

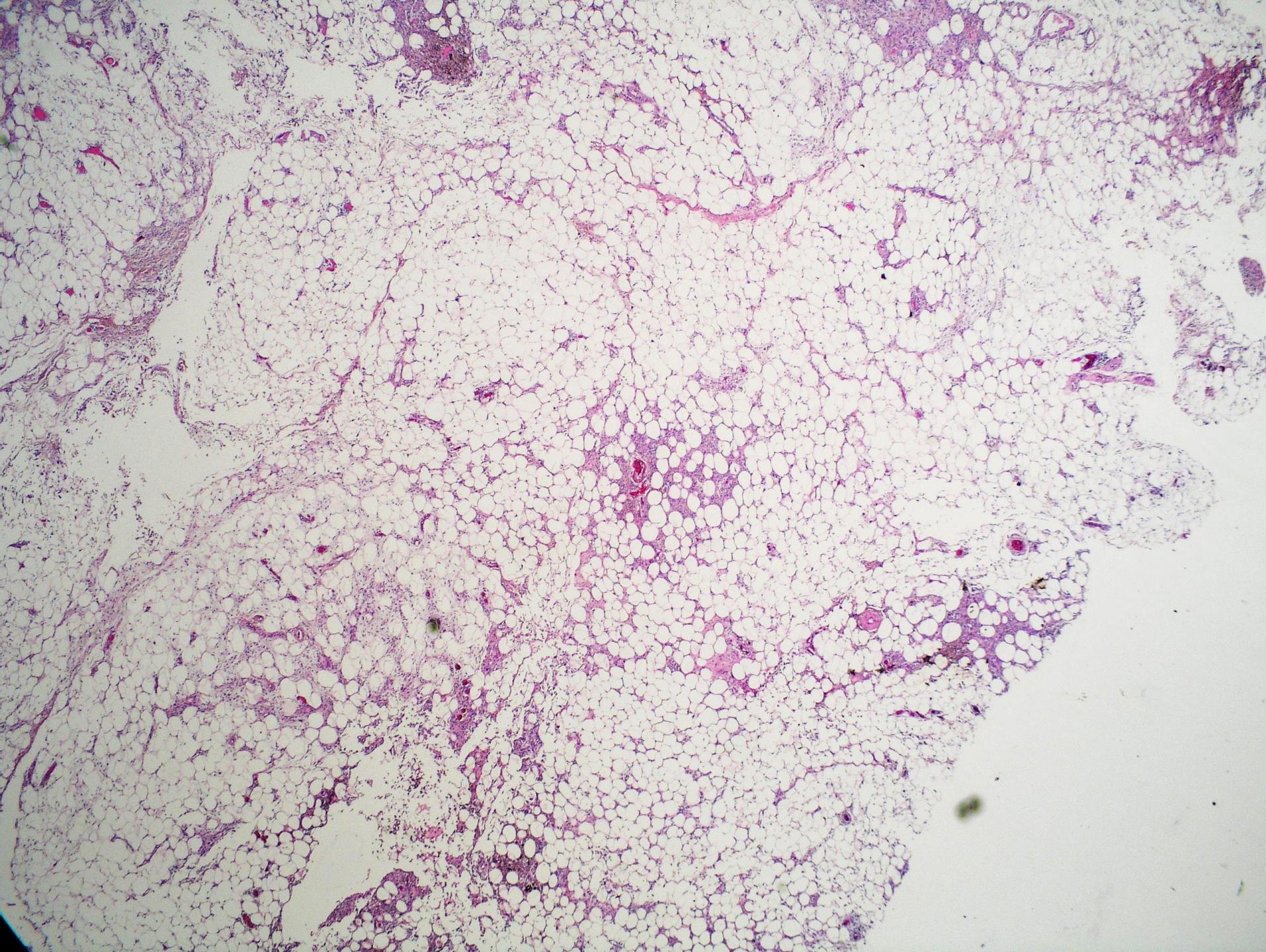
# Prípad SD-IAP č. 622

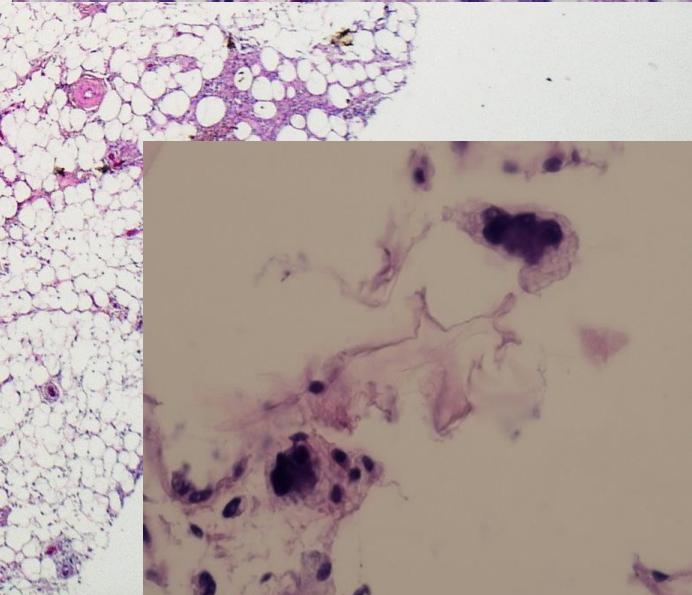
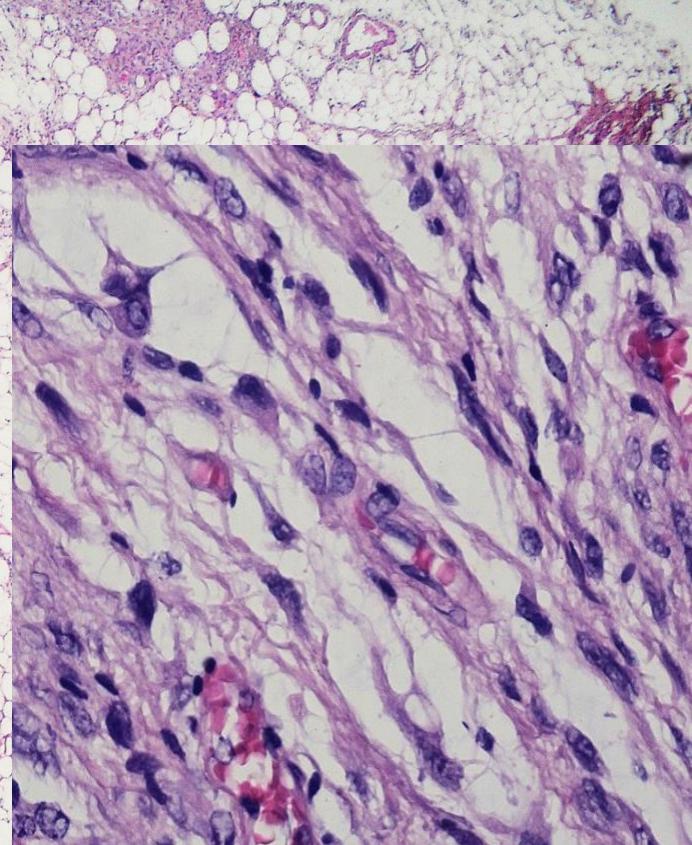
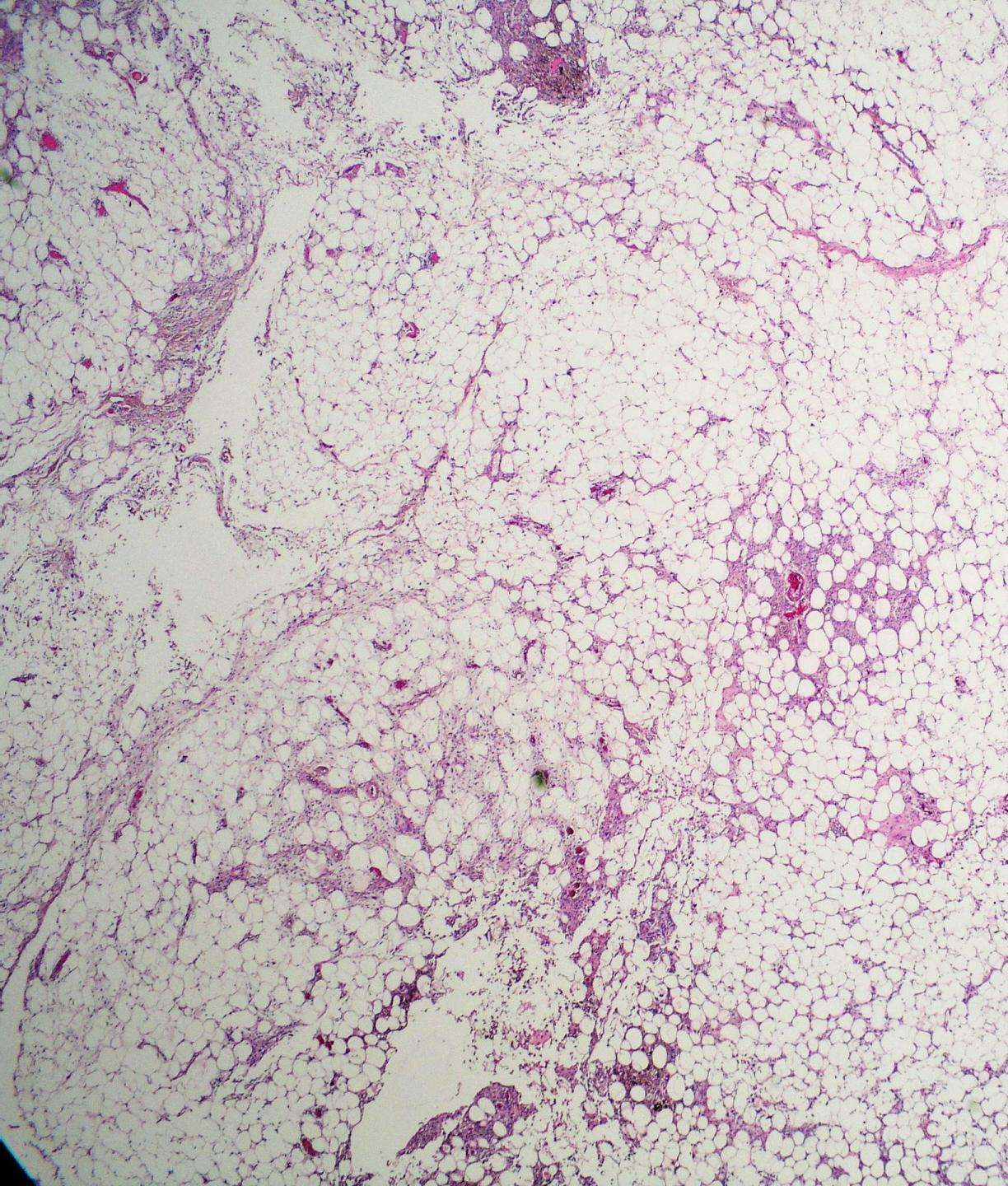
B. Rychlý

