

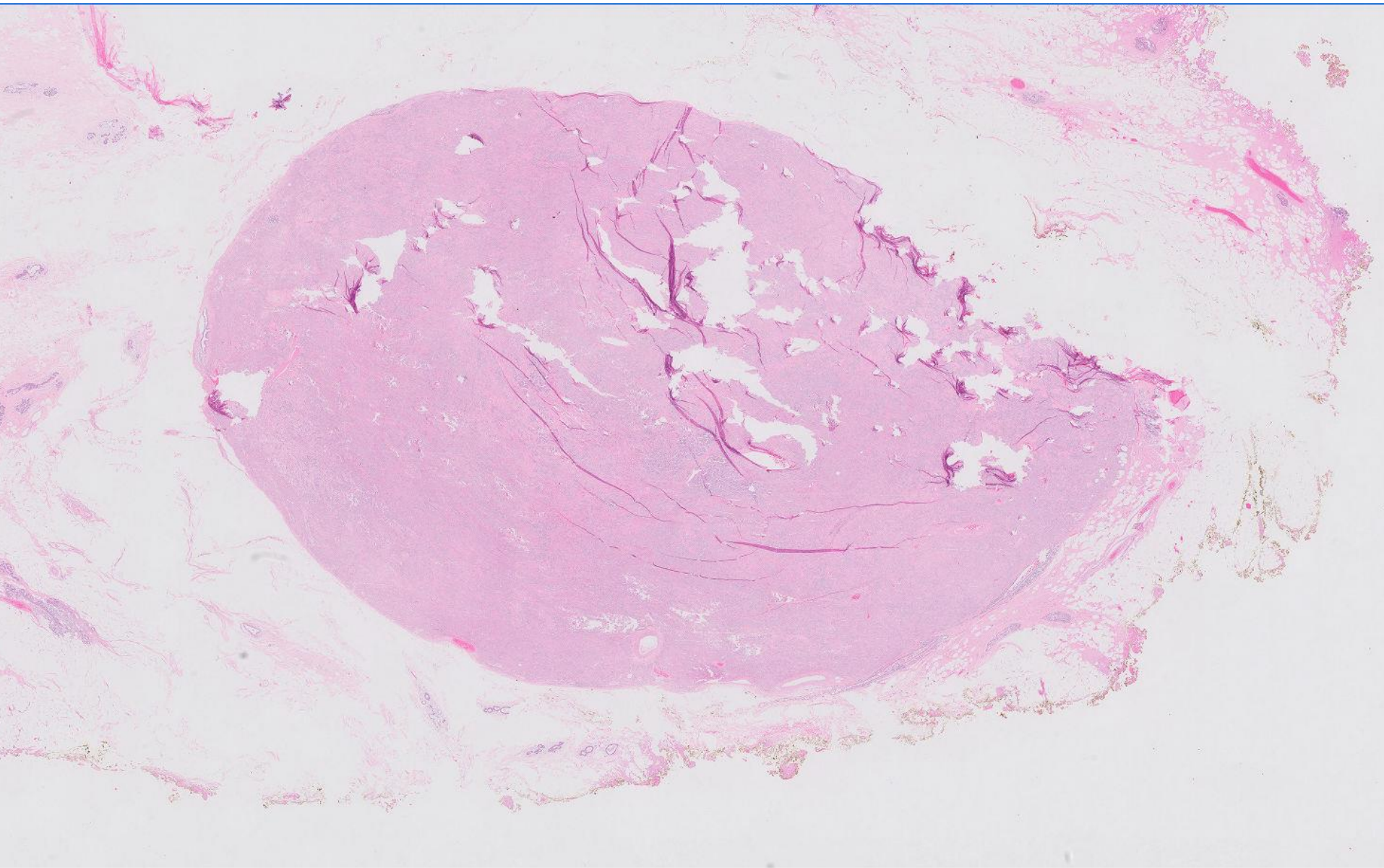
# Case 20

Adult female with a breast lump.

