77 ročný pacient
Dĺžka hospitalizácie: 6 dní

Pitvaný 12 hodín po úmrtí

Kristína Giertlová, Pavol Janega

KLINICKÝ PRIEBEH

Klinický stav

- 77 ročný pacient

- Hospitalizovaný
  - **niekoľko týždňov trvajúcu bolesť** pod pravým rebrovým oblúkom
  - pacient má **tmavší moč, subikterus**

- USG
  - hepatopatia so zväčšením pečene a jeho nehomogénnou štruktúrou
  - zhrubnutá stena žlčníka, cholecystolitiáza

Klinický stav

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- OA:
  - Arteriálna hypertenzia
  - Stav po diafragmálnom infarkte myokardu pred 40-timi rokmi
  - DM 2.typu na diéte
  - **Stav po operácii malígmeho melanómu v pravom hypogastriu (pred 2 rokmi), bez dispenzarizácie?**

Klinický stav

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- Hospitalizácia na internom oddelení 6 dní
  - Pacient afebrilný, KP kompenzovaný s hepatomegáliou a ikterom
  - USG brucha
    - Bez dilatácie žlčovodov
    - Difúzne ložiskové postihnutie pečene

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  - Onkomarkery: CA 19-9: +++, CEA: +++, CYFRA: +++
  - Serologické vyšetrenie: hepatitídy A-C negat., EBV IgG +, CMV IgG+

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    - Metastatické postihnutie pečene, metastatické postihnutie pleury, zväčšené LU abdominálne paravertebrálne a mediastinálne

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  - MR vyšetrenie
    - Metastatické postihnutie pečene
    - Tumor hepatálnej flexúry hrubého čreva

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    - Metastatické postihnutie pečene
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Klinický stav

- Diagnostický záver:
  - **Možný tumor hepatálnej flexúry.**
  - Hepatomegália v.s. **mts do pečene**, v oblasti pleury paravertebrálne vľavo.
  - Hraničné LU v mediastíne, nadbráničné vpravo a portokaválne.
  - Ascites. Ikterus. Hypokoagulačný stav. Hypoproteinémia s hypoalbuminémiou.
  - Anémia. Trombocytopénia ľahká asymptomatická.
  - Cholecystolitiáza, možná cholecystitída. Iritácia pankreasu.

  - ICHS nebolestivá forma, dekompenzovaná v malom obehu.
  - Stav po diafragmálnom infarkte myokardu.
  - Chronická obličková choroba IV. št. KDOQI, na podklade nefrosklerózy a diabetickej nefropatie.
  - DM 2.typu na diéte.
  - Polynueropatia DK.
  - Nadváha BMI=29,98kg/m2. Gynekomastia.
  - Chronická vénová choroba DK, varixy predkolení.

  - Stp. operácii malígneho melanómu v pravom hypogastriu (pred 2 rokmi)

PITVA

Vonkajšia obhliadka

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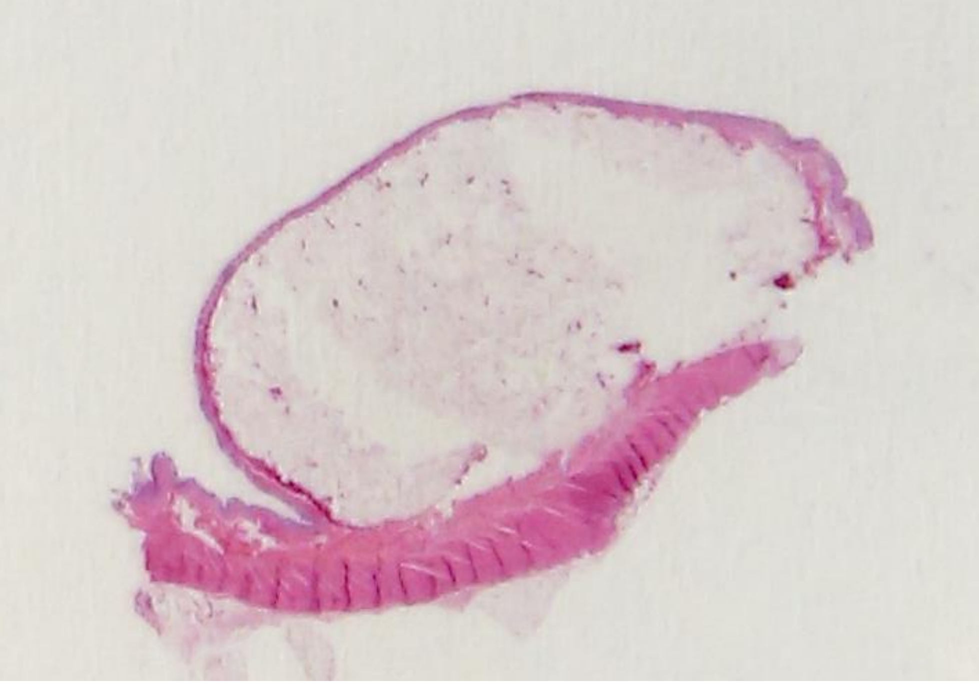
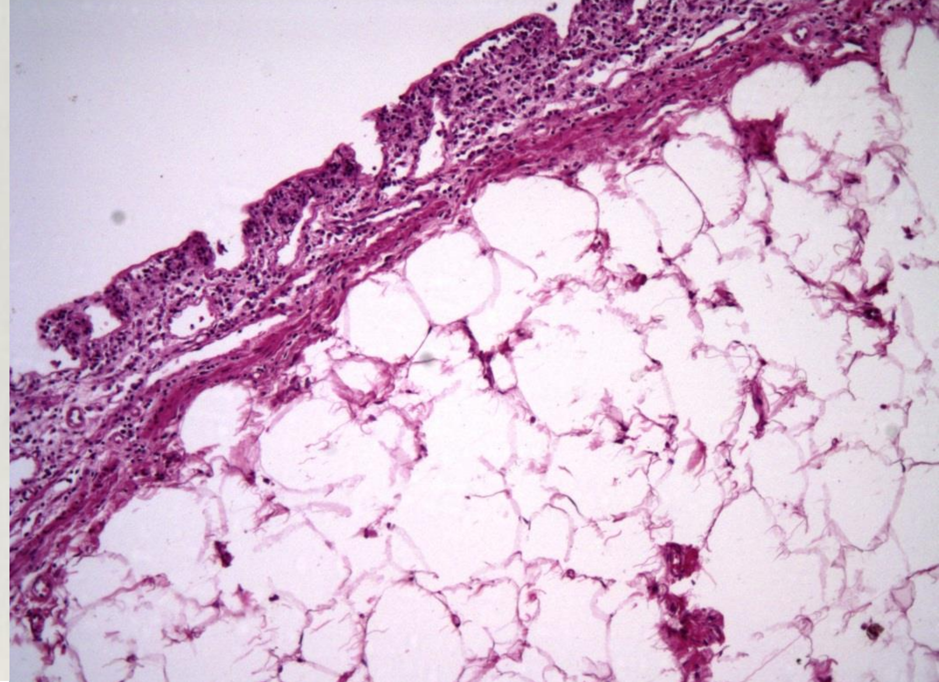
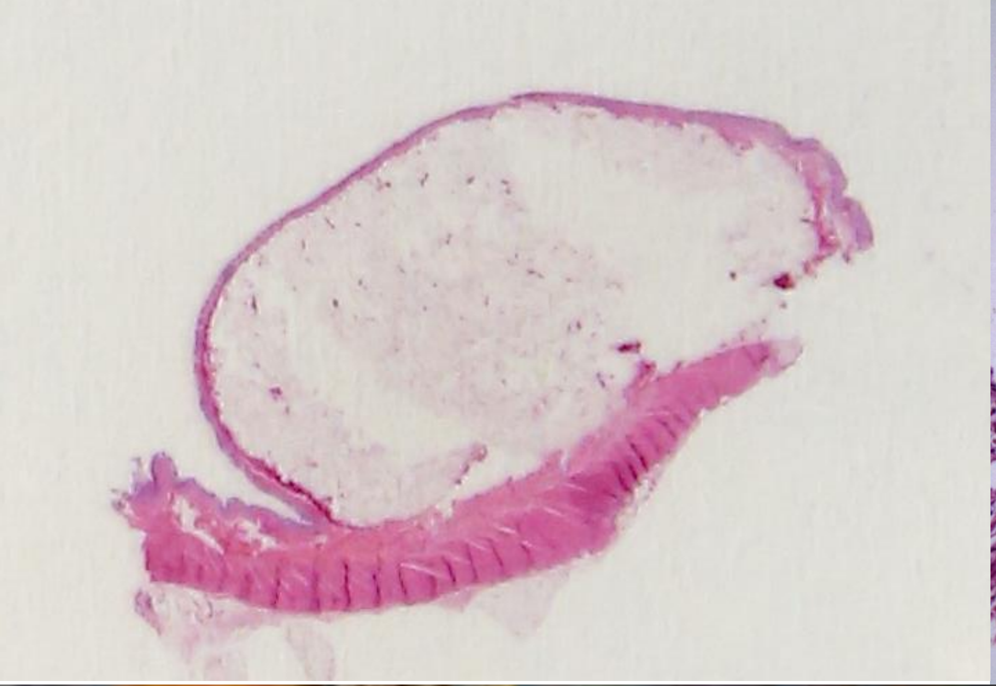
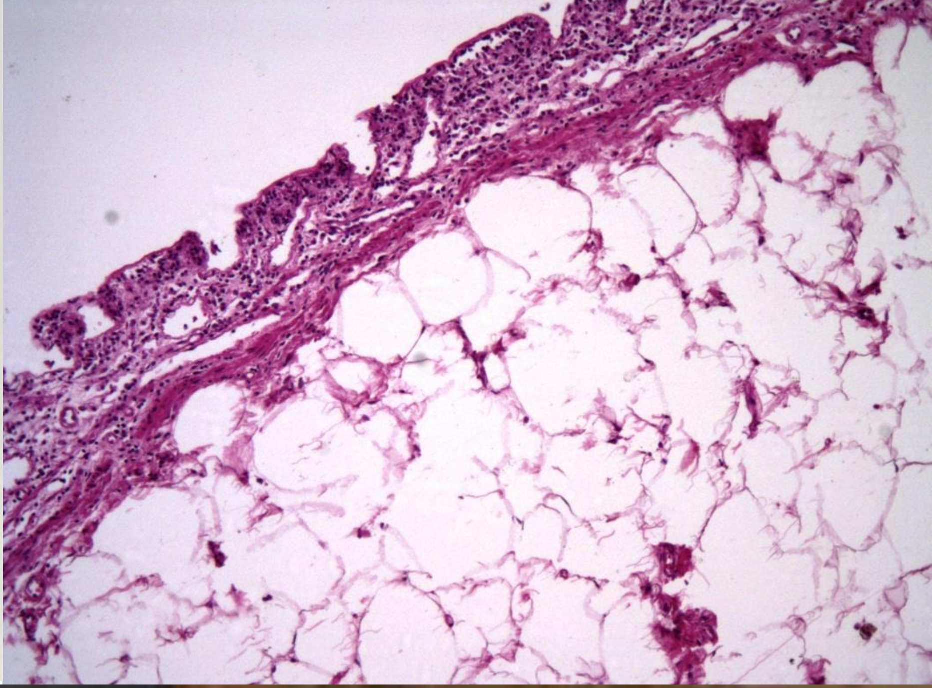


