UCS - Uterine Carcinosarcoma

Subtype	Biology & Expression	Genomic Alterations	Clinical Features
Subtype I (Low-grade UCS)	- Enriched cell–cell adhesion (e.g., PCDH1) and apoptosis pathways (CASP6, CASP8) - Lower EMT signature	- Frequent mutations in **TP53**, **PTEN**, **PIK3CA**, **PPP2R1A**, **FBXW7**, **KRAS** - Extensive arm-level & focal copy-number alterations	- Lower myometrial invasion (~36%) - Smaller tumor weight (~267 g) - Predominantly stage I disease - More often NOS histology - Better initial treatment response & overall prognosis
Subtype II (High-grade UCS)	- Enriched myogenesis & muscle-development programs (MYOD1, MYOG) - Higher EMT signature	- Similar spectrum of driver mutations & CNA burden as Subtype I - No clear subtype-specific recurrent mutations	- Higher myometrial invasion (~59%) - Larger tumor weight (~432 g) - Predominantly stage III disease - More often heterologous histology - Lower treatment sensitivity & poorer prognosis