

Case 15

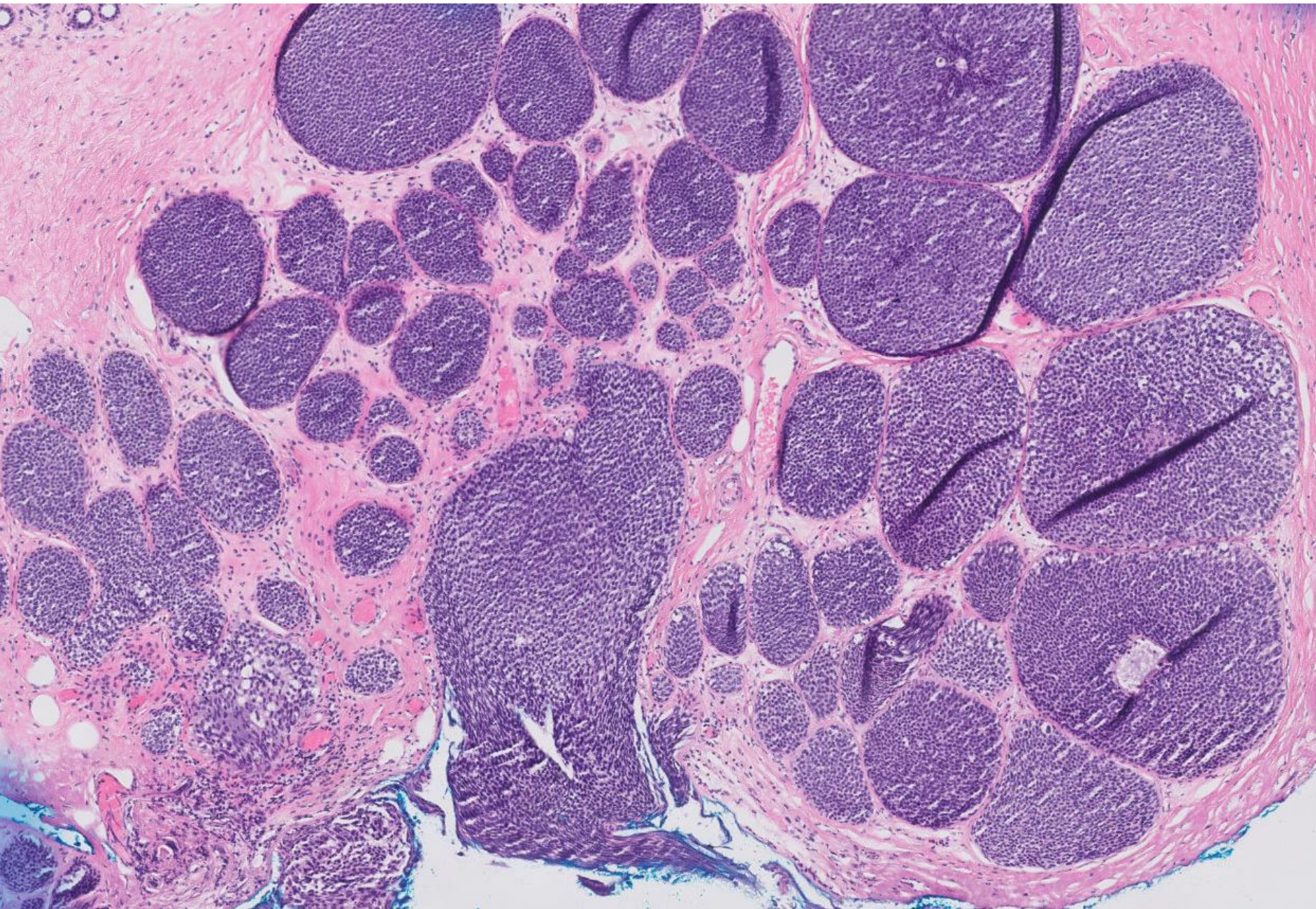
44 year old Caucasian female.

Excision biopsy was performed for a left breast 11 o'clock fibroadenoma which histologically harboured lobular neoplasia.

Section provided is from the 'left breast additional inferior margin'.

