

# Spindle cell parotid tumor

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France



PRELIMINARY  
PROGRAM

APRIL 11 & 12, 2024 - INSTITUT CURIE  
AMPHITHEATER CONSTANT BURG, FRANCE

**THE PATHOLOGY OF MELANOMA:**  
AN INTERNATIONAL COURSE

institut Curie

SIPIC



S F C C  
SOCIÉTÉ FRANÇAISE DE CYTOLOGIE CLINIQUE

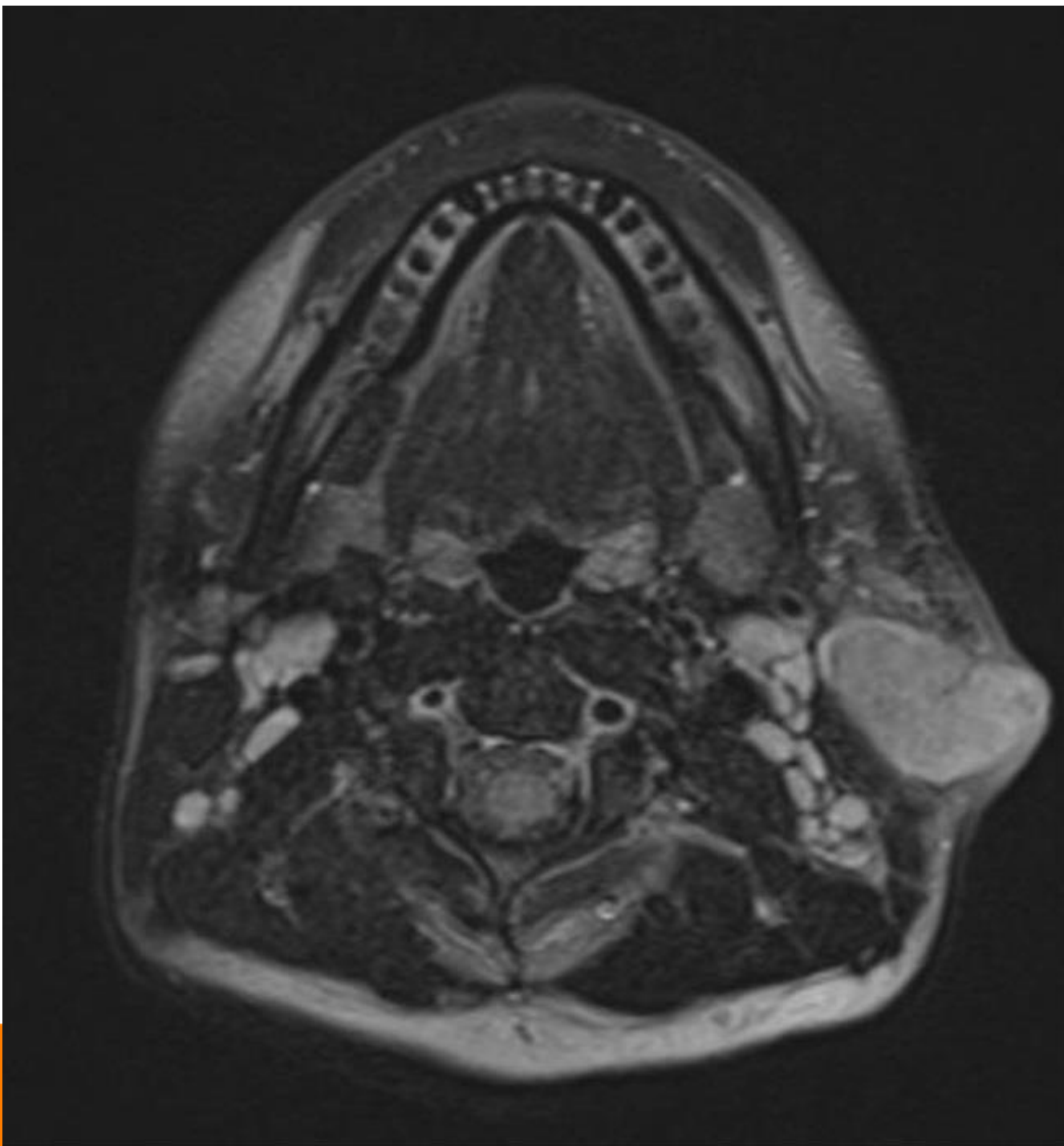
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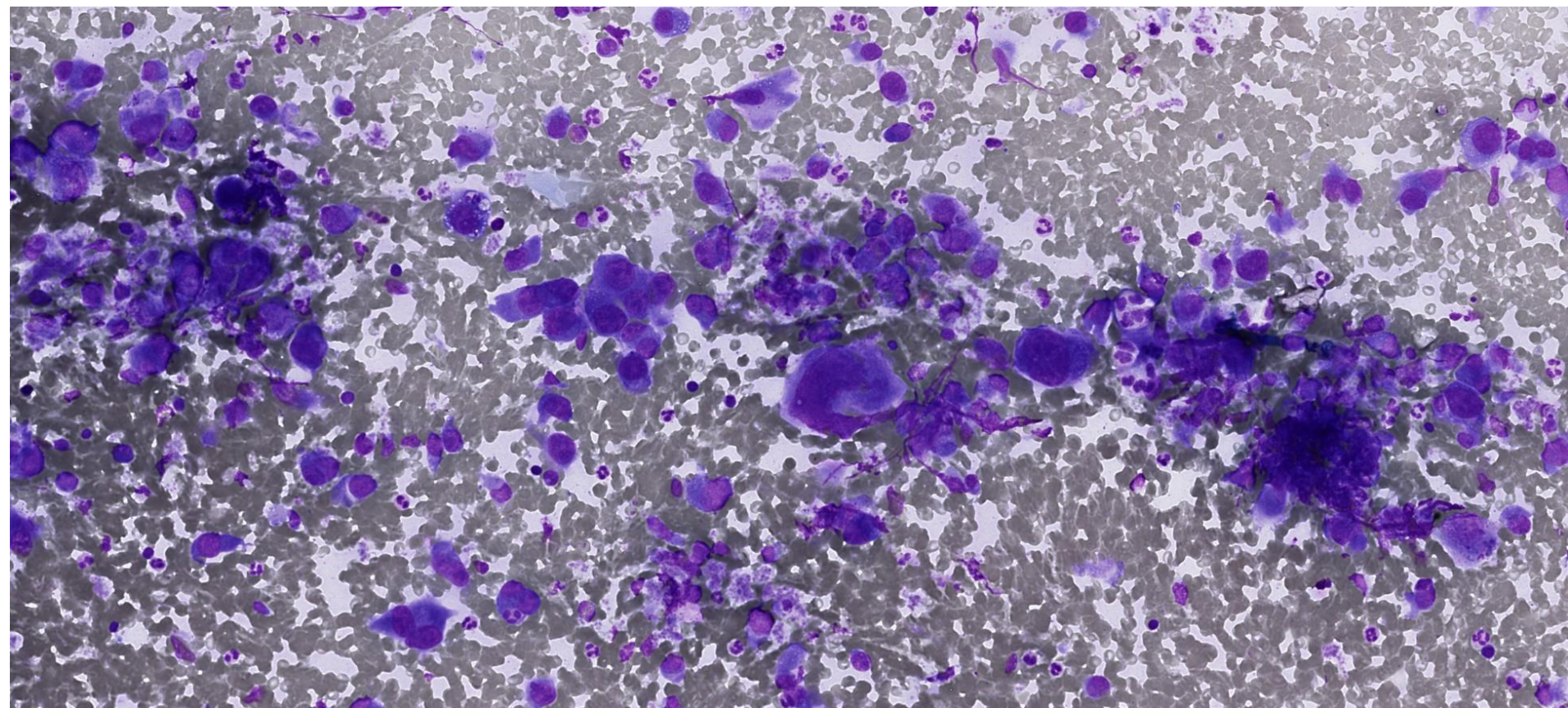
## Patient 2020438

