



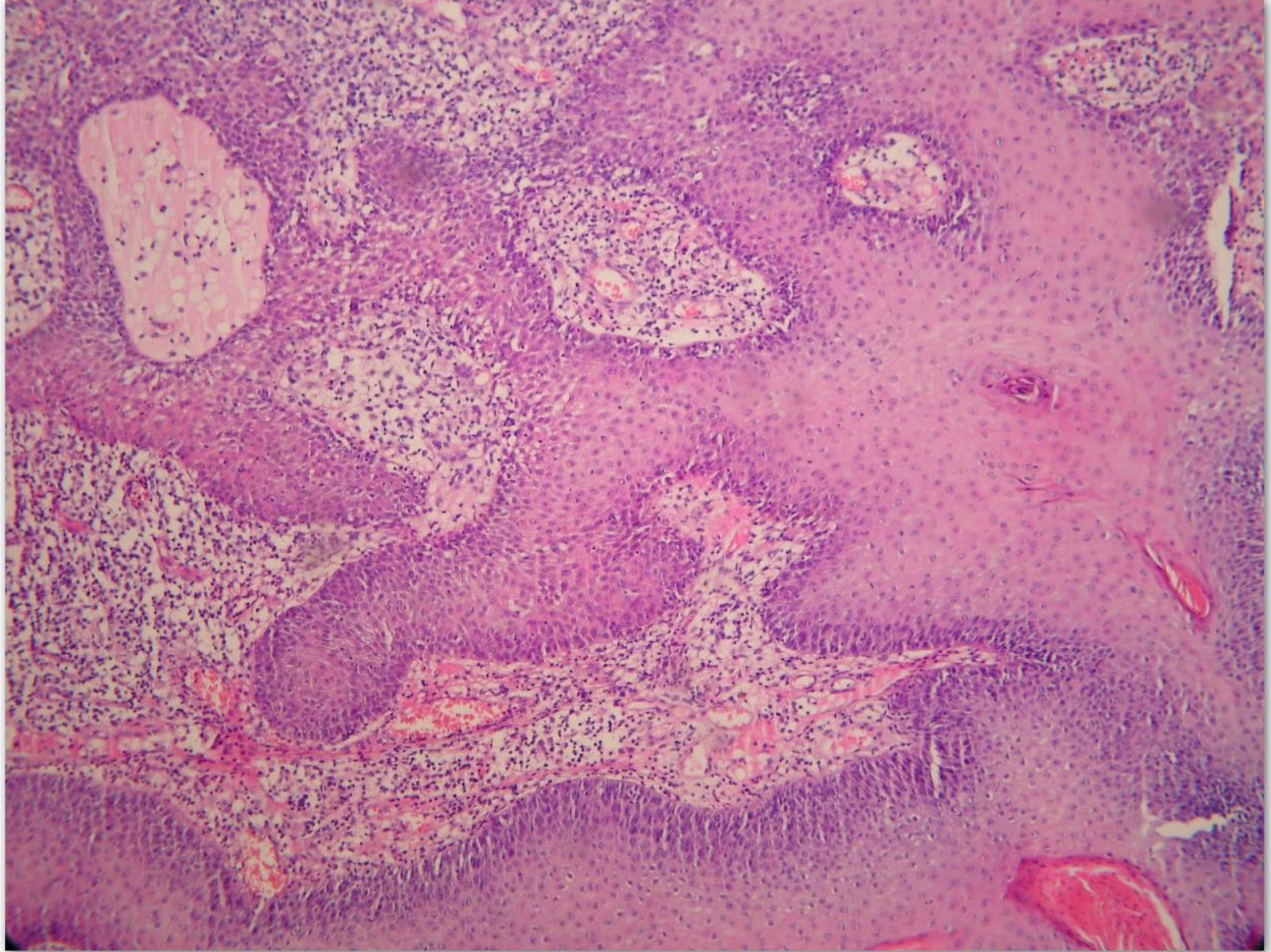
# Prípád SD-IAP 637

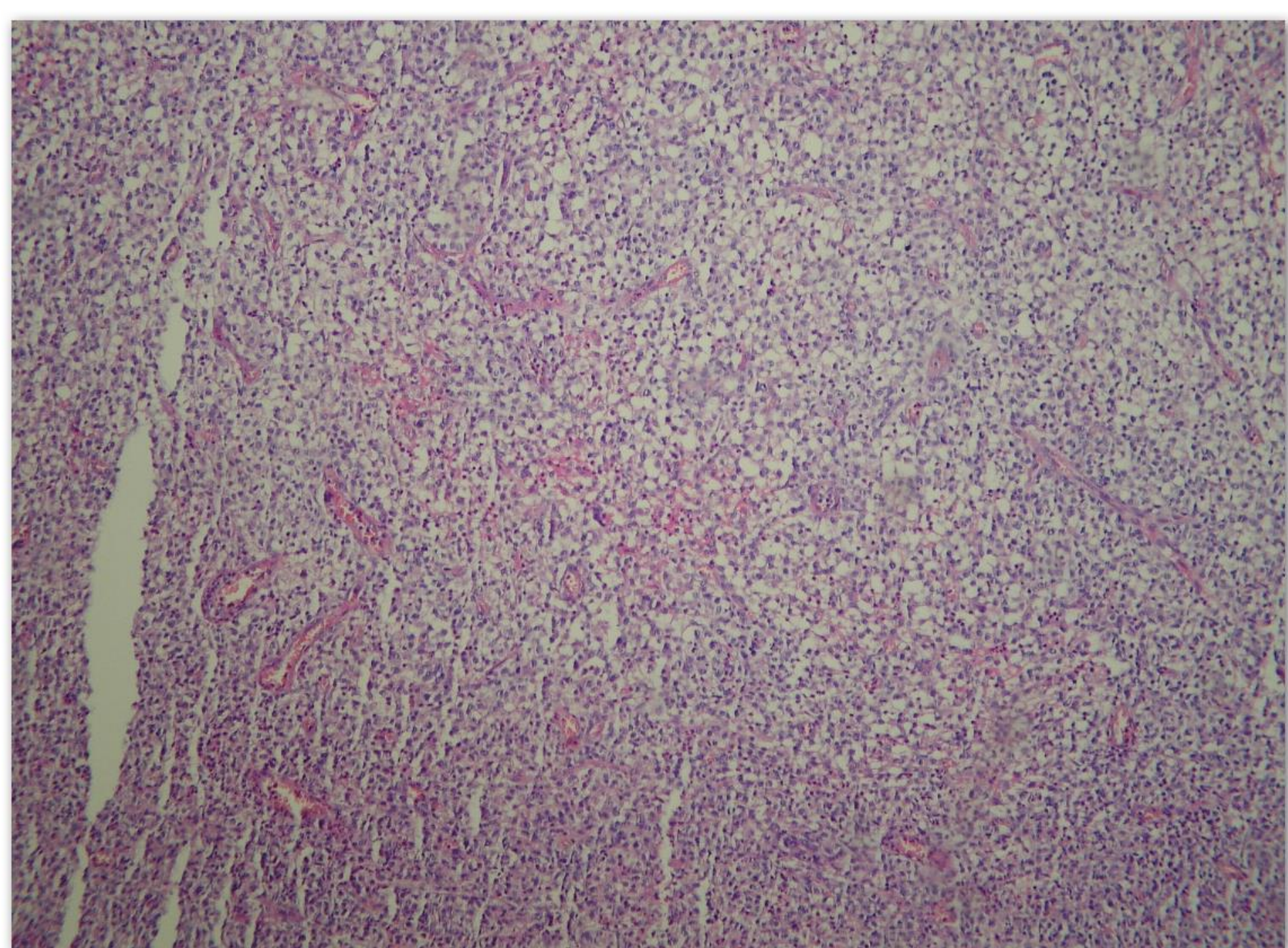
P Talarčík  
Cytopathos

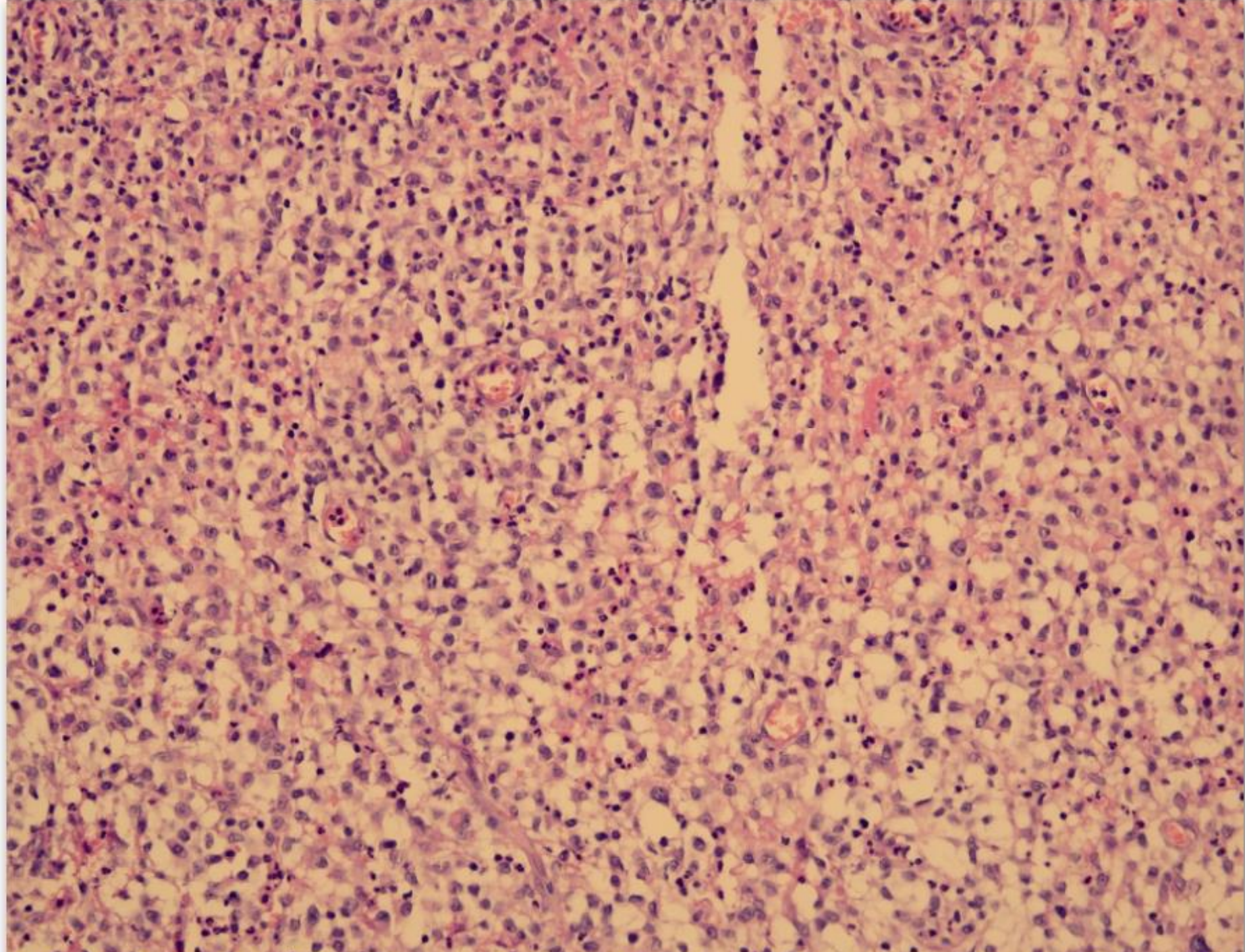
**Vek 85 rokov, muž**

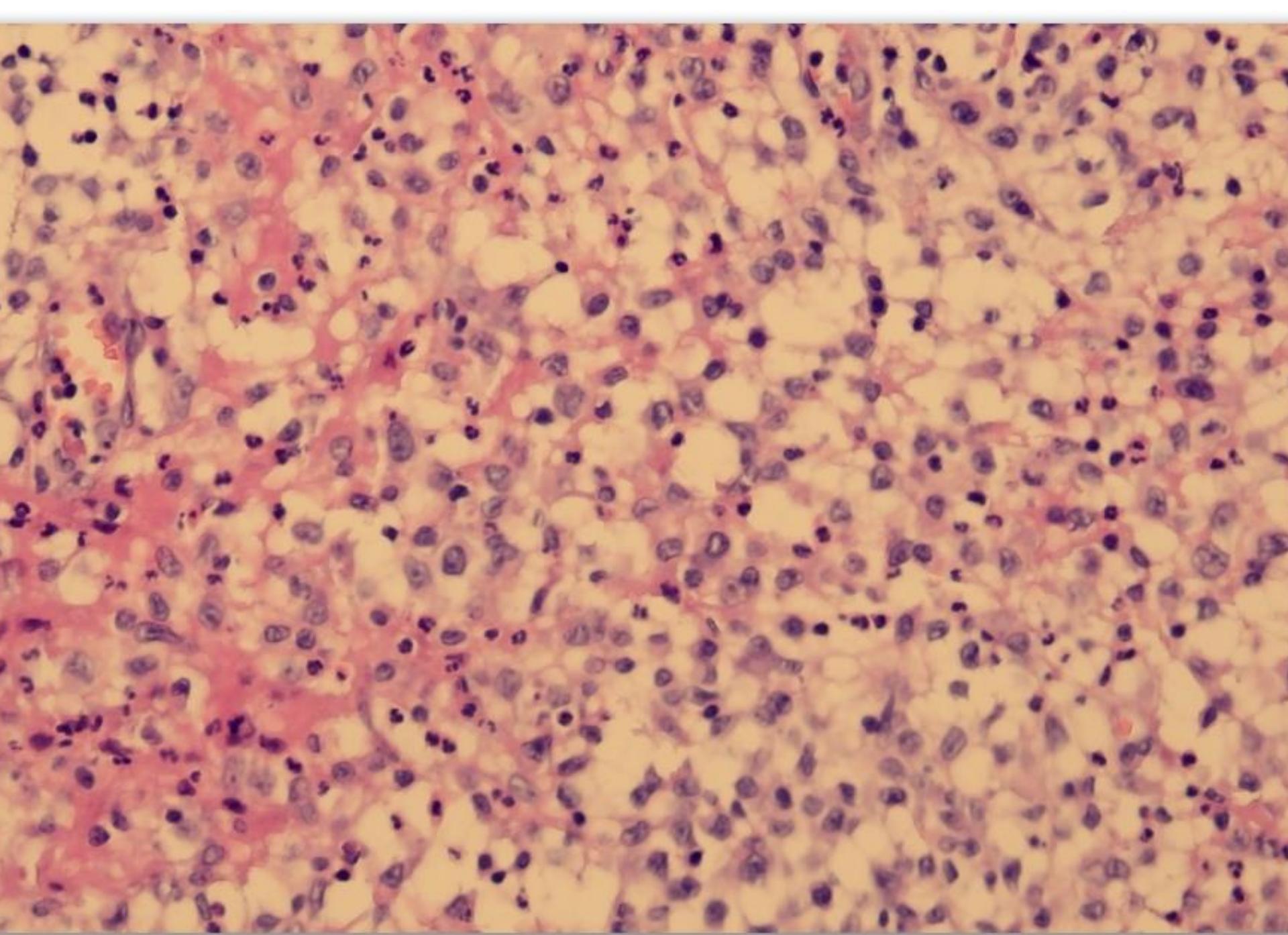
**Klinika: pacient s diagnózou v anamnéze  
„hematodermická dermoplázia“,  
myeloproliferatívny syndróm NOS**

**Makro: TU cutis pectoris l.dx., verukózna lézia pr.  
21mm.**









## **Základná diagnóza v rámci HE.**

- leukémia cutis/ lymphoid,myeloid/
- myeloidná leukémia cutis/MLC
- MLC najčastejšie pri AML/mono/
- incidencia MLC 1-20%
- incidencia MLC pri AML až 50%
- incidencia pri CMML – 10%

