

Prípad SD-IAP č. 766

Marián Švajdler



Klinické údaje

- 65-ročný muž
- stav po operácii pilocytického astrocytému mozočka pred 50 rokmi
- aktuálne od roku 2017 zhoršovanie stability, od VI/2020 problémy s chôdzou

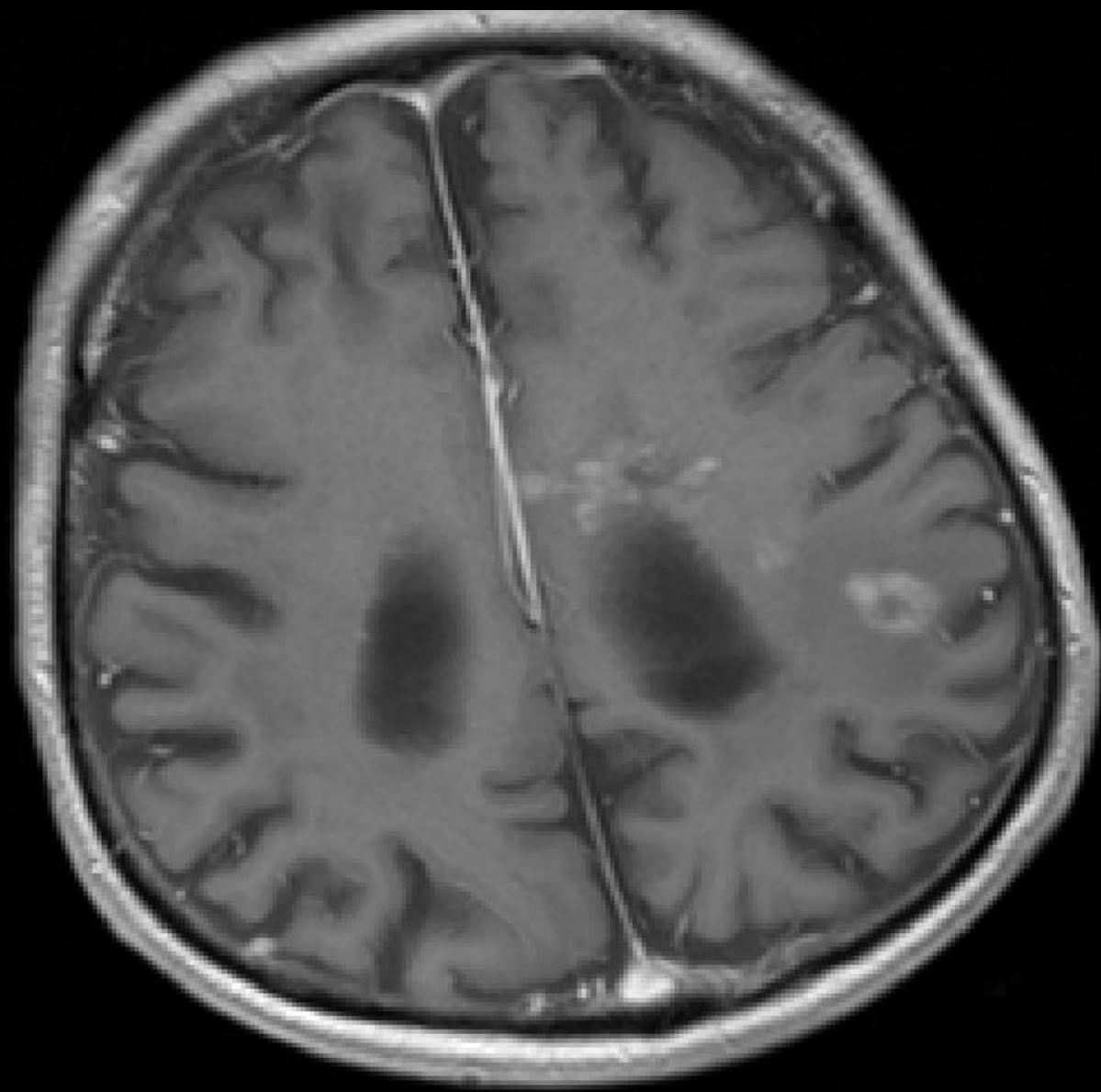
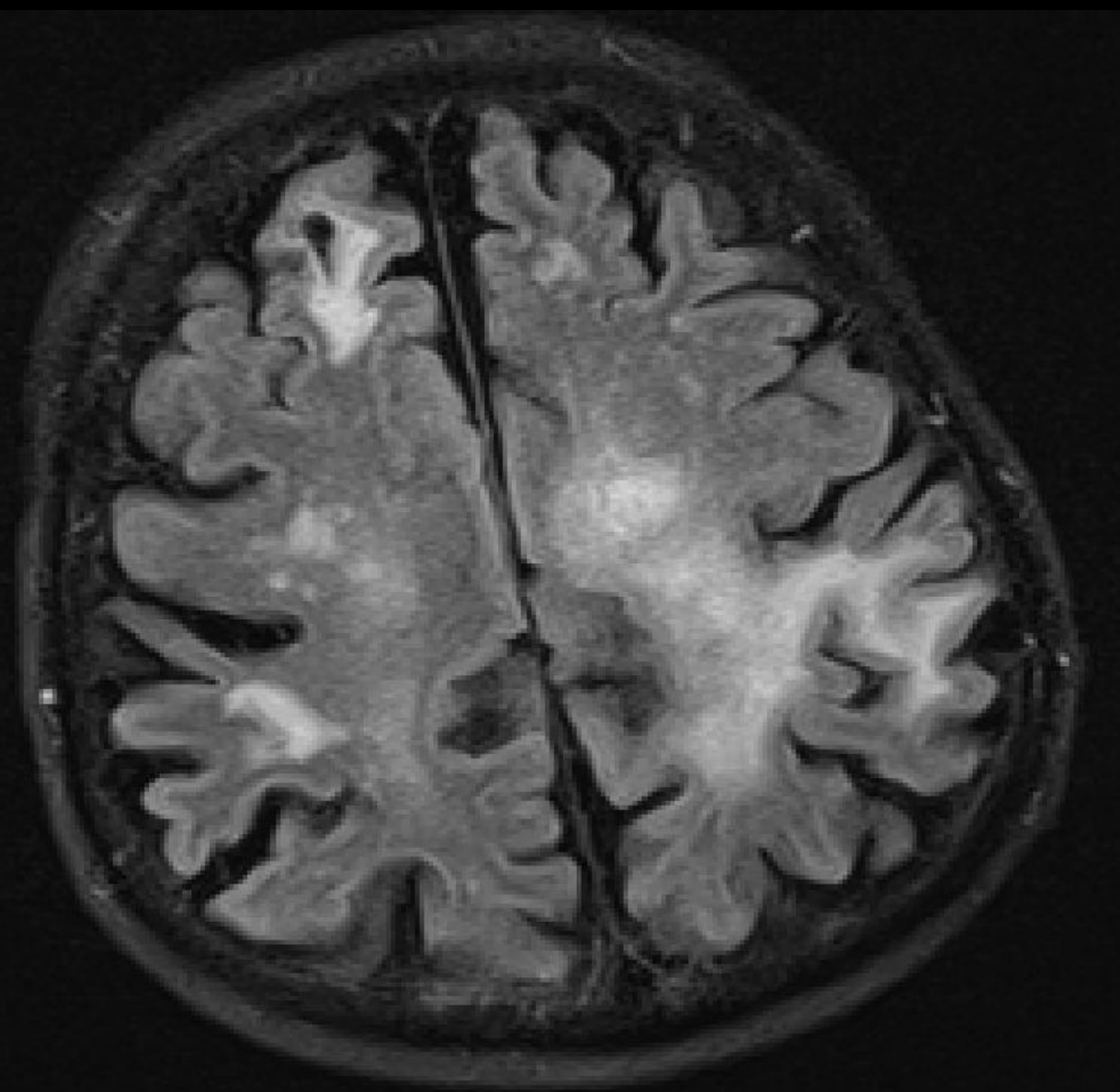
Zobrazovacie metódy

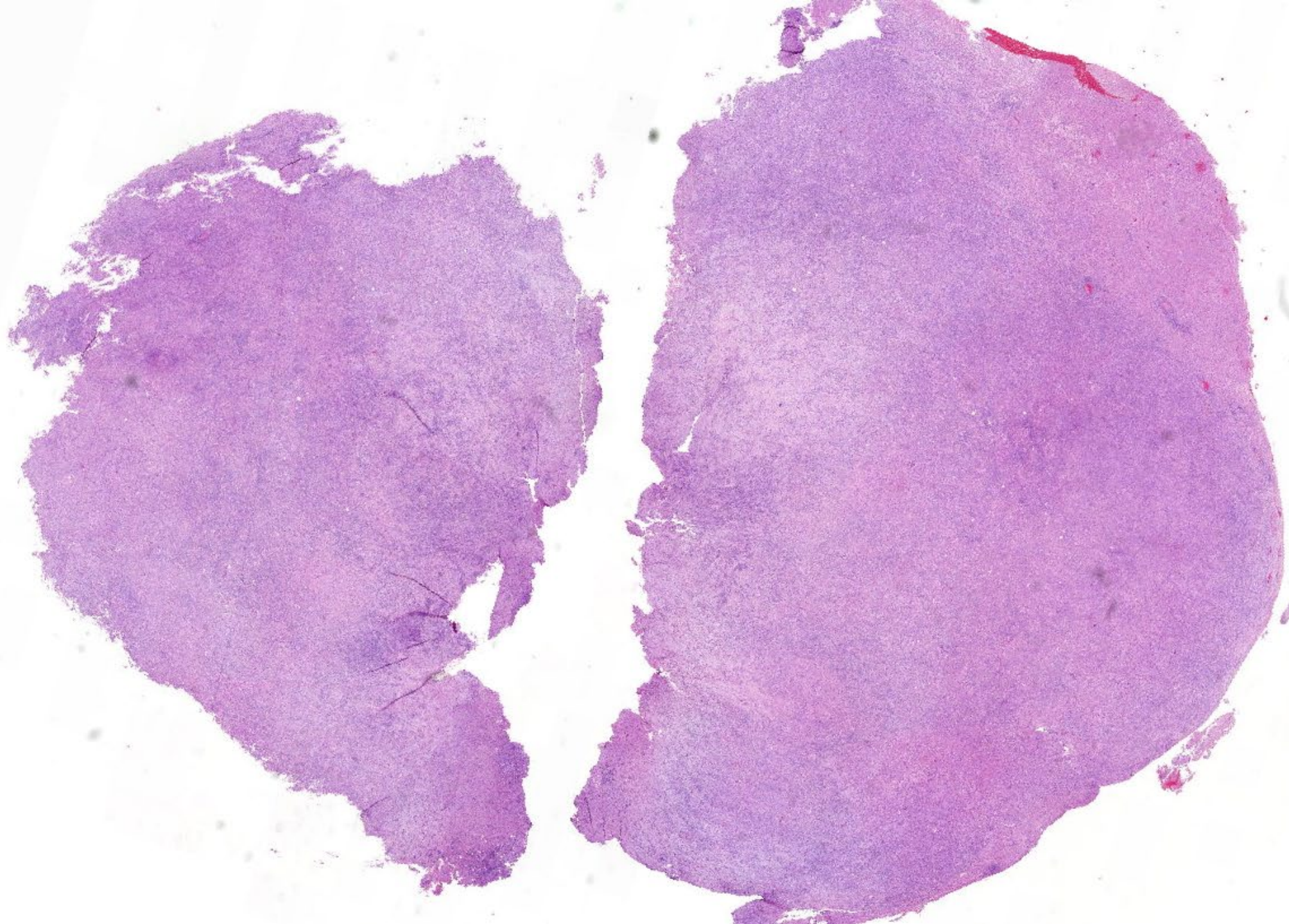
- MRI:

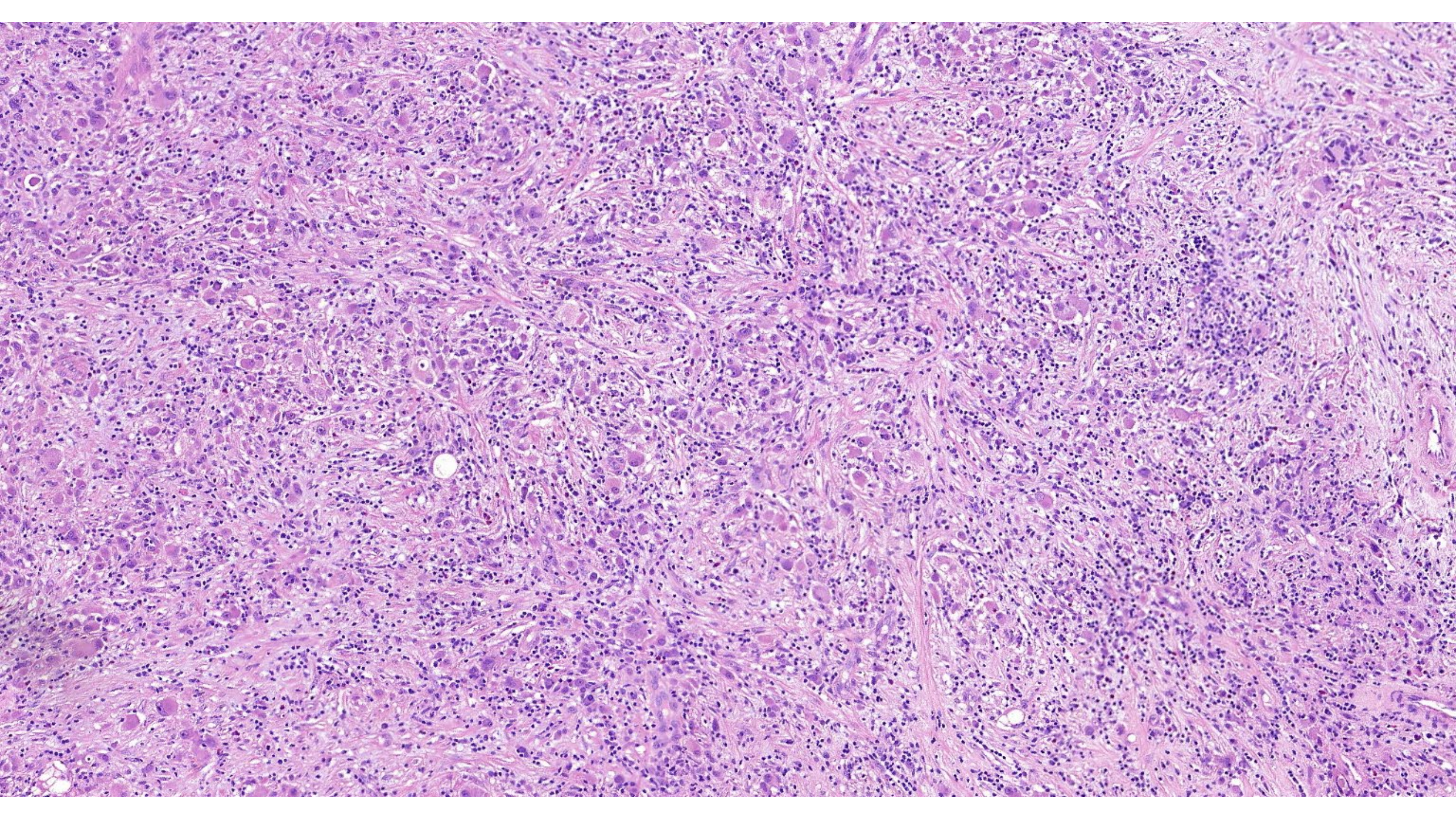
- výrazná atrofia mozočka, s multicystickou prestavbou vermis a výrazne rozšírená IV. komora
- supratentoriálne vľavo paraventrikulárne niekoľko nepravidelne sýtiacich sa lézií, najväčšie samostatné ložisko tesne nad komorou v ploche 30 mm, ložiská zasahujú do corpus callosum, nález v progresii...
- v.s. primárny viacložiskový nádorový proces – najskôr GBM, menej pravdepodobne lymfóm

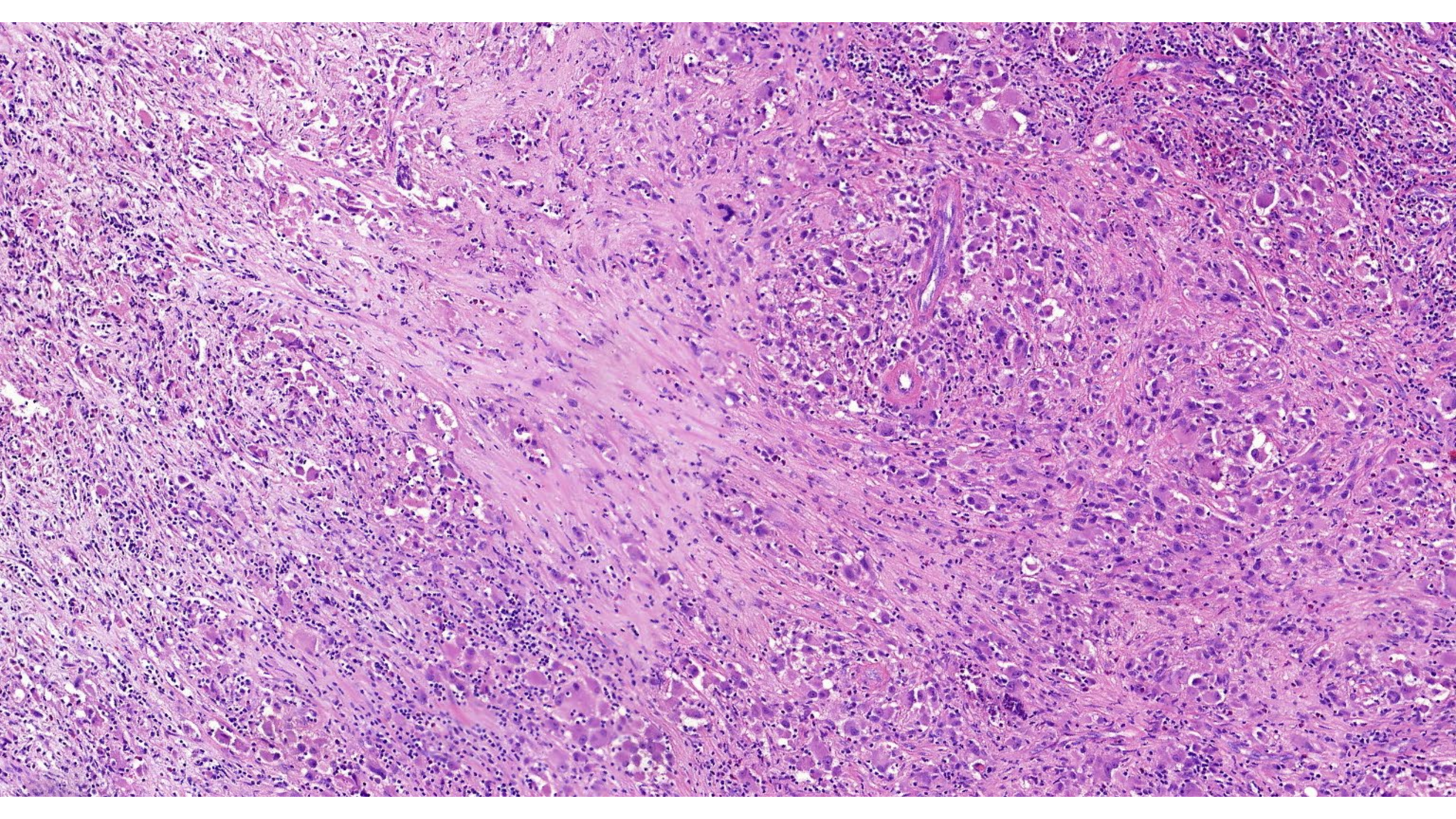
- PET/MRI

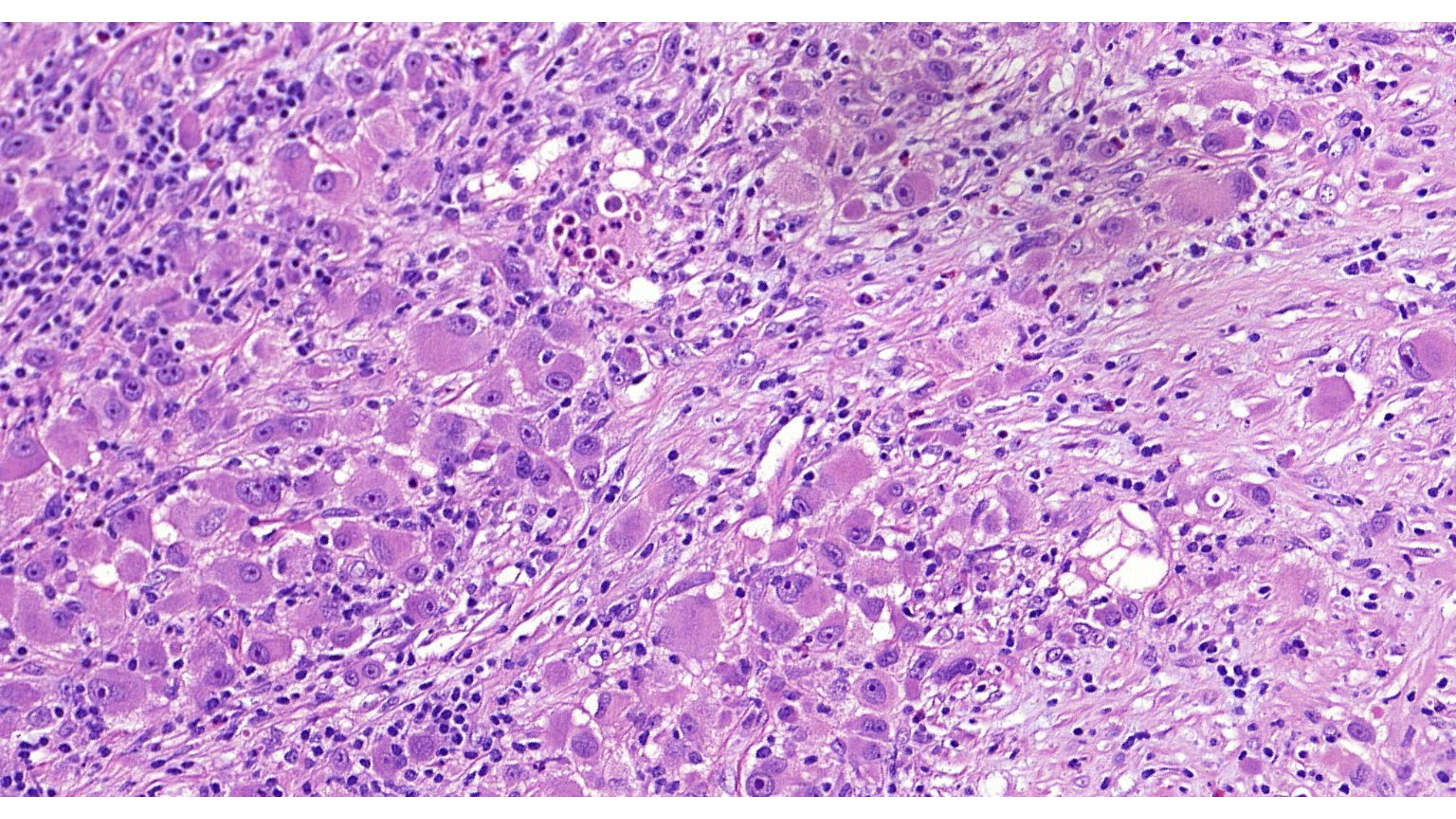
- **rozsiahly tumorózny proces vľavo, ktorý sa šíri pozdĺž postcentrálneho gyru až do capsula interna a cez corpus callosum kontralaterálne, pravdepodobne anaplastický astrocytóm s rysmi gliomatosis cerebri vznikajúci na podklade difúzneho astrocytómu**
- biopsia ložiska subkortikálne parietálne vpravo

