

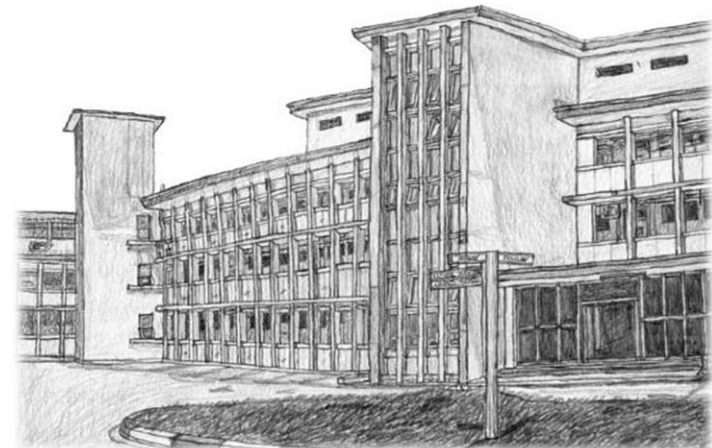
Case 36

67 year old female.

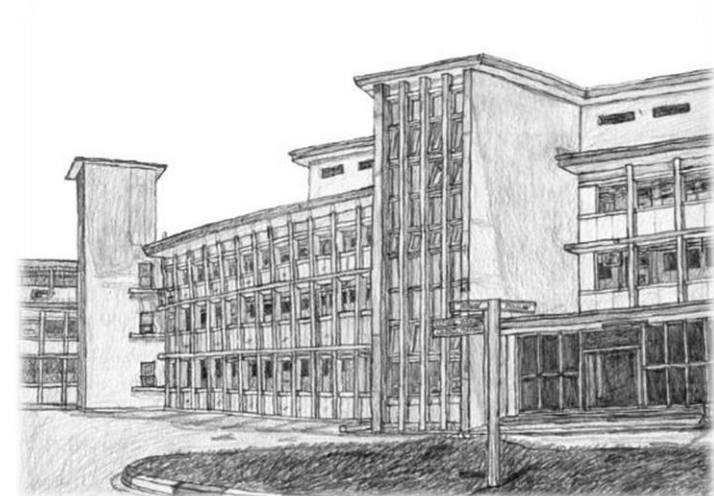
Right breast trucut biopsies.

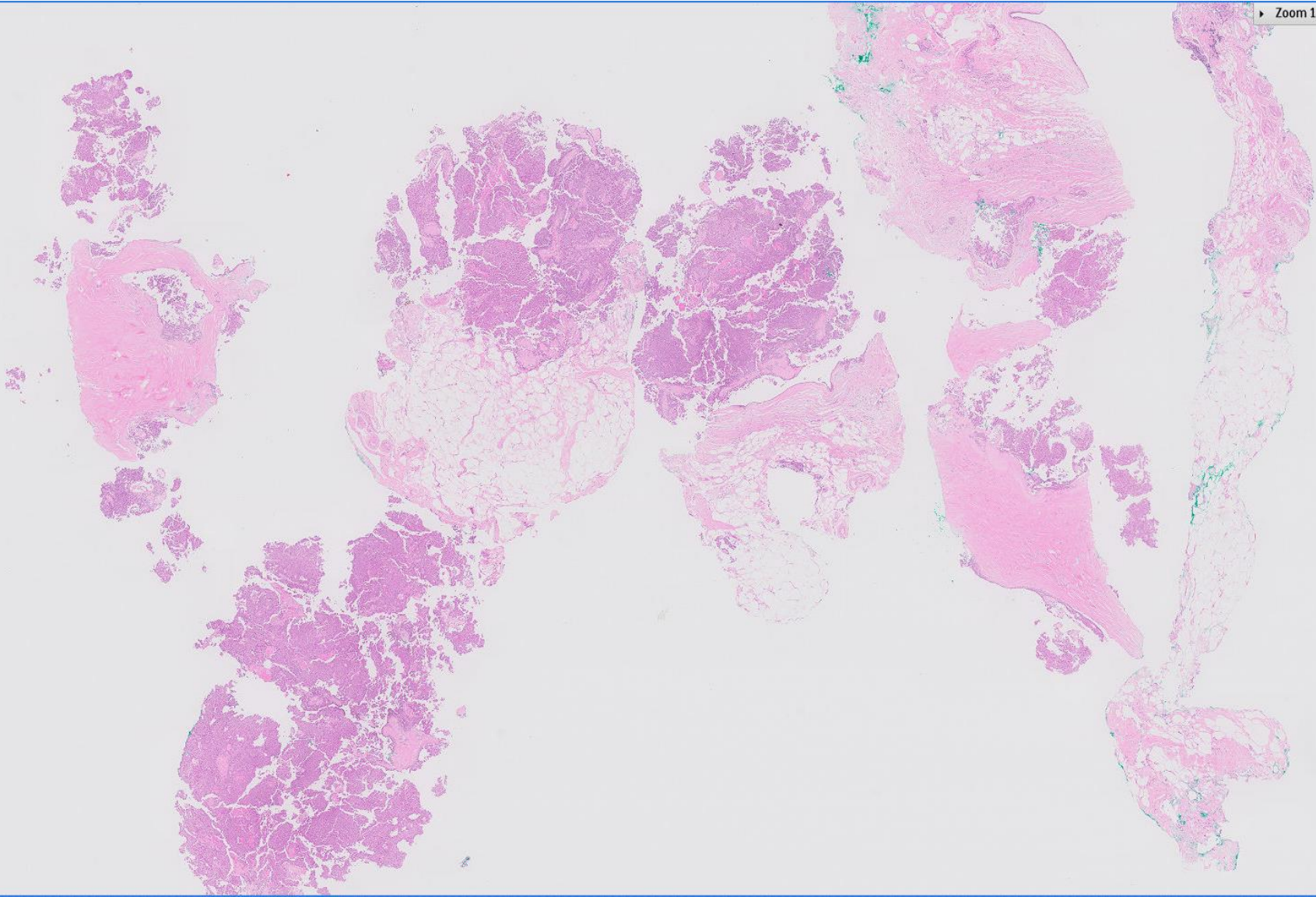
(A) 3 o'clock, 3cm from nipple.

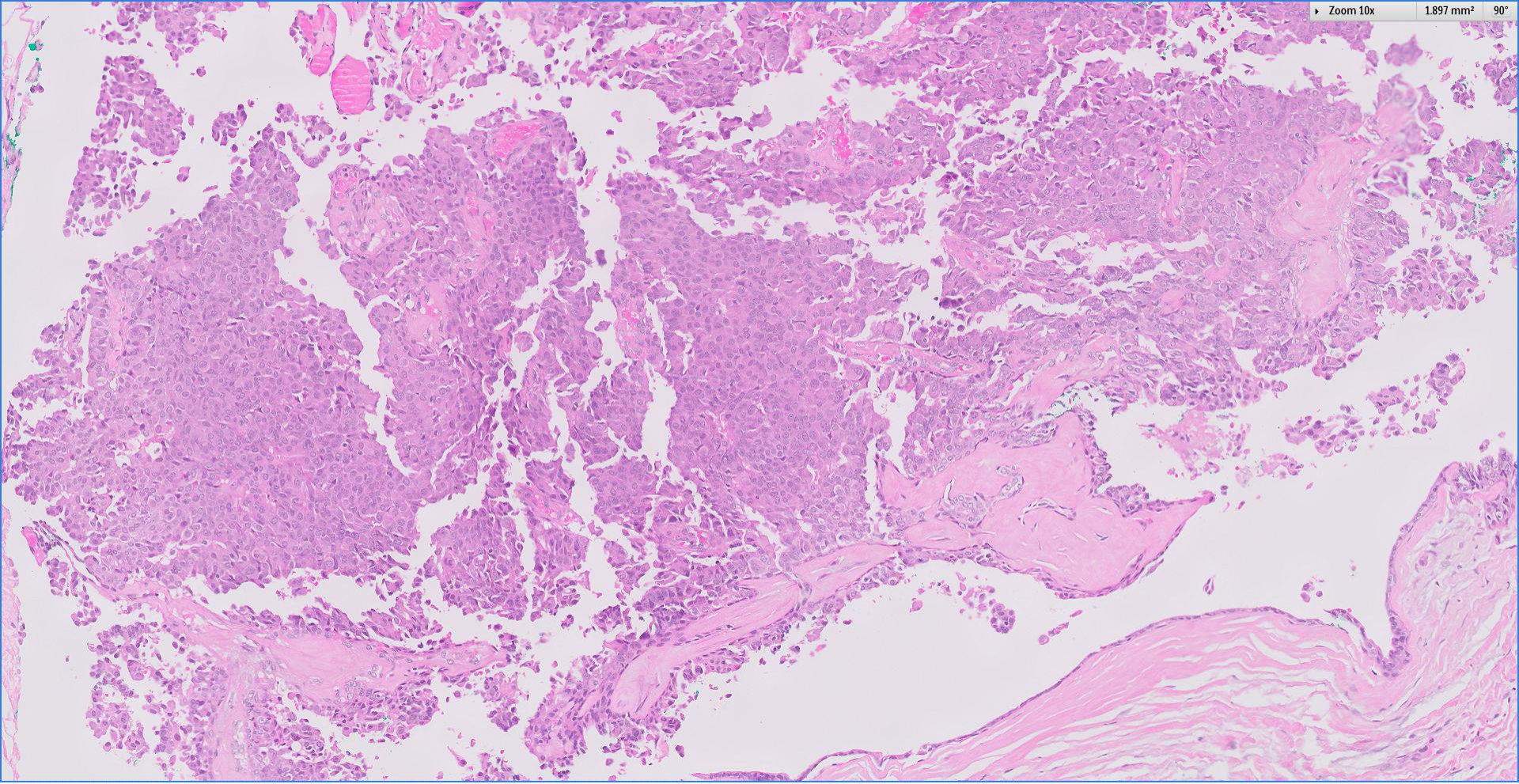
(B) 3 o'clock, 5cm from nipple.

