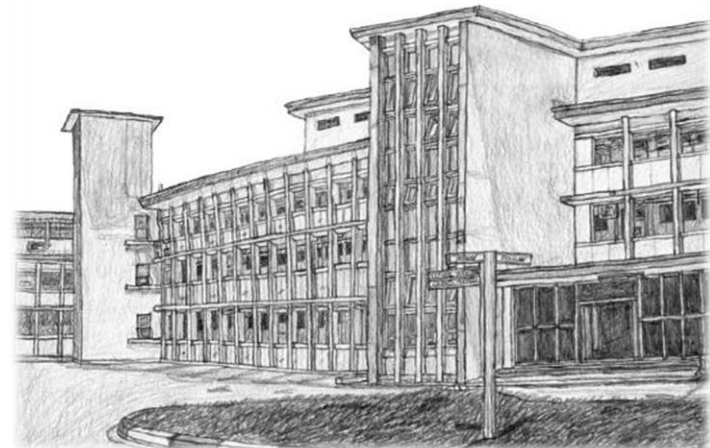


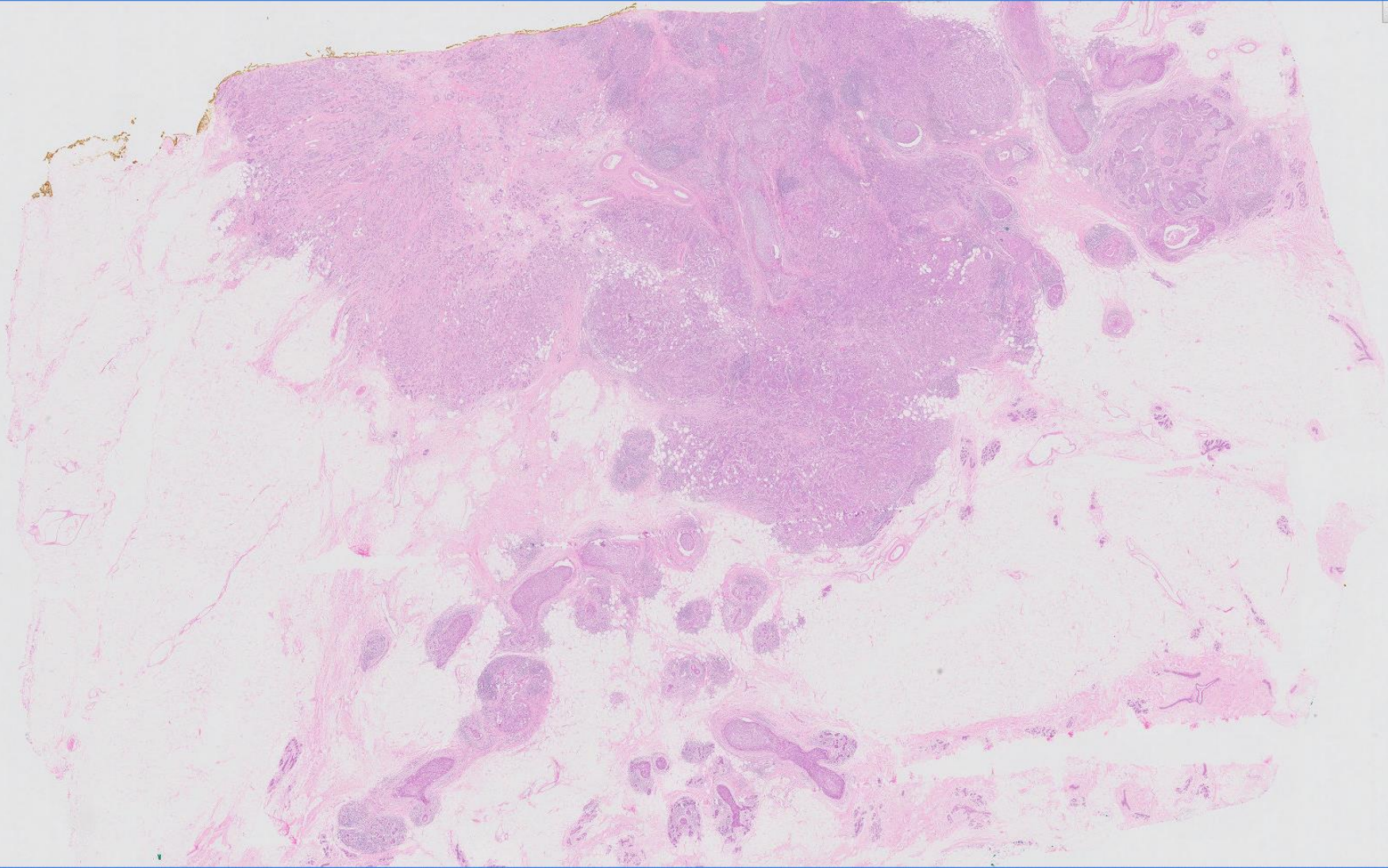
## Case 10

53 year old female.

Right mastectomy and axillary clearance.

Irregular whitish tumour measuring 2.5cm was found at the 12 o'clock position in the right breast.

