SD IAP č. 633

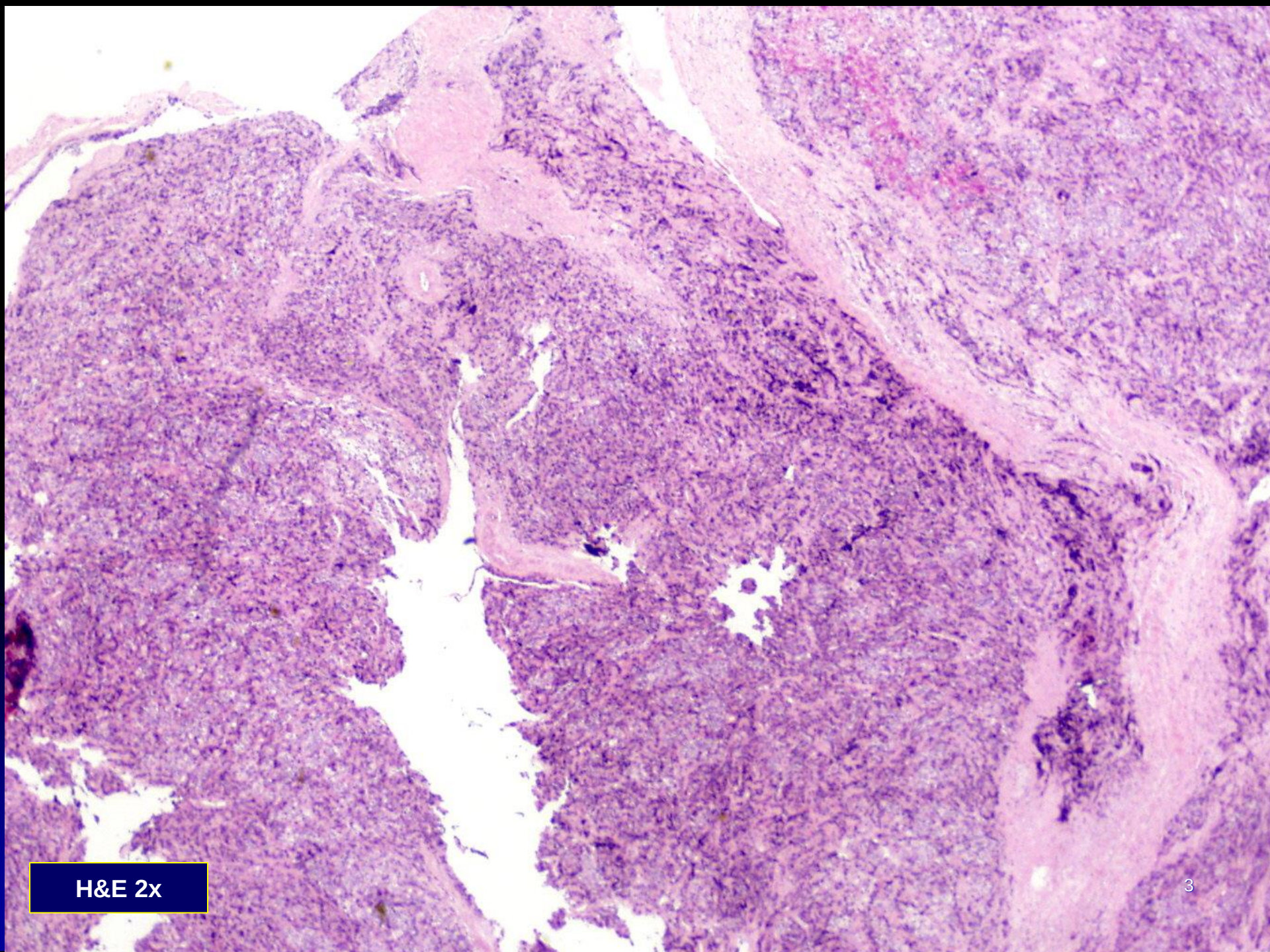
Peter SZÉPE

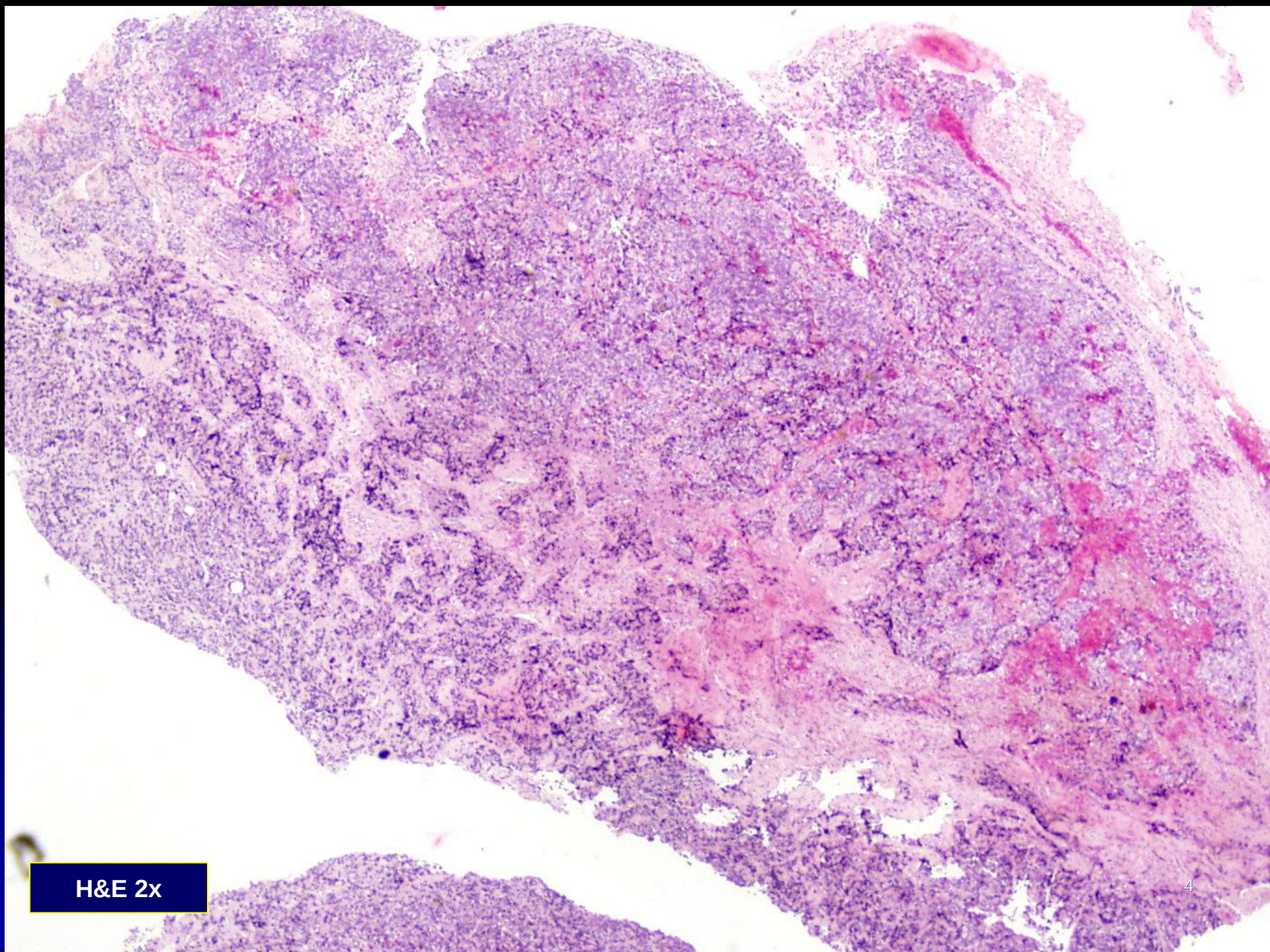
ÚPA JLF UK a UN Martin

24. Zjazd Slovenských a Českých patológov a letný bioptický seminár SD IAP, Senec , 19.-20. máj 2017

Klinické údaje

- muž, 86 rokov
- kliešťová biopsia z tumoru pravej pohrudničnej dutiny
- 3 neorientované tkanivové fragmenty; najväčší veľkosti cca 1,2 x 1,1 x 1 cm
- peroperačne na laterálnej časti karfiolovité útvary, belavé, tuhej konzistencie, miestami bohato vaskularizované. Pleurálna dutina bez výpotku, v mieste TU zrasty s pľúcami, podľa CT najvýraznejšie zmeny v dorzálnej časti pohrudničnej dutiny.
- **Klinická dg.: Tu pleurae l.dx. - v.s. mesothelioma**


H&E 2x



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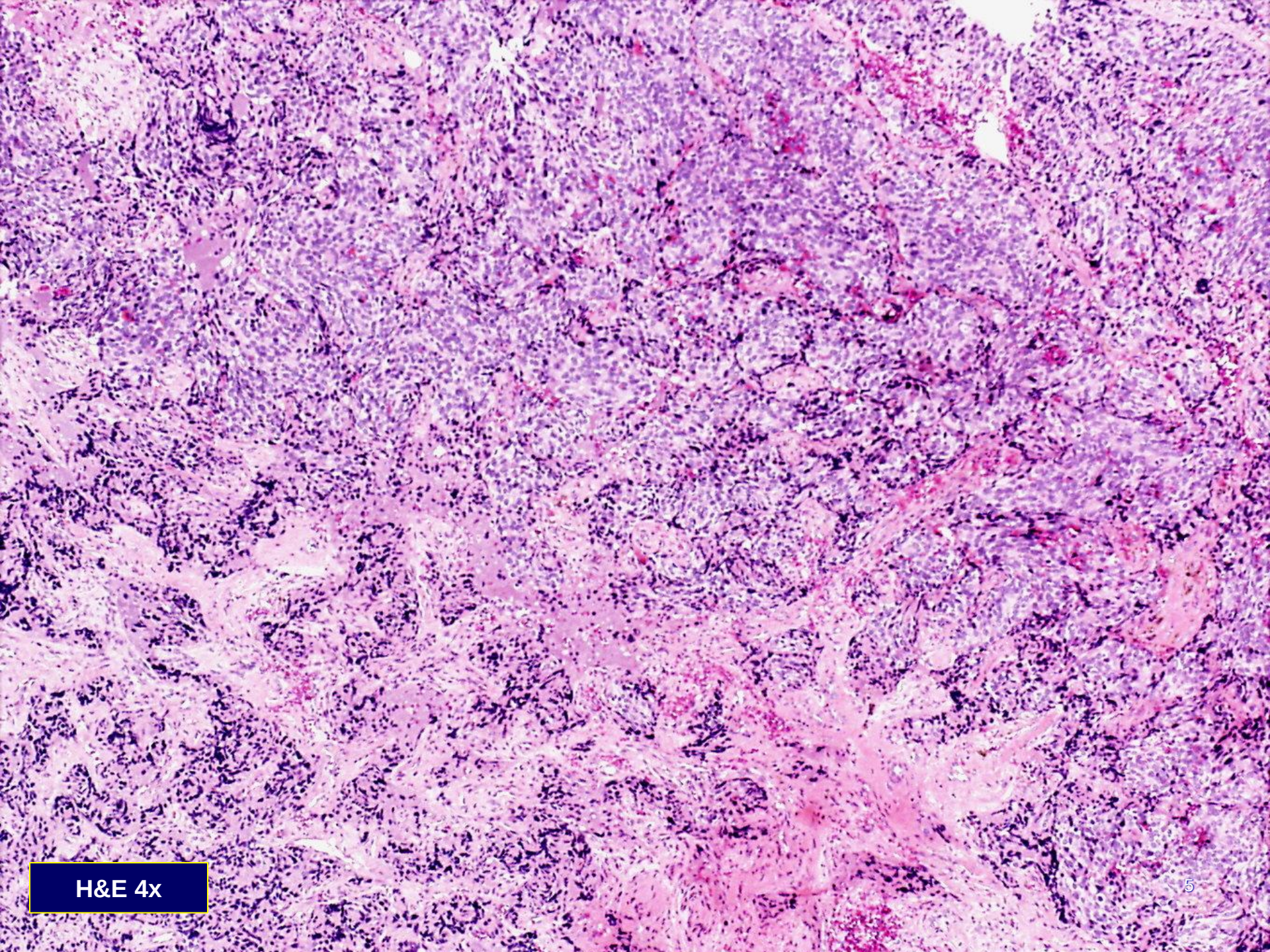
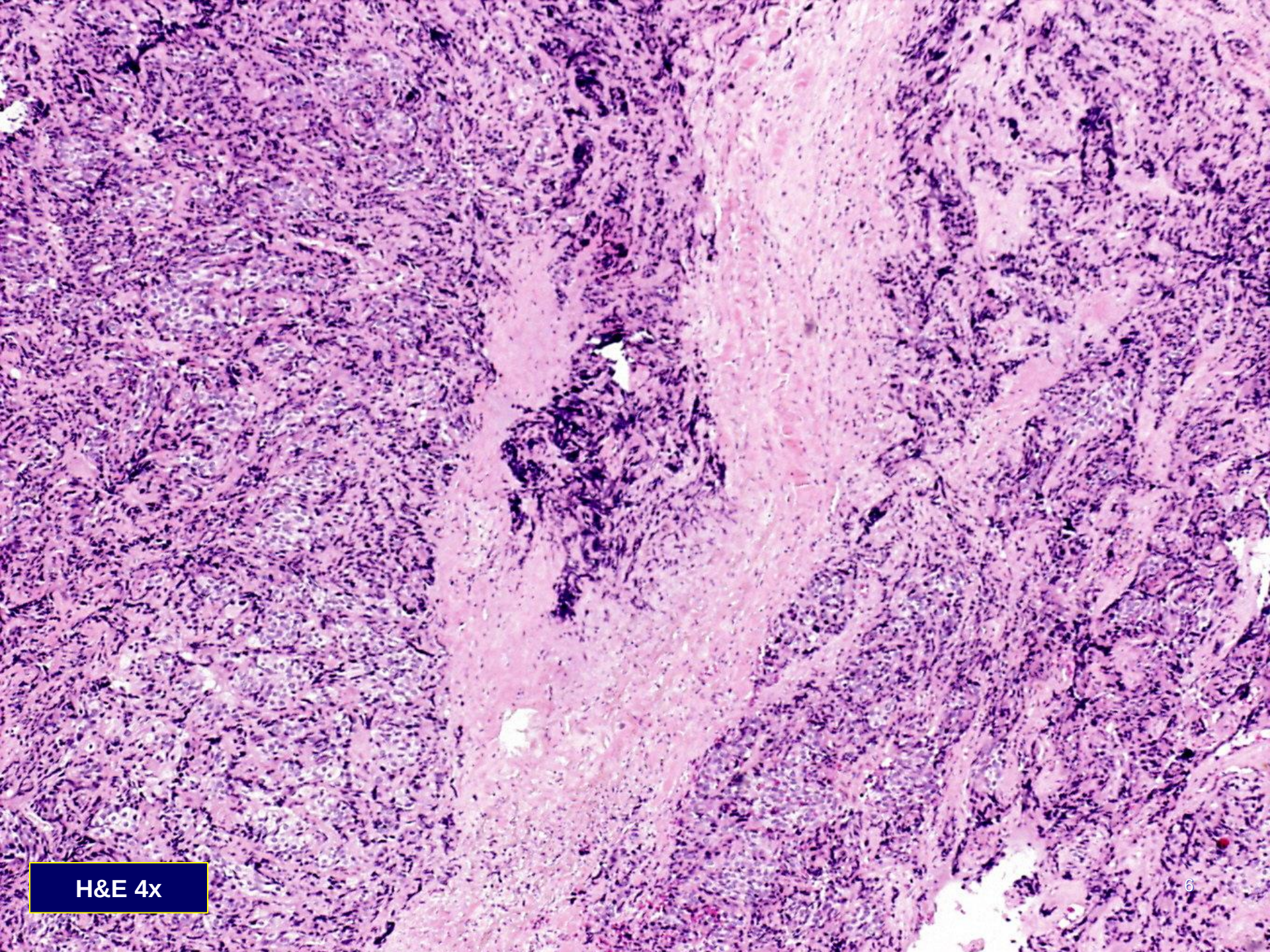

