# Slide Seminar

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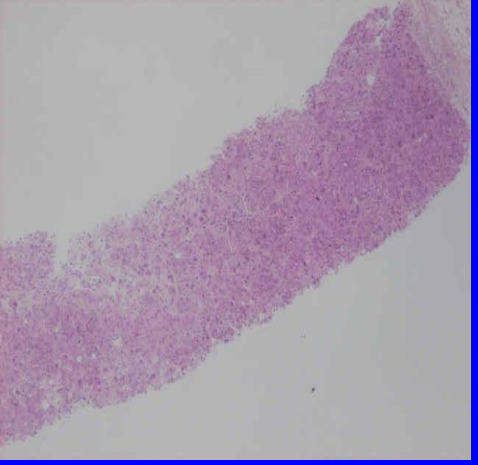
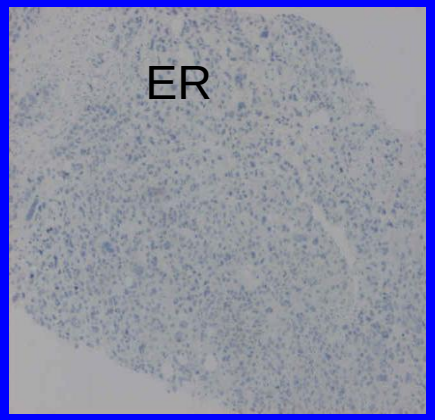
**Amman, November 2013**

