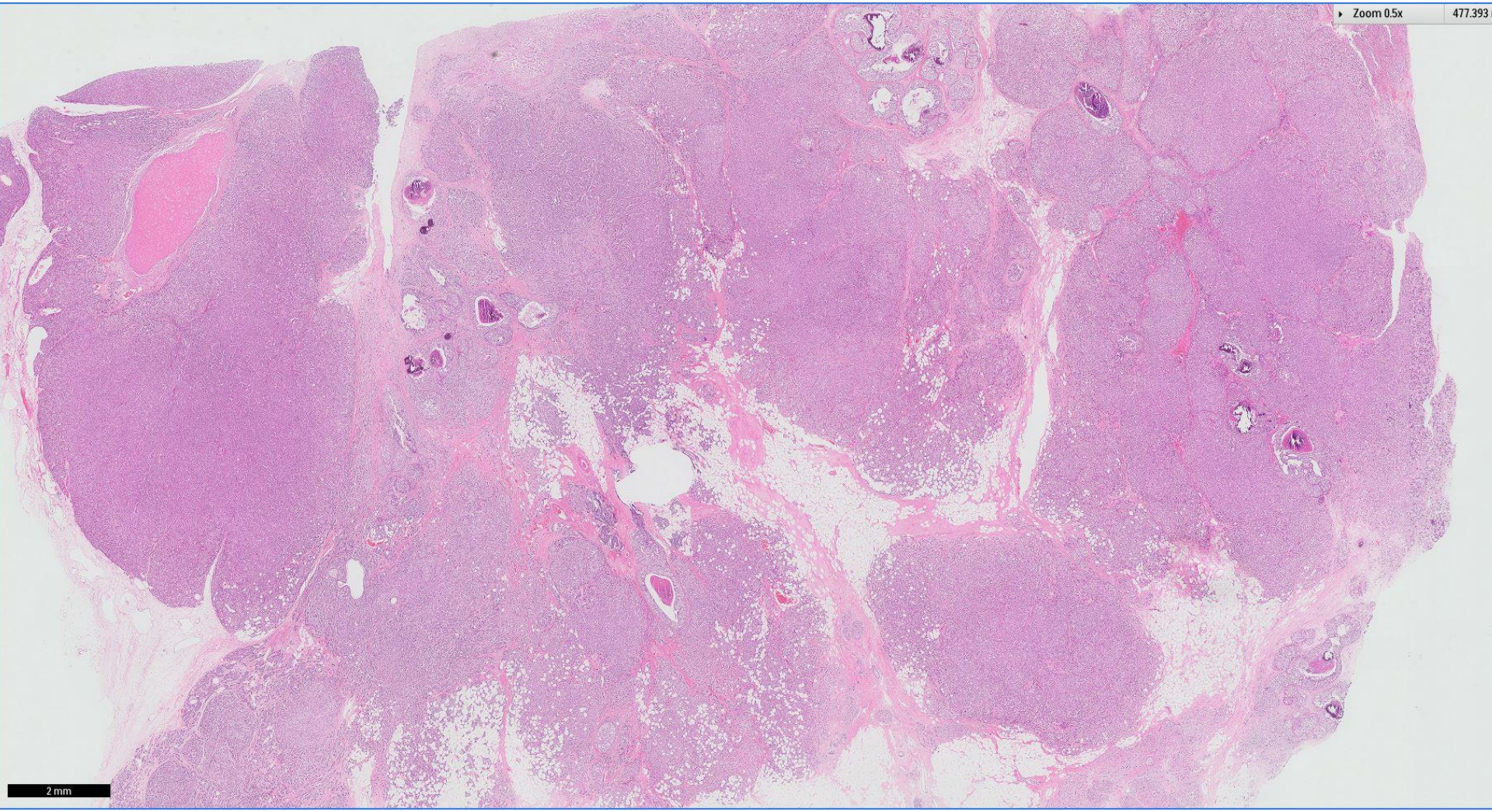
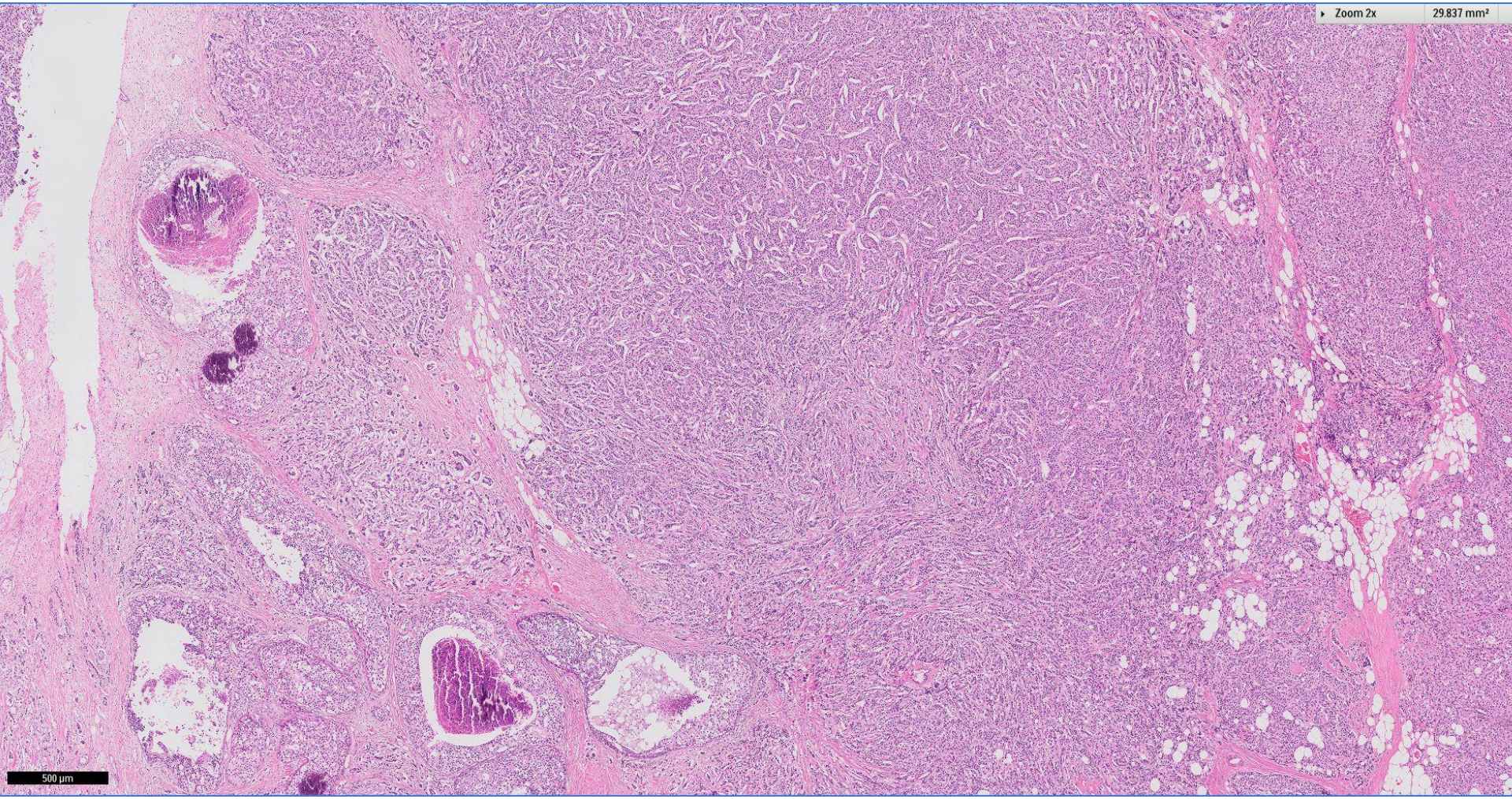