H&E 4x



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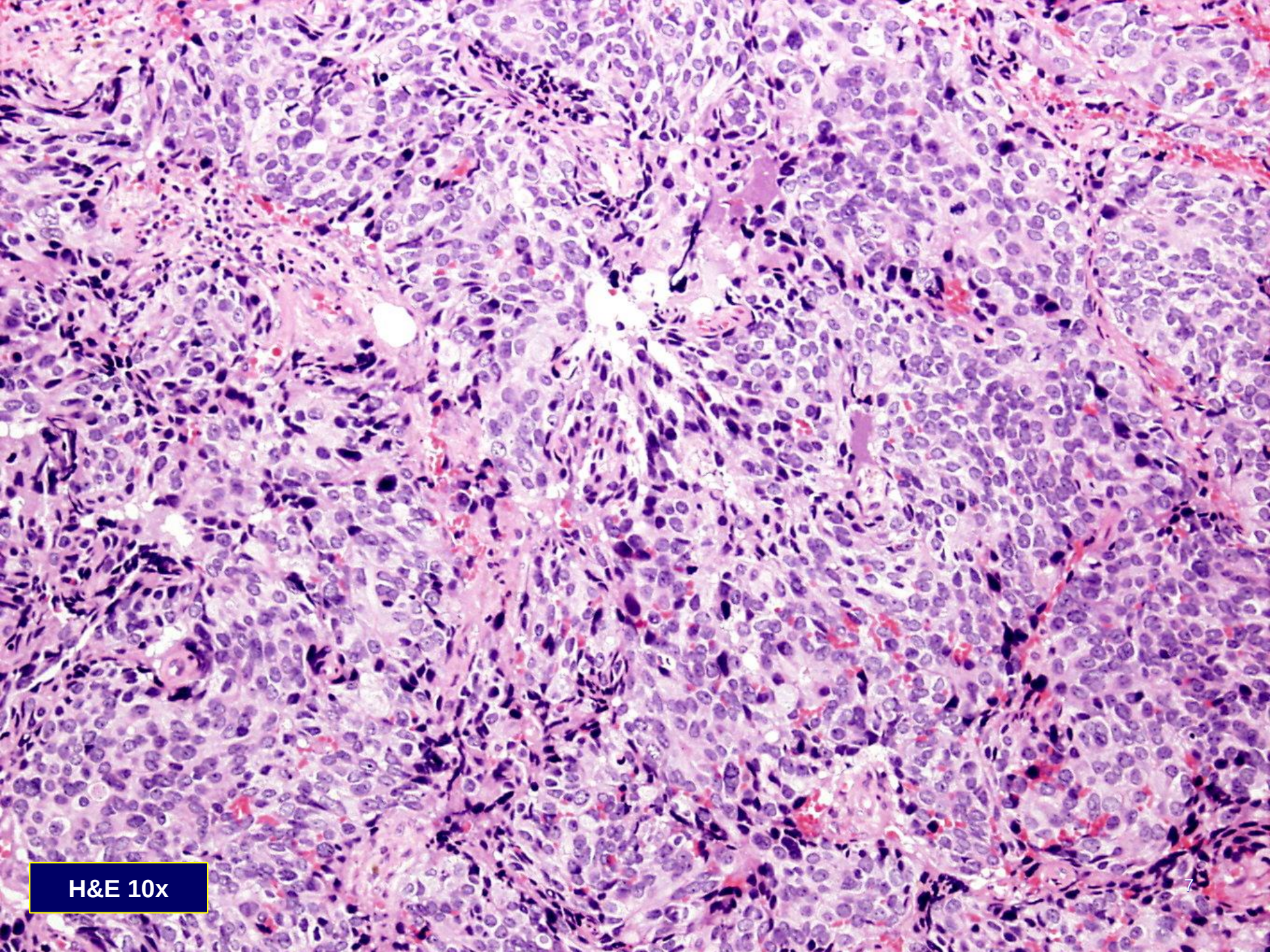

