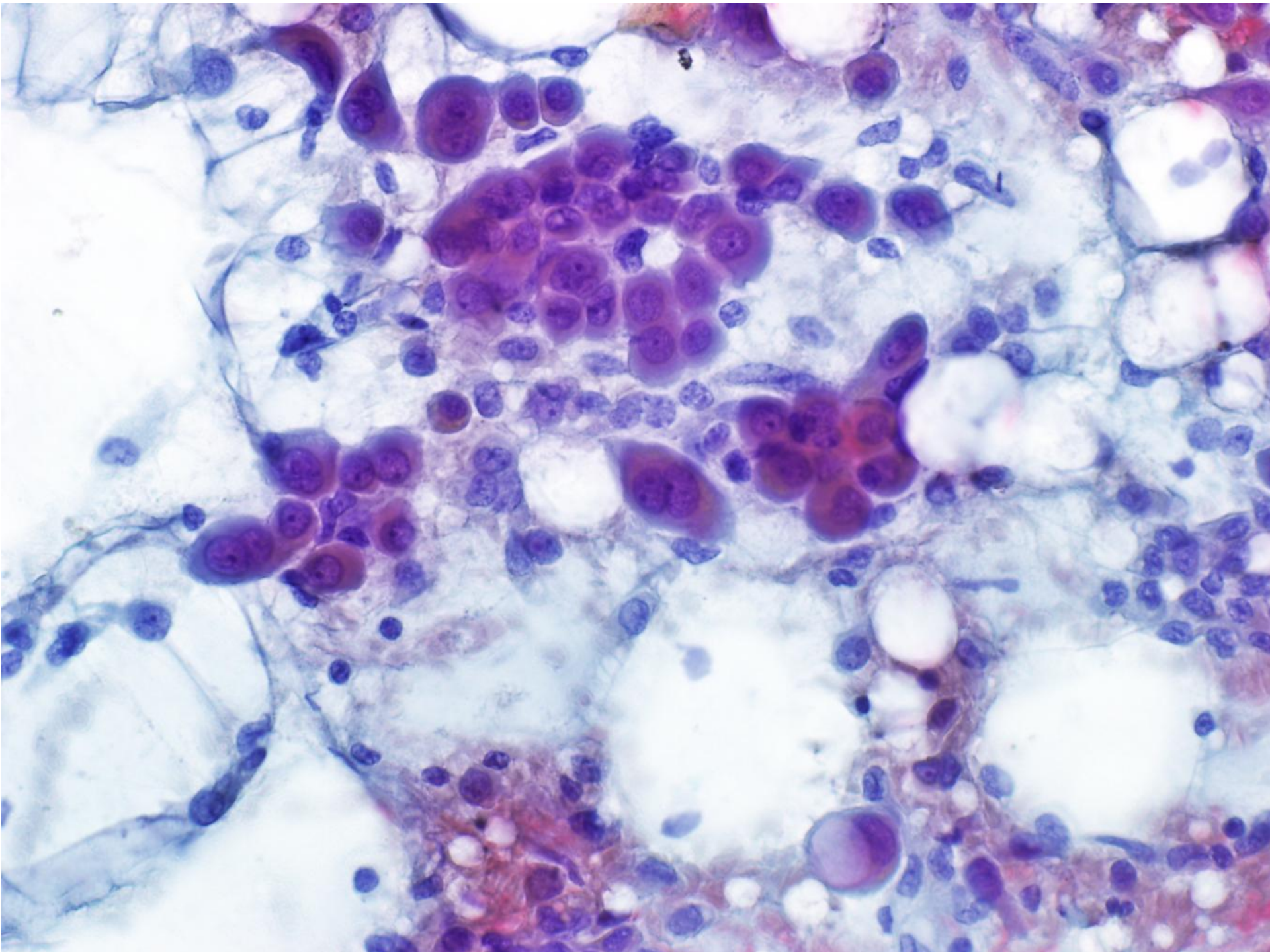


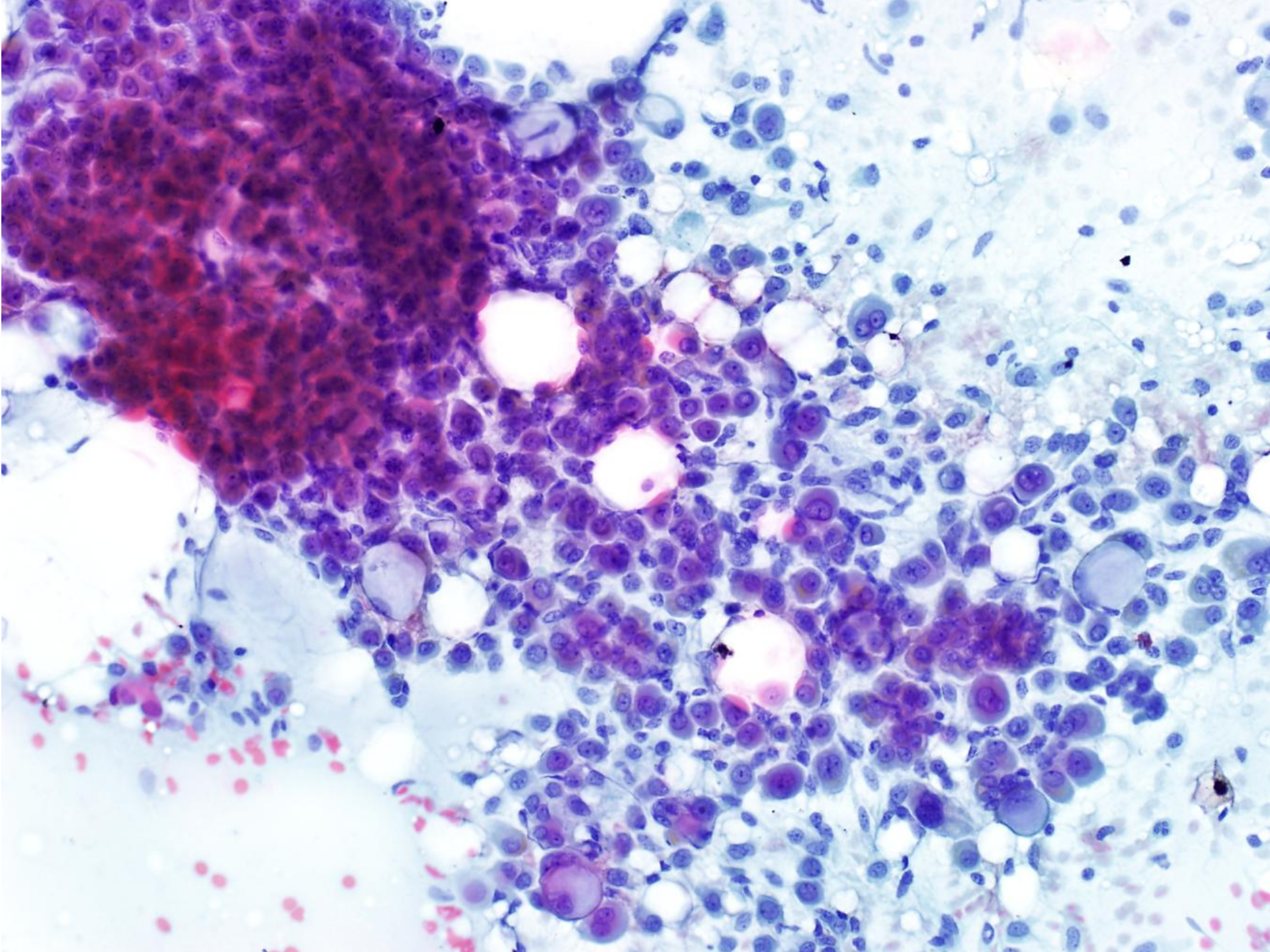
Interesting case conference

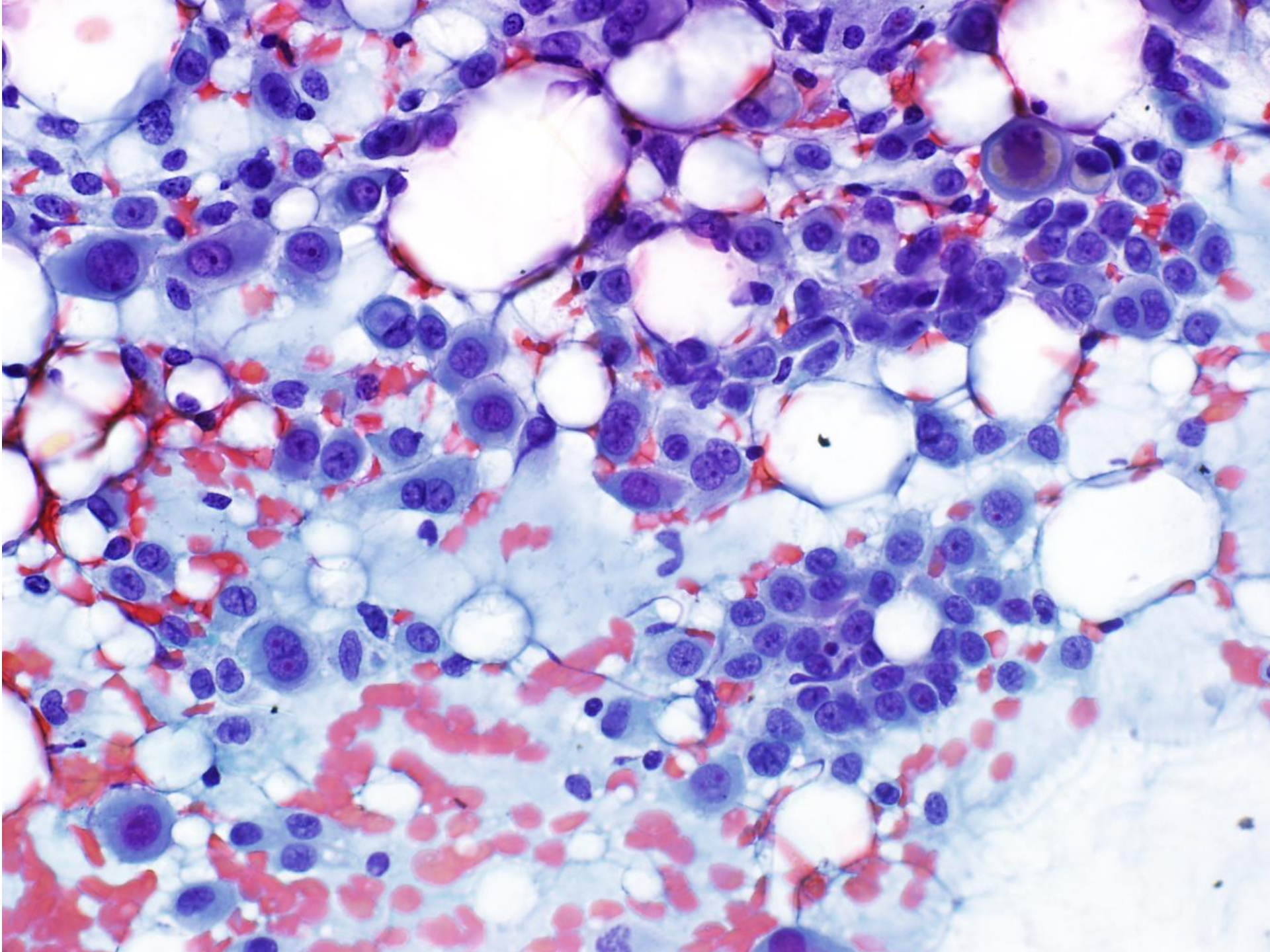
10/8/12

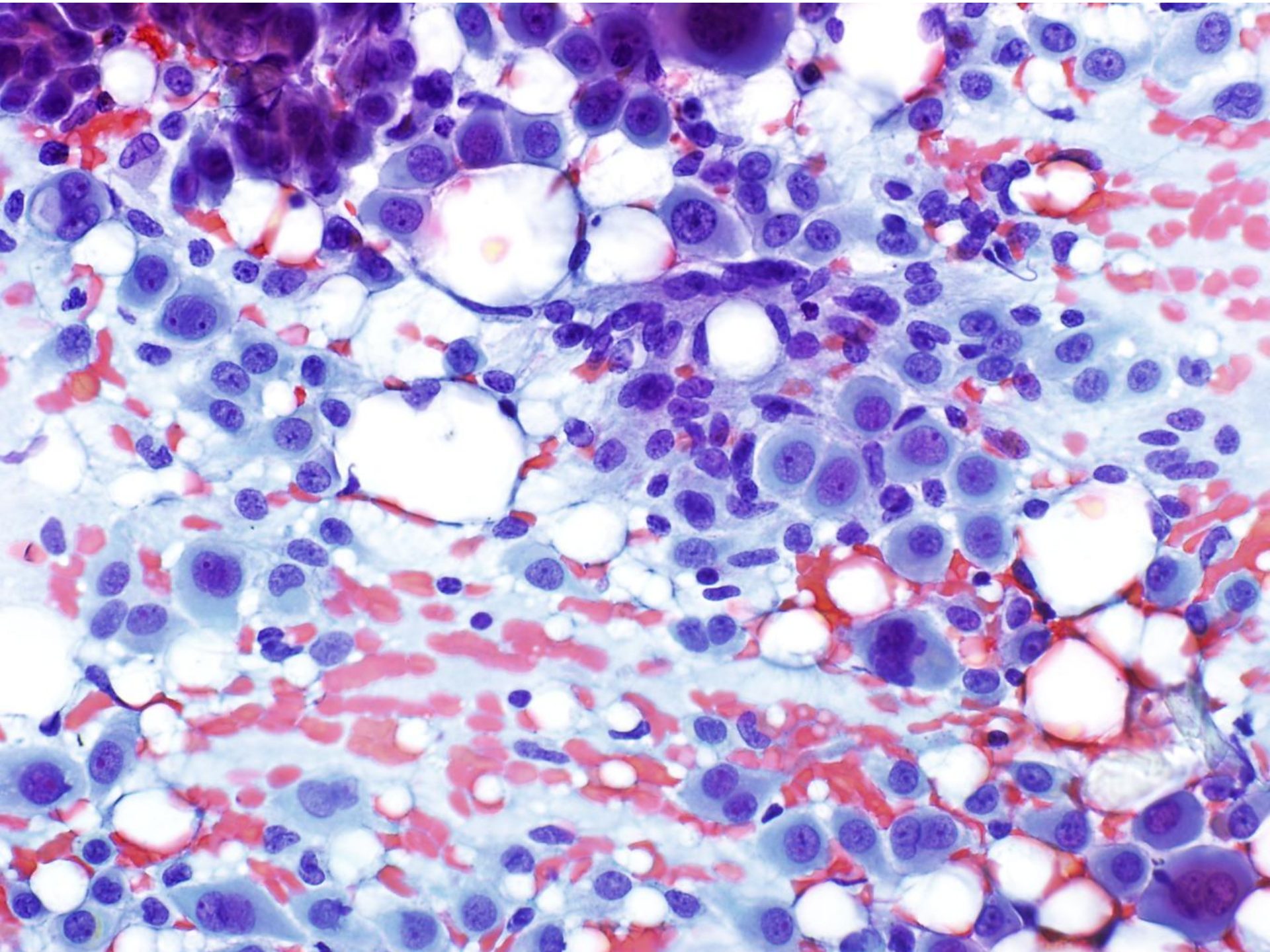
Clinical Data:

- 85-year-old woman undergoing evaluation for vague gastrointestinal symptoms and unintentional weight loss.
- CT scans revealed the presence of omental caking and peritoneal carcinomatosis but no evidence of any discrete lung, renal, pancreatic, or liver masses.
- CT guided FNA and core biopsy of one of the omental masses was performed.









