124 Reunión Territorial de Valencia, noviembre de 2026

CASO CLÍNICO

PATOLOGÍA DE MAMA

Elisabeth Burch Nchama (R3)

Hospital Universitari Doctor Peset

Hospital Universitari Vall d'Hebron

INTRODUCCIÓN



Mujer de **54 años** que presenta masa palpable en mama derecha.

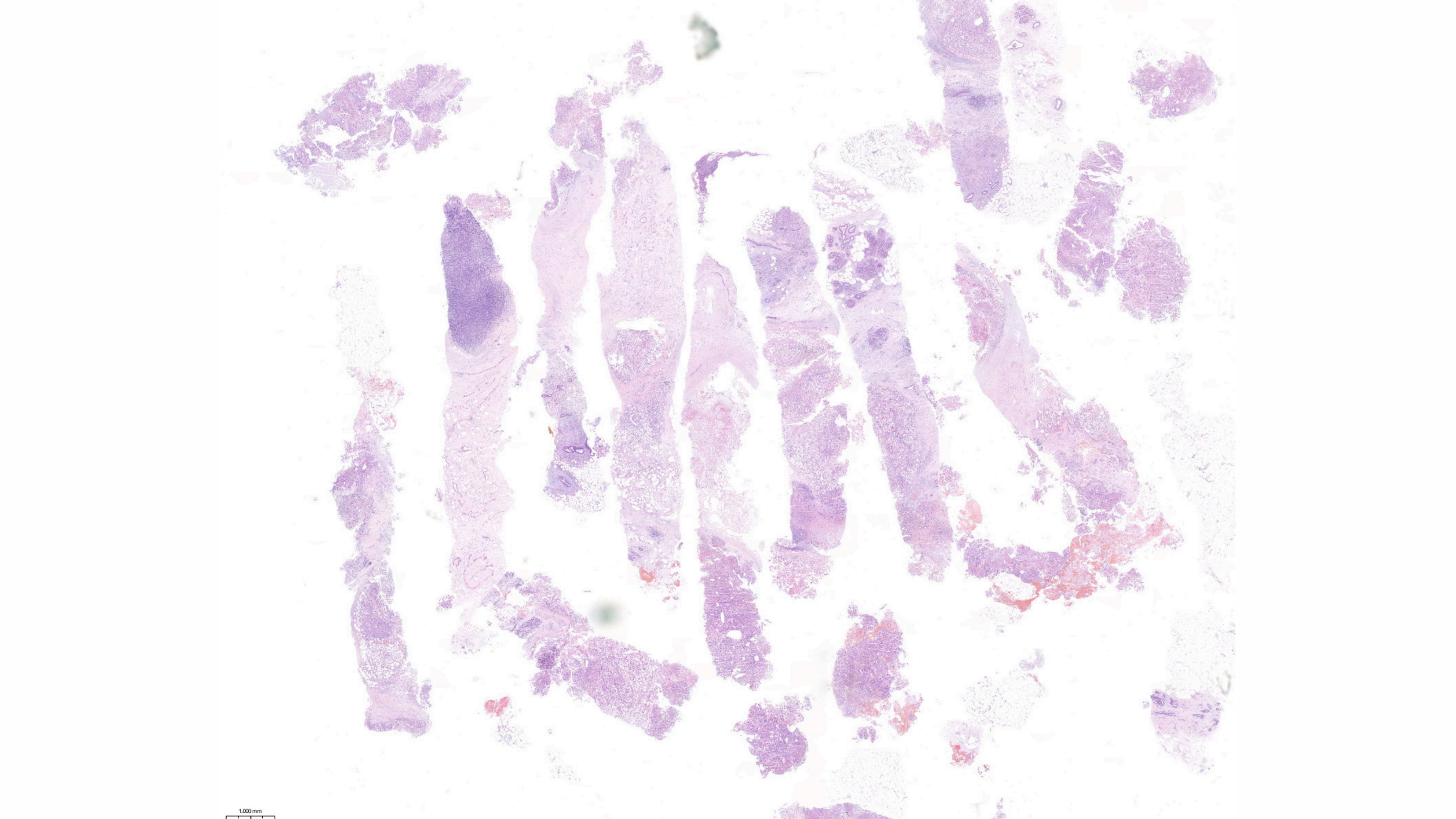
Sin antecedentes de interés.

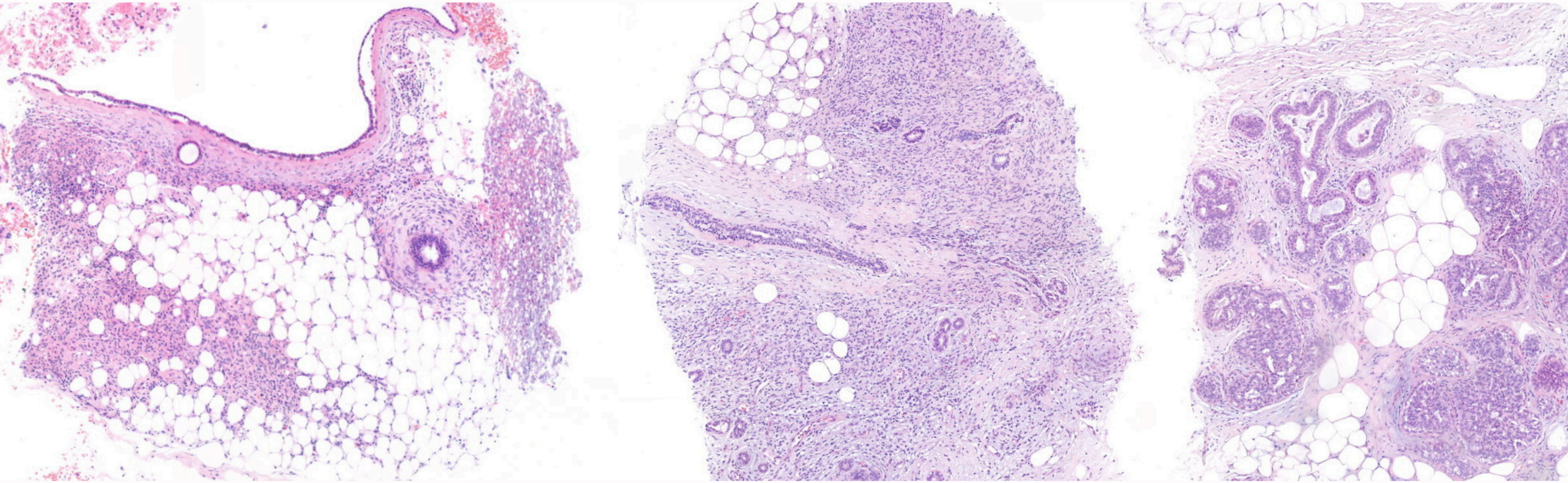


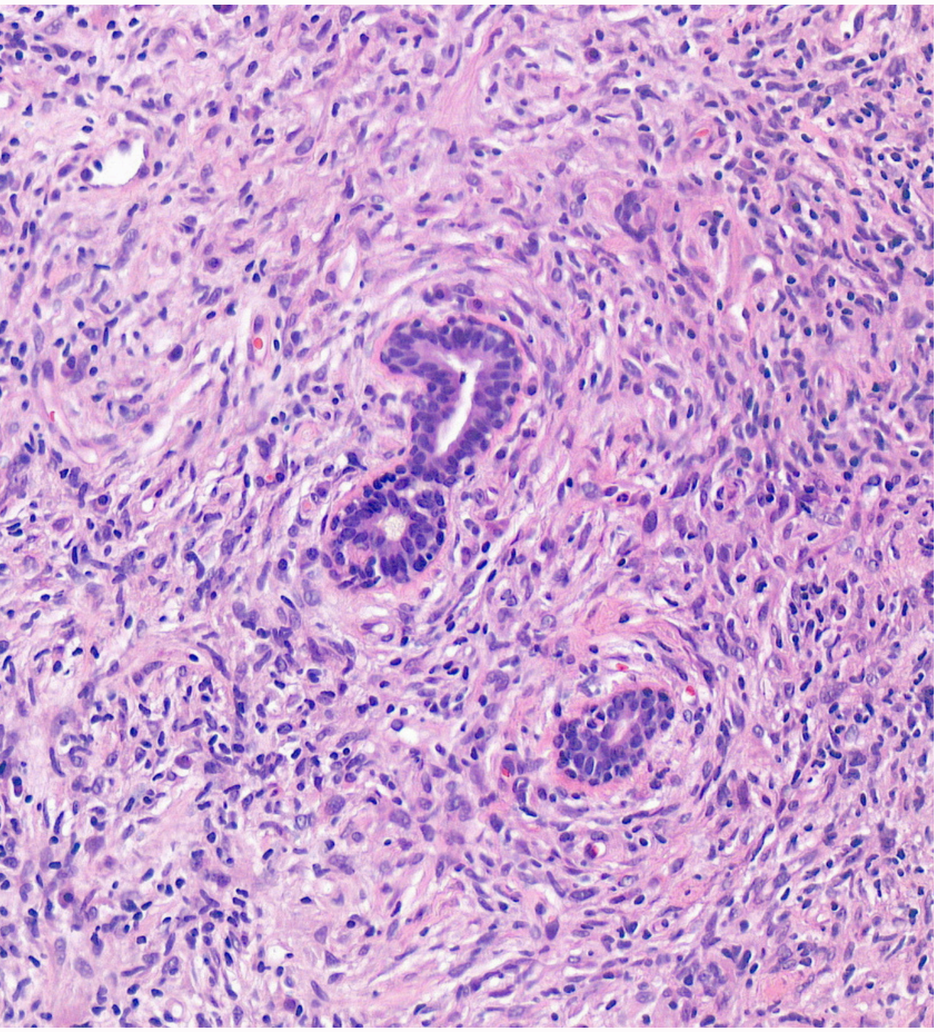
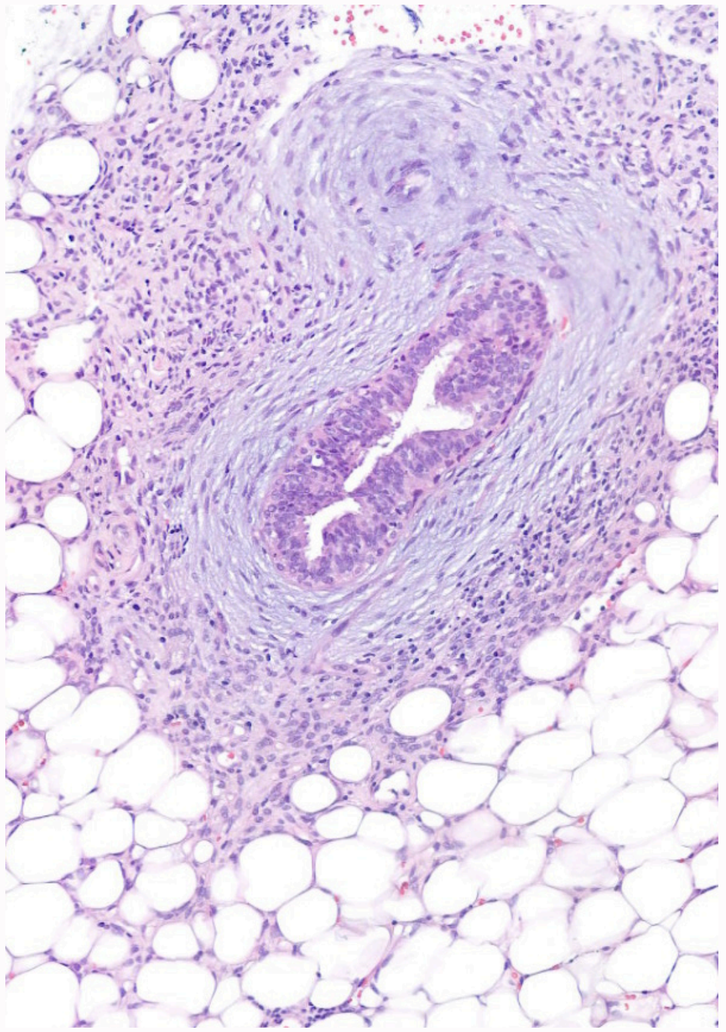
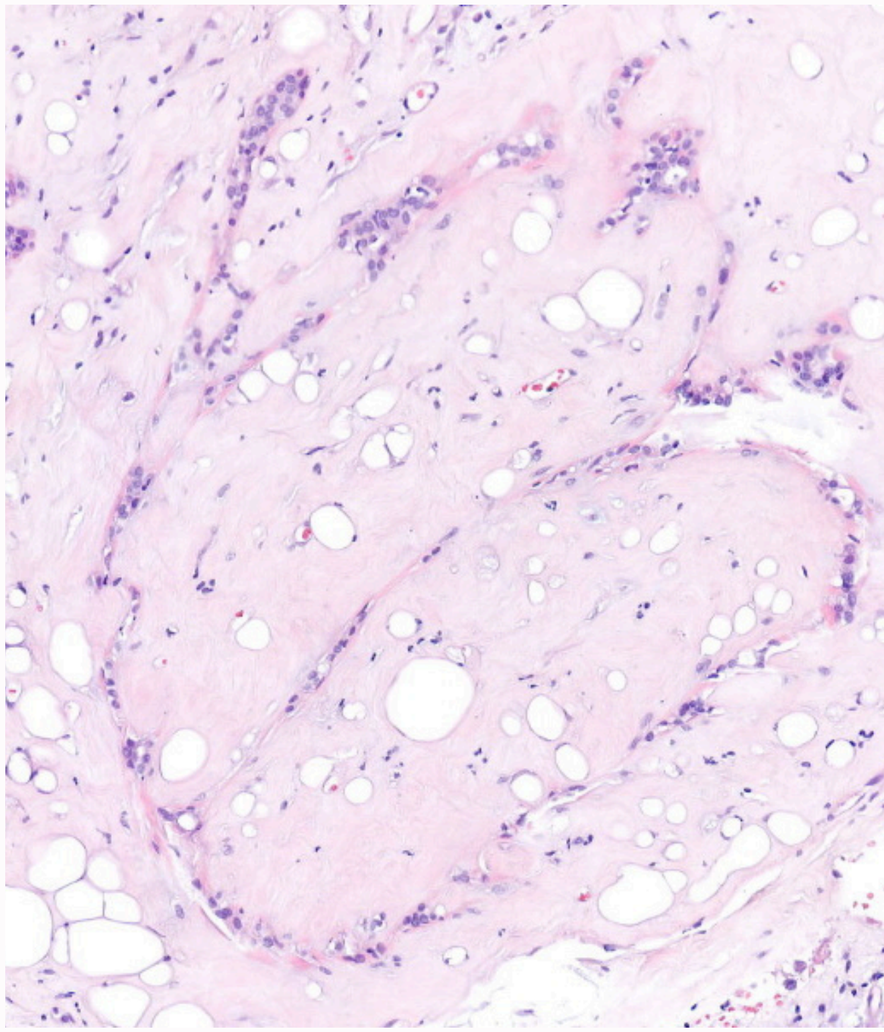
Nódulo de 3 cm con calcificaciones a nivel de unión de CS.

