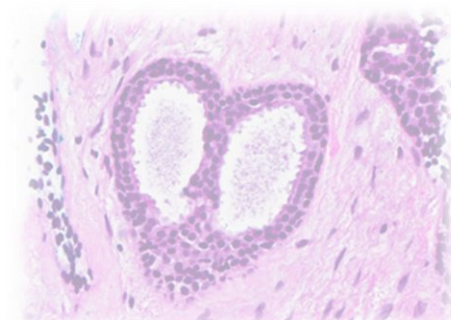
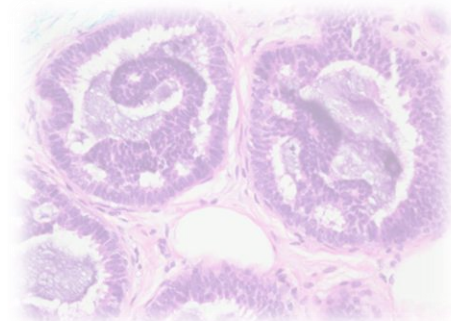
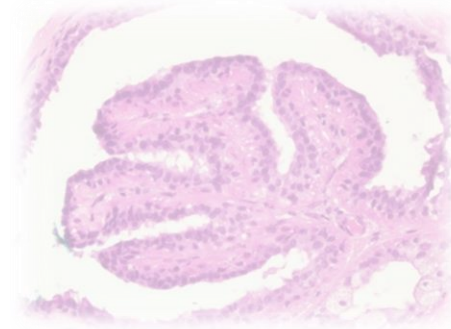
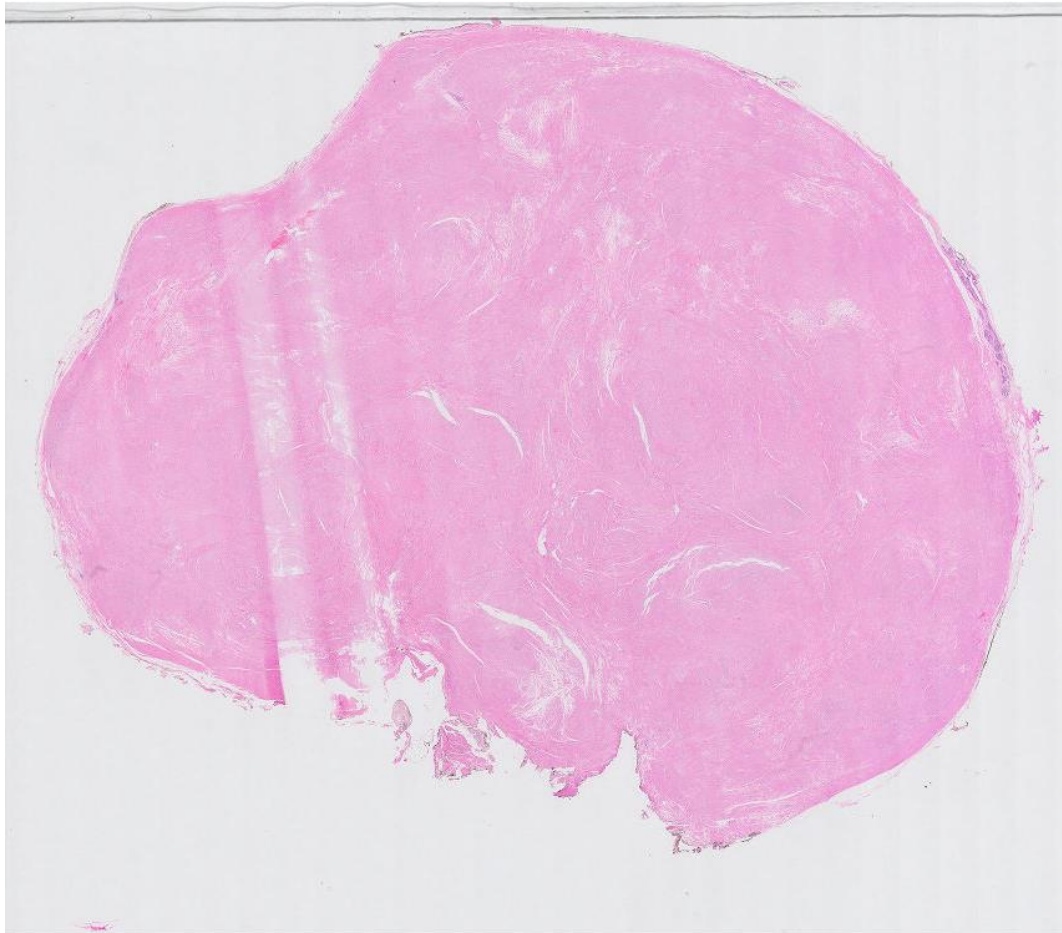


