

**Table S5.** Name, class and family of differentially up-regulated REs in SCLC together with their  $\log FC_{OE}$  and their statistical significance as an FDR. These data were used in Figures 4 and 5.

<b>differentially expressed RE</b>	<b>Class</b>	<b>Family</b>	$\log FC_{OE}$	<b>FDR</b>
MLT2B5	LTR	ERVL	2.6	1.1e-13
HERVL18-int	LTR	ERVL	2.1	5.0e-10
LTR18A	LTR	ERVL	1.8	6.3e-12
REP522	Satellite	telo	1.8	1.7e-09
Charlie11 ●	DNA	hAT-Charlie	1.7	1.3e-27
LTR12F	LTR	ERV1	1.7	2.2e-13
SST1	Satellite	centr	1.6	1.3e-13
HERVS71-int	LTR	ERV1	1.5	2.6e-14
UCON88●	Unknown	Unknown	1.3	6.6e-06
BSR_Beta	Satellite	Satellite	1.3	6.8e-16
MER51E ●	LTR	ERV1	1.2	4.1e-17
L1M3a ●	LINE	L1	1.2	4.8e-13
Tigger5 ●	DNA	TcMar-Tigger	1.1	3.3e-15
MER75A	DNA	PiggyBac	1.1	1.3e-07
UCON8	DNA	DNA	1.1	9.0e-09
HERV1_I-int	LTR	ERV1	1.1	8.7e-05
LTR25 ●	LTR	ERV1	1.1	1.4e-14
LTR21A	LTR	ERV1	1.0	2.3e-05
LTR12D	LTR	ERV1	1.0	8.4e-07
LTR49-int ●	LTR	ERV1	1.0	5.2e-16
L1PA12 ●	LINE	L1	1.0	8.1e-12

●: Potential SCLC-specific biomarker