



Aalst  
Geraardsbergen  
Wetteren

# Algemeen Stedelijk Ziekenhuis

# Cytopathology pancreatic lesion

Belgian Pancreas Pathology Course

14/5/2022

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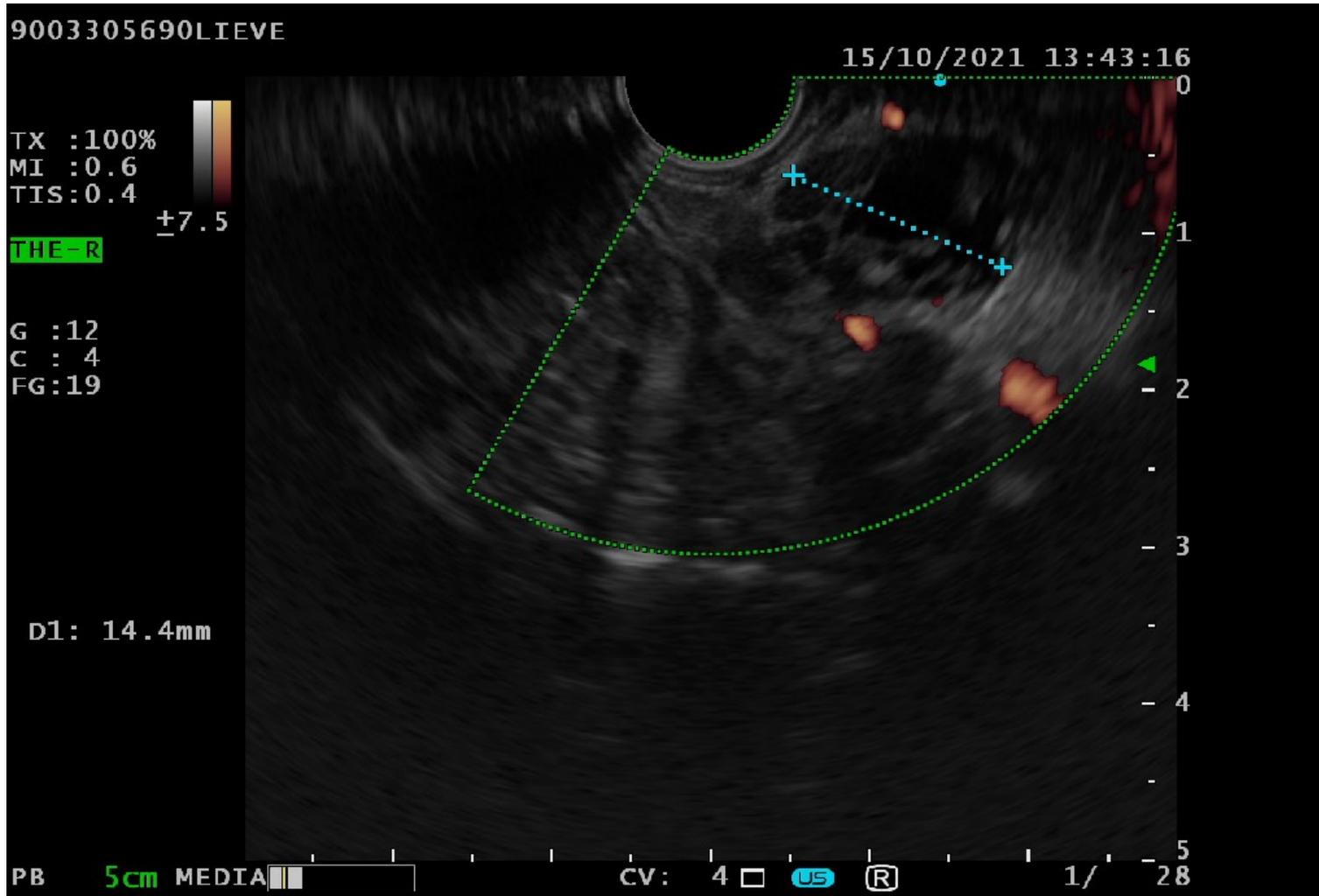


# Clinical information prior to EUS

- Male patient
- Age: 30y
- Medical history: none
- Presentation of dyspepsia
- CT abdomen reveals a nodular lesion in the uncinatus process of the pancreas