Case 22

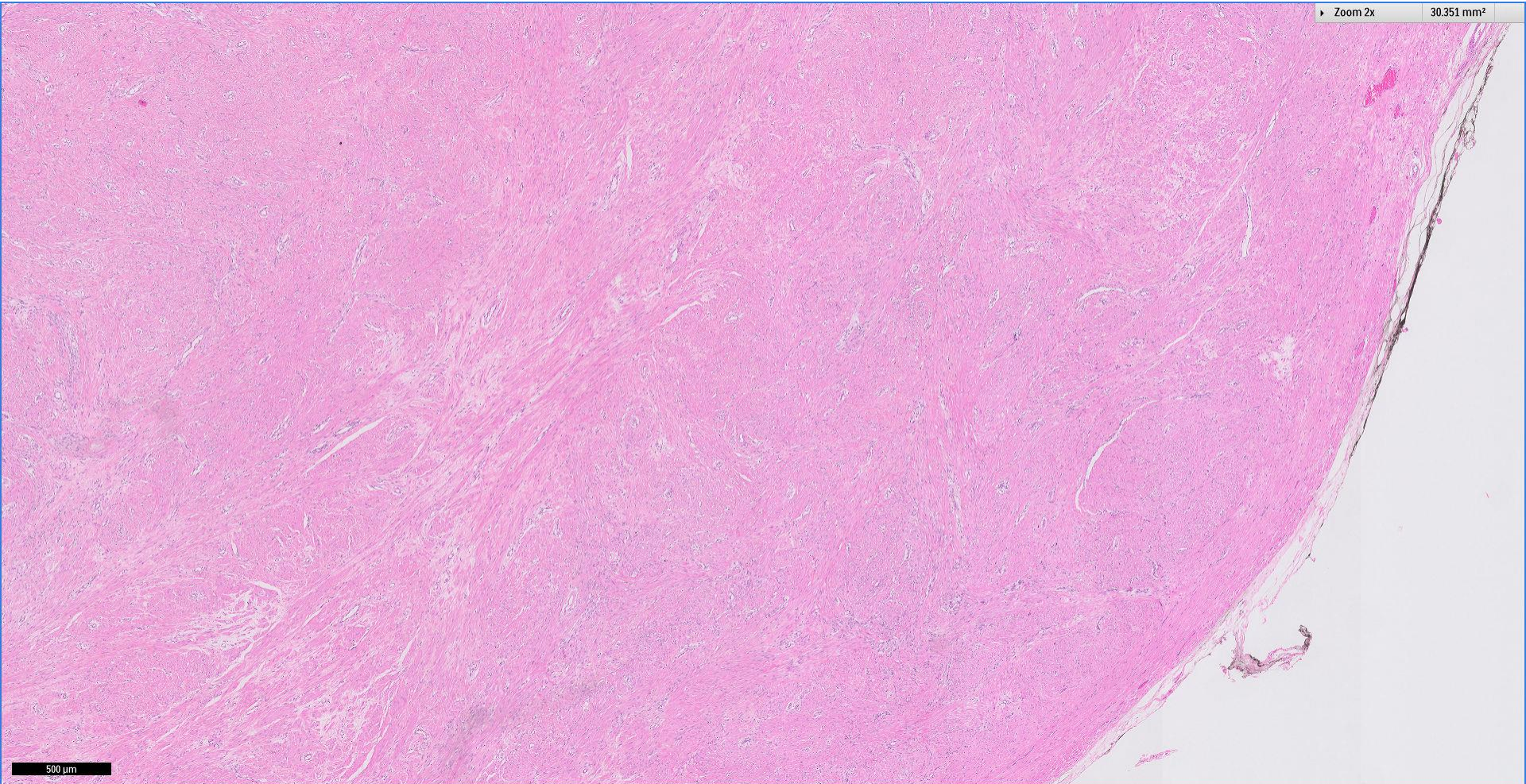
37 year old Chinese female.
Left breast lump, excision biopsy.

