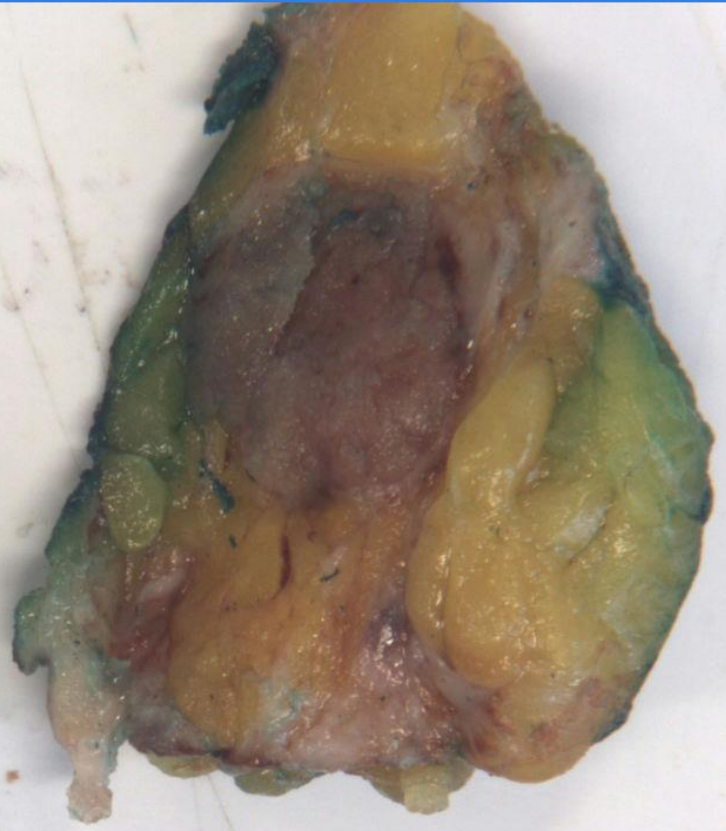
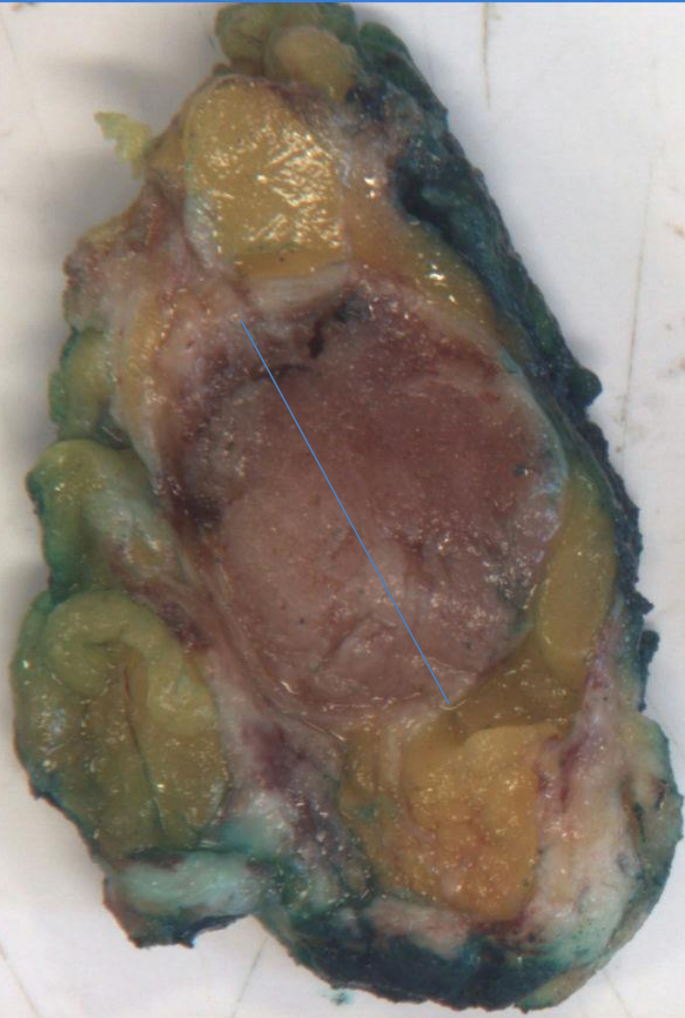