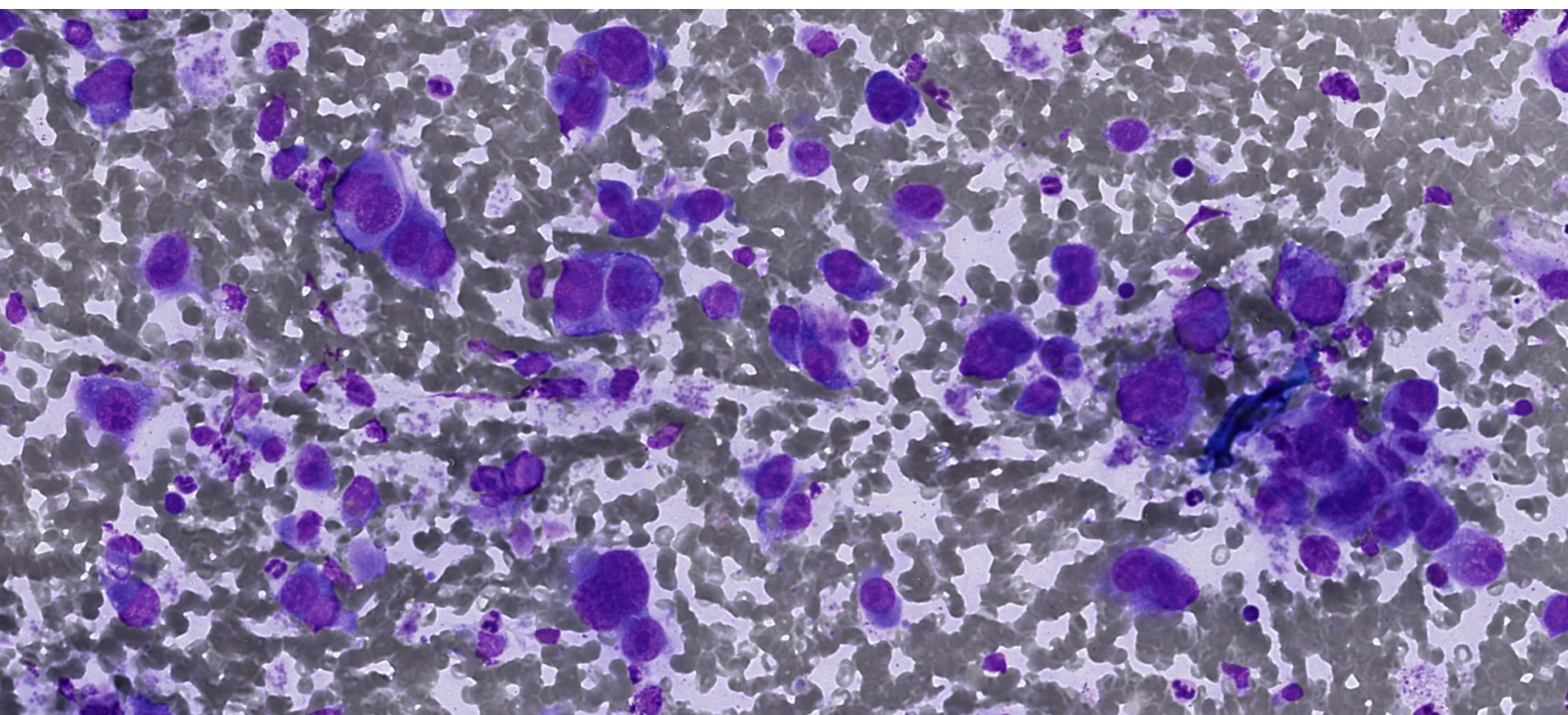
December 2020:  
31 yrs- old M  
No past history

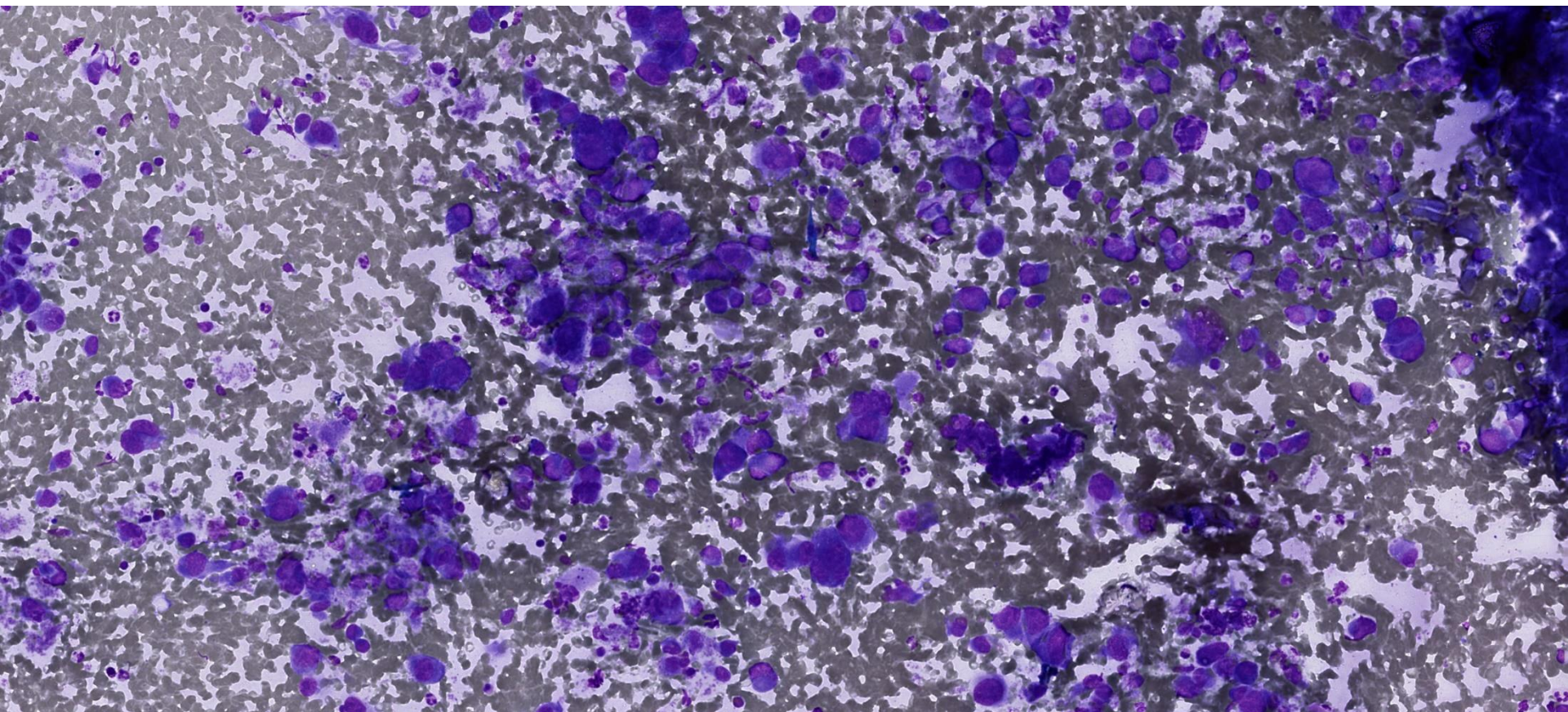
FNA + CB + Molecular  
Surgery  
CT → CR  
ADF March 2024  
(FU in Normandy)