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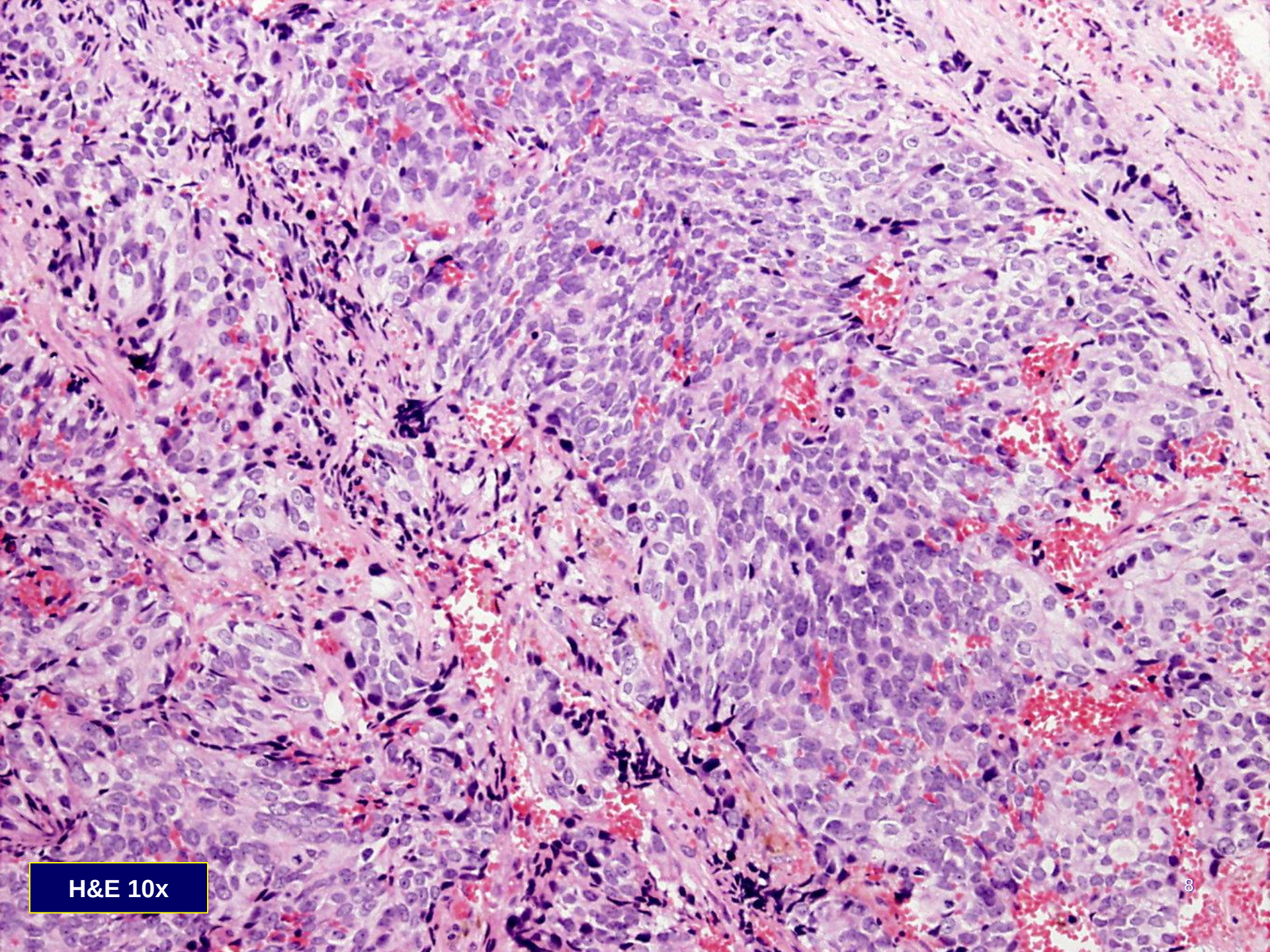
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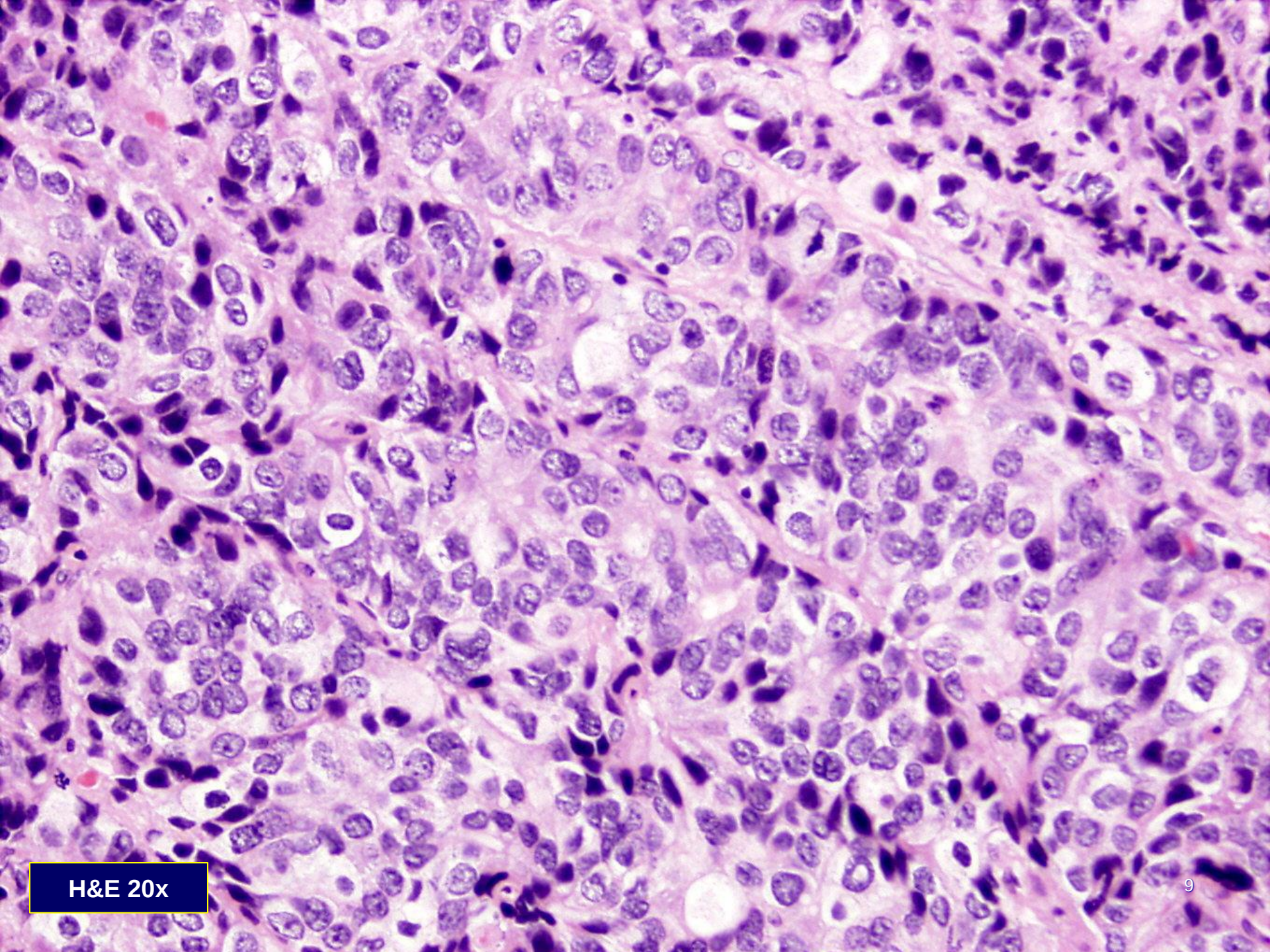