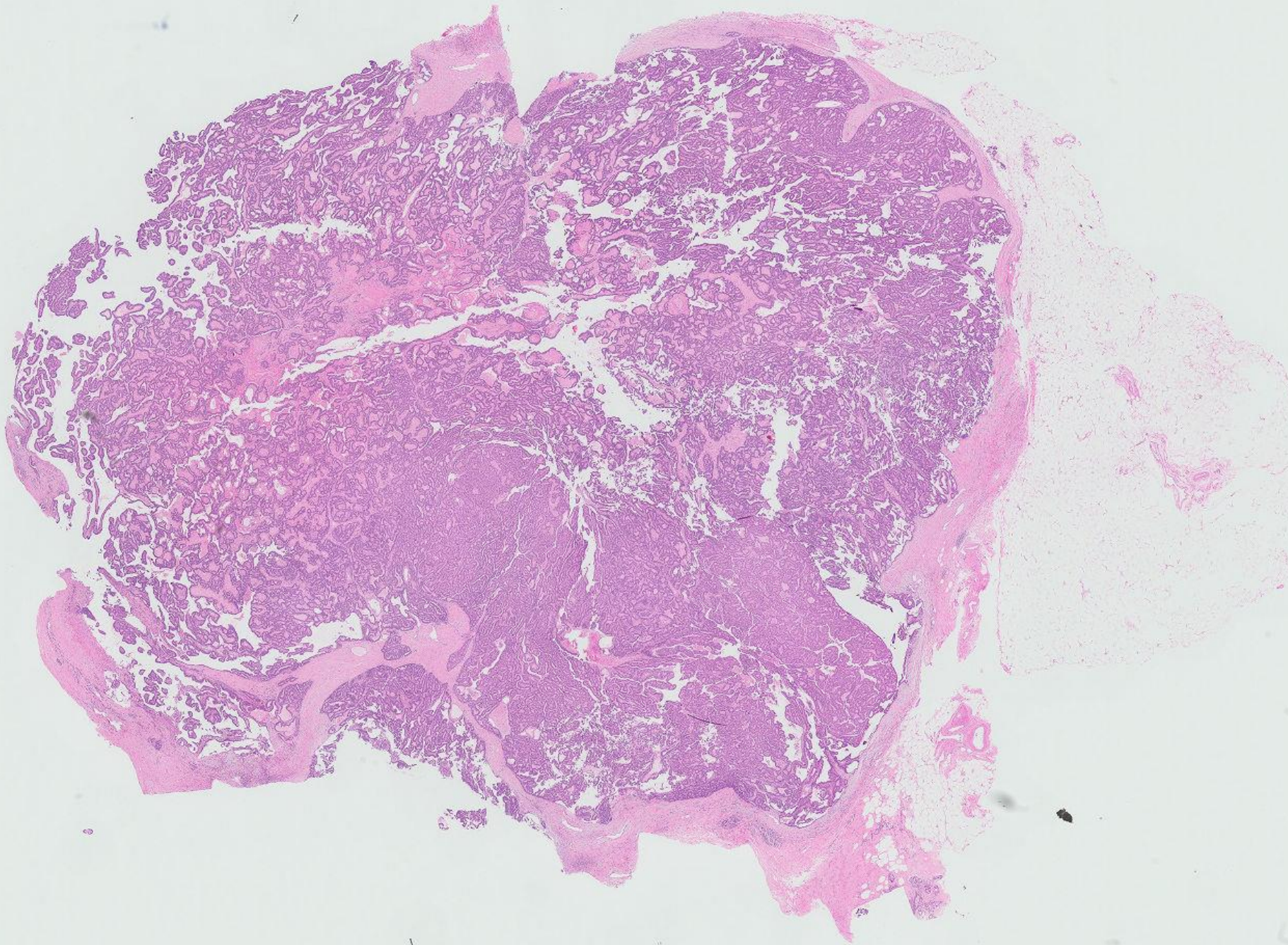
Case 11

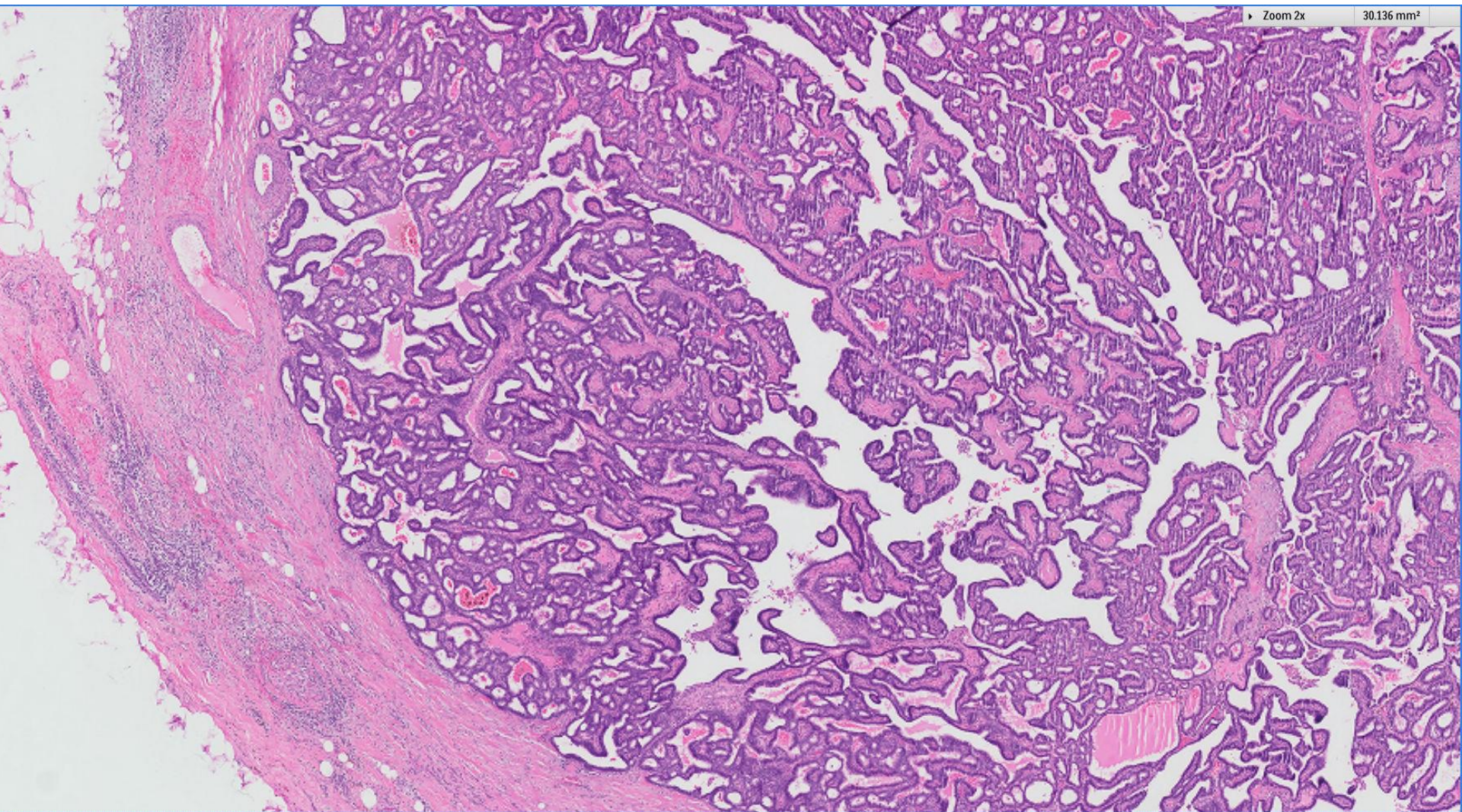
67 year old Chinese female.
Left breast upper inner quadrant
nodule.