J. Benko

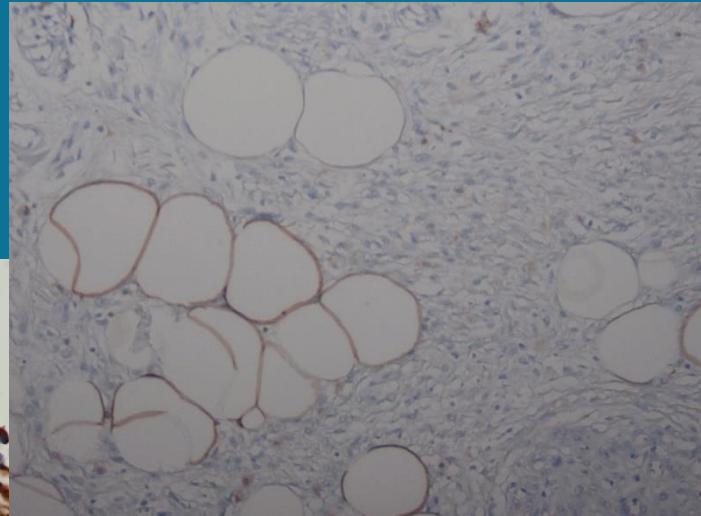
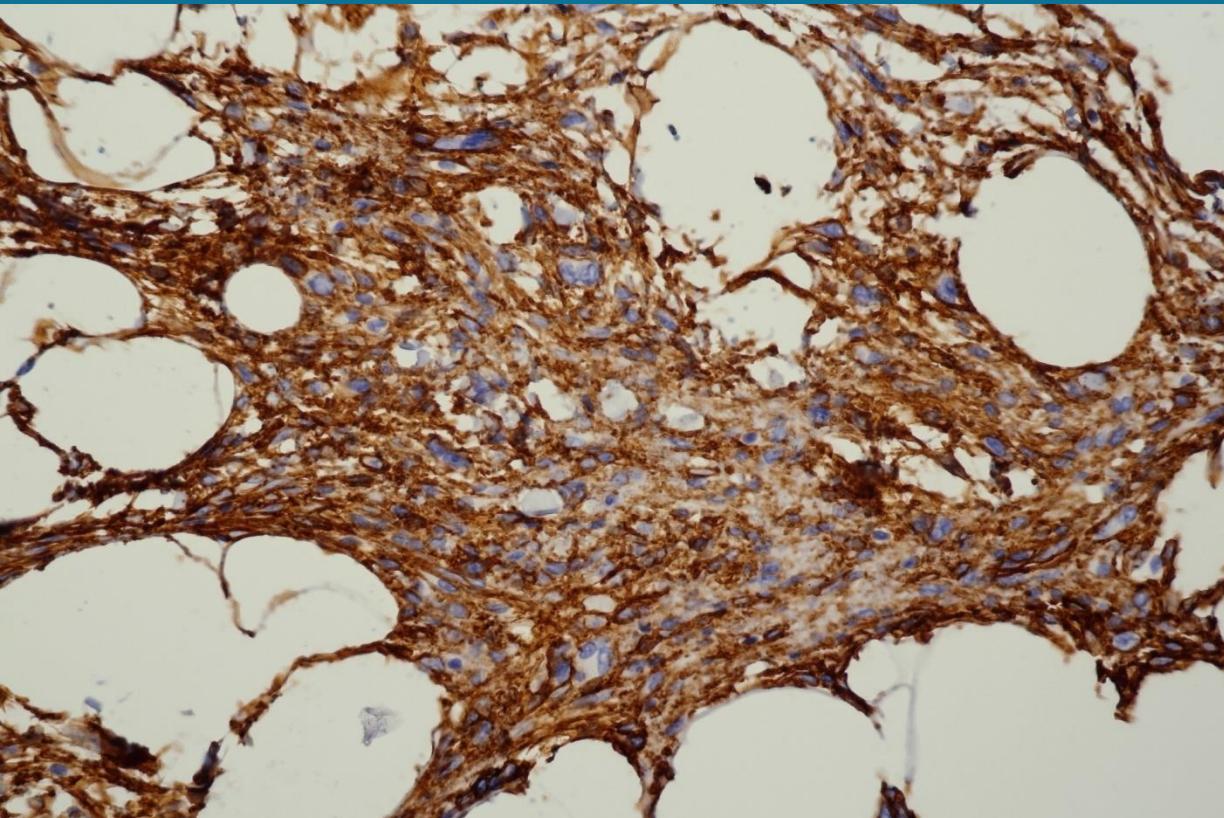
# Klincké údaje:

- 45-ročná žena s diagnózou fibrolipoma pedis l. dx.