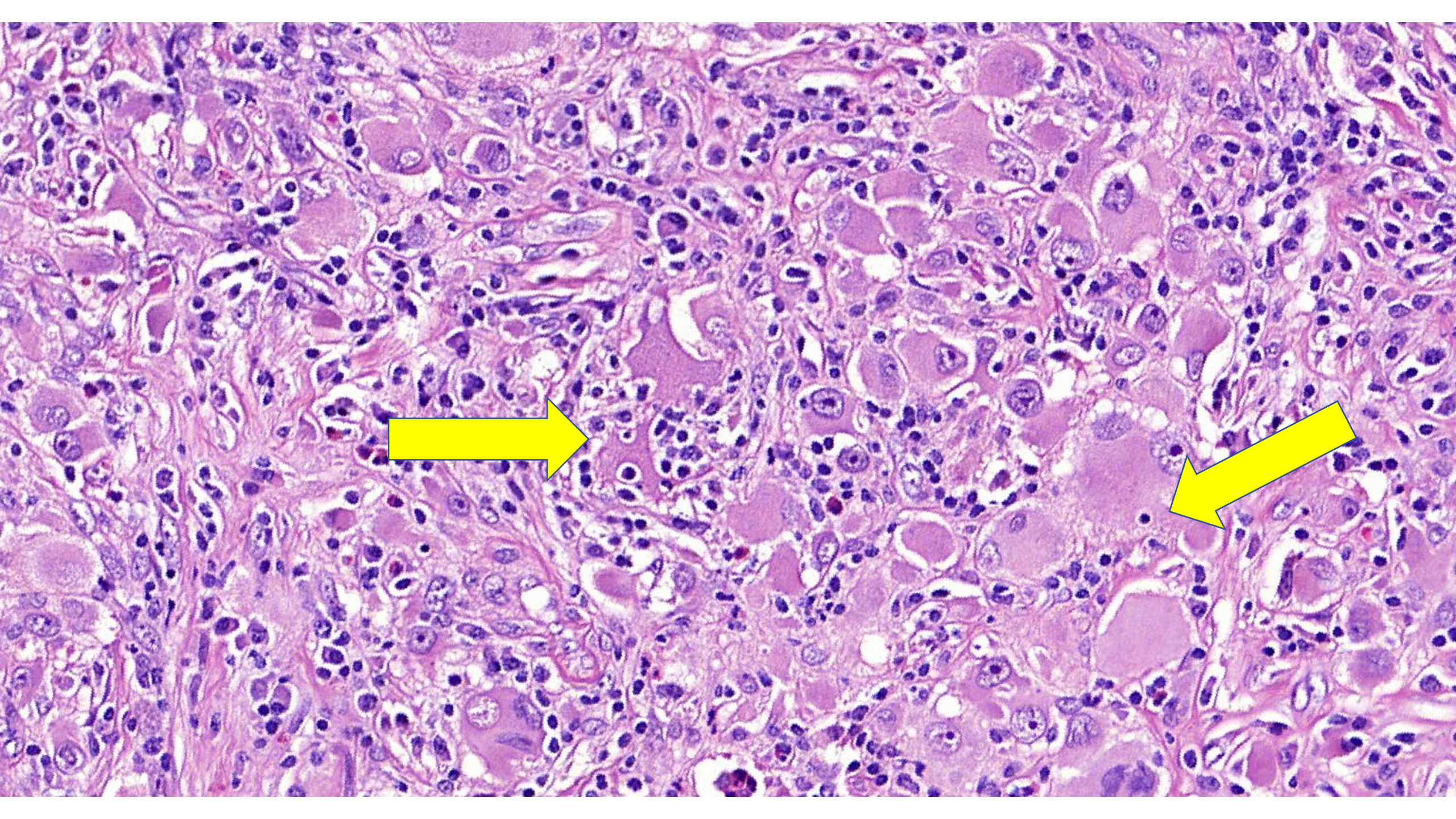












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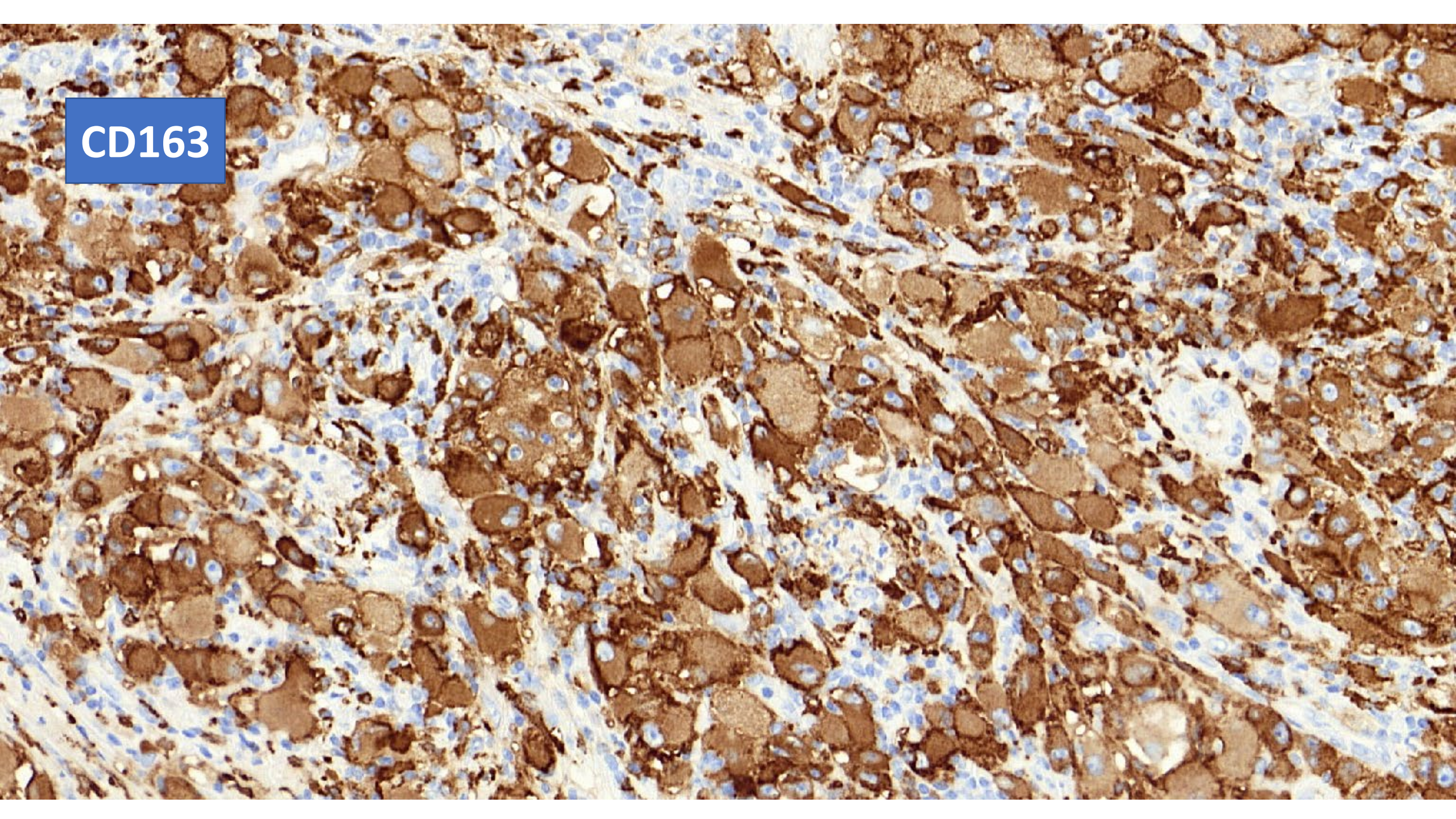