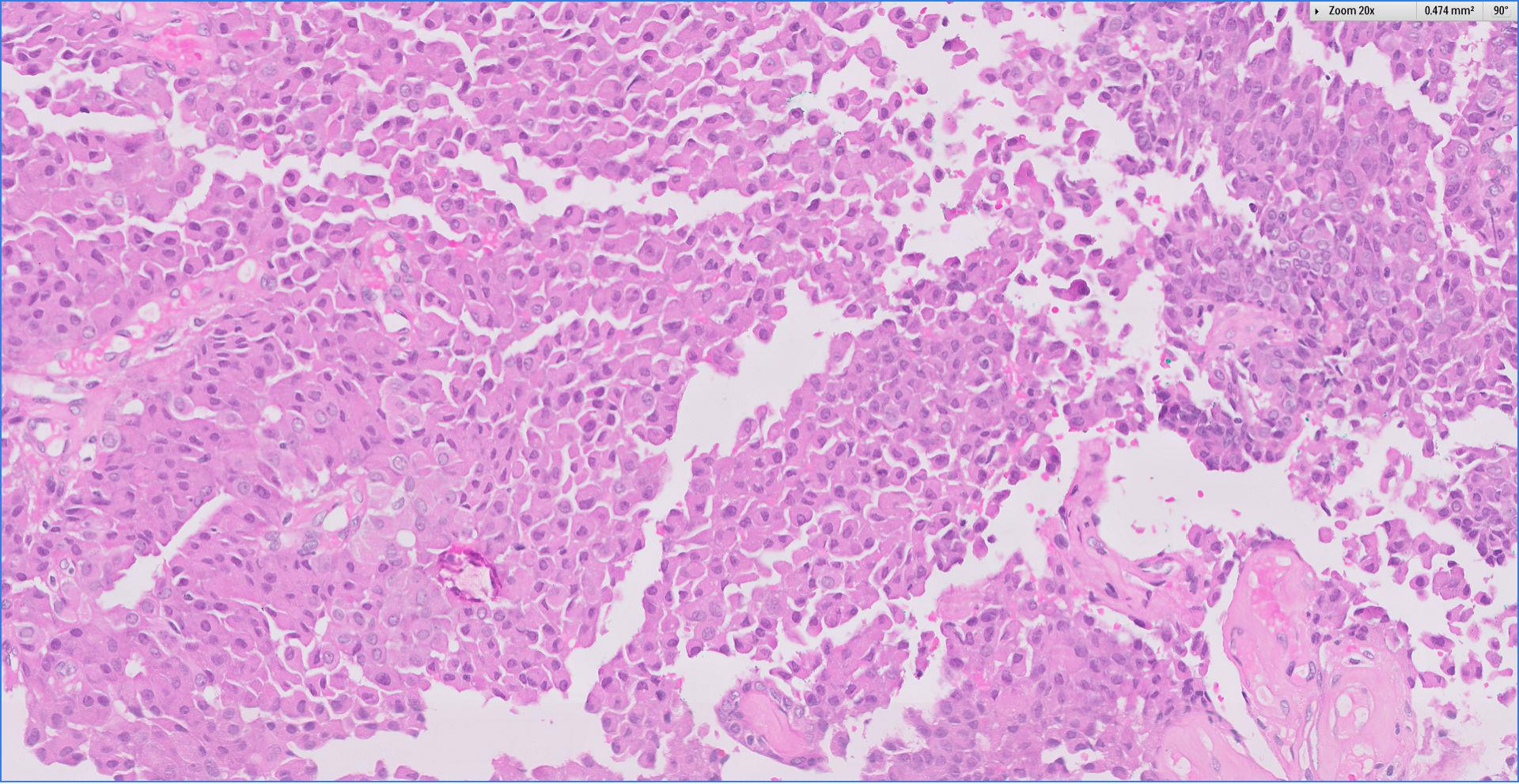


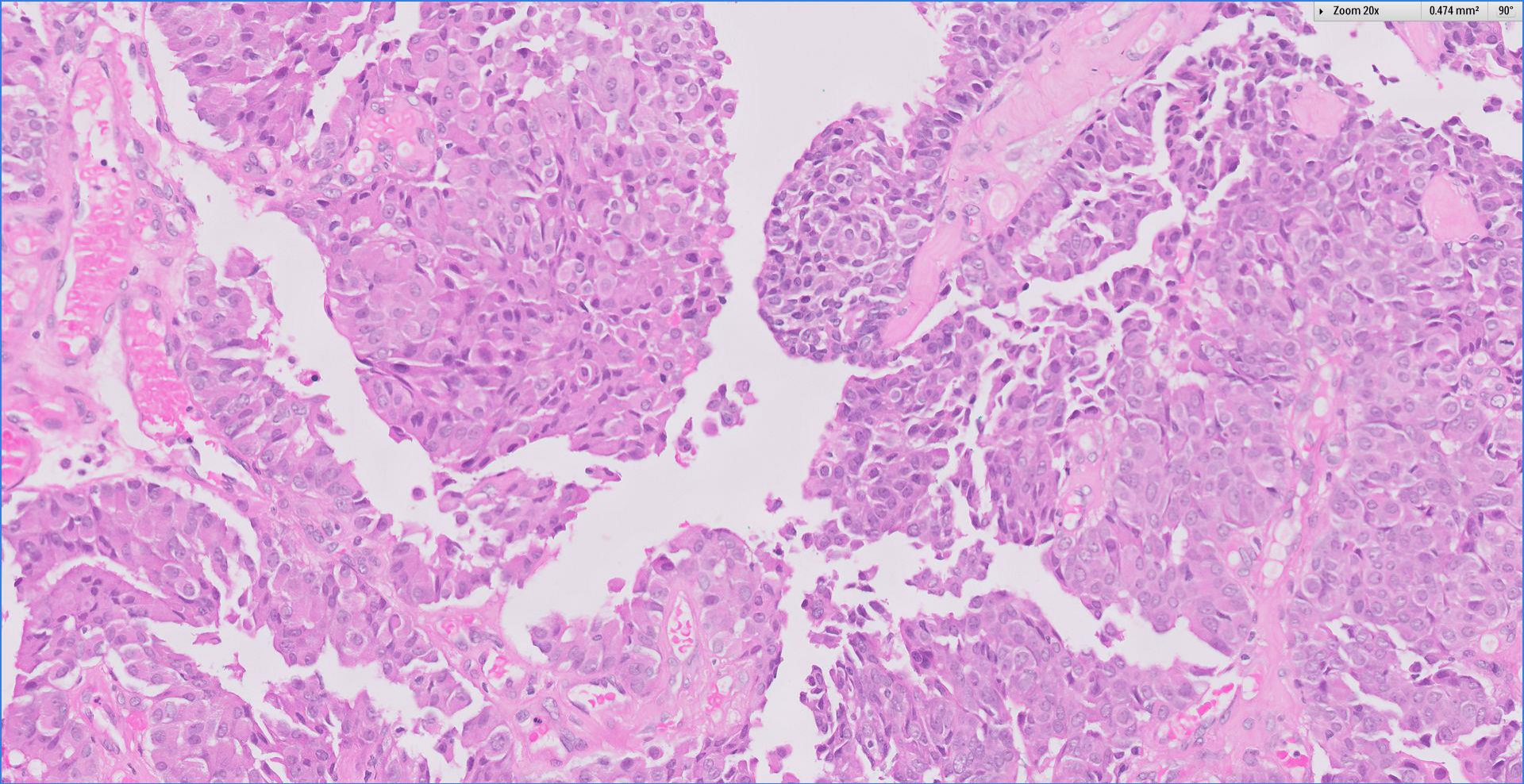
Section (A).