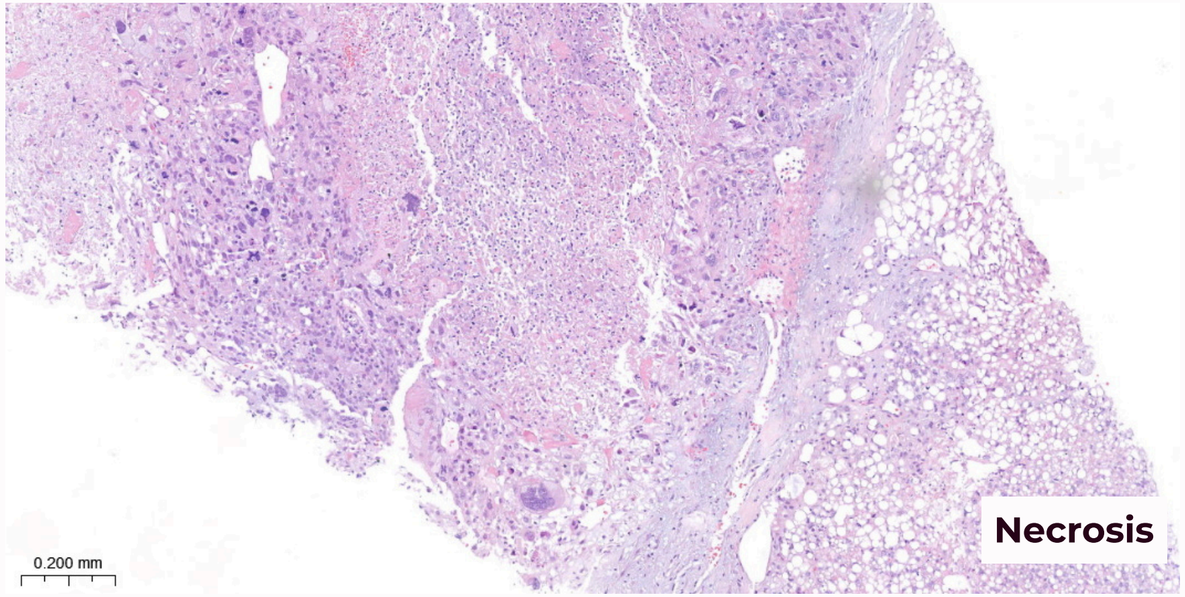


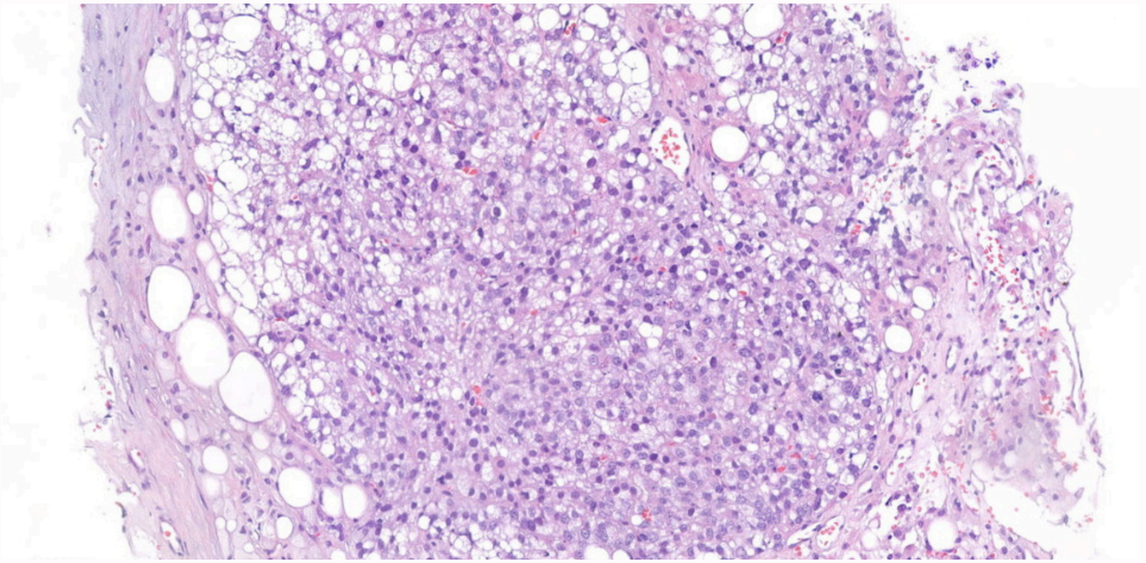
Se realiza **BAG**: múltiples cilindros (1,3 - 2 cm).


