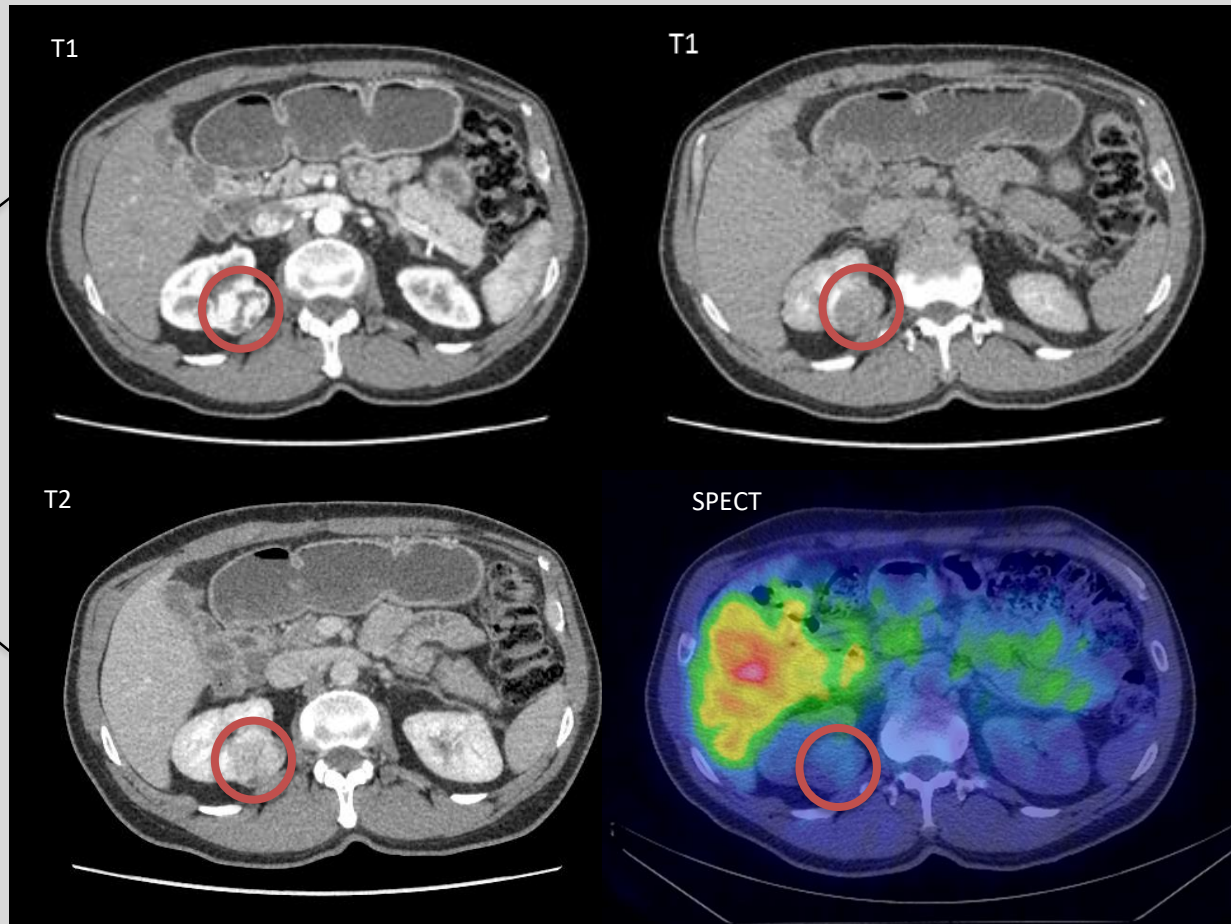
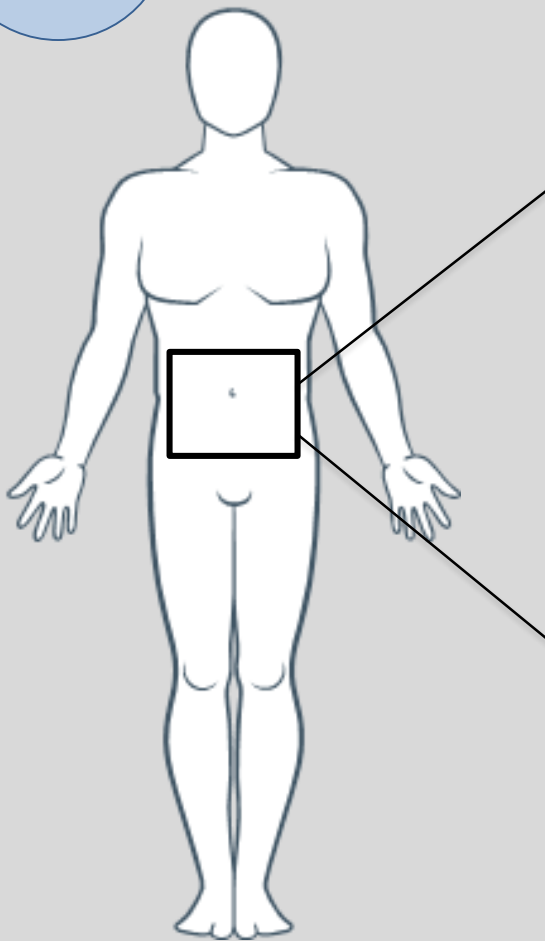