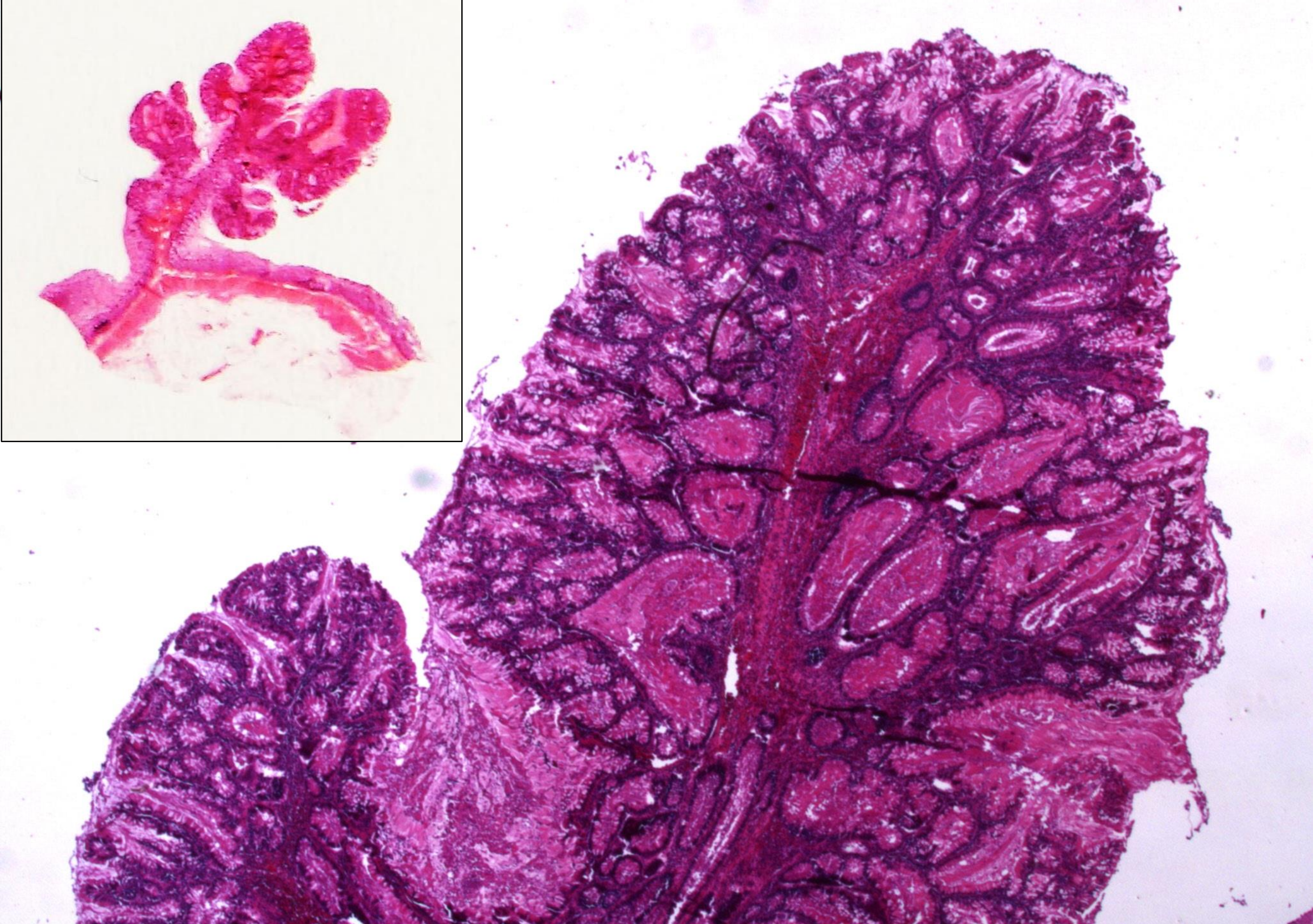


Hepatálna flexúra

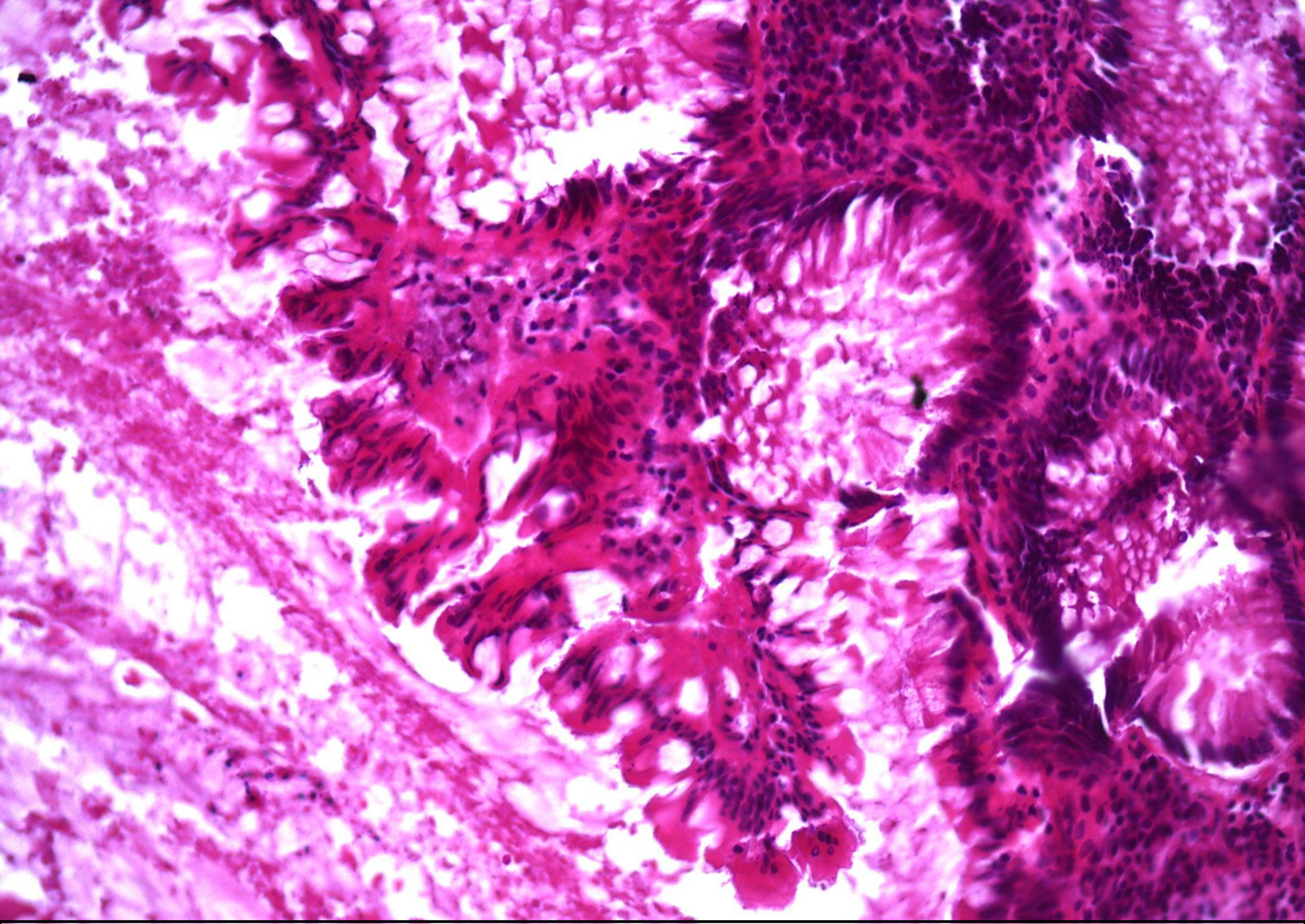




Lipóm hepatálnej flexúry



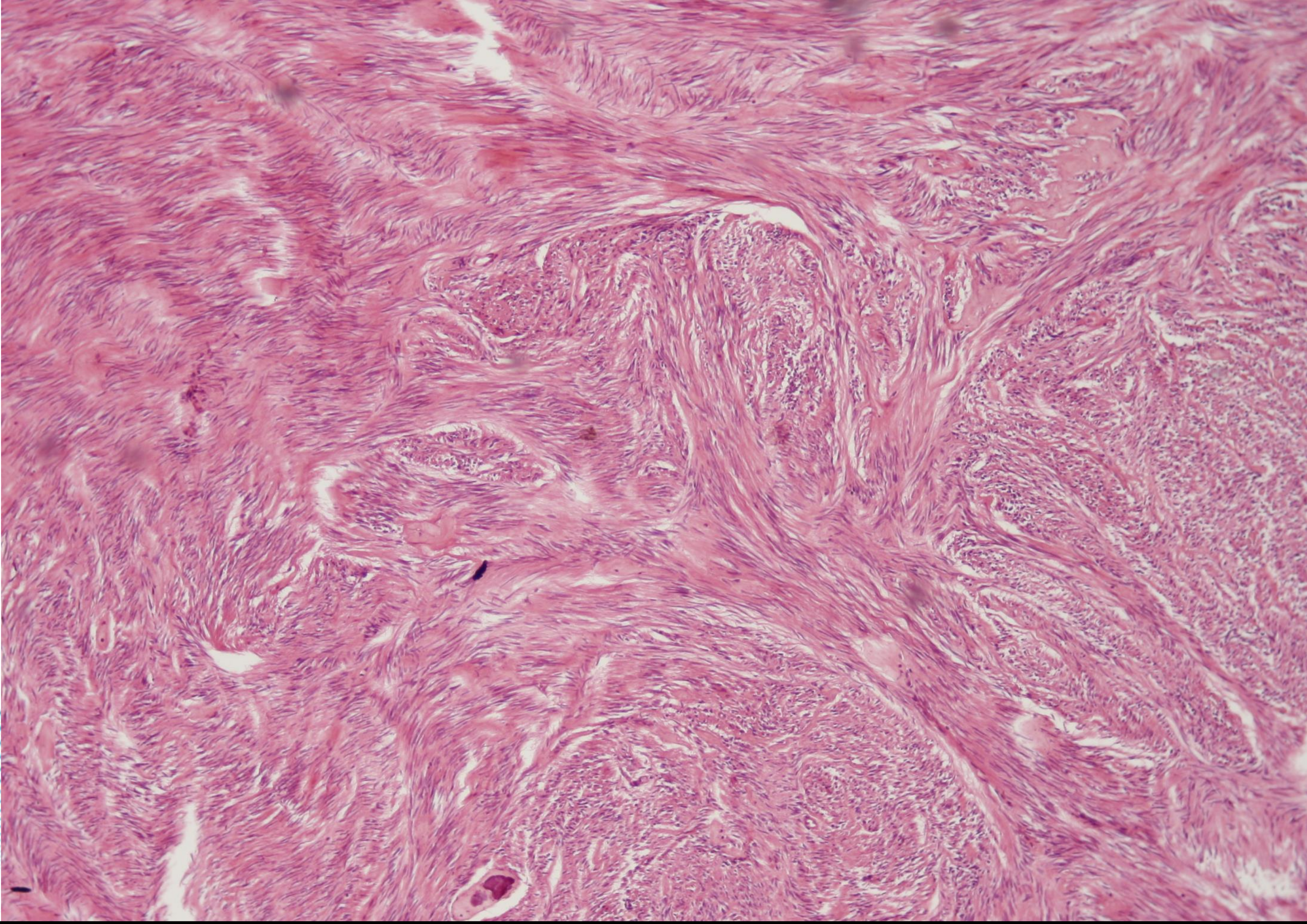
Hrubé črevo –sigma



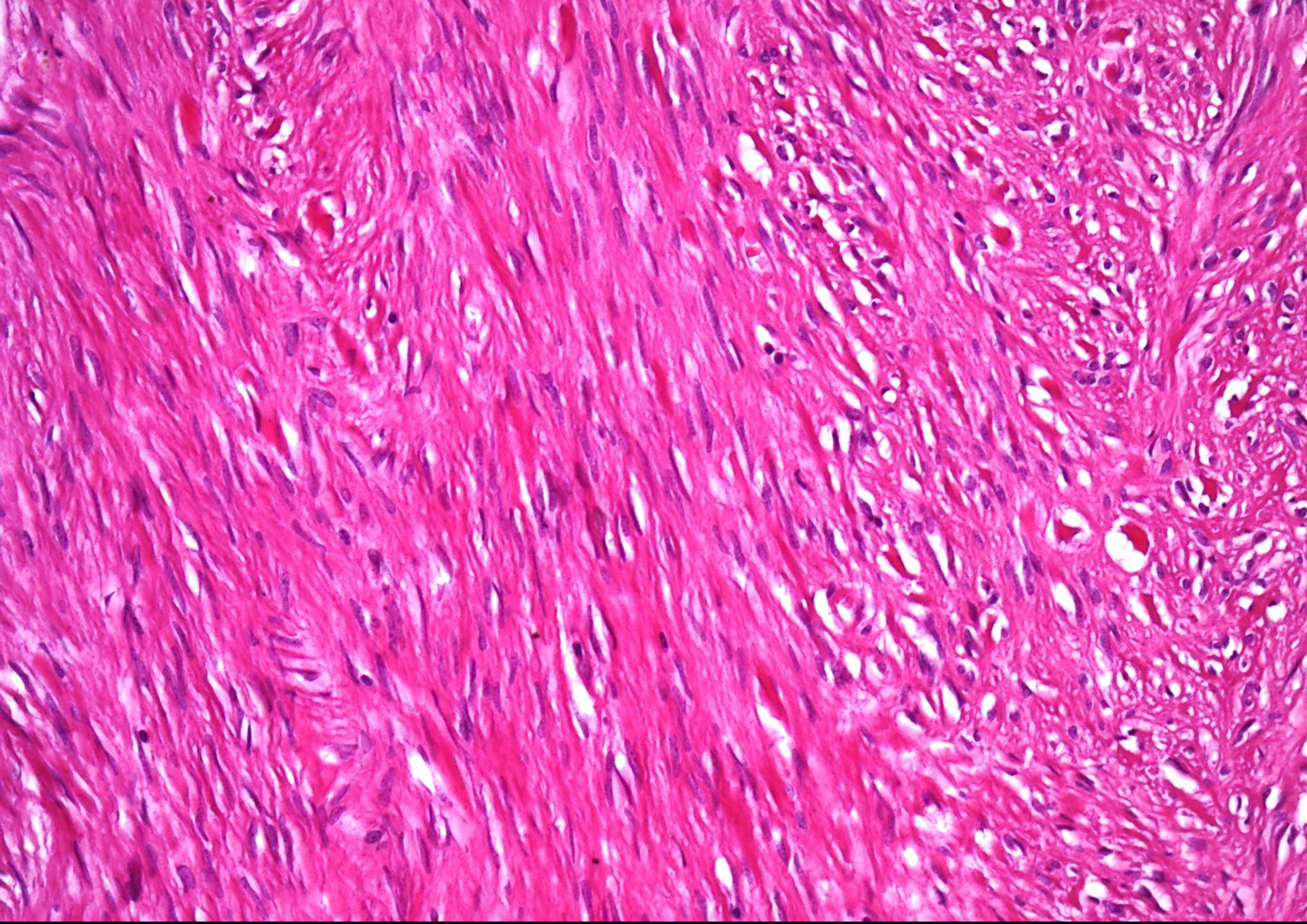
Hrubé črevo –sigma

Hyperplastický polyp sigmy hrubého čreva

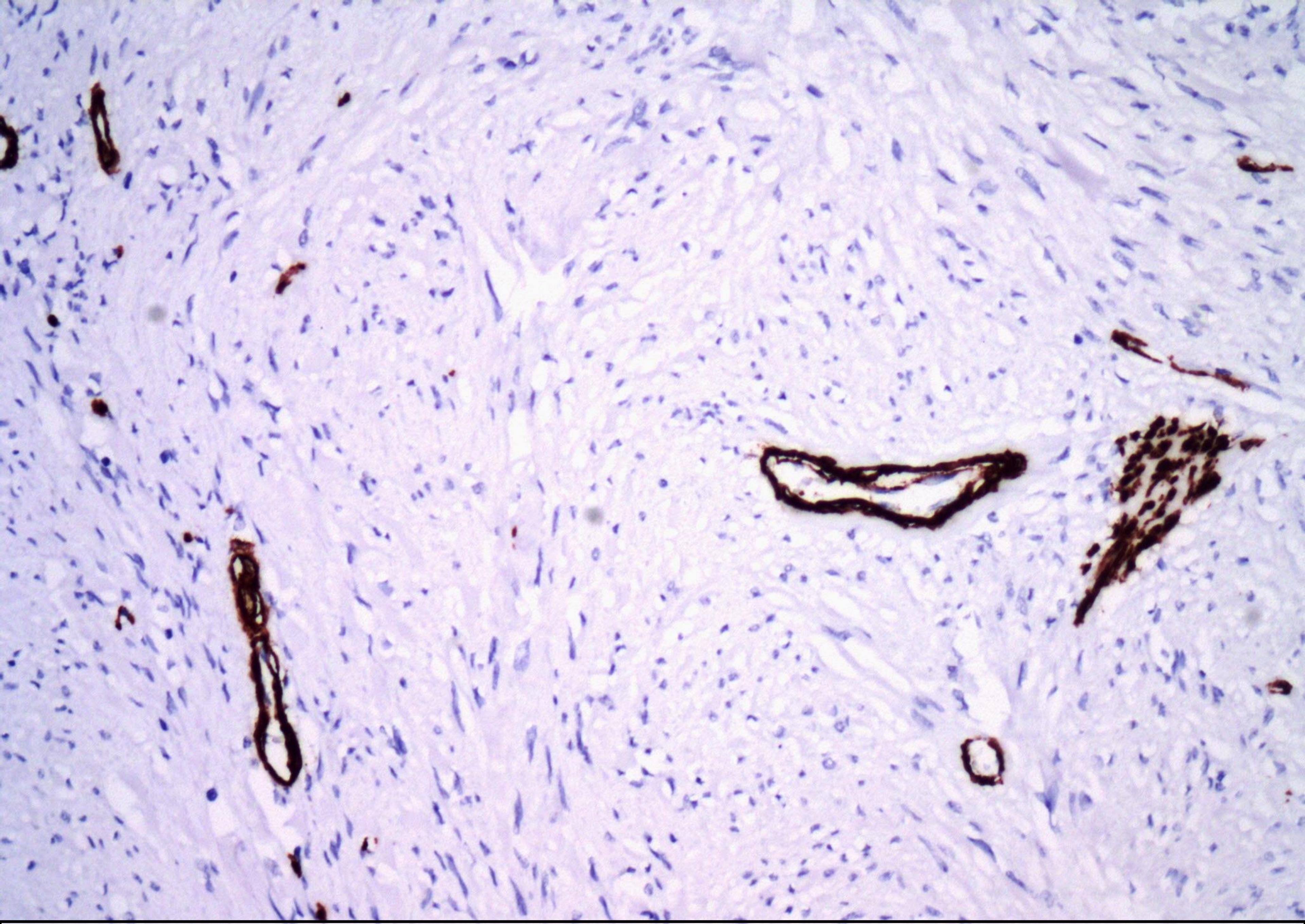
Hrubé črevo – rektosigma



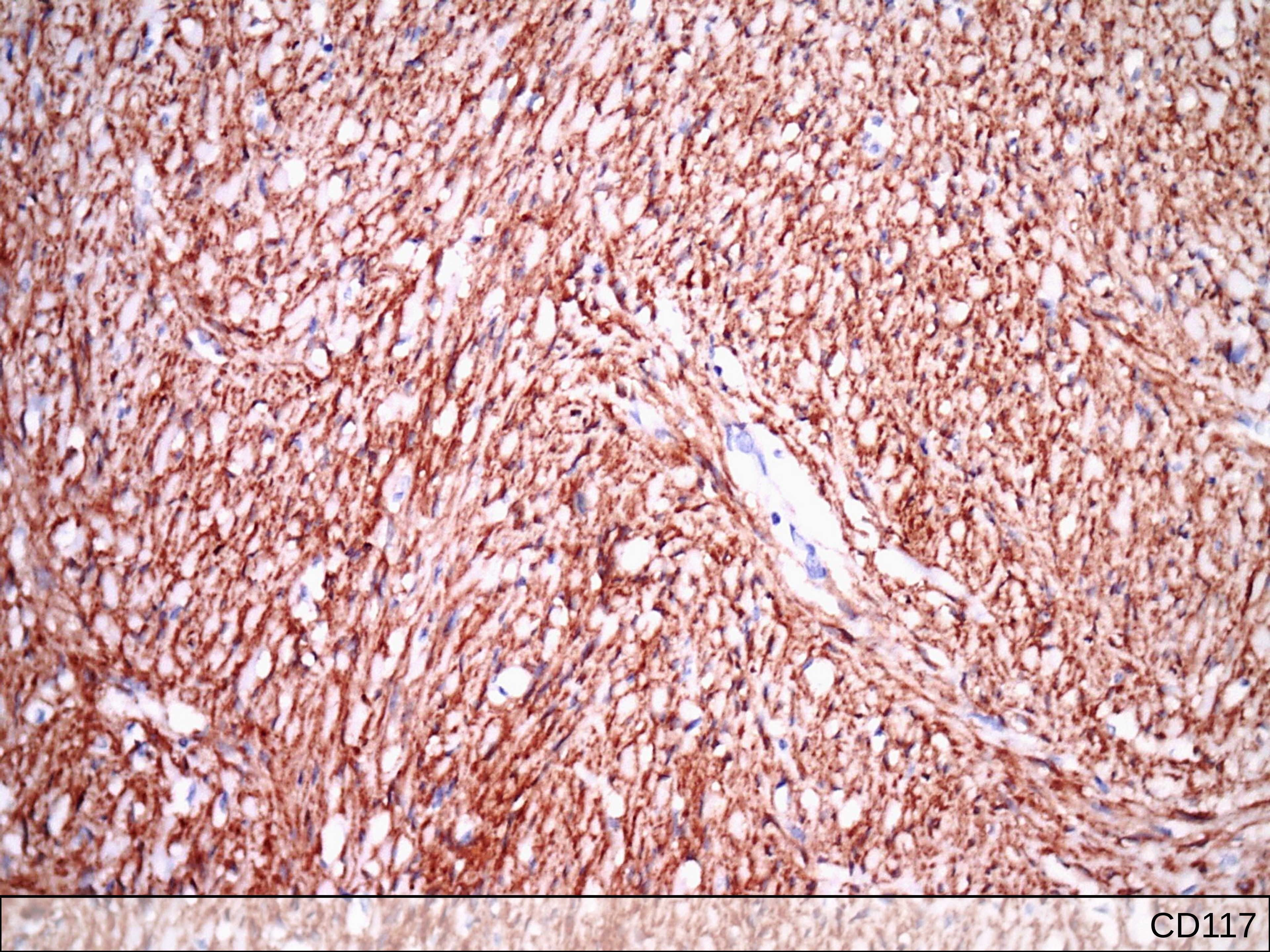
Hrubé črevo – rektosigma



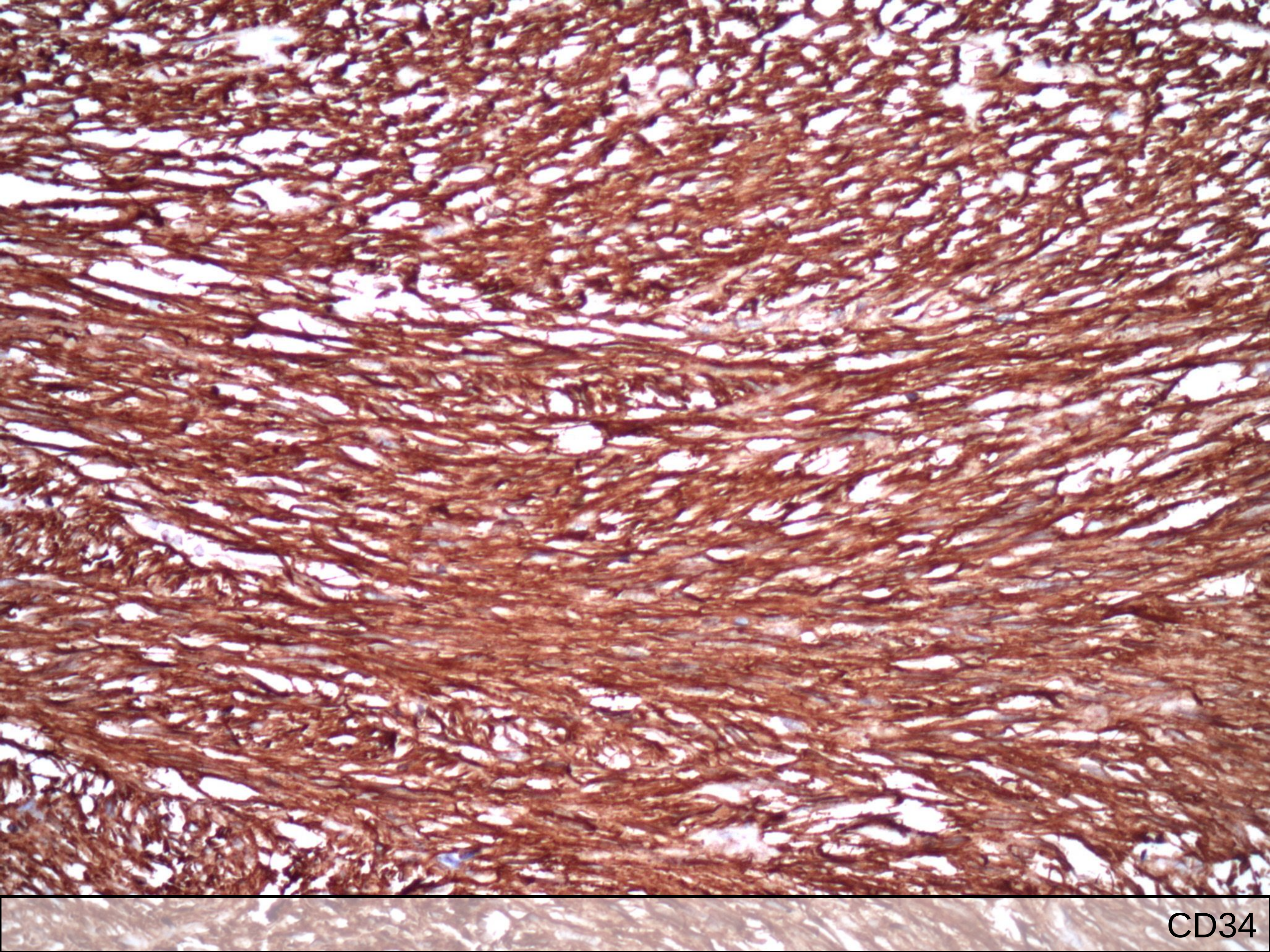
Hrubé črevo – rektosigma



SMA



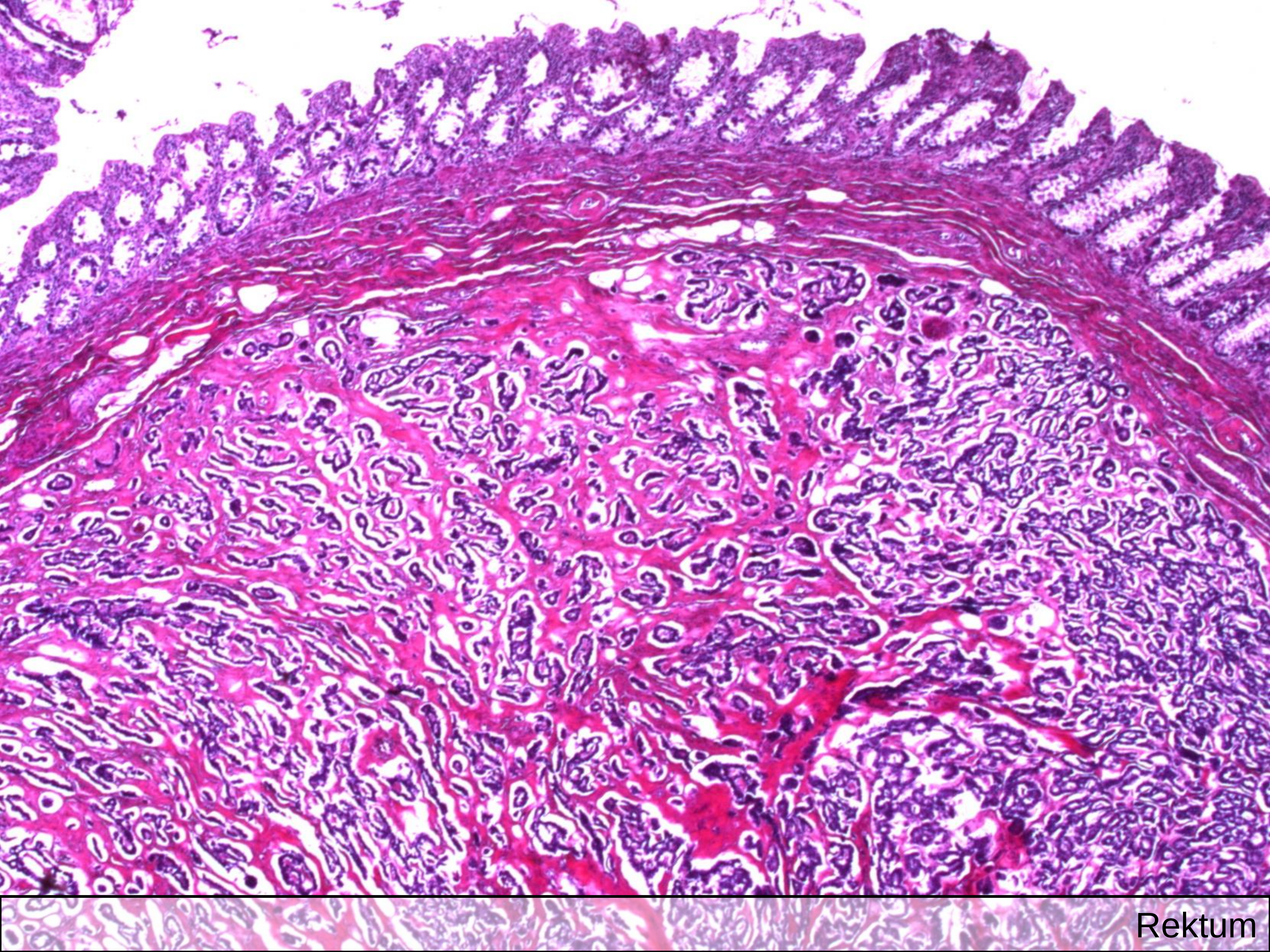
CD117


CD34


benígny GIST rektosigmy
benígny GIST žalúdka (3 ložiská)
CD34


Rektum


Rektum



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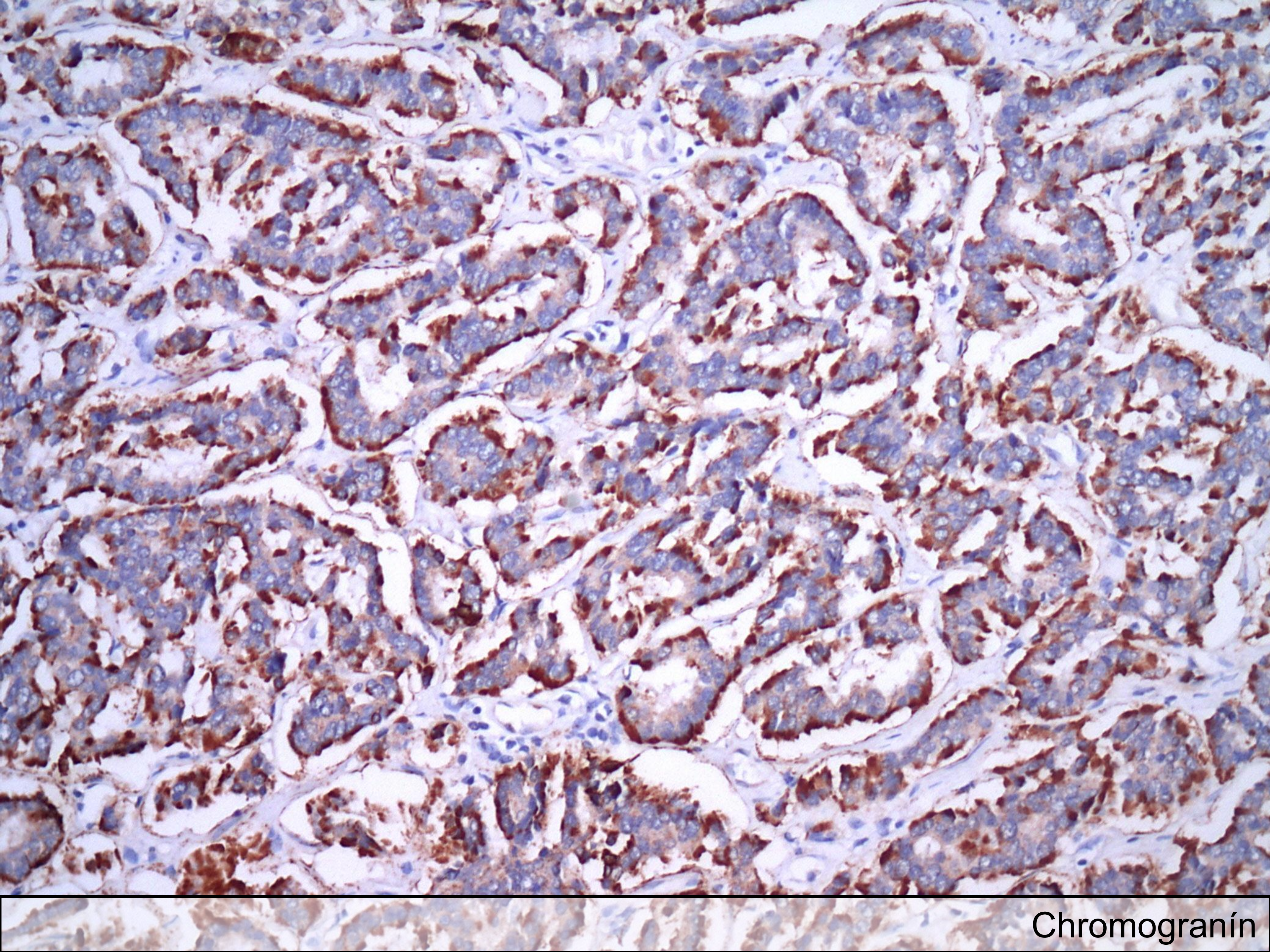
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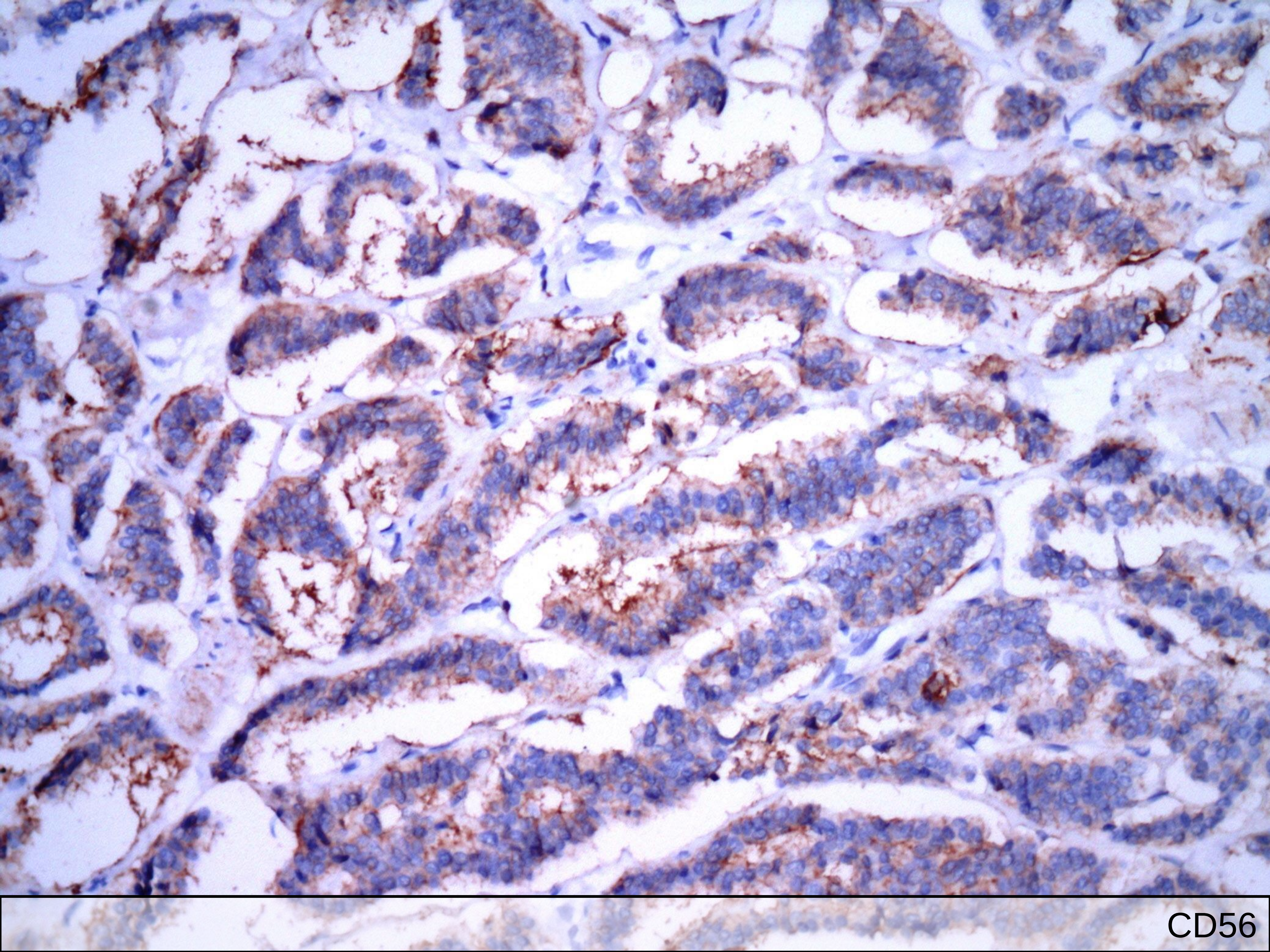