# **Imunohistochemia:**

**Základná imunopozitivita:**

**Difúzne:**

**CD4+/CD56+/CD43+/CD33+/CD5/  
/S100+/CD1a+/lyzozým**

**Slabo fokálne pozit: CD13, CD14,  
CD11c**



# **Imunohistochemia:**

## **Základná imunonegativita:**

**LCA, CD20, CD3, langerin, TdT,  
EBV, CD30, TIA, CD15, CD79a,  
CD7, CD23, CD21, CD123,  
granzyme B, CD117**

# **SÚHRN: Imunopozitivita.**

**Difúzne:**

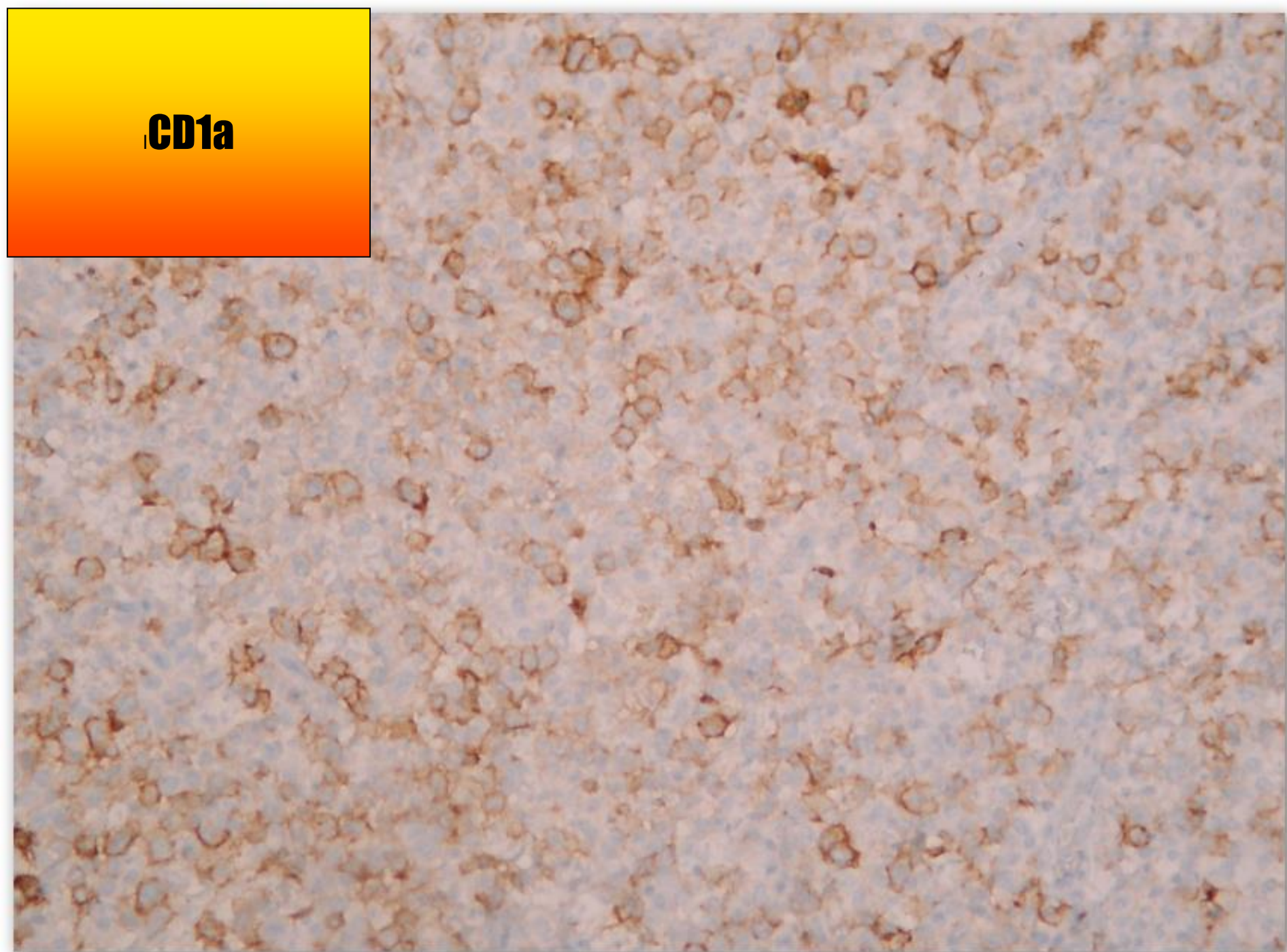
**CD4+/CD56+/CD43+/CD33+/CD5/  
/S100+/CD1a+/lyzozým/CD163**

