

#### Case 9

39 year old Chinese woman, diagnosed with breast carcinoma in Malaysia, sought an oncological opinion in Singapore.

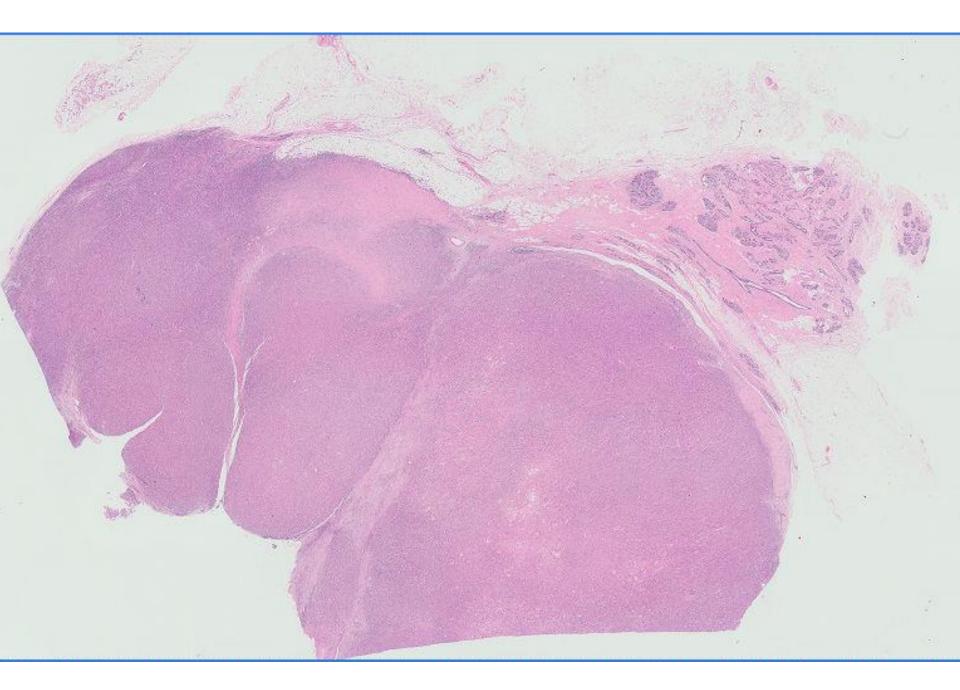
Materials of the breast tumour were submitted for histological review.

