

Patient	Tumor Location	Pathology	Tumor Status	Gender	Age	Key Mutations
GBM1	Lt temporal	GBM	Recurrent	M	59	
GBM2	Lt parietal	GBM	Recurrent	M	68	
GBM3	Rt occipital	GBM	New	M	67	CDKN Tert
GBM4	Lt parietal	GBM	secondary	M	38	
GBM5	Lt temporal	GBM	New	M	51	
GBM6	Lt frontal	Gliosarcoma	New	M	73	
GBM7	Lt parietal	GBM	Recurrent	M	51	EGFRviii amp tert PTEN CDKN2
GBM8	Rt parietal	GBM	Recurrent	M	29	
GBM9	Rt parietal	GBM	New	M	66	
GBM10	Lt occipital	GBM	New	M	79	
GBM11	Rt frontal	GBM	Recurrent	M	63	
GBM12	Lt frontal	GBM	Recurrent	M	75	
GBM13	Rt parietal	GBM	New	F	64	PIK3CA p53 Tert
GBM14	Rt temporal	GBM	New	M	29	EGFR amp CDKN2 Tert PIK3R2
GBM15	Rt parietal	GBM	Recurrent	M	29	
GBM16	Lt parietal		New	M	49	
GBM17	Lt occipital	GBM	New	M	79	
GBM18	Left frontal	GBM	Recurrent	F	43	
GBM19	Left temporal	GBM	New	F	83	
GBM20	Right temporal	GBM	New	F	45	
GBM21	Lt frontal	GBM	New	M	61	PTEN del CDKN2A/B EGFR amp PDGFRA amp
GBM 22	Lt temporal	GBM	Recurrent	F	58	p53 egfr cdkn2a
GBM 23	Lt frontal	GBM	Recurrent	M	30	idh1 p53 MycN
GBM 24	Lt frontal	AO	Recurrent	M	46	fgfr2 idh1 kit p53
GBM 25	Lt frontal	GBM	Recurrent	F	69	egfr amp
GBM 26	Lt temporal	GBM	New	M	67	egfr amp CDK4 PTEN Tert
GBM 30	Rt occipital	GBM	New	M	80	egfr amp p53 cdk4 tert
GBM 31	Rt frontal	GBM	New	M	48	egfrviii
GBM 32	Rt frontal	GBM	Recurrent	M	50	egfrviii, PTEN del, NF1, Tert
GBM 33	Lt parietal	GBM	New	M	71	egfr
GBM 34	Lt parietal	GBM	Recurrent	M	73	egfr, PIK3CA, ERBB2
GBM 35	Lt parietal	GBM	New	M	54	egfrviii
GBM 36	Lt parietal	GBM	Recurrent	M	55	egfr amp, PTEN del, Tert, Egfrviii del
GBM 37	Lt occipital	GBM	New	F	56	egfr amp,
GBM 38	Lt occipital	GBM	Recurrent	F	57	OIK3CA, EGFR amp, EGFR, PTEN, p53
GBM 39	Rt temporal	GBM	Recurrent	M	69	Tert p53 PIK3R1
GBM 40	Rt temporal	GBM	Recurrent	M	31	NA

Table S2. Key mutations in tumor samples used in the manuscript, except for scRNA samples. Shaded cells highlight matching new and recurrent tumors. Data based on targeted sequencing.