

# Interesting Case Conference

4/15/2013

# HISTORY

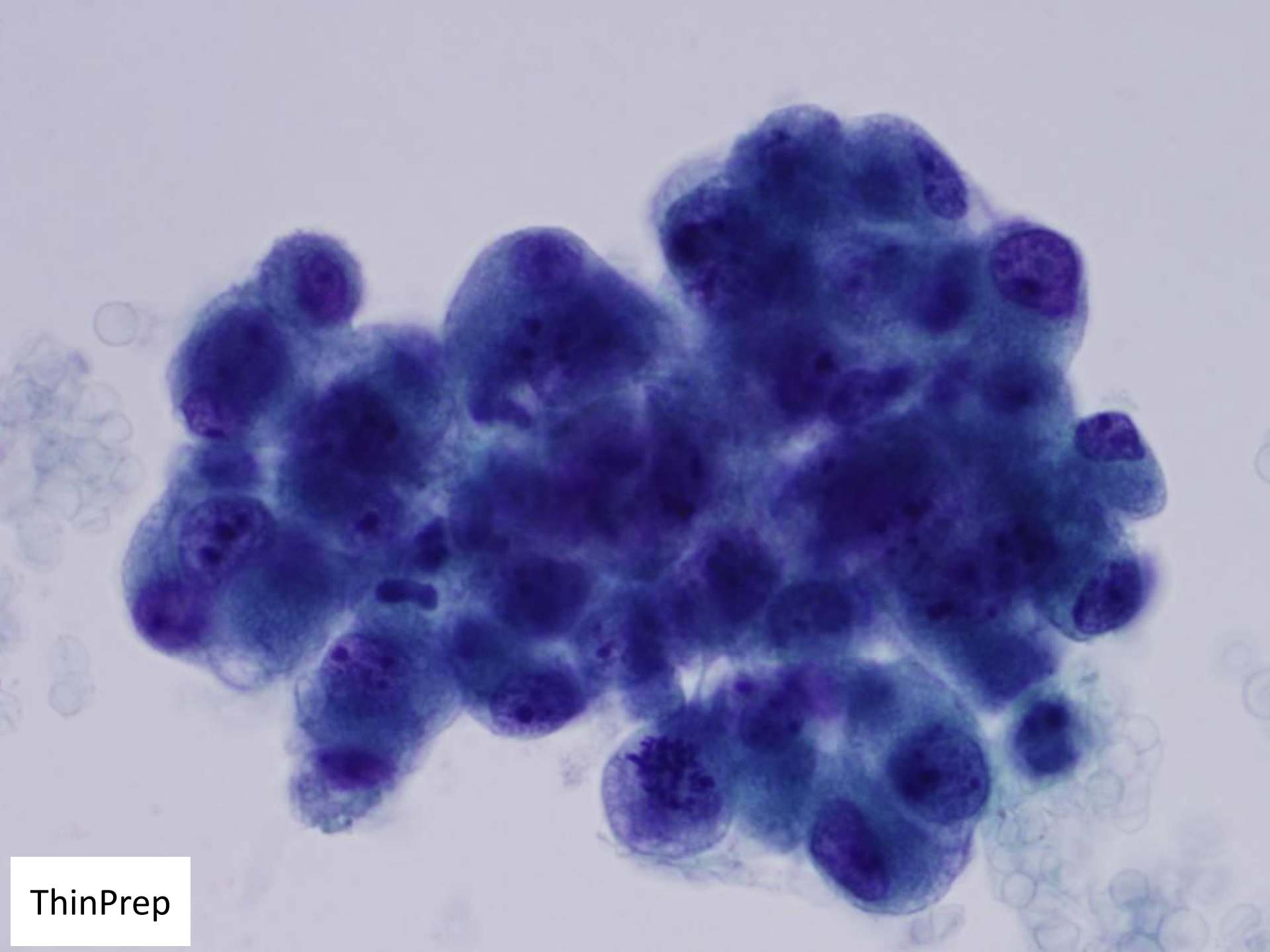
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- 44 year old African-American female with left flank and left sided pleuritic pain and mild dyspnea
- History of nonischemic cardiomyopathy status post orthotopic heart transplantation approximately 2 months ago
  - Had multifocal moderate rejection after transplantation
  - Next three biopsies without evidence of rejection
  - Most recent endomyocardial biopsy: mild diffuse cellular rejection

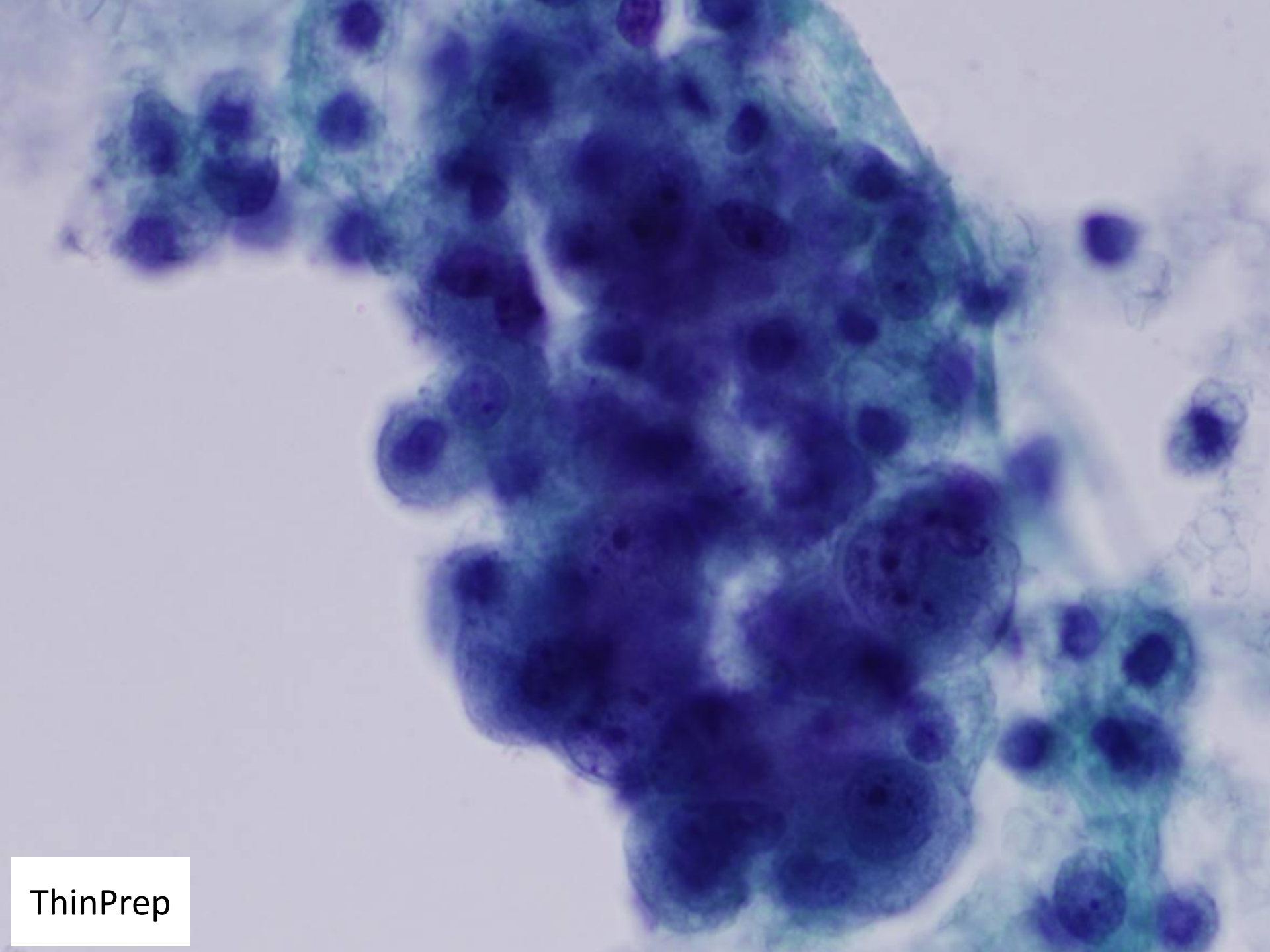
# HISTORY

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- Chest X-ray
  - No pneumothorax
  - Large left pleural effusion with adjacent atelectasis
  - Heart size difficult to evaluate due to effusion
  