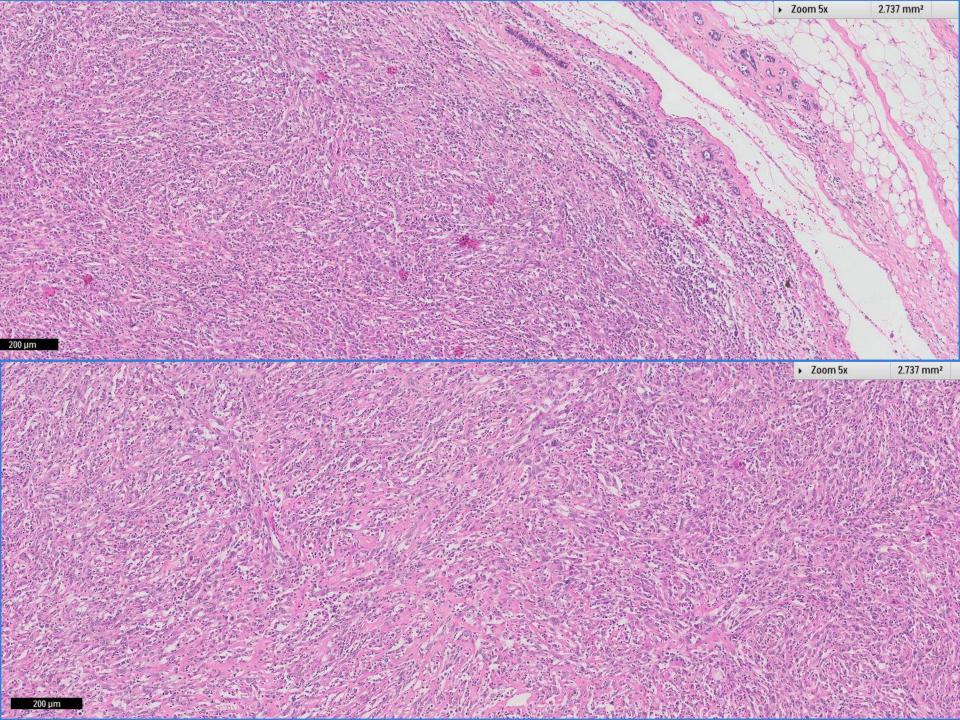


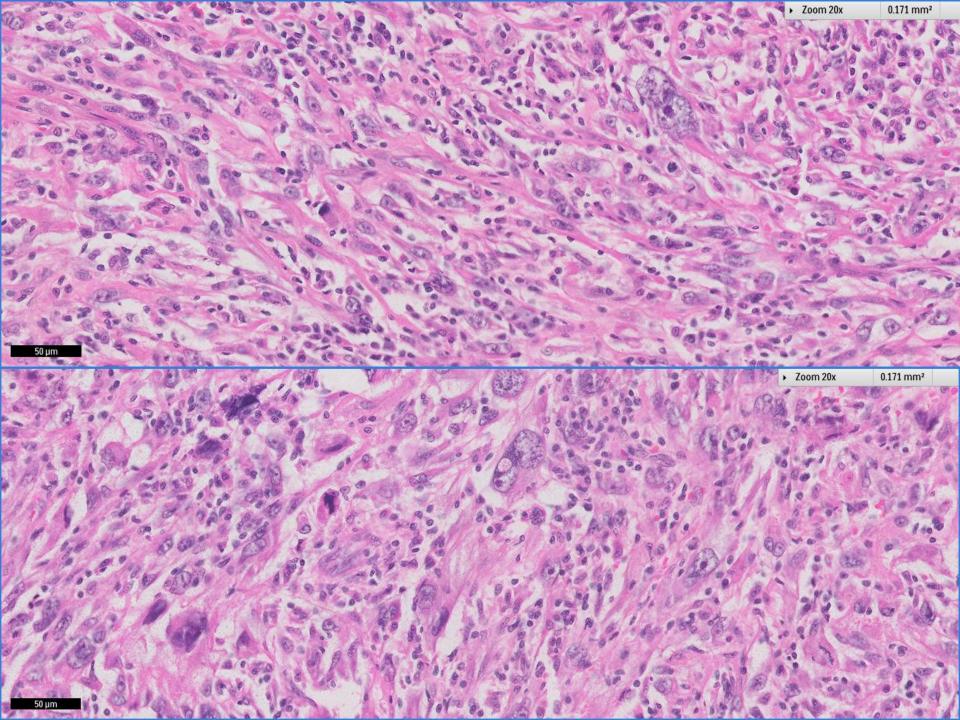


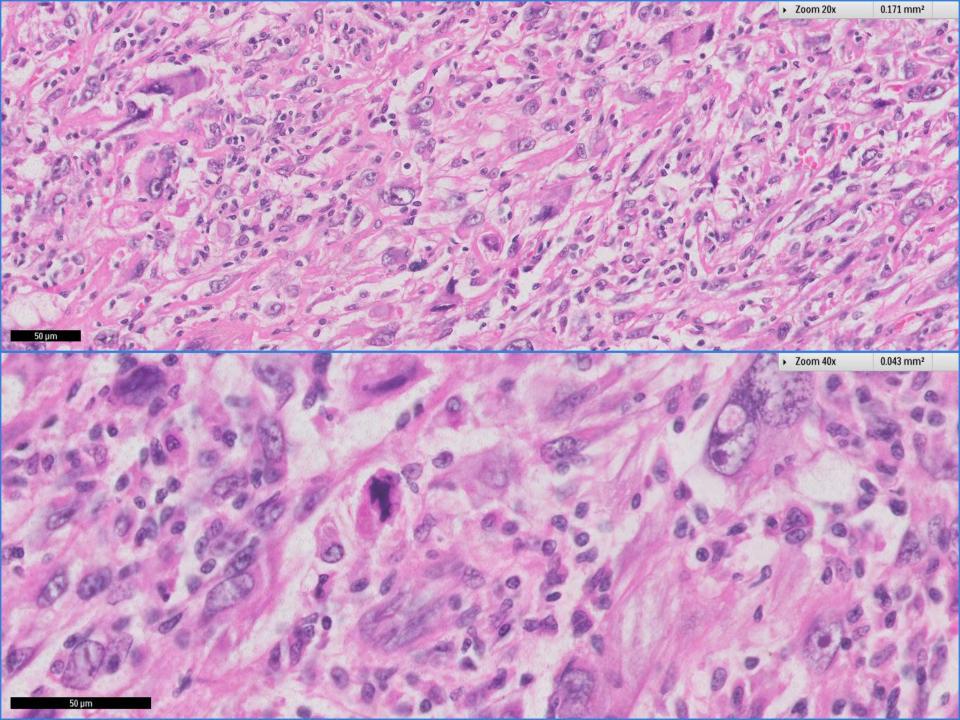
SingHealth DukeNUS ACADEMIC MEDICAL CENTRE PATHOLOGY