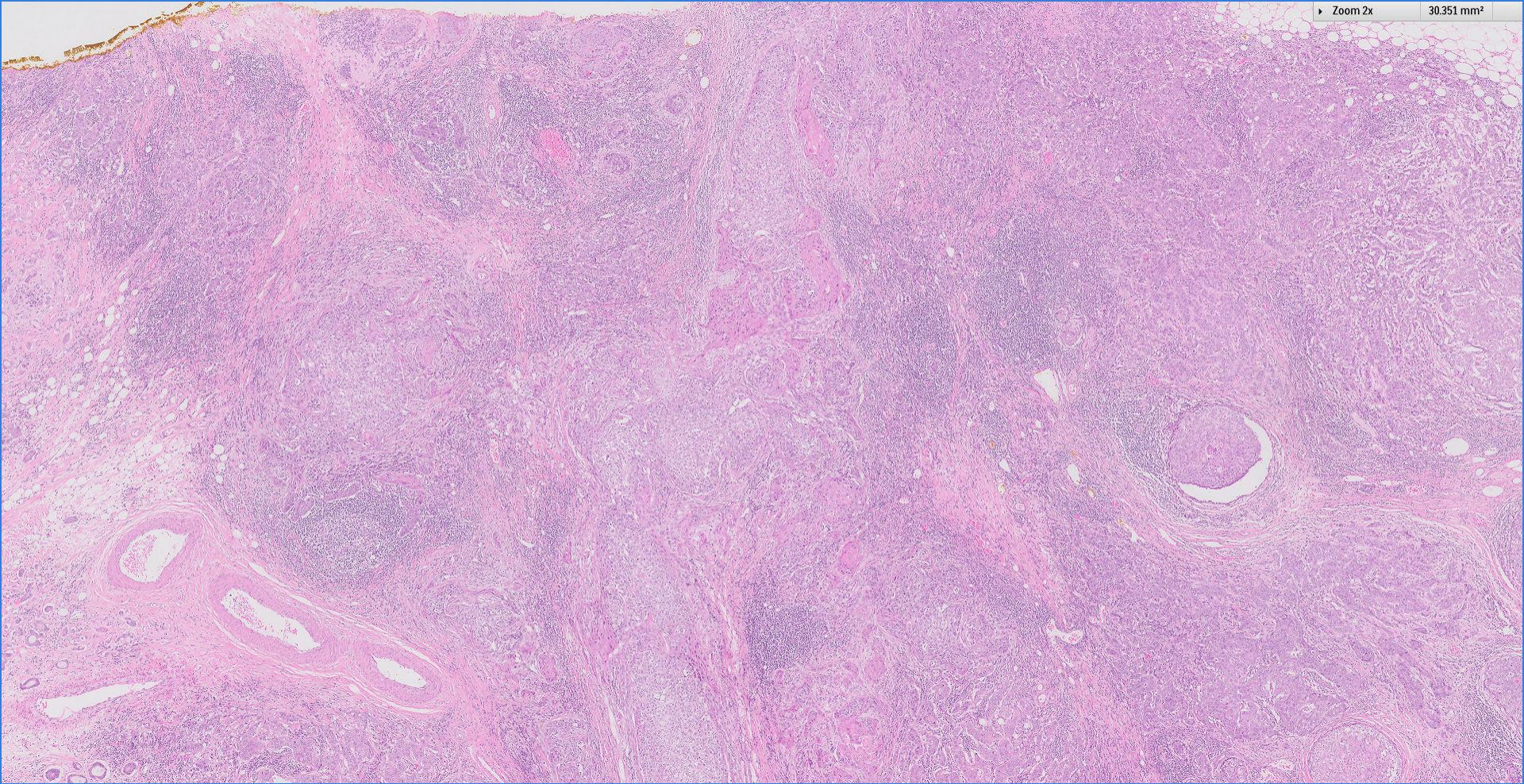






Zoom 2x

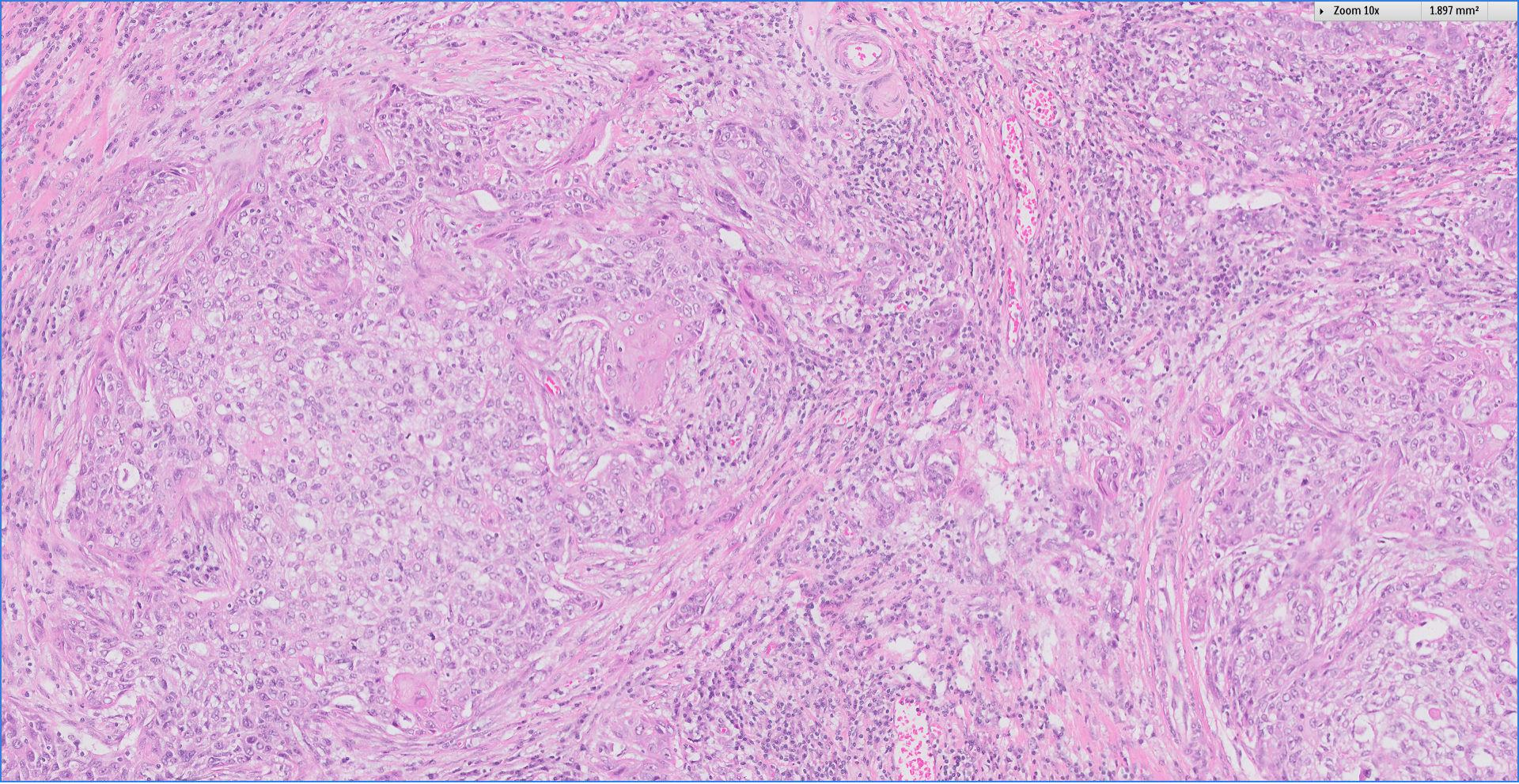
30.351 mm<sup>2</sup>