1.000 mm

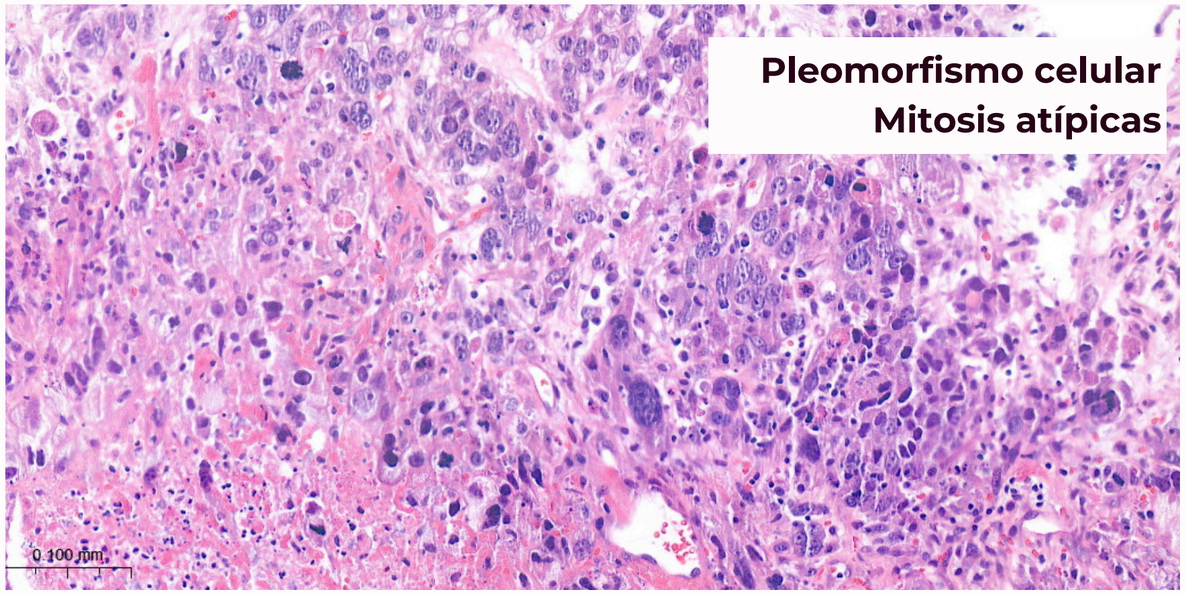


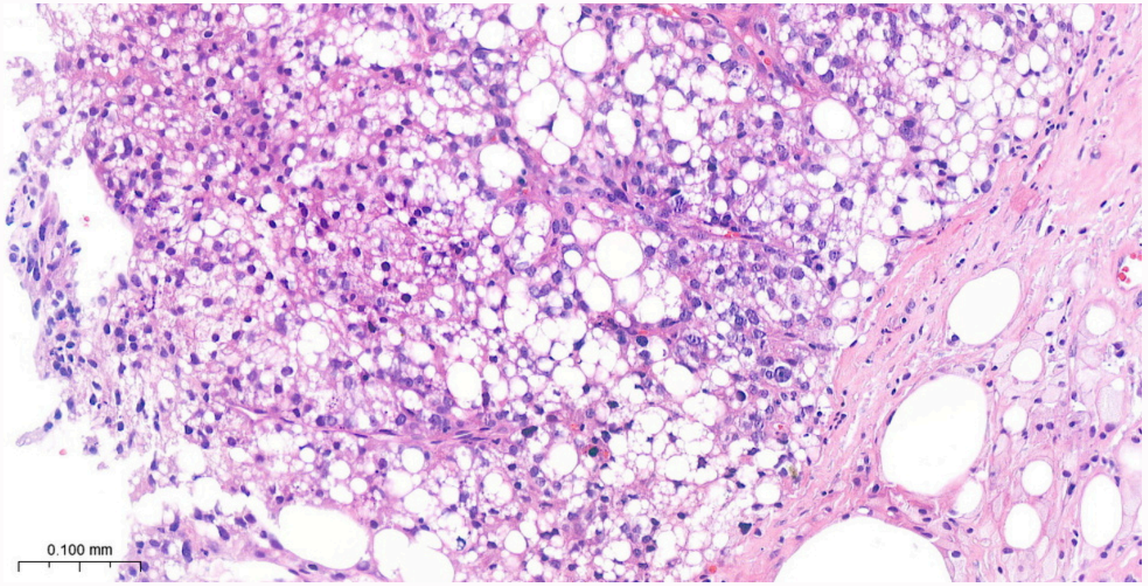








Lipoblastos atípicos y pleomórficos

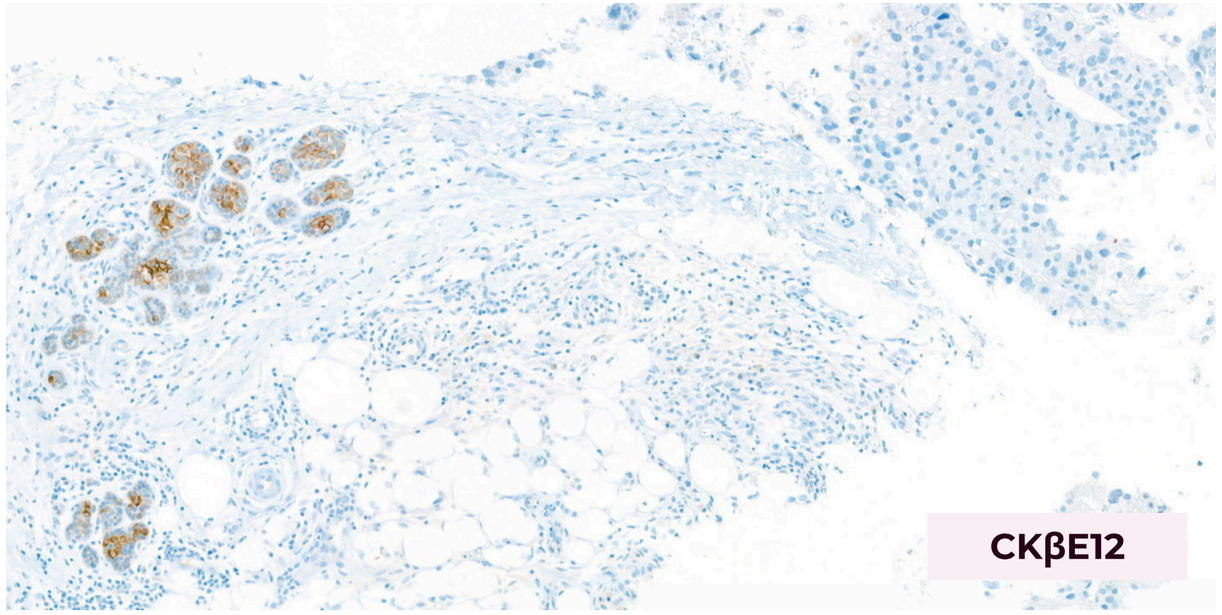


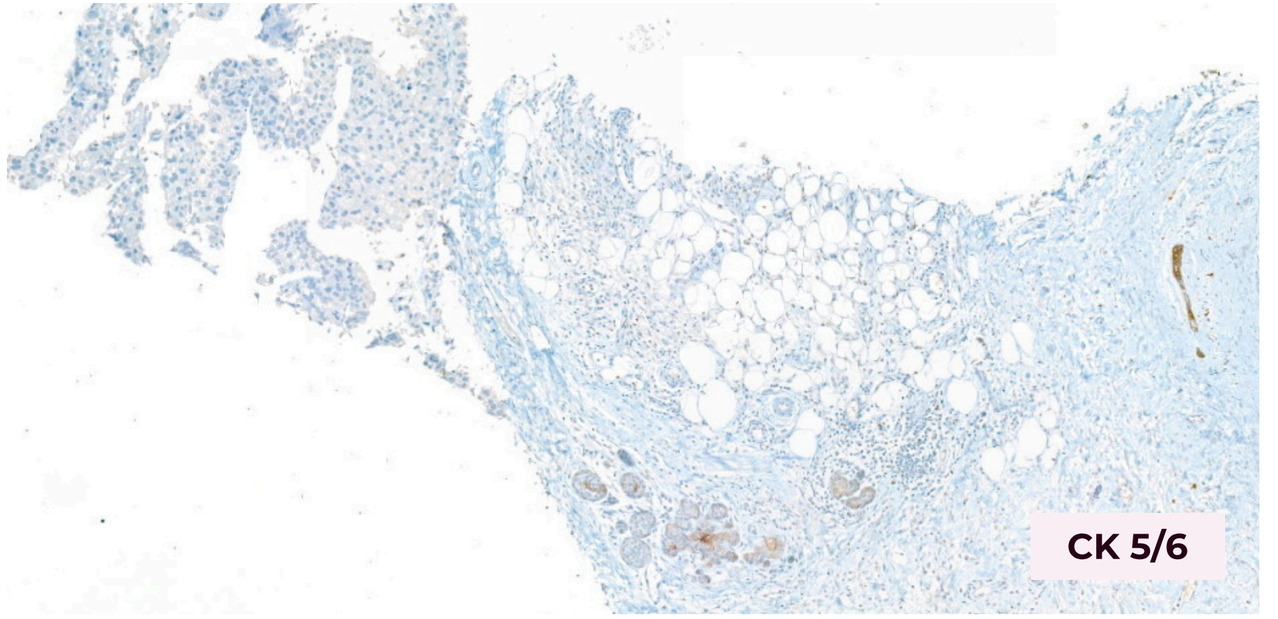


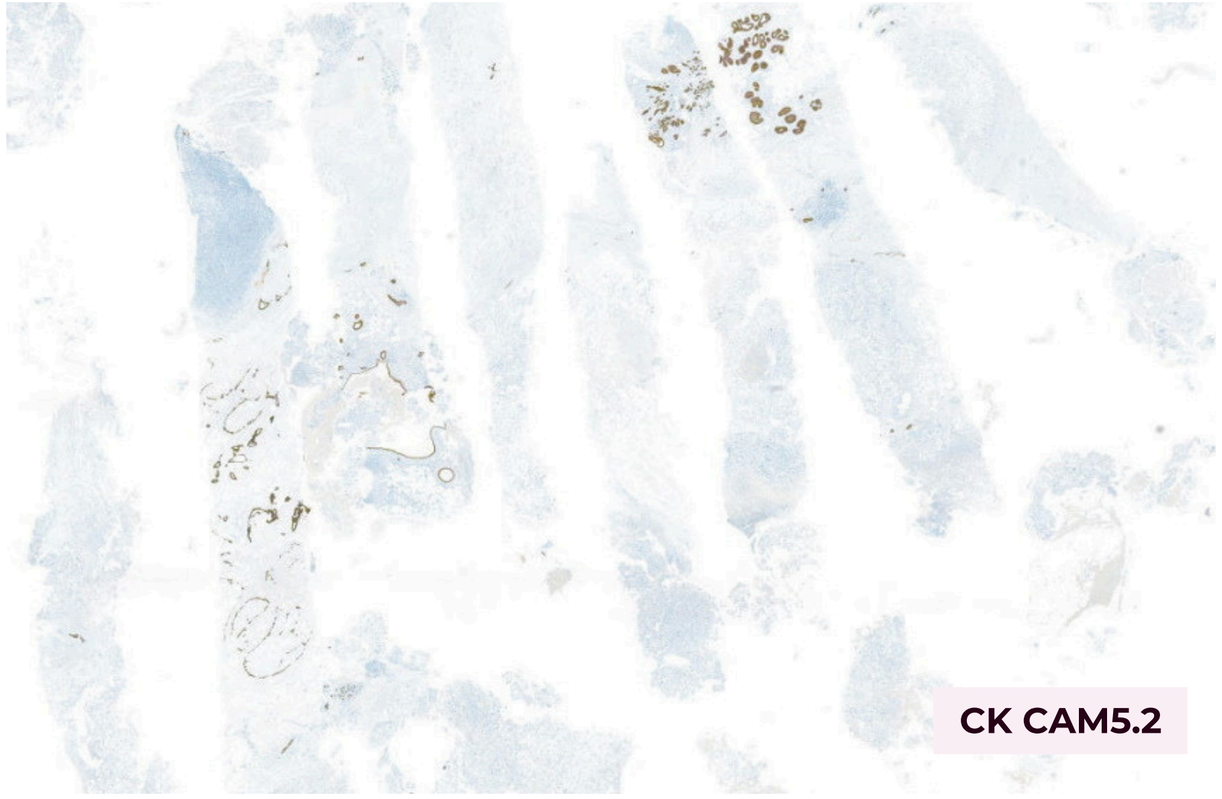
1. CARCINOMA METAPLÁSICO

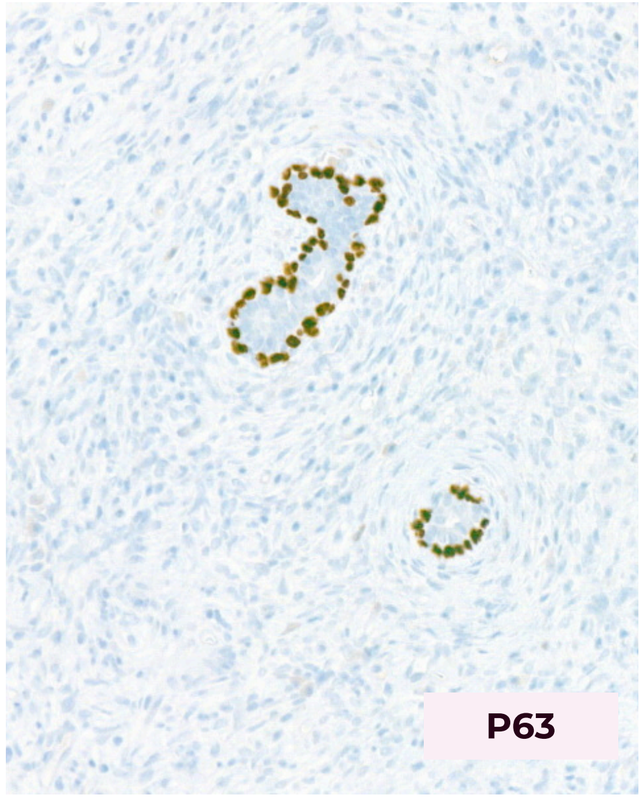
2. TUMOR PHYLLODES MALIGNO

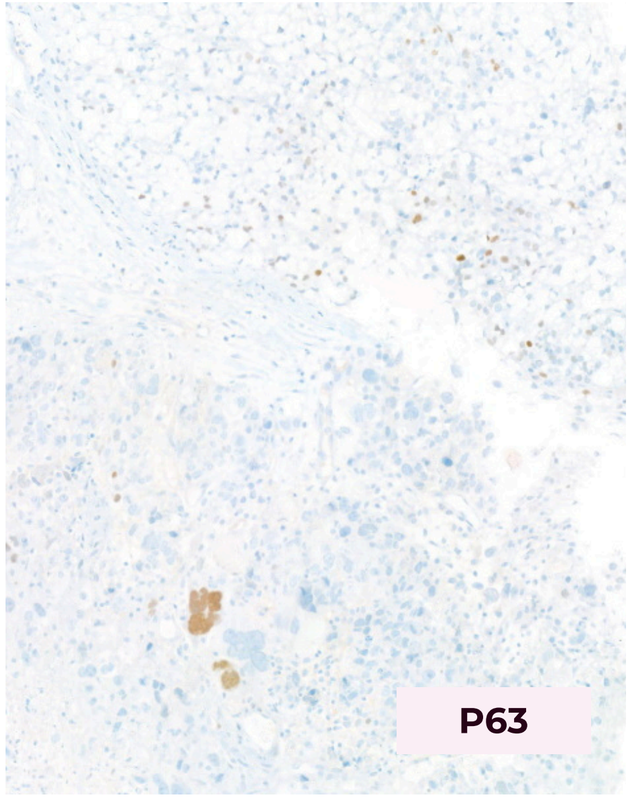
3. LIPOSARCOMA PRIMARIO


CKβE12

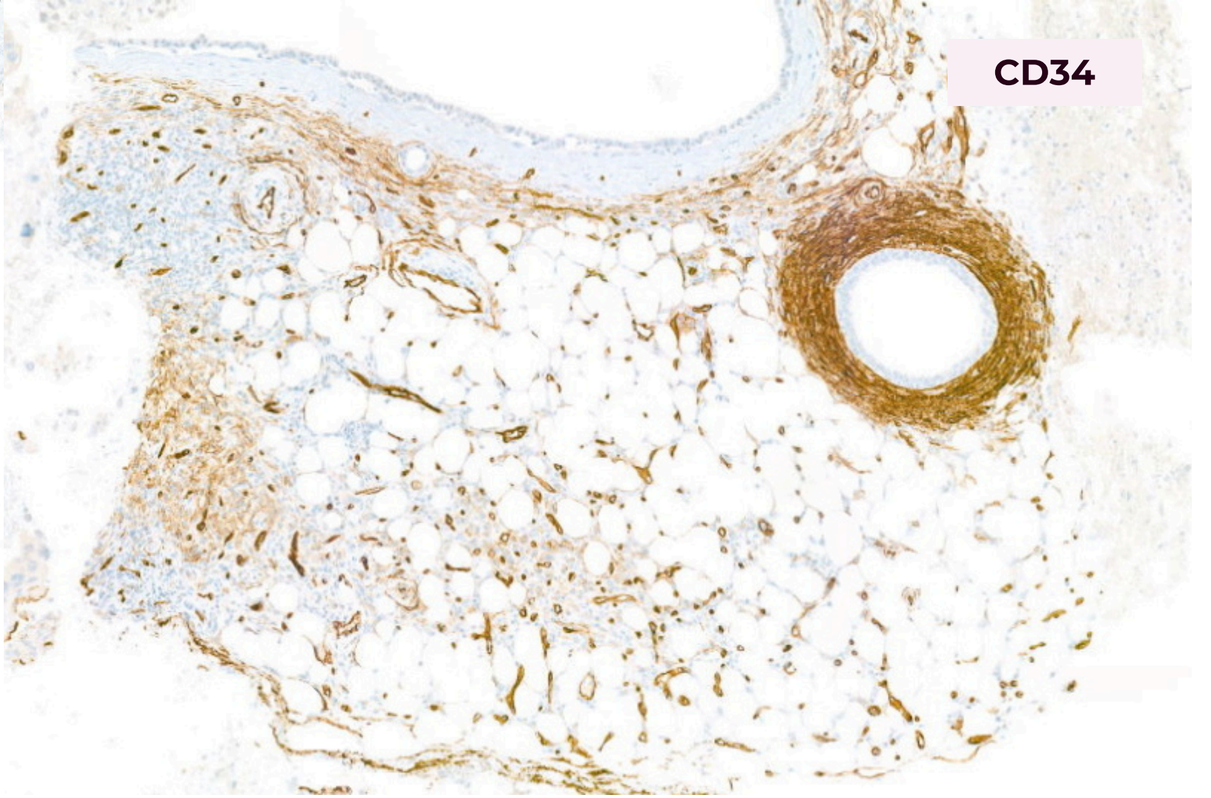

CK 5/6

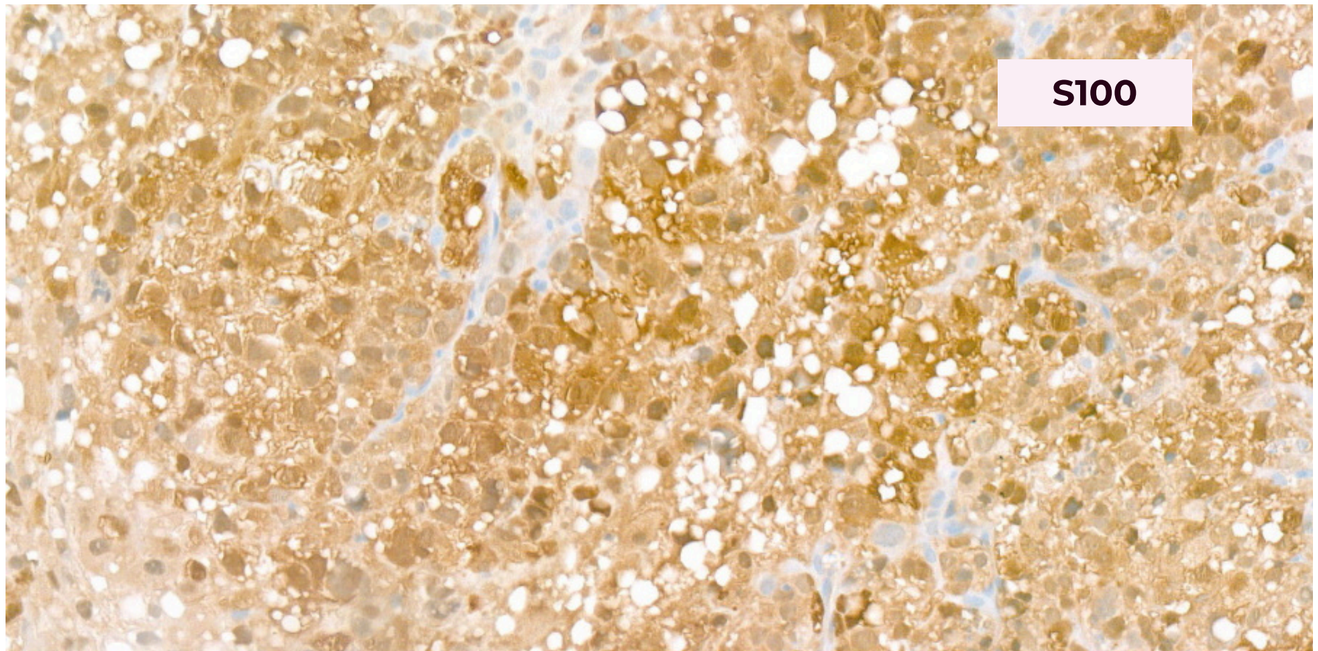

CK CAM5.2

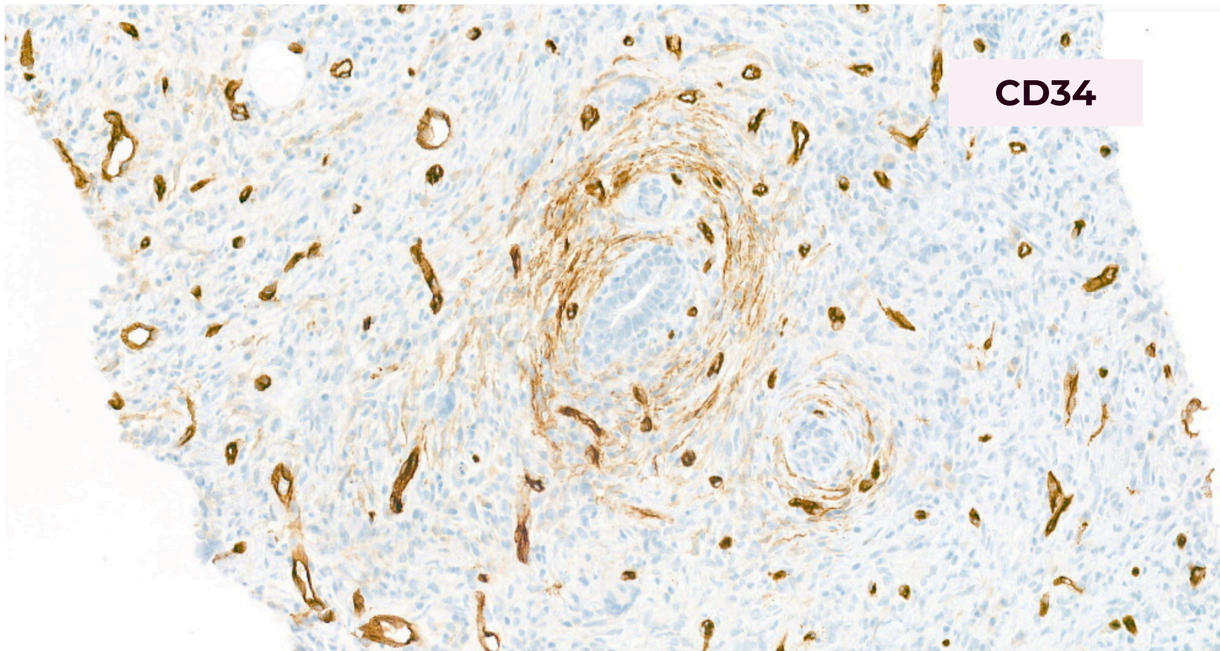

P63


P63


S100


CD34


S100


CD34

HALLAZGOS Y DIAGNÓSTICO PROVISIONAL