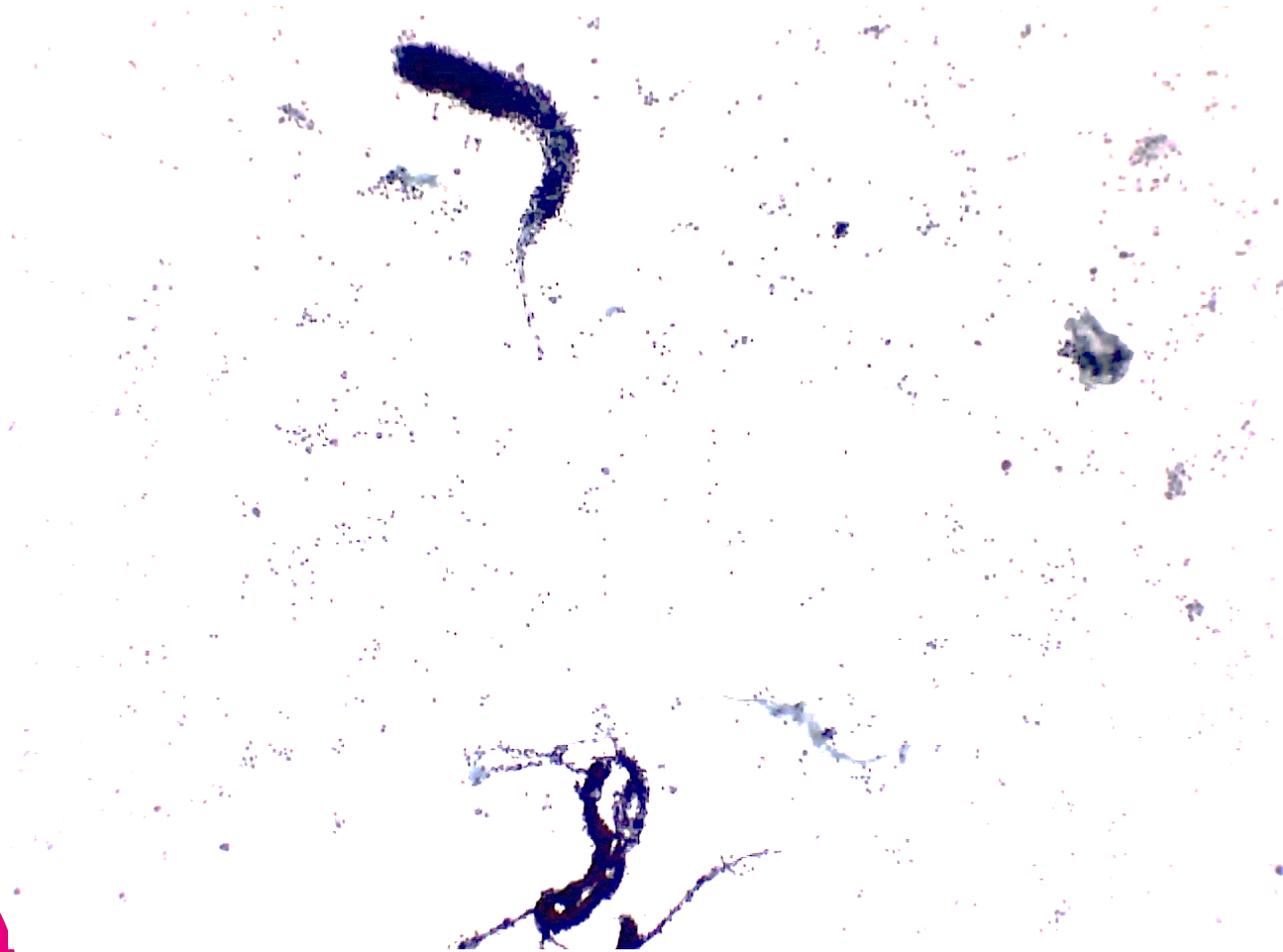


# Differential diagnosis

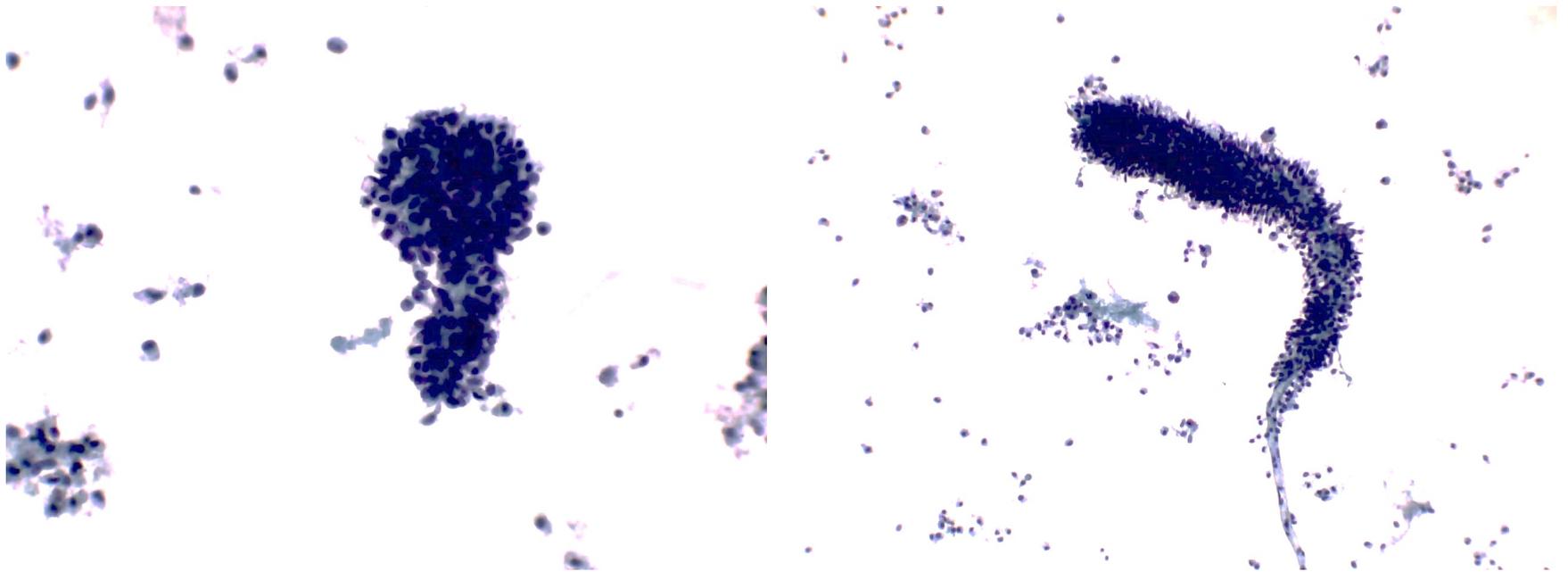
- PNET
- ACC
- SPPT
- Lymphoma or other rare tumors



# Cytology ThinPrep

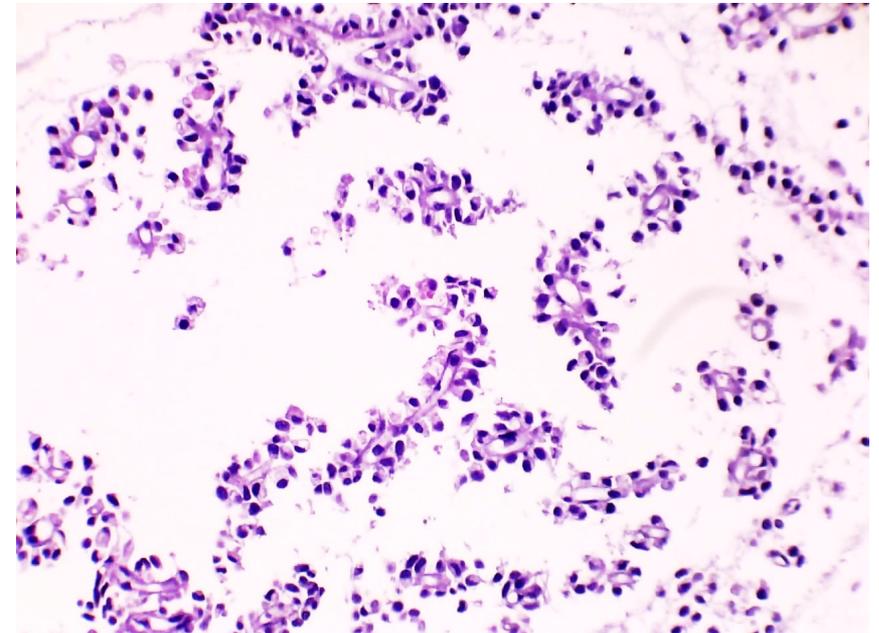
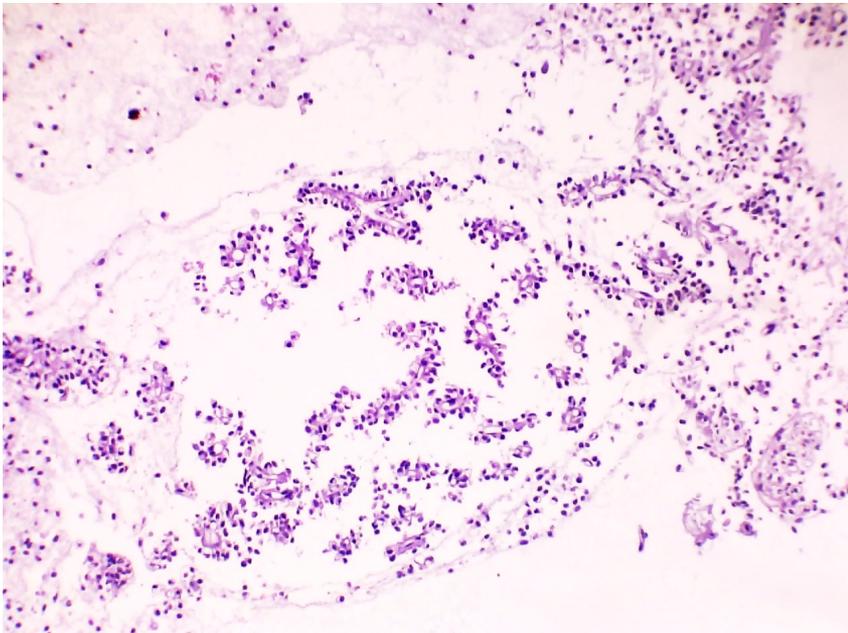