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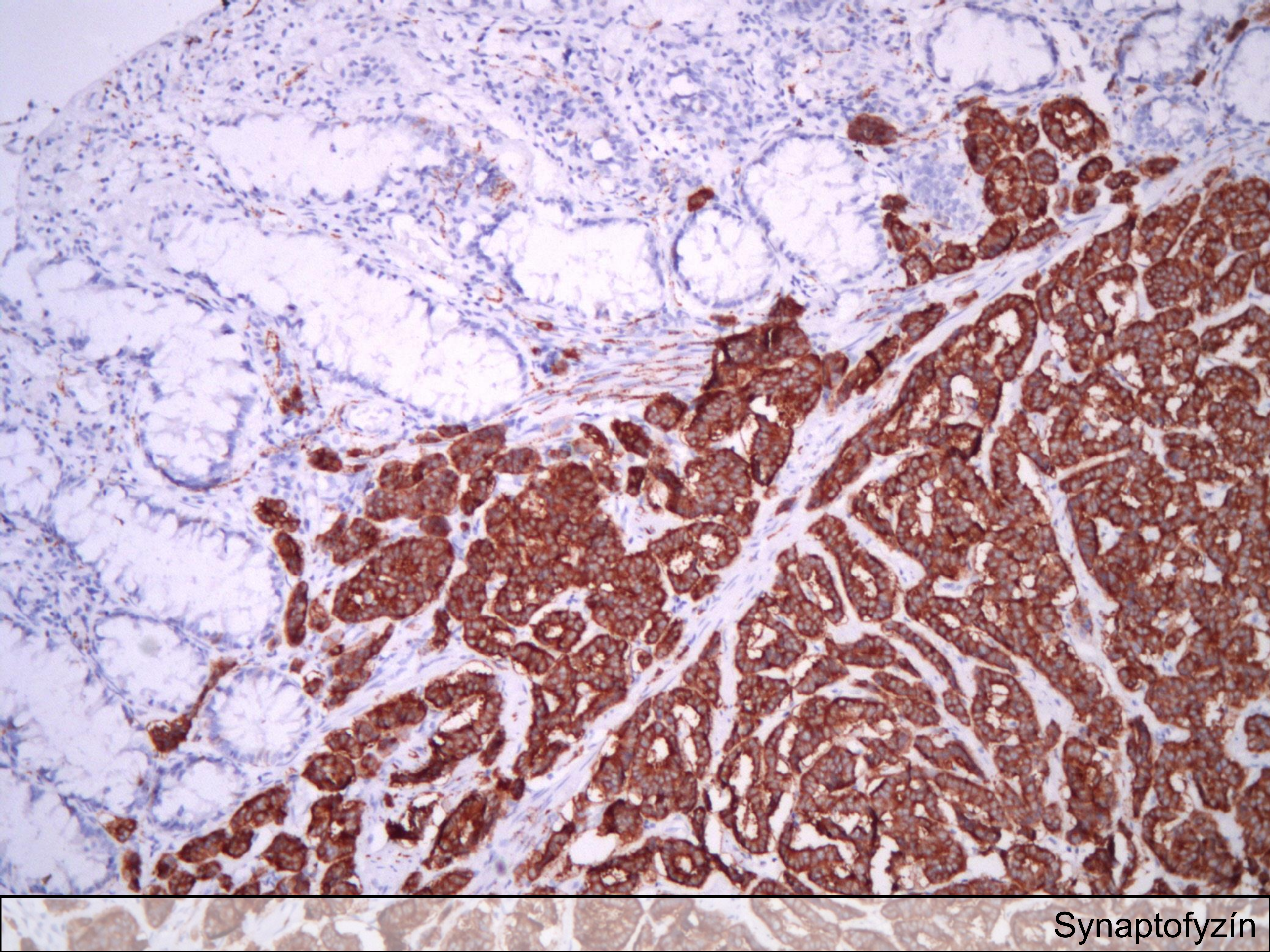
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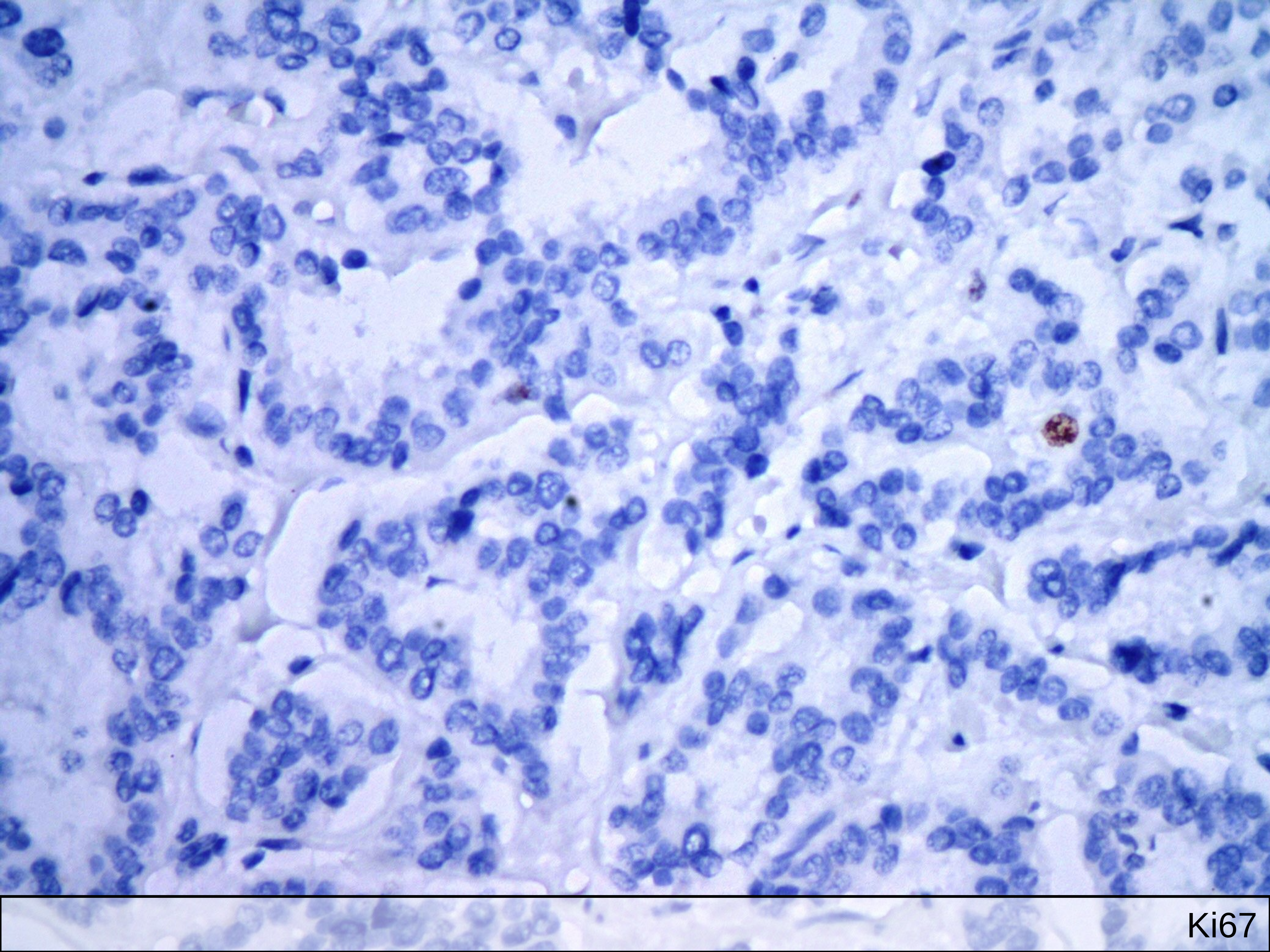
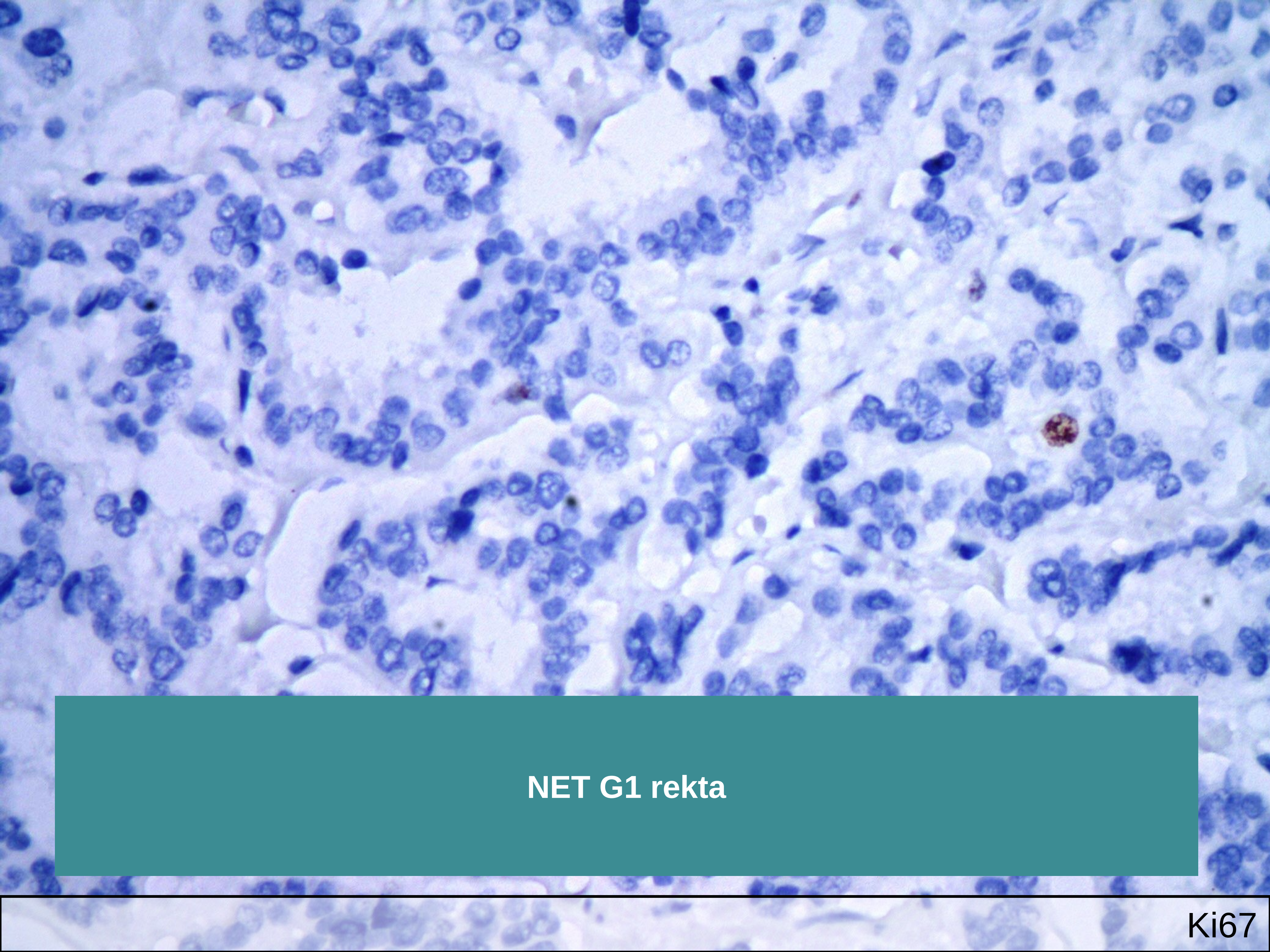
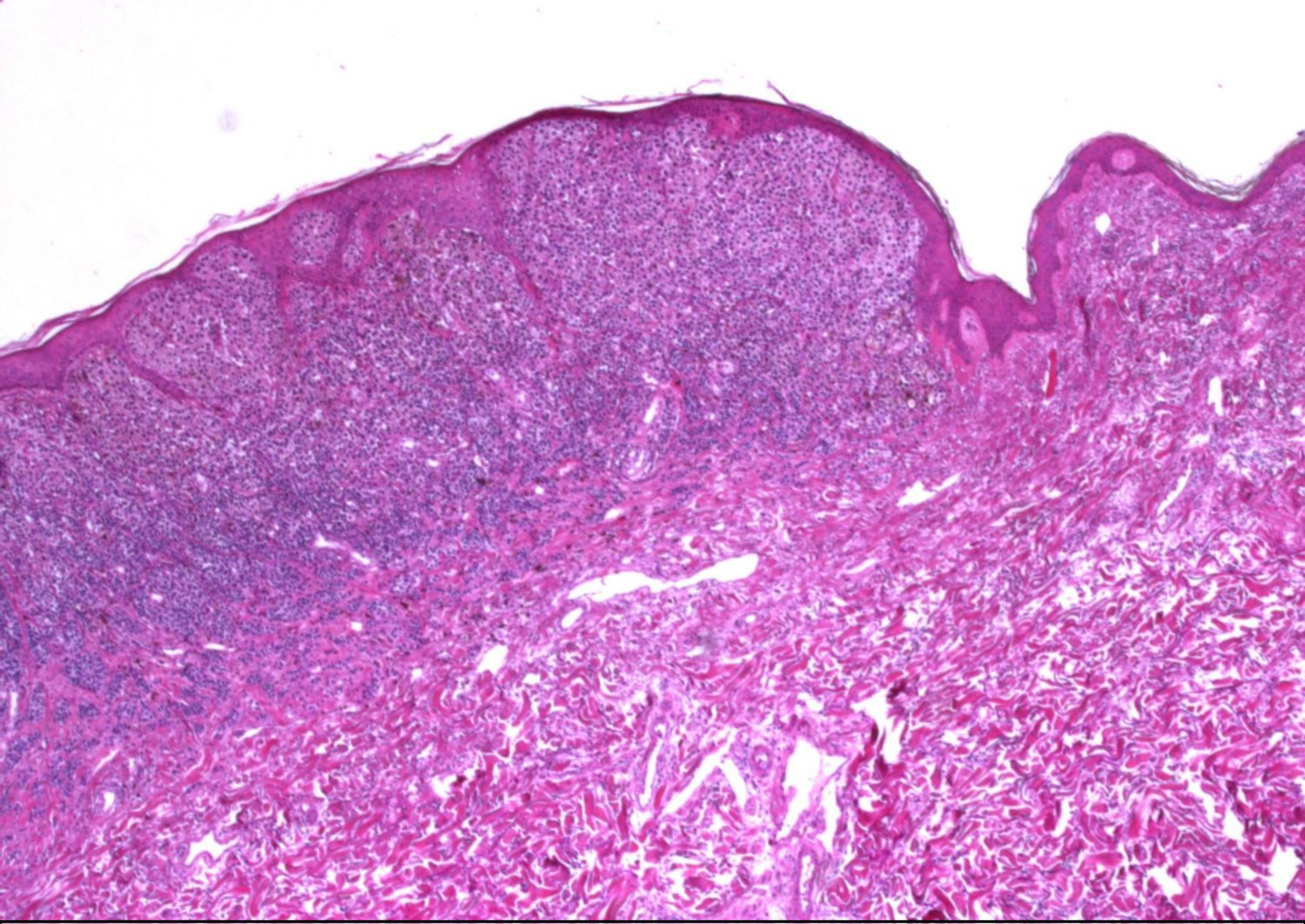