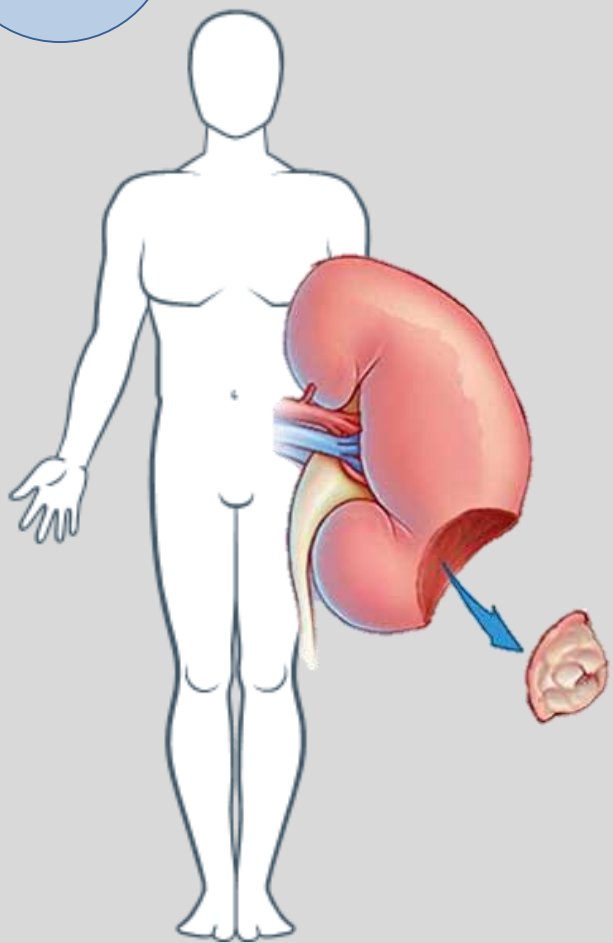
Sessió de nous patòlegs

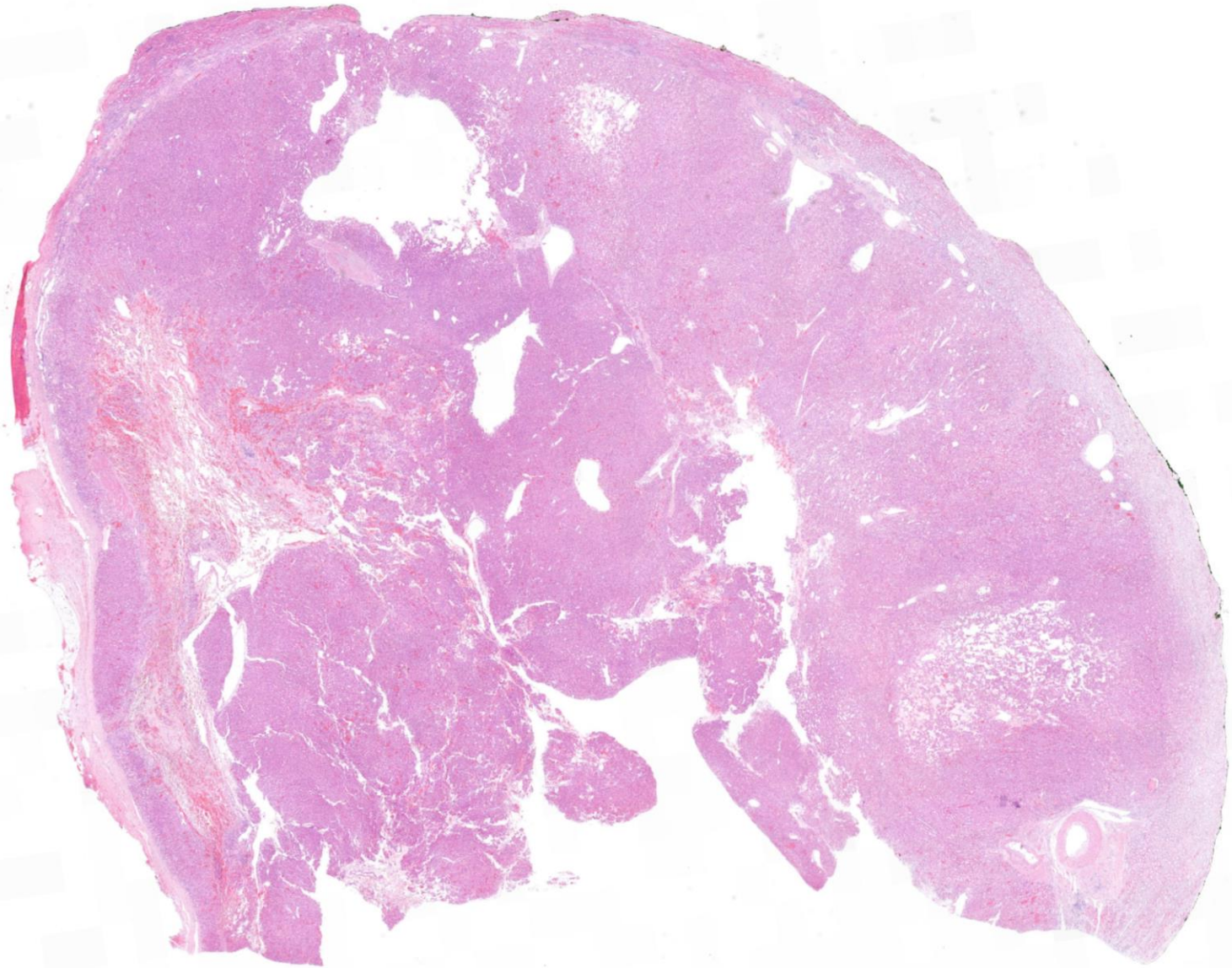


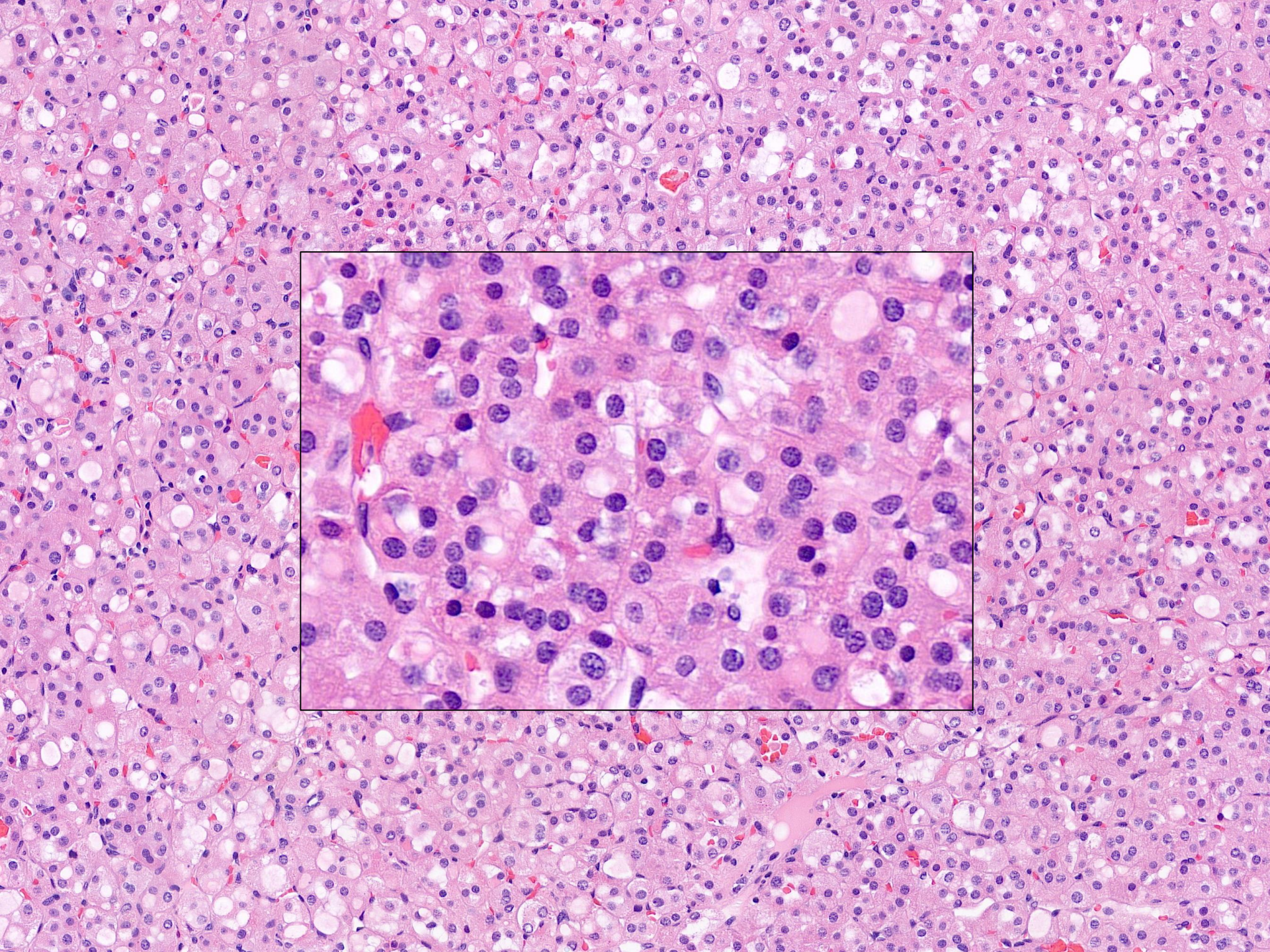
50
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50
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2022

**WHO Classification of
Tumours of the Urinary System
and Male Genital Organs**



Loading... Please Wait



WHO

I) Clear cell renal tumors

- Clear cell renal cell carcinoma
- Multilocular cystic renal neoplasm of low malignant potential

II) Papillary renal tumors

- Renal papillary adenoma
- Papillary renal cell carcinoma

III) Oncocytic and chromophobe renal tumors

- Oncocytoma of the kidney
- Chromophobe renal cell carcinoma
- Other oncocytic tumors of the kidney
 - Low grade oncocytic tumor (LOT)
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 - Hybrid oncocytic tumor
 - Unclassifiable low grade oncocytic tumor

IV) Collecting duct tumors

- Collecting duct carcinoma

V) Other renal tumors

- Clear cell papillary renal cell tumor
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VI) Molecular defined renal carcinomas

- TFE3-rearranged renal cell carcinomas
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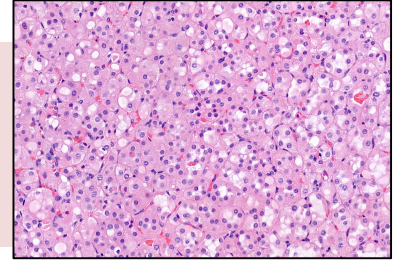
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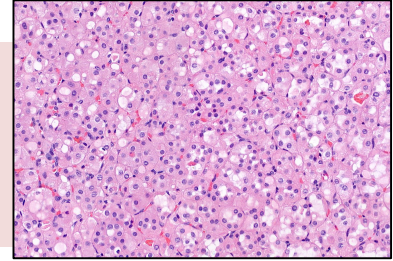
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Diagnòstic diferencial de tumors renals eosinofílics:



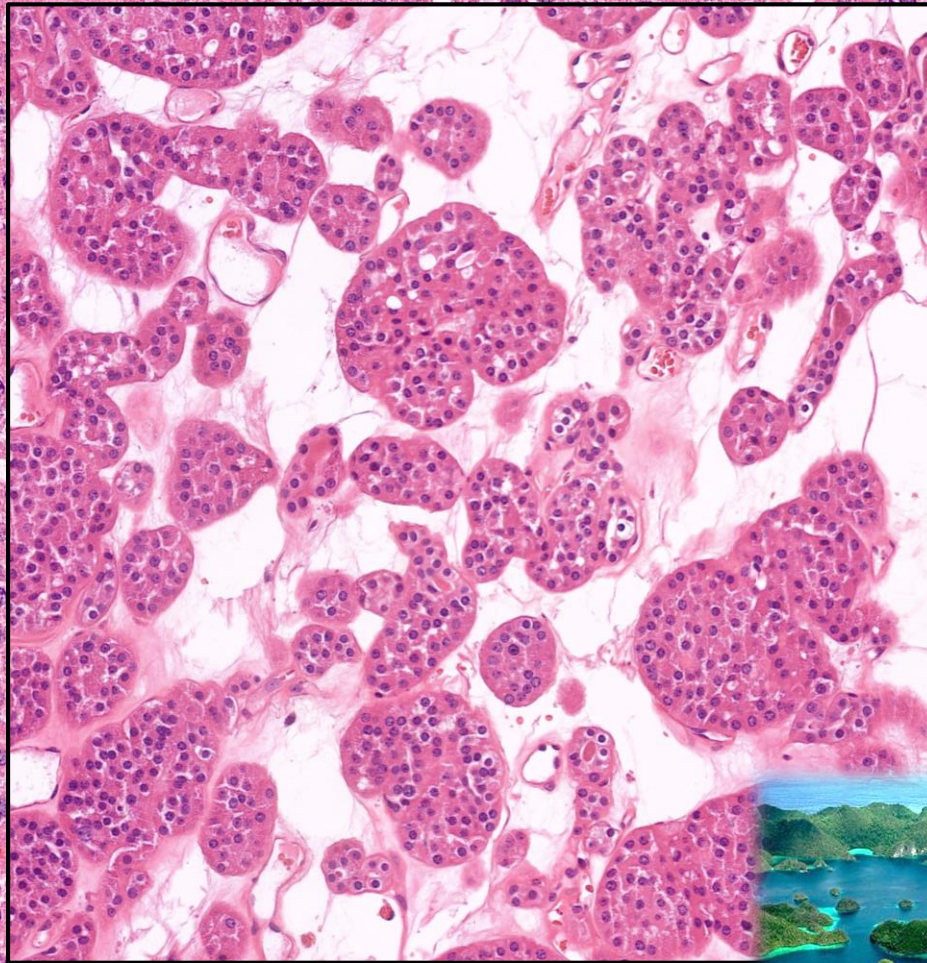
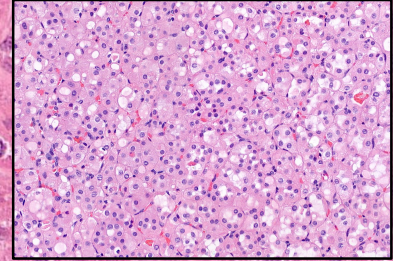
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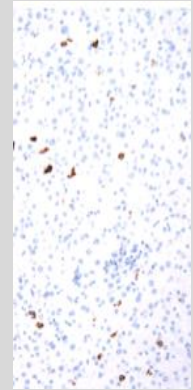


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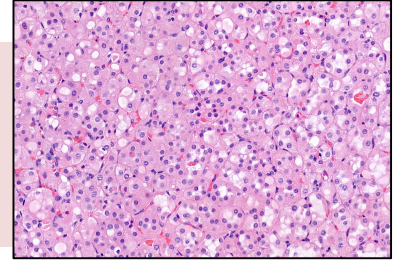
Oncocytoma



CK7

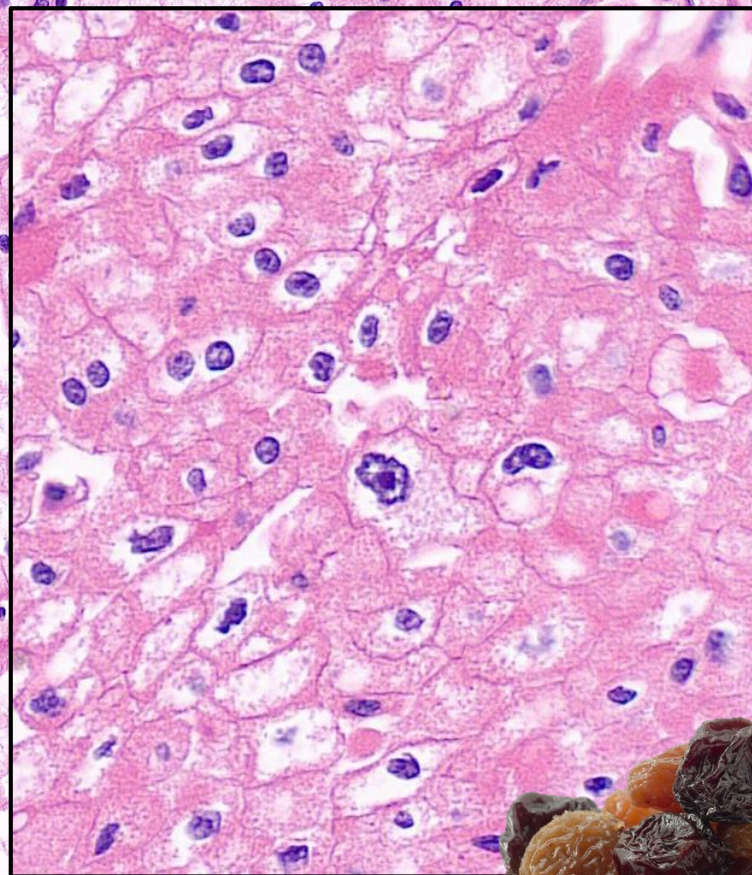
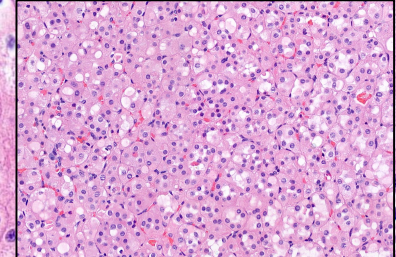