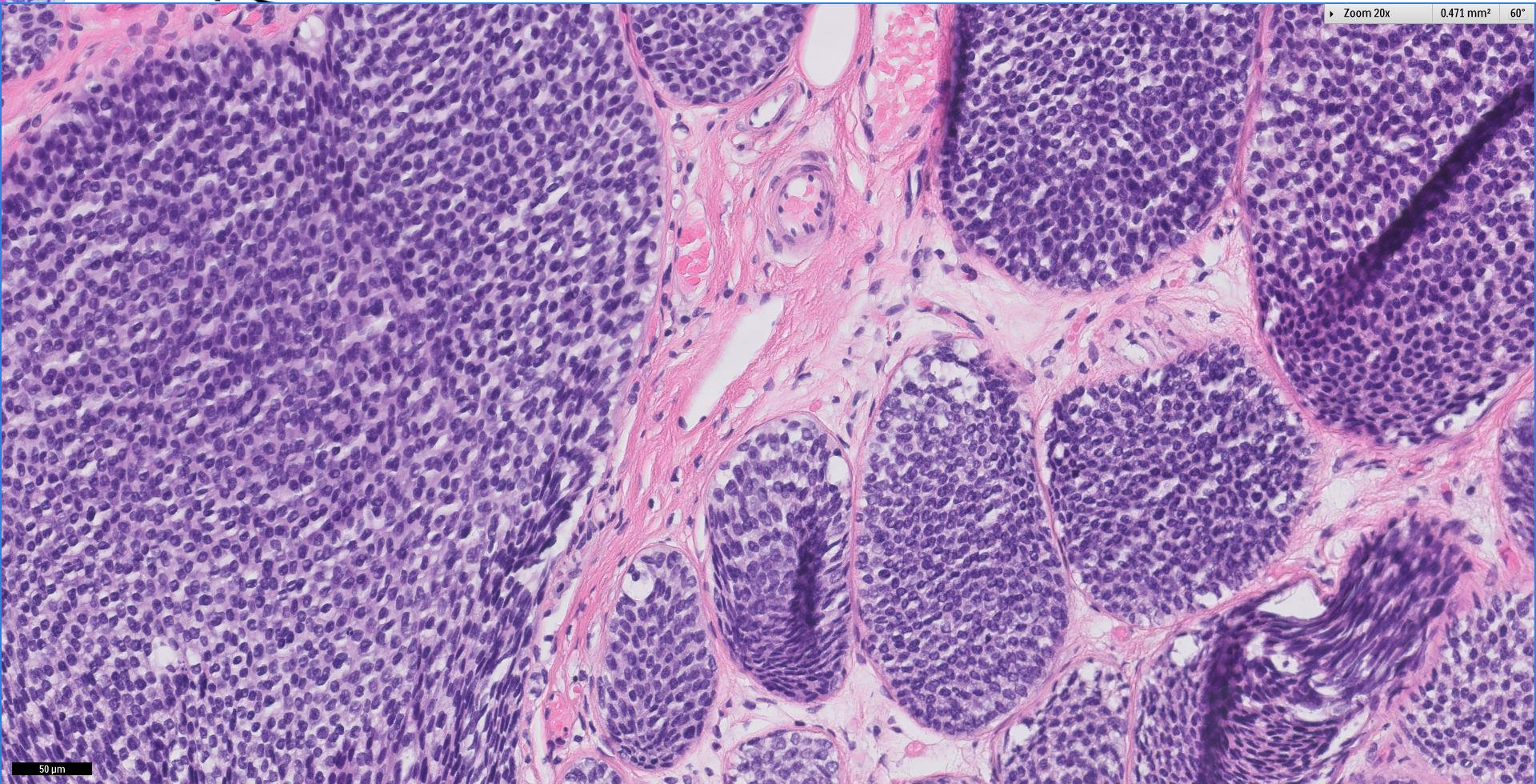
Presented by Puay Hoon Tan








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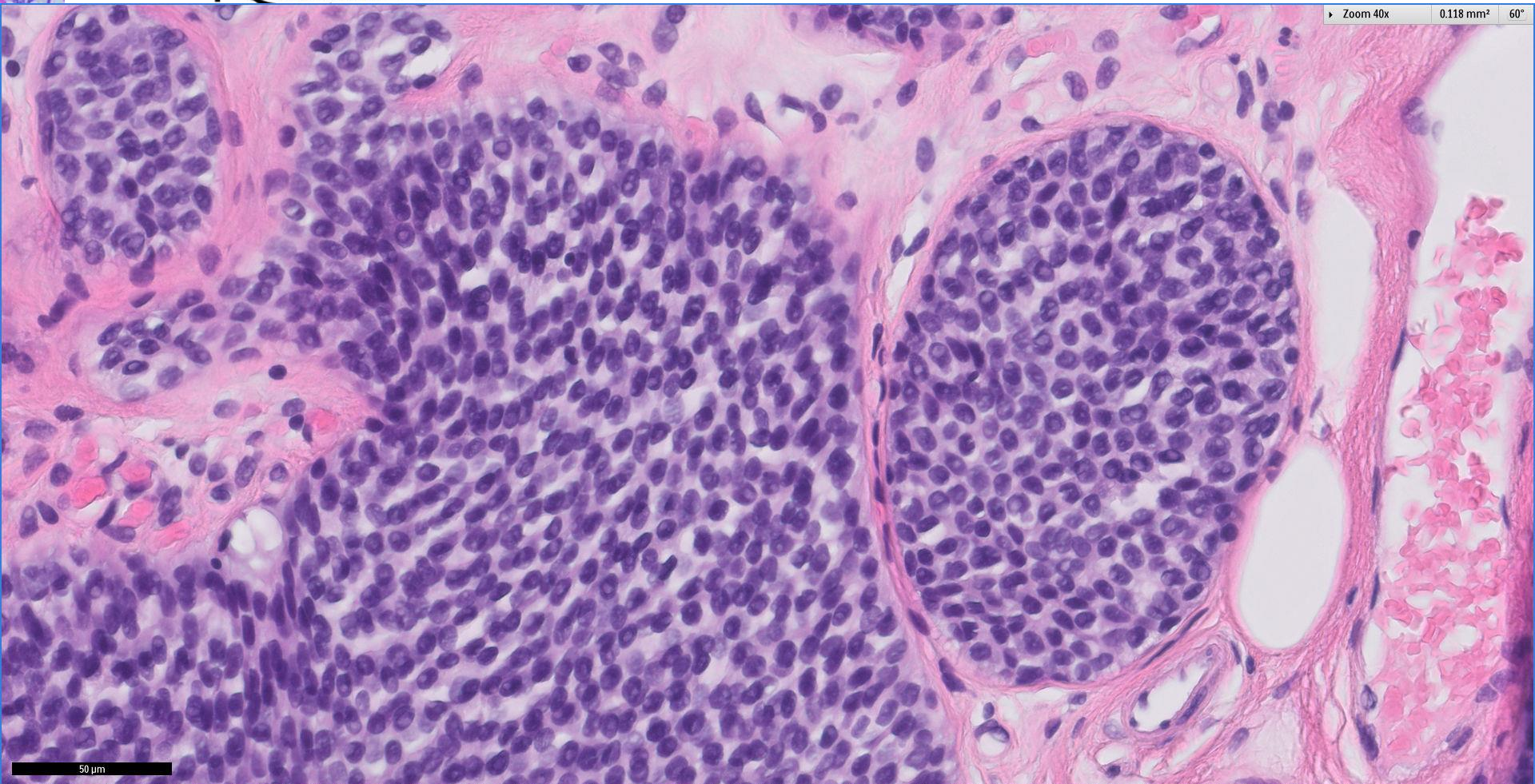


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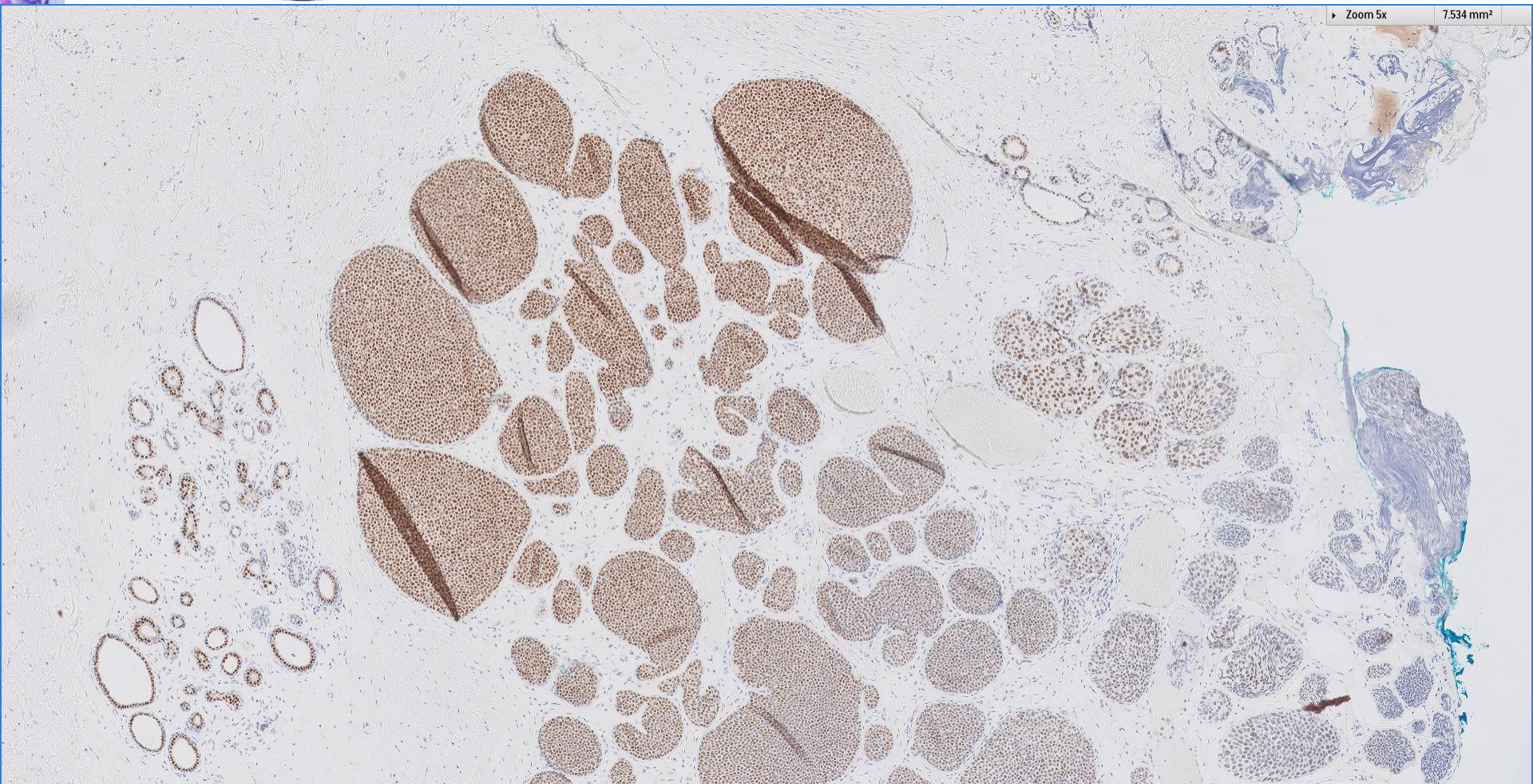
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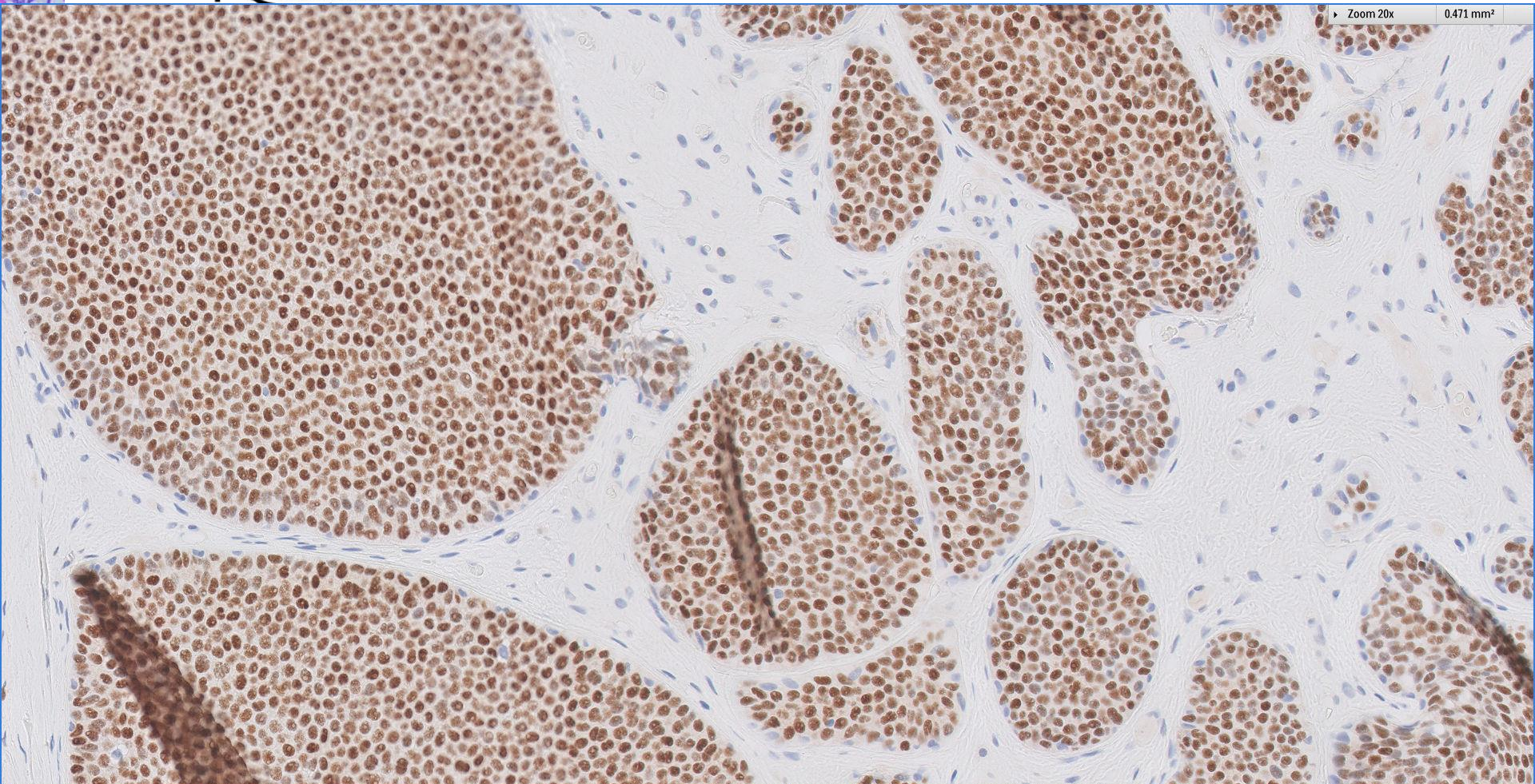