**Slabo fokálne pozit: CD13, CD14,  
CD11c**

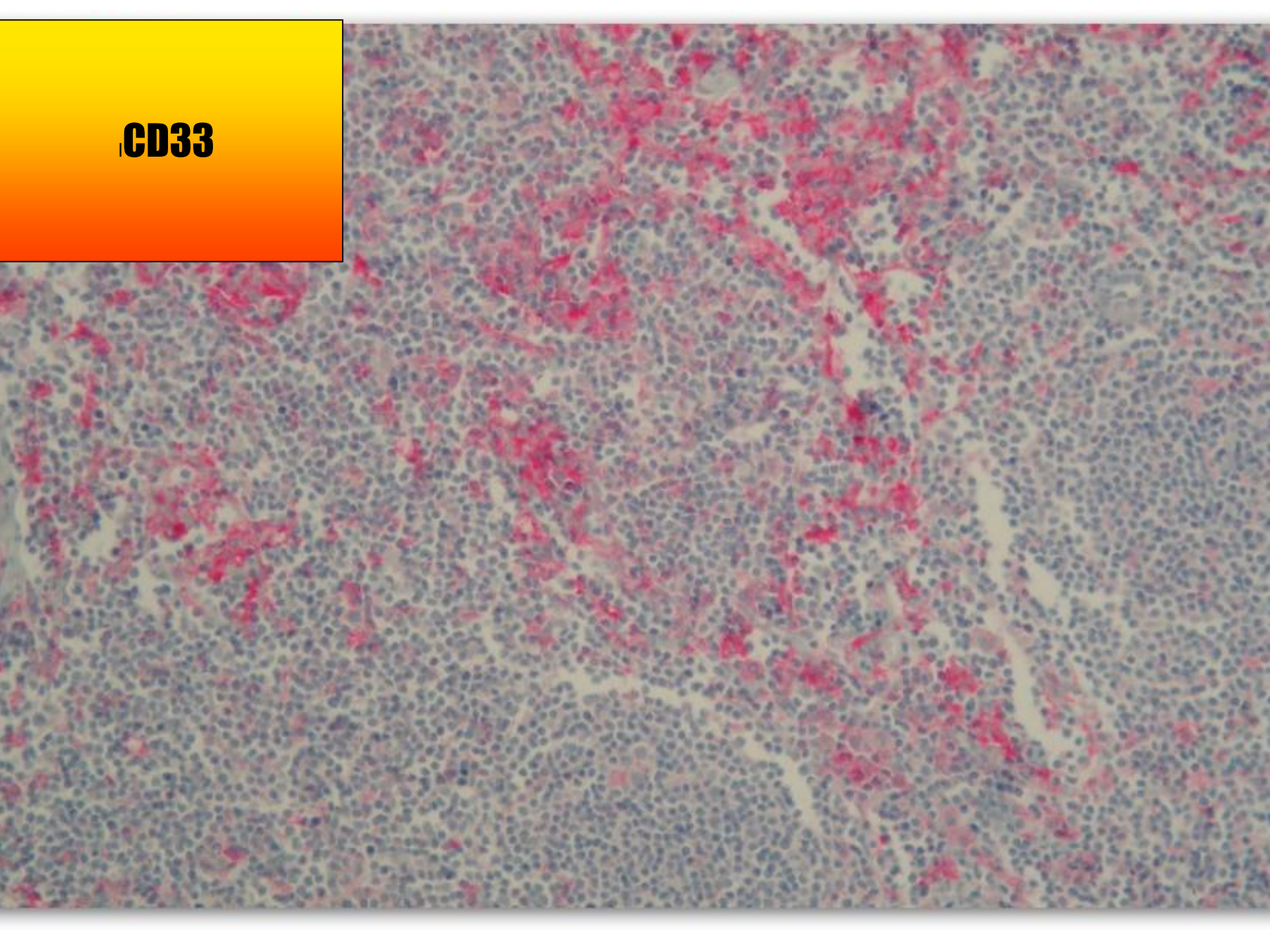
**S100**



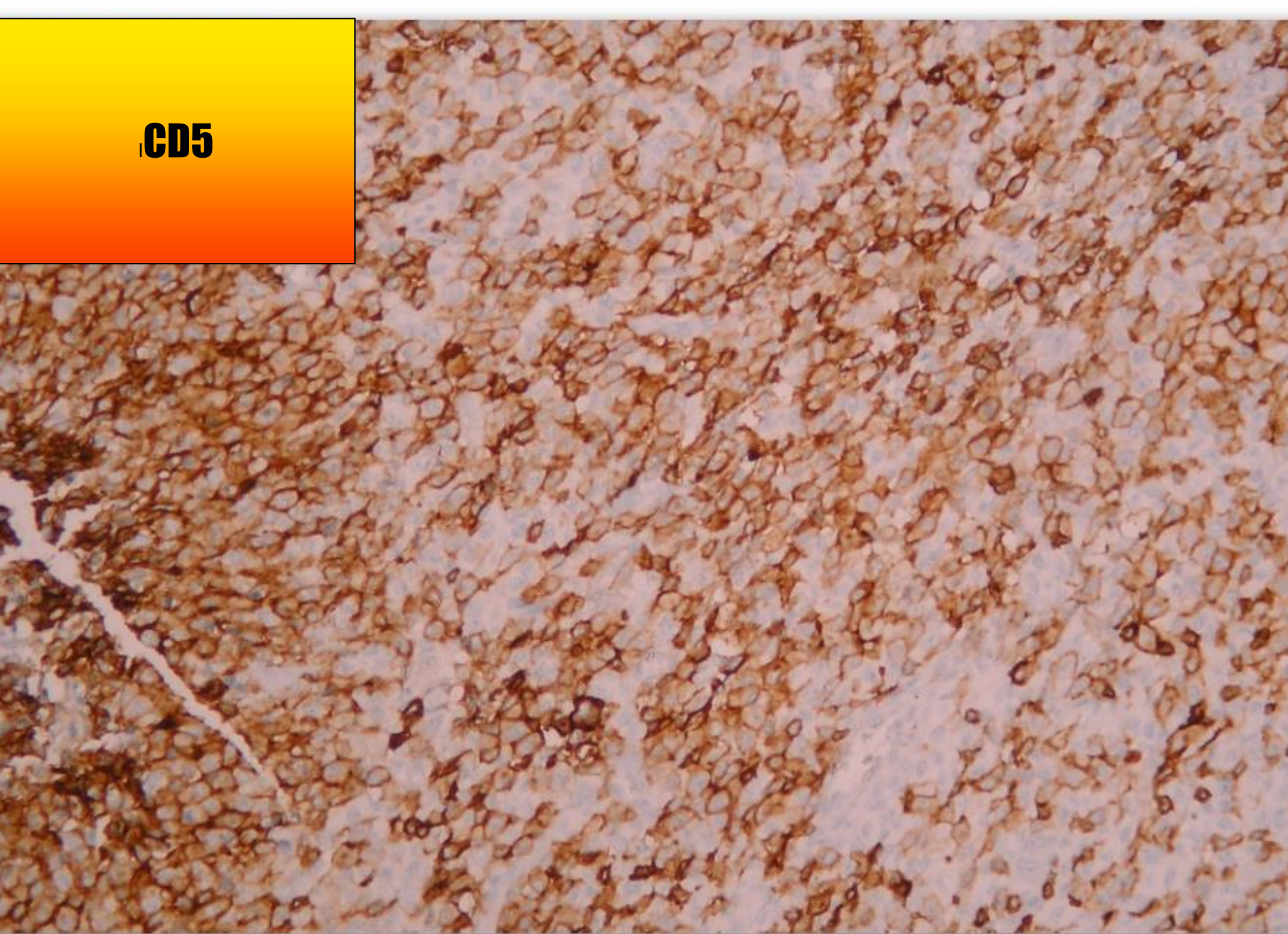
**CD1a**



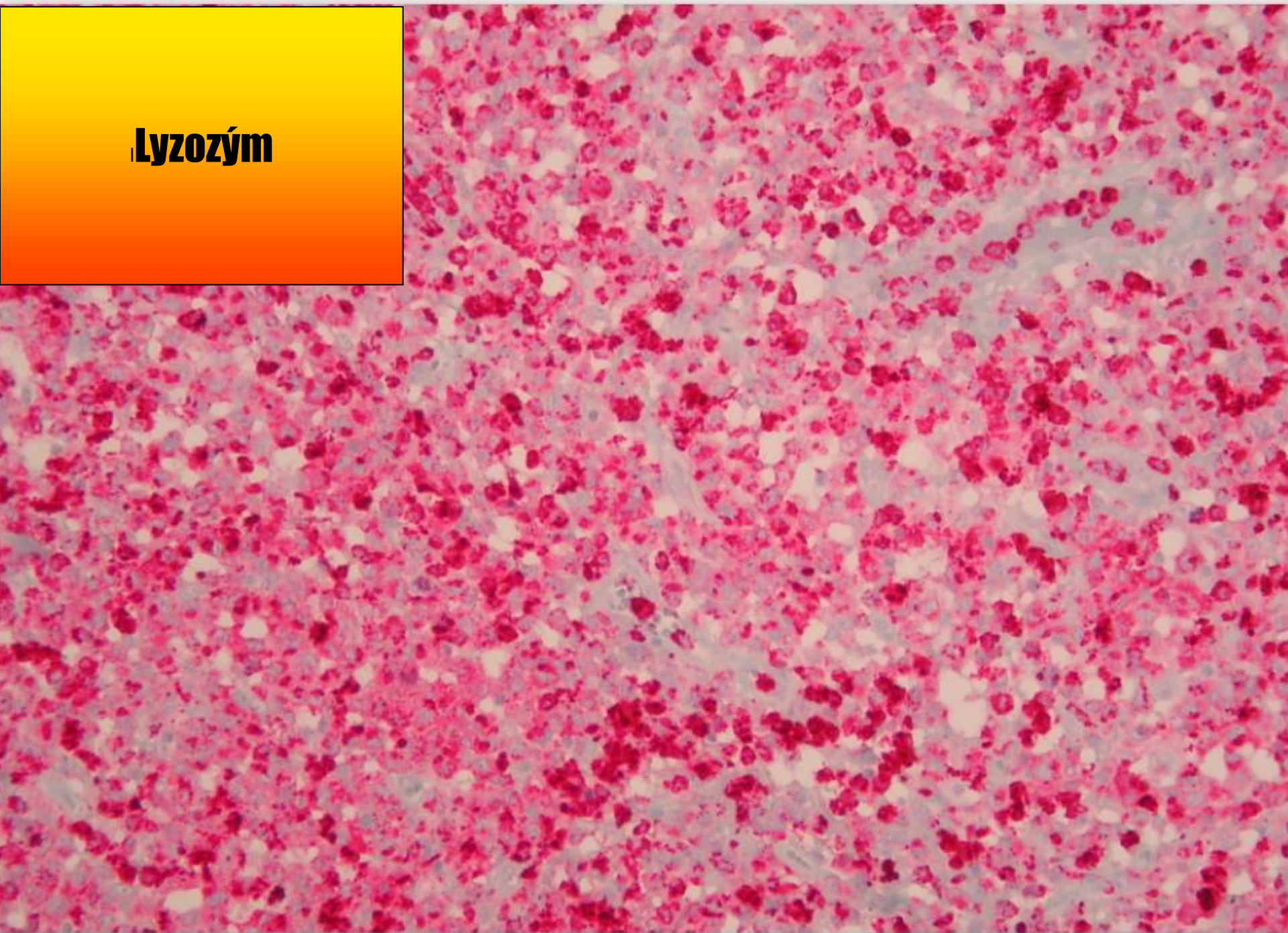
**CD33**



**CD5**



# **Lyzozým**



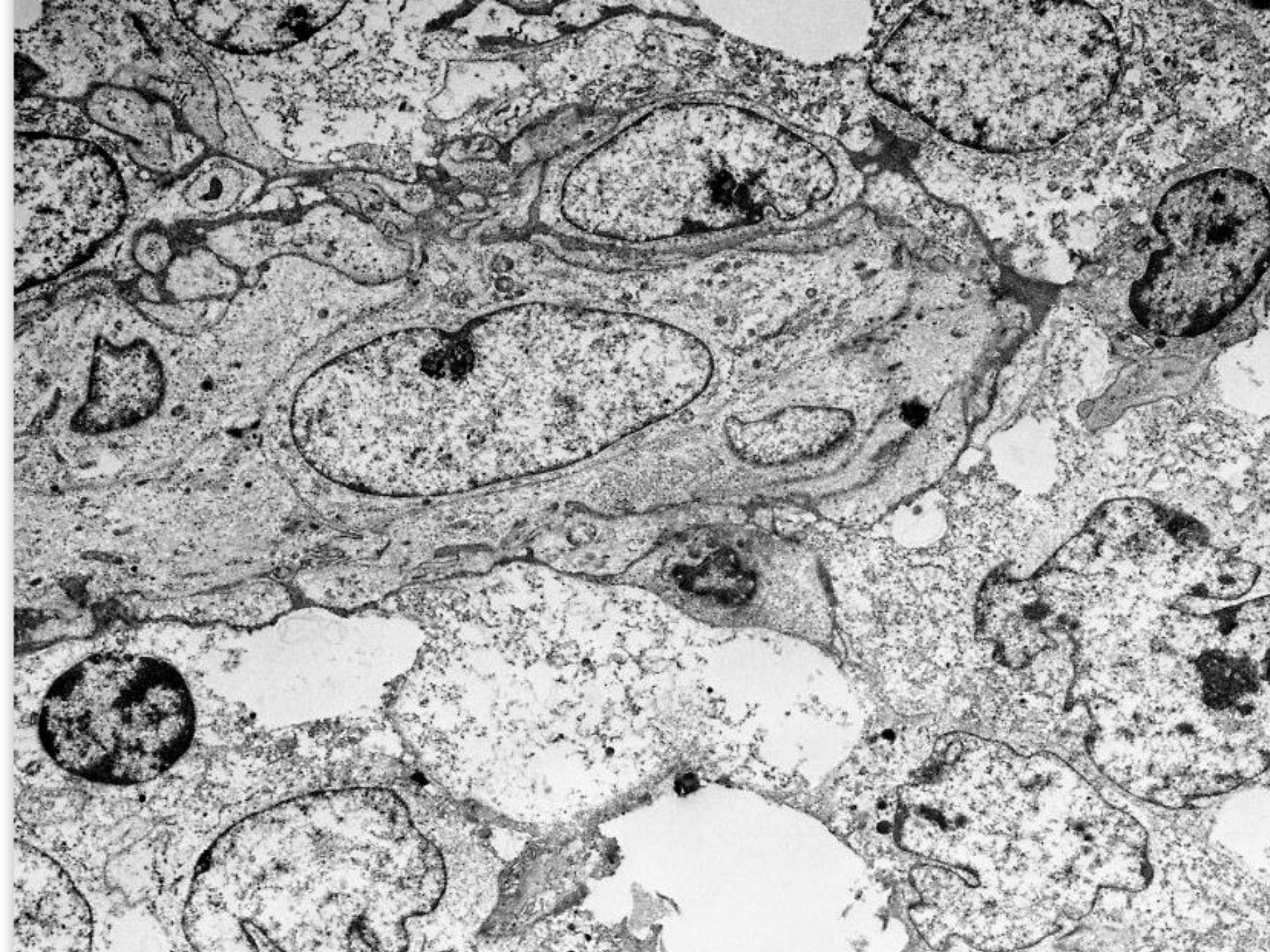


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**BLASTIC  
INDETERMINATED  
DENDRITIC CELL  
TUMOR**





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**Expert Review of Hematology** >

Volume 10, 2017 - Issue 3

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Review

# Lymphoma classification update: T-cell lymphomas, Hodgkin lymphomas, and histiocytic/dendritic cell neoplasms

Manli Jiang, N. Nora Bennani & Andrew L. Feldman

Pages 239-249 | Received 15 Nov 2016, Accepted 09 Jan 2017, Published online: 29 Jan 2017

Download citation <http://dx.doi.org/10.1080/17474086.2017.1281122>



Wybierz język |

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## ABSTRACT

## Specific skin lesions in chronic myelomonocytic leukemia: a spectrum of myelomonocytic and dendritic cell proliferations: a study of 42 cases.

Vitte F<sup>1</sup>, Fabiani B, Bénét C, Dalac S, Balme B, Delattre C, Vergier B, Bevlot-Barry M, Vignon-Pennamen D, Ortonne N, Algros MP, Carlotti A, Samaleire D, Frouin E, Levy A, Laroche L, Theate J, Monnier E, Mugneret E, Petrella T.

