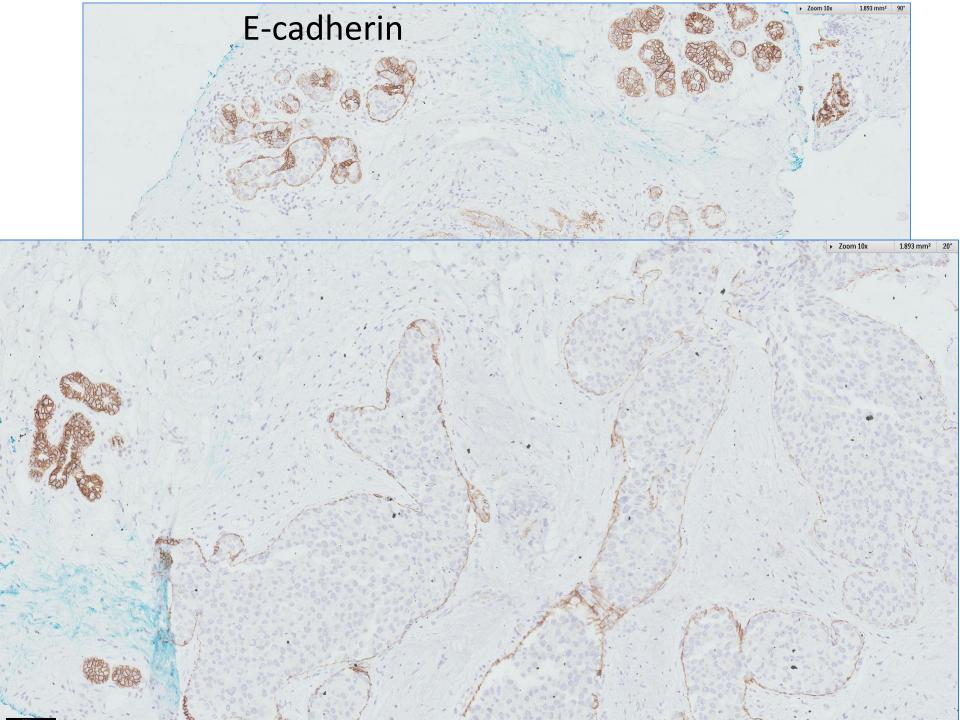


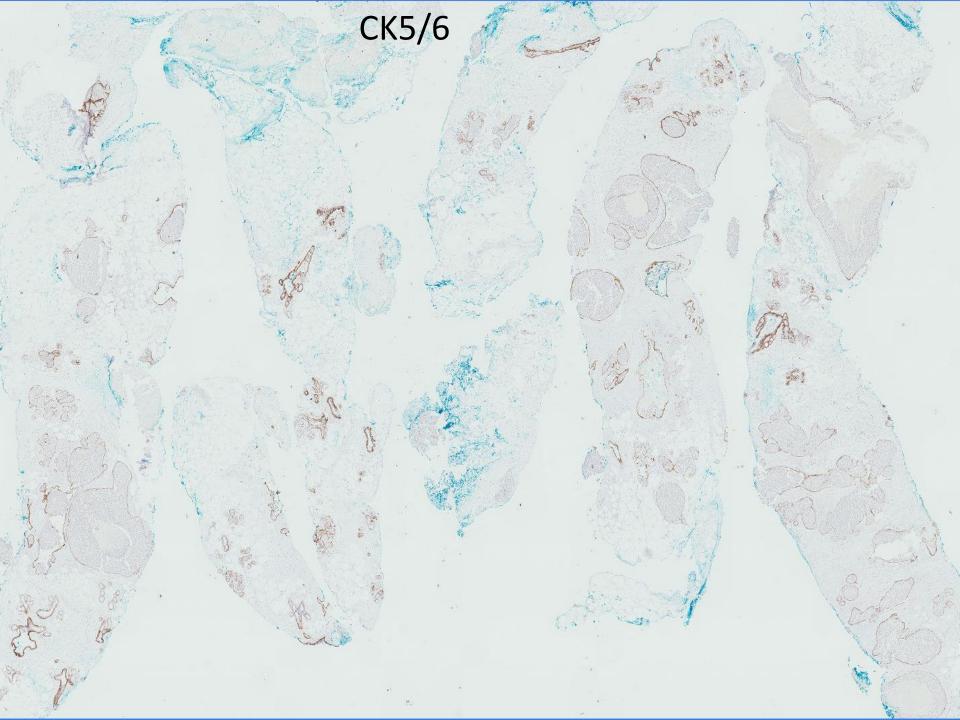