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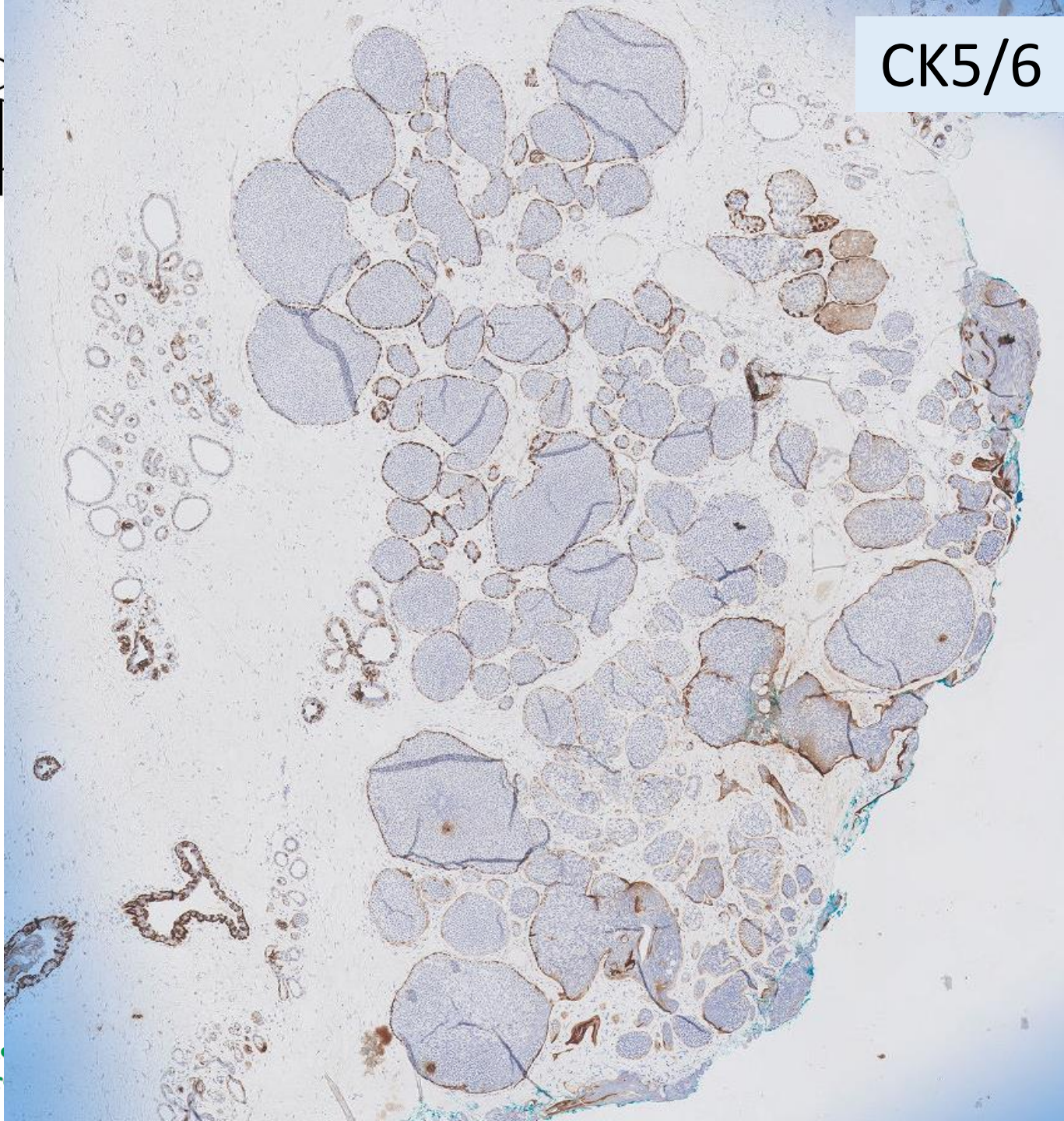


