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Supporting Information

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ASCL2 Maintains Stemness Phenotype through ATG9B and Sensitizes Gliomas to Autophagy Inhibitor

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The file includes:

Figure S1. ATG9B is correlated with poor prognosis in gliomas.

Figure S2. Knock-down of ATG9B inhibits autophagy flux in gliomas.

Figure S3. The mRNA expression of genomic neighborhood of *ATG9B* was not consistent and ASCL2 overexpression activates autophagy.

Figure S4. Enforced expression of ASCL2 improves stemness phenotype.

Figure S5. ATG9B is indispensable for ASCL2-mediated in glioma stem cell and ASCL2 is regulated by CTNNB1 in gliomas.

Figure S6. ASCL2 is correlated with poor prognosis in gliomas.

Figure S7. ROC-325 inhibits proliferation of intracranial xenografts and has no severe systemic side effects.

Figure S8. ROC-325 sensitizes glioma cells to TMZ.

Table S1. The clinicopathologic mutational and survival information of patients with glioma in southwest (SW) hospital.

Table S2. The clinicopathologic mutational and survival information of patients with glioma in TCGA dataset.

Table S3. Univariate and multivariable Cox regression analyses of factors associated with overall survival in glioma patients(n=610).

Table S4. The clinicopathologic information of patients whose samples were used in figure S6.

Table S5. The primers of indicated genes.

Table S6. Primary antibodies information list.

Table S7. Second antibodies information list.

Table S8: The clinicopathologic information of primary glioma cells.

Table S9. The primer of 3 predicted binding region of ATG9B.

Figure S1

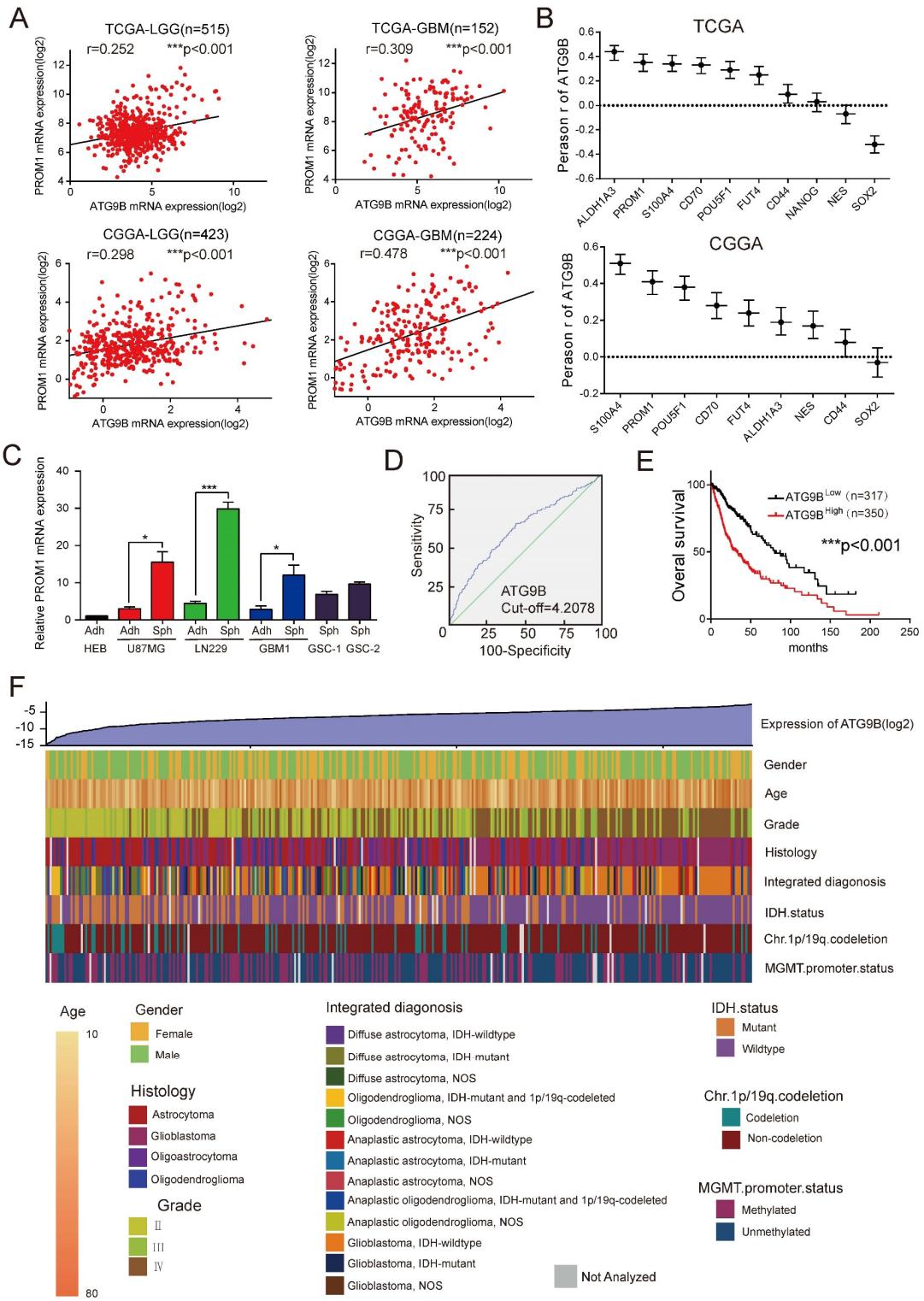


Figure S1. ATG9B is correlated with poor prognosis in gliomas. (A) Correlation analysis of the expression of ATG9B and stemness-related genes in the TCGA

(n=669) and CGGA(n=649) LGGGBM dataset, Pearson's r test. (B) Correlation analysis of the expression of ATG9B and PROM1 in the TCGA LGG(n=515)/GBM(n=152) and CGGA LGG(n=423)/GBM(n=224) datasets. Pearson's r test. (C) The mRNA expression of PROM1 in adherent cells/tumorspheres of 2 glioma cell lines (U87MG, LN229) and 1 primary glioma cell line (GBM1). HEB cell line as negative control and primary glioma stem cells as positive control (GSC-1 and GSC-2). (D, E) ROC analysis (D) and Kaplan-Meier survival analysis (E) were performed in patients with glioma in the TCGA database according to ATG9B mRNA expression. n=667, log-rank test. (F) Heatmap showing the distribution of clinical features and genetic characteristics in glioma specimens from Southwest Hospital. n=338.

Figure S2

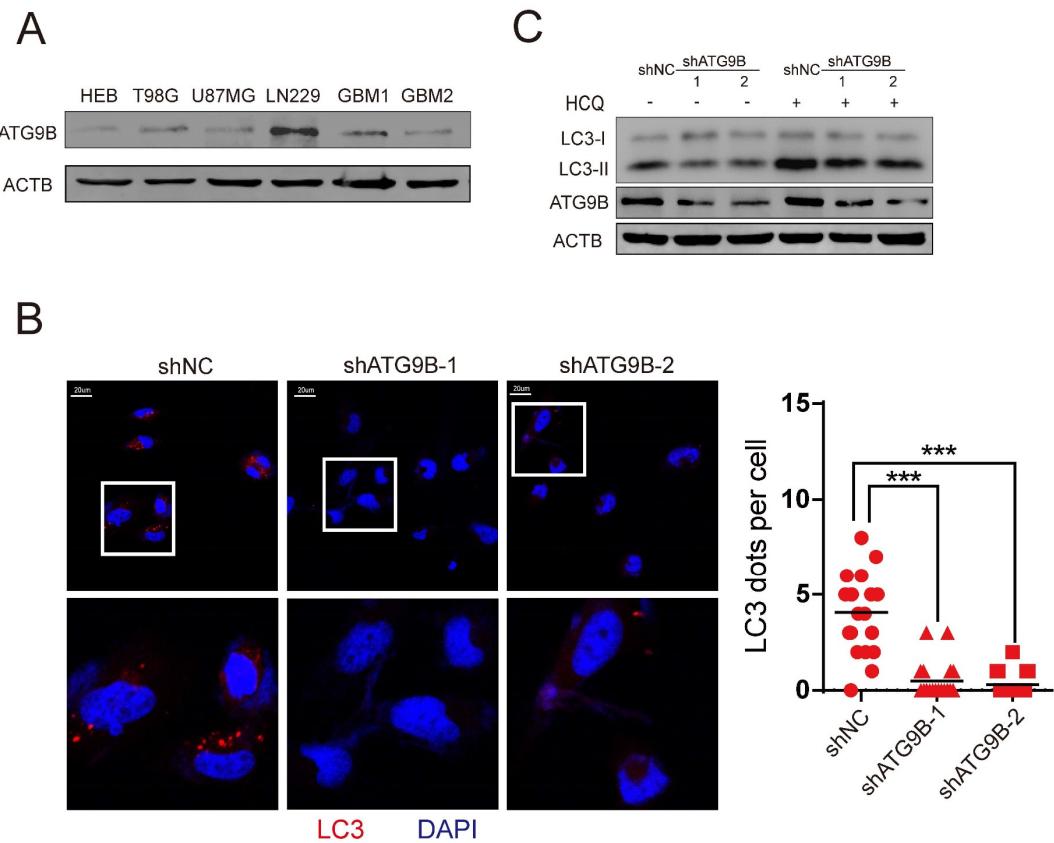


Figure S2. Knock-down of ATG9B inhibits autophagy flux in gliomas. (A) The expression of ATG9B was detected in glial cells, glioma cell lines and primary glioma cells. (B) Representative images of LC3 staining in LN229 cells expressing shNC/shATG9-1/shATG9B-2, with a magnified image (left panel). LC3 dots per cell were quantified (right panel). The scale bar represents 20 μm. Data are shown as scatter plots and means. n=20. (C) With or without hydroxychloroquine (HCQ, 10 μM) treatment, LC3-II accumulation was measured in LN229 cells expressing shNC/shATG9-1/shATG9B-2. ***P<0.001.

Figure S3

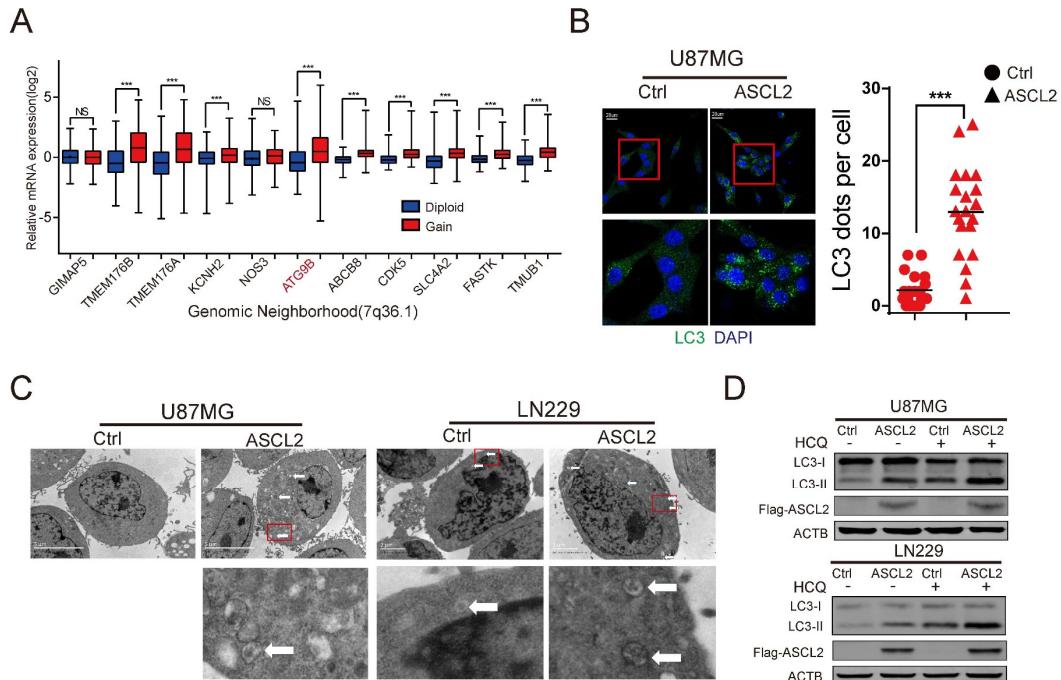


Figure S3. The mRNA expression of genomic neighborhood of *ATG9B* was not consistent and ASCL2 overexpression activates autophagy. (A) mRNA expression of the indicated genes in the indicated gene gain/diploid groups. The patients were from TCGA LGGGBM dataset. The genes were in the Genomic Neighborhood of *ATG9B*, which was located on 7q36.1. (B) Representative images of LC3 staining in U87MG cells overexpressing Ctrl/ASCL2, with magnified images (left panel). The number of LC3 dots per cell was quantified (right panel). Data are shown as scatter plots and means. n=20. (C) Representative electron micrographs of autophagic vesicles or autophagosomes of U87MG/LN229 cells overexpressing Ctrl/ASCL2. Arrows denote autophagosomes. Magnified images are shown. (D) With or without

hydroxychloroquine (HCQ, 10 μ M), LC3-II accumulation was measured in U87MG/LN229 cells overexpressing Ctrl/ASCL2. **P<0.01, ***P<0.001.

Figure S4

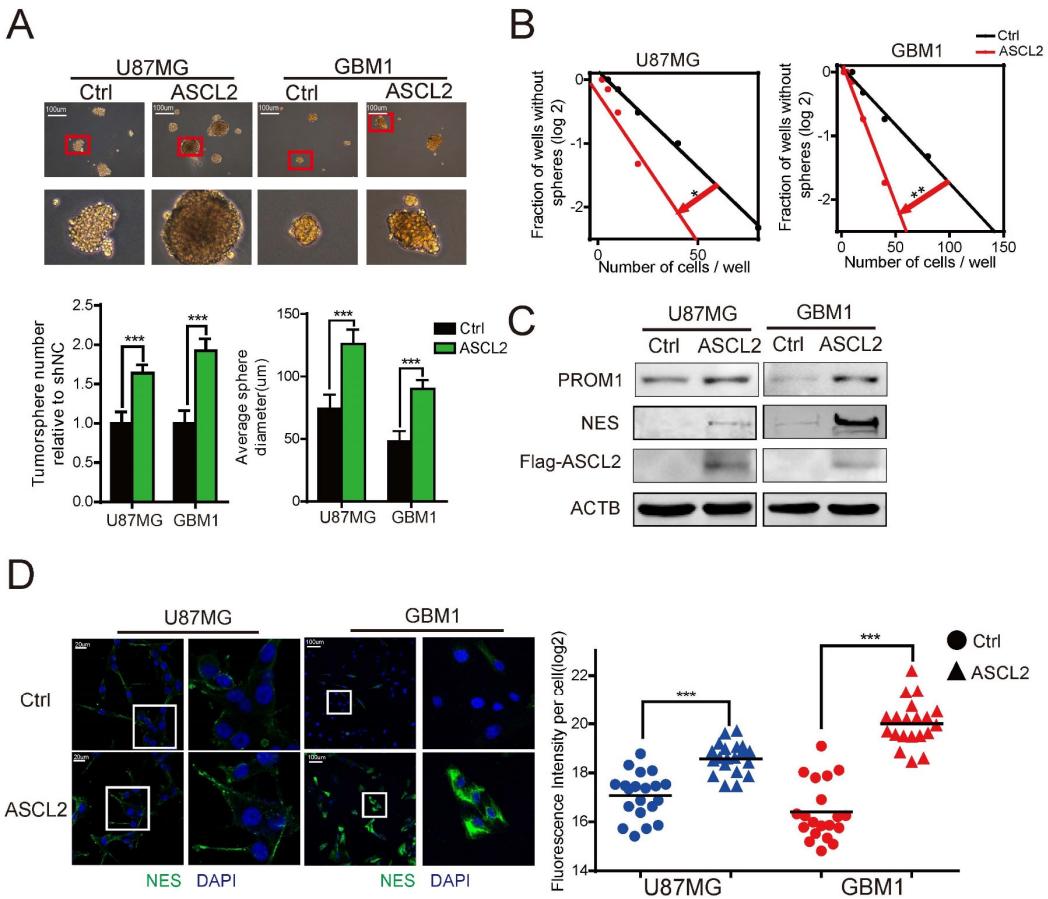


Figure S4. Enforced expression of ASCL2 improves stemness phenotype. (A) Representative images of tumorspheres in U87MG/GBM1 cells overexpressing Ctrl/ASCL2, with a magnified image (upper panel). The numbers and diameters of tumorspheres were quantified (lower panel). The data were collected on the 7th day after cell placement. (B) In vitro limiting dilution assay of U87MG/GBM1 cells overexpressing Ctrl/ASCL2. The data were collected on the 7th day after cell placement. (C) Protein level of PROM1/NES in U87MG/LN229 cells overexpressing Ctrl/ASCL2. (D) Representative images of NES staining and magnified images of the indicated cells overexpressing Ctrl/ASCL2 are shown (left panel). Fluorescence intensity per cell was

quantified (right panel). The scale bar is as shown. Data are shown as scatter plots and means. n=20. *P<0.05, **P<0.01, ***P<0.001.

Figure S5

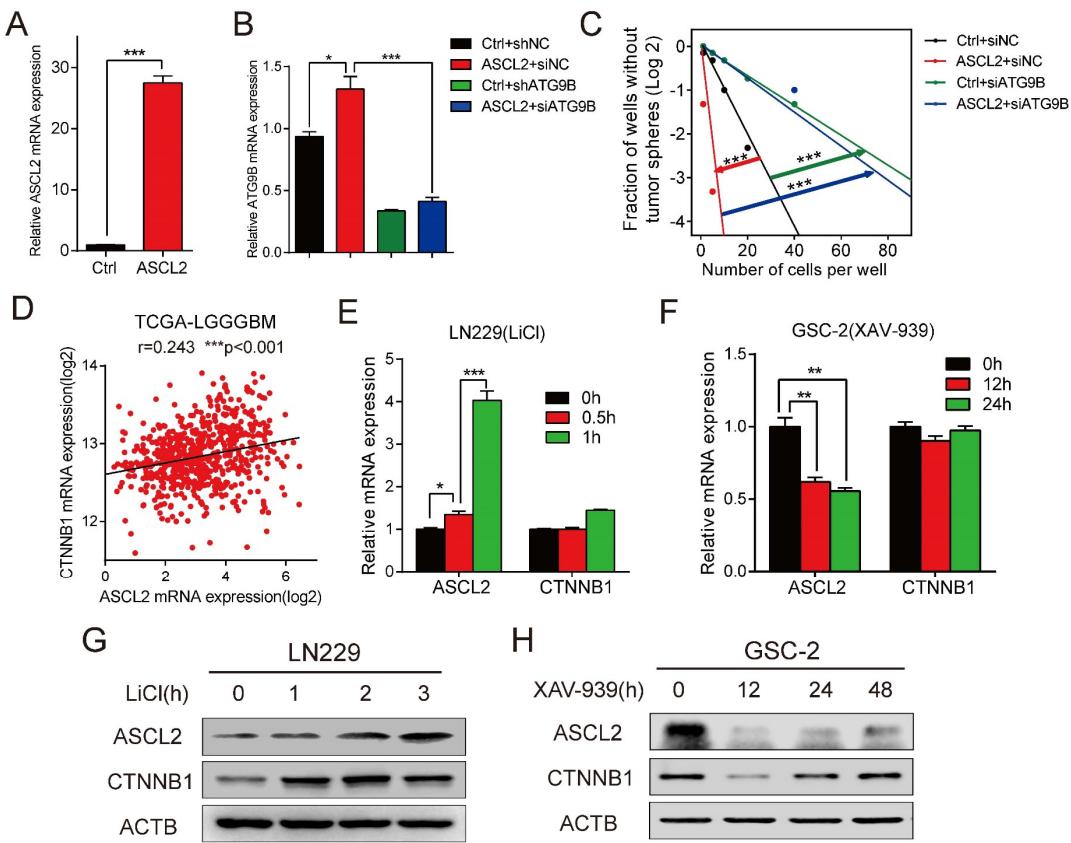


Figure S5. ATG9B is indispensable for ASCL2-mediated in glioma stem cell and ASCL2 is regulated by CTNNB1 in gliomas. (A) mRNA expression of ASCL2 in GSC-1 cells overexpressing Ctrl/ASCL2. (B) mRNA expression of ATG9B in GSC-1 cells expressing Ctrl/ASCL2 and siNC/siATG9B. (C) Limiting dilution assay was performed in GSC-1 cells expressing Ctrl/ASCL2 and siNC/siATG9B. (D) Correlation analysis of the expression of ASCL2 and CTNNB1 in the TCGA LGGGBM dataset (n=669). Pearson's r test. (E, F) mRNA expression of ASCL2 in LN229 cells treated with LiCl (activator of canonical wnt/β-catenin signaling, 20 mM) and GSC-1 cells treated with XAV-939 (inhibitor of canonical wnt/β-catenin signaling, 1 μM) for indicated times. (G, H) ASCL2 expression were detected by immunoblotting in LN229

cells treated with LiCl (20 mM) and GSC-1 cells treated with XAV-939 (1 μ M) for indicated times.

Figure S6

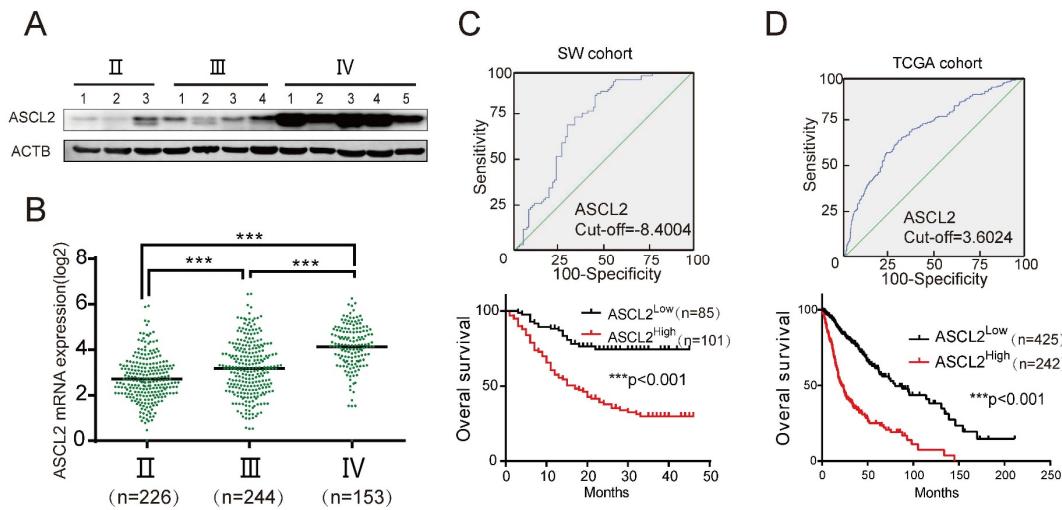


Figure S6. ASCL2 is correlated with poor prognosis in gliomas. (A) ASCL2 expression was measured by immunoblotting in glioma samples of different grades. **(B)** The ASCL2 mRNA expression of the TCGA cohort was summarized with different grades (n=623). **(C, D)** ROC analysis (upper panel) and Kaplan–Meier survival analysis (lower panel) were performed on data from glioma patients according to ATG9B protein expression in the SW cohort and ATG9B mRNA expression in the TCGA cohort.

Figure S7

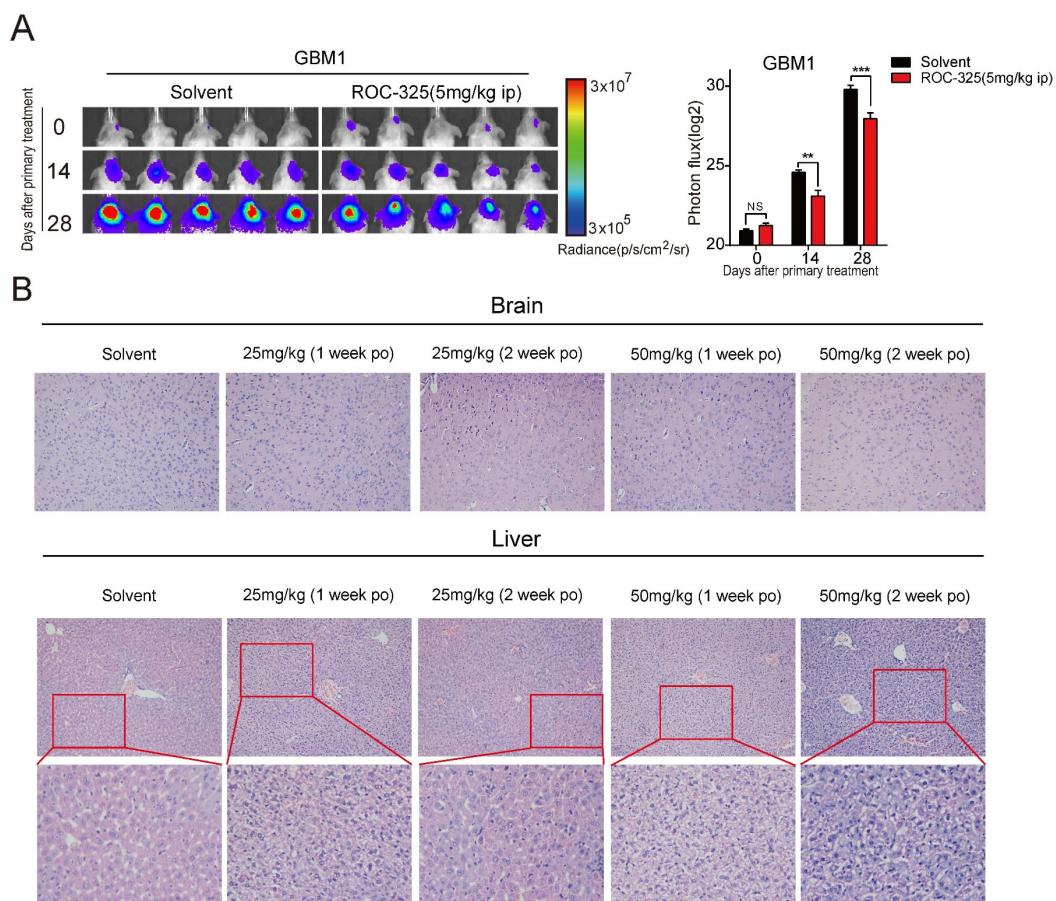


Figure S7. ROC-325 inhibits proliferation of intracranial xenografts and has no severe systemic side effects. (A) Representative bioluminescence images and quantification of intracranial xenografts derived from GBM1 cells treated with solvent/ROC-325 (5 mg/kg, 5 days a week, ip). n=10. **(B)** HE staining of brain and liver tissues from C57BL/6 mice treated with solvent/ROC-325 in Figure 6K.