CD34

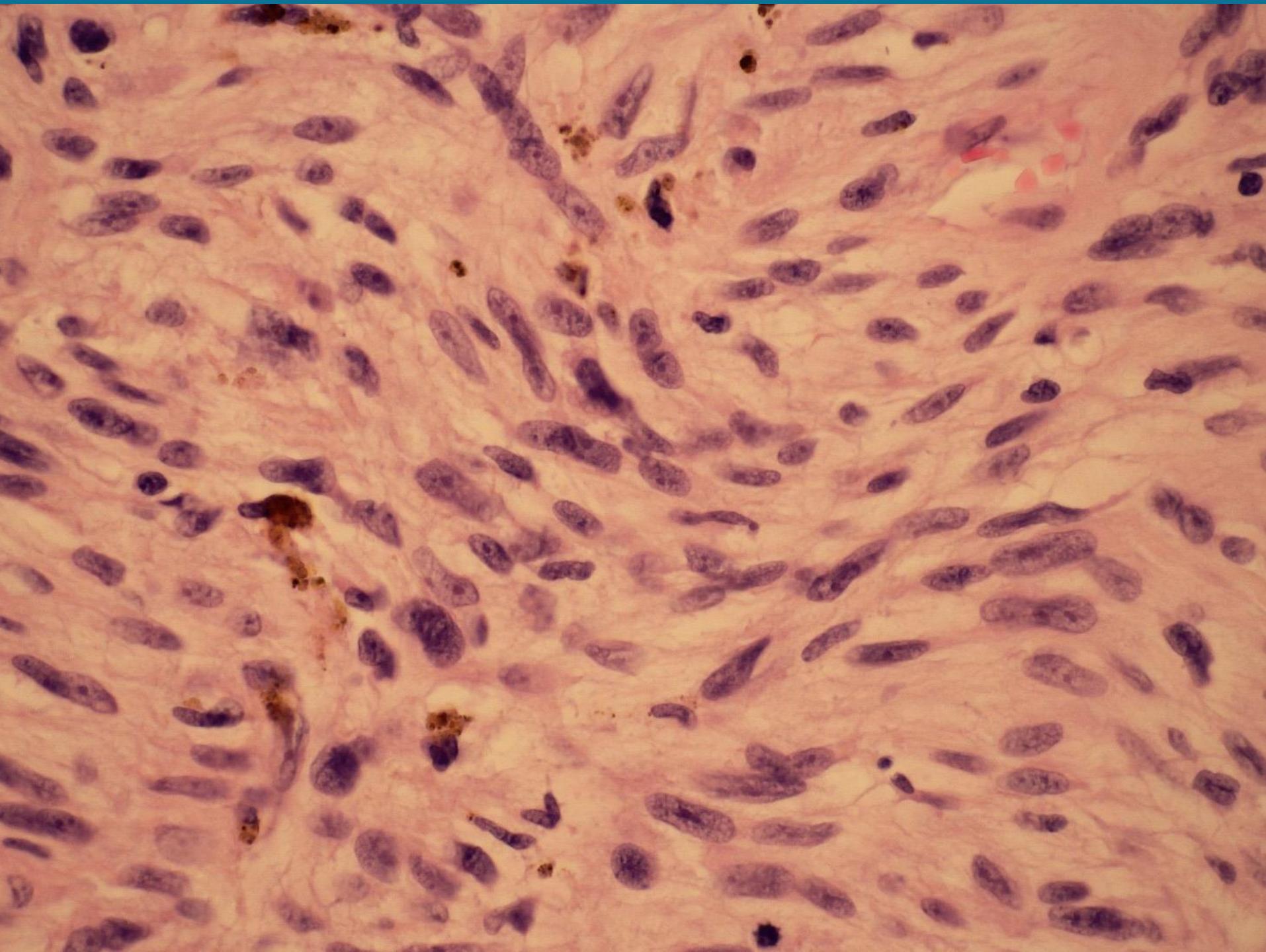


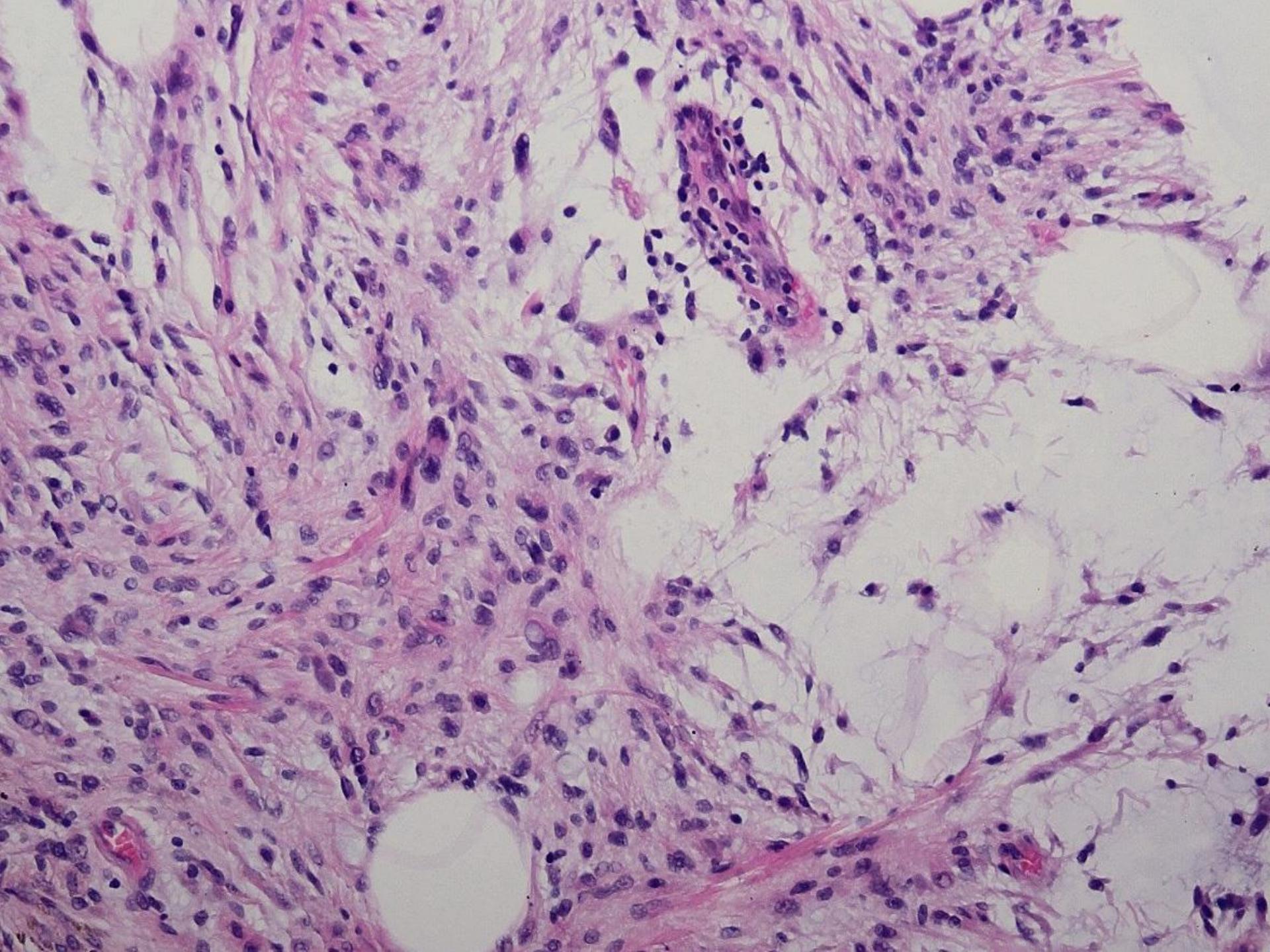
S-100

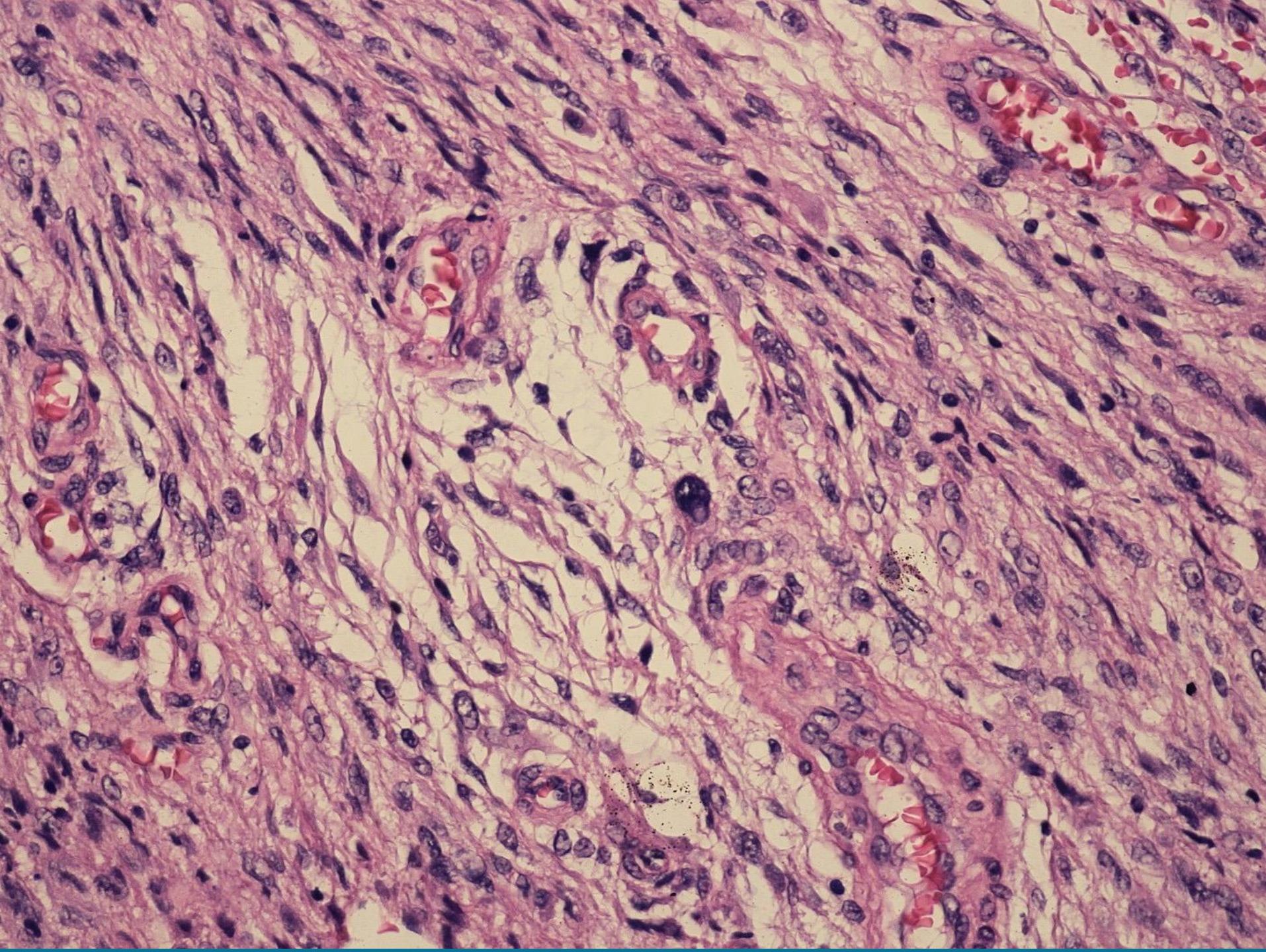
+ trochu  
CD68

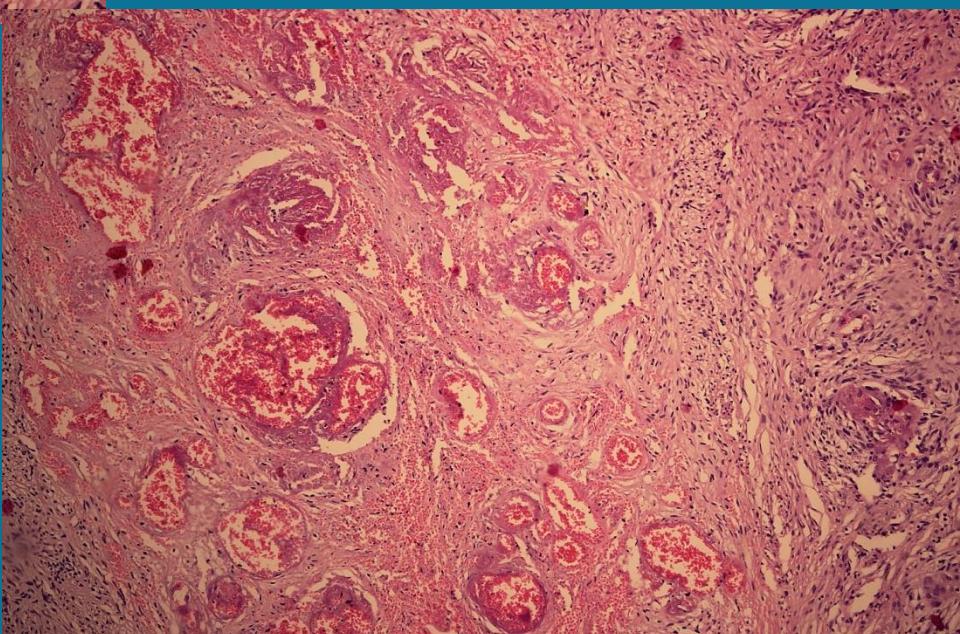