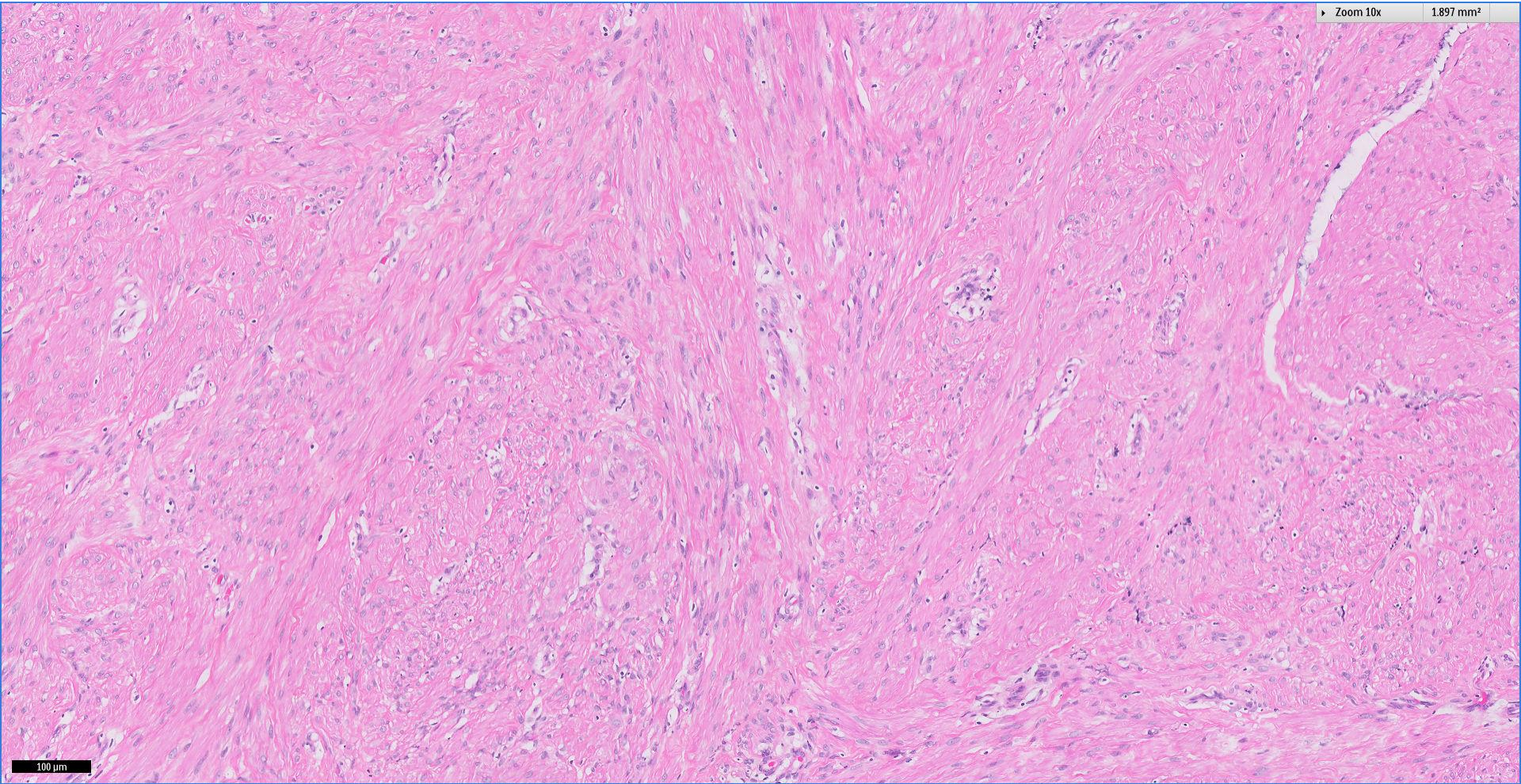