and overall phenotypic expression, the 42 patients were classified into 4 clinicopathologic categories of MLC: (1) myelomonocytic cell tumors (MMCTs) (n = 18); (2) mature plasmacytoid dendritic cell proliferations (MPDCPs) (n = 16); (3) blastic plasmacytoid dendritic cell neoplasms (BPDCNs) (n = 4); and (4) blastic indeterminate dendritic cell tumors (BIDCTs) (n = 4). Considering all categories, the median age was 71.0 years with a male to female ratio of 5:1, showing a clear male predominance of 83.3%.

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**TABLE 6. Survival Results**

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Pattern	OS1				OS2			
	Meantime	CI-	CI+	<i>P</i>	Meantime	CI-	CI+	<i>P</i>
MMCT	49.4	24	74.8	0.60	13.9	5.9	21.9	0.77
MPDCP	53.2	33.5	72.8		23	10	36	
BPDCN	49.8	21.9	77.6		10.4	4.5	16.2	
BIDCT	124	29.9	218.2		6.8	3.5	10.1	

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Results shown in months.

CI- indicates lower limit of the confidence interval; CI+, upper limit of the confidence interval.

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**TABLE 2.** Comparison of the Main Clinical Data for the 4 Categories

	All Patients	MMCT	MPDCP	BPDCN	BIDCT
No. patients (%)	42	18	16	4	4
Median age (y)	71	71.5	76.5	71.5	65.5
Sex					
Male	35 (83.3)	15 (83.3)	15 (93.7)	3 (75)	2 (50)
Female	7 (16.7)	3 (16.7)	1 (6.3)	1 (25)	2 (50)
Presentation					