GFAP-
SYP –
BRAF –
CD1a-

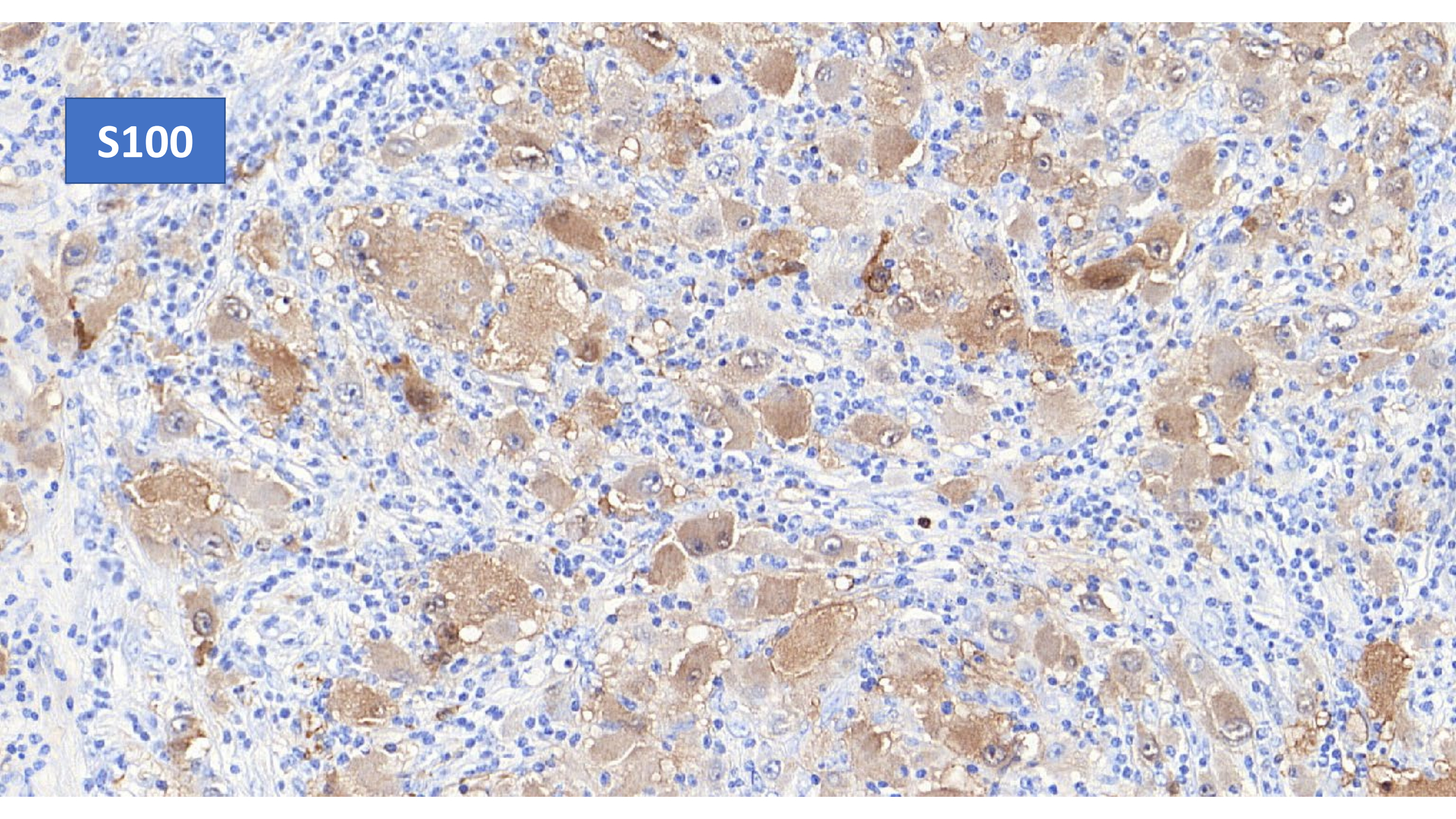
CD163/CD68



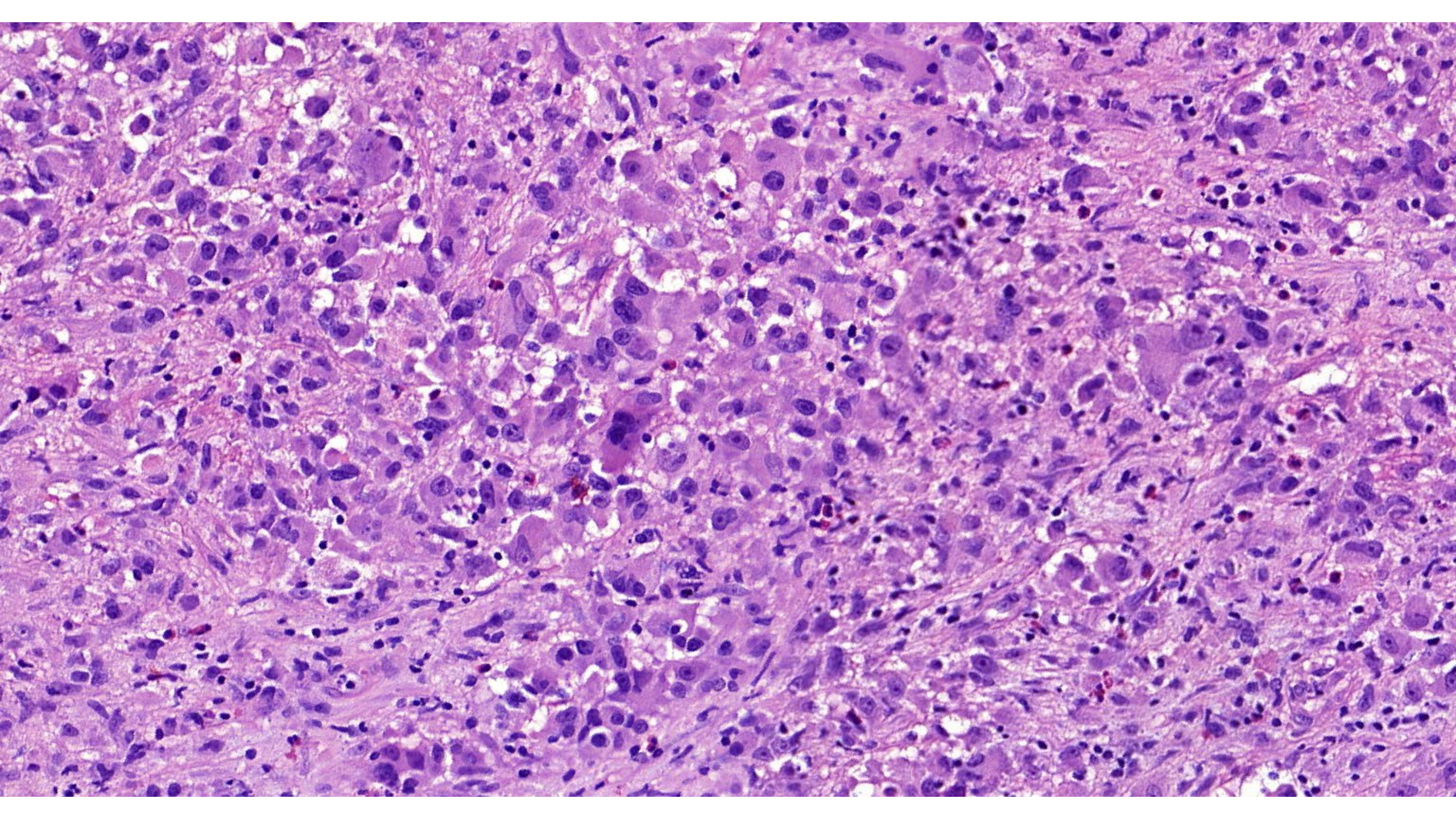
CD163

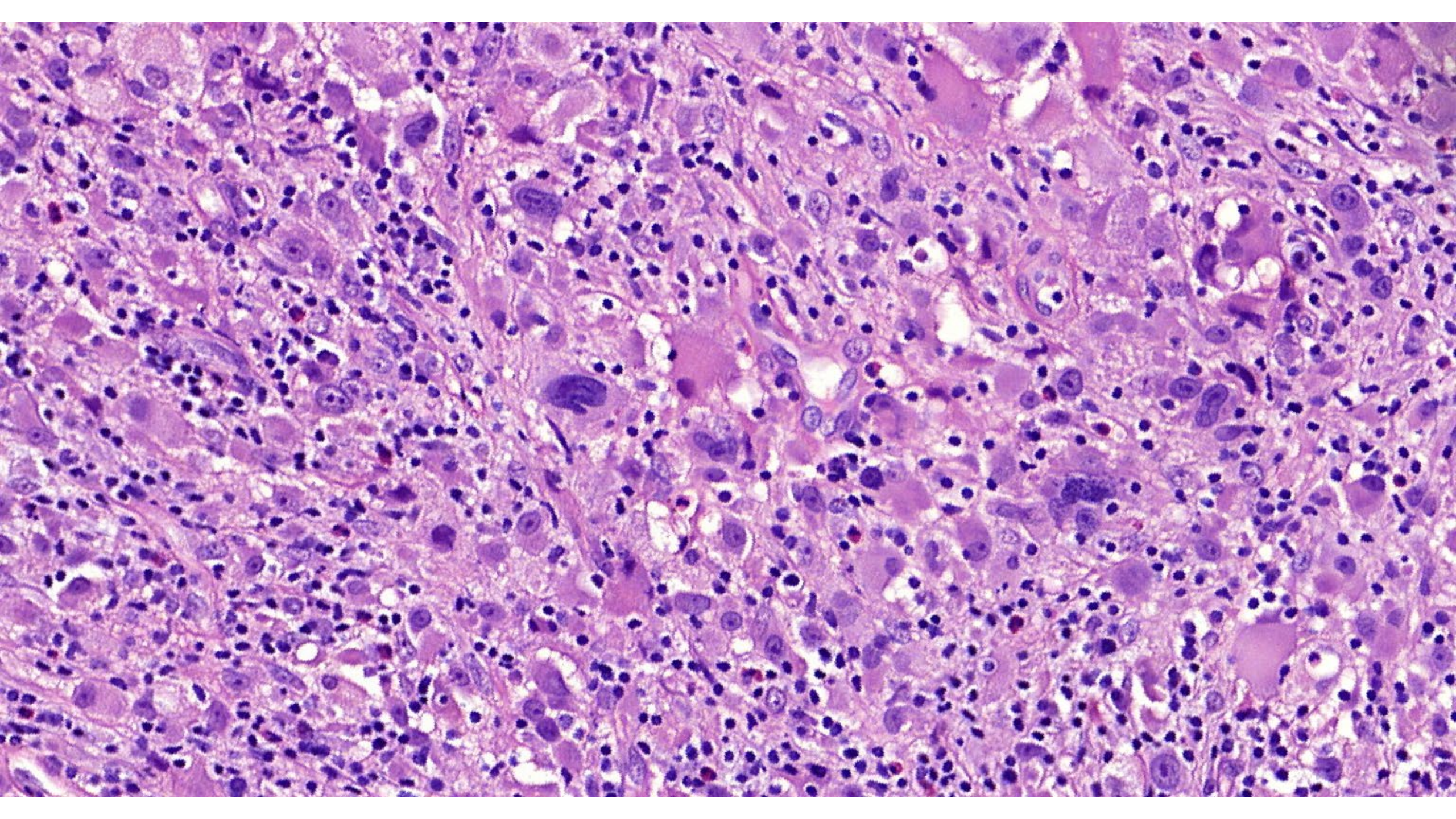


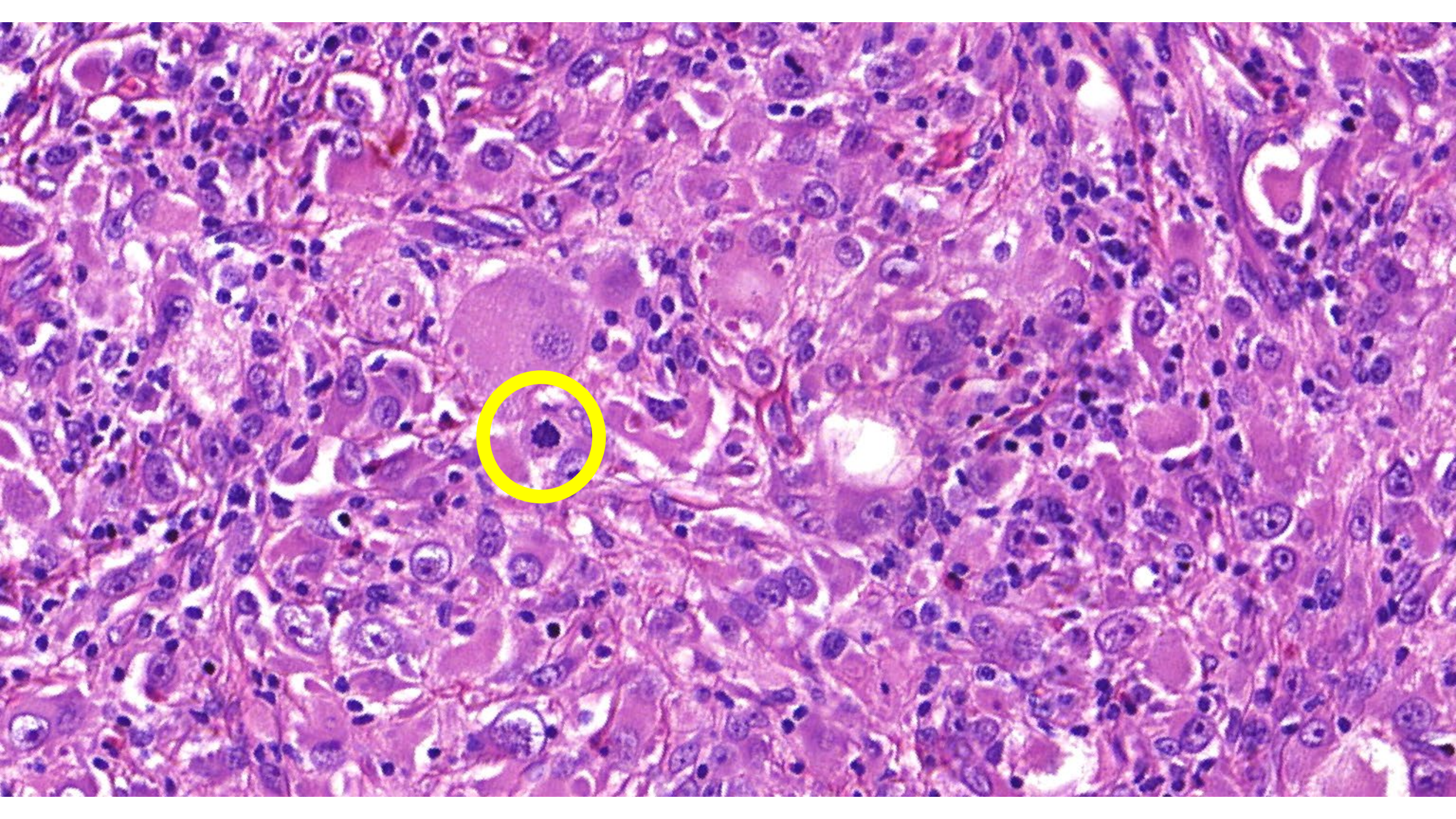
S100

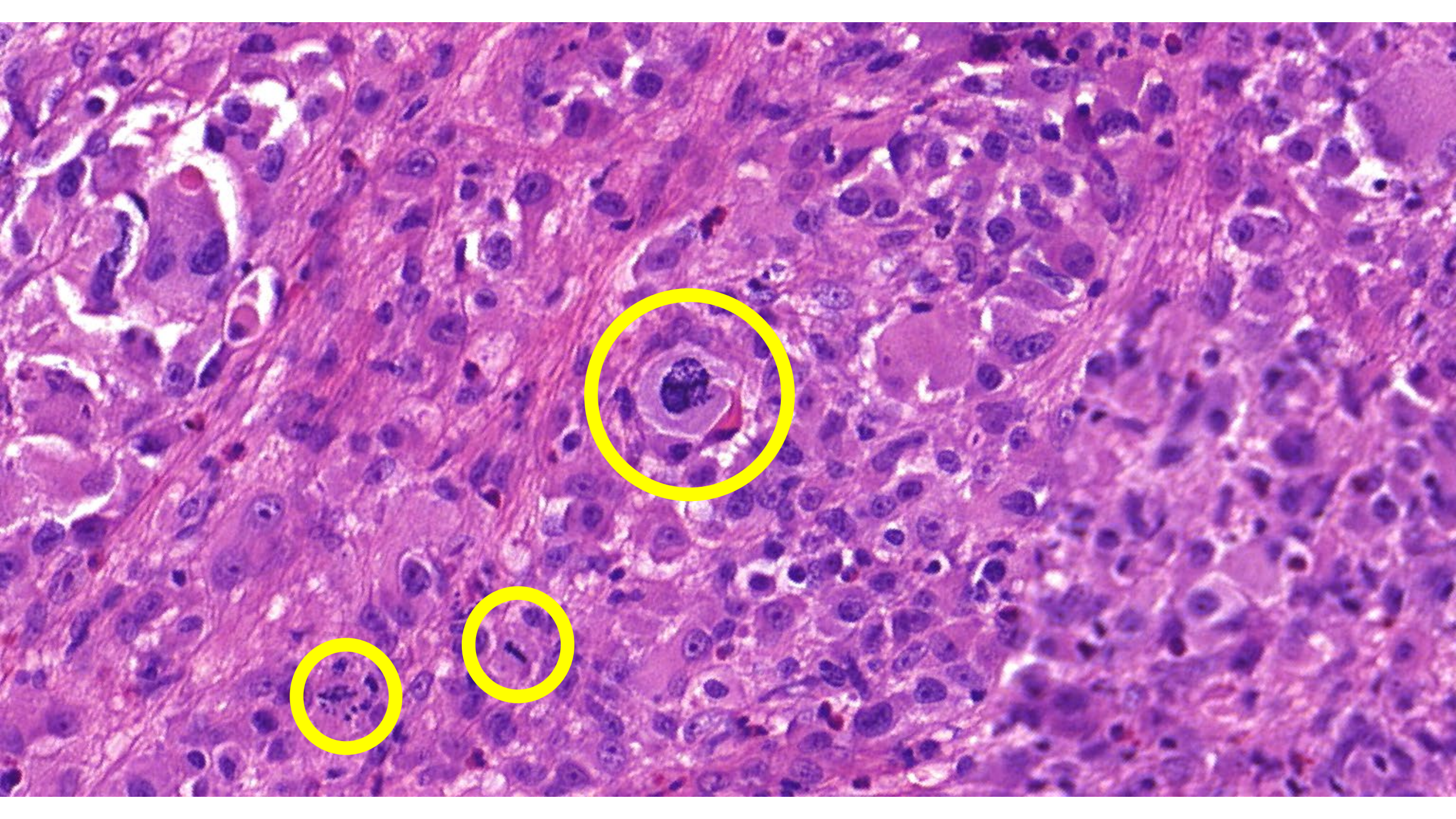