Cytomorphologic Findings:

Sheets and loosely-cohesive arrays of epithelioid cells.

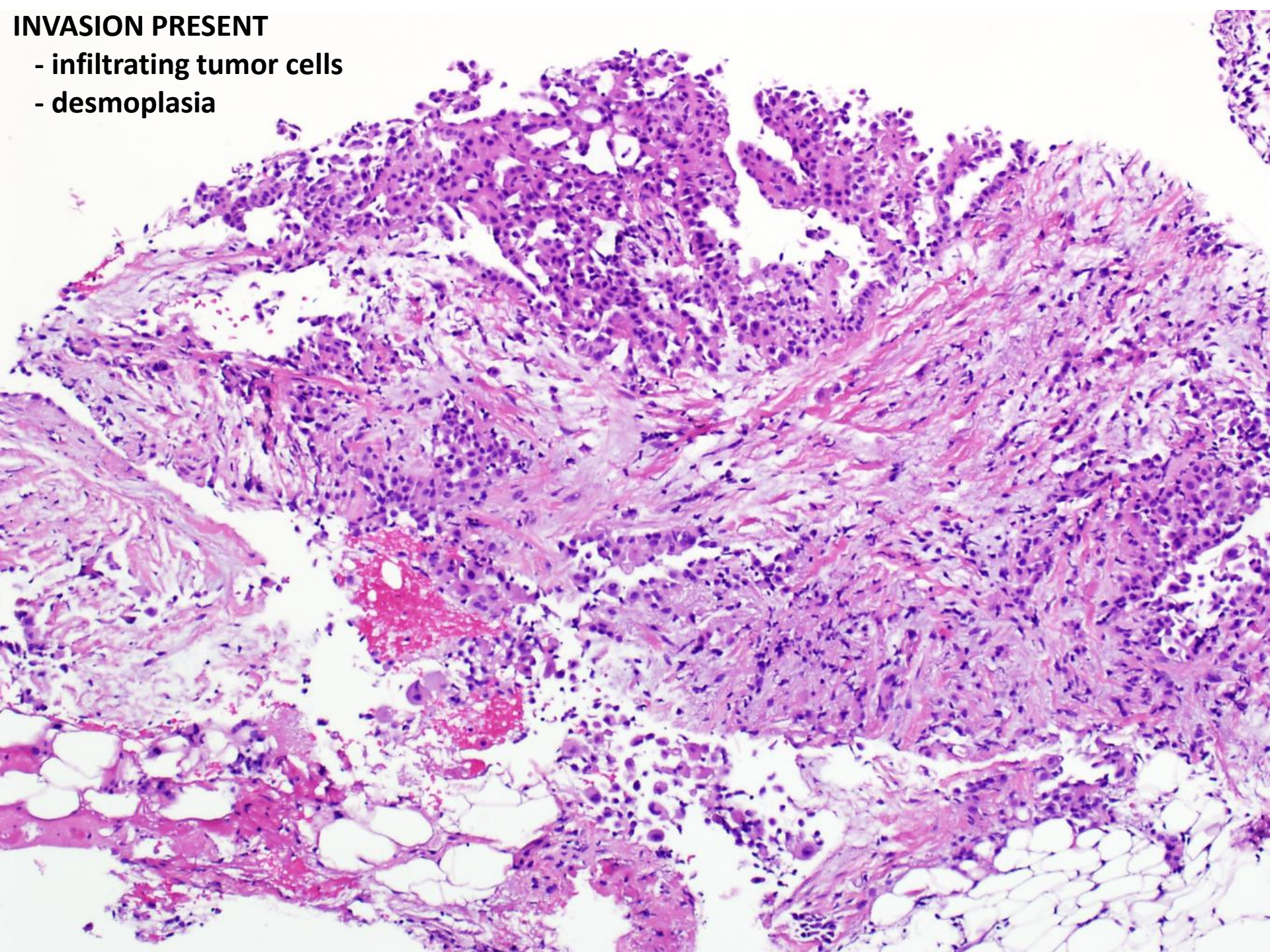
Some cells exhibit two-toned cytoplasm, others exhibit prominent cytoplasmic vacuolization.