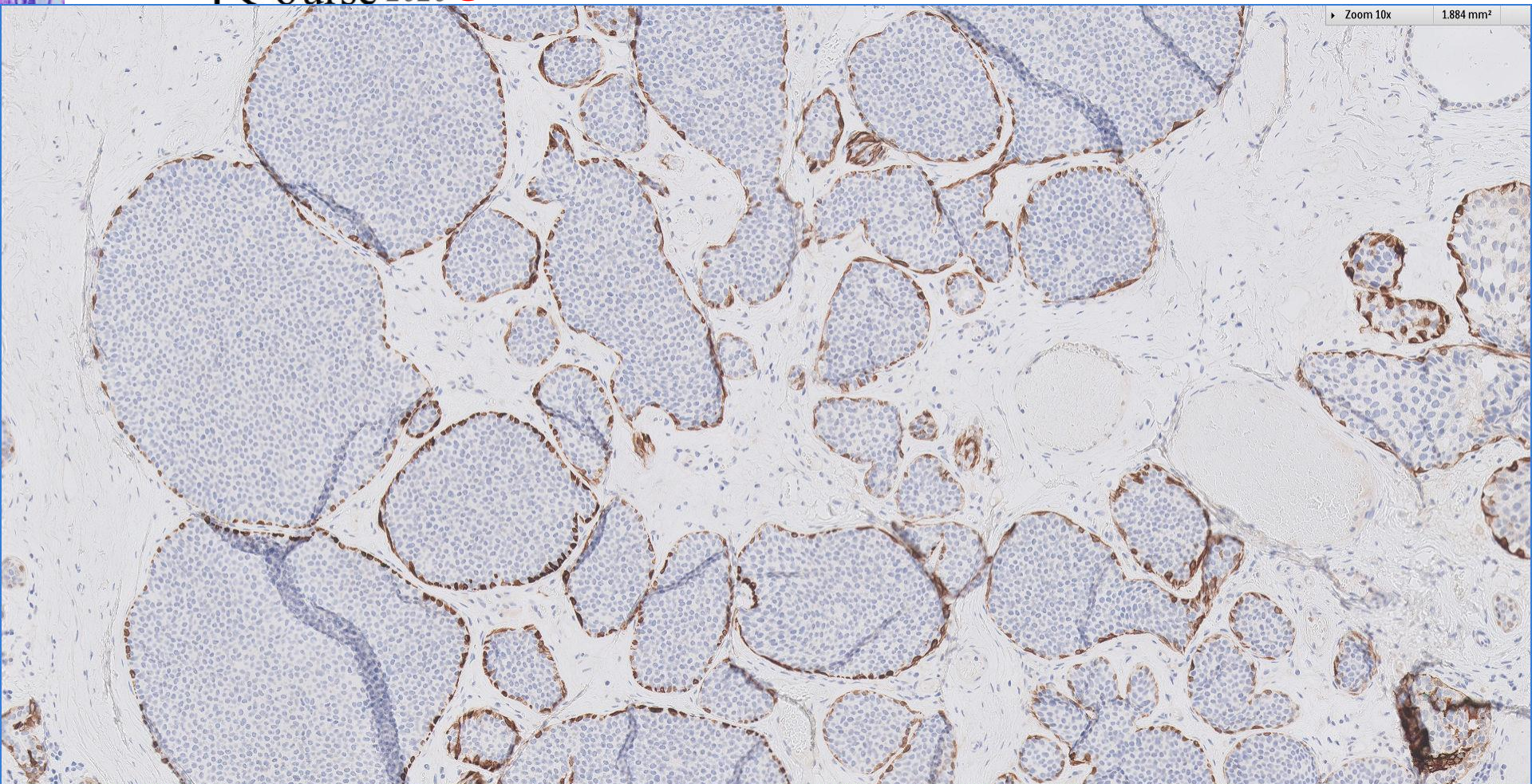
ER

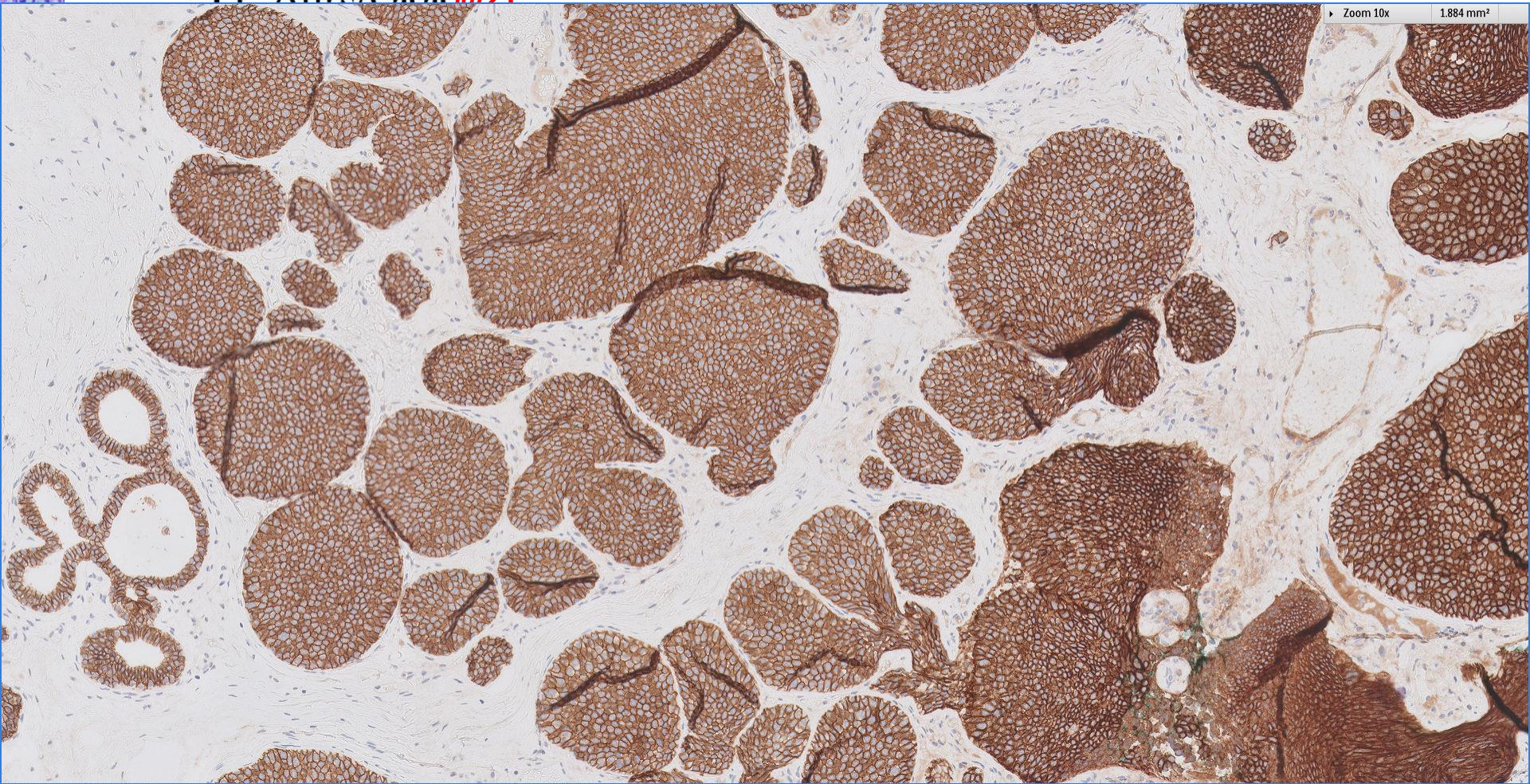




CK5/6

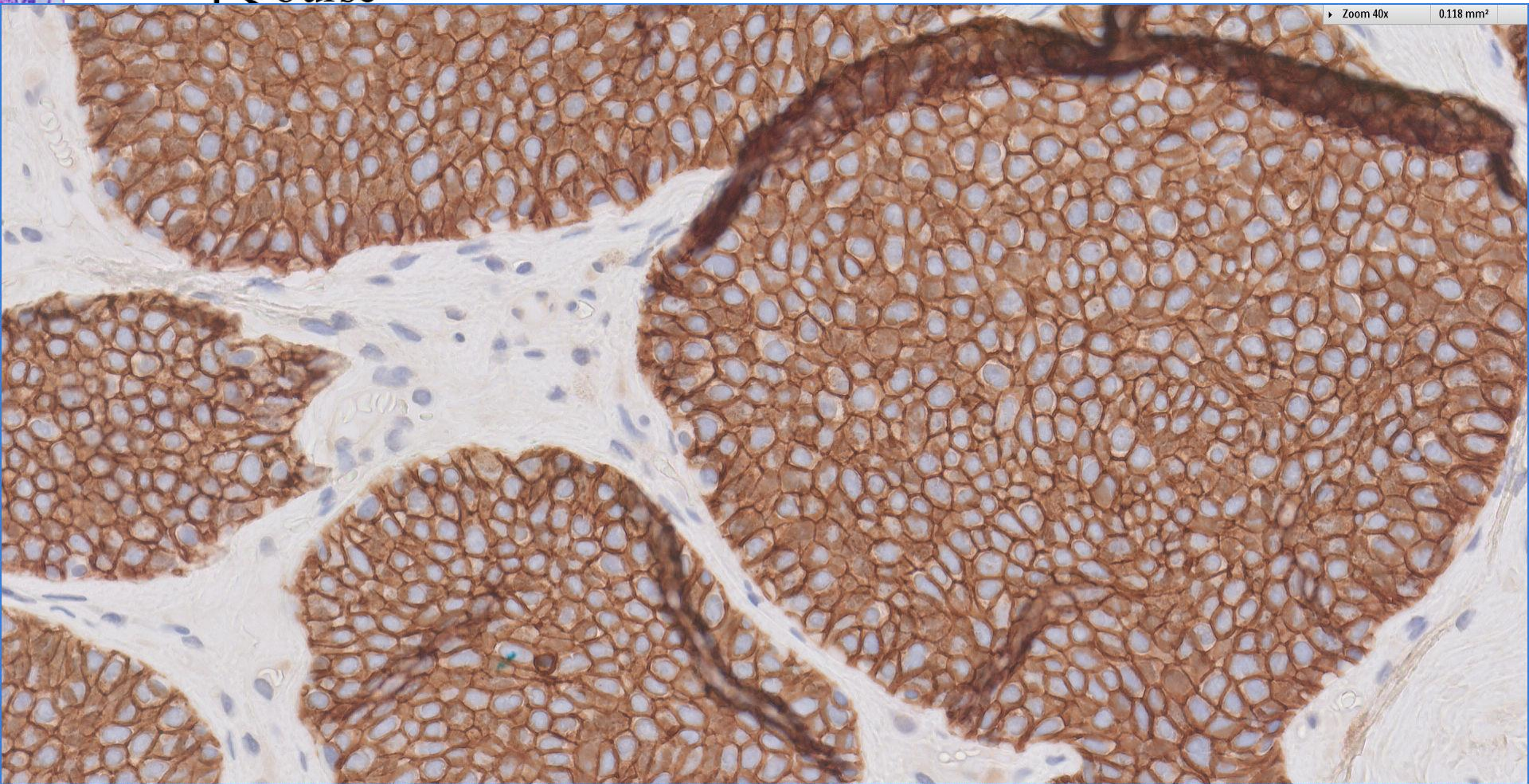








E-cadherin



Left breast inferior margin ~

- Low nuclear grade ductal carcinoma in situ, without necrosis or calcifications, 3.5mm



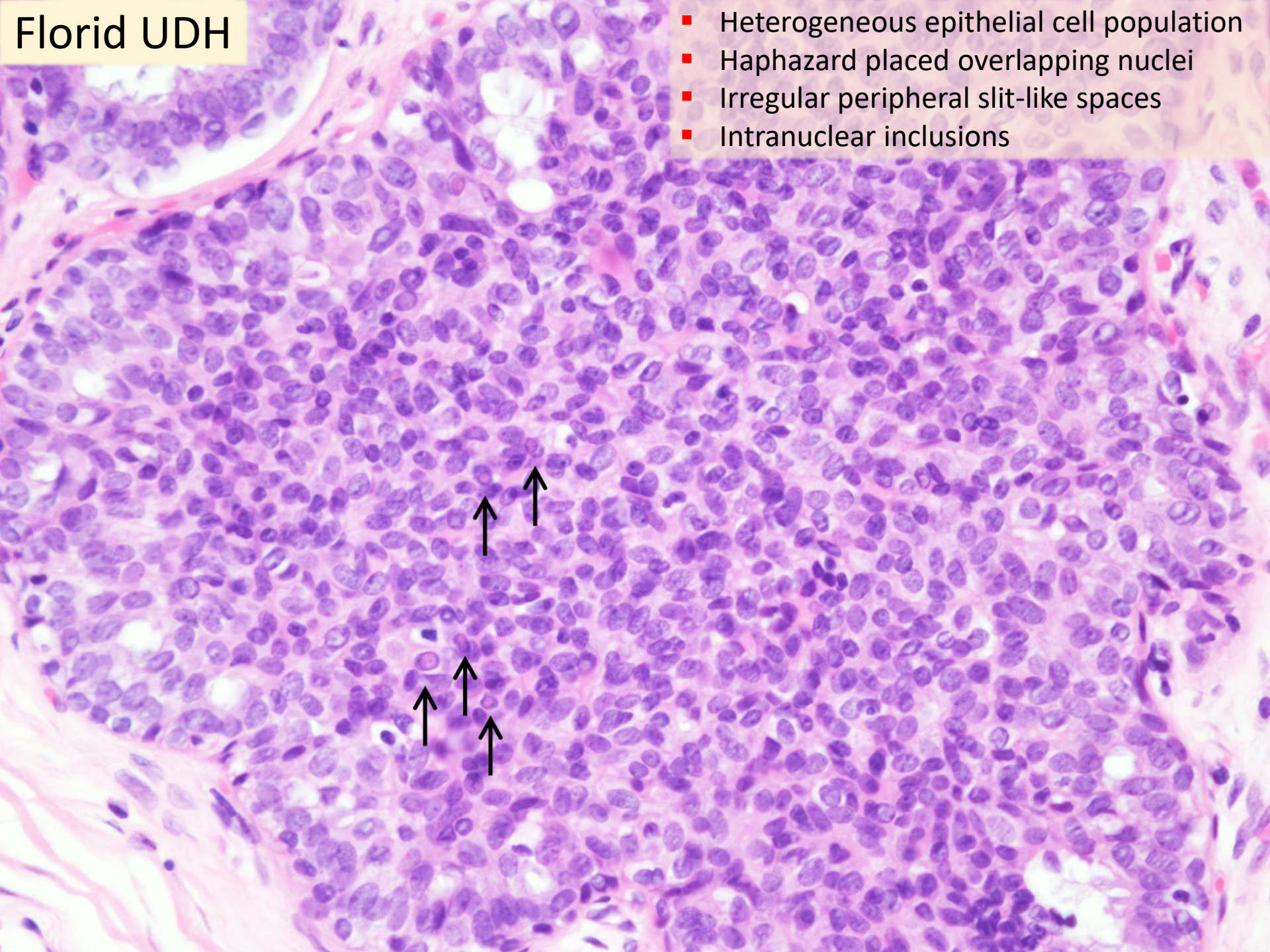
Differential diagnosis ~

- Florid usual ductal hyperplasia
- Lobular carcinoma in situ
- Solid papillary carcinoma in situ



Florid UDH

- Heterogeneous epithelial cell population
- Haphazard placed overlapping nuclei
- Irregular peripheral slit-like spaces
- Intranuclear inclusions