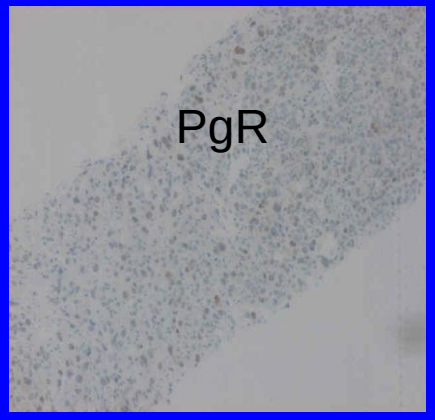
# Case 237

- F63
- Screen detected tumour

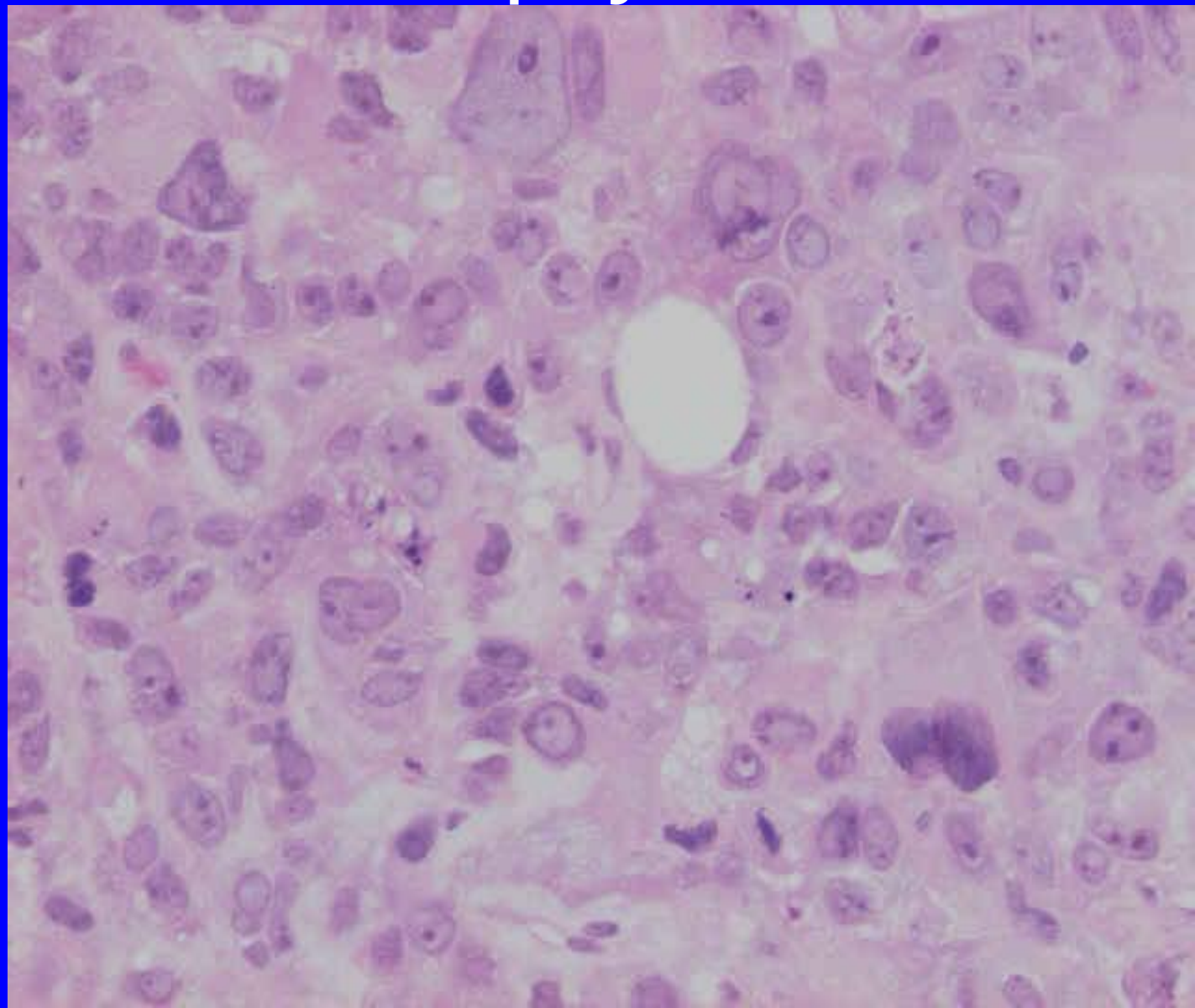
# Core Biopsy



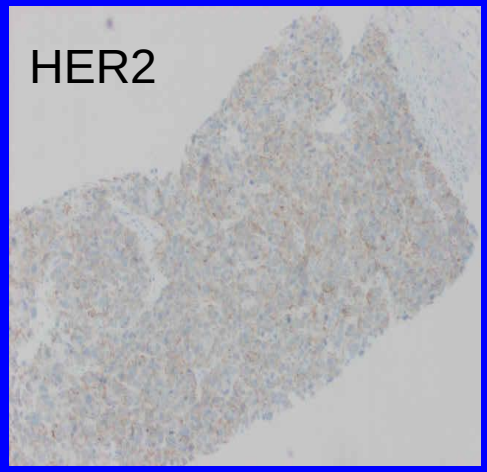


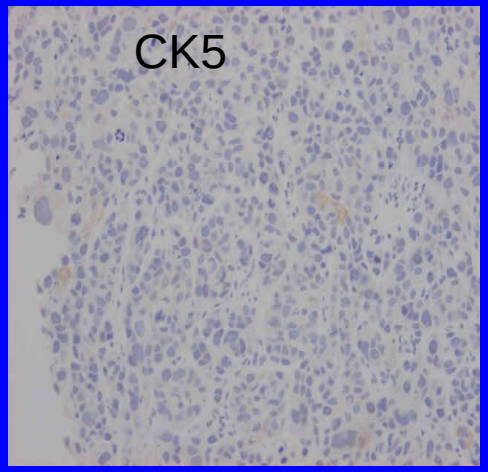



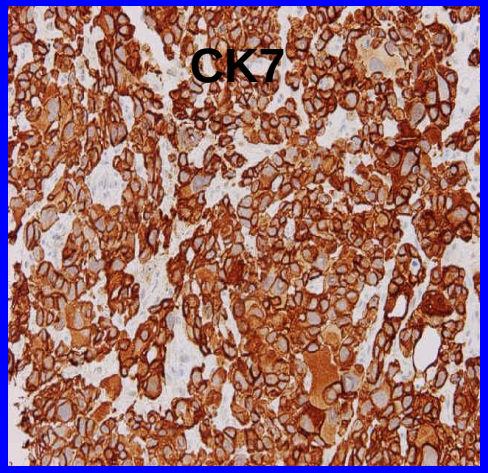

**No DCIS**

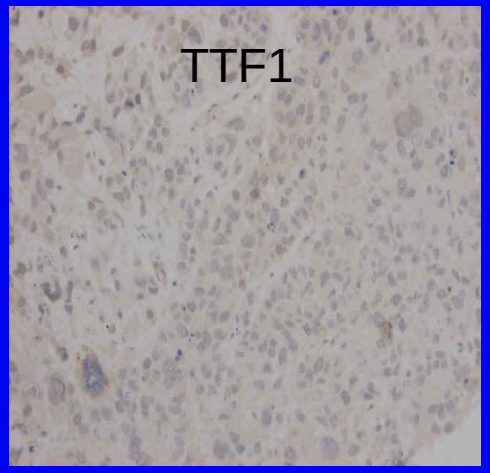


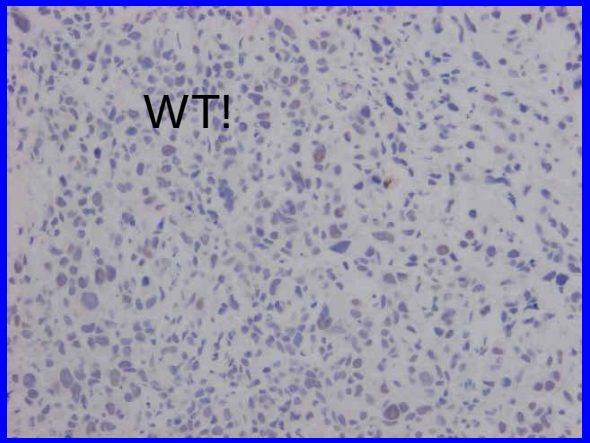
# Core Biopsy



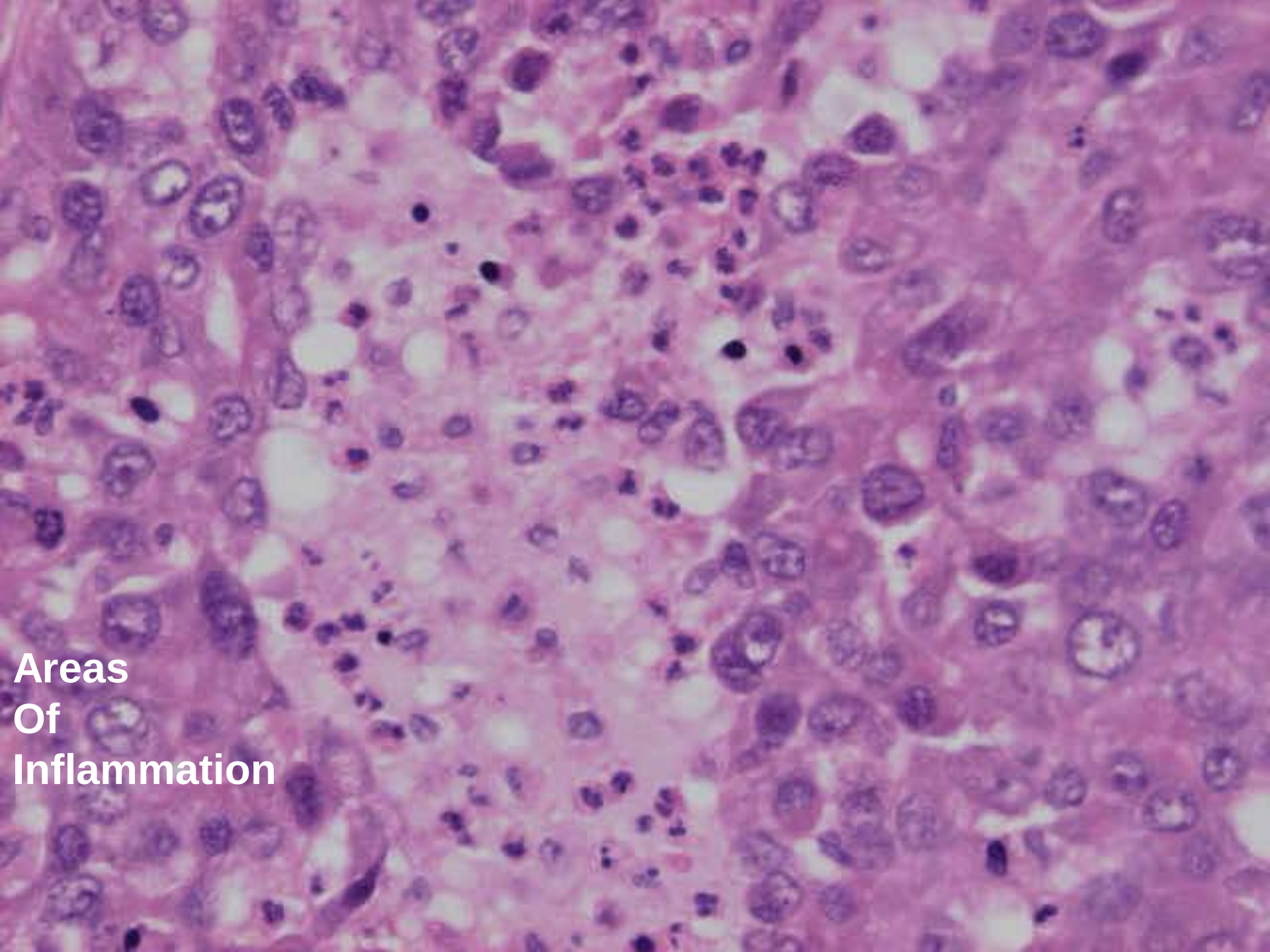



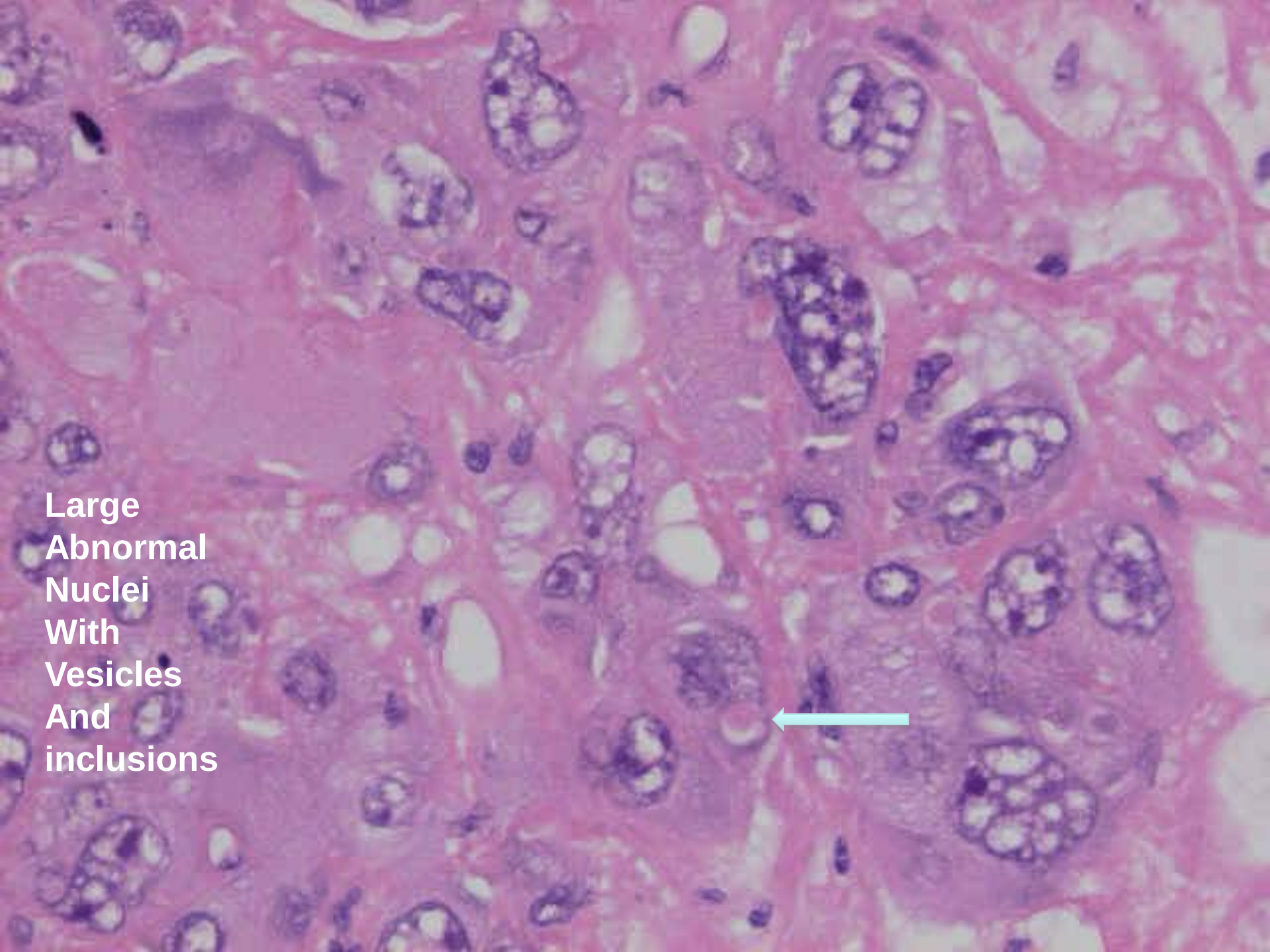



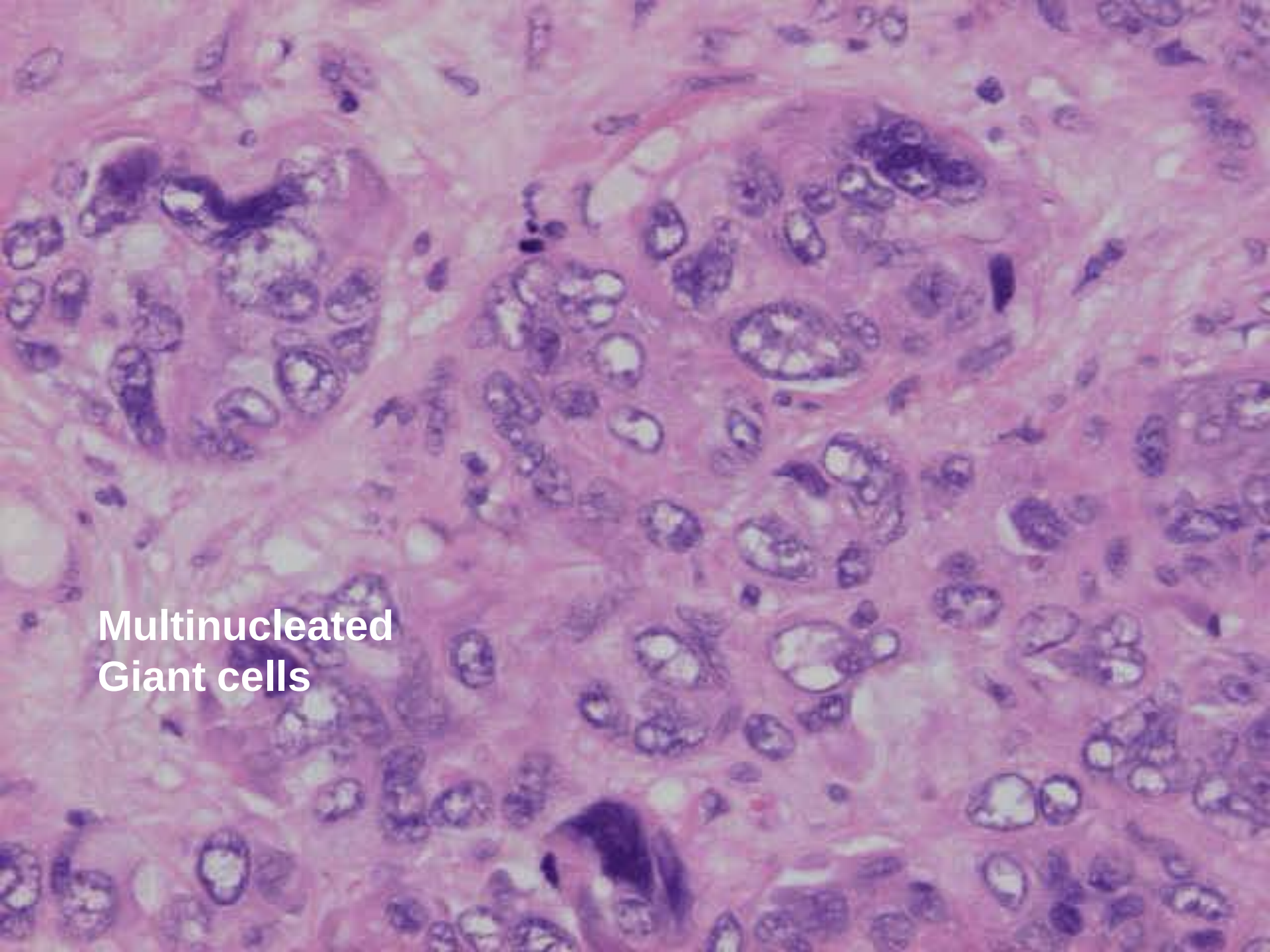



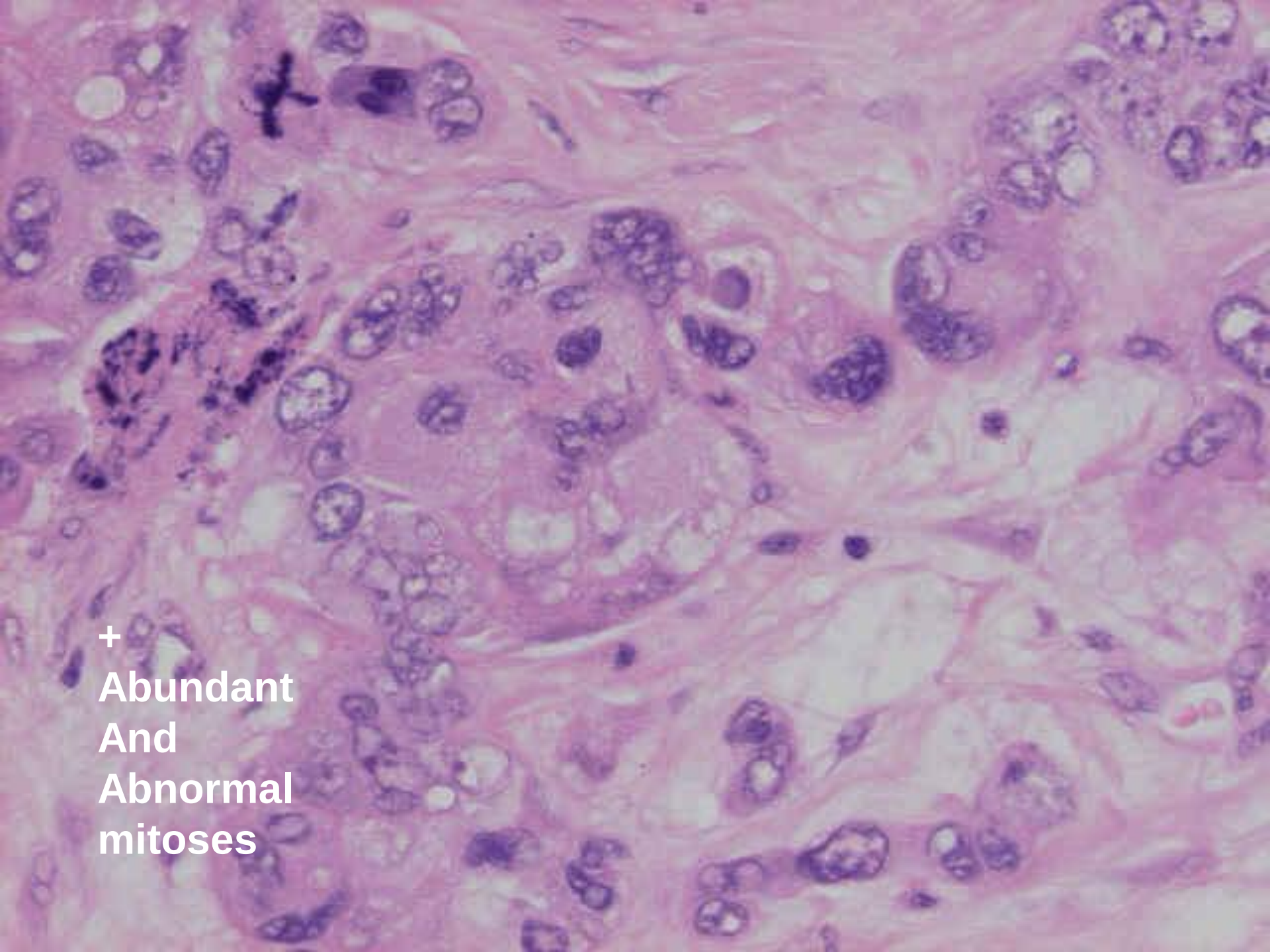



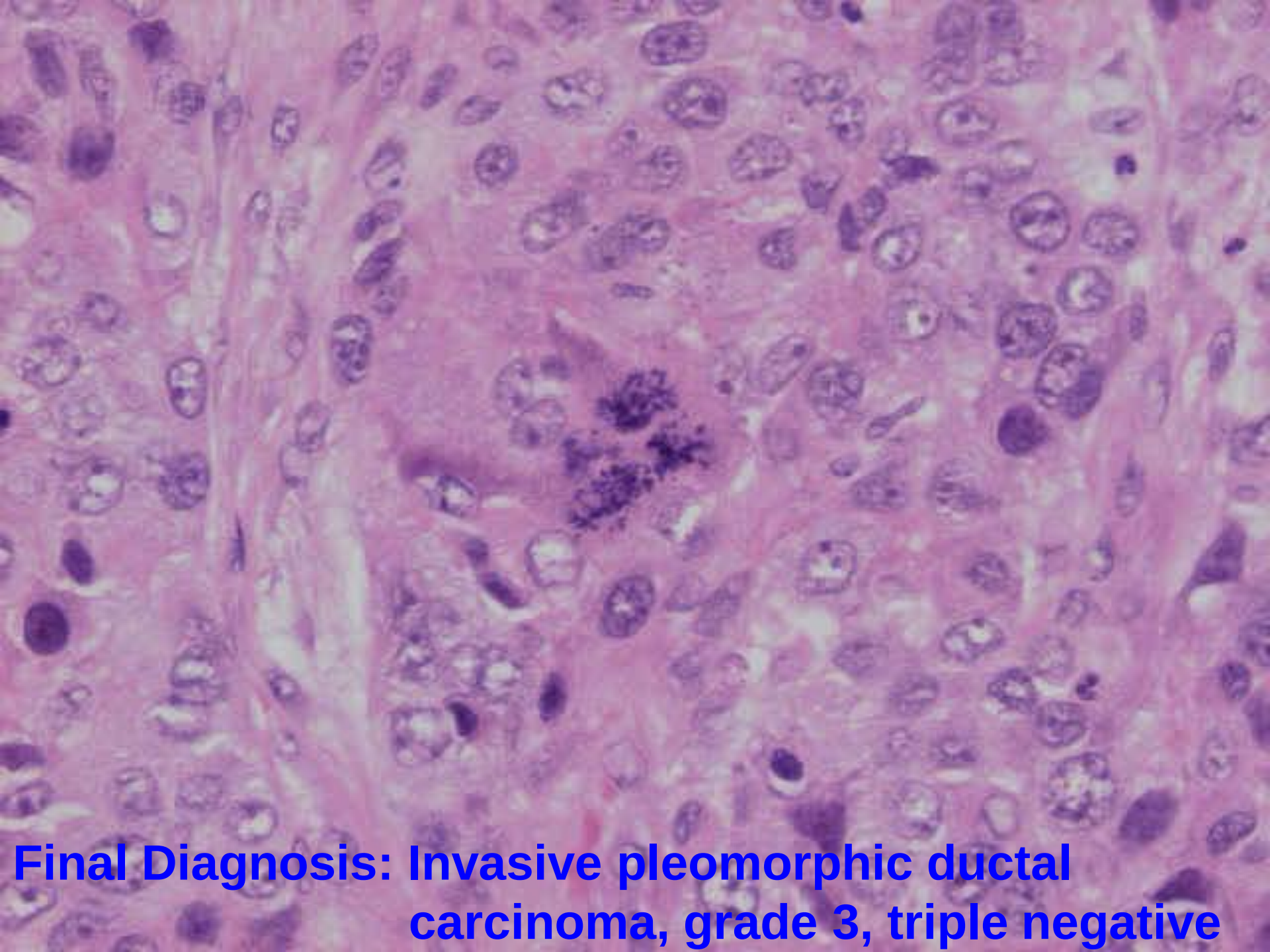

**DIAGNOSIS: Invasive pleomorphic ductal carcinoma of the breast (B5b), please exclude lung primary**


Areas
Of
Inflammation


Large
Abnormal
Nuclei
With
Vesicles
And
inclusions


Multinucleated
Giant cells


+
Abundant
And
Abnormal
mitoses



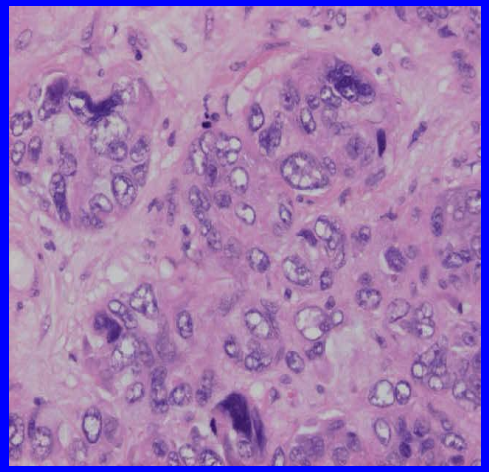