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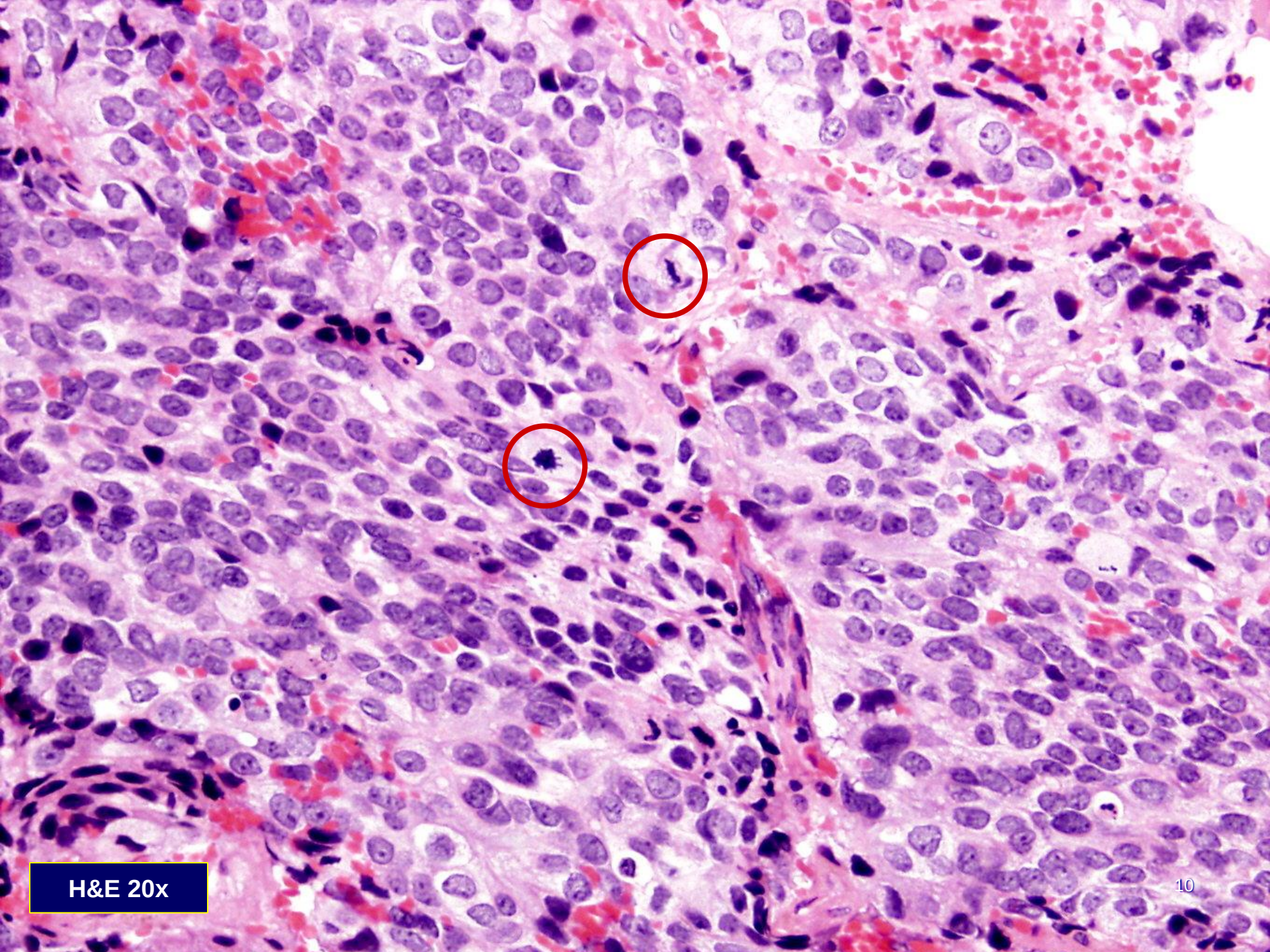
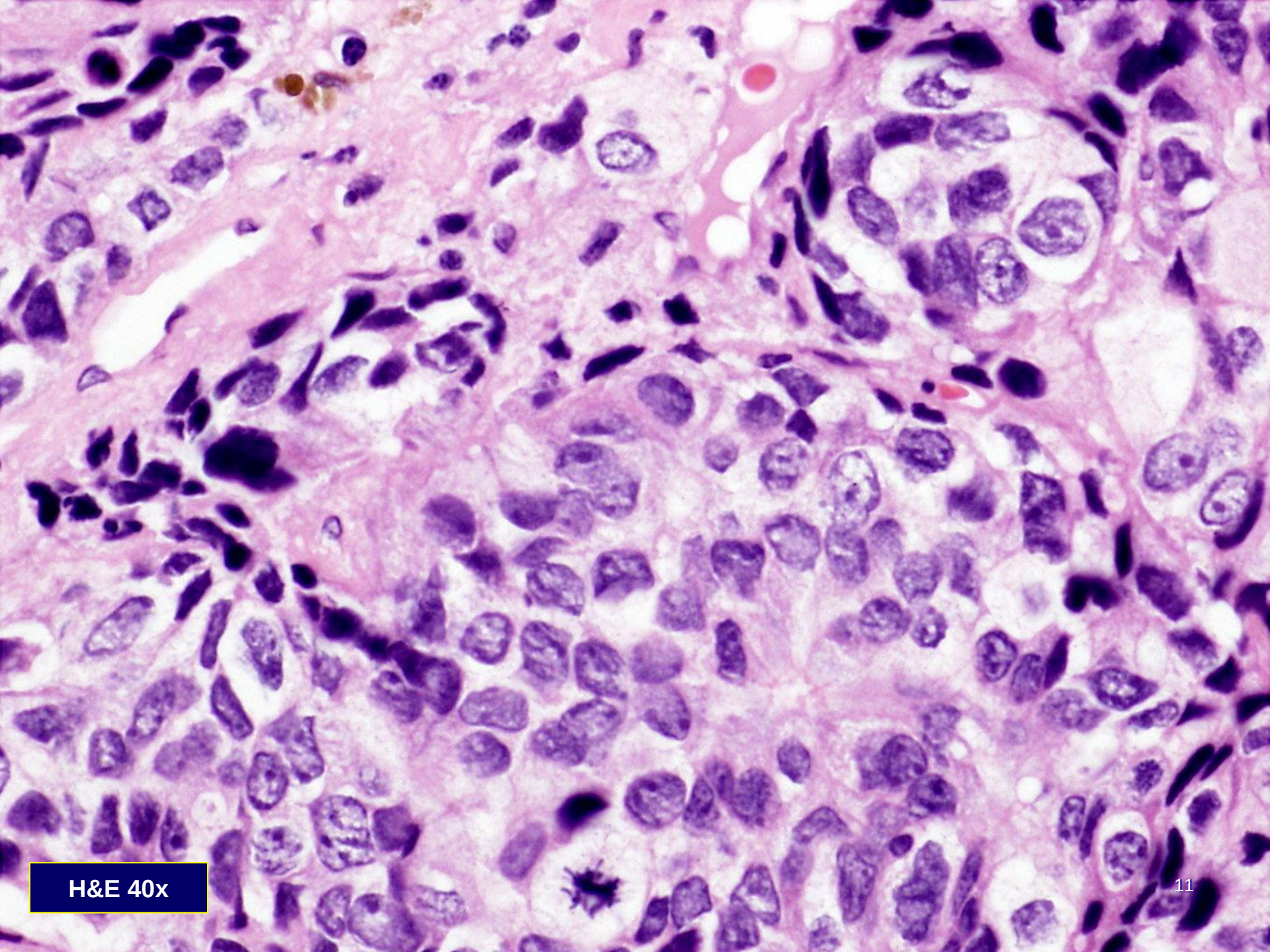
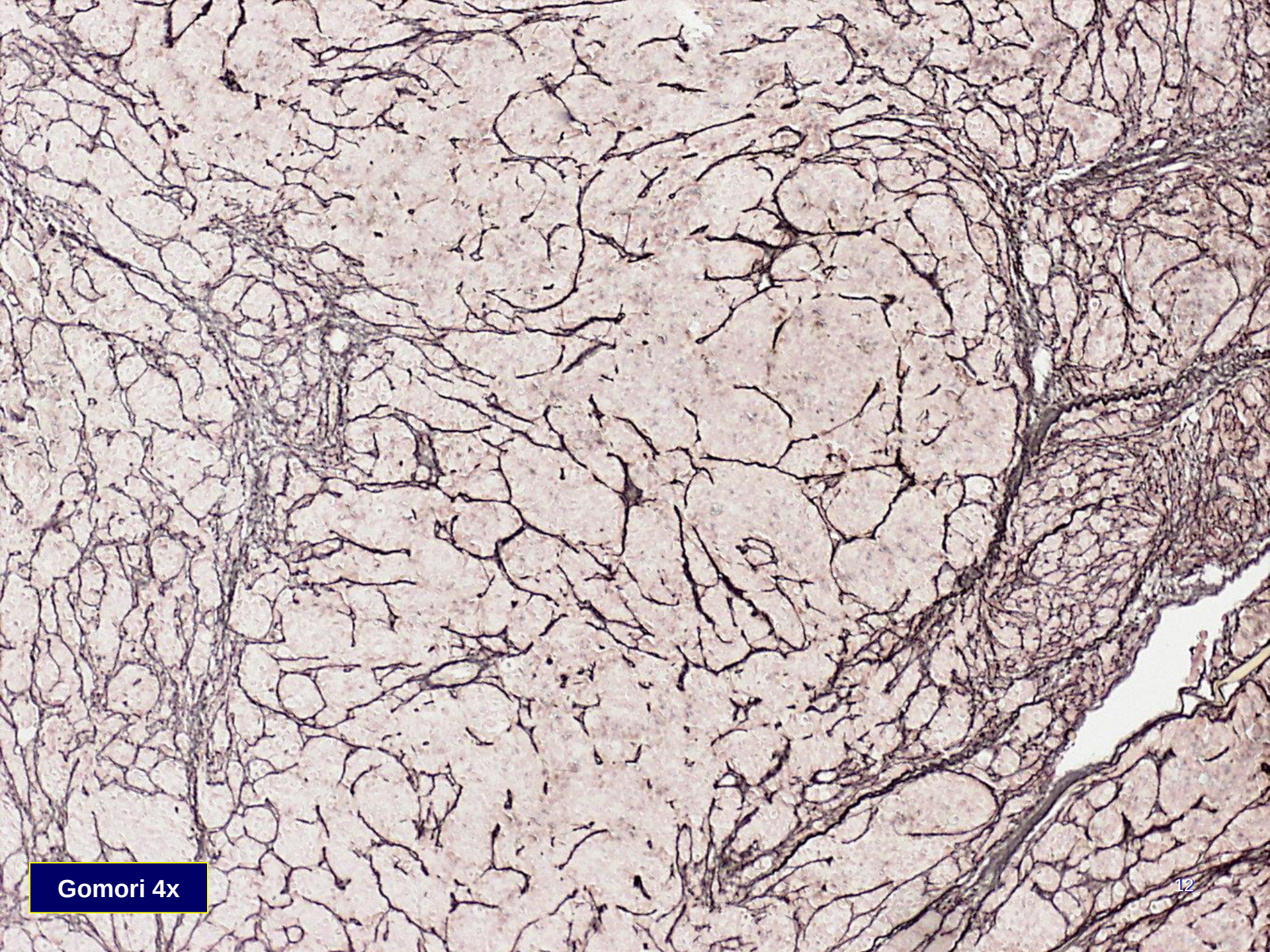
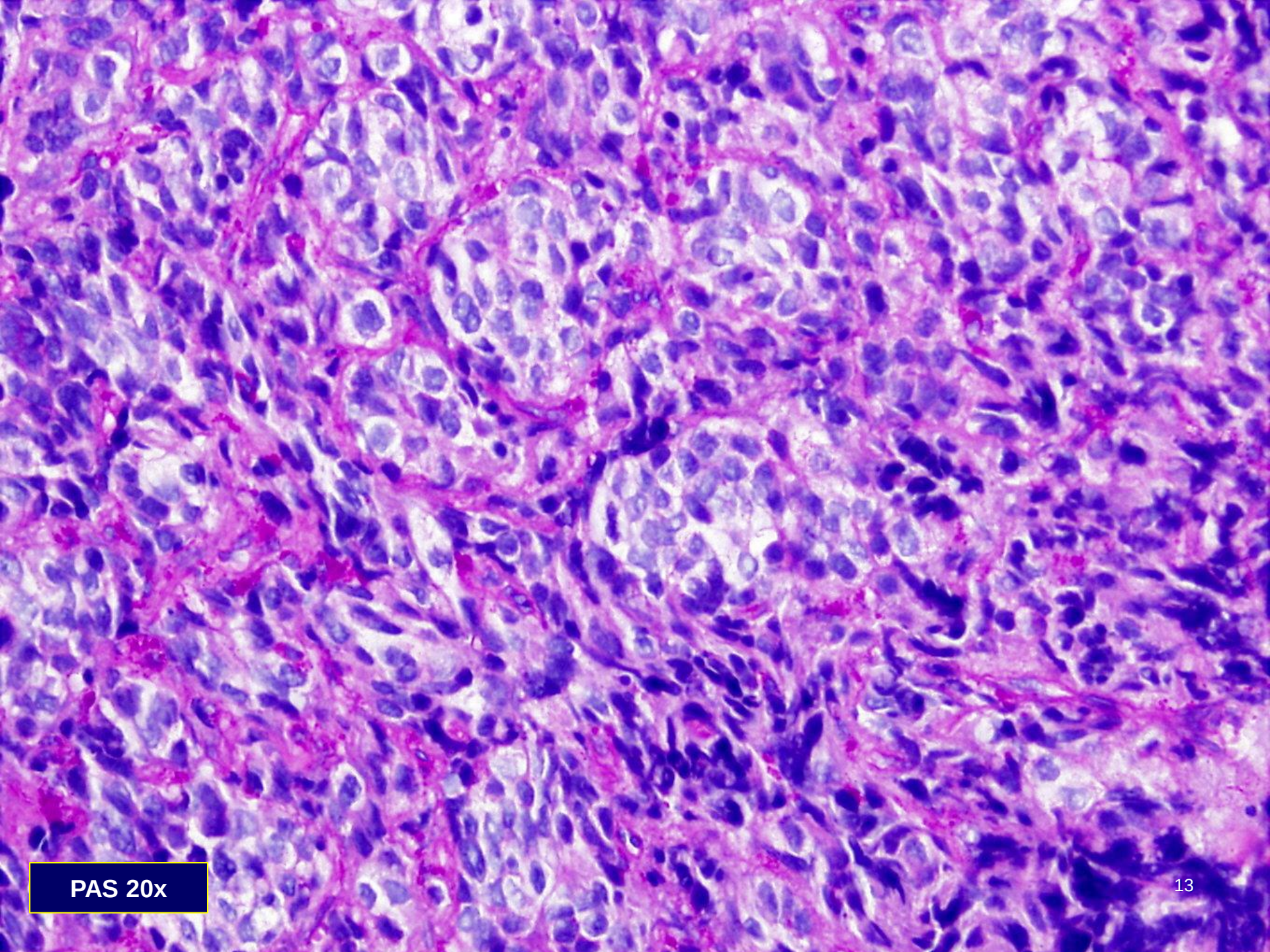