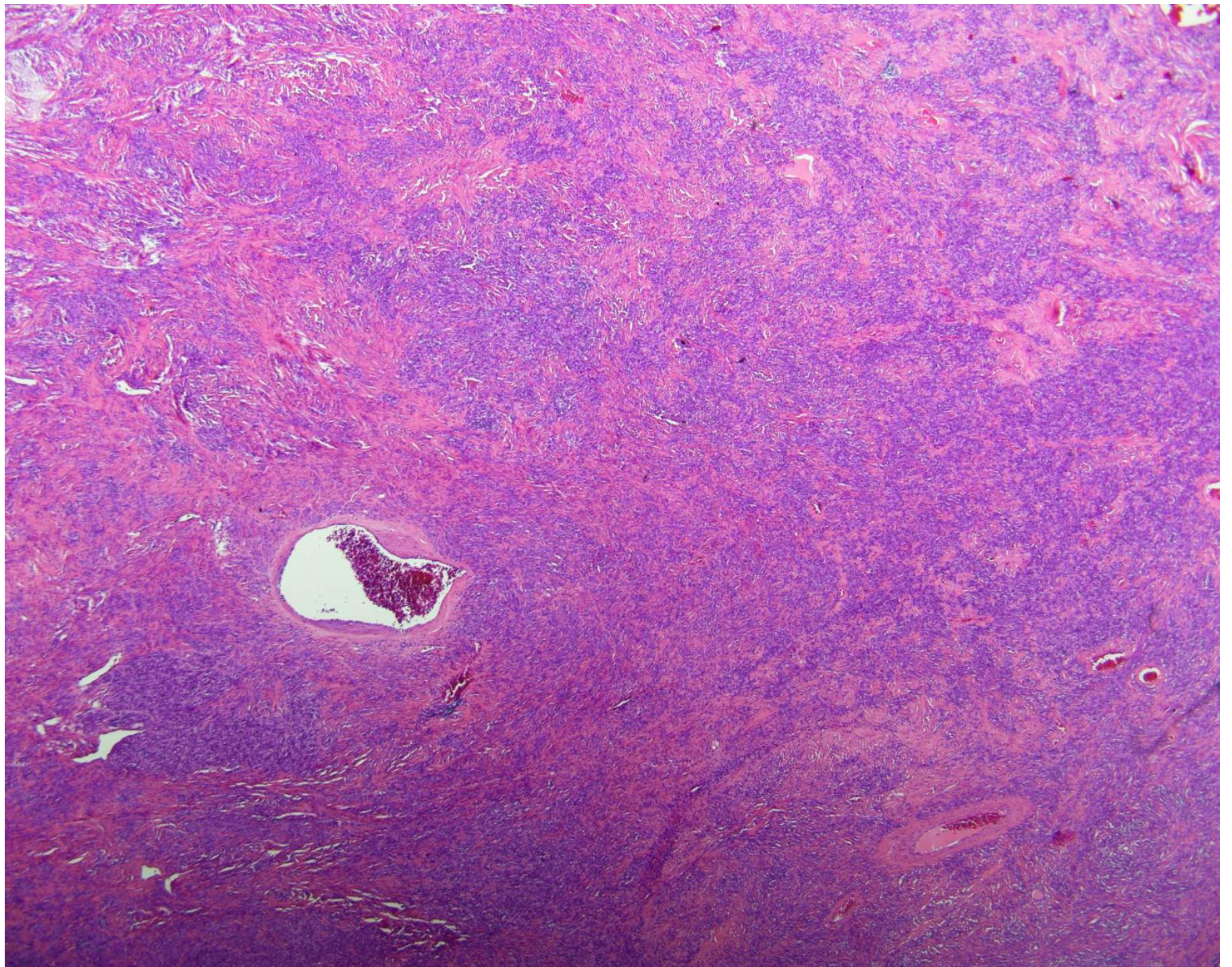
*(Contributed by Dr Chih-Jung Chen, Taiwan)*