**Final Diagnosis: Invasive pleomorphic ductal carcinoma, grade 3, triple negative**

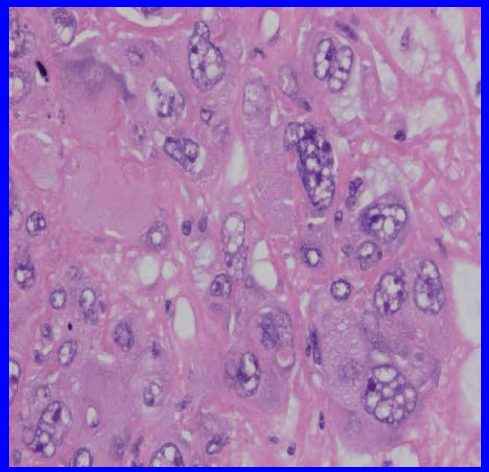
# Pleomorphic Ductal Carcinoma of the Breast

Characterised by [1, 2]:

1. Marked nuclear pleomorphism (>6 fold variation of nuclear size), in more than 50% of tumour cells

2. Presence of multinucleated giant tumour cells





# Pleomorphic Ductal Carcinoma of the Breast

In a series of 37 cases [2] :

- Age 23-78y
- Size: 1.2-11.6cm
- Positive Axillary Nodes in 52% [1, 2]
- Focal spindle cell component in 38% [1, 2]
- Necrosis in 76%
- Well or Fairly circumscribed in 61%
- Typical invasive ductal elements in 22%
- Associated DCIS in 38%

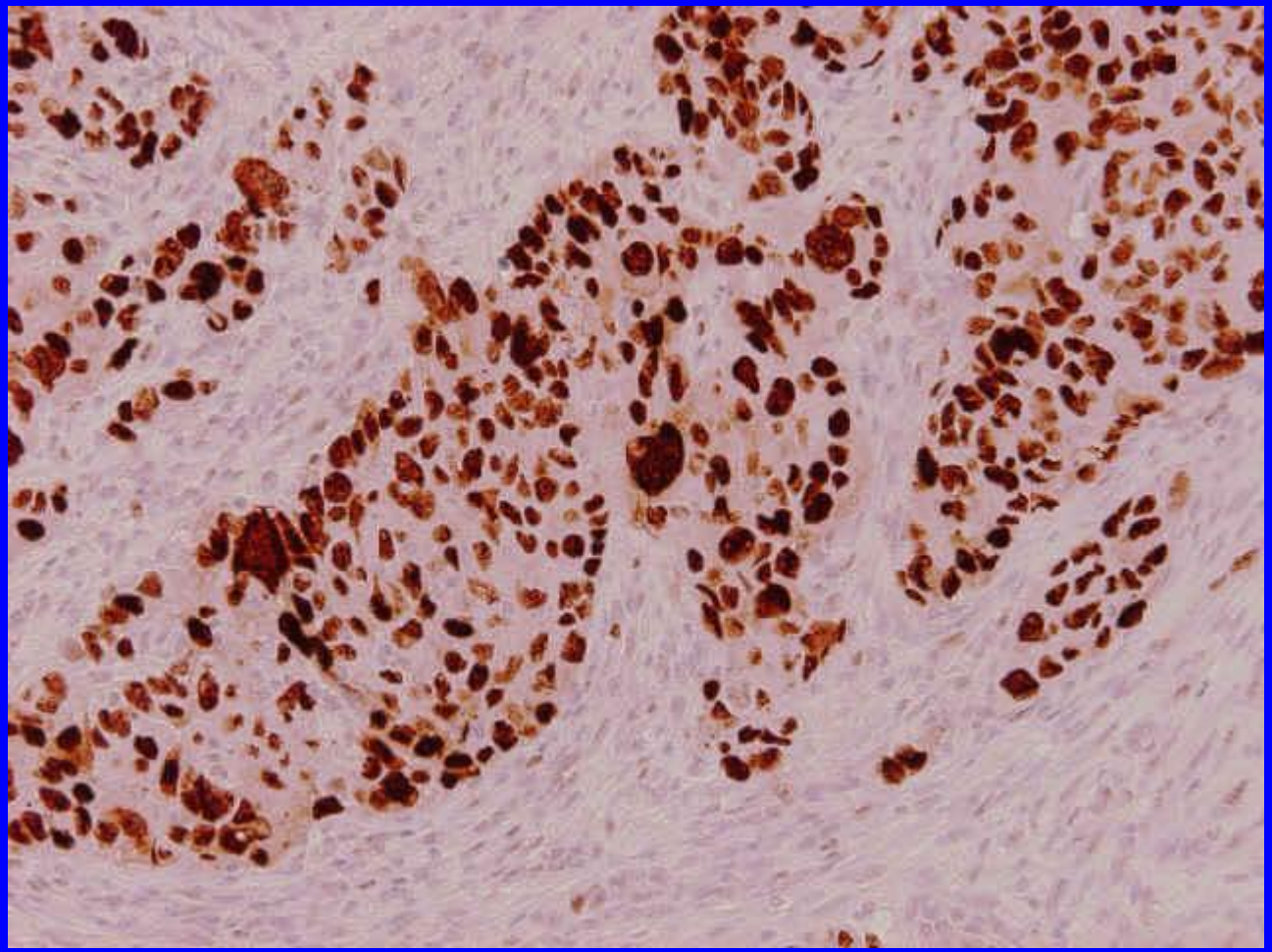
## Pleomorphic Ductal Carcinoma of the Breast/ Immunohistochemistry

- ER & PgR negative in 94-100%% [1-3]
- HER2 Negative in 40-84% [1-3]
- p53 expression in 60-71% [1,3]
- S100 positive in 40% [3]
- p63 positive in 20% (spindle cell elements)[3]
- Ki67: High