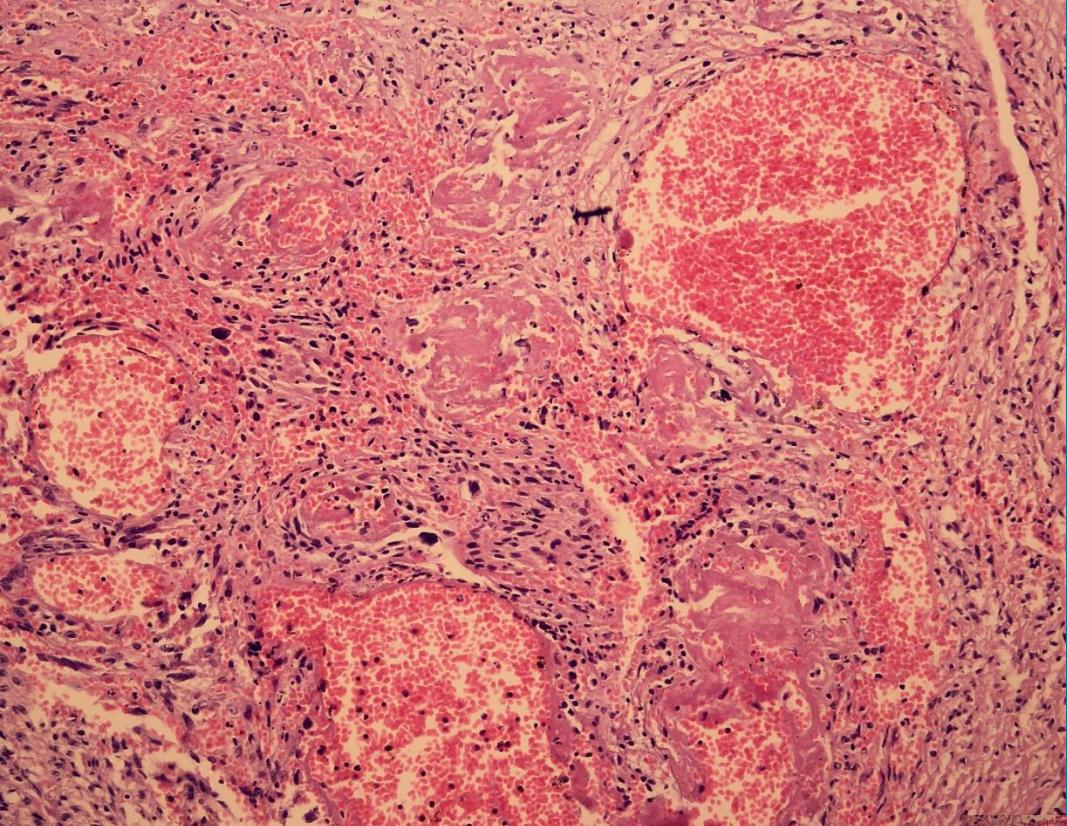
MDM2 a CDK4  
nemáme

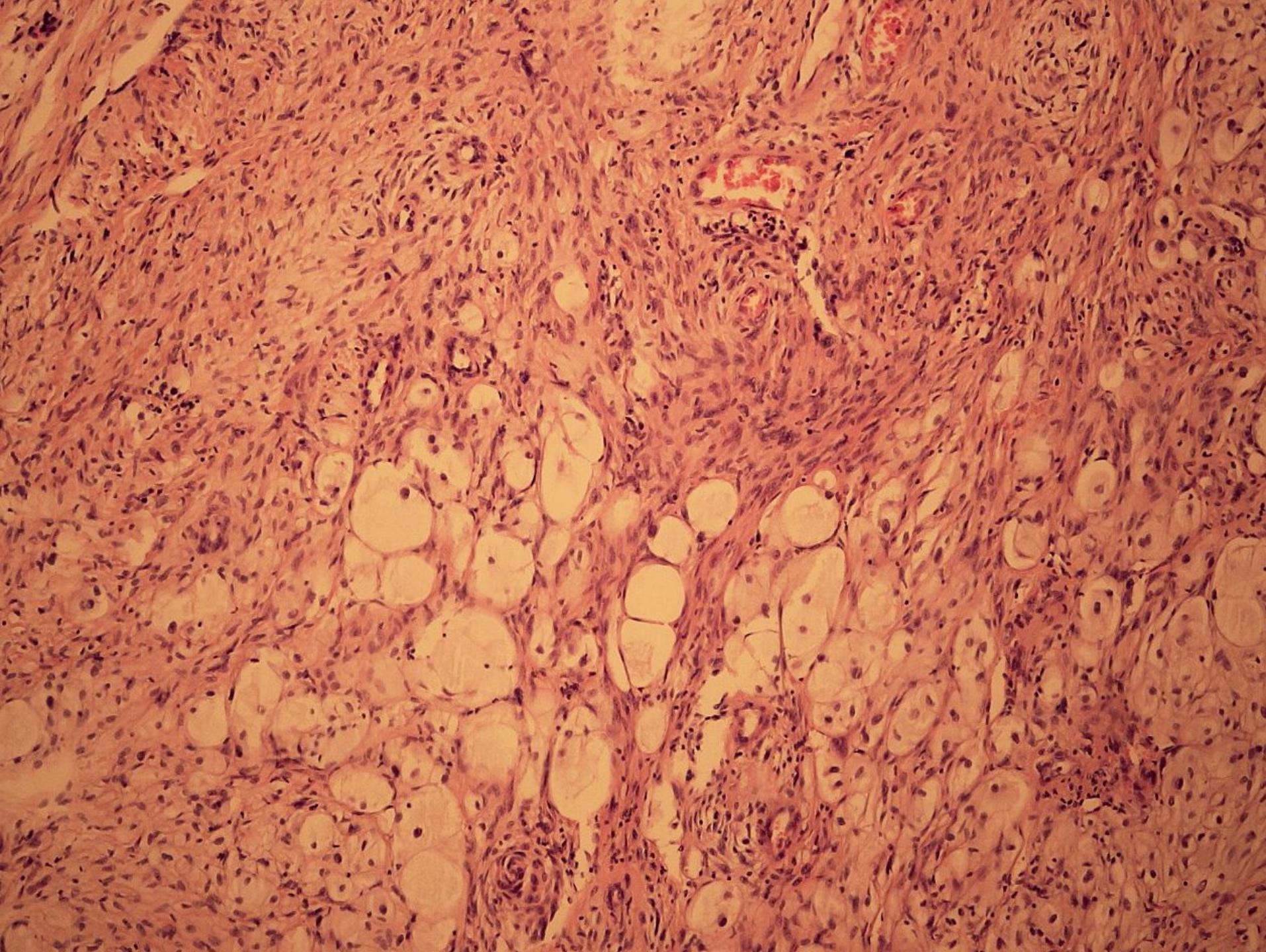
P16, SMA, HMB45, P53, KI67,  
CD30, CD15, EBV, Cyclin D1, PRAME...