# Cytology ThinPrep



# Cytology

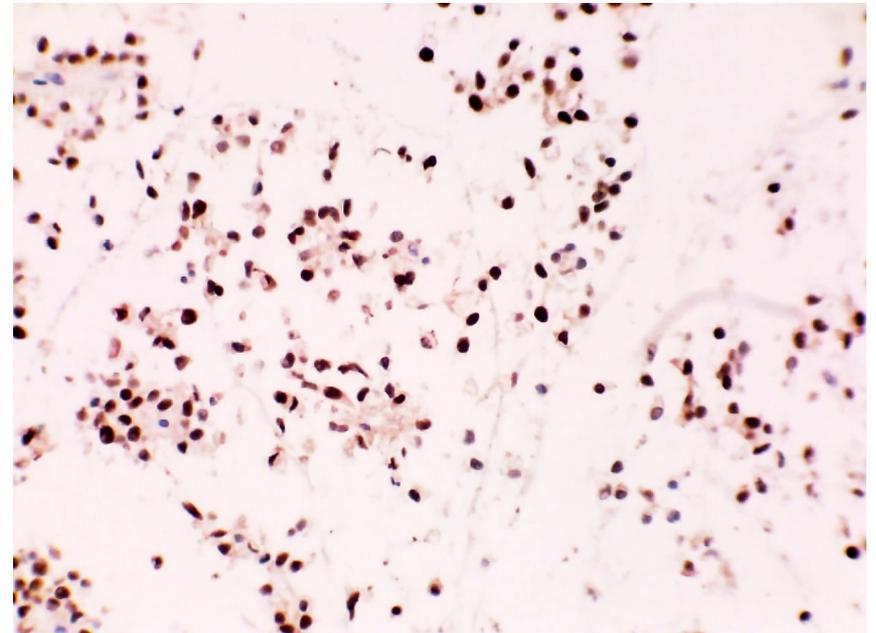
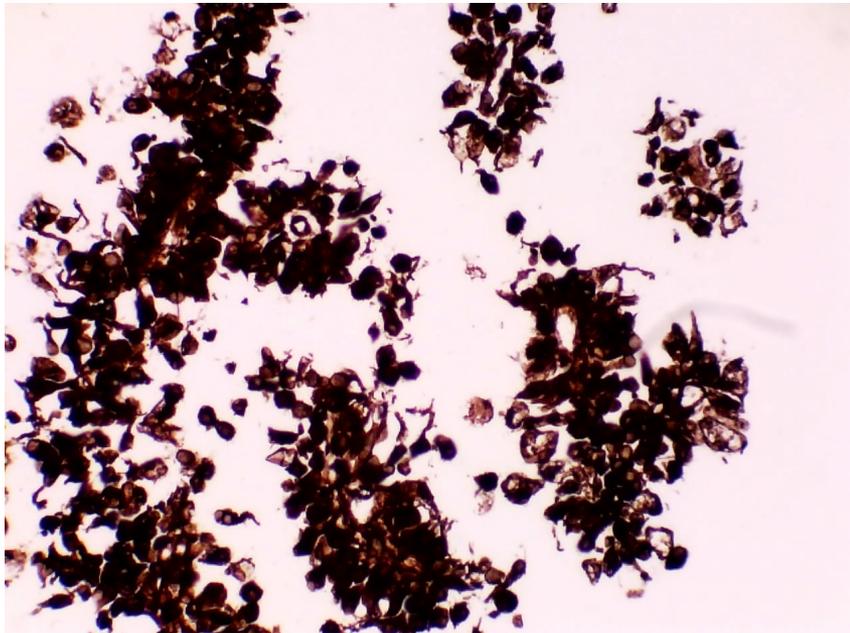
## Cell block



