

Description of Additional Supplementary Files

File Name: Supplementary Data 1

Description: **SMARCA4 variants in the FoundationCORE® database.** SMARCA4 short variants, copy number alterations and rearrangements detected from 9,434 patients with at least 1 SMARCA4 alteration (n=10,562 SMARCA4 variants).

File Name: Supplementary Data 2

Description: **Summary of total samples and SMARCA4 variants separated by cancer type.** The disease ontology of the total number of samples profiled, those with at least one SMARCA4 variant and those with SMARCA4 variants that could be assessed for zygosity.

File Name: Supplementary Data 3

Description: **SMARCA4 variants in human tumor-derived cell lines.** SMARCA4 variants identified by exome-sequencing in human tumor-derived cell lines.

File Name: Supplementary Data 4

Description: **qRT-PCR and CHIP reagents used for all experiments.** Taqman expression assays and sequences for qCHIP primers.