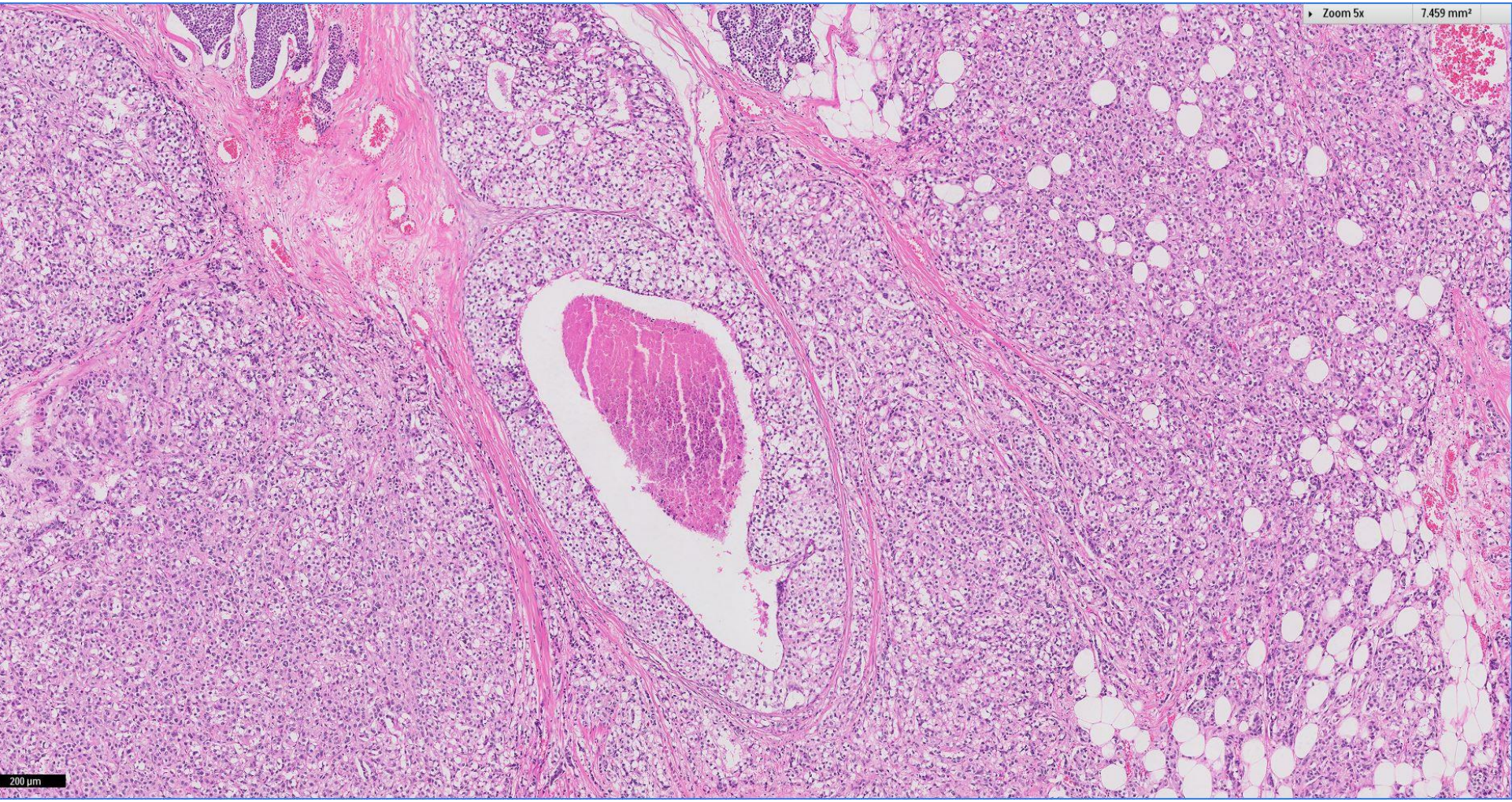
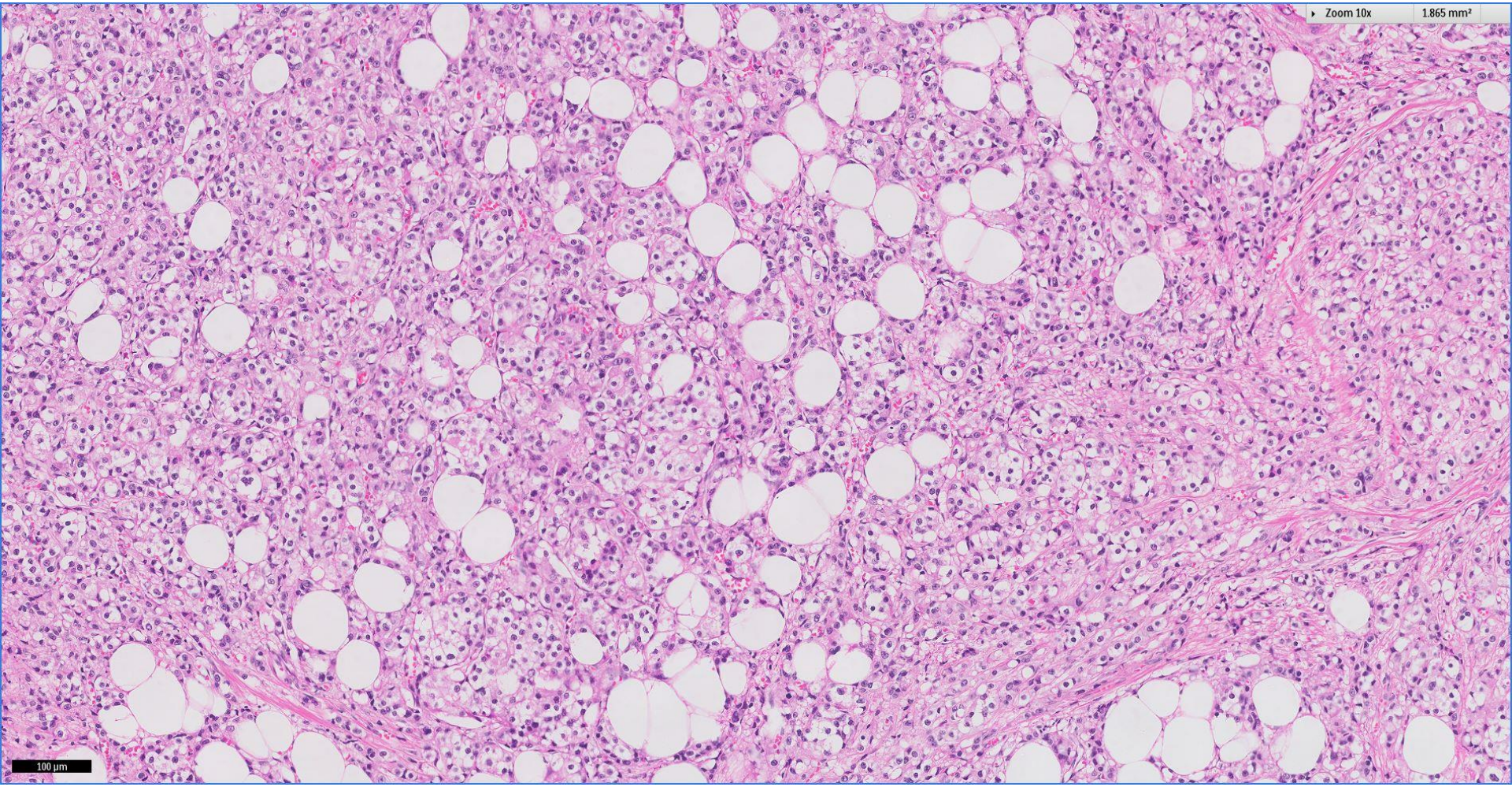
Case 6