# Cytology

## Immunohistochemistry

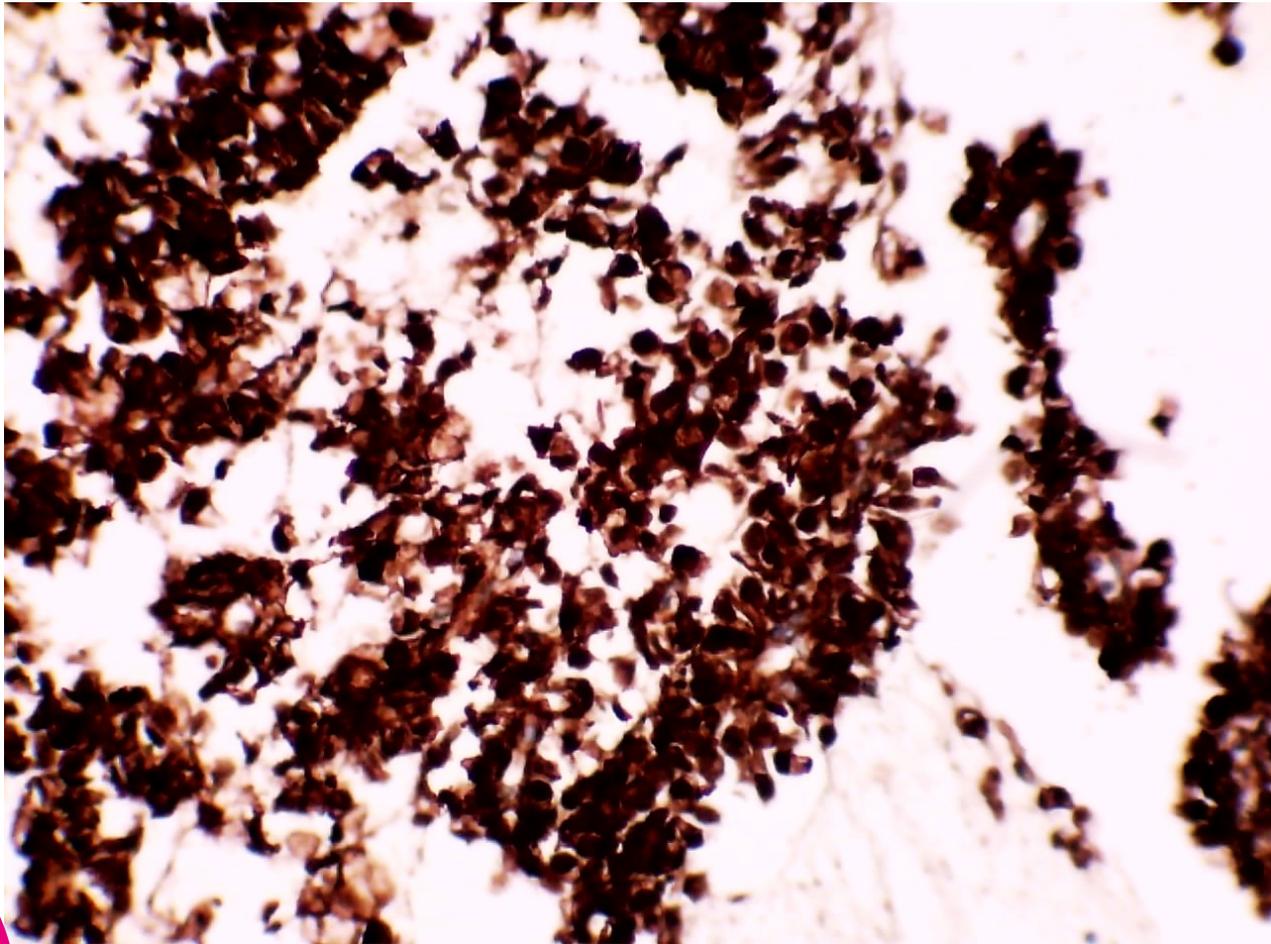
Beta catenin, PR



# Cytology

## Immunohistochemistry

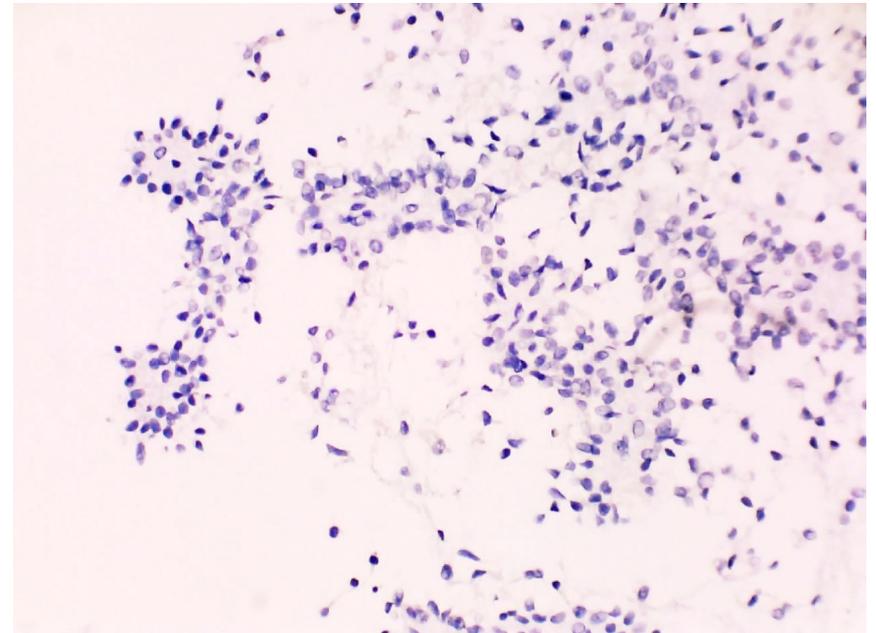
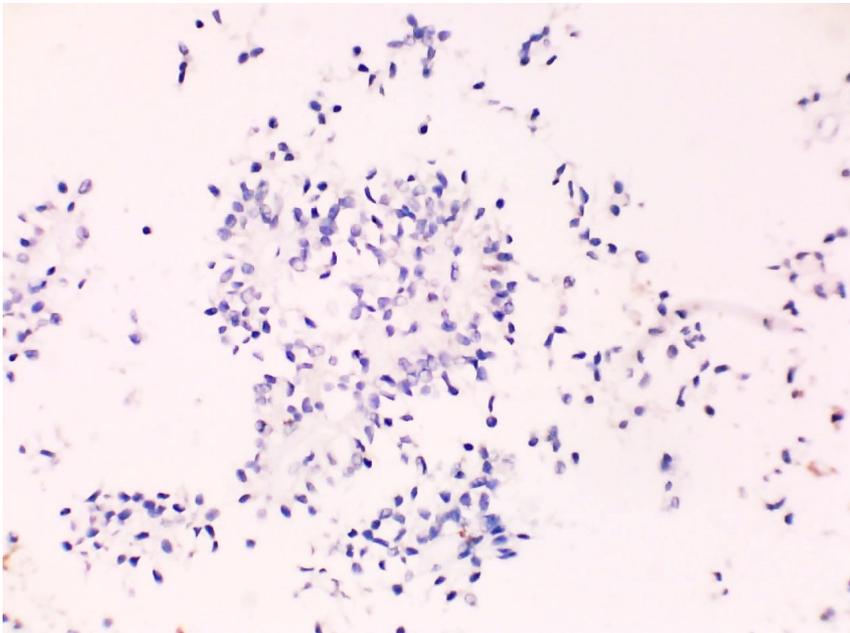
Vimentin