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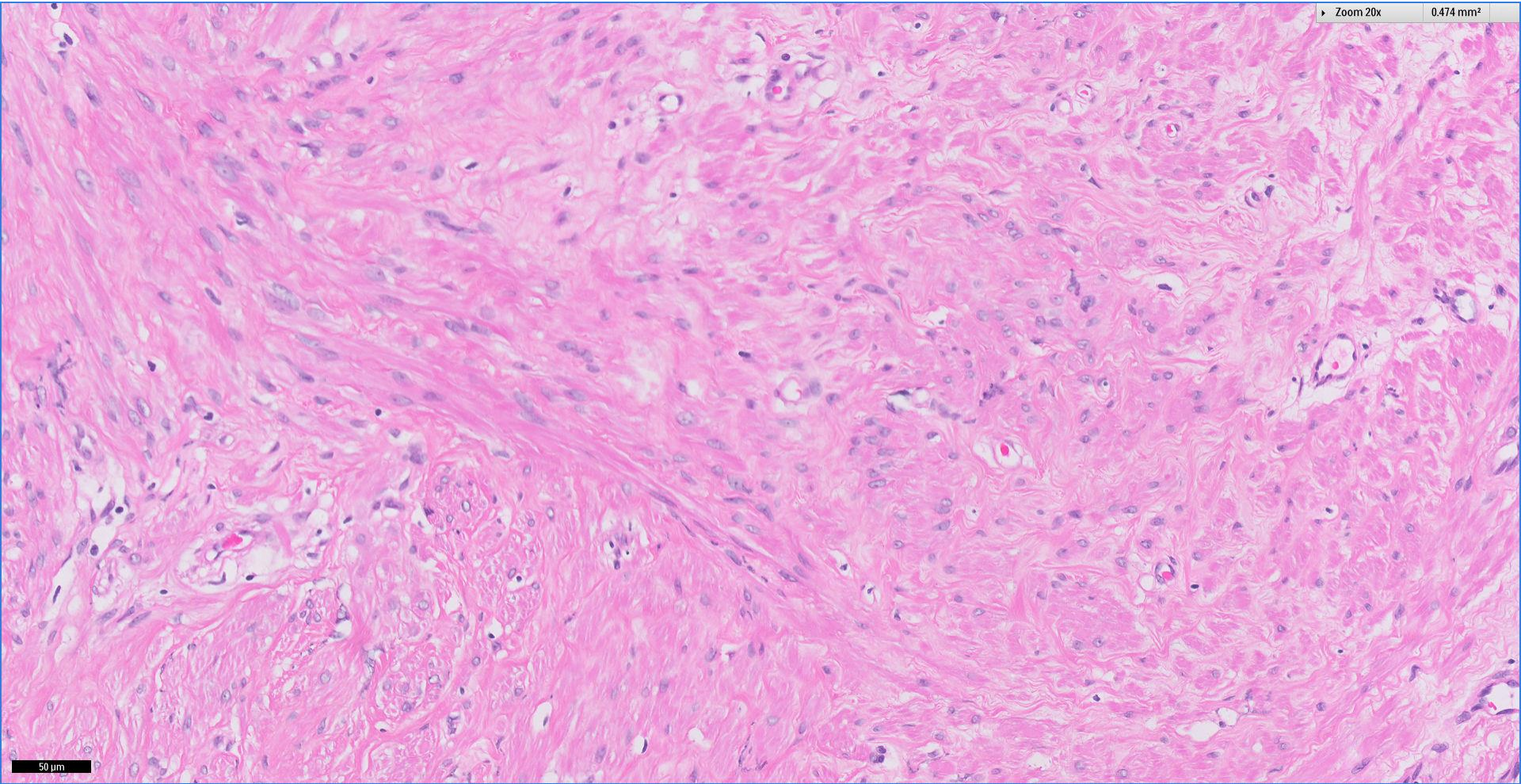


