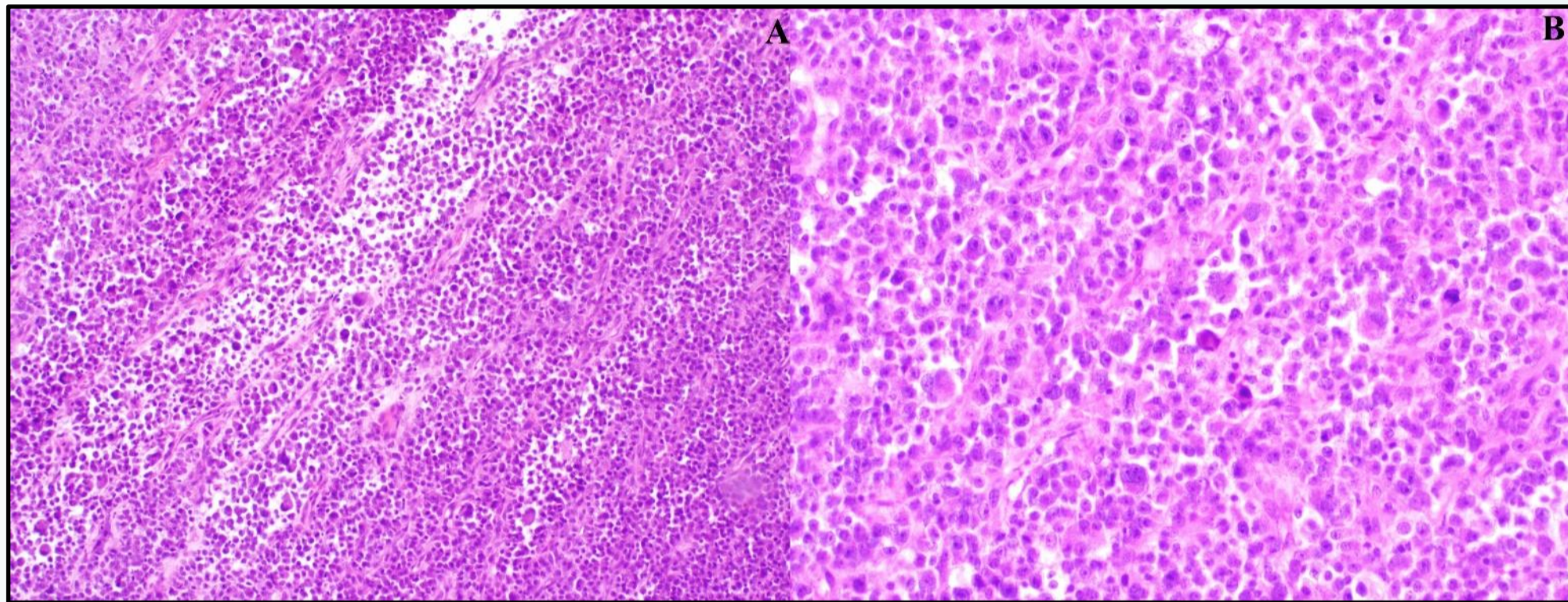


Malignant pleural mesothelioma with an *EML4-ALK* fusion: expect the unexpected!