Figure S8

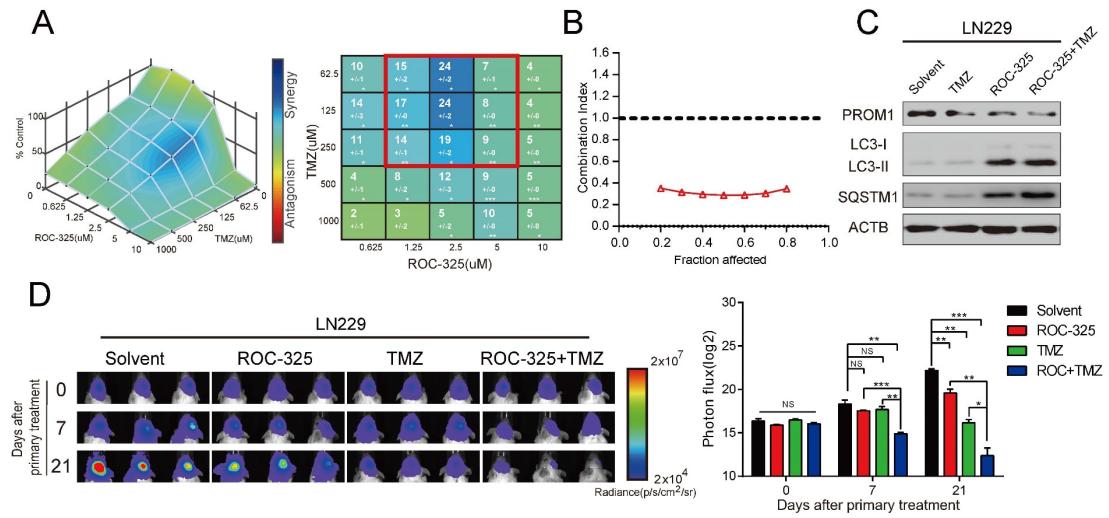


Figure S8. ROC-325 sensitizes glioma cells to TMZ. (A) Synergy surface plots in LN229 cells show increase in synergy between ROC-325 and TMZ (n=3). The data in red box was analyzed in panel B. (B) The interaction between ROC-325 and TMZ on cell killing was examined by the median-effect method of Chou–Talalay. Data are plotted as Fraction affected versus Combination Index (CI). CI < 1 represent synergistic interactions. (C) The expression of indicated molecules were detected with immunoblotting in LN229 cells treated with ROC-325(2.5 μM) and/or TMZ (250 μM) for 48 hr. (D) Bioluminescence images of intracranial xenografts derived from LN229 cells treated with ROC-325(5 mg/kg, 5 days a week, ip) and/or TMZ (5 mg/kg, 5 days a week, ip). n=3. Bioluminescence quantification of the intracranial xenografts in right panel.

Supplementary Table 1: the clinicopathologic mutational and survival information of patients with glioma in southwest hospital

Case ID	Gender	Age	Position	ASCL2 IOD(log2)	ATG9B IOD(log2)	Histology	WHO grade	Integrated Diagnosis	IDH1 mutant	1p/19q codeletion	MGMT Methylation
1	Male	43	left frontotemporal lobe and basal gan	-12.35362775	-6.902785852	Oligodendrogioma	II	Oligodendrogioma, NOS	-	+	+
2	Male	34	Right parietal occipital lobe	-4.957338236	-4.796658369	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	-
3	Female	48	Right parietal occipital lobe	-7.820569138	-6.247068283	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	+
4	Male	35	Left cerebellum	-9.768927093	-8.56627174	Astrocytoma	II	Diffuse astrocytoma, IDH-mutant	+	-	+
5	Female	67	Left frontal lobe	-7.642458157	-5.367938033	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	+
6	Male	27	Left temporal lobe	-6.655160584	-7.930201665	Glioblastoma	IV	Glioblastoma, IDH-mutant	+	-	-
7	Female	63	Right frontal lobe	-8.707785712	-5.258620279	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	+
8	Male	62	Left frontal lobe	-8.361343406	-8.312301377	Oligoastrocytoma	III	Anaplastic astrocytoma, IDH-wildtype	-	-	+
9	Male	32	Left frontal lobe	-9.945639774	-7.611406698	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	+
10	Male	63	Right frontal lobe	-7.05554787	-4.651154066	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	-
11	Male	29	Left frontal lobe	-11.240463435	-10.98673321	Astrocytoma	II	Diffuse astrocytoma, IDH-mutant	+	-	-
12	Male	63	Right temporal occipital lobe	-8.015055899	-5.955869129	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	+
13	Male	52	frontotemporal lobe and corpus callo	-6.501780954	-6.660809728	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	+
14	Female	48	Right fronto parietal lobe	-10.41700183	-6.32908042	Astrocytoma	II	Diffuse astrocytoma, IDH-mutant	+	-	-
15	Female	54	Right temporal occipital lobe	-3.900225745	-2.906708827	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	+
16	Male	35	Left frontal lobe	-8.630007798	-8.32366402	Astrocytoma	II	Diffuse astrocytoma, IDH-wildtype	-	-	-
17	Male	44	Right frontal lobe	-9.236180674	-7.046914449	Astrocytoma	III	Anaplastic astrocytoma, IDH-mutant	+	-	+
18	Female	20	Left temporal occipital lobe	-10.16684872	-8.967804975	Astrocytoma	III	Anaplastic astrocytoma, IDH-wildtype	-	-	-
19	Female	44	Right fronto parietal lobe	-7.700197215	-5.498471421	Oligodendrogioma	III	ligodendrogioma, IDH-mutant and 1p/19q	+	+	+
20	Female	74	Right frontal lobe	-8.444382694	-6.850382569	Oligodendrogioma	III	Anaplastic oligodendrogioma, NOS	-	-	+
21	Male	32	Left frontal lobe	-12.08103591	-10.03476621	Astrocytoma	II	Diffuse astrocytoma, IDH-mutant	+	-	+
22	Male	27	Left frontotemporal lobe	-10.48910032	-9.273680983	Oligoastrocytoma	II	ondrogioma, IDH-mutant and 1p/19q-cc	+	+	+
23	Male	55	Left temporal parietal occipital lobe	-8.046433295	-7.304065996	NA	II	NA	-	-	+
24	Male	50	Left frontal lobe	-9.692027604	-9.18165328	Oligodendrogioma	II	ondrogioma, IDH-mutant and 1p/19q-cc	+	+	+
25	Male	62	Right temporal parietal occipital lobe	-5.366973082	-4.689801636	Glioblastoma	IV	ondrogioma, IDH-mutant and 1p/19q-cc	-	-	+
26	Male	29	Left frontal lobe	-10.29711597	-7.509506074	Oligoastrocytoma	II	ondrogioma, IDH-mutant and 1p/19q-cc	+	+	-
27	Male	42	Left parietal occipital lobe	-6.744032456	-8.372976158	Oligodendrogioma	III	igodendrogioma, IDH-mutant and 1p/19q-cc	+	+	+
28	Male	30	Right temporal occipital lobe	-6.930050677	-6.75928257	Astrocytoma	III	Anaplastic astrocytoma, IDH-mutant	+	-	+
29	Female	59	Right parietal occipital lobe	-8.772138545	-8.545767977	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	+
30	Male	67	Left parietal occipital lobe	-8.620673577	-5.354088054	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	+
31	Male	19	Cerebellum	-8.977493348	-10.35431519	Astrocytoma	II	Diffuse astrocytoma, IDH-wildtype	-	-	NA
32	Female	67	Right parietal lobe	-6.534340526	-5.074152561	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	+
33	Male	55	Left temporal occipital lobe	-6.895053252	-6.005751566	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	-
34	Female	35	Left frontal lobe	-7.727545613	-5.610242432	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	+
35	Male	40	Right frontal lobe	-7.524556404	-5.405603204	Astrocytoma	III	Anaplastic astrocytoma, IDH-mutant	+	-	-
36	Male	35	Right parietal lobe	-7.248627939	-4.913606734	Glioblastoma	IV	Glioblastoma, IDH-mutant	+	+	+
37	Male	52	Right frontal lobe	-6.327205412	-4.662110532	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	+
38	Female	43	Right frontal lobe	-9.777397144	-7.331837064	Astrocytoma	III	Anaplastic astrocytoma, IDH-wildtype	-	-	+
39	Male	46	Right temporal lobe	-7.710219342	-5.279090332	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	-
40	Female	42	Left frontal lobe	-7.13947988	-7.041843129	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	-
41	Male	42	Right frontal lobe	-12.86845341	-9.220383599	Astrocytoma	II	Diffuse astrocytoma, IDH-mutant	+	-	-
42	Female	51	Left fronto parietal lobe	-7.766621227	-6.517300276	Glioblastoma	IV	Glioblastoma, IDH-mutant	+	+	+
43	Male	39	Right frontal lobe and corpus callosun	-7.677691362	-9.270896976	Astrocytoma	III	Anaplastic astrocytoma, IDH-mutant	+	-	-
44	Female	28	Left parietal lobe	-7.802288849	-7.598783885	Glioblastoma	IV	Glioblastoma, IDH-mutant	+	-	+
45	Female	30	Midbrain	-13.31660123	-6.583270633	Astrocytoma	II	Diffuse astrocytoma, IDH-wildtype	-	-	-
46	Female	51	Cervical spinal cord	-6.852453484	-6.021278483	Oligoastrocytoma	III	Anaplastic astrocytoma, IDH-wildtype	-	-	-
47	Female	31	Left temporal lobe	-9.358865469	-5.077760543	Astrocytoma	II	Diffuse astrocytoma, IDH-wildtype	-	-	-
48	Female	52	Right parietal occipital lobe	-6.64528337	-5.699040935	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	-
49	Male	19	Right temporal lobe	-7.964361888	-9.06242179	Astrocytoma	II	Diffuse astrocytoma, IDH-wildtype	-	-	-
50	Male	54	Right temporal lobe	-7.021865895	-4.577312721	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	+
51	Male	54	Right temporal occipital lobe	-8.095607314	-8.696705854	Astrocytoma	III	Anaplastic astrocytoma, IDH-mutant	+	-	-
52	Male	64	Right parietal occipital lobe	-7.341078299	-6.891369458	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	+	-
53	Female	29	Left temporal lobe	-9.576433416	-7.521299381	Astrocytoma	II	Diffuse astrocytoma, IDH-wildtype	-	-	-
54	Female	36	Right frontal lobe	-9.425335782	-7.288239196	Astrocytoma	II	Diffuse astrocytoma, IDH-wildtype	-	-	+
55	Male	44	Right temporal lobe	-9.990621369	-8.157691176	Astrocytoma	II	Diffuse astrocytoma, IDH-mutant	+	-	+
56	Male	19	Right cerebellum	-8.860548983	-6.432392231	Astrocytoma	III	Anaplastic astrocytoma, IDH-wildtype	-	-	NA
57	Female	42	Left frontal lobe	-8.68762744	-6.380733742	Oligodendrogioma	II	ondrogioma, IDH-mutant and 1p/19q-cc	+	+	+
58	Male	45	Left frontal lobe and corpus callosum	-7.621641232	-7.947342725	Oligoastrocytoma	III	igodendrogioma, IDH-mutant and 1p/19q-cc	+	+	+
59	Male	45	lateral frontal lobe and corpus calloso	-9.413952956	-6.592307288	Astrocytoma	II	Diffuse astrocytoma, IDH-mutant	+	-	+
60	Female	32	Left temporal lobe	-6.746221913	-4.689065893	Astrocytoma	III	Anaplastic astrocytoma, IDH-mutant	+	-	+
61	Female	55	Right parietal lobe	-7.436672626	-3.882858866	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	-
62	Male	69	Right frontal lobe	-8.19712877	-5.479915283	Astrocytoma	III	Anaplastic astrocytoma, IDH-wildtype	-	-	-
63	Female	52	Right frontal lobe	-10.2692986	-6.161564214	NA	IV	Glioblastoma, IDH-mutant	+	-	+
64	Male	26	Left parietal lobe	-9.062441849	-8.868611244	Astrocytoma	II	Diffuse astrocytoma, IDH-mutant	+	-	-
65	Female	40	Left frontotemporal parietal lobe	-11.67631696	-6.981441983	Oligodendrogioma	III	igodendrogioma, IDH-mutant and 1p/19q-cc	+	+	+

66	Male	37	Left frontal lobe	-8.591174606	-5.231567985	Glioblastoma	IV	Glioblastoma, IDH-mutant	+	-	-
67	Female	24	Right frontal lobe	-8.470814971	-6.630602491	Oligoastrocytoma	II	Endoglioma, IDH-mutant and 1p/19q-cc	+	+	NA
68	Male	47	lateral frontal lobe and corpus callosum	-6.334959363	-6.222553312	Astrocytoma	III	Anaplastic astrocytoma, IDH-mutant	+	-	+
69	Male	52	Left frontal lobe	-7.573550335	-6.329436404	Oligodendrogioma	III	Oligodendrogioma, IDH-mutant and 1p/1	+	+	+
70	Male	49	Left temporal lobe	-8.512846186	-5.160093167	Astrocytoma	III	Anaplastic astrocytoma, IDH-mutant	+	-	+
71	Male	67	Right frontal lobe	-8.804115713	-6.517369014	Glioblastoma	IV	Glioblastoma, IDH-mutant	+	-	-
72	Female	46	Left temporal occipital lobe	-9.856856462	-6.719318939	Astrocytoma	II	Diffuse astrocytoma, IDH-wildtype	-	-	+
73	Female	49	Right parietal lobe	-7.30100386	-5.655987061	Astrocytoma	III	Anaplastic astrocytoma, IDH-mutant	+	-	+
74	Male	48	lateral corpus callosum and lateral vent	-8.497699893	-4.352232391	Astrocytoma	III	Anaplastic astrocytoma, IDH-mutant	+	-	+
75	Male	64	Right frontotemporal lobe	-7.5854128	-5.835664514	Oligodendrogioma	III	Oligodendrogioma, IDH-mutant and 1p/1	+	+	+
76	Female	62	Left frontal lobe	-9.711587116	-6.573439563	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	+
77	Male	10	Left frontal lobe	-7.315716324	-7.178557349	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	+
78	Male	31	Left parietal occipital lobe	-7.537867683	-5.865425115	Astrocytoma	III	Anaplastic astrocytoma, IDH-wildtype	-	-	-
79	Male	27	Right frontal lobe	-8.238377126	-9.2622775	Astrocytoma	II	Diffuse astrocytoma, IDH-wildtype	-	-	+
80	Male	35	Left frontotemporal lobe	-9.125859341	-10.36007309	Astrocytoma	II	Diffuse astrocytoma, IDH-mutant	+	-	+
81	Female	49	Left hippocampus and temporal lobe	-7.896429281	-7.46455892	Astrocytoma	II	Diffuse astrocytoma, IDH-wildtype	-	-	-
82	Male	44	Left ventricle	-6.885395521	-5.467273516	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	+
83	Male	54	Superior cervical spinal cord	-10.07795062	-11.23150455	Astrocytoma	II	Diffuse astrocytoma, IDH-wildtype	-	-	+
84	Female	30	Right parietal lobe	-7.639604797	-6.548476606	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	-
85	Female	22	Right middle cranial fossa	-6.314419842	-5.944414709	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	-
86	Male	48	Left fronto parietal lobe	-8.533175987	-7.711941062	Astrocytoma	III	Anaplastic astrocytoma, IDH-wildtype	-	-	+
87	Male	44	Left frontotemporal lobe	-8.085686432	-6.226478275	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	-
88	Male	27	Brainstem	-6.481255461	-4.452373193	Astrocytoma	II	Diffuse astrocytoma, NOS	NA	-	NA
89	Male	51	Left temporal occipital lobe	-6.942235278	-3.966073609	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	+	+
90	Male	45	Left frontal lobe	-8.076937164	-9.109809081	Oligodendrogioma	III	ligodendrogioma, IDH-mutant and 1p/1	+	+	+
91	Male	30	Right fronto parietal lobe	-9.972377168	-6.25913314	Astrocytoma	III	Anaplastic astrocytoma, IDH-mutant	+	-	+
92	Male	58	Left temporal parietal occipital lobe	-8.191896949	-7.643170504	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	-
93	Male	38	Right temporal parietal lobe	-10.1174159	-6.45254816	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	-
94	Female	39	Right frontal lobe	-11.13039401	-10.15221588	Oligodendrogioma	II	Endoglioma, IDH-mutant and 1p/19q-cc	+	+	+
95	Male	19	Right frontal lobe	-12.331414102	-8.866735941	Astrocytoma	II	Diffuse astrocytoma, IDH-mutant	+	-	-
96	Male	47	Left temporal lobe	-11.0549391	-9.788138048	Astrocytoma	II	Diffuse astrocytoma, IDH-mutant	+	-	-
97	Female	37	Right frontotemporal basal ganglia	-14.2555197	-8.094930117	Oligodendrogioma	II	Endoglioma, IDH-mutant and 1p/19q-cc	+	+	+
98	Female	43	Right temporal lobe	-5.555422241	-5.964947665	Glioblastoma	IV	Glioblastoma, IDH-mutant	+	-	-
99	Male	39	Left frontal lobe	-7.05830551	-4.879815122	Glioblastoma	IV	Glioblastoma, IDH-mutant	+	-	-
100	Female	39	Left fronto parietal lobe	-6.836839193	-6.608767822	Oligoastrocytoma	III	ligodendrogioma, IDH-mutant and 1p/1	+	+	-
101	Female	25	Right temporal lobe	-8.439411726	-6.638299825	Astrocytoma	III	Anaplastic astrocytoma, IDH-wildtype	-	-	-
102	Male	22	Left parietal occipital lobe	-9.49028715	-5.052223983	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	-
103	Male	30	Right fronto parietal lobe	-8.54049744	-9.919461565	Astrocytoma	II	Diffuse astrocytoma, IDH-mutant	+	-	-
104	Female	49	Left frontotemporal lobe	-8.47536129	-5.003175504	Astrocytoma	III	Anaplastic astrocytoma, IDH-wildtype	-	-	-
105	Female	68	Left temporal lobe	-4.977966235	-5.574819468	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	-
106	Female	21	Right fronto parietal lobe	-11.77332006	-7.86033972	Oligodendrogioma	II	Diffuse astrocytoma, IDH-mutant	+	-	-
107	Female	27	Left Island leaf	-7.994271272	-8.361059645	Oligodendrogioma	II	Endoglioma, IDH-mutant and 1p/19q-cc	+	+	-
108	Male	49	Left frontotemporal lobe	-9.150189312	-9.591203545	Astrocytoma	II	Diffuse astrocytoma, IDH-wildtype	-	-	+
109	Female	35	Right parietal lobe	-11.80505519	-6.547563805	Astrocytoma	II	Diffuse astrocytoma, IDH-wildtype	-	-	-
110	Male	41	Right occipital lobe	-7.62314201	-4.531798006	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	-
111	Male	48	Right temporal lobe	-7.348036056	-5.713208113	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	-
112	Female	48	Right cerebellum	-9.698954085	-9.369969171	Astrocytoma	II	Diffuse astrocytoma, IDH-wildtype	-	-	-
113	Female	31	Left frontal lobe	-9.671566561	-8.148357183	Oligoastrocytoma	II	Diffuse astrocytoma, IDH-wildtype	-	-	-
114	Male	56	Right frontal lobe	-7.639627242	-5.280212548	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	-
115	Male	47	Right parietal occipital lobe	-9.222645772	-8.30932289	Astrocytoma	II	Diffuse astrocytoma, IDH-mutant	+	-	-
116	Male	29	temporal lobe, insular lobe and base	-8.12576413	-5.608099707	Oligoastrocytoma	II	Diffuse astrocytoma, IDH-mutant	+	-	+
117	Female	23	Right frontal lobe	-9.310632667	-7.0113531	Oligoastrocytoma	II	Diffuse astrocytoma, IDH-mutant	+	-	+
118	Female	61	Right frontal lobe and corpus callosum	-10.2727559	-7.23528199	Oligodendrogioma	II	Endoglioma, IDH-mutant and 1p/19q-cc	+	+	+
119	Male	51	Left frontal and temporal part	-8.683348619	-5.3857682	Astrocytoma	II	Diffuse astrocytoma, IDH-mutant	+	-	+
120	Male	74	Left temporal lobe	-6.989224049	-3.795009122	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	-
121	Female	19	Right temporal lobe	-7.597976807	-7.229594418	Oligoastrocytoma	II	Diffuse astrocytoma, IDH-wildtype	-	-	-
122	Female	53	frontotemporal lobe and parietooccipit	-8.34650259	-3.44571192	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	+
123	Male	50	Left temporal parietal lobe	-5.126205237	-3.562866956	Glioblastoma	IV	Glioblastoma, IDH-mutant	+	-	+
124	Female	63	Right fronto parietal lobe	-7.420609873	-4.207203302	Astrocytoma	III	Anaplastic astrocytoma, IDH-wildtype	-	-	-
125	Male	23	Left temporal lobe	-12.10893873	-5.666366746	Oligodendrogioma	II	Endoglioma, IDH-mutant and 1p/19q-cc	+	+	-
126	Male	55	ontotemporal lobe and parietooccipit	-7.443396272	-4.073528313	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	-
127	Female	47	Left frontal lobe	-8.886824525	-4.525171371	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	-
128	Male	53	Left parietal occipital lobe	-6.546490249	-4.225431462	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	-
129	Male	18	Left temporal lobe	-10.27523773	-7.970719721	Astrocytoma	II	Diffuse astrocytoma, IDH-wildtype	-	-	+
130	Male	43	Right frontal lobe	-11.3800836	-7.343684289	Astrocytoma	II	Diffuse astrocytoma, IDH-mutant	+	-	-
131	Male	52	Left frontal lobe and corpus callosum	-9.494448748	-6.483002912	Astrocytoma	II	Diffuse astrocytoma, IDH-mutant	+	-	+
132	Male	38	Right temporal occipital lobe	-8.75103509	-3.993161948	Astrocytoma	III	Anaplastic astrocytoma, IDH-mutant	+	-	-