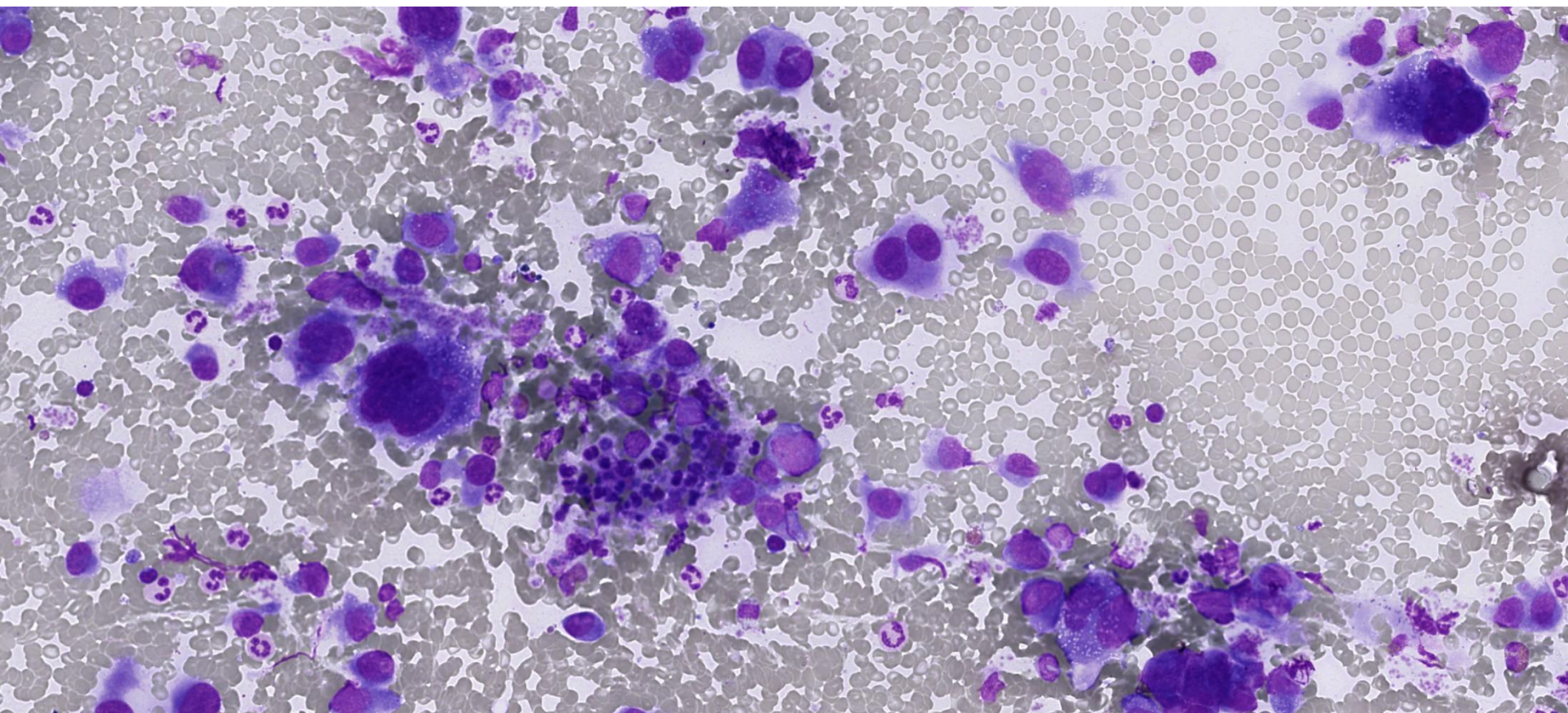


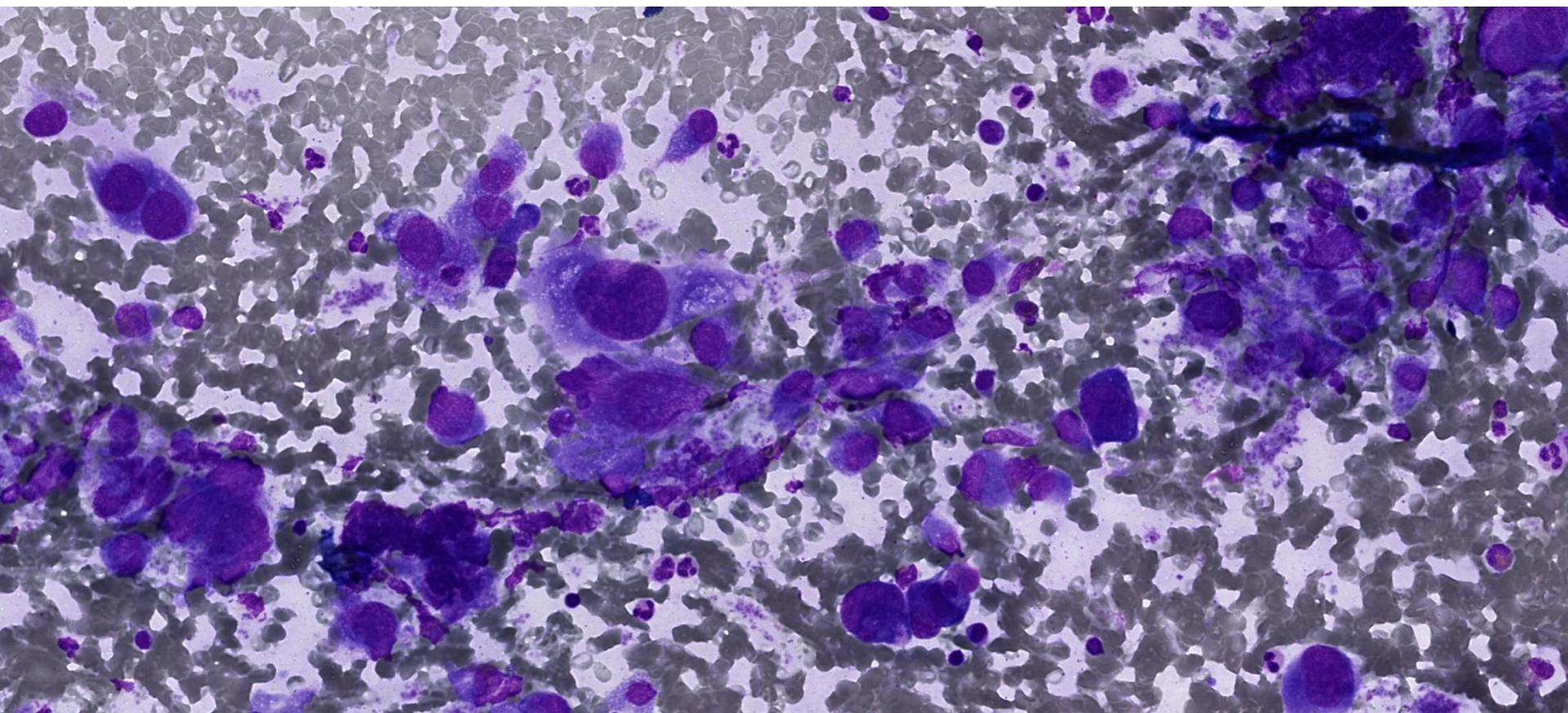


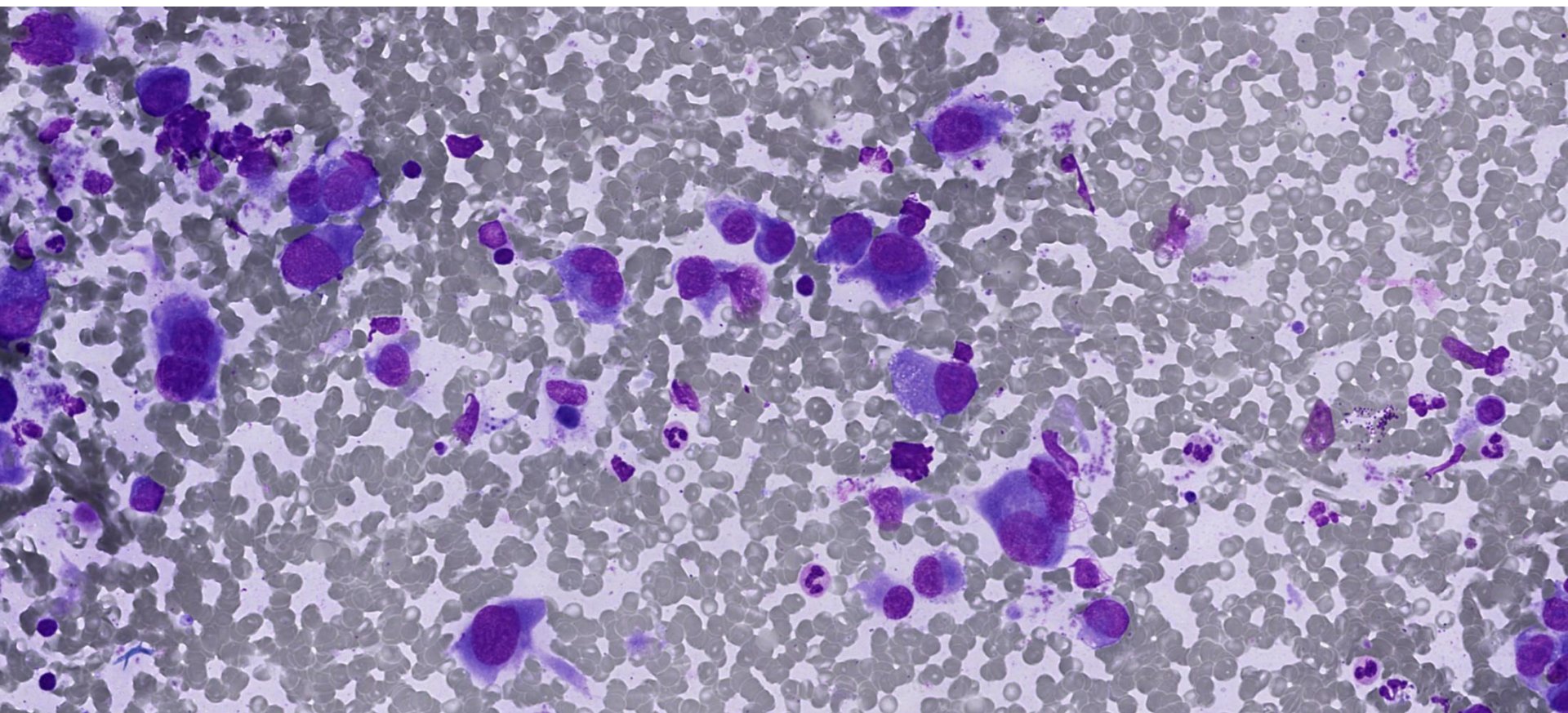


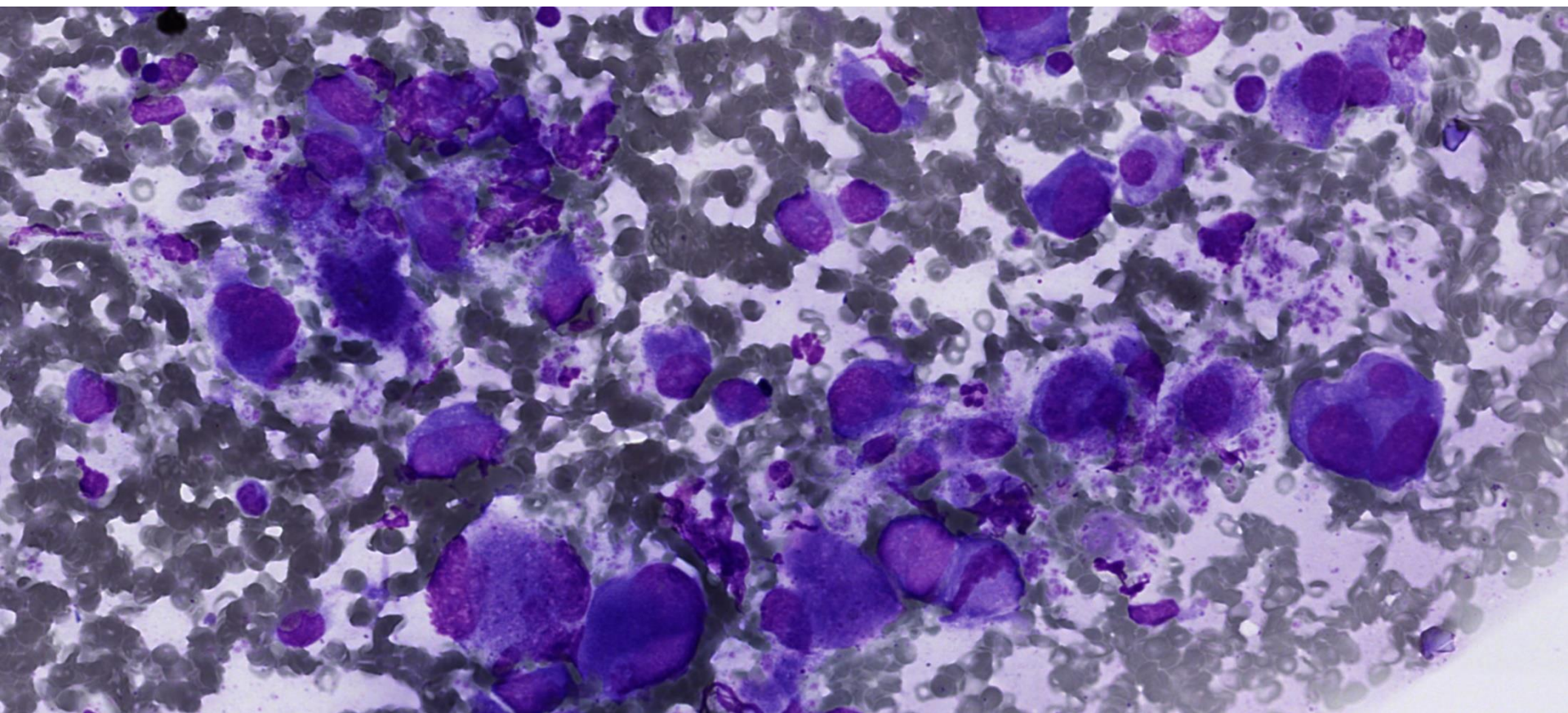




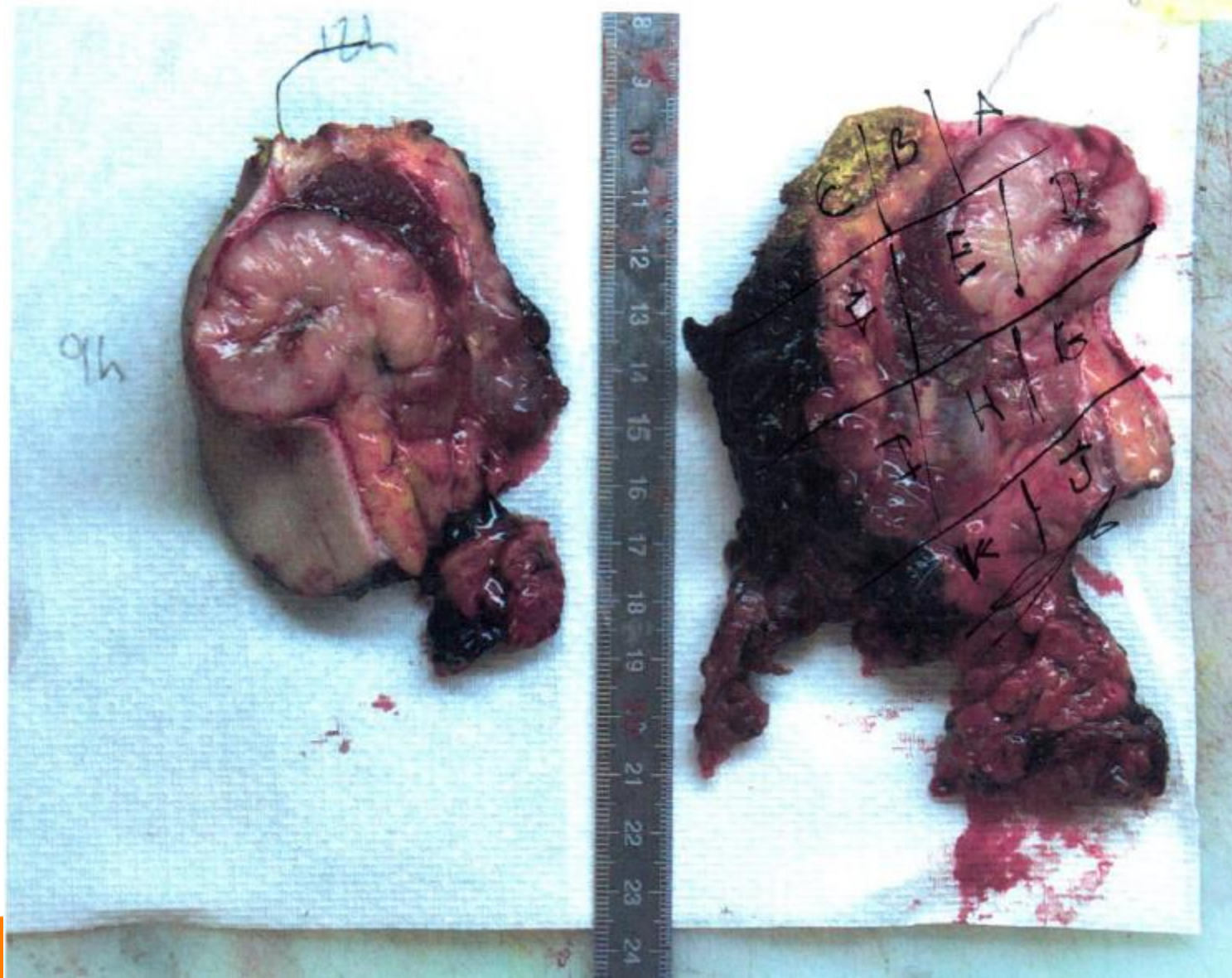