- Left thoracentesis performed
  - 500 ml of opaque, dark red, bloody fluid obtained



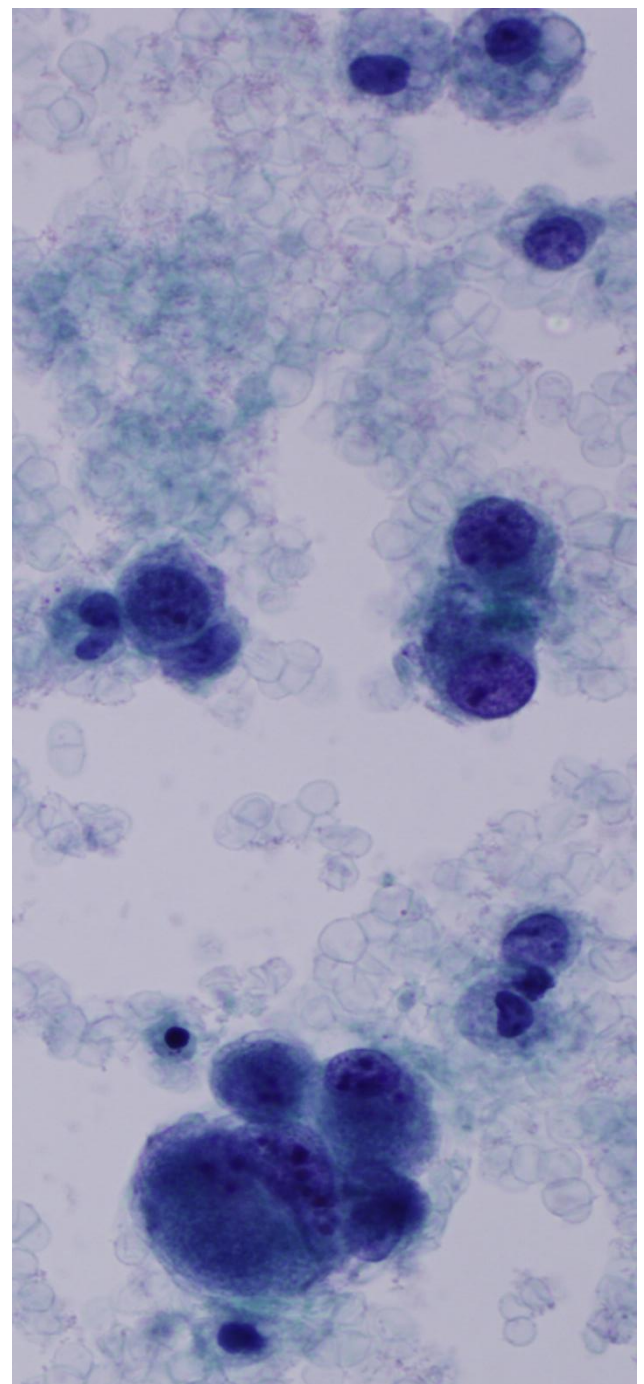
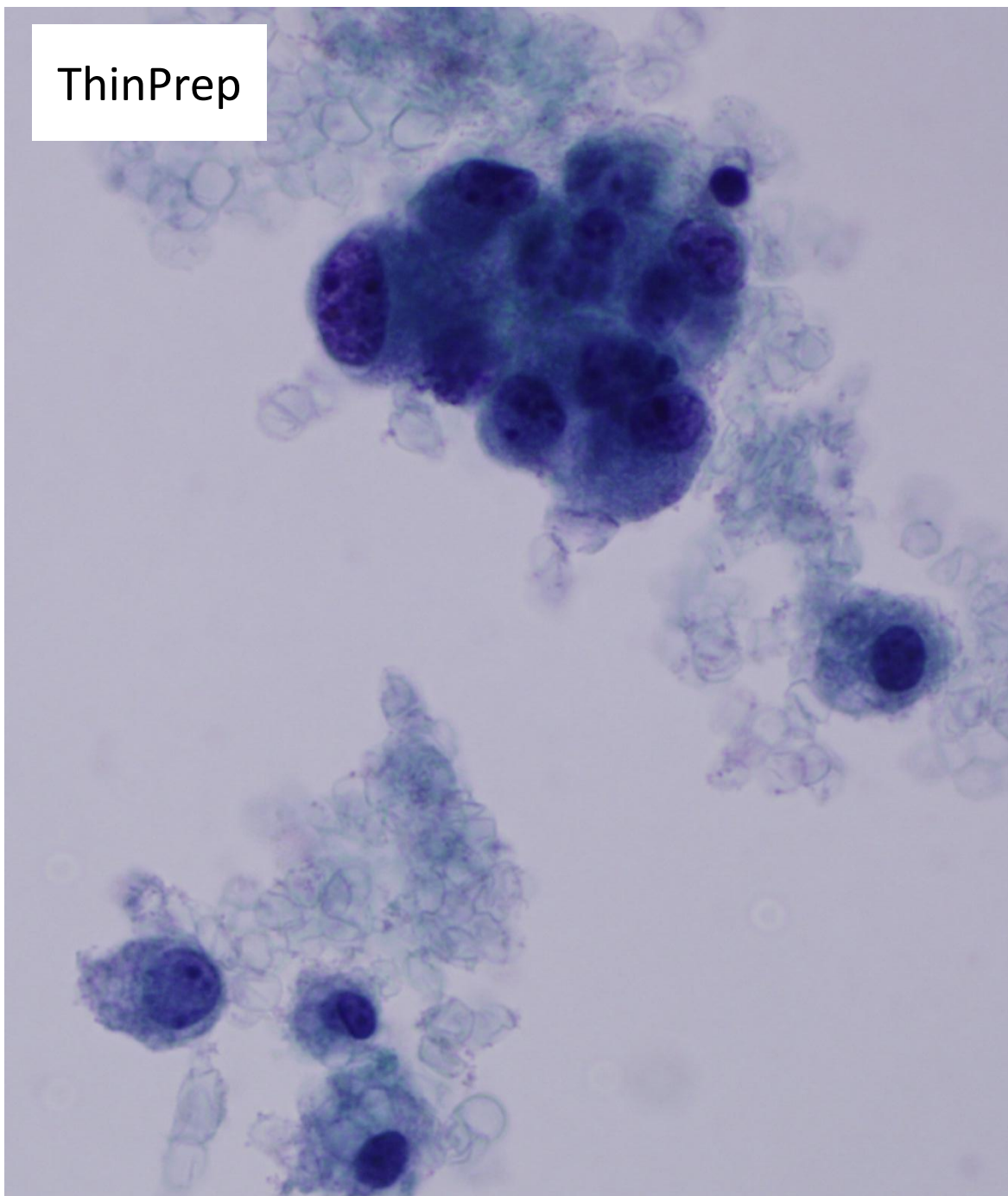