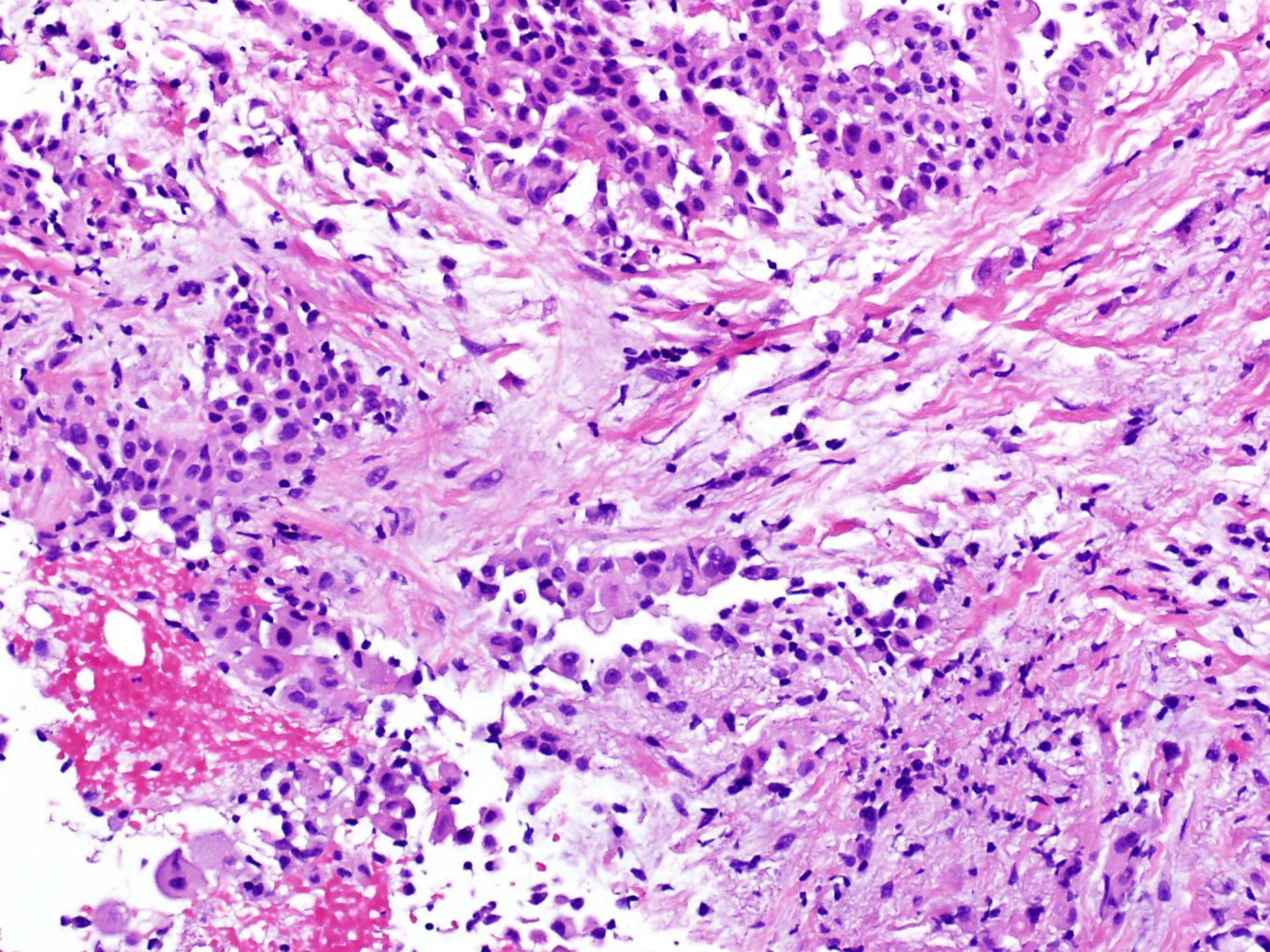
Occasional binucleation.

Intercellular windows appreciable in areas.