Neoplasia bifásica (proliferación estromal fusocelular y epitelio benigno).

Componente de liposarcoma pleomórfico (S100+).

CK de alto peso molecular negativas. MDM2 no amplificado mediante FISH.

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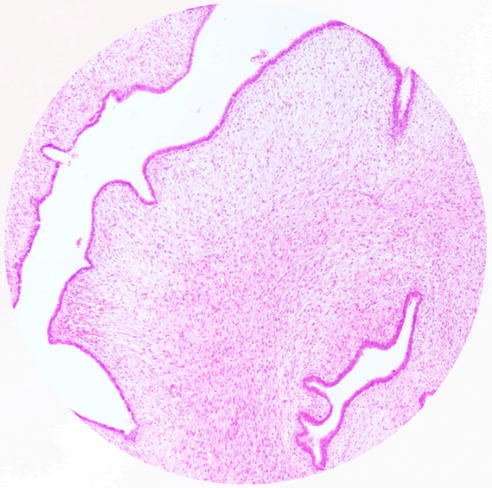
CK de alto peso molecular negativas. MDM2 no amplificado mediante FISH.

Neoplasia mesenquimal fusocelular con componente de liposarcoma pleomórfico, **sugestiva de tumor phyllodes maligno**.

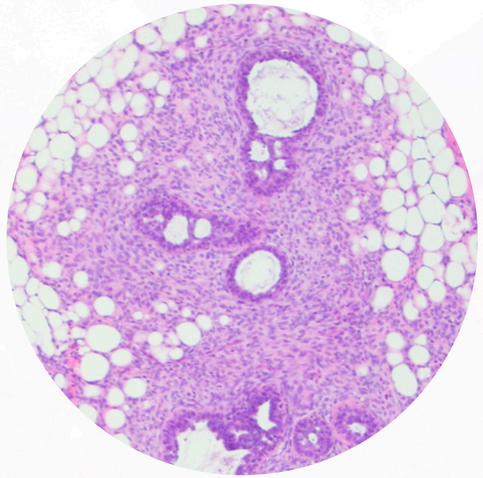
TUMOR PHYLLODES

El tumor phyllodes es una neoplasia fibroepitelial poco frecuente (**0,3-1%** de las neoplasias primarias de mama).