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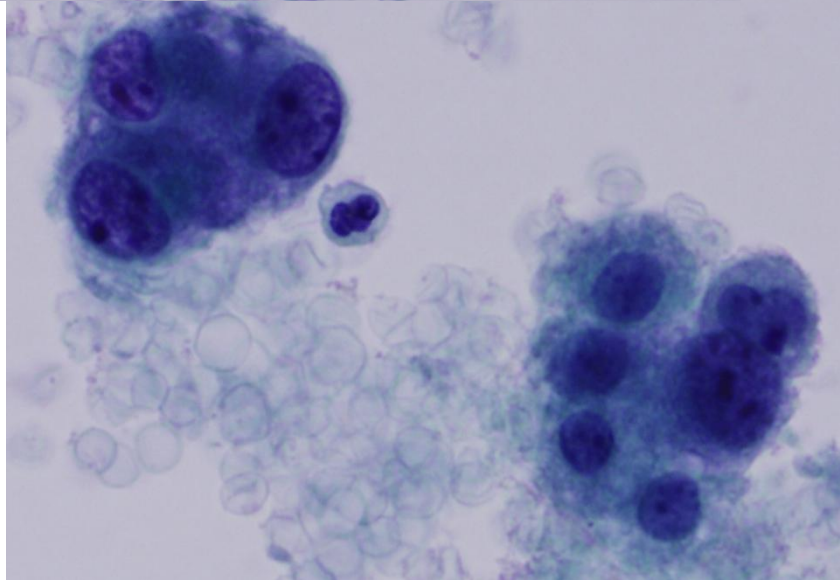
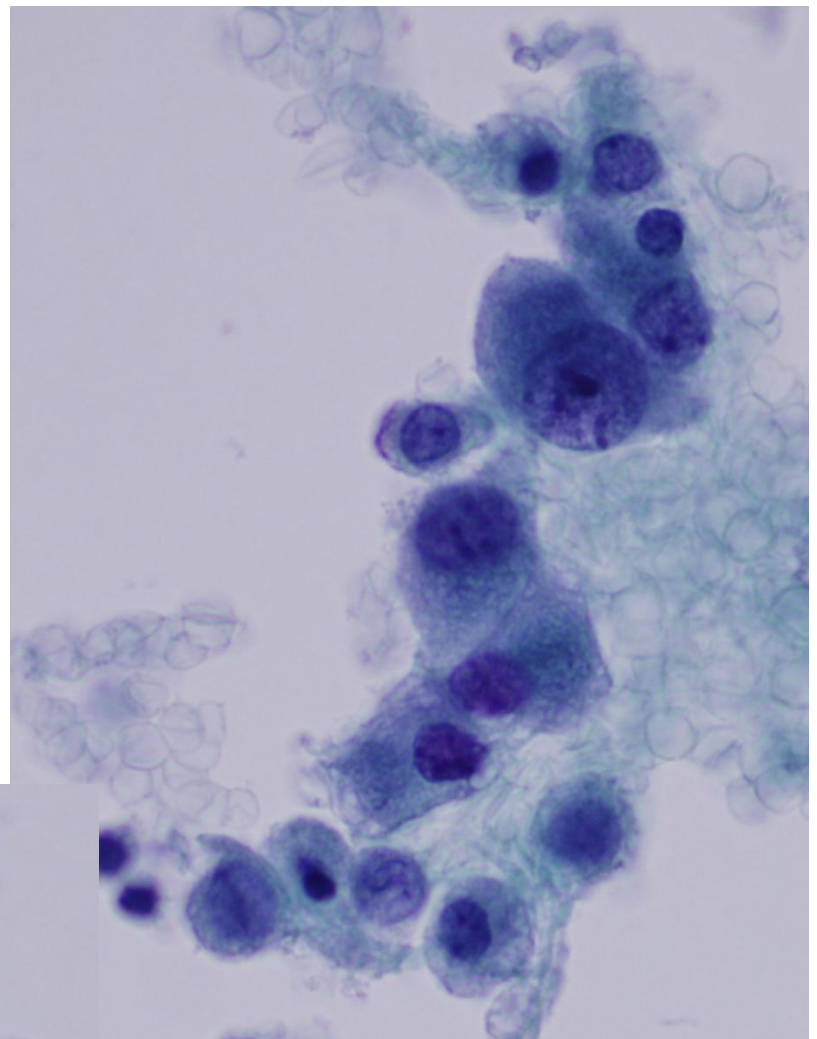
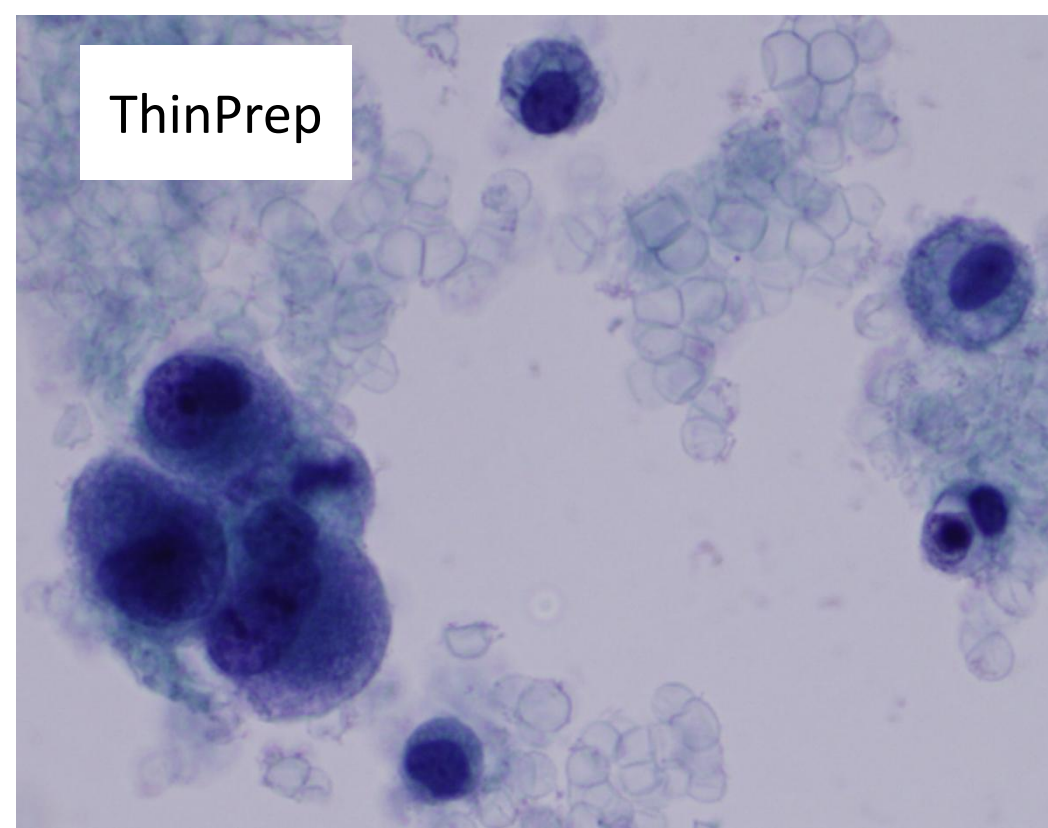
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