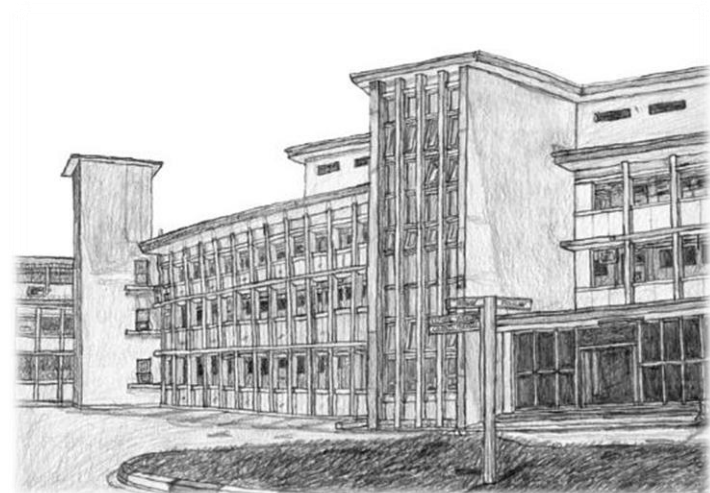


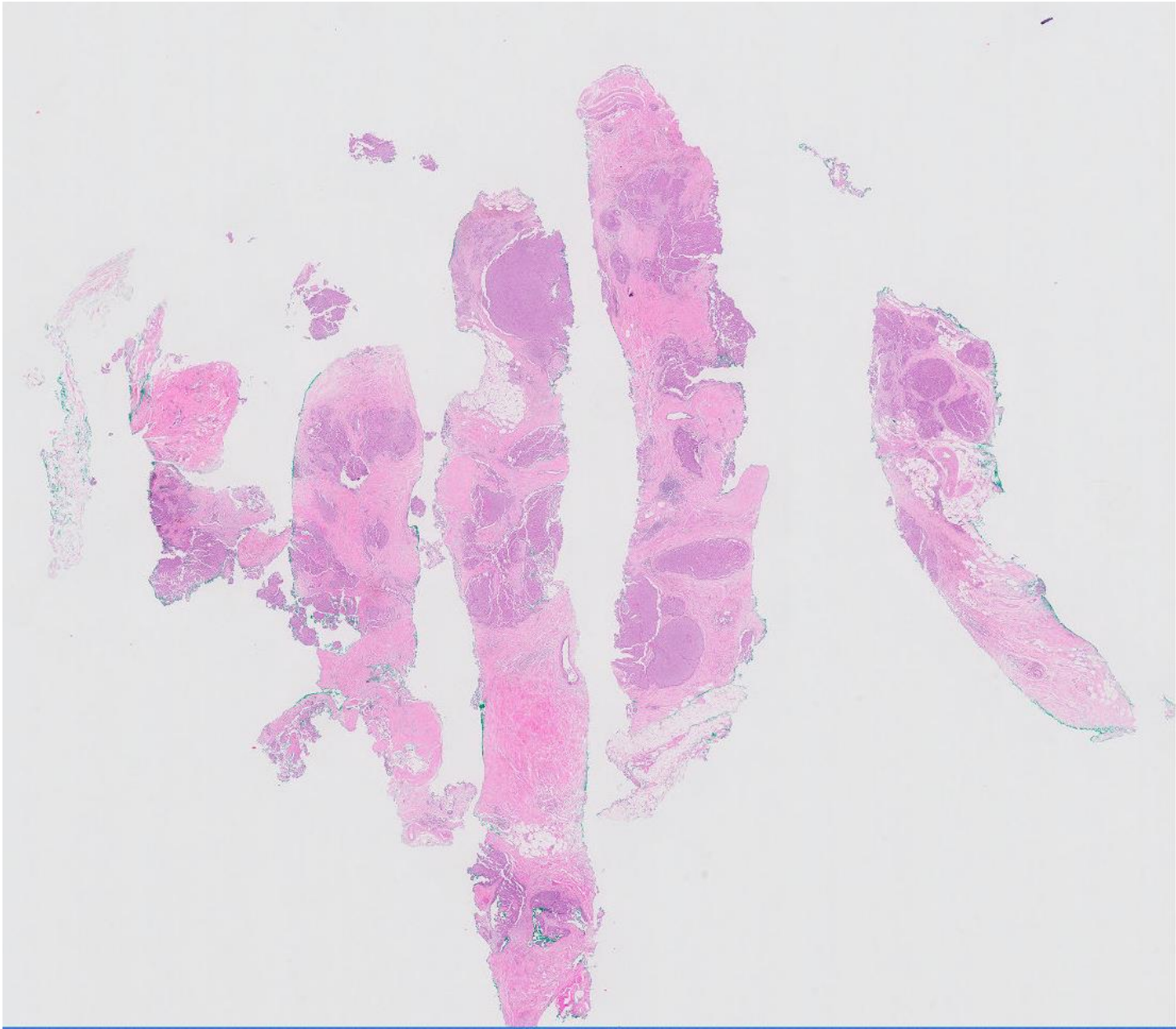






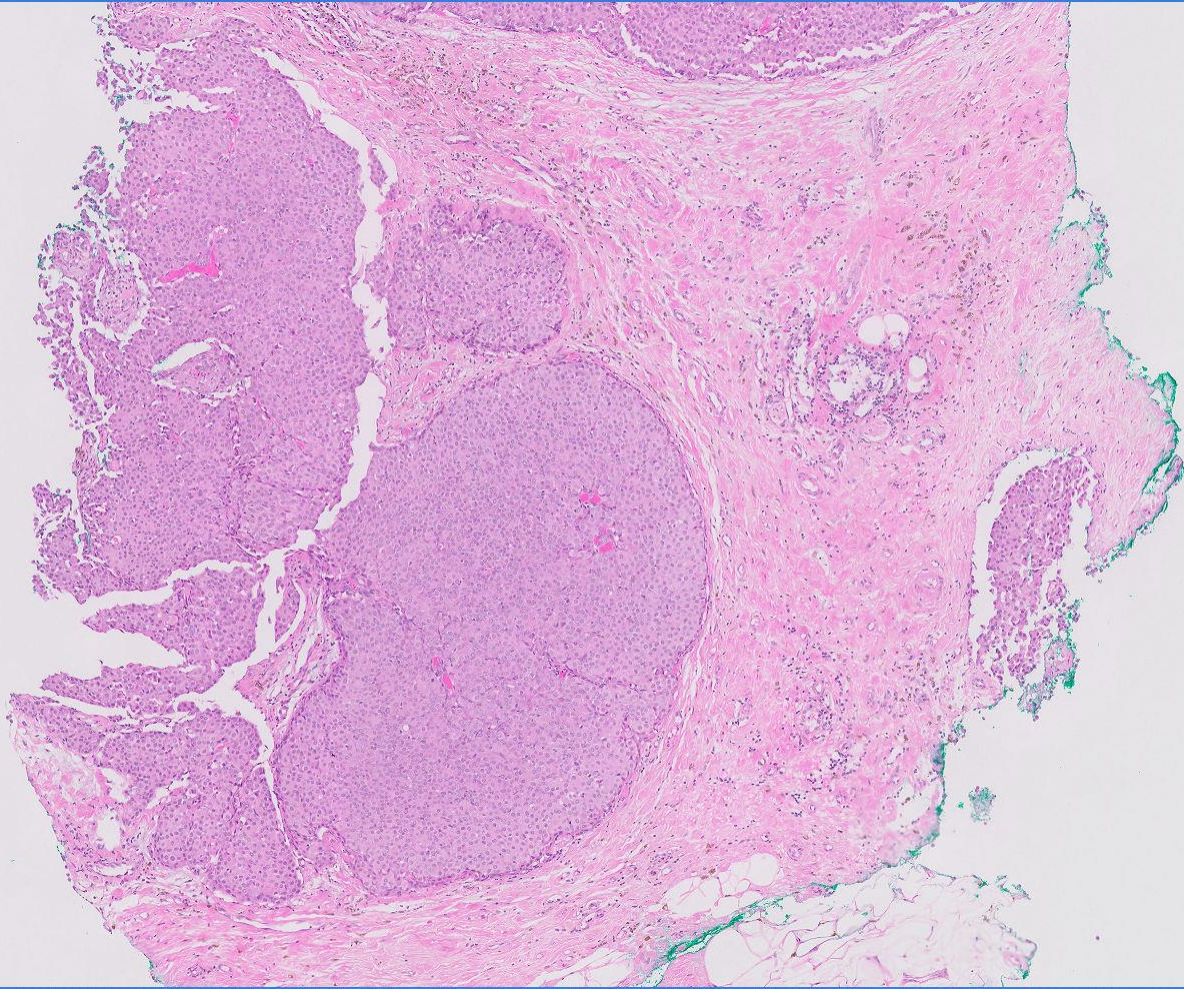
Section (B).