Zoom 10x

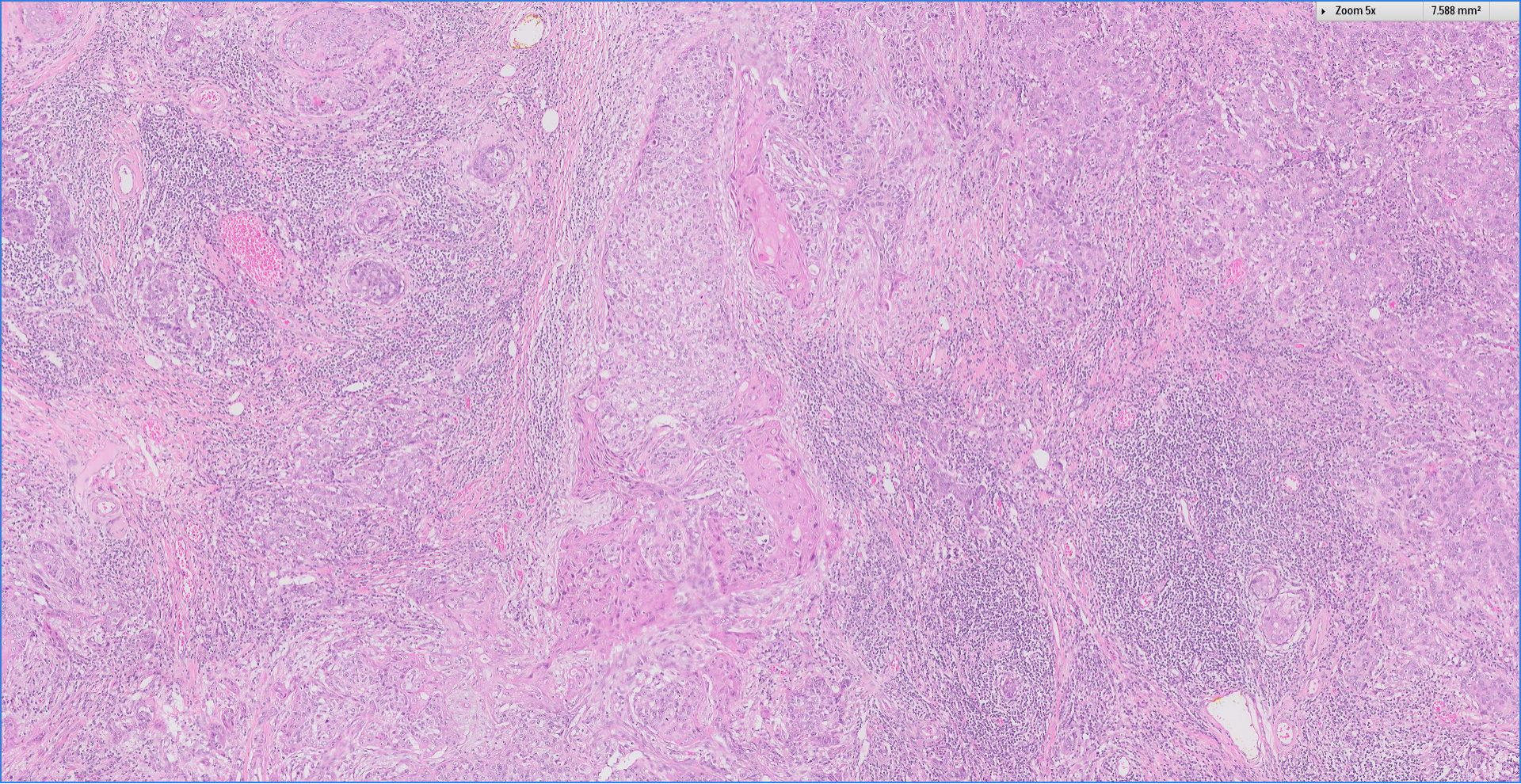
1.897 mm<sup>2</sup>





► Zoom 5x

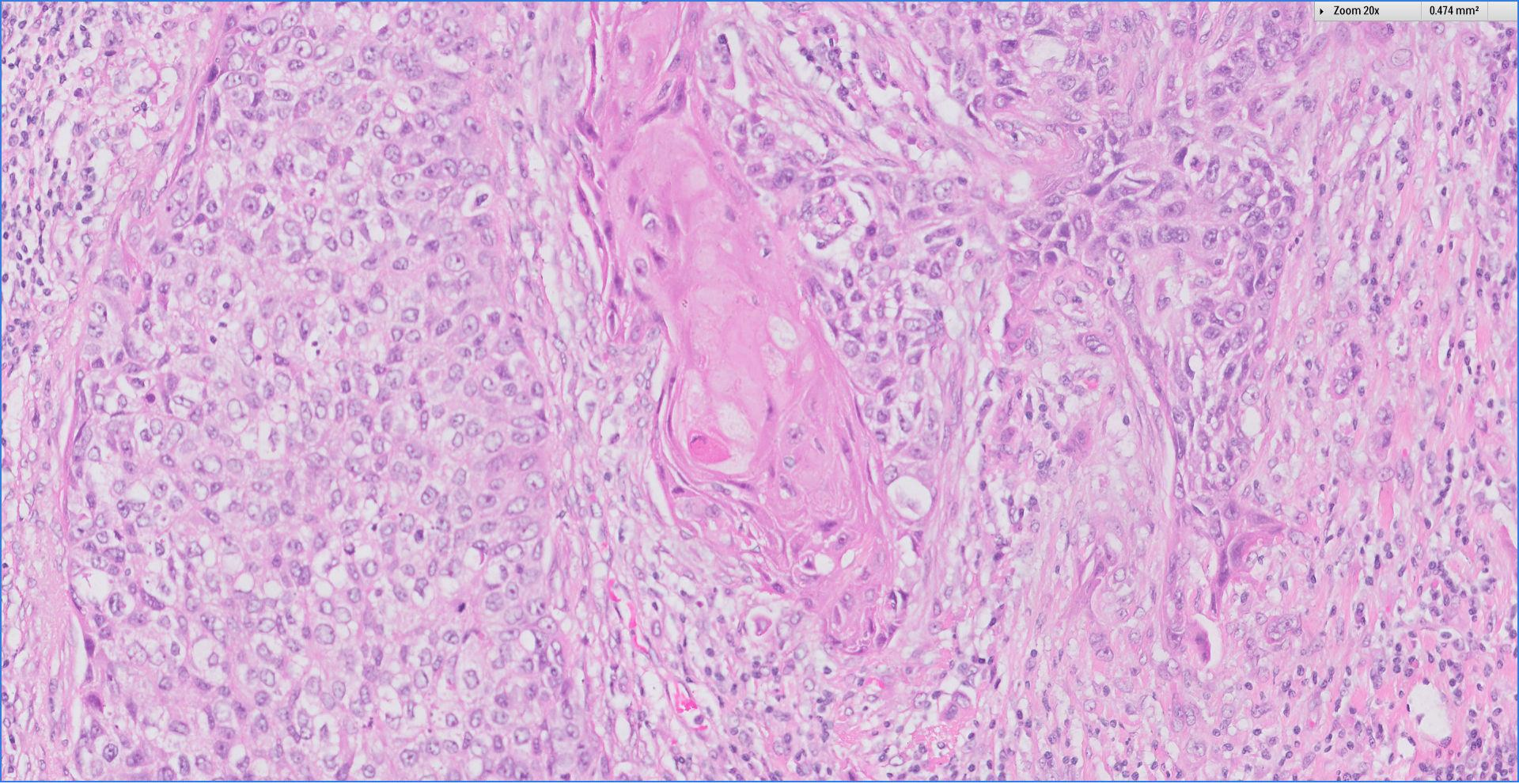
