

Supplementary Table 1. Patient Characteristics for Discovery Cohort 1. Tumor volume calculated by taking three measurements and using the following formula: $4\pi/3 * R1 * R2 * R3$. GBM = Glioblastoma, WT= Wildtype, N/A = Not Available, M=Male, F=Female

Study ID	Age	Sex	WHO Grade	Diagnosis	IDH1 status	Location	Volume (cm ³)	Contrast Enhancement	Duration (weeks)	Recurrent	TERT Status (MGH)	TERT Status by ddPCR (Tissue)	Copies/20 μ L of TERT Mutant from Tumor Tissue ddPCR	Copies/mL of TERT Mutant from ddPCR of Matched Plasma	Copies/mL of TERT WT from ddPCR of Matched Plasma
MGH-19046	24	M	III	Recurrent Oligodendroglioma	IDH1 R132H	L frontal	3.015929	YES	N/A	YES	C228T	C228T	1720	10.25	2941.25
BC-18037	67	M	IV	GBM	WT	R frontotemporal	696.5372	YES	4	NO	C250T	C250T	303	7.25	2598.75
BC-18040	48	F	IV	GBM	WT	R frontal	217.7752	YES	4	NO	C250T	C250T	522	19.375	2473.75
MGH-19061	61	M	IV	GBM	WT	L temporal	265.8541	YES	8	NO	C228T	C228T	3103	17.75	4750
MGH-18061	49	M	III	Anaplastic Astrocytoma	IDH1 R132S	R mesial temporal	327.6807	NO	4	NO	C228T	C228T	3120	11.125	508.75
BC-17013	57	M	N/A	GBM	WT	R temporal	32.75634	YES	N/A	YES	C228T	C228T	431	30.5	3448.75
MGH-18116	29	F	II	Oligodendroglioma	IDH1 R132H	R frontal	14.70265	NO	7	NO	C228T	C228T	1035	14.125	222.5
MGH-18099	46	F	N/A	Recurrent Oligodendroglioma	IDH1 R132H	L temporal	424.869	NO	N/A	YES	C250T	C250T	1682	8.875	427.5
MGH-19006	71	M	IV	GBM	WT	L anterior temporal	267.7475	YES	4	NO	Unknown	C228T	2416	10.375	547.5
MGH-19059	77	M	IV	Diffuse Astrocytoma	WT	L temporal/occipital	N/A	N/A	4	NO	C228T	C228T	3260	8.875	78.75
MGH-19038	54	F	IV	GBM	WT	R temporoparietal	23.49911	YES	3	NO	C228T	C228T	3630	7	2548.75
MGH-18086	38	F	II	Oligodendroglioma	IDH1 R132H	R frontoparietal	696.6796	YES	3	NO	C250T	C250T	1593	9.125	600
BC-18022	46	F	IV	GBM	WT	R frontoparietal	387.4631	YES	4	NO	C250T	C250T	653	15.85714	2057.143
BC-17045	47	F	IV	GBM	IDH1 R132C	R temporal	377.3681	YES	6	NO	C250T	C250T	104	14.85714	2350
MGH-18092	63	M	IV	GBM	WT	L temporo-parietal	61.92707	YES	4	NO	C250T	C250T	441	15.75	475
MGH-18078	52	M	IV	GBM	WT	L frontal	686.8276	YES	3	NO	Unknown	C228T	1826	14.75	588.75
MGH-18133	74	F	IV	GBM	WT	L temporal	16.9646	YES	6	NO	C228T	C228T	1229	8.625	1818.75
MGH-19030	41	M	IV	GBM	WT	R temporal	360.215	YES	3	NO	C228T	C228T	880	6.25	943.75
MGH-18113	82	M	IV	GBM	WT	R parietal	99.42512	YES	1	NO	C228T	C228T	415	14.375	1426.25
MGH-19050	50	M	IV	GBM	WT	R occipital	96.20813	YES	8	NO	C228T	C228T	2218	2.875	917.5
MGH-18104	74	F	IV	Residual GBM	WT	L anterior temporal	23.12212	YES	N/A	NO	C228T	C250T	391	7.375	1602.5
MGH-19065	30	M	III	Anaplastic Astrocytoma	IDH1 R132G	R posterior	136.1692	NO	8	NO	WT	WT	2.3	8.428572	870.0001
MGH-19015	64	F	N/A	Recurrent/Residual GBM	IDH1 R132H	R frontal, multifocal	8.385958	YES	N/A	YES	WT	WT	0	5.285715	2287.143
MGH-18060	43	M	IV	GBM	IDH1 R132H	L frontal	458.5804	YES	13	NO	WT	WT	0	6.428572	2851.429
MGH-19019	39	M	II	Diffuse Astrocytoma	IDH1 R132H	L parietal	291.5398	YES	24	NO	WT	WT	1.8	7	2021.429
C2019-027	30	F	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	WT	N/A	N/A	7.625	7075
C2019-014	24	F	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	WT	N/A	N/A	8.375	1121.25
C2019-024	25	F	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	WT	N/A	N/A	4.875	542.5
C2019-004	24	M	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	WT	N/A	N/A	0.75	731.25
C2019-026	33	M	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	WT	N/A	N/A	1	1308.75
C2019-017	43	M	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	WT	N/A	N/A	4.625	1707.5
C2019-015	56	F	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	WT	N/A	N/A	0	1890
C2019-011	86	M	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	WT	N/A	N/A	0	1030
C2019-007	77	F	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	WT	N/A	N/A	8	1400
C2019-018	29	F	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	WT	N/A	N/A	8	551.25