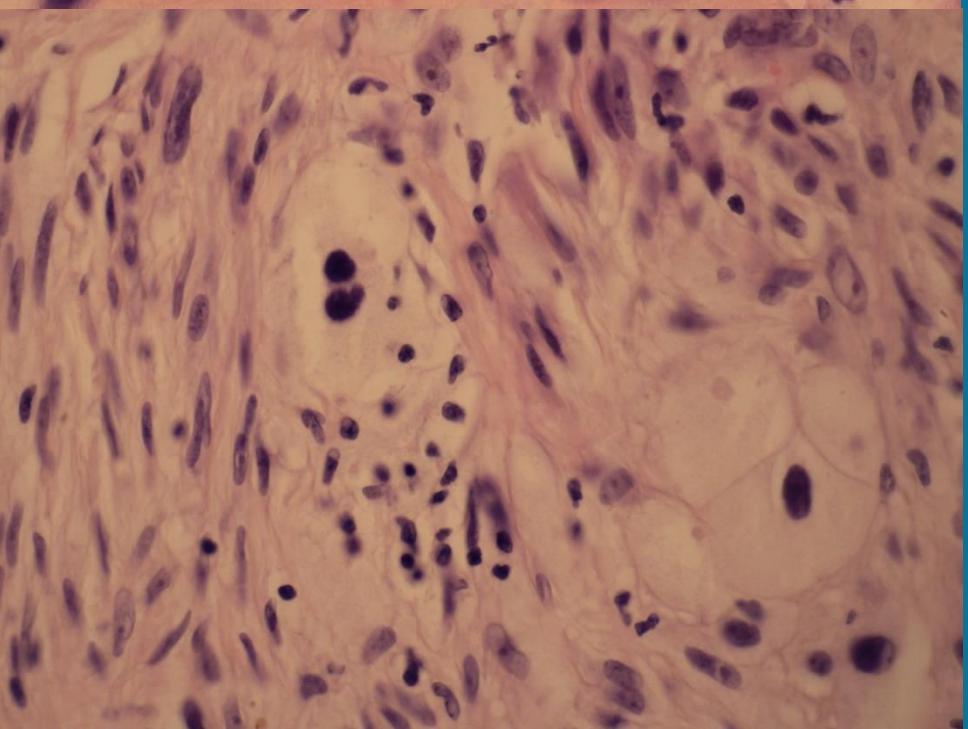
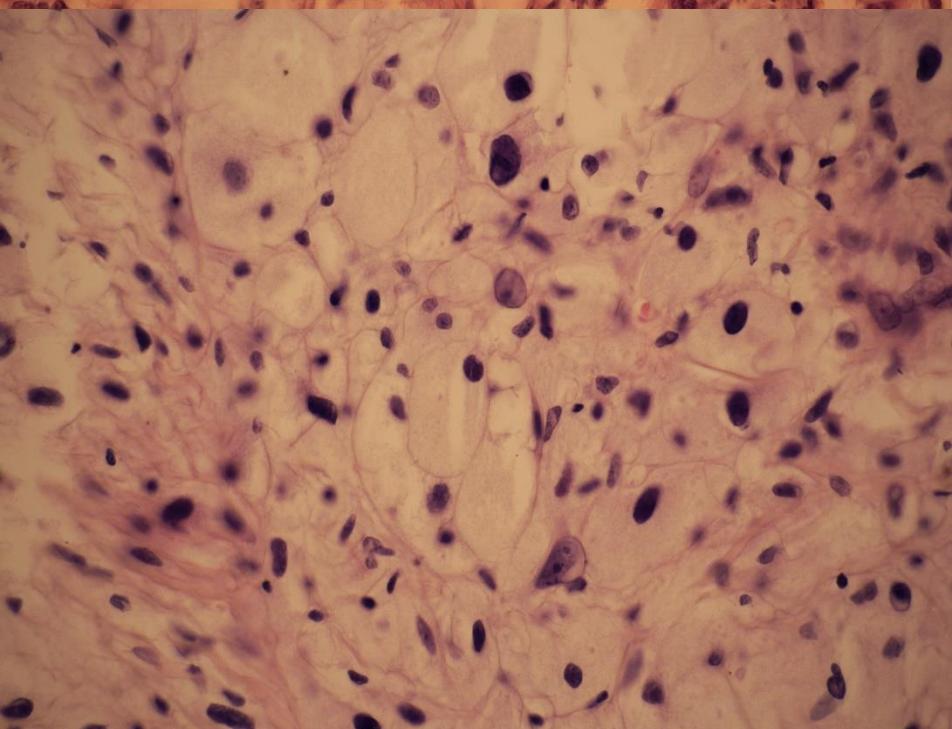
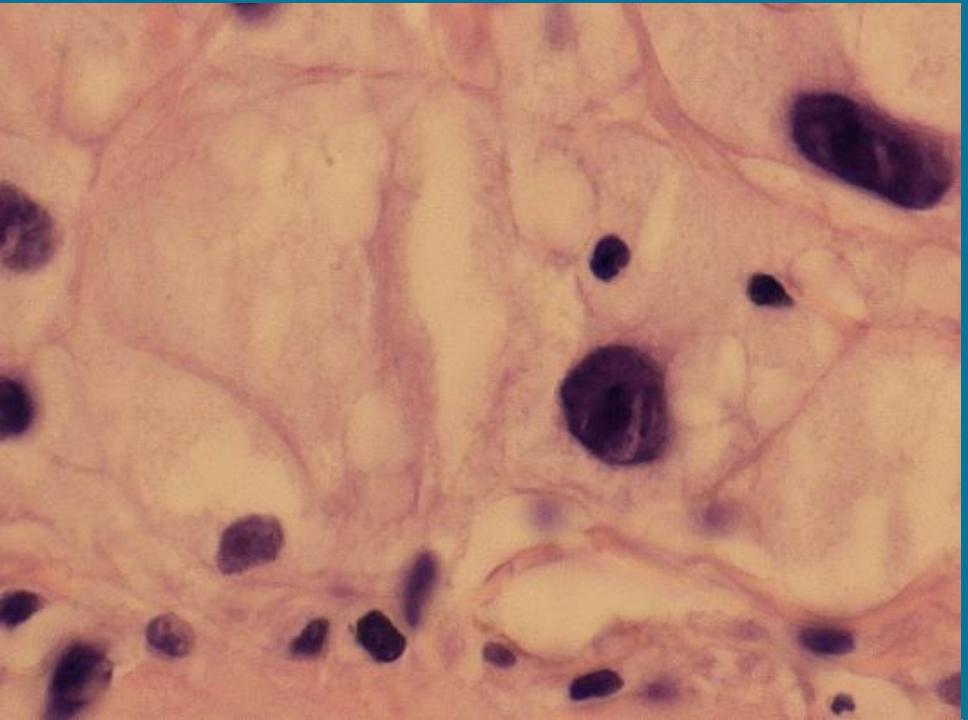
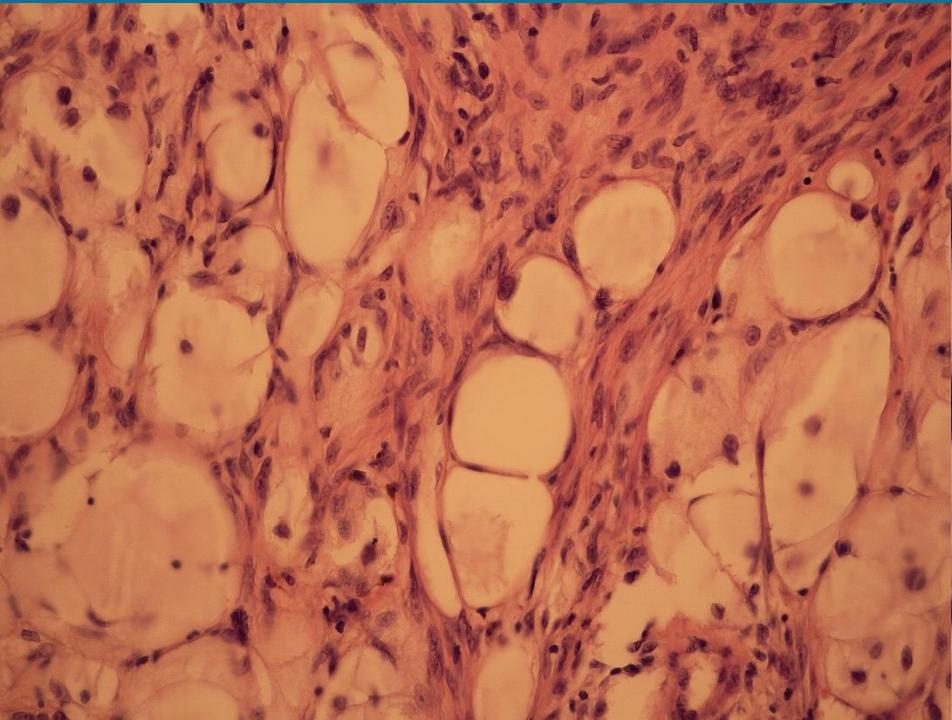