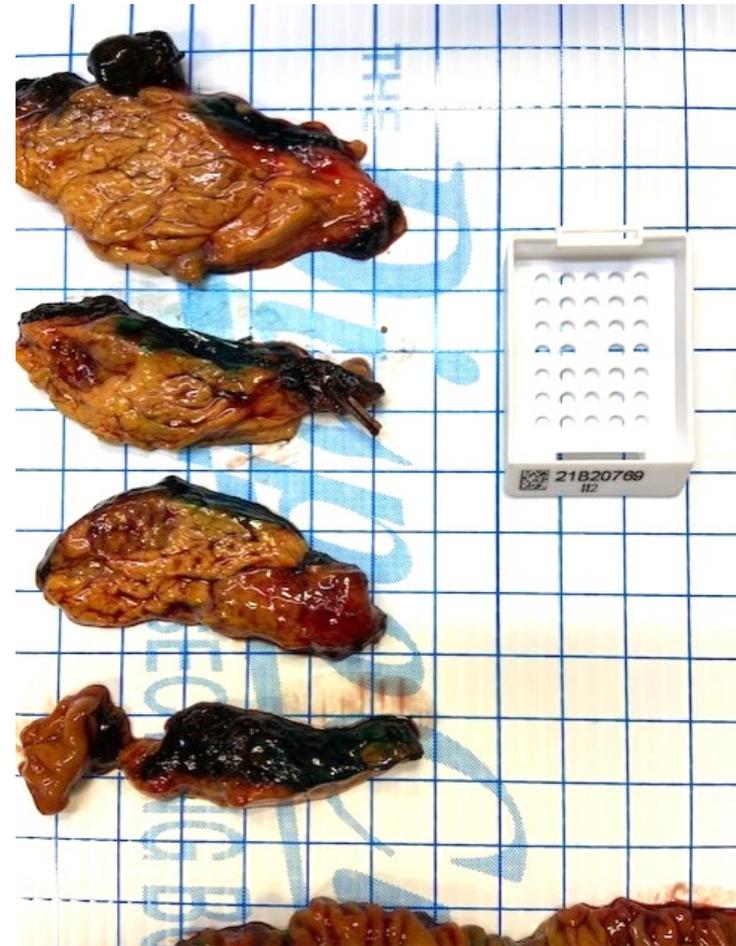
# Cytology

## Immunohistochemistry

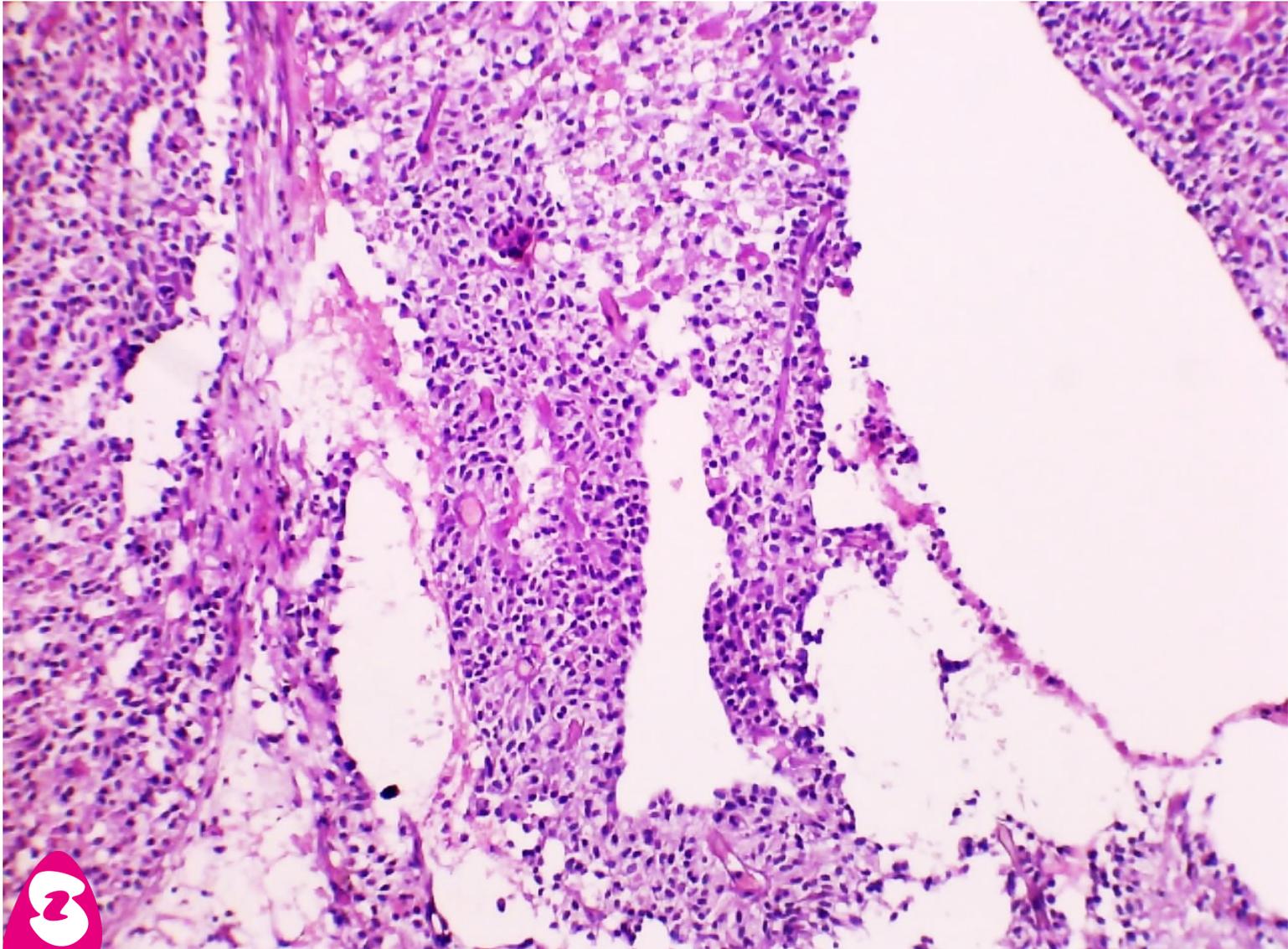
Chromogranin, Synaptophysin