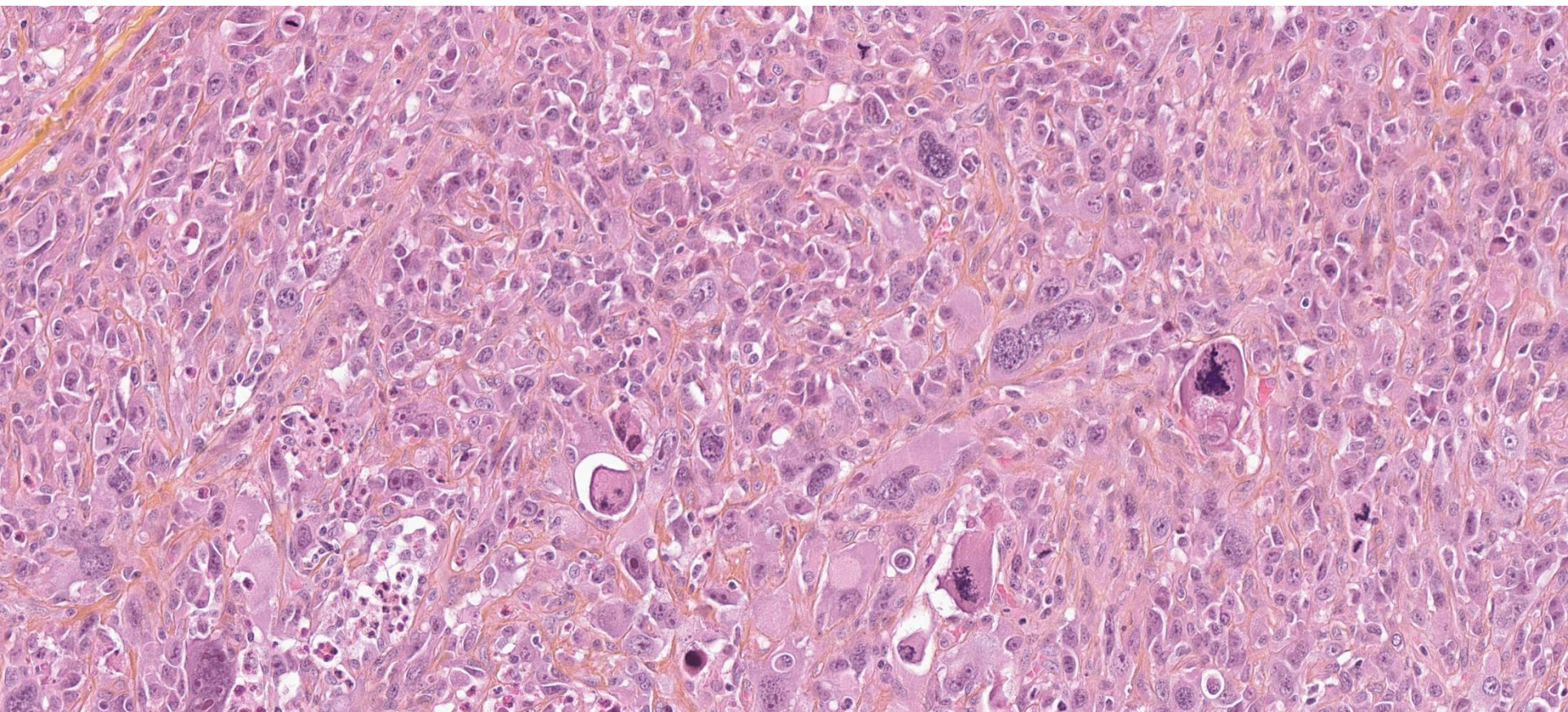


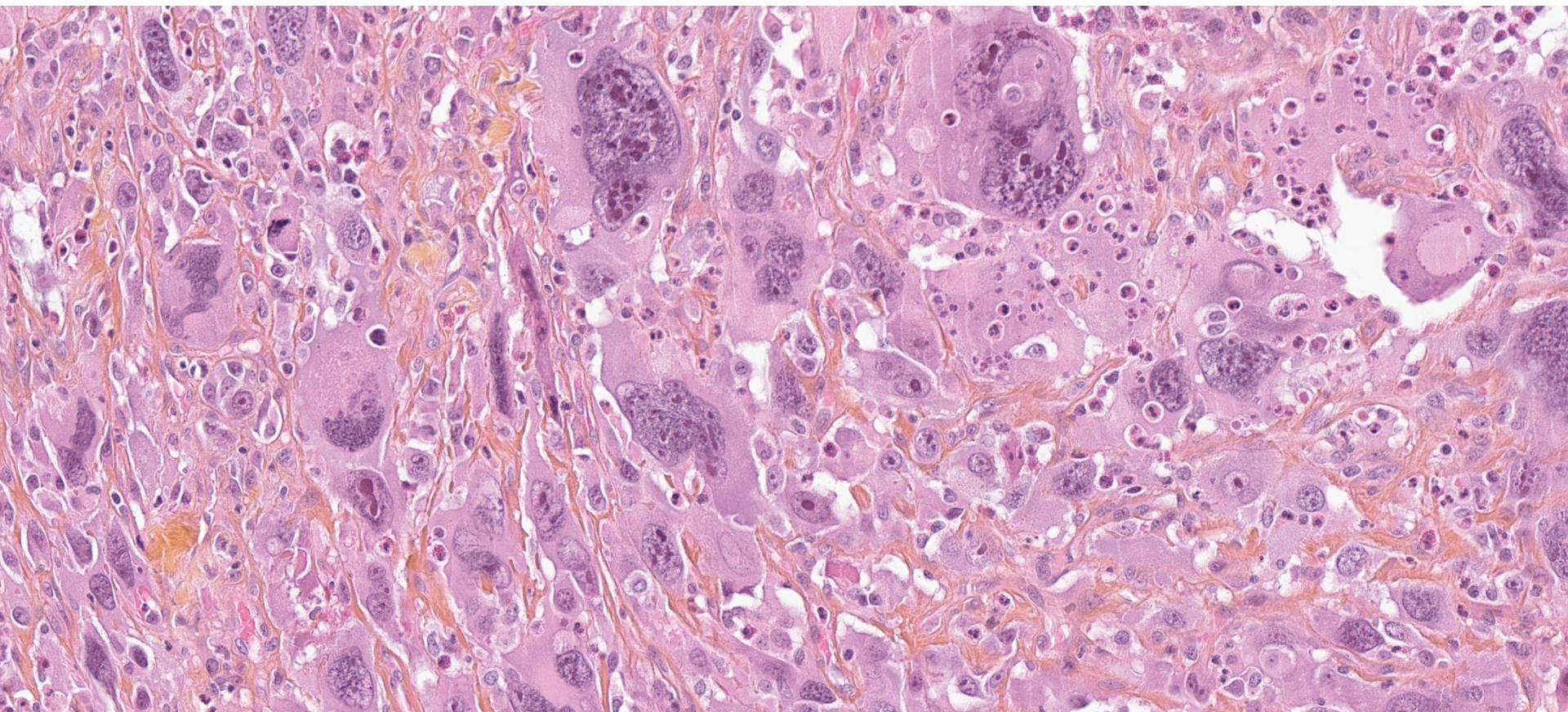


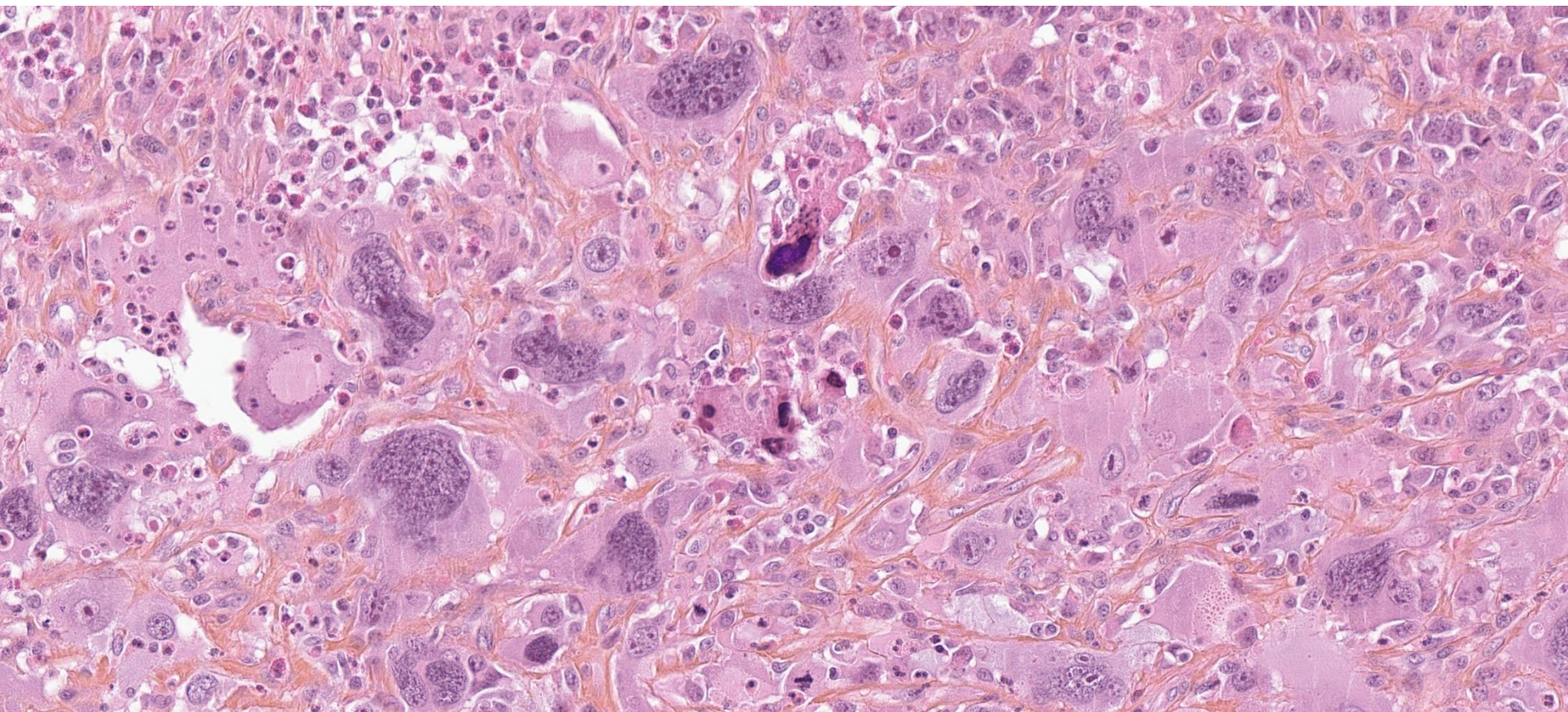


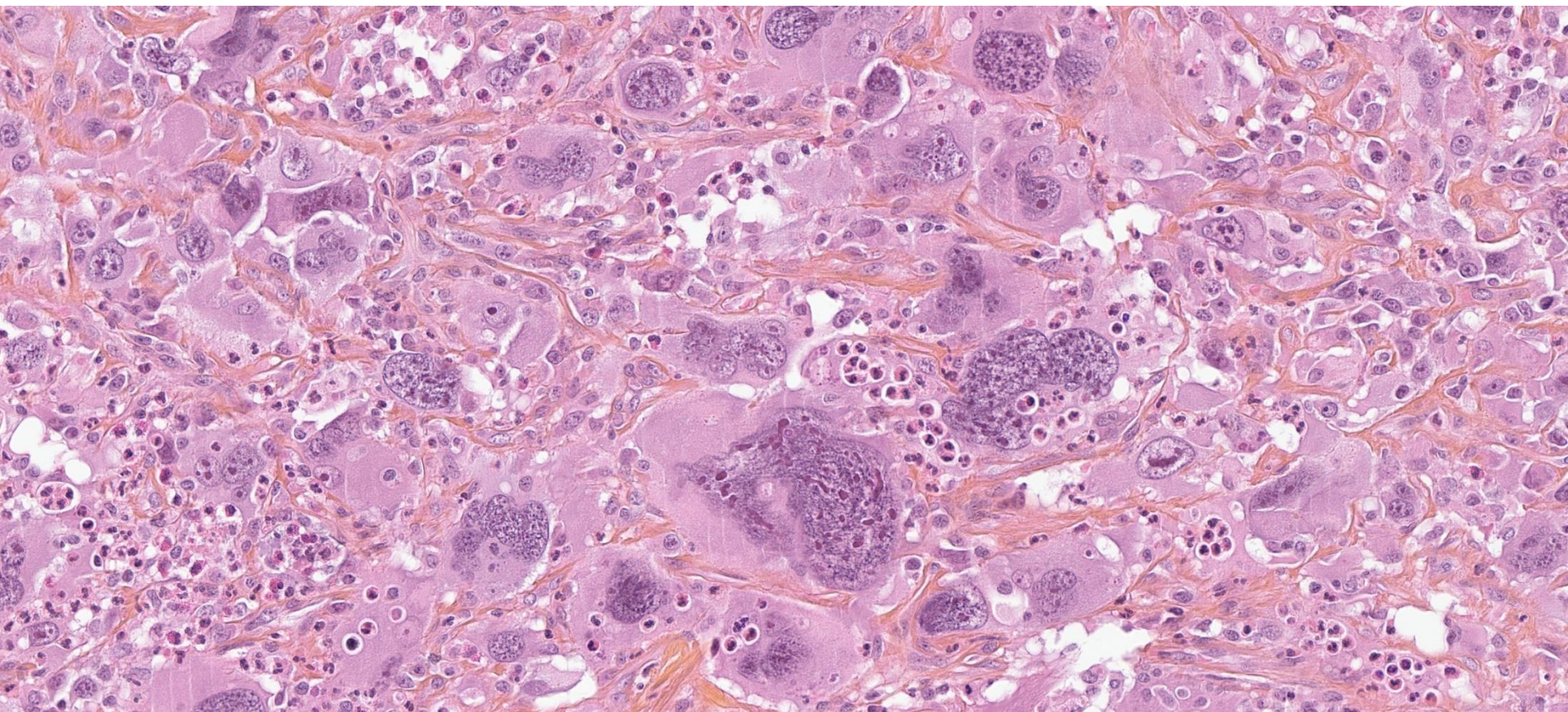