7.588 mm<sup>2</sup>





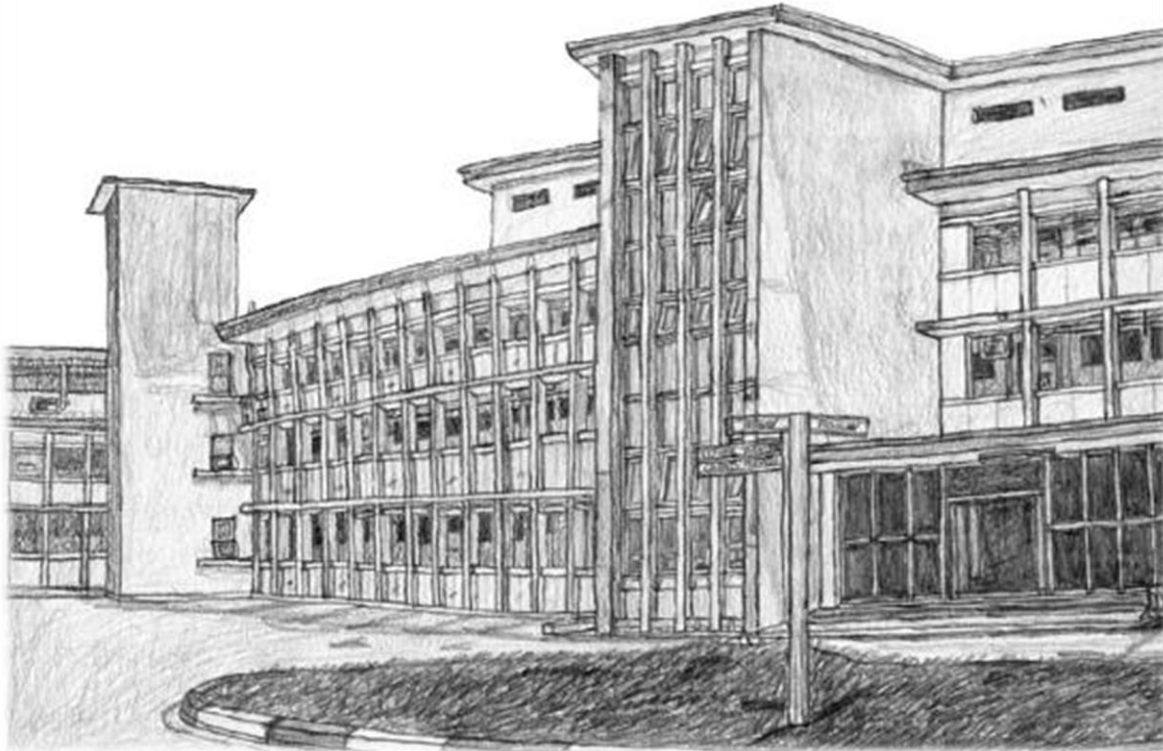
Zoom 20x

0.474 mm<sup>2</sup>





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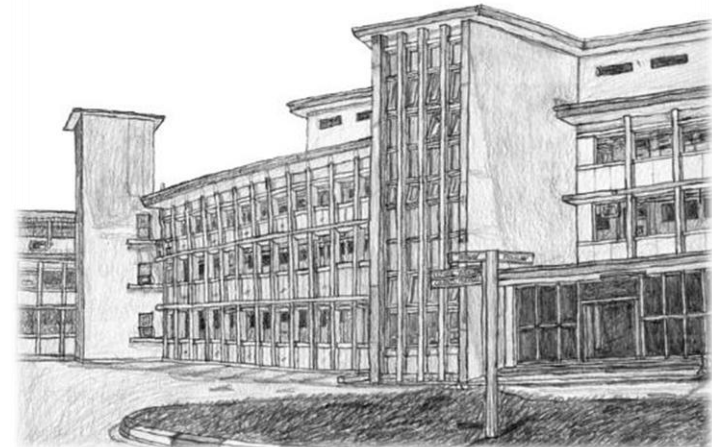
## *Diagnosis*

Right breast mastectomy and axillary clearance:

Invasive ductal carcinoma with metaplastic features  
(squamous differentiation), grade 3, 25mm.