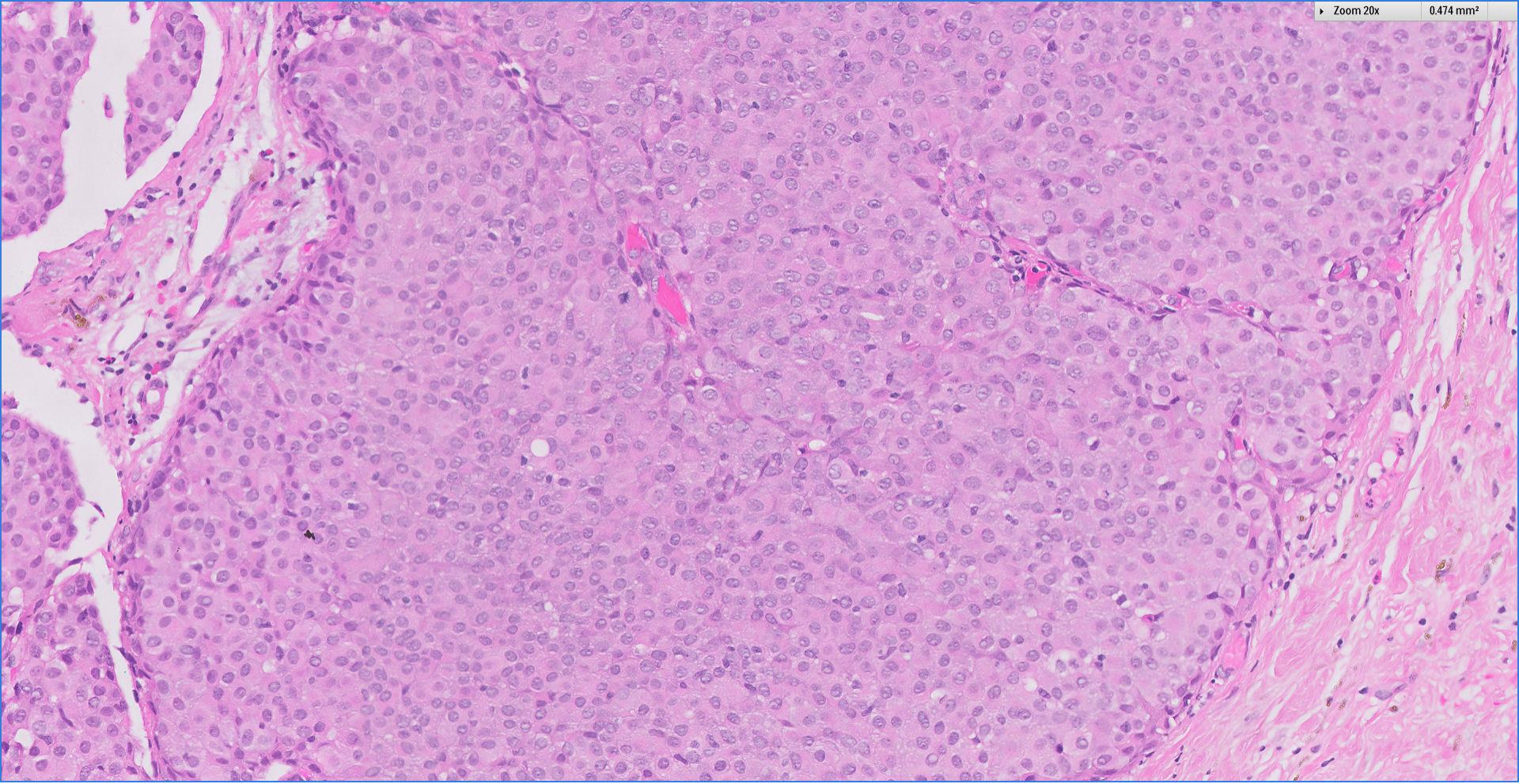
► Zoom 5x

7.588 mm²



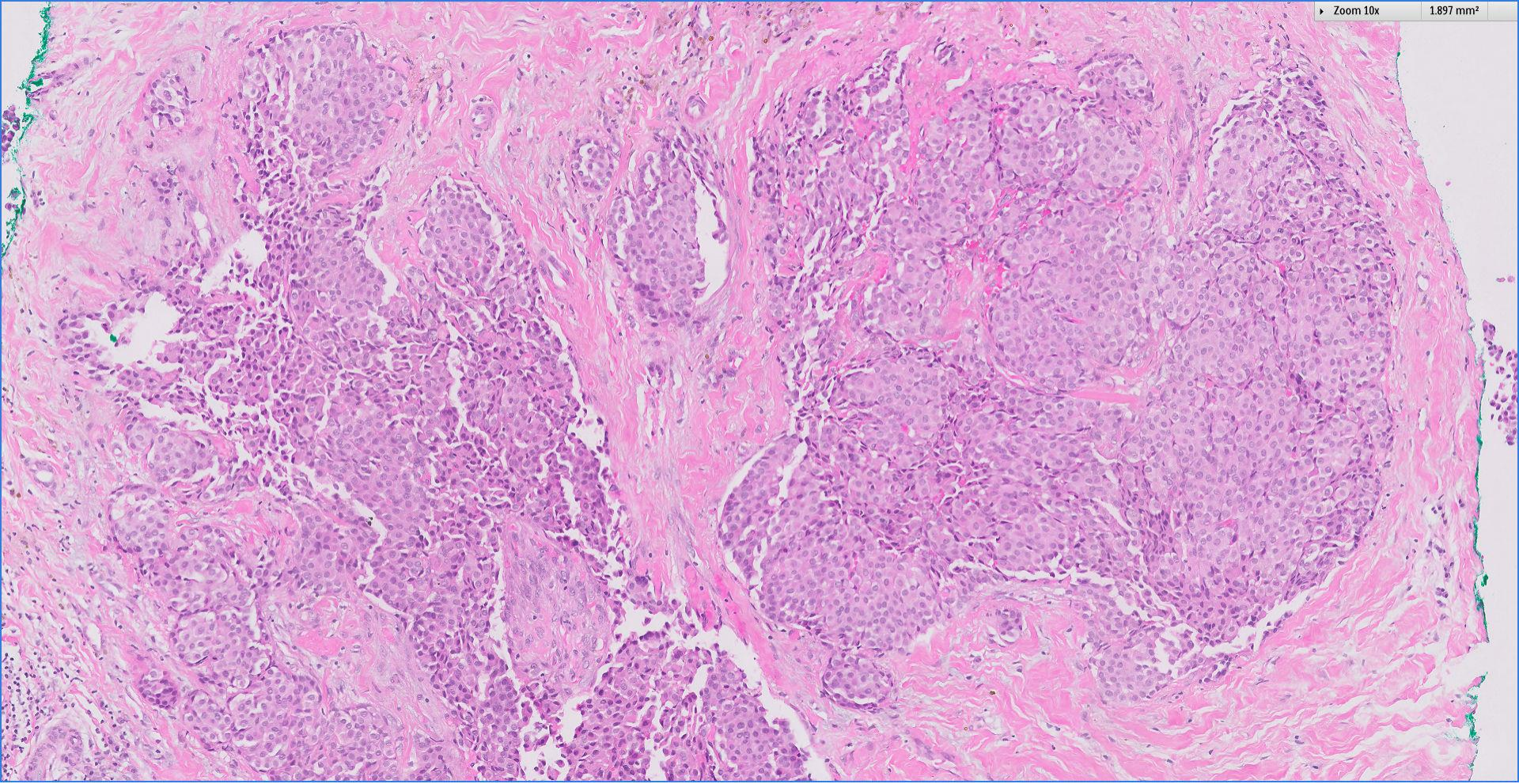
Zoom 20x

0.474 mm²



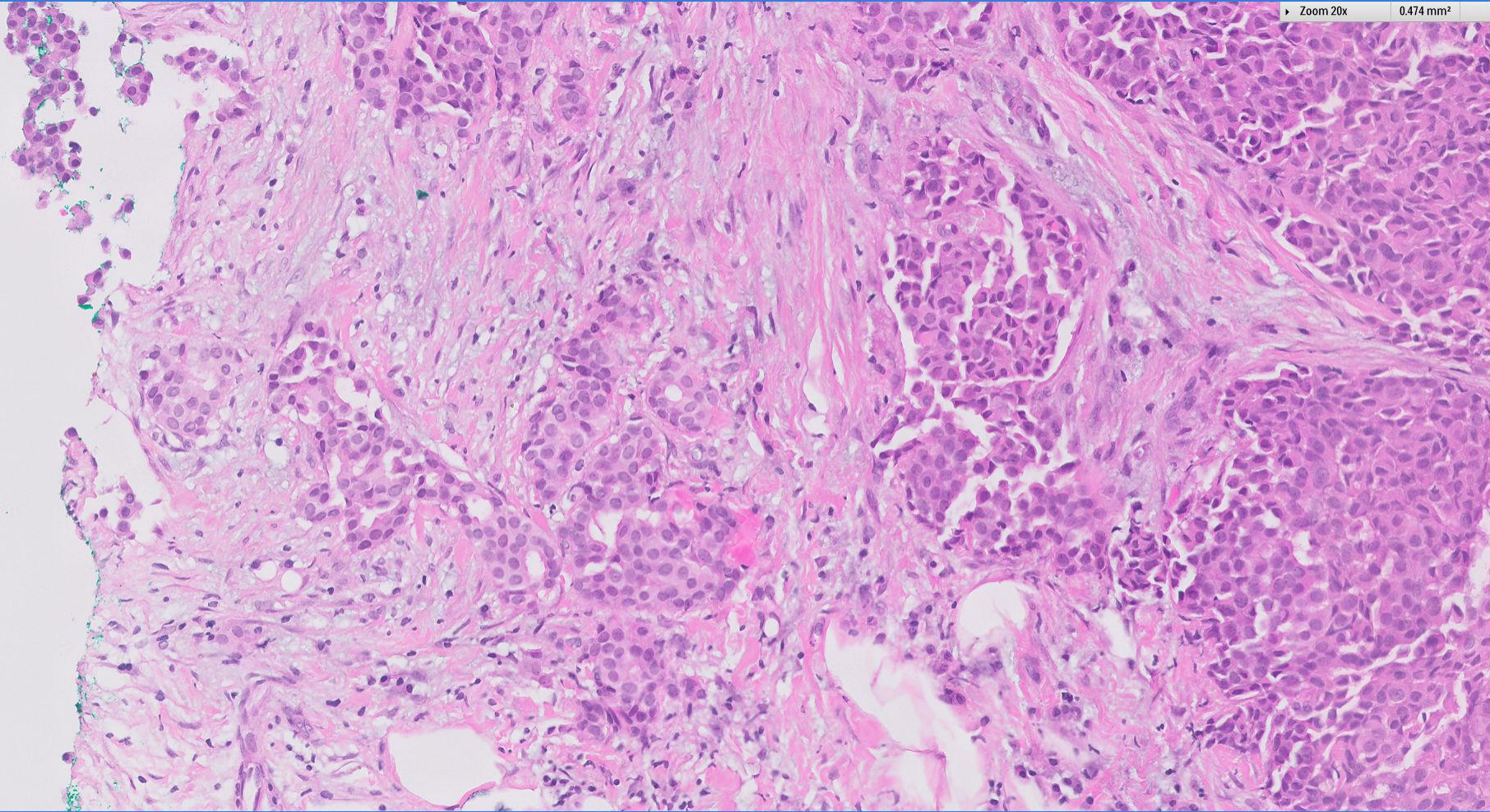
Zoom 10x

1.897 mm²

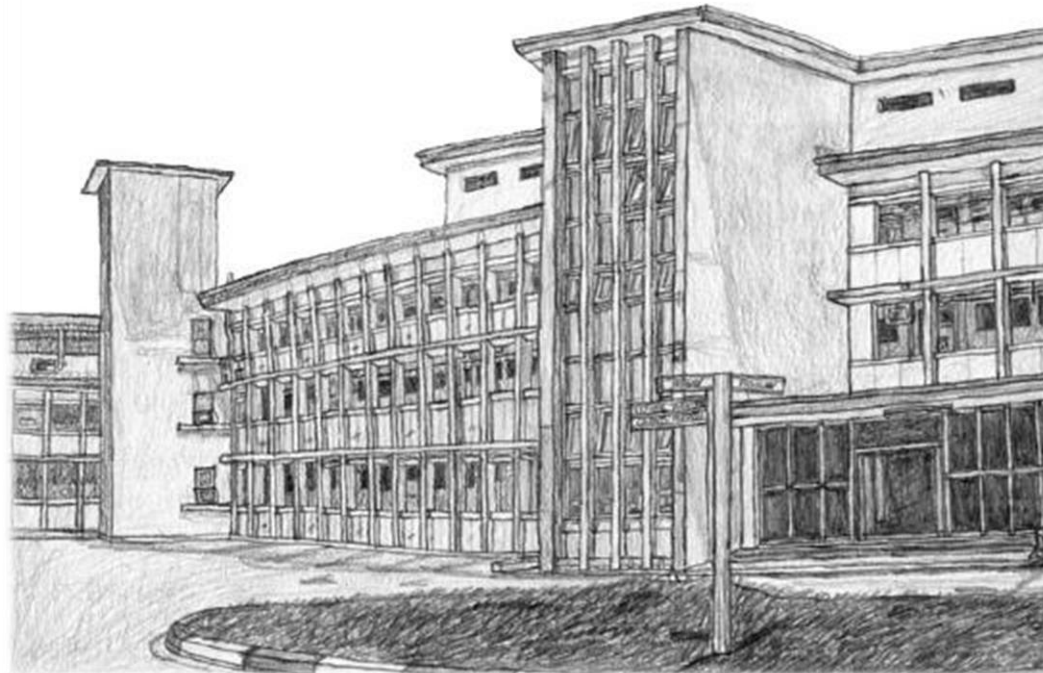


Zoom 20x