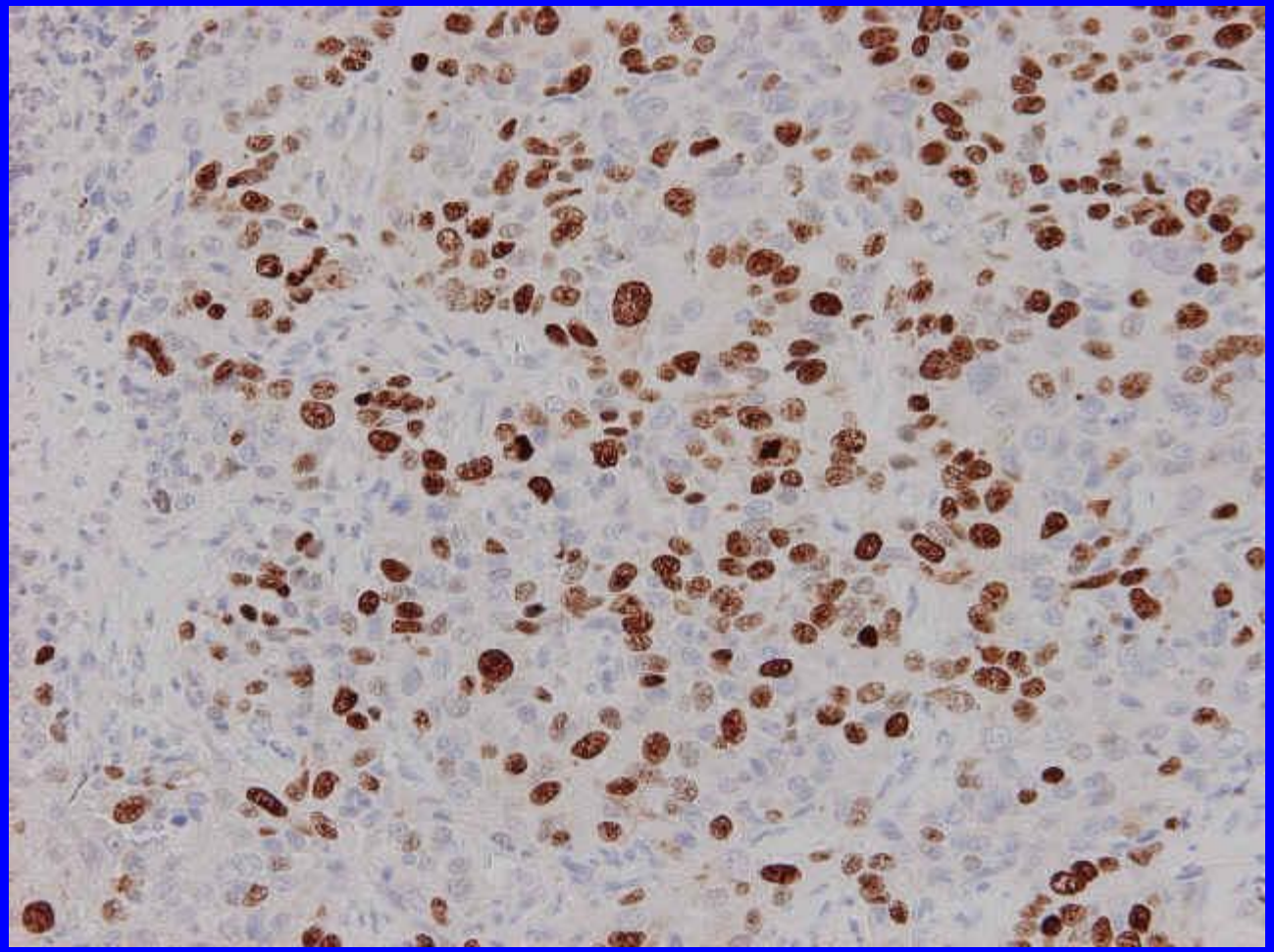
# Pleomorphic Ductal Carcinoma of the Breast

- 5-year survival [2] :
  - 38% if there are spindle cell elements
  - 89% in the absence of spindle cell elements

