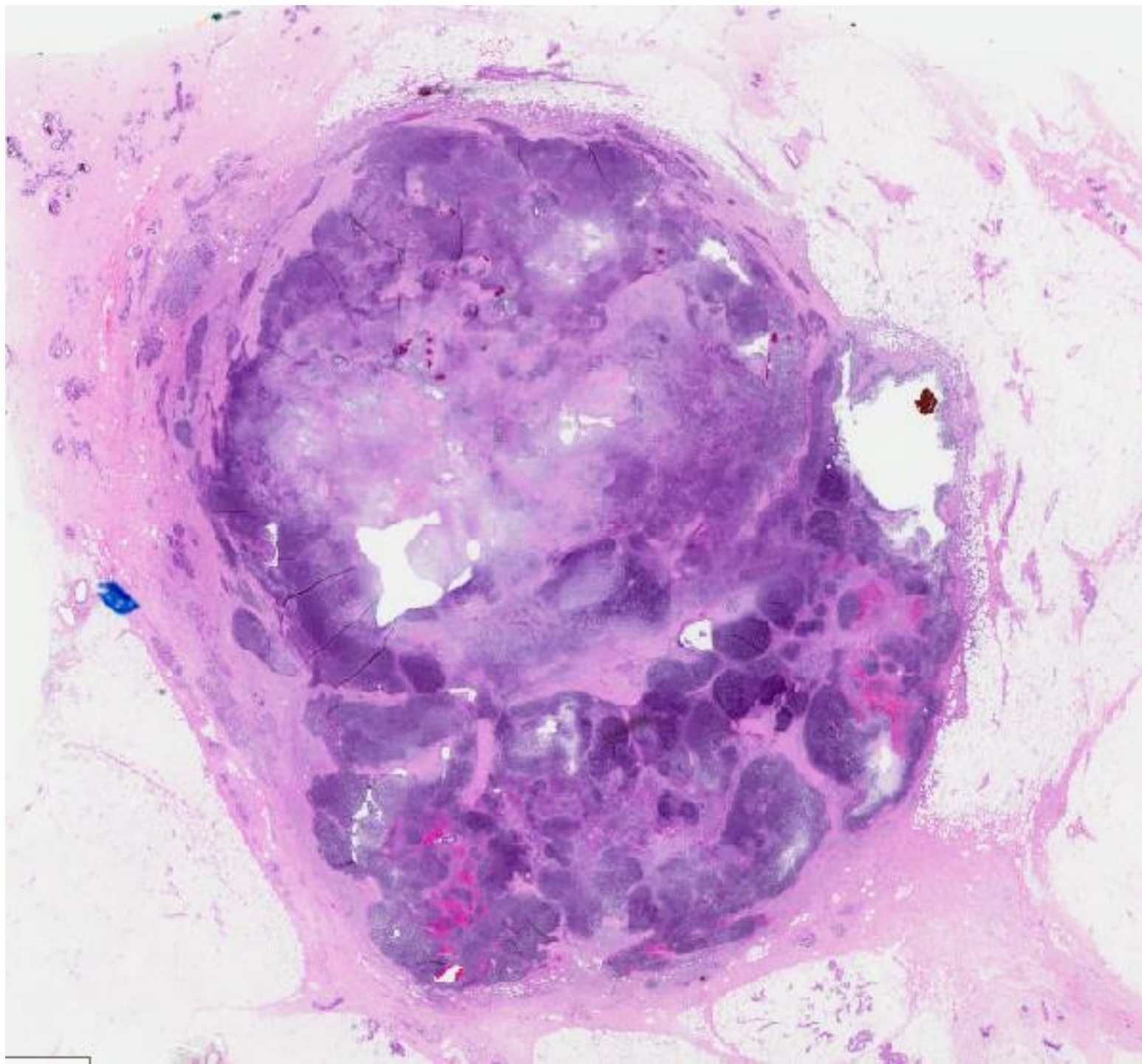


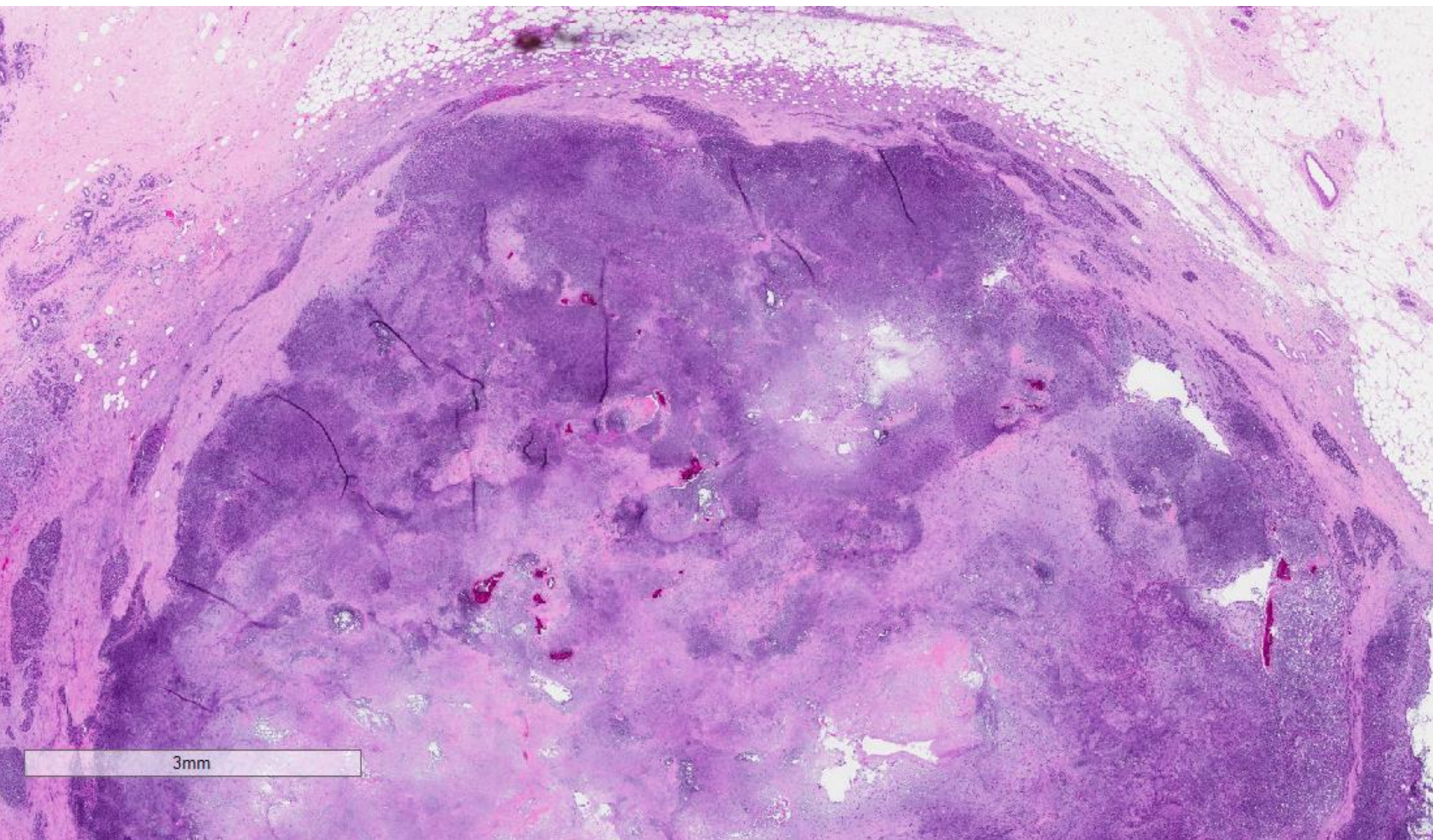
# Case 1

## 58 year old lady with a right breast mass

*Excision biopsy*

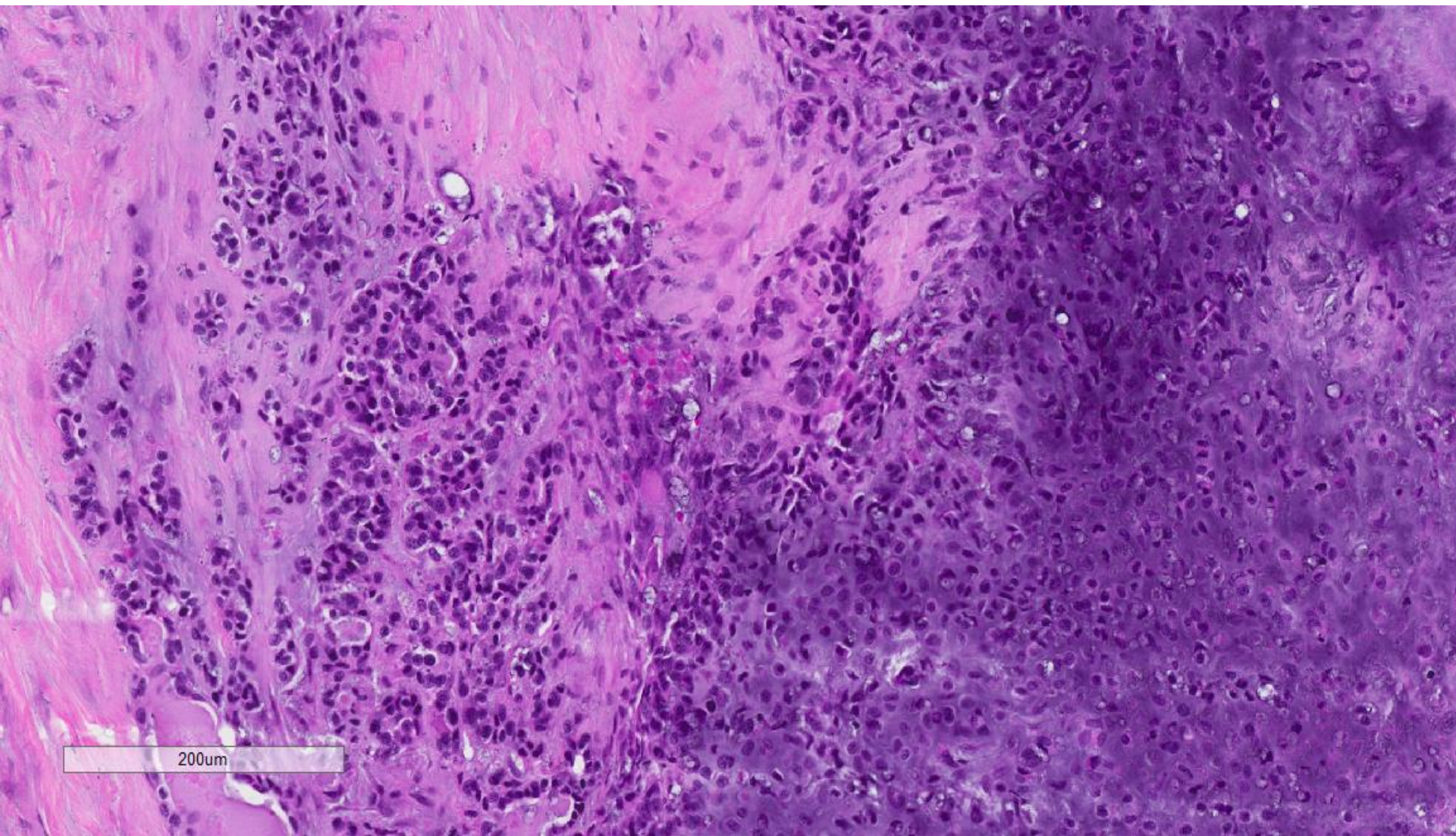




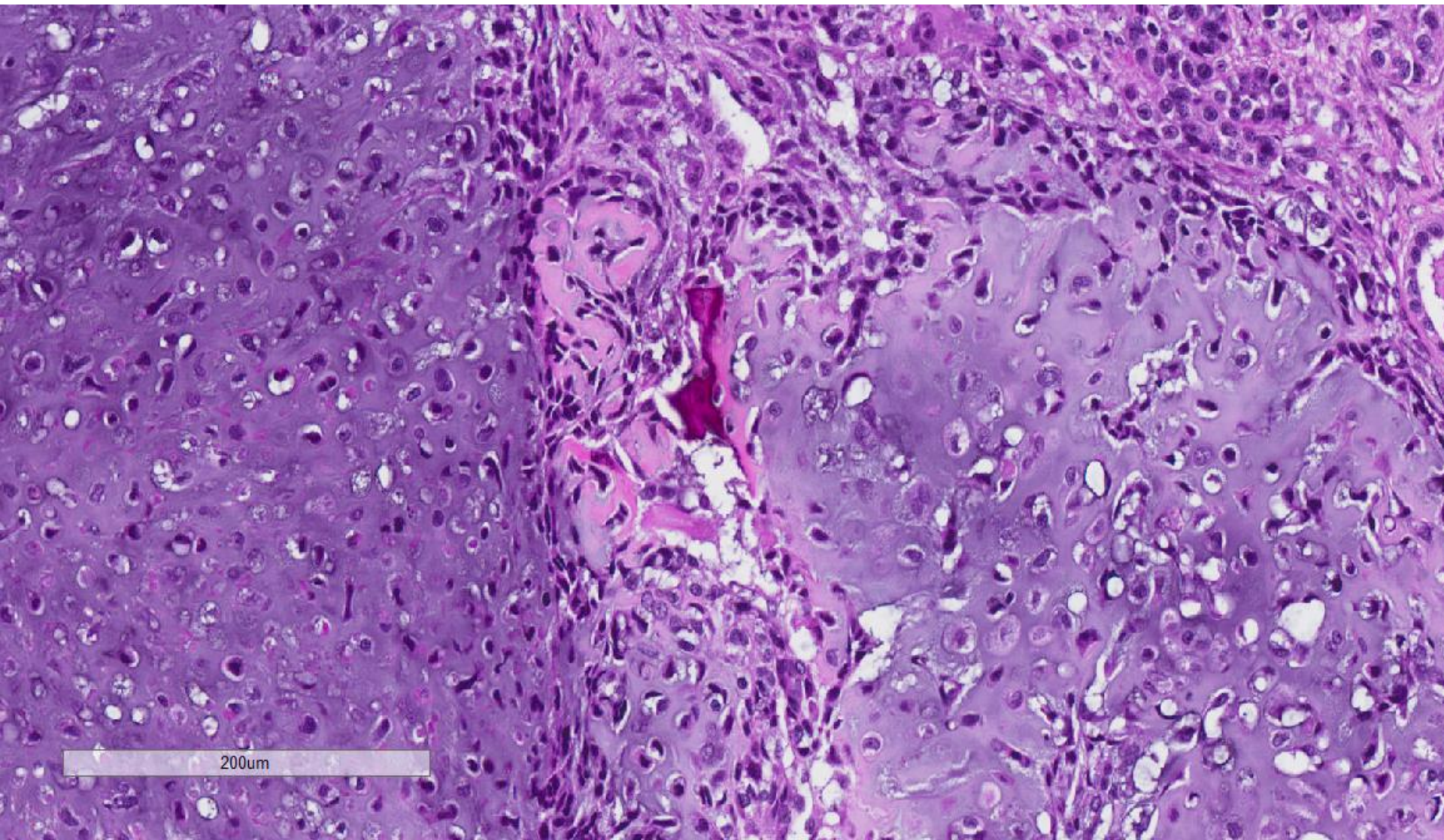


3mm



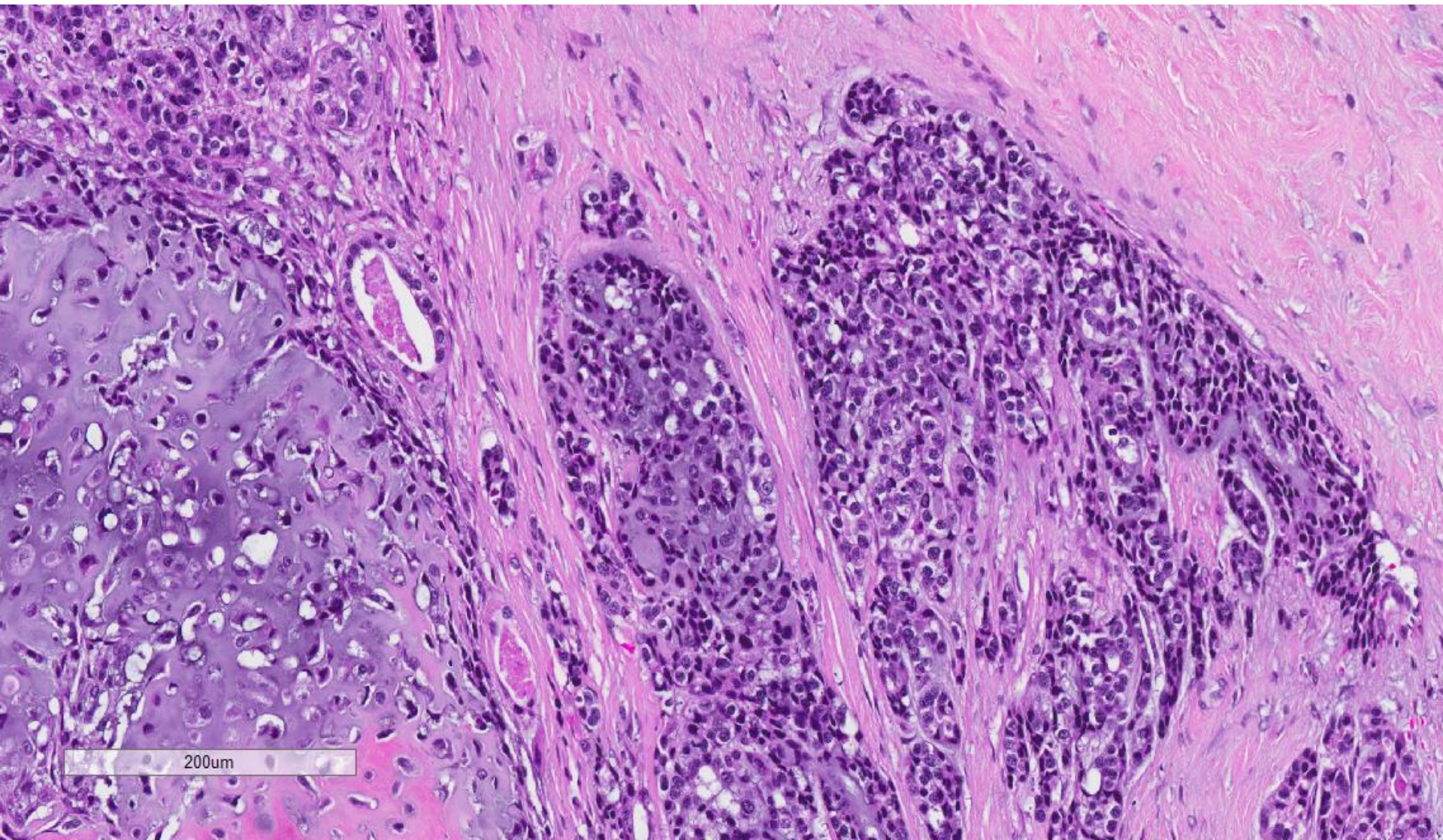




