

Case 41

Adult woman sought a second opinion on the diagnosis of her breast lesion.

There was a family history of breast carcinoma.

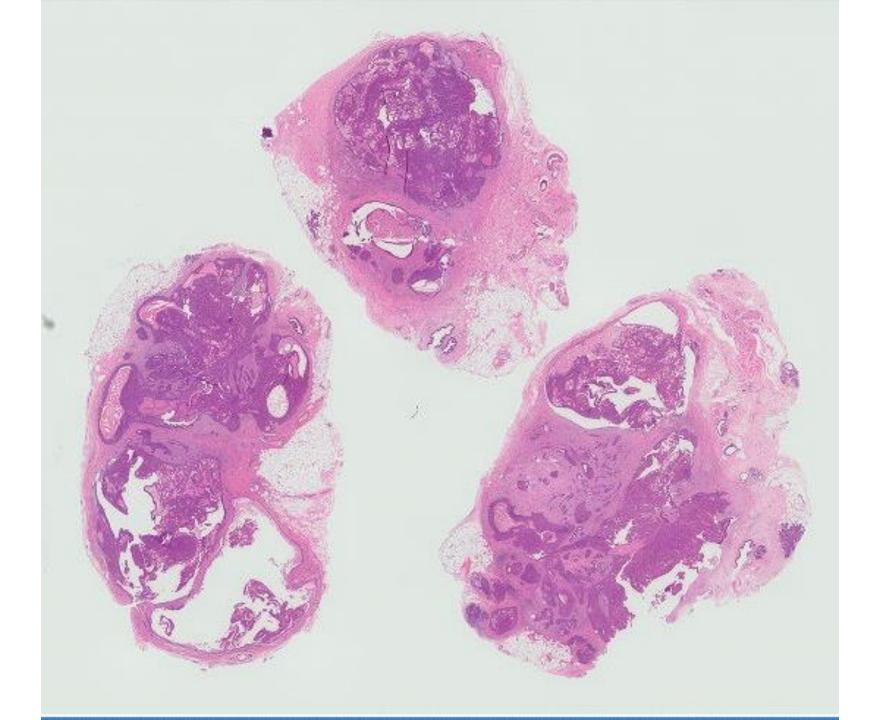
(Case contributed by Dr Hong Wui Tan, Quest laboratories)