0.474 mm²



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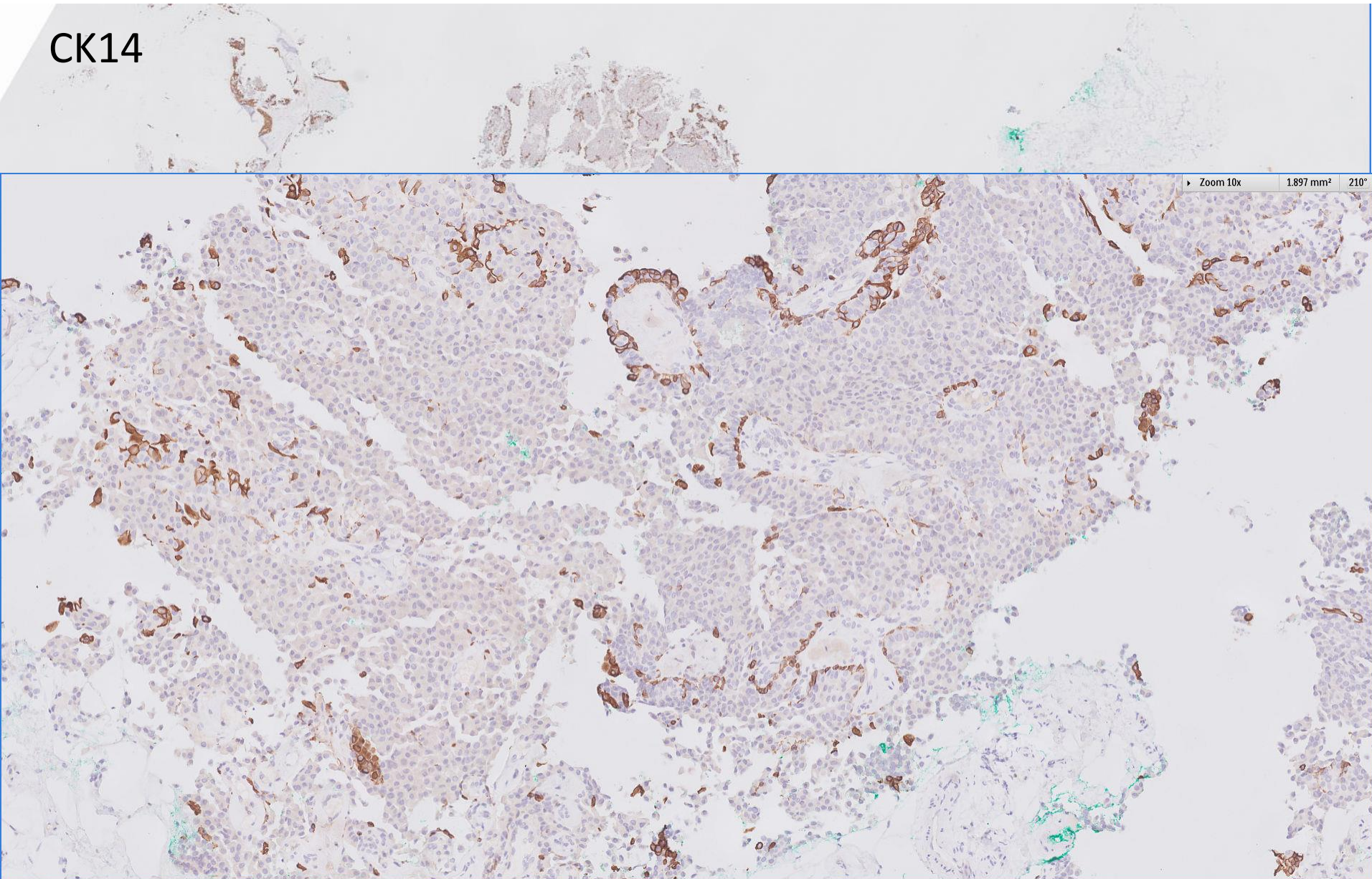
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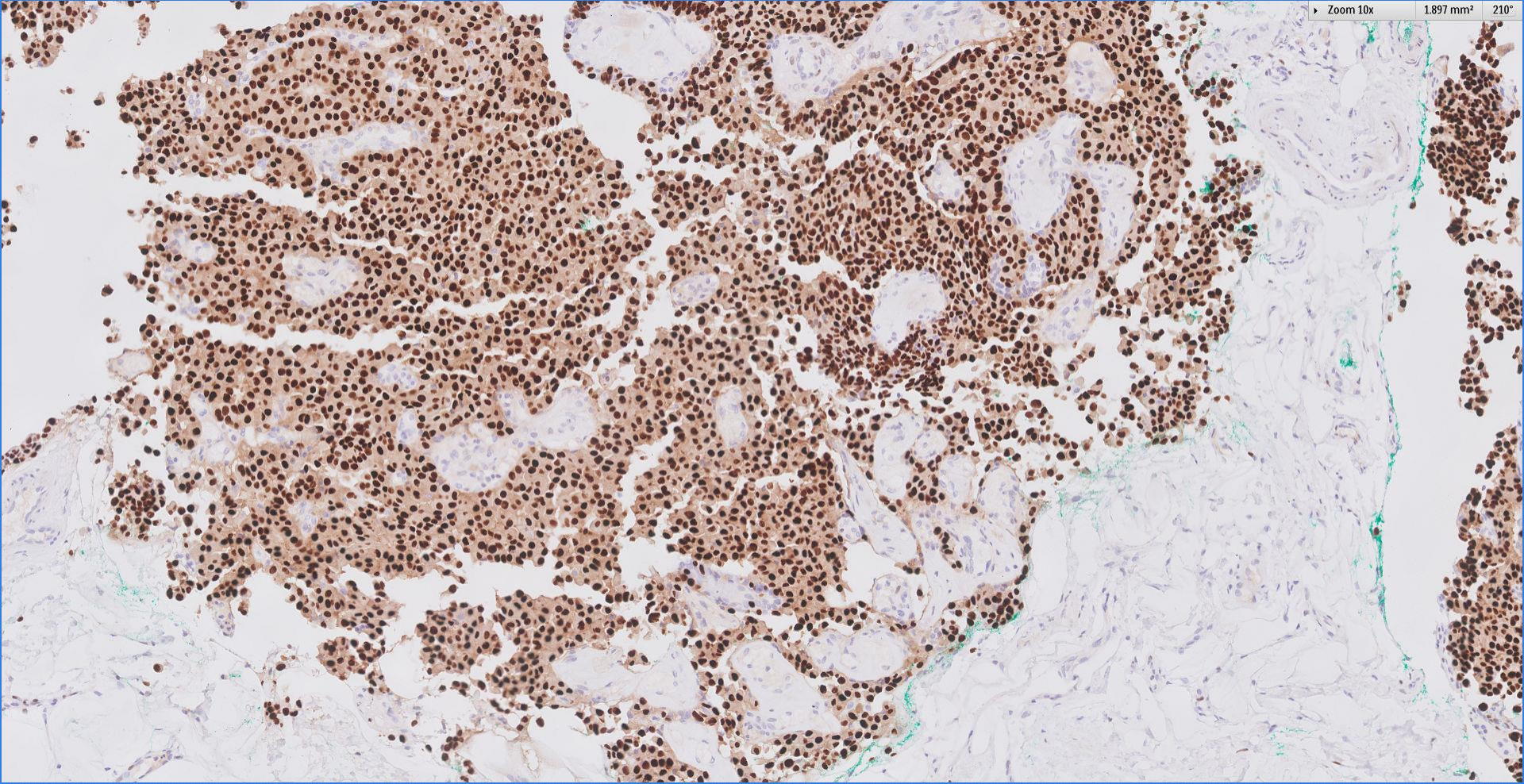
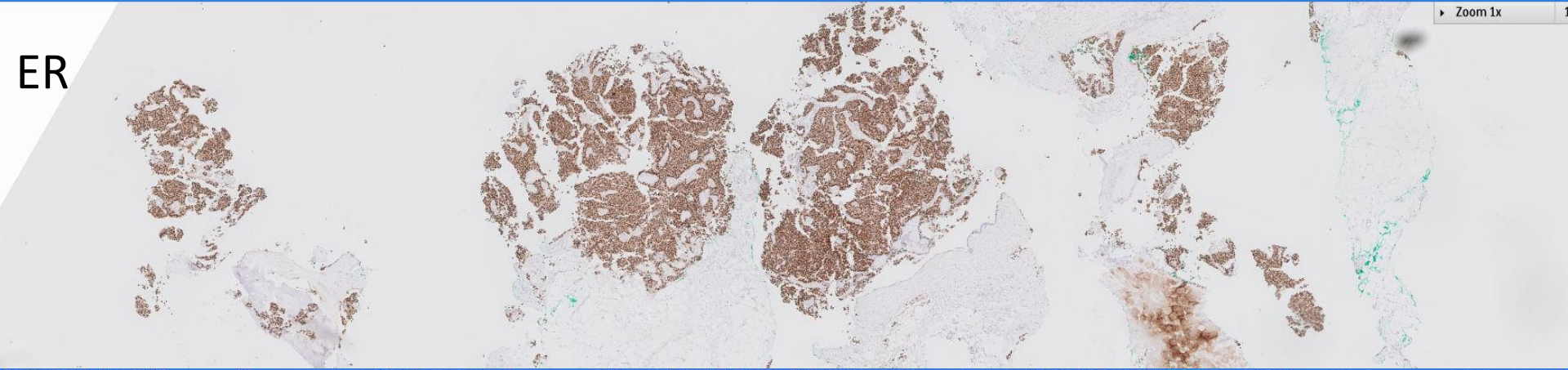