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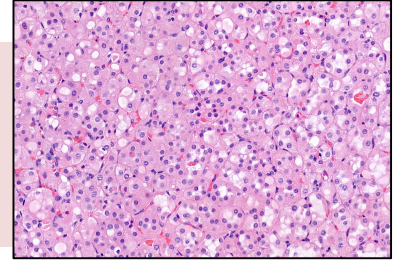
Carcinoma cromòfob



CK7

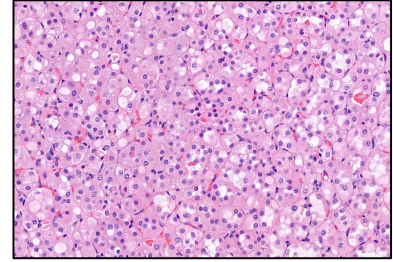
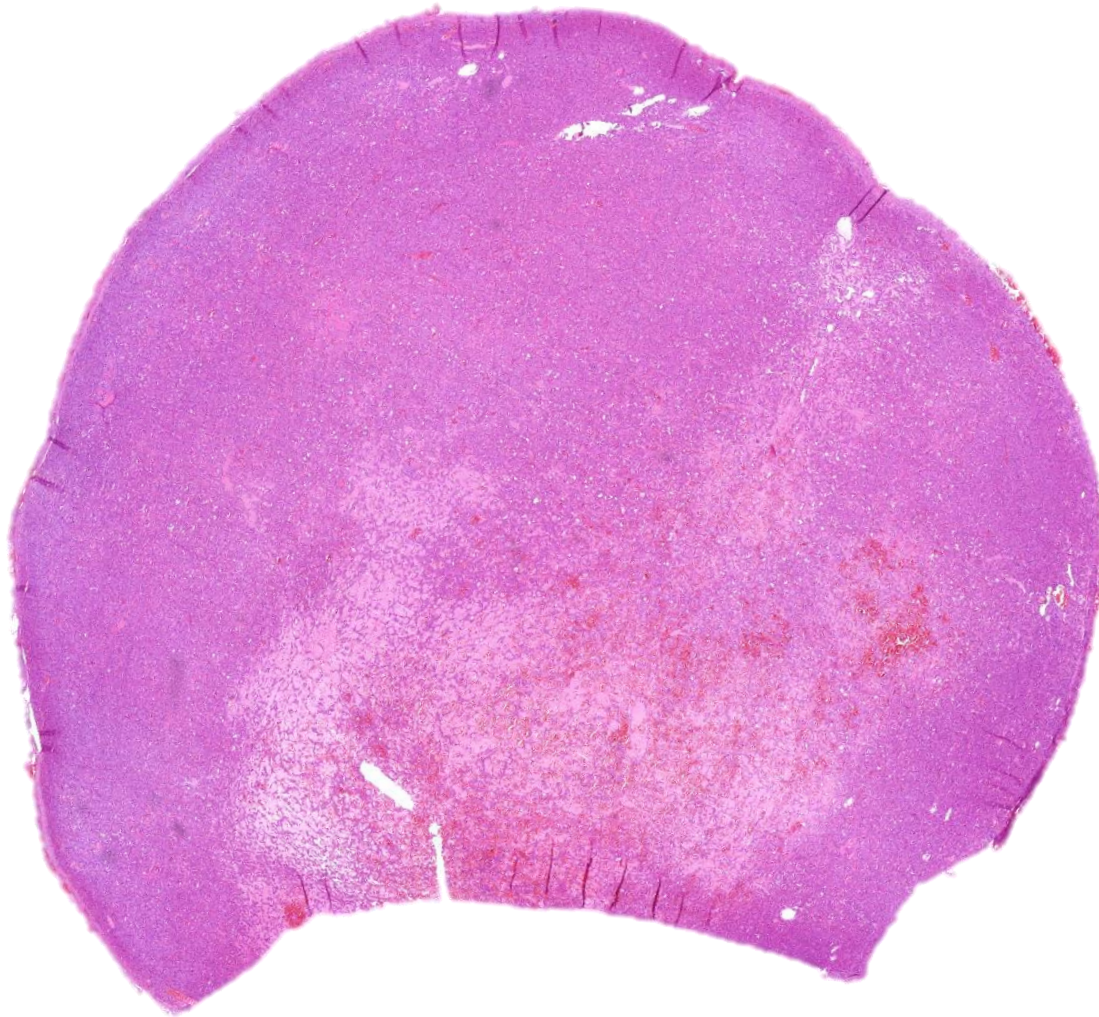


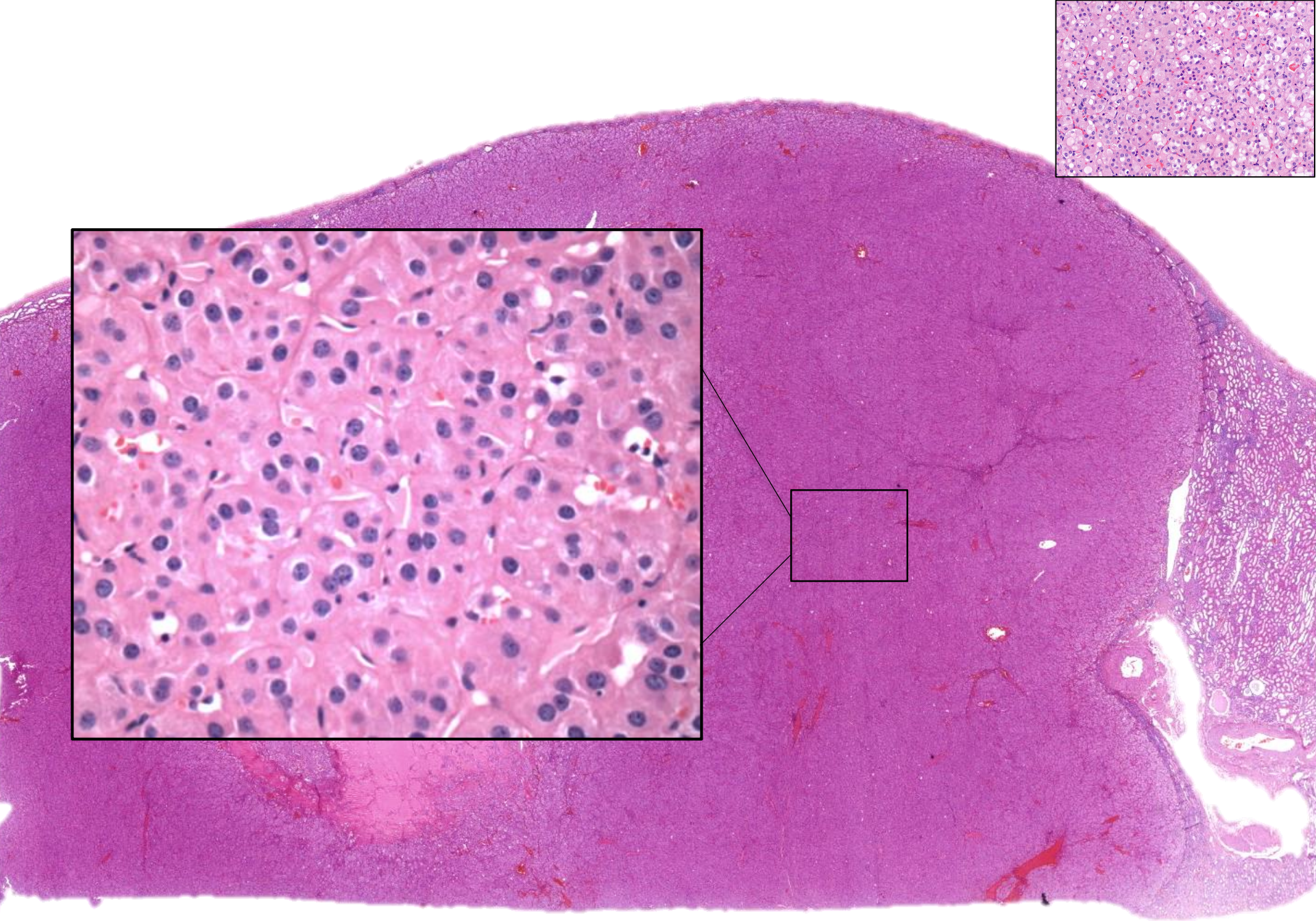
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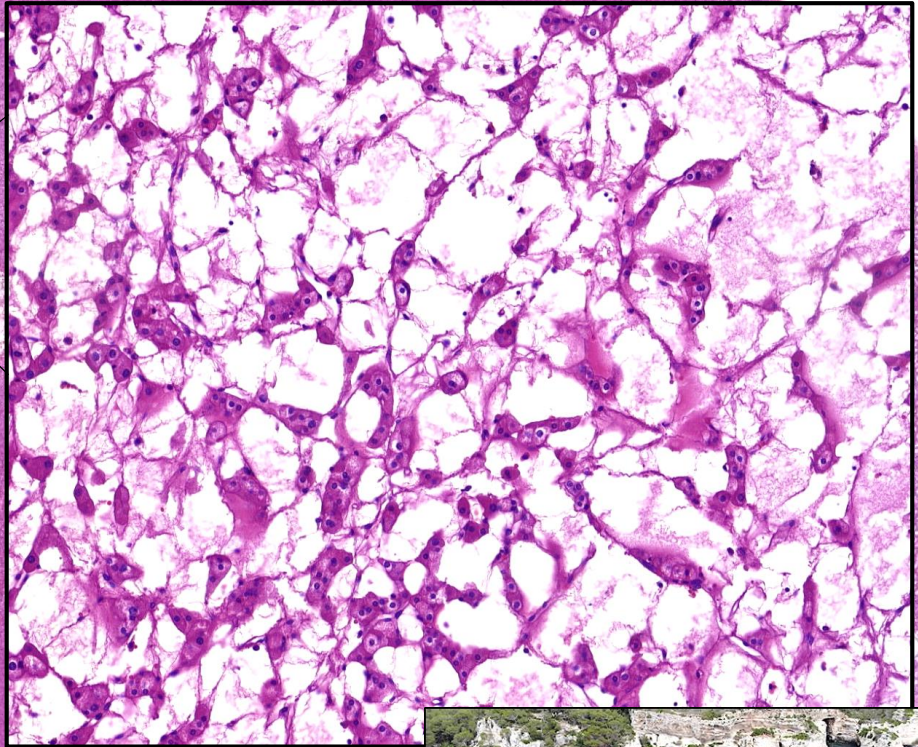
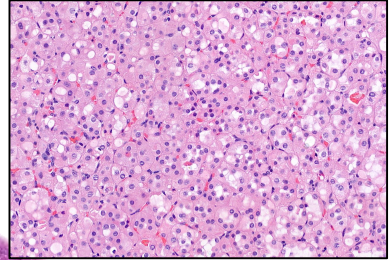
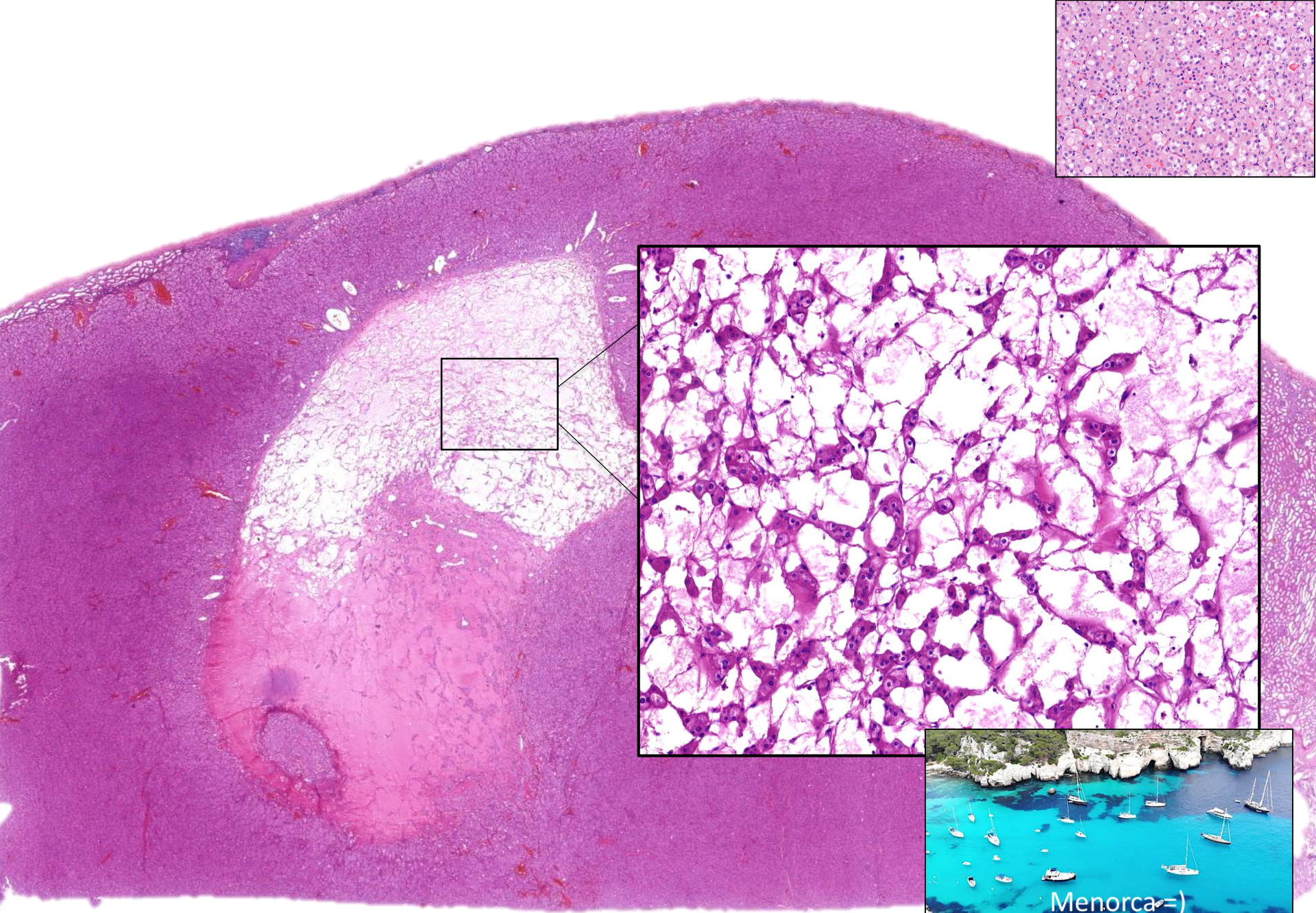