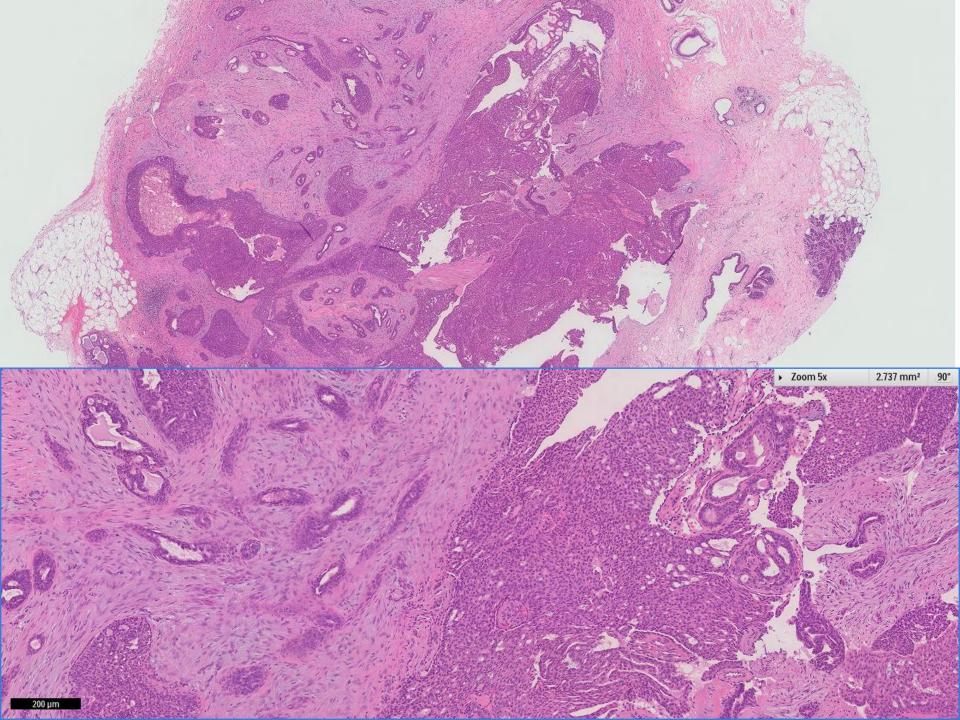


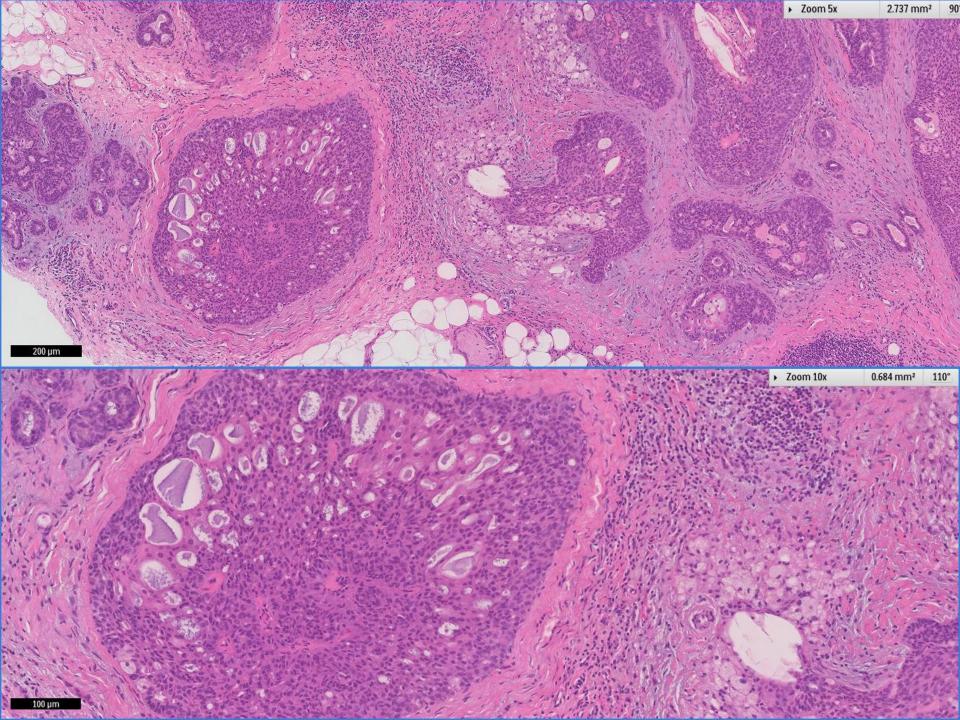


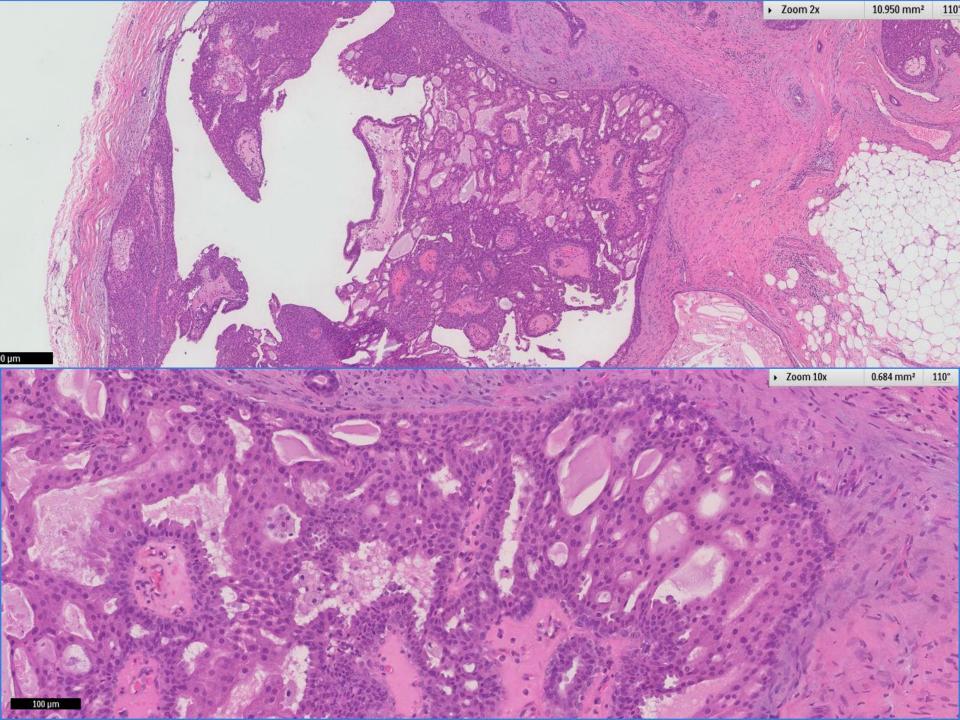