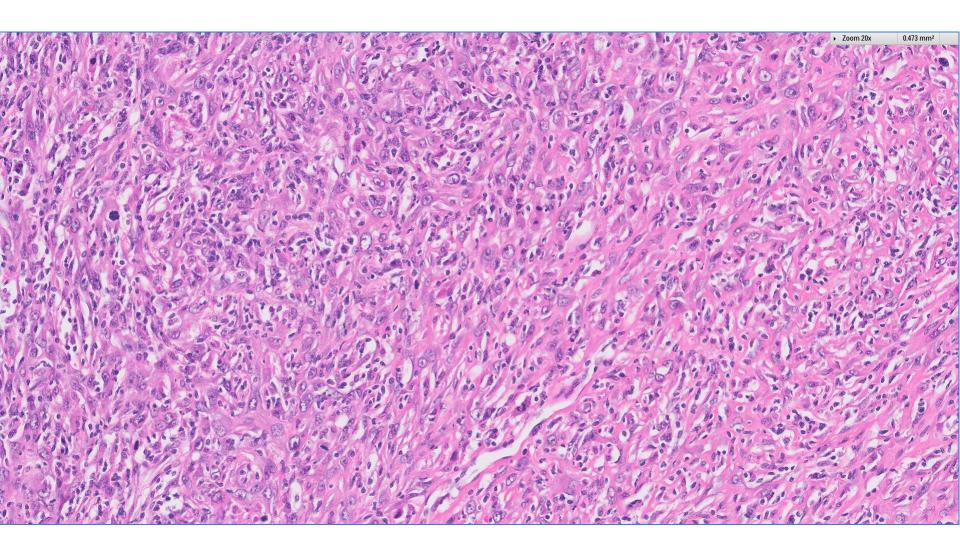


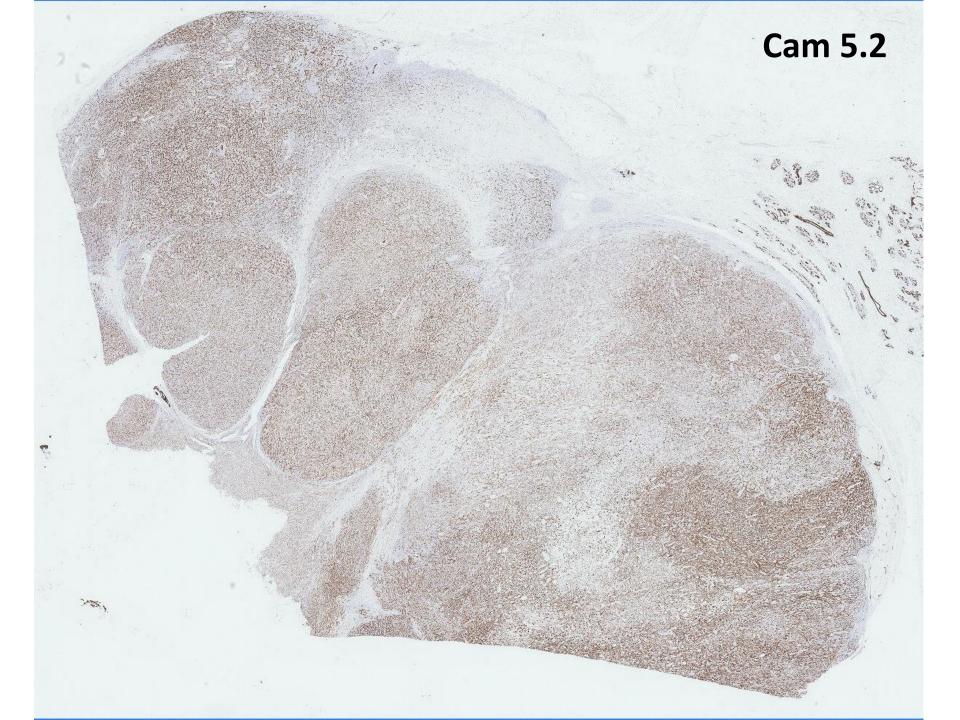


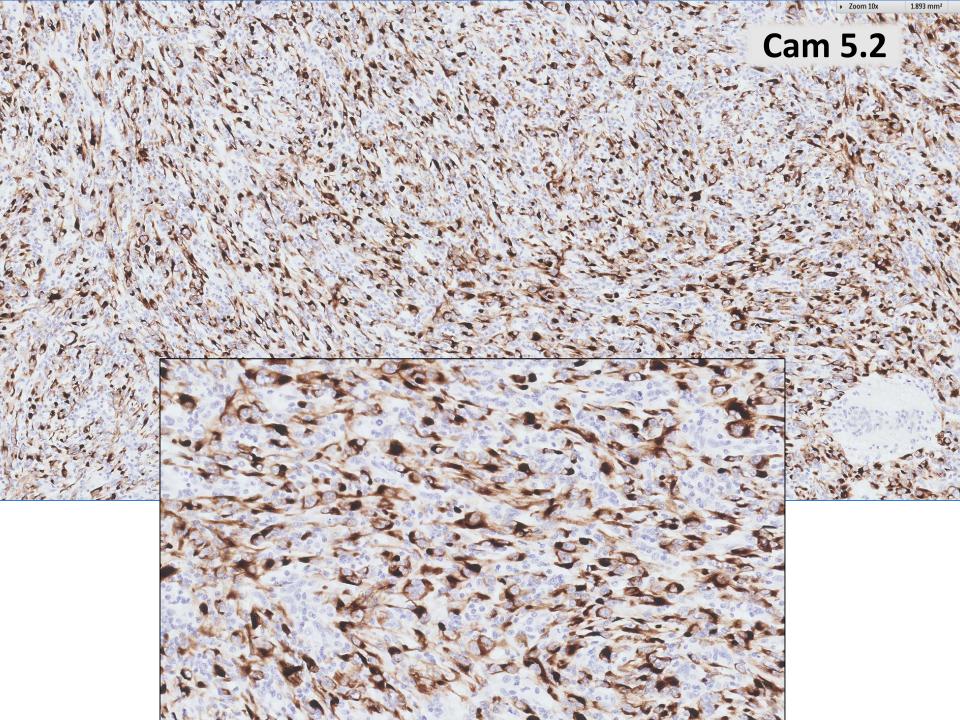


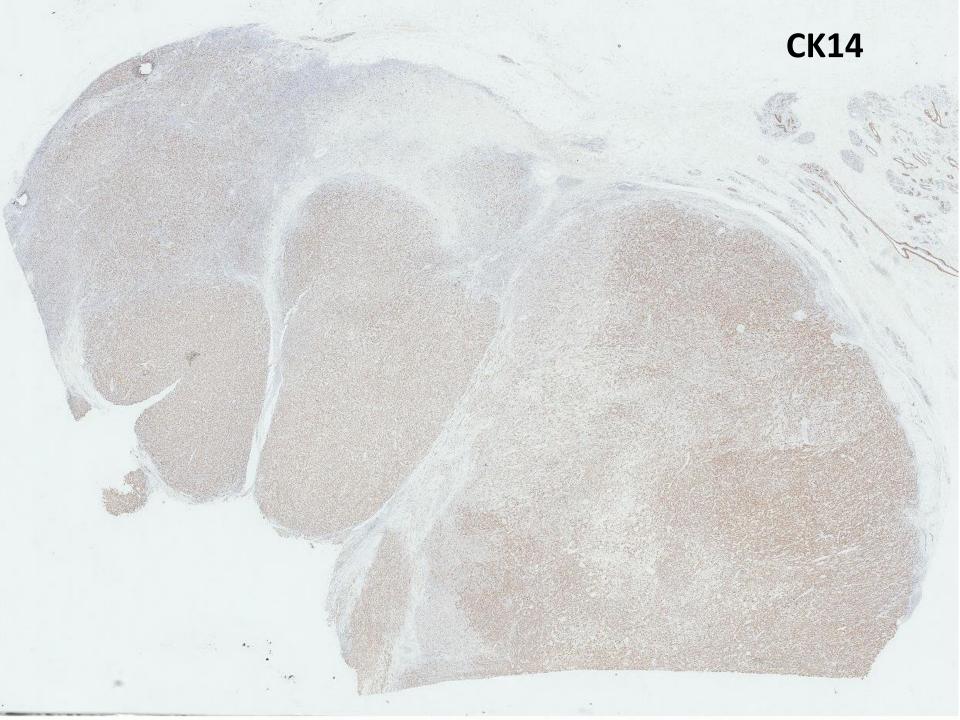


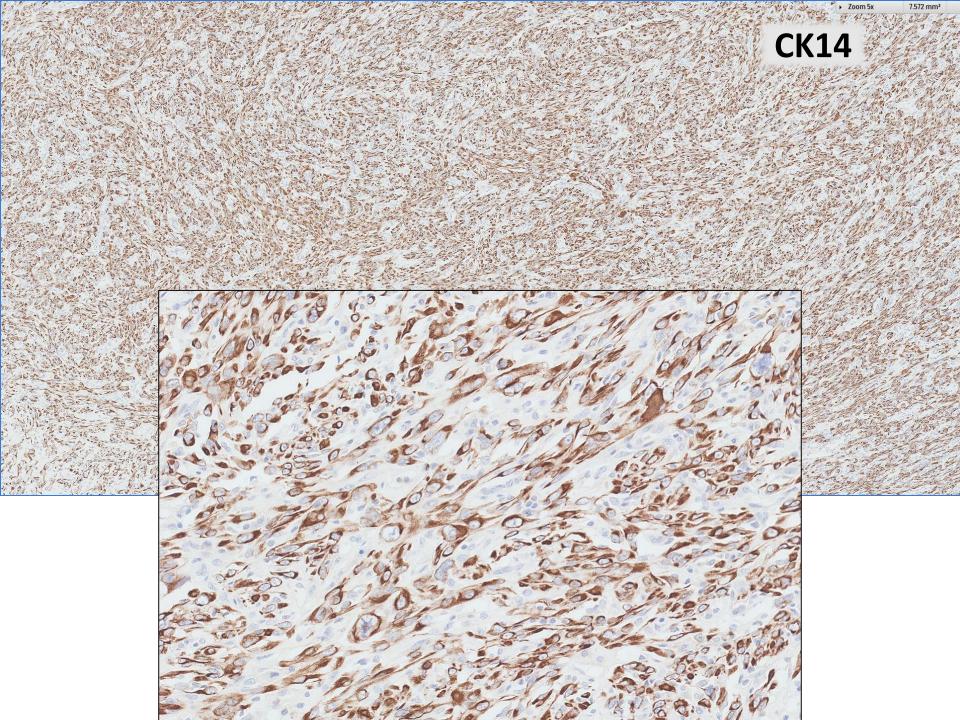
Singapore Botanic Gardens











# Diagnosis

Submitted material, breast tumour ~ *Spindle cell metaplastic carcinoma, grade 3. ER negative, PR negative, cerbB2 negative. Basal expression present. Androgen receptor negative.* 









### Metaplastic carcinoma

- Breast carcinoma with metaplasia to squamous or mesenchymal-like elements.
- May show both conventional carcinoma and metaplastic components, or may consist entirely of metaplastic elements.