Ki67

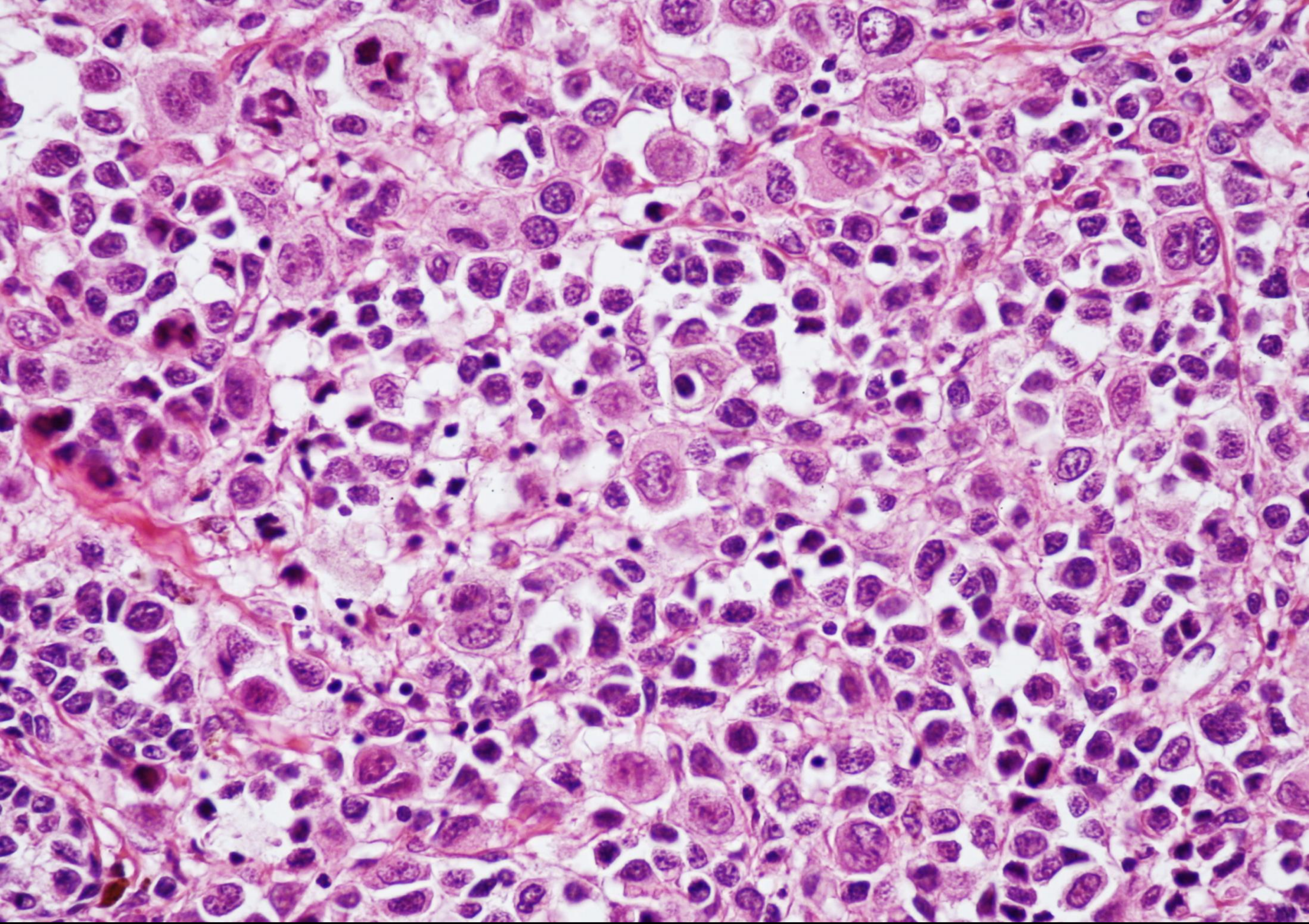


NET G1 rekta

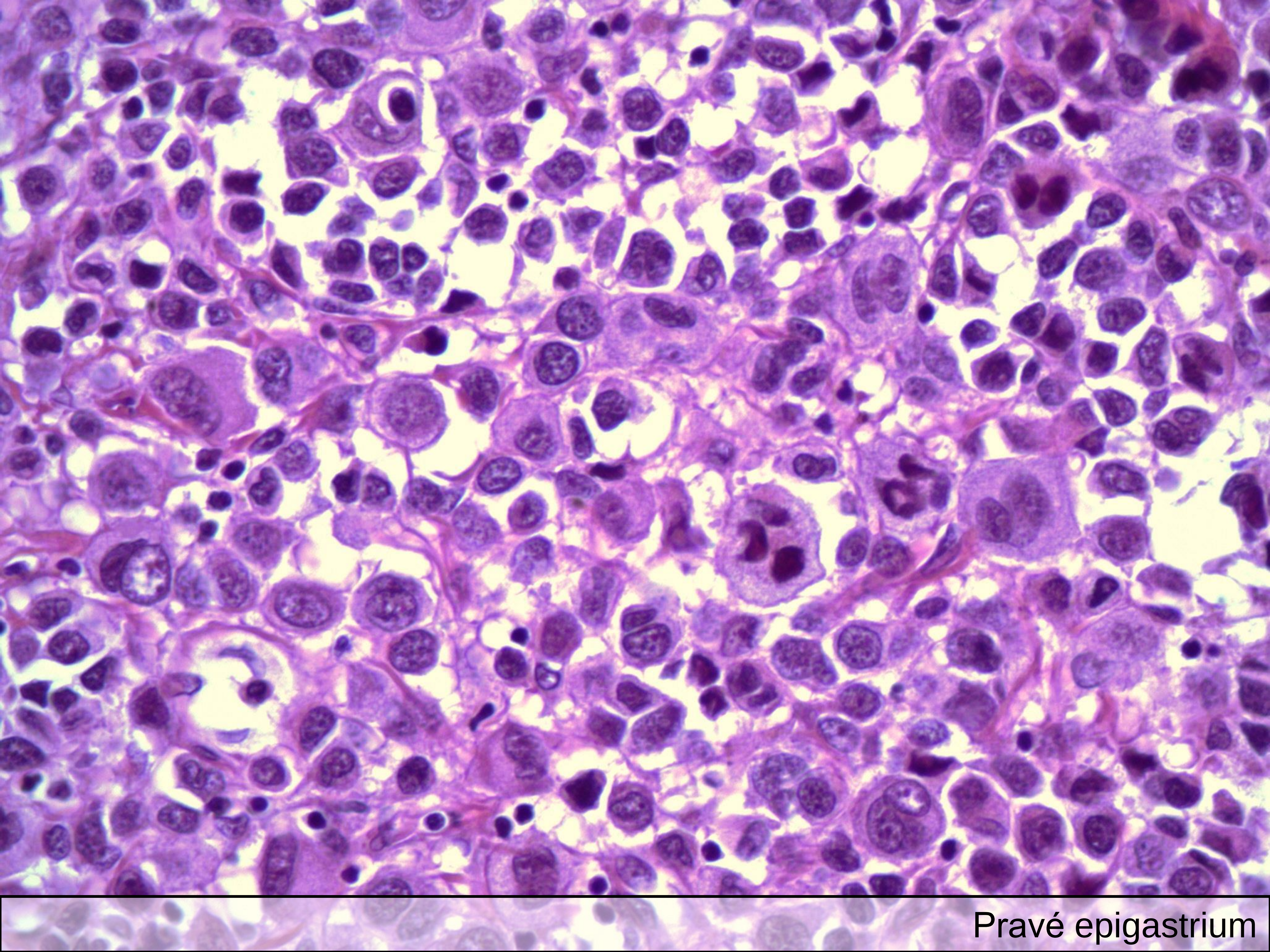
Ki67

Pravé epigastrium

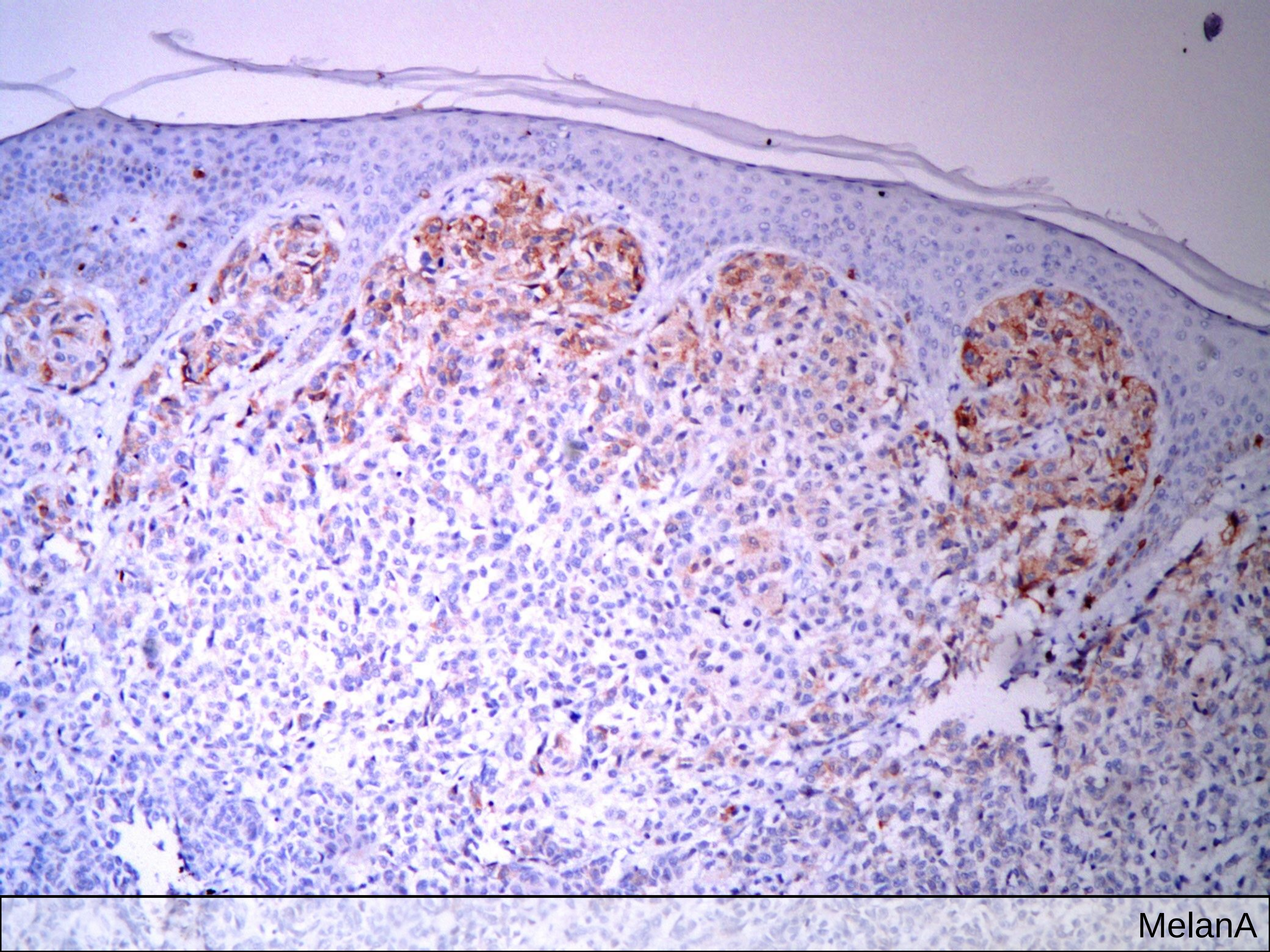

Pravé epigastrium

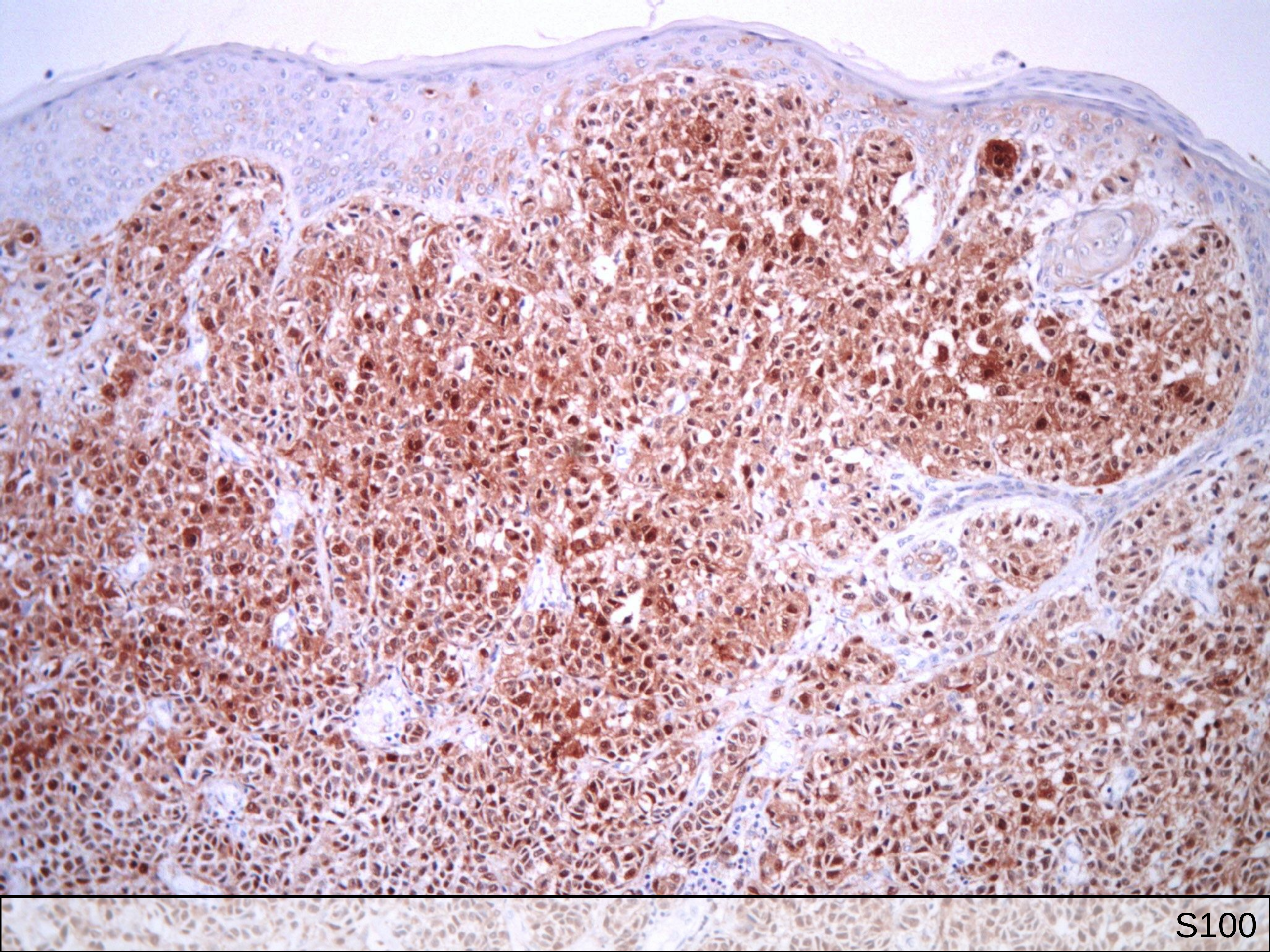


Pravé epigastrium



Pravé epigastrium


MelanA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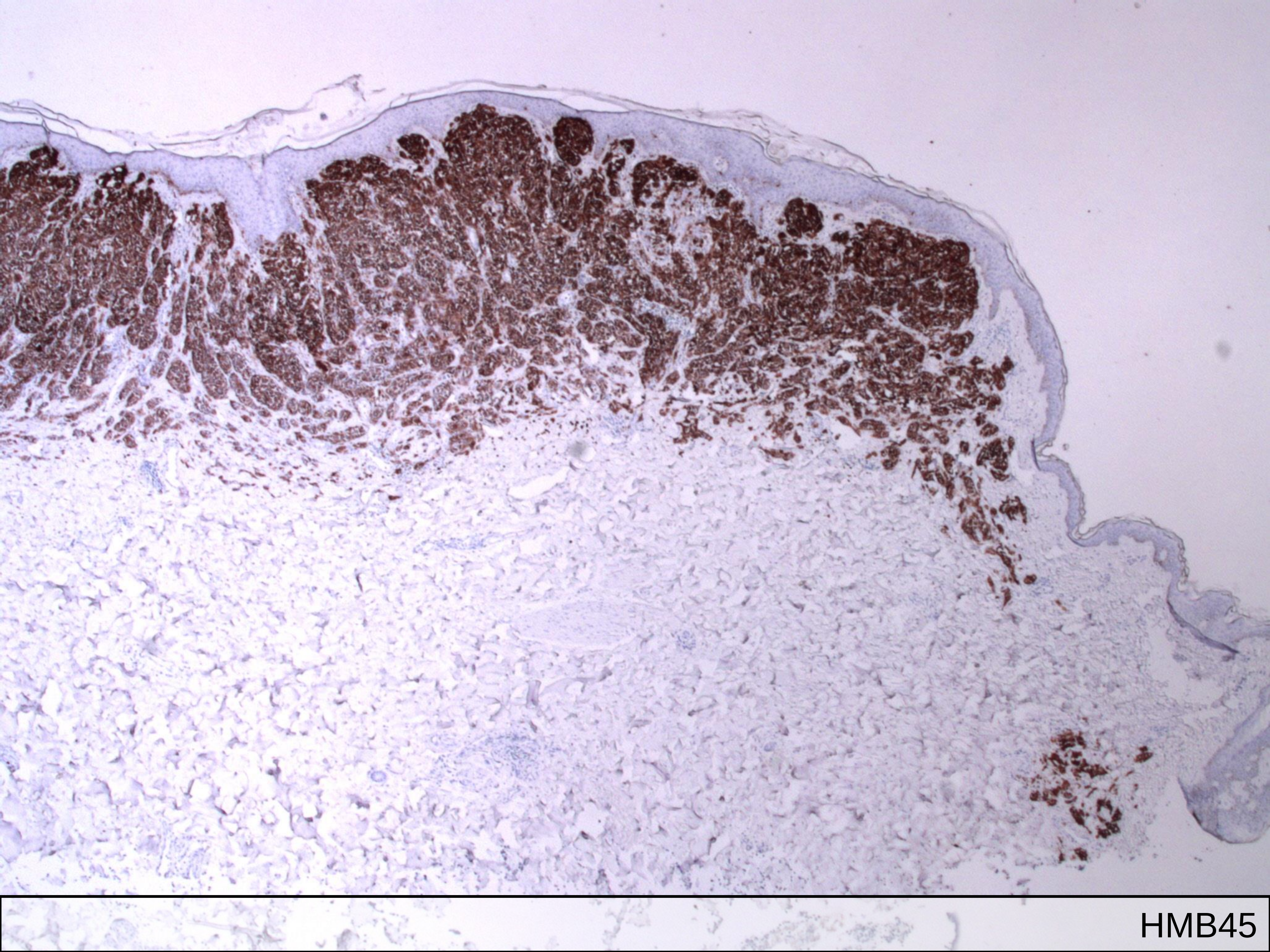
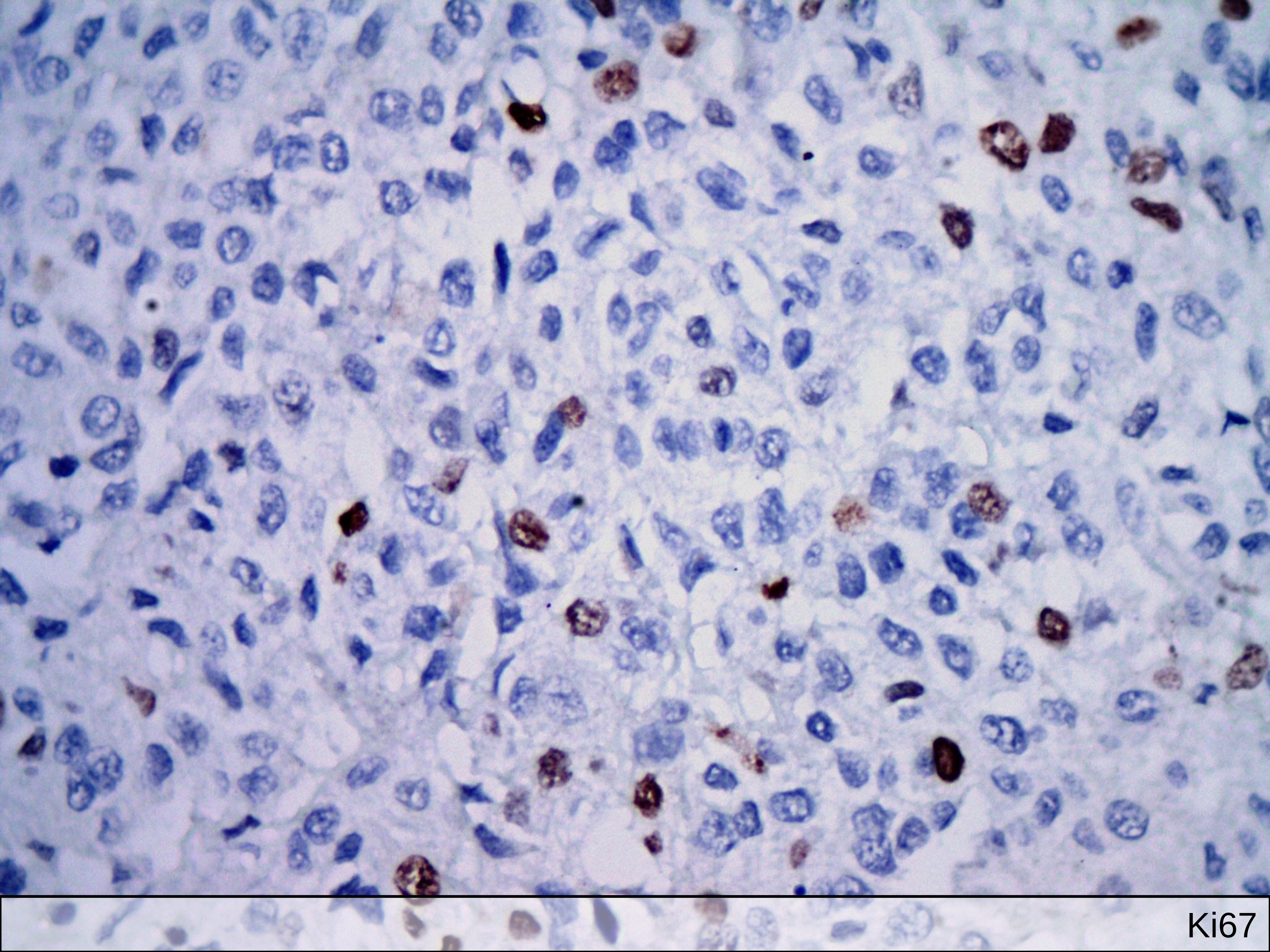

HMB45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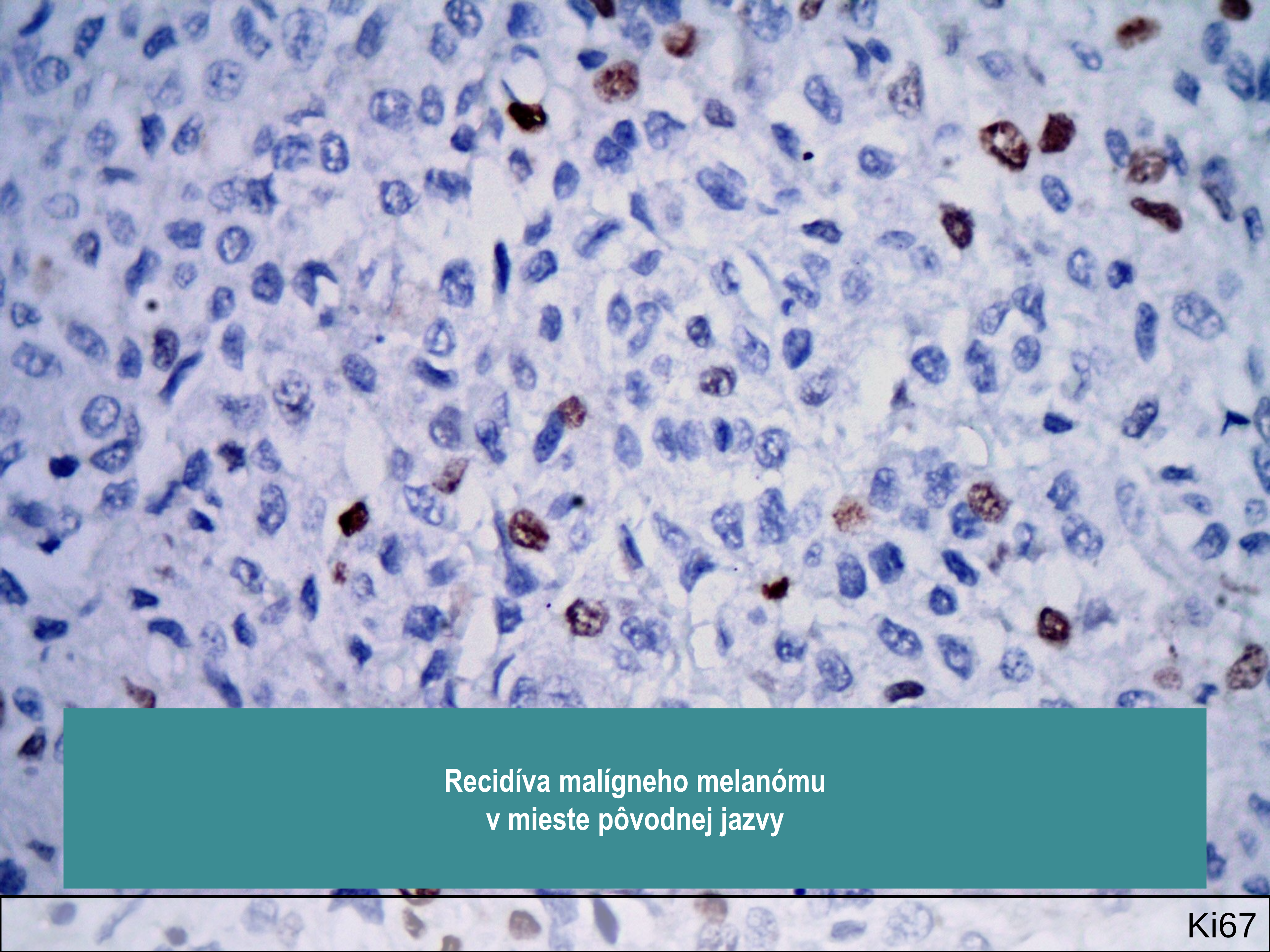
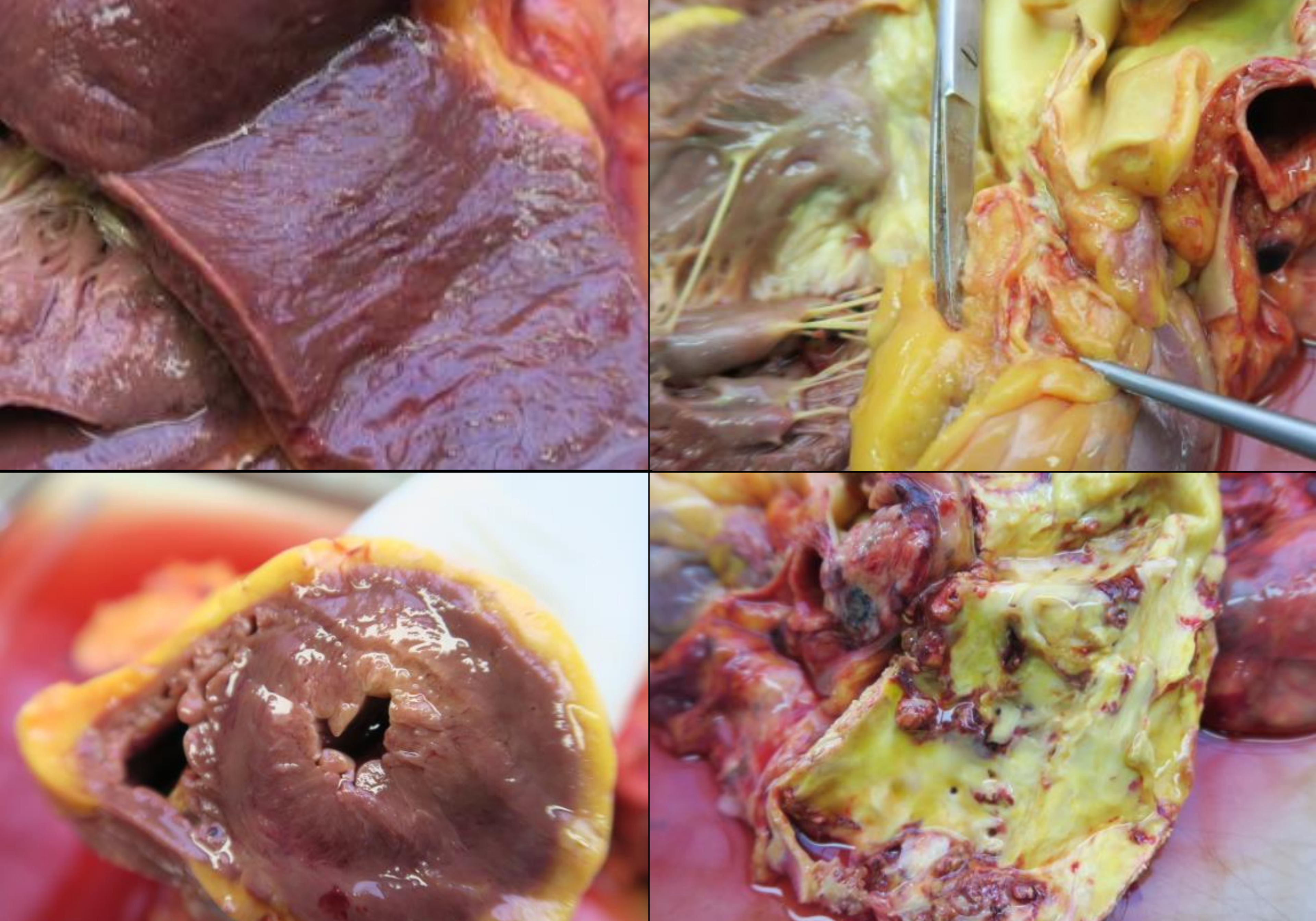
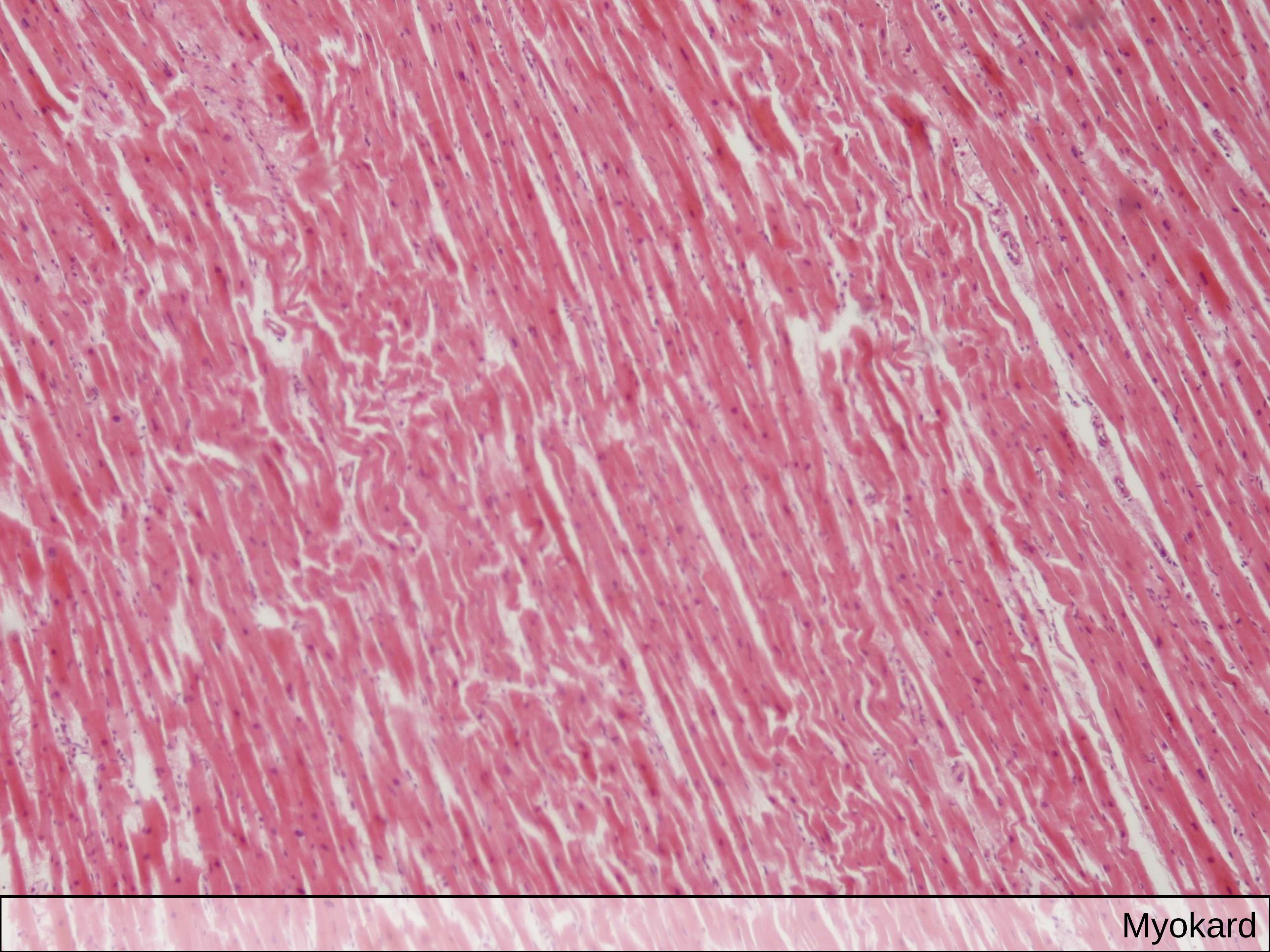


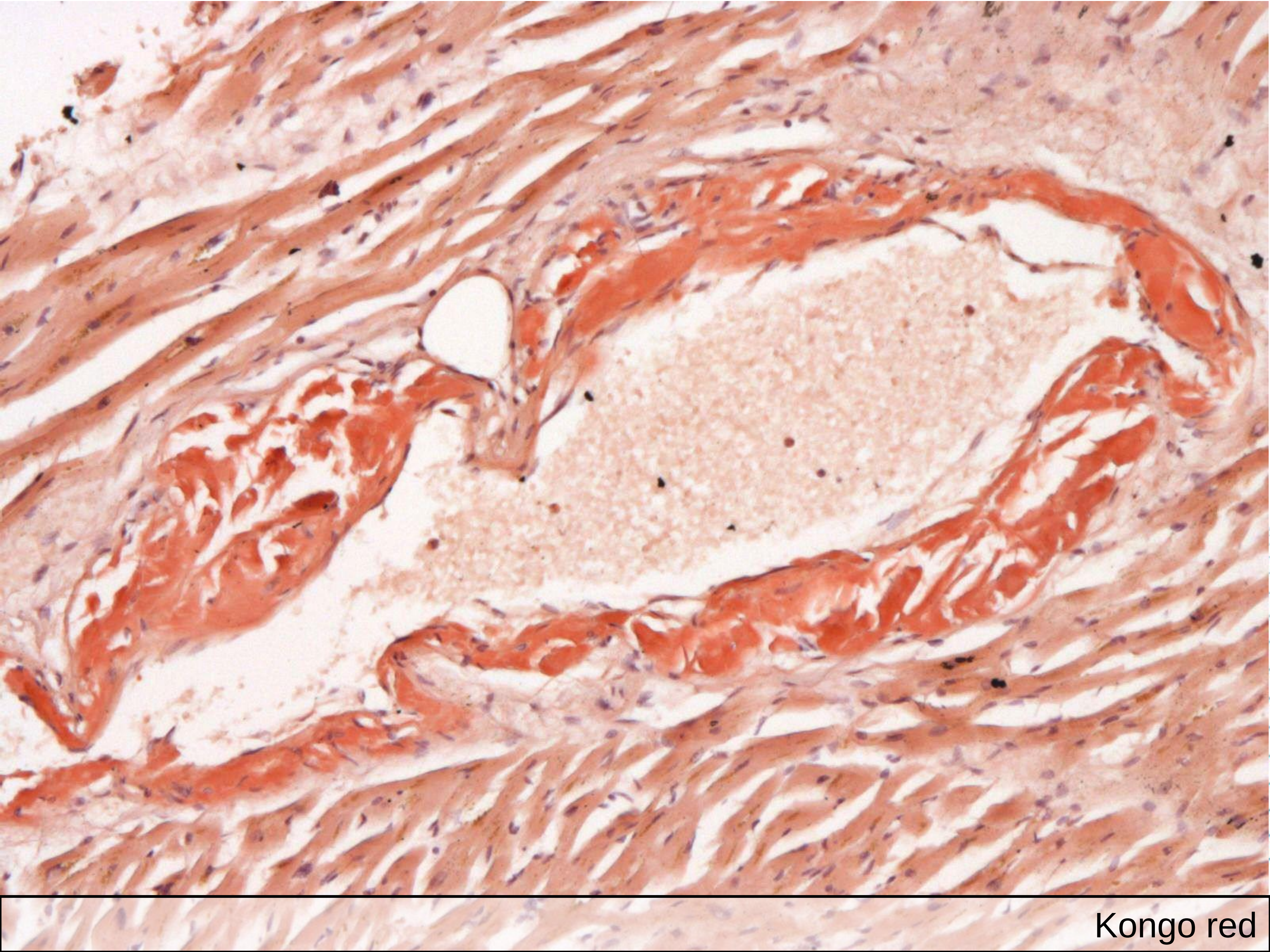
Recidíva malígneho melanómu
v mieste pôvodnej jazvy