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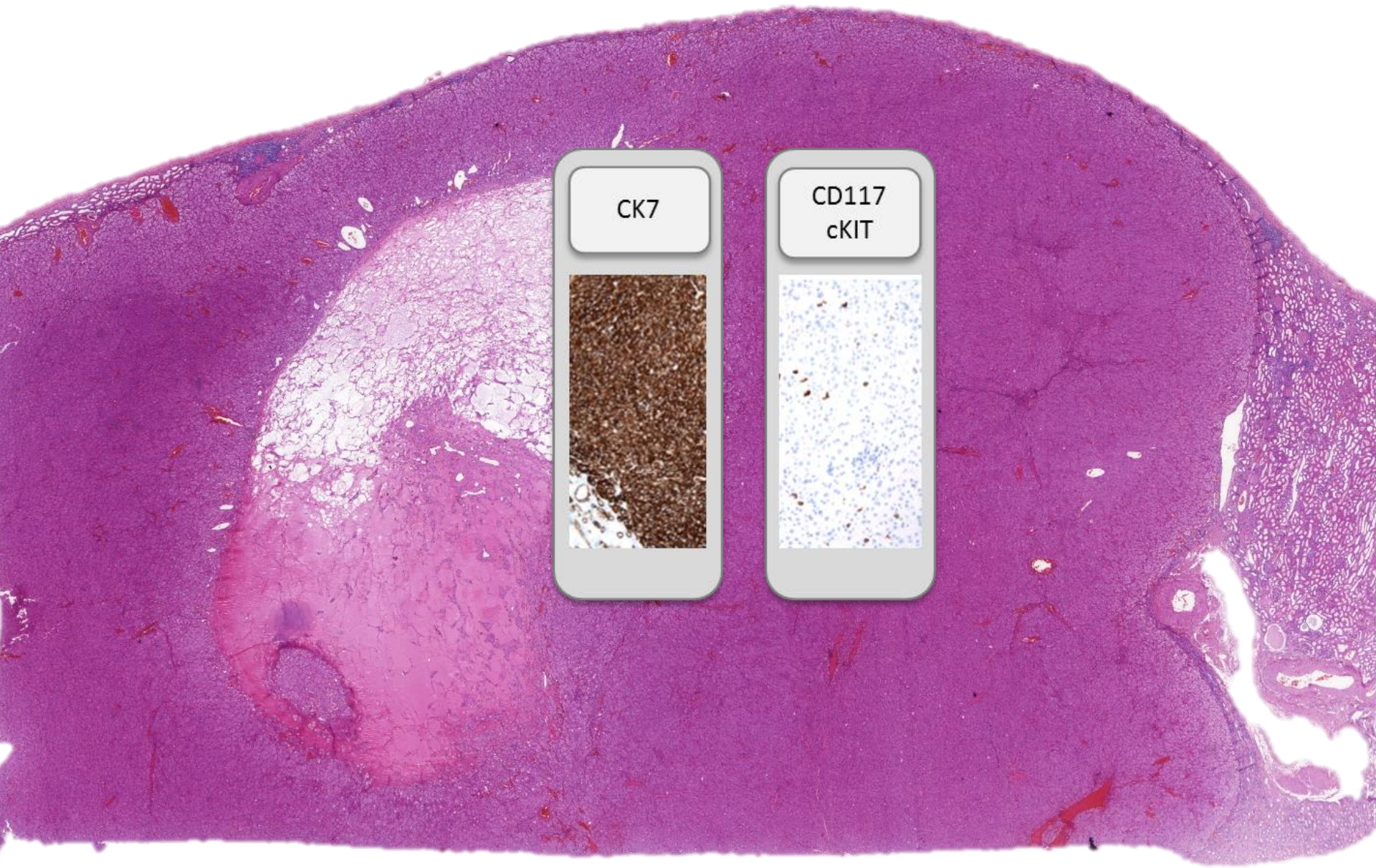
Tumor oncocítico de baix grau







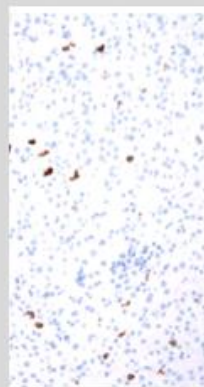
Menorca



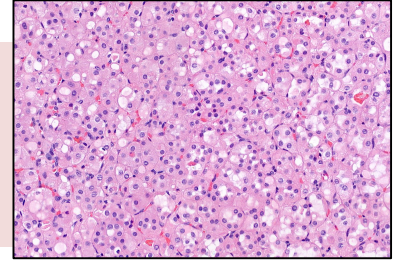
CK7



CD117
cKIT



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Tumor eosinofílic vacuolat

High grade oncocytic tumor (HOT)

“High-grade oncocytic renal tumor”: morphologic, immunohistochemical, and molecular genetic study of 14 cases

Huiying He¹ · Kiril Trpkov² · Petr Martinek³ · Ozlem Tanas Isikli⁴ · Cristina Maggi-Galuzzi⁵ · Reza Alaghebandan⁶ · Anthony J Gill^{7,8,9} · Maria Tretiakova¹⁰ · Jose Ignacio Lopez¹¹ · Sean R. Williamson¹² · Delia Perez Montiel¹³ · Maris Sperga¹⁴ · Eva Comperat¹⁵ · Fadi Brimo¹⁶ · Ali Yilmaz² · Kristyna Pivovarcikova³ · Kveta Michalova³ · David Slouka¹⁷ · Kristyna Prochazkova¹⁸ · Milan Hora¹⁸ · Michael Bonert¹⁹ · Michal Michal³ · Ondrej Hes³

2018

Eosinophilic Vacuolated RC Carcinoma

Somatic Mutations of *TSC2* or *MTOR* Characterize a Morphologically Distinct Subset of Sporadic Renal Cell Carcinoma With Eosinophilic and Vacuolated Cytoplasm

Ying-Bei Chen, MD, PhD, Leili Mirsadraei, MD, Gowtham Jayakumaran, MS, Hikmat A. Al-Ahmadie, MD, Samson W. Fine, MD, Anuradha Gopalan, MD, S. Joseph Sirintrapun, MD, Satish K. Tickoo, MD, and Victor E. Reuter, MD