H&E 20x

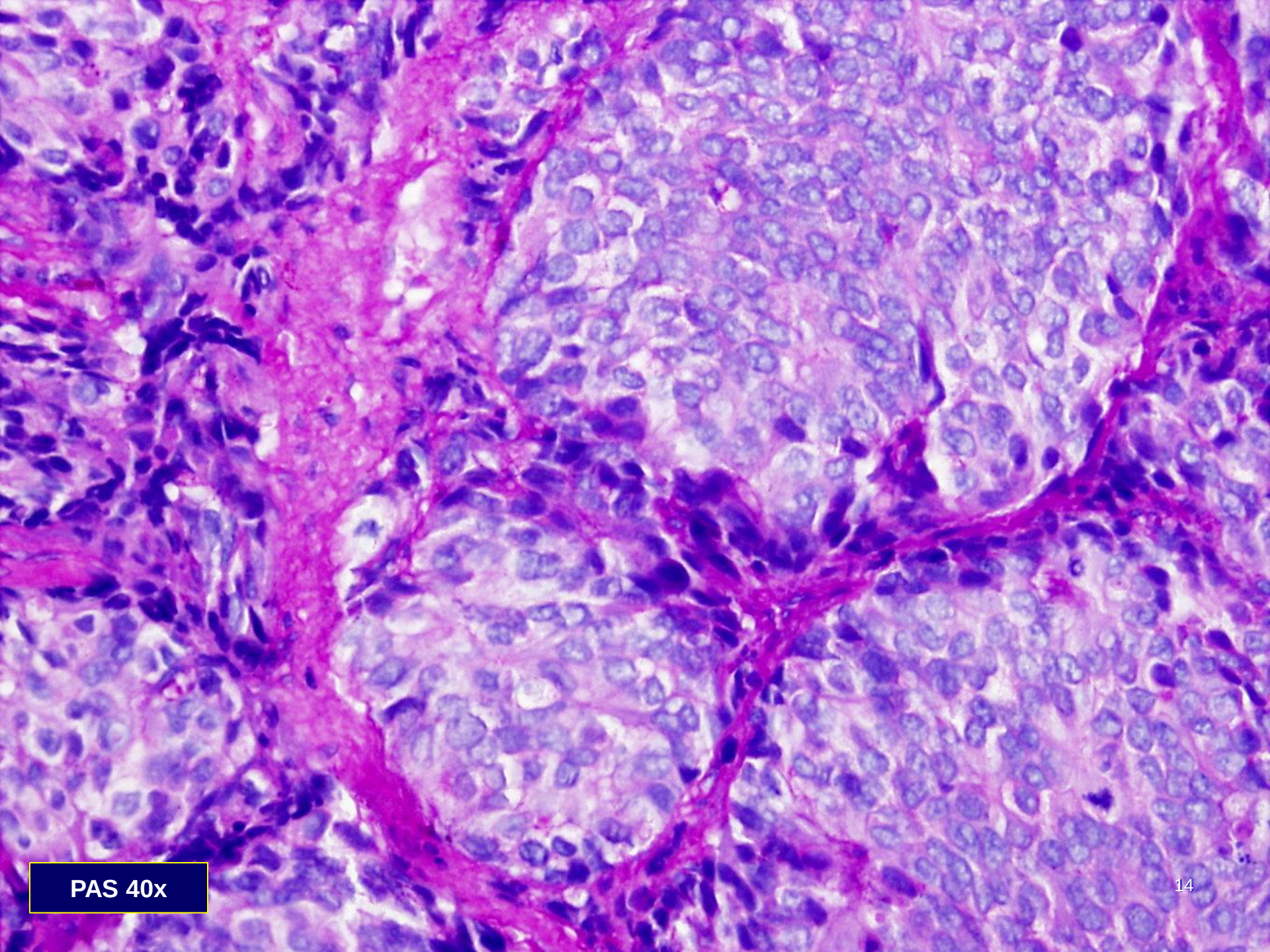

H&E 40x



Gomori 4x



PAS 20x

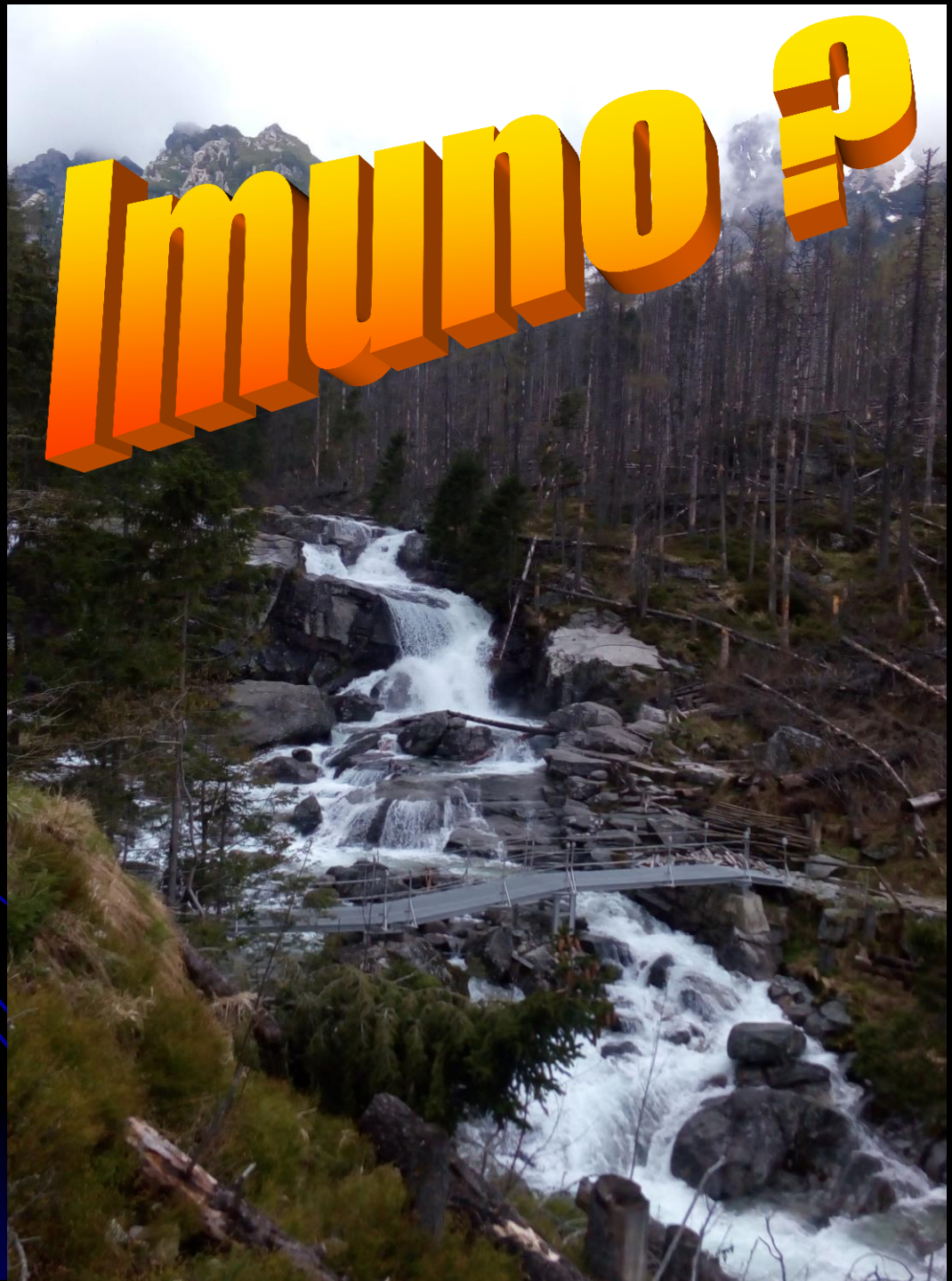


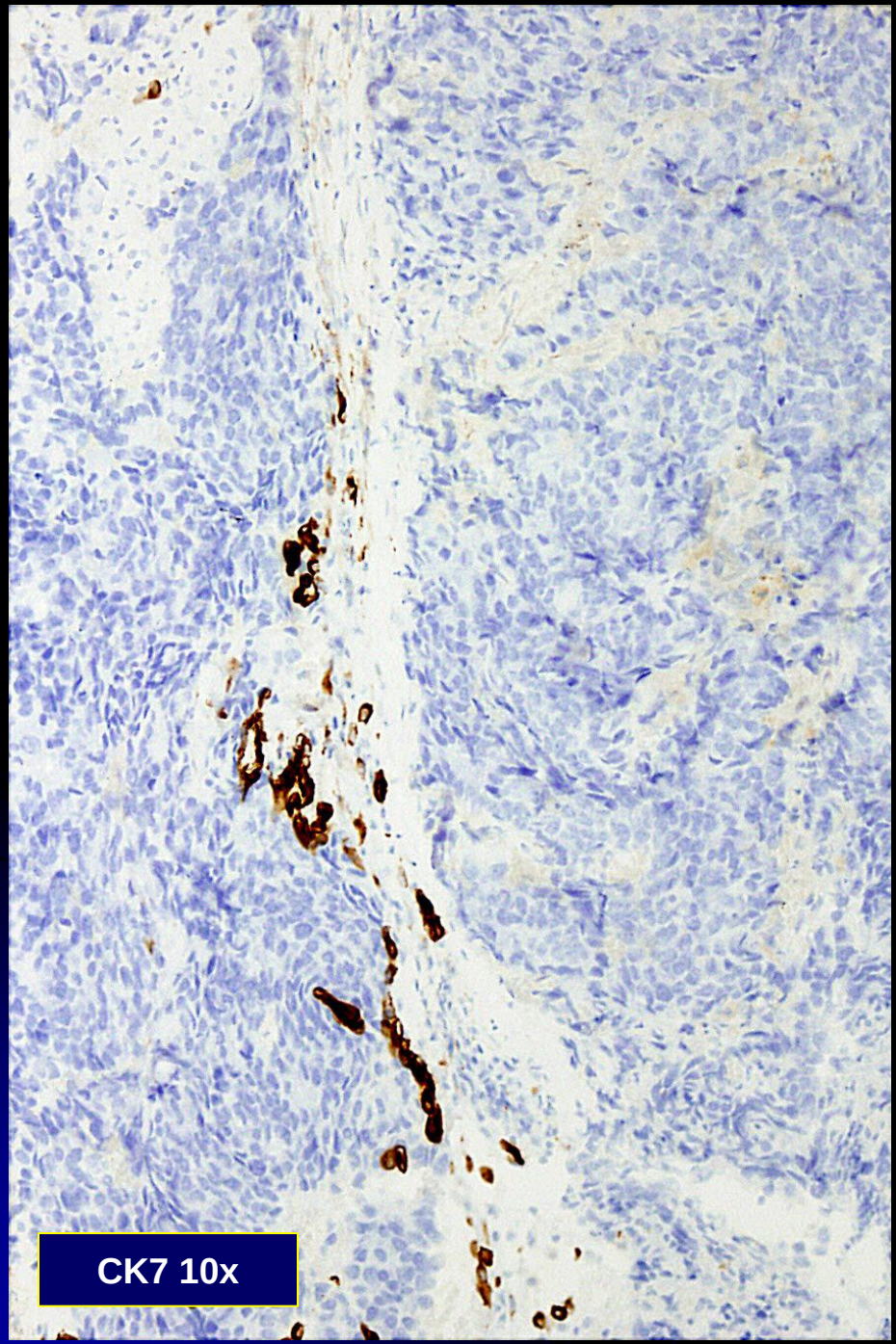
PAS 40x

Sumarizácia morfológie

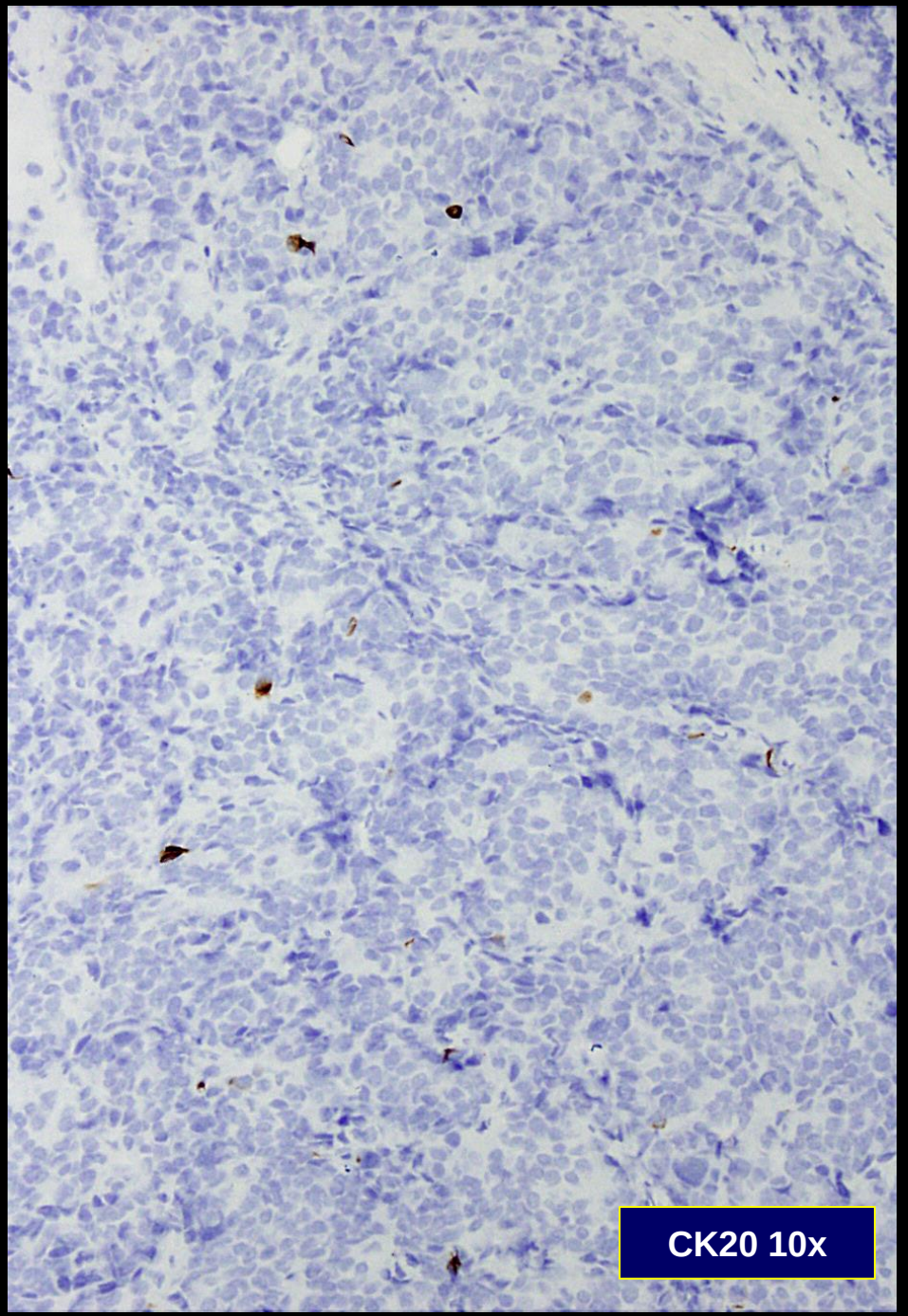
- alveolárne, trabekulárne a solídne rastúci nádor
- epitelová, miestami naznačne vretenobunková morfológia
- PAS negativita
- mitotická aktivita

Vaša diagnóza

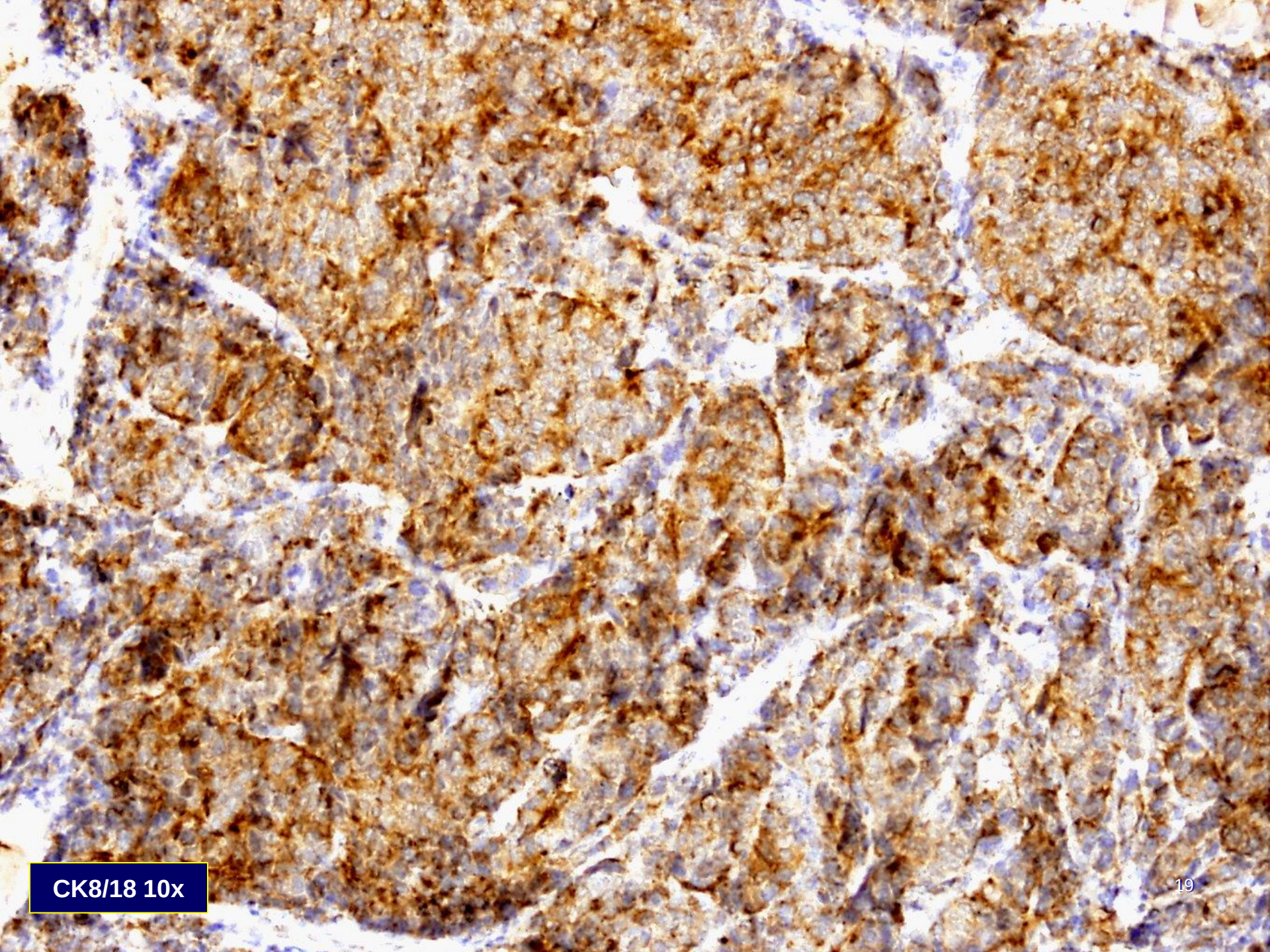

Imuno ?