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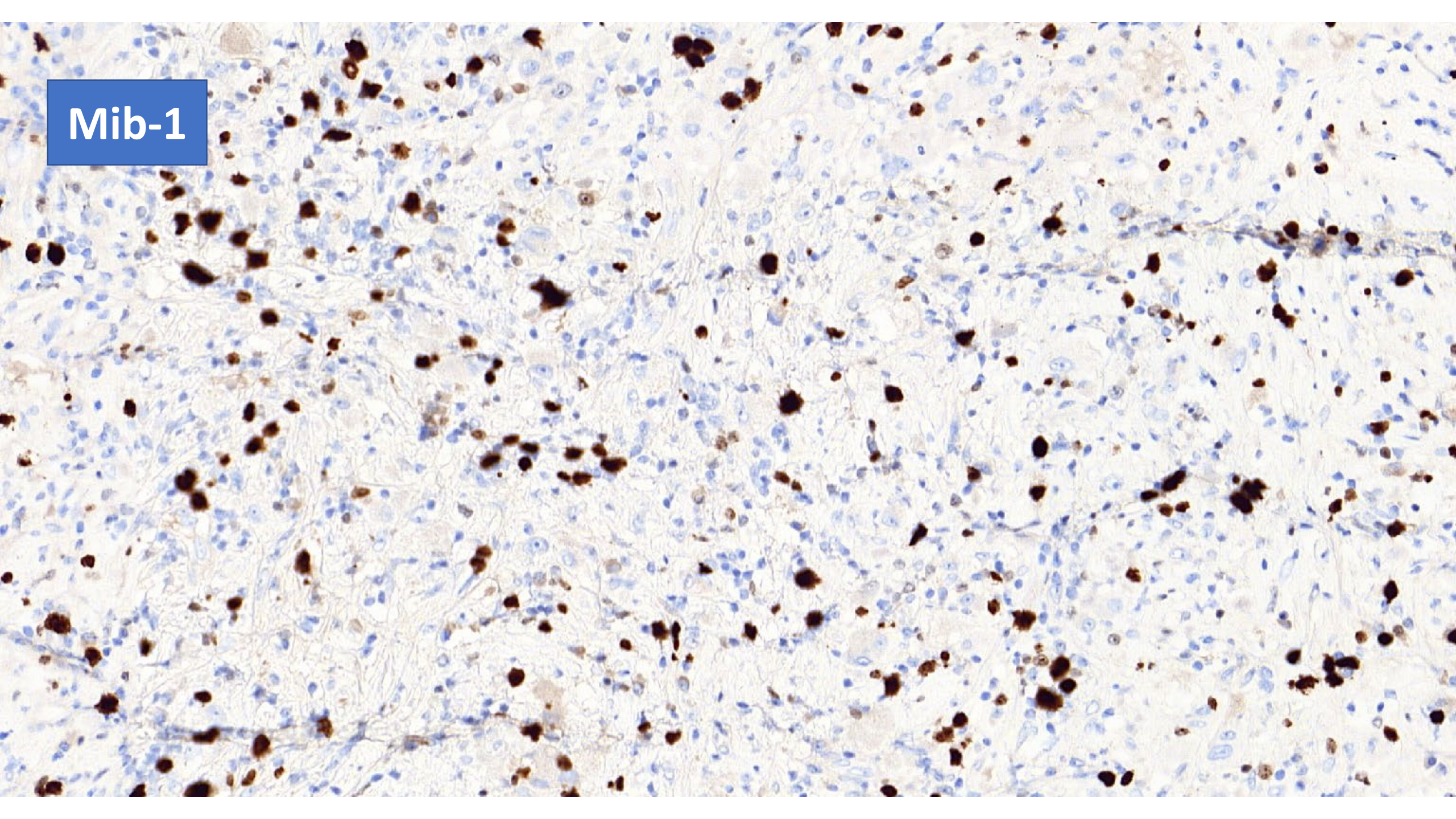








Mib-1

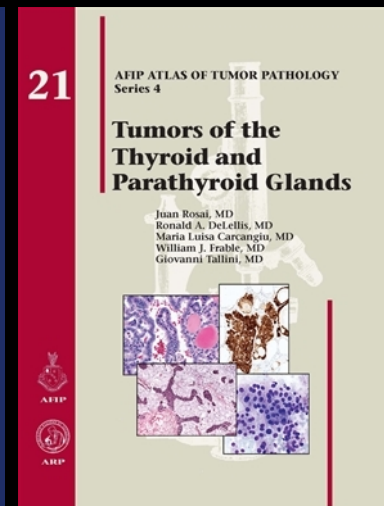
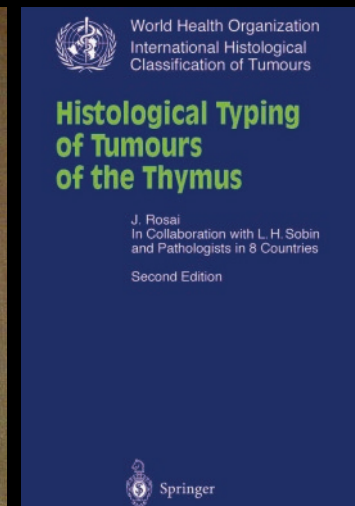
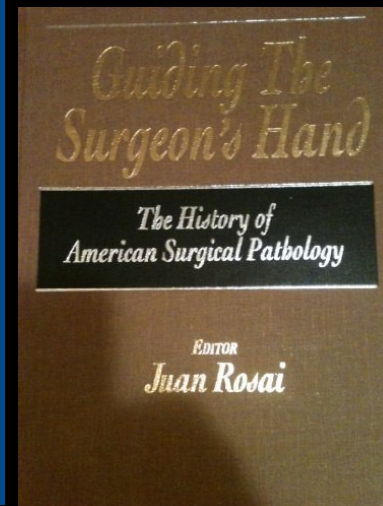
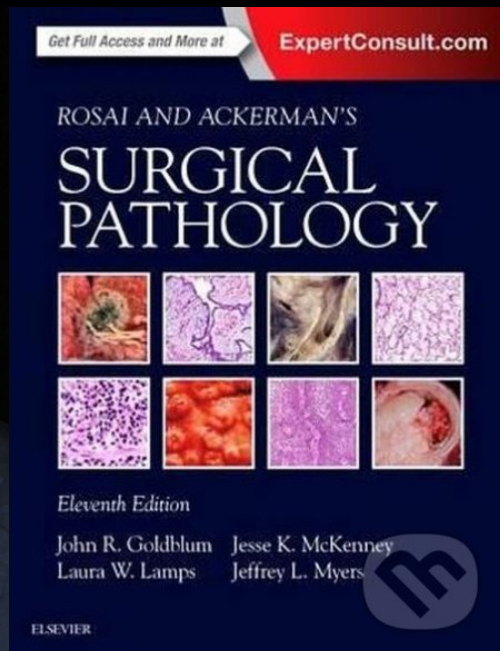