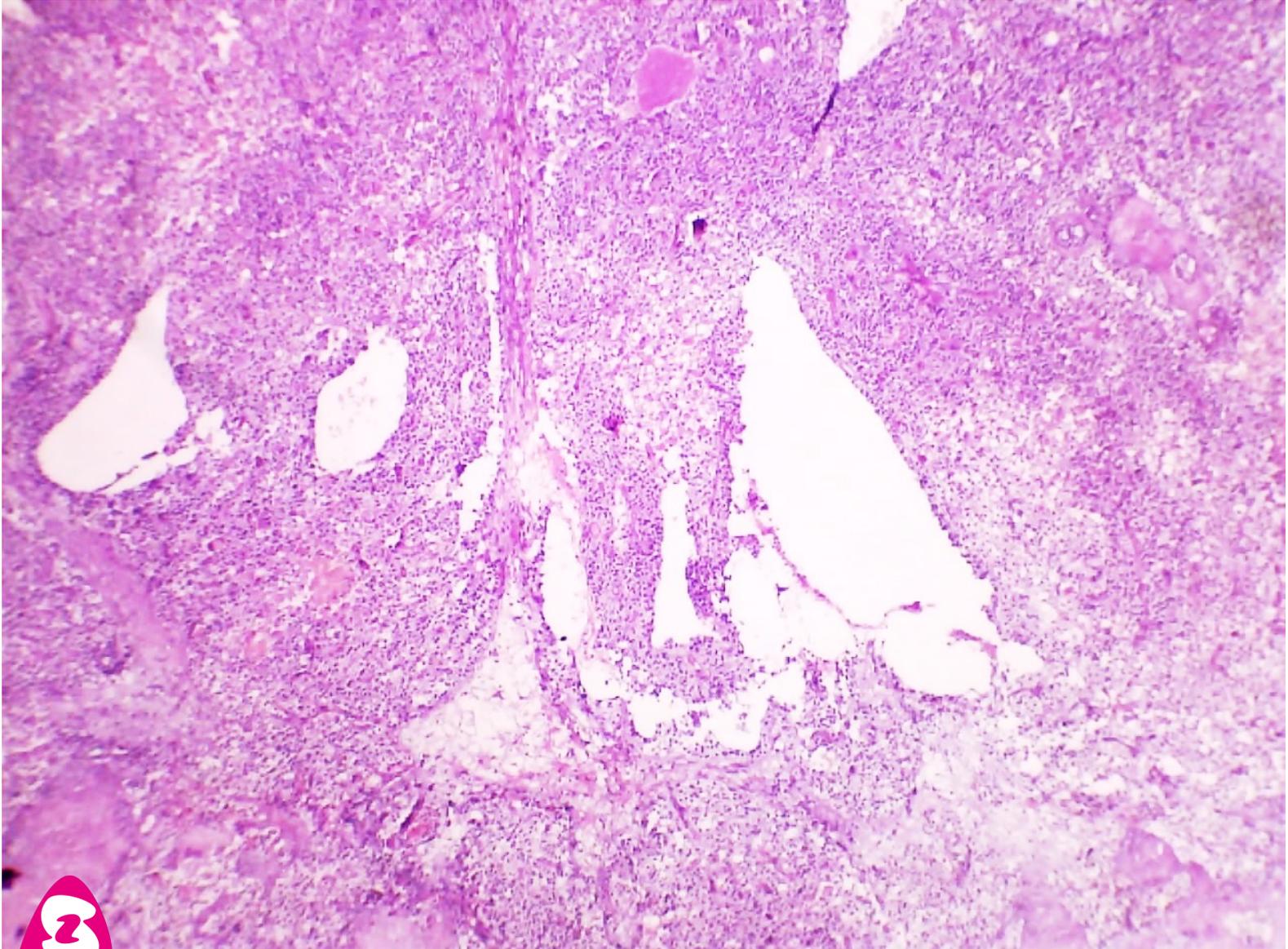


# Resection Macroscopy



# Histology

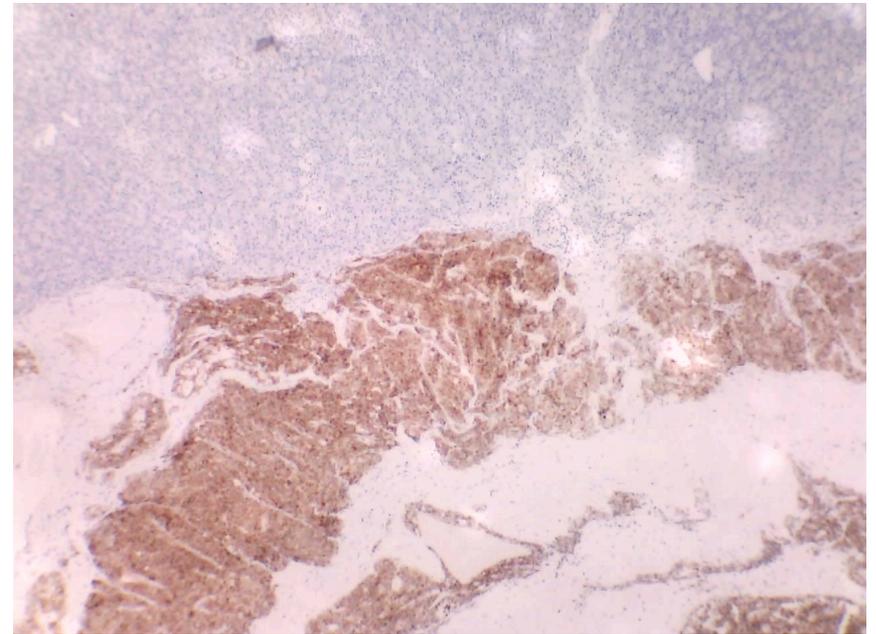
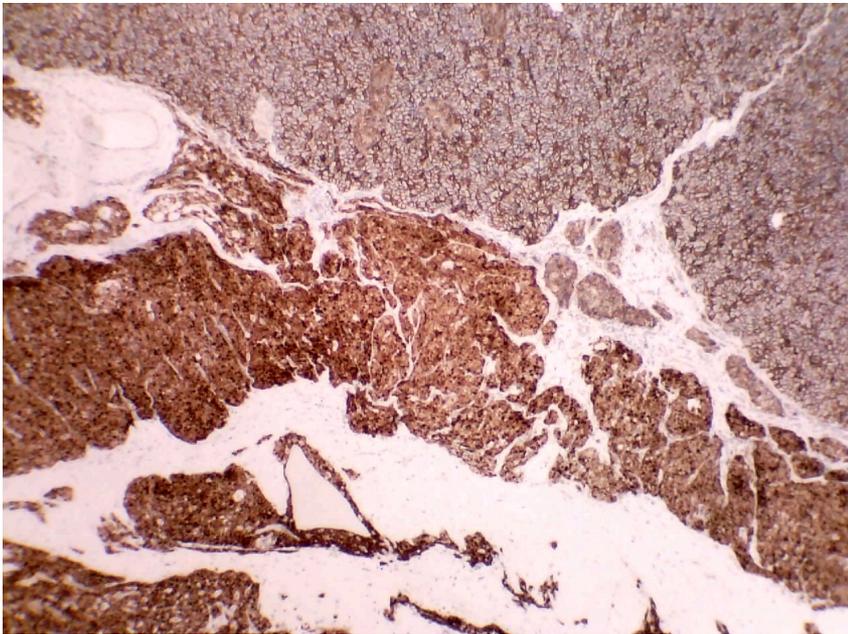




