

Table S1. Genetic variants or alterations of unknown significance.

Sample type	ID	Gene	Amino acid change	Type of alteration	SNP138 database	Interpretation
Tissue	ZH-679	D2HGDH	Y398H	nonsynonymous SNV	NA	unclear
Tissue	ZH-679	ARID1B	N1672S	nonsynonymous SNV	rs140177120	unclear
Tissue	ZH-679	MYBL1	G197E	nonsynonymous SNV	rs201510981	unclear
Tissue	ZH-679	TSC2	I463V	nonsynonymous SNV	rs45517171	unclear
Tissue	ZH-679	BRCA1	NA	nonframeshift substitution	NA	artifact
Tissue	ZH-696	MSH6	A49V	nonsynonymous SNV	NA	unclear
Tissue	ZH-696	CCND1	E76V	nonsynonymous SNV	NA	unclear
Tissue	ZH-696	TRAF7	R356W	nonsynonymous SNV	NA	potentially relevant
Tissue	ZH-696	NF2	S87X	stopgain SNV	NA	relevant
Tissue	ZH-696	ARID1A	K980fs	frameshift deletion	NA	potentially relevant
Tissue	ZH-706	NOTCH2	R91L	nonsynonymous SNV	rs143195893	unclear
Tissue	ZH-706	KMT2D	V4178L	nonsynonymous SNV	NA	unclear
Tissue	ZH-706	GNAS	P345R	nonsynonymous SNV	rs200430001	unclear
Tissue	ZH-706	BRCA1	NA	nonframeshift substitution	NA	artifact
Tissue	ZH-707	SMO	W535L	nonsynonymous SNV	rs121918347	relevant
Tissue	ZH-707	PTCH1	V482M	nonsynonymous SNV	NA	unclear
Tissue	ZH-707	KMT2D	S1065T	nonsynonymous SNV	NA	unclear
Tissue	ZH-707	NF1	A1676T	nonsynonymous SNV	NA	unclear
Cells	ZH-707b	PTCH1	V482M	nonsynonymous SNV	NA	unclear
Cells	ZH-707b	KMT2D	S1065T	nonsynonymous SNV	NA	unclear
Cells	ZH-707b	NF1	A1676T	nonsynonymous SNV	NA	unclear
Tissue	ZH-719	NF2	55_60del	nonframeshift deletion	NA	relevant
Tissue	ZH-733	NOTCH1	R1350L	nonsynonymous SNV	rs150343794	unclear
Tissue	ZH-733	ATM	Y1124X	stopgain SNV	NA	potentially relevant
Tissue	ZH-733	PTEN	I101fs	frameshift deletion	NA	potentially relevant
Cells	ZH-733	MSH2	R293K	nonsynonymous SNV	NA	unclear
Cells	ZH-733	NOTCH1	R1350L	nonsynonymous SNV	rs150343794	unclear
Cells	ZH-733	ATM	Y1124X	stopgain SNV	NA	potentially relevant
Cells	ZH-733	TP53	D149Y	nonsynonymous SNV	NA	potentially relevant
Cells	ZH-733	TP53	S83R	nonsynonymous SNV	NA	unclear
Tissue	ZH-734	TSC2	G440S	nonsynonymous SNV	rs45484298	unclear
Tissue	ZH-734	GNAS	G334D	nonsynonymous SNV	NA	unclear
Tissue	ZH-734	NF2	Y398X	stopgain SNV	NA	relevant
Tissue	ZH-734	PTEN	R335fs	frameshift insertion	NA	potentially relevant
Cells	ZH-734	MSH6	A49V	nonsynonymous SNV	NA	unclear
Cells	ZH-734	CCND1	E76V	nonsynonymous SNV	NA	unclear
Cells	ZH-734	NF2	S87X	stopgain SNV	NA	relevant
Cells	ZH-734	NOTCH2	6_6del	frameshift deletion	NA	artifact
Tissue	ZH-735	NF2	Y61X	stopgain SNV	NA	relevant
Tissue	ZH-735	NF2	NA	nonframeshift substitution c.183_186AGCA	NA	relevant

Cells	ZH-739	RET	T338I	nonsynonymous SNV	NA	unclear
Cells	ZH-739	TRAF7	N520S	nonsynonymous SNV	NA	potentially relevant
Cells	ZH-739	NOTCH1	NA	nonframeshift substitution c.5094_5103TGTGCCGCG	NA	artifact

All detected variants in samples analyzed by panel sequencing. Sample type, ID within this study, amino acid change, and type of alteration are stated. If available, the rs number from the SNP138 database is provided. Interpretation of relevance is based on (a) SNP138 and ClinVar entries if available, (b) established relevance of the gene in meningioma, (c) configuration of the variant (e.g. protein sequence disruption is rather categorized as potentially relevant than single base exchanges). Frequent calling artifacts are also annotated.