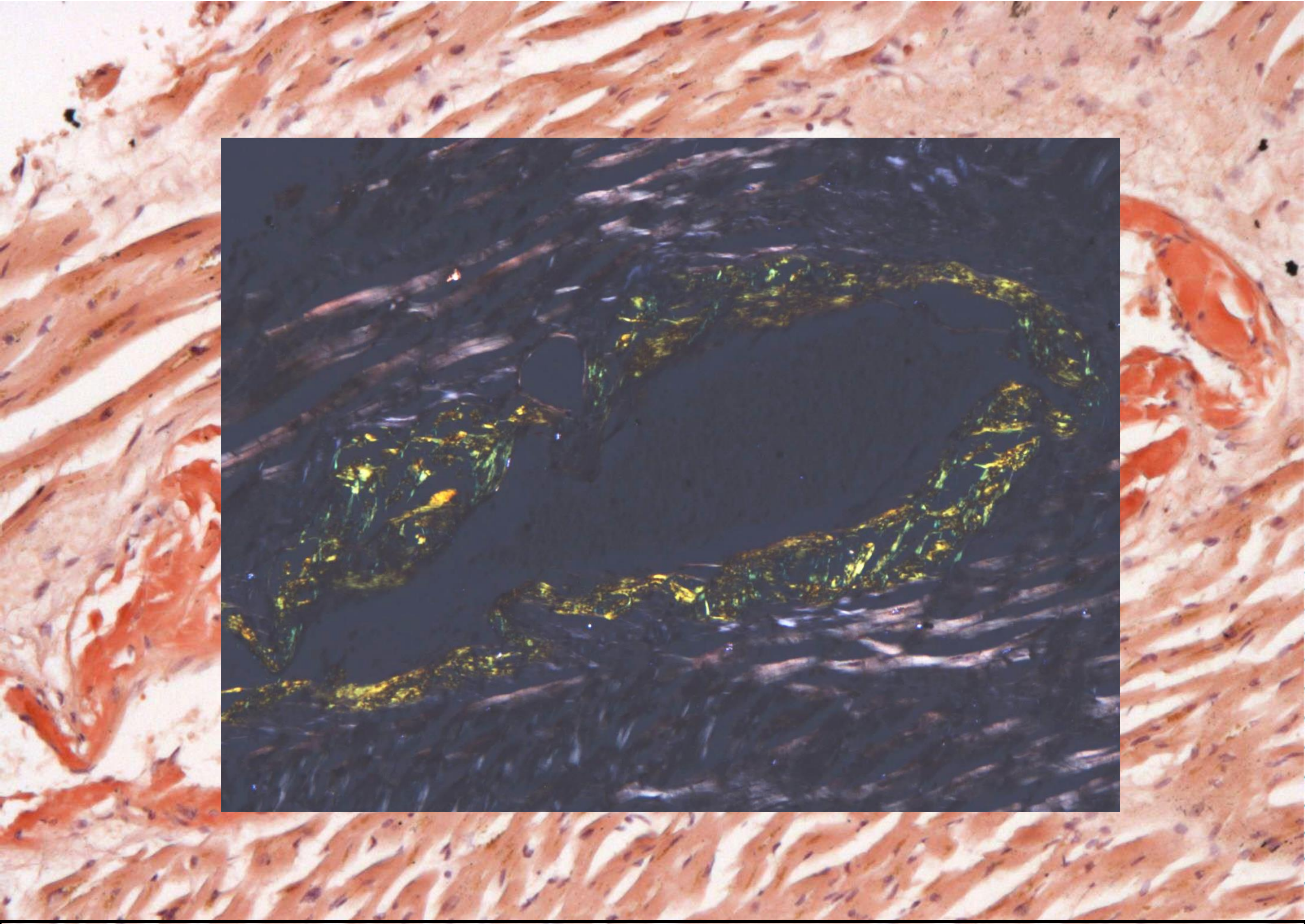


Srdce

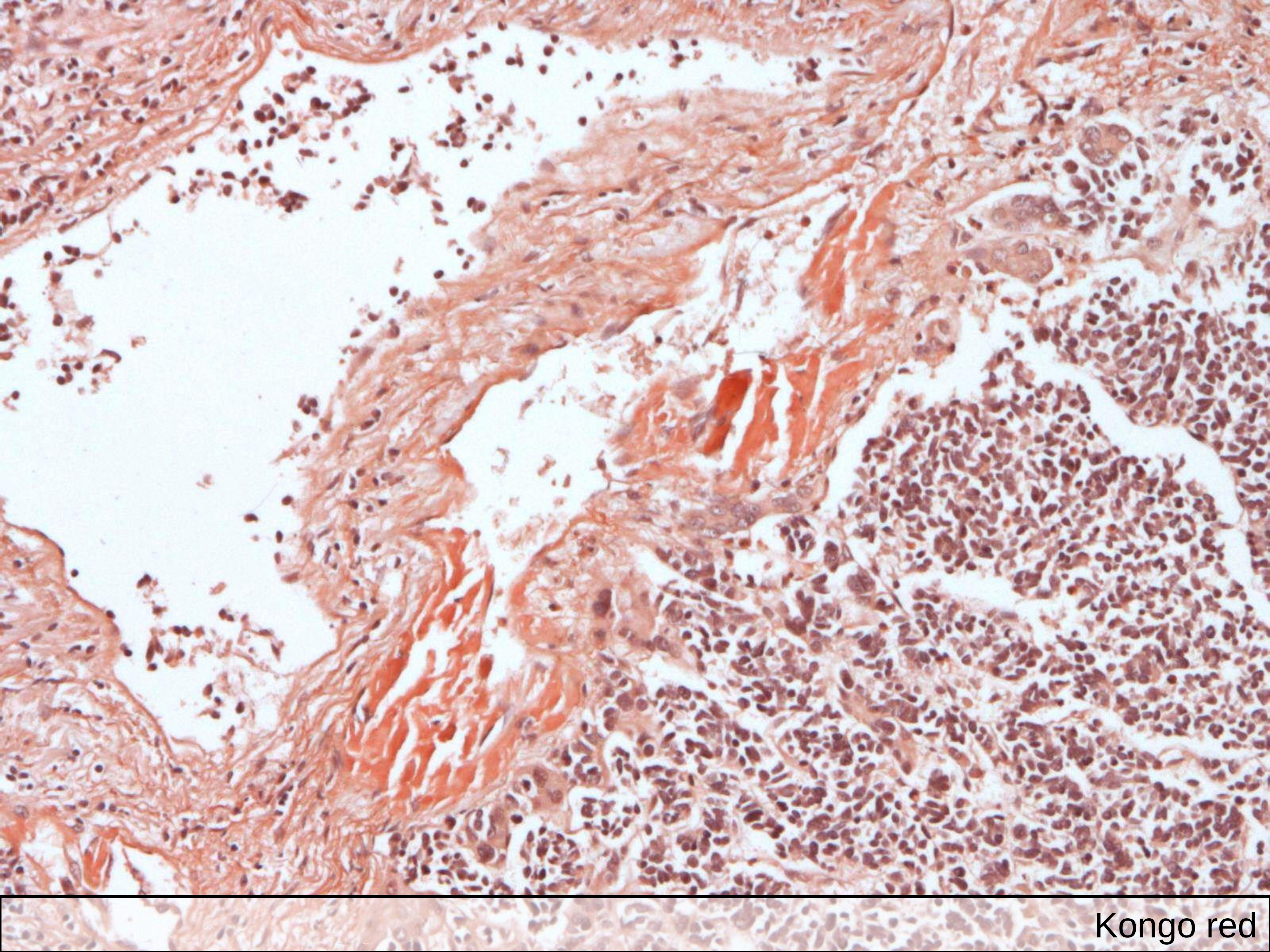


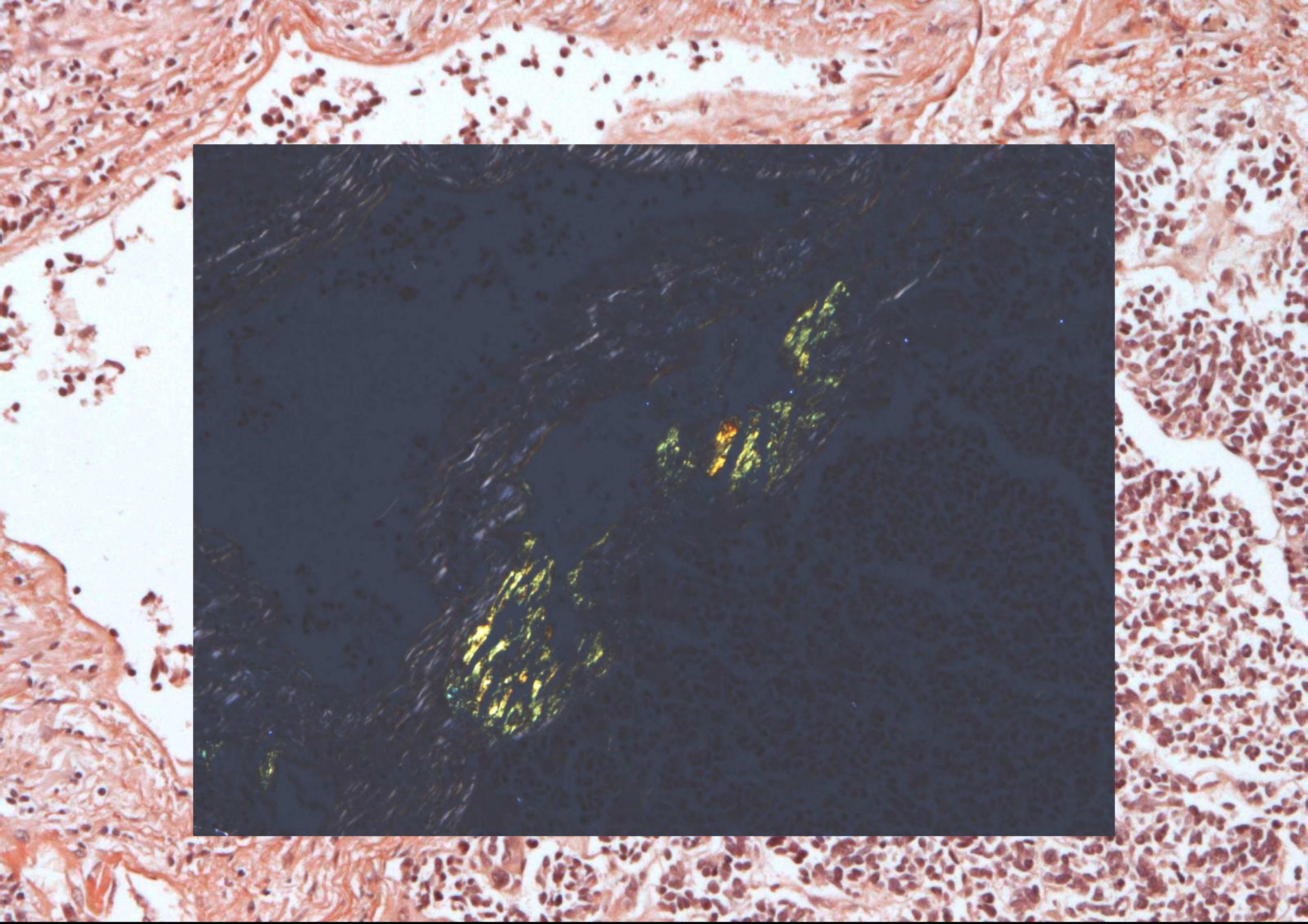
Myokard


Kongo red



Kongo red


Kongo red



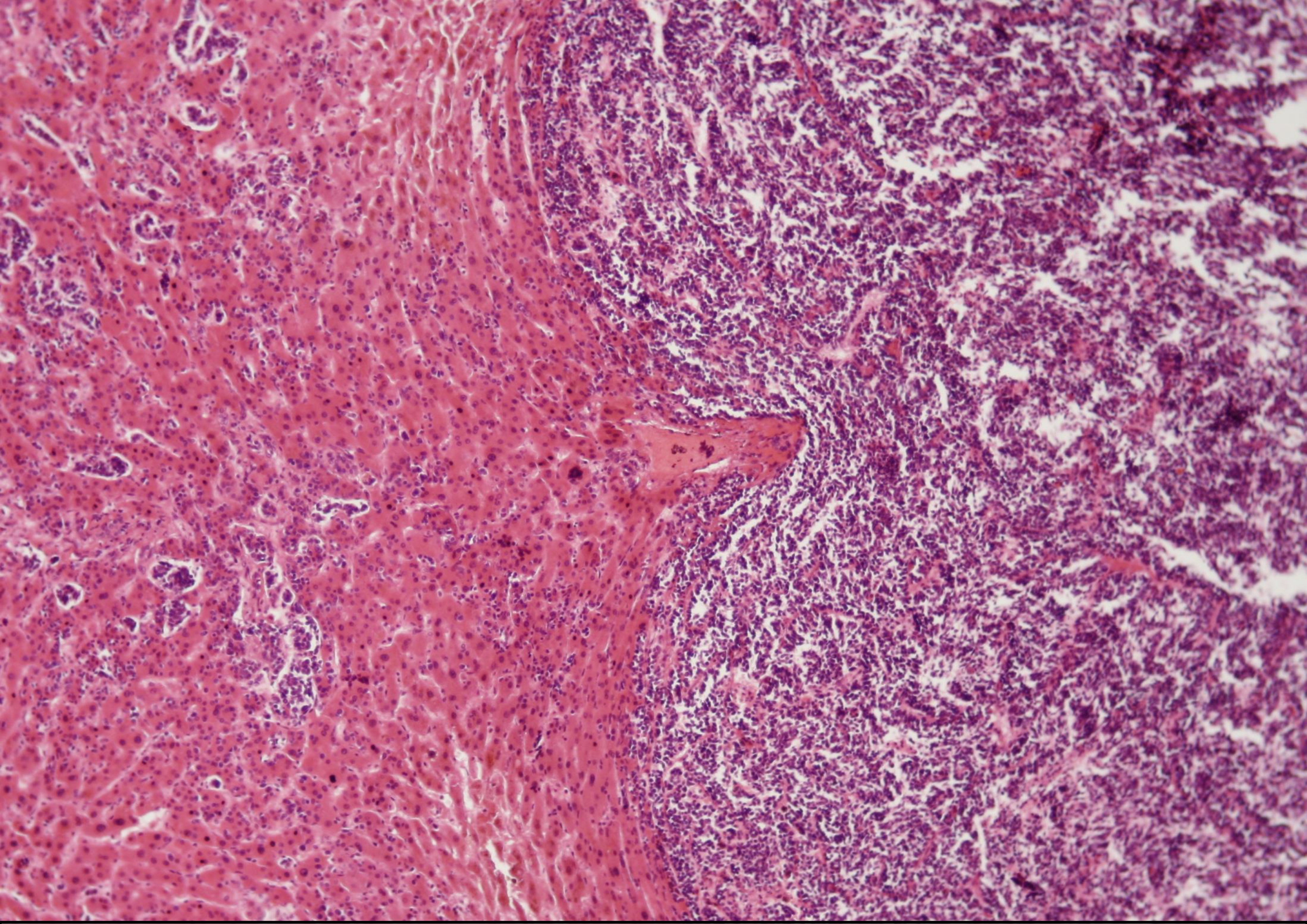
Kongo red

Amyloidóza srdca a pečene

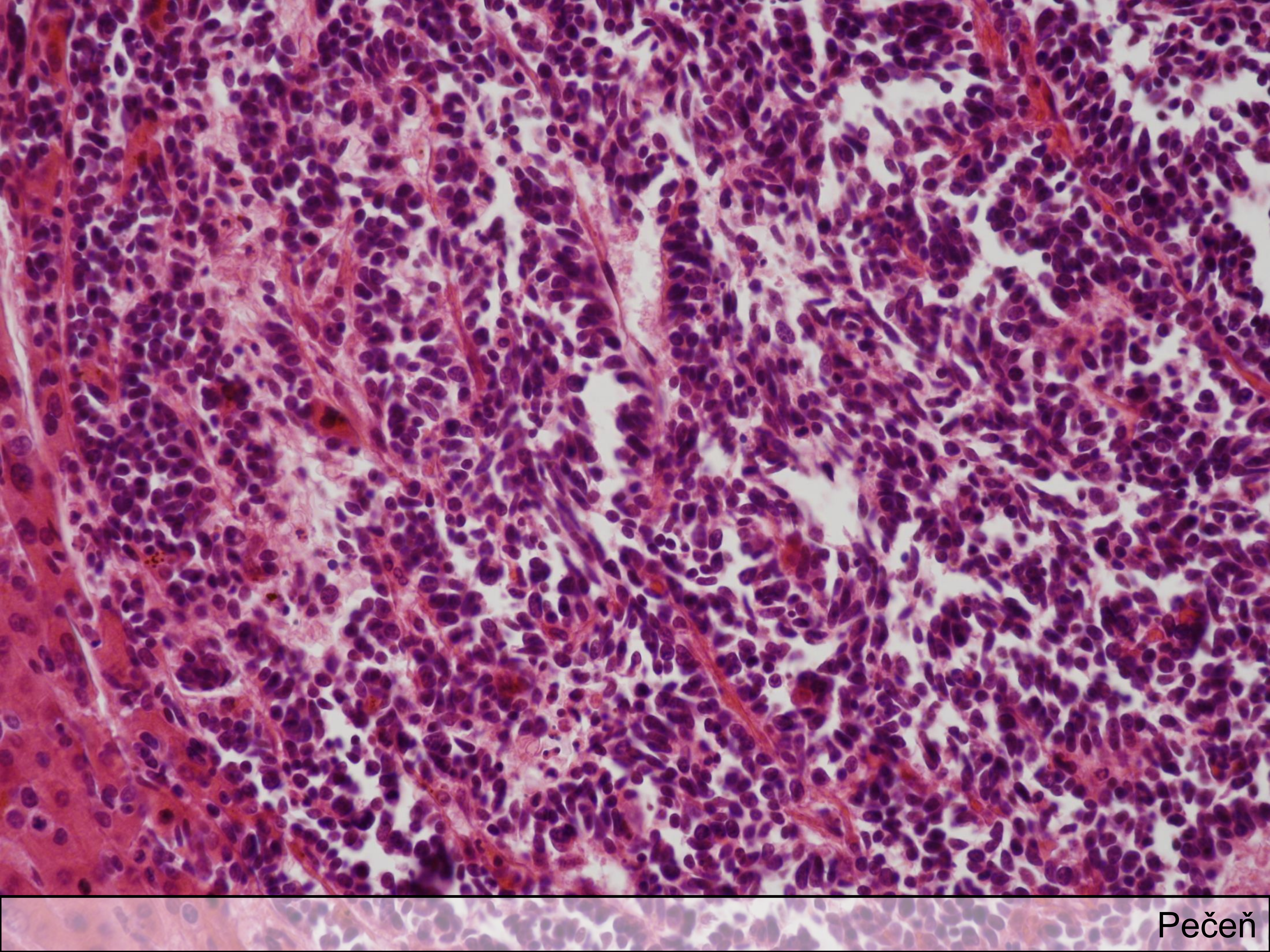
Kongo red

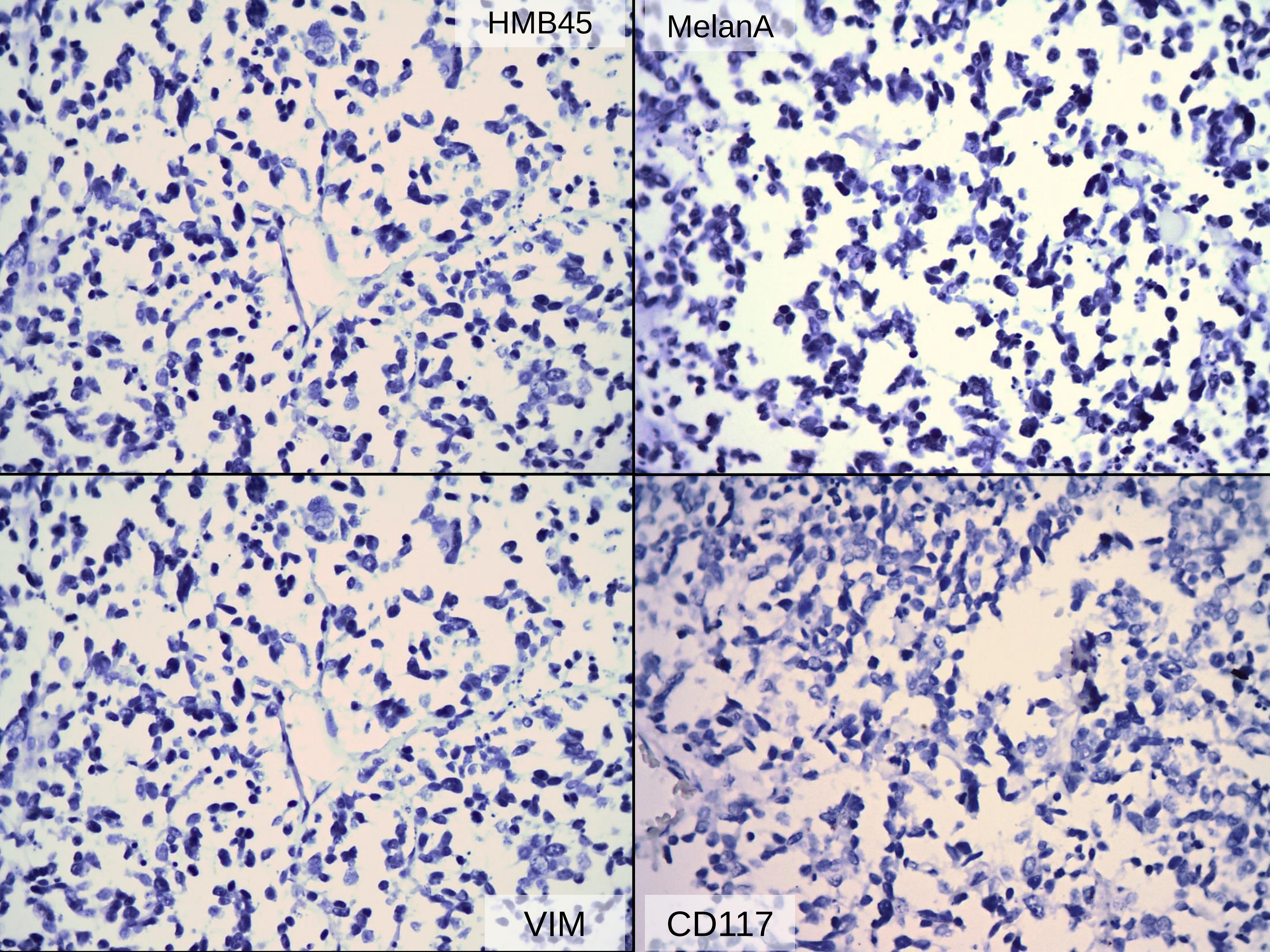
Pečeň

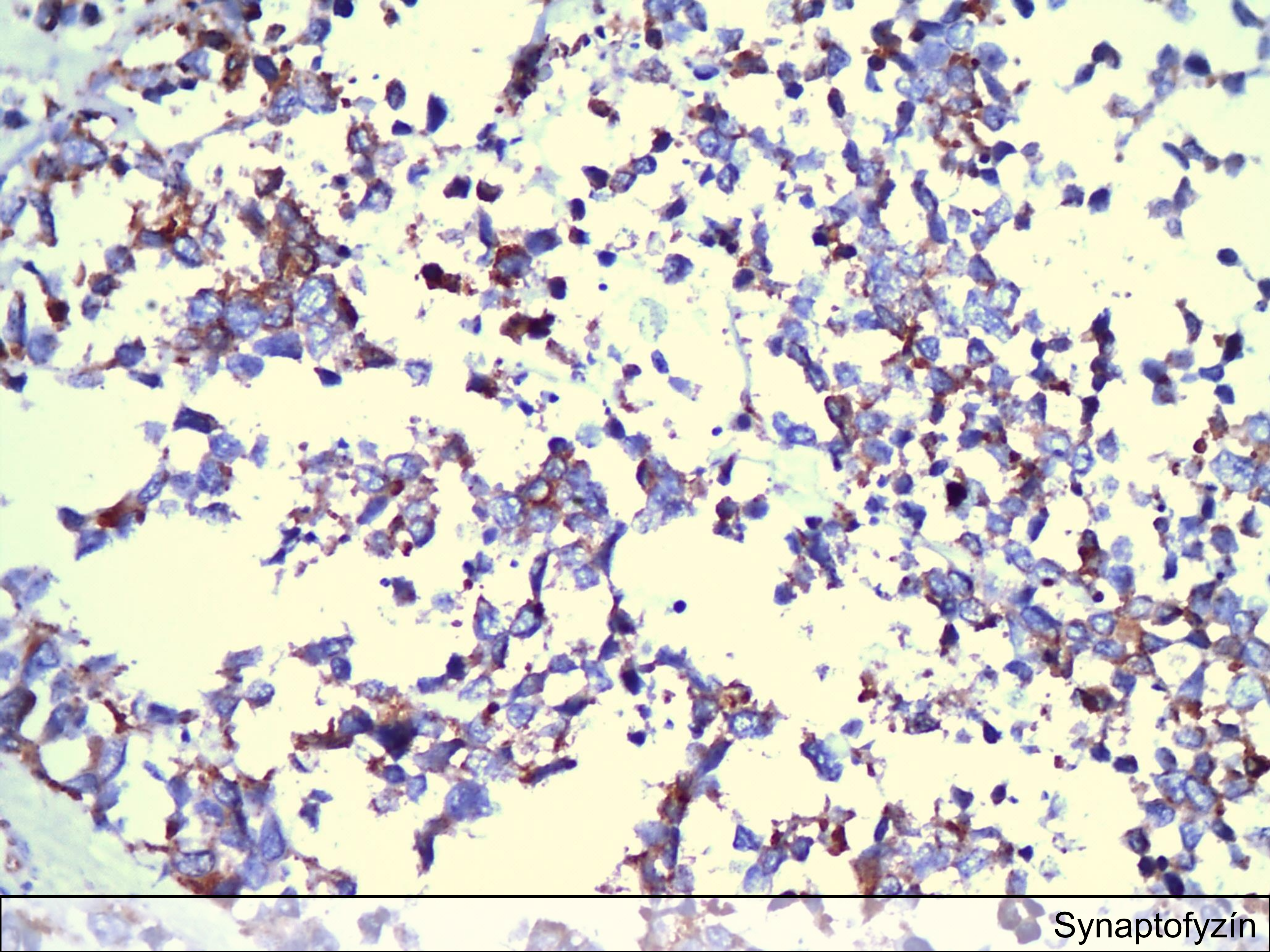