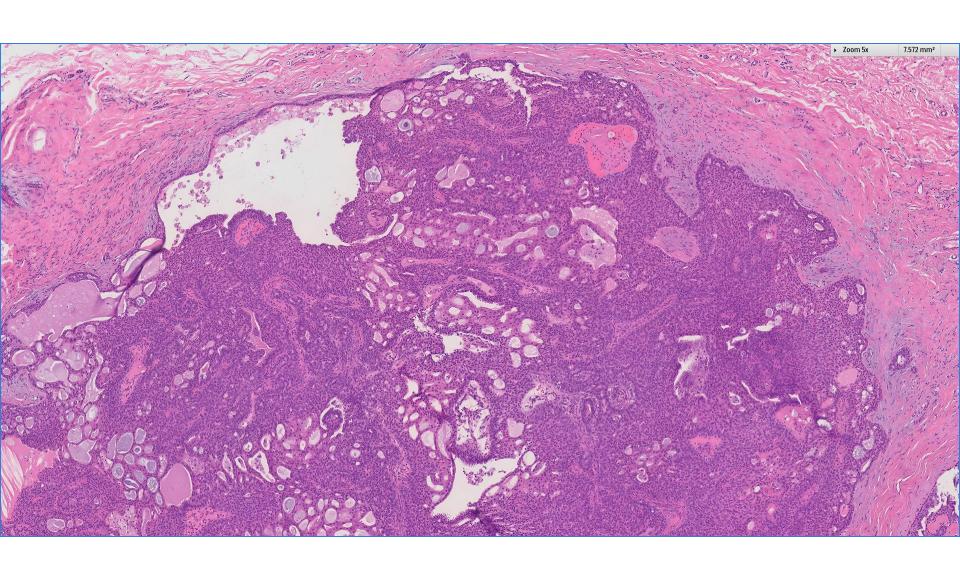


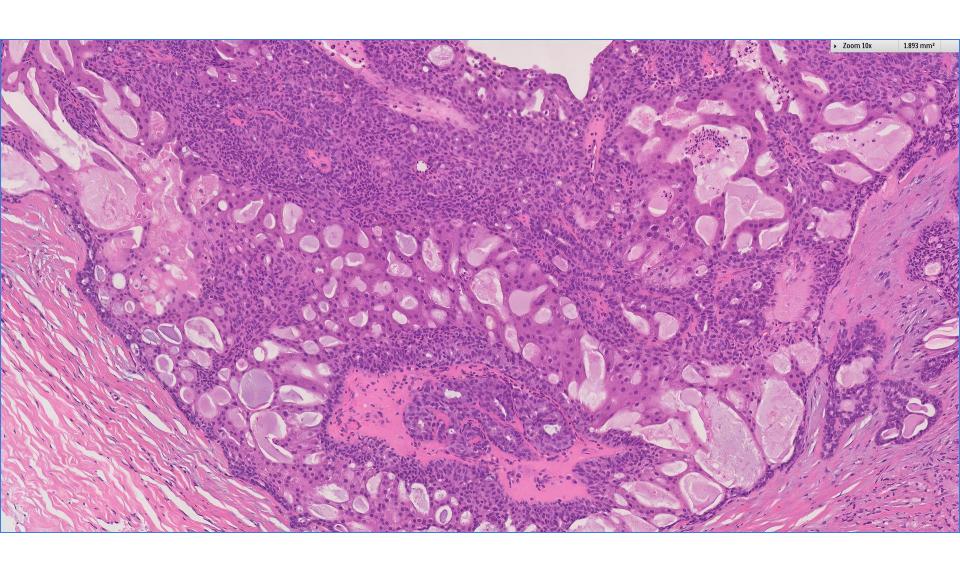


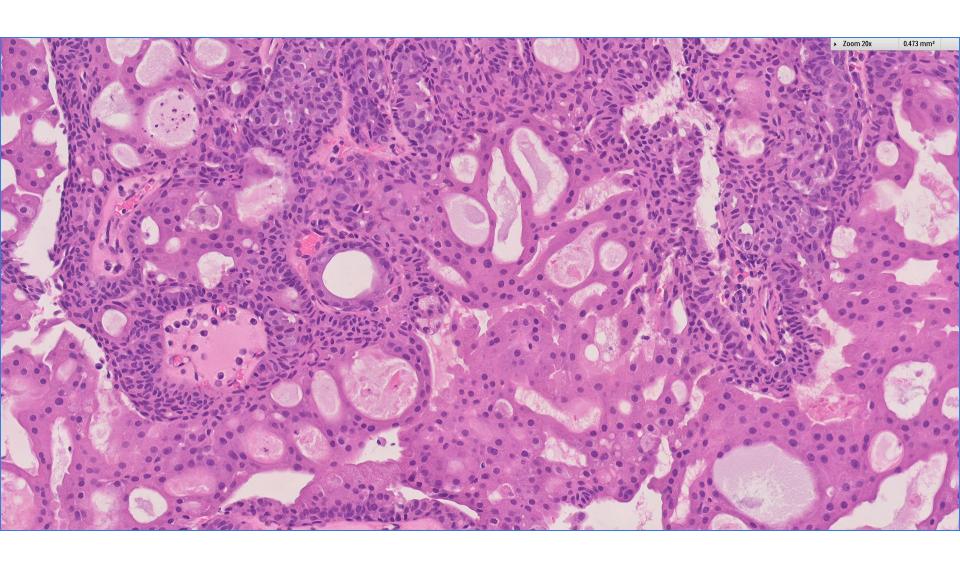