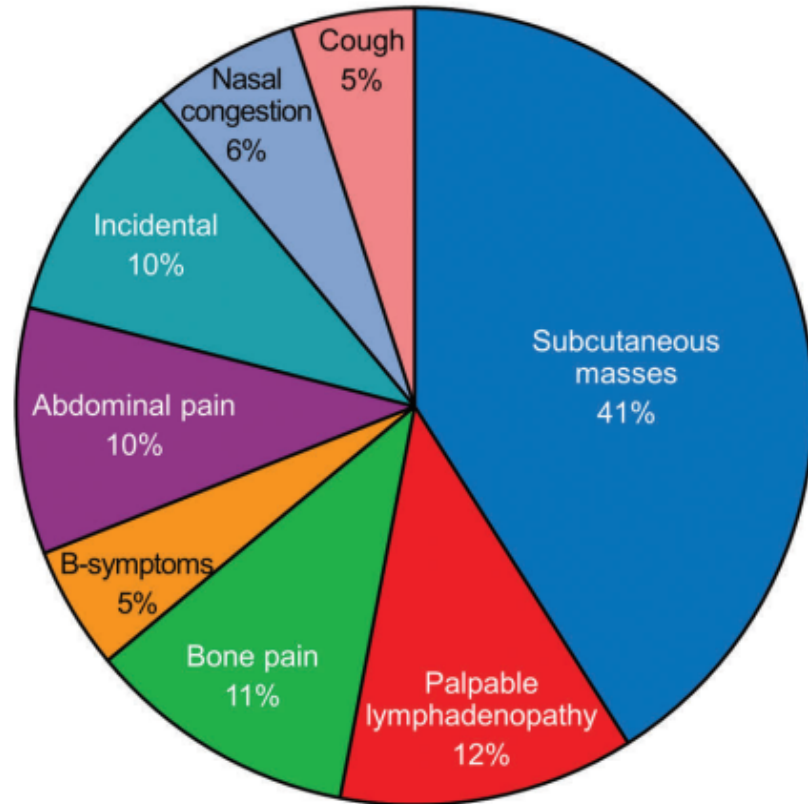
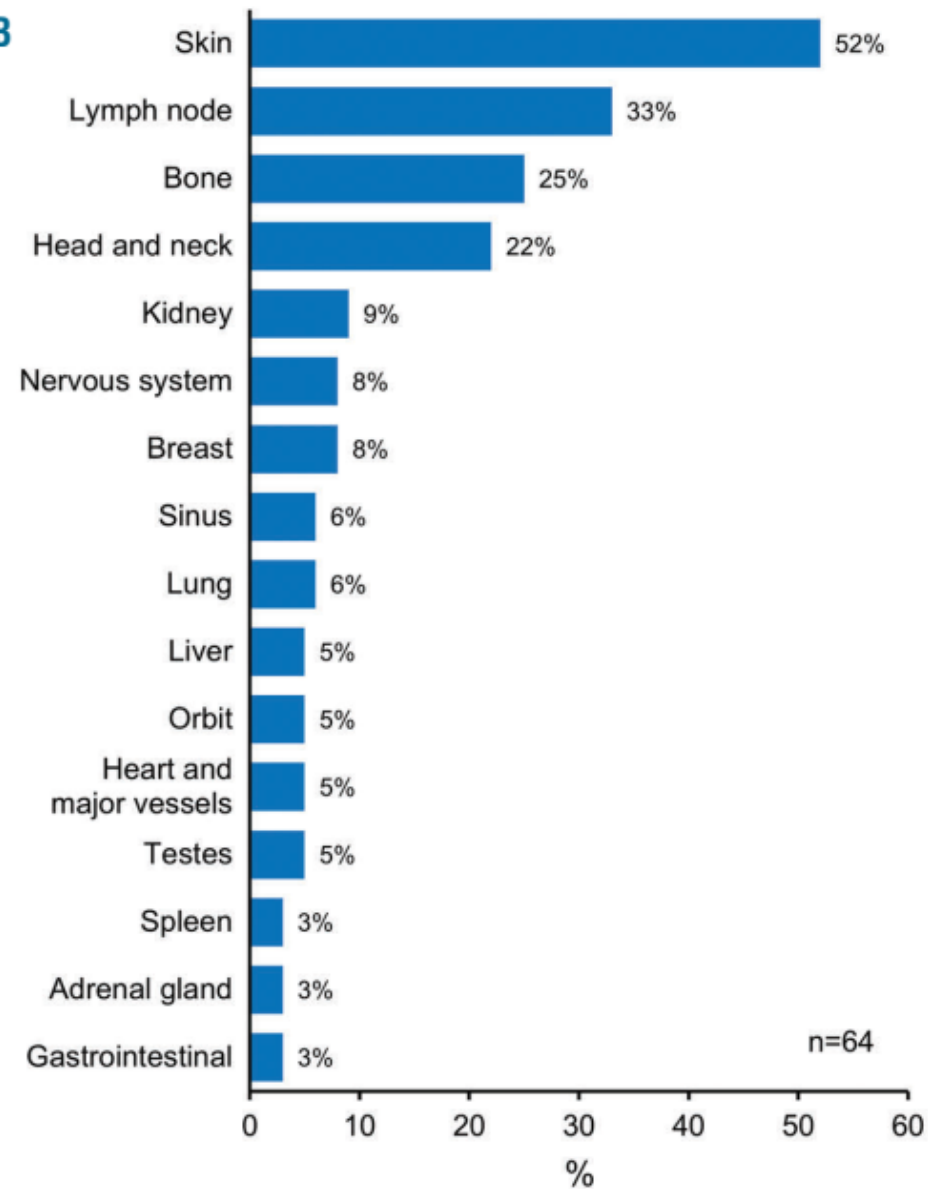
Rosai-Dorfman-Destombes disease (RDD)

- RDD = sinus histiocytosis with massive lymphadenopathy
 - vzácna non-Langerhans cell histiocytóza
 - 1965 (Destombes), 1968 (Rosai-Dorfman): benígna, „self-limiting“ lézia - platí najmä v prípade postihnutia LU, kože...
- často s extranodálnym postihnutím
 - koža, orbita/oko, respiračný trakt, kosti, CNS, retroperitoneum, GIT, GU..., často bez postihnutia LU
- možné (multi)systémové agresívne ochorenie
 - dysfunkcia postihnutého orgánu spôsobená zápalom a fibrózou, indukovanou abnormálnymi histiocytmi
- časť asociovaná s lymfoproliferatívnymi a autoimunitnými ochoreniami, IgG4...

1940-2020

- Rosai-Dorfman disease
- Desmoplastic small round cell tumor
- Spindle-cell epithelial tumor with thymus-like differentiation



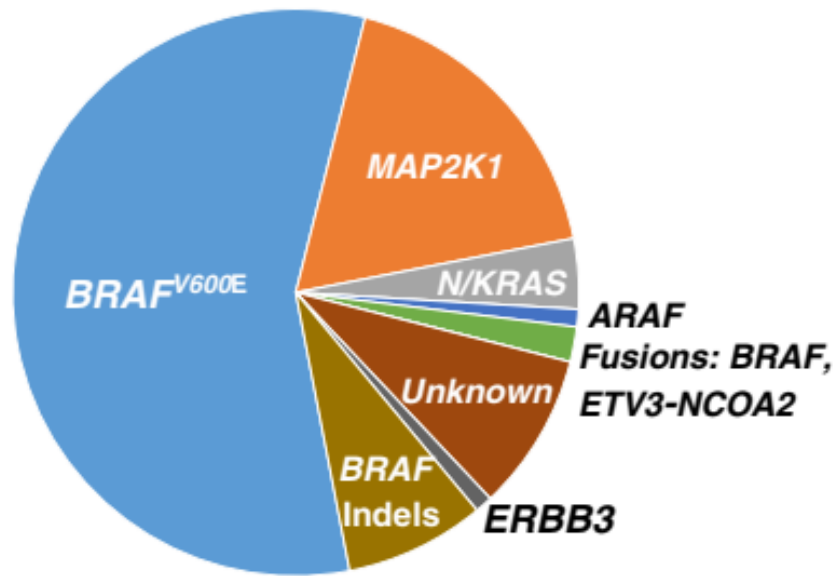
A**B**

Goyal G et al.; Mayo Clinic Histiocytosis Working Group. Clinicopathological features, treatment approaches, and outcomes in Rosai-Dorfman disease. *Haematologica*. 2020;105(2):348-357

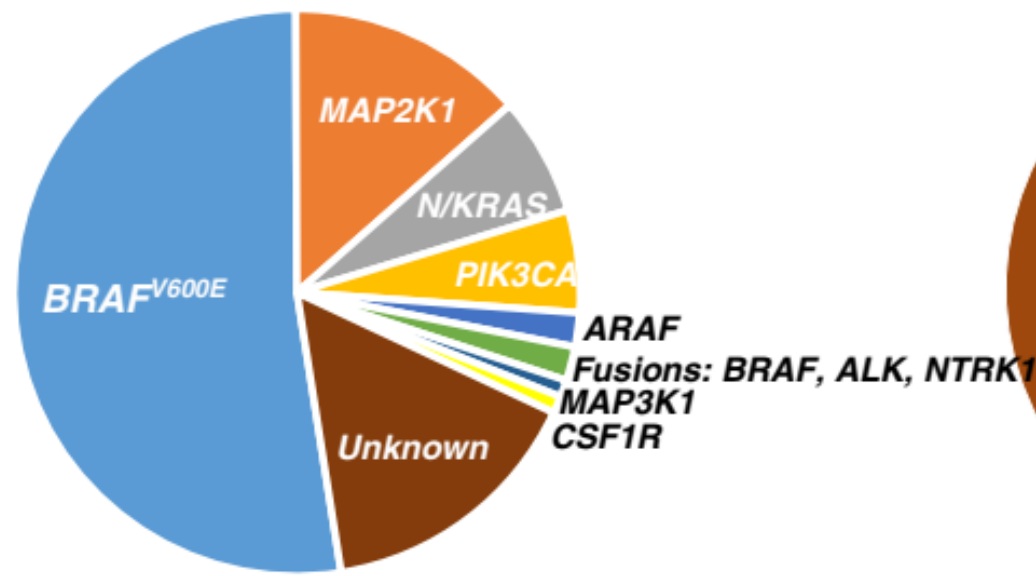
Onkogénne mutácie v histiocytózach

- Langerhans cell histiocytosis
- Erdheim-Chester disease
- Rosai-Dorfman-DeStombes disease
 - juvenilný xantogranulóm
- cca 1/3 (RDD) a až >1/2 (LCH, EChD) prípadov má onkogénne mutácie
 - zápalové versus nádorové ochorenia?
 - súvis LCH a Erdheim-Chester?
 - možný prekryv RDD a LCH/Erdheim-Chester („mixed histiocytosis“)
- väčšinou v MAPK ceste (*BRAF*, *MAP2K1*, *RAS*, *ARAF* a ďalšie)
 - vzácnejšie alterácie v ceste PI3K-AKT (*PIK3CA*)
 - potenciálny terapeutický cieľ (*BRAF*, MEK inhibítory) – dobré klinické výsledky
 - *BRAF*-mutované LCH prípady horšie reagujú na klasickú liečbu (steroidy, CHT)

