

**Table S1. Glioma patients' characteristics in TCGA and GSE16011.**

Clinical characteristics		TCGA		GSE16011	
		No. of patients	Percentage (%)	No. of patients	Percentage (%)
<b>Age (year)</b>		9-89 (Median 52)		11-81 (Median 51)	
<b>Sex</b>	Male	651	58.4	184	66.7
	Female	460	41.3	92	33.3
	Missing	3	0.270	0	0
<b>Vital status</b>	Alive	570	51.2	24	8.70
	Dead	539	48.4	240	87.0
	Missing	5	0.450	12	4.30
<b>WHO grade</b>	G1			8	2.90
	G2	249	22.4	24	8.70
	G3	265	23.8	85	30.8
	G4	596	53.5	159	57.6
	Missing	4	3.60	0	0
<b>Histology</b>	Pilocytic astrocytoma			8	2.90
	Astrocytoma	194	17.4	29	10.5
	Oligodendroglioma	191	17.2	52	18.8
	Oligoastrocytoma	130	11.7	28	10.1
	Glioblastoma	596	53.5	159	57.6
	Missing	3	0.270	0	0
<b>KPS</b>	<80	151	13.6	82	29.7
	≥80	584	52.4	183	66.3
	Missing	379	34.0	11	3.99
<b>Tumor status</b>	Tumor free	209	18.8		
	With tumor	783	70.3		
	Missing	122	10.95		
<b>IDH1 mutation</b>	Yes	91	8.17	83	30.1
	No	34	3.05	143	51.8
	Missing	989	88.8	50	18.1
<b>Family history of cancer</b>	Yes	132	11.9		
	No	210	18.85		

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	Missing	772	69.30
<b>Ethnicity</b>	Hispanic or Latino	45	4.04
	Not Hispanic or Latino	939	84.29
	Missing	130	11.67

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