133	Male	52	Right basal ganglia and temporal lobe	-7.316858432	-5.745140856	Glioblastoma	IV	Glioblastoma, IDH-mutant	+	-	-
134	Female	31	Right frontal lobe	-9.024921368	-4.684797286	Astrocytoma	II	Diffuse astrocytoma, IDH-mutant	+	-	-
135	Female	48	Left frontal lobe	-6.934633095	-3.777468658	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	+
136	Female	43	Right frontal lobe	-9.318516397	-8.158741555	Astrocytoma	II	Diffuse astrocytoma, IDH-mutant	+	-	-
137	Male	25	Left parietal lobe	-9.26499874	-6.088923672	Astrocytoma	II	Diffuse astrocytoma, IDH-mutant	+	-	-
138	Male	30	Bilateral frontal lobe	-8.784394443	-7.5856362	Astrocytoma	II	Dendrogioma, IDH-mutant and 1p/19q-cc	+	+	+
139	Male	55	Left frontal lobe	-8.236361698	-3.933505042	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	+
140	Female	35	Left frontal lobe	-8.296360882	-5.787652985	Astrocytoma	II	Diffuse astrocytoma, IDH-mutant	+	-	-
141	Female	49	Right cerebellum and brainstem	-9.479506776	-4.799257214	Astrocytoma	II	Diffuse astrocytoma, NOS	NA	-	-
142	Male	28	Left frontotemporal lobe	-9.000061232	-5.514632347	Oligoastrocytoma	II	Dendrogioma, IDH-mutant and 1p/19q-cc	+	+	+
143	Male	45	Right frontal lobe	-7.866263119	-2.929694717	Oligoastrocytoma	III	Dendrogioma, IDH-mutant and 1p/19q-cc	+	+	+
144	Male	47	Right frontal lobe	-8.735791475	-5.40754318	Oligodendrogioma	III	Dendrogioma, IDH-mutant and 1p/19q-cc	+	+	+
145	Male	46	Right parietal lobe	-6.295194933	-4.300070816	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	-
146	Male	52	Left frontotemporal lobe	-7.017698252	-4.179118639	Glioblastoma	IV	Glioblastoma, IDH-mutant	+	+	+
147	Female	51	NA	-7.639544944	-4.570733634	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	-
148	Male	51	Temporal occipital lobe and temporal par	-7.86188375	-3.786489189	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	-
149	Female	53	Left frontal lobe	-7.197734512	-2.968163124	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	-
150	Female	22	Right frontal lobe	-8.557919283	-5.21221561	Astrocytoma	III	Anaplastic astrocytoma, IDH-wildtype	-	-	+
151	Female	63	Left frontal lobe	-5.088513833	-4.67973619	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	+
152	Female	43	Left parietal lobe	-7.277523607	-8.194092882	Oligodendrogioma	III	NA	NA	+	+
153	Male	58	Left frontal lobe	-8.349461013	-8.527945433	Oligodendrogioma	II	Dendrogioma, IDH-mutant and 1p/19q-cc	+	+	+
154	Female	48	Left temporal and insular lobes	-9.389463995	-11.12770508	Astrocytoma	II	Diffuse astrocytoma, IDH-mutant	+	+	+
155	Male	45	Left frontal lobe	-7.831731591	-8.258710771	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	-
156	Male	42	Right frontal lobe	-12.6823464	-8.763258985	Astrocytoma	II	Diffuse astrocytoma, IDH-mutant	+	-	+
157	Female	15	Right temporal lobe	-7.003412565	-7.085080098	Oligodendrogioma	III	Anaplastic oligodendrogioma, NOS	+	-	-
158	Female	52	Bilateral frontal lobe	-8.105917288	-6.502651625	Astrocytoma	III	Anaplastic astrocytoma, IDH-wildtype	-	-	-
159	Male	45	Right frontal lobe	-5.229122908	-7.279486652	Oligodendrogioma	III	Anaplastic oligodendrogioma, NOS	+	-	+
160	Male	68	Right frontal lobe and corpus callosum	-7.047083139	-6.265639439	Astrocytoma	III	Anaplastic astrocytoma, IDH-wildtype	-	-	+
161	Male	50	Left temporal lobe	-7.407345722	-4.822291932	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	+	-
162	Male	44	Left temporal lobe	-6.750513863	-9.280734602	Astrocytoma	III	Anaplastic astrocytoma, IDH-mutant	+	-	+
163	Female	37	Left temporal lobe	-5.378831021	-5.890632492	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	+
164	Male	41	Left frontal lobe	-7.671459474	-7.463167949	Oligoastrocytoma	II	Dendrogioma, IDH-mutant and 1p/19q-cc	+	+	+
165	Female	36	Left frontal lobe	-6.721831522	-6.874907807	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	-
166	Female	31	Left frontal lobe	-5.976767767	-7.853989092	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	-
167	Male	28	Left frontal lobe	-13.68382685	-9.383763274	Astrocytoma	II	Diffuse astrocytoma, IDH-wildtype	-	-	-
168	Female	38	Right frontal lobe	-9.446724063	-6.011677442	Oligoastrocytoma	II	Dendrogioma, IDH-mutant and 1p/19q-cc	+	+	+
169	Male	66	Left temporal lobe	-8.808836034	-4.140792379	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	-
170	Male	42	Left frontal lobe	-13.11175892	-7.442064692	Astrocytoma	II	Diffuse astrocytoma, IDH-wildtype	+	-	-
171	Male	30	Right temporal lobe	-7.301228709	-5.753759445	Glioblastoma	IV	Glioblastoma, IDH-wildtype	+	-	+
172	Male	53	Occipital lobe	-5.029043807	-4.800037782	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	-
173	Male	49	Left occipital lobe	-6.75029977	-5.233739067	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	-
174	Female	61	Right frontotemporal parietal lobe	-6.032600762	-7.107944679	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	+
175	Male	69	Right frontal lobe	-6.114732831	-3.542920547	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	+
176	Female	28	Left fronto parietal lobe	-6.666065716	-2.980675024	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	-
177	Male	40	Right frontal lobe	-6.342898343	-3.47118732	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	-
178	Female	61	Right parietal lobe	-6.450617307	-2.675680592	Astrocytoma	III	Anaplastic astrocytoma, IDH-wildtype	-	-	-
179	Male	45	NA	-7.429805493	-4.199906258	Oligoastrocytoma	II	Diffuse astrocytoma, IDH-wildtype	-	-	-
180	Male	28	Right frontal lobe	-6.509895811	-3.557626354	NA	III	NA	-	-	-
181	Female	68	Left temporal lobe	-6.527495409	-3.192403776	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	-
182	Male	46	Left temporal lobe	-6.032190652	-4.261391466	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	-
183	Female	36	Right frontal lobe	-6.598620252	-5.855815295	Astrocytoma	II	Diffuse astrocytoma, IDH-wildtype	-	-	-
184	Male	61	Right frontal lobe	-6.903522317	-8.294710497	Astrocytoma	III	Anaplastic astrocytoma, IDH-mutant	+	-	-
185	Male	35	Right temporal lobe	-5.828764394	-4.312824736	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	+
186	Female	57	Right temporal lobe	-5.287885904	-3.370636504	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	-
187	Male	47	Left frontal lobe	-8.522071568	-6.892104574	Astrocytoma	III	Anaplastic astrocytoma, IDH-wildtype	-	-	-
188	Female	33	Left frontal lobe	-6.403208491	-5.558352379	Astrocytoma	III	Anaplastic astrocytoma, IDH-mutant	+	-	-
189	Female	42	Left frontal lobe	-6.536853569	-4.890917437	Oligoastrocytoma	III	Anaplastic astrocytoma, IDH-mutant	+	-	-
190	Male	48	Left temporal lobe	-7.247629793	-3.615986235	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	-
191	Male	71	Right temporal occipital lobe	-5.994393255	-3.163941729	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	-
192	Male	37	Right parietal lobe	-9.423582685	-3.91307704	Oligoastrocytoma	II	Dendrogioma, IDH-mutant and 1p/19q-cc	+	+	+
193	Female	72	Left temporal lobe	-6.568730663	-2.986966102	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	-
194	Male	20	Right temporal lobe	-10.80781003	-6.418458087	NA	II	Diffuse astrocytoma, IDH-wildtype	-	-	-
195	Male	24	Left temporal parietal lobe	-6.961184098	-5.154980341	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	-
196	Male	48	Left frontal and temporal lobes	-7.587215403	-3.675370422	Astrocytoma	III	Anaplastic astrocytoma, IDH-wildtype	-	-	-
197	Male	73	Left frontal lobe	-6.481996444	-4.548809395	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	-
198	Female	53	Right frontal lobe	-9.808247251	-10.50150218	Astrocytoma	III	Anaplastic astrocytoma, IDH-mutant	+	+	+
199	Male	30	Left parietal lobe	-7.440988577	-4.860013896	Astrocytoma	II	Diffuse astrocytoma, IDH-mutant	+	-	-

200	Male	41	Right frontal lobe	-8.310501636	-5.40141863	Oligodendrogioma	II	Oligodendrogioma, IDH-mutant and 1p/19q-cc	+	+	+
201	Male	18	Left occipital lobe	-7.183587207	-4.501161431	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	+
202	Male	30	Right frontal lobe	-6.428641518	-6.922803575	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	-
203	Female	22	Left frontal lobe	-8.869839398	-4.74580711	Oligoastrocytoma	II	Diffuse astrocytoma, IDH-wildtype	-	-	-
204	Male	62	Right frontal lobe	-7.824705603	-4.194974941	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	-
205	Female	54	Right temporal lobe	-7.721934492	-4.604151335	Oligodendrogioma	III	Anaplastic oligodendrogioma, NOS	-	+	-
206	Male	20	Right temporal occipital lobe	-6.786517664	-3.521141288	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	NA	-
207	Male	58	Right temporal lobe	-4.515624089	-3.46832974	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	-
208	Female	36	Left frontal lobe	-8.454073653	-3.81015536	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	-
209	Female	13	Cervical and thoracic spinal cord	-6.94937223	-5.14779709	Oligodendrogioma	II	Oligodendrogioma, NOS	NA	+	-
210	Female	44	Left temporal lobe	-7.458897446	-3.011278983	Oligoastrocytoma	III	Oligodendrogioma, IDH-mutant and 1p/1	+	+	+
211	Female	46	Left temporal lobe	-9.119897826	-6.209572606	Oligodendrogioma	II	Oligodendrogioma, NOS	NA	-	-
212	Male	42	Right frontal lobe	-9.730427103	-8.928409133	Glioblastoma	IV	Glioblastoma, IDH-mutant	+	+	+
213	Male	49	Left frontal lobe	-8.889508841	-13.31048972	Oligoastrocytoma	II	Oligodendrogioma, IDH-mutant and 1p/19q-cc	+	+	+
214	Male	53	Left frontotemporal lobe	-9.530232334	-3.572401928	Astrocytoma	III	Anaplastic astrocytoma, IDH-wildtype	-	-	-
215	Female	42	Left frontal lobe	-7.726154688	-10.84549005	Astrocytoma	II	Diffuse astrocytoma, IDH-mutant	+	-	-
216	Female	16	Left temporal lobe	-8.592883017	-5.417088398	Oligodendrogioma	II	Diffuse astrocytoma, IDH-wildtype	-	-	+
217	Male	57	Left parietal lobe	-6.907840891	-4.812034377	Glioblastoma	IV	Diffuse astrocytoma, IDH-wildtype	-	-	-
218	Female	18	Cerebellum	-9.114231122	-5.607823398	Astrocytoma	II	Diffuse astrocytoma, IDH-wildtype	-	-	-
219	Female	32	Right frontotemporal lobe	-7.903050757	-4.626428099	Astrocytoma	II	Diffuse astrocytoma, IDH-wildtype	-	-	-
220	Female	24	Right thalamus	-8.23072667	-3.591919524	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	-
221	Female	62	Left frontotemporal lobe	-8.668158985	-4.398389813	Oligoastrocytoma	III	Anaplastic astrocytoma, IDH-wildtype	-	-	-
222	Male	64	Thoracic spinal cord	-7.83537742	-10.76611476	Astrocytoma	II	Diffuse astrocytoma, IDH-wildtype	-	-	-
223	Male	36	Left frontal lobe	-8.958797173	-12.06599675	Oligodendrogioma	II	Oligodendrogioma, NOS	NA	+	-
224	Male	50	Left temporal lobe	-7.298154868	-2.853663343	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	+	-
225	Male	18	Thoracic and lumbar spinal cord	-6.207084107	-3.717041614	Glioblastoma	IV	Glioblastoma, NOS	NA	-	-
226	Female	26	Left frontal lobe	-7.118531198	-4.116028853	Astrocytoma	II	Diffuse astrocytoma, NOS	NA	-	-
227	Female	49	Left temporal lobe	-11.32948166	-14.73406504	Astrocytoma	II	Diffuse astrocytoma, IDH-mutant	+	-	-
228	Male	61	Left temporal lobe	-5.117320831	-7.15942793	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	+
229	Male	59	Right frontal lobe	-7.80280818	-11.9792154	Oligoastrocytoma	II	Diffuse astrocytoma, IDH-wildtype	-	+	-
230	Male	52	Left temporal lobe	-5.090360946	-4.053166656	Glioblastoma	IV	Glioblastoma, IDH-mutant	+	-	+
231	Female	15	Left parietal lobe	-6.324165966	-4.625599854	Oligodendrogioma	III	Anaplastic oligodendrogioma, NOS	-	-	-
232	Female	61	Left fronto parietal lobe	-6.455202372	-12.50373389	Oligodendrogioma	II	Oligodendrogioma, IDH-mutant and 1p/19q-cc	+	+	+
233	Male	46	Left parietal lobe	-8.080233502	-5.701746874	Oligoastrocytoma	II	Diffuse astrocytoma, IDH-wildtype	-	-	-
234	Female	24	Right parietal lobe	-5.331956446	-3.108421879	Astrocytoma	III	Anaplastic astrocytoma, IDH-wildtype	-	-	-
235	Female	30	Left frontal lobe	-11.01634733	-14.23222644	Astrocytoma	II	Diffuse astrocytoma, IDH-wildtype	-	+	+
236	Male	42	Left temporal parietal lobe	-7.468739897	-5.718743837	NA	III	Diffuse astrocytoma, IDH-wildtype	-	-	-
237	Female	20	Left frontal lobe	-5.388583559	-3.443626077	Glioblastoma	IV	NA	-	-	-
238	Male	35	Right frontal lobe	-5.600599642	-5.381797109	NA	III	Glioblastoma, IDH-wildtype	-	-	-
239	Female	62	Frontal lobe	-6.29099227	-5.662224526	Oligodendrogioma	II	Oligodendrogioma, NOS	NA	+	+
240	Male	38	Right frontal lobe	-5.176127159	-5.53970082	Astrocytoma	III	Anaplastic astrocytoma, NOS	NA	-	-
241	Female	46	Right frontal lobe	-4.269724807	-4.551376821	NA	III	NA	-	+	NA
242	Male	43	Left temporal lobe	-5.801269576	-6.330664922	Glioblastoma	IV	Glioblastoma, NOS	NA	-	-
243	Male	60	Left frontal lobe	-5.514869068	-4.910364914	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	+
244	Female	61	Left frontal lobe	-6.892305125	-7.980115097	Astrocytoma	II	Diffuse astrocytoma, IDH-wildtype	-	-	-
245	Female	45	Left temporal lobe	-5.2066005	-4.973628578	Astrocytoma	III	Anaplastic astrocytoma, NOS	NA	-	-
246	Male	64	Right temporal occipital lobe	-5.285563072	-3.767227489	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	+
247	Male	78	Left frontal lobe	-5.378055344	-3.426015518	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	-
248	Female	59	Right frontal lobe	-6.00479961	-5.062791678	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	+
249	Male	62	Frontal lobe	-5.553234262	-8.516592468	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	-
250	Male	50	Left frontal lobe	-5.5495657	-5.046290716	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	+
251	Male	27	Left frontal lobe	-5.861085358	-5.996487692	Oligoastrocytoma	III	Anaplastic astrocytoma, IDH-wildtype	-	-	+
252	Male	33	Left temporal lobe	-5.732195062	-5.141300763	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	+	+
253	Female	73	Right occipital lobe	-5.633661596	-5.525351073	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	-
254	Male	59	Right frontal lobe	-6.141263688	-6.627115884	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	-
255	Male	36	Right parietal lobe	-5.974784327	-4.737121682	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	+
256	Male	49	Left temporal lobe	-4.864693628	-4.399046678	Glioblastoma	IV	Glioblastoma, IDH-mutant	+	-	+
257	Female	47	Right frontal lobe	-5.742555243	-5.566125973	Astrocytoma	II	Diffuse astrocytoma, NOS	NA	+	-
258	Male	36	Right temporal lobe	-9.846733218	-11.05749566	Astrocytoma	II	Diffuse astrocytoma, IDH-wildtype	-	-	-
259	Male	72	Right occipital lobe	-5.302874722	-5.703268876	Oligodendrogioma	III	Anaplastic oligodendrogioma, NOS	NA	-	-
260	Male	62	Right parietal occipital lobe	-5.628570397	-3.254506753	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	-
261	Female	25	Left frontal lobe	-5.852373278	-7.684228062	Glioblastoma	IV	Glioblastoma, NOS	NA	-	-
262	Male	42	Right frontal lobe	-12.03827321	-12.30744365	Astrocytoma	II	Oligodendrogioma, IDH-mutant and 1p/19q-cc	+	+	-
263	Female	51	Right frontal lobe	-10.11433509	-10.50400629	Astrocytoma	II	Diffuse astrocytoma, IDH-mutant	+	-	-
264	Male	11	Posterior fossa	-5.240260641	-5.207807743	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	-
265	Male	37	frontal lobe	-6.242160818	-5.747731111	Oligoastrocytoma	II	Diffuse astrocytoma, IDH-mutant	+	-	-

266	Female	39	Right frontal lobe	-5.891209119	-3.772550222	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	-
267	Male	22	Right thalamus	-5.158075601	-4.752234831	Oligoastrocytoma	III	Anaplastic astrocytoma, IDH-wildtype	-	-	-
268	Female	14	Right parietal occipital lobe	-5.3094434	-4.376848956	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	-
269	Male	52	Left frontal lobe	-4.540746628	-4.637908376	Glioblastoma	IV	Glioblastoma, IDH-mutant	+	-	-
270	Male	51	Left parietal occipital lobe	-4.48210209	-5.696392591	Glioblastoma	IV	Glioblastoma, IDH-mutant	+	+	+
271	Male	47	Left frontal lobe	-4.670021267	-6.655103864	Oligoastrocytoma	II	Oligodendrogioma, NOS	-	+	-
272	Female	46	Left frontal lobe	-6.021010449	-6.303707325	Oligodendrogioma	II	Oligodendrogioma, NOS	-	+	+
273	Male	45	Left frontal lobe	-3.735715001	-6.985420472	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	-
274	Male	60	Right frontal lobe	-11.06446928	-10.11184195	Oligoastrocytoma	II	Oligodendrogioma, IDH-mutant and 1p/19q-cc	+	+	+
275	Male	70	Left frontal lobe	-5.335180479	-3.258805219	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	-
276	Male	23	Right fronto parietal lobe	-6.217214688	-6.264750618	Astrocytoma	II	Diffuse astrocytoma, IDH-wildtype	-	-	-
277	Female	41	Right frontotemporal lobe	-7.759603695	-4.626981453	Oligoastrocytoma	II	Diffuse astrocytoma, IDH-wildtype	-	-	-
278	Male	30	Left frontal lobe	-5.904924436	-3.706648319	Oligoastrocytoma	II	Diffuse astrocytoma, IDH-mutant	+	-	NA
279	Male	39	Left frontotemporal lobe	-5.922500884	-4.56111753	Oligodendrogioma	III	Anaplastic oligodendrogioma, NOS	-	+	+
280	Male	77	Right temporal lobe	-5.564983459	-7.393350617	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	+
281	Female	42	Left temporal lobe	-4.725930278	-6.436838386	Oligodendrogioma	II	Oligodendrogioma, NOS	-	-	-
282	Male	56	Left frontal lobe	-5.407888799	-4.823335731	Astrocytoma	III	Anaplastic astrocytoma, IDH-wildtype	-	-	-
283	Female	57	Right temporal lobe	-7.441516751	-7.594796521	Astrocytoma	II	Diffuse astrocytoma, IDH-wildtype	-	-	-
284	Male	39	Right frontal lobe	-6.333303582	-6.770417236	Astrocytoma	II	Diffuse astrocytoma, IDH-wildtype	-	-	+
285	Male	47	Right frontotemporal lobe	-6.357452733	-3.394642307	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	-
286	Female	38	Right frontal lobe	-7.418297635	-5.465122313	Astrocytoma	II	Diffuse astrocytoma, IDH-mutant	+	-	+
287	Male	20	Right temporal lobe	-8.526201509	-5.21772281	Astrocytoma	II	Diffuse astrocytoma, IDH-wildtype	-	-	NA
288	Female	47	Right lateral ventricle	-8.491853096	-6.602946407	Astrocytoma	II	Diffuse astrocytoma, IDH-wildtype	-	-	-
289	Male	51	Right frontal lobe	-5.049007102	-6.153462573	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	-
290	Female	16	Left cerebellum	-8.691391539	-7.580291294	Astrocytoma	II	Diffuse astrocytoma, IDH-wildtype	-	-	-
291	Female	58	Left temporal lobe	-5.466347625	-3.268543465	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	-
292	Male	57	Right temporal lobe	-4.807289941	-3.797741696	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	+	-
293	Male	58	Left frontal lobe	-5.321878571	-7.085339924	Oligoastrocytoma	III	Anaplastic astrocytoma, IDH-mutant	+	-	-
294	Male	76	Left parietal lobe	-5.458772034	-4.276210092	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	-
295	Male	71	Right frontal lobe	-5.930441905	-5.871409009	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	-
296	Female	43	Right temporal parietal lobe	-6.72615866	-5.056610086	Astrocytoma	III	Anaplastic astrocytoma, IDH-wildtype	-	-	-
297	Male	35	Right parietal occipital lobe	-9.90518074	-11.44847931	NA	II	NA	-	-	-
298	Male	49	Left frontal lobe	-5.655555797	-5.492944188	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	-
299	Female	34	Right frontal lobe	-5.894048865	-5.914979076	Astrocytoma	II	Diffuse astrocytoma, IDH-mutant	+	-	+
300	Male	46	Left frontal lobe	-5.811524357	-2.718120574	Astrocytoma	III	Anaplastic astrocytoma, IDH-mutant	+	-	-
301	Male	25	Right temporal lobe	-5.905745218	-3.7441171919	Astrocytoma	III	Anaplastic astrocytoma, IDH-wildtype	-	-	+
302	Male	61	Left frontal lobe	-4.695680704	-6.049081629	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	-
303	Female	40	Left frontal lobe	-6.665620002	-7.142259768	Astrocytoma	II	Diffuse astrocytoma, IDH-wildtype	-	-	-
304	Female	37	Left frontal lobe	-5.724536942	-5.355889255	NA	III	NA	-	-	-
305	Female	25	Right frontal lobe	-5.784839109	-5.147670734	Oligodendrogioma	III	ligodendrogioma, IDH-mutant and 1p/19q-cc	+	+	NA
306	Female	64	Right fronto parietal lobe	-5.293969912	-4.412332661	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	NA
307	Female	33	Left temporal lobe	-6.313625799	-3.526800313	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	NA
308	Female	47	Right parietal occipital lobe	-6.414394516	-4.557606475	Astrocytoma	III	Anaplastic astrocytoma, IDH-wildtype	-	-	NA
309	Female	51	Right temporal parietal lobe	-5.088221526	-7.195890544	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	-
310	Male	59	Left frontal lobe	-5.950362533	-6.653097405	Astrocytoma	II	Diffuse astrocytoma, IDH-wildtype	-	-	NA
311	Male	46	Left frontal lobe	-4.883828351	-9.527128571	Astrocytoma	III	Anaplastic astrocytoma, IDH-mutant	+	+	NA
312	Female	37	Left frontal lobe	-7.217689302	-8.490570515	Oligoastrocytoma	II	Diffuse astrocytoma, IDH-wildtype	+	-	+
313	Female	44	Left Insular lobe	-6.212496593	-5.042839642	Astrocytoma	II	Oligodendrogioma, NOS	-	-	-
314	Female	41	NA	-12.19991729	-10.56709684	Oligodendrogioma	II	Anaplastic astrocytoma, IDH-wildtype	-	-	-
315	Male	58	Right parietal lobe	-5.142542027	-7.898504742	Astrocytoma	III	Anaplastic astrocytoma, IDH-wildtype	-	-	NA
316	Female	37	Left Insular lobe	-6.228975153	-5.026603173	Astrocytoma	III	Anaplastic astrocytoma, IDH-wildtype	-	-	NA
317	Male	41	Left temporal lobe	-7.432311223	-13.58415952	NA	III	NA	-	-	NA
318	Male	59	Right occipital part	-7.58228882	-6.476964581	Oligodendrogioma	II	Oligodendrogioma, NOS	-	+	+
319	Female	73	Right frontal lobe	-5.443569337	-4.691618396	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	+	-
320	Male	21	Left frontal lobe	-6.31954685	-5.462433263	Astrocytoma	III	Anaplastic astrocytoma, IDH-wildtype	-	-	-
321	Female	49	Right parietal occipital lobe	-5.714795464	-8.418105115	Astrocytoma	III	Anaplastic astrocytoma, IDH-wildtype	-	-	+
322	Male	40	Bilateral frontal lobe	-10.11271406	-12.51576827	Astrocytoma	II	astrodysplasia, IDH-mutant and 1p/19q-cc	+	+	+
323	Male	64	Right temporal lobe	-5.890403024	-4.125590805	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	+	-
324	Female	39	Right insular lobe	-5.890305319	-8.449029902	Astrocytoma	III	Anaplastic astrocytoma, IDH-wildtype	-	-	-
325	Male	58	Right temporal occipital lobe	-5.180454111	-5.251152051	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	+
326	Male	44	Right frontal lobe	-7.093315364	-7.671757807	Astrocytoma	II	Diffuse astrocytoma, IDH-mutant	+	-	-
327	Male	61	Right frontotemporal lobe	-6.456140901	-4.427996886	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	NA
328	Male	46	Right frontal lobe	-5.895292176	-7.756866263	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	-
329	Male	58	Left frontotemporal lobe	-6.049943945	-4.672047593	Oligodendrogioma	III	Anaplastic oligodendrogioma, NOS	-	-	-
330	Male	68	Left parietal lobe	-6.734108971	-4.590445889	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	-
331	Female	27	Right frontal lobe	-6.121879649	-6.945491787	Oligoastrocytoma	III	ligodendrogioma, IDH-mutant and 1p/19q-cc	+	+	+
332	Female	49	Right frontal lobe	-6.739146349	-11.50973854	Astrocytoma	III	Anaplastic astrocytoma, IDH-wildtype	-	-	+

333	Male	51	Left frontal lobe	-5.274875983	-3.680471037	Oligoastrocytoma	III	Anaplastic astrocytoma, IDH-wildtype	-	-	-	+
334	Female	24	spinal cord	-6.833395034	-5.466503558	Oligoastrocytoma	II	Diffuse astrocytoma, IDH-wildtype	-	-	-	-
335	Male	67	Right temporal lobe	-6.097132169	-5.517712751	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	-	-
336	Female	12	'ons, medulla oblongata and brainstem	-4.899889669	-4.046833212	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	-	-
337	Female	59	Right frontotemporal lobe	-6.045466513	-4.499392709	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	-	+
338	Male	59	Right temporal lobe	-6.276979437	-6.71417292	Glioblastoma	IV	Glioblastoma, IDH-wildtype	-	-	-	-

Supplementary Table 2: the clinicopathologic mutational and survival information of patients with glioma in TCGA dataset