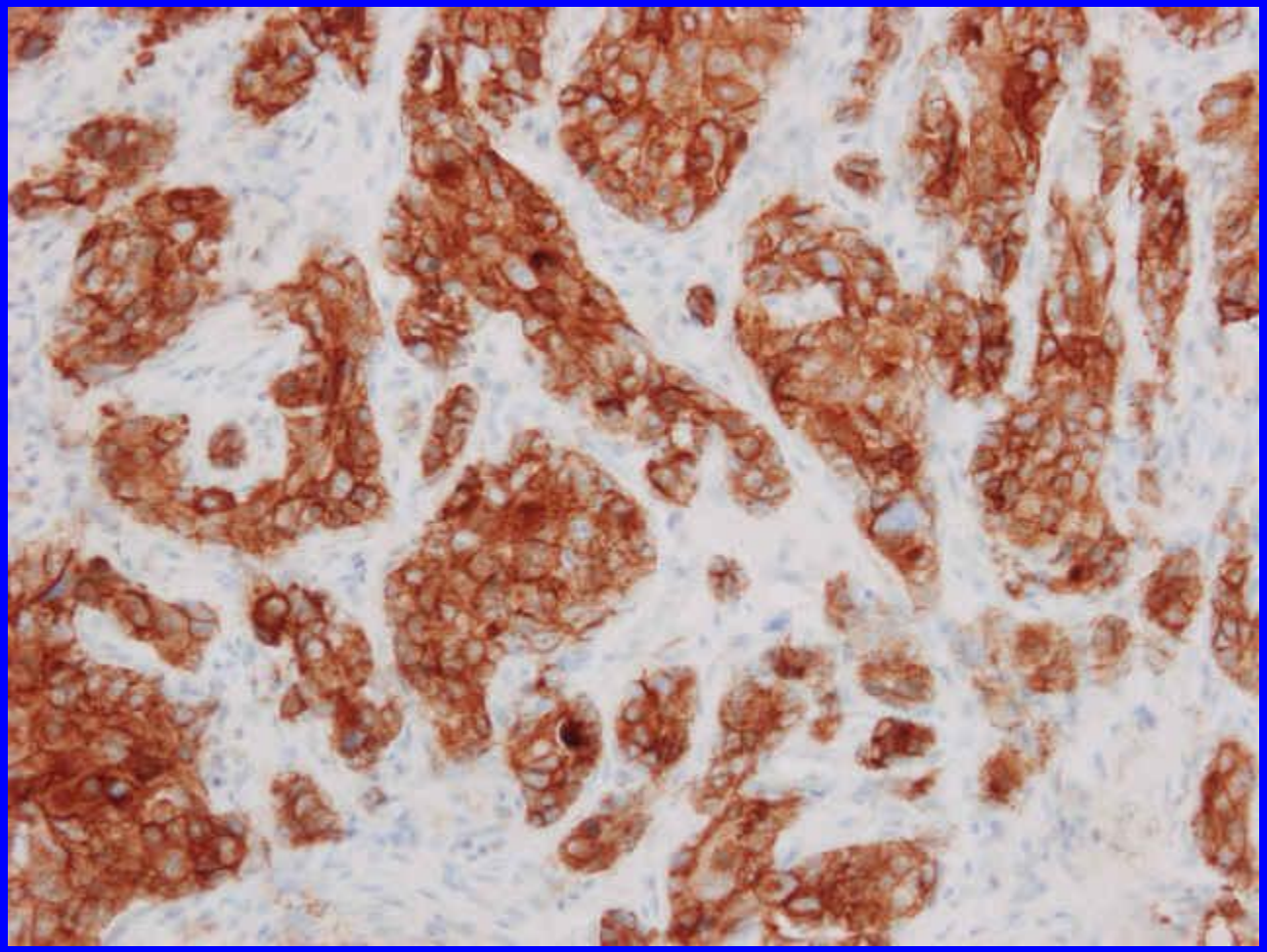
# p53



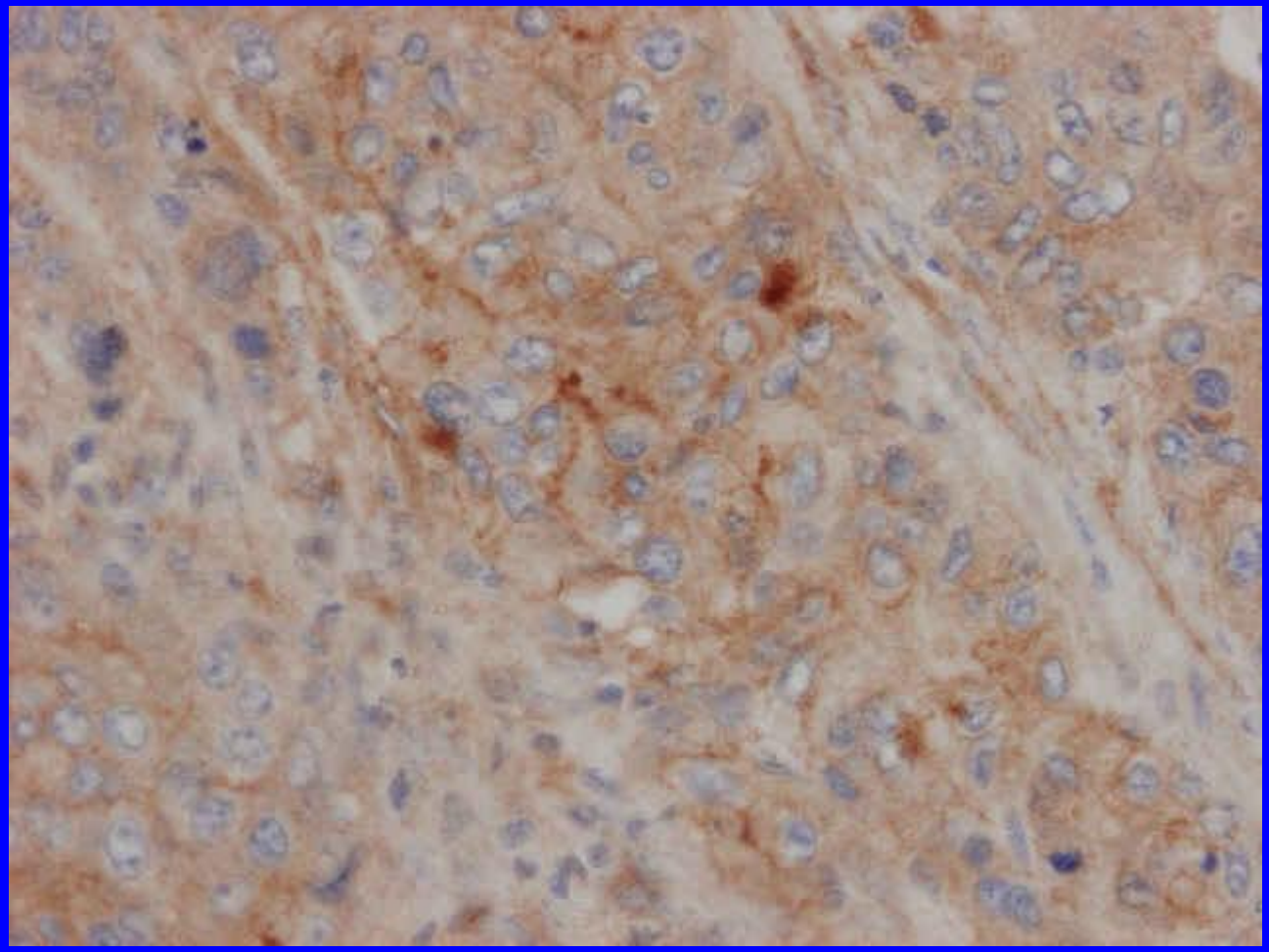
# Ki67



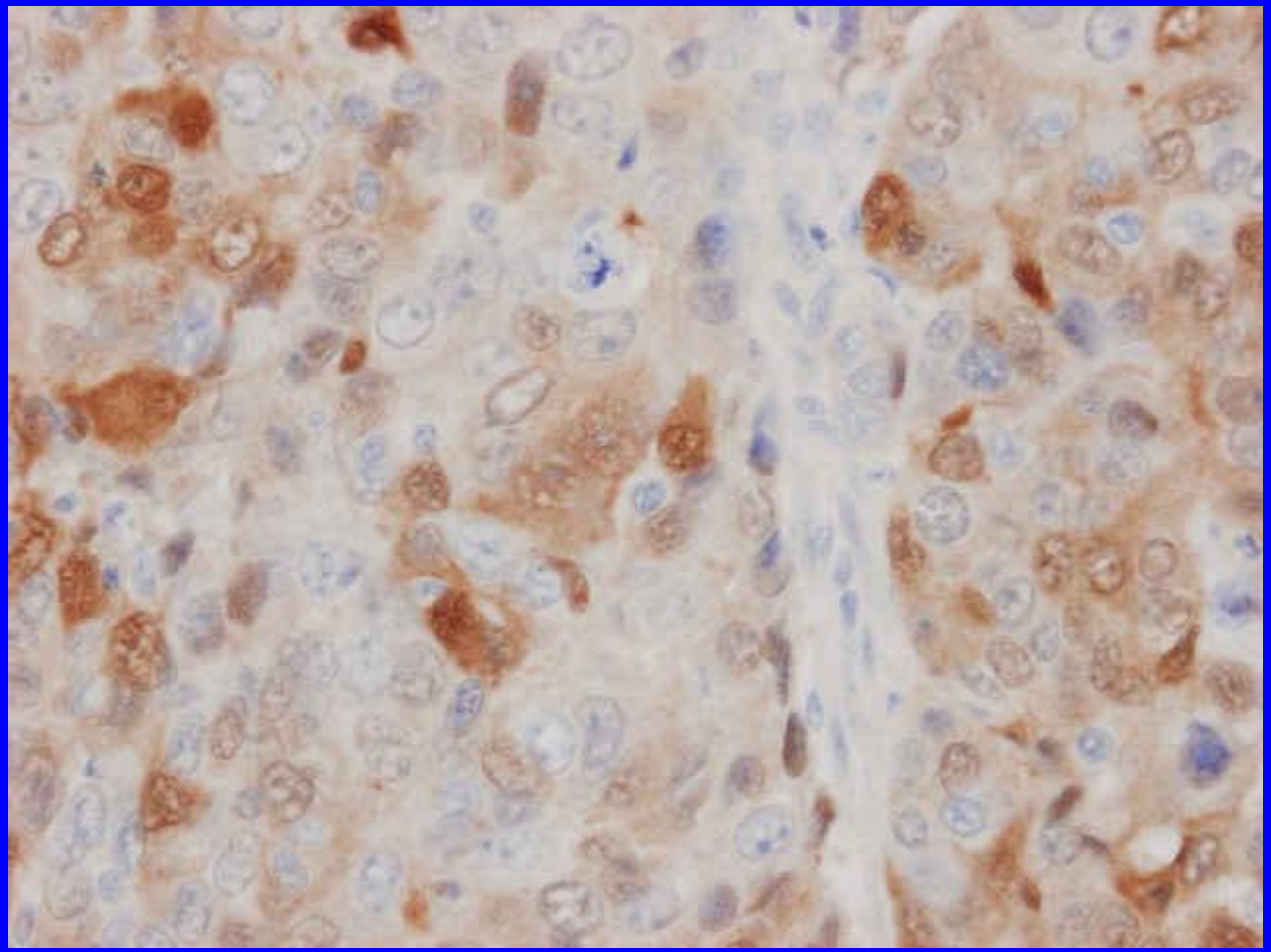
# E-Cadherin



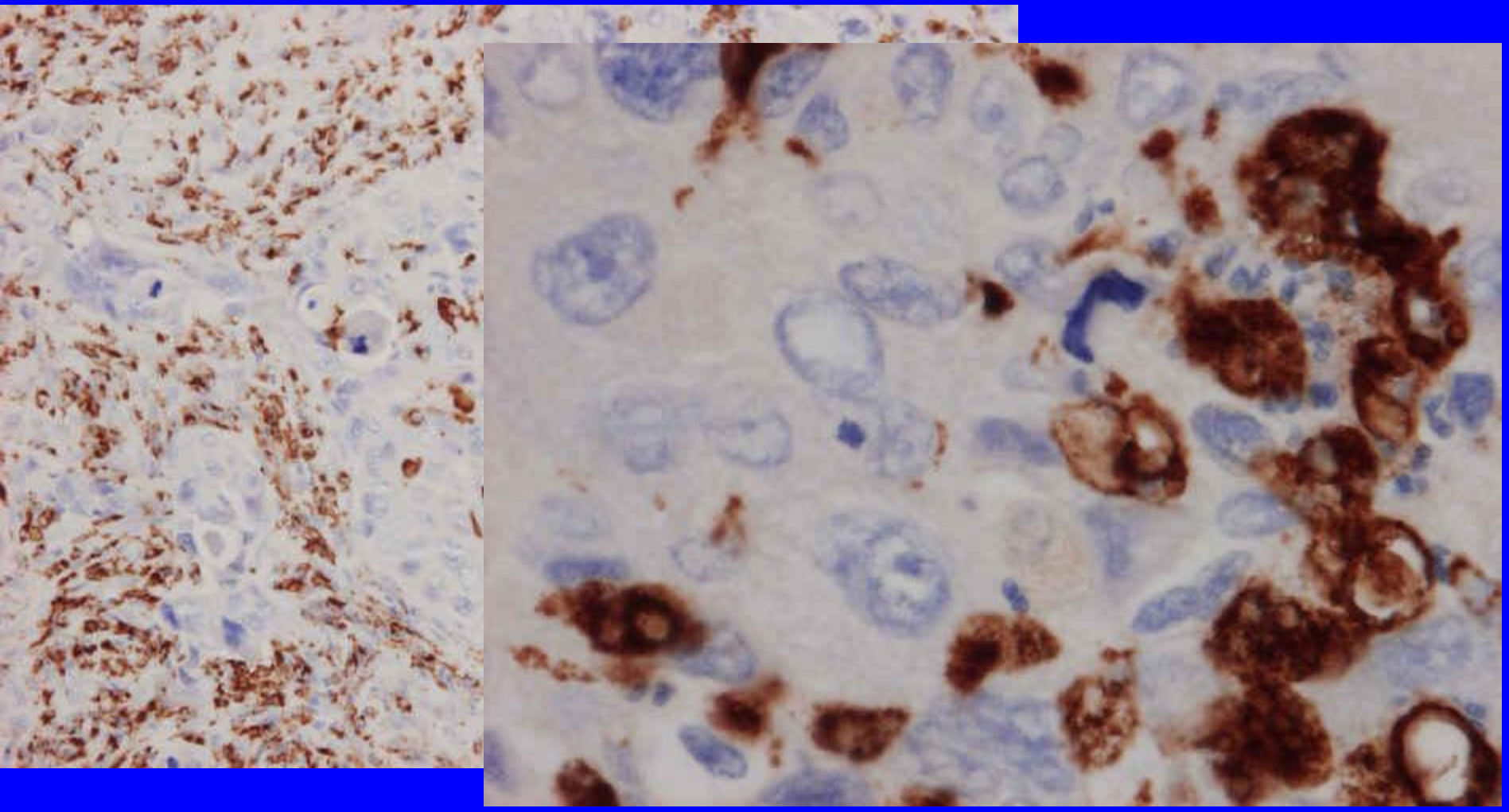
# EGFR



# S100



# CD68



**Macrophage markers have been described in 2 cases[4]**

# Follow up

- Patient Well with no evidence of recurrence or metastasis 14 months after surgery (Had no chemo or radiotherapy because of Huntington's disease)


Does Tumour morphology reflect unique patient's personality? (Personalised Pathology!)

# References


1. Silver SA, Tavassoli FA. Pleomorphic carcinoma of the breast: clinicopathological analysis of 25 cases of an unusual high-grade phenotype of ductal carcinoma. Histopathology 2000, 36: 505-514

2. Nguyen CV et al. Pleomorhic ductal carcinoma of the breast: Predictors of decreased overall survival. Am J Surg Pathol 2010,34: 486-493

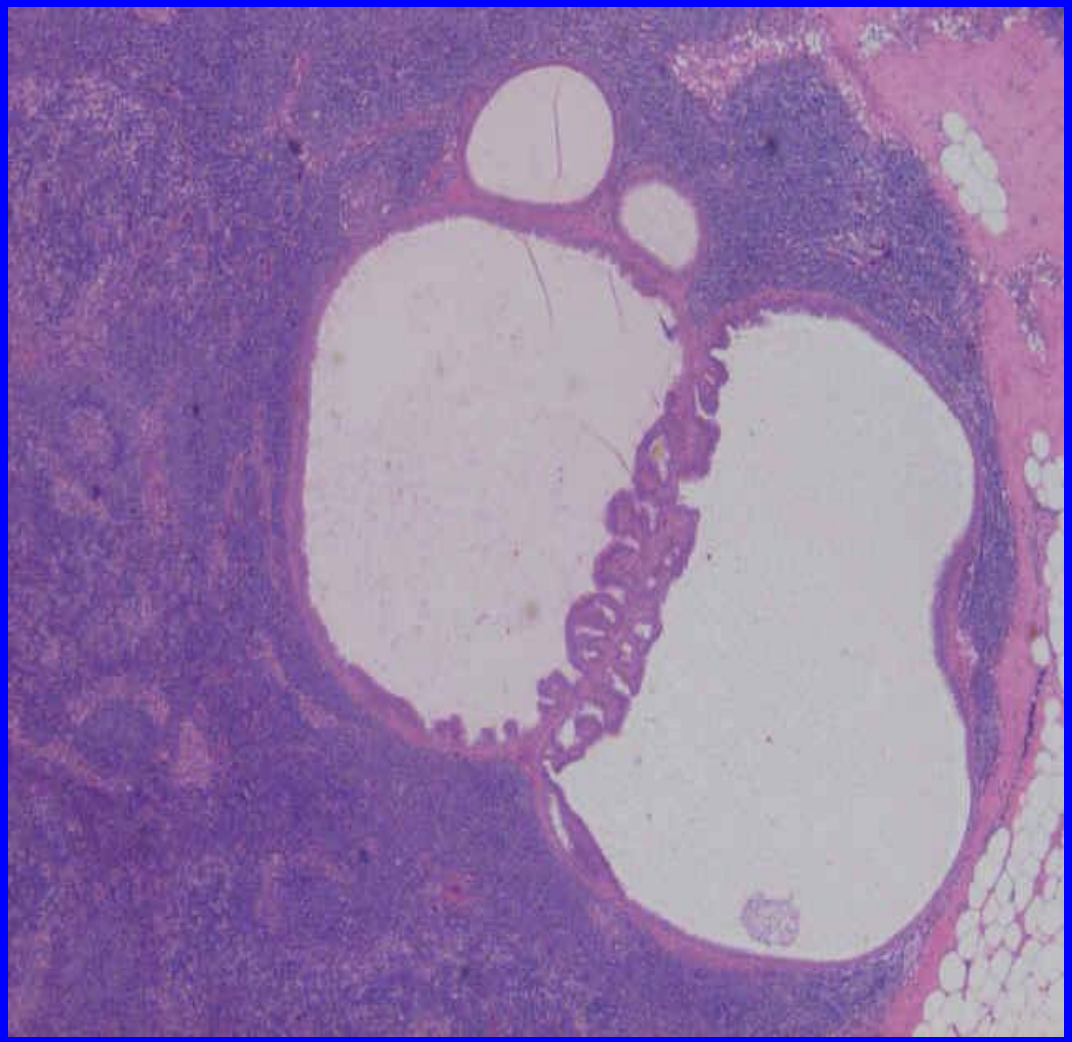
3. Zhao J et al. Clinicopathologic characteristics of pleomrphic carcinoma of the breast. Virchows Arch 2010: 456: 31-37

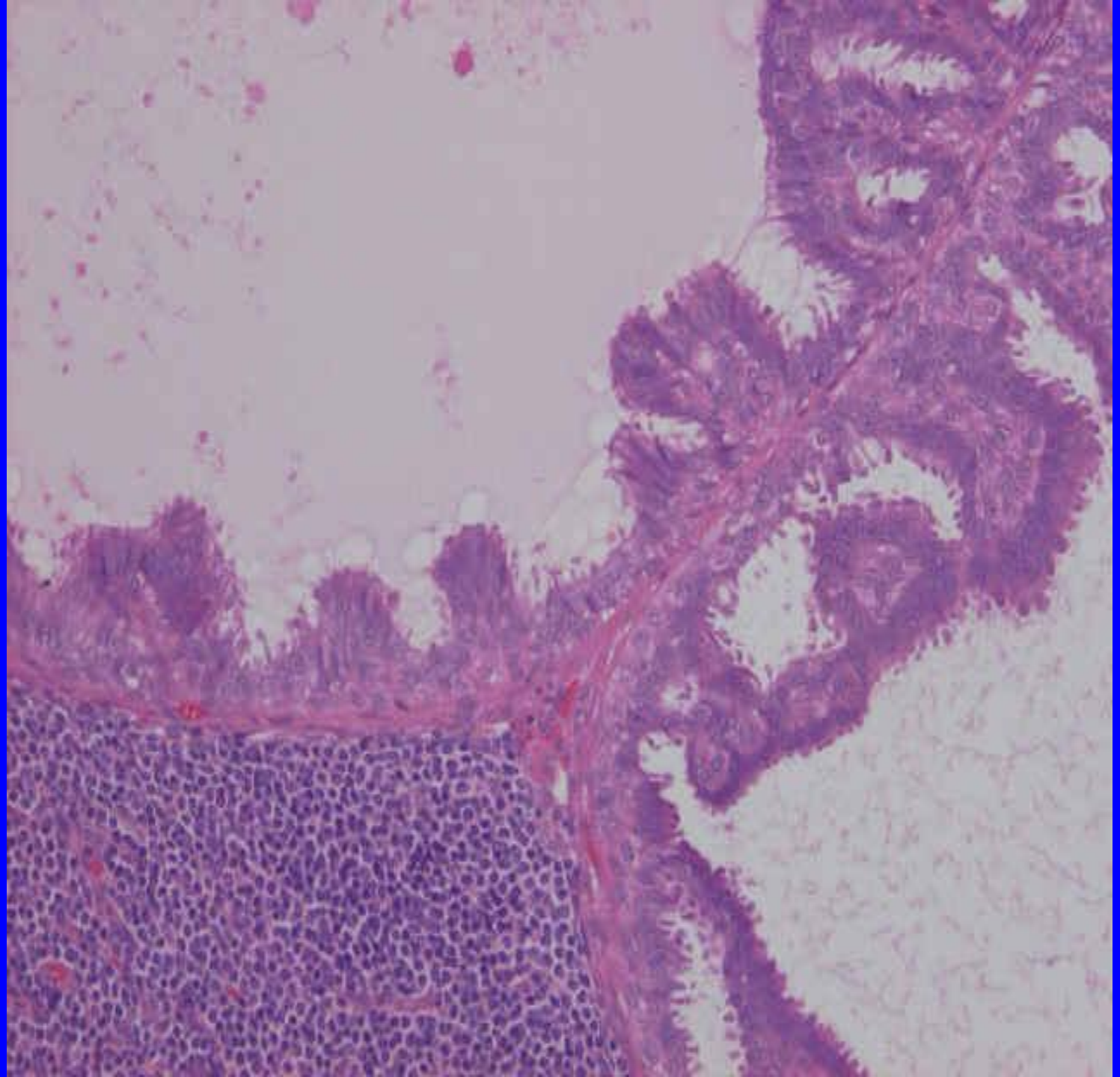
4. Cordoba A et al. Pleomorphic carcinoma of the breast with expression of macrophage markers: report of two cases. Pathol Int 2012: 62: 491-495

