

**Table S1. Gene list**

STK11	PTEN	MET	NFE2L2	KEAP1
CTNNB1	FGFR3	FBXW7	PIK3CA	MAP2K1
EGFR	ERBB2	ARID1A	CBL	ARID2
ERCC2	EP300	NOTCH3	NOTCH2	ERCC1
RB1	ABCA3	PRDM14	DAB2IP	RAB31