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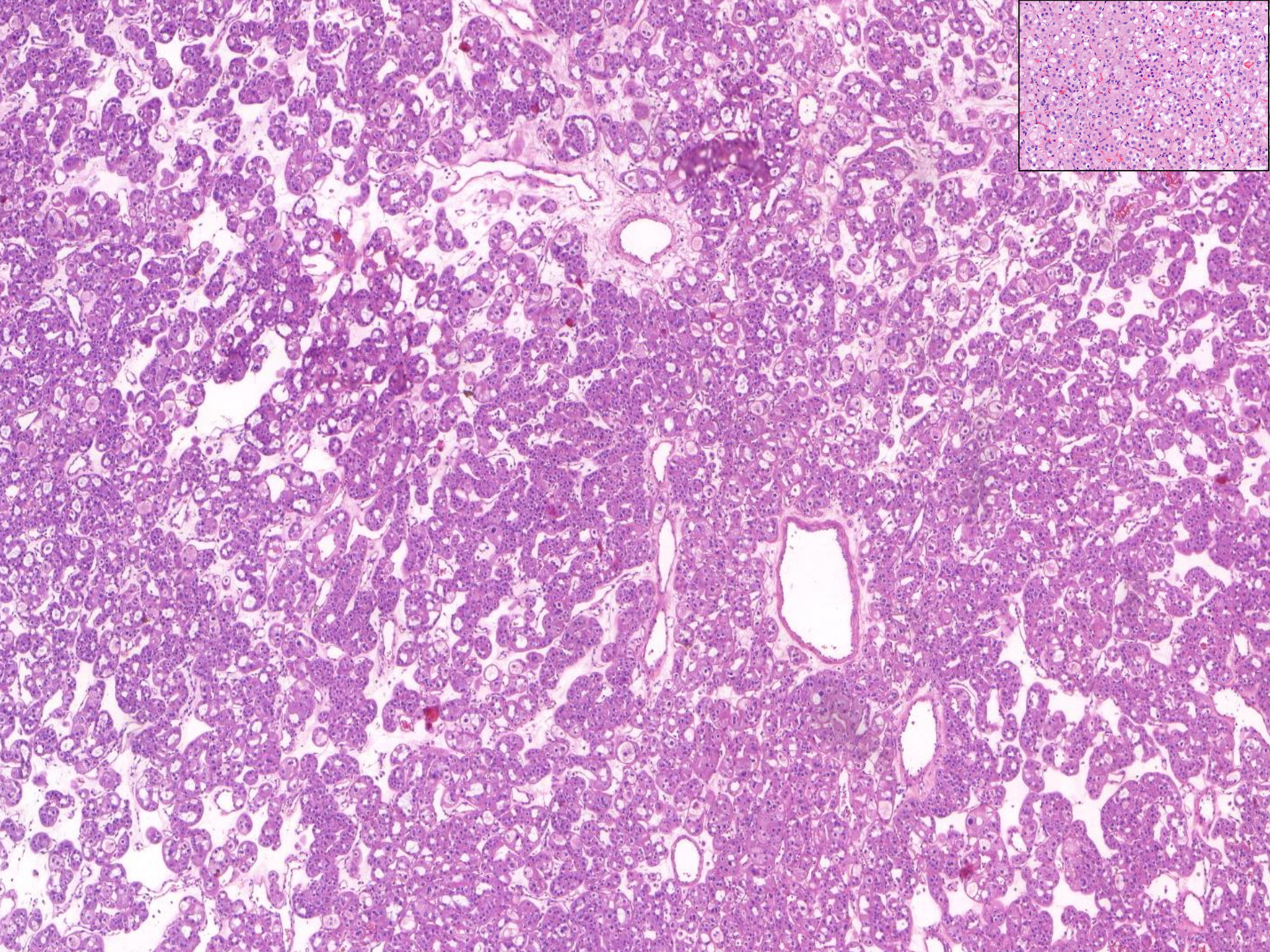
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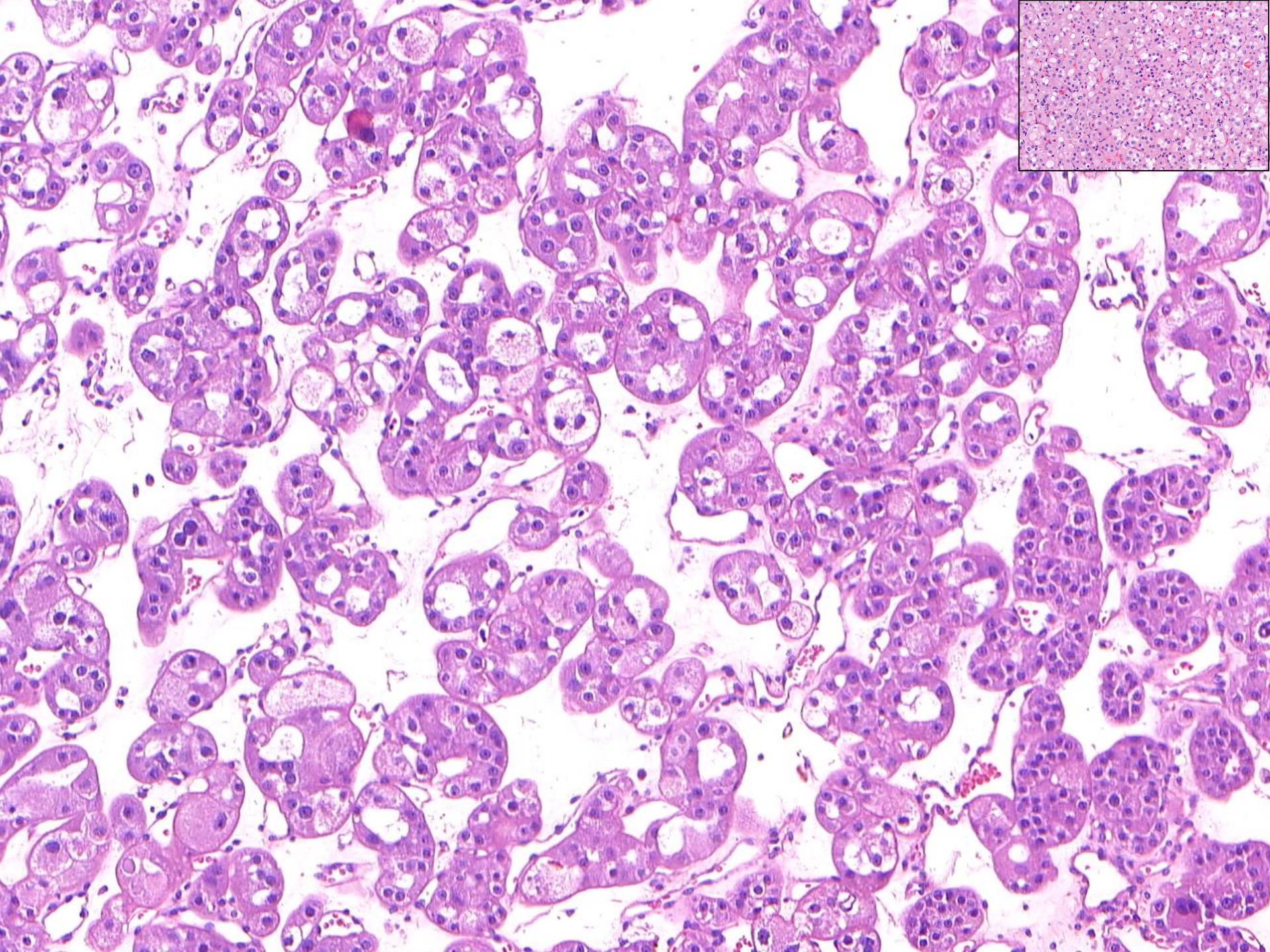
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Eosinophilic vacuolated tumor (EVT) of kidney demonstrates sporadic *TSC/MTOR* mutations: next-generation sequencing multi-institutional study of 19 cases

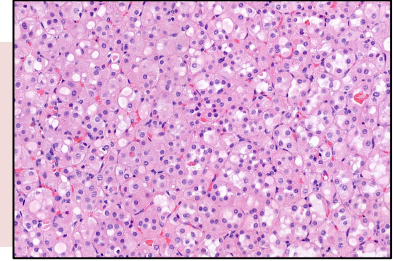
Mihaela Farcaș^{1,2}, Zoran Gatalica³, Kiril Trpkov^{4,32}, Jeffrey Swensen⁵, Ming Zhou⁶, Reza Alaghebandan⁷, Sean R. Williamson⁸, Cristina Magi-Galluzzi⁹, Anthony J. Gill^{10,11}, Maria Tretiakova¹², Jose I. Lopez¹³, Delia Perez Montiel¹⁴, Maris Sperga¹⁵, Eva Comperat^{16,17}, Fadi Brimo¹⁸, Asli Yilmaz², Farshid Siadat⁴, Ankur Sangoi¹⁹, Yuan Gao²⁰, Nikola Ptáková²¹, Levente Kuthi²², Kristyna Pivovarcikova²³, Joanna Rogala²³, Abbas Agaimy²⁴, Arndt Hartmann²⁴, Cristoph Fraune²⁵, Boris Rychly²⁶, Pavel Humik²⁷, Dušan Durcansky²⁸, Michael Bonert²⁹, Georgios Gakis³⁰, Michal Michal²³, Milan Hora³¹ and Ondrej Hes^{23,32,33}

2021



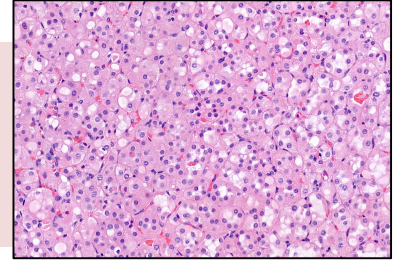


Diagnòstic diferencial de tumors renals eosinofílics:



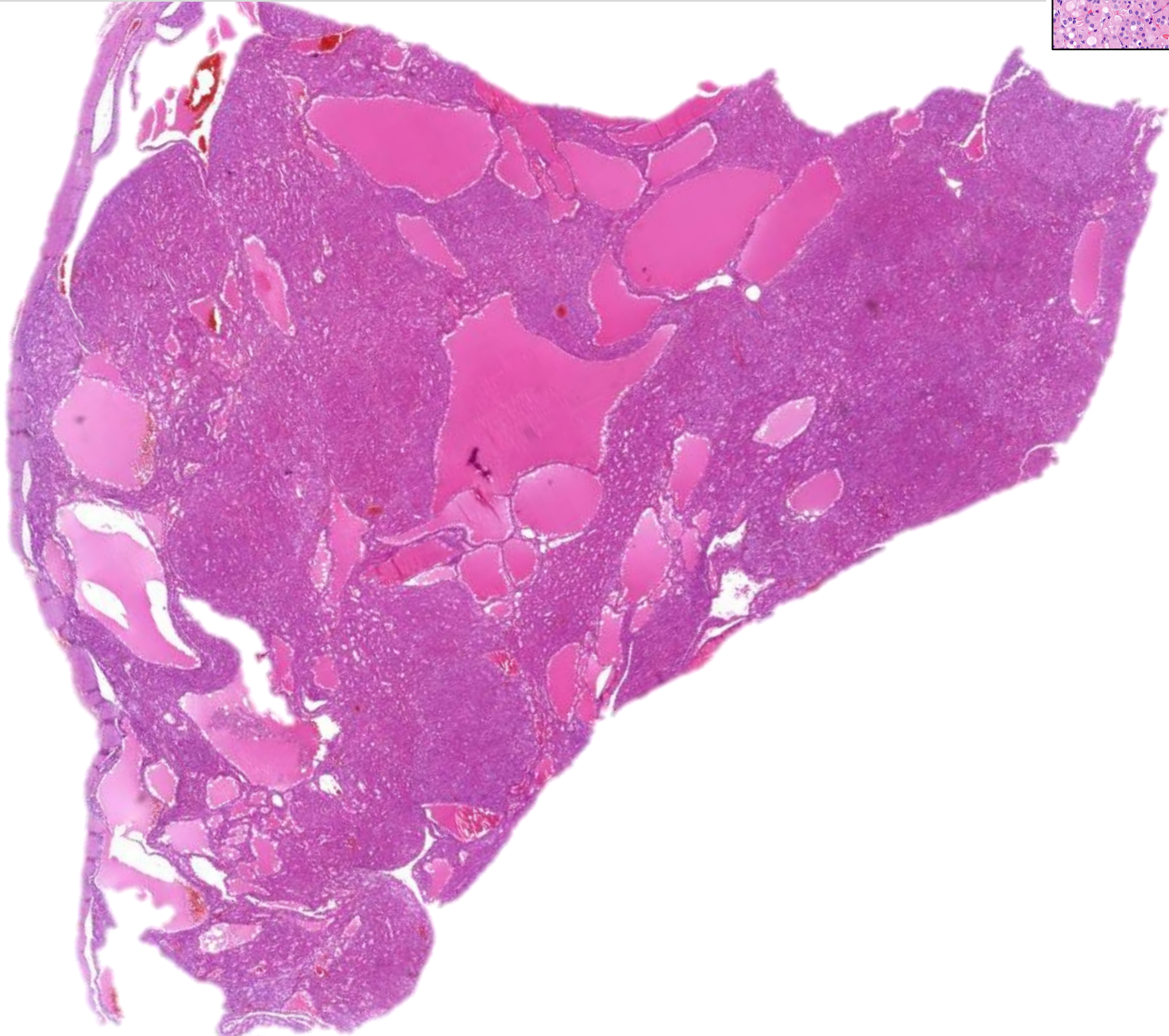
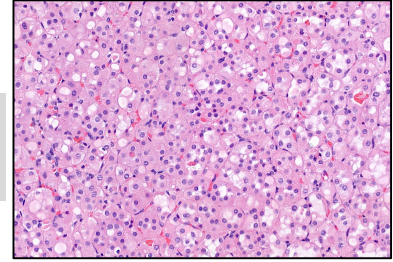
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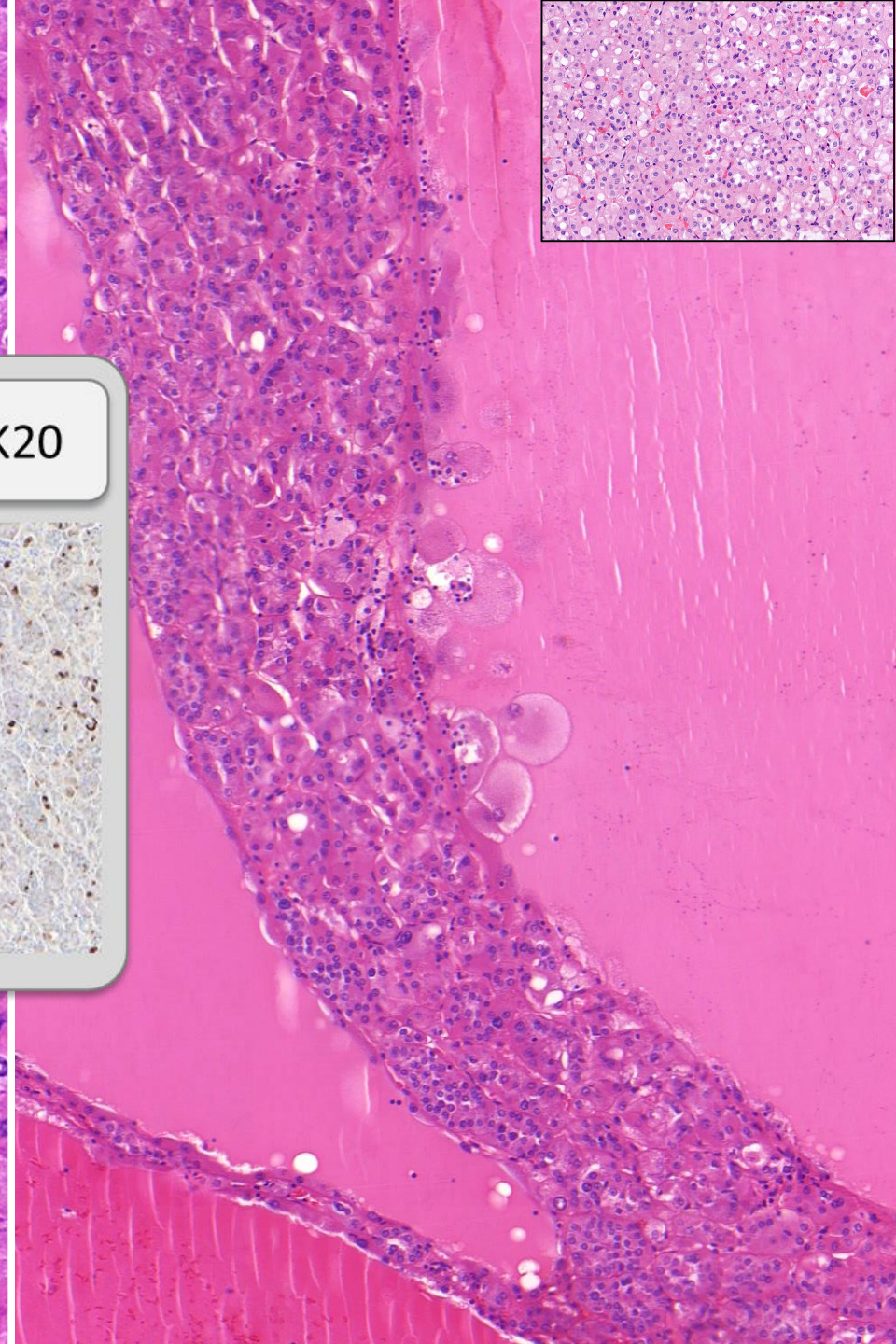
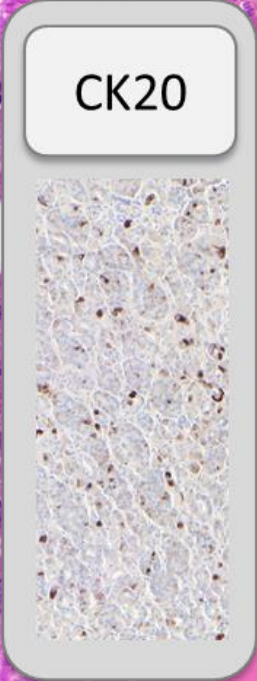
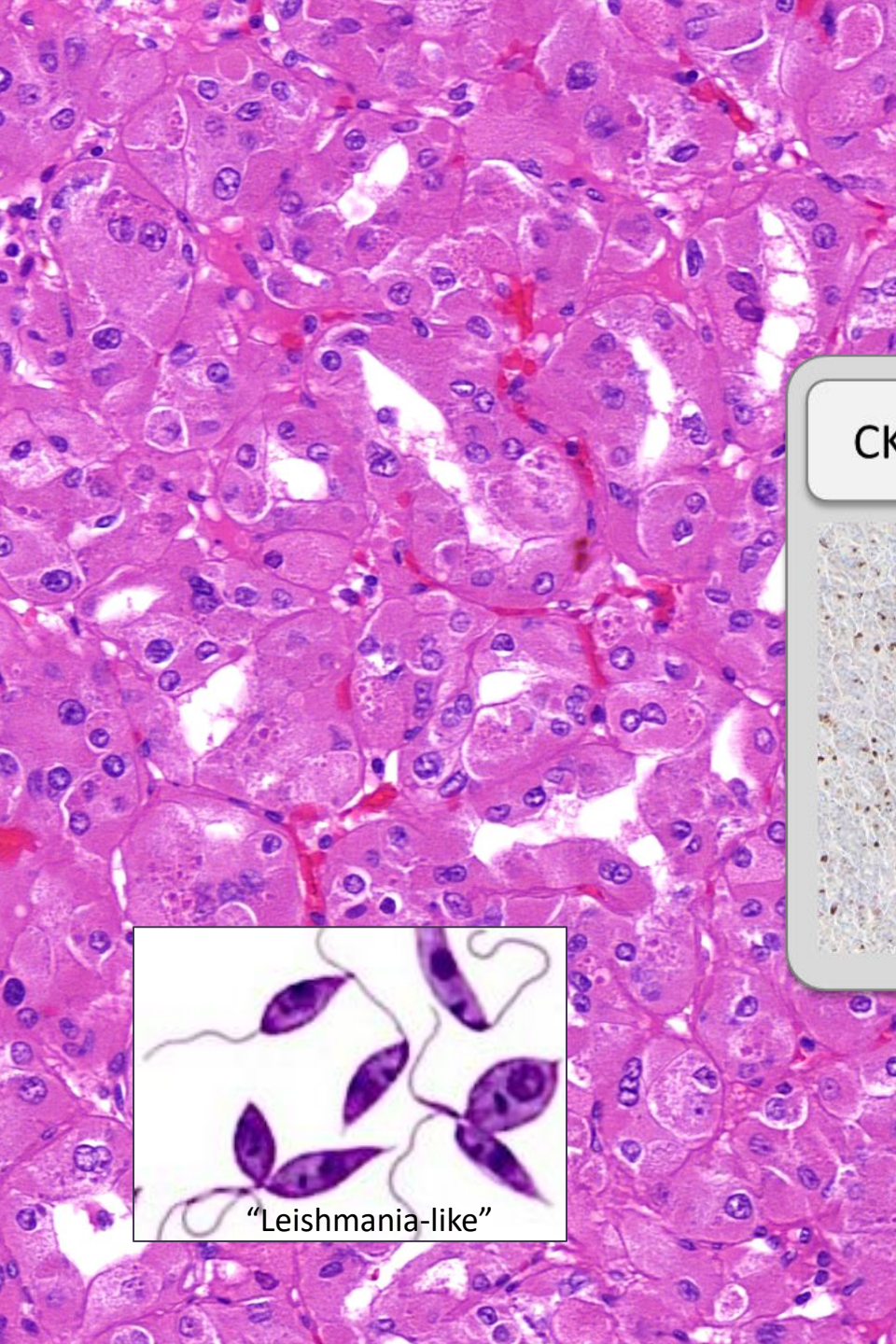
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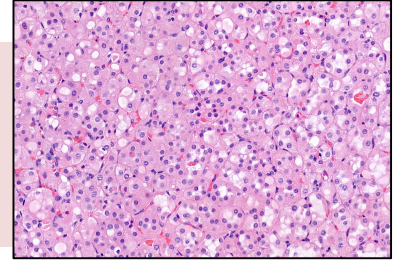
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Eosinophilic solid and cystic renal cell carcinoma (ESC)