100 µm



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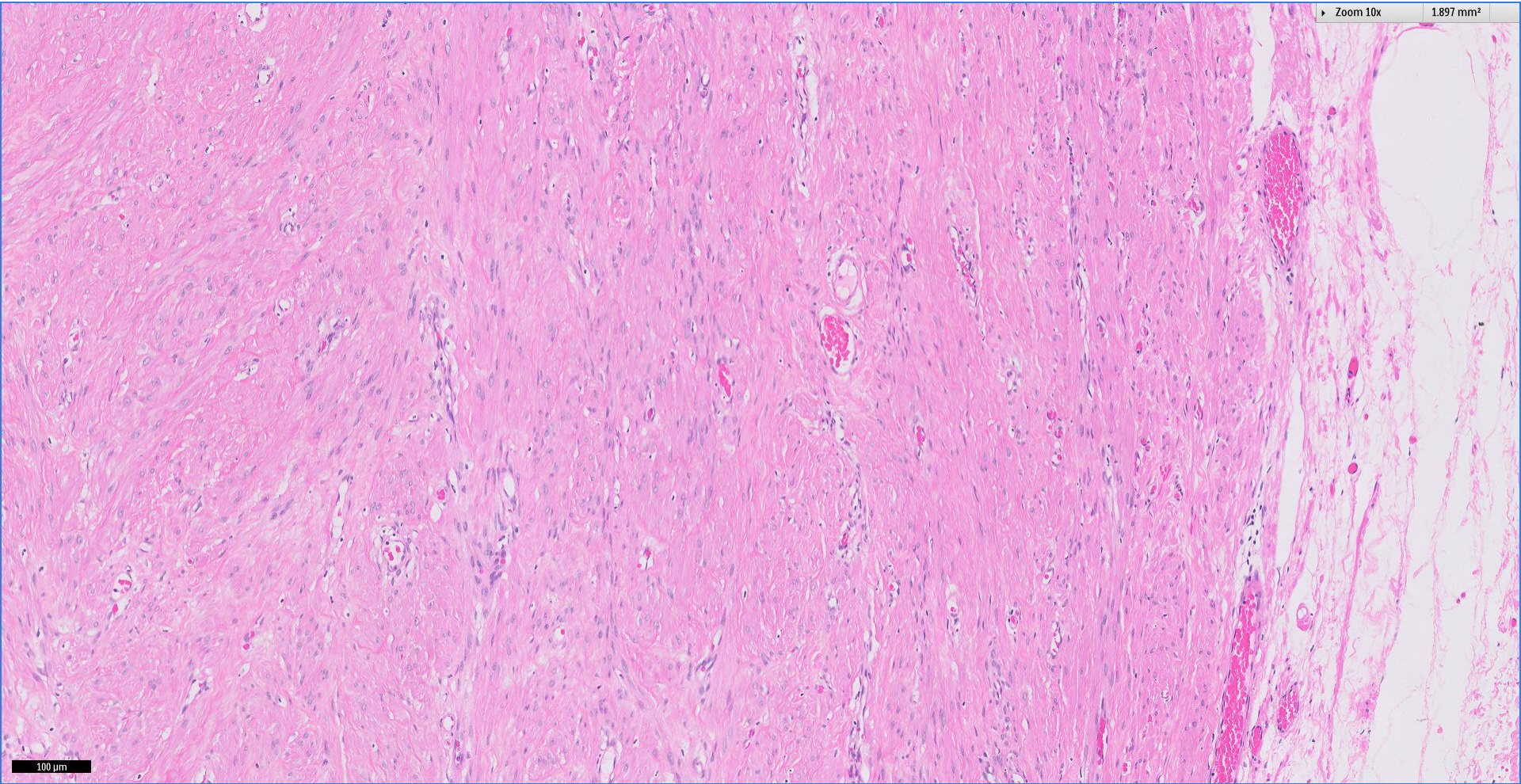