Pečeň

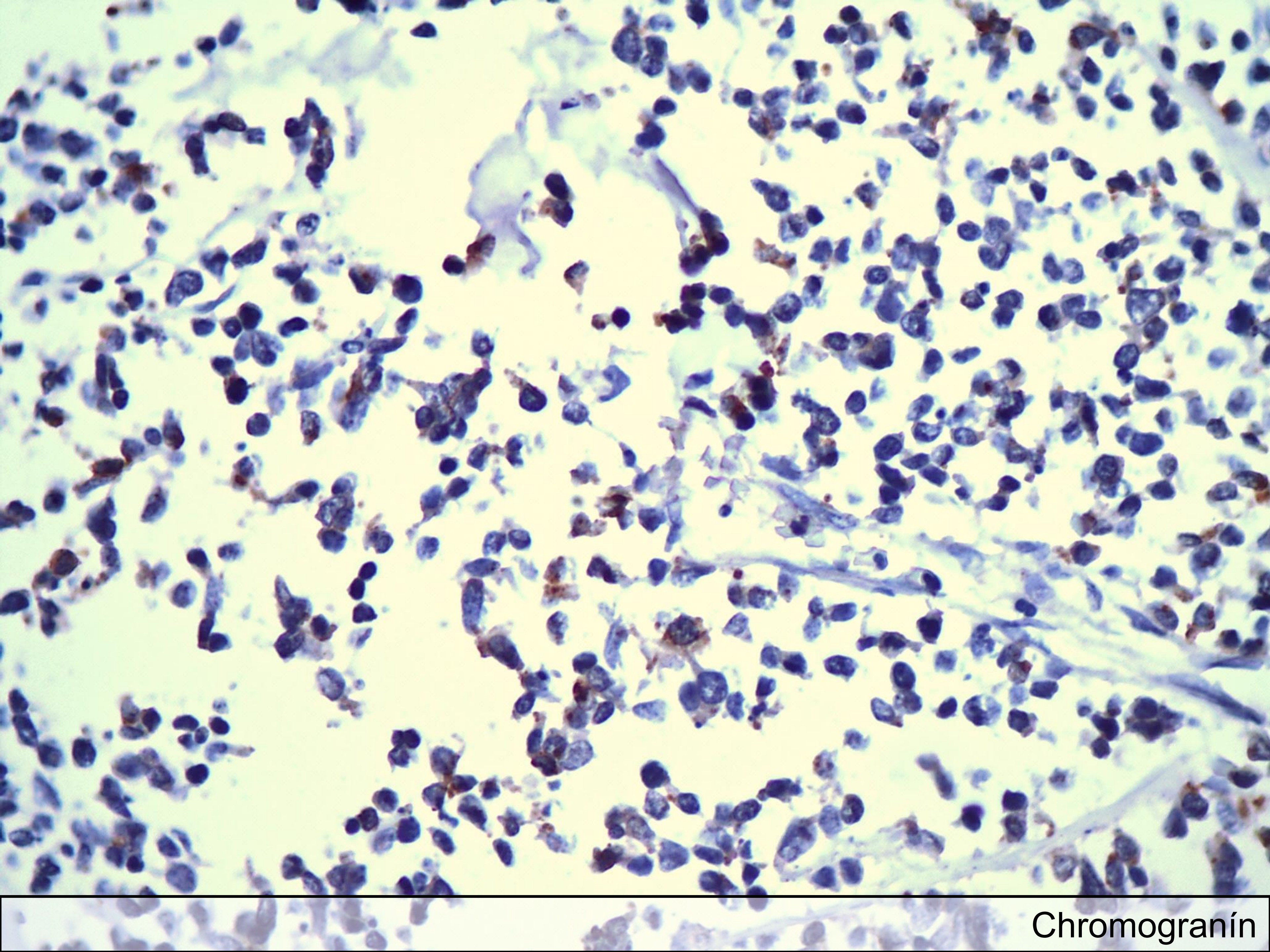


Pečeň

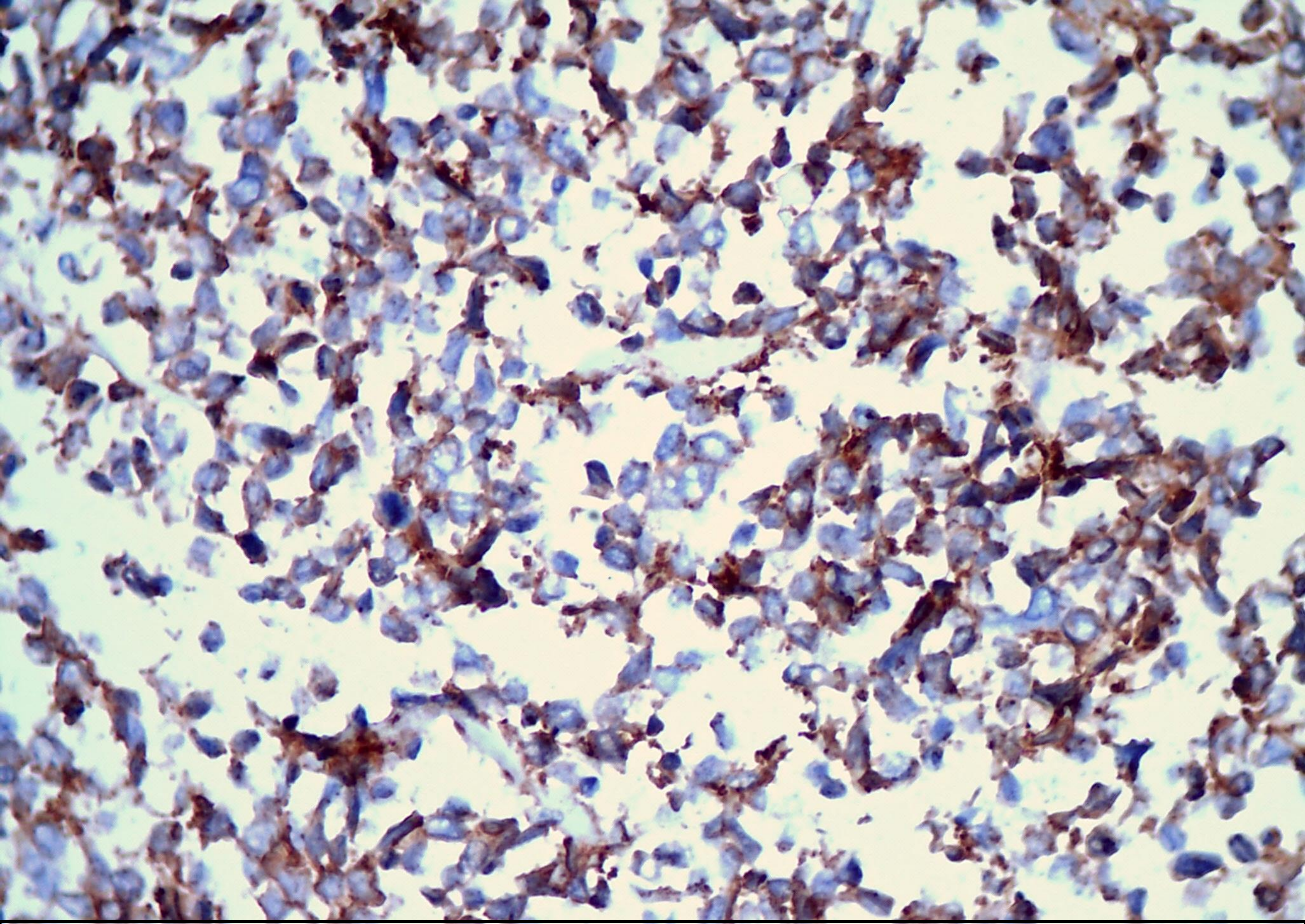

Pečeň


HMB45
MelanA
VIM
CD117


Synaptofyzín



Chromogranín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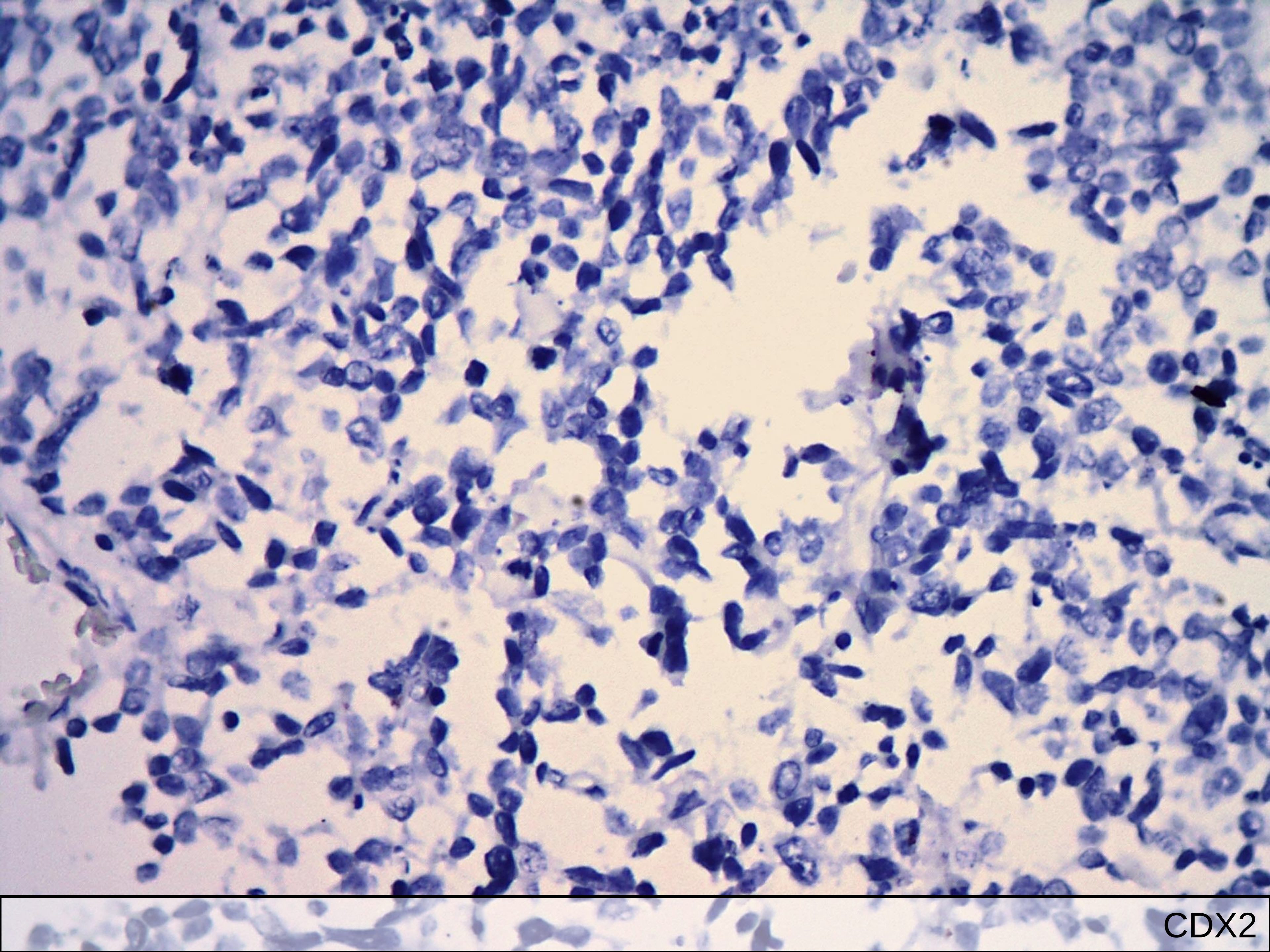
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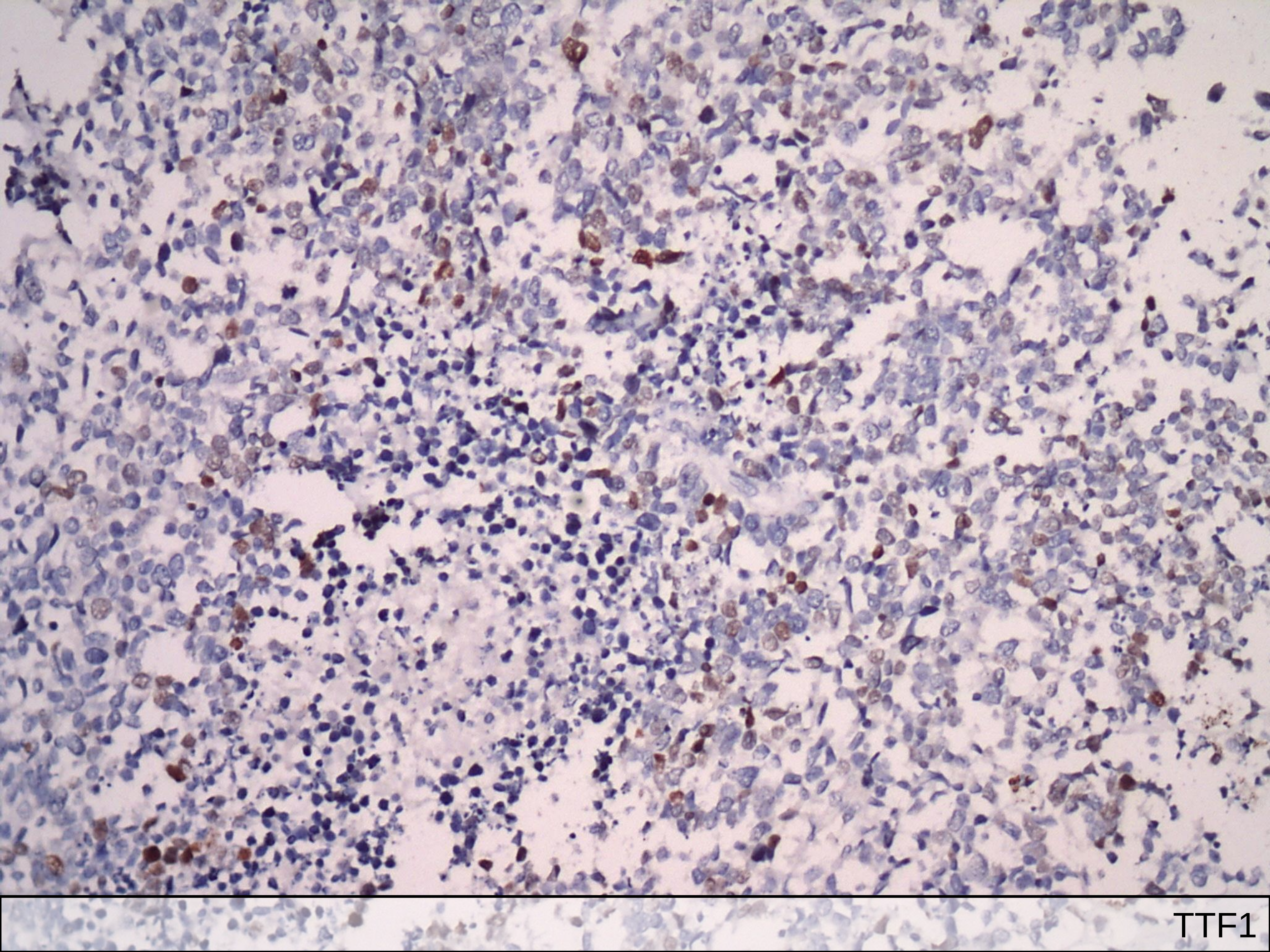
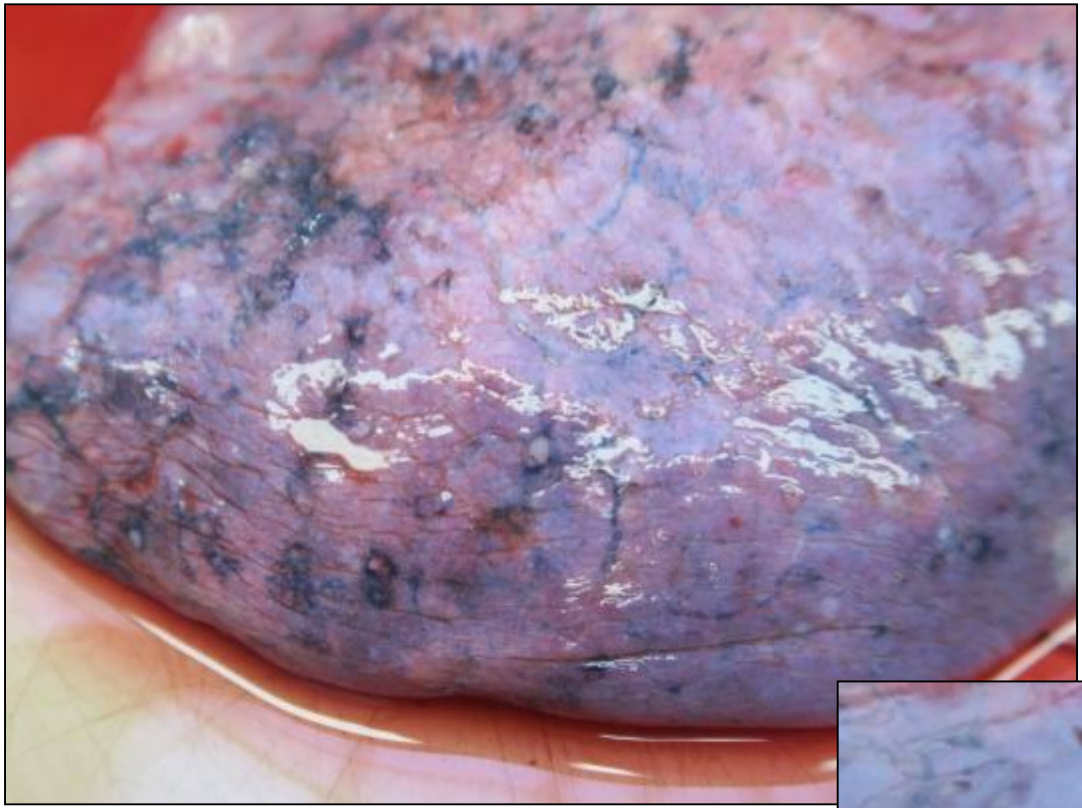