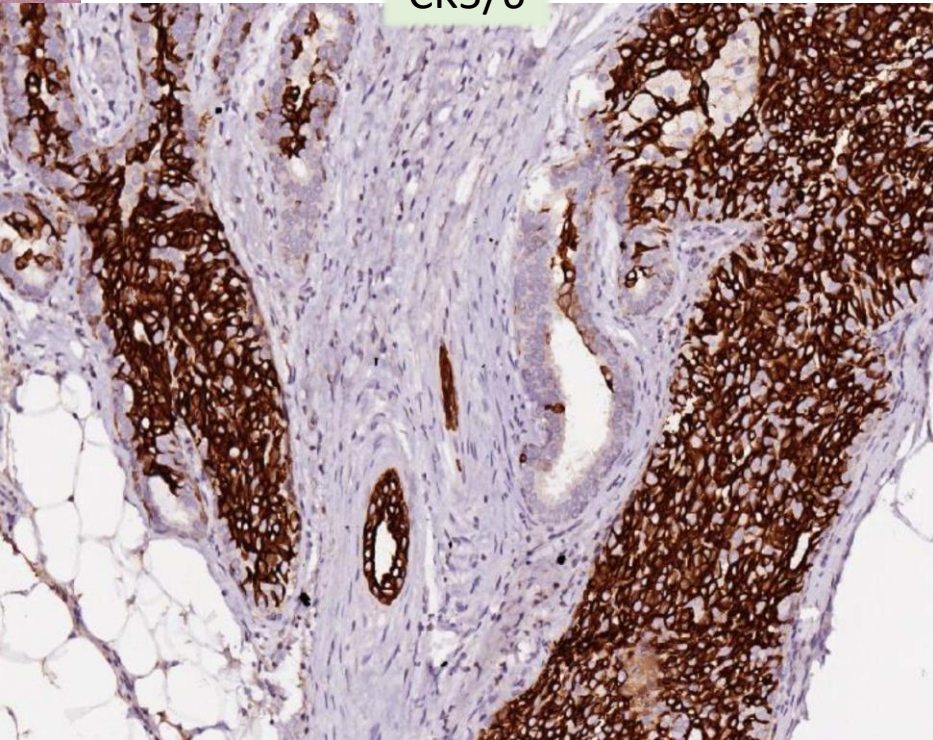


Florid UDH

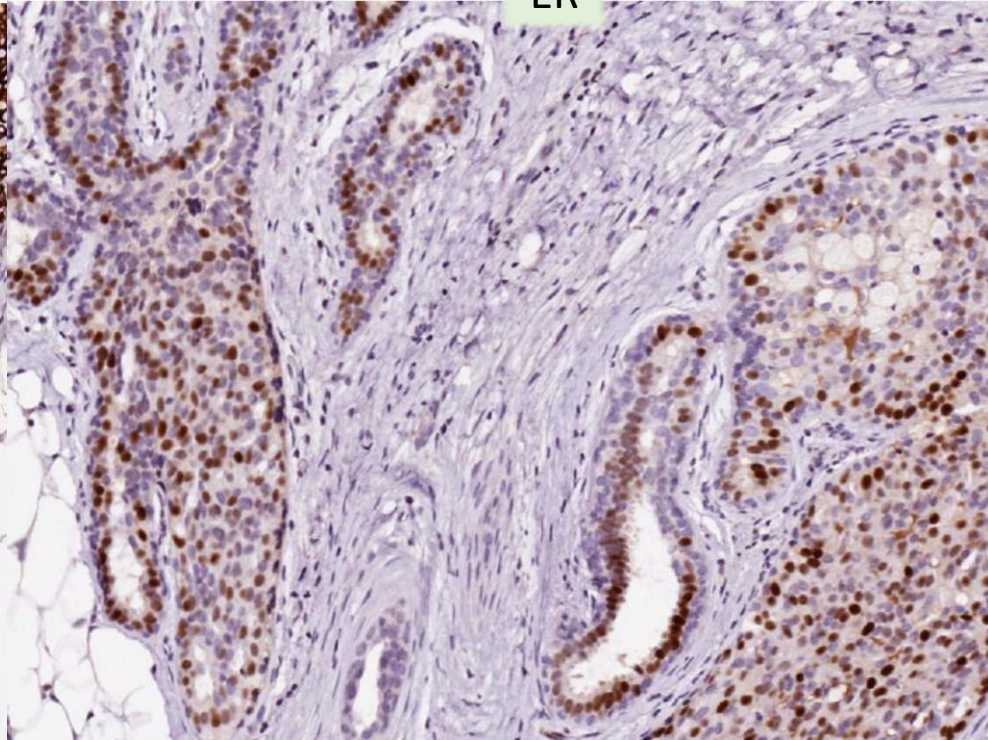


- Immunohistochemistry ~
CK5/6, CK14 show mosaic pattern of staining
ER shows patchy heterogeneous staining

CK5/6

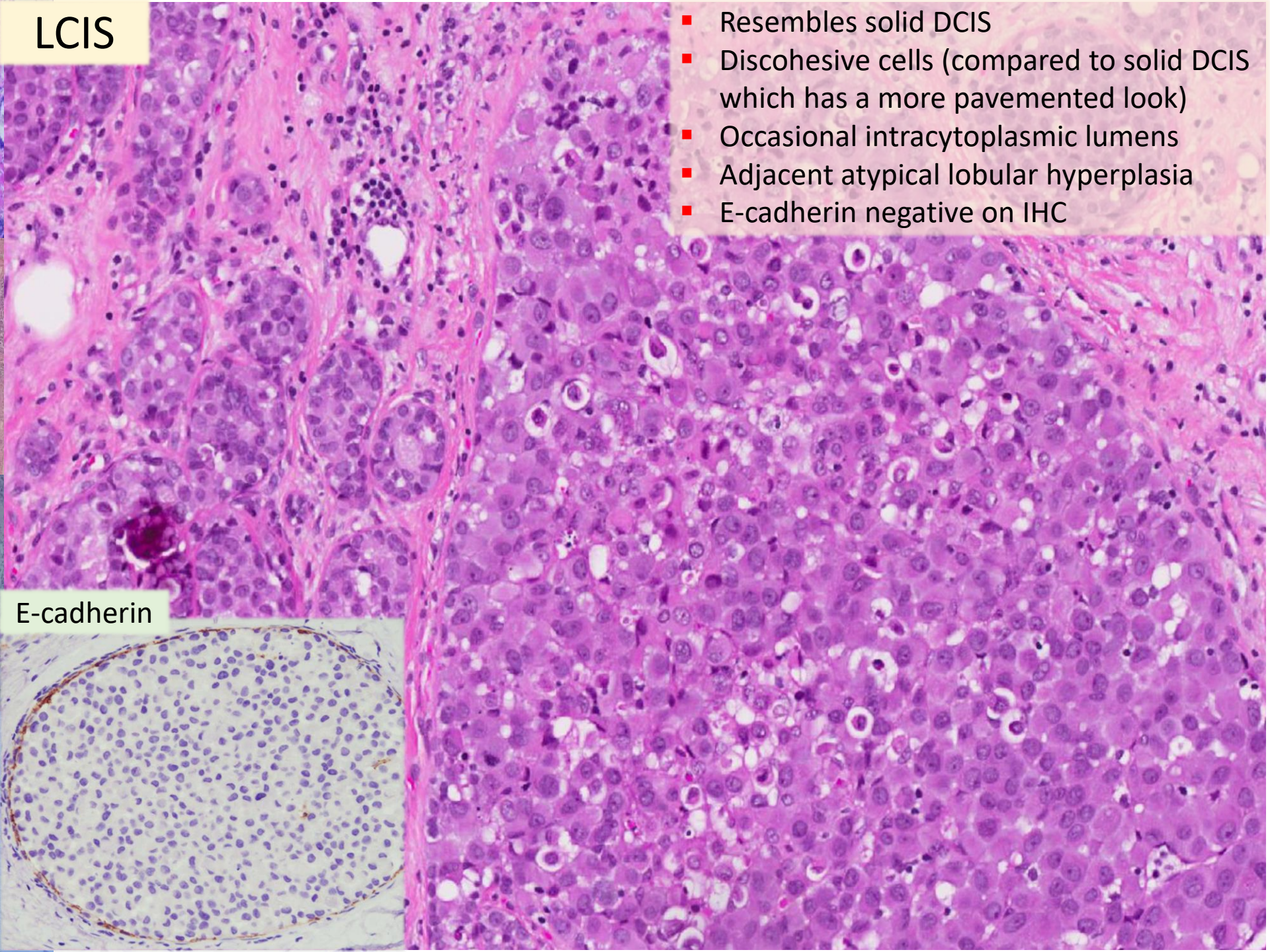
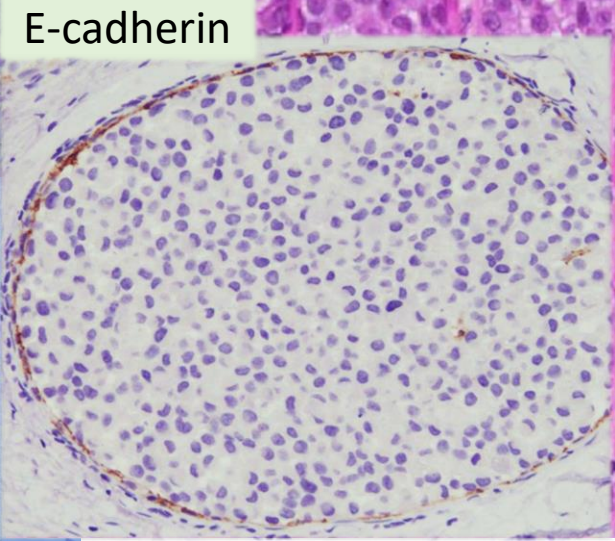