INVASION PRESENT

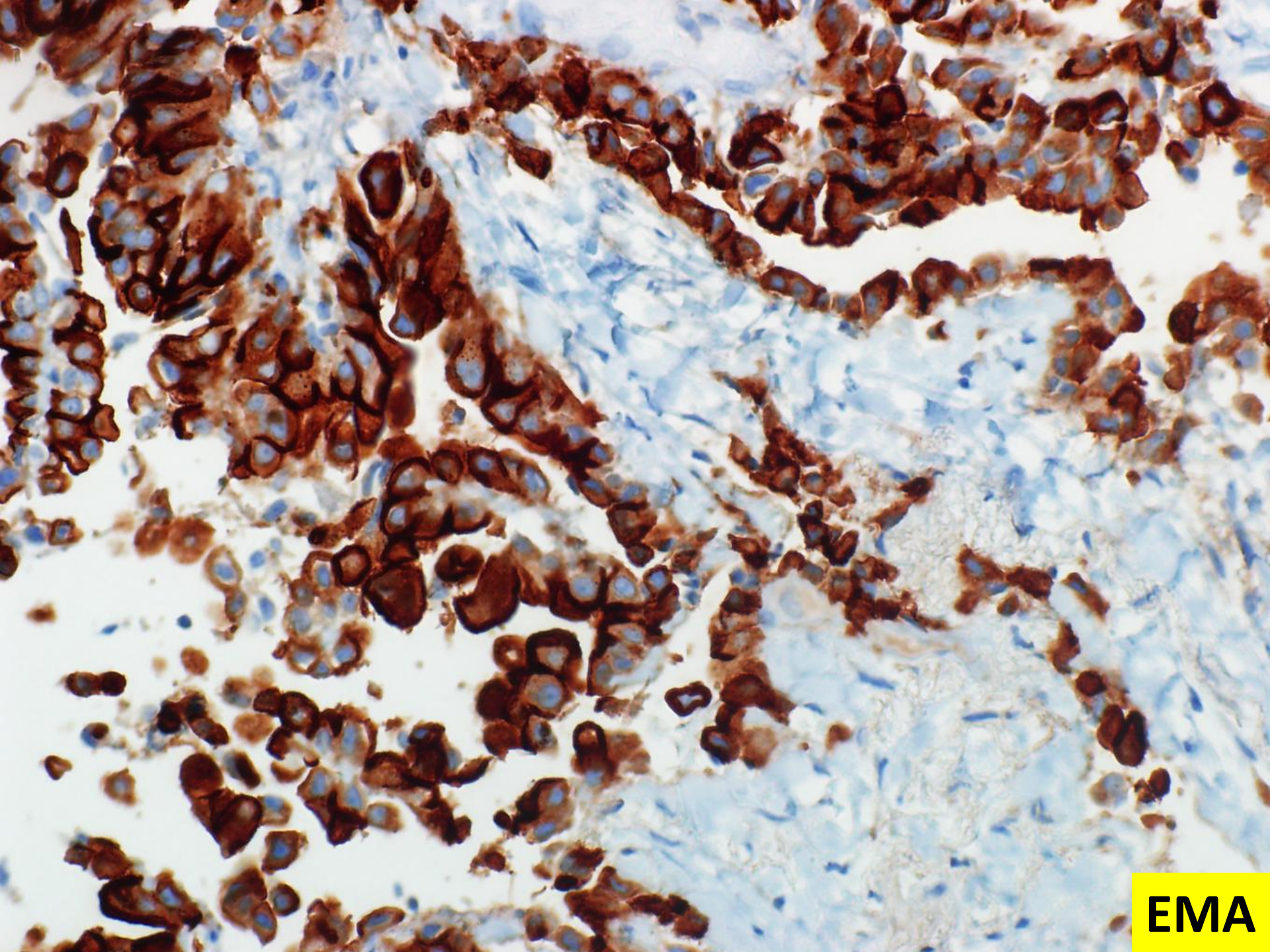
- infiltrating tumor cells
- desmoplasia