TTF1

Mediastínum

Mediastínum



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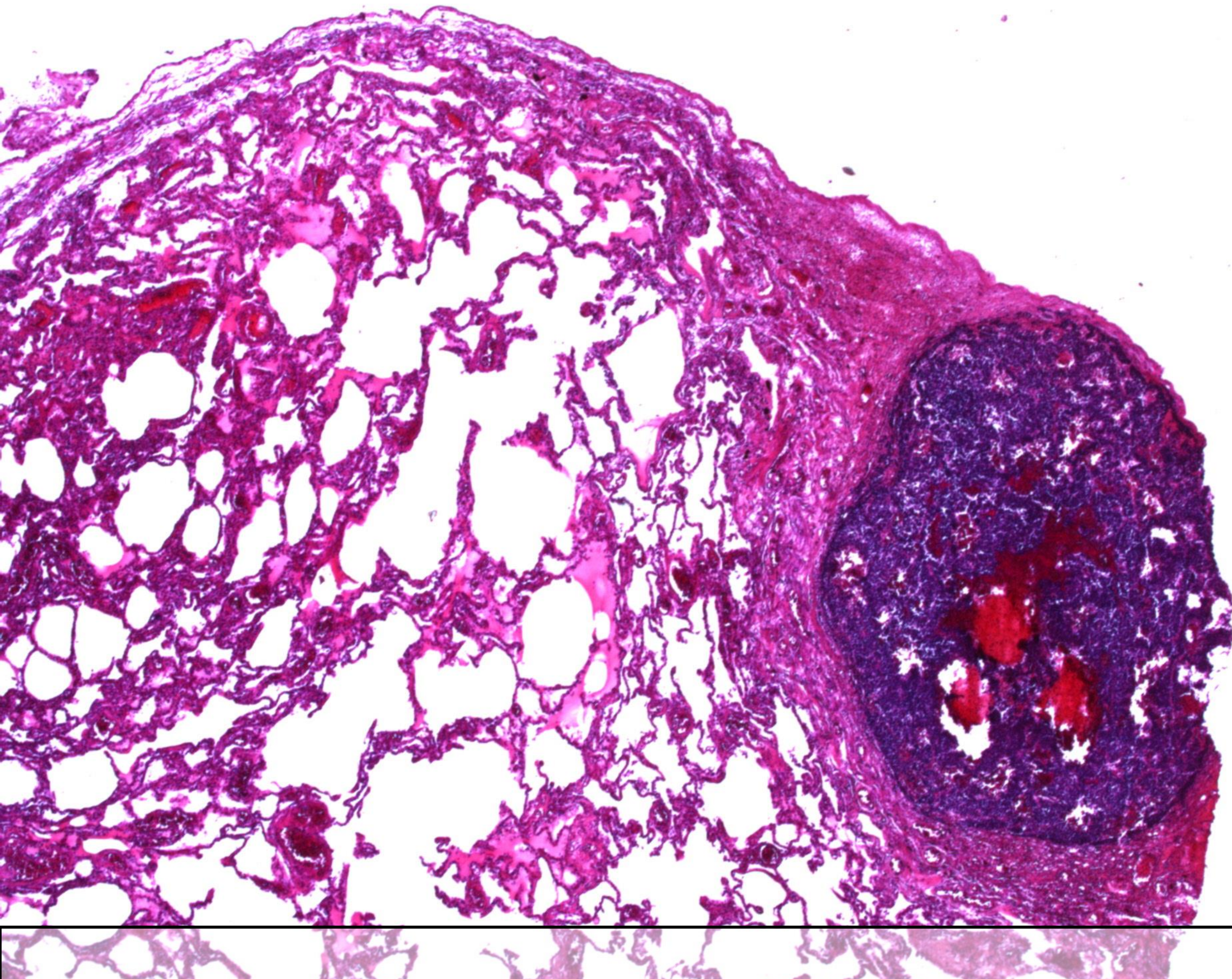
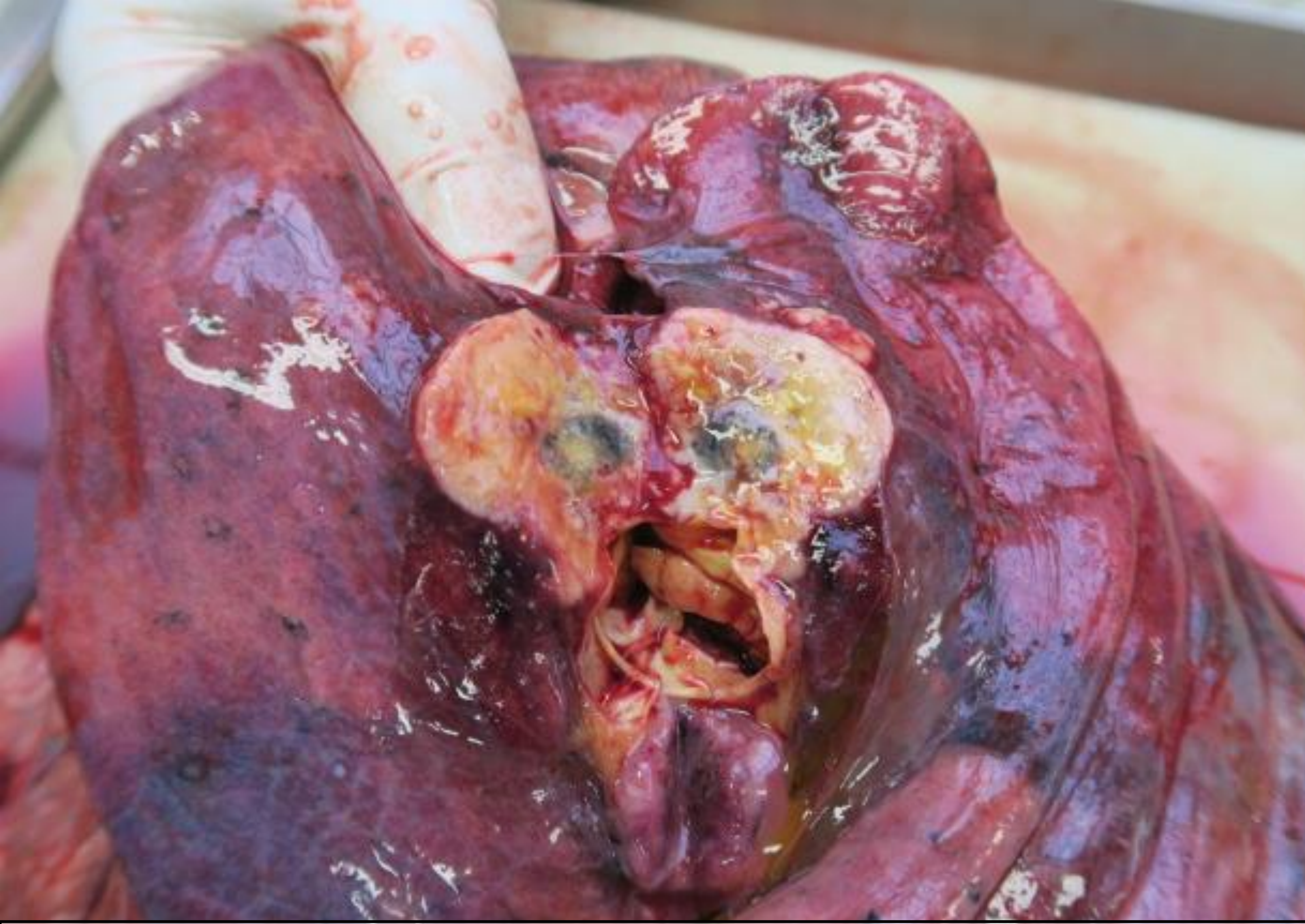
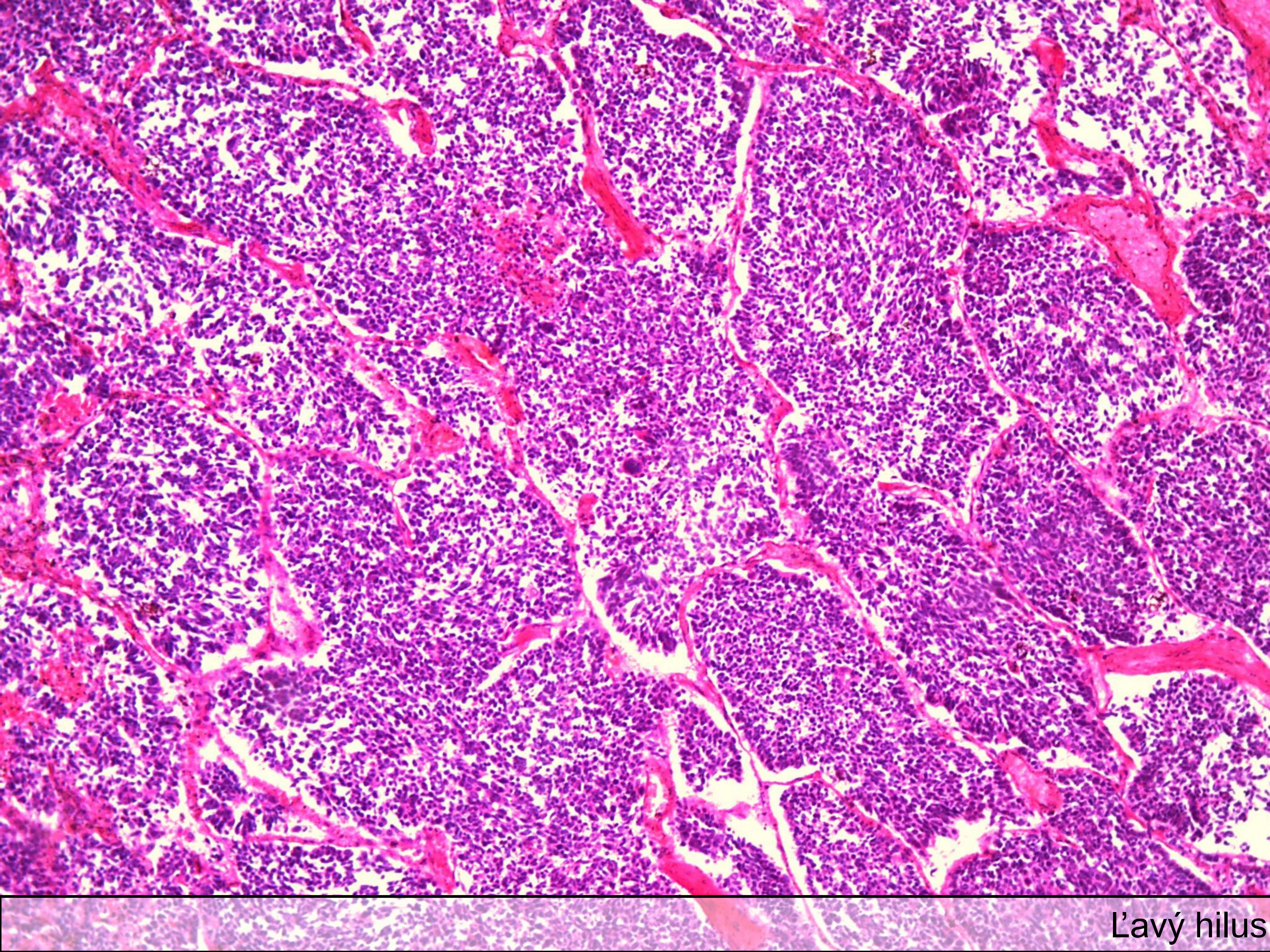


Pleura

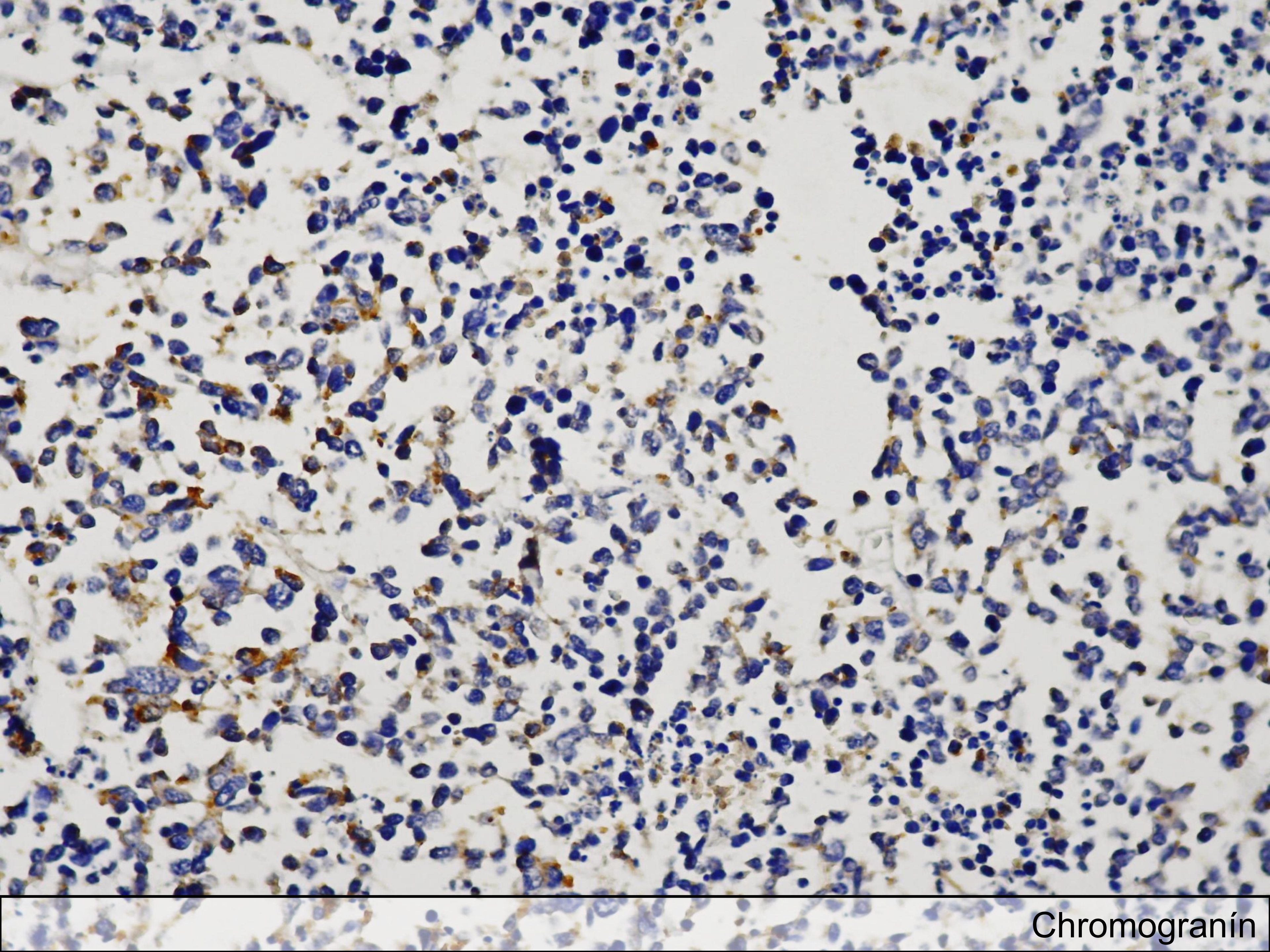
Ľavý hilus



Ľavý hilus



Ľavý hilus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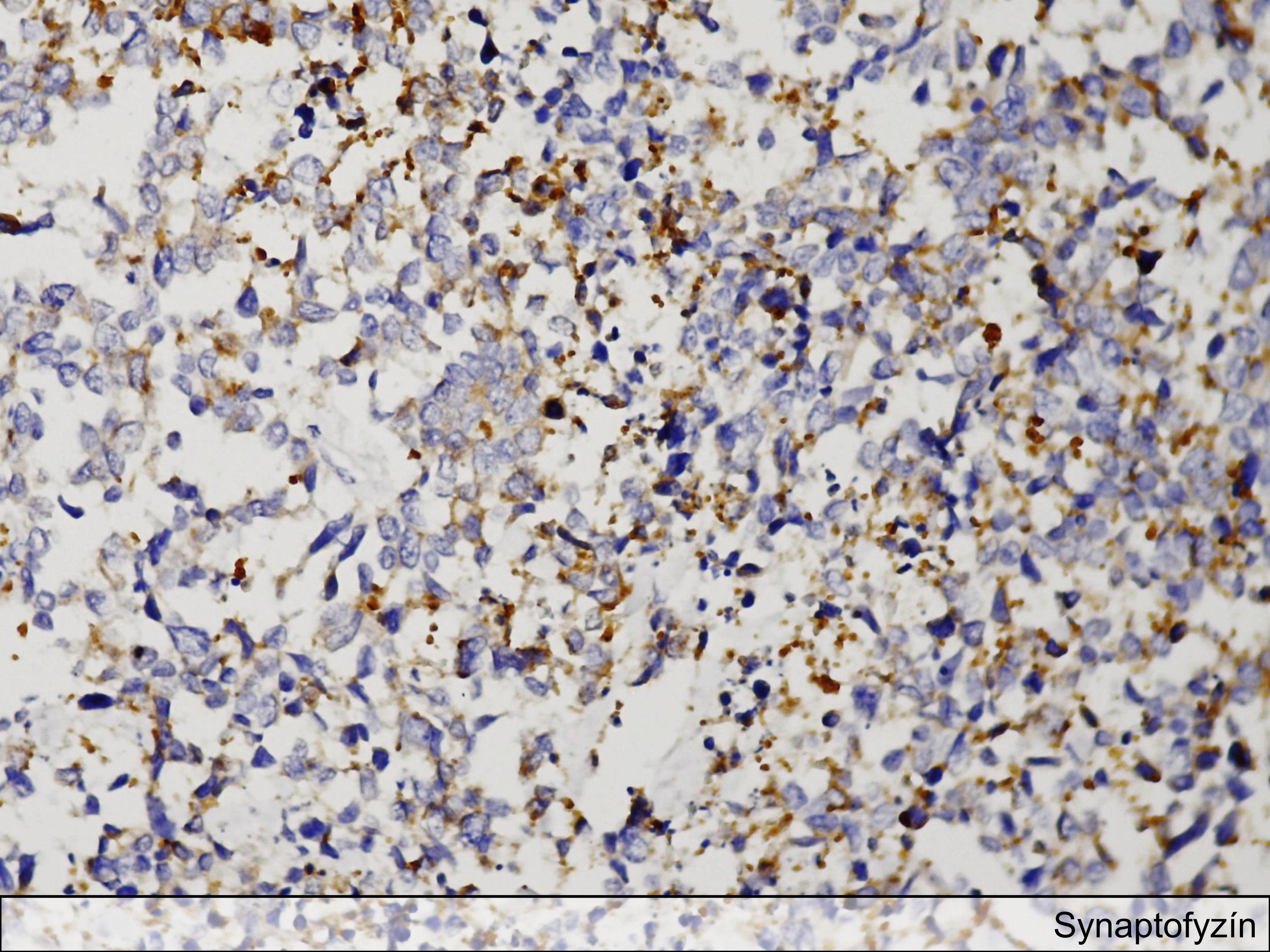
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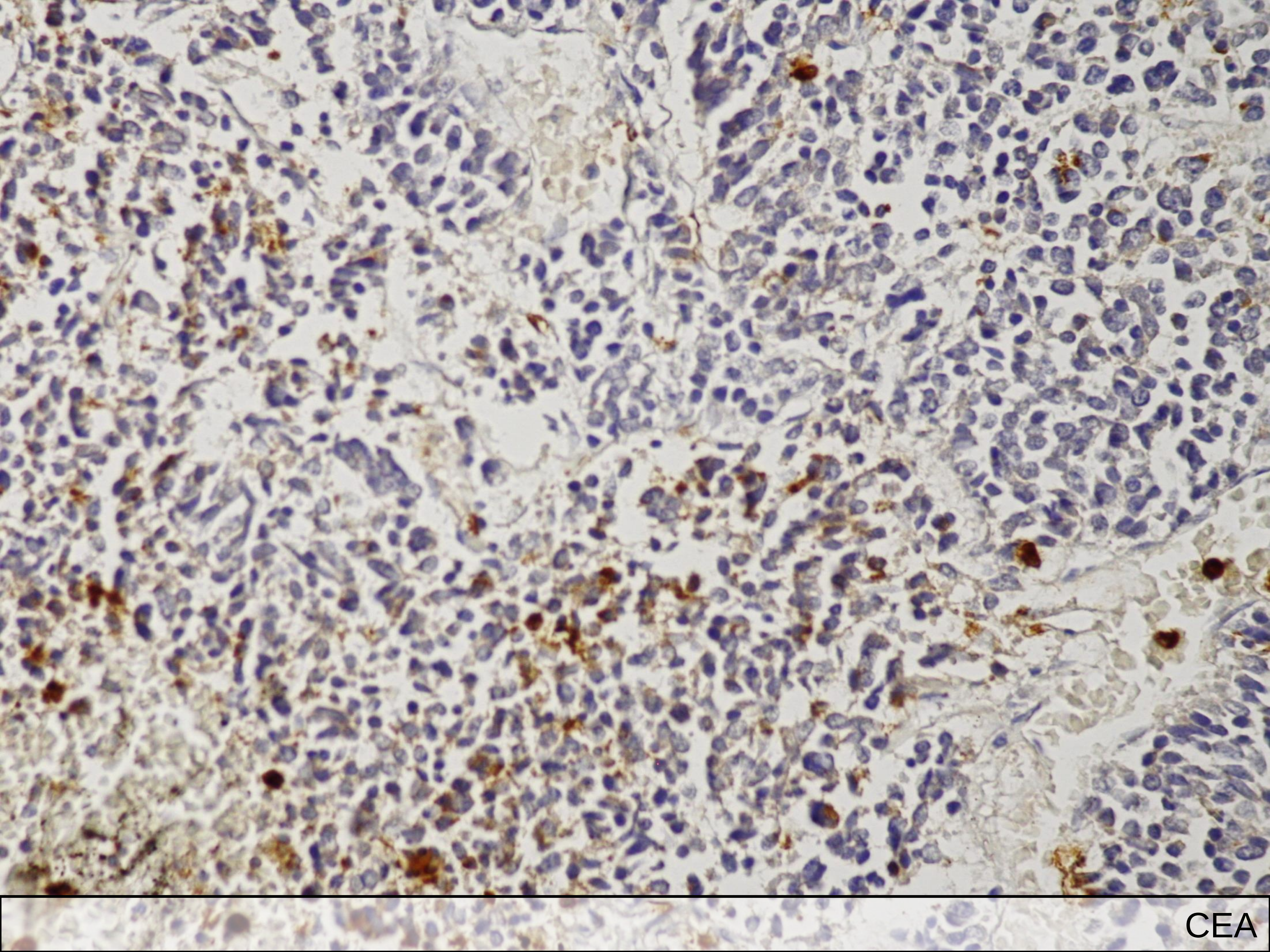
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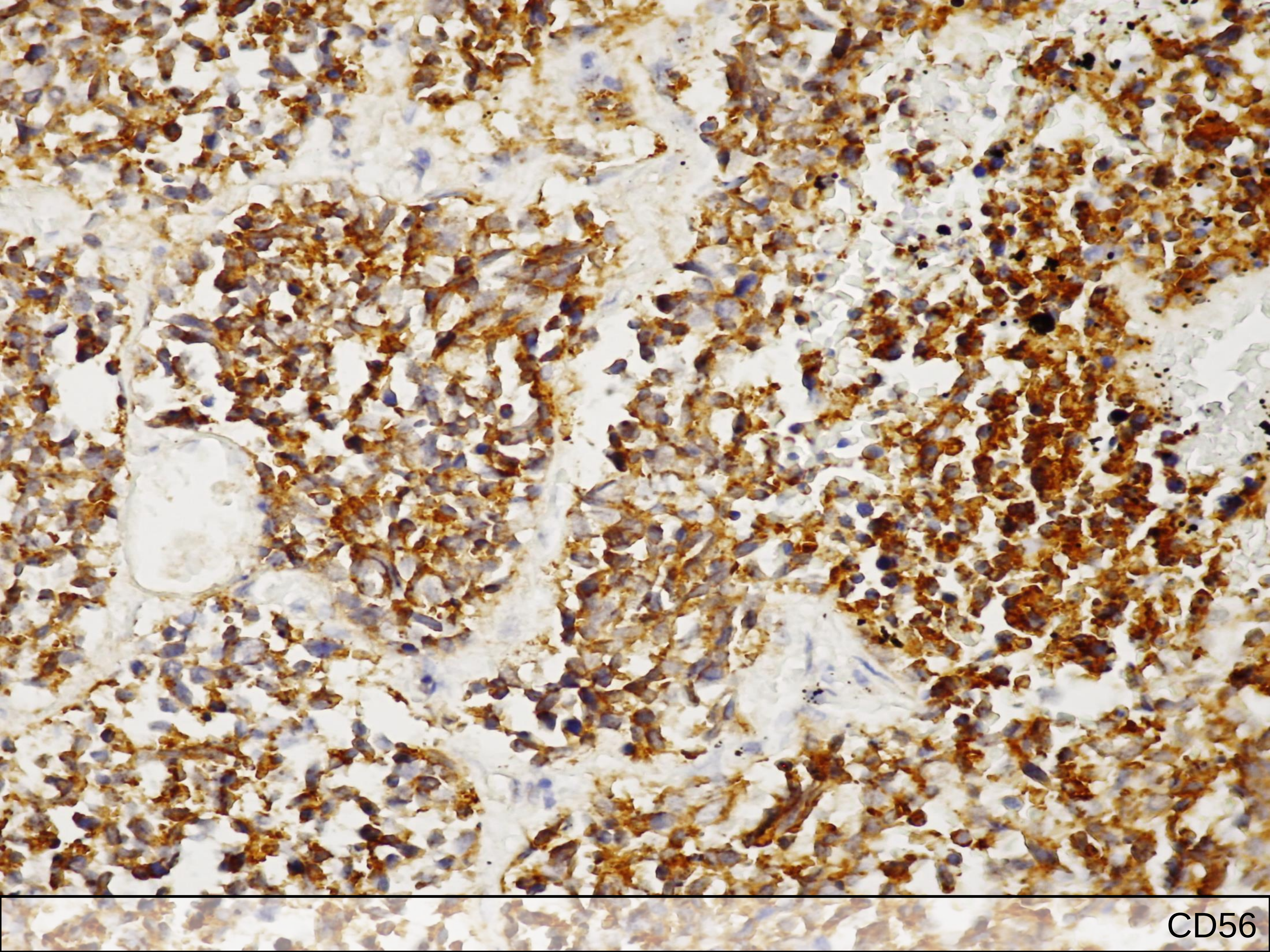
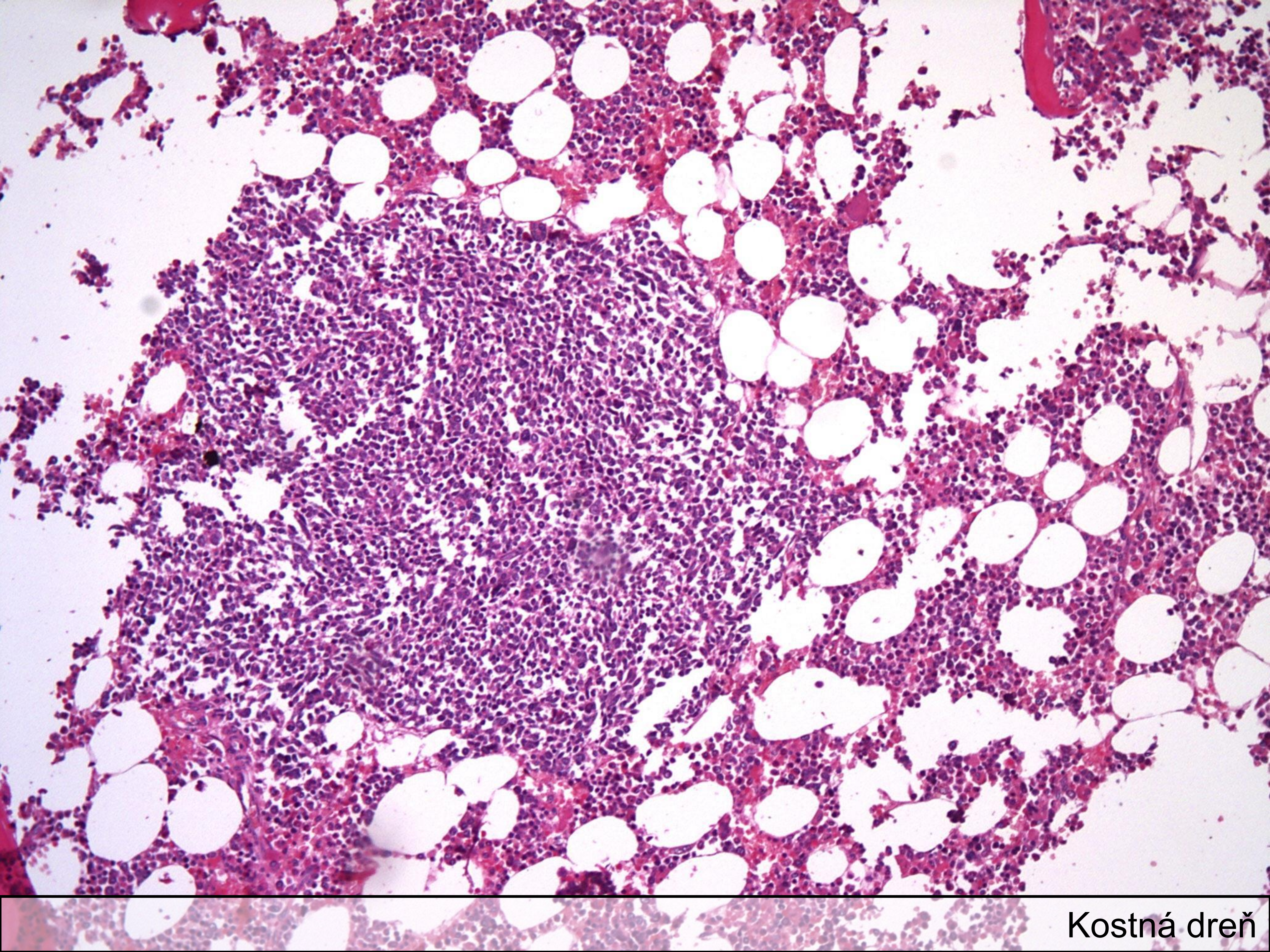