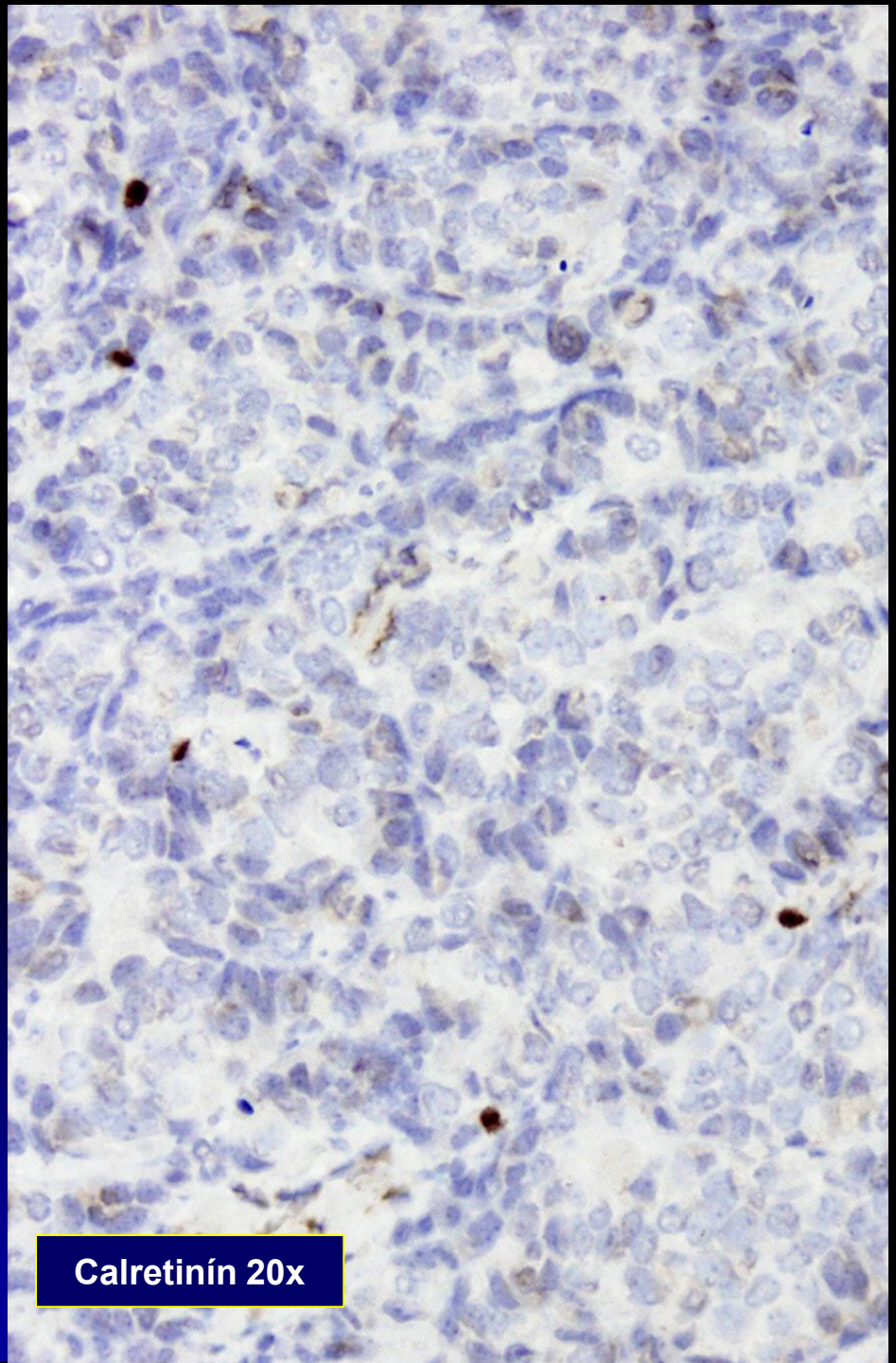


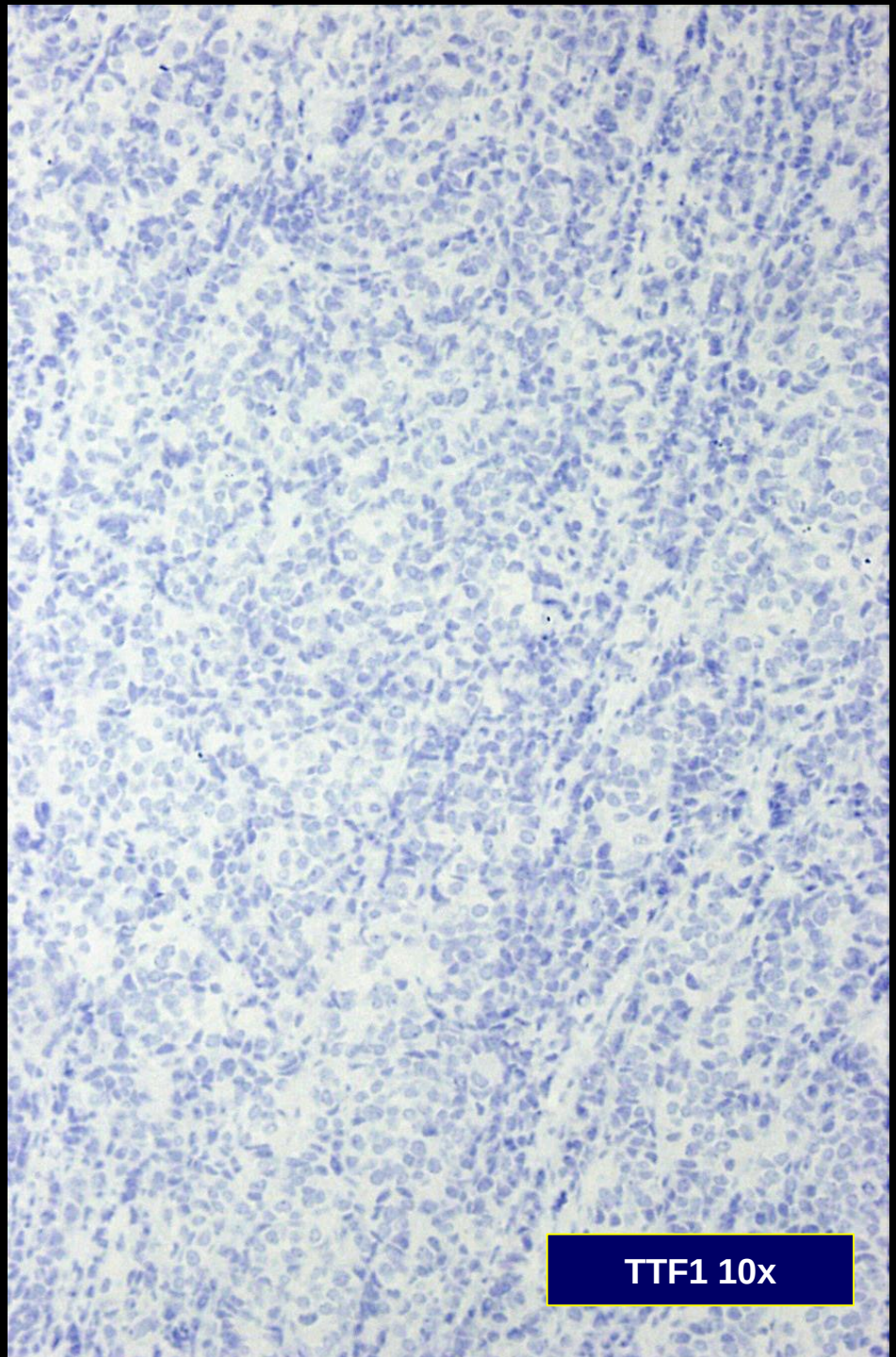
CK7 10x

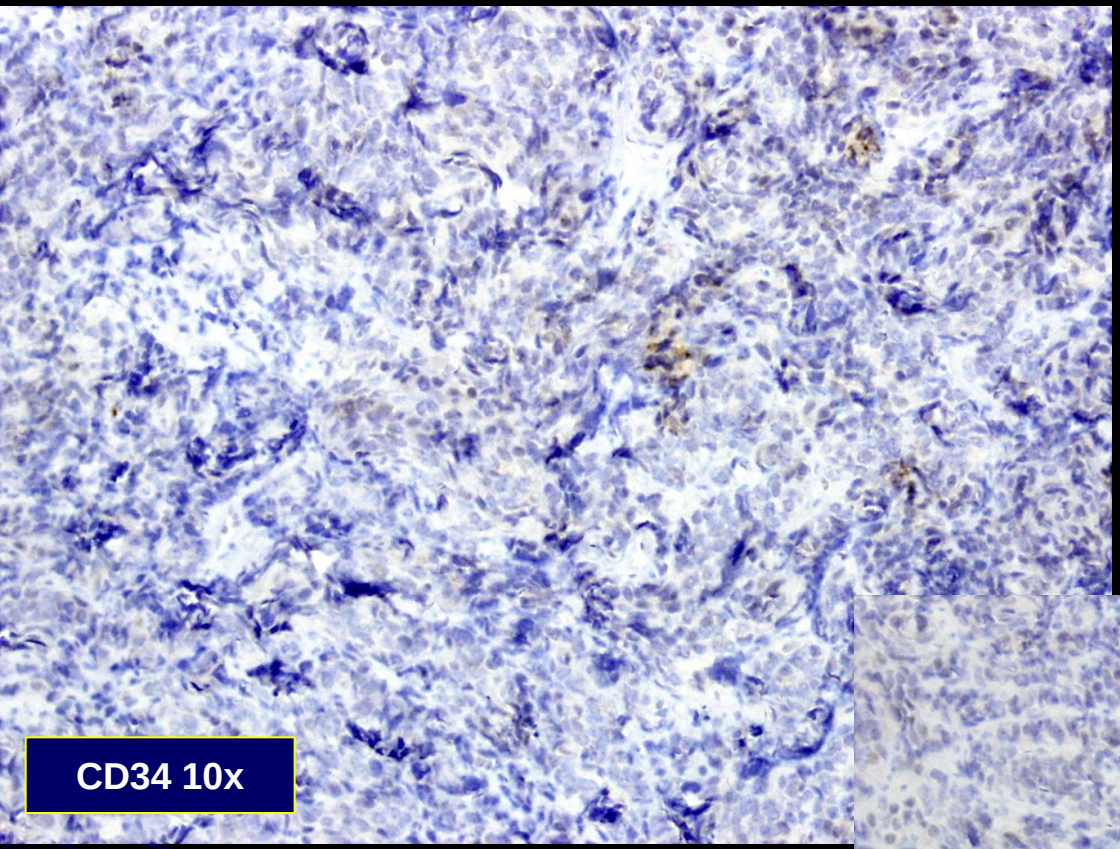


CK20 10x

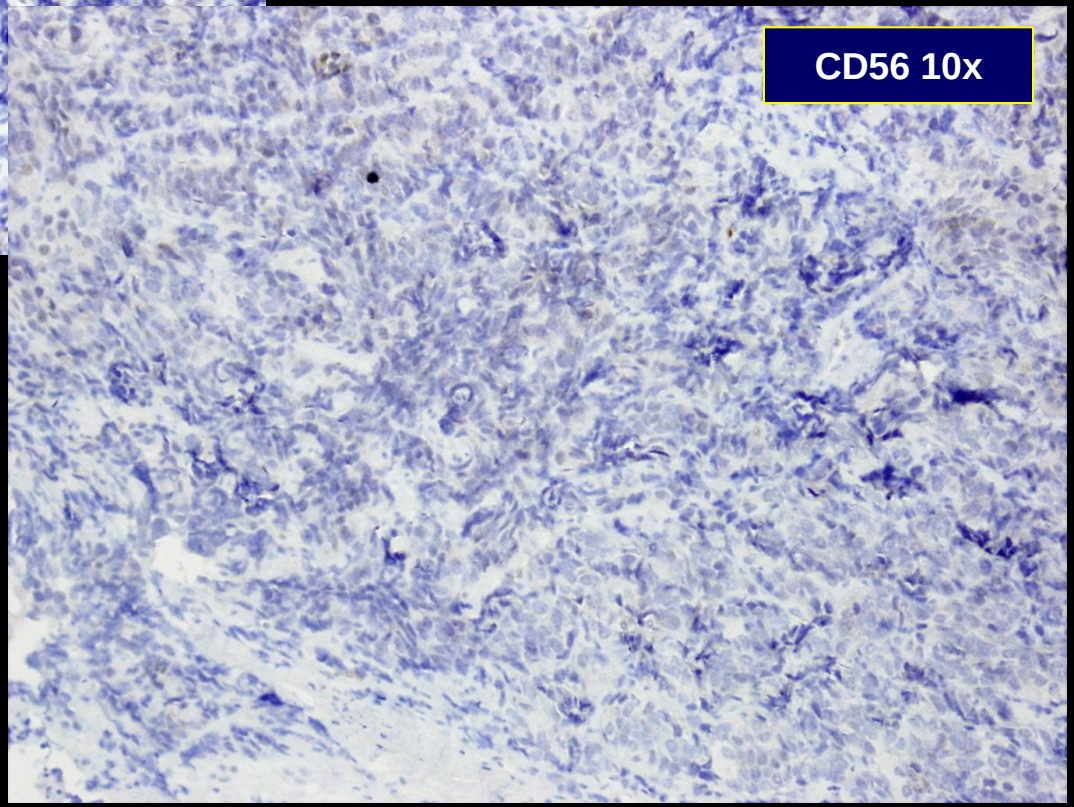

CK8/18 10x


Calretinín 20x


TTF1 10x



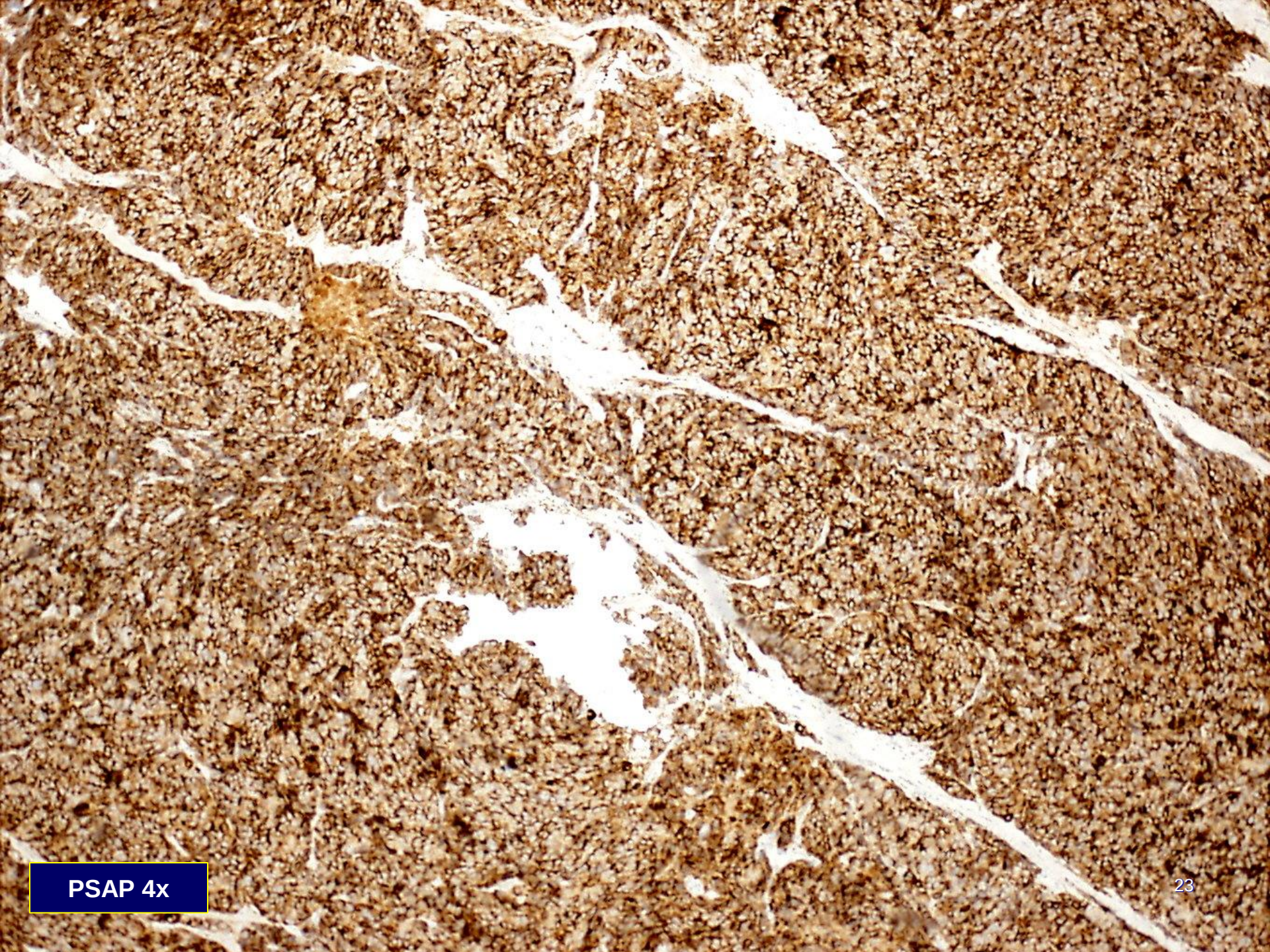
CD34 10x



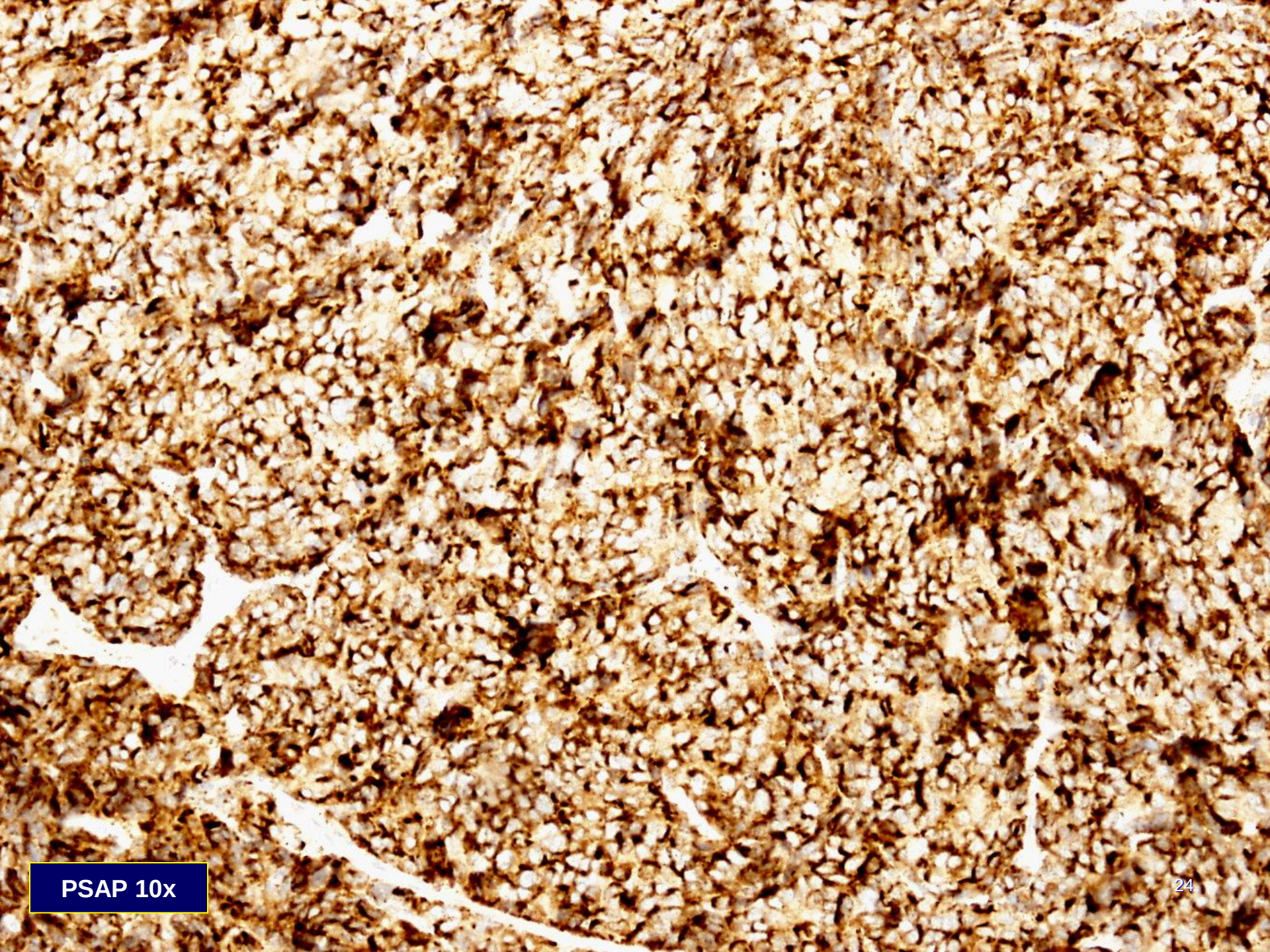
CD56 10x

p40, CEA, SALL4, dezmín, S-100

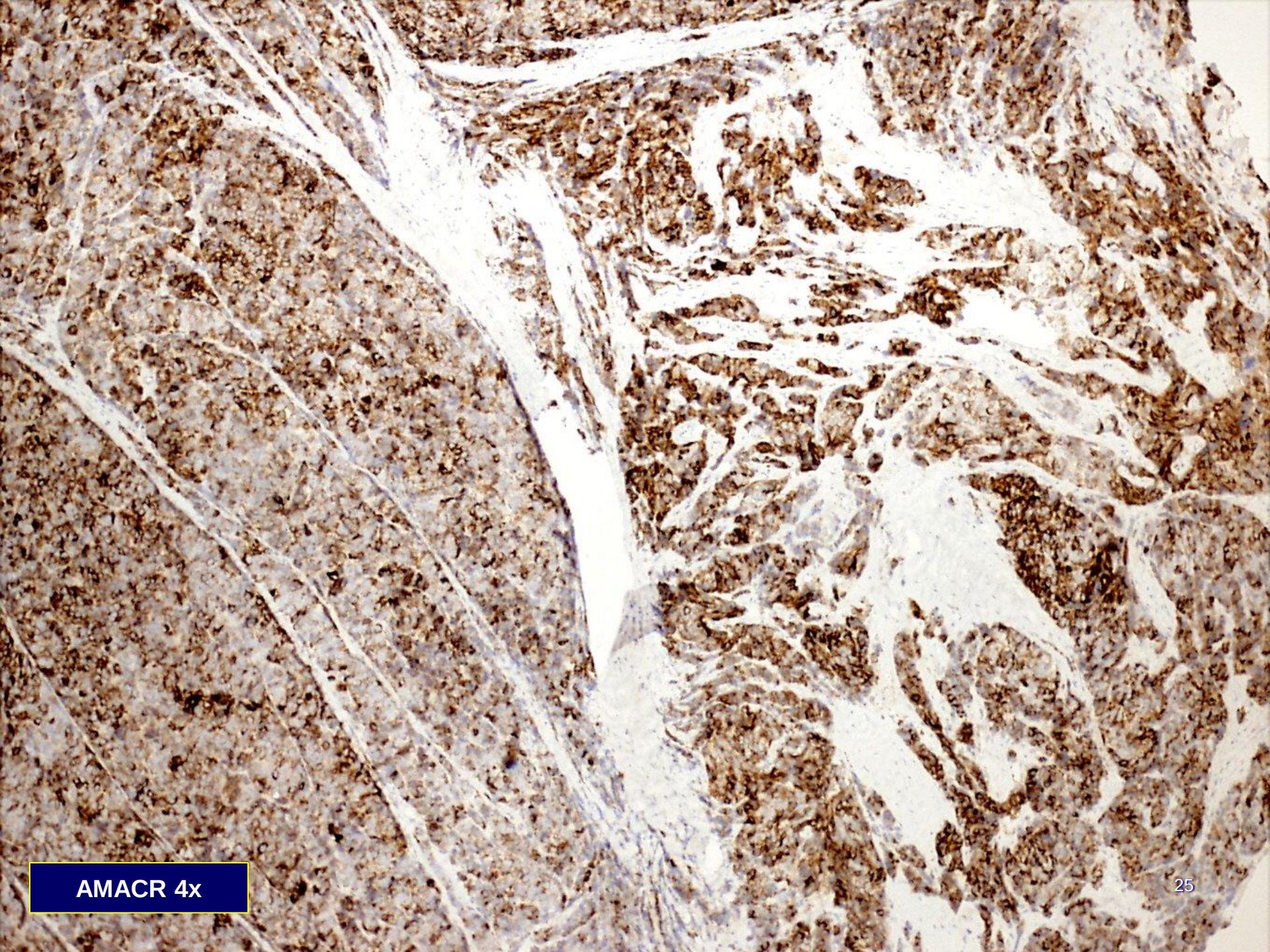
Čo teraz



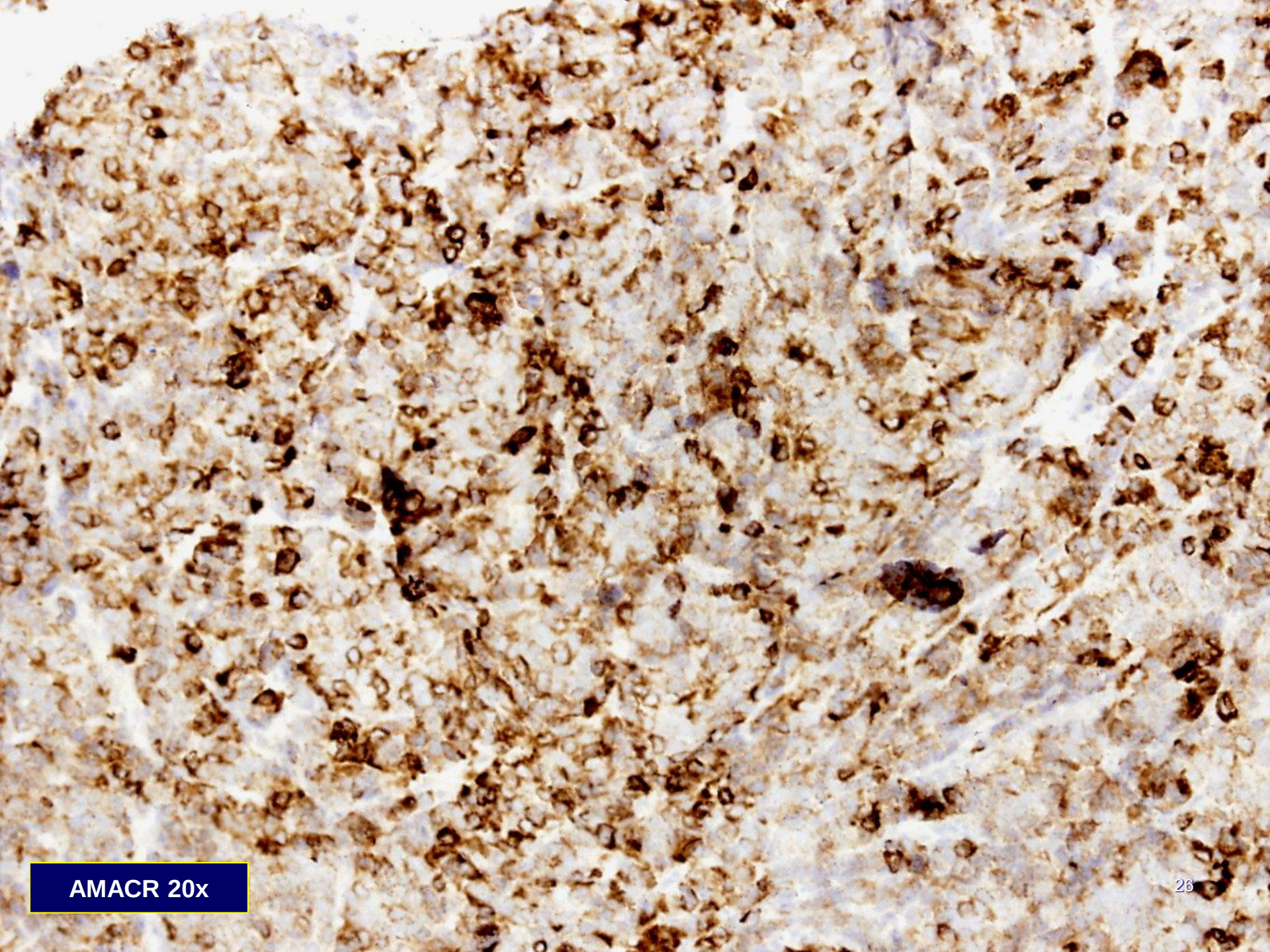
PSAP 4x