Sample	Age	Gender	ASCL2 level	ATGB8 level	ATGB9 CNV	Histology	Grade	Integrated diagnosis	Subtype	Transcriptome.Subtype	survival time(days)	survival time(months)	status(0:survival;1:dead)	IDH.status	Chr.1p_19q.codeletion	MGMT.promoter.status	Chr.7.gain	Chr.10.loss	ATRX.status
TCGA-02-0047	76	Male	3.930979235	5.80488735	diploid	GBM	IV	Glioblastoma, IDH-wildtype	LGm6-GBM	ME	441	14.7	1	WT	non-codel	Unmethylated	No combined CNA	WT	
TCGA-02-0055	62	Female	3.74353651	4.05951103	Gain	GBM	IV	Glioblastoma, IDH-wildtype	Mesenchymal-like	ME	75	2.5	1	WT	non-codel	Unmethylated	No combined CNA	WT	
TCGA-02-2483	43	Male	4.54205898	4.964828327	diploid	GBM	IV	Glioblastoma, IDH-mutant	G-CIMP-low	PN	459	15.3	0	Mutant	non-codel	Methylated	No combined CNA	Mutant	
TCGA-02-2485	53	Male	3.181325221	4.31883019	Gain	GBM	IV	Glioblastoma, IDH-wildtype	Classic-like	CL	462	15.4	0	WT	non-codel	Unmethylated	Gain chr 7 & loss chr 10	WT	
TCGA-02-2486	64	Male	5.164540928	3.126262564	Gain	GBM	IV	Glioblastoma, IDH-wildtype	Classic-like	ME	609	20.3	1	WT	non-codel	Unmethylated	Gain chr 7 & loss chr 10	WT	
TCGA-06-0125	63	Female	1.558022674	4.899862004	Gain	GBM	IV	Glioblastoma, IDH-wildtype	Classic-like	CL	1428	47.6	1	WT	non-codel	Methylated	No combined CNA	WT	
TCGA-06-0129	30	Male	5.382141535	4.40888166	diploid	GBM	IV	Glioblastoma, IDH-mutant	G-CIMP-low	PN	1011	33.7	1	Mutant	non-codel	Methylated	No combined CNA	Mutant	
TCGA-06-0130	54	Male	6.244059327	4.302436041	Gain	GBM	IV	Glioblastoma, IDH-wildtype	Mesenchymal-like	ME	387	12.9	1	WT	non-codel	Unmethylated	No combined CNA	WT	
TCGA-06-0132	49	Male	5.311208281	5.090455449	Gain	GBM	IV	Glioblastoma, IDH-wildtype	NE		762	25.4	1	WT	non-codel	No combined CNA	WT		
TCGA-06-0138	43	Male	5.267149973	6.150259084	Gain	GBM	IV	Glioblastoma, IDH-wildtype	ME		726	24.2	1	WT	non-codel	Gain chr 7 & loss chr 10			
TCGA-06-0141	62	Male	4.496583783	6.601194338	Gain	GBM	IV	Glioblastoma, IDH-wildtype	LGm6-GBM	ME	309	10.3	1	WT	non-codel	Unmethylated	No combined CNA	WT	
TCGA-06-0156	57	Male	3.823494626	7.893842708	NA	GBM	IV	Glioblastoma, IDH-mutant	ME		174	5.8	1	Mutant					
TCGA-06-0157	63	Female	4.081936082	4.620955834	Gain	GBM	IV	Glioblastoma, IDH-wildtype	CL		96	3.2	1	WT	non-codel	Gain chr 7 & loss chr 10	WT		
TCGA-06-0158	73	Male	4.750767272	4.057736183	diploid	GBM	IV	Glioblastoma, IDH-wildtype	CL		324	10.8	1	WT	non-codel	No combined CNA	WT		
TCGA-06-0168	59	Female	5.125308074	4.87657097	Gain	GBM	IV	Glioblastoma, IDH-wildtype	ME		591	19.7	1	WT	non-codel	Gain chr 7 & loss chr 10	WT		
TCGA-06-0174	54	Male	2.918386234	6.748592723	Gain	GBM	IV	Glioblastoma, IDH-wildtype	PN		96	3.2	1	WT	non-codel	Gain chr 7 & loss chr 10	WT		
TCGA-06-0178	38	Male	4.73545719	4.322779034	diploid	GBM	IV	Glioblastoma, IDH-mutant	PN		2643	88.1	1	Mutant	non-codel	No combined CNA	WT		
TCGA-06-0184	63	Male	5.91482589	3.60844261	Gain	GBM	IV	Glioblastoma, IDH-wildtype	ME		2097	69.9	1	WT	non-codel	Gain chr 7 & loss chr 10	WT		
TCGA-06-0187	69	Male	3.469898997	5.502212834	Gain	GBM	IV	Glioblastoma, IDH-wildtype	CL		816	27.2	1	WT	non-codel	No combined CNA	WT		
TCGA-06-0190	62	Male	4.810813242	5.983461092	Gain	GBM	IV	Glioblastoma, IDH-wildtype	ME		312	10.4	1	WT	non-codel	Gain chr 7 & loss chr 10	WT		
TCGA-06-0210	72	Female	4.058758229	6.550191145	Gain	GBM	IV	Glioblastoma, IDH-wildtype	ME		222	7.4	1	WT	non-codel	Gain chr 7 & loss chr 10	WT		
TCGA-06-0211	47	Male	3.895176574	3.59489485	Gain	GBM	IV	Glioblastoma, IDH-wildtype	CL		354	11.8	1	WT	non-codel	Gain chr 7 & loss chr 10	WT		
TCGA-06-0219	67	Male	4.327162783	4.824375819	diploid	GBM	IV	Glioblastoma, IDH-wildtype	NE		21	0.7	1	WT	non-codel	No combined CNA	WT		
TCGA-06-0238	46	Male	5.060566245	7.16437238	Gain	GBM	IV	Glioblastoma, IDH-wildtype	PN		399	13.3	1	WT	non-codel	Gain chr 7 & loss chr 10	WT		
TCGA-06-0644	71	Male	3.42155945	5.236182616	Gain	GBM	IV	Glioblastoma, IDH-wildtype	ME		378	12.6	1	WT	non-codel	Gain chr 7 & loss chr 10	WT		
TCGA-06-0645	55	Female	5.129315992	5.12102458	Gain	GBM	IV	Glioblastoma, IDH-wildtype	ME		174	5.8	1	WT	non-codel	Gain chr 7 & loss chr 10	WT		
TCGA-06-0646	60	Male	4.759773699	7.189487561	Gain	GBM	IV	Glioblastoma, IDH-wildtype	ME		174	5.8	1	WT	non-codel	Gain chr 7 & loss chr 10	WT		
TCGA-06-0649	73	Female	4.79215257	4.978227622	Gain	GBM	IV	Glioblastoma, IDH-wildtype	ME		63	2.1	1	WT	non-codel	Gain chr 7 & loss chr 10	WT		
TCGA-06-0686	53	Male	4.099855243	8.067835517	Gain	GBM	IV	Glioblastoma, IDH-wildtype	PN		426	14.2	1	WT	non-codel	Gain chr 7 & loss chr 10	WT		
TCGA-06-0743	69	Male	4.291154119	6.49815511	Gain	GBM	IV	Glioblastoma, IDH-wildtype	CL		792	26.4	1	WT	non-codel	Gain chr 7 & loss chr 10	WT		
TCGA-06-0744	66	Male	4.752994728	4.62684794	Gain	GBM	IV	Glioblastoma, IDH-wildtype	CL		1407	46.9	1	WT	non-codel	Gain chr 7 & loss chr 10	WT		
TCGA-06-0745	59	Male	5.59819546	7.209464088	Gain	GBM	IV	Glioblastoma, IDH-wildtype	ME		237	7.9	1	WT	non-codel	Gain chr 7 & loss chr 10	WT		
TCGA-06-0747	53	Male	3.038105251	3.893983426	Gain	GBM	IV	Glioblastoma, IDH-wildtype	CL		81	2.7	1	WT	non-codel	No combined CNA	WT		
TCGA-06-0749	60	Male	6.020036864	6.498212665	Gain	GBM	IV	Glioblastoma, IDH-wildtype	NE		81	2.7	1	WT	non-codel	Gain chr 7 & loss chr 10	WT		
TCGA-06-0750	43	Male	4.515434926	6.740525557	Gain	GBM	IV	Glioblastoma, IDH-wildtype	ME		27	0.9	1	WT	non-codel	Gain chr 7 & loss chr 10	WT		
TCGA-06-0787	74	Male	4.754785976	4.907284878	Gain	GBM	IV	Glioblastoma, IDH-wildtype	ME		216	7.2	0	WT	non-codel	Unmethylated	Gain chr 7 & loss chr 10	WT	
TCGA-06-0862	30	Male	5.302077729	6.436842318	Gain	GBM	IV	Glioblastoma, IDH-wildtype	LGm6-GBM	ME	624	20.8	1	WT	non-codel	Unmethylated	Gain chr 7 & loss chr 10	WT	
TCGA-06-1804	81	Female	3.471889774	5.459316854	Gain	GBM	IV	Glioblastoma, IDH-wildtype	Classic-like		408	13.6	1	WT	non-codel	Methylated	Gain chr 7 & loss chr 10	WT	
TCGA-06-2557	76	Male	5.489921794	4.213347282	Gain	GBM	IV	Glioblastoma, IDH-wildtype	Classic-like		33	1.1	1	WT	non-codel	No combined CNA	WT		
TCGA-06-2559	75	Female	3.65775711	6.74395396	Gain	GBM	IV	Glioblastoma, IDH-wildtype	Mesenchymal-like		375	12.5	1	WT	non-codel	Unmethylated	Gain chr 7 & loss chr 10	WT	
TCGA-06-2559	83	Male	3.925097452	6.779452785	Gain	GBM	IV	Glioblastoma, IDH-wildtype	Mesenchymal-like		147	4.9	1	WT	non-codel	Methylated	No combined CNA	WT	
TCGA-06-2561	53	Female	3.973730652	7.471188030	Gain	GBM	IV	Glioblastoma, IDH-wildtype	Mesenchymal-like		528	17.6	1	WT	non-codel	Unmethylated	Gain chr 7 & loss chr 10	WT	
TCGA-06-2562	81	Male	4.093357346	6.591064501	Gain	GBM	IV	Glioblastoma, IDH-wildtype	Classic-like		378	12.6	1	WT	non-codel	Unmethylated	Gain chr 7 & loss chr 10	WT	
TCGA-06-2563	72	Female	4.089091319	4.018162337	Gain	GBM	IV	Glioblastoma, IDH-wildtype	Classic-like		918	30.6	0	WT	non-codel	Methylated	Gain chr 7 & loss chr 10	WT	
TCGA-06-2564	50	Male	4.892629027	4.176242975	Gain	GBM	IV	Glioblastoma, IDH-wildtype	Mesenchymal-like		180	6	0	WT	non-codel	Unmethylated	Gain chr 7 & loss chr 10	WT	
TCGA-06-2565	59	Male	3.728475649	4.635882026	diploid	GBM	IV	Glioblastoma, IDH-wildtype	Classic-like		498	16.6	1	WT	non-codel	Methylated	No combined CNA	WT	
TCGA-06-2567	65	Male	4.918977694	4.393155317	Gain	GBM	IV	Glioblastoma, IDH-wildtype	Mesenchymal-like		132	4.4	0	WT	non-codel	Unmethylated	Gain chr 7 & loss chr 10	WT	
TCGA-06-2569	24	Female	1.255742421	4.837014776	NA	GBM	IV	Glioblastoma, IDH-wildtype	LGm6-GBM		12	0.4	0	WT	non-codel	Unmethylated	No combined CNA	WT	
TCGA-06-2570	21	Female	4.451026435	5.523819109	diploid	GBM	IV	Glioblastoma, IDH-mutant	G-CIMP-low		945	31.5	0	Mutant	non-codel	Methylated	No combined CNA	Mutant	
TCGA-06-5408	54	Female	3.635417762	6.400087017	Gain	GBM	IV	Glioblastoma, IDH-wildtype	Mesenchymal-like		351	11.7	1	WT	non-codel	Unmethylated	Gain chr 7 & loss chr 10	WT	
TCGA-06-5410	72	Female	3.538621875	4.083732475	Gain	GBM	IV	Glioblastoma, IDH-wildtype	LGm6-GBM	ME	105	3.5	1	WT	non-codel	Methylated	No combined CNA	WT	
TCGA-06-5411	51	Male	3.209094597	6.697102403	Gain	GBM	IV	Glioblastoma, IDH-wildtype	Mesenchymal-like		249	8.3	1	WT	non-codel	Unmethylated	No combined CNA	WT	
TCGA-06-5412	78	Female	4.810288852	5.412734112	Gain	GBM	IV	Glioblastoma, IDH-wildtype	Mesenchymal-like		135	4.5	1	WT	non-codel	Methylated	No combined CNA	WT	
TCGA-06-5413	67	Male	3.500958124	7.996089849	Gain	GBM	IV	Glioblastoma, IDH-wildtype	Classic-like		264	8.8	0	WT	non-codel	Unmethylated	Gain chr 7 & loss chr 10	WT	
TCGA-06-5414	61	Male	3.706408984	7.98010084	Gain	GBM	IV	Glioblastoma, IDH-wildtype	Classic-like		270	9	0	WT	non-codel	Unmethylated	Gain chr 7 & loss chr 10	WT	
TCGA-06-5415	60	Male	3.608915667	5.09405867	Gain	GBM	IV	Glioblastoma, IDH-wildtype	Classic-like		258	8.6	0	WT	non-codel	Unmethylated	Gain chr 7 & loss chr 10	WT	
TCGA-06-5416	23	Female	-1	7.644830401	diploid	GBM	IV	Glioblastoma, NOS	PN		201	6.7	0	WT	non-codel	Unmethylated	No combined CNA	WT	
TCGA-06-5417	45	Female	1.268070523	2.109962258	NA	GBM	IV	Glioblastoma, IDH-mutant	ME		153	5.1	0	Mutant	non-codel	Methylated			
TCGA-06-5418	75	Female	3.744451835	5.911418355	Gain	GBM	IV	Glioblastoma, IDH-wildtype	Mesenchymal-like		81	2.7	1	WT	non-codel	Unmethylated	Gain chr 7 & loss chr 10	WT	
TCGA-06-5586	58	Male	4.076011738	5.920338562	Gain	GBM	IV	Glioblastoma, IDH-wildtype	Classic-like		114	3.8	1	WT	non-codel	Unmethylated	No combined CNA	WT	
TCGA-06-5588	45	Female	4.569694757	5.644606															

TCGA.16.1045	49 Female	5.119684025	4.88462234 Gain	GBM	IV	Glioblastoma, IDH-wildtype	Mesenchymal-like	ME	870	29	1 WT	non-codel	Methylated	Gain chr 7 & loss chr 10 WT	
TCGA.19.1390	63 Female	3.301880253	7.369502254 Gain	GBM	IV	Glioblastoma, IDH-wildtype	Classic-like	PN	762	25.4	1 WT	non-codel	No combined CNA	WT	
TCGA.19.1787	48 Male	5.14501301	2.361263047 Gain	GBM	IV	Glioblastoma, NOS	ME		381	12.7	1	non-codel	Methylated	Gain chr 7 & loss chr 10 WT	
TCGA.19.2619	55 Female	2.560397037	5.042215317 Gain	GBM	IV	Glioblastoma, IDH-wildtype	Mesenchymal-like	CL	291	9.7	0 WT	non-codel	Methylated	Gain chr 7 & loss chr 10 WT	
TCGA.19.2620	70 Male	3.271649772	4.408834118 Gain	GBM	IV	Glioblastoma, IDH-wildtype	Classic-like	CL	147	4.9	1 WT	non-codel	Methylated	No combined CNA	WT
TCGA.19.2624	51 Male	2.074950644	7.166912234 Gain	GBM	IV	Glioblastoma, IDH-wildtype	Mesenchymal-like	CL	6	0.2	1 WT	non-codel	Unmethylated	Gain chr 7 & loss chr 10 WT	
TCGA.19.2625	76 Female	4.355749269	5.55095298 diploid	GBM	IV	Glioblastoma, IDH-wildtype	Mesenchymal-like	ME	123	4.1	1 WT	non-codel	Unmethylated	No combined CNA	WT
TCGA.19.2629	60 Male	4.987207156	2.171270889 Gain	GBM	IV	Glioblastoma, IDH-mutant	G-CIMP-low		726	24.2	1 Mutant	non-codel	Unmethylated	No combined CNA	WT
TCGA.19.4065	36 Male	4.176266915	6.055451644 Gain	GBM	IV	Glioblastoma, NOS	ME		210	7	0	non-codel	Unmethylated	Gain chr 7 & loss chr 10 WT	
TCGA.19.5960	56 Male	3.129794055	4.821051976 Gain	GBM	IV	Glioblastoma, IDH-wildtype	Classic-like	CL	450	15	1 WT	non-codel	Unmethylated	Gain chr 7 & loss chr 10 WT	
TCGA.26.1442	43 Male	2.971111255	4.381705597 Gain	GBM	IV	Glioblastoma, IDH-mutant	G-CIMP-high		939	31.3	0 Mutant	non-codel	Methylated	No combined CNA	WT
TCGA.26.5132	74 Male	4.042189046	5.119908081 Gain	GBM	IV	Glioblastoma, IDH-wildtype	Classic-like	ME	282	9.4	0 WT	non-codel	Methylated	Gain chr 7 & loss chr 10 WT	
TCGA.26.5133	59 Male	2.911269736	4.400674542 diploid	GBM	IV	Glioblastoma, IDH-wildtype	LGmb-GBM		447	14.9	0 WT	non-codel	Unmethylated	No combined CNA	WT
TCGA.26.5134	74 Male	3.891337158	5.90873121 diploid	GBM	IV	Glioblastoma, IDH-wildtype	Mesenchymal-like		165	5.5	0 WT	non-codel	Unmethylated	No combined CNA	WT
TCGA.26.5135	72 Female	4.187569822	6.62223782 Gain	GBM	IV	Glioblastoma, IDH-wildtype	Mesenchymal-like	ME	267	8.9	1 WT	non-codel	Methylated	Gain chr 7 & loss chr 10 WT	
TCGA.26.5136	78 Female	5.417255065	6.310500081 Gain	GBM	IV	Glioblastoma, IDH-wildtype	Mesenchymal-like	ME	570	19	1 WT	non-codel	Methylated	Gain chr 7 & loss chr 10 WT	
TCGA.26.5139	65 Female	3.564491513	6.175011769 Gain	GBM	IV	Glioblastoma, IDH-wildtype	Mesenchymal-like	CL	48	1.6	0 WT	non-codel	Unmethylated	Gain chr 7 & loss chr 10 WT	
TCGA.27.1830	57 Male	3.811645705	5.628616637 Gain	GBM	IV	Glioblastoma, IDH-wildtype	Mesenchymal-like	ME	153	5.1	1 WT	non-codel	Unmethylated	Gain chr 7 & loss chr 10 WT	
TCGA.27.1831	66 Male	3.860893293	4.477573719 Gain	GBM	IV	Glioblastoma, IDH-wildtype	Mesenchymal-like	ME	498	16.6	1 WT	non-codel	Unmethylated	Gain chr 7 & loss chr 10 WT	
TCGA.27.1832	59 Female	5.005103513	7.028342606 Gain	GBM	IV	Glioblastoma, IDH-wildtype	Mesenchymal-like	ME	297	9.9	1 WT	non-codel	Unmethylated	Gain chr 7 & loss chr 10 WT	
TCGA.27.1834	56 Male	4.92680122	7.761210796 Gain	GBM	IV	Glioblastoma, IDH-wildtype	Mesenchymal-like		1215	40.5	1 WT	non-codel	Methylated	Gain chr 7 & loss chr 10 WT	
TCGA.27.1835	53 Female	2.975941948	4.526813761 Gain	GBM	IV	Glioblastoma, IDH-wildtype	Mesenchymal-like	CL	639	21.3	1 WT	non-codel	Methylated	Gain chr 7 & loss chr 10 WT	
TCGA.27.1837	36 Male	4.436401733	5.297371192 Gain	GBM	IV	Glioblastoma, IDH-wildtype	Mesenchymal-like	CL	420	14	1 WT	non-codel	Methylated	No combined CNA	WT
TCGA.27.2519	48 Male	4.147534646	8.817570498 Gain	GBM	IV	Glioblastoma, IDH-wildtype	Mesenchymal-like	ME	543	18.1	1 WT	non-codel	Unmethylated	Gain chr 7 & loss chr 10 WT	
TCGA.27.2521	34 Male	2.418540793	3.575820573 Gain	GBM	IV	Glioblastoma, IDH-mutant	G-CIMP-low	PN	312	10.4	0 Mutant	non-codel	Methylated	No combined CNA	WT
TCGA.27.2523	63 Male	3.194228918	5.547372707 Gain	GBM	IV	Glioblastoma, IDH-wildtype	Classic-like	CL	483	16.1	1 WT	non-codel	Methylated	Gain chr 7 & loss chr 10 WT	
TCGA.27.2524	56 Male	4.870268783	5.995957040 Gain	GBM	IV	Glioblastoma, IDH-wildtype	Mesenchymal-like	ME	228	7.6	1 WT	non-codel	Unmethylated	Gain chr 7 & loss chr 10 WT	
TCGA.27.2526	79 Female	4.893046647	3.746452514 Gain	GBM	IV	Glioblastoma, IDH-wildtype	Mesenchymal-like	CL	87	2.9	1 WT	non-codel	Unmethylated	No combined CNA	WT
TCGA.27.2528	62 Male	1.265378883	10.30281151 Gain	GBM	IV	Glioblastoma, IDH-wildtype	Classic-like	CL	474	15.8	1 WT	non-codel	Methylated	No combined CNA	WT
TCGA.28.1747	44 Male	4.989552315	4.022962525 Gain	GBM	IV	Glioblastoma, IDH-wildtype	Mesenchymal-like	CL	75	2.5	1 WT	non-codel	Methylated	No combined CNA	WT
TCGA.28.1753	53 Male	4.14151537	5.347467237 Gain	GBM	IV	Glioblastoma, IDH-wildtype	Mesenchymal-like	ME	36	1.2	0 WT	non-codel	Unmethylated	Gain chr 7 & loss chr 10 WT	
TCGA.28.2499	59 Male	3.591057016	4.151046991 NA	GBM	IV	Glioblastoma, IDH-wildtype	Classic-like	CL	93	3.1	0 WT	non-codel	Unmethylated	Gain chr 7 & loss chr 10 WT	
TCGA.28.2509	77 Female	4.04719808	6.636595621 Gain	GBM	IV	Glioblastoma, IDH-wildtype	Classic-like	ME	144	4.8	0 WT	non-codel	Methylated	Gain chr 7 & loss chr 10 WT	
TCGA.28.2510	30	3.07593943	6.250400753 Gain	GBM	IV	Glioblastoma, IDH-wildtype	LGmb-GBM	NE	0	WT	non-codel	Unmethylated	No combined CNA	WT	
TCGA.28.2513	69 Female	4.641193239	5.708347281 Gain	GBM	IV	Glioblastoma, IDH-wildtype	Mesenchymal-like	ME	219	7.3	0 WT	non-codel	Unmethylated	No combined CNA	WT
TCGA.28.2514	45 Male	3.210045919	7.185743763 diploid	GBM	IV	Glioblastoma, IDH-wildtype	Mesenchymal-like	CL	159	5.3	0 WT	non-codel	Unmethylated	No combined CNA	WT
TCGA.28.5204	72 Male	3.993737756	5.47976807 Gain	GBM	IV	Glioblastoma, IDH-wildtype	Classic-like	CL	447	14.9	1 WT	non-codel	Unmethylated	Gain chr 7 & loss chr 10 WT	
TCGA.28.5207	71 Male	3.630020981	4.793287263 Gain	GBM	IV	Glioblastoma, IDH-wildtype	Mesenchymal-like	CL	339	11.3	1 WT	non-codel	Unmethylated	Gain chr 7 & loss chr 10 WT	
TCGA.28.5208	52 Male	3.984197409	4.3646825073 diploid	GBM	IV	Glioblastoma, IDH-wildtype	Classic-like	CL	537	17.9	1 WT	non-codel	Methylated	No combined CNA	WT
TCGA.28.5209	66 Female	3.00123725	4.74990428 Gain	GBM	IV	Glioblastoma, IDH-wildtype	Classic-like	CL	75	2.5	0 WT	non-codel	Methylated	Gain chr 7 & loss chr 10 WT	
TCGA.28.5213	72 Male	5.220511828	4.652245548 Gain	GBM	IV	Glioblastoma, IDH-wildtype	Mesenchymal-like	ME	939	31.3	0 WT	non-codel	Unmethylated	Gain chr 7 & loss chr 10 WT	
TCGA.28.5215	62 Female	3.438465856	6.614915929 Gain	GBM	IV	Glioblastoma, IDH-wildtype	Mesenchymal-like	PN	330	11	1 WT	non-codel	Methylated	No combined CNA	WT
TCGA.28.5216	52 Male	3.956564364	6.3875772692 diploid	GBM	IV	Glioblastoma, IDH-wildtype	Mesenchymal-like	ME	408	13.6	0 WT	non-codel	Unmethylated	No combined CNA	WT
TCGA.28.5218	63 Male	5.469933803	4.688605606 Gain	GBM	IV	Glioblastoma, IDH-wildtype	LGmb-GBM	ME	156	5.2	1 WT	non-codel	Unmethylated	No combined CNA	WT
TCGA.28.5220	67 Male	4.744198777	7.250402648 Gain	GBM	IV	Glioblastoma, IDH-wildtype	Mesenchymal-like		315	10.5	0 WT	non-codel	Unmethylated	Gain chr 7 & loss chr 10 WT	
TCGA.32.1970	59 Male	3.778450407	4.465426060 Gain	GBM	IV	Glioblastoma, IDH-wildtype	Mesenchymal-like	CL	462	15.4	1 WT	non-codel	Unmethylated	Gain chr 7 & loss chr 10 WT	
TCGA.32.1980	72 Male	4.916987707	6.277871335 Gain	GBM	IV	Glioblastoma, IDH-wildtype	LGmb-GBM	NE	36	1.2	1 WT	non-codel	Unmethylated	No combined CNA	WT
TCGA.32.1982	76 Female	4.377040434	7.067568809 Gain	GBM	IV	Glioblastoma, IDH-wildtype	Classic-like	ME	141	4.7	1 WT	non-codel	Methylated	Gain chr 7 & loss chr 10 WT	
TCGA.32.2615	62 Male	3.9652171	6.066763009 diploid	GBM	IV	Glioblastoma, IDH-wildtype	Mesenchymal-like	ME	477	15.9	1 WT	non-codel	Unmethylated	No combined CNA	WT
TCGA.32.2632	80 Male	5.202218547	9.137755035 Gain	GBM	IV	Glioblastoma, IDH-wildtype	Mesenchymal-like	ME	264	8.8	1 WT	non-codel	Unmethylated	No combined CNA	WT
TCGA.32.2634	82 Male	1.970708406	6.04306667 diploid	GBM	IV	Glioblastoma, IDH-wildtype	Classic-like		684	22.8	0 WT	non-codel	Methylated	No combined CNA	WT
TCGA.32.2638	67 Male	3.665108479	4.236694897 Gain	GBM	IV	Glioblastoma, IDH-wildtype	Classic-like	CL	756	25.2	1 WT	non-codel	Methylated	Gain chr 7 & loss chr 10 WT	
TCGA.32.4213	47 Female	5.454722066	5.309136161 diploid	GBM	IV	Glioblastoma, IDH-wildtype	Mesenchymal-like	ME	597	19.9	0 WT	non-codel	Methylated	No combined CNA	WT
TCGA.32.5222	66 Male	3.865661524	6.021176564 Gain	GBM	IV	Glioblastoma, IDH-wildtype	Classic-like	CL	576	19.2	1 WT	non-codel	Methylated	Gain chr 7 & loss chr 10 WT	
TCGA.41.2571	89 Male	3.222201767	9.177107543 Gain	GBM	IV	Glioblastoma, IDH-wildtype	Mesenchymal-like	PN	24	0.8	1 WT	non-codel	Unmethylated	Gain chr 7 & loss chr 10 WT	
TCGA.41.2572	67 Male	4.836342184	7.378225284 Gain	GBM	IV	Glioblastoma, IDH-wildtype	Classic-like	CL	399	13.3	1 WT	non-codel	Unmethylated	Gain chr 7 & loss chr 10 WT	
TCGA.41.3915	48 Male	4.881933754	7.463212096 Gain	GBM	IV	Glioblastoma, IDH-wildtype	Mesenchymal-like	ME	354	11.8	1 WT	non-codel	Methylated	Gain chr 7 & loss chr 10 WT	
TCGA.41.4097	63 Female	5.25197341	5.589704363 diploid	GBM	IV	Glioblastoma, IDH-wildtype	Classic-like	ME	6	0.2	1 WT	non-codel	Unmethylated	No combined CNA	WT
TCGA.41.5651	59 Female	2.25268976	6.821000937 Gain	GBM	IV	Glioblastoma, IDH-wildtype	Classic-like	PN	453	15.1	1 WT	non-codel	Methylated	Gain chr 7 & loss chr 10 WT	
TCGA.76.4925	76 Male	2.328667253	6.991386294 Gain	GBM	IV	Glioblastoma, IDH-wildtype	Classic-like	CL	144	4.8	1 WT	non-codel	Methylated	Gain chr 7 & loss chr 10 WT	
TCGA.76.4926	68 Male	3.239811894	6.20130800 Gain	GBM	IV	Glioblastoma, IDH-wildtype	Mesenchymal-like	CL	135	4.5	1 WT	non-codel	Unmethylated	Gain chr 7 & loss chr 10 WT	
TCGA.76.4927	58 Male	4.418426104	6.755129267 NA	GBM	IV	Glioblastoma, IDH-wildtype	Classic-like	CL	528	17.6	1 WT	non-codel	Unmethylated	WT	
TCGA.76.4928	85 Female	4.206854175	4.909019404 Gain	GBM	IV	Glioblastoma, IDH-wildtype	Mesenchymal-like	ME	93	3.1	1 WT	non-codel	Methylated	Gain chr 7 & loss chr 10 WT	
TCGA.76.4929	76 Female	2.842403174	8.332625594 Gain	GBM	IV	Glioblastoma, IDH-wildtype	Classic-like	CL	108	3.6	1 WT	non-codel	Methylated	Gain chr 7 & loss chr 10 WT	
TCGA.76.4931	70 Female	3.440008691	6.164279444 Gain	GBM	IV	Glioblastoma, IDH-wildtype	Mesenchymal-like	CL	276	9.2	1 WT	non-codel	Unmethylated	Gain chr 7 & loss chr 10 WT	
TCGA.76.4932	50 Female	4.363659059	7.436559059 NA	GBM	IV	Glioblastoma, IDH-wildtype	Classic-like	CL	1437	47.9	0 WT	non-codel	Methylated	WT	
TCGA.CS.4938	31 Female	3.009329255	3.700262145 Gain	Astrocytoma	III	Difuse astrocytoma, IDH-mutant	G-CIMP-high		141	4.7	0 Mutant	non-codel	Unmethylated	No combined CNA	WT
TCGA.CS.4941	67 Male	4.931716146	7.595150045 Gain	Astrocytoma	III	Anaplastic astrocytoma, IDH-wildtype	Mesenchymal-like	CL	231	7.7	1 WT	non-codel	Methylated	Gain chr 7 & loss chr 10 WT	
TCGA.CS.4942	44 Female	4.037118612	6.261990595 Gain	Astrocytoma	III	Anaplastic astrocytoma, IDH-mutant	G								