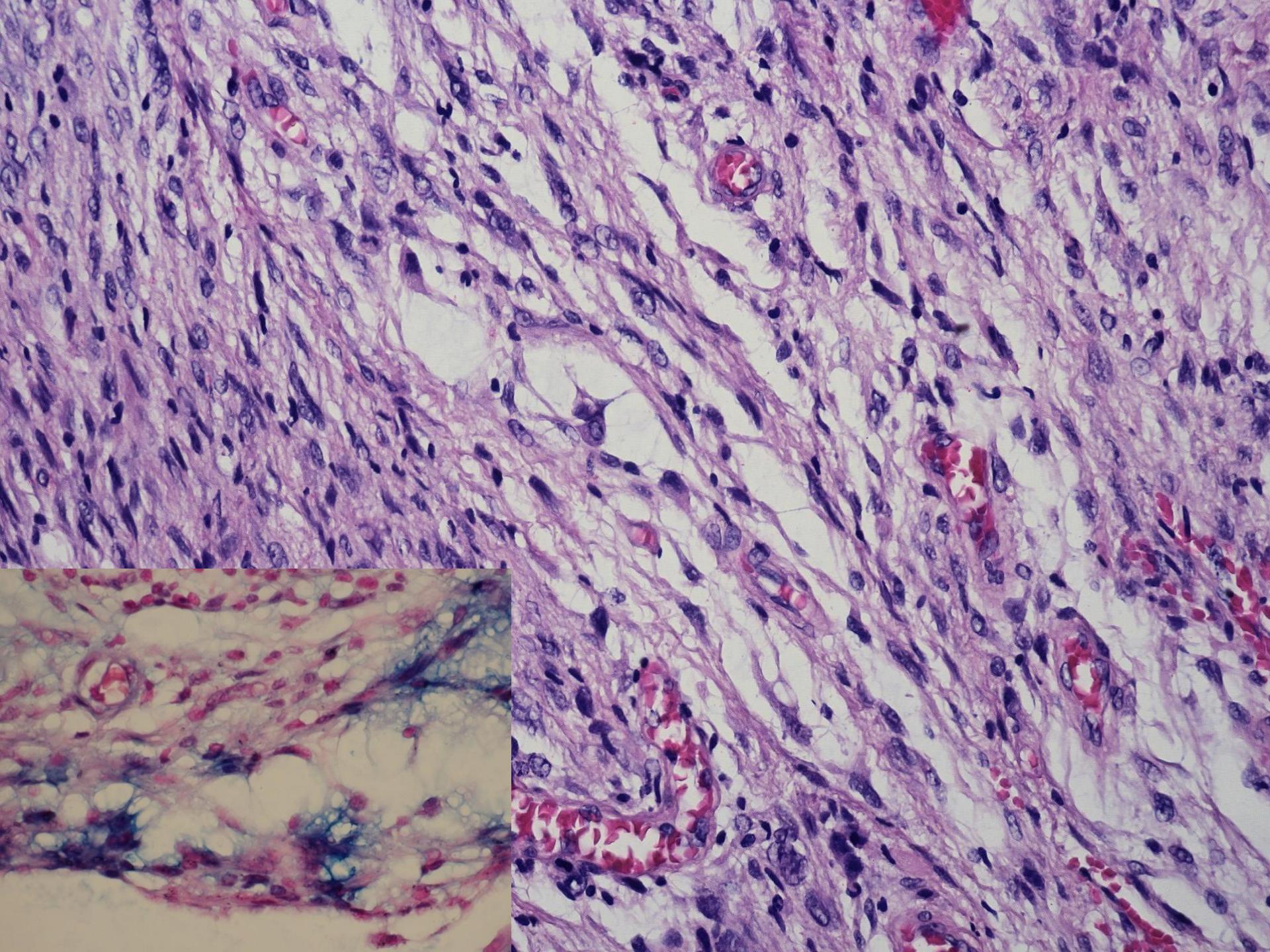


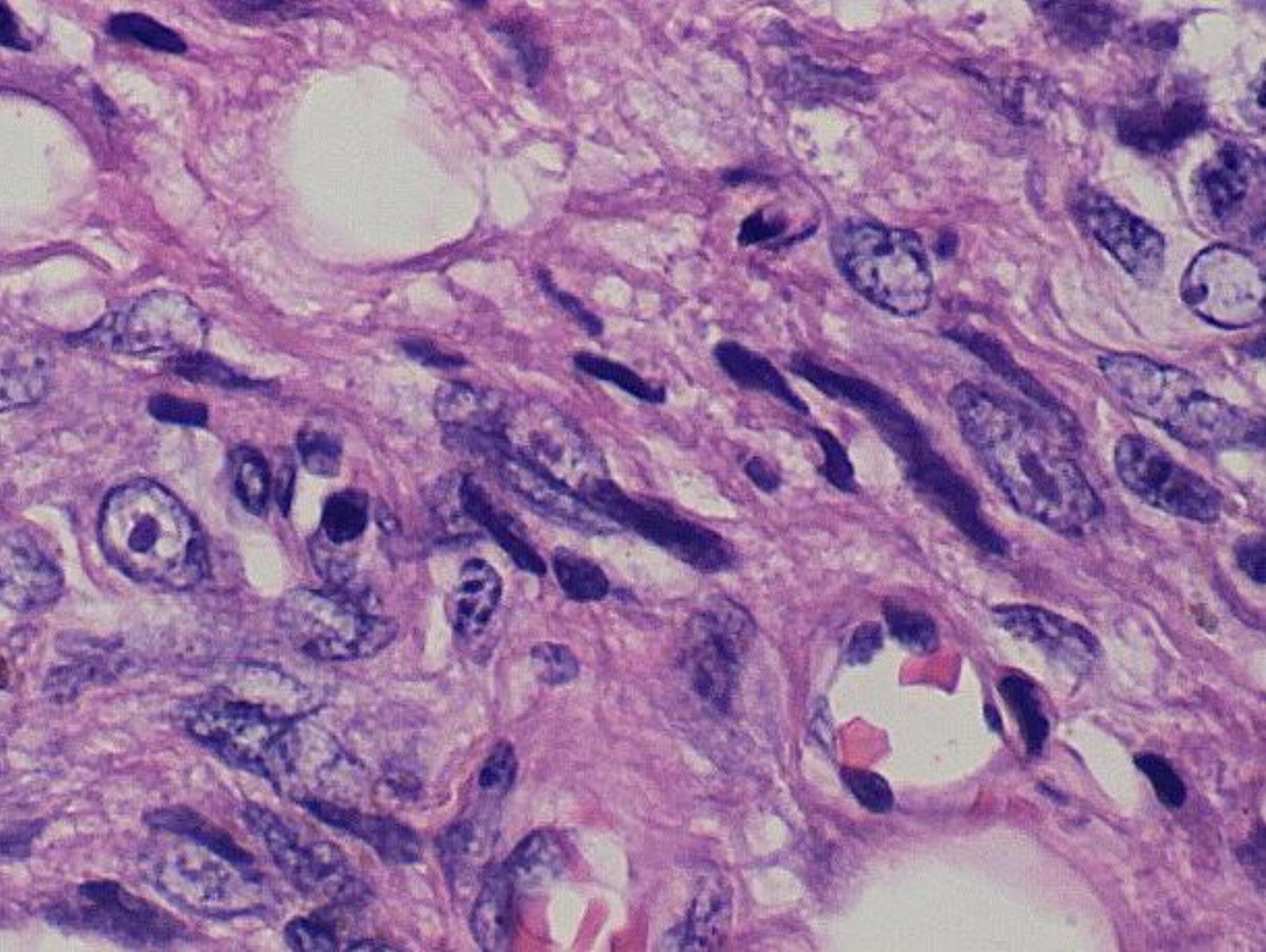


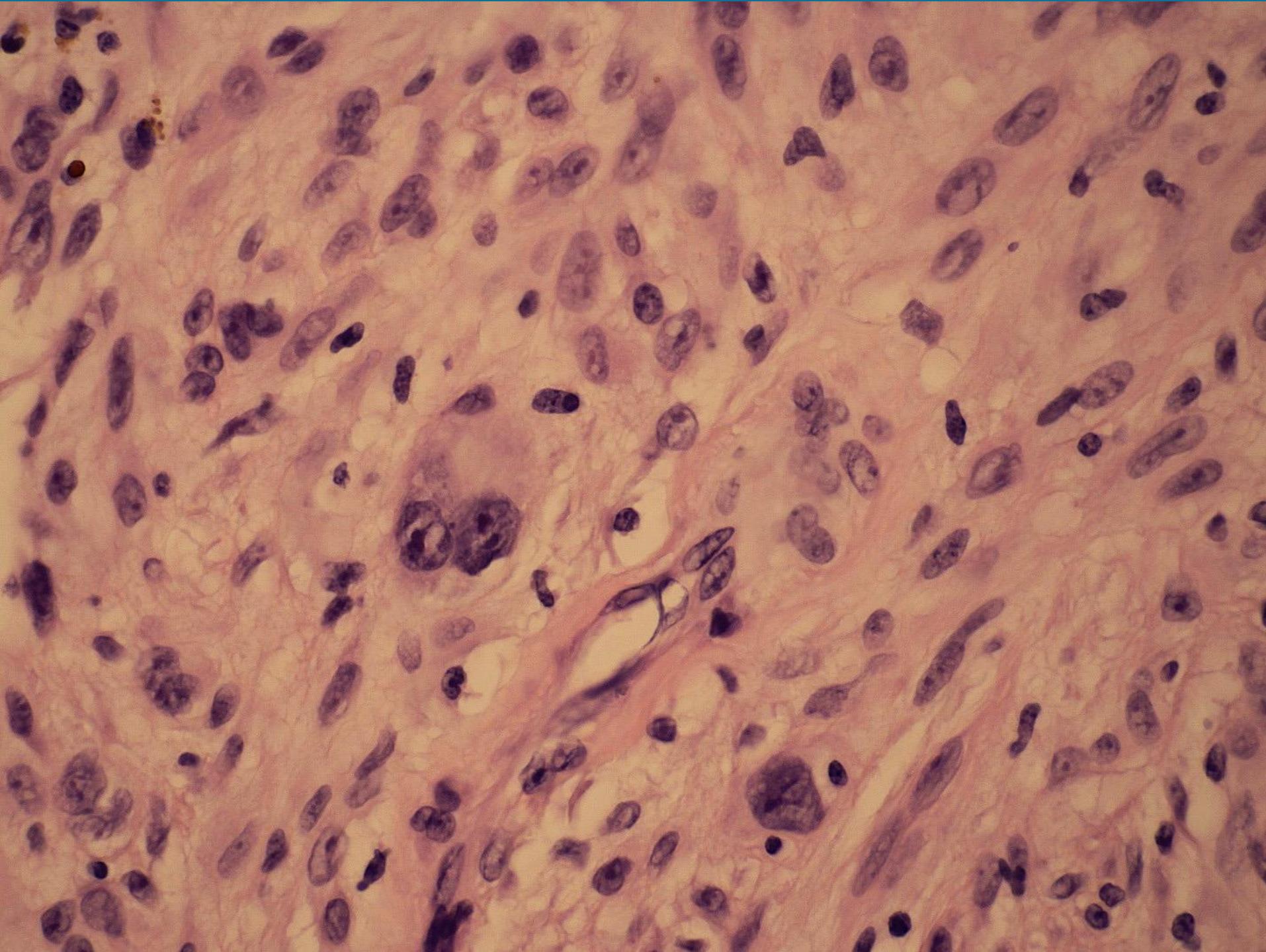


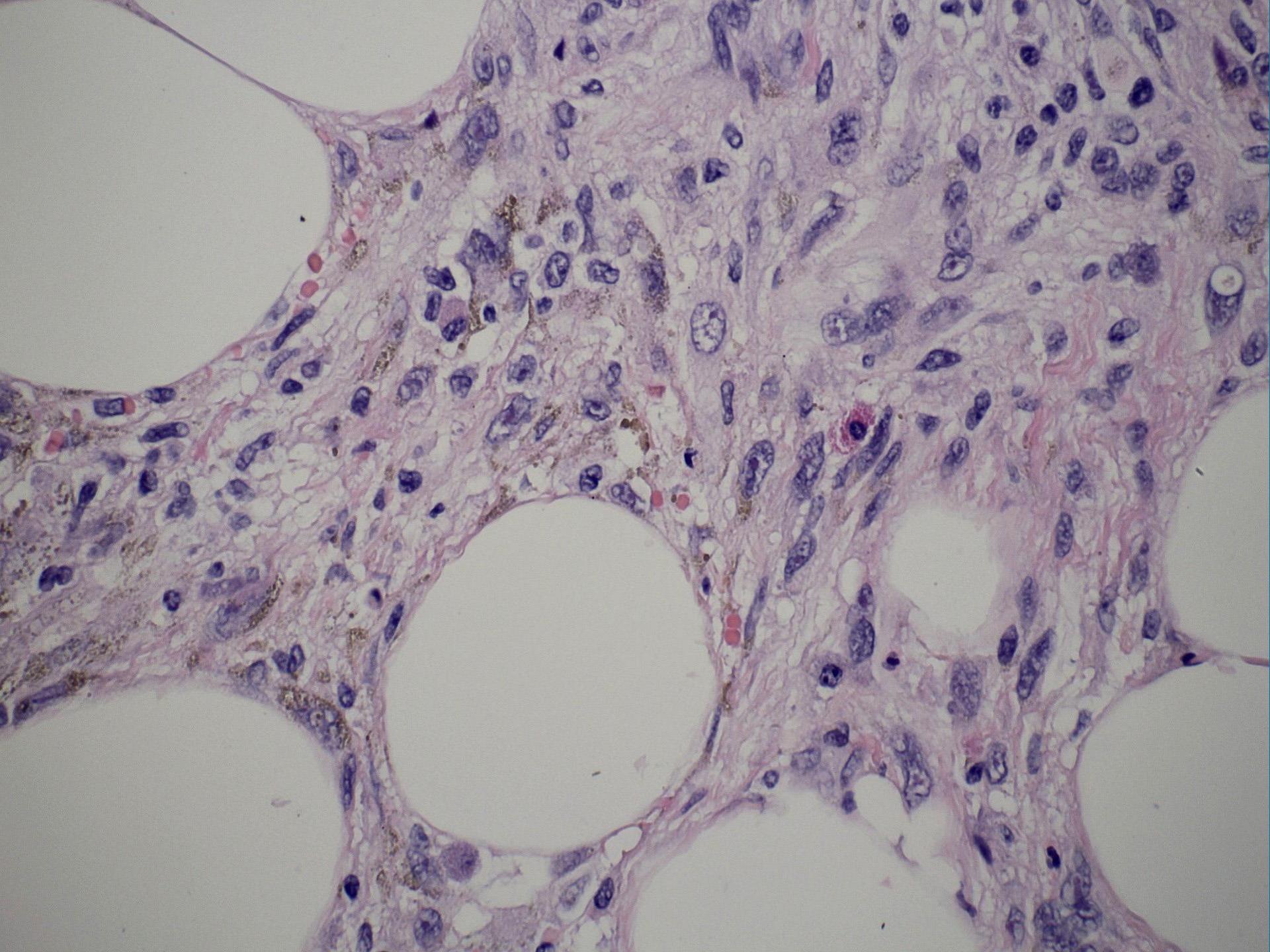














# Naša diagnóza:

Myxoinflamatórny fibroblastický sarkóm

+ konzultácia

# MIF

- 1998 nezávisle popísaný tromi skupinami

1. Montgomery EA, Devaney KO, Giordano TJ, et al. Inflammatory myxohyaline tumor of distal extremities with virocyte or Reed-Sternberg-like cells: a distinctive lesion with features simulating inflammatory conditions, Hodgkin's disease, and various sarcomas. *Mod Pathol.* 1998;11:384–391.
2. Meis-Kindblom JM, Kindblom LG. Acral myxoinflammatory fibroblastic sarcoma: a low-grade tumor of the hands and feet. *Am J Surg Pathol.* 1998;22:911–924.
3. Michal M. Inflammatory myxoid tumor of the soft parts with bizarre giant cells. *Pathol Res Pract.* 1998;194:529–533.

- WHO 2002 - MIF

# MIF

- LG mezenchymálny tumor
- predilekcia pre akrálne lokality
- častá rekurencia
- zriedkavé MTS
- možná ale zriedkavá histologická progresia do HG sarkómu

# Zbytočné imuná

- Miettinen 2014 – 104 prípadov
- vimentin (100%),
- D2-40 (86%)
- CD34 (50%)
- keratin (33%)
- CD68 (27%)
- actin (26%), desmin (9%)
- S-100 protein (7%)
- EMA (6%).

# MIF - histológia

- fibrosklerotická stróma
- mucinózne ložiská (dilepidated brick wall)
- epitheloidné bunky s prominentnými eozinofilnými jadierkami (virocyte, RS like)
- pseudolipoblasty (soccer balls)
- zápalové bunky
- emperypolesis (10% ? / 100%)
- jednotlivé zložky môžu byť rozlične zastúpené

# MIF – atypické znaky

- Miettinen 2014 – 104 prípadov
- cca 20% 1 alebo viac atypických znakov
- komplexná „sarcoma like“ vaskulatúra
- hypercelurita
- zvýšená mitotická aktivita, atypické mitózy
- nekorelujú s agresívnym správaním