Intracanalicular



Pericanalicular



Clasificación en benigno, *borderline y* maligno según criterios de malignidad:

- ✓ **Límites infiltrativos**
- ✓ **Estroma hipercelular**
- ✗ Atipia celular marcada
- ✗ Actividad mitótica elevada (> 5 mitosis/mm2).
- ✗ Expansión estromal.

BREAKING NEWS

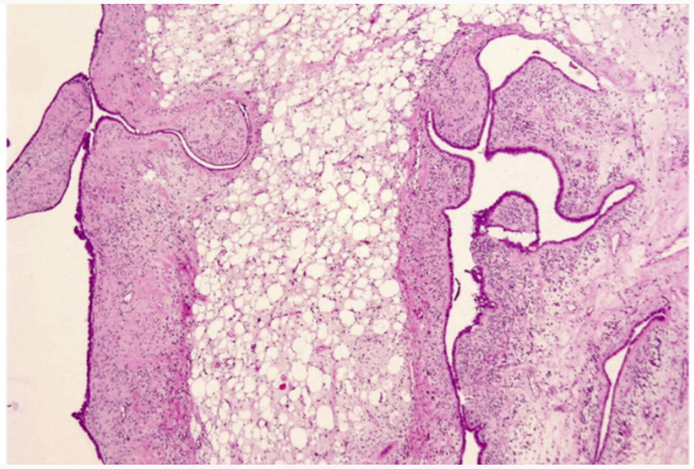
WHO (6th ed.): necesarios 4 criterios.

DIFERENCIACIÓN HETERÓLOGA

La presencia de un **componente heterólogo** es suficiente para el diagnóstico de tumor phyllodes maligno.

Supone un **factor predictivo de metástasis**.

Excepto WDLP.



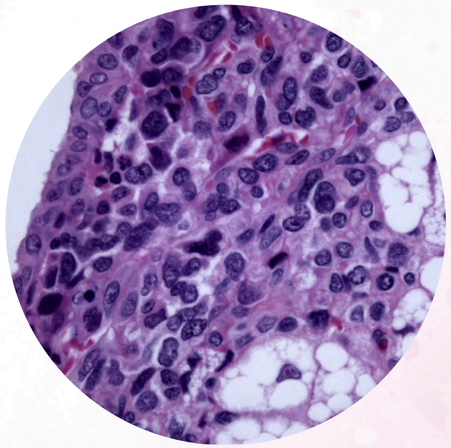
Liposarcoma pleomórfico: poco frecuente

› Ann Diagn Pathol. 2016 Apr:21:1-6. doi: 10.1016/j.anndiagpath.2015.12.001. Epub 2015 Dec 10.

Lipophyllodes of the breast. A reappraisal of fat-rich tumors of the breast based on 22 cases integrated by immunohistochemical study, molecular pathology insights, and clinical follow-up

Carlos E Bacchi [1], Sheila C Wludarski [1], Janez Lamovec [2], David Ben Dor [3], Elisa Ober [4],

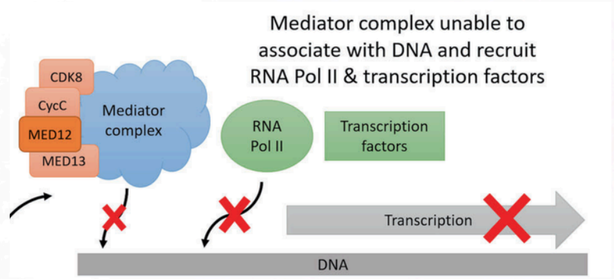
8 casos con PLS (1 con componente desdiferenciado de célula redonda).

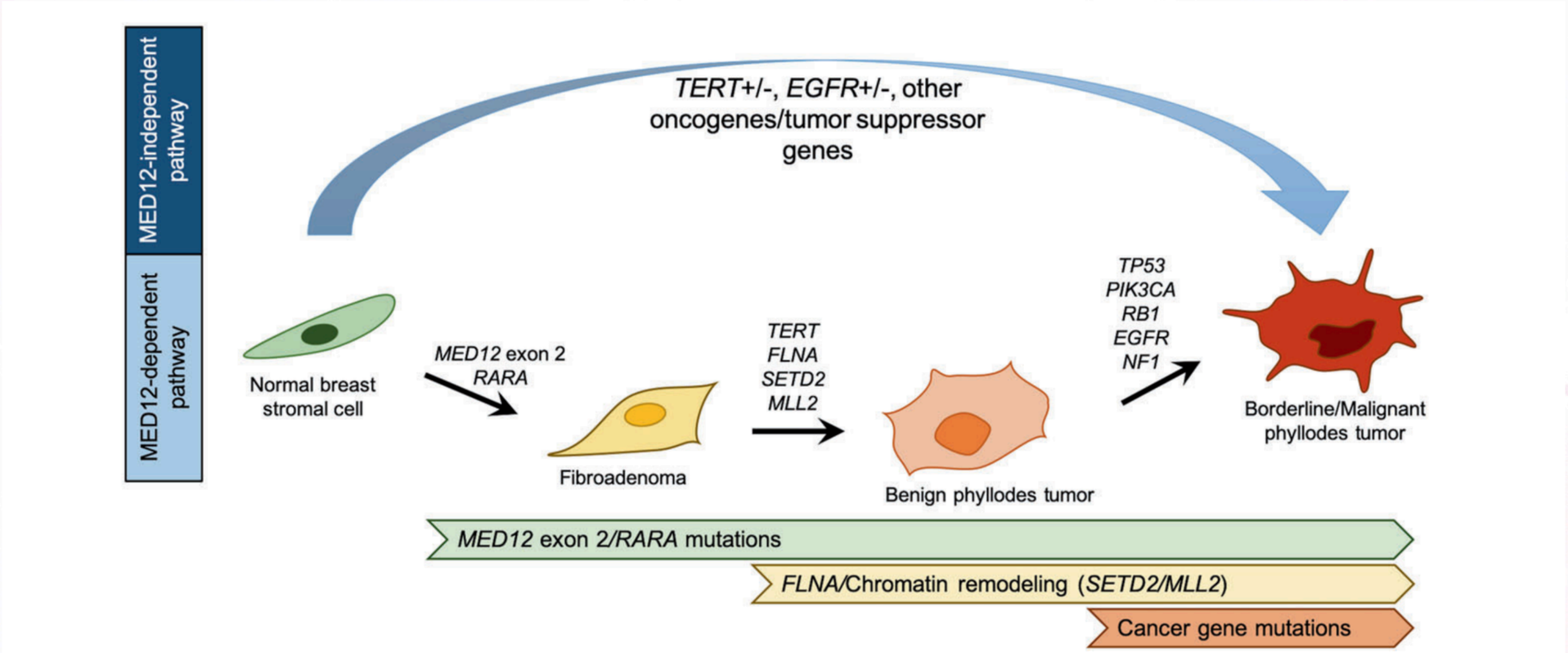


PATOGÉNESIS DEL TUMOR PHYLLODES

MED12: gen mutado con más frecuencia.

Participa en la regulación del Complejo Modulador, para inhibir su asociación con la RNA polimerasa II y la transciprición de genes.





Histopathology

Histopathology 2026, **88**, 1115–1125. DOI: 10.1111/his.70098

REVIEW

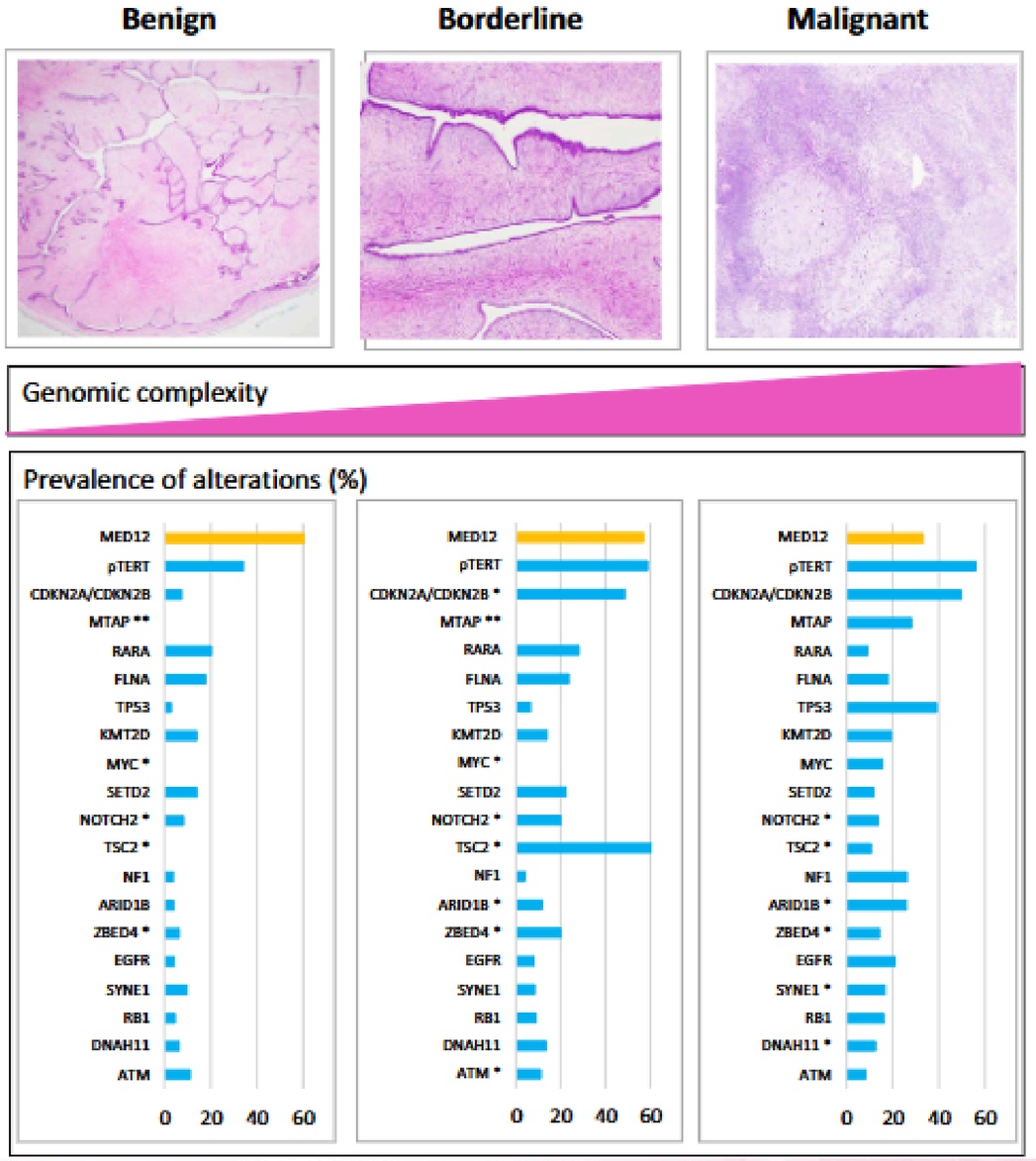
Molecular pathology of phyllodes tumours of the breast—much more than *MED12*

Jia-Min B Pang,[1,2] Kylie L Gorringe,[1,2] Puay Hoon Tan[3] & Stephen B Fox[1,2,4]

[1]*Peter MacCallum Cancer Centre,* [2]*Sir Peter MacCallum Department of Oncology, Melbourne, Victoria, Australia,* [3]*Luma Medical Centre, KK Women's and Children's Hospital and Yong Loo Lin School of Medicine, National University of Singapore, Singapore, Singapore and* [4]*Collaborative Centre for Cancer Genomic Medicine, The University of Melbourne, Melbourne, Victoria, Australia*

When phyllodes tumours are regarded as a whole, the most frequently altered genes are *MED12* (53%), *TERT* promoter region (p*TERT*, 47%), *CDKN2A/CDKN2B* (44%), *MTAP* (28%), *RARA* (20%), *FLNA* (19%), *TP53* (17%), *KMT2D* (16%), *MYC* (15%), *SETD2* (15%), *NOTCH2* (13%), *TSC2* (12%), *NF1* (12%), *ARID1B* (11%), *ZBED4* (11%), *EGFR* (11%), *SYNE1* (10%), *RB1* (10%), *DNAH11* (10%), *ATM* (9%), *USH2A* (9%), *PCLO* (9%), *NRAS* (9%), *PIK3CA* (8%), *ADAMTS18* (8%), *BRAF* (8%), *BRCA2* (7%), *NTRK* (6%), *PTEN* (6%), *ERBB3* (6%), *PDGFRB* (6%), *STK11* (6%), *KIT* (6%), *CHEK2* (5%) and *RUNX1* (5%)[20-43] (see supplementary data).