Extensive high nuclear grade DCIS.

6 of 8 axillary lymph nodes with metastatic carcinoma.





# *Metaplastic carcinoma*

- Encompasses a group of neoplasms characterized by differentiation of the neoplastic epithelium into squamous cells and/or mesenchymal-looking elements, including but not restricted to spindle, chondroid, osseous, and rhabdomyoid cells.
- May be either entirely composed of metaplastic elements, or a complex admixture of carcinoma and metaplastic areas.

**WHO 2012**



# *Metaplastic carcinoma*

- Low-grade adenosquamous carcinoma 8570/3
- Fibromatosis-like metaplastic carcinoma 8572/3
- Squamous cell carcinoma 8070/3
- Spindle cell carcinoma 8032/3
- Carcinoma with mesenchymal differentiation
  - Chondroid differentiation 8571/3
  - Osseous differentiation 8571/3
  - Other types of mesenchymal differentiation 8575/3
- Myoepithelial carcinoma 8982/3

**WHO 2012**



# *Squamous cell carcinoma*

- Usually presents as a cystic lesion, where the cavity is lined by squamous cells with varying degrees of nuclear atypia and pleomorphism.
- The neoplastic cells infiltrate the adjacent stroma in the form of sheets, cords and nests, elicit a conspicuous stromal reaction.
- Inflammatory infiltrate is usually prominent.
- Infiltrating squamous elements may vary in degrees of squamous differentiation, with spindle cells commonly observed at the invasive fronts of the tumour.
- For a diagnosis of primary squamous cell carcinoma of the breast to be rendered, a primary squamous cell carcinoma from other sites, especially skin, must be ruled out.

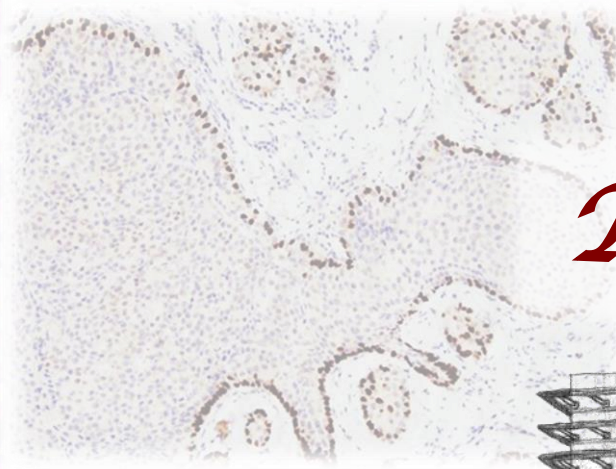
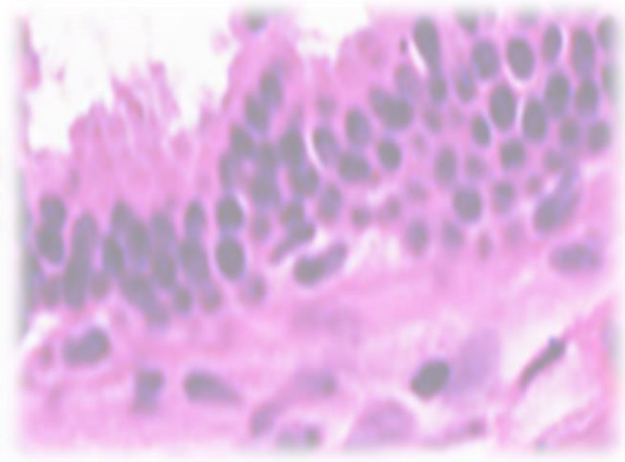
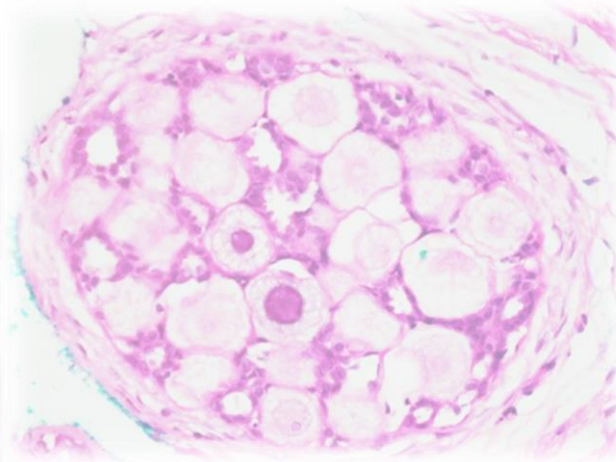
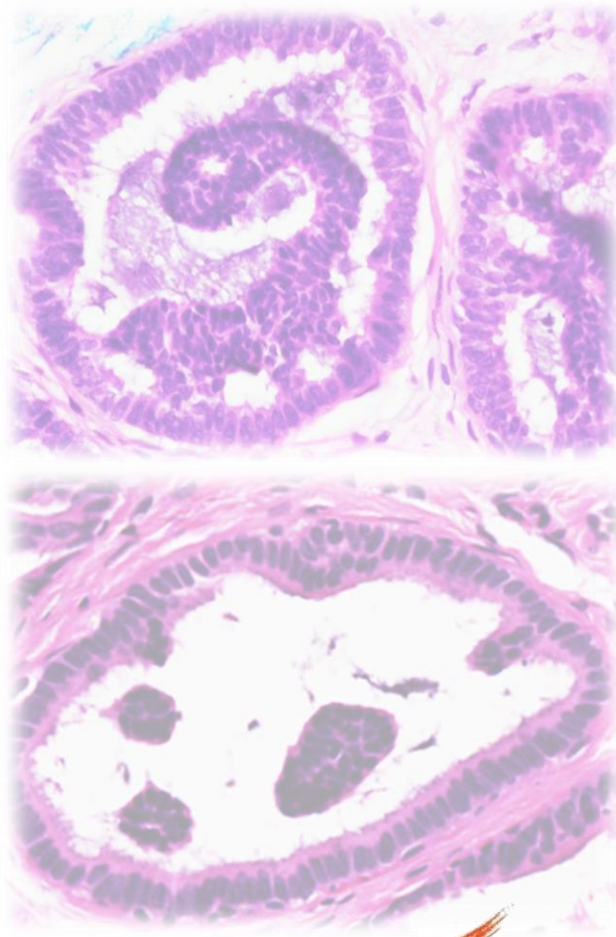