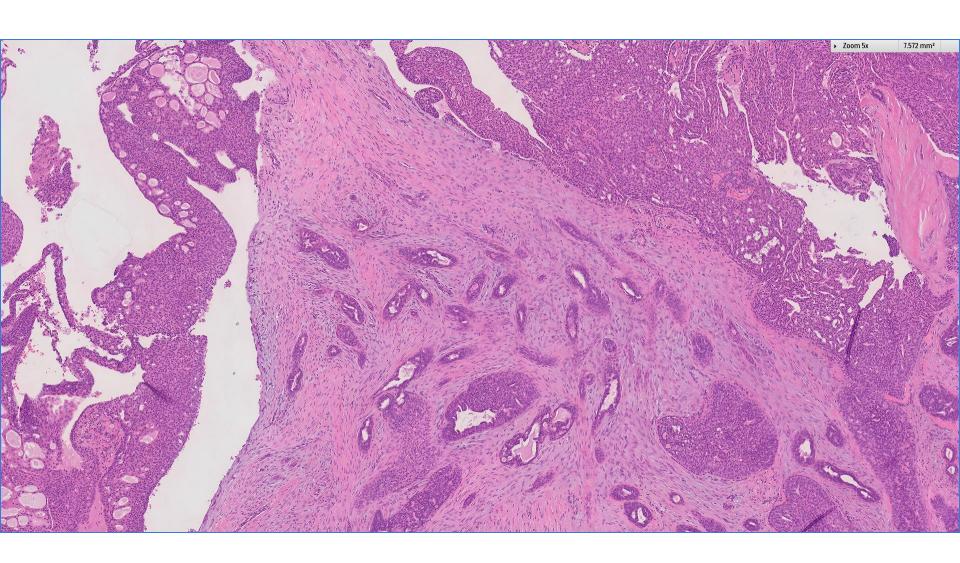






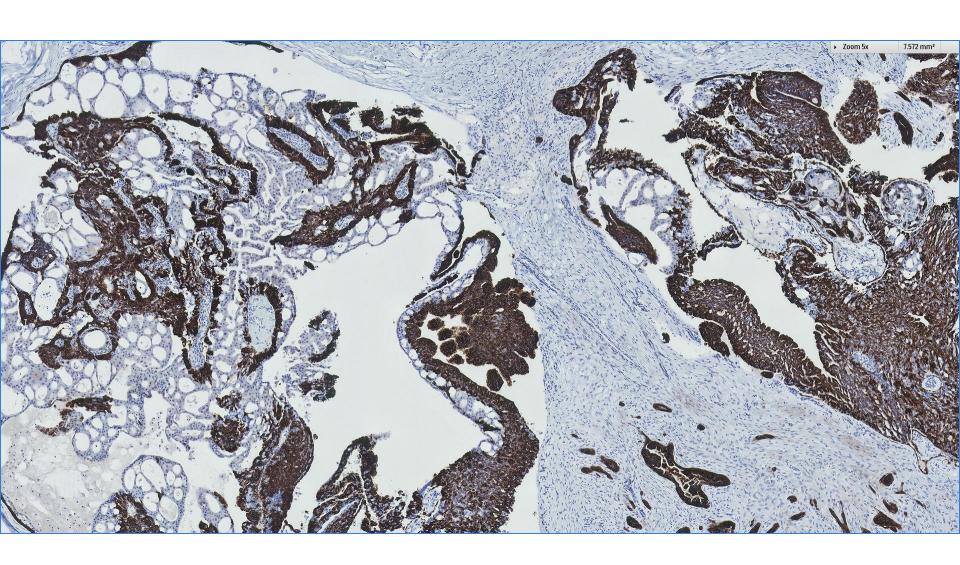




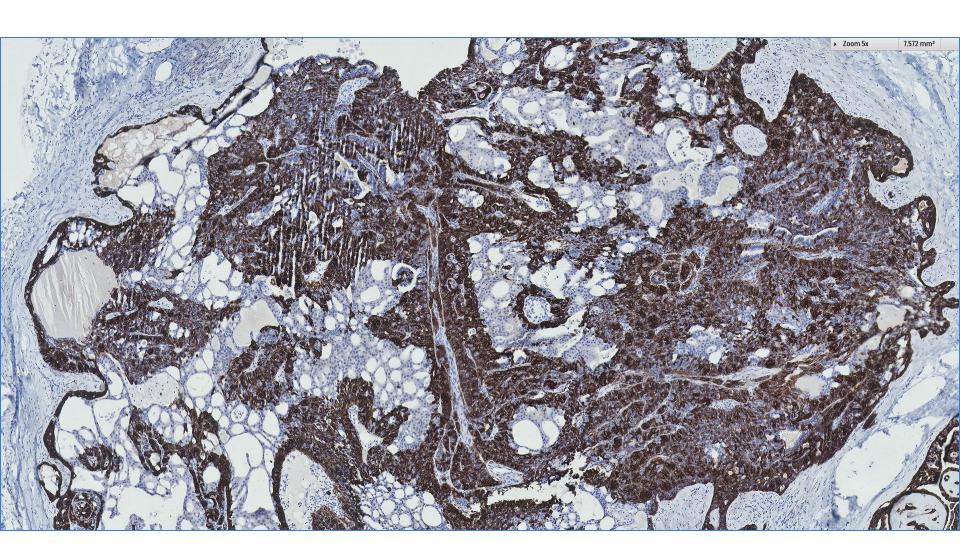