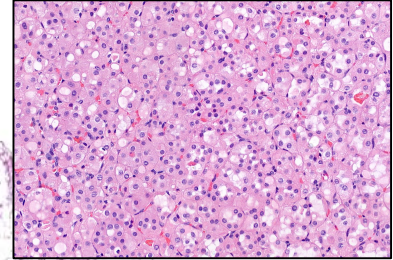
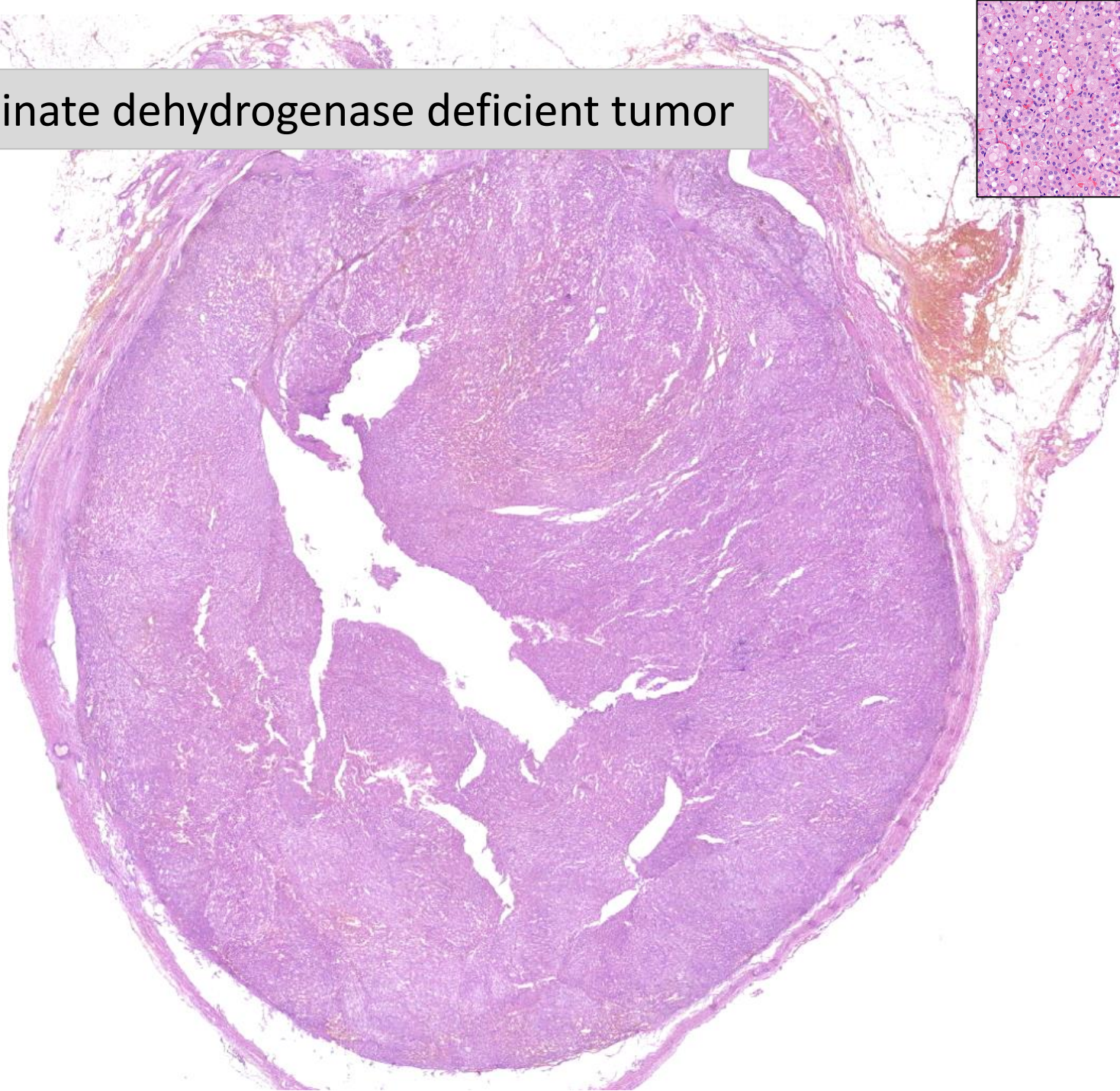


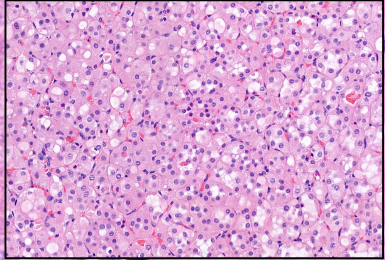
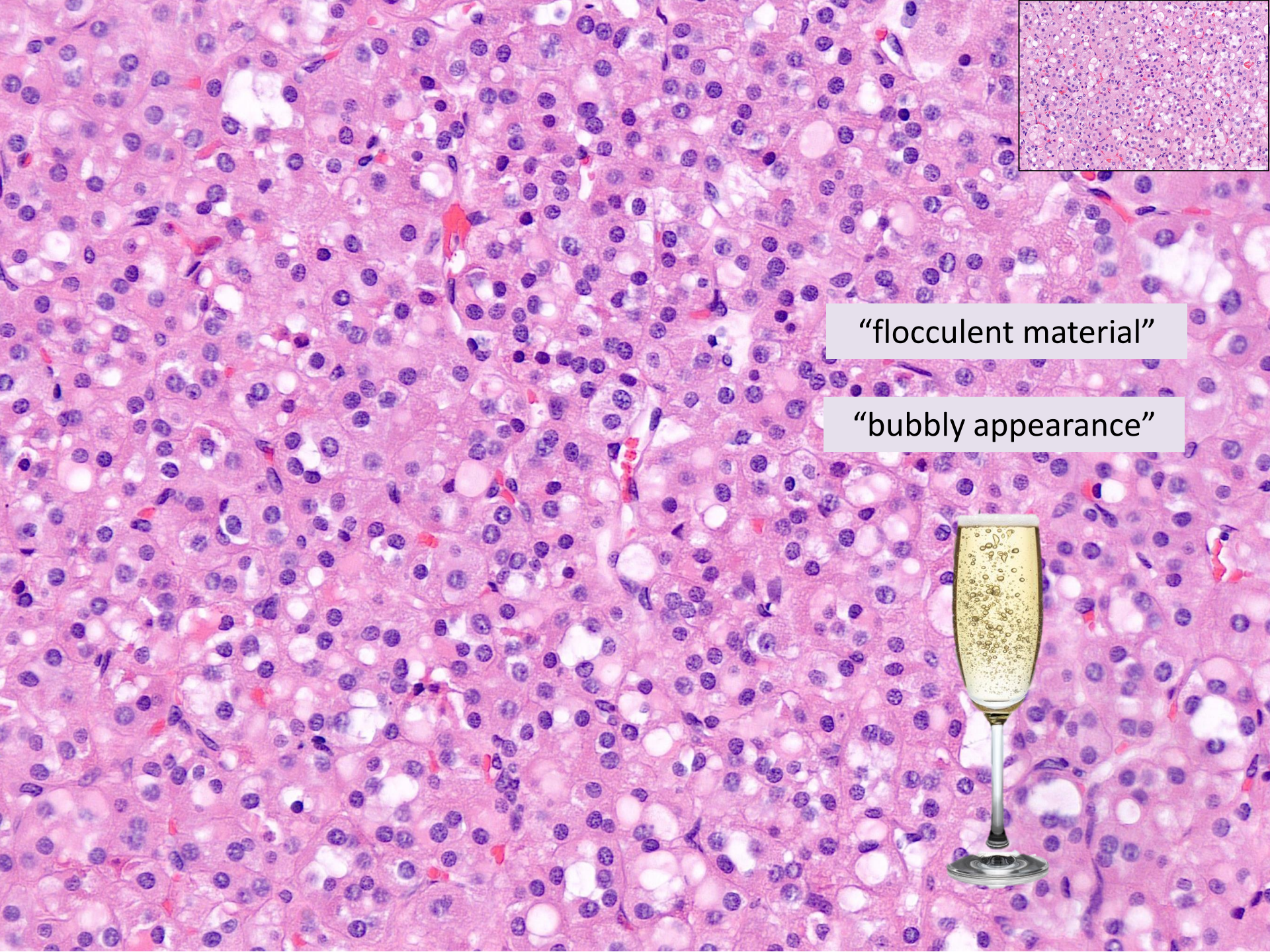
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Succinate dehydrogenase deficient tumor

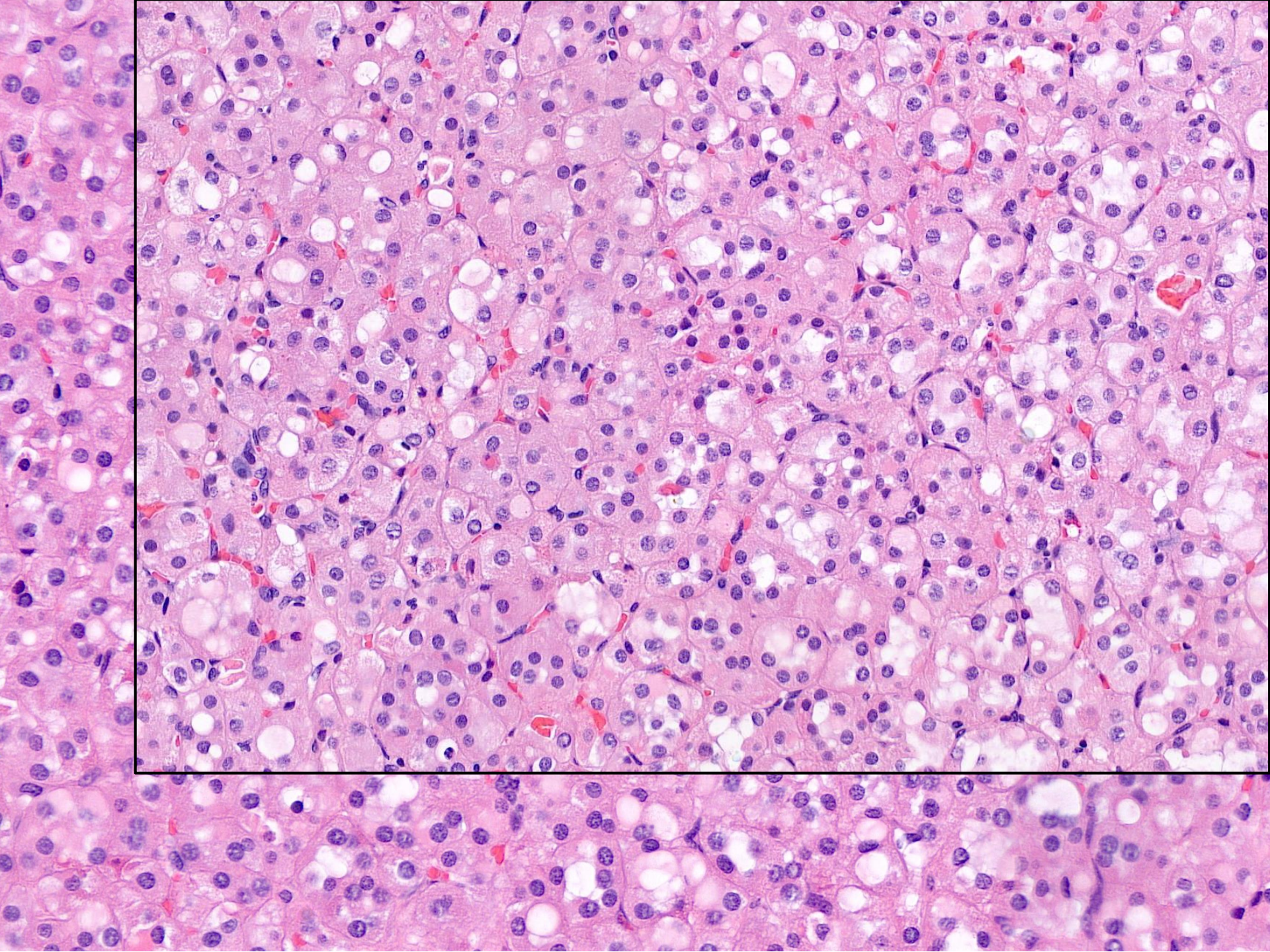




“flocculent material”