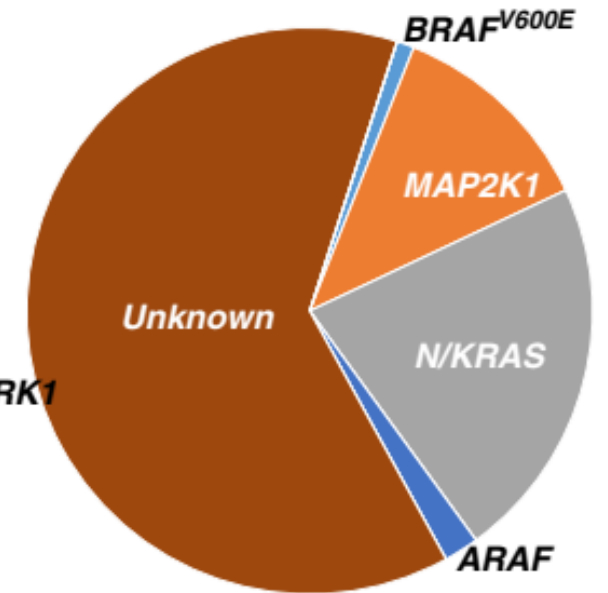
Langerhans cell histiocytosis



Erdheim–Chester disease

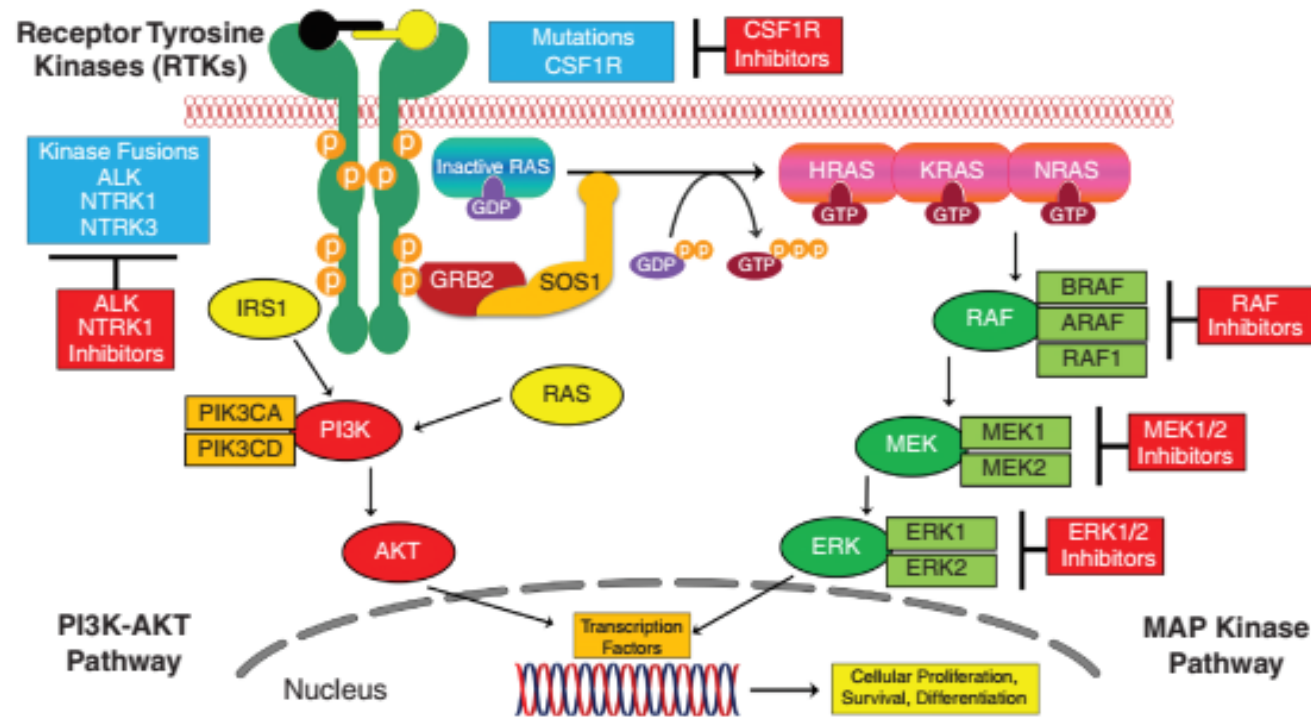


Destombes–Rosai–Dorfman disease

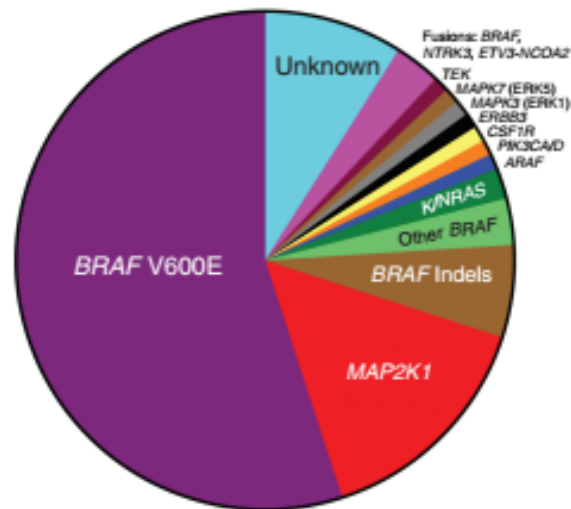


Papo M et al. Systemic Histiocytosis (Langerhans Cell Histiocytosis, Erdheim-Chester Disease, Destombes-Rosai-Dorfman Disease): from Oncogenic Mutations to Inflammatory Disorders. Curr Oncol Rep. 2019;21(7):62.

A

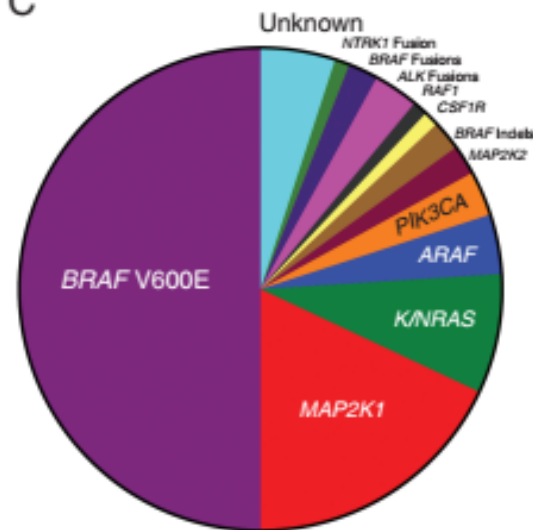


B



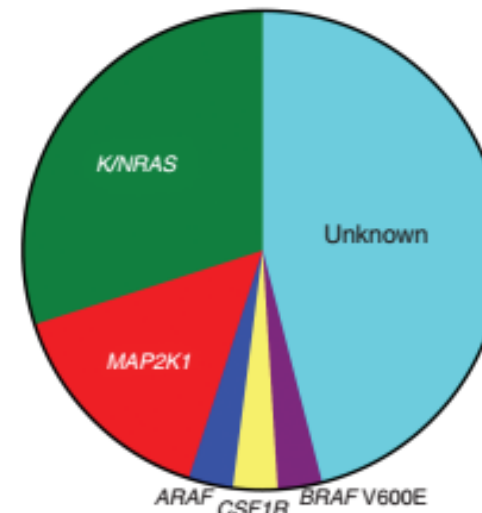
Langerhans Cell Histiocytosis

C



Erdheim-Chester Disease

D



Rosai-Dorfman-Destombes

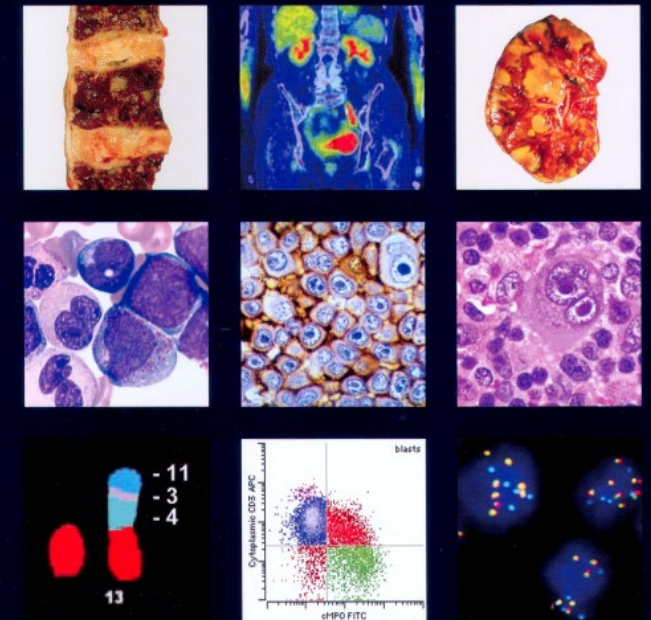
Cohen Aubart F et al.
Histiocytosis and the nervous system: from diagnosis to targeted therapies. *Neuro Oncol.* 2021;23(9):1433–46.

Histiocytic and dendritic cell neoplasms

Histiocytic sarcoma	9755/3
Langerhans cell histiocytosis, NOS	9751/1
Langerhans cell histiocytosis, monostotic	9751/1
Langerhans cell histiocytosis, polystotic	9751/1
Langerhans cell histiocytosis, disseminated	9751/3
Langerhans cell sarcoma	9756/3
Indeterminate dendritic cell tumour	9757/3
Interdigitating dendritic cell sarcoma	9757/3
Follicular dendritic cell sarcoma	9758/3
Fibroblastic reticular cell tumour	9759/3
Disseminated juvenile xanthogranuloma	
Erdheim–Chester disease	9749/3

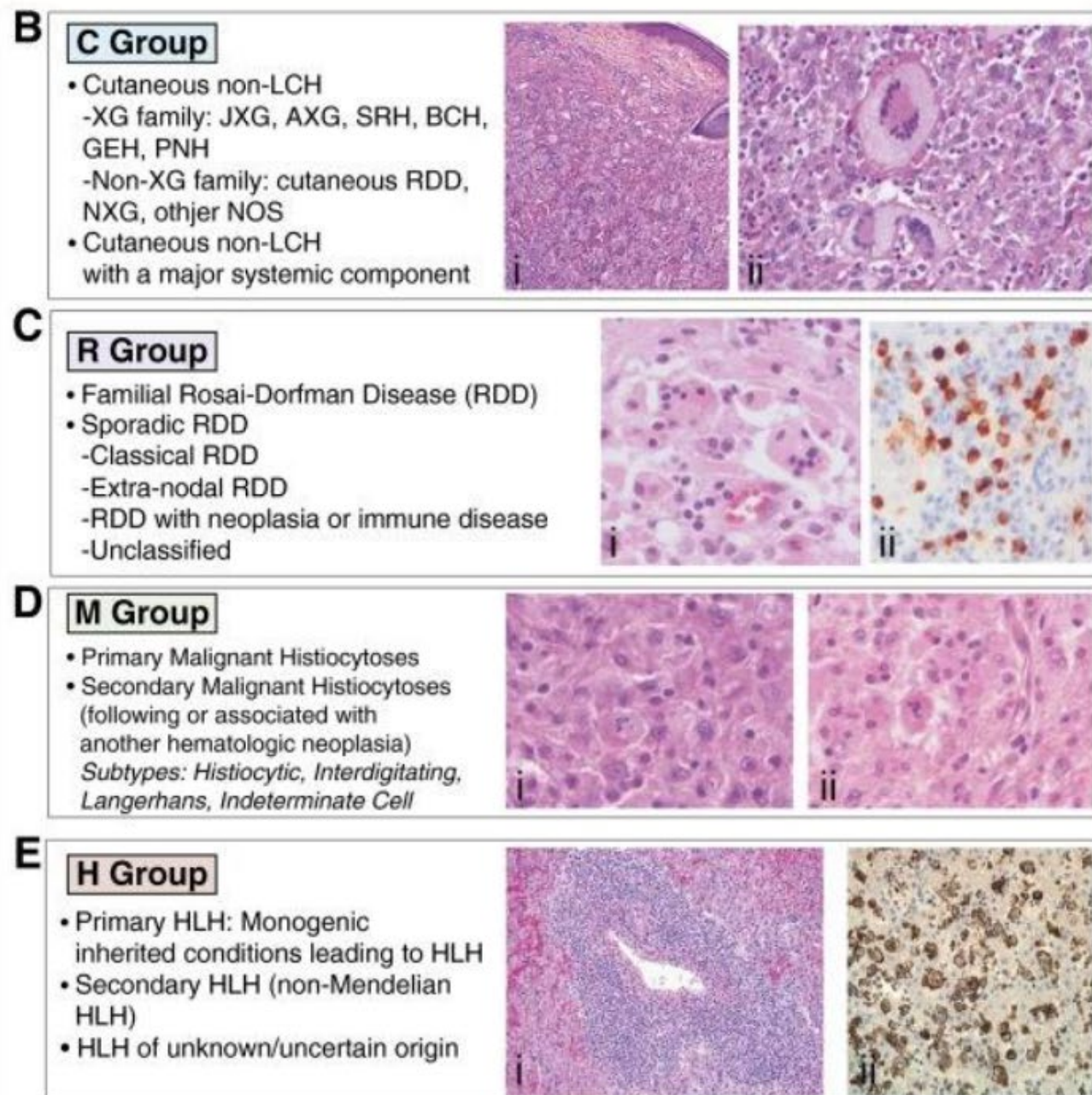
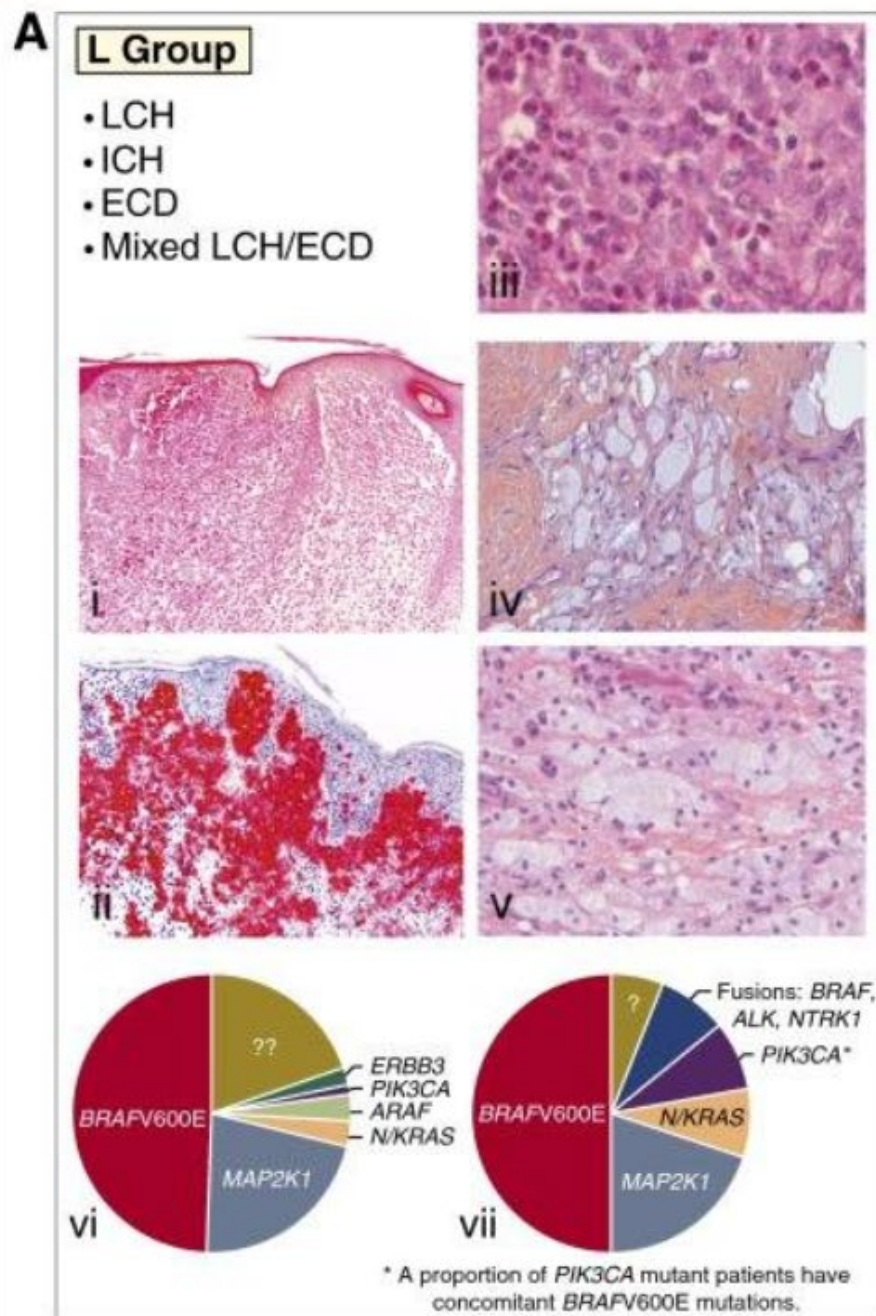
WHO Classification of Tumours of Haematopoietic and Lymphoid Tissues