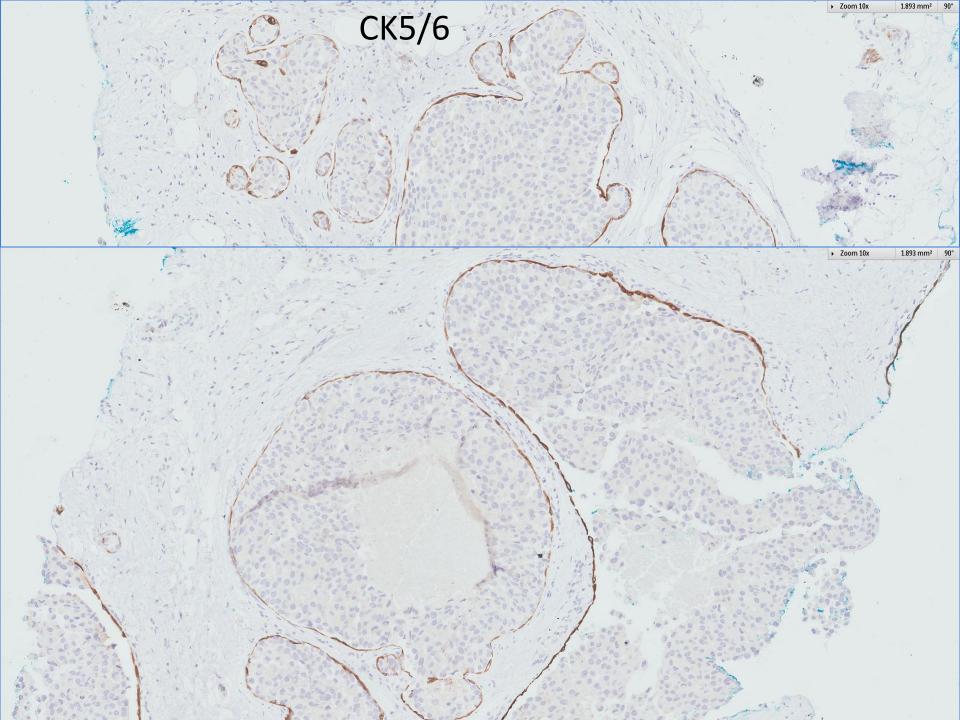














Diagnosis

Ultrasound guided trucut biopsy of right breast mass:

Pleomorphic lobular carcinoma in situ with necrosis and calcifications











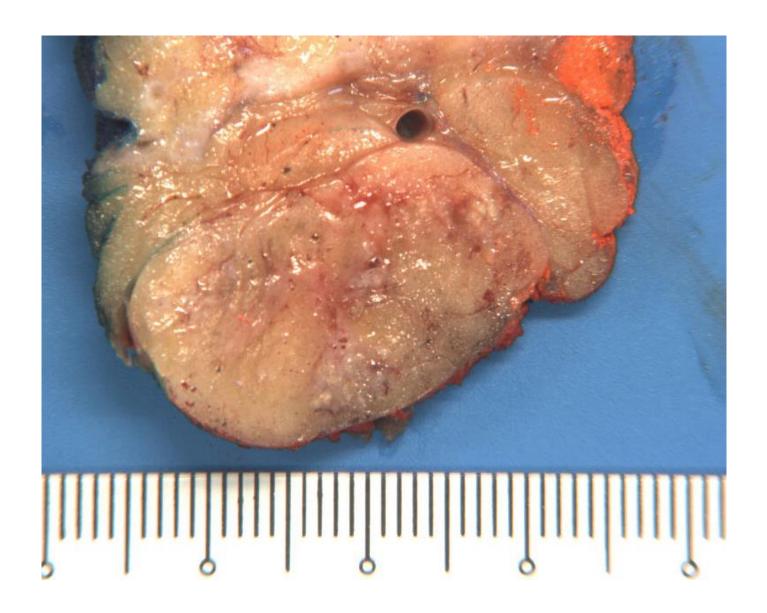
Right breast wide excision

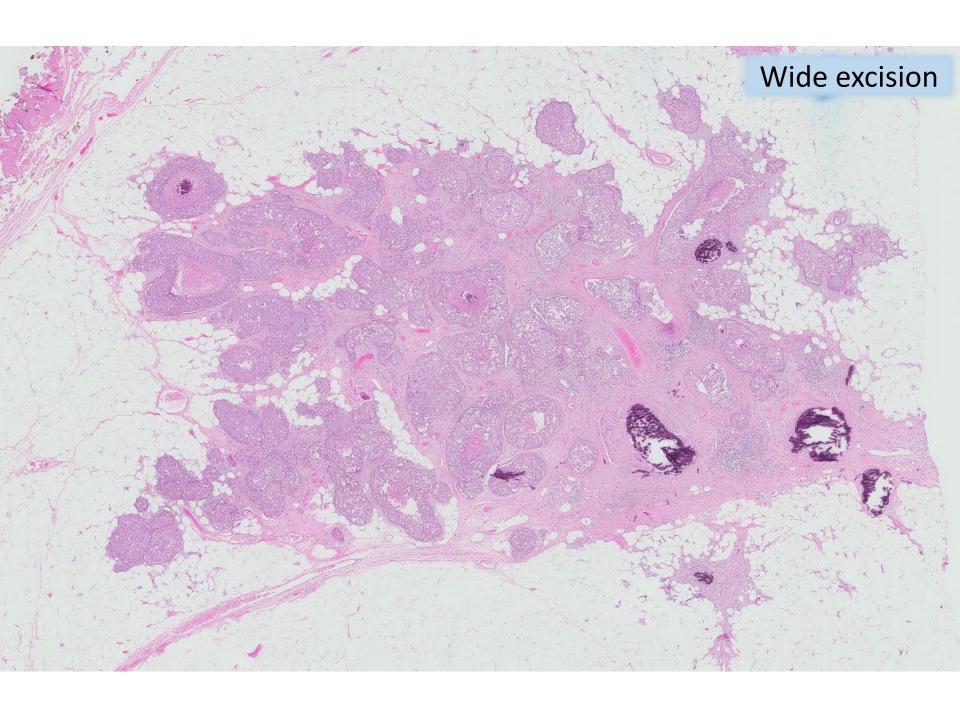


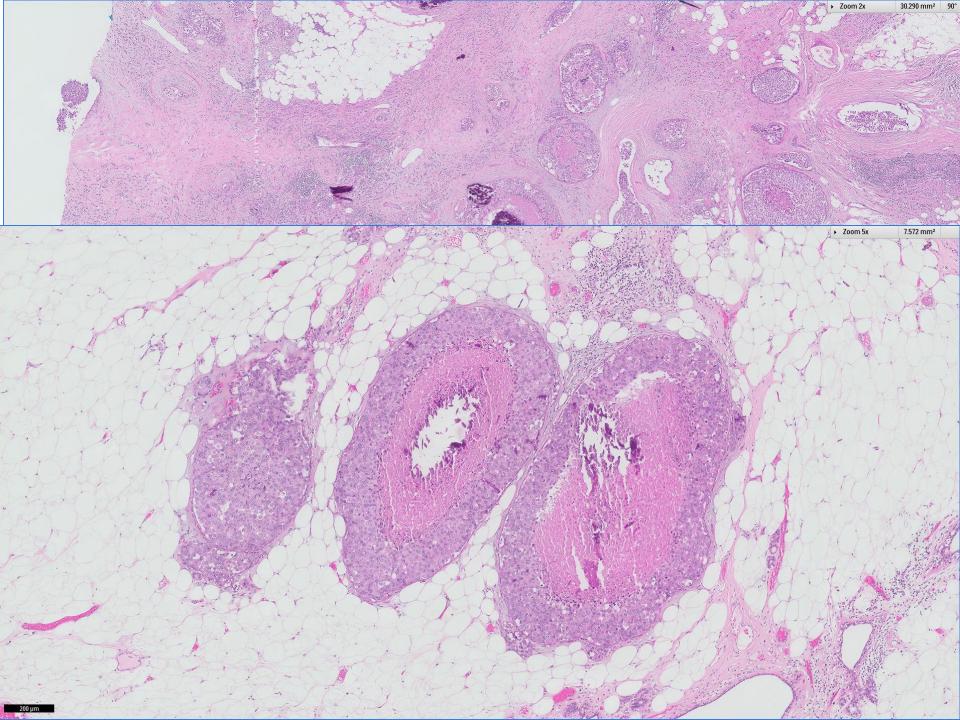


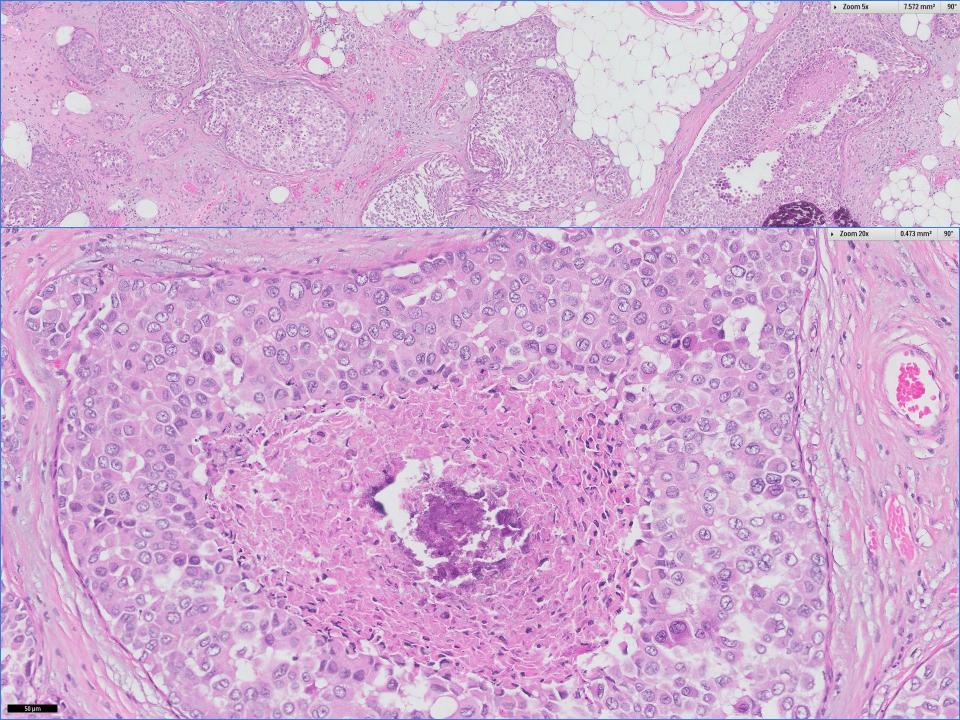


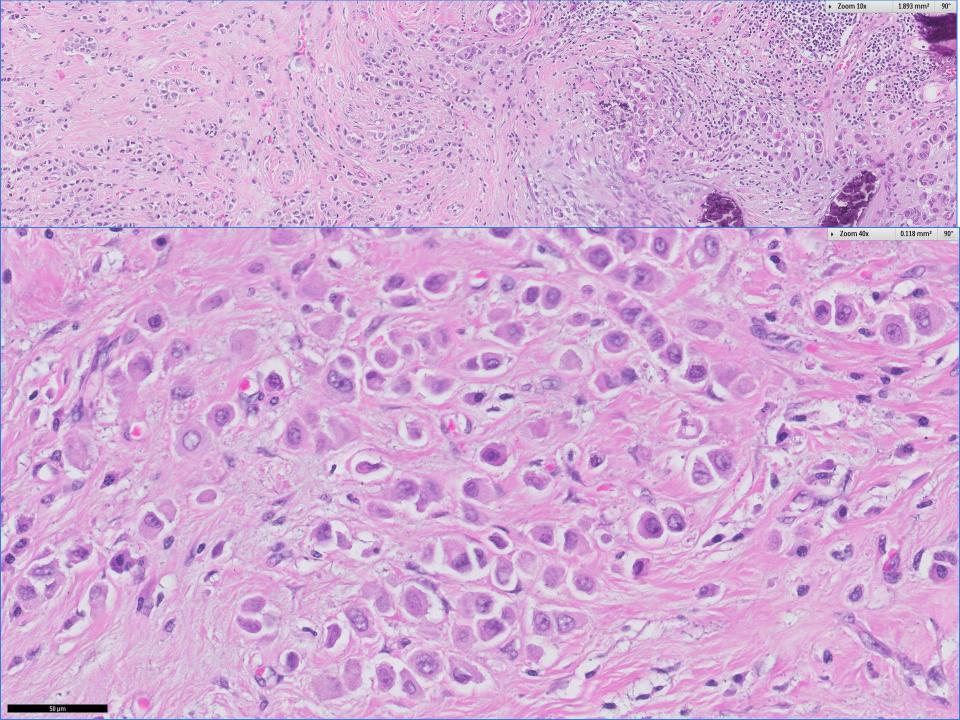


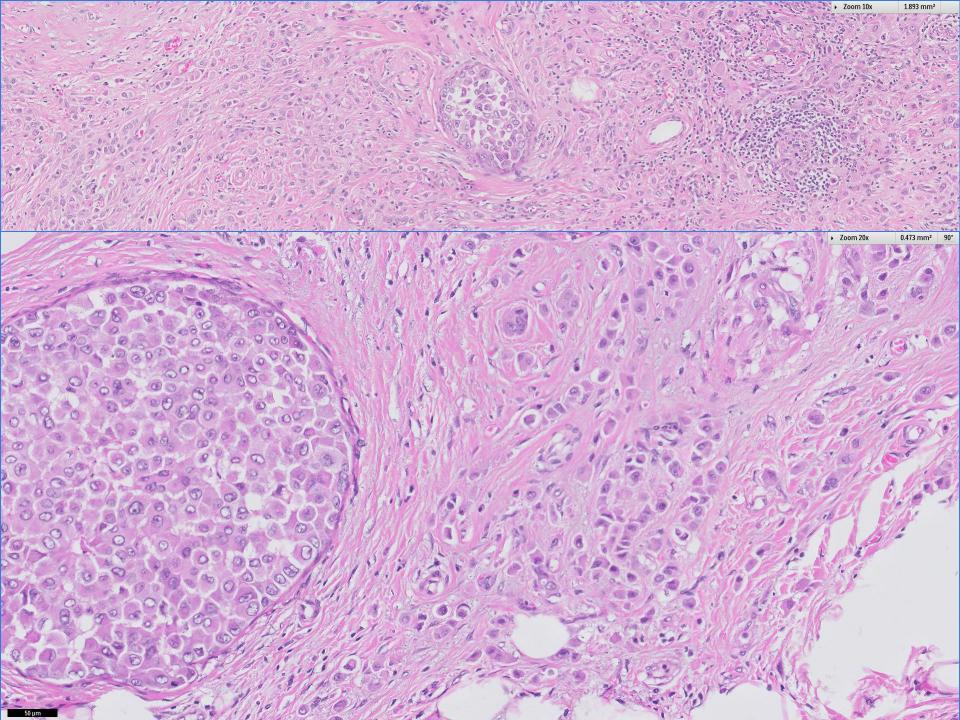




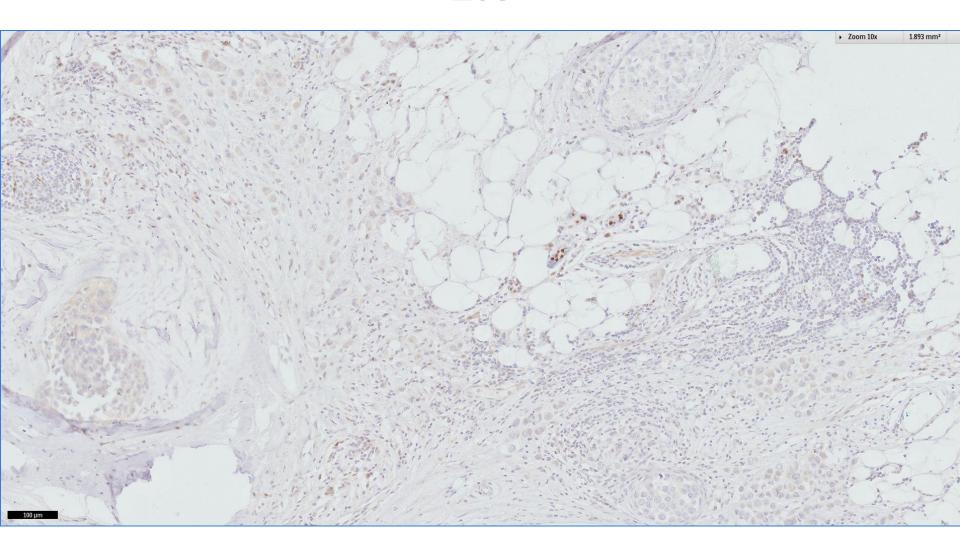




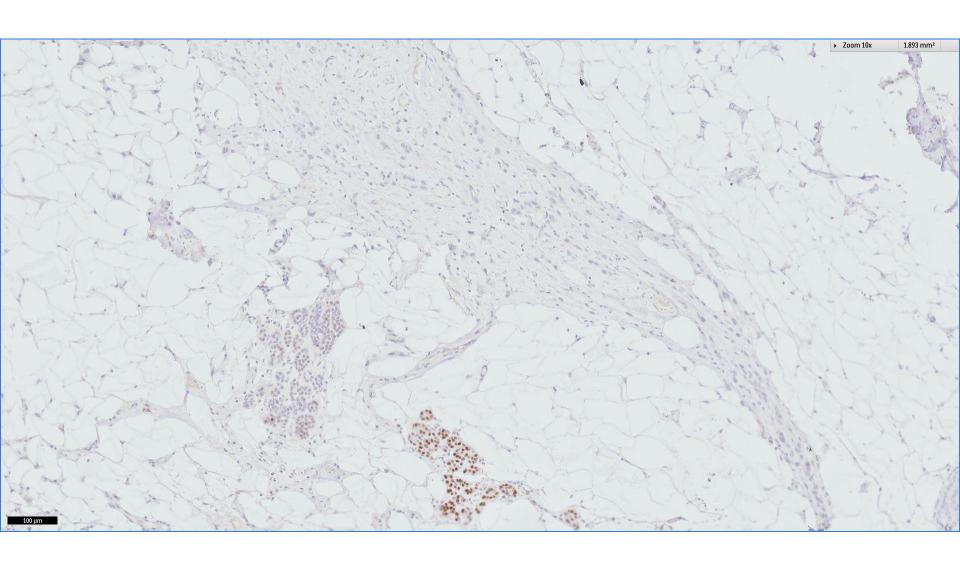