Specimen (A)

CK14

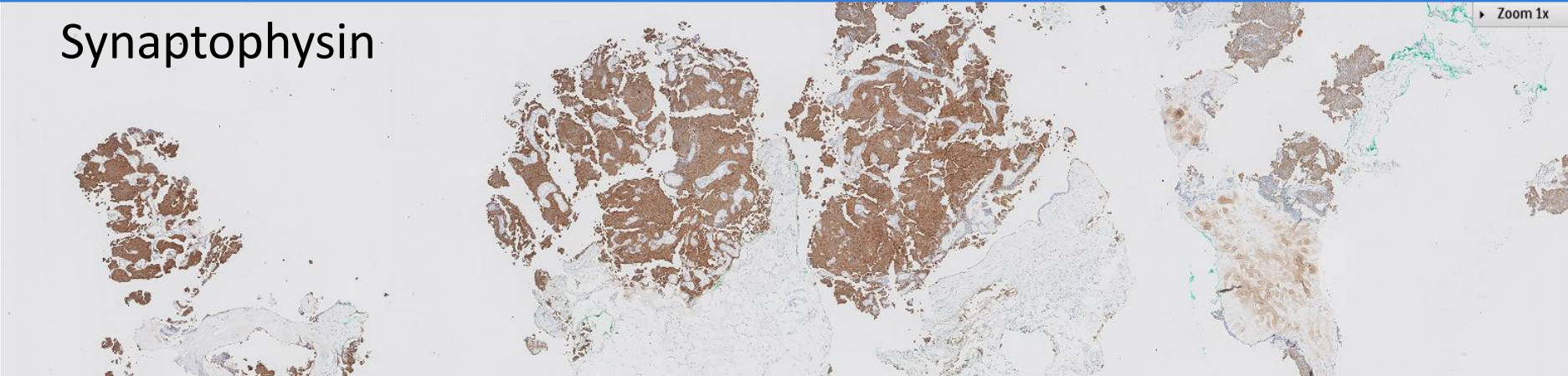


ER



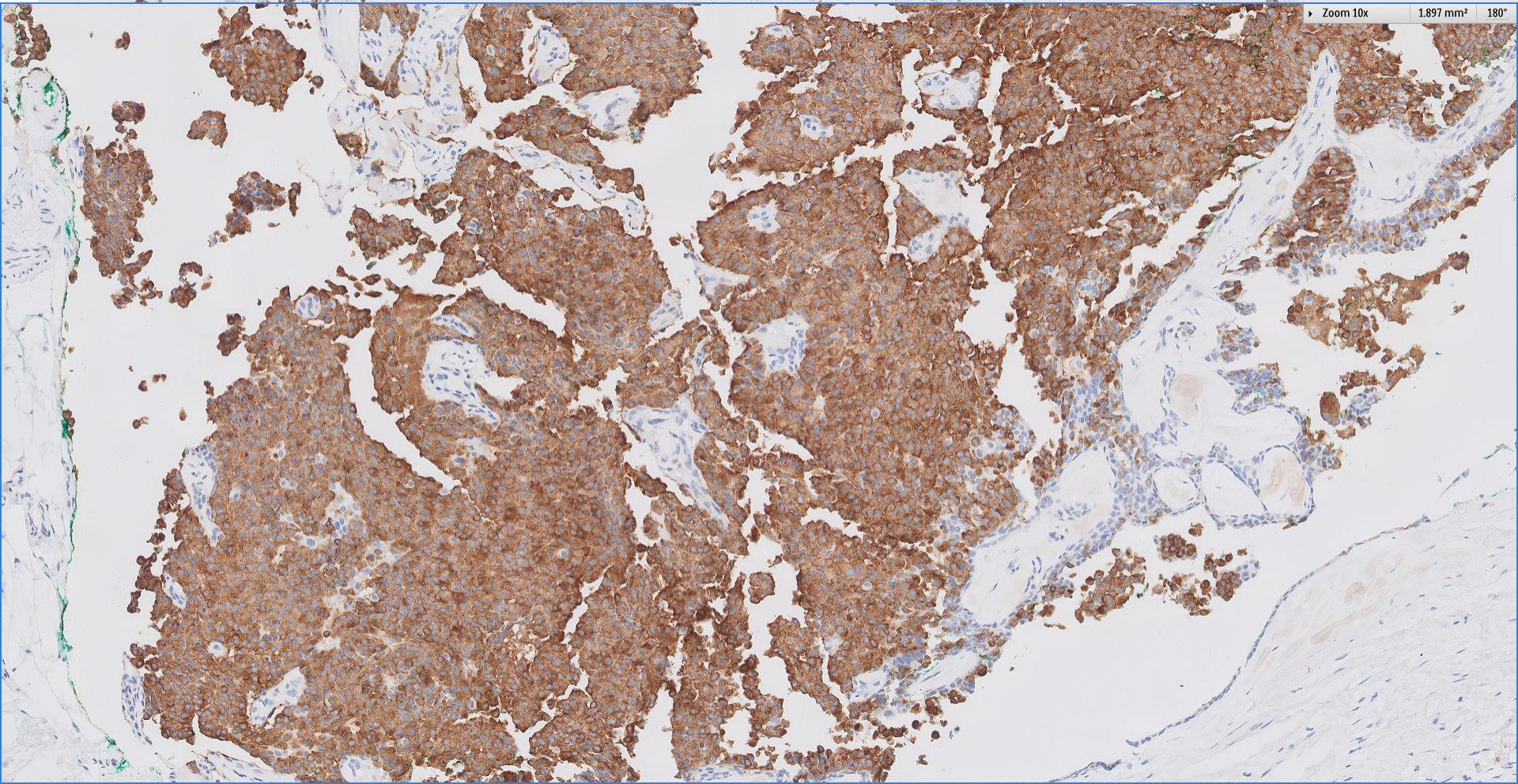
Synaptophysin

Zoom 1x



Zoom 10x

1.897 mm² 180°

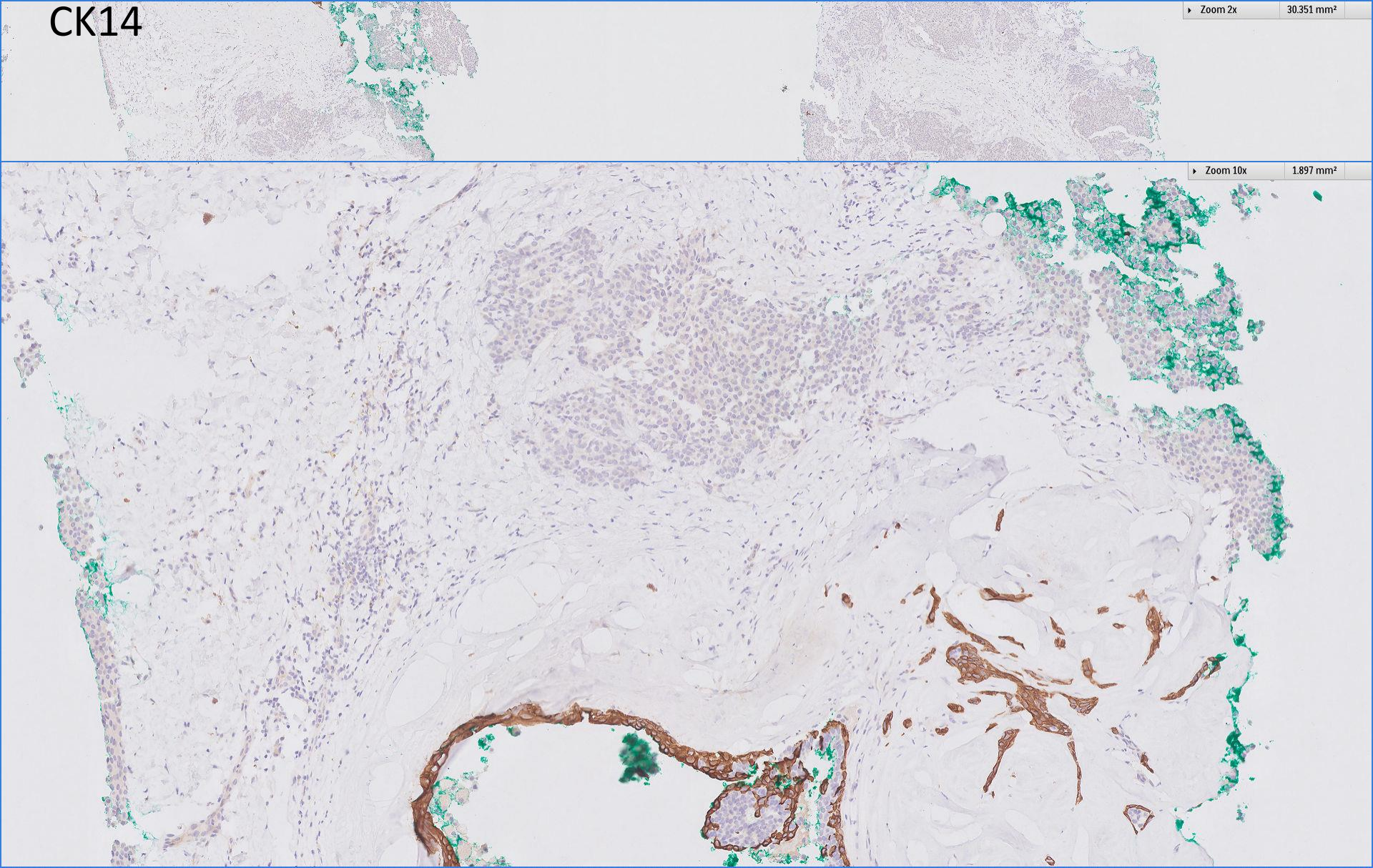


Specimen (B)

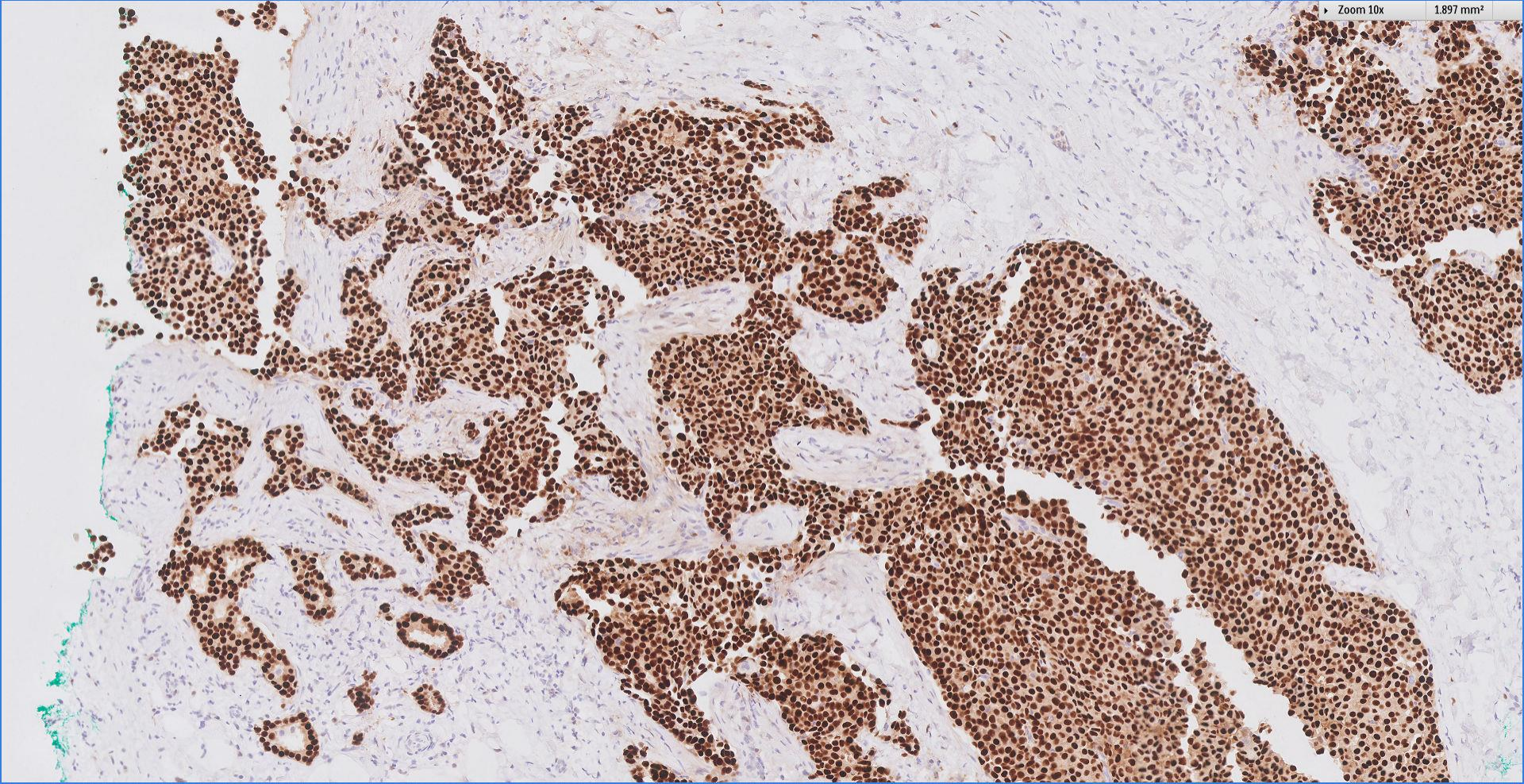
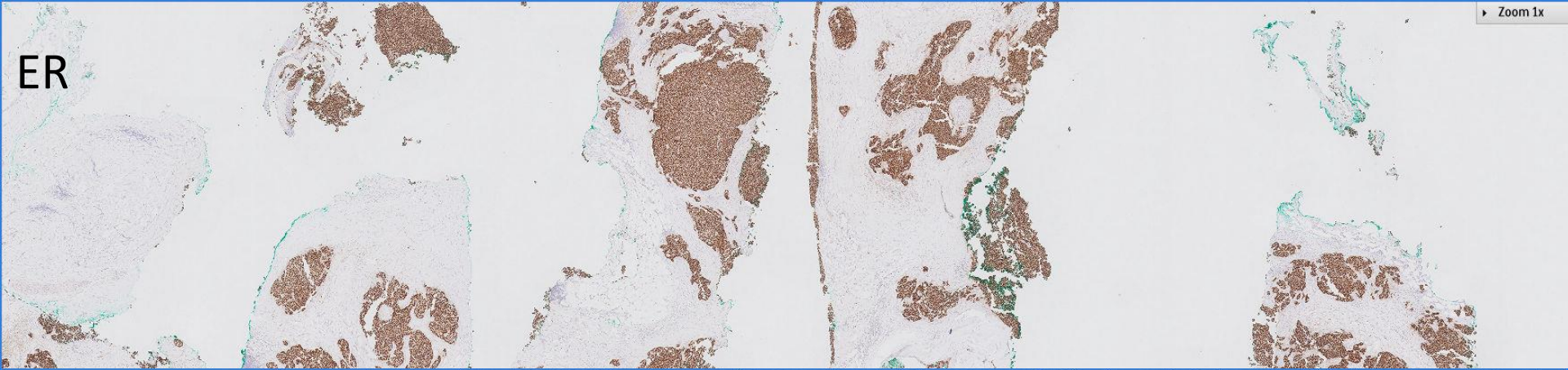
CK14