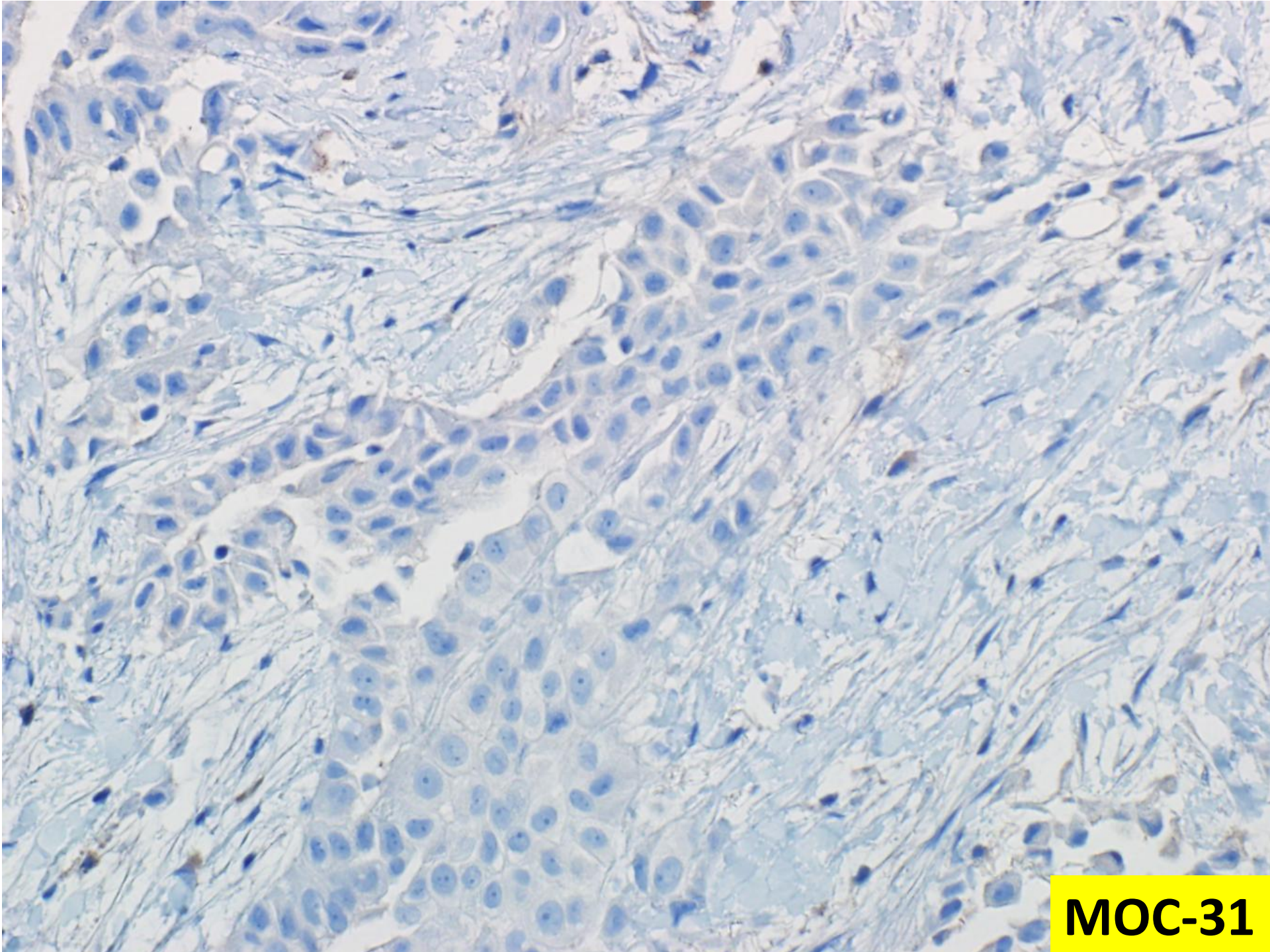


Differential Diagnosis:

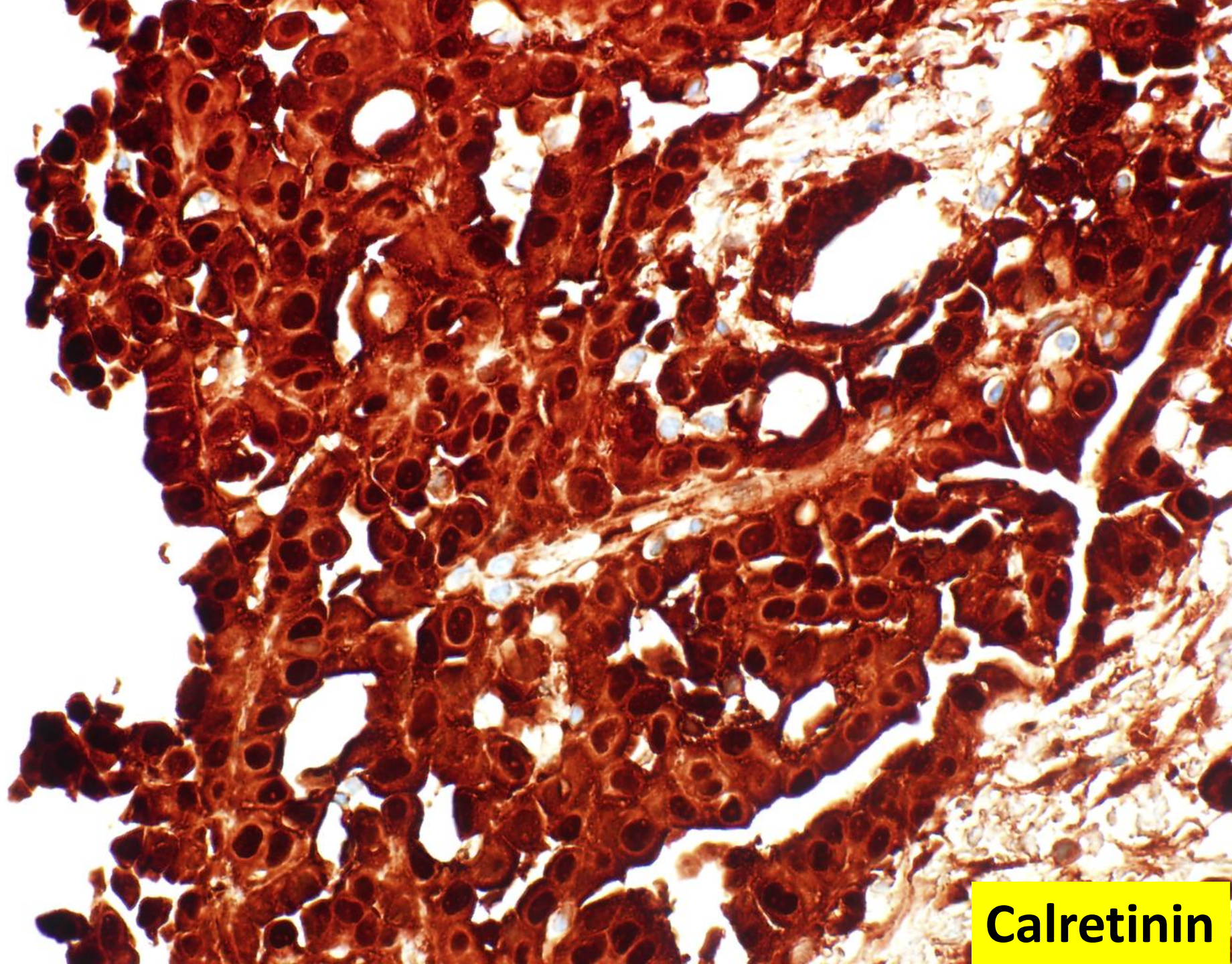
1. Metastatic adenocarcinoma
2. Malignant mesothelioma (vs. benign reactive mesothelium)
3. Metastatic melanoma