The gene alterations consisted of single nucleotide variants alone *(MED12, FLNA, SETD2, ARID1B, ZBED4, SYNE1, PCLO, NRAS, ADAMTS18, BRCA2, ERBB3, CHEK2, RUNX1)*, copy number alterations alone *(MTAP, MYC, KIT)*, mutations and copy number alterations *(CDKN2A/CDKN2B, RARA, KMT2D, NOTCH2, TSC2, NF1, EGFR, DNAH11, ATM, USH2A, PIK3CA, PTEN, PDGFRB)*, mutations and gene fusions *(BRAF, STK11)*, as well as genes affected by mutations, copy number alterations and fusions *(pTERT, TP53, RB1, NTRK)*.[20-43]



NGS (*Oncomine Comprehensive Assay v3 GX*)

- SNV/INDEL

TP53 (exon 7)
c. 722C>G : p. (Ser241Cys)

PTEN (exon 8)
c.955-958del : p.(Thr319Ter)

RB1 (exon 20)
c.2014G>T : p.(Glu672Ter)

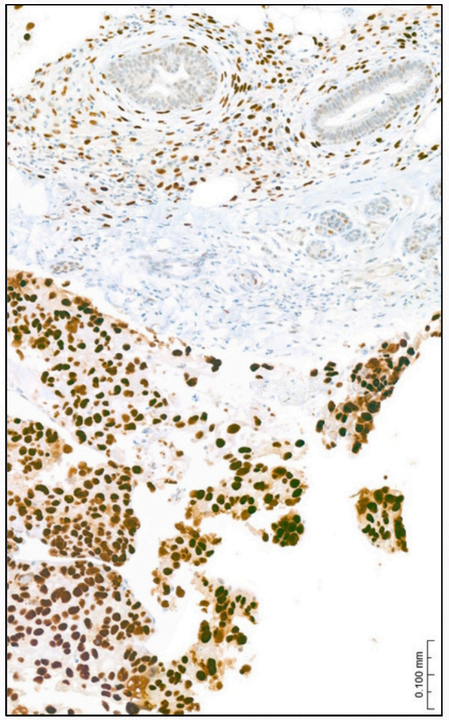
- CNV

MYC:
13,7 copias

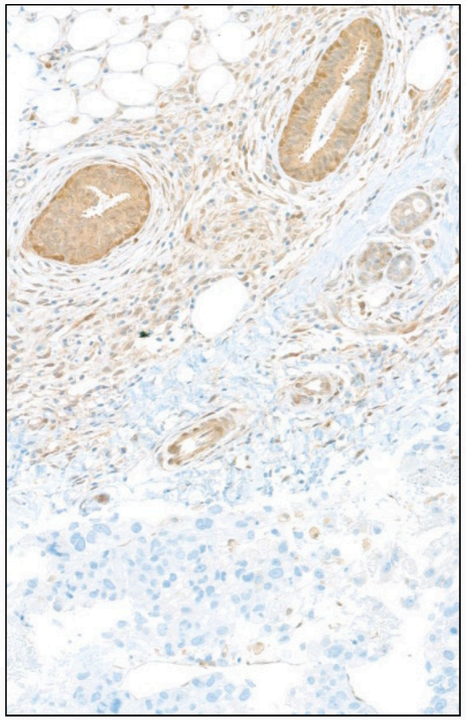
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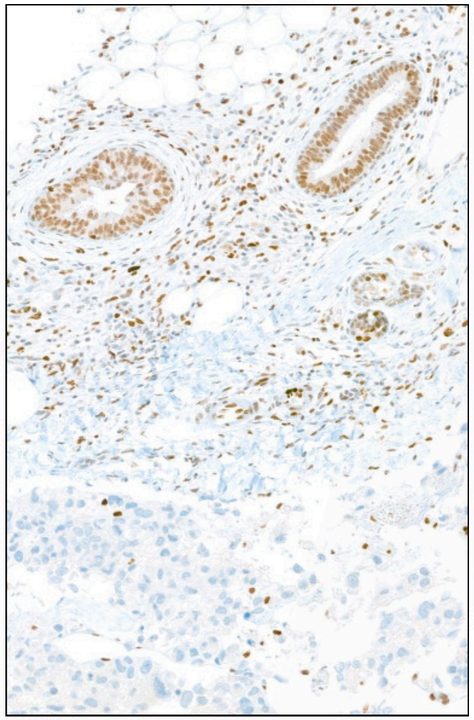
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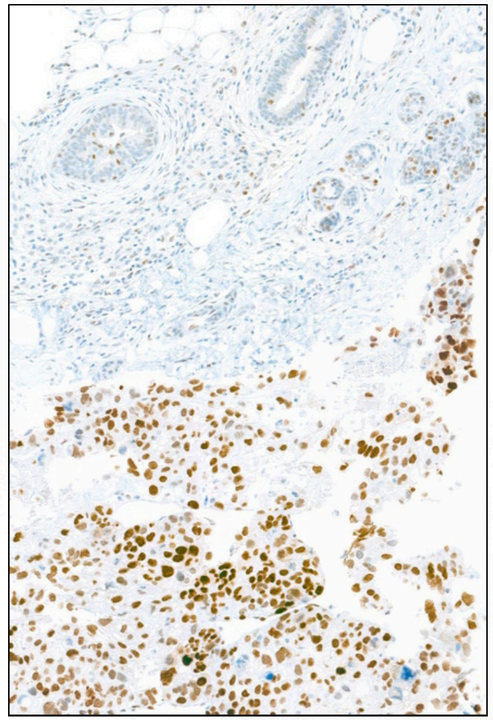
PTEN (exon 8)
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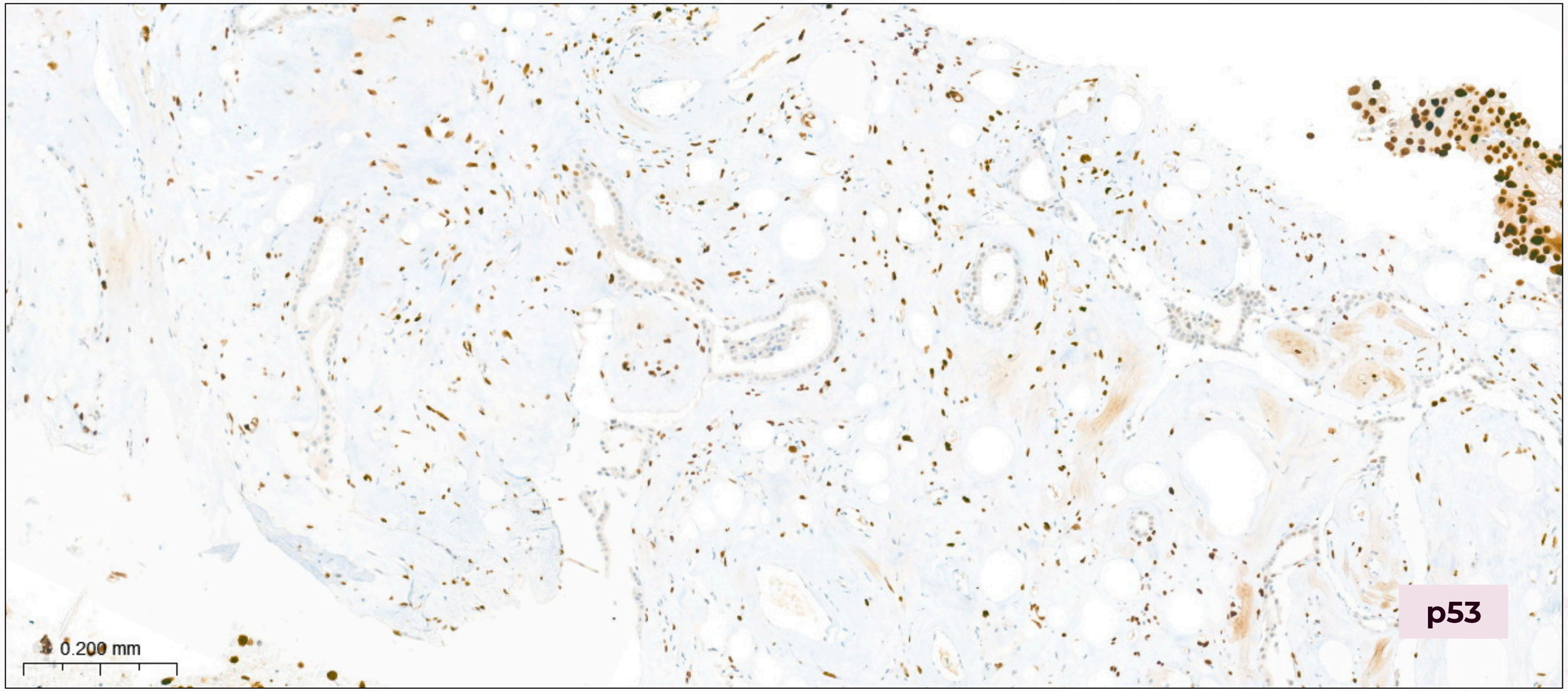


RB1 (exon 20)
c.2014G>T : p.(Glu672Ter)