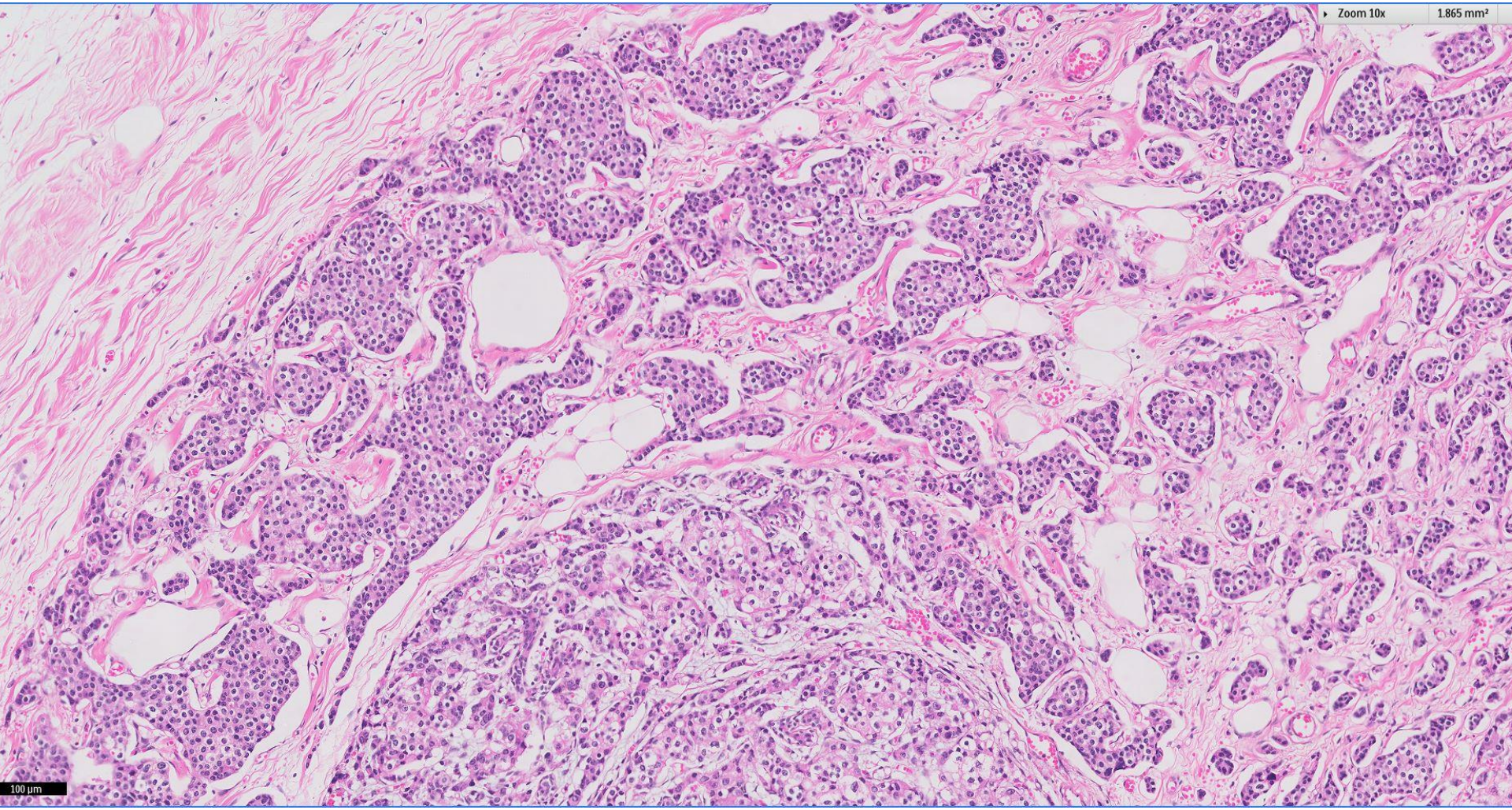
46 year old woman with a breast lump, laterality not specified.