Unique lesion	6/42 (14.3)	2/18 (11.1)	1/16 (6.3)	1/4 (25)	2/4 (50)
Multiple lesion	35/42 (83.3)	15/18 (83.3)	15/16 (93.8)	3/4 (75)	2/4 (50)
Data not available	1/42 (2.4)	1/18 (5.6)	0/16 (0)	0/4 (0)	0/4 (0)
Chronology of skin lesions					
Before diagnosis of CMML	1/42 (2.4)	0/18 (0)	0/16 (0)	0/4 (0)	0/4 (0)
Concurrent to diagnosis of CMML	14/42 (33.3)	4/18 (22.2)	8/16 (50)	2/4 (50)	1/4 (25)
After diagnosis of CMML	27/42 (64.3)	14/18 (77.8)	8/16 (50)	2/4 (50)	3/4 (75)
Treatment					
None	4/42 (9.5)	1/18 (5.6)	1/16 (6.3)	1/4 (25)	1/4 (25)
Local corticoid	3/42 (7.1)	1/18 (5.6)	2/16 (12.5)	0/4 (0)	0/4 (0)
Cytoreductive	18/42 (42.9)	7/18 (38.9)	9/16 (56.3)	0/4 (0)	2/4 (50)
High-dose chemotherapy	7/42 (16.7)	4/18 (22.2)	0/16 (0)	2/4 (50)	1/4 (25)
Radiotherapy	2/42 (4.8)	0/18 (0)	1/16 (6.3)	1/4 (25)	0/4 (0)
Data not available	8/42 (19)	5/18 (27.8)	3/16 (18.8)	0/4 (0)	0/4 (0)
Treatment response					
None	8/42 (19)	3/18 (16.7)	2/16 (12.5)	1/4 (25)	2/4 (50)
Partial response	13/42 (31)	4/18 (22.2)	6/16 (37.5)	2/4 (50)	1/4 (25)
Complete response	11/42 (26.2)	4/18 (22.2)	5/16 (31.3)	1/4 (25)	1/4 (25)
Data not available	10/42 (23.8)	7/18 (38.9)	3/16 (18.8)	0/4 (0)	0/4 (0)
Outcome at the date of last follow-up					
Alive	22/42 (52.4)	9/18 (50)	11/16 (68.8)	1/4 (25)	1/4 (25)
Dead	19/42 (45.2)	8/18 (44.4)	5/16 (31.3)	3/4 (75)	3/4 (75)
Data not available	1/42 (2.4)	1/18 (5.6)	0/16 (0)	0/4 (0)	0/4 (0)