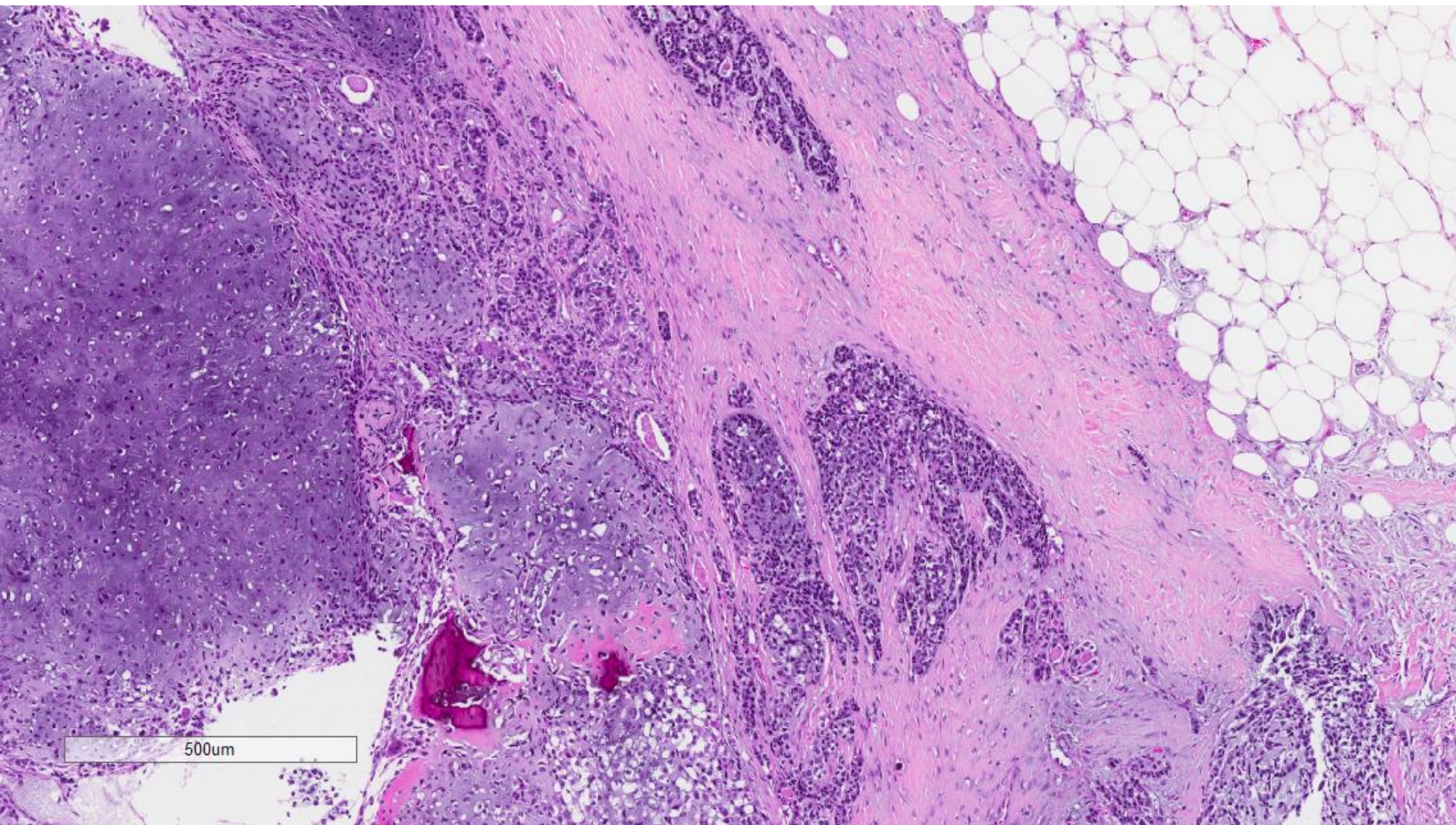


200um

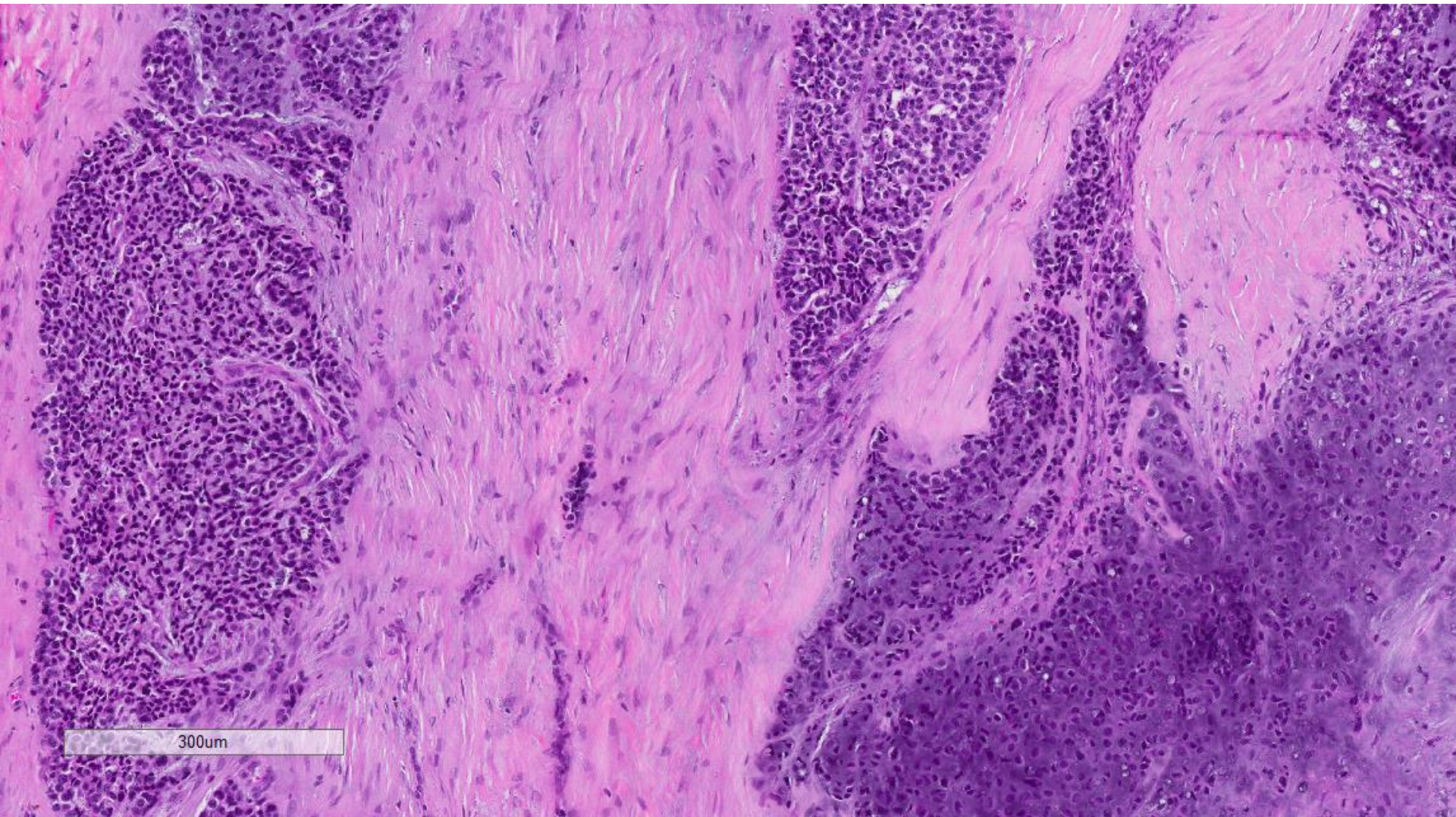






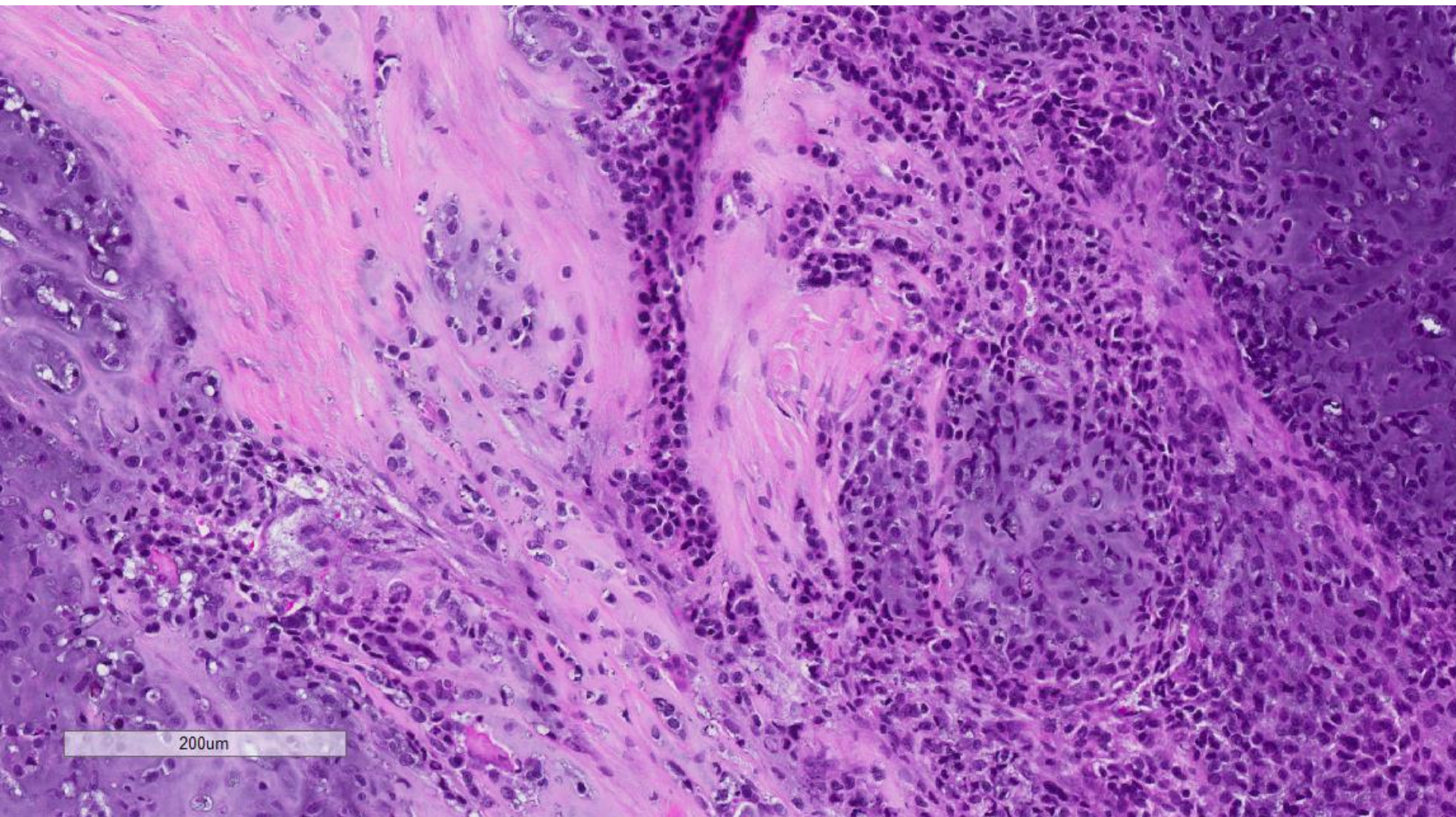




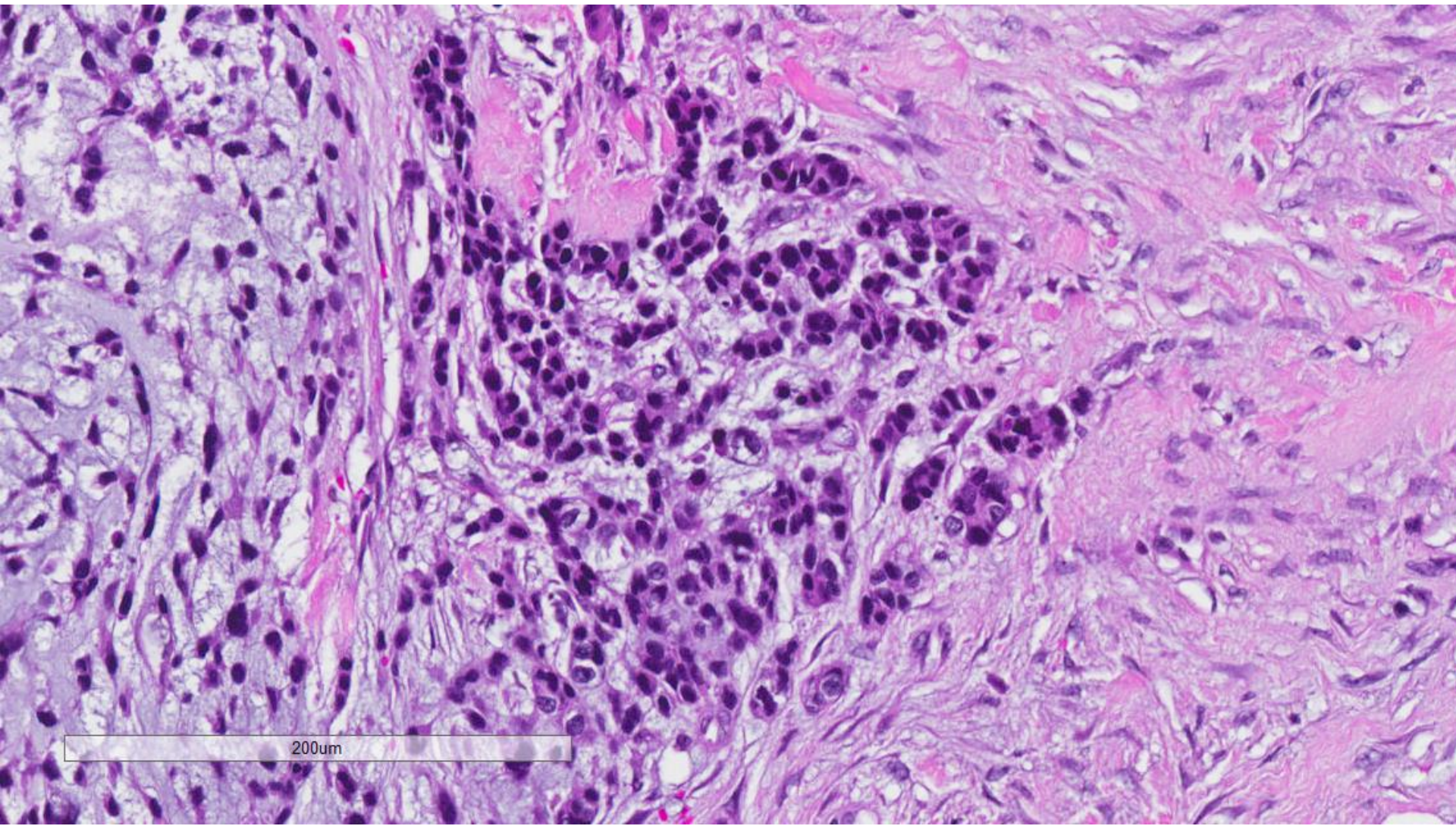


300um



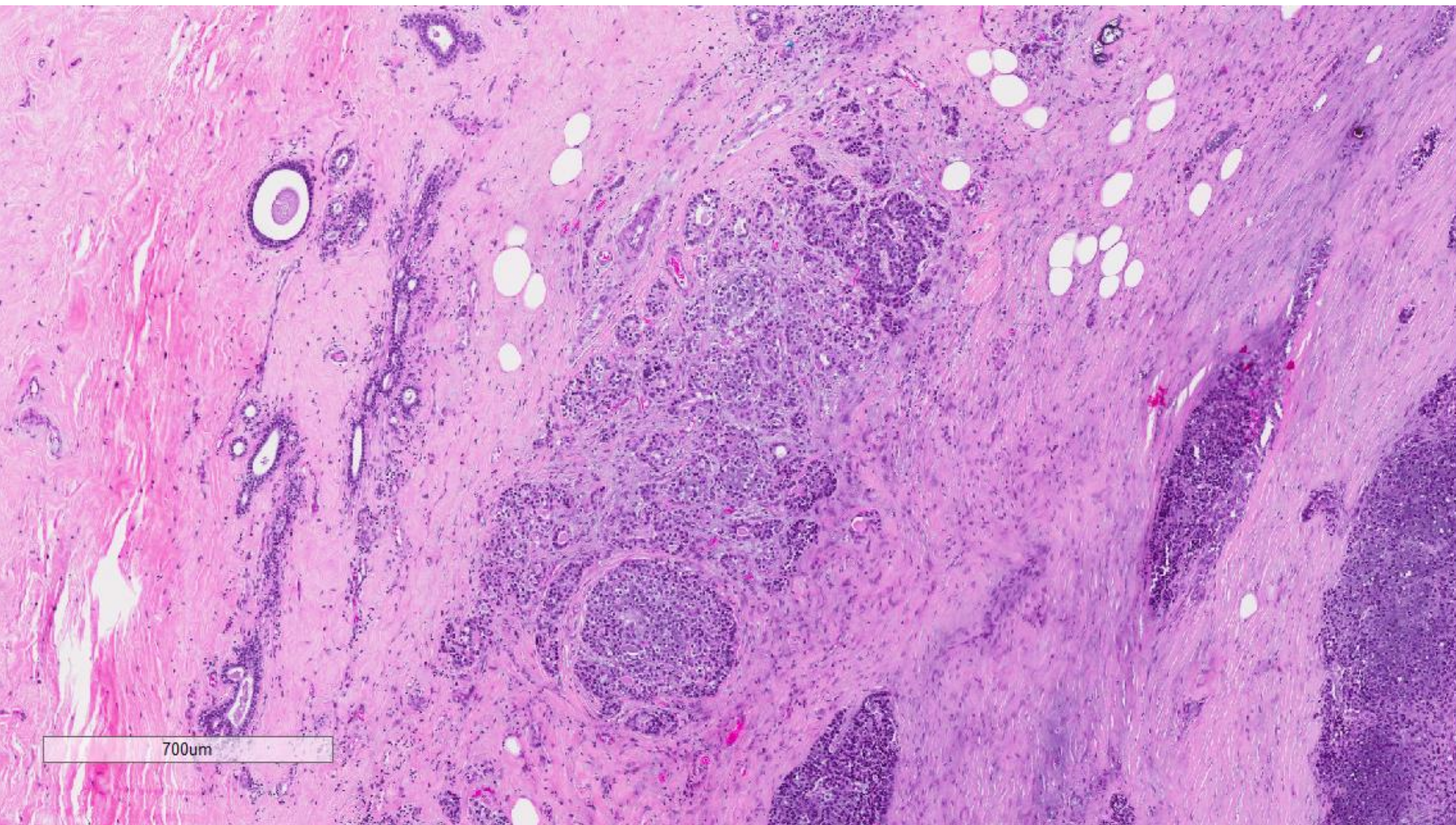




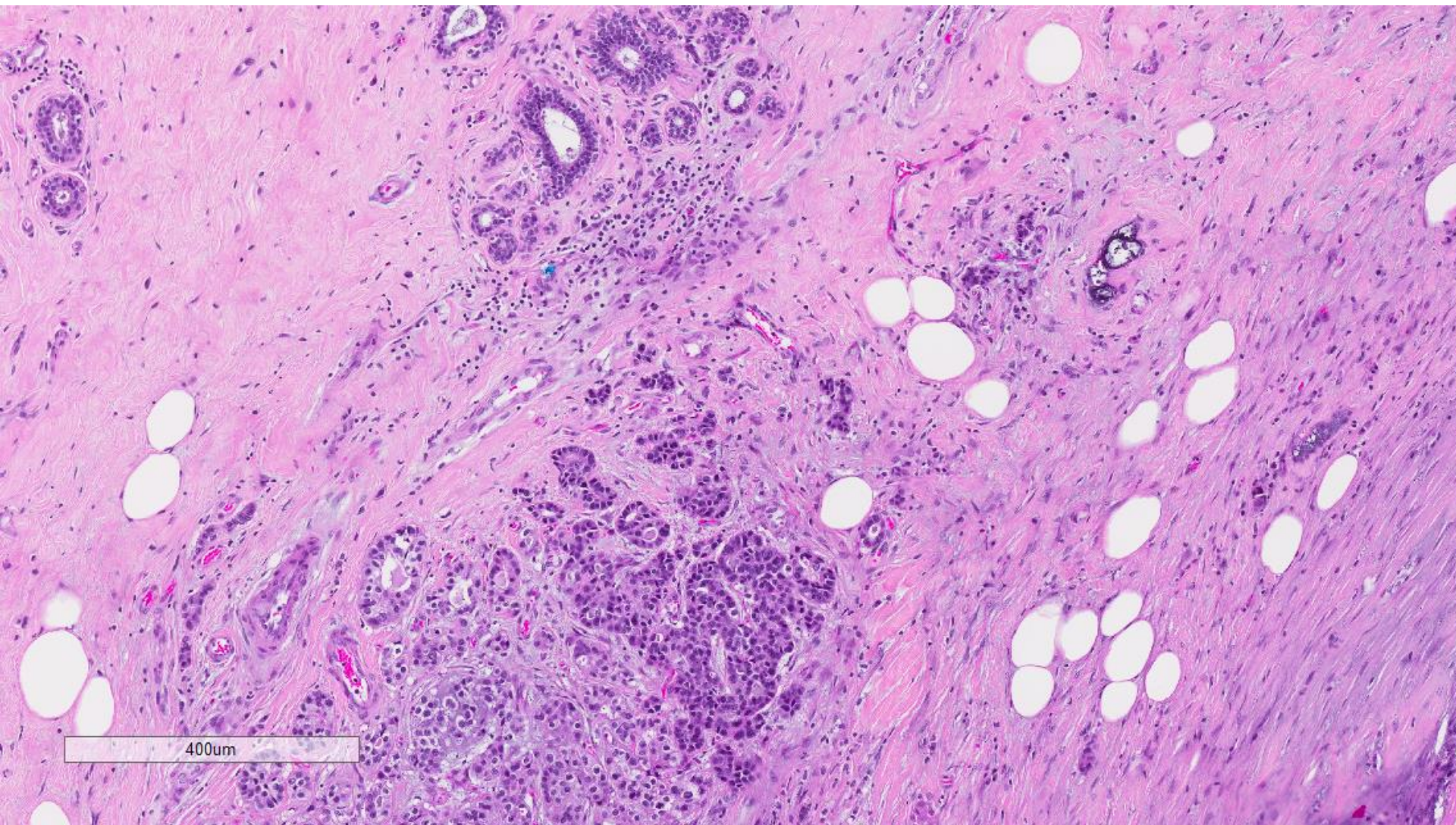


200um