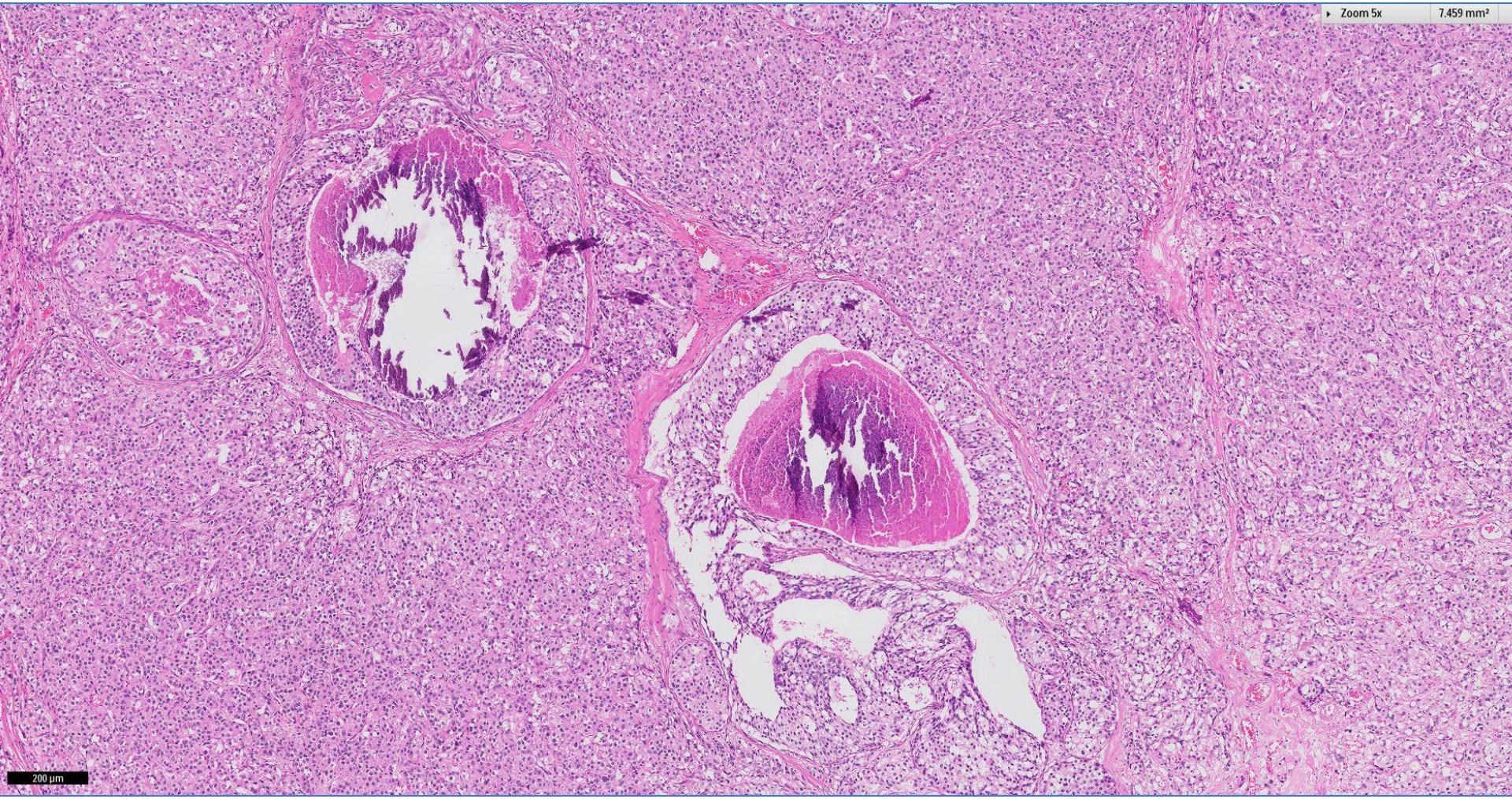

Zoom 0.5x
477.393
2 mm

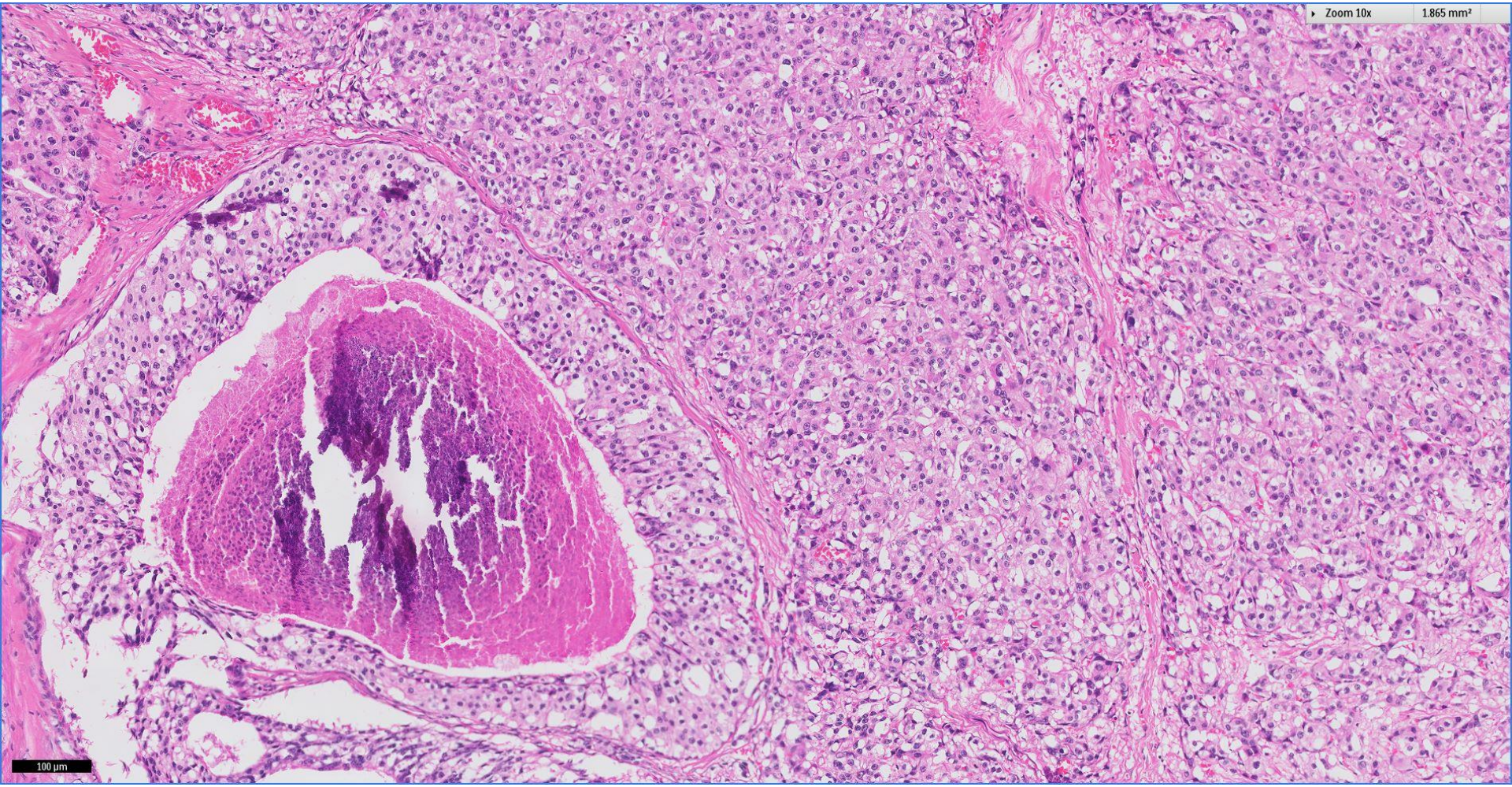

Zoom 2x
29.837 mm²
500 µm

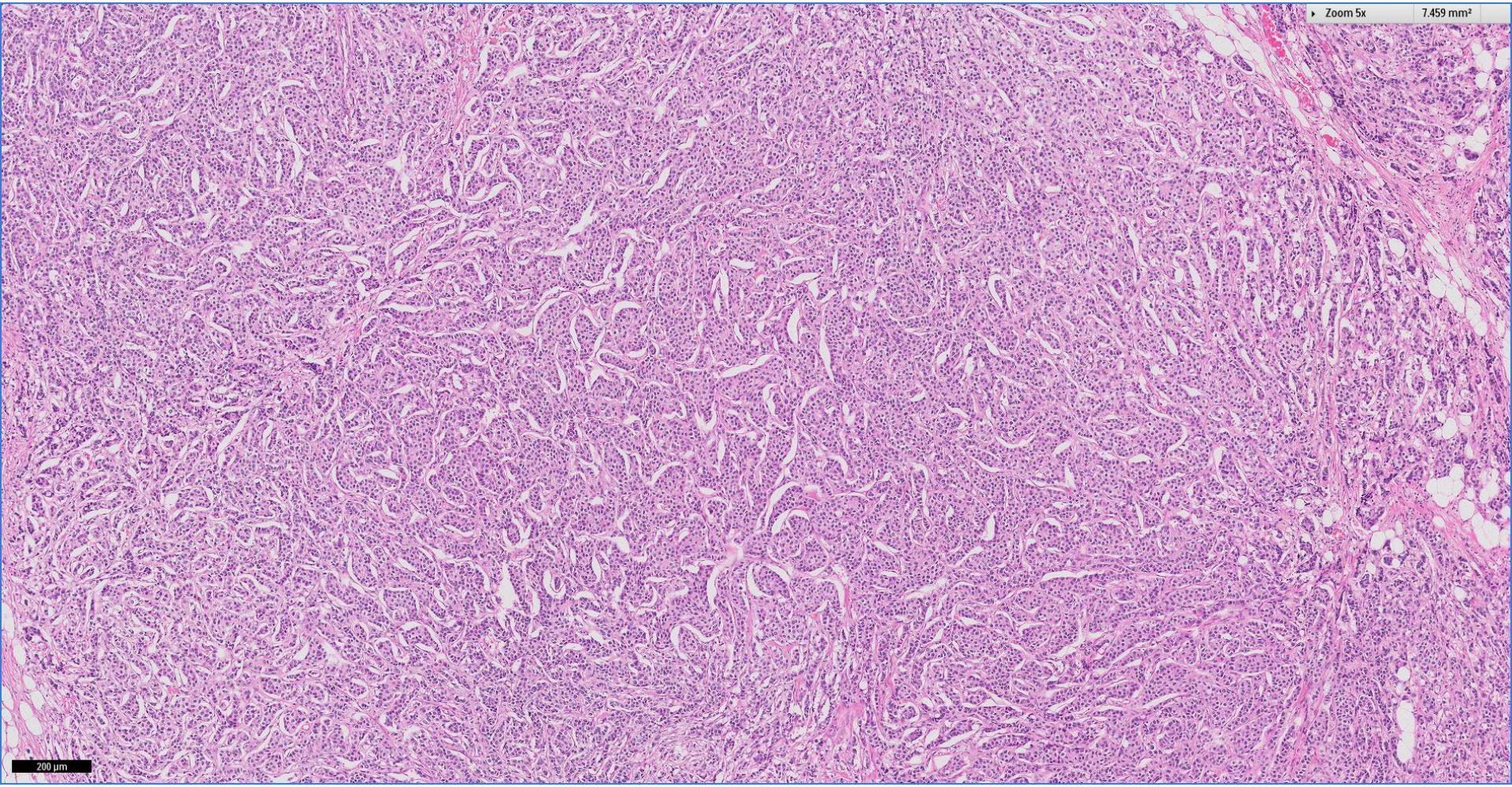

Zoom 5x
7.459 mm²
200 µm

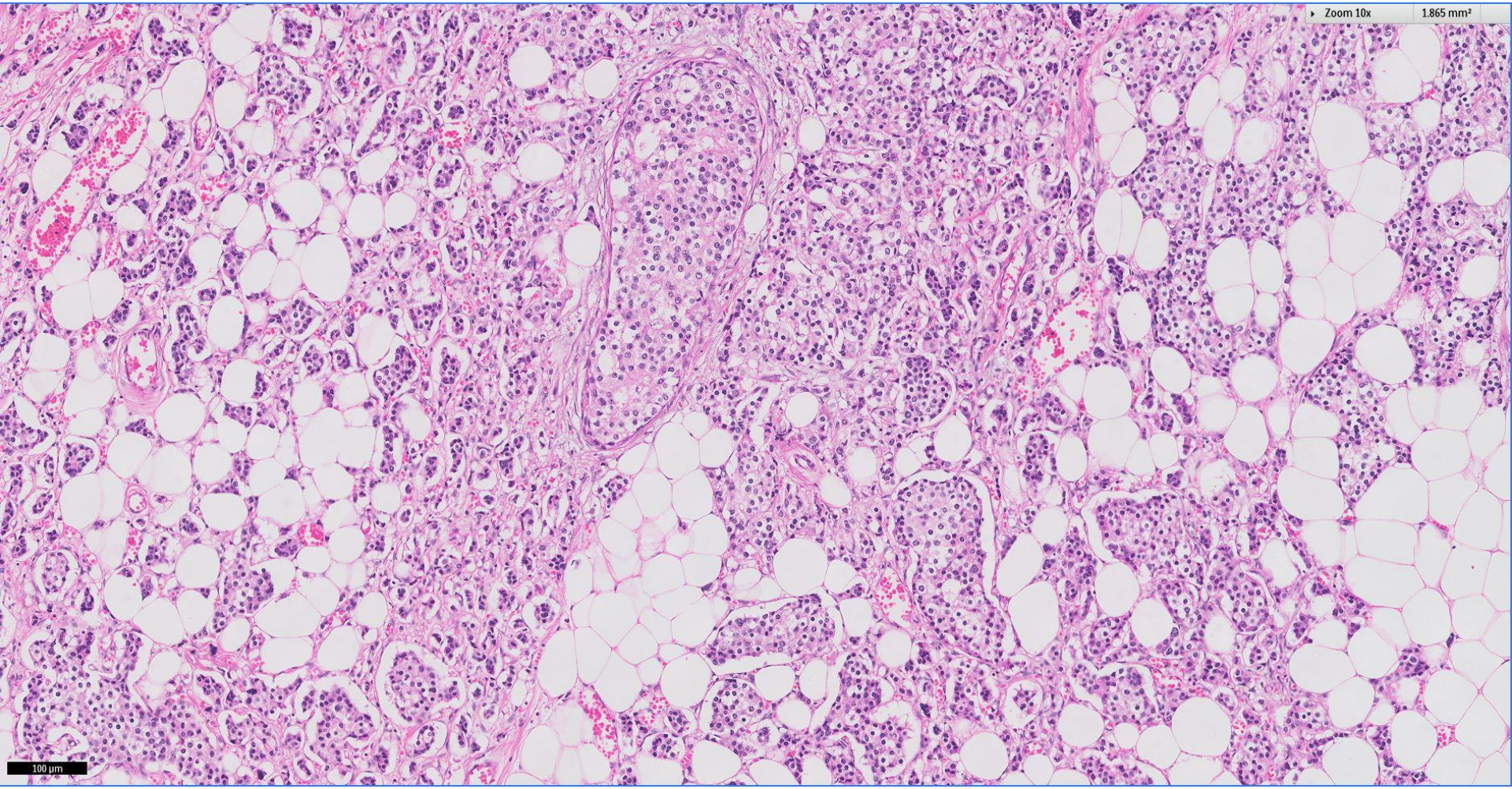

Zoom 10x
1.865 mm²
100 µm

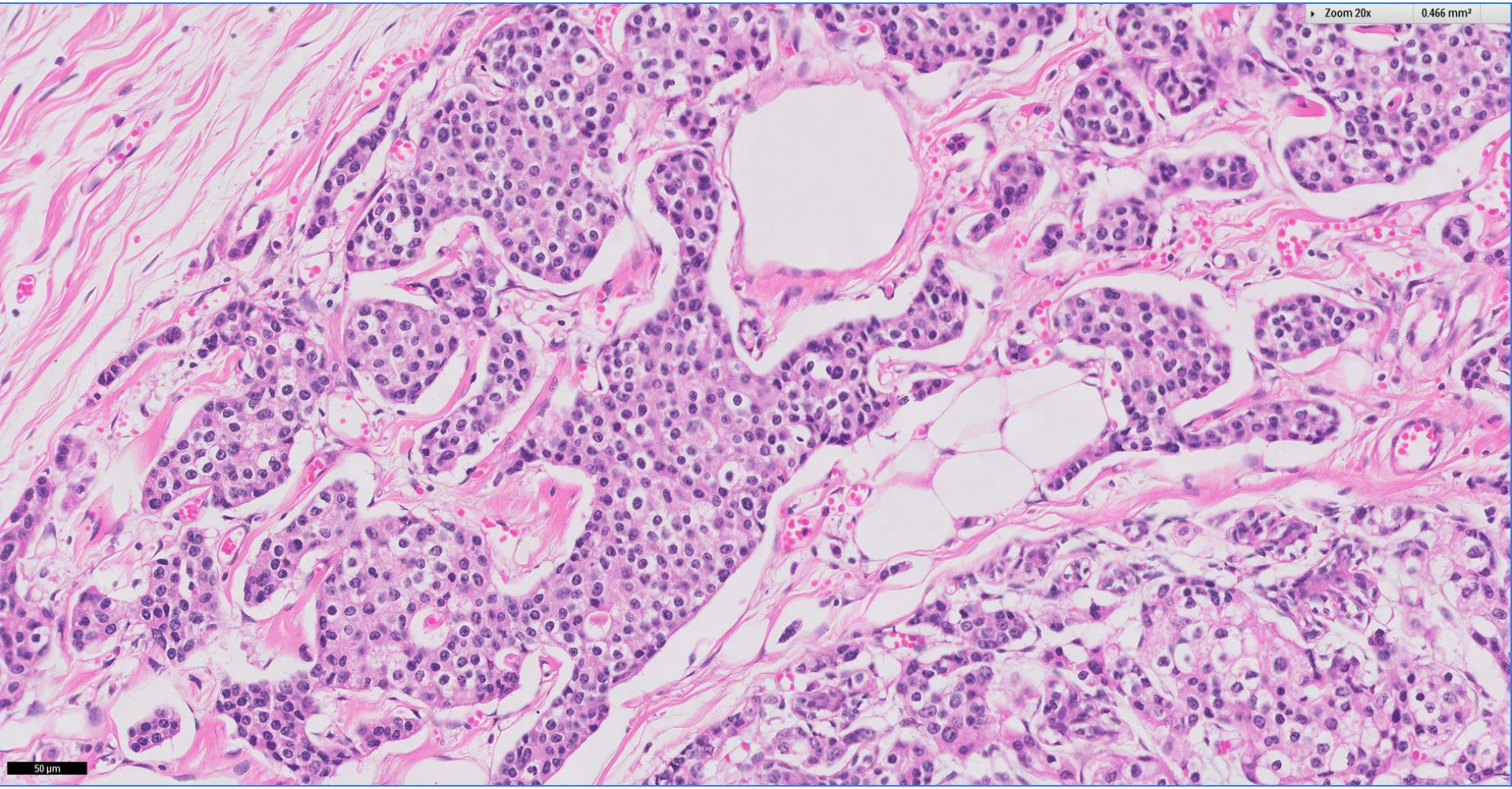

Zoom 10x
1.865 mm²
100 µm

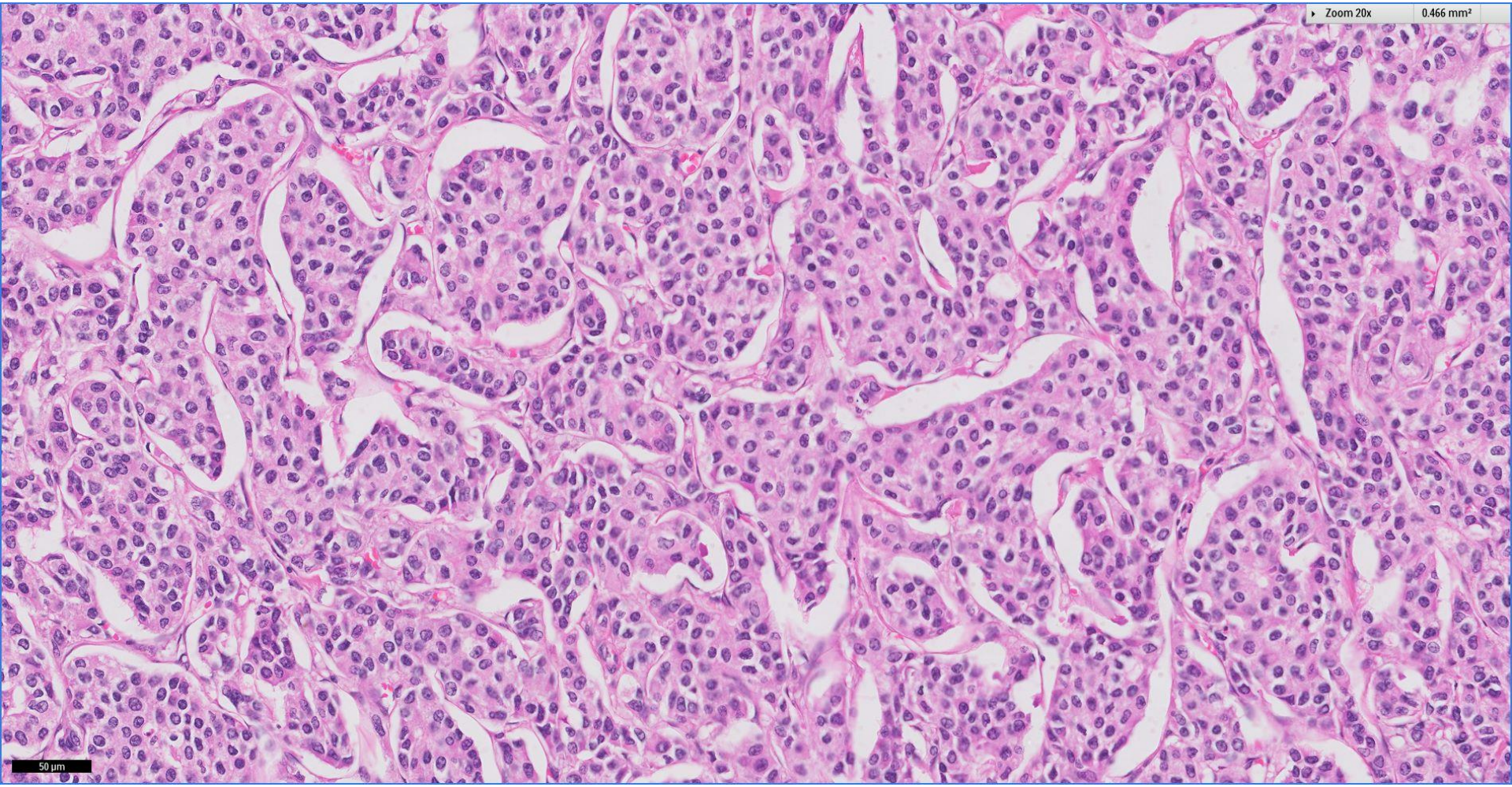

Zoom 5x
7.459 mm²
200 µm

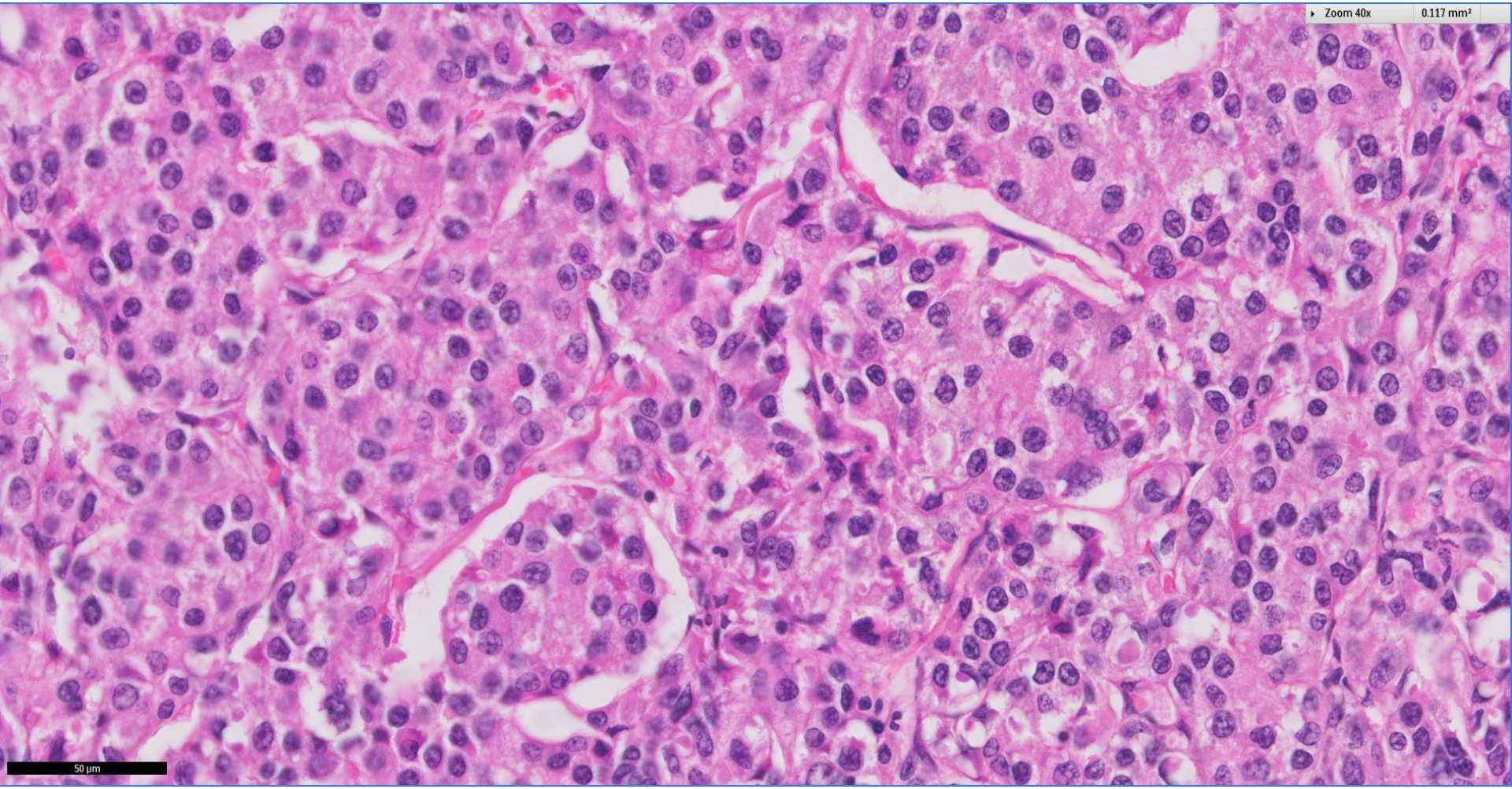

Zoom 10x
1.865 mm²
100 µm

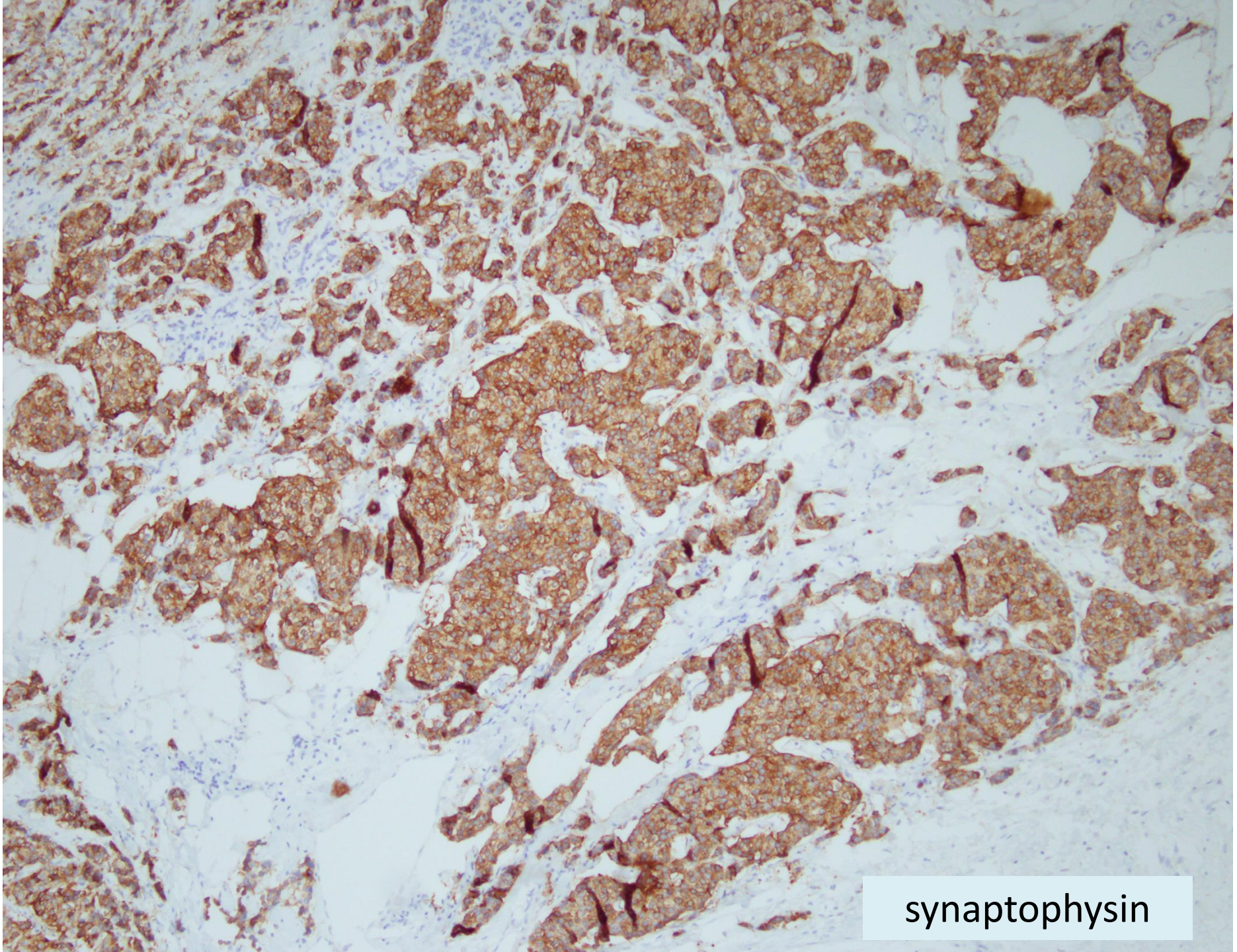

Zoom 5x
7.459 mm²