PSAP 10x



AMACR 4x



AMACR 20x

Sumarizácia imunoprofilu

- **Pozitivita:** CK8/18, PSAP, AMACR, MIB1 40%

- **Negativita:** CK7, CK20, TTF-1, p40, WT-1, calretinín, CD34, CD56, SALL4, CEA, dezmín, S-100 proteín,

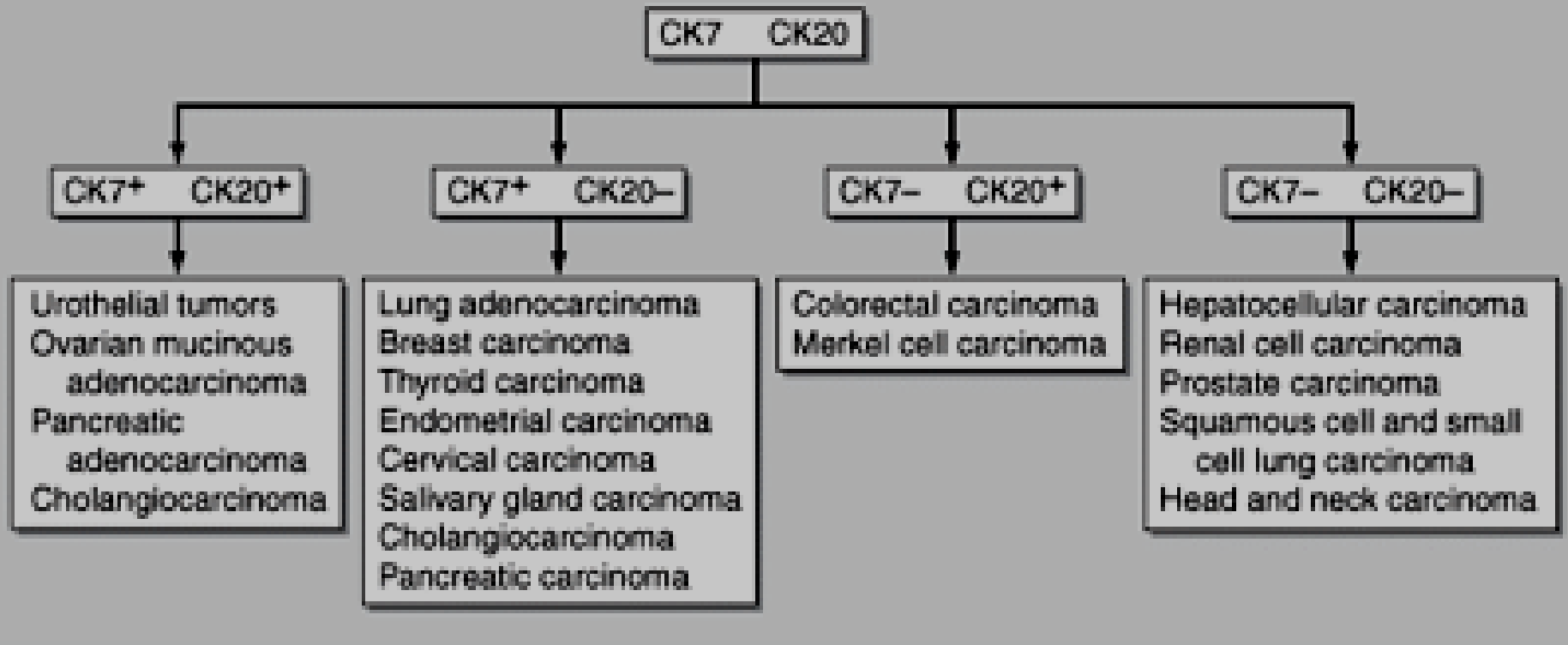
DIAGNÓZA

MTS infiltrácia pleury adenokarcinómom, ktorého morfológia a verifikovaný profil zodpovedajú origu v prostate

DIFERENCIÁLNA DIAGNÓZA

- mezotelióm
- MTS adenoCa pľúc
- iné MTS (NCa)
- SFT (?)