TCGA.DB.5273	33 Male	4.162347015	1.517124486	diploid	Astrocytoma	III	Anaplastic astrocytoma, IDH-mutant	G-CIMP-high		2460	82	0 Mutant	non-codel	Unmethylated	No combined CNA	Mutant
TCGA.DB.5274	37 Female	3.651797967	3.721339846	diploid	Oligoastrocytoma	III	Anaplastic oligodendrogloma, IDH-mutant	Codel	PN	2256	75.2	0 Mutant	codel	Methylated	No combined CNA	WT
TCGA.DB.5275	36 Male	1.938265792	3.386921262	diploid	Oligoastrocytoma	III	Anaplastic astrocytoma, IDH-mutant	G-CIMP-high	PN	1437	47.9	0 Mutant	non-codel	Methylated	No combined CNA	Mutant
TCGA.DB.5276	32 Male	3.667358536	3.899596565	diploid	Oligoastrocytoma	III	Anaplastic astrocytoma, IDH-mutant	G-CIMP-high	NE	2187	72.9	0 Mutant	non-codel	Methylated	No combined CNA	Mutant
TCGA.DB.5277	34 Male	2.527320608	4.84029705	Gain	Astrocytoma	III	Anaplastic astrocytoma, IDH-mutant	G-CIMP-high	PN	1527	50.9	1 Mutant	non-codel	Methylated	No combined CNA	WT
TCGA.DB.5278	17 Male	1.966799588	5.498193414	diploid	Oligodendrogloma	II	Oligodendrogloma, IDH-mutant and 1p/19	Codel	PN	2733	91.1	0 Mutant	codel	Methylated	No combined CNA	WT
TCGA.DB.5279	59 Male	2.145807862	3.633861281	diploid	Oligodendrogloma	II	Oligodendrogloma, IDH-mutant and 1p/19	Codel	NE	1335	44.5	0 Mutant	codel	Methylated	No combined CNA	WT
TCGA.DB.5280	43 Male	2.61223453	4.826248477	diploid	Oligoastrocytoma	II	Diffuse astrocytoma, IDH-mutant	G-CIMP-high	PN	1098	36.6	0 Mutant	non-codel	Methylated	No combined CNA	Mutant
TCGA.DB.5281	61 Male	2.298365055	4.54620921	Gain	Oligoastrocytoma	III	Anaplastic astrocytoma, IDH-mutant	G-CIMP-high	NE	2349	78.3	0 Mutant	non-codel	Methylated	No combined CNA	Mutant
TCGA.DB.A4X9	33 Female	1.859929804	4.770120739	Gain	Oligoastrocytoma	III	Diffuse astrocytoma, IDH-mutant	G-CIMP-high	PN	1392	46.4	0 Mutant	non-codel	Methylated	No combined CNA	WT
TCGA.DB.A4XA	30 Male	3.040980077	3.564475727	diploid	Oligoastrocytoma	II	Oligodendrogloma, IDH-mutant and 1p/19	Codel	PN	564	18.8	0 Mutant	codel	Methylated	No combined CNA	WT
TCGA.DB.A4XB	38 Male	2.086715841	4.701698752	Gain	Astrocytoma	III	Anaplastic astrocytoma, IDH-mutant	G-CIMP-high	PN	906	30.2	0 Mutant	non-codel	Methylated	No combined CNA	WT
TCGA.DB.A4XC	26 Male	3.136864006	4.293738322	diploid	Oligoastrocytoma	II	Diffuse astrocytoma, IDH-mutant	G-CIMP-high	NE	1401	46.7	0 Mutant	non-codel	Methylated	No combined CNA	Mutant
TCGA.DB.A4XD	32 Male	2.263654447	3.528833984	Gain	Astrocytoma	III	Anaplastic astrocytoma, IDH-mutant	G-CIMP-high	PN	1194	39.8	0 Mutant	non-codel	Methylated	No combined CNA	Mutant
TCGA.DB.A4XE	27 Female	2.206736984	4.312483664	Gain	Oligoastrocytoma	III	Anaplastic astrocytoma, IDH-mutant	G-CIMP-high	PN	1125	37.5	0 Mutant	non-codel	Methylated	No combined CNA	Mutant
TCGA.DB.A4XF	41 Female	1.9341903	3.993653439	diploid	Astrocytoma	III	Anaplastic astrocytoma, IDH-mutant	G-CIMP-high	PN	1008	33.6	0 Mutant	non-codel	Methylated	No combined CNA	WT
TCGA.DB.A4XG	34 Male	2.526287243	3.844566431	diploid	Oligodendrogloma	II	Anaplastic oligodendrogloma, IDH-mutant	Codel	PN	2190	73	0 Mutant	codel	Methylated	No combined CNA	WT
TCGA.DB.A4XH	53 Female	1.108290261	4.1717176327	diploid	Oligoastrocytoma	II	Oligodendrogloma, IDH-mutant and 1p/19	Codel	NE	948	31.6	0 Mutant	codel	Methylated	No combined CNA	WT
TCGA.DB.A4L6	67 Female	3.068516044	5.167173243	diploid	Oligodendrogloma	II	Oligodendrogloma, IDH-mutant and 1p/19	Codel	NE	726	24.2	0 Mutant	codel	Methylated	No combined CNA	WT
TCGA.DB.A640	59 Male	3.144715338	6.437442489	WT	Oligoastrocytoma	II	Diffuse astrocytoma, IDH-wildtype	Mesenchymal-like	NE	765	25.5	1 WT	non-codel	Unmethylated	Gain chr 7 ∓ loss chr 10	WT
TCGA.DB.A64P	40 Male	2.101347522	5.750349241	diploid	Oligodendrogloma	II	Anaplastic oligodendrogloma, IDH-mutant	Codel	PN	903	30.1	0 Mutant	codel	Methylated	No combined CNA	WT
TCGA.DB.A64Q	31 Female	2.202417722	3.659536517	diploid	Oligoastrocytoma	II	Oligodendrogloma, IDH-mutant and 1p/19	Codel	PN	180	6	0 Mutant	codel	Methylated	No combined CNA	WT
TCGA.DB.A64R	24 Female	1.285698126	4.5976261	diploid	Oligodendrogloma	II	Oligodendrogloma, IDH-mutant and 1p/19	Codel	PN	942	31.4	0 Mutant	codel	Methylated	No combined CNA	WT
TCGA.DB.A64S	20 Male	2.300065137	3.553839686	diploid	Oligoastrocytoma	II	Diffuse astrocytoma, IDH-mutant	G-CIMP-high	NE	822	27.4	0 Mutant	non-codel	Unmethylated	No combined CNA	Mutant
TCGA.DB.A64U	38 Female	2.644710013	3.523223197	diploid	Oligoastrocytoma	II	Oligodendrogloma, IDH-mutant and 1p/19	Codel	PN	834	27.8	0 Mutant	codel	Methylated	No combined CNA	WT
TCGA.DB.A64V	54 Male	4.62479107	3.720453592	diploid	Oligodendrogloma	II	Oligodendrogloma, IDH-mutant and 1p/19	Codel	PN	876	29.2	0 Mutant	codel	Methylated	No combined CNA	WT
TCGA.DB.A64W	65 Female	-0.08341233	4.991907522	diploid	Oligoastrocytoma	II	Anaplastic oligodendrogloma, IDH-mutant	Codel	PN	432	14.4	1 Mutant	codel	Methylated	No combined CNA	WT
TCGA.DB.A64X	56 Female	3.099227866	4.177256073	Gain	Astrocytoma	III	Anaplastic astrocytoma, IDH-mutant	G-CIMP-high	NE	555	18.5	0 Mutant	non-codel	Methylated	No combined CNA	WT
TCGA.DB.A75K	55 Female	4.414108465	4.251964271	diploid	Oligoastrocytoma	II	Anaplastic oligodendrogloma, IDH-mutant	Codel	PN	363	12.1	0 Mutant	codel	Methylated	No combined CNA	WT
TCGA.DB.A75L	36 Female	2.032347738	4.647095723	diploid	Astrocytoma	III	Anaplastic astrocytoma, IDH-mutant	G-CIMP-high	NE	336	11.2	0 Mutant	non-codel	Methylated	No combined CNA	WT
TCGA.DB.A75M	47 Male	2.171623176	4.497816717	diploid	Astrocytoma	III	Diffuse astrocytoma, IDH-mutant	G-CIMP-high	PN	537	17.9	0 Mutant	non-codel	Methylated	No combined CNA	Mutant
TCGA.DB.A75O	29 Male	4.810751559	3.958285901	Gain	Astrocytoma	III	Anaplastic astrocytoma, IDH-mutant	G-CIMP-high	PN	921	30.7	0 Mutant	non-codel	Methylated	No combined CNA	WT
TCGA.DB.A75P	25 Female	3.751570837	5.983230544	diploid	Astrocytoma	III	Diffuse astrocytoma, IDH-mutant and 1p/19	PA-like	NE	486	16.2	0 WT	non-codel	Unmethylated	No combined CNA	WT
TCGA.DH.5140	38 Female	3.157686334	6.179370673	diploid	Oligoastrocytoma	II	Anaplastic astrocytoma, IDH-wildtype	PA-like	PN	600	20	1 WT	non-codel	Unmethylated	No combined CNA	WT
TCGA.DH.5141	32 Male	2.861705209	4.1767061488	diploid	Oligodendrogloma	II	Anaplastic oligodendrogloma, IDH-mutant	Codel	PN	954	31.8	0 Mutant	codel	Methylated	No combined CNA	WT
TCGA.DH.5142	29 Male	4.246404986	2.382445921	diploid	Astrocytoma	III	Anaplastic astrocytoma, IDH-mutant	G-CIMP-high	PN	1917	63.9	0 Mutant	non-codel	Methylated	No combined CNA	Mutant
TCGA.DH.5143	30 Male	3.455346949	3.331676557	diploid	Oligoastrocytoma	II	Anaplastic oligodendrogloma, IDH-mutant	G-CIMP-high	NE	1383	46.1	0 Mutant	non-codel	Methylated	No combined CNA	WT
TCGA.DH.5144	56 Female	1.994724529	4.198686227	Gain	Oligodendrogloma	II	Anaplastic oligodendrogloma, IDH-mutant	Codel	PN	240	8	0 Mutant	codel	Methylated	No combined CNA	Mutant
TCGA.DH.5145	70 Male	3.684448481	3.531493752	Gain	Oligodendrogloma	II	Anaplastic oligodendrogloma, IDH-mutant	Codel	PN	906	30.2	1 Mutant	codel	Methylated	No combined CNA	WT
TCGA.DH.5146B	52 Male	3.0753663	4.86844972	NA	Astrocytoma	III	Anaplastic astrocytoma, IDH-mutant	G-CIMP-high	PN	1260	42	0 Mutant	non-codel	Methylated	No combined CNA	WT
TCGA.DH.5146D	43 Female	3.885056932	4.115091522	Gain	Astrocytoma	III	Anaplastic astrocytoma, IDH-mutant	G-CIMP-high	PN	834	27.8	0 Mutant	non-codel	Methylated	No combined CNA	WT
TCGA.DH.5146F	49 Male	2.627396722	4.26387273	diploid	Oligodendrogloma	II	Oligodendrogloma, IDH-mutant and 1p/19	Codel	PN	516	17.2	0 Mutant	codel	Methylated	No combined CNA	WT
TCGA.DH.5146G	49 Female	2.812559834	4.778702703	Gain	Oligodendrogloma	II	Anaplastic astrocytoma, IDH-mutant	G-CIMP-high	PN	516	17.2	0 Mutant	non-codel	Methylated	No combined CNA	WT
TCGA.DH.5147	59 Female	1.076906234	5.623612303	diploid	Oligodendrogloma	II	Anaplastic oligodendrogloma, IDH-mutant	Codel	PN	1626	54.2	0 Mutant	codel	Methylated	No combined CNA	WT
TCGA.DH.5147U5	50 Male	2.471542007	3.886130642	diploid	Oligodendrogloma	II	Oligodendrogloma, IDH-mutant and 1p/19	Codel	PN	696	23.2	0 Mutant	codel	Methylated	No combined CNA	WT
TCGA.DH.5147U7	30 Male	3.658376908	5.726704053	Gain	Astrocytoma	III	Anaplastic astrocytoma, IDH-mutant	G-CIMP-high	PN	525	17.5	1 Mutant	non-codel	Methylated	No combined CNA	WT
TCGA.DH.5147U7U	43 Male	2.620516033	3.44796263	diploid	Oligoastrocytoma	II	Anaplastic astrocytoma, IDH-mutant	G-CIMP-high	PN	411	13.7	0 Mutant	non-codel	Methylated	No combined CNA	WT
TCGA.DH.5147U7VU	49 Male	2.952501312	3.370966334	Gain	Astrocytoma	III	Anaplastic astrocytoma, IDH-mutant	G-CIMP-high	PN	558	18.6	0 Mutant	non-codel	Methylated	No combined CNA	Mutant
TCGA.DH.5147U7W	34 Female	4.2982624	6.069566843	diploid	Oligoastrocytoma	II	Anaplastic astrocytoma, IDH-wildtype	Mesenchymal-like	ME	540	18	0 WT	non-codel	Methylated	No combined CNA	WT
TCGA.DH.5147U7X	48 Male	1.394988224	4.928332419	Gain	Oligodendrogloma	II	Oligodendrogloma, IDH-mutant and 1p/19	Codel	NE	438	14.6	0 Mutant	codel	Methylated	No combined CNA	WT
TCGA.DH.5147U7Y	40 Female	2.92314918	5.125411404	diploid	Oligoastrocytoma	II	Anaplastic astrocytoma, IDH-mutant	G-CIMP-high	PN	525	17.5	0 Mutant	non-codel	Methylated	No combined CNA	Mutant
TCGA.DH.5147U7Z	61 Female	5.095755674	5.246225649	diploid	Oligoastrocytoma	II	Anaplastic astrocytoma, IDH-wildtype	Mesenchymal-like	CL	201	6.7	1 WT	non-codel	Methylated	No combined CNA	Mutant
TCGA.DH.5148	29 Male	3.102154192	3.340747401	diploid	Oligoastrocytoma	II	Diffuse astrocytoma, IDH-mutant	G-CIMP-high	PN	402	13.4	0 Mutant	non-codel	Methylated	No combined CNA	WT
TCGA.DH.5148A	57 Female	4.359601537	4.351790849	Gain	Astrocytoma	III	Anaplastic astrocytoma, IDH-wildtype	Mesenchymal-like	CL	252	8.4	0 WT	non-codel	Unmethylated	Gain chr 7 ∓ loss chr 10	WT
TCGA.DH.5148B	49 Female	4.008854364	3.788309851	Gain	Oligoastrocytoma	II	Anaplastic astrocytoma, IDH-mutant	G-CIMP-high	PN	204	6.8	0 Mutant	non-codel	Methylated	No combined CNA	WT
TCGA.DH.5148D	34 Female	1.91490892	2.285638949	diploid	Oligodendrogloma	II	Oligodendrogloma, IDH-mutant and 1p/19	Codel	PN	5469	182.3	0 Mutant	codel	Methylated	No combined CNA	WT
TCGA.DH.5148E	37 Female	1.6969285	3.772117912	diploid	Oligoastrocytoma	II	Diffuse astrocytoma, IDH-mutant	G-CIMP-high	PN	567	18.9	0 Mutant	non-codel	Methylated	No combined CNA	Mutant
TCGA.DH.5148F	43 Female	3.023894043	4.13487805	diploid	Oligoastrocytoma	II	Diffuse astrocytoma, IDH-mutant	G-CIMP-high	PN	525	17.5	0 Mutant	non-codel	Methylated	No combined CNA	WT
TCGA.DH.5148G	62 Female	0.96761131	2.853556568	diploid	Oligodendrogloma	II	Oligodendrogloma, IDH-mutant and 1p/19	Codel	PN	456	15.2	0 Mutant	codel	Methylated	No combined CNA	WT
TCGA.DH.6392	35 Female	2.983768886	6.226701185	Gain	Astrocytoma	III	Anaplastic astrocytoma, IDH-wildtype	PA-like	PN	6336	211.2	0 WT	non-codel	Unmethylated	No combined CNA	Mutant
TCGA.DH.6393	66 Male	1.740711733	2.857310910	diploid	Oligodendrogloma	II	Anaplastic oligodendrogloma, IDH-mutant	Codel	PN	1563	52.1	1 Mutant	codel	Methylated	No combined CNA	WT
TCGA.DH.6394	53 Male	1.386424705	2.427284346	diploid	Oligodendrogloma	II	Anaplastic oligodendrogloma, IDH-mutant	Codel	PN	672	22.4	1 Mutant	codel	Methylated	No combined CNA	WT
TCGA.DH.6395	31 Male	1.720803782	3.743514969	Gain	Oligoastrocytoma	II	Diffuse astrocytoma, IDH-mutant	G-CIMP-high	PN	1470	49	1 Mutant	non-codel	Methylated	No combined CNA	Mutant
TCGA.DH.6396	31 Female	4.784666251	1.405066556	diploid	Oligoastrocytoma	II	Anaplastic astrocytoma, IDH-mutant	G-CIMP-high	PN	2256	75.2	1 Mutant	non-codel	Methylated	No combined CNA	Mutant
TCGA.DH.6397	45 Male	2.431511933	1.750692249	diploid	Oligodendrogloma	II	Anaplastic oligodendrogloma, IDH-mutant	Codel	PN	1383	46.1</					