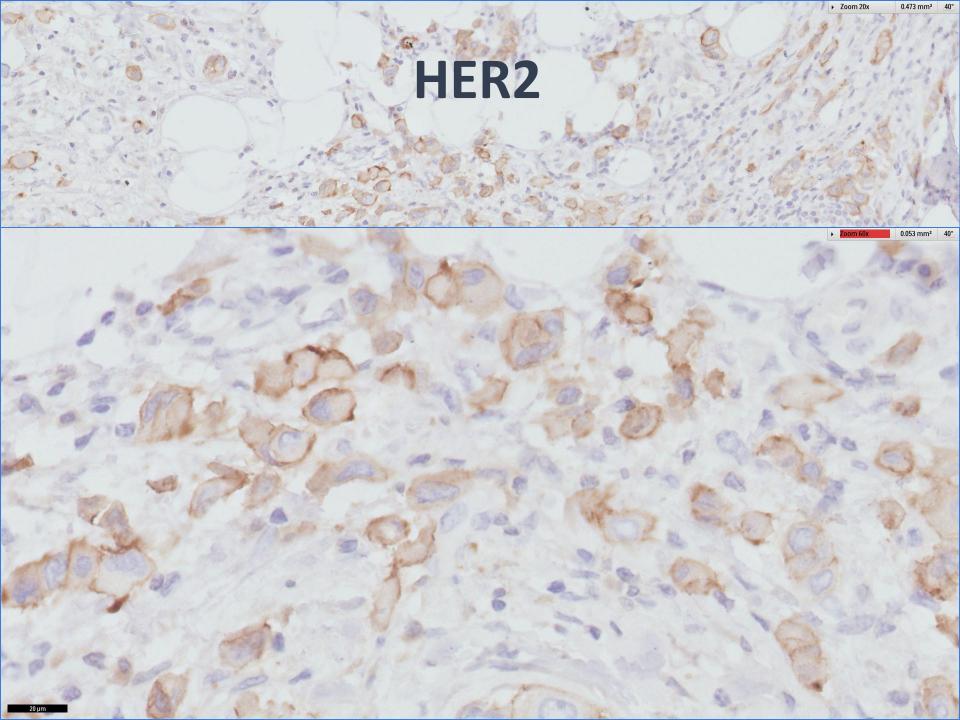


ER



PR







Diagnosis

Right breast, wide excision:

Invasive lobular carcinoma with pleomorphic features, 20mm, grade 2.

Pleomorphic lobular carcinoma in situ.

ER negative, PR negative, HER2 borderline.

HER2 FISH not amplified.











Discussion points

- Pleomorphic LCIS
- Triple negative invasive lobular carcinoma









Pleomorphic LCIS

- Variant of LCIS.
- Marked nuclear pleomorphism similar to that of high nuclear grade DCIS.