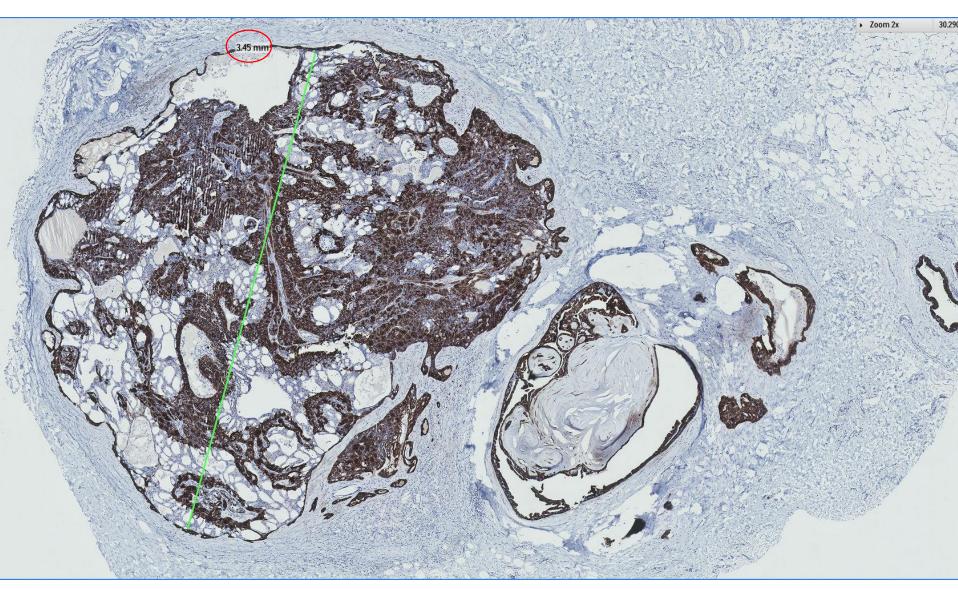
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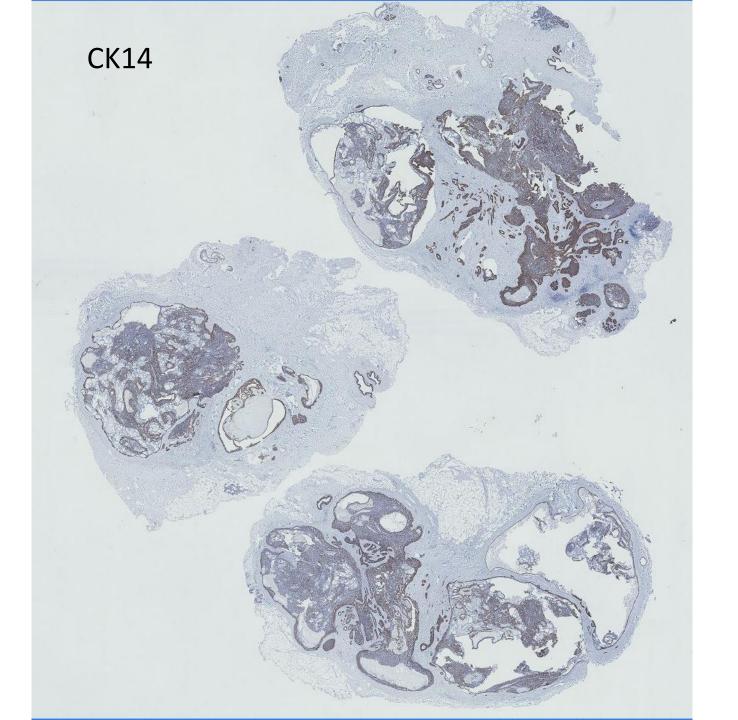