Zoom 2x 30.351 mm²

Zoom 10x 1.897 mm²

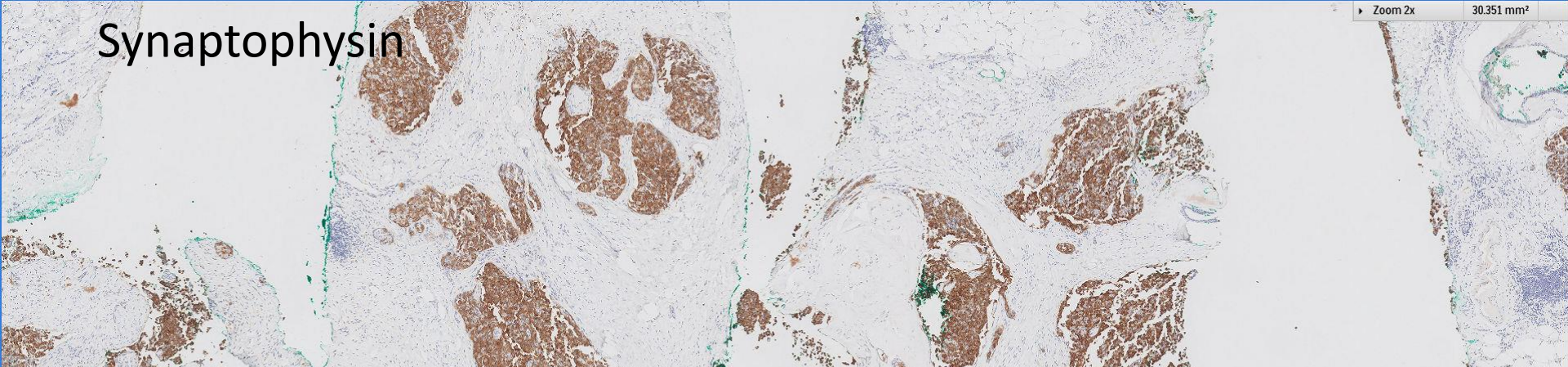


ER

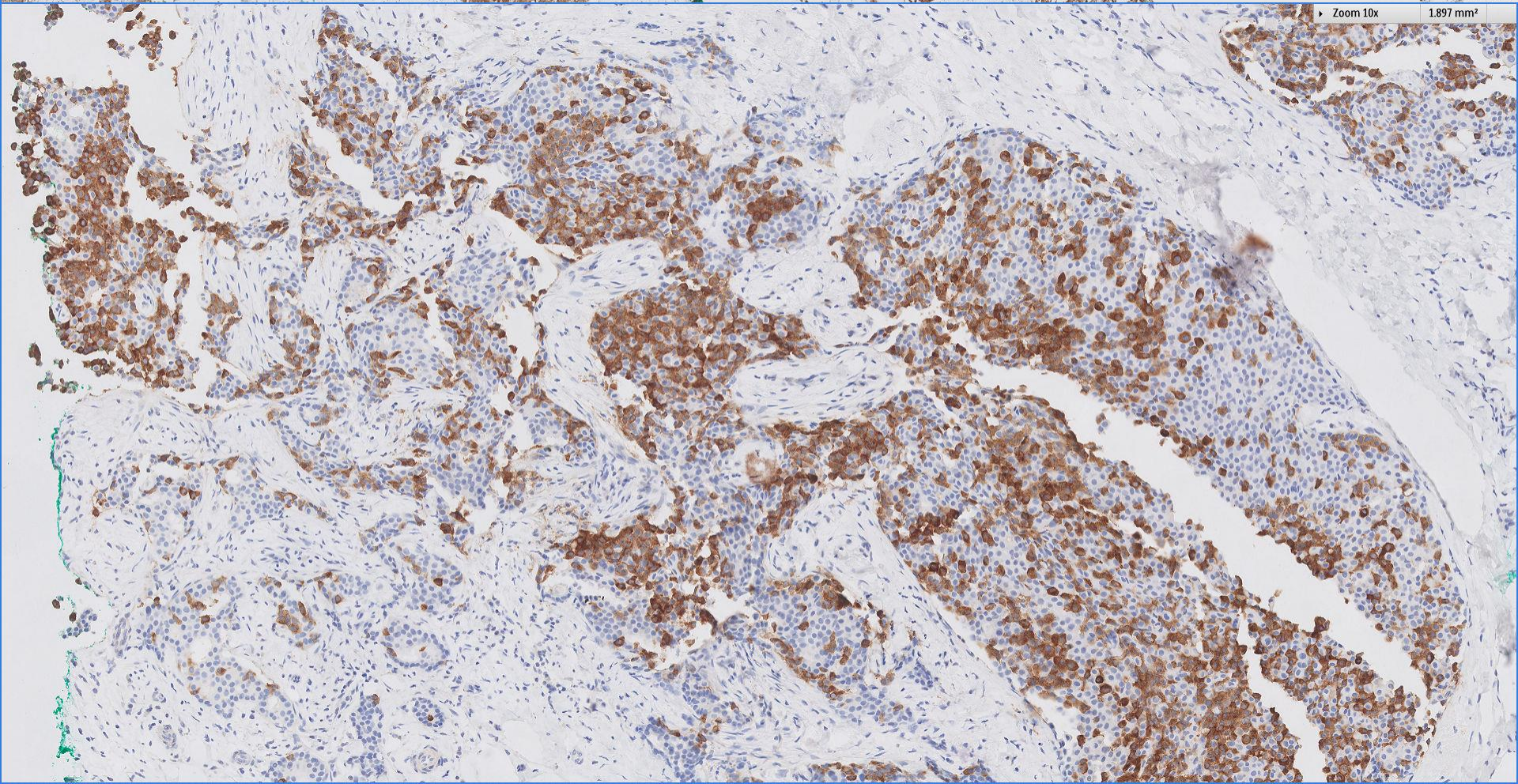


Synaptophysin

Zoom 2x 30.351 mm²

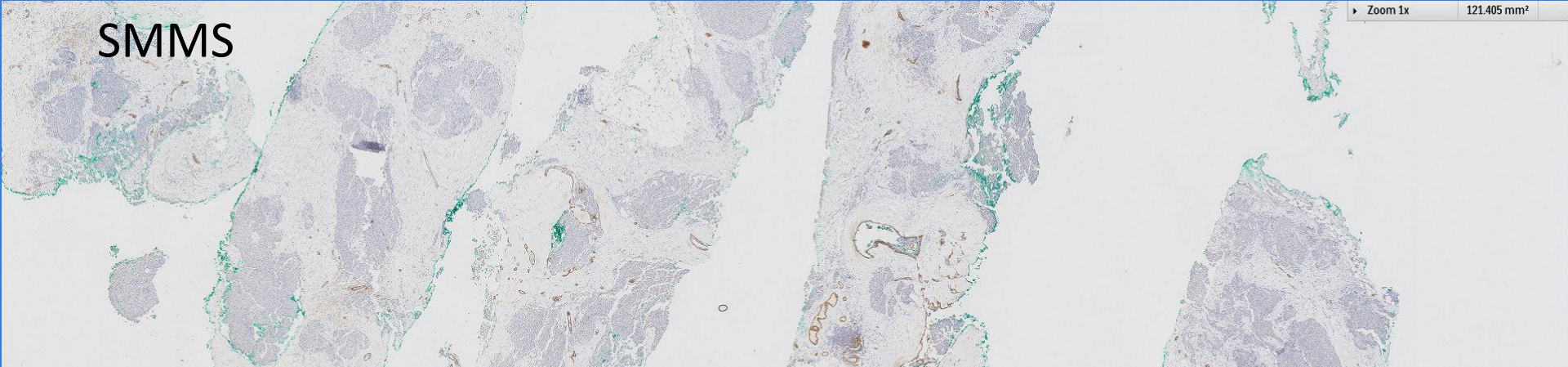


Zoom 10x 1.897 mm²

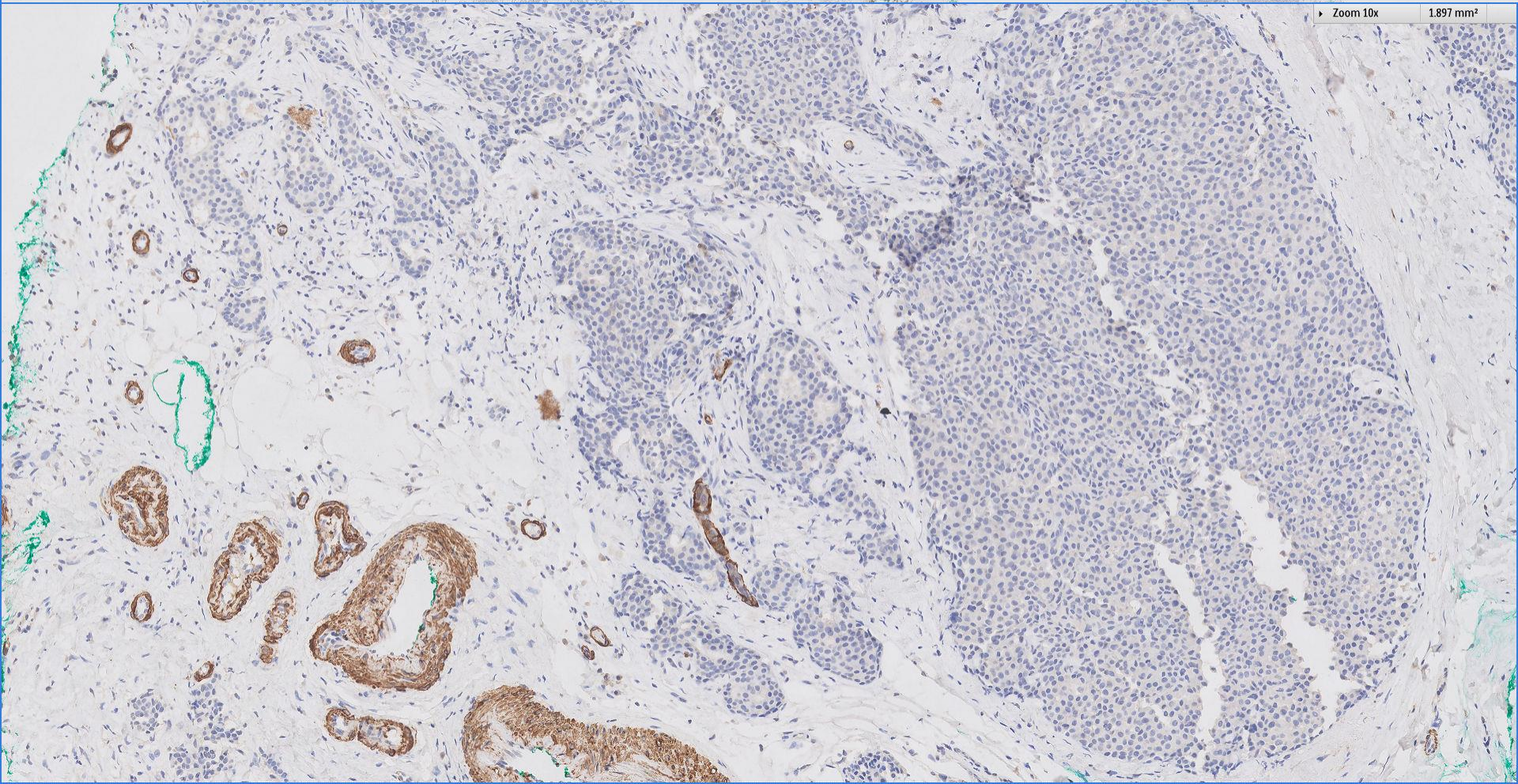


SMMS

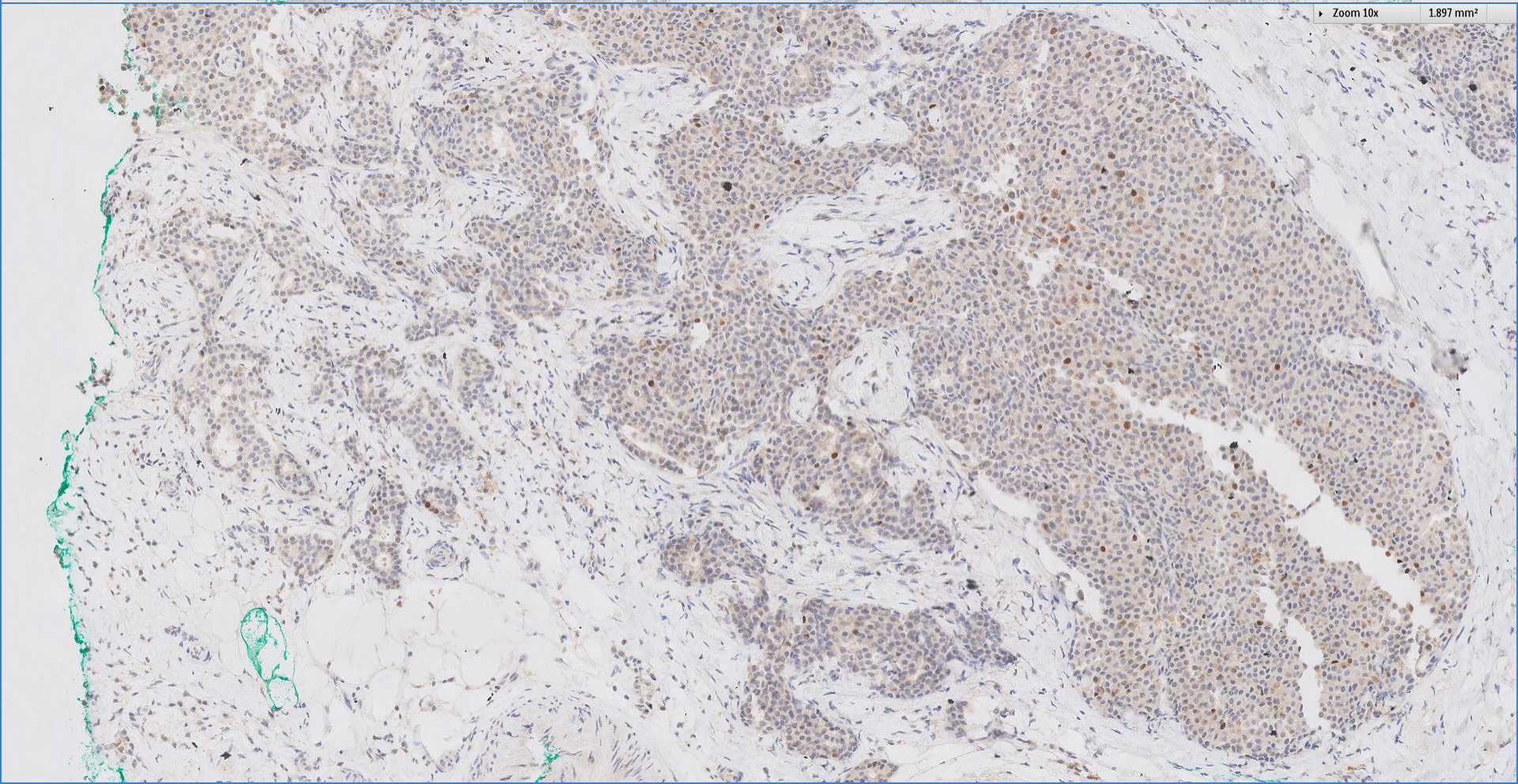
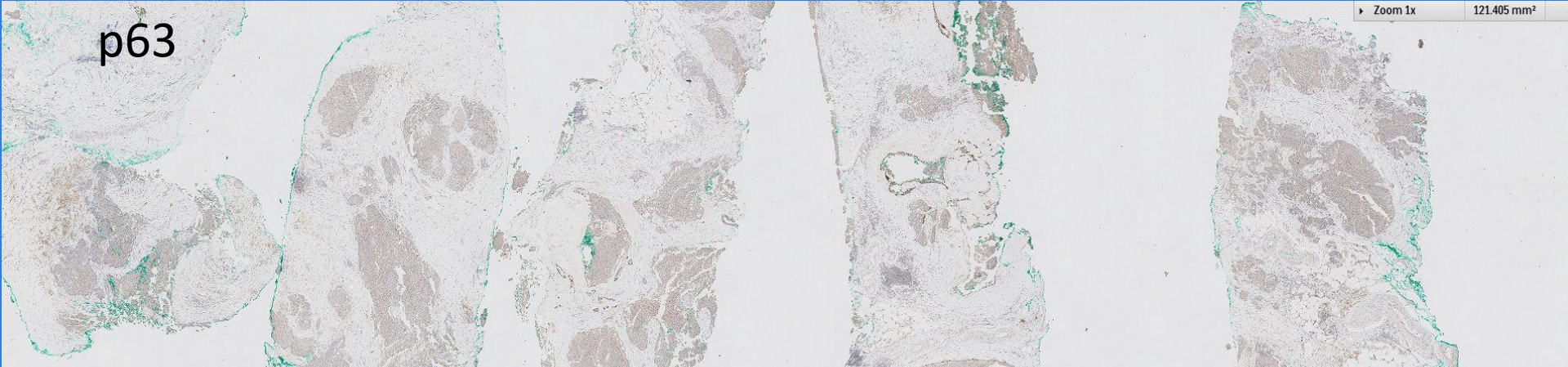
Zoom 1x 121.405 mm²