# HFL – PHAT - MIF

- hemosiderotic fibrohistiocytic lipomatous lesion
- pleomorphic hyalinizing angiectatic tumor
- myxoinflammatory fibroblastic sarcoma
- rekurencie, progresie, kompozitné tumory

# HFL – PHAT - MIF

Elco CP, Marino-Enríquez A, Abraham JA, et al. Hybrid myxoinflammatory fibroblastic sarcoma/hemosiderotic fibrolipomatous tumor: report of a case providing further evidence for a pathogenetic link. Am J Surg Pathol 2010; 34: 1723-7.

Antonescu CR, Zhang L, Nielsen GP, et al. Consistent t(1;10) with rearrangements of TGFB3 and MGEA5 in both myxoinflammatory fibroblastic sarcoma and hemosiderotic fibrolipomatous tumor. Genes Chromosomes Cancer 2011; 50: 757-64.

Zreik RT, Carter JM, Sukov WR, et al. Myxoinflammatory fibroblastic sarcoma and hybrid hemosiderotic fibrolipomatous tumor/myxoinflammatory fibroblastic sarcoma: related or not? United States and Canadian Academy of Pathology Annual Meeting (platform presentation). Boston March 23 2015.

Riddle NN, Gardner JM. The new kids on the block: recently characterized soft tissue tumors. Surg Pathol Clin 2015; 8: 467-91.

# Genetika

- translokácia t(1;10)(p22:q24)  
s prestavbou a génov:
  - TGFB3 (Transforming Growth Factor Beta Receptor 3)
  - MGEA5 (Meningioma Expressed Antigen 5)



Pleomorphic hyalinizing angiectatic tumor revisited: all tumors manifest typical morphologic features of myxoinflammatory fibroblastic sarcoma, further suggesting 2 morphologic variants of a single entity<sup>☆,☆☆</sup>



Michael Michal, MD <sup>a,\*</sup>, Dmitry V. Kazakov, MD <sup>b</sup>, Ladislav Hadravský, MD <sup>b</sup>, Abbas Agaimy, MD <sup>c</sup>, Marián Švajdler, MD <sup>b,d</sup>, Naoto Kuroda, MD <sup>e</sup>, Michal Michal, MD <sup>b</sup>

<sup>a</sup> Department of Pathology, Charles University, Biomedical Center, Faculty of Medicine in Plzen and Charles University Hospital Plzen, Czech Republic