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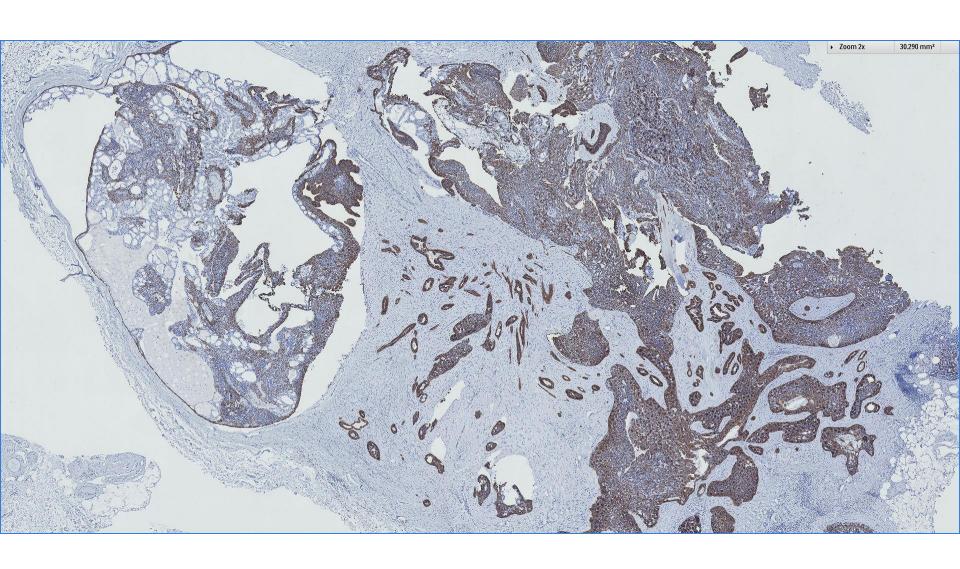


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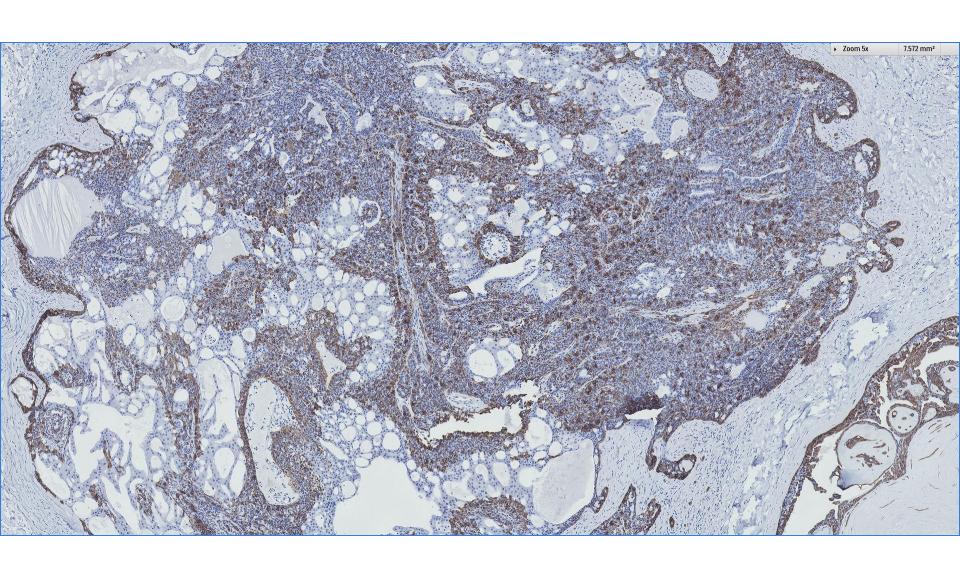