TCGA.DU.7019	39 Male	1.500547137	3.26477661	diploid	Oligoastrocytoma	III	Anaplastic astrocytoma, IDH-mutant	G-CIMP-high	789	26.3	0 Mutant	non-codel	Methylated	No combined CNA	WT
TCGA.DU.7290	45 Female	3.346616558	3.495797882	diploid	Astrocytoma	III	Anaplastic astrocytoma, IDH-wildtype	Mesenchymal-like	312	10.4	1 WT	non-codel	Unmethylated	No combined CNA	WT
TCGA.DU.7292	69 Male	2.48805203	5.429180747	Gain	Astrocytoma	III	Anaplastic astrocytoma, IDH-wildtype	Classic-like	240	8	1 WT	non-codel	Methylated	No combined CNA	WT
TCGA.DU.7294	53 Female	0.590434352	2.724933981	diploid	Oligodendrogloma	II	Oligodendrogloma, IDH-mutant and 1p/19	Codel	2829	94.3	0 Mutant	codel	Methylated	No combined CNA	WT
TCGA.DU.7298	38 Female	5.231201259	3.556413529	diploid	Astrocytoma	III	Anaplastic astrocytoma, IDH-mutant	G-CIMP-high	567	18.9	1 Mutant	non-codel	Methylated	No combined CNA	WT
TCGA.DU.7299	33 Male	1.892546459	2.551589842	diploid	Astrocytoma	III	Anaplastic astrocytoma, IDH-mutant	G-CIMP-high	1320	44	1 Mutant	non-codel	Methylated	No combined CNA	WT
TCGA.DU.7300	53 Female	2.69081934	4.367182329	diploid	Oligodendrogloma	III	Anaplastic oligodendrogloma, IDH-mutant	Codel	1860	62	1 Mutant	codel	Methylated	No combined CNA	WT
TCGA.DU.7301	53 Male	2.895225055	2.157852169	Gain	Oligodendrogloma	II	Oligodendrogloma, NOS	G-CIMP-high	777	25.9	1 Mutant	non-codel	Methylated	No combined CNA	WT
TCGA.DU.7302	48 Female	1.690059451	4.141089407	diploid	Oligodendrogloma	III	Anaplastic oligodendrogloma, IDH-mutant	Codel	1809	60.3	0 Mutant	codel	Methylated	No combined CNA	WT
TCGA.DU.7304	43 Male	3.642066138	4.496954413	diploid	Oligoastrocytoma	III	Anaplastic astrocytoma, IDH-mutant	G-CIMP-high	699	23.3	1 Mutant	non-codel	Methylated	No combined CNA	WT
TCGA.DU.7306	67 Male	1.876094513	0.574634393	Gain	Oligoastrocytoma	II	Diffuse astrocytoma, IDH-mutant	G-CIMP-high	1260	42	0 Mutant	non-codel	Methylated	No combined CNA	WT
TCGA.DU.7309	41 Female	2.23526753	1.12164955	Gain	Oligodendrogloma	III	Anaplastic oligodendrogloma, NOS	G-CIMP-high	84	2.8	0 Mutant	non-codel	Methylated	No combined CNA	WT
TCGA.DU.8158	57 Female	3.766171089	8.871678577	diploid	Astrocytoma	III	Anaplastic astrocytoma, IDH-wildtype	Mesenchymal-like	153	5.1	1 WT	non-codel	Unmethylated	No combined CNA	WT
TCGA.DU.8161	63 Female	4.245077275	5.545905919	Gain	Oligoastrocytoma	III	Anaplastic astrocytoma, IDH-wildtype	Mesenchymal-like	711	23.7	1 WT	non-codel	Unmethylated	Gain chr 7 &#amp; loss chr 10	WT
TCGA.DU.8162	61 Female	3.161355641	5.372457653	diploid	Oligoastrocytoma	III	Anaplastic astrocytoma, IDH-wildtype	Mesenchymal-like	438	14.6	1 WT	non-codel	Unmethylated	No combined CNA	WT
TCGA.DU.8163	29 Male	3.414338525	4.646277884	Gain	Oligoastrocytoma	III	Anaplastic astrocytoma, IDH-mutant	G-CIMP-high	621	20.7	0 Mutant	non-codel	Methylated	No combined CNA	WT
TCGA.DU.8164	51 Male	1.449482184	3.640019234	diploid	Oligodendrogloma	II	Oligodendrogloma, IDH-mutant and 1p/19	Codel	642	21.4	0 Mutant	codel	Methylated	No combined CNA	WT
TCGA.DU.8165	60 Female	4.023769875	7.308878688	Gain	Oligodendrogloma	III	Anaplastic oligodendrogloma, NOS	Mesenchymal-like	573	19.1	0 WT	non-codel	Unmethylated	Gain chr 7 &#amp; loss chr 10	WT
TCGA.DU.8166	29 Female	1.444136957	4.176386607	Gain	Oligoastrocytoma	II	Diffuse astrocytoma, IDH-mutant	G-CIMP-high	510	17	0 Mutant	non-codel	Methylated	No combined CNA	WT
TCGA.DU.8167	69 Female	3.210170636	3.998475348	diploid	Oligoastrocytoma	II	Diffuse astrocytoma, IDH-mutant	G-CIMP-high	465	15.5	0 Mutant	non-codel	Methylated	No combined CNA	WT
TCGA.DU.8168	55 Female	2.165585254	3.05000653	diploid	Oligodendrogloma	III	Anaplastic oligodendrogloma, IDH-mutant	Codel	426	14.2	0 Mutant	codel	Methylated	No combined CNA	WT
TCGA.DU.A5TP	33 Male	3.63282657	3.347056138	diploid	Astrocytoma	III	Anaplastic astrocytoma, IDH-mutant	G-CIMP-high	999	33.3	0 Mutant	non-codel	Methylated	No combined CNA	WT
TCGA.DU.A5TR	51 Male	2.552274114	4.778213834	Gain	Oligoastrocytoma	II	Diffuse astrocytoma, IDH-mutant	G-CIMP-high	897	29.9	0 Mutant	non-codel	Methylated	No combined CNA	WT
TCGA.DU.A5TS	42 Male	3.757151291	3.057467260	diploid	Oligodendrogloma	II	Oligodendrogloma, NOS	G-CIMP-high	951	31.7	0 Mutant	non-codel	Methylated	No combined CNA	WT
TCGA.DU.A5TT	70 Male	3.191973167	8.073367051	Gain	Oligodendrogloma	III	Anaplastic oligodendrogloma, NOS	Mesenchymal-like	732	24.4	0 WT	non-codel	Methylated	No combined CNA	WT
TCGA.DU.A5TU	62 Female	5.2217843	4.126807703	Gain	Astrocytoma	II	Diffuse astrocytoma, IDH-mutant	G-CIMP-high	786	26.2	0 Mutant	non-codel	Methylated	No combined CNA	WT
TCGA.DU.A5TW	33 Female	1.84633074	4.988093858	Gain	Oligoastrocytoma	III	Anaplastic astrocytoma, IDH-mutant	G-CIMP-high	750	25	0 Mutant	non-codel	Methylated	No combined CNA	WT
TCGA.DU.A5TY	46 Female	5.396313644	4.900746075	Gain	Astrocytoma	III	Anaplastic astrocytoma, IDH-wildtype	Mesenchymal-like	1020	34	1 WT	non-codel	Methylated	Gain chr 7 &#amp; loss chr 10	WT
TCGA.DU.A6S2	37 Female	1.189603197	5.387889980	diploid	Oligodendrogloma	II	Oligodendrogloma, IDH-mutant and 1p/19	Codel	768	25.6	0 Mutant	codel	Methylated	No combined CNA	WT
TCGA.DU.A6S3	60 Male	1.586164246	4.91334901	diploid	Oligodendrogloma	II	Oligodendrogloma, IDH-mutant and 1p/19	Codel	648	21.6	0 Mutant	codel	Methylated	No combined CNA	WT
TCGA.DU.A6S6	35 Female	2.749126603	5.620160631	Gain	Oligoastrocytoma	II	Oligodendrogloma, IDH-mutant and 1p/19	Codel	2853	95.1	0 Mutant	codel	Methylated	No combined CNA	WT
TCGA.DU.A6S7	27 Female	3.90446483	3.368181655	diploid	Astrocytoma	III	Anaplastic astrocytoma, IDH-mutant	G-CIMP-high	630	21	0 Mutant	non-codel	Methylated	No combined CNA	WT
TCGA.DU.A6S8	74 Female	1.646899949	3.249930709	diploid	Oligodendrogloma	III	Anaplastic oligodendrogloma, IDH-mutant	Codel	669	22.3	0 Mutant	codel	Methylated	No combined CNA	WT
TCGA.DU.A76K	87 Male	1.900490089	4.973790339	Gain	Oligodendrogloma	II	Oligodendrogloma, NOS	Classic-like	342	11.4	1 WT	non-codel	Unmethylated	Gain chr 7 &#amp; loss chr 10	WT
TCGA.DU.A76L	54 Male	3.655683839	6.098635557	Gain	Oligodendrogloma	III	Anaplastic oligodendrogloma, NOS	Mesenchymal-like	804	26.8	1 WT	non-codel	Methylated	Gain chr 7 &#amp; loss chr 10	WT
TCGA.DU.A76O	30 Male	4.309634308	3.686970055	Gain	Astrocytoma	III	Diffuse astrocytoma, IDH-mutant	G-CIMP-high	516	17.2	0 Mutant	non-codel	Methylated	No combined CNA	WT
TCGA.DU.A76R	51 Male	2.146915848	4.015399441	Gain	Oligodendrogloma	III	Anaplastic oligodendrogloma, IDH-mutant	Codel	639	21.3	1 Mutant	codel	Methylated	No combined CNA	WT
TCGA.DU.A77E	73 Female	1.356087485	5.398295639	diploid	Oligodendrogloma	II	Anaplastic oligodendrogloma, IDH-mutant	Codel	540	18	1 Mutant	codel	Methylated	No combined CNA	WT
TCGA.DU.A77B	35 Male	3.010761938	4.245191398	Gain	Oligoastrocytoma	III	Anaplastic astrocytoma, IDH-mutant	G-CIMP-high	4170	139	1 Mutant	non-codel	Methylated	No combined CNA	WT
TCGA.DU.A77A	32 Male	3.682348561	4.720606811	Gain	Oligodendrogloma	II	Oligodendrogloma, NOS	G-CIMP-high	2529	84.3	0 Mutant	non-codel	Methylated	No combined CNA	WT
TCGA.DU.A77B	56 Male	3.197053729	6.116441697	diploid	Oligodendrogloma	II	Oligodendrogloma, NOS	PA-like	1545	51.5	0 WT	non-codel	Unmethylated	No combined CNA	WT
TCGA.DU.A77C	32 Male	3.4126116	5.553750617	diploid	Astrocytoma	II	Diffuse astrocytoma, IDH-mutant	G-CIMP-high	1122	37.4	0 Mutant	non-codel	Methylated	No combined CNA	WT
TCGA.DU.A77D	52 Male	3.577547192	3.84796865	Gain	Oligoastrocytoma	III	Anaplastic astrocytoma, IDH-wildtype	Mesenchymal-like	225	7.5	1 WT	non-codel	Unmethylated	Gain chr 7 &#amp; loss chr 10	WT
TCGA.DU.A77I	40 Male	2.445348265	6.174188671	diploid	Oligodendrogloma	II	Oligodendrogloma, NOS	G-CIMP-high	1332	44.4	1 Mutant	non-codel	Methylated	No combined CNA	WT
TCGA.DU.A77T	32 Male	3.339222918	4.74592965	Gain	Astrocytoma	III	Anaplastic astrocytoma, NOS	NE	1167	38.9	1 Mutant	codel	Methylated	No combined CNA	WT
TCGA.DU.A77J	55 Male	4.065141438	2.700151151	Gain	Astrocytoma	III	Anaplastic astrocytoma, IDH-wildtype	Mesenchymal-like	18	0.6	0 WT	non-codel	Unmethylated	Gain chr 7 &#amp; loss chr 10	WT
TCGA.E1.5302	41 Male	4.208111425	2.508834274	Gain	Astrocytoma	III	Anaplastic astrocytoma, IDH-mutant	G-CIMP-high	1503	50.1	1 Mutant	non-codel	Methylated	No combined CNA	WT
TCGA.E1.5303	38 Male	3.405789328	3.046563517	diploid	Astrocytoma	III	Anaplastic astrocytoma, IDH-mutant	G-CIMP-high	2025	67.5	1 Mutant	non-codel	Methylated	No combined CNA	WT
TCGA.E1.5304	42 Male	1.384823459	2.889707158	Gain	Astrocytoma	III	Anaplastic astrocytoma, IDH-mutant	G-CIMP-low	1233	41.1	1 Mutant	non-codel	Unmethylated	No combined CNA	WT
TCGA.E1.5305	34 Male	1.82321946	3.027366405	diploid	Astrocytoma	III	Anaplastic astrocytoma, IDH-mutant	G-CIMP-high	2400	80	1 Mutant	non-codel	Methylated	No combined CNA	WT
TCGA.E1.5307	62 Female	2.041930769	3.406033191	diploid	Astrocytoma	III	Anaplastic astrocytoma, IDH-mutant	G-CIMP-high	1737	57.9	1 Mutant	non-codel	Methylated	No combined CNA	WT
TCGA.E1.5311	31 Male	2.072140109	4.137946101	diploid	Oligodendrogloma	III	Anaplastic oligodendrogloma, IDH-mutant	Codel	4029	134.3	1 Mutant	codel	Methylated	No combined CNA	WT
TCGA.E1.5312	42 Female	1.817077212	3.297296424	diploid	Oligodendrogloma	II	Oligodendrogloma, IDH-mutant and 1p/19	Codel	2346	78.2	1 Mutant	codel	Methylated	No combined CNA	WT
TCGA.E1.5319	48 Female	1.892546459	1.946139152	diploid	Oligodendrogloma	II	Oligodendrogloma, IDH-mutant and 1p/19	Codel	2868	95.6	1 Mutant	codel	Methylated	No combined CNA	WT
TCGA.E1.5322	38 Female	2.159871772	2.359830637	Gain	Oligoastrocytoma	II	Diffuse astrocytoma, IDH-mutant	G-CIMP-high	3924	130.8	1 Mutant	non-codel	Methylated	No combined CNA	WT
TCGA.E1.57YD	57 Male	3.60645073	6.531156851	Gain	Astrocytoma	III	Anaplastic astrocytoma, IDH-wildtype	Mesenchymal-like	429	14.3	1 WT	non-codel	Unmethylated	Gain chr 7 &#amp; loss chr 10	WT
TCGA.E1.57YF	32 Female	3.098436403	4.202736855	diploid	Astrocytoma	III	Anaplastic astrocytoma, IDH-mutant	G-CIMP-low	873	29.1	1 Mutant	non-codel	Unmethylated	No combined CNA	WT
TCGA.E1.57YH	47 Female	3.670035845	4.253543718	diploid	Astrocytoma	III	Anaplastic astrocytoma, IDH-mutant	G-CIMP-high	2796	93.2	1 Mutant	non-codel	Methylated	No combined CNA	WT
TCGA.E1.57YI	33 Female	3.019339468	2.8915765	diploid	Astrocytoma	III	Anaplastic astrocytoma, IDH-mutant	G-CIMP-low	108	3.6	1 Mutant	non-codel	Unmethylated	No combined CNA	WT
TCGA.E1.57YK	55 Male	3.561501689	3.608974788	diploid	Astrocytoma	III	Anaplastic astrocytoma, IDH-wildtype	Classic-like	585	19.5	1 WT	non-codel	Unmethylated	Gain chr 7 &#amp; loss chr 10	WT
TCGA.E1.57YK	52 Male	5.071192033	3.988567474	diploid	Astrocytoma	III	Anaplastic astrocytoma, IDH-mutant	G-CIMP-high	372	12.4	1 Mutant	non-codel	Methylated	No combined CNA	WT
TCGA.E1.57YL	46 Male	3.577092507	6.762326224	Gain	Astrocytoma	III	Anaplastic astrocytoma, IDH-wildtype	Mesenchymal-like	486	16.2	1 WT	non-codel	Unmethylated	Gain chr 7 &#amp; loss chr 10	WT
TCGA.E1.57YM	63 Male	3.73433027	4.847155086	Gain	Astrocytoma	III	Anaplastic astrocytoma, IDH-wildtype	Mesenchymal-like	639	21.3	1 WT	non-codel	Unmethylated	Gain chr 7 &#amp; loss chr 10	WT
TCGA.E1.57YN	63 Female	6.448915814	4.551989661	Gain	Astrocytoma	III	Anaplastic astrocytoma, IDH-wildtype	Mesenchymal-like	717	23.9	1 WT	non-codel	Methylated	Gain chr 7 &#amp; loss chr 10	WT
TCGA.E1.57YQ	45 Male	1.815602249	4.264679042	diploid	Oligodendrogloma	III	Anaplastic oligodendrogloma, IDH-mutant	Codel	2250	75	1 Mutant	codel	Methylated	No combined CNA	WT
TCGA.E1.57YQ	58 Female	6.483387673	5.298478701	Gain	Oligodendrogloma	III	Anaplastic oligodendrogloma, NOS	Classic-like	1557	51.9	1 WT	non-codel	Unmethylated	Gain chr 7 &#amp; loss chr 10	WT
TCGA.E1.57YS	71 Male	0.970780046	3.139769528	diploid	Oligodendrogloma	III	Anaplastic oligodendrogloma, IDH-mutant	Codel	459	15.3	1 Mutant	codel	Methylated	No combined CNA</td	

TCGA.FG.7636	48 Male	2.765948049	4.465700261	diploid	Astrocytoma	III	Anaplastic astrocytoma, IDH-mutant	G-CIMP-high	PN	537	17.9	0 Mutant	non-codel	Methylated	No combined CNA	Mutant
TCGA.FG.7637	49 Male	0.645148266	1.63862995	NA	Oligoastrocytoma	II	Diffuse astrocytoma, IDH-mutant	Codel	PN	1203	40.1	0 Mutant	non-codel	Methylated	WT	WT
TCGA.FG.7638	31 Female	2.617651119	4.060795648	diploid	Oligodendrogloma	III	Anaplastic oligodendrogloma, IDH-mutant	Codel	NE	678	22.6	0 Mutant	codel	Methylated	No combined CNA	Mutant
TCGA.FG.7641	31 Male	1.597698019	4.924099886	diploid	Oligodendrogloma	III	Oligodendrogloma, IDH-mutant and 1p19' Codel	NE	618	20.6	0 Mutant	codel	Methylated	No combined CNA	WT	
TCGA.FG.7643	49 Female	1.765831741	5.766436149	Gain	Oligoastrocytoma	II	Diffuse astrocytoma, IDH-wildtype	Mesenchymal-like	NE	603	20.1	0 WT	non-codel	Methylated	No combined CNA	WT
TCGA.FG.8181	23 Male	2.762221232	6.762501635	diploid	Oligoastrocytoma	III	Anaplastic astrocytoma, IDH-wildtype	PA-like	NE	849	28.3	0 WT	non-codel	Unmethylated	No combined CNA	WT
TCGA.FG.8182	35 Male	2.736128588	3.539444219	Gain	Oligodendrogloma	II	Oligodendrogloma, NOS	G-CIMP-high	PN	411	13.7	0 Mutant	non-codel	Methylated	No combined CNA	Mutant
TCGA.FG.8185	37 Male	2.947423038	2.65558081	diploid	Astrocytoma	III	Anaplastic astrocytoma, IDH-mutant	G-CIMP-high	PN	426	14.2	0 Mutant	non-codel	Methylated	No combined CNA	Mutant
TCGA.FG.8186	42 Female	4.061041705	4.053884622	Gain	Oligoastrocytoma	III	Anaplastic oligodendrogloma, IDH-mutant	Codel	NE	480	16	0 Mutant	codel	Methylated	No combined CNA	WT
TCGA.FG.8187	31 Male	2.095451881	4.326530158	diploid	Oligoastrocytoma	II	Oligodendrogloma, IDH-mutant and 1p19' Codel	NE	603	20.1	0 Mutant	codel	Methylated	No combined CNA	WT	
TCGA.FG.8188	41 Male	2.793375711	1.846994687	diploid	Oligoastrocytoma	II	Diffuse astrocytoma, IDH-mutant	G-CIMP-high	NE	450	15	0 Mutant	non-codel	Methylated	No combined CNA	Mutant
TCGA.FG.8189	33 Female	3.323836804	6.926744302	diploid	Oligodendrogloma	II	Oligodendrogloma, NOS	G-CIMP-high	NE	675	22.5	0 Mutant	non-codel	Methylated	No combined CNA	WT
TCGA.FG.8191	30 Male	1.915138426	3.495886993	diploid	Oligodendrogloma	III	Anaplastic oligodendrogloma, NOS	G-CIMP-high	PN	978	32.6	0 Mutant	non-codel	Unmethylated	No combined CNA	Mutant
TCGA.FG.8197	27 Female	1.916667717	4.354318154	diploid	Oligodendrogloma	II	Oligodendrogloma, NOS	G-CIMP-high	PN	1149	38.3	0 Mutant	non-codel	Methylated	No combined CNA	Mutant
TCGA.FG.844MU	58 Male	3.253777534	5.457019647	Gain	Oligoastrocytoma	III	Anaplastic astrocytoma, IDH-wildtype	Mesenchymal-like	CL	321	10.7	0 WT	non-codel	Methylated	Gain chr 7 &#amp; loss chr 10	WT
TCGA.FG.844MV	63 Male	3.129085148	4.740085653	Gain	Oligoastrocytoma	III	Anaplastic astrocytoma, IDH-wildtype	Classic-like	CL	552	18.4	1 WT	non-codel	Methylated	Gain chr 7 &#amp; loss chr 10	WT
TCGA.FG.844MX	47 Male	5.209096294	5.535228712	diploid	Astrocytoma	III	Diffuse astrocytoma, IDH-mutant	G-CIMP-high	NE	561	18.7	0 Mutant	codel	Methylated	No combined CNA	Mutant
TCGA.FG.844MY	44 Female	2.176131252	3.589260133	diploid	Oligoastrocytoma	II	Diffuse astrocytoma, IDH-mutant	G-CIMP-high	PN	711	23.7	0 Mutant	non-codel	Methylated	No combined CNA	WT
TCGA.FG.846JU	47 Female	1.774375932	4.079241932	diploid	Oligoastrocytoma	II	Diffuse astrocytoma, IDH-mutant and 1p19' Codel	G-CIMP-high	PN	444	14.8	0 Mutant	non-codel	Methylated	No combined CNA	WT
TCGA.FG.846KU	34 Female	2.107922163	3.503819379	diploid	Oligoastrocytoma	II	Oligodendrogloma, IDH-mutant and 1p19' Codel	PN	534	17.8	0 Mutant	codel	Methylated	No combined CNA	WT	
TCGA.FG.846L0	34 Female	3.294547234	4.056644217	diploid	Astrocytoma	III	Diffuse astrocytoma, IDH-mutant	G-CIMP-high	NE	645	21.5	0 Mutant	non-codel	Methylated	No combined CNA	WT
TCGA.FG.846I2	60 Male	3.122254341	3.148478616	diploid	Oligodendrogloma	II	Oligodendrogloma, IDH-mutant and 1p19' Codel	PN	450	15	0 Mutant	codel	Methylated	No combined CNA	WT	
TCGA.FG.846J1	44 Female	3.332937028	4.027770650	diploid	Oligodendrogloma	II	Oligodendrogloma, IDH-mutant and 1p19' Codel	PN	492	16.4	0 Mutant	codel	Methylated	No combined CNA	WT	
TCGA.FG.846J3	52 Female	5.13480825	2.574392191	diploid	Astrocytoma	III	Anaplastic astrocytoma, IDH-mutant	G-CIMP-low	ME	669	22.3	0 Mutant	non-codel	Methylated	No combined CNA	WT
TCGA.FG.8470Y	20 Female	3.961176305	5.129090423	diploid	Oligodendrogloma	II	Oligodendrogloma, NOS	G-CIMP-high	NE	855	28.5	0 Mutant	non-codel	Methylated	No combined CNA	Mutant
TCGA.FG.870Z	53 Female	4.105745116	4.872158957	Gain	Oligoastrocytoma	III	Anaplastic astrocytoma, IDH-wildtype	Mesenchymal-like	CL	324	10.8	0 WT	non-codel	Methylated	Gain chr 7 &#amp; loss chr 10	WT
TCGA.FG.870ZJ	50 Female	3.82767678	4.193038383	diploid	Oligodendrogloma	II	Oligodendrogloma, IDH-mutant and 1p19' Codel	PN	1101	36.7	0 Mutant	codel	Methylated	No combined CNA	WT	
TCGA.FG.8711	33 Female	2.41267315	4.641829223	Gain	Oligoastrocytoma	II	Oligodendrogloma, NOS	G-CIMP-high	NE	1461	48.7	1 Mutant	non-codel	Unmethylated	No combined CNA	Mutant
TCGA.FG.8713	74 Female	2.969141276	6.359752707	diploid	Oligoastrocytoma	II	Oligodendrogloma, IDH-mutant and 1p19' Codel	NE	612	20.4	0 Mutant	codel	Methylated	No combined CNA	WT	
TCGA.FG.887N	37 Female	2.469885976	4.183232413	diploid	Astrocytoma	III	Anaplastic astrocytoma, IDH-mutant	G-CIMP-low	NE	558	18.6	0 Mutant	non-codel	Methylated	No combined CNA	WT
TCGA.FG.887Q	61 Female	5.298804923	5.025587333	Gain	Astrocytoma	III	Anaplastic astrocytoma, IDH-wildtype	Classic-like	NE	171	5.7	0 WT	non-codel	Methylated	Gain chr 7 &#amp; loss chr 10	WT
TCGA.FN.7833	25 Male	3.492712046	3.864069639	diploid	Oligoastrocytoma	III	Anaplastic astrocytoma, IDH-mutant	G-CIMP-high	NE	825	27.5	0 Mutant	non-codel	Methylated	No combined CNA	Mutant
TCGA.FT.7467	54 Male	1.919111216	4.841490128	diploid	Oligodendrogloma	II	Oligodendrogloma, IDH-mutant and 1p19' Codel	NE	3	0.1	0 Mutant	codel	Methylated	No combined CNA	WT	
TCGA.FT.7468	30 Male	0.837216667	2.516090811	diploid	Oligodendrogloma	III	Anaplastic oligodendrogloma, IDH-mutant	Codel	PN	201	6.7	0 Mutant	codel	Methylated	No combined CNA	WT
TCGA.FT.7469	30 Male	2.741553276	3.269098533	diploid	Oligodendrogloma	III	Anaplastic oligodendrogloma, NOS	PA-like	CL	345	11.5	1 WT	non-codel	Methylated	No combined CNA	Mutant
TCGA.FT.7470	37 Male	2.791418187	4.049482657	diploid	Oligodendrogloma	III	Anaplastic oligodendrogloma, NOS	G-CIMP-high	NE	1203	40.1	1 Mutant	non-codel	Methylated	No combined CNA	WT
TCGA.FT.7471	37 Female	2.90403366	3.579168077	diploid	Astrocytoma	III	Anaplastic oligodendrogloma, IDH-mutant	G-CIMP-low	NE	3	0.1	0 Mutant	codel	Methylated	No combined CNA	WT
TCGA.FT.7472	38 Male	2.629916278	6.015698267	diploid	Oligodendrogloma	II	Oligodendrogloma, NOS	G-CIMP-high	PN	0	0	0 Mutant	non-codel	Methylated	No combined CNA	Mutant
TCGA.FT.7473	28 Male	4.708374874	2.997816272	Gain	Oligoastrocytoma	II	Diffuse astrocytoma, IDH-mutant	G-CIMP-high	NE	495	16.5	0 Mutant	non-codel	Methylated	No combined CNA	WT
TCGA.FT.7474	52 Male	2.078739041	5.533028927	diploid	Oligoastrocytoma	II	Diffuse astrocytoma, IDH-mutant	G-CIMP-high	NE	114	3.8	0 Mutant	non-codel	Methylated	No combined CNA	Mutant
TCGA.FT.7475	67 Male	0.864176238	5.192277033	diploid	Oligoastrocytoma	III	Anaplastic astrocytoma, IDH-mutant	G-CIMP-high	NE	522	17.4	0 Mutant	non-codel	Methylated	No combined CNA	WT
TCGA.FT.7476	26 Male	4.585875896	4.76176315	diploid	Astrocytoma	II	Diffuse astrocytoma, IDH-mutant	G-CIMP-high	NE	195	6.5	0 Mutant	non-codel	Methylated	No combined CNA	Mutant
TCGA.FT.7477	62 Male	2.211697545	4.547283241	Gain	Astrocytoma	III	Anaplastic astrocytoma, IDH-mutant	G-CIMP-high	PN	729	24.3	0 Mutant	non-codel	Methylated	No combined CNA	Mutant
TCGA.FT.7478	36 Male	3.003854057	3.640297000	diploid	Astrocytoma	III	Diffuse astrocytoma, IDH-mutant	G-CIMP-high	ME	192	6.4	0 Mutant	non-codel	Unmethylated	No combined CNA	Mutant
TCGA.FT.7479	44 Male	3.143474505	3.39179521	diploid	Astrocytoma	III	Anaplastic astrocytoma, IDH-mutant	G-CIMP-high	ME	1209	40.3	0 Mutant	non-codel	Methylated	No combined CNA	WT
TCGA.FT.7480	33 Male	1.386424705	4.024124611	diploid	Oligodendrogloma	II	Oligodendrogloma, IDH-mutant and 1p19' Codel	PN	2256	75.2	0 Mutant	codel	Methylated	No combined CNA	WT	
TCGA.FT.7481	39 Male	-0.17755361	4.133185377	diploid	Oligodendrogloma	II	Oligodendrogloma, IDH-mutant and 1p19' Codel	NE	2877	95.9	0 Mutant	codel	Methylated	No combined CNA	WT	
TCGA.FT.7482	18 Female	2.798071258	2.677377283	diploid	Oligoastrocytoma	II	Diffuse astrocytoma, IDH-mutant	G-CIMP-high	PN	3210	107	0 Mutant	non-codel	Methylated	No combined CNA	Mutant
TCGA.FT.7483	14 Male	1.20845831	3.917489042	diploid	Oligoastrocytoma	II	Diffuse astrocytoma, IDH-mutant	G-CIMP-high	PN	5184	172.8	0 Mutant	non-codel	Methylated	No combined CNA	Mutant
TCGA.FT.7485	42 Male	2.665324546	2.299420514	diploid	Astrocytoma	II	Diffuse astrocytoma, IDH-mutant	G-CIMP-high	PN	120	4	0 Mutant	non-codel	Methylated	No combined CNA	Mutant
TCGA.FT.7601	30 Female	3.767834859	3.064520753	diploid	Oligoastrocytoma	II	Anaplastic astrocytoma, IDH-mutant	G-CIMP-high	NE	150	5	0 Mutant	non-codel	Methylated	No combined CNA	WT
TCGA.FT.7602	21 Male	2.871488844	3.505628872	diploid	Oligodendrogloma	II	Oligodendrogloma, NOS	G-CIMP-high	NE	897	29.9	0 Mutant	non-codel	Methylated	No combined CNA	WT
TCGA.FT.7603	29 Male	3.210373278	6.015698267	diploid	Oligodendrogloma	II	Oligodendrogloma, NOS	G-CIMP-high	NE	696	23.2	0 Mutant	non-codel	Methylated	No combined CNA	Mutant
TCGA.FT.7604	50 Male	1.765843455	2.571506928	Gain	Astrocytoma	II	Diffuse astrocytoma, IDH-mutant	G-CIMP-high	PN	3675	122.5	0 Mutant	non-codel	Methylated	No combined CNA	WT
TCGA.FT.7605	38 Male	1.976510281	5.224727182	diploid	Oligodendrogloma	II	Oligodendrogloma, IDH-mutant and 1p19' Codel	NE	138	4.6	0 Mutant	codel	Methylated	No combined CNA	WT	
TCGA.FT.7606	30 Female	2.358946331	3.756201359	diploid	Astrocytoma	II	Diffuse astrocytoma, IDH-mutant	G-CIMP-high	PN	519	17.3	0 Mutant	non-codel	Unmethylated	No combined CNA	WT
TCGA.FT.7607	61 Female	2.286023554	5.468840681	diploid	Astrocytoma	II	Diffuse astrocytoma, IDH-mutant	Codel	NE	96	3.2	1 Mutant	codel	Methylated	No combined CNA	WT
TCGA.FT.7608	61 Male	1.885105754	3.125006307	diploid	Oligoastrocytoma	II	Oligodendrogloma, IDH-mutant and 1p19' Codel	NE	663	22.1	0 Mutant	codel	Methylated	No combined CNA	WT	
TCGA.FT.7609	34 Male	1.040120917	1.925847540	diploid	Oligoastrocytoma	II	Anaplastic astrocytoma, IDH-mutant	G-CIMP-high	PN	1380	46	0 Mutant	non-codel	Methylated	No combined CNA	WT
TCGA.FT.7610	25 Female	1.909465911	5.039230529	Gain	Oligoastrocytoma	II	Diffuse astrocytoma, IDH-mutant	G-CIMP-high	NE	1683	56.1	0 Mutant	non-codel	Methylated	No combined CNA	Mutant
TCGA.FT.7611	36 Male	2.44939108	2.619323443	diploid	Oligoastrocytoma	II	Diffuse astrocytoma, IDH-mutant	G-CIMP-high	NE	1728	57.6	0 Mutant	non-codel	Methylated	No combined CNA	Mutant
TCGA.FT.7612	75 Male	3.794374275	1.887525271	diploid	Oligodendrogloma	II	Anaplastic oligodendrogloma, IDH-mutant	Codel	ME	6	0.2	1 Mutant	codel	Methylated	No combined CNA	WT
TCGA.FT.7620	40 Male	1.382667253	4.294927567	diploid	Oligodendrogloma	II	Anaplastic oligodendrogloma, IDH-mutant	Codel	PN	429	14.3	0 Mutant	codel	Methylated	No combined CNA	WT
TCGA.FT.7626	26 Male	3.548991401	2.529596093	diploid	Oligodendrogloma	II	Oligodendrogloma, NOS	G-CIMP-high	PN	6	0.2	0 Mutant	non-codel	Unmethylated	No combined CNA	Mutant
TCGA.FT.7627	53 Male	1.688345535	3.621008601	diploid	Oligodendrogloma	II	Anaplastic oligodendrogloma, IDH-mutant	Codel	PN	486	16.2	0				