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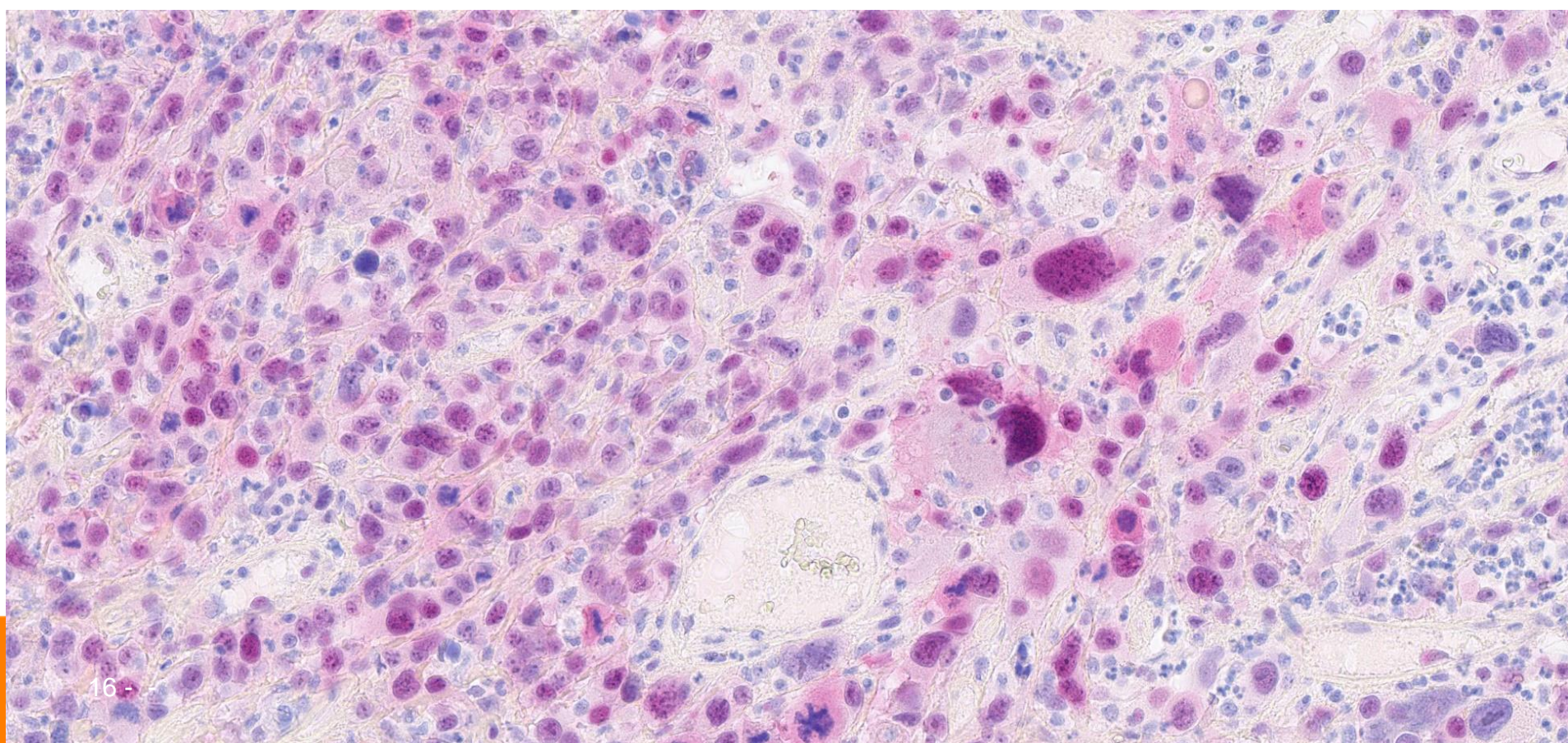




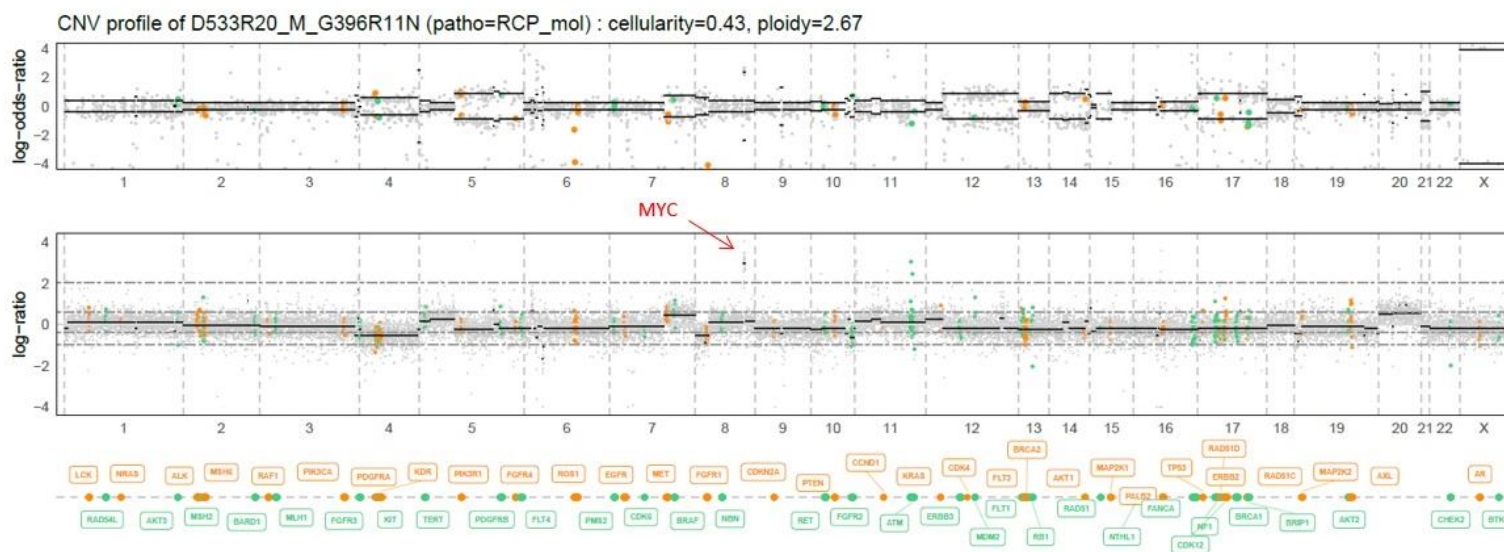


Immunohistochemistry + : PRAME, CD56, WT1, CD10, p63

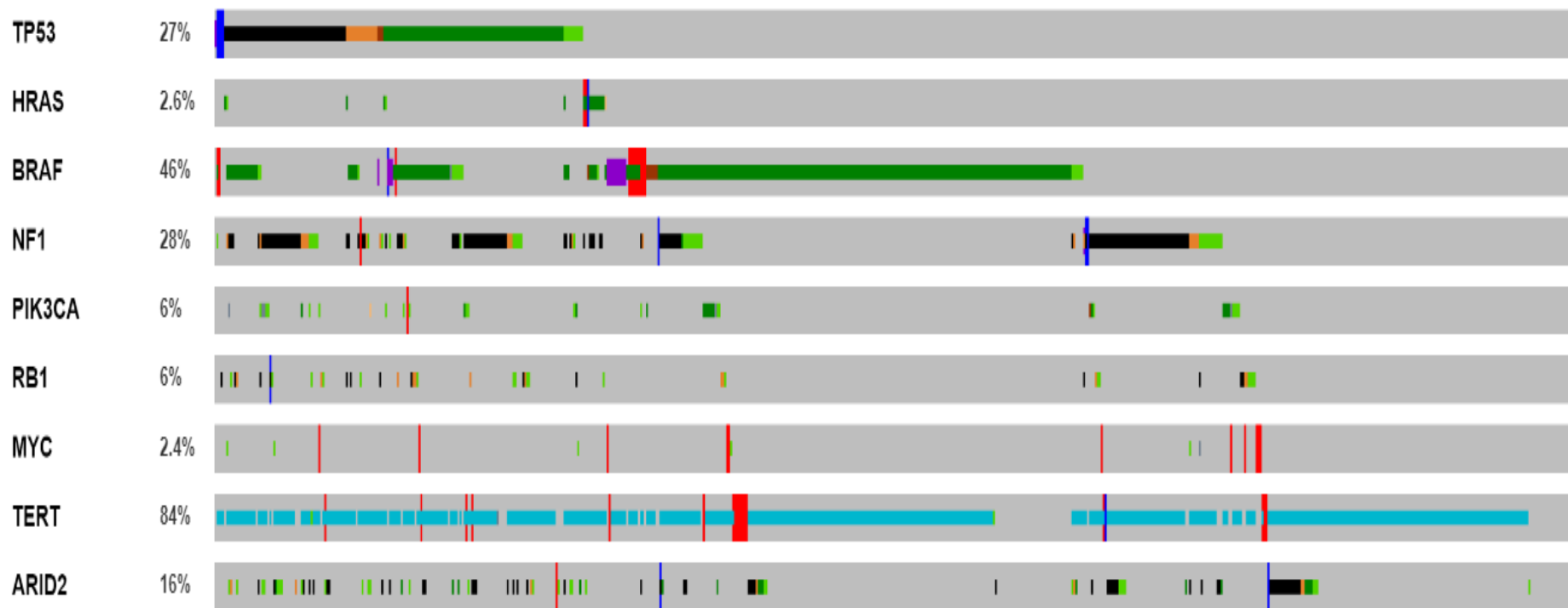
Immunohistochemistry - : desmin, EMA, SMA, MUC4, CD31, caldesmon, Melan-A, CK20, SOX10, CKIT, STAT6, MDM2, CK7, S100, DOG1, HMB45, CD34, AE1, ALK, NUT, CD30, BCOR, CD45, Ki67 = 60 %