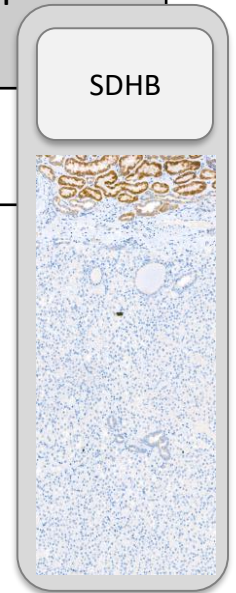
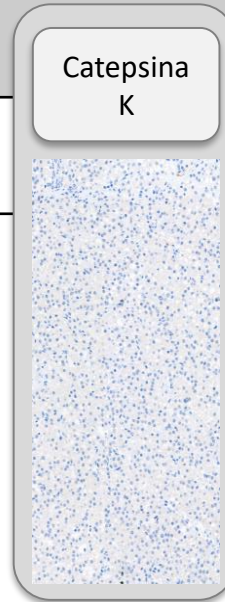
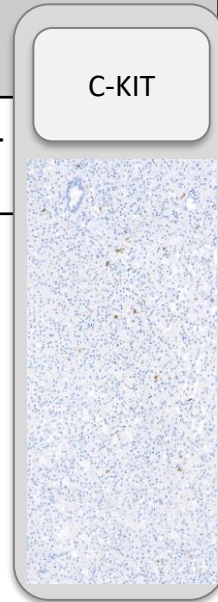
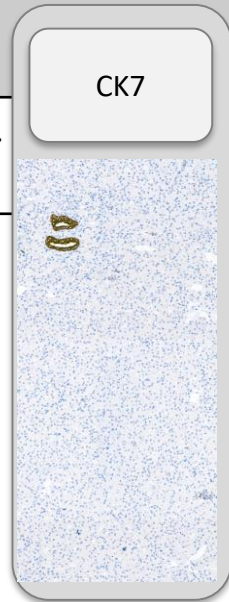
“bubbly appearance”





Perfil immunohistoquímic

	CK7	C-KIT	Catepsina K	CK20	SDHB
Oncocitoma	-	+++		-	+++
CCR cromòfob	+++	+++		-	+++
LOT	+++	-		-	+++
Tumor eosinofílic vacuolat (EVT)	+/-	+/-	+	-	+++
CCR eosinofílic sòlid i quístic				+	+++
CCR SDH deficient	-	-	-	-	-



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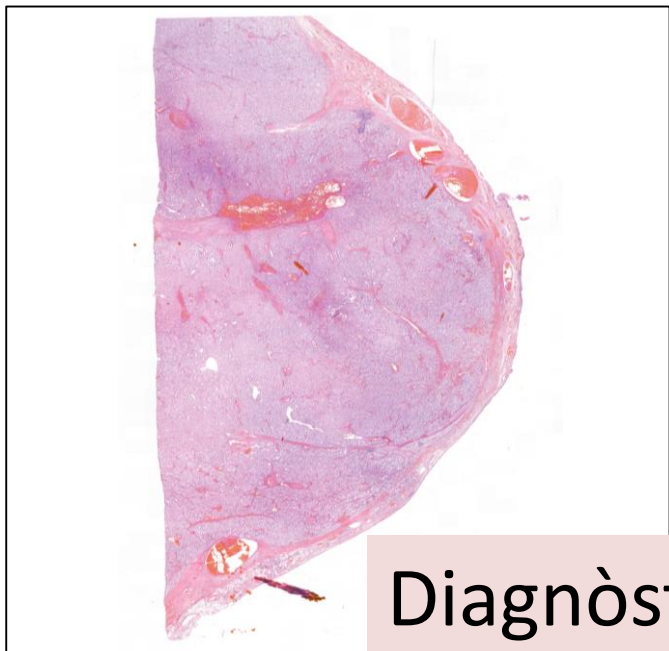
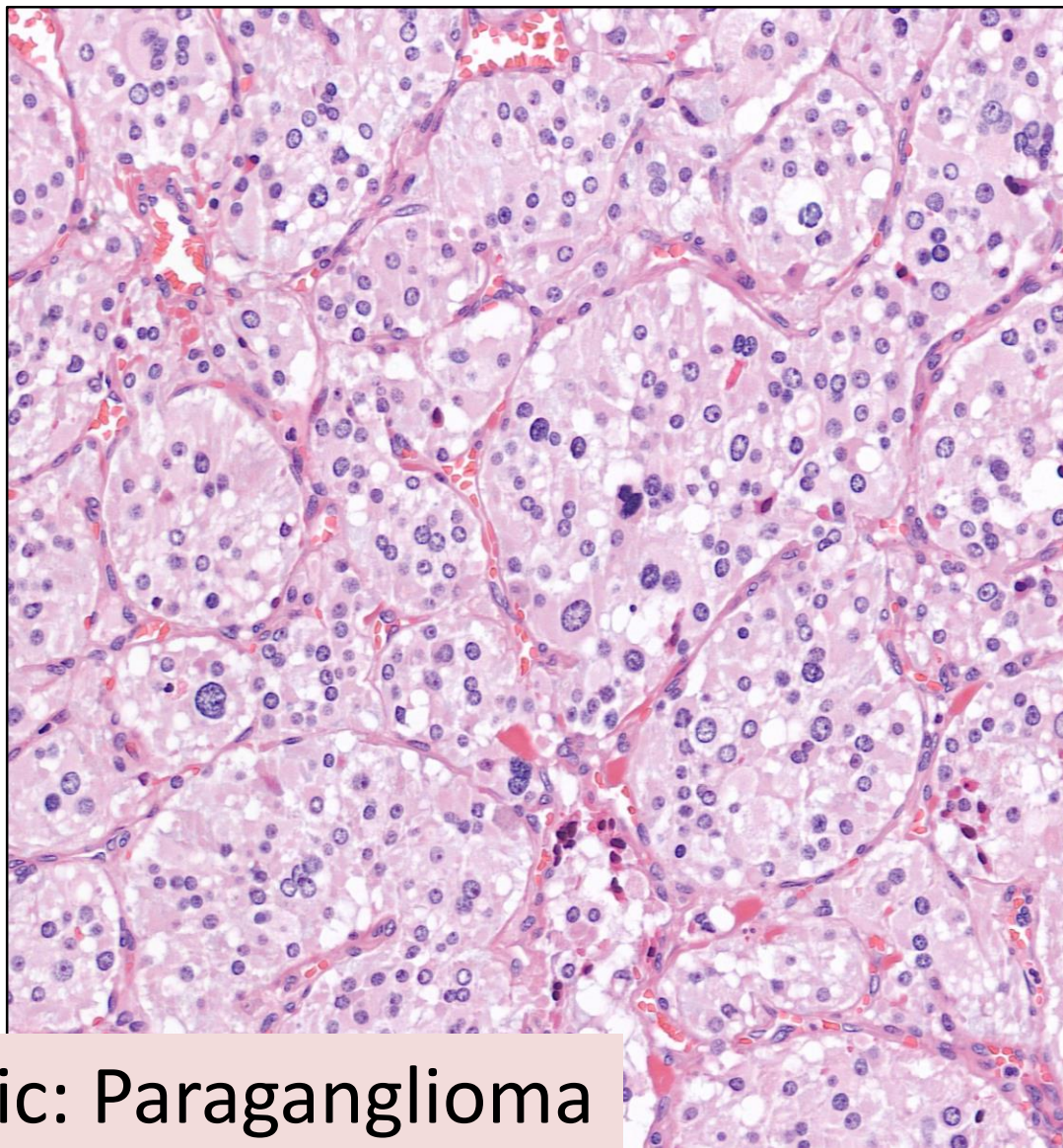
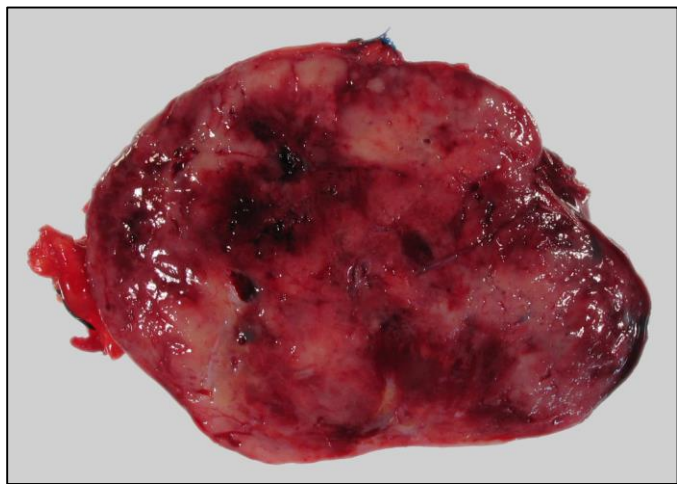
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Revisant la història clínica del nostre pacient...



Diagnòstic: Paraganglioma

2022

**WHO Classification of
Tumours of the Urinary System
and Male Genital Organs**



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En una altra secció...

Genetic tumour syndromes of the urinary and male genital tracts

- Von Hippel-Lindau syndrome
- Birt-Hogg-Dube syndrome
- Hereditary papillary renal carcinoma
- Hereditary leiomyomatosis and renal cell carcinoma syndrome
- Succinate dehydrogenase-deficient tumor syndromes
- BAP1 tumor predisposition syndrome
- Hereditary pheochromocytoma-paraganglioma síndromes
- Tuberous sclerosis
- Genitourinary system and Lynch syndrome
- Hereditary tumor síndromes associated with homologous recombination pathway mutations
- Carney complex
- Peutz-Jeghers syndrome

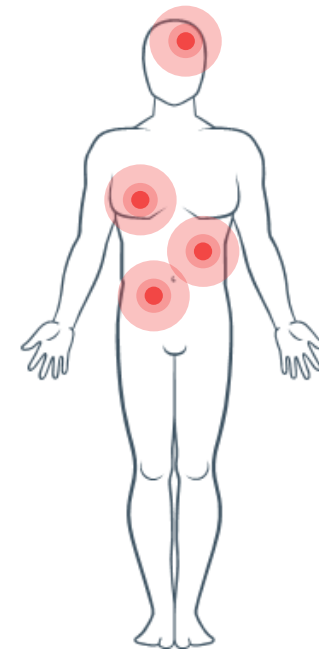
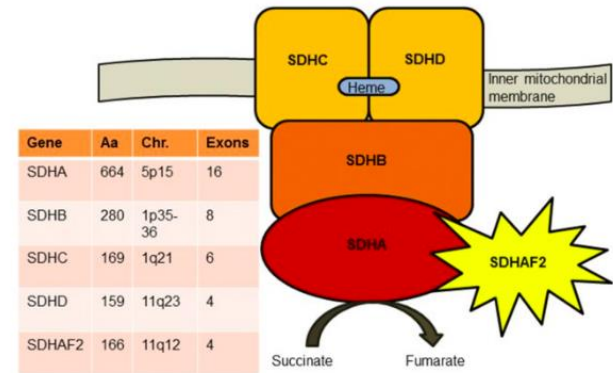
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Succinate dehydrogenase-deficient tumor syndromes

- Inactivació bial·lèlica de qualsevol gen que codifica un component del complex SDH (SDHA, SDHB, SDHC, SDHD o SDHAF2)
- Mutació en línia germinal >> mutació somàtica
- Feocromocitoma - paraganglioma, GIST, carcinoma renal, adenoma hipofisari/tumor neuroendocrí hipofisari (PitNET) i condroma pulmonar
- Pronòstic favorable
- Es recomana vigilància i seguiment estret per tal de descartar altres tumoracions associades a la síndrome





Take home messages

- Conèixer les **característiques morfològiques** dels tumors renals eosinofílics.
- **L'estudi immunohistoquímic** pot ajudar en la caracterització d'aquestes lesions.
- Fer l'estudi immunohistoquímic de **SDHB** i **FH** en tumors renals amb morfologies peculiars especialment en pacients < 50 anys.
- És imprescindible conèixer **la història i el context clínic** dels nostres pacients.
- El paper del patòleg és fonamental per **detectar malalties sindròmiques**.