200 µm

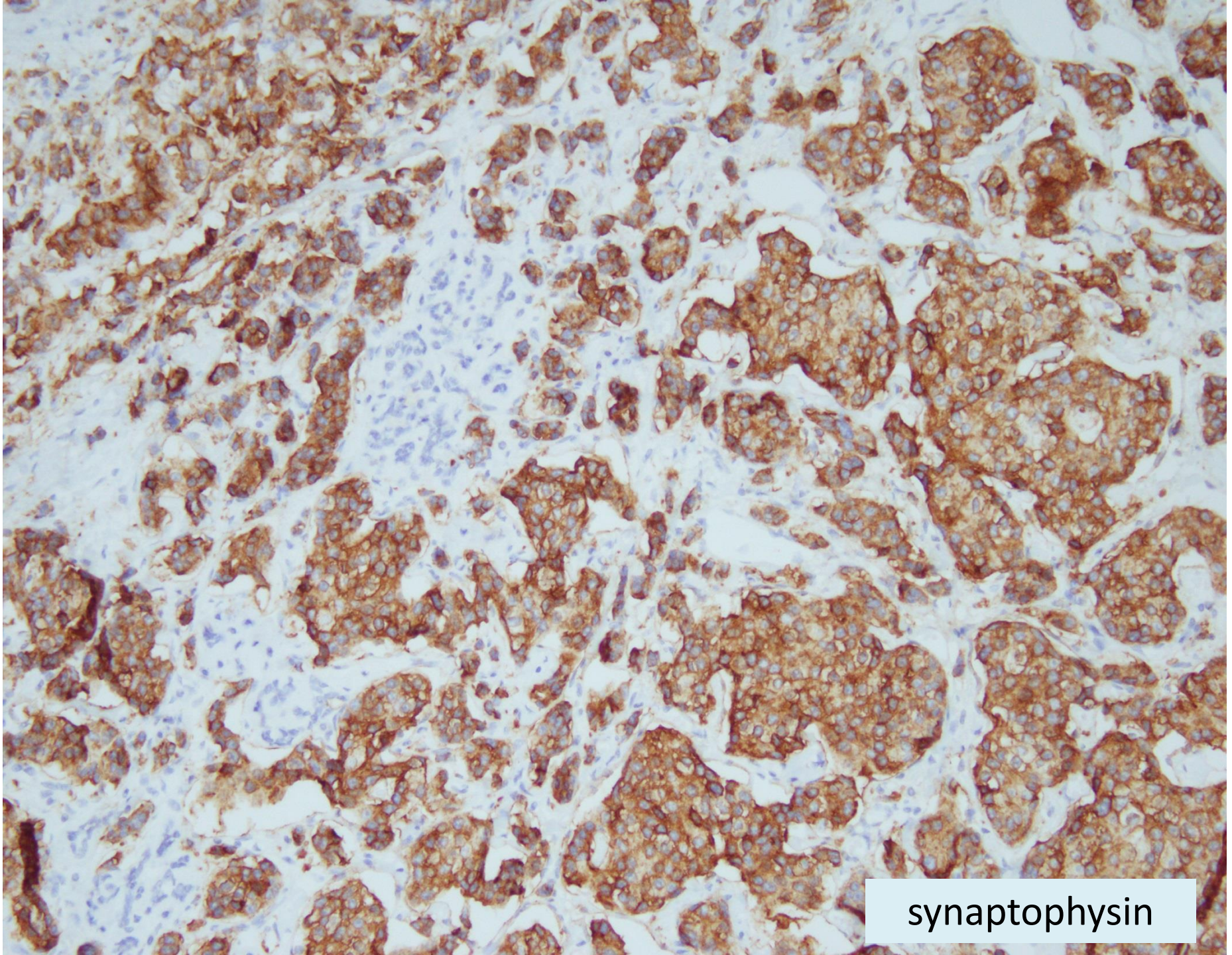

Zoom 10x
1.865 mm²
100 µm


Zoom 20x
0.466 mm²
50 µm

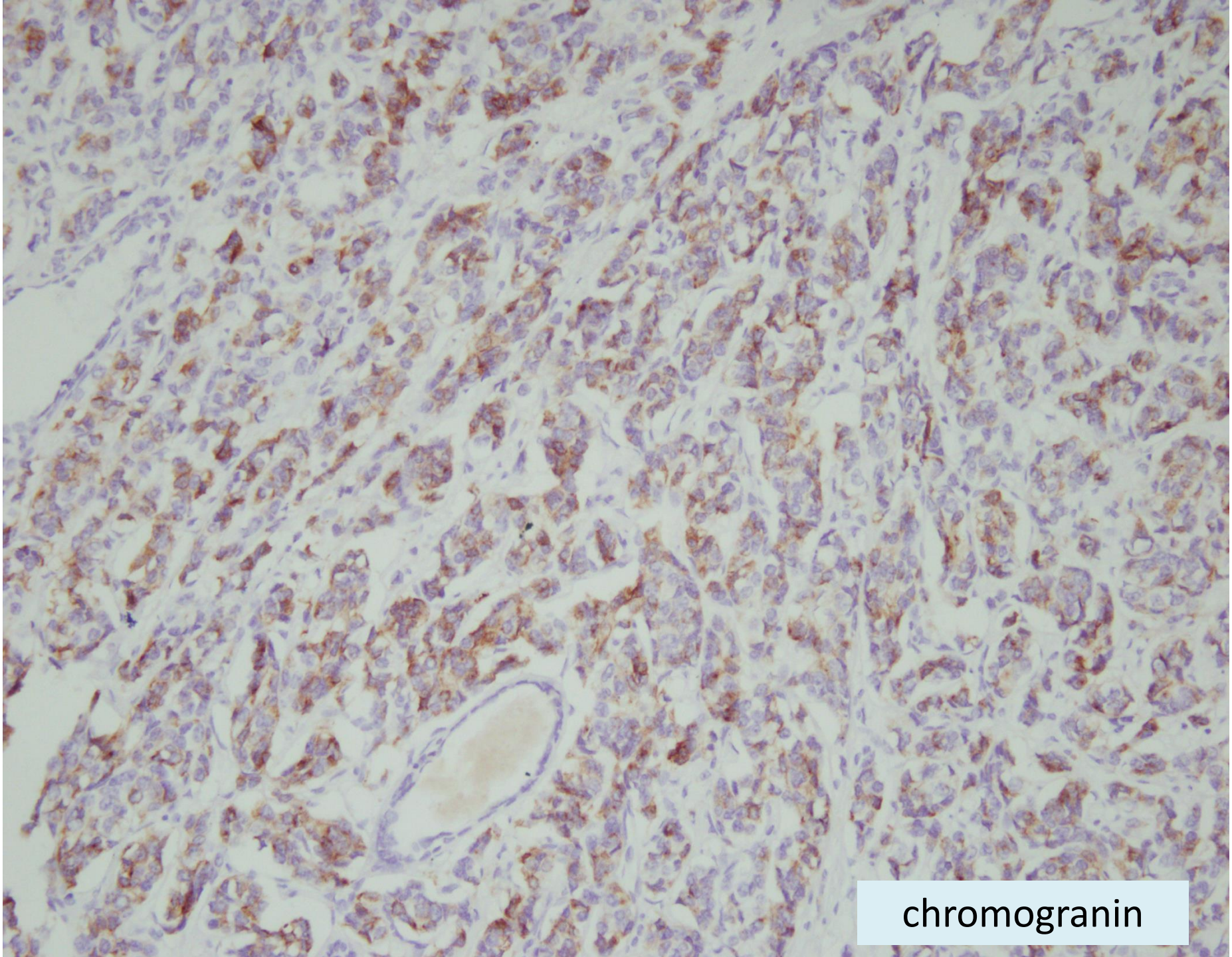

Zoom 20x
0.466 mm²
50 µm

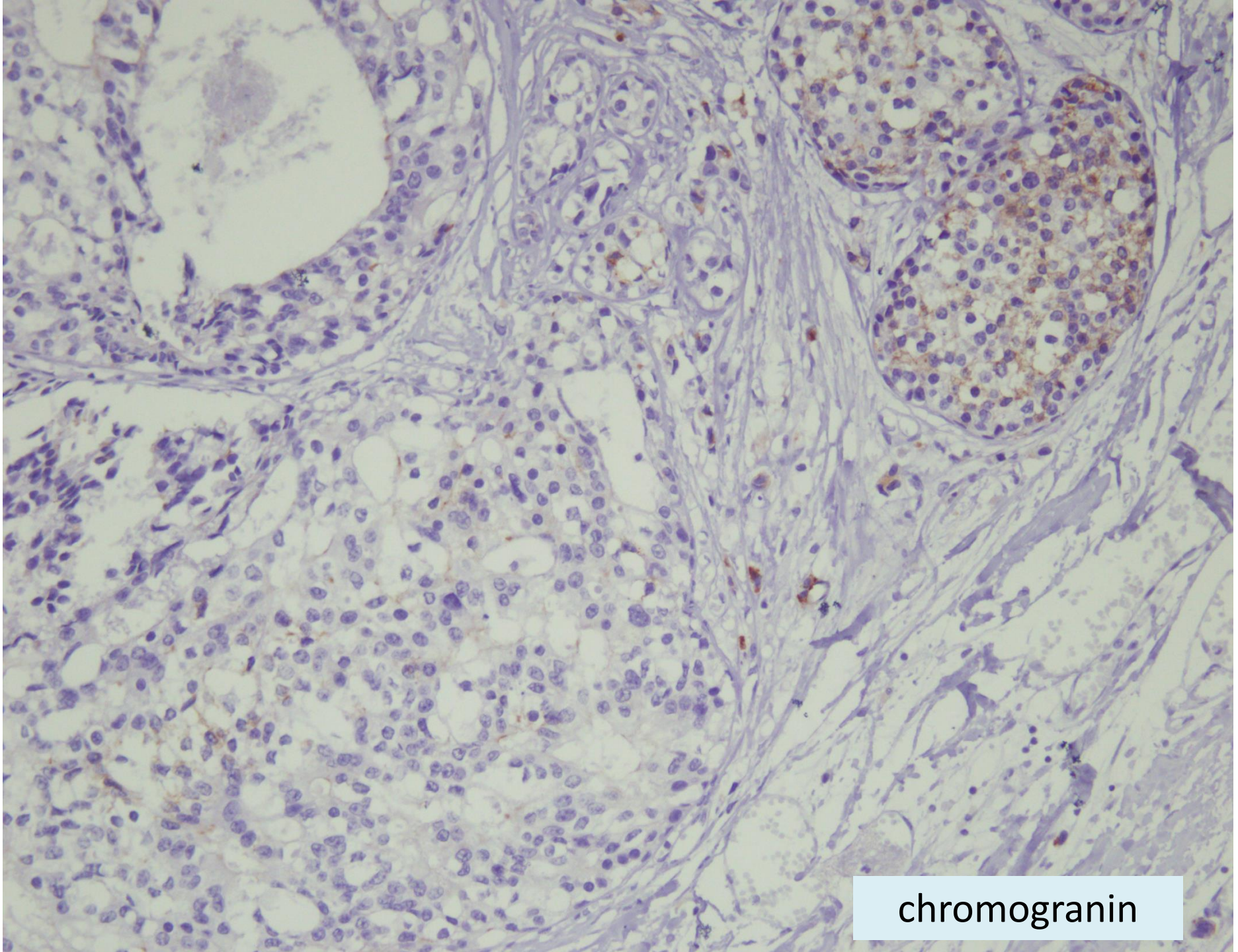

Zoom 40x
0.117 mm²
50 µm


synaptophysin


synaptophysin

synaptophysin


chromogranin


chromogranin

Breast tumour:

Infiltrative ductal carcinoma, grade 2, with neuroendocrine differentiation

Carcinomas with neuroendocrine differentiation

- Neuroendocrine differentiation has been reported in 4–30% of breast cancers, on the basis of immunohistochemistry.