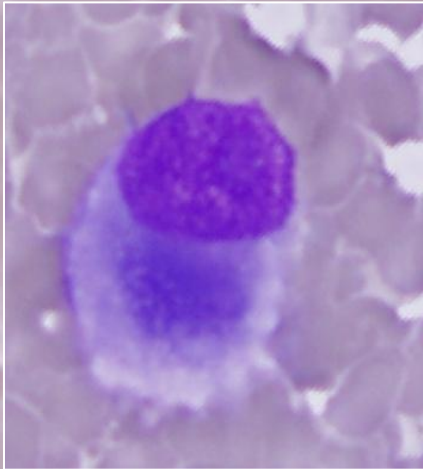
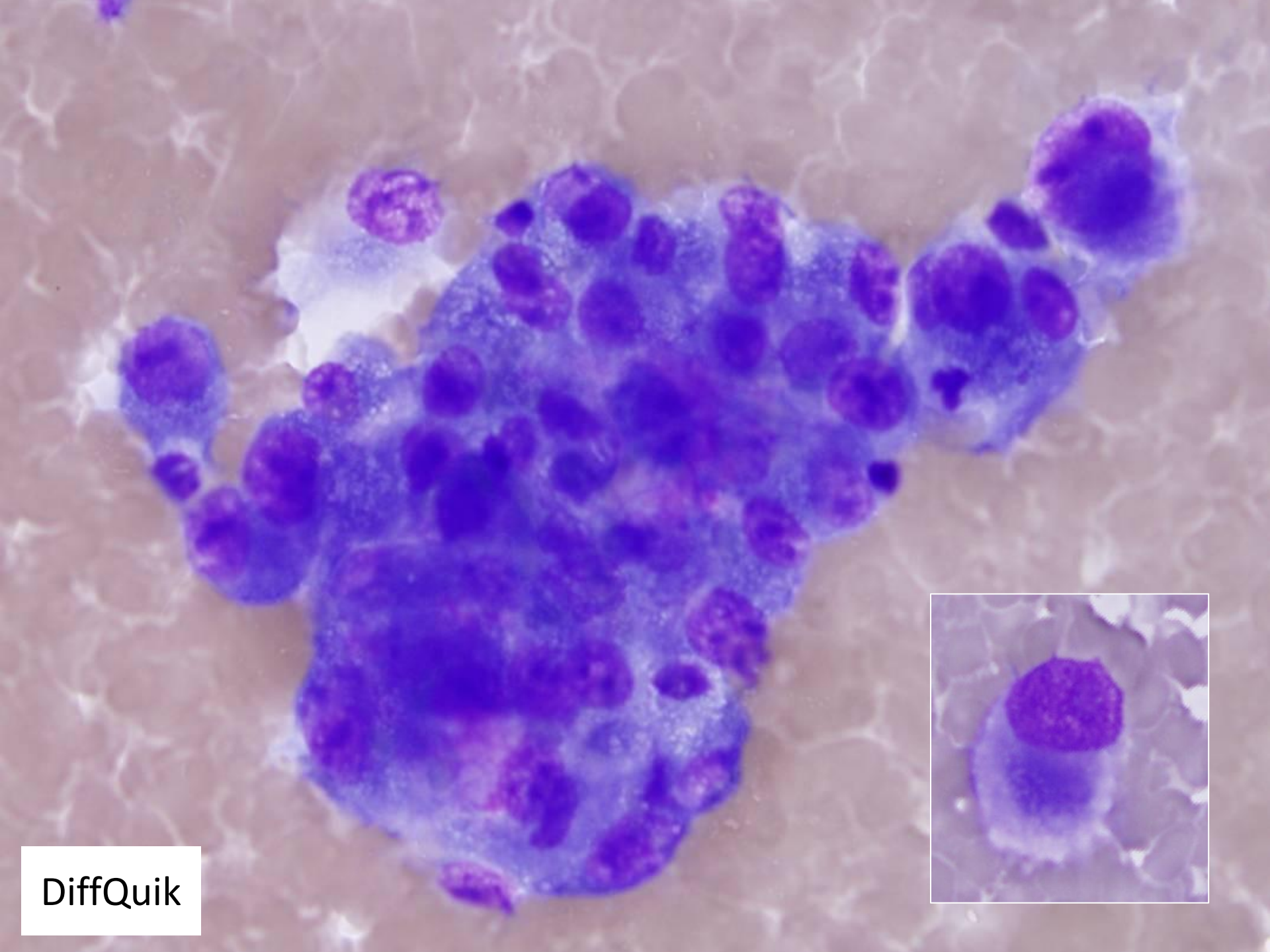
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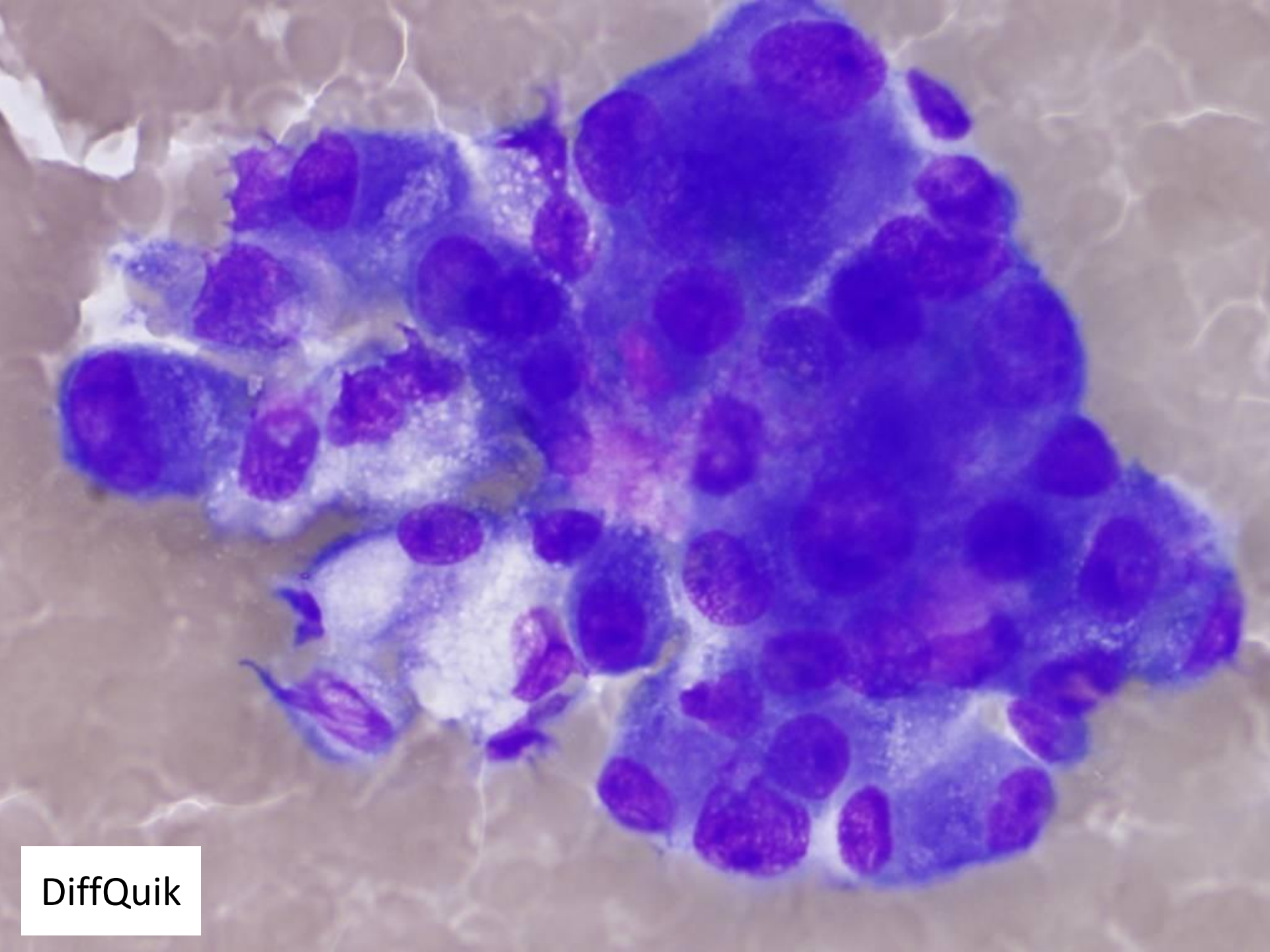