# *Squamous cell carcinoma*

- Acantholytic variant of squamous cell carcinoma, characterized by the formation of irregular spaces lined by atypical squamous cells leading to a pseudoglandular or pseudoangiosarcomatous appearance, is a potential differential diagnosis with angiosarcoma.
- Metaplastic squamous cell carcinoma may be pure or mixed with coexisting invasive carcinoma NST.
- Squamous differentiation can also be found in carcinomas with medullary-like features.



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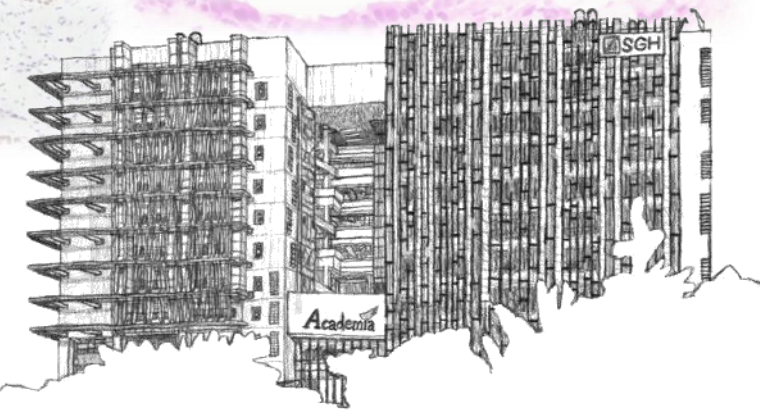


*Thank you!*

 Singapore  
General Hospital  
SingHealth  
Division of Pathology

 SingHealth DukeNUS  
ACADEMIC MEDICAL CENTRE  
**PATHOLOGY**

 **IAP**  
International Academy of Pathology  
Singapore Division



THE ACADEMIA,  
SINGAPORE GENERAL HOSPITAL

09.05.2014

*Handwritten signature*