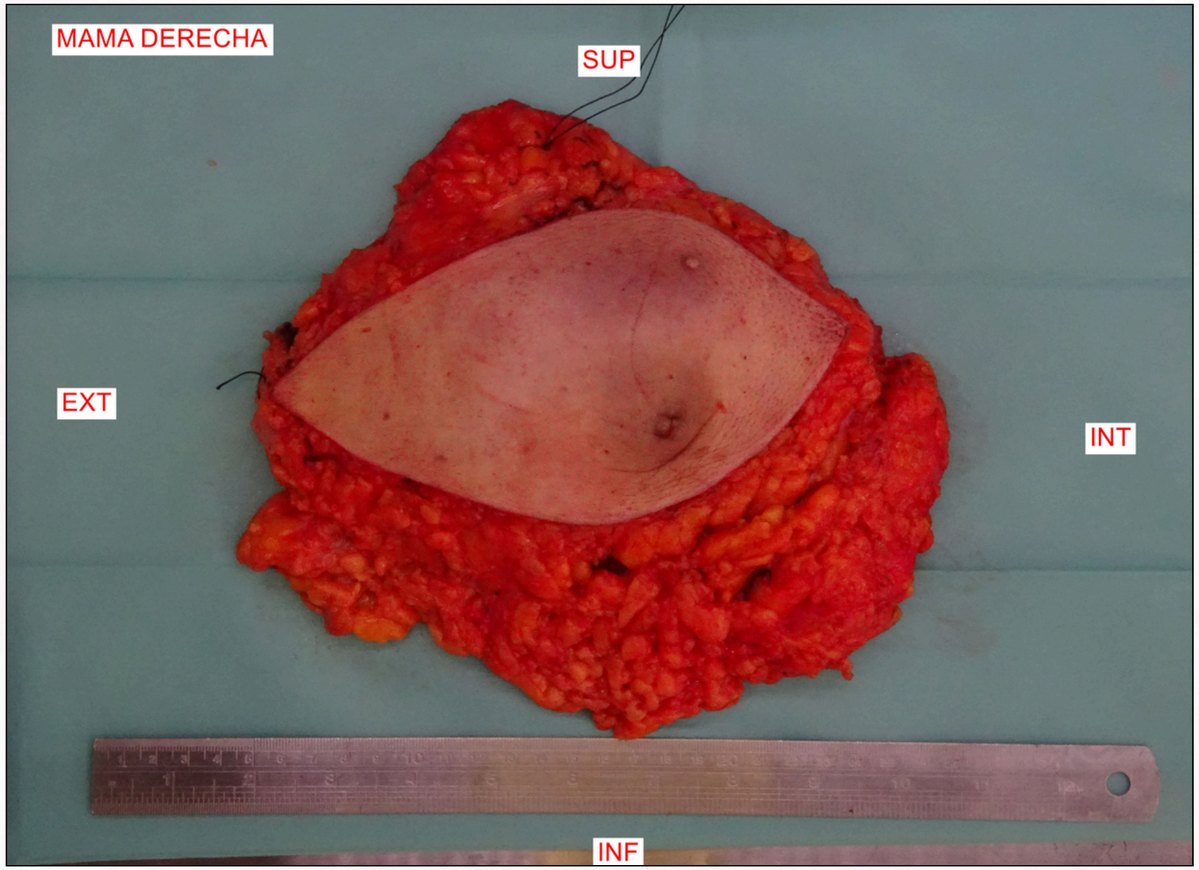


MYC:
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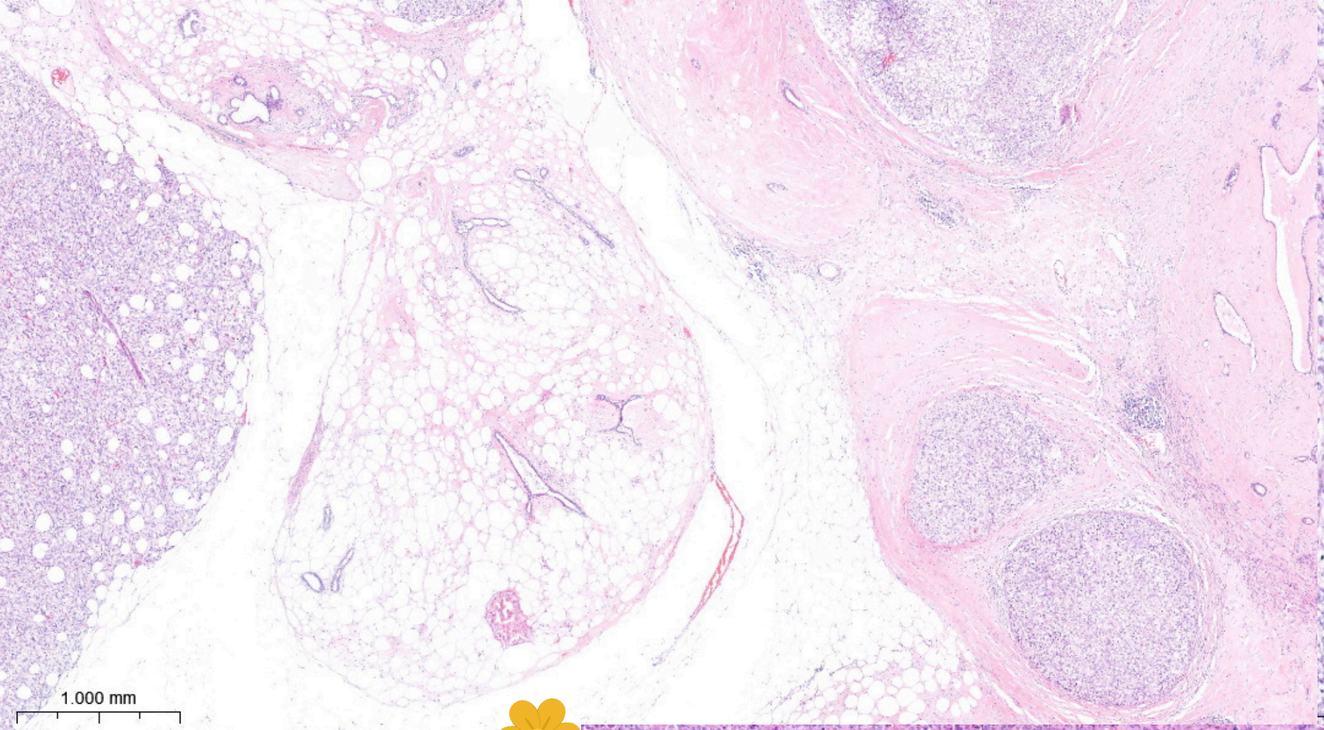