<sup>b</sup> Department of Pathology, Charles University, Medical Faculty and Charles University Hospital Plzen, Czech Republic

<sup>c</sup> Institute of Pathology, Friedrich-Alexander University Erlangen-Nürnberg, Erlangen, Germany

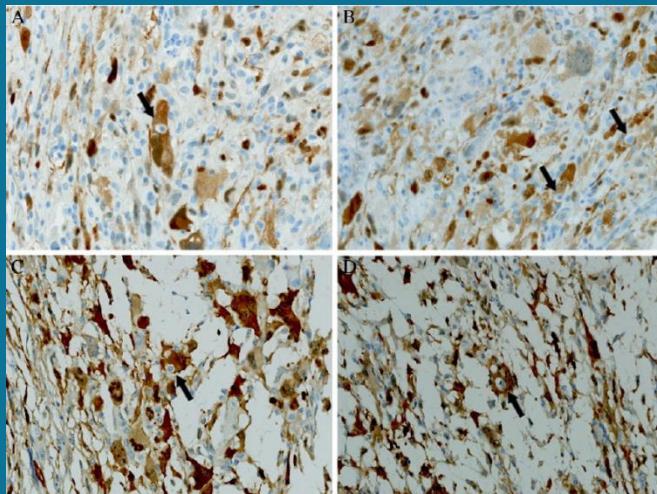
<sup>d</sup> Department of Pathology, Louis Pasteur University Hospital, Košice, Slovakia

<sup>e</sup> Red Cross Hospital Kochi, Kochi, Japan

- z 13 PHATov – 9 MIF = PHAT je MIF s ektatickými cievami
- s dôrazom na emperipolézu
- zo skupiny „nevím“ zaindexovaných 7 empeipolézov – 5 MIF

# Emperipolesis

- Cyclin D1, PRAME (myxoidný liposarkóm)



Annals of Diagnostic Pathology 19 (2015) 157–163

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Michael Michal, MD <sup>a,b</sup>, Dmitry V. Kazakov, MD, PhD <sup>a</sup>, Ladislav Hadrařský, MD <sup>a</sup>, Zdeněk Kinkor, MD, PhD <sup>a</sup>, Naoto Kuroda, MD <sup>b</sup>, Michal Michal, MD <sup>b</sup>

<sup>a</sup> Department of Pathology, Charles University, Medical Faculty and Charles University Hospital Písek, Písek, Czech Republic

<sup>b</sup> Red Cross Hospital Kochi, Kochi, Japan

CrossMark

# Dif. dg.

- zápalový proces
- myxóm
- nodulárna fascitída
- Rosai–Dorfman
- myxofibrosarkóm
- Hodgkin
- AFX
- myxoidný liposarkóm

# Záver

- každý môže stretnúť MIF
- akrálny vretenobunkový TU s prominentnými eozinofílnymi jadierkami

**Slovenská spoločnosť patológov SLS**  
**Slovenská divízia medzinárodnej akadémie patológie (SD IAP)**  
**Cytopathos spol. s r.o. a Ústav patológie SZU Bratislava**

usporiadajú v dňoch 19.- 20. mája 2017 v Senci

**24. ZJAZD SLOVENSKÝCH A ČESKÝCH  
PATOLÓGOV**  
**LETNÝ BIOPTICKÝ SEMINÁR SD IAP**  
**SEMINÁR SLOVENSKÝCH A ČESKÝCH**  
**HISTOLOGICKÝCH A CYTOLOGICKÝCH**  
**LABORANTOV**