*Presented by Puay Hoon Tan*

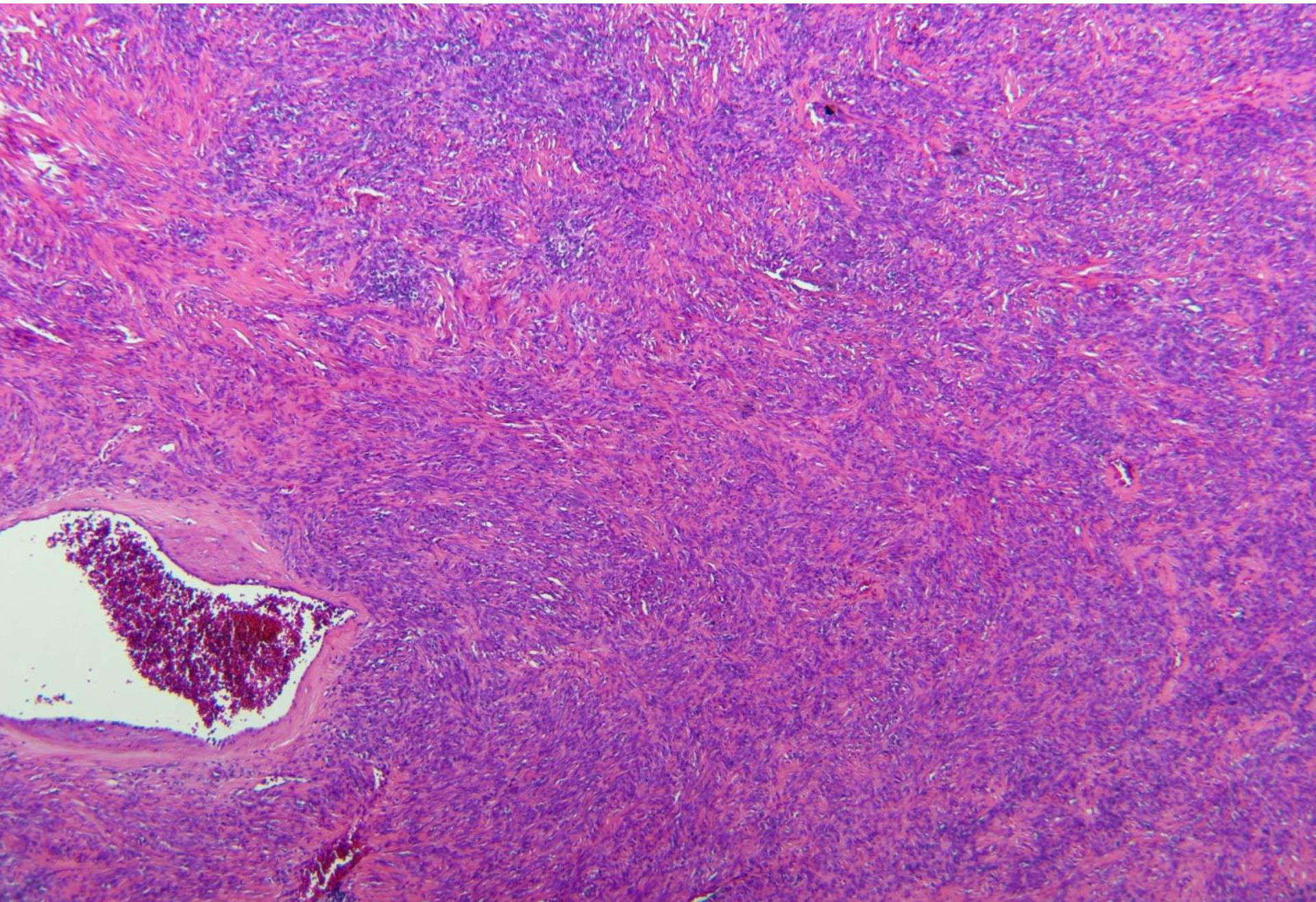






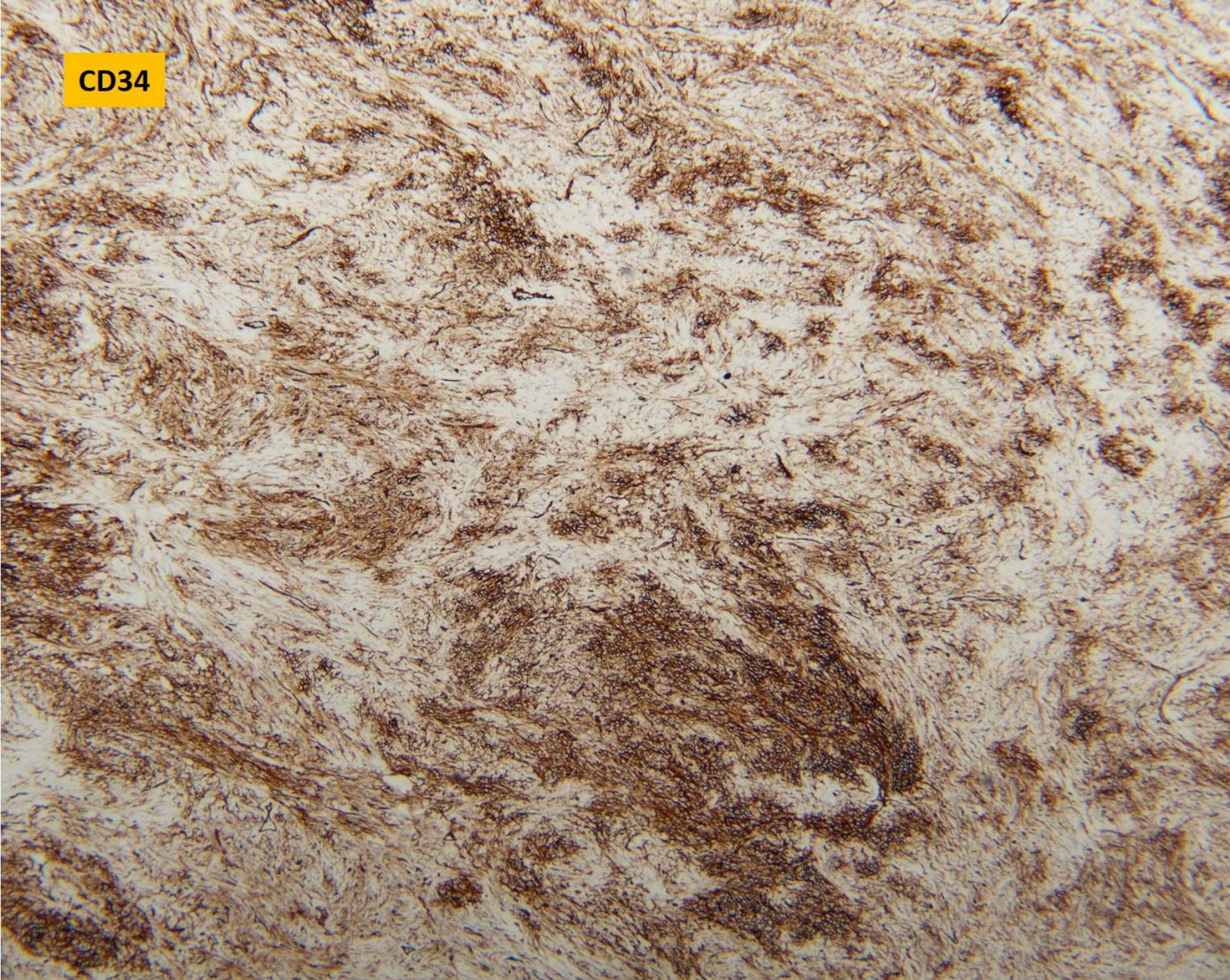






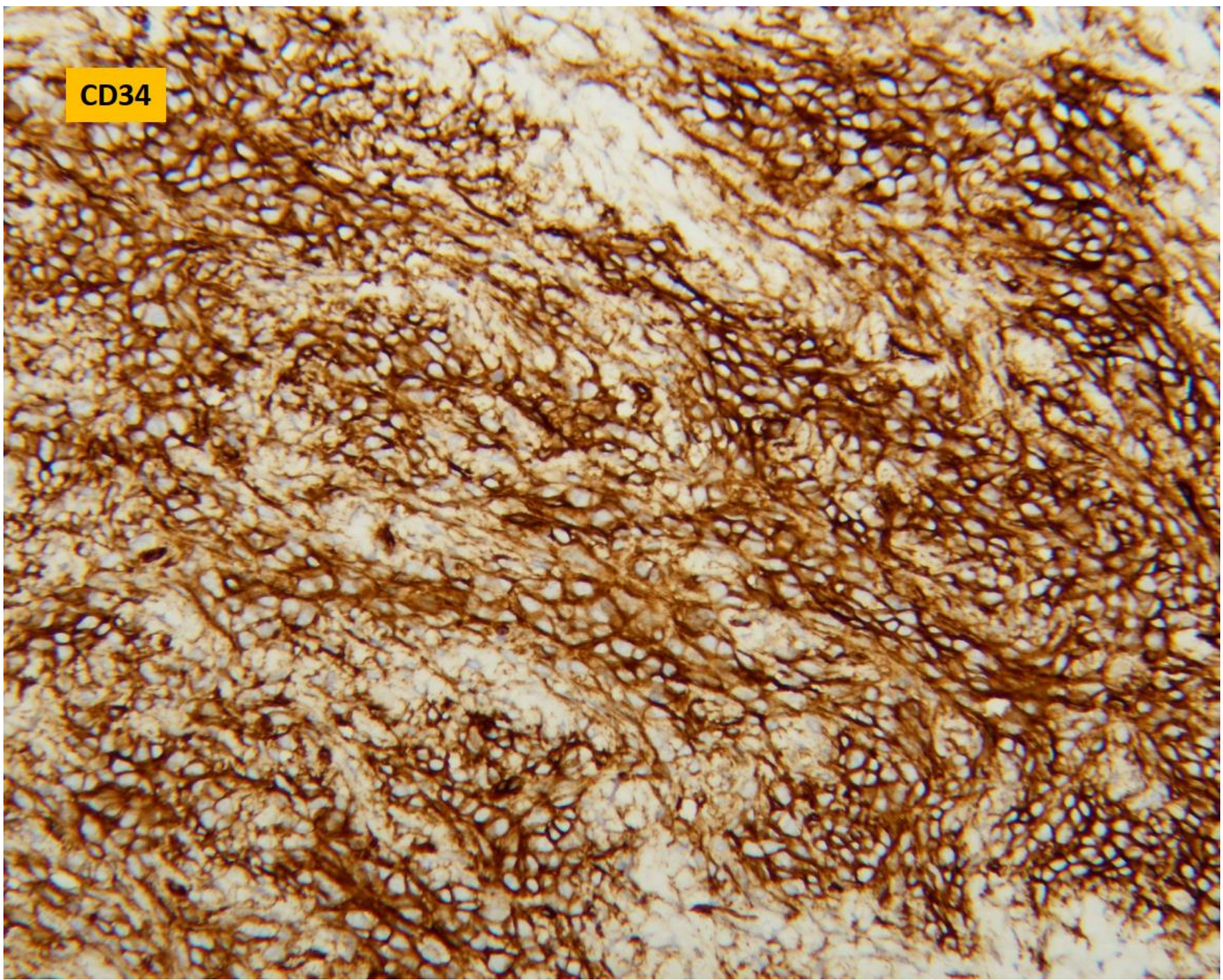


**CD34**



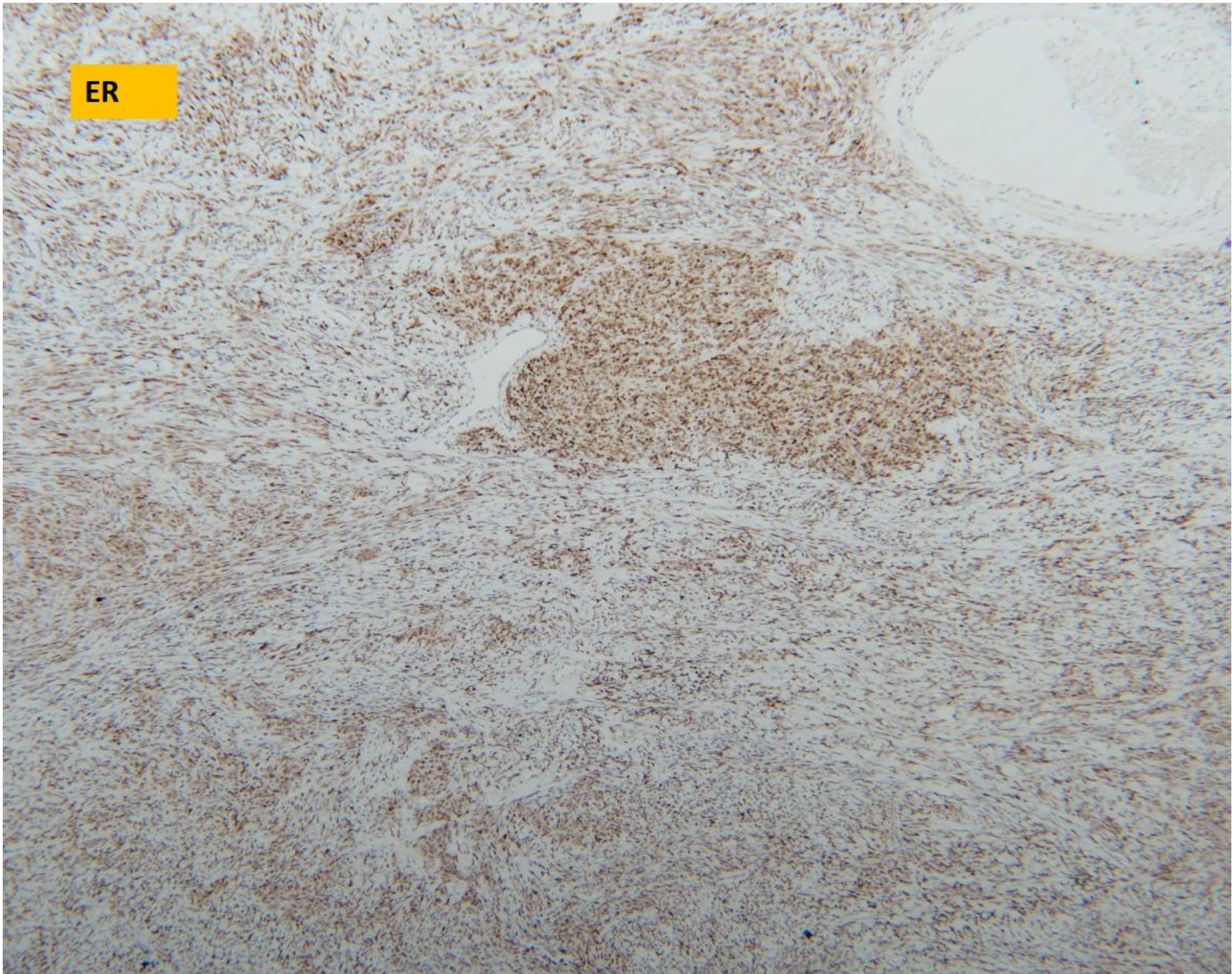


CD34



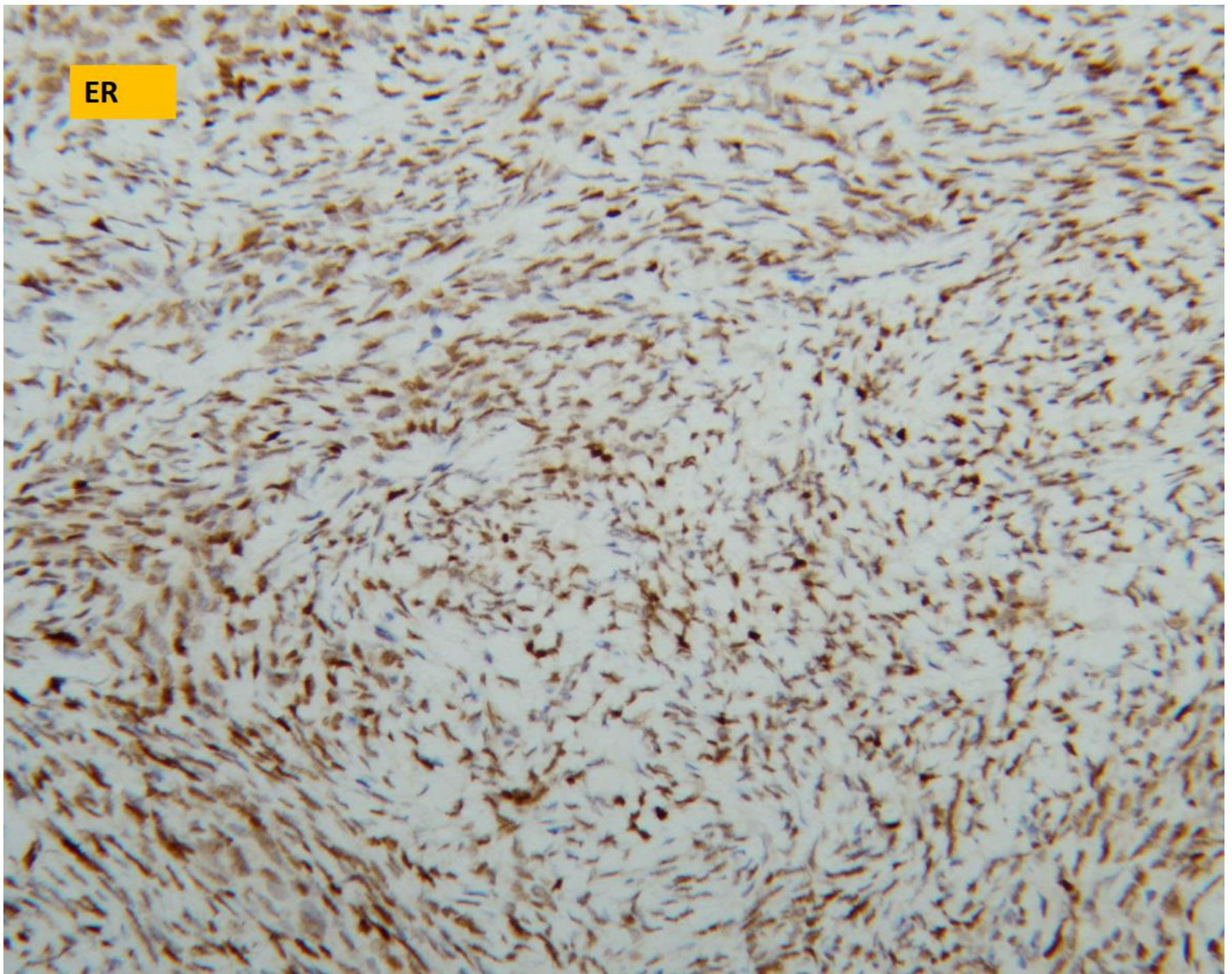


ER





ER





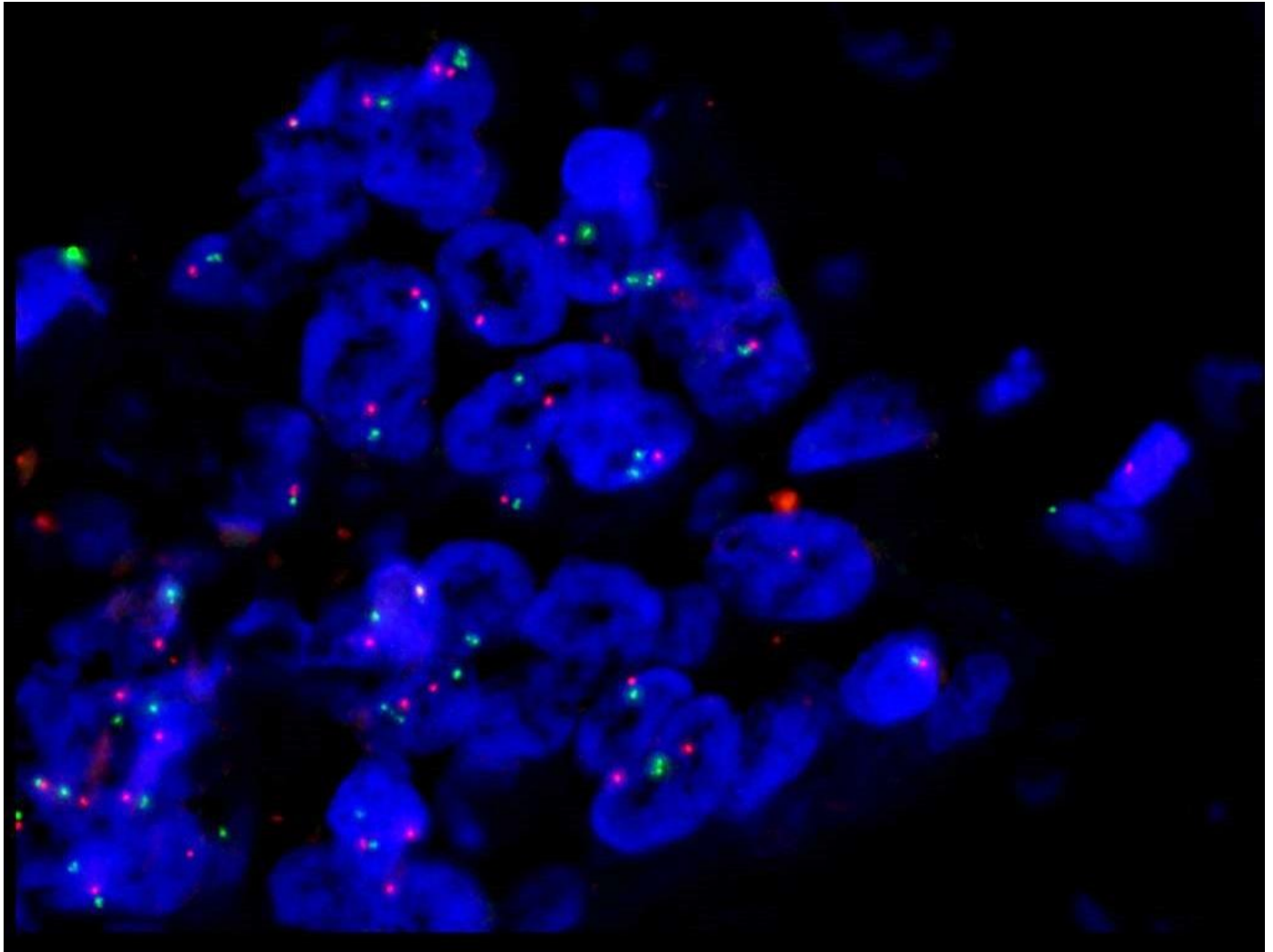