ER



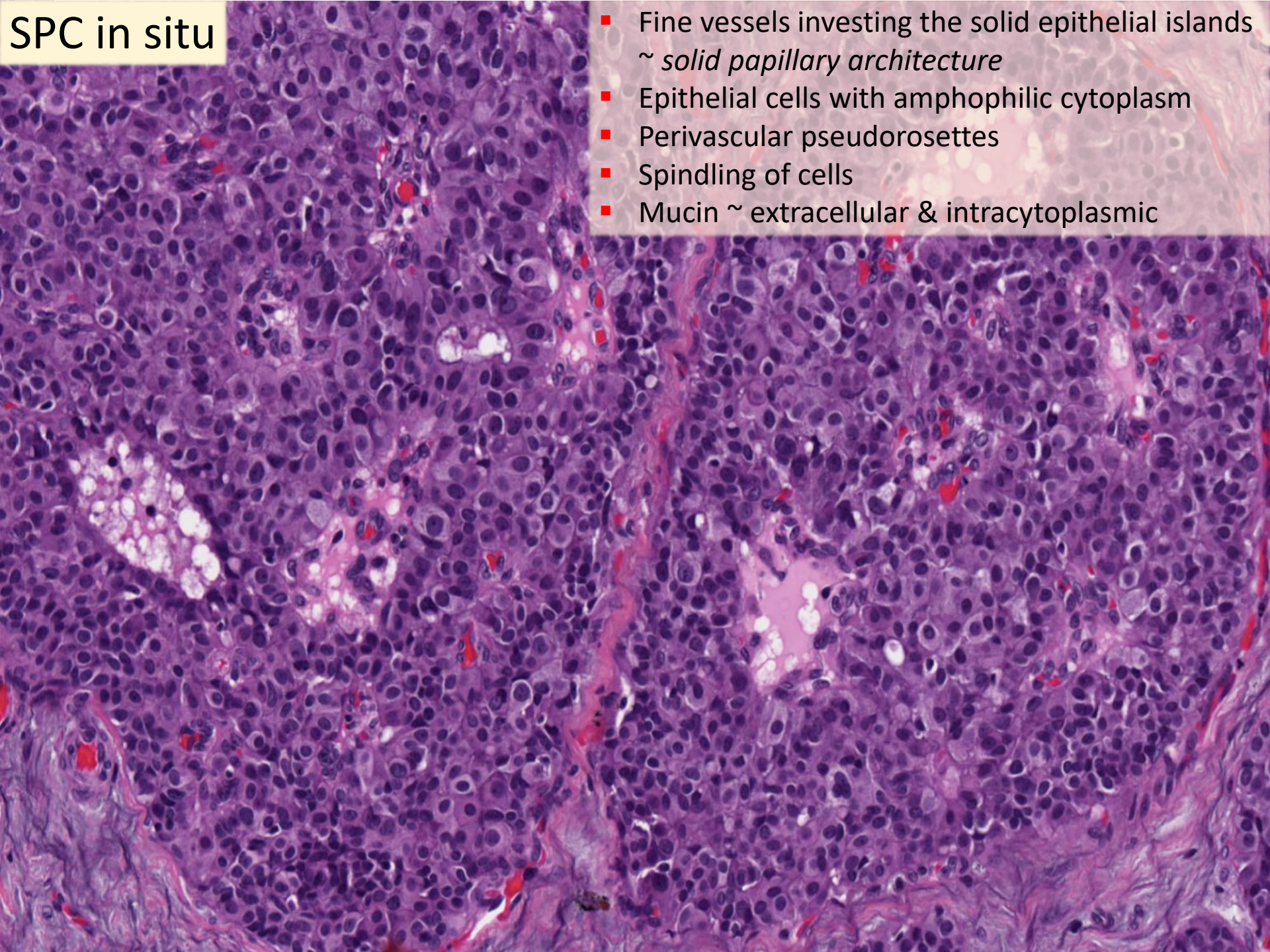
LCIS

- Resembles solid DCIS
- Discohesive cells (compared to solid DCIS which has a more paved look)
- Occasional intracytoplasmic lumens
- Adjacent atypical lobular hyperplasia
- E-cadherin negative on IHC



SPC in situ

- Fine vessels investing the solid epithelial islands ~ *solid papillary architecture*
- Epithelial cells with amphophilic cytoplasm
- Perivascular pseudorosettes
- Spindling of cells
- Mucin ~ extracellular & intracytoplasmic