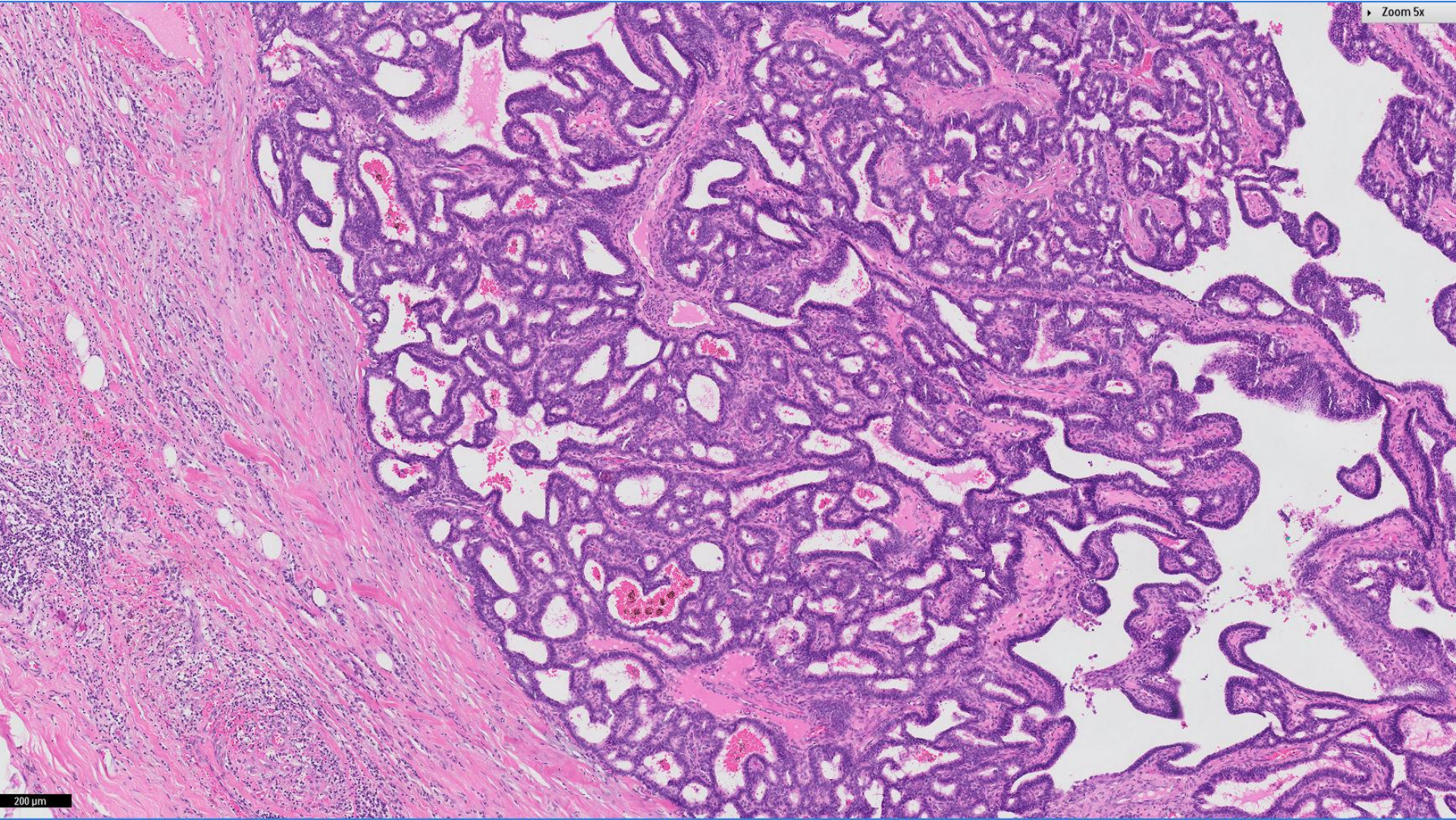
Presented by Dr Puay Hoon Tan





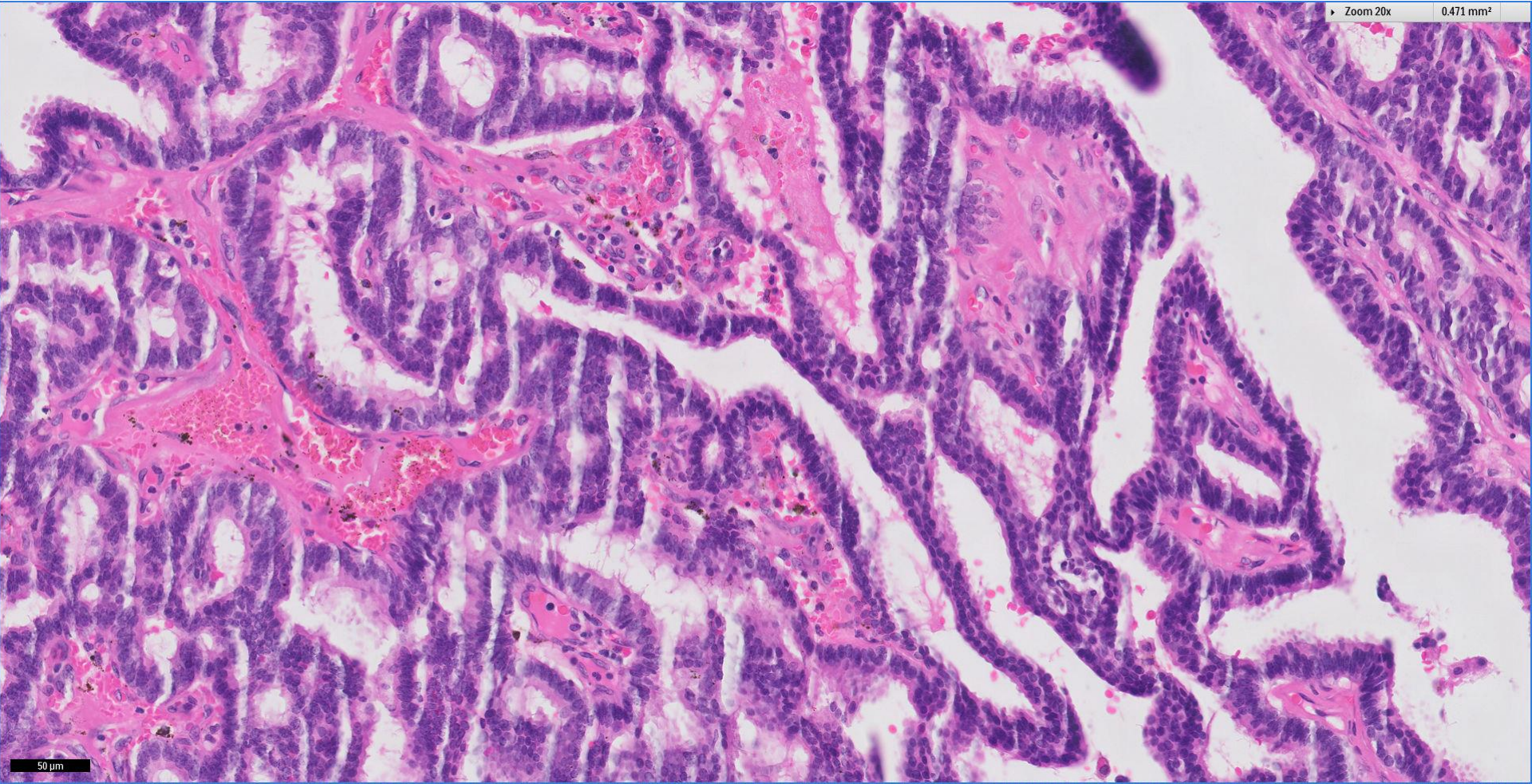






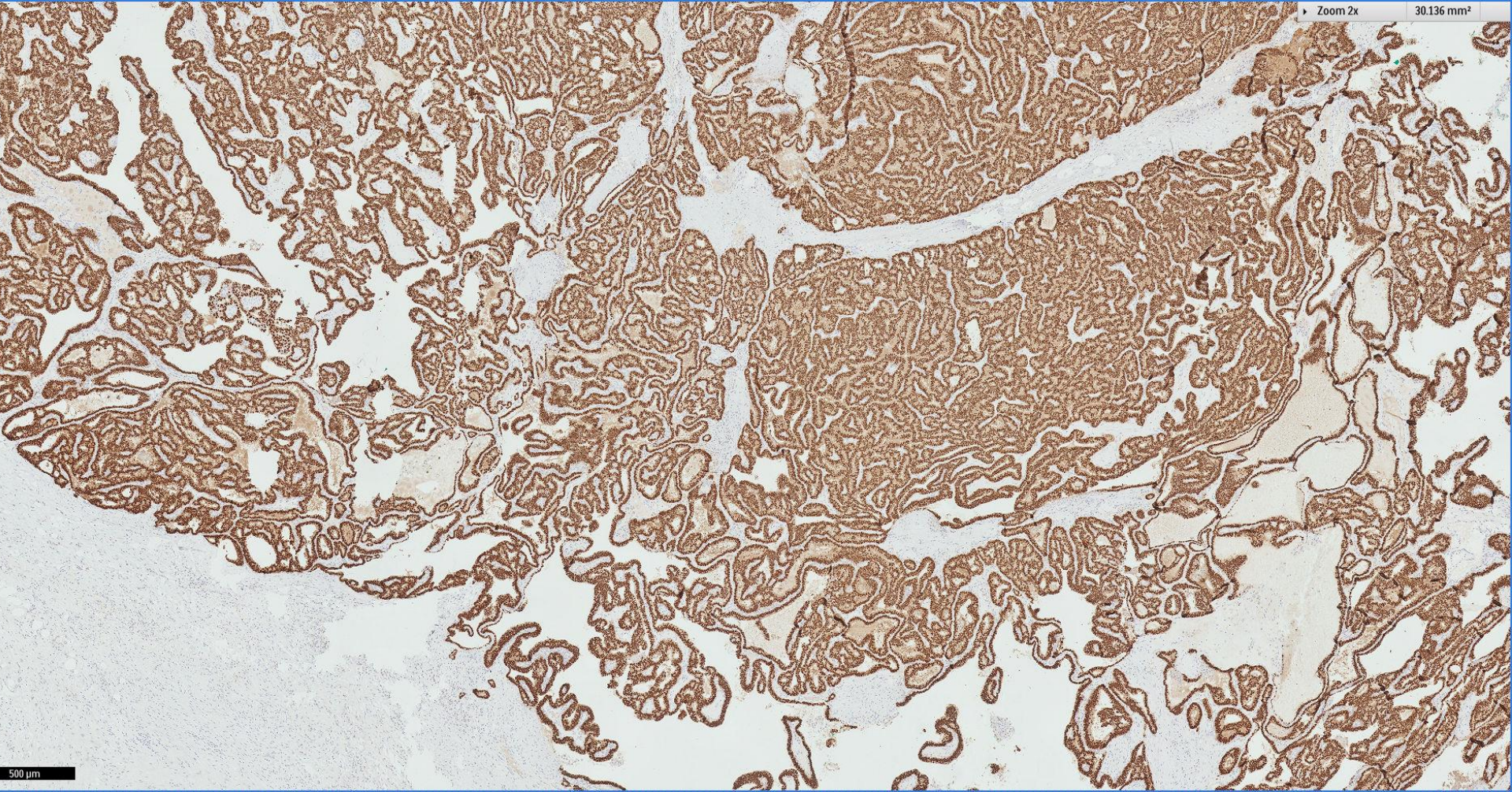
Zoom 20x

0.471 mm²



50 μ m

ER



Zoom 2x 30.136 mm²

500 µm

Immunohistochemistry ~ SMMS, p63, CK14 negative



Diagnosis:

Encapsulated papillary carcinoma, 1.4cm,
low nuclear grade, without necrosis or
calcifications

3 benign sentinel lymph nodes



Encapsulated papillary carcinoma

- Previously referred to as encysted/intracystic papillary carcinoma.
- Expansile papillary neoplasm that is well circumscribed, within a cystic space and surrounded by a fibrous wall/capsule.
- Usually consists of a single nodule but multinodular cases have been described.
- Key feature is the absence of myoepithelial cells, both within, as well as at the periphery of the neoplasm, differentiating it from papillary DCIS, although both EPC and papillary DCIS can co-exist.
- Most common in elderly postmenopausal women.
- Usually presents as a mass that is centrally located, may be associated with nipple discharge and pain.

