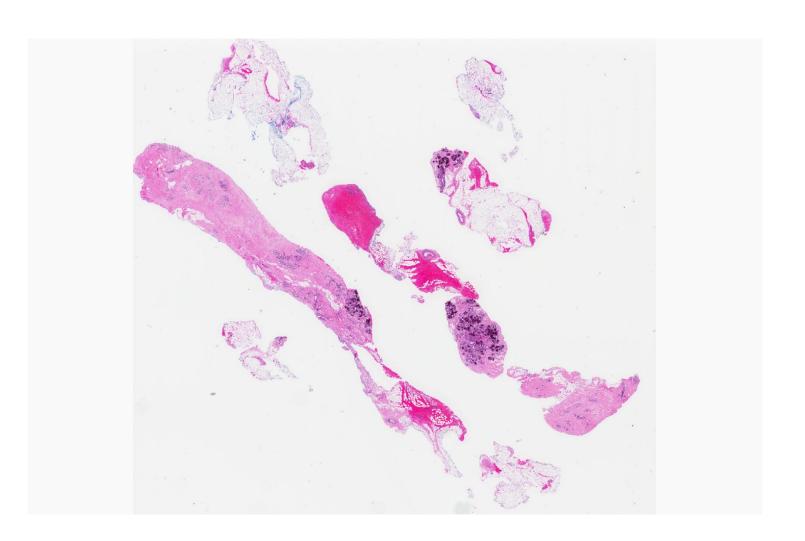
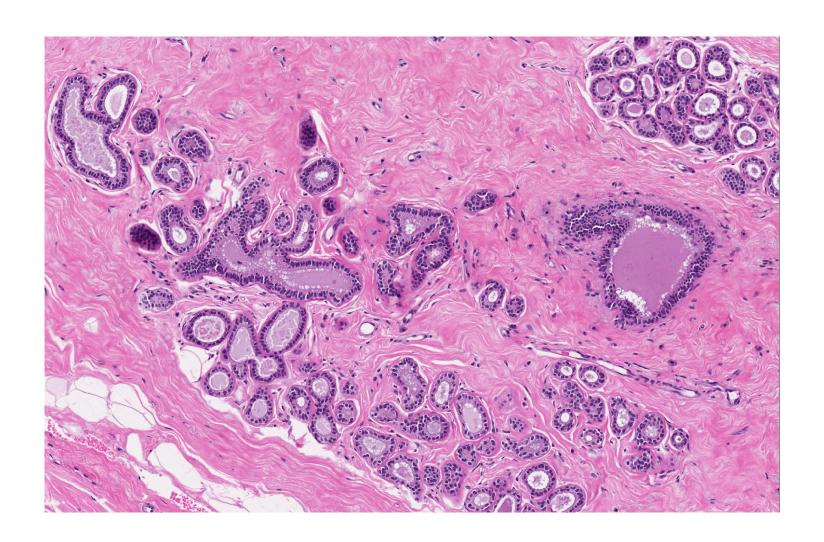
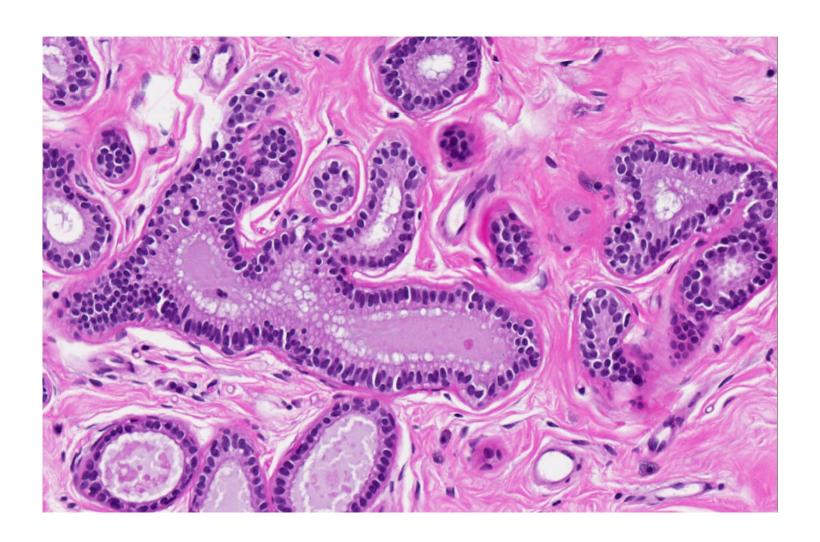
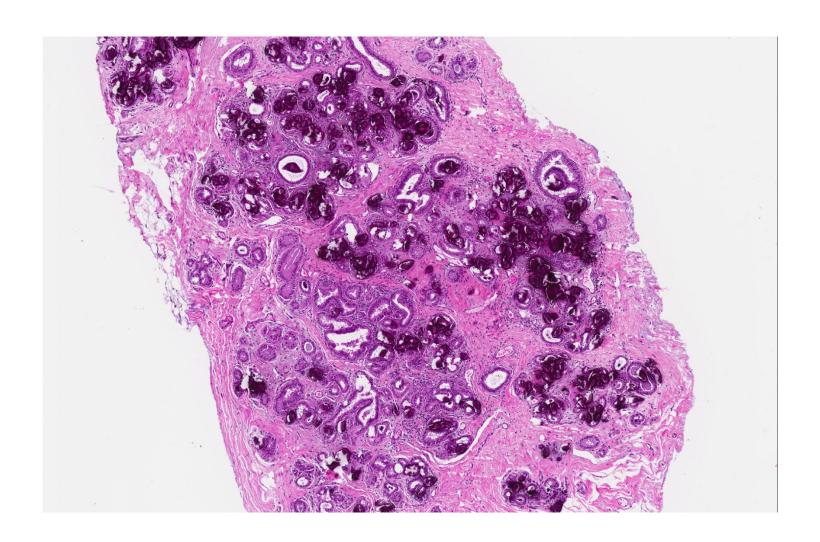
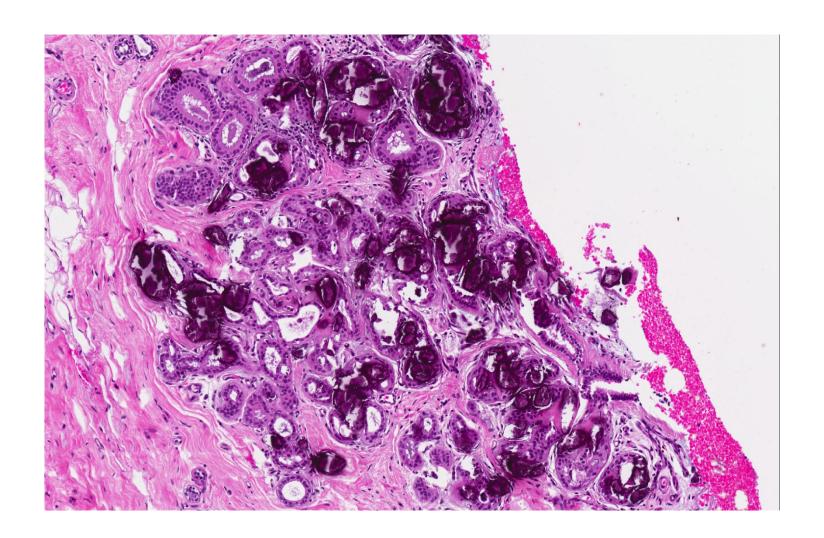
- Set B.3
- 51 year old Chinese female with screen detected 'indeterminate' calcifications in the lower outer quadrant of the left breast, underwent mammotome core biopsies.