Zoom 10x 1.897 mm²



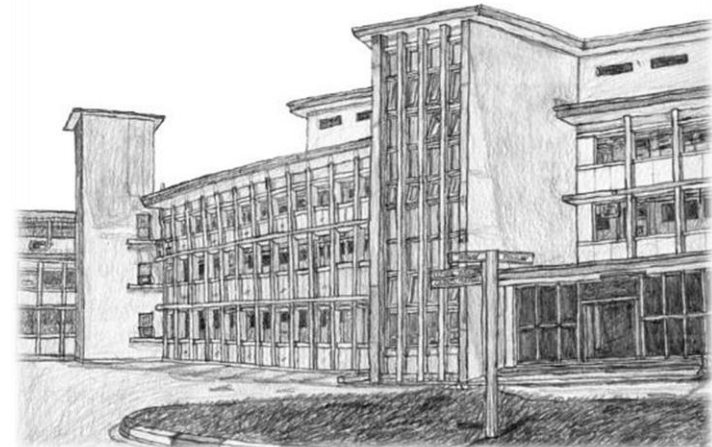
p63



Diagnosis

Right breast trucut biopsies ~

- (A) 3 o'clock, 3cm from nipple: Papillary ductal carcinoma in situ with neuroendocrine differentiation.
- (B) 3 o'clock, 5cm from nipple: Invasive and in situ solid papillary carcinoma with neuroendocrine differentiation.



Solid papillary carcinoma

- Malignant tumour consisting of multinodular, expansile solid epithelial masses whose underlying papillary architecture is subtly reflected by fine delicate vessels coursing through the cellular islands.
- Myoepithelial cells may be present, attenuated, or completely absent around the nodular masses.
- Neuroendocrine differentiation and mucin production are frequent.
- Solid papillary carcinoma should be qualified as either in situ (majority of cases) or invasive.

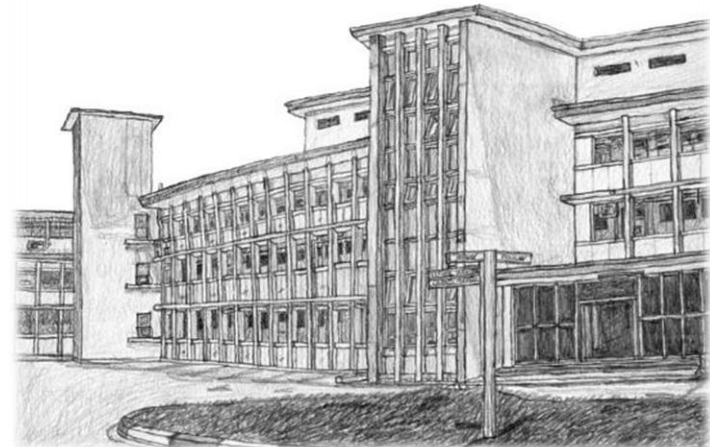
Solid papillary carcinoma

- Solid papillary carcinoma appears grossly as multinodular lobulated soft-to-firm masses.
- Tumours with mucin production may show a glistening cut surface.



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Solid papillary carcinoma

- Histologically, solid nodules of monotonous low or intermediate nuclear grade epithelial cells are punctuated by fine congested vessels.
- Focal papillary formations may be seen, as in (A) which has a predominantly papillary architecture.
- Epithelial nuclei possess fine chromatin with inconspicuous nucleoli, while cytoplasm can be eosinophilic to amphophilic when there is neuroendocrine differentiation.
- Sweeping spindle cell sheets, perivascular pseudorosettes, and mucin production may be observed.
- Myoepithelial cells are sometimes found around nodular tumour islands, but they may be attenuated or completely absent.
- Despite the absence of myoepithelial cells, rounded islands of solid papillary carcinoma with pushing contours are regarded as non-invasive Tis disease.
- Apart from neuroendocrine differentiation, solid papillary carcinoma is usually diffusely oestrogen receptor positive.

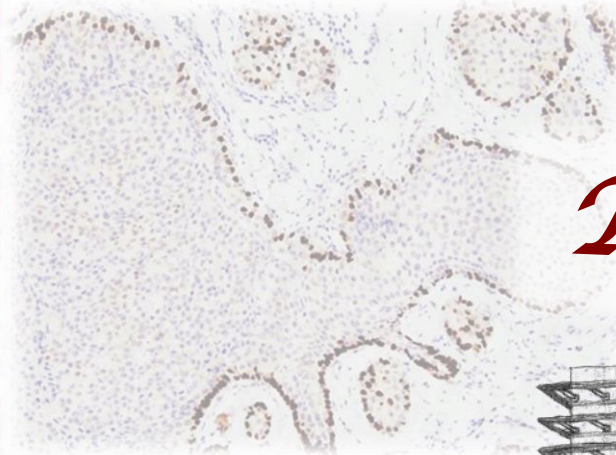
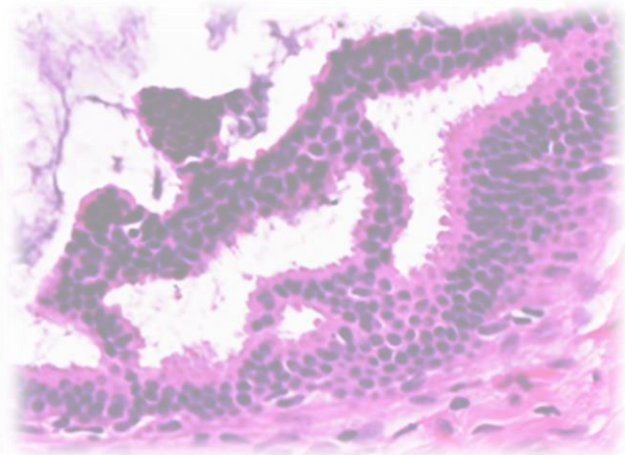
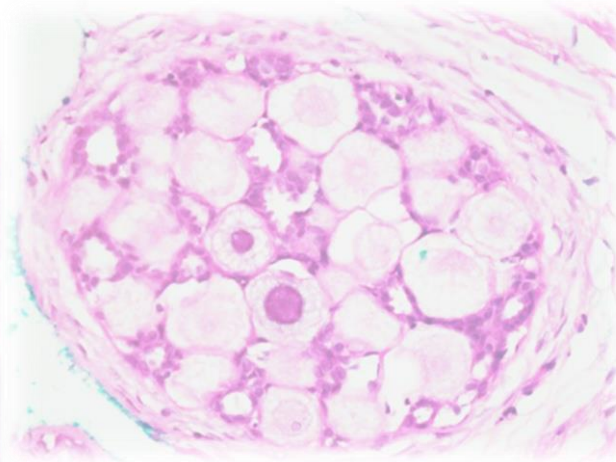
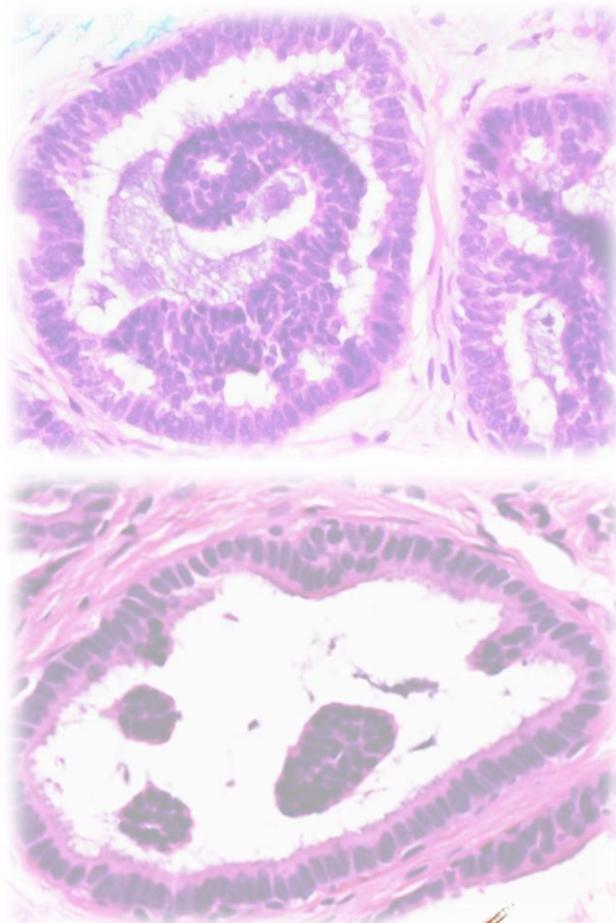
Solid papillary carcinoma

- When the tumour islands are more irregular in outlines and occur as jigsaw puzzle-like pieces within desmoplastic stroma, a diagnosis of invasive solid papillary carcinoma is warranted.
- Invasive carcinoma of ductal, mucinous, neuroendocrine, and other subtypes maybe associated with solid papillary carcinoma in situ.
- These are graded, subtyped, and staged separately.
- Size of solid papillary carcinoma in situ is not added into the invasive tumour measurement.

Solid papillary carcinoma

- Solid papillary carcinoma without areas of conventional invasive carcinoma is currently staged and managed as non-invasive disease (Tis), despite occasional absence of myoepithelial cells and rare reports of metastases to axillary lymph nodes.
- Prognosis after excision is generally favourable.
- Presence of a solid papillary carcinoma pattern is associated with favourable clinicopathological parameters when evaluated among breast cancers with neuroendocrine differentiation.

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Thank you!