- Synonyms:
  - Carcinosarcoma
  - Sarcomatoid carcinoma
  - Carcinoma with pseudosarcomatous metaplasia
  - Carcinoma with pseudosarcomatous stroma
  - Biphasic carcinoma
  - Spindle cell carcinoma
  - Spindle cell metaplastic tumour
  - Matrix producing carcinoma
  - Adenosquamous carcinoma, etc

## Metaplastic carcinoma

- 0.3% to 5% of all invasive breast cancers.
- Heterogeneous group of tumours.
- Classification:
  - Low-grade adenosquamous carcinoma
  - Fibromatosis-like metaplastic carcinoma
  - Squamous cell carcinoma
  - Spindle cell carcinoma
  - Carcinoma with mesenchymal differentiation
    - Chondroid differentiation
    - Osseous differentiation
    - Other types of mesenchymal differentiation
  - Mixed







### Metaplastic carcinoma

- Various components observed should be provided in the report of a metaplastic carcinoma.
- > 90% are triple negative.
- Basal markers CK 5/6, CK14 and EGFR can be positive.
- > 90% are p63 positive.









# Differential diagnosis

- Malignant phyllodes tumour with sarcomatous overgrowth.
- Primary breast sarcoma.









Important to test another block if initial immunohistochemistry for epithelial markers performed on sections cut from a different block is negative.











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