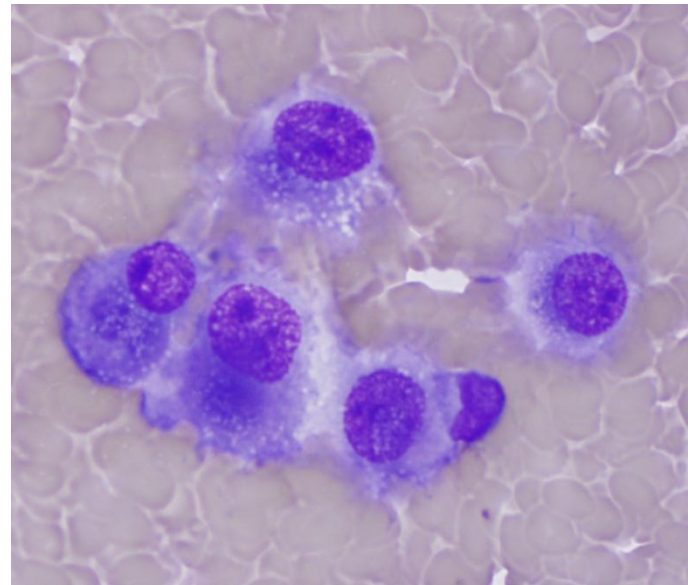
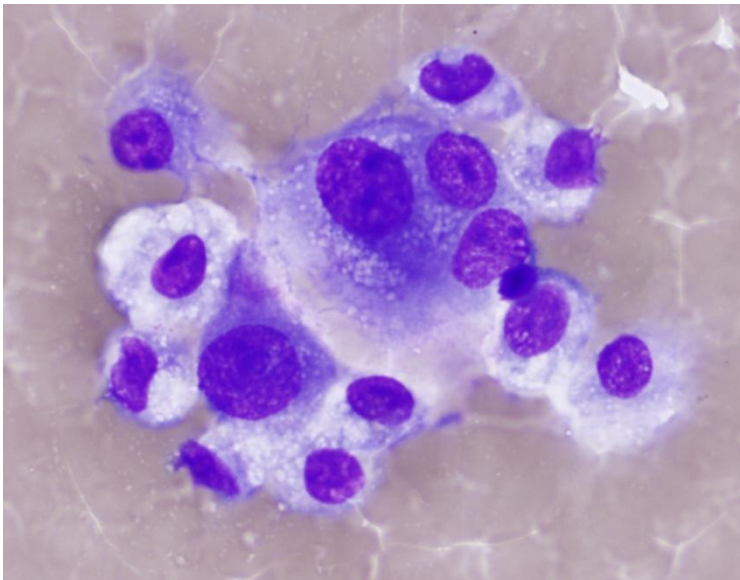
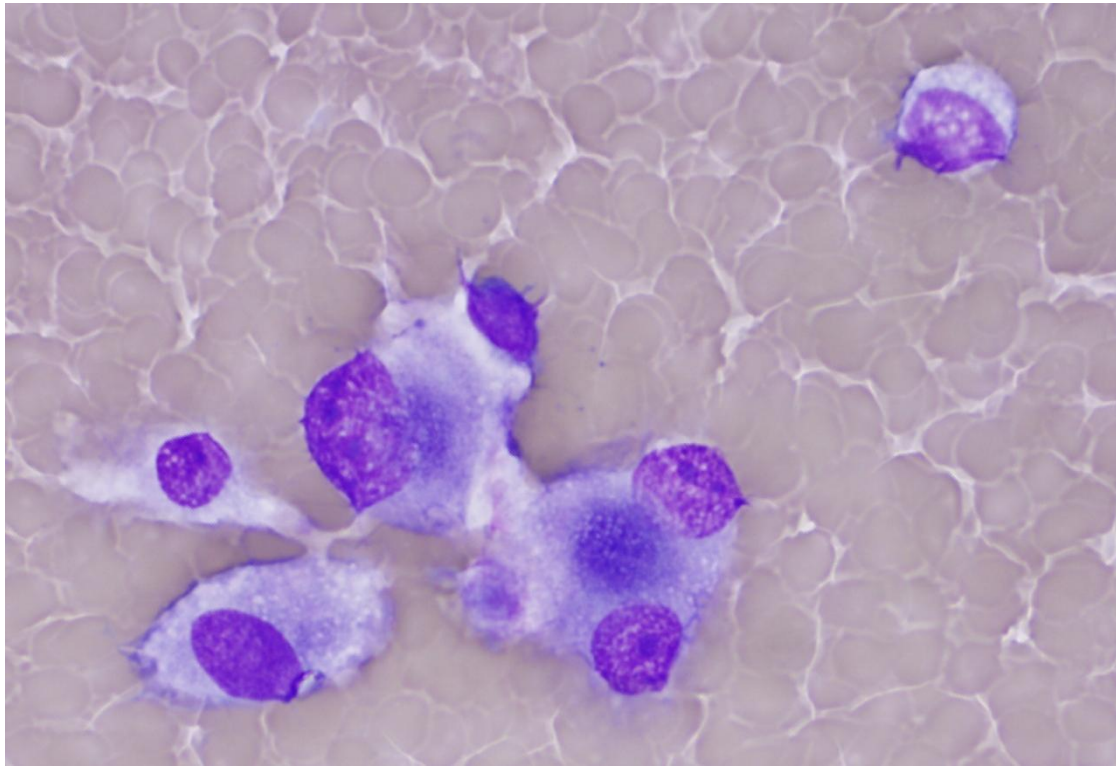
DiffQuik