Barcode	Gene	Chr	C_point	P_point	Depth	Allelic ratio
D533R20	<i>BRAF</i>	chr7	c.1799T>A	p.(Val600Glu)	3984 X	42.8 %
D533R20	<i>TP53</i>	chr17	c.653T>G	p.(Val218Gly)	600 X	40.5 %
D533R20	<i>TERT</i>	chr5	c.-146C>T	p.?	290 X	34.8 %
D533R20	<i>RB1</i>	chr13	c.2152_2153delinsC	p.(Asp718ThrfsTer8)	288 X	17.4 %
D533R20	<i>RB1</i>	chr13	c.2107-11_2111del	p.?	206 X	11.0 %



# Public molecular results of target sequencing on 696 melanomas (cbioportal)



RAS-MAPK  
signaling pathway

<i>TP53</i>	
<i>HRAS</i>	
<i>BRAF</i>	
<i>NF1</i>	
<i>PIK3CA</i>	
<i>TERT</i>	
<i>RB1</i>	
<i>MYC</i>	
<i>ARID2</i>	

- Missense driver mutation
- Inactivating mutation
- Promoter mutation
- Amplification

# Molecular results

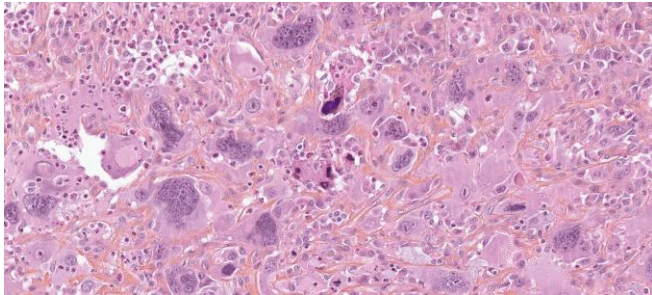
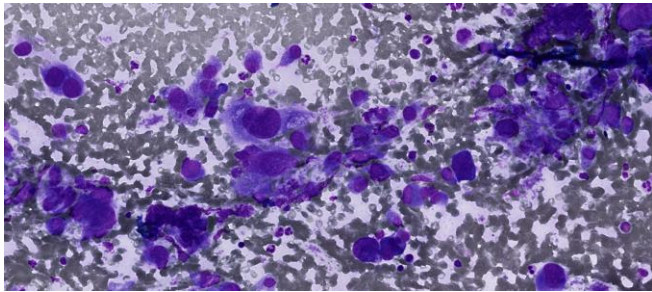
Hotspot mutation in *TP53*, *BRAF* and in the promoter of *TERT*

Two inactivating mutations in the *RB1* gene

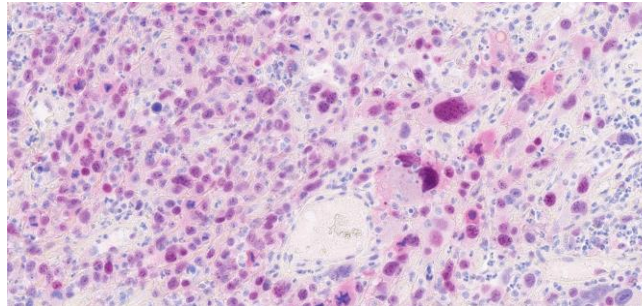
A genomic profile including several chromosome arms copy number alterations and a amplification of *MYC*

# Which are arguments in favor of Malignant Melanoma?

## Morphology



PRAME, CD56,  
p63, WT1, CD10



## IHC

## Molecular

TP53	Green
HRAS	White
BRAF	Green
NF1	White
PIK3CA	White
TERT	Blue
RB1	Black
MYC	Red
ARID2	White

# Two possibilities to find melanoma in the parotid gland

1. Metastasis +++
2. Primary ?

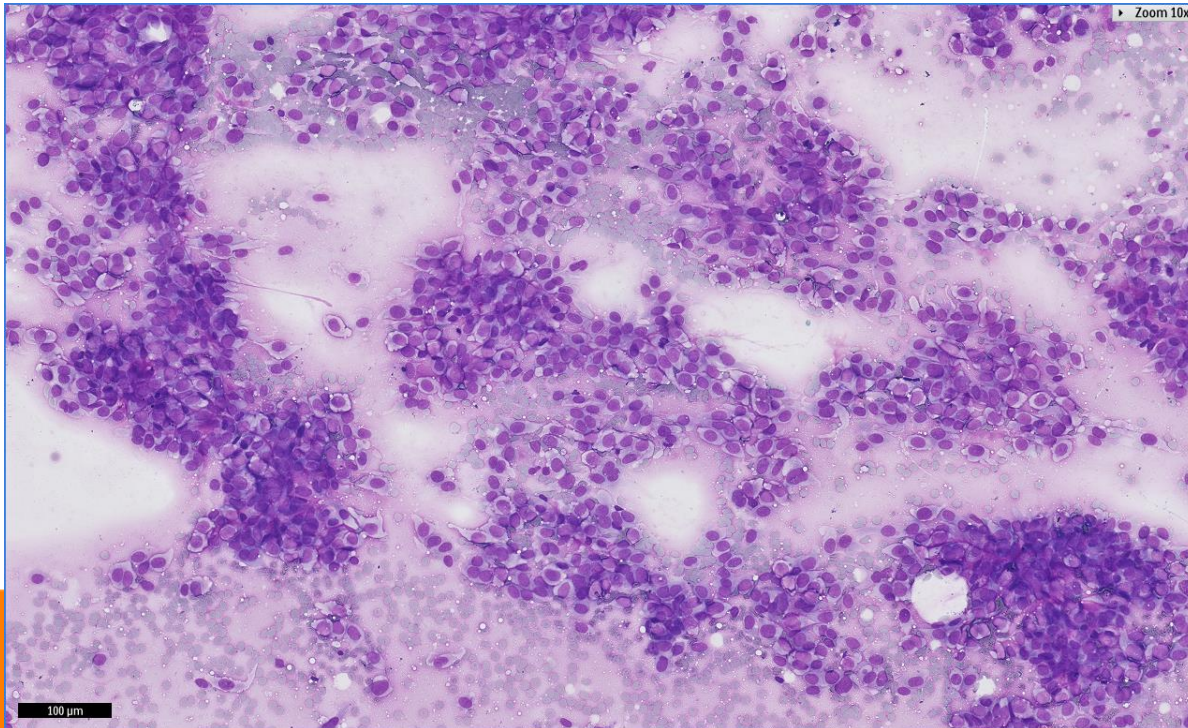
► [Cancer](#). 2000 Dec 25;90(6):350-6.

# **Fine-needle aspiration of metastatic nonlymphomatous tumors to the major salivary glands: a clinicopathologic study of 40 cases cytologically diagnosed and histologically correlated**

C Lussier<sup>1</sup>, J Klijanienko, P Vielh


Affiliations + expand

PMID: 11156518



*Case Report*

# Primary Malignant Melanoma in the Parotid Gland: A Case Report and Literature Review

Mengmeng Yan, MS <sup>1</sup>, Sujuan Duan, MS<sup>1</sup>, Meixia Du, MS<sup>1</sup>, Lishan Xiao, MS<sup>1</sup>, Guodong Yao, MD<sup>2</sup>, and Chunping Ning, MD<sup>2</sup>

## Abstract

Primary melanoma of the parotid gland is an extremely rare and challenging tumor with a poor prognosis, and its ultrasonic characteristics have yet to be reported. This article presents a case of a 77-year-old man with a left parotid mass that was confirmed as a melanoma following surgery. The ultrasonic features of melanoma were examined in detail, with a particular focus on their diagnostic value. Furthermore, we summarized the clinical characteristics, treatment options, and outcomes associated with primary melanoma of the parotid gland based on a thorough analysis of the available literature.

Table 1. Cases in the Literature of Primary Malignant Melanoma of the Parotid Gland.