Steven H. Swerdlow, Elias Campo, Nancy Lee Harris, Elaine S. Jaffe, Stefano A. Pileri, Harald Stein, Jürgen Thiele, Daniel A. Arber, Robert P. Hasserjian, Michelle M. Le Beau, Attilio Orazi, Reiner Siebert



WHO

Rosai – Dorfman – Destombes disease ???



NGS v našem prípade

- - TruSight Oncology 500 Panel - DNA část
- Detekce somatických mutací v klinicky relevantních oblastech 523 genů NGS kitem TruSight Oncology 500 (Illumina). Kit umožňuje detekci mutační nálože (TMB) a mikrosatelitní nestability (MSI):
 - Ve vyšetřovaném vzorku **PROKAZUJEME klinicky významnou mutaci genu TP53 c.309C>G, p.(Tyr103Ter), AF: 12%.**
 - Prokazujeme NÍZKOU mutační nálož - (TMB: Low; 1,6 mut/Mb).
PROKAZUJEME NÍZKOU mikrosatelitní nestabilitu (MSI-L; 1,68 % lokusů).
NEPROKAZUJEME klinicky významné početní změny ve vyšetřovaných genech.
- - TruSight Oncology 500 Panel - RNA část:
 - Ve vyšetřovaném vzorku NEPROKAZUJEME fúzní transkript žádného z vyšetřovaných genů

Atypický variant RDD? VS histiocytický sarkóm

Received: 12 May 2020 | Revised: 22 August 2020 | Accepted: 12 September 2020

DOI: 10.1111/cup.13883

CASE REPORT

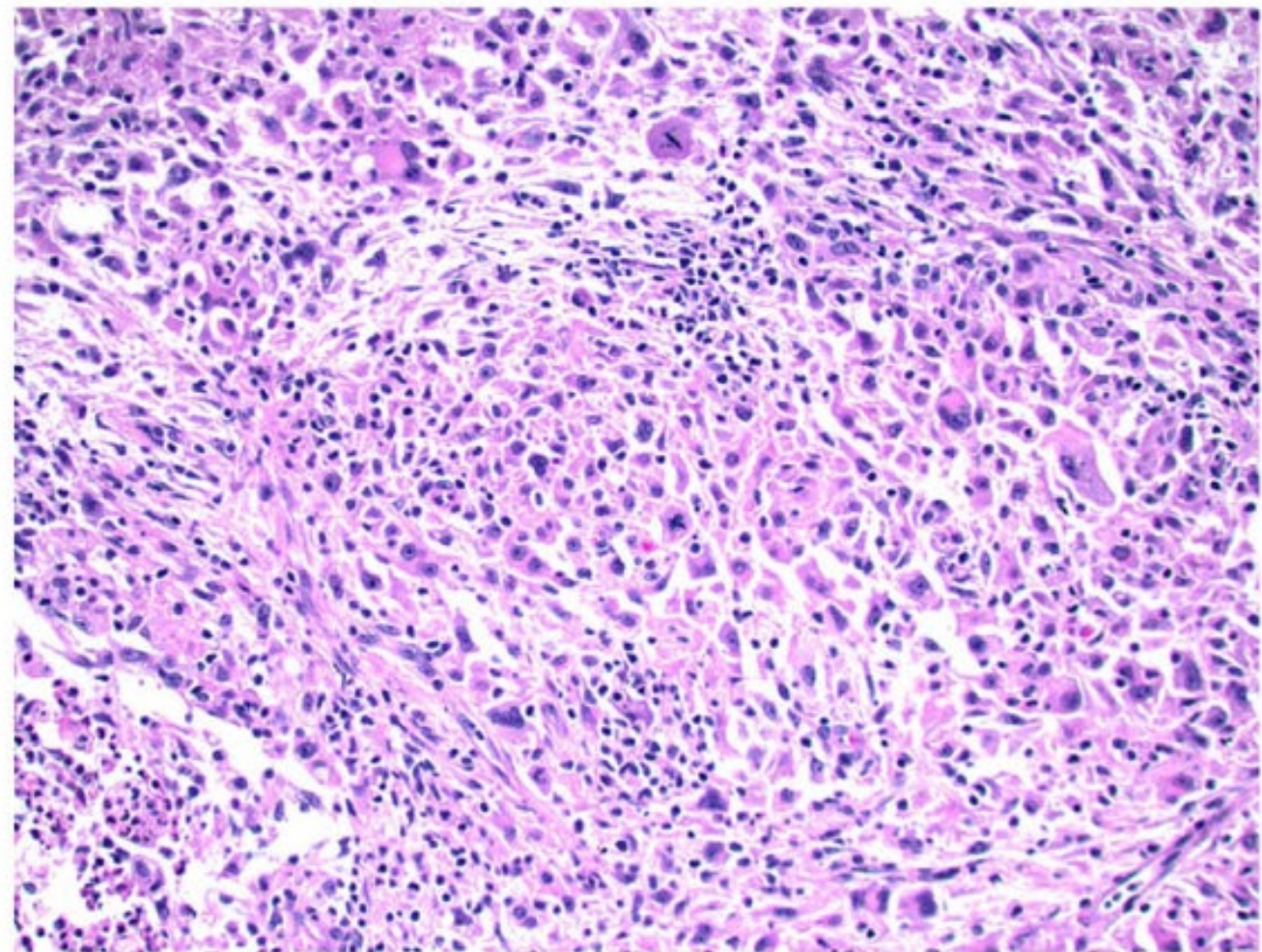
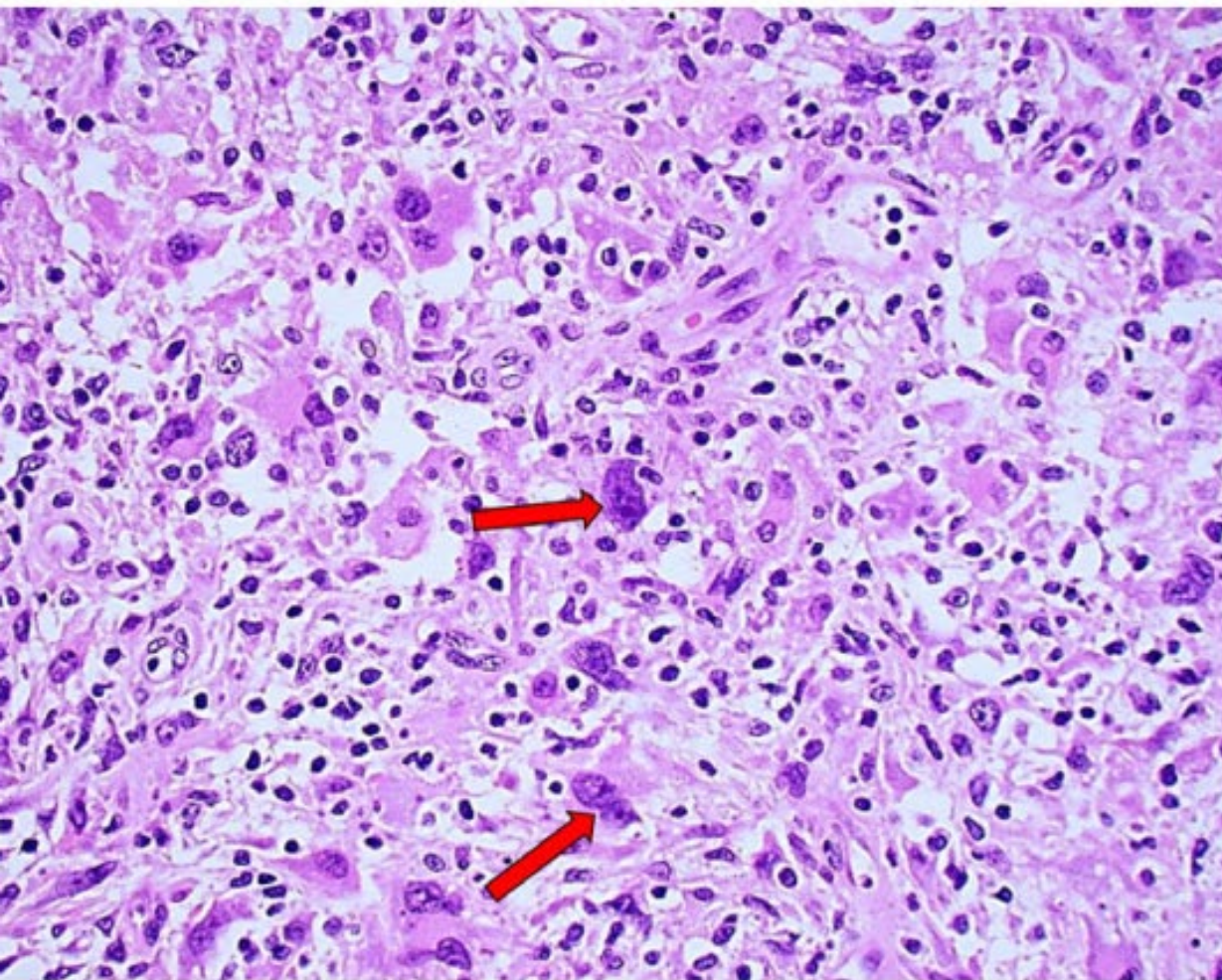


WILEY

***KRAS 117N* positive Rosai-Dorfman disease with atypical features**

Zainab A. Jafri¹ | Shivani P. Reddy MD² | David S. Cassarino MD, PhD²

J Cutan Pathol. 2021;48:147–
150



...treatment with the MEK inhibitor cobimetinib.... interval CT imaging revealed a mild decrease in size of the liver, lung, and midline abdominal masses after 2 months of therapy, but several follow-up imaging studies over the next year did not show significant changes in the mass lesions...

Ďakujem za pozornosť!

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