5. Sousa CM et al. The huntington disease protein accelerates breast tumour development and metastasis through ErbB2/HER2 signaling. EMBO Mol Med 2013,34: 309-325

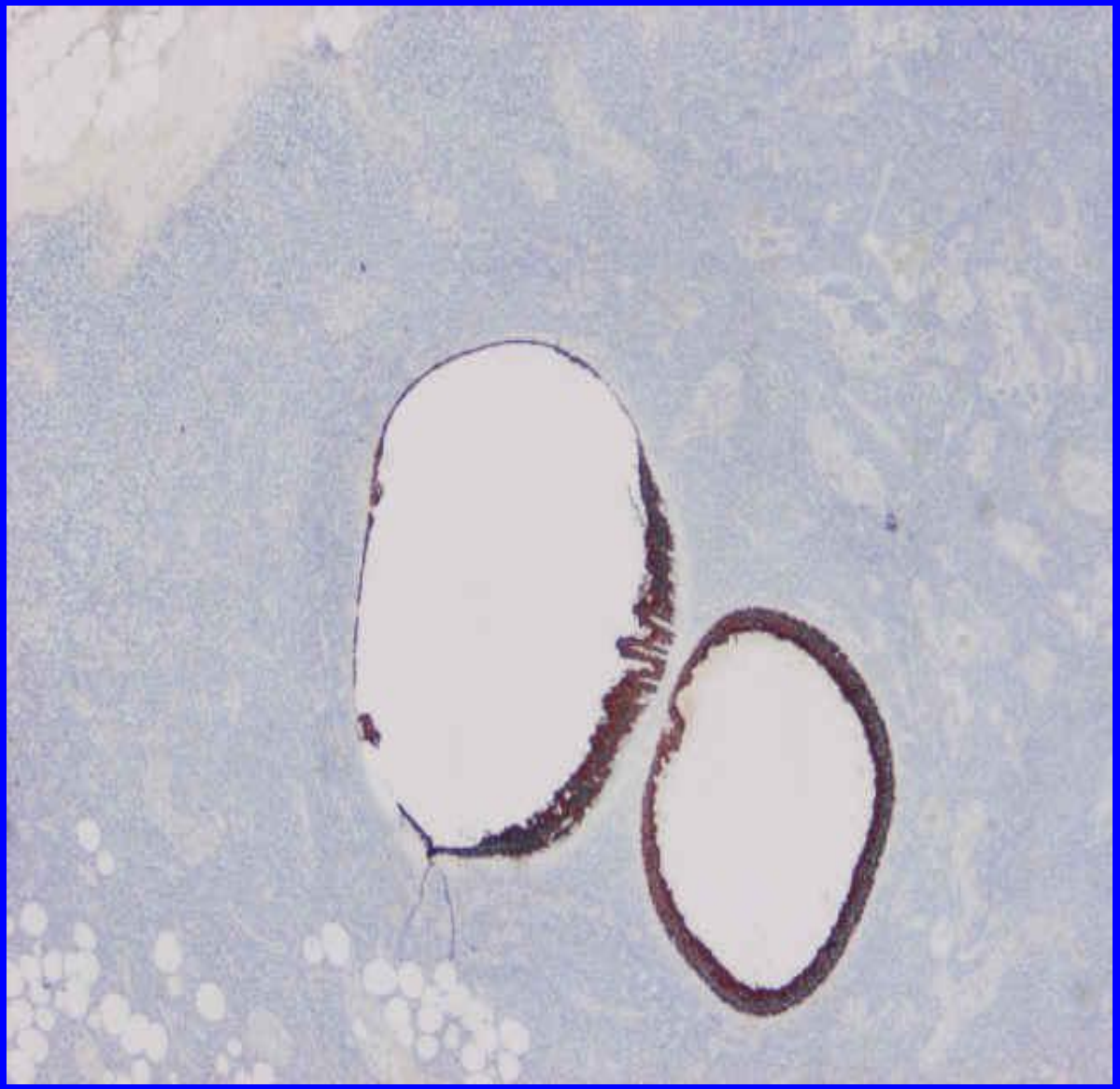
- F75 with breast cancer
- Section of Sentinel lymph node