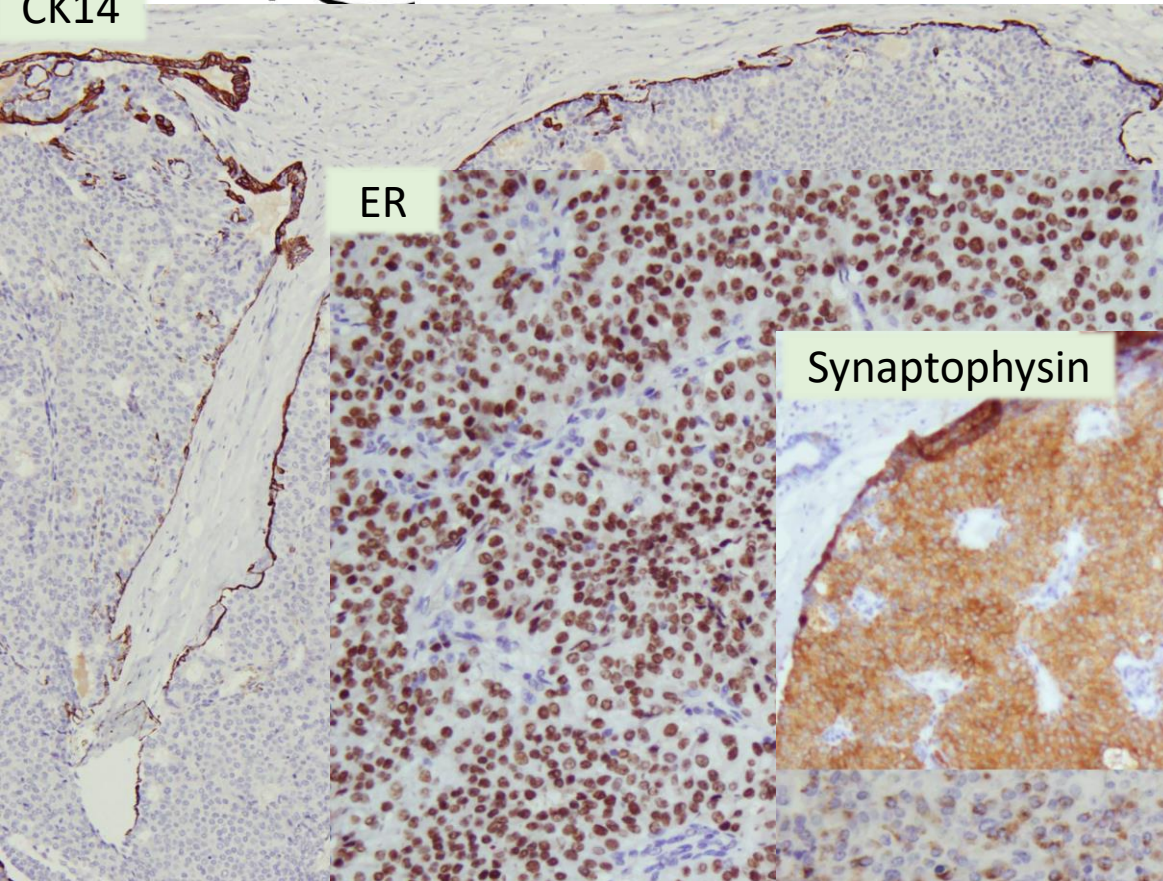
SPC in situ



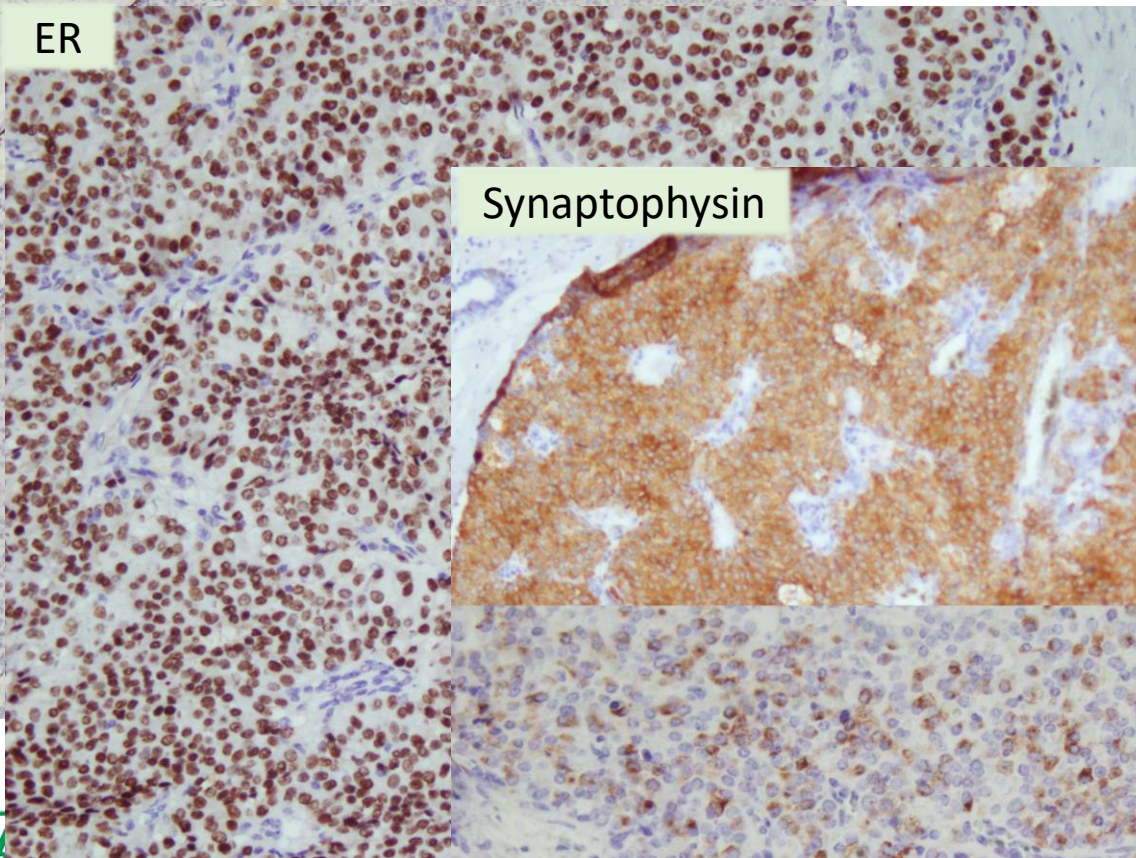
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- Immunohistochemistry ~
Diminished/negative staining for CK5/6, CK14
Diffuse & uniform ER reactivity
Frequent neuroendocrine expression

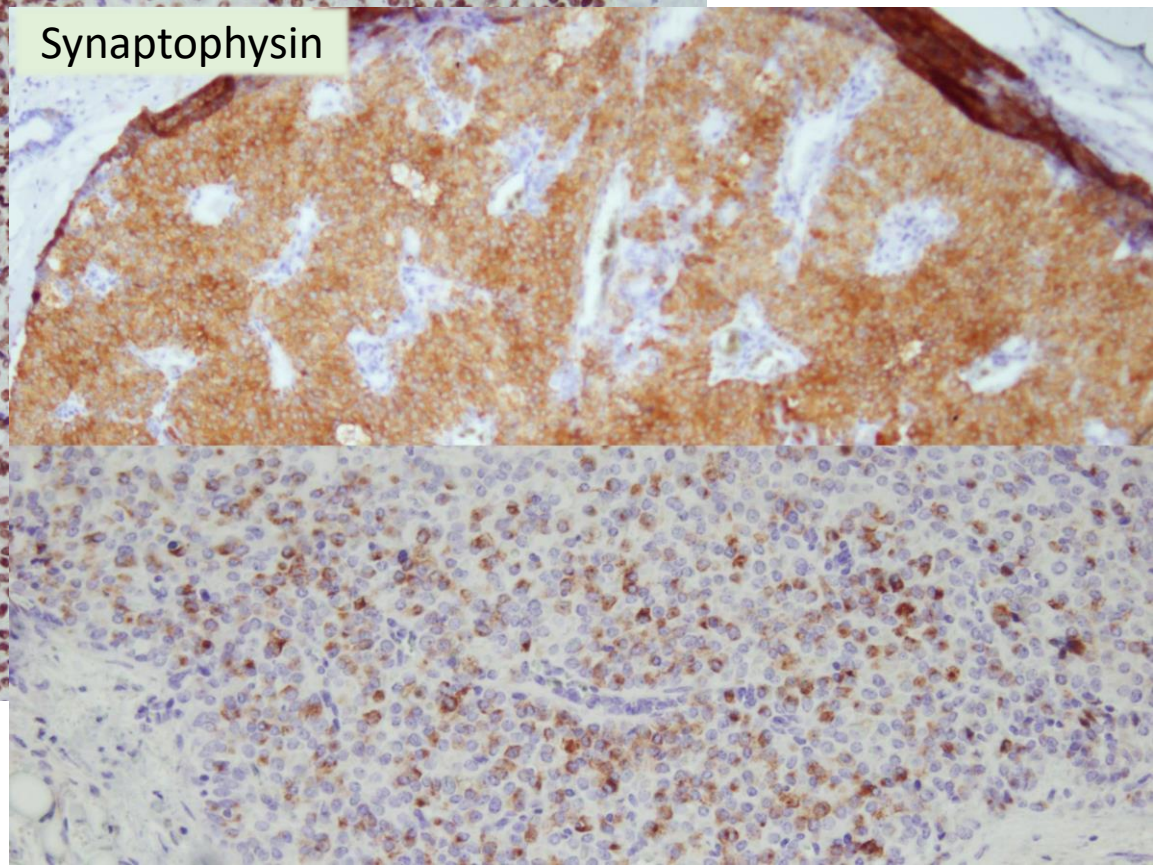
CK14



ER



Synaptophysin



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Solid epithelial proliferations ~ differential diagnosis

Histological feature	Florid UDH	Solid DCIS	LCIS	SPC in situ
Epithelial population	<ul style="list-style-type: none"> Heterogeneous Haphazardly placed, overlapped nuclei Irregular slit-like spaces May have intranuclear inclusions 	<ul style="list-style-type: none"> Monotonous epithelial population Pavemented appearance May show focal luminal differentiation with epithelial polarisation Associated with other morphological patterns of DCIS 	<ul style="list-style-type: none"> Discohesive cells (compared to solid DCIS which has a more pavemented look) Occasional intracytoplasmic lumens Adjacent atypical lobular hyperplasia 	<ul style="list-style-type: none"> Fine vessels investing the solid epithelial islands ~ solid papillary architecture Epithelial cells with amphophilic cytoplasm Perivascular pseudorosettes Spindling of cells Mucin ~ extracellular & intracytoplasmic
IHC	<ul style="list-style-type: none"> CK5/6, CK14 shows mosaic pattern of staining ER shows patchy heterogeneous reactivity 	<ul style="list-style-type: none"> Diffuse ER positivity Diminished or negative staining for CK5/6 and CK14 E-cadherin shows cytoplasmic membrane staining 	<ul style="list-style-type: none"> Diffuse ER positivity Diminished or negative staining for CK5/6 and CK14 E-cadherin negative 	<ul style="list-style-type: none"> Diminished or negative staining for CK5/6, CK14 Diffuse & uniform ER reactivity Frequent neuroendocrine expression
Others	UDH in adjacent lobules	Other morphological patterns of DCIS	Associated low grade lesions ~ ALH, FEA	May be associated with papillary structures



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Thank You



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