CK7 / CK20



Source: Wiener C: *Harrison's Principles of Internal Medicine: Self-Assessment and Board Review*, 17th Edition: http://www.accessmedicine.com

DISKUSIA

Diagn Cytopathol. 1996 Aug;15(2):103-7.

Cytology of metastatic adenocarcinoma of the prostate in pleural effusions.

Renshaw AA1, Nappi D, Cibas ES.

Abstract

Malignant pleural effusions due to prostatic carcinoma are rare. We examined the cytologic and clinical presentations of 14 malignant pleural effusions caused by prostate cancer. These cases represented 2.3% of all positive pleural effusions at our institution. All patients (n = 10) had high grade, high stage tumors, including three with small cell anaplastic carcinoma. Three cases had clinically documented metastases to pleura, and in two cases, metastases were documented at autopsy. Most tumor cells had large nucleoli and were arranged in small, loosely cohesive groups. Fluids due to the small cell type of prostate carcinoma often contained a mixture of cells similar to those seen in small cell carcinoma of other sites such as the lung, as well as cells resembling the more typical type of prostate cancer. Prostatic specific antigen and prostatic acid phosphatase were positive in less than 50% of these malignant effusions. We conclude that prostatic carcinoma in pleural effusions occurs most commonly in high grade, high stage tumors and has a characteristic cytologic appearance. Negative staining for PSA and PAP does not rule out a prostatic source for malignant cells in effusions.

Respiratory Medicine Case Reports 13 (2014) 24–25

Contents lists available at ScienceDirect

Respiratory Medicine Case Reports

journal homepage: www.elsevier.com/locate/rmcr

Case report

Malignant pleural effusion from prostate adenocarcinoma

James C. Knight [a,*], Malia A. Ray [b], Sadia Benzaquen [a]

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Keywords:
Pleural effusion
Malignancy
Prostate adenocarcinoma
Pleural metastasis

A B S T R A C T

Prostate adenocarcinoma is the most common newly diagnosed cancer in males. Pulmonary and pleural metastasis are not uncommon on autopsy, but malignant effusions are not common clinical findings. There are no current recommendations to guide prostate specific antigen level assessment in pleural fluid.

A 73 yo w/prostate cancer presented with complaints of subacute worsening of exertional dyspnea. He underwent a CT of the chest which excluded pulmonary emboli but did show moderate to large bilateral pleural effusions.

The patient had a thoracentesis performed which confirmed an exudative effusion with atypical cells and elevated PSA levels. Metastatic visceral & parietal foci of prostate adenocarcinoma were found on medical pleuroscopy. The patient was symptomatically treated with bilateral tunneled chest tube catheters for intermittent drainage.

Pulmonary metastasis secondary to prostate cancer is commonly found on autopsy, with pulmonary metastasis in 46% of patients and pleural metastasis in 21% of patients. Pleural effusions are not common, in one series, only 6/620 (1%) were found to have pleural masses/nodules or effusions. Diagnosis of pleural effusion secondary to metastatic prostate cancer can be achieved by direct cytology evaluation and/or PSA level elevation in the fluid. While specific, the sensitivity is not high enough to rule out disease if negative. Elevated pleural fluid PSA levels may aid in the diagnosis; however, there are no current recommendations as to what level may be considered diagnostic. Further studies are needed to define the sensitivity and specificity of PSA in pleural fluid.

Atypical Metastases From Prostate Cancer: 10-Year Experience at a Single Institution

Anant H. Vinjamoori[1]
Jyothi P. Jagannathan
Atul B. Shinagare
Mary-Ellen Taplin
William K. Oh
Annick D. Van den Abbeele
Nikhil H. Ramaiya

OBJECTIVE. The purpose of the study was to retrospectively review the frequency, sites, and patterns of atypical metastases from prostate cancer and to determine whether any correlation exists between the atypical sites and biochemical or histologic variables.

MATERIALS AND METHODS. All available imaging studies of 620 consecutive patients with biopsy-proven prostate carcinoma seen at our institute between 1999 and 2009 were reviewed. Eighty-two patients (mean age, 72 years; age range, 58–87 years) with atypical sites of metastases were identified. Patients were separated into groups on the basis of the presence or absence of concurrent osseous metastasis and high or low Gleason grade, and metastatic patterns were compared using the Fisher exact test. The maximum prostate-specific antigen (PSA) level for each patient was recorded and correlated with metastatic pattern using the Mann-Whitney test.

RESULTS. The most frequent sites of atypical metastases were the lungs and pleura (40%, 33/82), liver (37%, 30/82), supradiaphragmatic lymph nodes (34%, 28/82), and adrenal glands (15%, 12/82). Supradiaphragmatic lymphadenopathy was more common in patients with osseous metastases (45%, 25/56) than in patients without concurrent osseous involvement (12%, 3/26; $p < 0.05$). There was no significant correlation between the other atypical metastatic sites and osseous metastases. Abdominal visceral metastasis occurred more frequently in patients with a high Gleason grade (25/43, 58%) than in patients with a low Gleason grade (9/29, 31%; $p < 0.05$). There was no significant correlation between metastatic pattern and PSA level.

CONCLUSION. The lungs and pleura, liver, supradiaphragmatic lymph nodes, and adrenal glands are the most common extranodal metastatic sites of prostate cancer. Supradiaphragmatic lymphadenopathy was strongly associated with concurrent osseous metastases.

Prostate carcinoma ranks as the most common noncutaneous cancer and as the third most common cause of cancer death in men in the United States [1]. Metastatic prostate cancer has a recognizable pattern of spread, most often to regional lymph nodes and the bones [2, 3]. Pelvic and abdominal retroperitoneal lymph

likelihood of encountering atypical metastatic sites from prostate cancer. Therefore, radiologists should be familiar with the pathways of spread including common and uncommon sites of metastases.

However, to date little attention has been focused on documenting the radiologic and clinical features of the less common sites of

Keywords: atypical metastatic sites, oncologic imaging, osseous metastases, prostate cancer

DOI:10.2214/AJR.11.7533

Pulmonary & Respiratory Medicine

Shantanu Singh and Ashish Singh, J Pulmon Resp Med 2013, 3:1
http://dx.doi.org/10.4172/2161-105X.1000135

Case Report Open Access

Metastasis of Prostate Cancer to Pleura

Shantanu Singh* and Ashish Singh

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Abstract

Prostate cancer is the most common type of malignancy in males in many parts of the world. Prostate adenocarcinoma is both second leading cause of cancer and cancer death in the North American males. Of the patients who are detected with prostate cancer, about 10-20% of them are found to have metastatic cancer on presentation. Prostate cancer commonly metastasizes to the bones; vertebrae, ribs, long bones and the skull.

Metastasis to pleura is extremely uncommon. We present a case of prostate cancer metastasizing to pleura. The purpose of this report is to remind physicians of this rare occurrence. This case also highlights that pleural fluid cytology can be negative repeatedly even though pleural surface has multiple metastatic nodules.

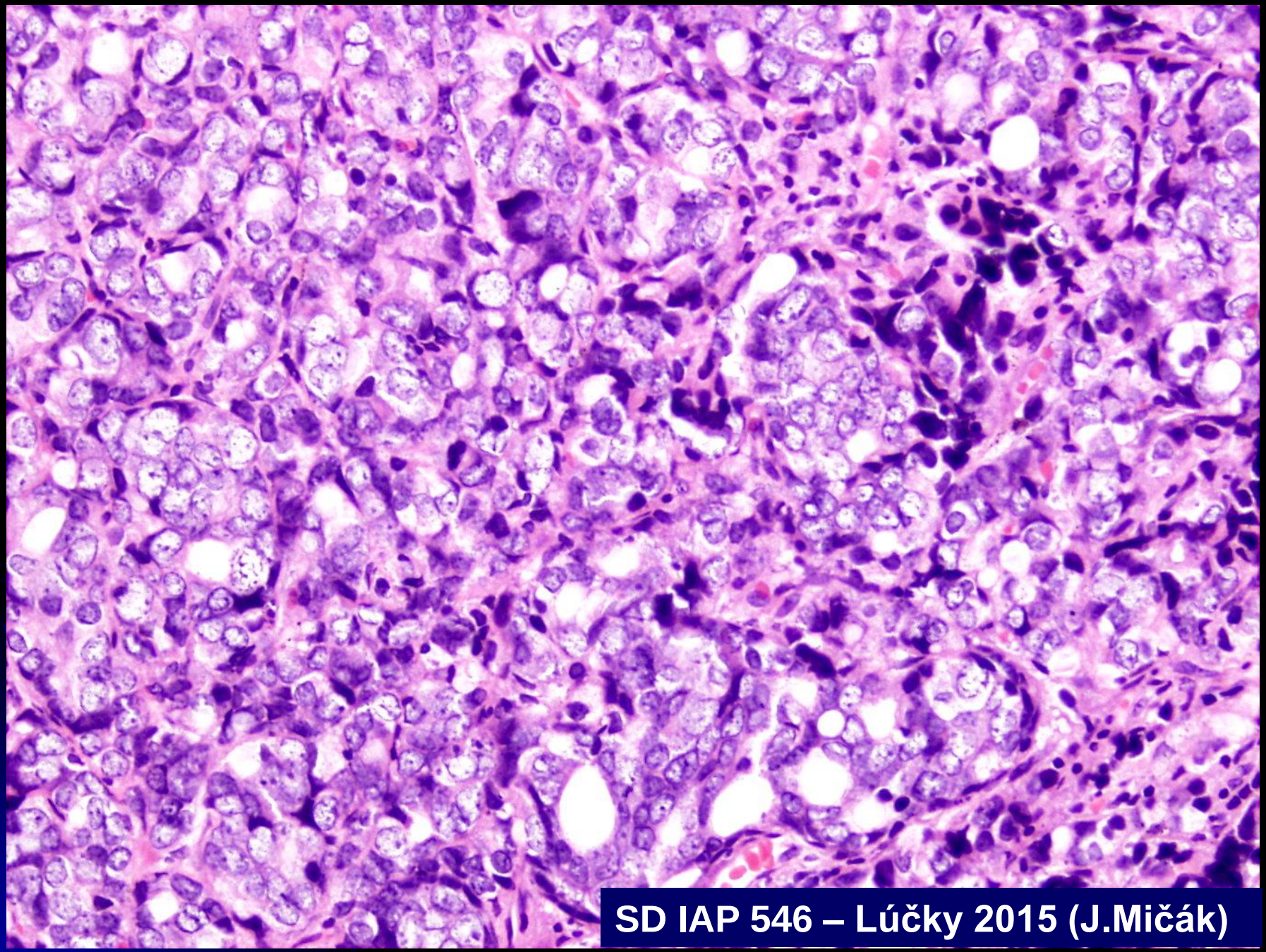
Keywords: Prostate cancer; Pleural metastasis; Pleural effusion; Video assisted thoracoscopic surgery; Thoracoscopy

Key Message

The purpose of this report is to remind busy practicing physicians to keep pleural metastasis in the differential diagnosis in a patient with history of Prostate Cancer who presents with pleural effusions even if repeated pleural fluid cytology are negative. When index of suspicion is high in such patients, thoracoscopy can be done to establish the diagnosis.

infiltrate suspicious for pneumonia and small right pleural effusion. Treatment for pneumonia was started.

Patient's symptoms worsened despite treatment for pneumonia. CXR showed an increase in the pleural effusion. A diagnostic and therapeutic thoracentesis was done with removal of 1500 cc of straw colored fluid. Fluid analysis showed it to be transudate and cytology was negative. CT chest showed mediastinal adenopathy (Figure 1), right hilar mass (Figure 2) suspicious for primary lung carcinoma with metastases, right pleural effusion and near complete consolidation of right lower lobe (Figure 3). Bronchoscopy showed widened right minor


SD IAP 546 – Lúčky 2015 (J.Mičák)

ZÁVER

- MTS CaP do pleury sú relatívne zriedkavé ...,
- so stúpajúcou incidenciou CaP a predlžovaním primerného veku mužov je treba túto možnosť myslieť v rámci diferenciálnej diagnostiky
- patológ by nemal suplovať predoperačnú dg.
- opakovanie je matka múdrosti (Lúčky 2015)

Ďakujem za pozornosť