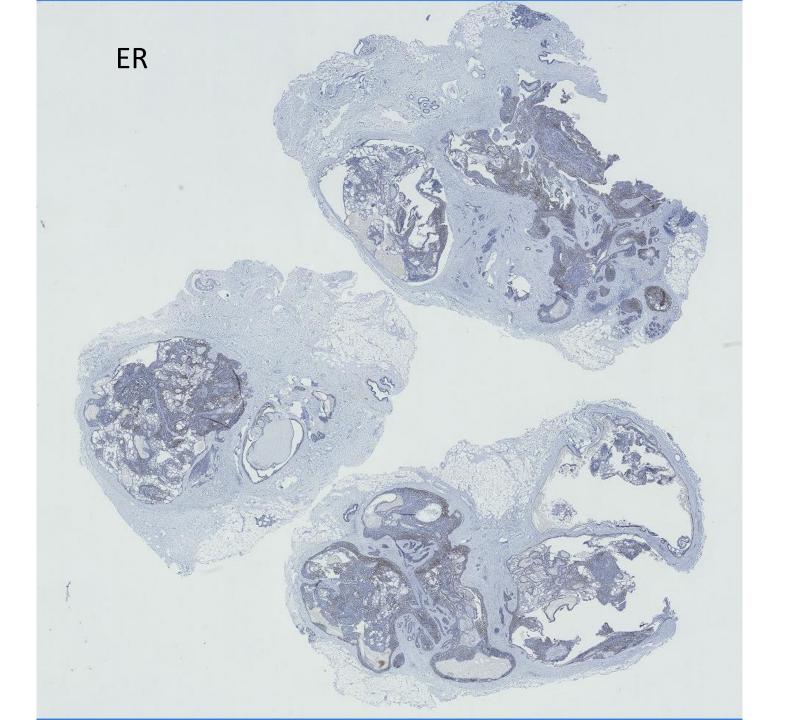


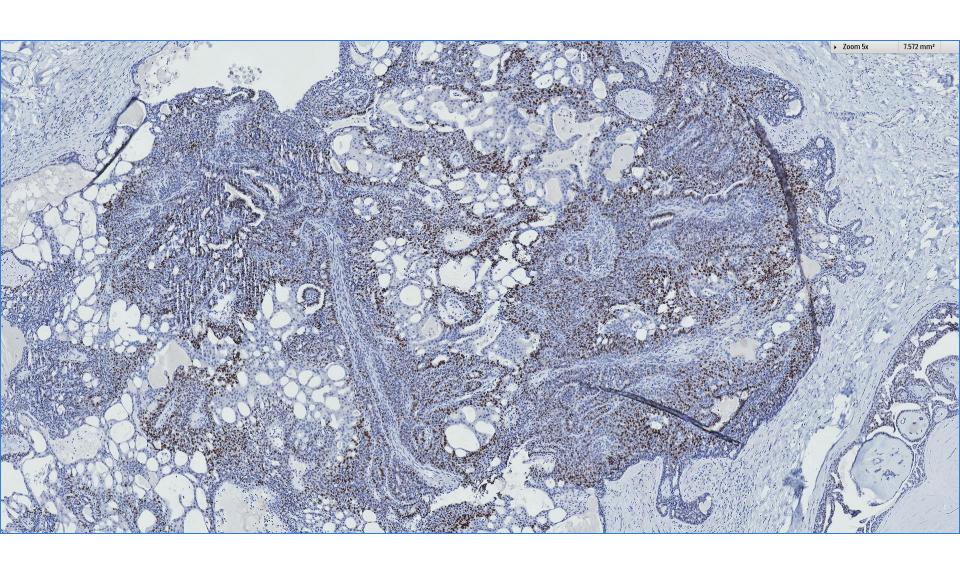
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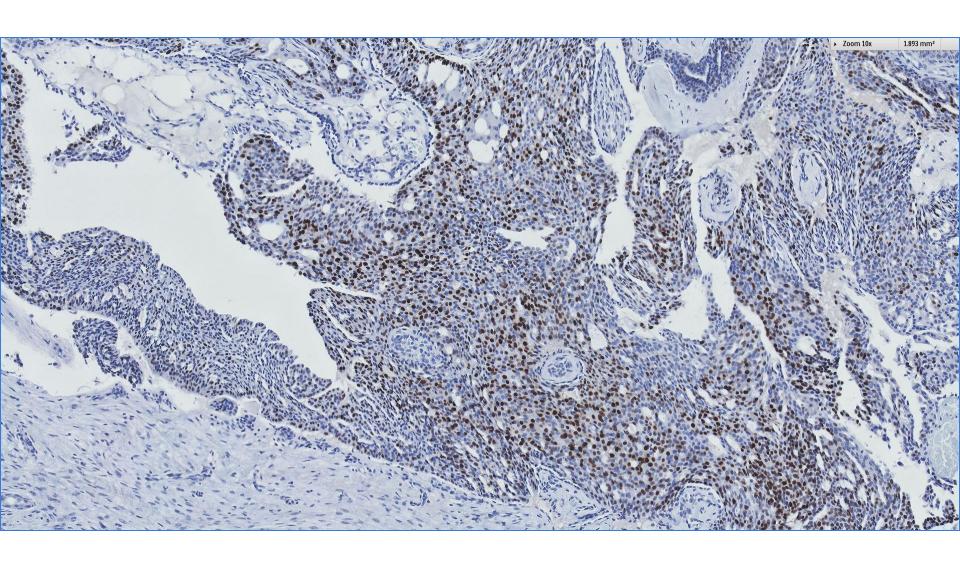