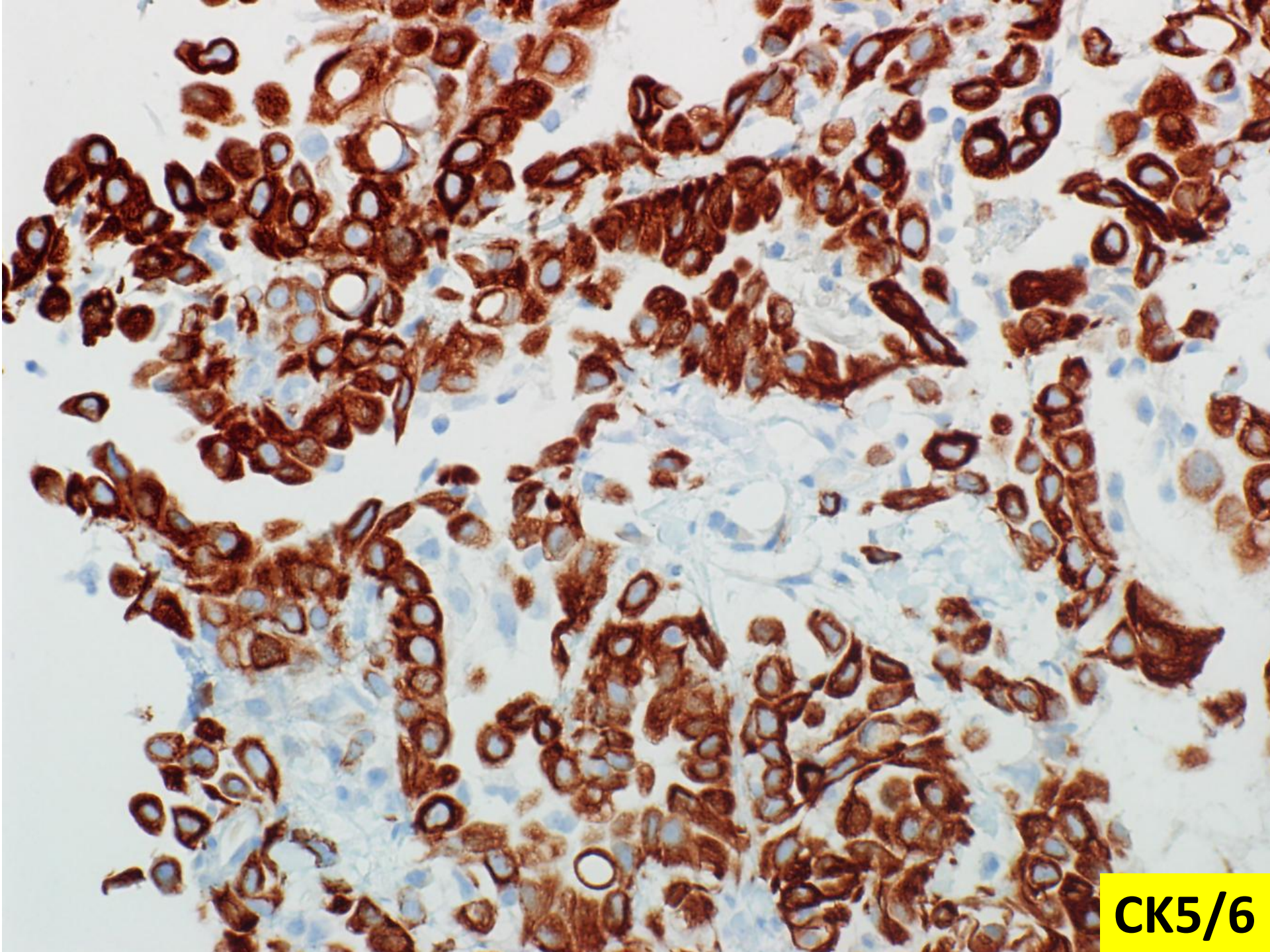
EMA



MOC-31



Calretinin



CK5/6

FINAL DIAGNOSIS:

Positive for malignancy.

Consistent with malignant mesothelioma.

Lessons

- Peritoneal mesothelioma is much less common than adenocarcinoma.
- Nonetheless, there are cytomorphologic cues to raise awareness of the possibility of peritoneal mesothelioma including:
 - Intercellular windows
 - Two-toned cytoplasm
 - NOTE: cytoplasmic vacuolization does not exclude mesothelioma.
- EMA immunoreactivity can be seen in peritoneal mesothelioma (usually negative in reactive mesothelium) and adenocarcinoma.
- Utilization of a panel of immunostains is essential for an accurate diagnosis.
 - MOC-31 immunoreactivity favors adenocarcinoma
 - Calretinin and CK5/6 immunoreactivity favors mesothelial differentiation
 - D2-40 expression also favors mesothelial differentiation.