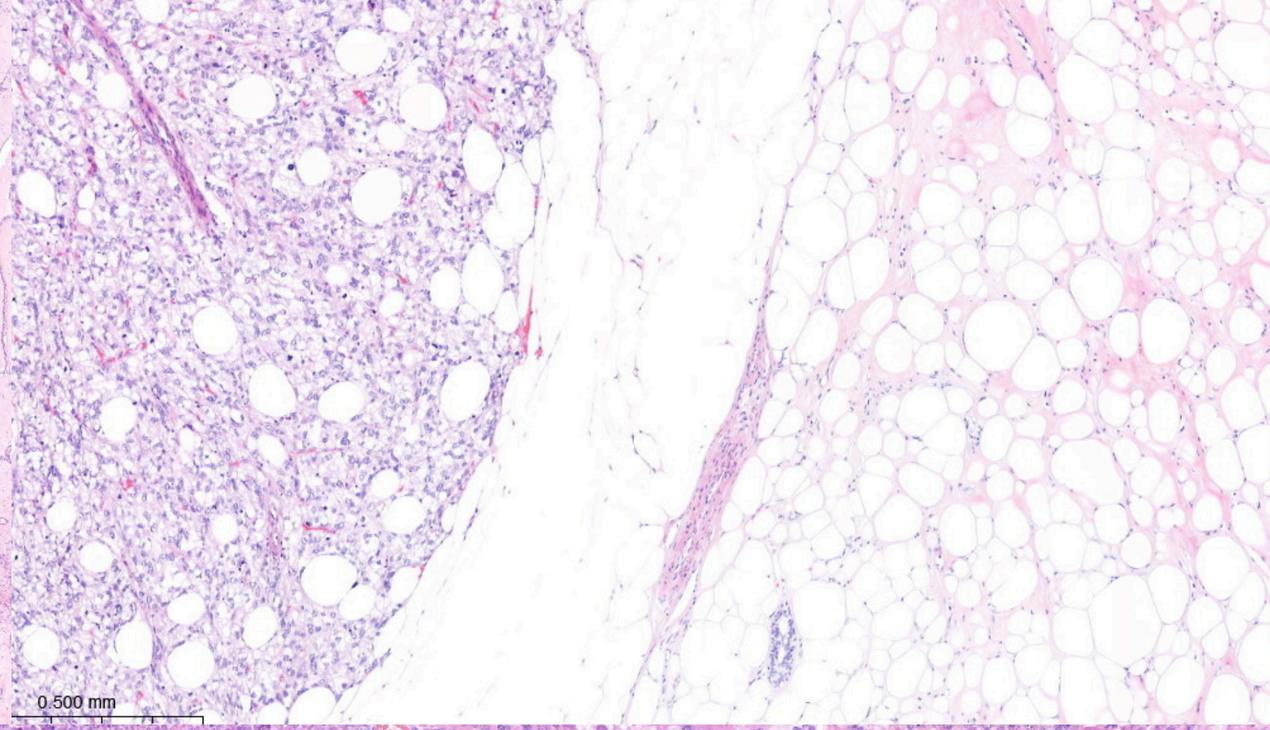

0.200 mm
p53

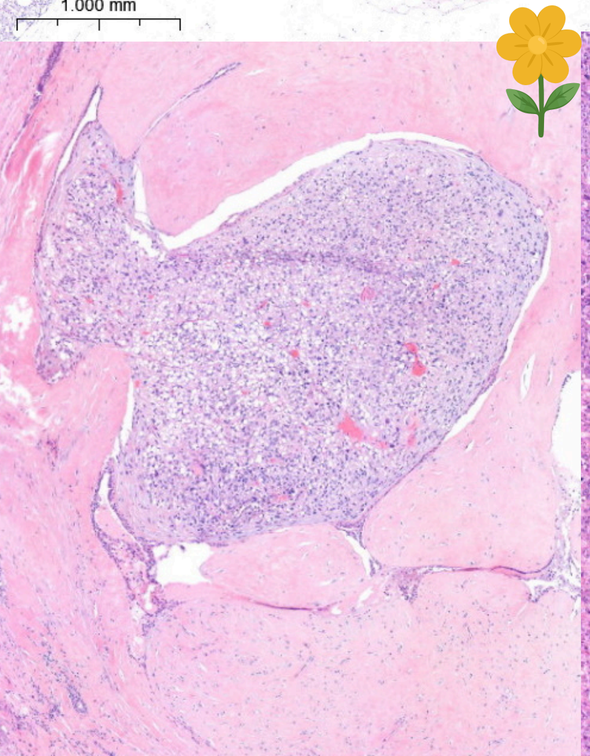
MASTECTOMÍA SIMPLE

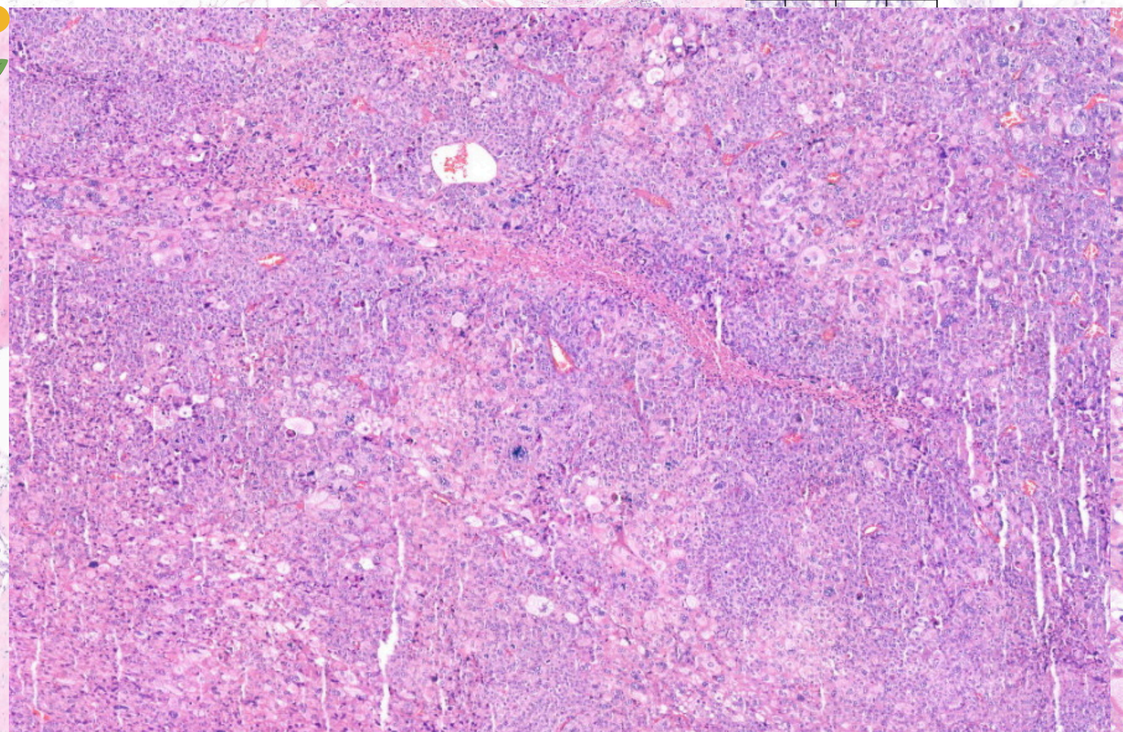


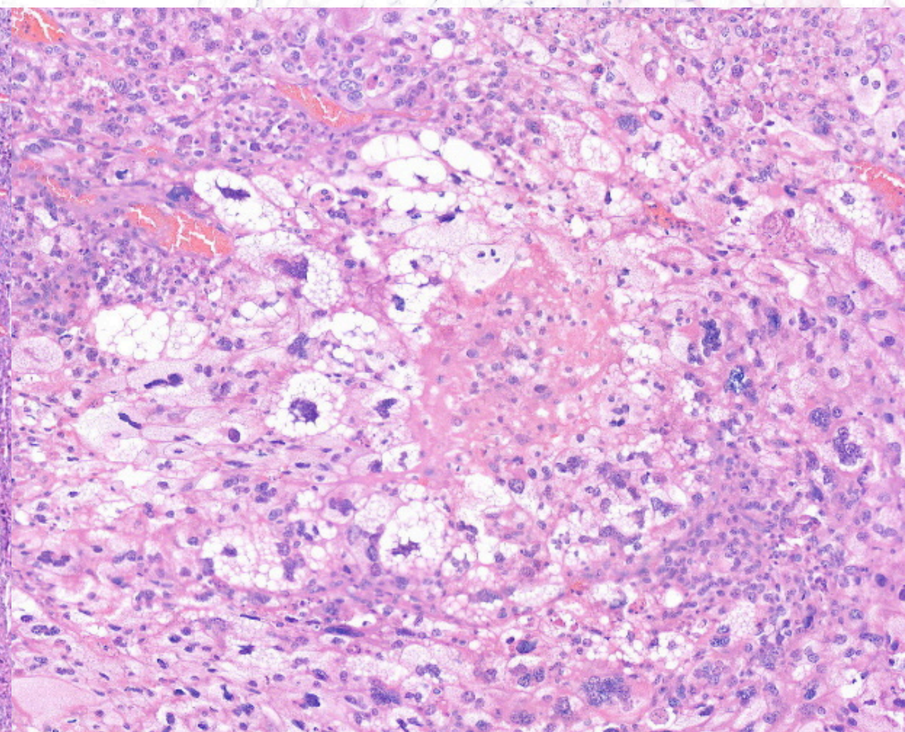



1.000 mm


0.500 mm







1. CARCINOMA METAPLÁSICO

2. TUMOR PHYLLODES MALIGNO

3. LIPOSARCOMA PRIMARIO

¿Cómo está la paciente?



Un año después:

Carcinoma apocrino en **mama contralateral**.

Tumorectomía + QT adyuvante.

Sin enfermedad a distancia hasta el momento.

CONCLUSIONES



1. El tumor phyllodes presenta histología heterogénea y debe considerarse en el diagnóstico diferencial de lesiones sarcomatoides.

2. La diferenciación heteróloga se asocia a mayor riesgo de metástasis.

3. Las técnicas moleculares aportan información sobre la patogénesis y pueden incorporarse como herramientas para el diagnóstico diferencial.

4. Existen numerosas alteraciones moleculares alternativas a MED12.

BIBLIOGRAFÍA

1. Bacchi, Carlos E et al. “Lipophyllodes of the breast. A reappraisal of fat-rich tumors of the breast based on 22 cases integrated by immunohistochemical study, molecular pathology insights, and clinical follow-up.” Annals of diagnostic pathology vol. 21 (2016): 1-6.
2. Zhou, Peng et al. “Molecular characterization of pleomorphic liposarcomatous differentiation in malignant phyllodes tumor of the breast: A case report.” Pathology, research and practice vol. 224 (2021): 153489.
3. Rakha, Emad A et al. “Spindle cell lesions of the breast: a diagnostic approach.” Virchows Archiv : an international journal of pathology vol. 480,1 (2022): 127-145.
4. Tan, Puay Hoon. “Fibroepithelial lesions revisited: implications for diagnosis and management.” Modern pathology : an official journal of the United States and Canadian Academy of Pathology, Inc vol. 34,Suppl 1 (2021): 15-37.
5. Krings, Gregor et al. “Genetic Profiling of Mammary Periductal Stromal Tumors With Histologic Correlation Highlights High-Grade and Low-Grade Groups and Similarities to Phyllodes Tumors.” Modern pathology : an official journal of the United States and Canadian Academy of Pathology, Inc vol. 39,3 (2026): 100961.
6. Pang, Jia-Min B et al. “Molecular pathology of phyllodes tumours of the breast-much more than MED12.” Histopathology vol. 88,6 (2026): 1115-1125.

Gràcies

Adjuntos responsables del caso, residentes y colaboradores:

Tulio Mateo Silva

Vicente Peg

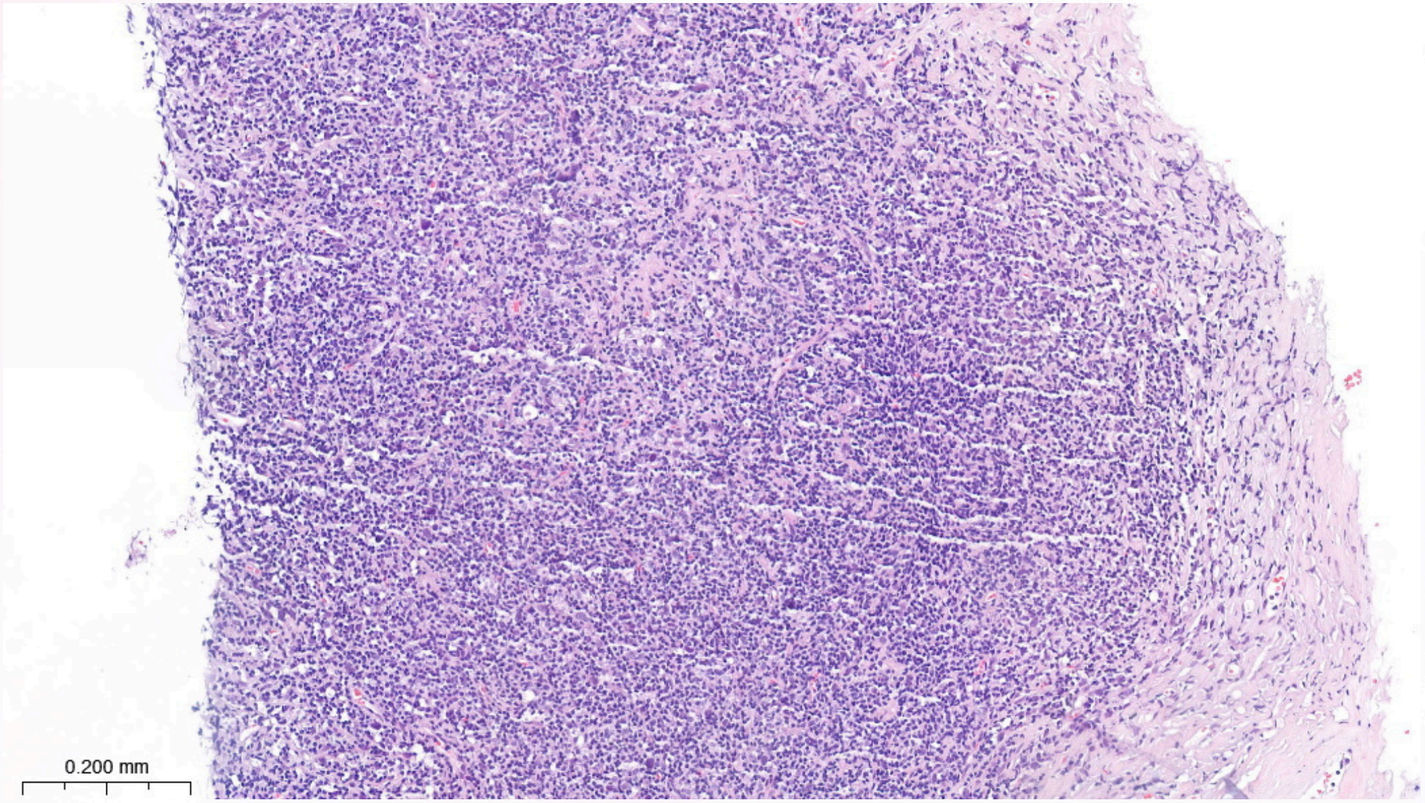
María Cleofé Romagosa

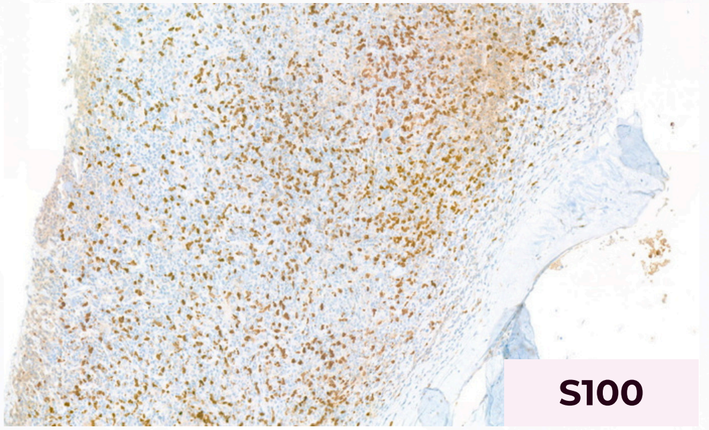
Elisa Blangini

Jan Bosch Schips

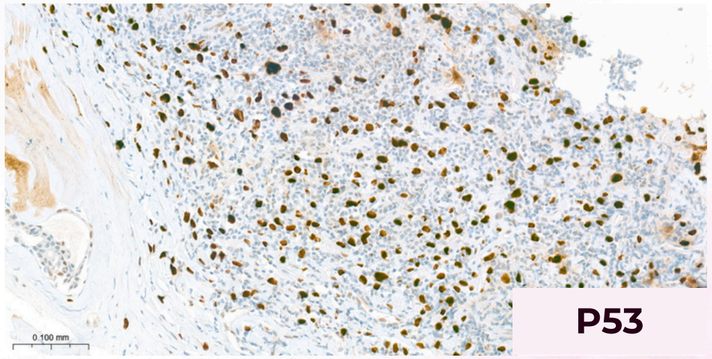
Raquel Dolz Gaitón

ANEXO





S100



P53