MESO - Mesothelioma

Subtype	Biology & Expression	Genomic Alterations	Clinical Features
Epithelioid-like (C1)	• High expression of immune-regulatory and inflammatory genes • More differentiated phenotype	• Frequent **BAP1** mutations/deletions • Low tumor mutation burden (TMB) • Fewer CNAs	• Best overall survival (~20 months) • Typically epithelioid histology • Better response to therapy
Sarcomatoid-like (C2)	• EMT signature, high mesenchymal marker expression • Poorly differentiated, stem-like profile	• Frequent **NF2** and **CDKN2A** alterations • Higher CNA burden • TMB still relatively low	• Worst overall survival (~6 months) • Sarcomatoid or biphasic histology • Poor treatment response
BAP1-deficient (C3)	• Intermediate phenotype; partial EMT • Enriched chromatin remodeling and DNA repair signatures	• Biallelic **BAP1** inactivation (mutation + LOH) • Moderate chromosomal instability	• Intermediate survival • May respond to EZH2 or PARP inhibitors