# F75, Rt invasive ductal carcinoma, Sentinel node biopsy

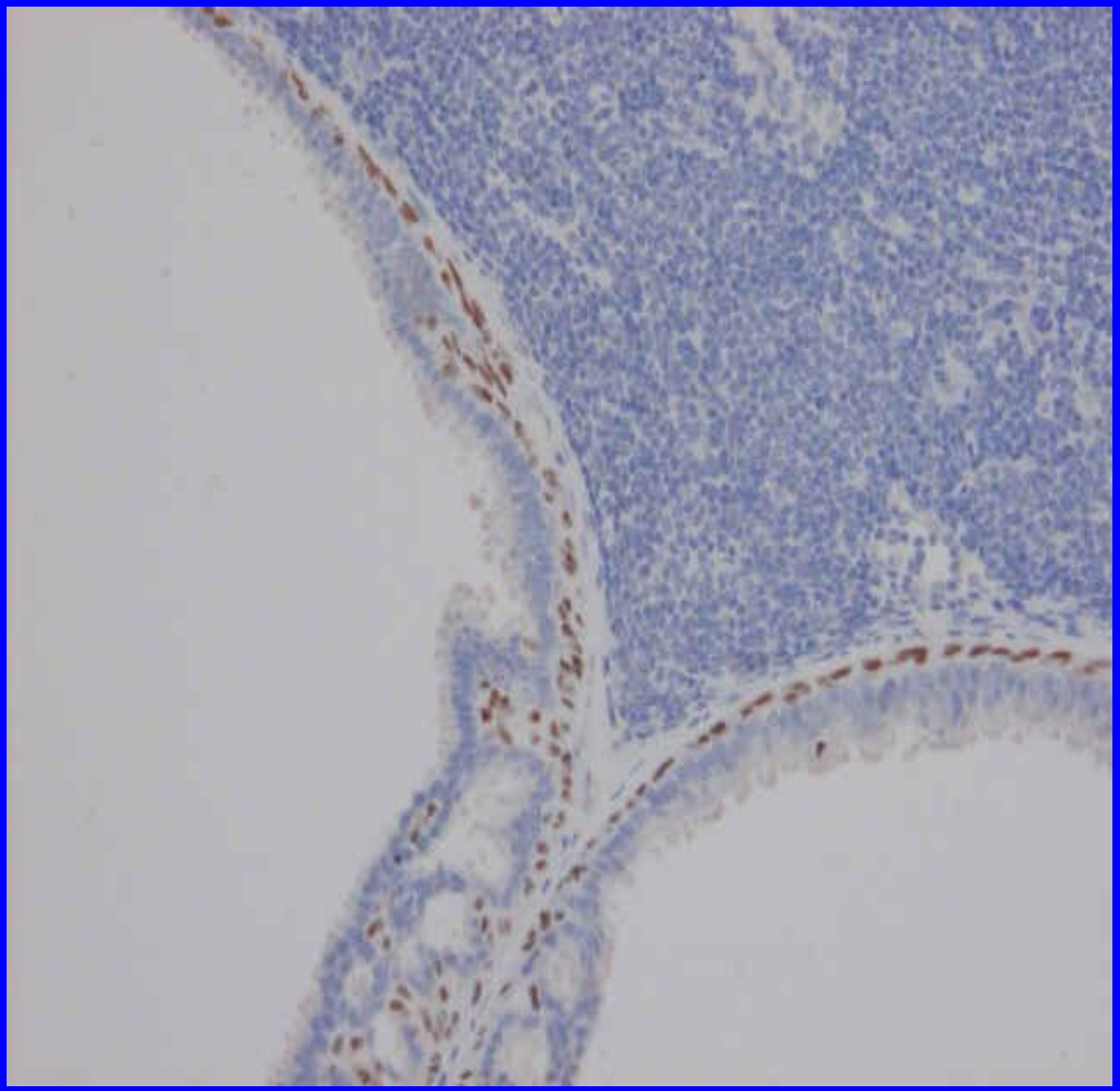




# AE1/AE3



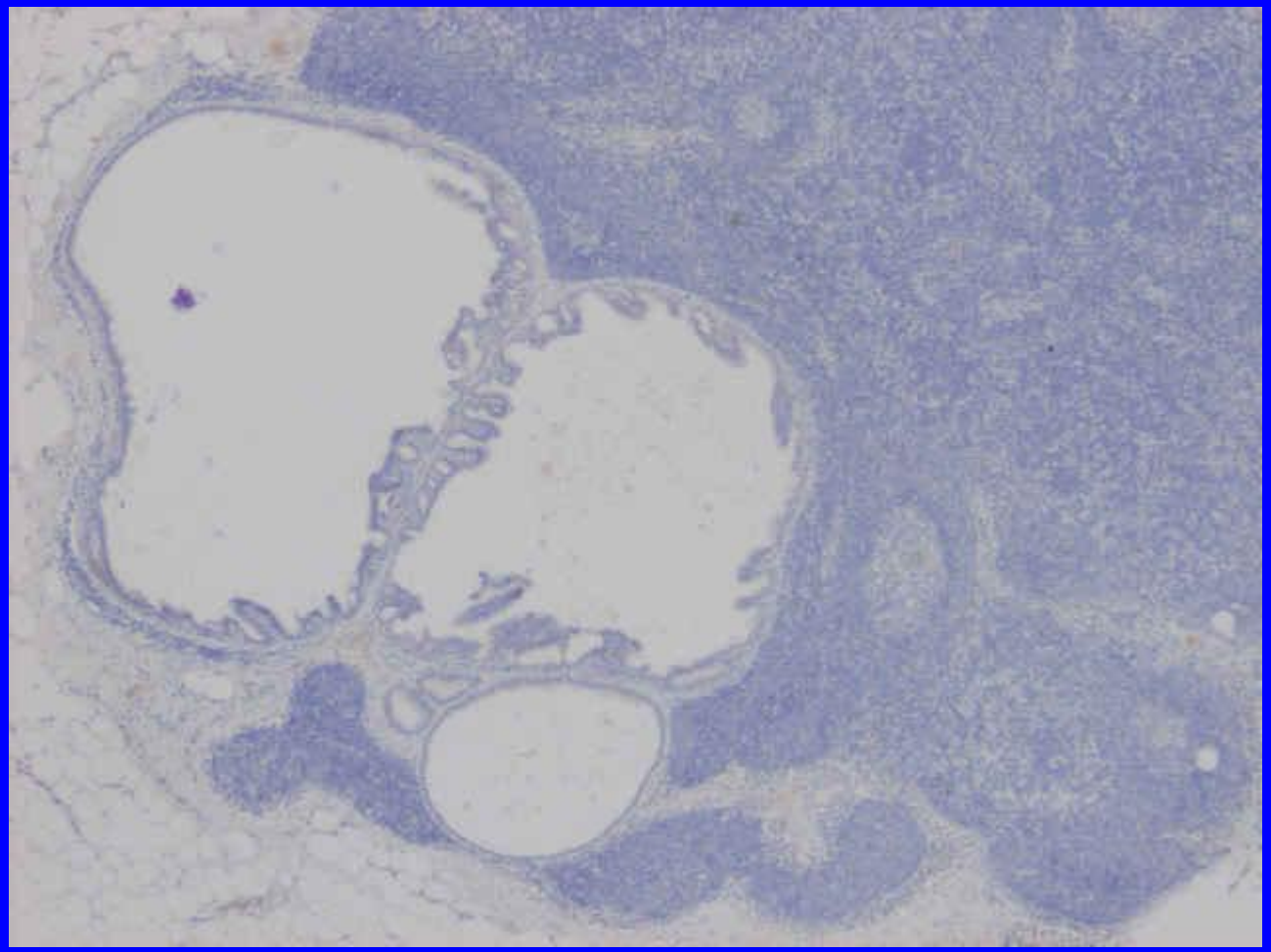
# p63



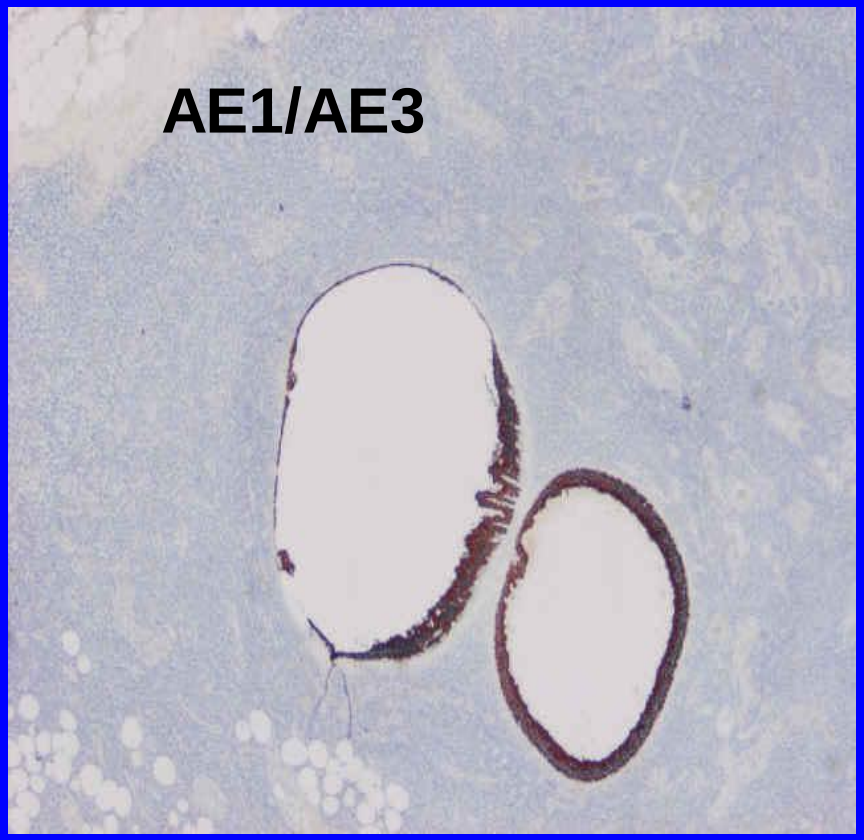
**Diagnosis:**

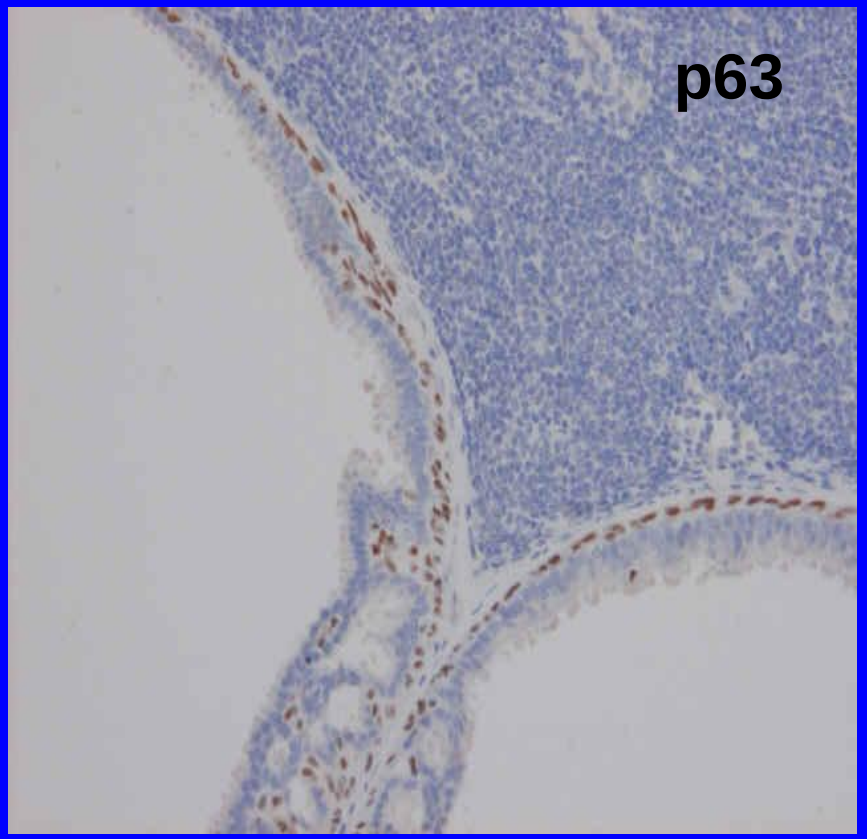
**Benign Glandular inclusions**

# WT1



**WT1 negative: Not consistent with endosalpingiosis**




**Diagnosos: Benign glandular breast-like epithelial inclusions**

# Benign epithelial inclusions in axillary lymph nodes

- **Uncommon, but now increasingly seen in sentinel node biopsies, and can be mistaken for metastatic carcinoma.**

- **Four types have been described*;**

1. **Glandular breast like inclusions:**
   - **Myoepithelial cells are present around the glands.**
   - **Negative for WT1.**
   - **Can show all pathological changes that can be seen in the breast.**

2. **Glandular Mullerian like inclusions (nodal endosalpingiosis):**
   - **Myoepithelial cells absent.**
   - **Cells are ciliated and are WT1 positive.**

3. **Squamous inclusions: solid or cystic.**

4. **Mixed glandular and squamous inclusions**

*Fellgara G, Carcangiu ML, Rosai J. Benign epithelial inclusions in axillary lymph nodes: Report of 18 cases and review of the literature. Am J Surg Pathol 2011; 35: 1123-1133

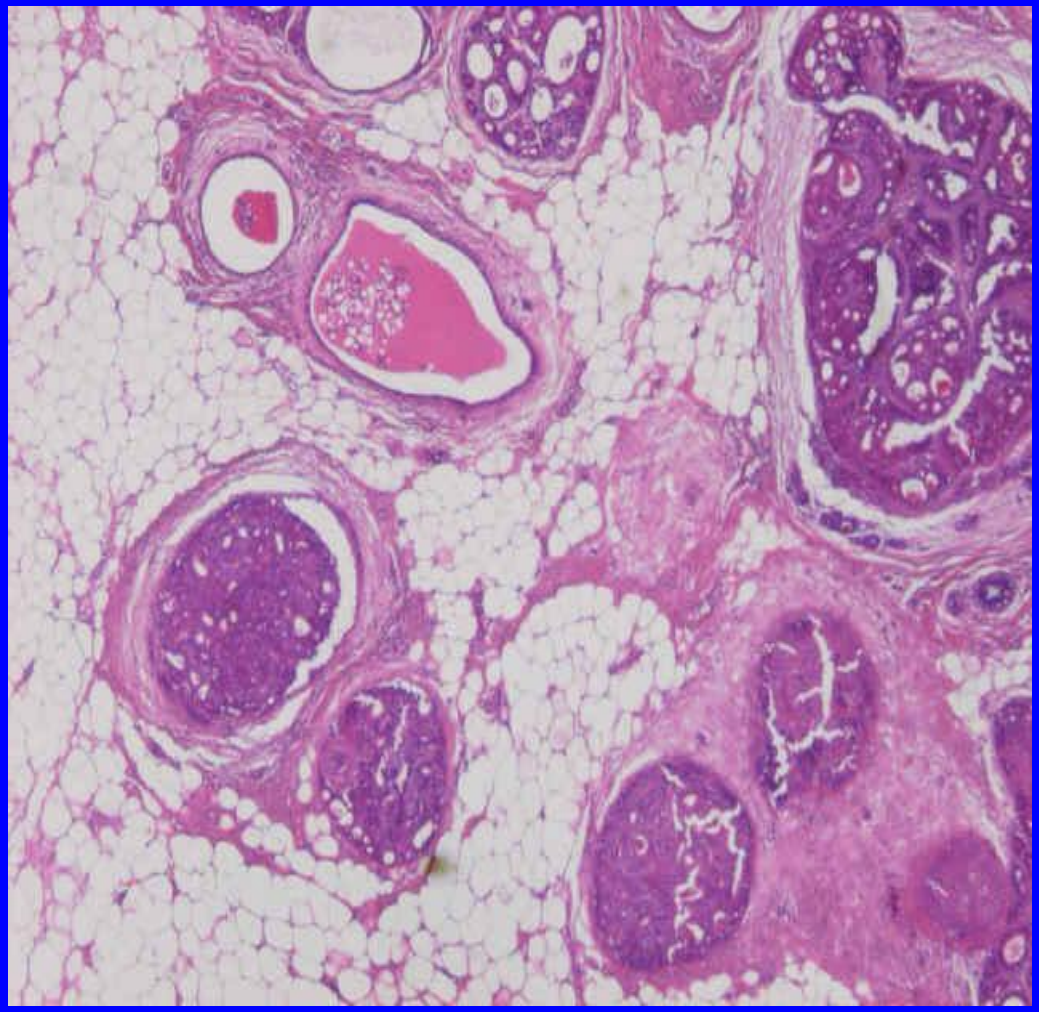
# Benign epithelial inclusions in axillary lymph nodes

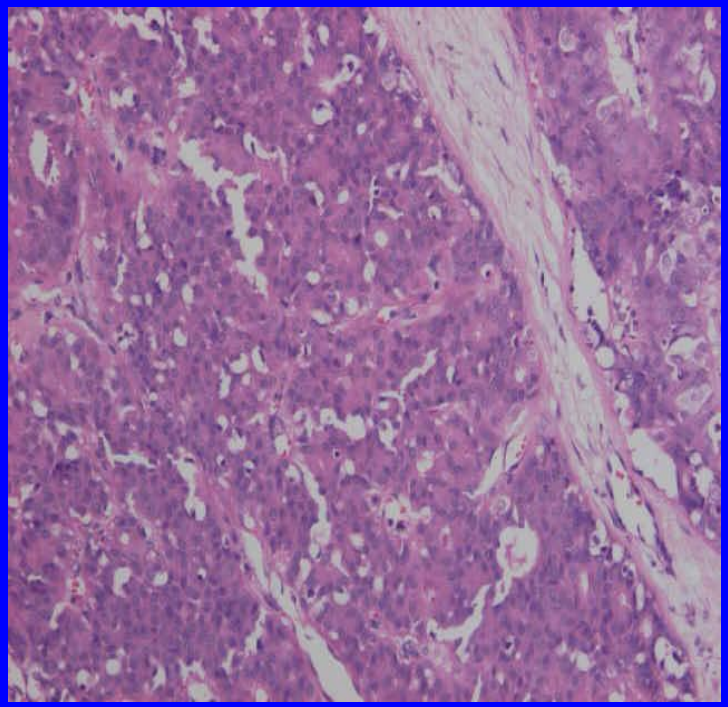
- Possible aetiology:
  - Transported epithelium from the breast (possibly in some cases that had breast surgery)
  - embryologic epithelial rests (as sometimes seen with no previous breast surgery)