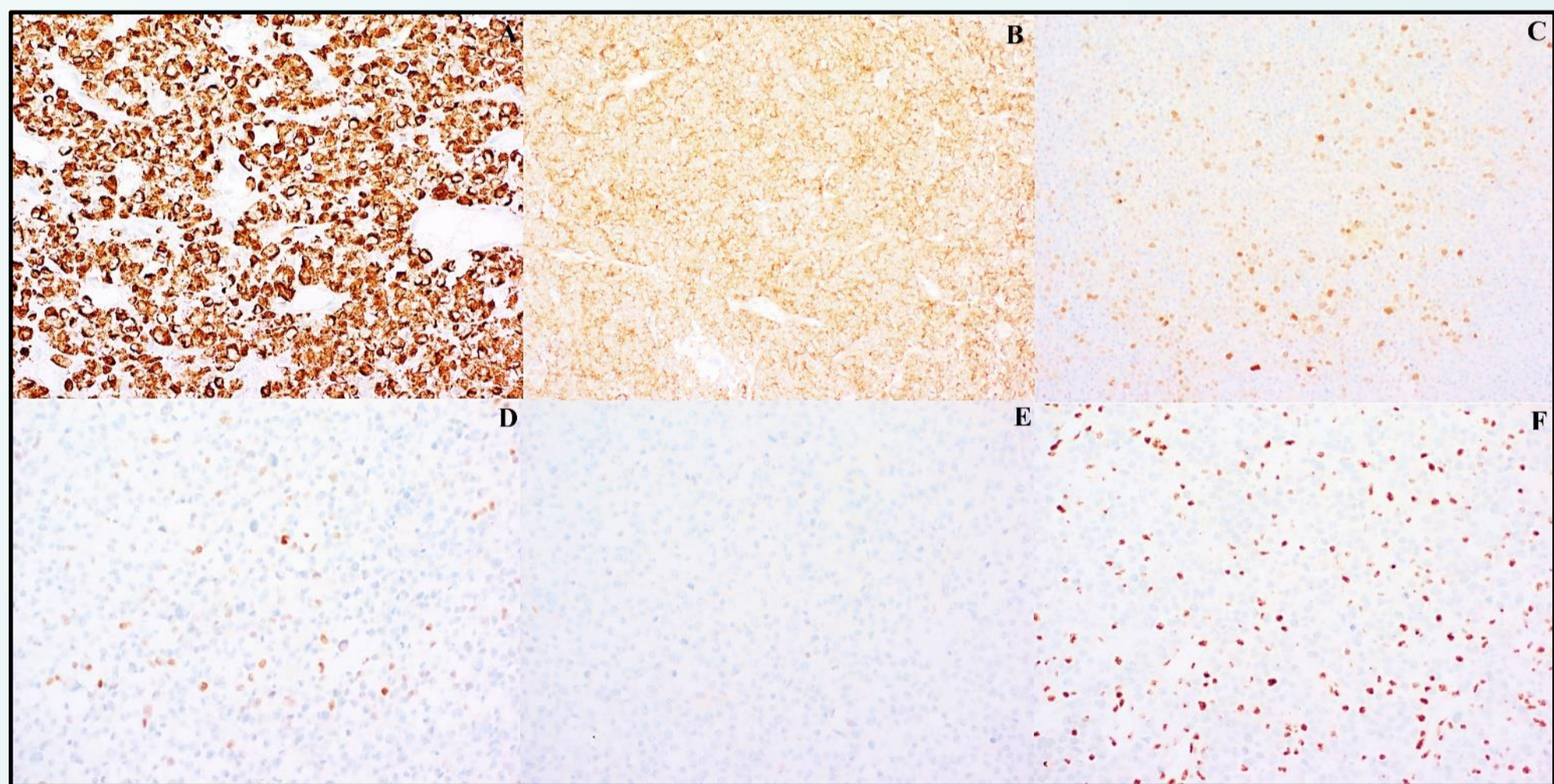
By **Fleur Cordier**, Joni Van der Meulen, Nadine van Roy, Herwig van Dijck, Filip Vanhoenacker, Marc Lambrechts, Valentin Noyez, Liesbeth Ferdinande, Amélie Dendooven, Jo Van Dorpe, David Creytens

Malignant pleural mesothelioma



- Cellular, poorly differentiated proliferation
- Epithelioid morphology
- Focal discohesive growth pattern with pseudo-alveolar spaces

- Strong positivity for D2-40 and ALK (A-B)
- Scattered positivity for calretinin (C)
- Focal nuclear expression for GATA-3 (D)
- Loss of expression for p16 and BAP1 (E-F)



With ...

Loss of *BAP1*, a *TP53* pathogenic variant, a homozygous deletion of *CDKN2A*, deletions of *NF2*, *LATS2* and *SETD2*

AND ...

EML4-ALK fusion

Detected by **FISH** and confirmed by **RNA-based targeted NGS**

This could suggest a potential target for therapy!