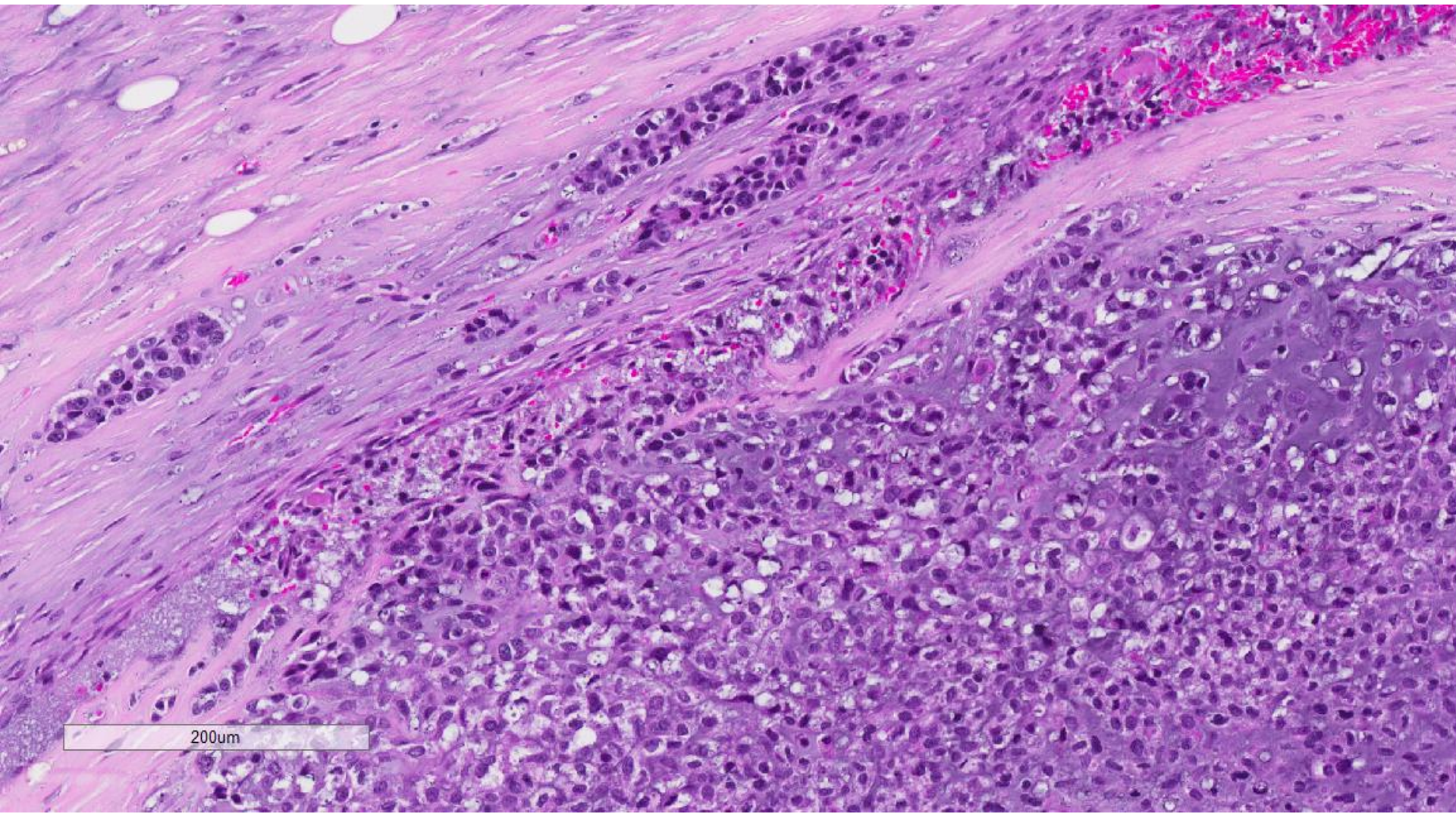






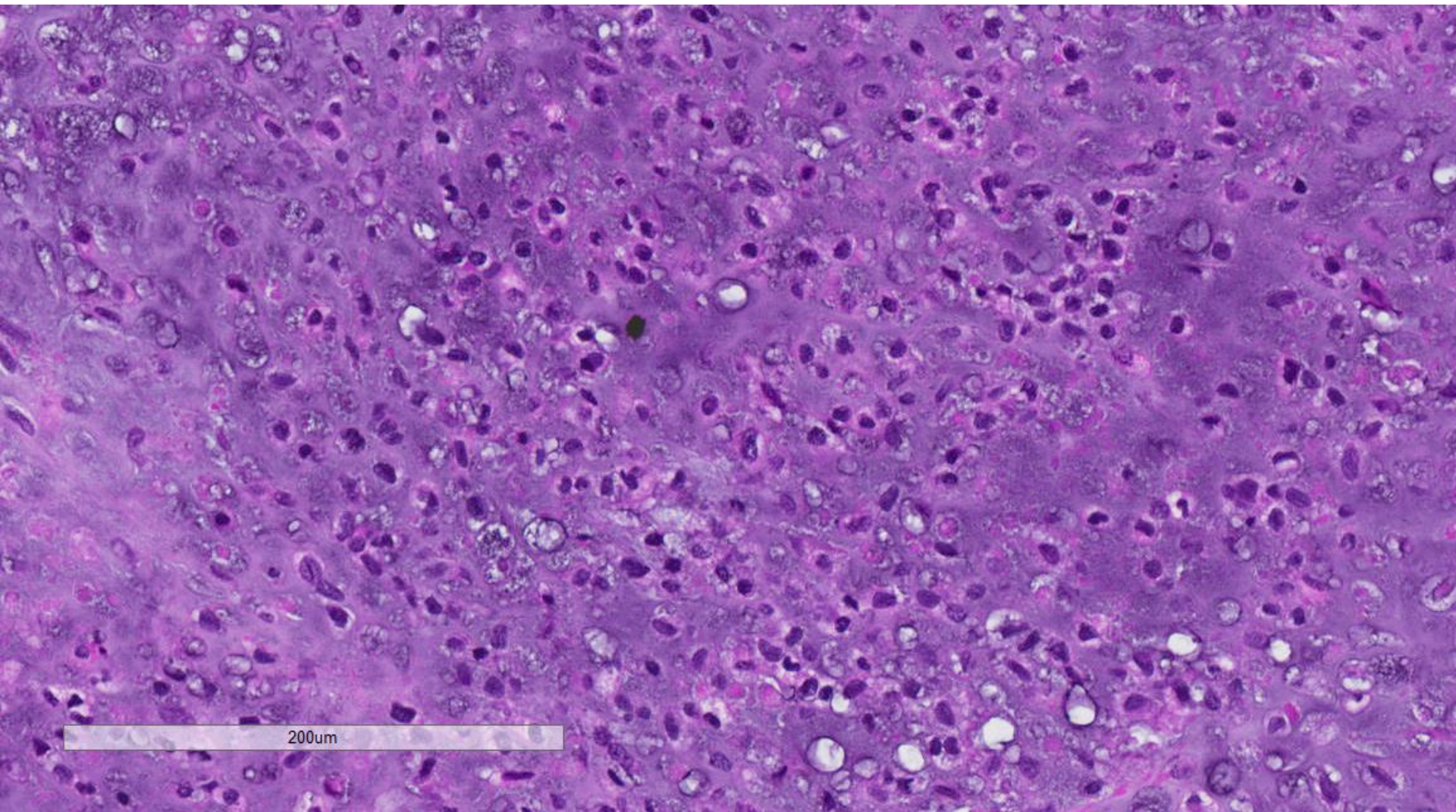






200um







# Immunohistochemistry

- Keratin positive in epithelial component.
- Negative staining in epithelial component for p63, 34BE12 and EGFR.
- S100 variably positive.
- ER, PR, cerbB2 negative.