50 μm



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100 µm

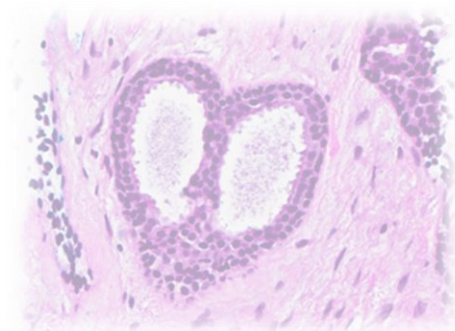
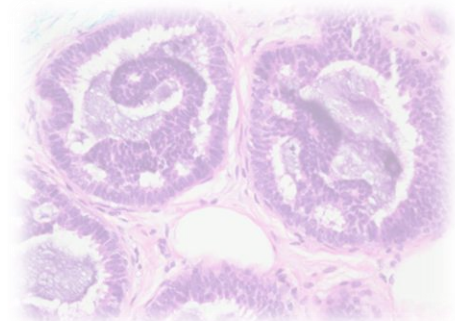
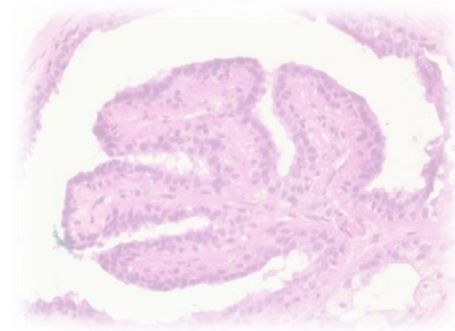


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Diagnosis, case 22

- Left breast lump, excision biopsy:
Leiomyoma.



Leiomyoma

- Benign tumour of smooth muscle.
- Subtypes ~
 - Superficial ~ cutaneous (pilar) leiomyoma of the nipple/areola.
 - Deep ~ leiomyoma of the breast parenchyma.
- Clinical features ~
 - Asymptomatic or may present with pain or a palpable nodule/mass without specific imaging features.
 - Multiple tumours occur rarely.
- Epidemiology ~
 - Mostly women, with broad age range (20 – 70 years), average 43 years.
- Etiology ~
 - A few cases are associated with the syndrome of hereditary leiomyomatosis and renal cell carcinoma (fumarate hydratase mutation)
- Pathogenesis ~
 - Unknown.

Leiomyoma

- Macroscopic appearance ~
 - Superficial lesions are poorly defined.
 - Parenchymal lesions are well circumscribed.
 - Firm rubbery, grey to tan, whorled cut surface.
 - Superficial lesions usually smaller than deep-seated ones.
- Histopathology ~
 - Identical to smooth muscle tumours elsewhere.
 - Spindle cells with elongated cigar-shaped nuclei and eosinophilic cytoplasm.
 - Focal degenerative nuclear atypia may be present.
 - Mitotic figures are absent.
 - Oedema and hyalinisation may be seen
 - Immunohistochemistry shows SMA, desmin positivity.
 - Loss of FH staining may suggest hereditary leiomyomatosis and renal cell carcinoma syndrome.

Leiomyoma

- Essential diagnostic criteria ~
 - Tumour composed of cells with smooth muscle differentiation, absence of atypia and substantial mitotic activity.
- Prognosis and prediction ~
 - Excision is the treatment of choice.
 - Recurrences are rare.

Thank You