TCGA-HT.7879	31 Male	3.338481465	3.439370478	diploid	Oligoastrocytoma	III	Anaplastic astrocytoma, IDH-mutant	G-CIMP-high	PN	111	3.7	0 Mutant	non-codel	Methylated	No combined CNA	Mutant
TCGA-HT.7880	30 Male	3.180466161	5.429666173	diploid	Oligoastrocytoma	II	Diffuse astrocytoma, IDH-mutant	G-CIMP-high	NE	159	5.3	0 Mutant	non-codel	Methylated	No combined CNA	Mutant
TCGA-HT.7881	38 Male	2.190203958	5.203306887	diploid	Oligodendrogloma	III	Oligodendrogloma, IDH-mutant and 1p/19	Codel	NE	1065	35.5	0 Mutant	codel	Methylated	No combined CNA	WT
TCGA-HT.7882	66 Male	3.487048947	5.223677393	Gain	Oligodendrogloma	III	Anaplastic oligodendrogloma, NOS	Mesenchymal-like	ME	111	3.7	1 WT	non-codel	Methylated	No combined CNA	WT
TCGA-HT.7884	44 Female	1.932817103	4.396460933	Gain	Astrocytoma	II	Diffuse astrocytoma, IDH-mutant	G-CIMP-high	PN	339	11.3	0 Mutant	non-codel	Methylated	No combined CNA	Mutant
TCGA-HT.7902	30 Female	2.315160343	4.561582759	diploid	Oligoastrocytoma	II	Diffuse astrocytoma, IDH-mutant	G-CIMP-high	NE	942	31.4	0 Mutant	non-codel	Methylated	No combined CNA	Mutant
TCGA-HT.8010	64 Female	1.394349504	5.545551434	diploid	Oligodendrogloma	II	Oligodendrogloma, IDH-mutant and 1p/19	Codel	NE	48	1.6	0 Mutant	codel	Methylated	No combined CNA	WT
TCGA-HT.8011	55 Male	1.979732709	6.199342548	Gain	Astrocytoma	III	Anaplastic astrocytoma, IDH-wildtype	Mesenchymal-like		486	16.2	0 WT	non-codel	Unmethylated	Gain chr 7 &#amp; loss chr 10	WT
TCGA-HT.8012	30 Female	2.189824559	4.273560647	diploid	Oligodendrogloma	II	Oligodendrogloma, IDH-mutant and 1p/19	Codel	PN	282	9.4	0 Mutant	codel	Methylated	No combined CNA	WT
TCGA-HT.8013	37 Female	4.741267422	3.529146268	Gain	Oligoastrocytoma	II	Diffuse astrocytoma, IDH-mutant	G-CIMP-high	PN	1905	63.5	1 Mutant	non-codel	Methylated	No combined CNA	Mutant
TCGA-HT.8015	21 Male	4.223878147	6.259377954	diploid	Astrocytoma	II	Diffuse astrocytoma, IDH-wildtype	PA-like	NE	3	0.1	0 WT	non-codel	Unmethylated	No combined CNA	WT
TCGA-HT.8018	40 Female	3.611609136	5.445626217	diploid	Oligoastrocytoma	II	Diffuse astrocytoma, IDH-mutant	G-CIMP-high	NE	1137	37.9	1 Mutant	non-codel	Methylated	No combined CNA	WT
TCGA-HT.8019	34 Female	3.182310918	7.023700028	diploid	Oligodendrogloma	III	Anaplastic oligodendrogloma, NOS	PA-like	NE	990	33	0 WT	non-codel	Unmethylated	No combined CNA	WT
TCGA-HT.8104	51 Female	3.122059733	5.010560554	Gain	Astrocytoma	III	Anaplastic astrocytoma, IDH-wildtype	Classic-like	CL	366	12.2	0 WT	non-codel	Unmethylated	Gain chr 7 &#amp; loss chr 10	WT
TCGA-HT.8105	54 Male	1.486765851	4.546456184	diploid	Oligodendrogloma	III	Anaplastic oligodendrogloma, IDH-mutant	Codel	PN	186	6.2	0 Mutant	codel	Methylated	No combined CNA	WT
TCGA-HT.8106	53 Male	3.525789346	4.057432942	diploid	Astrocytoma	III	Anaplastic astrocytoma, IDH-mutant	G-CIMP-high	ME	3	0.1	0 Mutant	non-codel	Methylated	No combined CNA	WT
TCGA-HT.8107	62 Male	0.913569218	3.386014386	diploid	Oligodendrogloma	II	Oligodendrogloma, NOS	PA-like	NE	15	0.5	0 WT	non-codel	Methylated	No combined CNA	WT
TCGA-HT.8108	26 Female	2.997671777	3.042294126	Gain	Oligodendrogloma	II	Oligodendrogloma, NOS	G-CIMP-high	PN	75	2.5	0 Mutant	non-codel	Methylated	No combined CNA	Mutant
TCGA-HT.8109	64 Male	2.915616094	4.322822289	diploid	Oligodendrogloma	III	Anaplastic oligodendrogloma, IDH-mutant	Codel	NE	168	5.6	0 Mutant	codel	Methylated	No combined CNA	WT
TCGA-HT.8110	57 Male	4.851973859	7.033594783	Gain	Astrocytoma	III	Anaplastic astrocytoma, IDH-wildtype	Mesenchymal-like	ME	414	13.8	0 WT	non-codel	Unmethylated	Gain chr 7 &#amp; loss chr 10	WT
TCGA-HT.8111	32 Male	3.763783355	4.122681001	diploid	Oligoastrocytoma	II	Anaplastic astrocytoma, IDH-mutant	G-CIMP-high	PN	6	0.2	0 Mutant	non-codel	Methylated	No combined CNA	WT
TCGA-HT.8113	49 Female	3.213126165	5.6493472	diploid	Oligodendrogloma	II	Oligodendrogloma, NOS	Codel	NE	888	29.6	0 Mutant	non-codel	Methylated	No combined CNA	WT
TCGA-HT.8114	36 Male	4.368274268	2.8253528	Gain	Oligoastrocytoma	II	Anaplastic astrocytoma, IDH-mutant	G-CIMP-high		1026	34.2	0 Mutant	non-codel	Methylated	No combined CNA	WT
TCGA-HT.8558	29 Female	3.225984379	3.6390488	NA	Oligodendrogloma	II	Oligodendrogloma, NOS	PA-like	NE	411	13.7	0 WT	non-codel	Unmethylated	No combined CNA	WT
TCGA-HT.8563	30 Female	4.999702413	2.944764761	diploid	Astrocytoma	III	Anaplastic astrocytoma, IDH-mutant	G-CIMP-high	ME	849	28.3	0 Mutant	non-codel	Methylated	No combined CNA	WT
TCGA-HT.8564	47 Male	3.235635166	5.91179942	Gain	Astrocytoma	III	Anaplastic astrocytoma, IDH-wildtype	PA-like	NE	471	15.7	0 WT	non-codel	Unmethylated	No combined CNA	WT
TCGA-HT.A4D5	55 Female	5.951042205	6.168094423	Gain	Astrocytoma	III	Anaplastic astrocytoma, IDH-wildtype	Mesenchymal-like	CL	6	0.2	0 WT	non-codel	Methylated	No combined CNA	WT
TCGA-HT.A4D6	51 Female	1.887525271	5.001622122	diploid	Oligodendrogloma	III	Anaplastic oligodendrogloma, IDH-mutant	Codel	NE	780	26	0 Mutant	codel	Methylated	No combined CNA	WT
TCGA-HT.A5R5	33 Female	3.043972791	4.915367923	Gain	Oligodendrogloma	II	Oligodendrogloma, NOS	G-CIMP-high	NE	3	0.1	0 Mutant	non-codel	Methylated	No combined CNA	Mutant
TCGA-HT.A5R7	33 Female	2.256576929	5.600341125	NA	Astrocytoma	III	Anaplastic astrocytoma, IDH-mutant	G-CIMP-high	NE	606	20.2	0 Mutant	non-codel	Methylated	No combined CNA	WT
TCGA-HT.A5R9	48 Female	0.893317778	5.010457613	Gain	Oligodendrogloma	III	Anaplastic oligodendrogloma, IDH-mutant	Codel	PN	3	0.1	0 Mutant	codel	Methylated	No combined CNA	WT
TCGA-HT.A5R9A	65 Female	3.977783634	3.399116333	Gain	Astrocytoma	III	Anaplastic astrocytoma, IDH-wildtype	Mesenchymal-like	CL	822	27.4	0 WT	non-codel	Unmethylated	No combined CNA	WT
TCGA-HT.A5R9B	24 Male	2.644456226	4.647807523	diploid	Astrocytoma	II	Diffuse astrocytoma, IDH-mutant	G-CIMP-high	PN	3	0.1	0 Mutant	non-codel	Methylated	No combined CNA	Mutant
TCGA-HT.A5RC	70 Female	3.31231425	4.345684744	diploid	Astrocytoma	III	Anaplastic astrocytoma, IDH-wildtype	Classic-like	CL	159	5.3	1 WT	non-codel	Unmethylated	Gain chr 7 &#amp; loss chr 10	WT
TCGA-HT.A614	47 Male	2.966484925	4.248763557	diploid	Oligoastrocytoma	II	Diffuse astrocytoma, IDH-mutant	G-CIMP-high	PN	81	2.7	0 Mutant	codel	Methylated	No combined CNA	WT
TCGA-HT.A615	38 Female	4.323103412	5.67226892	diploid	Oligodendrogloma	II	Oligodendrogloma, IDH-mutant and 1p/19	Codel	PN	507	16.9	0 Mutant	codel	Methylated	No combined CNA	WT
TCGA-HT.A616	36 Female	2.120517834	4.775129577	Gain	Astrocytoma	II	Diffuse astrocytoma, IDH-mutant	G-CIMP-high	NE	54	1.8	0 Mutant	non-codel	Methylated	No combined CNA	Mutant
TCGA-HT.A617	47 Male	4.683348369	4.727288797	Gain	Oligodendrogloma	II	Oligodendrogloma, NOS	Classic-like	CL	483	16.1	0 WT	non-codel	Unmethylated	Gain chr 7 &#amp; loss chr 10	WT
TCGA-HT.A618	37 Female	4.146027894	3.498927371	NA	Astrocytoma	III	Anaplastic astrocytoma, IDH-mutant	G-CIMP-high	PN	504	16.8	0 Mutant	non-codel	Methylated	No combined CNA	Mutant
TCGA-HT.A619	51 Female	-0.69906106	2.548781844	Gain	Oligodendrogloma	III	Anaplastic oligodendrogloma, IDH-mutant	Codel	PN	642	21.4	0 Mutant	codel	Methylated	No combined CNA	WT
TCGA-HT.A61A	20 Female	0.803715458	6.565737239	NA	Oligodendrogloma	II	Oligodendrogloma, NOS	G-CIMP-high		192	6.4	0 Mutant	non-codel	Methylated	No combined CNA	WT
TCGA-HT.A61C	22 Male	4.664648631	4.243612874	diploid	Astrocytoma	III	Anaplastic astrocytoma, IDH-mutant	G-CIMP-high	PN	525	17.5	0 Mutant	non-codel	Methylated	No combined CNA	WT
TCGA-HT.A61D	38 Female	4.323103412	5.67226892	diploid	Oligodendrogloma	II	Oligodendrogloma, IDH-mutant and 1p/19	Codel	PN	507	16.9	0 Mutant	codel	Methylated	No combined CNA	WT
TCGA-HT.A61E	36 Female	2.120517834	4.775129578	Gain	Astrocytoma	II	Diffuse astrocytoma, IDH-mutant	G-CIMP-high	NE	54	1.8	0 Mutant	non-codel	Methylated	No combined CNA	Mutant
TCGA-HT.A61F	47 Male	4.683348369	4.727288797	Gain	Oligodendrogloma	II	Oligodendrogloma, NOS	Classic-like	CL	483	16.1	0 WT	non-codel	Unmethylated	Gain chr 7 &#amp; loss chr 10	WT
TCGA-HT.A61G	33 Male	2.713255902	5.838447759	Gain	Oligoastrocytoma	II	Diffuse astrocytoma, IDH-mutant	G-CIMP-high	PN	315	10.5	0 Mutant	codel	Methylated	No combined CNA	WT
TCGA-HT.A74K	58 Female	4.320520781	3.7408305	diploid	Oligodendrogloma	III	Anaplastic oligodendrogloma, IDH-mutant	Codel	PN	459	15.3	0 Mutant	codel	Methylated	No combined CNA	WT
TCGA-HT.A74L	22 Female	1.541361658	2.349761562	Gain	Oligoastrocytoma	II	Oligoastrocytoma, IDH-mutant and 1p/19	Codel	PN	333	11.1	0 Mutant	codel	Methylated	No combined CNA	WT
TCGA-HT.A74O	34 Male	2.575376212	3.544967523	Gain	Astrocytoma	III	Anaplastic astrocytoma, IDH-mutant	G-CIMP-high	PN	3	0.1	0 Mutant	non-codel	Methylated	No combined CNA	Mutant
TCGA-HW.7486	37 Male	2.858378925	2.896736847	diploid	Oligodendrogloma	II	Oligodendrogloma, IDH-mutant and 1p/19	Codel	PN	1698	56.6	0 Mutant	codel	Methylated	No combined CNA	WT
TCGA-HW.7487	39 Male	-1.274533772	3.01274533772	diploid	Oligodendrogloma	II	Oligodendrogloma, IDH-mutant and 1p/19	Codel	NE	402	13.4	0 Mutant	codel	Methylated	No combined CNA	WT
TCGA-HW.7489	38 Male	1.716112942	5.6565481414	diploid	Astrocytoma	II	Diffuse astrocytoma, IDH-mutant	G-CIMP-high	NE	1245	41.5	1 Mutant	non-codel	Methylated	No combined CNA	Mutant
TCGA-HW.7490	41 Male	2.857762087	2.188337619	diploid	Astrocytoma	II	Diffuse astrocytoma, IDH-mutant	G-CIMP-high	PN	1368	45.6	0 Mutant	non-codel	Methylated	No combined CNA	WT
TCGA-HW.7491	35 Male	0.454075683	2.339536494	diploid	Oligodendrogloma	II	Oligodendrogloma, IDH-mutant and 1p/19	Codel	PN	2049	68.3	0 Mutant	codel	Methylated	No combined CNA	WT
TCGA-HW.7493	40 Female	2.505179567	4.628621967	diploid	Astrocytoma	II	Diffuse astrocytoma, NOS	NE	NE	2079	69.3	0 Mutant	non-codel	Methylated	No combined CNA	WT
TCGA-HW.7495	45 Female	1.983166916	4.743995951	Gain	Oligodendrogloma	II	Oligodendrogloma, IDH-mutant and 1p/19	Codel	NE	1062	35.4	0 Mutant	codel	Methylated	No combined CNA	WT
TCGA-HW.8319	34 Female	2.206393169	4.737398413	diploid	Astrocytoma	III	Anaplastic astrocytoma, IDH-mutant	G-CIMP-high	PN	1194	39.8	1 Mutant	non-codel	Unmethylated	No combined CNA	Mutant
TCGA-HW.8320	36 Male	2.335997652	3.081390762	diploid	Astrocytoma	III	Anaplastic astrocytoma, IDH-mutant	G-CIMP-high	PN	1200	40	0 Mutant	non-codel	Methylated	No combined CNA	WT
TCGA-HW.8321	31 Male	0.556797247	3.833740198	diploid	Astrocytoma	III	Anaplastic astrocytoma, IDH-mutant	G-CIMP-high	PN	1275	42.5	0 Mutant	non-codel	Methylated	No combined CNA	WT
TCGA-HW.8322	39 Male	2.001694172	5.180744616	Gain	Oligodendrogloma	II	Oligodendrogloma, IDH-mutant and 1p/19	Codel	PN	186	6.2	0 Mutant	codel	Methylated	No combined CNA	WT
TCGA-HW.85KJ	68 Male	0.994072791	4.671723626	Gain	Oligoastrocytoma	II	Anaplastic oligodendrogloma, IDH-mutant	Codel	PN	318	10.6	0 Mutant	codel	Methylated	No combined CNA	WT
TCGA-HW.85K6	64 Male	4.871986531	7.056150508	diploid	Astrocytoma	III	Anaplastic astrocytoma, IDH-wildtype	Mesenchymal-like	CL	384	12.8	1 WT	non-codel	Methylated	No combined CNA	WT
TCGA-HW.85KU	42 Female	2.611361264	2.422959548	diploid	Astrocytoma	II	Diffuse astrocytoma, IDH-mutant	G-CIMP-high	PN	624	20.8	0 Mutant	non-codel	Methylated	No combined CNA	WT
TCGA-HW.85KM	35 Male	5.922003688	1.509493161	Gain	Astrocytoma	II	Diffuse astrocytoma, IDH-mutant	G-CIMP-high	ME	621	20.7	0 Mutant	non-codel	Methylated	No combined CNA	WT
TCGA-HW.7475	43 Male	2.30591217	1.861396611	diploid	Oligodendrogloma	II	Oligodendrogloma, NOS	G-CIMP-high	PN	570	19	1 Mutant	non-codel	Methylated	No combined CNA	WT
TCGA-HW.8125	62 Male	2.443261849	4.296200416													