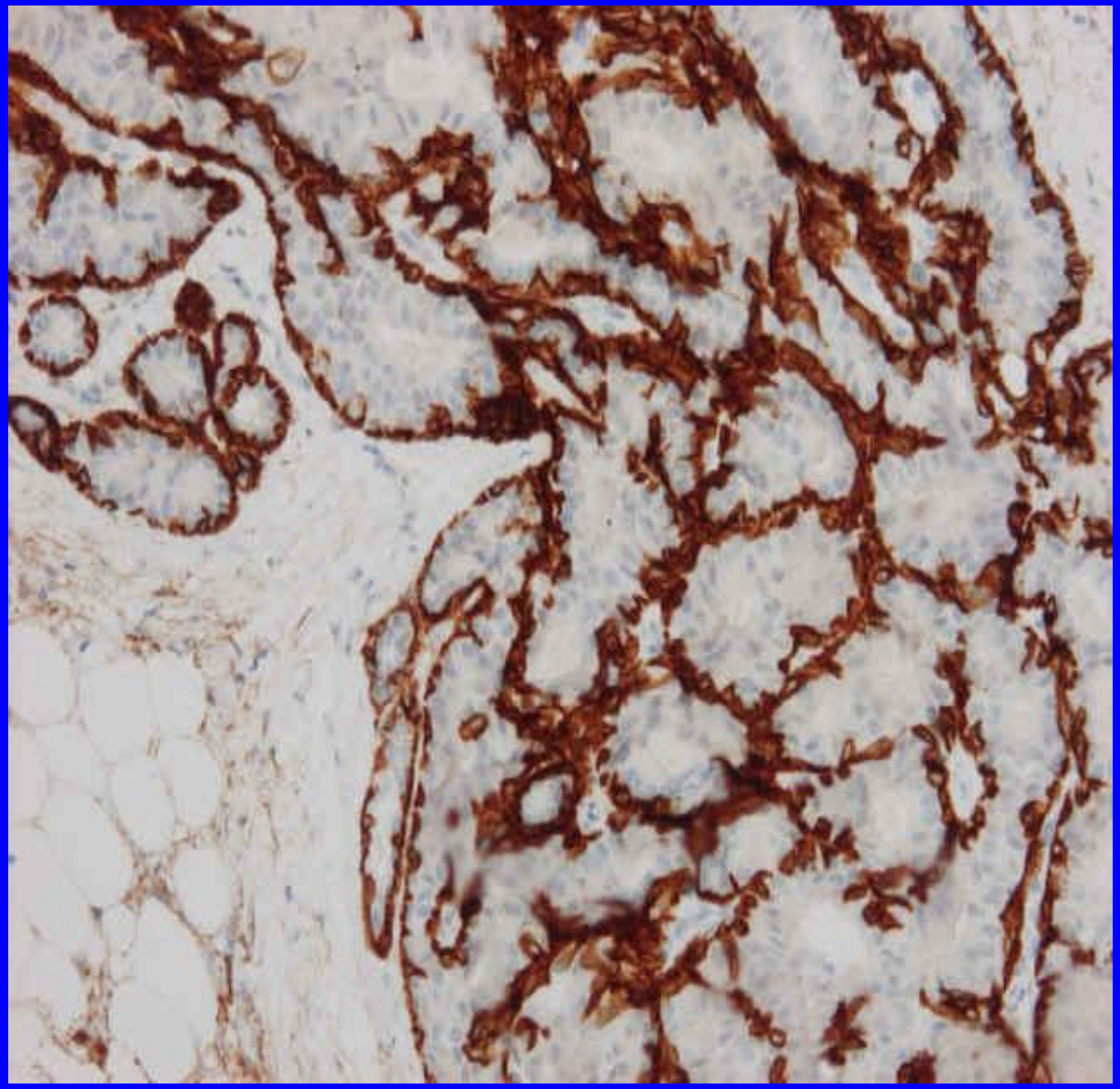
# Conclusion

- Not all epithelial elements in lymph nodes are malignant

# Case 258: F46 Rt Breast Lump

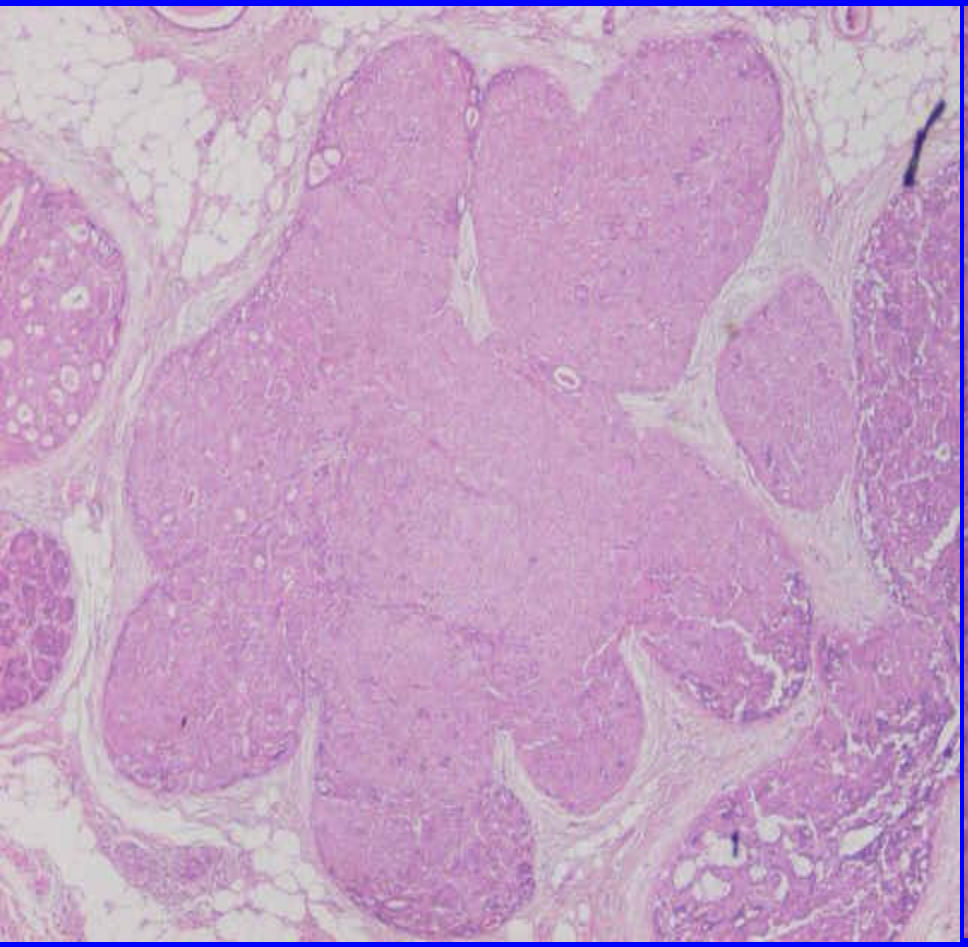


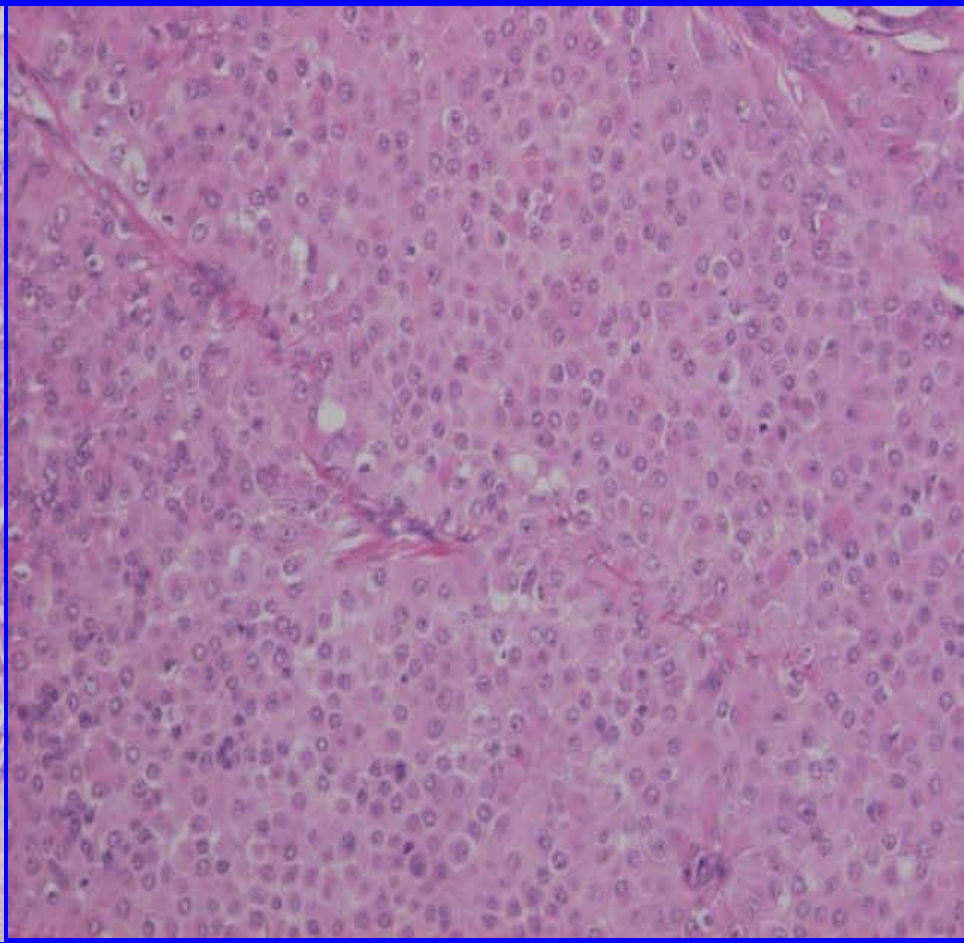


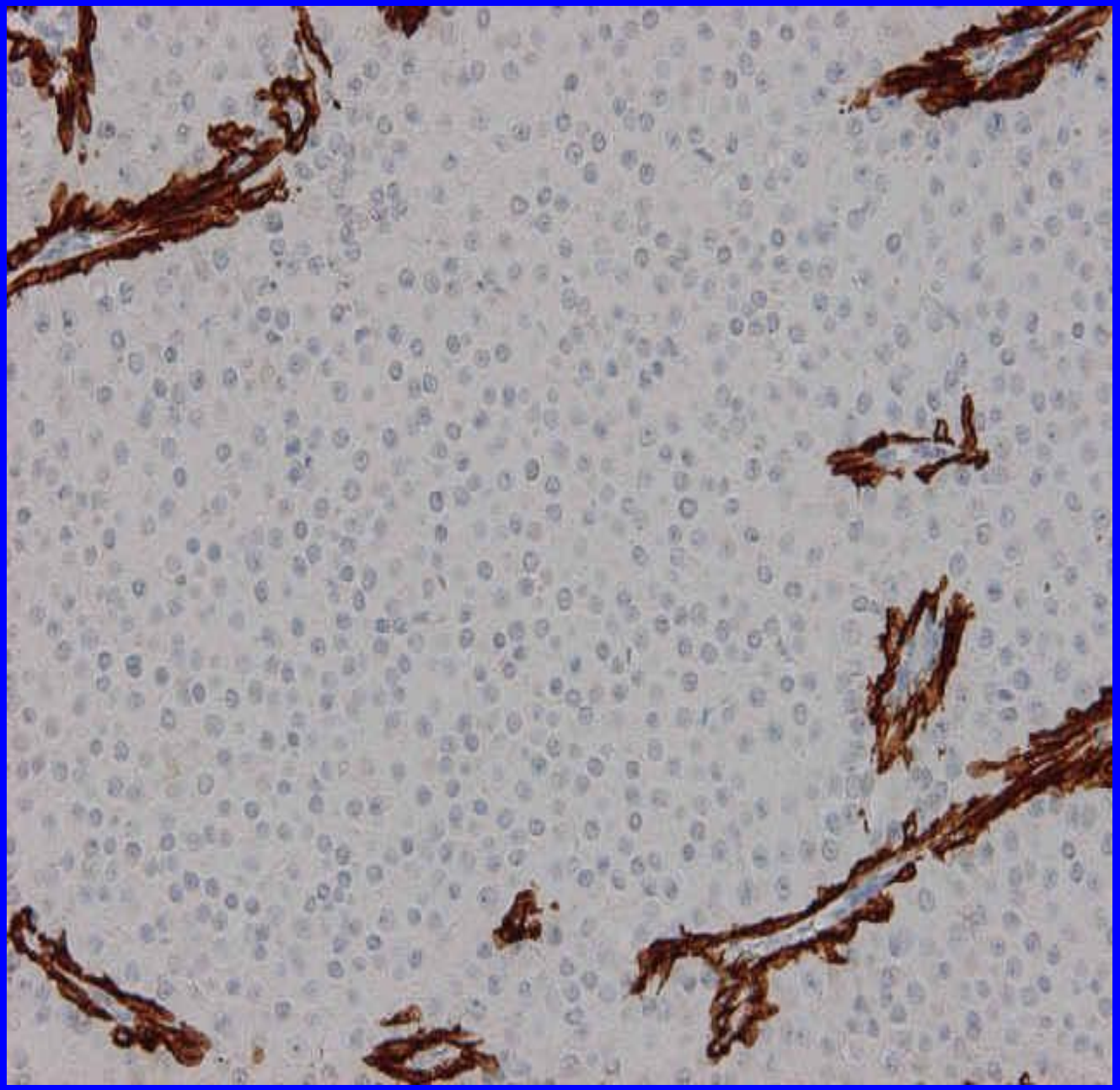


Diagnosis: Extensive atypical crbriform hyperplasia (Juvenile papillomatosis)

# Case 258







With focal low grade in situ malignant change