CD56


Malobunkový karcinóm pľúc
CD56



Kostná dreň

Ia. Bezprostredná príčina smrti

1 Metabolický rozvrat

Ib. Predchádzajúca príčina smrti

2 Početné metastázy malobunkového karcinómu do pečene, LU, obojstranná karcinomatóza pleury

Ic. Základné ochorenie

3 Malobunkový karcinóm ľavého hilu pľúc

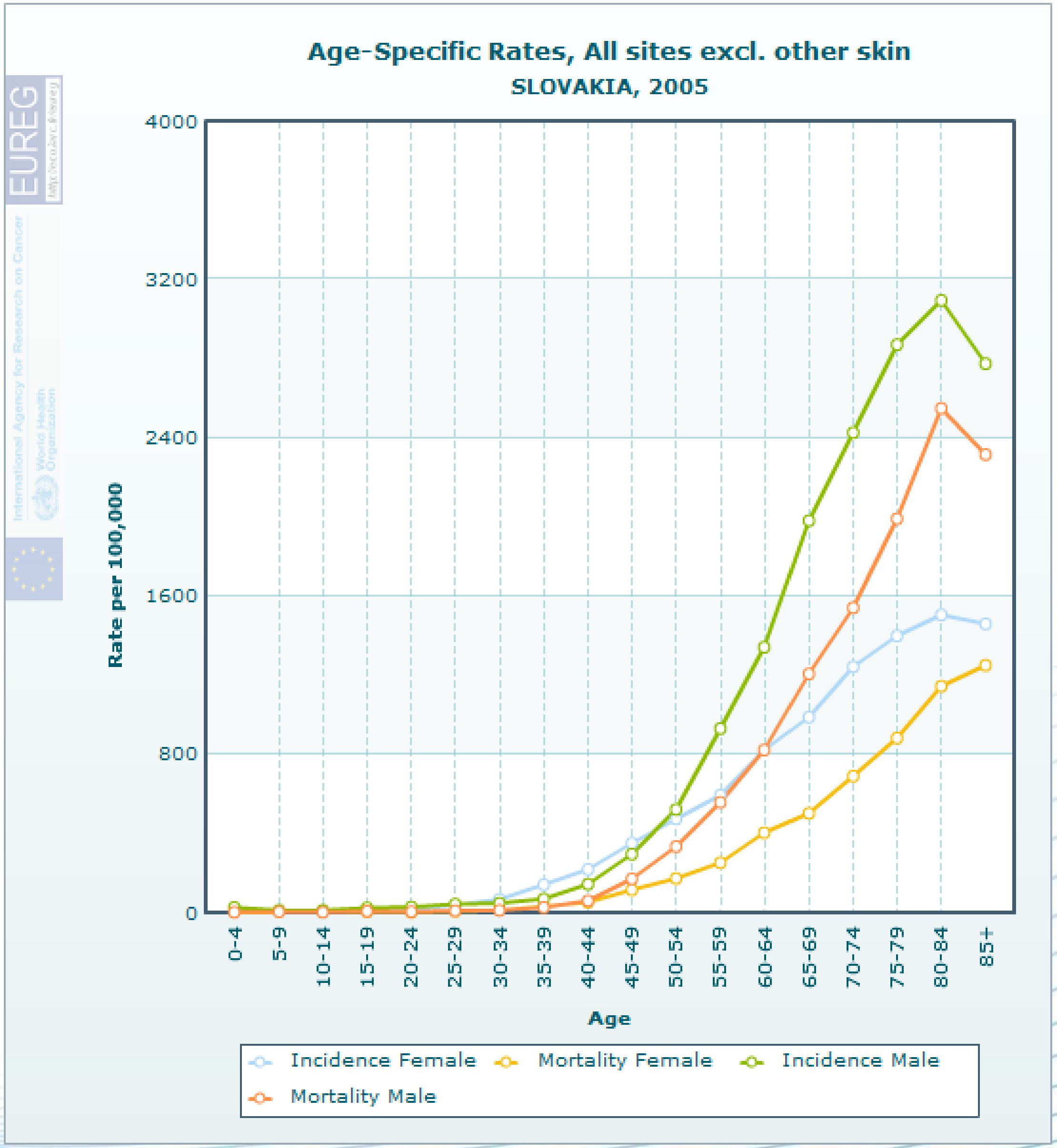
Pridružené ochorenia

Malígny melanóm s recidívou v mieste excízie

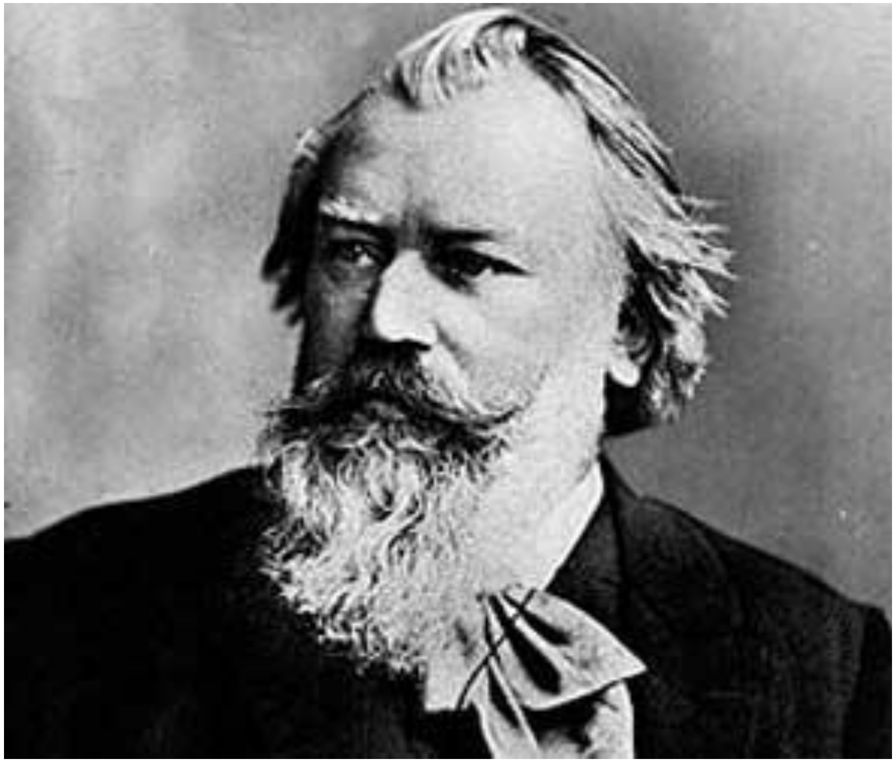
Stav po operácii malígneho melanómu v oblasti pravého mesogastria (2015)

Ostatný nález

NET rekta G1
Vretenobunkový benígny GIST žalúdka (3x) a rektosigmy (1x)
Submukózny lipóm hepatálnej flexúry hrubého čreva
Hyperplastický polyp sigmy
Ikterus
Ascites (1500 ml)
Systémová vaskulárna amyloidóza
Jazva po infarkte myokardu v oblasti septa
Ateroskleróza mozgových artérií (f.k. 25%), koronárnych artérií (f.k. 70%), hrudnej aorty (f.k.a. 80%), brušnej aorty (f.k.a. 90%)
Difúzna a diseminovaná myofibróza srdca
Hypertenzná choroba s hypertenzným srdcom a arteriolosklerotickou nefroklserózou
Diabetes mellitus 2.typ (sec.dg.clin.)
Postmalatická pseudocysta frontálne vľavo (priemeru 13 mm)
Atrofia kôry mozgu
Jemné adhézie v pravej pleurálnej dutine
Emfyzém, chronická venostáza a antrakóza pľúc
Hepatomegália (2800 g)
Chronická venostáza pečene
Solitárny konkrement žlčníka
Venostáza sleziny
Artériosklerotická nefroskleróza
Adenomyomatózna hyperplázia prostaty s retenciou moču (800 ml)
Početné kôrové cysty obličiek
Nodózna folikulárna struma s regresívnymi zmenami
Nadváha (BMI = 29,98 kg/m2)
Gynekomastia
Varixy predkolení
Trofické zmeny predkolení obojstranne
Onychodystrofia prstov dolných končatín
Stav po apendektómii (v minulosti)

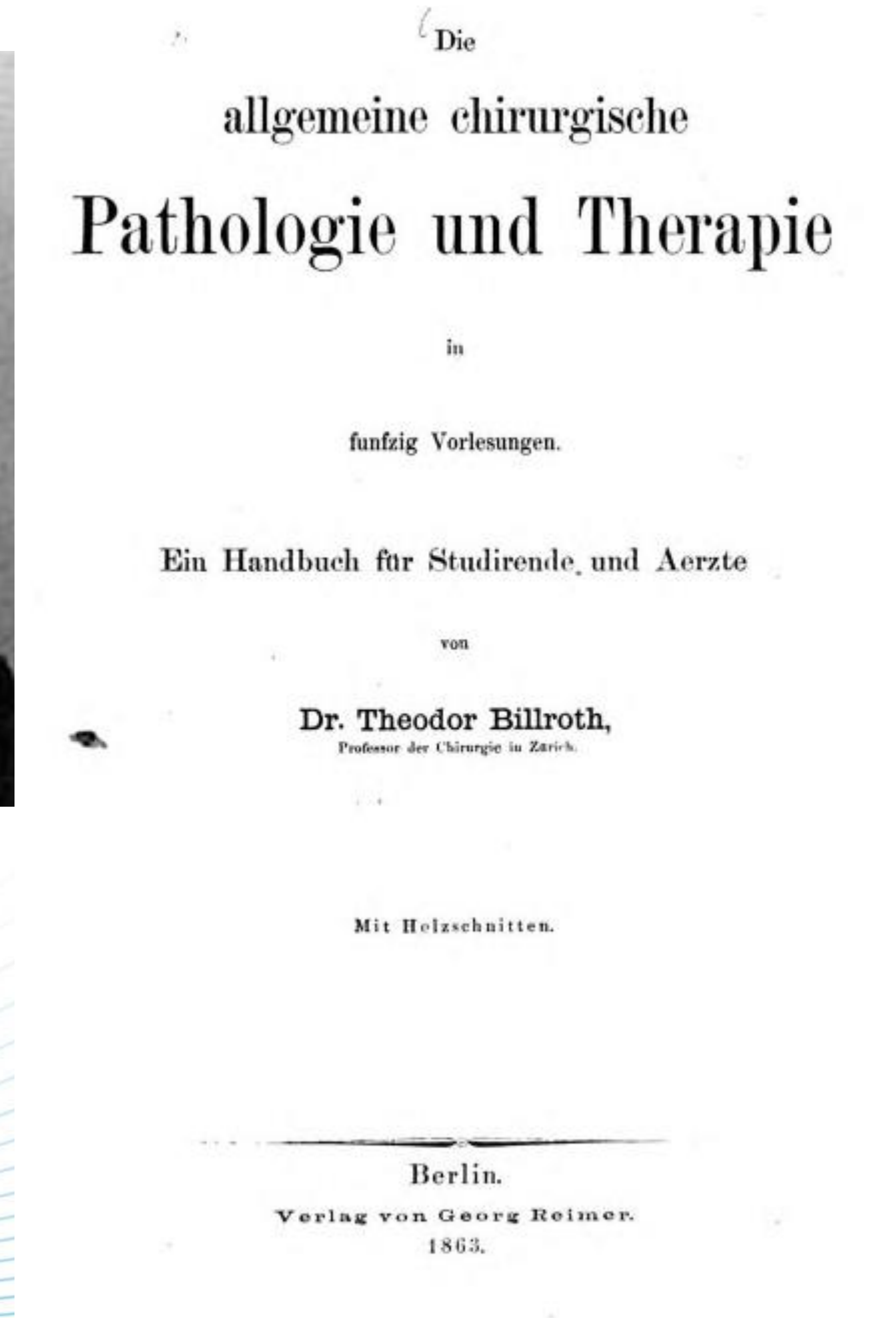


Age-Specific Rates, All sites excl. other skin
SLOVAKIA, 2005
Rate per 100,000
4000
3200
2400
1600
800
0
0-4
5-9
10-14
15-19
20-24
25-29
30-34
35-39
40-44
45-49
50-54
55-59
60-64
65-69
70-74
75-79
80-84
85+
Age
Incidence Female
Mortality Female
Incidence Male
Mortality Male
EUREG



Theodore Billroth (1829-1894)

1. Každý nádor má odlišný histologický obraz
2. Každý nádor musí vzniknúť za iných podmienok
3. Každý nádor musí tvoriť vlastné metastázy



Die

allgemeine chirurgische

Pathologie und Therapie

in

funfzig Vorlesungen.

Ein Handbuch für Studirende und Aerzte

von

Dr. Theodor Billroth,

Professor der Chirurgie in Zürich.

Mit Holzschnitten.

Berlin.

Verlag von Georg Reimer.

1863.

Olive Gates, Shields Warren

„Warren S, Gates O. Multiple primary malignant tumors: a survey of the literature and statistical study. Am J Cancer. 1932;16:1358–1414“

1. Nádory sú malígne
2. Nádory musia byť jednoznačne určené
3. Musí byť vylúčená možnosť že ide o metastázu

Mnohopočetné primárne malígne nádory

- Nádory ktoré sú histologicky odlišné
- Nádory ktoré postihujú viac orgánov
- Nádory ktoré sú histologicky podobné a postihujú jeden orgán

- Dôsledky

  Prítomnosť mnohopočetných nádorov neovplyvňuje prežívanie pacientov a nemá vplyv na manažovanie pacientov

  Objavenie sa nasledujúcich nádorov pre pacientov s predchádzajúcou históriou nádorovej choroby nie je indikatívne pre metastázy prvotného nádoru.

Semin Oncol 31:264-273. © 2004 Elsevier Inc.

Table 1. Prevalence of Multiple Primary Malignancies in Autopsy Series

	Total Number	Prevalence (%)	Median Age
Warren & Gates[31]	1,078	3.7	62
Warren & Ehrenreich[41]	2,829	6.8	74
Hajdu & Hajdu[42]	3,321	5.3	67
Berg & Foote[43]*	5,636	3.1	64
		9.2	
Stanta et al[44]	607	9.2	80
		16.5‡	

*Data statified by age.
†Women.
‡Men.

Table 3. Registry Experience With Second Primary Cancers Following Specific Tumors

Study	Primary Cancer	Risk of Second Malignancy	Age
Mydlo & Gerstein[51]	Urologic	22/515 (4.7%)	64 (mean)
Wegner[52]	Urologic	144/4,353 (3.3%)	66.6 first primary 70.49 second primary 73.36 third primary
Salminen et al[53]	Bladder	652/10,014 (5.6%)	66 (mean)
Rabbani et al[54]	Renal	148/551	63 (mean)
Levi et al[55]	Lung	175/5,794 (2.9%)	>60
Neugut et al[56]	Prostate	1,395/141,761 (0.9%)	70
Boice et al[36]	Cervix	5,146/182,040 (2.7%)	Not reported

Multiple Primary Malignant Tumors (MPMT):
Study of 68 Autopsy Cases (1963–1980)

TUNG-KWANG LEE, MD,* RICHARD T. MYERS, MD,† MODESTO SCHARYJ, MD,‡ and RICHARD B. MARSHALL, MD,§

TABLE 1
Classification and Number of Cases of MPMT in 68 Patients

Type	Two	Three	Four	Five	Total
Synchronous*	13	2	—	—	15
Metachronous†	46	2	—	1	49
Combined‡	—	3	1	—	4
Total	59	7	1	1	68

* Occurring simultaneously or within six months.
† Interval between diagnoses longer than six months.
‡ Only in patients having more than two PMTs.

TABLE 3
Age Distribution of Patients with MPMT

Sex	Age (Years)									
	20+	30+	40+	50+	60+	70+	80+	Total	Range	Mean ± SEM
Male	1	1	3	2	14	10	5	36	27–88	66.4 ± 2.4
Female	0	1	4	10	7	8	2	32	34–83	61.3 ± 2.08
Total	1	2	7	12	21	18	7	68	27–88	64.0 ± 2.3

Semin Oncol 31:264-273.

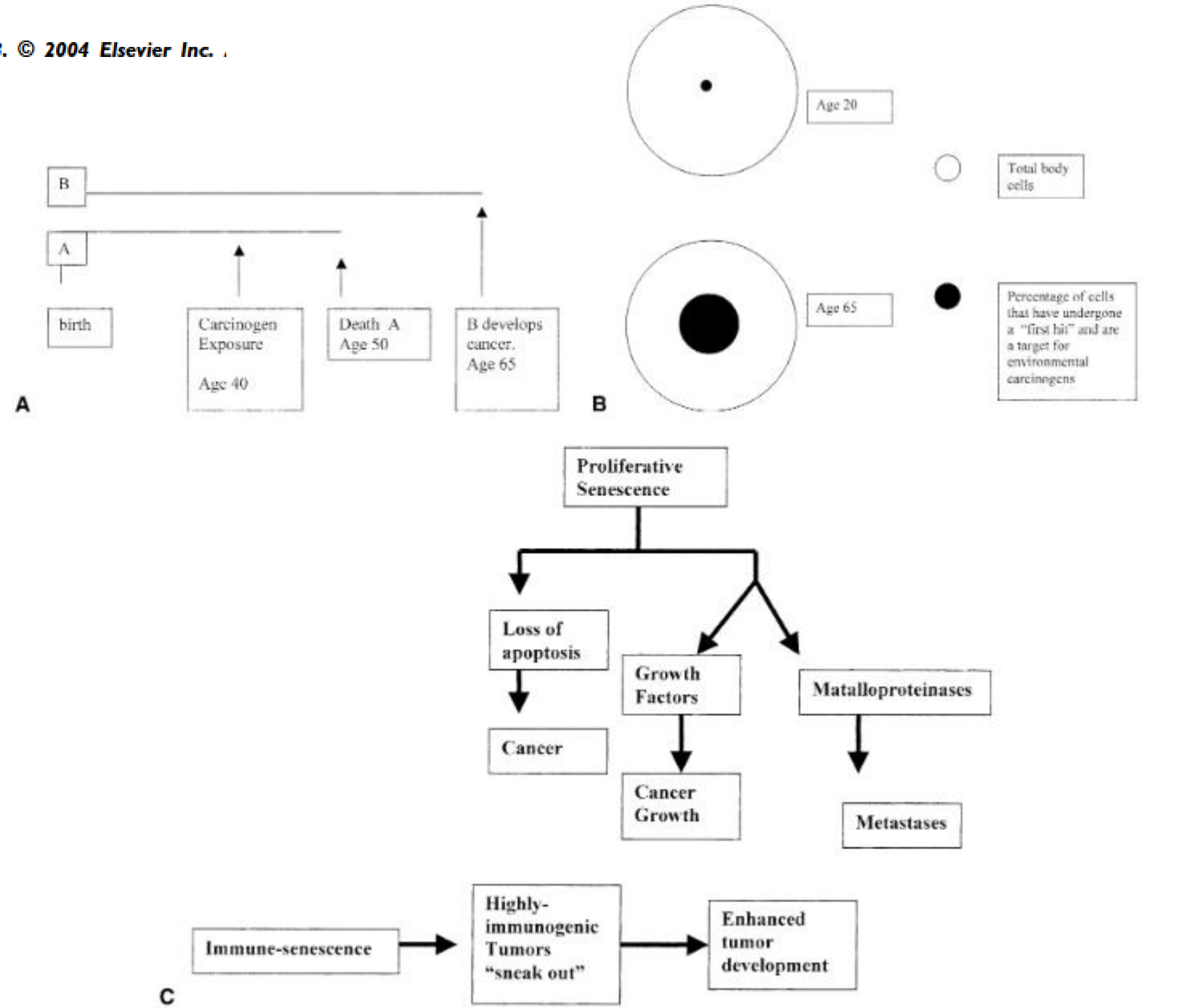


Fig 1. Mechanisms explaining the association of cancer and aging. (A) Time length of carcinogenesis. (B) Molecular changes of age: prime aging tissues to the effects of carcinogens. (C) Changes in bodily environment.

Yeh *et al. World Journal of Surgical Oncology* 2013, **11**:66
http://www.wjso.com/content/11/1/66

WORLD JOURNAL OF SURGICAL ONCOLOGY

CASE REPORT Open Access

Synchronous triple carcinoma of the colon and rectum

Chien-Chih Yeh[1,4], Sheng-Chuan Hsi[2], Chih-Pin Chuu[3] and Yung-Hsi Kao[4*]

Online Submissions: wjg.wjgnet.com
www.wjgnet.com
wjg@wjgnet.com

World J Gastroenterol 2008 February 14; 14(6): 969-973
World Journal of Gastroenterology ISSN 1007-9327

CASE REPORT

Synchronous colorectal and lung cancer: Report of three cases

Yi-Fan Peng, Jin Gu

Multiple Primary Carcinomas of the Colon and Associated Extracolonic Primary Malignant Tumors

TUNG-KWANG LEE, M.D., MICHAEL BARRINGER, M.D., RICHARD T. MYERS, M.D., F.A.C.S., J. MICHAEL STERCHI, M.D., F.A.C.S.

A review of 308 cases of colorectal carcinoma showed 12 cases (3.9%) of colorectal multiple primary malignant tumors and 14 cases (4.5%) of colorectal primary malignant tumor associated with extracolonic primary malignant tumor. A total of 60 tu-

From the Department of Surgery, Bowman Gray School of Medicine of Wake Forest University, Winston-Salem, North Carolina

Samaras *et al. BMC Gastroenterology* 2011, **11**:27
http://www.biomedcentral.com/1471-230X/11/27

BMC Gastroenterology

CASE REPORT — Open Access

Synchronous well differentiated neuroendocrine tumour and gastrointestinal stromal tumour of the stomach: a case report

Vassilis D Samaras[1*], Periklis G Foukas[1], Konstantinos Triantafyllou[2], Vassilia Leontara[1], Dimitrios Tsapralis[3], Eirini M Tsompanidi[1], Anastasios Machairas[3], Ioannis G Panayiotides[1]

Online Submissions: wjg.wjgnet.com
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doi:10.3748/wjg.14.6884

World J Gastroenterol 2008 November 28; 14(44): 6884-6887
World Journal of Gastroenterology ISSN 1007-9327

CASE REPORT

Gastric carcinoid tumor in a patient with a past history of gastrointestinal stromal tumor of the stomach

Chien-Yuan Hung, Ming-Jen Chen, Shou-Chuan Shih, Tsang-Pai Liu, Yu-Jan Chan, Tsang-En Wang, Wen-Hsiung Chang

Coexistence of gastrointestinal stromal tumors with other neoplasms

Łukasz Liszka[1], Ewa Zielińska-Pająk[1], Jacek Pająk[1], Dariusz Gołka[2], and Joanna Huszno[1]

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[2]Department of Pathology, Victoria Hospital, Blackpool, UK

Table 1. Literature data on the accompanying neoplasms in patients with gastrointestinal stromal tumors

Tumor site or type	Reference Nos.
Gastric carcinoma	4, 17–30
Breast carcinoma	24, 28, 31, 32
Cervical carcinoma	24, 33
Endometrial carcinoma	24, 28
Ovarian carcinoma	28, 34
Lung carcinoma	24, 28
Colorectal carcinoma and adenoma	4, 14, 24–28, 31, 32, 33, 34, 35, 36
Pancreatic carcinoma	4, 28, 34
Hepatocellular carcinoma	37
Melanoma	26, 31, 38, 39
Prostatic carcinoma	28, 31, 32
Renal carcinoma	24, 28, 31, 32, 40, 41
Squamous cell carcinoma of the tonsil	34
Disseminated squamous cell carcinoma	26
Thyroid carcinoma	31
Gallbladder carcinoma	18
Carcinoma of the Vater's papilla	42, 43
Duodenal Brunner's gland adenoma	25
Esophageal carcinoma	32, 44
Cutaneous carcinoma	32
Seminoma	24
Granular cell tumor	17
Chronic lymphatic leukemia	24, 25
MALT-lymphoma	20, 45, 46
Non-Hodgkin lymphoma (not precisely specified)	34
Burkitt's lymphoma	47
Anaplastic lymphoma	26
High-grade follicle center lymphoma	28
Plasmocytoma	28, 34
Carcinoid	22, 24–27, 34, 48–50
Somatostatinoma	51
Pheochromocytoma	26
Neuroendocrine carcinoma	28, 52
Neuroblastoma	53
Osteosarcoma	24, 54
Uterine sarcoma	24
Lipoma	24, 55

MALT, mucosa-associated lymphoid tissue

Clin Ter. 2003 Jul-Aug;154(4):271-5.

An unusual association of malignant melanoma and small cell lung cancer: case report. An eleven-year-follow-up.

Bruno G[1], Coppola M, Eleuteri E, Barucco M, Molfetta R, Bruno A, Angelini L.

Synchronous small-cell lung cancer and gastrointestinal stromal tumor: a case report

Atteinte synchrone d'un cancer bronchique à petites cellules et d'une tumeur stromale gastro-intestinale : à propos d'un cas

Nicolas Girard[1], Vincent Cottin[1], Marie-George Lapalus[2], François Tronc[3], Jean-François Cordier[1]

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World J Gastroenterol 2006 September 7; 12(33): 5360-5362
World Journal of Gastroenterology ISSN 1007-9327

RAPID COMMUNICATION

Synchronous occurrence of gastrointestinal stromal tumors and other primary gastrointestinal neoplasms

Marek Wronski, Bogna Ziarkiewicz-Wroblewska, Barbara Gornicka, Wlodzimierz Cebulski, Maciej Slodkowski, Aleksander Wasiutynski, Ireneusz W Krasnodebski