DiffQuik

# DiffQuik



## Question

Are they just reactive mesothelial cells  
or is it adenocarcinoma?

Some of the “suspicious” cells display two-toned cytoplasm but the atypia is quite marked.

Vacuolated cytoplasm can be seen in reactive mesothelial cells.

## Bothersome aspects of case

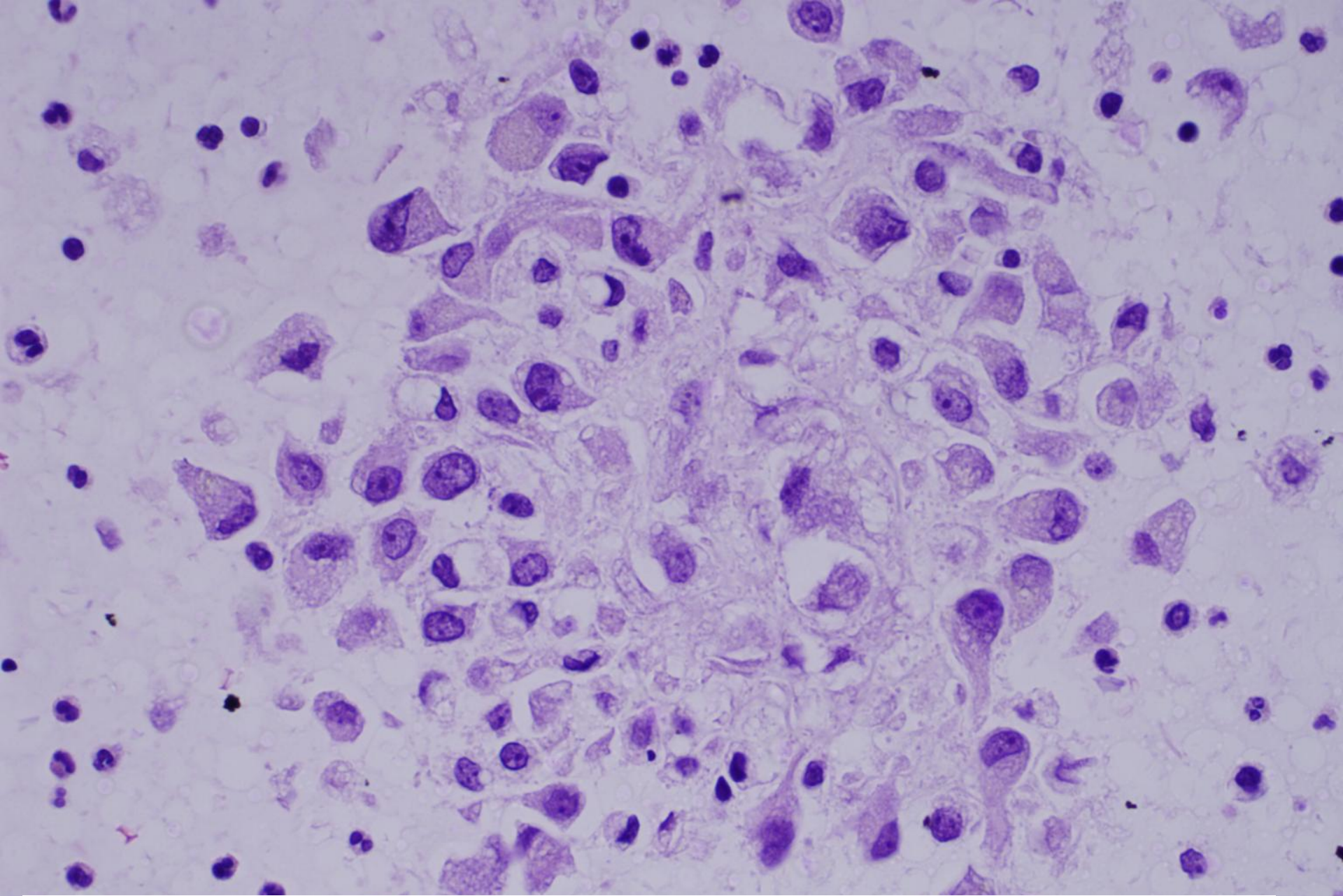
- If it is heart failure, we’d expect bilateral effusions.
- This was a unilateral effusion and it was bloody (500 cc bloody fluid) therefore worrisome for malignancy.
- BUT imaging revealed no evidence of a lung mass or hilar lymphadenopathy.

# How did we answer the question since not much was in the cell block?

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- Remember 500 ml of bloody fluid was obtained.
- We pulled the specimen.
- Shook the heck out of it.
- Dispensed some of the fluid into 4 conical tubes.
- Centrifuged the tubes, suctioned the supernatant, and added cytolyte to lyse the blood.
- Repeated above process three times.
- Obtained decent cell buttons.
  - White buttons indicate that you likely have cells rather than a bunch of blood.
- Submitted buttons to make cell blocks.

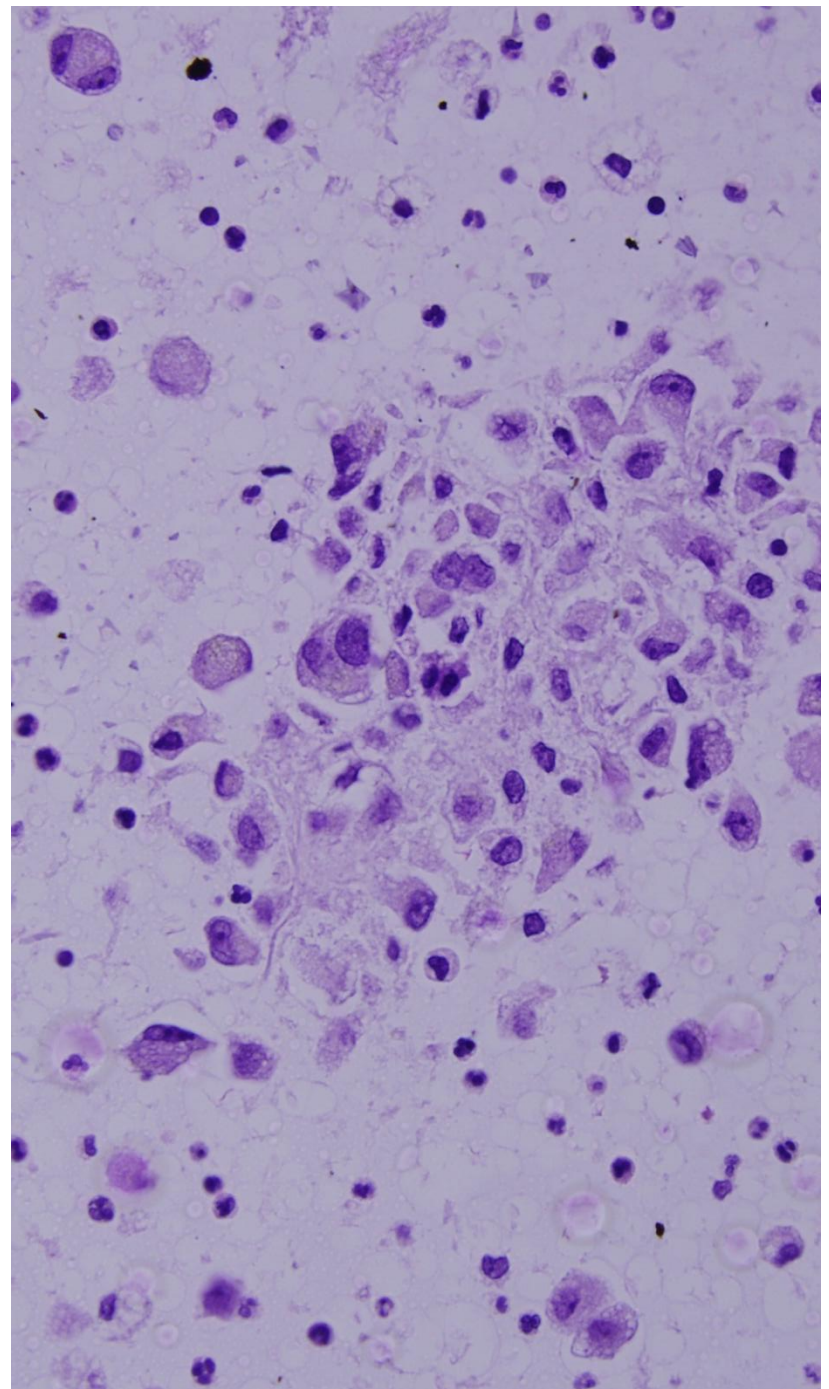
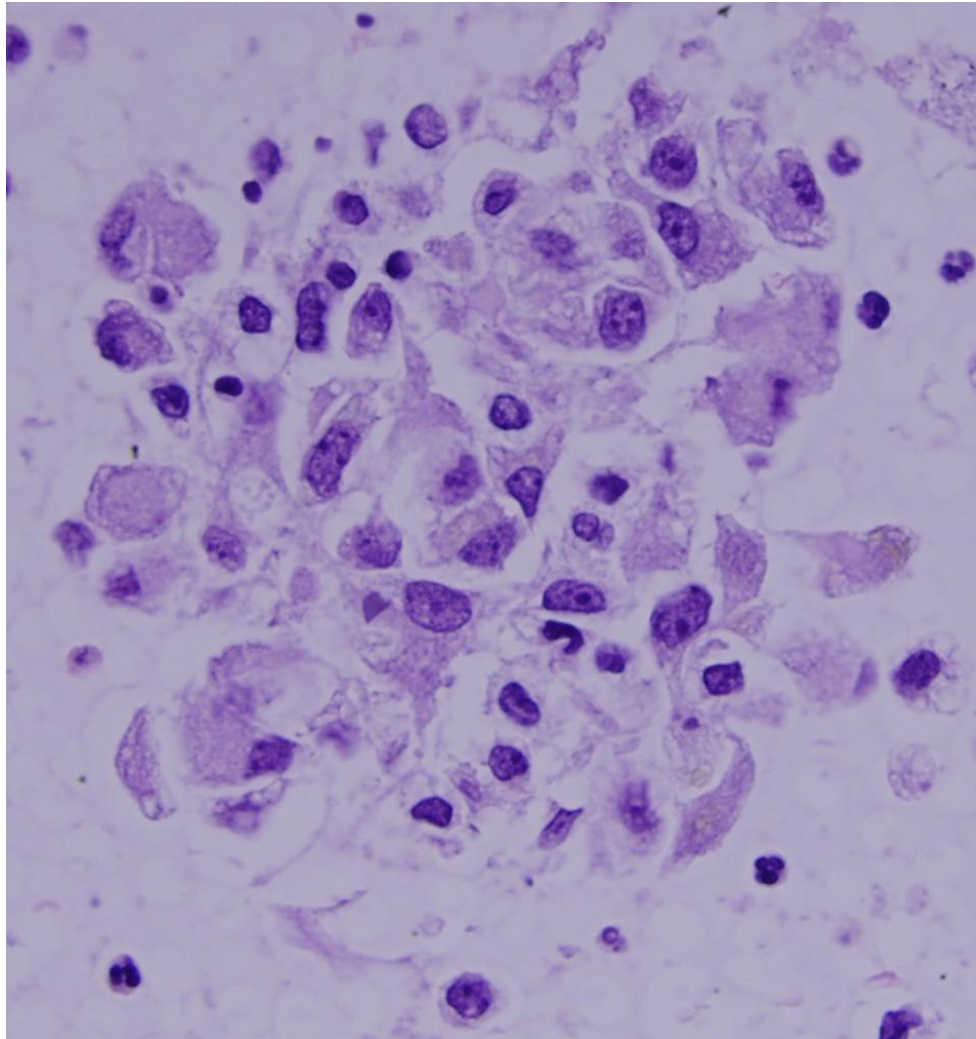