*Immunohistochemistry ~  
Cytokeratins negative  
SMA, desmin focally positive*





75% of 200 nuclei scored showed one copy of RB1 gene and one copy of the control probe at 13q34, suggesting monosomy 13.

*Note: RB1 gene is labelled with Spectrum Orange while the control probe is labelled with Spectrum Green.*  
(red dots are the RB1 gene and the green dots are the control probe at 13q34)





# *Diagnosis: Myofibroblastoma*





# *Myofibroblastoma*

- Benign tumour of the mammary stroma composed of fibroblasts and myofibroblasts.
- Most common site is the breast, but may occur in extramammary sites (inguinal/groin area, vulva, perineum, scrotum).
- Clinical presentation as a slow-growing, painless, non-tender mass.
- Males and females equally affected.
- Hormonal aetiology ~
  - Expression of hormone receptors
  - Association with gynaecomastia, PASH





# *Myofibroblastoma*

- Derived from a precursor cell of the mammary stroma.
- Genetic monoallelic or biallelic deletions of 13q (13q14), sometimes in combination with 16q monosomy.
- 13q deletion results in the loss of RB1 expression on immunohistochemistry.
- Morphological patterns ~
  - Lipomatous
  - Myxoid
  - Fibrous/collagenous
  - Epithelioid/deciduoid
  - Palisading/Schwannian-like





# *Myofibroblastoma*

- Essential criteria ~
  - Well-circumscribed margins
  - Mesenchymal tumour
  - No significant cytologic atypia
  - Low mitotic count
  - Short interlacing fascicles
- Desirable criteria ~
  - IHC positivity for CD34, ER/PR/AR, desmin
  - FISH 13q14 deletion





Thank

You!

WORLDWIDE  
BREAST CANCER  
RESEARCH FUND