Metaplastic carcinoma – matrix producing, grade 3, 23 mm size



# Metaplastic carcinoma (WHO 2012 classification)

- Low grade adenosquamous carcinoma
- Fibromatosis-like metaplastic carcinoma
- Squamous cell carcinoma
- Spindle cell carcinoma
- Metaplastic carcinoma with mesenchymal differentiation
- Mixed metaplastic carcinoma



# Metaplastic carcinoma with mesenchymal differentiation

- Often composed of an admixture of ***mesenchymal*** components, including chondroid, osseous, rhabdomyoid and even neuroglial differentiation, with ***carcinomatous*** areas, which can be in the form of glandular tubules, solid clusters and/ or foci of squamous differentiation.
- Mesenchymal components can either appear differentiated with minimal atypia to exhibiting frankly malignant features that to some extent recapitulate the patterns found in true sarcomas of soft tissues.



- Historically, the term “**matrix producing carcinomas**” was applied to a subgroup of metaplastic carcinomas with mesenchymal elements where an abrupt transition from epithelial to the mesenchymal components without the presence of intervening spindle cells was found.
- True chondroid differentiation or chondroid matrix is often present.
- Areas of epithelial differentiation can be readily found in most tumours, but in some cases, extensive sampling is required for the carcinomatous areas to be documented.
- Immunohistochemical analysis reveals the expression of epithelial markers, usually high-molecular-weight keratins.