Encapsulated papillary carcinoma

- Papillary fronds are delicate or slender, lined by epithelial cells of low to at most intermediate grade atypia.
- Mitotic activity is low with one study documenting a mean of 3 mitoses per 10 high power fields.
- Areas of cribriform architecture can coexist and solid areas may be present focally.
- Myoepithelial cells are absent at the epithelial-stroma interface along papillae and at the tumour periphery, although focal staining for myoepithelial markers may be observed.
- Majority strongly express ER, PR and are negative for HER2 on immunohistochemistry.

Encapsulated papillary carcinoma ~ biological behaviour

- Debate regarding whether it should be considered as in situ or invasive.
- **In situ** ~
 - Very low prevalence of lymph node or distant metastasis in pure EPC without an invasive component.
 - Fibrous capsule limits invasion.
- **Invasive** ~
 - No myoepithelial cells.
 - Reports of metastasis to lymph nodes and distant sites:
 - 3% with lymph node metastases
 - 2.2% with distant metastases
 - Indolent.
- **Transitional phase** between in situ and invasive disease ~
 - Expression pattern of matrix metalloproteinases intermediate between DCIS and invasive carcinoma.
- Consensus to stage EPC as in situ carcinoma (pTis).
- Locoregional recurrence (4.9% to 7%) as EPC, invasive papillary carcinoma or invasive carcinoma NST.

Encapsulated papillary carcinoma vs papillary DCIS

Histological feature	Encapsulated papillary carcinoma	Papillary DCIS
Scanning magnification	Marked distension of affected duct with encapsulated solid-cystic mass	No mass-like distension of affected ducts
Myoepithelial cells	Absent along the distended duct wall Absent along the fibrovascular cores of papillae	Present along the duct wall Absent/diminished along the fibrovascular cores of papillae
Other DCIS patterns	May or may not be present in surrounding breast	Usually present

Both lesions can co-exist!



Breast
Pathology
Course 2020

PATHOLOGY

118 years of Singapore pathology

Thank You



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