# Histology

## Immunohistochemistry

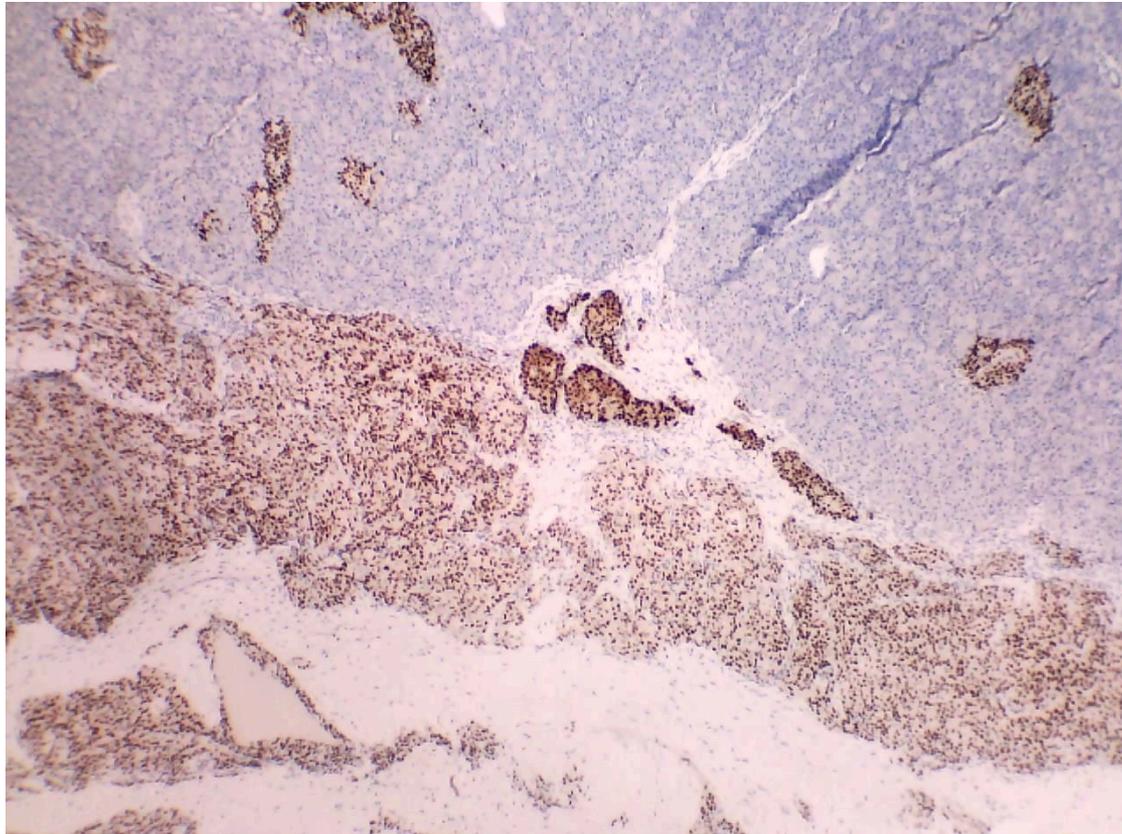
beta catenin, CD10



# Histology

## Immunohistochemistry

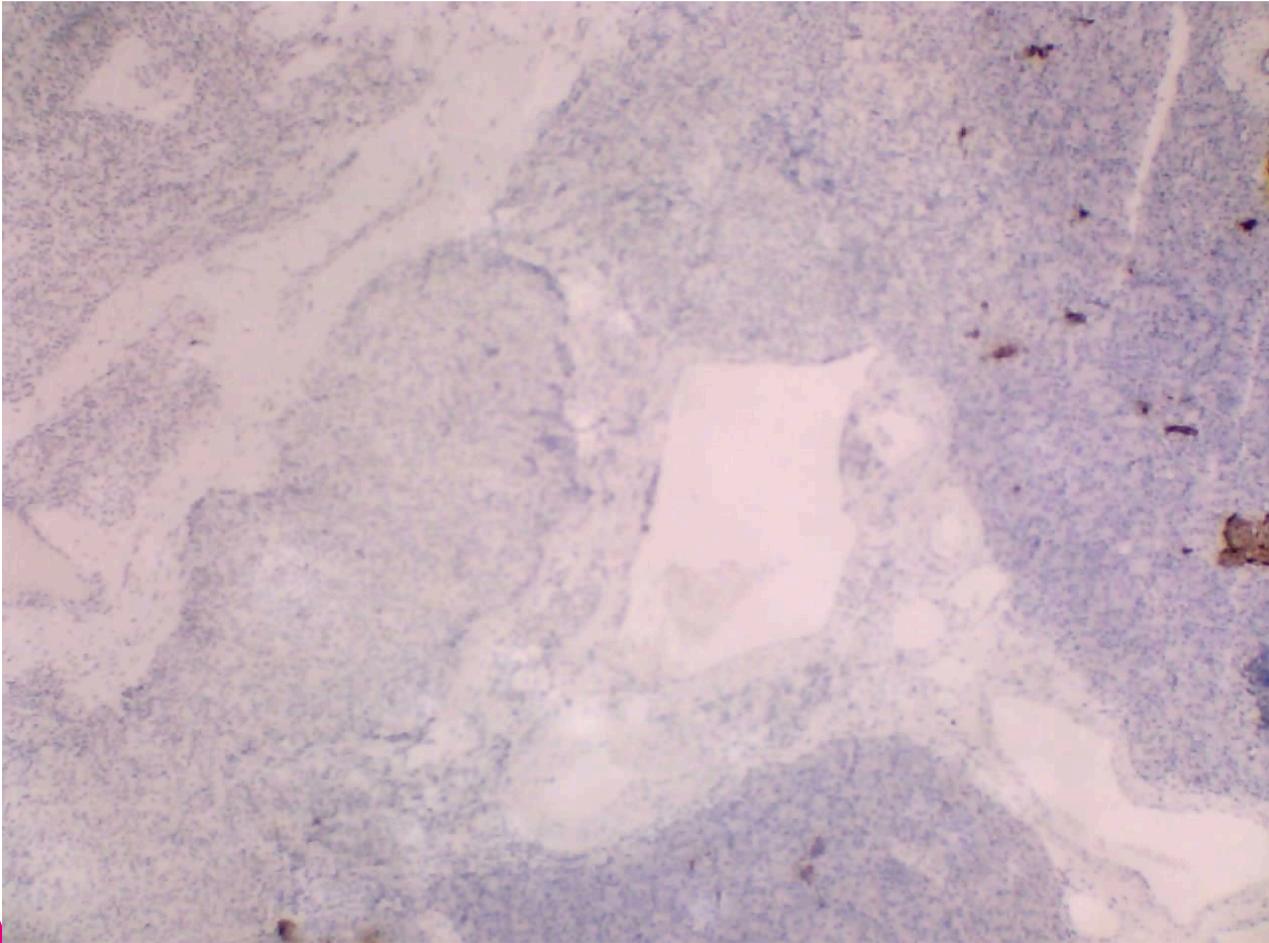
PR



# Histology

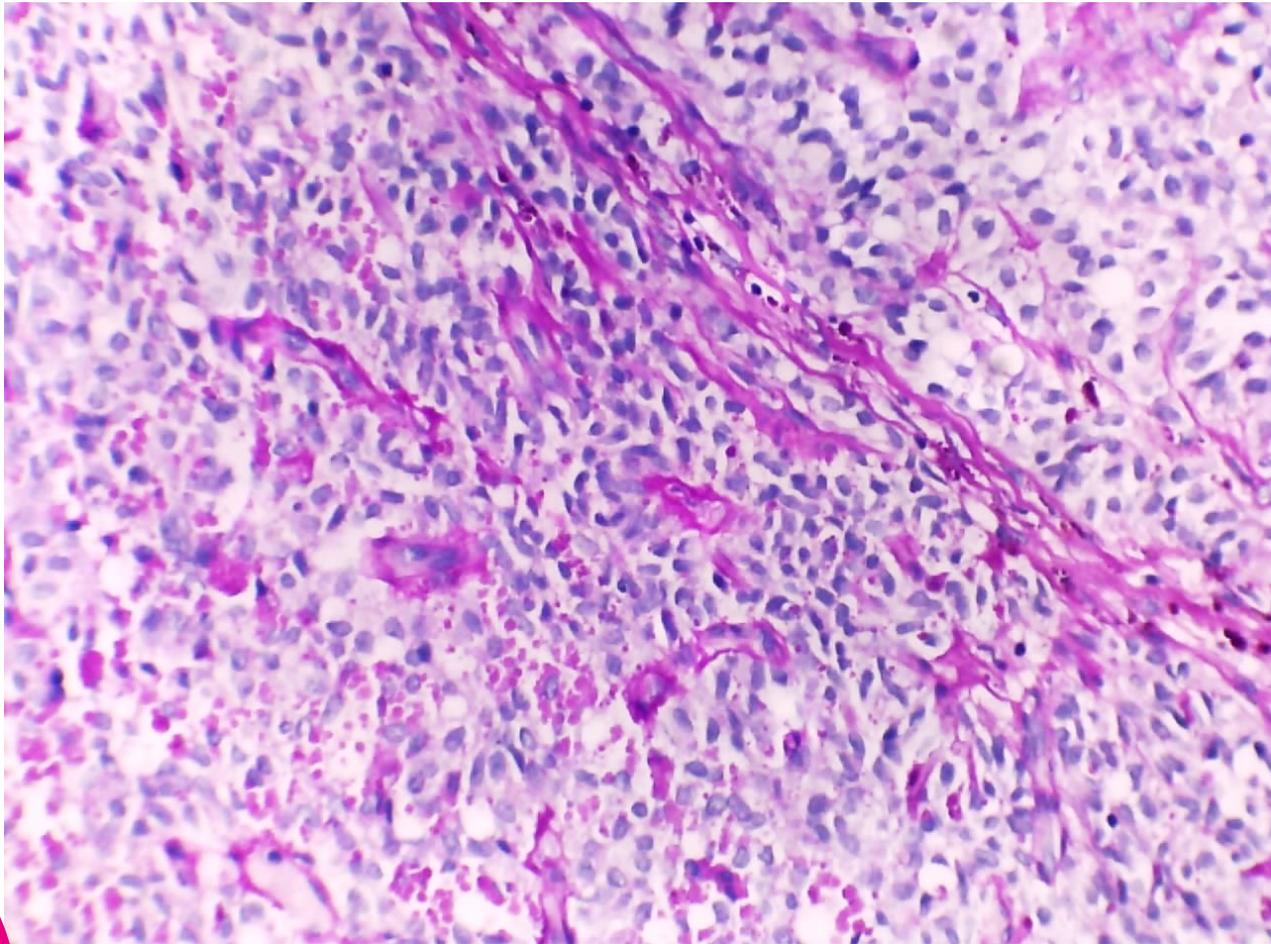
## Immunohistochemistry

chromogranin



# Histology

## PAS



# SPPT

- Poorly cohesive, monomorphic, uniform epithelial cells forming solid nests and sheets, together with pseudopapillae
- Often grooved nuclei
- Bands of hyalinized and myxoid stroma containing small blood vessels
- Degenerate changes: hemorrhage, cystic spaces, cholesterol clefts, calcification
- Eosinophilic globules in the cytoplasm or outside the cells
- PAS-D, PR, ER, CD10, beta-catenin, vimentin, Cyclin D1, CD56 positive



# DD NET

- Nuclear salt and pepper
- No pseudopapillae
- Globules can be seen in 5% of PNET's
- Synaptophysin, CD56 positive
- Chromogranin positive
- Beta-catenin and vimentin negative



# DD acinary cell carcinoma

- Older age group
- More frequently males
- Ovoid cells with prominent nucleolus and frequent mitoses
- Antichymotrypsin and antitrypsin positive



# To conclude

- Cytology is a very useful technique in diagnosis of pancreatic lesions
- Clinical information + imaging techniques (+CEA/amylase) + cytology has > 95% sensitivity and specificity
- Powerful aid in the fastlane work up towards treatment



**THANK YOU FOR YOUR ATTENTION**



# Literature references

- Pathology of The Pancreas: A practical Approach, Fiona campbell, Caroline S. Verbeke
- Pancreatic Cytopathology: Essentials in Cytopathology, David C. Cchieng, Edward B.Stelow
- WHO Classification of Tumours: Digestive System Tumours