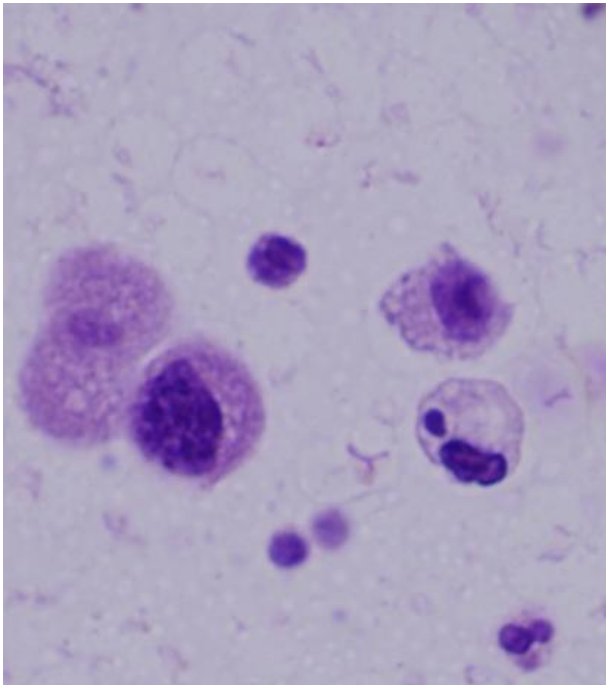
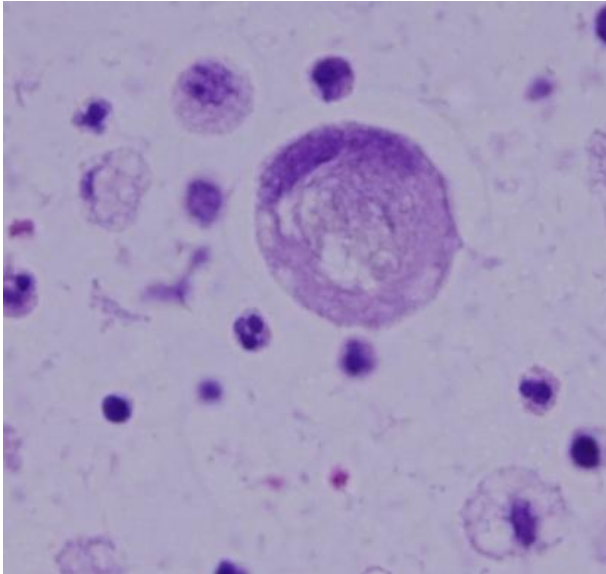
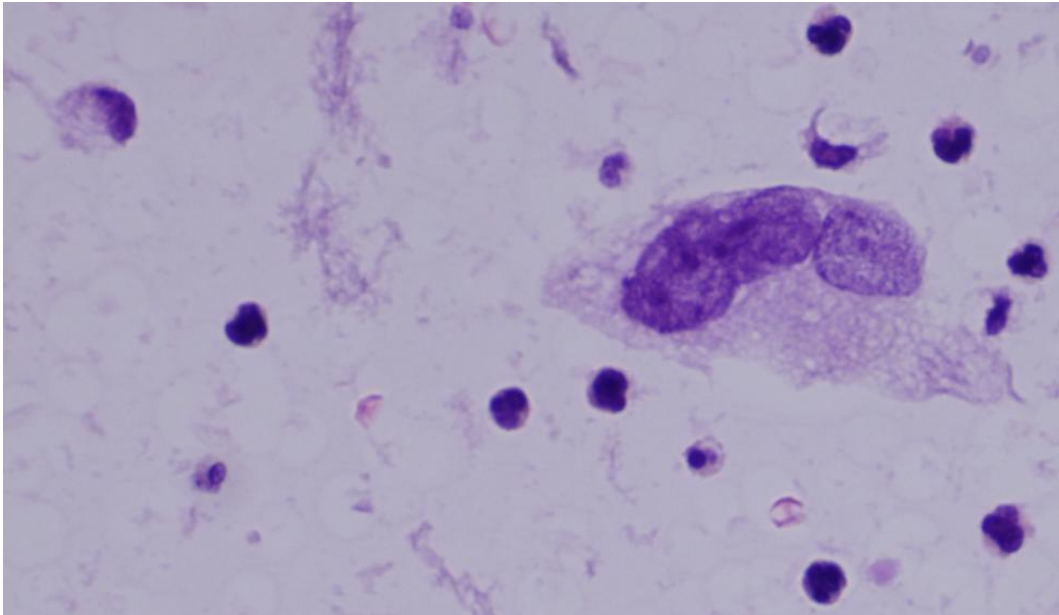
Cell block: A lot more material, some of which was more concerning than before