- Apocrine features may be seen.
- Necrosis can be present.
- Lacks E-cadherin protein expression.
- Genomic alterations typical of lobular lesions with 16q losses and 1q gains.









Pleomorphic LCIS

- Clues to diagnosis:
 - Discohesion of tumour cells.
 - Cytomorphology ~ eccentric nuclei, intracytoplasmic vacuoles.
 - Adjacent classic lobular neoplasia.









Pleomorphic invasive lobular carcinoma

- Growth pattern of ILC.
- Greater degree of atypia (grade 3 nuclei), pleomorphism and mitoses.
- Triple negativity can occur; less frequent than in invasive ductal carcinoma.
- Androgen receptor & GCDFP15 tend to be positive.









| Author, journal, year | Pleomorphic LCIS | Pleomorphic ILC | ILC |
|---|---|--|--|
| Harbhajanka A et al. Appl Immunohistochem Mol Morphol. 2014 Jul;22(6):e18-26. | | | 255 ILC. 5.49% of ILC are triple negative: - Elderly Pleomorphic Larger tumour size. Increased expression of vimentin, CK5, p16, p53, and c-kit. |
| Khoury T et al. Histopathology. 2014 Jun;64(7):981-93. | 47 PLCIS. Adverse ER/PR/HER2 molecular profile. At least 41.2% overexpress HER2. At least 11.7% triple- negative. | | |
| Monhollen L. Histopathology. 2012 Sep;61(3):365-77. | | 40 cases. 5 of 38 (13.2%) triple-negative cases. 4% basal phenotype. Older patients, negative hormonal receptor status correlated significantly with worse clinical outcome. | |