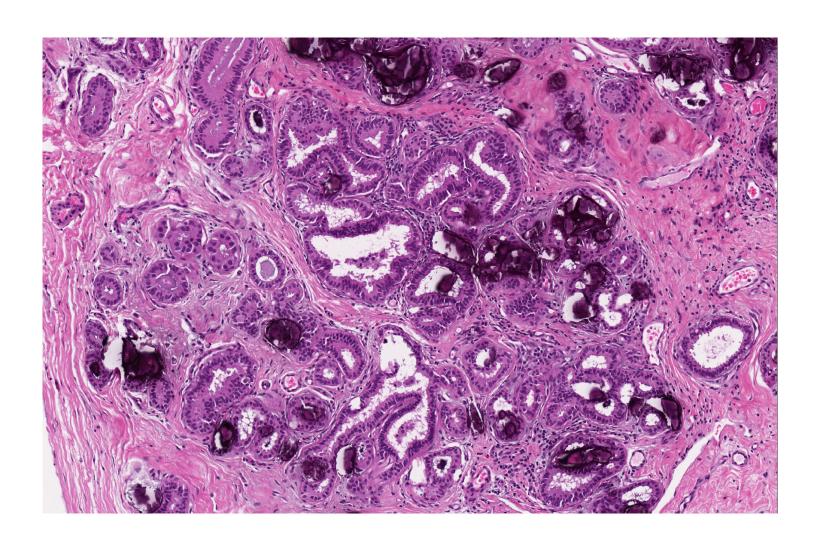


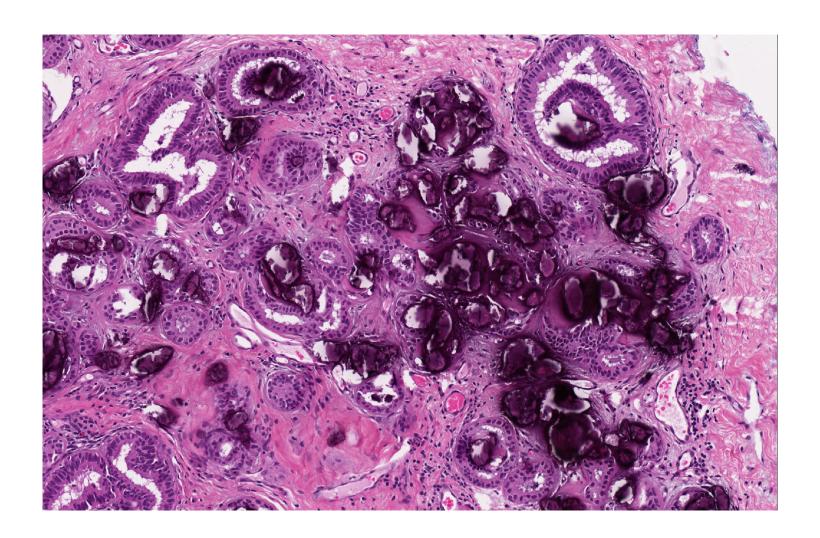


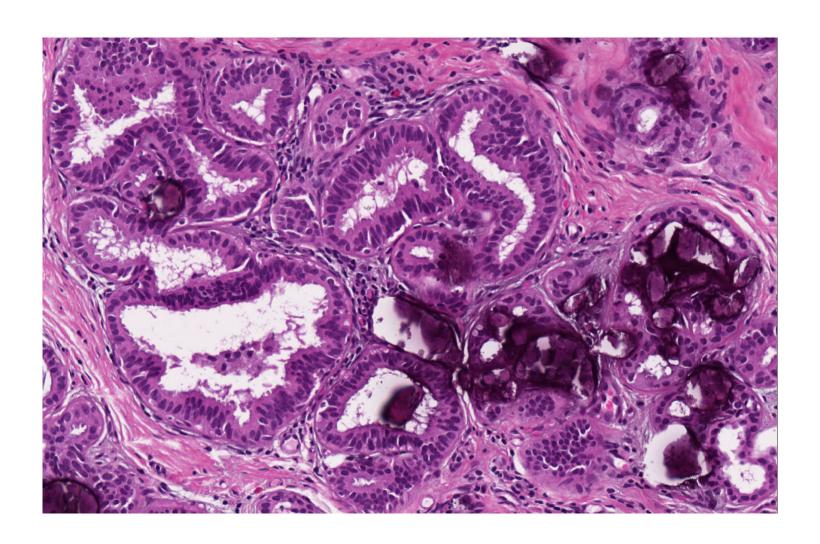


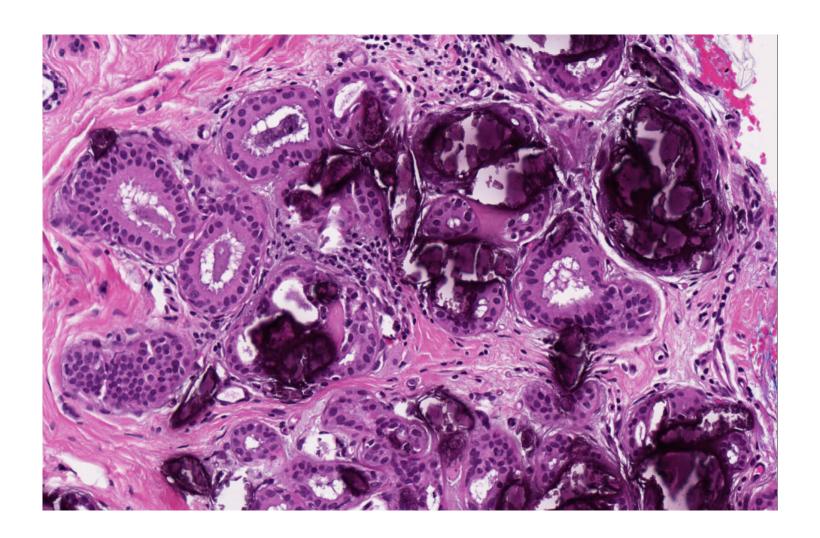


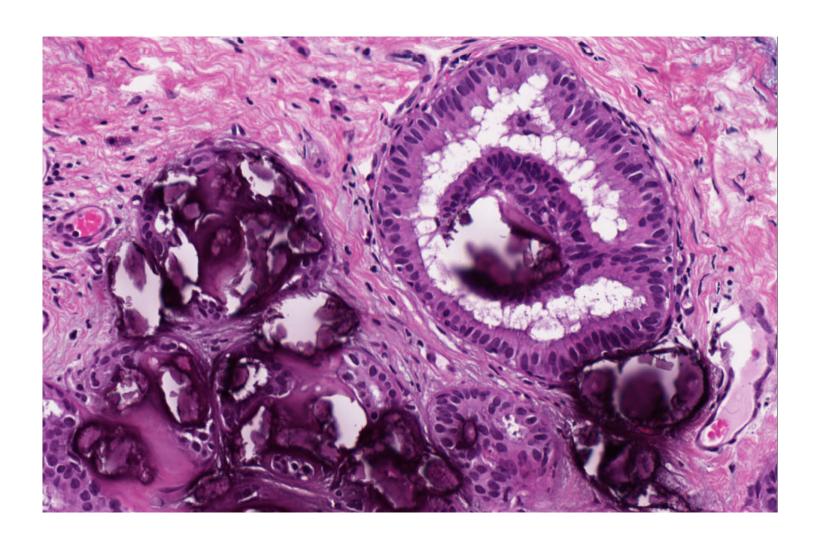












Columnar cell lesion with calcifications.

## Columnar cell lesions of the breast

- Spectrum of benign to atypical entities having in common variably dilated terminal duct lobular units lined by columnar epithelial cells with/without prominent apical cytoplasmic snouts.
- As luminal microcalcifications are a frequent accompaniment in these lesions, many such columnar lesions are picked up on radiography.

# Flat epithelial atypia

 Presumably neoplastic intraductal alteration characterised by replacement of native epithelial cells by a single or 3 to 5 layers of mildly atypical cells.

(World Health Organisation)

## Flat epithelial atypia:

- Distinguished from atypical ductal hyperplasia by absence of architectural atypia.
- Lacking micropapillary tufts, Roman bridges and rigid arcades.

- Spectrum of columnar cell lesions:
  - Columnar cell change.
  - Columnar cell hyperplasia.
  - Columnar cell change with cytologic atypia.
  - Columnar cell hyperplasia with cytologic atypia.

Flat epithelial atypia

#### **ORIGINAL ARTICLE**

Pathological diagnosis of columnar cell lesions of the breast: are there issues of reproducibility?

P H Tan, B C-S Ho, S Selvarajan, W M Yap, A Hanby

J Clin Pathol 2005;58:705-709. doi: 10.1136/jcp.2004.025239

### Take home messages

- We assessed inter/intraobserver variability in the interpretation by seven staff pathologists of a series of digitised images of columnar cell lesions (CCL) of the breast after a tutorial on breast CCL
- Interobserver and intraobserver agreement was good for ductal carcinoma in situ, but more effort is needed to improve diagnostic consistency in the category of columnar cell changes with cytological atypia
- Continued awareness and study of these lesions are necessary to enhance recognition and understanding

## **Columnar cell lesions:**

## Practical considerations

- If CCL are identified in the absence of cytologic or architectural atypia, no further action is needed.
- If a CCL is associated with cytologic and/or architectural atypia:
  - Open biopsy: follow-up.
  - Core biopsy: follow with open biopsy (treat as for atypical epithelial hyperplasia).

- Columnar cell lesions with cytologic and/or architectural atypia represent a "borderline" breast lesion for which management is currently best approached as for atypical epithelial hyperplasia of the breast.
- More information is required about the true biology of this lesion in order for better understanding and management.