- Wide range in the reported frequency of neuroendocrine differentiation is probably related to a variety of factors, including the particular markers studied and the threshold used for marker positivity.
- Special-type breast cancers with frequent neuroendocrine marker expression are the hypercellular (Capella type B) variant of mucinous carcinoma and solid papillary carcinoma.

Carcinomas with neuroendocrine differentiation

- WHO classification:
  - Neuroendocrine tumour, well differentiated.
  - Neuroendocrine tumour, poorly differentiated/small cell carcinoma.
  - Invasive breast carcinoma with neuroendocrine differentiation.

WHO 2012

Invasive breast carcinoma with neuroendocrine differentiation

- Invasive carcinomas with special-type or without special-type histomorphology that are accompanied by neuroendocrine differentiation.
- Hypercellular variant of mucinous carcinoma and the invasive form of solid papillary carcinoma constitute a significant proportion of such tumours.
- As immunohistochemistry for neuroendocrine markers is not routinely performed on all invasive breast carcinomas, an exact estimate of neuroendocrine differentiation is not available.

Invasive breast carcinoma with neuroendocrine differentiation

- As neuroendocrine differentiation can be seen in several morphological subtypes of invasive breast carcinoma, the recommendation is to primarily classify these tumours according to the recognizable histological subtype, appending the accompaniment of neuroendocrine expression if present.

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