CK14









Diagnosis

Breast lesion, excision biopsy ~

Intraductal papilloma with florid usual ductal hyperplasia & atypical apocrine hyperplasia







Apocrine atypical ductal hyperplasia

- Low grade apocrine proliferation with architectural atypia.
- Size threshold for apocrine ADH versus low grade apocrine DCIS is controversial.
- Some authors use 4 to 8mm as the cut-off.
- No size threshold is required for high grade apocrine DCIS.









Table 4.1 Histological comparison of papillary lesions

Feature	Intraductal papilloma	Intraductal papilloma with ADH/DCIS	Papillary DCIS	Encapsulated papillary carcinoma	Solid papillary carcinoma
Papillae	Broad papillae with well-developed fibrovascular cores	Broad papillae with well-developed fibrovascular cores	Narrow papillae with slender fibrovascular cores	Narrow papillae with slender fibrovascular cores	Solid cellular nodules with fine vessels Papillae are inconspicuous
Myoepithelial cells	Present within papillae and at periphery	Present within papillae and at periphery Diminished in areas of ADH/DCIS	Absent or diminished within papillae Present at periphery	Absent or diminished within papillae Absent at periphery	Present or absent at periphery
Epithelial population	Heterogeneous population of luminal and myoepithelial cells, apocrine cells	Heterogeneous population of luminal and myoepithelial cells, apocrine cells Monotonous population in ADH/ DCIS (low nuclear grade)	Monotonous single-cell population Usually low-to- intermediate nuclear grade, rarely high grade	Monotonous single-cell population Usually low-to- intermediate nuclear grade, rarely high grade	Monotonous single-cell population Usually low-to- intermediate nuclear grade Spindle cells may be present Neuroendocrine differentiation Mucin production
Surrounding breast tissue	Usual ductal hyperplasia Fibrocystic changes	ADH/DCIS may be present	DCIS may be present	DCIS may be present	DCIS may be present
IHC, p63	Positive within papillae and at periphery	Positive within papillae and at periphery Diminished in ADH/ DCIS	Absent or diminished within papillae Present at periphery	Absent or diminished within papillae Absent at periphery	Present or absent at periphery
IHC, high-molecular- weight keratins	Positive within papillae and at periphery Heterogeneous staining in UDH	Positive within papillae and at periphery Diminished staining in ADH/DCIS	Absent or diminished within papillae Present at periphery	Absent or diminished within papillae Absent at periphery	Present or absent at periphery
IHC, ER	Heterogeneous positivity in UDH and luminal epithelium	Heterogeneous positivity in UDH and luminal epithelium Diffuse positivity in ADH/DCIS	Diffuse positivity	Diffuse positivity	Diffuse positivity

ADH atypical ductal hyperplasia, DCIS ductal carcinoma in situ, ER oestrogen receptor, IHC immunohistochemistry, UDH usual ductal hyperplasia

Atlas of differential diagnosis in breast pathology, in press