## Review Series

### THE UPDATED WHO CLASSIFICATION OF HEMATOLOGICAL MALIGNANCIES

## The 2016 revision to the World Health Organization classification of myeloid neoplasms and acute leukemia

Daniel A. Arber,<sup>1</sup> Attilio Orazi,<sup>2</sup> Robert Hasserjian,<sup>3</sup> Jürgen Thiele,<sup>4</sup> Michael J. Borowitz,<sup>5</sup> Michelle M. Le Beau,<sup>6</sup> Clara D. Bloomfield,<sup>7</sup> Mario Cazzola,<sup>8</sup> and James W. Vardiman<sup>9</sup>

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The World Health Organization (WHO) classification of tumors of the hematopoietic and lymphoid tissues was last updated in 2008. Since then, there have been numerous advances in the identification of unique biomarkers associated with some myeloid neoplasms and acute leukemias, largely derived from gene expression analysis and next-generation sequencing that can significantly improve the diagnostic criteria as well as

the prognostic relevance of entities currently included in the WHO classification and that also suggest new entities that should be added. Therefore, there is a clear need for a revision to the current classification. The revisions to the categories of myeloid neoplasms and acute leukemia will be published in a monograph in 2016 and reflect a consensus of opinion of hematopathologists, hematologists, oncologists, and geneticists.

The 2016 edition represents a revision of the prior classification rather than an entirely new classification and attempts to incorporate new clinical, prognostic, morphologic, immunophenotypic, and genetic data that have emerged since the last edition. The major changes in the classification and their rationale are presented here. (*Blood*. 2016; 127(20):2391-2405)

**Table 1. (continued)**

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**WHO myeloid neoplasm and acute leukemia classification**

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**Blastic plasmacytoid dendritic cell neoplasm**



**Myeloid/lymphoid neoplasms with eosinophilia and rearrangement of *PDGFRA*, *PDGFRB*, or *FGFR1*, or with *PCM1-JAK2***

Myeloid/lymphoid neoplasms with *PDGFRA* rearrangement

Myeloid/lymphoid neoplasms with *PDGFRB* rearrangement

Myeloid/lymphoid neoplasms with *FGFR1* rearrangement

*Provisional entity: Myeloid/lymphoid neoplasms with PCM1-JAK2*

**Myelodysplastic/myeloproliferative neoplasms (MDS/MPN)**

Chronic myelomonocytic leukemia (CMML)

Atypical chronic myeloid leukemia (aCML), *BCR-ABL1*<sup>-</sup>

Juvenile myelomonocytic leukemia (JMML)

MDS/MPN with ring sideroblasts and thrombocytosis (MDS/MPN-RS-T)

MDS/MPN, unclassifiable

**Myelodysplastic syndromes (MDS)**

MDS with single lineage dysplasia

MDS with ring sideroblasts (MDS-RS)

MDS-RS and single lineage dysplasia

MDS-RS and multilineage dysplasia

MDS with multilineage dysplasia

MDS with excess blasts

MDS with isolated del(5q)

MDS, unclassifiable

*Provisional entity: Refractory cytopenia of childhood*


Myeloid neoplasms with germ line predisposition

## Myelodysplastic/myeloproliferative neoplasms

The myelodysplastic syndrome (MDS)/MPN category was introduced in the third edition to include myeloid neoplasms with clinical, laboratory, and morphologic features that overlap between MDS and MPN.<sup>24</sup> Based on accumulated scientific evidence, a provisional entity within the MDS/MPN unclassifiable group, refractory anemia with ring sideroblasts associated with marked thrombocytosis (RARS-T), has been accepted as a full entity, now termed MDS/MPN with ring sideroblasts and thrombocytosis in the 2016 revision. The 2016 revised criteria for diseases in this category are summarized in Tables 11-14.<sup>25</sup>

In MDS/MPN, the karyotype is often normal or shows abnormalities in common with MDS. Targeted sequencing of genes mutated in

myeloid neoplasms detects mutations in a high proportion of cases of chronic myelomonocytic leukemia (CMML) as well as other MDS/MPN patients.<sup>26</sup> The most commonly mutated genes in CMML are *SRSF2*, *TET2*, and/or *ASXL1* (>80% of cases).<sup>26,27</sup> Other mutations which occur at lower frequency include *SETBP1*, *NRAS/KRAS*, *RUNX1*, *CBL*, and *EZH2*.<sup>28,29</sup> They can be helpful adjunct studies in difficult cases, particularly given the frequently normal karyotype of CMML, but should not be used alone as proof of neoplasia because some of these mutations occur in healthy older patients as so-called clonal hematopoiesis of indeterminate potential (CHIP)<sup>30,31</sup> (for further discussion, see “Myelodysplastic syndromes”). *ASXL1* is a predictor of aggressive disease behavior and has been incorporated into a prognostic scoring system for CMML alongside karyotype and clinicopathologic parameters.<sup>27</sup> Of note, *NPM1* mutation is seen in a rare subset of CMML (3%-5%) and appears also to herald a more aggressive clinical course.



**Next generation  
sequencing solution or  
dissolution?**

**Take home message??**

**Don't take any.....**

**....take a tripple mojito...**

**:)**



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