Author	Age (year)	Sex	Case history (month)	Location	Pain	Pathology	Treatment
Bahar et al <sup>4</sup>	28	Female	6	Left	No	MM	TP + I
Woodwards et al <sup>5</sup>	51	Female	9	Left	No	MM	SP + left RND + C + R
Bussi et al <sup>6</sup>	60	Female	60	Right	/	MM	TP + homolateral RND
Barbieri et al <sup>3</sup>	64	Female	18	Left	No	MM	TP + left RND
Gao et al <sup>7</sup>	37	Male	2	Left	Yes	AMM	TP
Bangerter <sup>8</sup>	55	Male	1/2	Right	/	MM	TP + homolateral RND
Villarreal et al <sup>9</sup>	50	Male	3	Left	No	MM	TP
Mohammed <sup>11</sup>	54	Male	2	Right	No	MM	TP + R
Koc et al <sup>10</sup>	80	Male	5	Right	No	AMM	R
Chaouki et al <sup>12</sup>	27	Female	8	Left	No	MM	TP + R
Sultana et al <sup>13</sup>	60	Female	42	Left	Yes	AMM	SP + C

Letter to the Editor

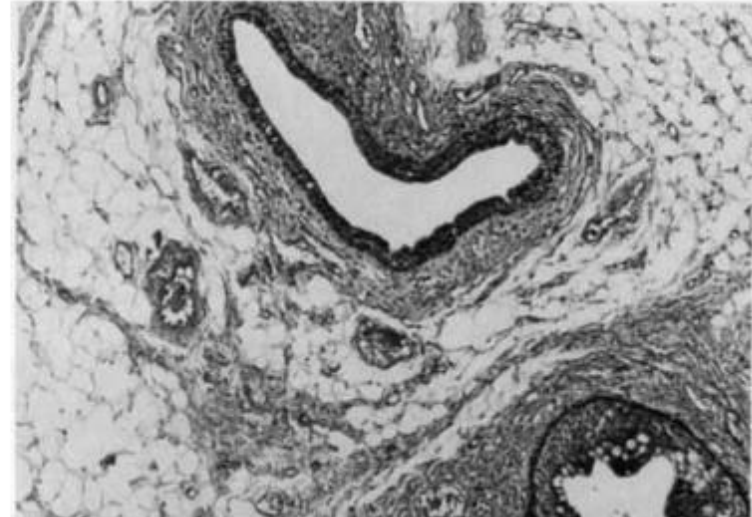
## **Melanocytes in the human parotid gland**

**Yasunori Takeda**

*Department of Oral Pathology, School of Dentistry, Iwate Medical University, Morioka, Japan*

**A review of the literature yields about 20 reported cases of purportedly primary malignant melanoma of the parotid gland, but no convincing examples of pre-existent melanocytes in the salivary glands. The present paper reports the existence of melanocytes in the interlobular duct of the parotid gland observed during an autopsy case of a Japanese male. Melanocytes with long cytoplasmic processes were distributed in the basal and suprabasal layers of hyperplastic duct epithelium, and melanin granules were sparsely scattered in the duct epithelial cells. This is the first report of melanocytes in the human salivary gland.**

**Key words:** duct epithelium, melanocyte, parotid gland, salivary gland

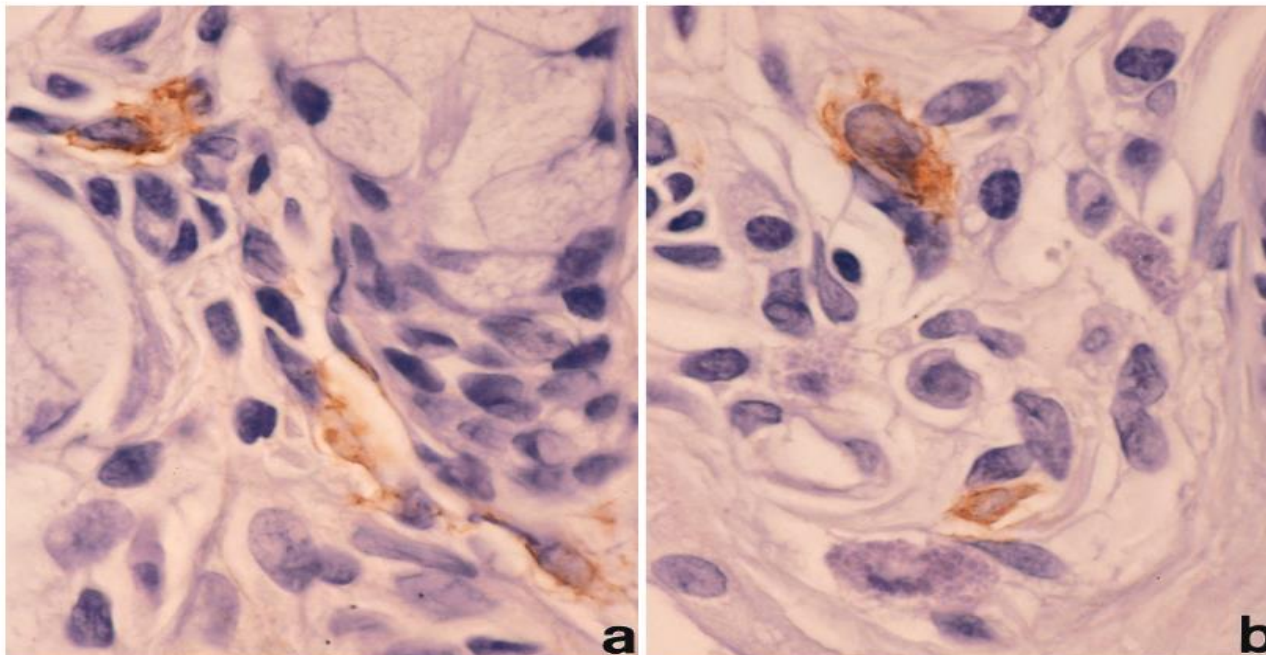


Original Article

## Existence and distribution of melanocytes and HMB-45-positive cells in the human minor salivary glands

Yasunori Takeda

*Department of Oral Pathology, School of Dentistry, Iwate Medical University, Morioka, Japan*



**Figure 3** HMB-45 antibody immunostain showing distinctly positive in cells without intracytoplasmic fine granules, scattered solitary or in groups of a few cells in fibrous tissue around the duct and acini. (a) Some of these cells appear in contact with epithelial component (lower right), and (b) others are sparsely distributed in the fibrous tissue with or without slight infiltration of mononuclear cells.

# Melanotic Pigmentation of Palatal Salivary Glands as a Possible Precursor to Malignant Melanoma: Report of an Unusual Case

*Marco Meleti, DDS, PhD,\* Wolter J. Mooi, MD, PhD,† and  
Isaïc van der Waal, DDS, PhD‡*

Melanocytes are embryologically derived from the neural crest and are generally thought not to be constituents of normal salivary tissue.<sup>1,2</sup> However, Takeda documented the presence of pigmented cells, most likely melanocytes, in 1.8% of 445 specimens from autopsy and biopsy samples of human minor

salivary glands.<sup>3</sup> Melanin-containing cells have also been observed within salivary gland tumors, as well as in minor salivary glands around oral malignant melanoma (OMM).<sup>2,4,5</sup>

Phagocytosis and transfer of melanin from melanocytes to other cells types are the 2 possible explanations for the presence of melanin pigment within the cytoplasm of nonmelanogenic cells.

The present case reports the exceptional finding of melanotic pigmentation of the ductal cells of minor salivary glands of the palate in the presence of paucicellular melanocytic proliferation with atypia in the overlying mucosal epithelium and the subsequent development of OMM at the junction of the hard and the

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\*Consultant Professor, Unit of Oral Pathology and Laser-assisted Surgery, Section of Odontostomatology, Department of Otolaryngological/Dental/Ophthalmological and Cervico-Facial Sciences, University of Parma, Italy; and Department of Oral and Maxillofacial Surgery, Oral Pathology, VU Medical Center/ACTA, Amsterdam, The Netherlands.



## Case study

# Melanoma in a carcinoma ex pleomorphic adenoma of the parotid gland: a case report and putative histogenesis<sup>☆</sup>

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### Keywords:

Carcinoma ex  
pleomorphic adenoma;  
Parotid melanoma;  
Dedifferentiation;  
Metastatic melanoma

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**Summary** A rare example of melanoma arising in carcinoma ex pleomorphic adenoma is presented. The diagnosis, differential diagnosis, and putative histogenesis of the melanoma component are discussed.  
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## Questions and challenges

**Is Primary Poorly Differentiated Sarcomatoid Malignancy of the Parotid Gland Sarcomatoid Undifferentiated / Dedifferentiated Melanoma ?**

**When “classical” melanic ICC markers are negative**

**When tumor is amelanotic**

**Pleomorphic Sarcoma vs Sarcomatoid Undiff / Dediff Melanoma**

**Maybe some undifferentiated “sarcomas” are MM ?**

# **Is Primary Poorly Differentiated Sarcomatoid Malignancy of the Parotid Gland Sarcomatoid Undifferentiated/Dedifferentiated Melanoma? Report of Three Unusual Cases Diagnosed by Fine-Needle Aspiration Combined with Histological, Immunohistochemical, and Molecular Analyses**

Jerzy Klijanienko<sup>a</sup> Julien Masliah-Planchon<sup>a</sup> Olivier Choussy<sup>b</sup>  
Guillaume Rougier<sup>b</sup> Antoine Dubray Vautrin<sup>b</sup> Maria Lesnik<sup>b</sup>  
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