# Cell block

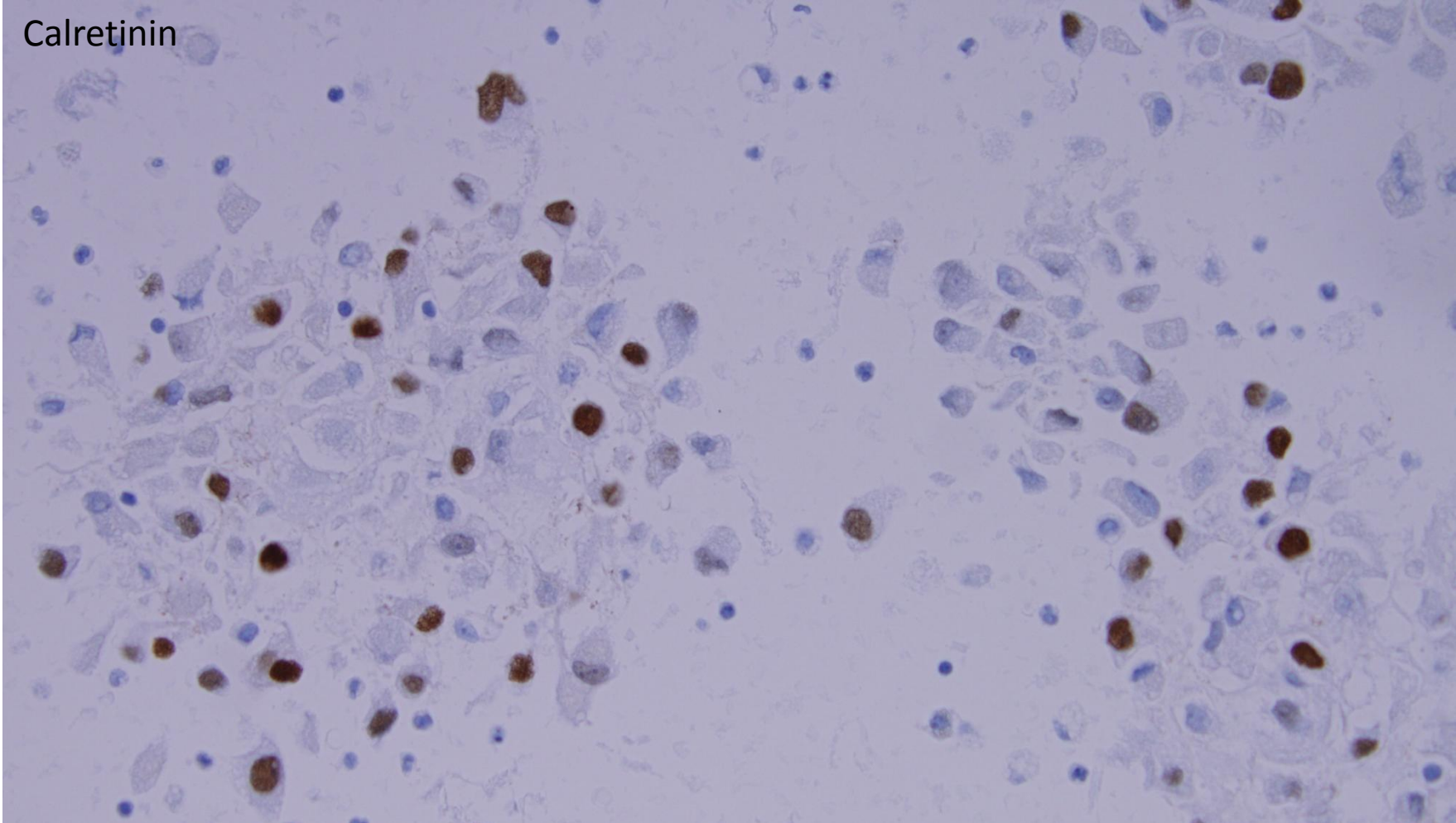


Cell block





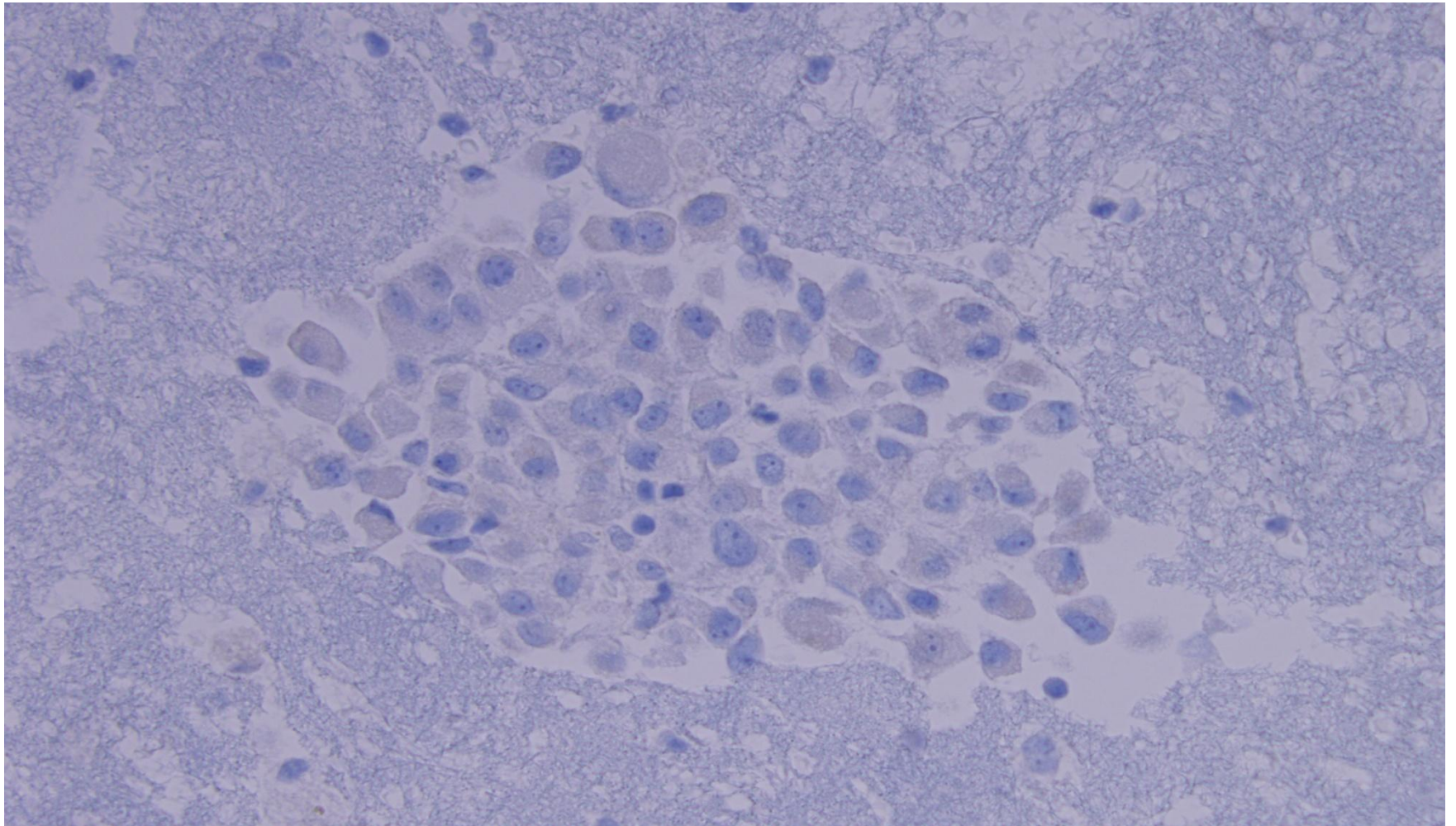
# Immunohistochemistry



(+) calretinin and D2-40



## Immunohistochemistry



(-) MOC-31, EMA, TTF-1, Napsin-A, ER, PR, PAX8, CDX2,

# FINAL DIAGNOSIS & FOLLOW-UP

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- Left pleural fluid:
  - No malignant cells identified.
  - Reactive mesothelial cells and inflammatory cells.
- Second thoracentesis performed next day and approximately same amount obtained. Chest tube placed.
- No source of bleeding identified. No further bleeding during hospital course.
- Discharged 1.5 weeks later.