TCGA-P5-A737	47	Male	2.441536597	3.285076651	diploid	Oligoastrocytoma	II	Oligodendrogloma, IDH-mutant and 1p/19 Codel	PN	366	12.2	0	Mutant	codel	Methylated	No combined CNA	WT	
TCGA-P5-A77W	37	Female	1.69968488	2.776292696	diploid	Oligoastrocytoma	III	Anaplastic oligodendrogloma, IDH-mutant Codel	PN	576	19.2	0	Mutant	codel	Methylated	No combined CNA	WT	
TCGA-P5-A77X	55	Female	1.746441765	5.015452966	diploid	Oligoastrocytoma	II	Oligodendrogloma, IDH-mutant and 1p/19 Codel	NE	105	3.5	0	Mutant	codel	Methylated	No combined CNA	WT	
TCGA-P5-A780	44	Female	1.857025515	3.414135533	diploid	Astrocytoma	III	Anaplastic astrocytoma, IDH-mutant	PN	72	2.4	0	Mutant	non-codel	Methylated	No combined CNA	WT	
TCGA-P5-A781	34	Female	2.309496363	4.479382962	diploid	Astrocytoma	III	Anaplastic astrocytoma, IDH-mutant	Codel	NE	132	4.4	0	Mutant	codel	Methylated	No combined CNA	WT
TCGA-QH-A65R	38	Female	0.802234584	4.507084215	diploid	Oligodenodrogloma	III	Anaplastic oligodendrogloma, IDH-mutant	Codel	PN	456	15.2	0	Mutant	codel	Methylated	No combined CNA	WT
TCGA-QH-A65S	32	Female	3.07995315	2.900910251	diploid	Oligoastrocytoma	II	Diffuse astrocytoma, IDH-mutant	G-CIMP-high	PN	75	2.5	0	Mutant	non-codel	Methylated	No combined CNA	WT
TCGA-QH-A65V	43	Female	2.932193488	4.723045172	diploid	Oligodenodrogloma	III	Oligodendrogloma, IDH-mutant and 1p/19 Codel	NE	378	12.6	0	Mutant	codel	Methylated	No combined CNA	WT	
TCGA-QH-A65X	28	Female	3.53302459	4.03114813	diploid	Oligoastrocytoma	III	Anaplastic oligodendrogloma, IDH-mutant	Codel	474	15.8	0	Mutant	codel	Methylated	No combined CNA	WT	
TCGA-QH-A65Z	54	Male	0.857423709	3.575965753	diploid	Oligodenodrogloma	III	Oligodendrogloma, IDH-mutant and 1p/19 Codel	PN	420	14	0	Mutant	codel	Methylated	No combined CNA	WT	
TCGA-QH-A6CS	41	Male	3.834761772	6.11329611	Gain	Astrocytoma	III	Anaplastic astrocytoma, IDH-wildtype	PA-like	579	19.3	0	WT	non-codel	Unmethylated	Gain chr 7 & loss chr 10	WT	
TCGA-QH-A6CU	52	Female	3.6715777	4.760806423	Gain	Oligodenodrogloma	III	Anaplastic oligodendrogloma, IDH-mutant	Codel	444	14.8	0	Mutant	codel	Methylated	No combined CNA	WT	
TCGA-QH-A6CV	51	Male	4.81275491	6.86931865	Gain	Oligoastrocytoma	III	Anaplastic astrocytoma, IDH-wildtype	Classic-like	CL	435	14.5	0	WT	non-codel	Unmethylated	Gain chr 7 & loss chr 10	WT
TCGA-QH-A6CW	43	Male	2.18475353	4.28036249	diploid	Oligoastrocytoma	III	Anaplastic astrocytoma, IDH-mutant	G-CIMP-high	408	13.6	0	Mutant	non-codel	Methylated	No combined CNA	WT	
TCGA-QH-A6CX	66	Male	5.063690618	4.030636241	Gain	Astrocytoma	II	Diffuse astrocytoma, IDH-wildtype	Mesenchymal-like	CL	366	12.2	1	WT	non-codel	Unmethylated	No combined CNA	WT
TCGA-QH-A6CY	38	Male	2.272351716	4.751447653	diploid	Oligoastrocytoma	III	Anaplastic oligodendrogloma, IDH-mutant	Codel	NE	66	2.2	0	Mutant	codel	Methylated	No combined CNA	WT
TCGA-QH-A6CZ	38	Male	2.165333137	4.295069109	diploid	Oligoastrocytoma	II	Oligodendrogloma, IDH-mutant and 1p/19 Codel	PN	276	9.2	0	Mutant	codel	Methylated	No combined CNA	WT	
TCGA-QH-A6X3	27	Male	1.613908779	2.965525731	Gain	Oligoastrocytoma	II	Diffuse astrocytoma, IDH-mutant	G-CIMP-high	309	10.3	0	Mutant	non-codel	Methylated	No combined CNA	WT	
TCGA-QH-A6X4	47	Male	3.096801582	4.025081964	diploid	Oligoastrocytoma	III	Anaplastic oligodendrogloma, IDH-mutant	Codel	435	14.5	0	Mutant	codel	Methylated	No combined CNA	WT	
TCGA-QH-A6X5	58	Female	2.265916194	3.630754919	diploid	Oligoastrocytoma	II	Oligodendrogloma, IDH-mutant and 1p/19 Codel	PN	489	16.3	0	Mutant	codel	Methylated	No combined CNA	WT	
TCGA-QH-A6X8	56	Female	3.586596629	2.653656238	diploid	Oligodenodrogloma	III	Anaplastic oligodendrogloma, IDH-mutant	Codel	PN	501	16.7	0	Mutant	codel	Methylated	No combined CNA	WT
TCGA-QH-A6X9	73	Female	1.714663152	4.144209561	Gain	Oligodenodrogloma	III	Oligodendrogloma, NOS	G-CIMP-high	PN	57	1.9	0	Mutant	non-codel	Methylated	No combined CNA	WT
TCGA-QH-A6XA	23	Female	1.855750557	4.34889804	Gain	Oligoastrocytoma	III	Diffuse astrocytoma, IDH-mutant	G-CIMP-high	PN	495	16.5	0	Mutant	non-codel	Methylated	No combined CNA	WT
TCGA-QH-A6XC	48	Male	3.362932711	5.040520744	Gain	Astrocytoma	III	Anaplastic astrocytoma, IDH-wildtype	Classic-like	CL	150	5	0	WT	non-codel	Methylated	Gain chr 7 & loss chr 10	WT
TCGA-QH-A6X6	33	Male	2.035905384	4.41719767	diploid	Oligodenodrogloma	III	Oligodendrogloma, IDH-mutant and 1p/19 Codel	PN	333	11.1	0	Mutant	codel	Methylated	No combined CNA	WT	
TCGA-QH-A6T0	38	Female	2.008702008	3.175205209	Gain	Oligoastrocytoma	III	Anaplastic astrocytoma, IDH-mutant	G-CIMP-high	390	13	0	Mutant	non-codel	Methylated	No combined CNA	WT	
TCGA-R8-A6M0	40	Male	2.697240404	3.905081284	diploid	Oligodenodrogloma	III	Oligodendrogloma, IDH-mutant and 1p/19 Codel	PN	2664	88.8	0	Mutant	codel	Methylated	No combined CNA	WT	
TCGA-R8-A6ML	52	Male	0.691991445	3.836621000	diploid	Oligodenodrogloma	III	Anaplastic oligodendrogloma, IDH-mutant	Codel	PN	2820	94	0	Mutant	codel	Methylated	No combined CNA	WT
TCGA-R8-A6M0	53	Female	3.831097640	4.440267985	diploid	Oligodenodrogloma	III	Oligodendrogloma, IDH-mutant and 1p/19 Codel	PN	978	32.6	0	Mutant	codel	Methylated	No combined CNA	WT	
TCGA-R8-A6YH	NA	NA	3.268565167	3.546005424	diploid	Astrocytoma	NA	NA	G-CIMP-high	PN	0	0	0	WT	non-codel	Unmethylated	No combined CNA	WT
TCGA-R8-A73M	48	Female	1.420886575	4.523421962	diploid	Oligodenodrogloma	II	Oligodendrogloma, IDH-mutant and 1p/19 Codel	Codel	PN	1782	59.4	0	Mutant	codel	Methylated	No combined CNA	WT
TCGA-RY-A83X	46	Female	3.457904391	3.984425295	diploid	Oligodenodrogloma	II	Oligodendrogloma, IDH-mutant and 1p/19 Codel	PN	927	30.9	0	Mutant	codel	Methylated	No combined CNA	WT	
TCGA-RY-A83Y	45	Male	3.142250403	3.4666881	diploid	Oligodenodrogloma	II	Oligodendrogloma, IDH-mutant and 1p/19 Codel	PN	165	5.5	0	Mutant	codel	Methylated	No combined CNA	WT	
TCGA-RY-A83Z	54	Female	3.648991056	4.309620048	diploid	Astrocytoma	III	Anaplastic astrocytoma, IDH-mutant	G-CIMP-low	297	9.9	0	Mutant	non-codel	Methylated	No combined CNA	WT	
TCGA-RY-A840	47	Male	2.349478319	4.122186307	diploid	Oligodenodrogloma	III	Anaplastic oligodendrogloma, IDH-mutant	Codel	843	28.1	0	Mutant	codel	Methylated	No combined CNA	WT	
TCGA-RY-A843	30	Male	3.098369023	4.440267985	diploid	Astrocytoma	III	Anaplastic astrocytoma, IDH-mutant	G-CIMP-high	63	2.1	0	Mutant	non-codel	Methylated	No combined CNA	WT	
TCGA-RY-A845	40	Female	3.072363095	3.640158155	Gain	Oligoastrocytoma	III	Diffuse astrocytoma, IDH-mutant	G-CIMP-high	588	19.6	0	Mutant	non-codel	Methylated	No combined CNA	WT	
TCGA-RY-A847	45	Male	3.899243316	4.638693657	diploid	Oligodenodrogloma	II	Oligodendrogloma, IDH-mutant and 1p/19 Codel	PN	921	30.7	0	Mutant	codel	Methylated	No combined CNA	WT	
TCGA-S9-A6T5	48	Female	3.150137204	4.212063451	NA	Astrocytoma	III	Anaplastic astrocytoma, IDH-mutant	G-CIMP-high	NE	1866	62.2	1	WT	non-codel	Methylated	No combined CNA	WT
TCGA-S9-A6TU	38	Male	2.834228474	3.503517587	diploid	Astrocytoma	II	Diffuse astrocytoma, IDH-mutant	G-CIMP-high	PN	2613	87.1	0	Mutant	non-codel	Methylated	No combined CNA	WT
TCGA-S9-A6TV	50	Male	4.17270352	4.169612386	diploid	Oligoastrocytoma	III	Anaplastic astrocytoma, IDH-mutant	G-CIMP-high	ME	564	18.8	0	Mutant	non-codel	Methylated	No combined CNA	WT
TCGA-S9-A6TW	40	Male	-0.02125322	4.665279061	diploid	Oligodenodrogloma	III	Anaplastic oligodendrogloma, IDH-mutant	Codel	1233	41.1	0	Mutant	codel	Methylated	No combined CNA	WT	
TCGA-S9-A6TX	46	Male	2.065916194	3.640447400	diploid	Oligodenodrogloma	III	Anaplastic oligodendrogloma, IDH-mutant	Codel	PN	843	28.1	0	Mutant	codel	Methylated	No combined CNA	WT
TCGA-S9-A6TY	50	Male	0.392097567	4.144214236	Gain	Oligodenodrogloma	II	Oligodendrogloma, IDH-mutant and 1p/19 Codel	PN	1062	35.4	0	Mutant	codel	Methylated	No combined CNA	WT	
TCGA-S9-A6TZ	39	Female	2.440899055	3.834043700	diploid	Astrocytoma	II	Diffuse astrocytoma, IDH-mutant	G-CIMP-high	PN	1104	36.8	0	Mutant	non-codel	Methylated	No combined CNA	WT
TCGA-S9-A6U0	46	Male	4.228987957	4.802219301	Gain	Astrocytoma	III	Anaplastic astrocytoma, IDH-wildtype	Mesenchymal-like	ME	732	24.4	1	WT	non-codel	Unmethylated	Gain chr 7 & loss chr 10	WT
TCGA-S9-A6U1	22	Female	3.14891784	2.468296574	diploid	Astrocytoma	III	Anaplastic astrocytoma, IDH-mutant	G-CIMP-high	PN	774	25.8	0	Mutant	codel	Methylated	No combined CNA	WT
TCGA-S9-A6U2	48	Female	2.250749397	2.944538894	diploid	Oligodenodrogloma	III	Oligodendrogloma, IDH-mutant and 1p/19 Codel	Codel	897	29.9	0	Mutant	codel	Methylated	No combined CNA	WT	
TCGA-S9-A6U5	33	Male	3.670874319	3.655981439	diploid	Astrocytoma	II	Diffuse astrocytoma, IDH-mutant	Codel	PN	978	32.6	0	Mutant	codel	Methylated	No combined CNA	WT
TCGA-S9-A6U6	28	Male	3.02185279	4.474362236	diploid	Astrocytoma	III	Anaplastic astrocytoma, IDH-mutant	G-CIMP-high	NE	1053	35.1	0	Mutant	non-codel	Methylated	No combined CNA	WT
TCGA-S9-A6U8	24	Male	4.357052253	4.36920874	diploid	Astrocytoma	III	Diffuse astrocytoma, IDH-mutant	G-CIMP-high	PN	2946	98.2	1	WT	non-codel	Methylated	No combined CNA	WT
TCGA-S9-A6U9	36	Male	3.197660985	4.369710751	diploid	Astrocytoma	III	Anaplastic astrocytoma, IDH-mutant	G-CIMP-high	PN	2877	95.9	0	Mutant	non-codel	Methylated	No combined CNA	WT
TCGA-S9-A6U6	66	Male	3.708893509	4.454840486	diploid	Astrocytoma	III	Anaplastic astrocytoma, IDH-wildtype	PA-like	ME	174	5.8	1	WT	non-codel	Methylated	No combined CNA	WT
TCGA-S9-A6UB	52	Male	0.855750557	3.683763816	diploid	Oligodenodrogloma	II	Oligodendrogloma, IDH-mutant and 1p/19 Codel	PN	3711	123.7	0	Mutant	codel	Methylated	No combined CNA	WT	
TCGA-S9-A6WD	58	Male	2.545671894	3.813586254	diploid	Oligodenodrogloma	II	Anaplastic oligodendrogloma, IDH-mutant	Codel	2256	75.2	0	Mutant	codel	Methylated	No combined CNA	WT	
TCGA-S9-A6WE	34	Male	2.444932049	2.972692654	diploid	Oligodenodrogloma	II	Oligodendrogloma, IDH-mutant and 1p/19 Codel	PN	4056	135.2	0	Mutant	codel	Methylated	No combined CNA	WT	
TCGA-S9-A6WQ	31	Male	3.61915473	5.619096996	diploid	Astrocytoma	III	Anaplastic astrocytoma, IDH-mutant	G-CIMP-high	ME	2565	85.5	0	Mutant	non-codel	Methylated	No combined CNA	WT
TCGA-S9-A6WQ	73	Female	1.360027093	2.560666040	diploid	Oligoastrocytoma	II	Oligodendrogloma, IDH-mutant and 1p/19 Codel	PN	1158	38.6	0	Mutant	codel	Methylated	No combined CNA	WT	
TCGA-S9-A6WU	56	Female	2.224626867	5.516330387	diploid	Oligoastrocytoma	II	Diffuse astrocytoma, IDH-mutant	G-CIMP-high	NE	2550	85	0	Mutant	non-codel	Methylated	No combined CNA	WT
TCGA-S9-A6WL	52	Male	2.448474205	4.822949330	diploid	Astrocytoma	III	Anaplastic astrocytoma, IDH-mutant	Codel	NE	933	31.1	0	Mutant	codel	Methylated	No combined CNA	WT
TCGA-S9-A6WN	59	Female	3.100560833	6.5397455	Gain	Astrocytoma	III	Anaplastic astrocytoma, IDH-wildtype	Mesenchymal-like	CL	597	19.9	0	WT	non-codel	Unmethylated	Gain chr 7 & loss chr 10	WT
TCGA-S9-A6WQ	38	Female	4.456924398	3.20873947	diploid	Astrocytoma	III	Anaplastic astrocytoma, IDH-mutant	Codel	ME	795	26.5	0	Mutant	codel	Methylated	No combined CNA	WT
TCGA-S9-A6WQ	29	Male	1.912611546	3.272														

TCGA.TM.A7C5	30	Male	1.488926268	4.55637865	diploid	Oligoastrocytoma	II	Oligodendrogloma, IDH-mutant and 1p/19 Codel	PN	1479	49.3	0	Mutant	codel	Methylated	No combined CNA	WT
TCGA.TM.A7CA	44	Male	1.522758841	4.064736299	Gain	Astrocytoma	II	Difuse astrocytoma, IDH-mutant	G-CIMP-high	1044	34.8	0	Mutant	non-codel	Methylated	No combined CNA	Mutant
TCGA.TM.A7CF	41	Female	3.996054248	5.680465018	diploid	Astrocytoma	II	Difuse astrocytoma, IDH-mutant	G-CIMP-high	1962	65.4	0	Mutant	non-codel	Methylated	No combined CNA	WT
TCGA.TM.A84B	40	Male	1.931872127	5.262662413	Gain	Astrocytoma	III	Anaplastic astrocytoma, IDH-wildtype	Mesenchymal-like	747	24.9	1	WT	non-codel	Unmethylated	Gain chr 7 & loss chr 10	WT
TCGA.TM.A84C	32	Male	2.117960953	1.84263291	diploid	Astrocytoma	II	Difuse astrocytoma, IDH-wildtype	PA-like	486	16.2	1	WT	non-codel	Unmethylated	No combined CNA	WT
TCGA.TM.A84F	48	Male	5.853950749	5.128969712	diploid	Astrocytoma	II	Anaplastic astrocytoma, IDH-mutant	G-CIMP-high	1770	59	0	Mutant	non-codel	Methylated	No combined CNA	WT
TCGA.TM.A84G	54	Female	1.259844931	2.78425269	diploid	Oligodendrogloma	III	Anaplastic oligodendrogloma, IDH-mutant	Codel	1218	40.6	0	Mutant	codel	Methylated	No combined CNA	WT
TCGA.TM.A84H	44	Female	0.667301759	5.486534186	Gain	Oligoastrocytoma	III	Anaplastic astrocytoma, IDH-mutant	G-CIMP-high	912	30.4	0	Mutant	non-codel	Methylated	No combined CNA	Mutant
TCGA.TM.A84I	30	Male	3.299508434	3.856736756	diploid	Astrocytoma	III	Anaplastic astrocytoma, IDH-mutant	G-CIMP-low	843	28.1	0	Mutant	non-codel	Methylated	No combined CNA	WT
TCGA.TM.A84J	63	Male	2.842978832	7.567251092	diploid	Oligodendrogloma	III	Anaplastic oligodendrogloma, NOS	PA-like	726	24.2	0	WT	non-codel	Unmethylated	No combined CNA	WT
TCGA.TM.A84L	31	Male	3.64938552	3.66152159	diploid	Oligoastrocytoma	II	Difuse astrocytoma, IDH-mutant	G-CIMP-high	1224	40.8	1	Mutant	non-codel	Methylated	No combined CNA	WT
TCGA.TM.A84N	40	Male	1.361038407	3.567679295	Gain	Oligodendrogloma	III	Anaplastic oligodendrogloma, IDH-mutant	Codel	744	24.8	0	Mutant	codel	Methylated	No combined CNA	WT
TCGA.TM.A84O	61	Female	4.296589557	3.266711594	diploid	Oligodendrogloma	III	Anaplastic oligodendrogloma, IDH-mutant	Codel	996	33.2	1	Mutant	codel	Methylated	No combined CNA	WT
TCGA.TM.A84Q	31	Male	2.963344646	3.71225459	diploid	Astrocytoma	II	Difuse astrocytoma, IDH-mutant	G-CIMP-high	762	25.4	0	Mutant	non-codel	Methylated	No combined CNA	Mutant
TCGA.TM.A84R	46	Male	0.676400556	6.038554704	diploid	Oligodendrogloma	III	Oligodendrogloma, IDH-mutant and 1p/19	Codel	558	18.6	0	Mutant	codel	Methylated	No combined CNA	WT
TCGA.TM.A84S	36	Male	2.867975514	3.287206309	diploid	Oligodendrogloma	III	Anaplastic oligodendrogloma, IDH-mutant	Codel	447	14.9	0	Mutant	non-codel	Methylated	No combined CNA	WT
TCGA.TM.A84T	19	Male	3.41945799	3.142576814	diploid	Oligoastrocytoma	II	Difuse astrocytoma, IDH-mutant	G-CIMP-high	714	23.8	0	Mutant	non-codel	Methylated	No combined CNA	WT
TCGA.TQ.A7RF	27	Female	3.108139687	3.306743447	diploid	Oligodendrogloma	III	Anaplastic oligodendrogloma, NOS	G-CIMP-high	642	21.4	0	Mutant	non-codel	Unmethylated	No combined CNA	WT
TCGA.TQ.A7RG	36	Male	1.303225478	2.754395833	diploid	Oligoastrocytoma	II	Oligodendrogloma, IDH-mutant and 1p/19	Codel	591	19.7	0	Mutant	codel	Methylated	No combined CNA	WT
TCGA.TQ.A7RH	39	Male	3.380216187	4.828174575	Gain	Oligoastrocytoma	II	Difuse astrocytoma, IDH-mutant	G-CIMP-high	480	16	0	Mutant	non-codel	Methylated	No combined CNA	Mutant
TCGA.TQ.A7RI	37	Female	3.274723845	3.16904058	Gain	Oligodendrogloma	III	Oligodendrogloma, IDH-mutant and 1p/19	Codel	60	2	0	Mutant	codel	Methylated	No combined CNA	WT
TCGA.TQ.A7RJ	25	Female	3.598377117	4.029338031	diploid	Oligoastrocytoma	II	Difuse astrocytoma, IDH-mutant	G-CIMP-high	1212	40.4	0	Mutant	non-codel	Methylated	No combined CNA	Mutant
TCGA.TQ.A7RK	29	Male	2.525693061	3.576884881	diploid	Oligoastrocytoma	II	Difuse astrocytoma, IDH-mutant	G-CIMP-high	1323	44.1	0	Mutant	non-codel	Methylated	No combined CNA	Mutant
TCGA.TQ.A7RM	41	Female	3.142145714	3.75084229	Gain	Oligoastrocytoma	III	Anaplastic astrocytoma, IDH-mutant	G-CIMP-high	1101	36.7	0	Mutant	non-codel	Methylated	Gain chr 7 & loss chr 10	WT
TCGA.TQ.A7RN	32	Male	1.051720116	4.217813763	diploid	Oligodendrogloma	III	Oligodendrogloma, IDH-mutant and 1p/19	Codel	1011	33.7	0	Mutant	codel	Methylated	No combined CNA	WT
TCGA.TQ.A7RO	29	Male	3.239094886	4.48981906	diploid	Oligoastrocytoma	II	Oligodendrogloma, IDH-mutant and 1p/19	Codel	936	31.2	0	Mutant	codel	Methylated	No combined CNA	WT
TCGA.TQ.A7RP	66	Male	3.21549223	3.64178877	Gain	Oligoastrocytoma	II	Difuse astrocytoma, IDH-wildtype	Mesenchymal-like	903	30.1	0	WT	non-codel	Methylated	No combined CNA	WT
TCGA.TQ.A7RQ	38	Female	0.854394678	4.396604781	diploid	Oligodendrogloma	II	Oligodendrogloma, IDH-mutant and 1p/19	Codel	783	26.1	0	Mutant	codel	Methylated	No combined CNA	WT
TCGA.TQ.A7RR	38	Male	3.369954977	4.38955304	diploid	Oligoastrocytoma	II	Difuse astrocytoma, IDH-mutant	G-CIMP-high	777	25.9	0	Mutant	non-codel	Unmethylated	No combined CNA	Mutant
TCGA.TQ.A7RS	25	Female	1.25960393	3.827747904	diploid	Oligodendrogloma	III	Oligodendrogloma, IDH-mutant and 1p/19	Codel	0	0	0	Mutant	codel	Methylated	No combined CNA	WT
TCGA.TQ.A7RU	51	Male	1.600794742	4.07561460	diploid	Oligodendrogloma	III	Oligodendrogloma, IDH-mutant and 1p/19	Codel	1017	33.9	0	Mutant	codel	Methylated	No combined CNA	WT
TCGA.TQ.A7RV	27	Male	2.547474507	4.508105341	diploid	Astrocytoma	II	Difuse astrocytoma, IDH-mutant	G-CIMP-high	1842	61.4	0	Mutant	non-codel	Methylated	No combined CNA	Mutant
TCGA.TQ.A7RW	32	Male	3.810833802	3.698351849	diploid	Oligodendrogloma	III	Oligodendrogloma, NOS	G-CIMP-high	810	27	1	Mutant	non-codel	Methylated	No combined CNA	WT
TCGA.TQ.A8XE	42	Female	2.290542363	4.925187674	diploid	Oligodendrogloma	III	Oligodendrogloma, NOS	G-CIMP-high	942	31.4	1	Mutant	non-codel	Methylated	No combined CNA	WT
TCGA.VM.A8C8	50	Female	3.21521389	3.451211112	diploid	Oligodendrogloma	III	Oligodendrogloma, NOS	G-CIMP-high	1290	43	0	Mutant	non-codel	Unmethylated	No combined CNA	Mutant
TCGA.VM.A8C9	37	Female	5.868965737	5.189875942	diploid	Astrocytoma	II	Difuse astrocytoma, IDH-wildtype	PA-like	1296	43.2	0	WT	non-codel	Unmethylated	No combined CNA	WT
TCGA.VM.A8CA	54	Male	3.789499737	5.018635025	diploid	Oligodendrogloma	III	Oligodendrogloma, NOS	Codel	405	13.5	0	Mutant	codel	Methylated	No combined CNA	WT
TCGA.VM.A8CB	33	Male	1.260627908	4.435941919	diploid	Oligodendrogloma	III	Anaplastic oligodendrogloma, IDH-mutant	Codel	3	0.1	0	Mutant	codel	Methylated	No combined CNA	WT
TCGA.VM.A8CD	58	Male	4.349160013	4.03725921	diploid	Astrocytoma	III	Anaplastic astrocytoma, IDH-wildtype	Mesenchymal-like	237	7.9	1	WT	non-codel	Unmethylated	No combined CNA	WT
TCGA.VM.A8CE	25	Male	1.723427501	3.870197012	diploid	Oligodendrogloma	III	Oligodendrogloma, IDH-mutant and 1p/19	Codel	1176	39.2	0	Mutant	codel	Methylated	No combined CNA	WT
TCGA.VM.A8CF	44	Female	6.436340098	4.553102417	diploid	Astrocytoma	III	Anaplastic astrocytoma, IDH-mutant	G-CIMP-high	600	20	0	Mutant	non-codel	Methylated	No combined CNA	Mutant
TCGA.VM.A8CH	24	Female	3.5627675	3.3950624	diploid	Astrocytoma	II	Difuse astrocytoma, IDH-mutant	G-CIMP-high	705	23.5	0	Mutant	non-codel	Unmethylated	No combined CNA	Mutant
TCGA.VV.A829	44	Male	2.894507368	2.78177934	diploid	Oligoastrocytoma	III	Anaplastic oligodendrogloma, IDH-mutant	Codel	1110	37	0	Mutant	codel	Methylated	No combined CNA	WT
TCGA.VV.A86M	36	Female	2.847275378	3.19194159	diploid	Astrocytoma	III	Anaplastic astrocytoma, IDH-mutant	G-CIMP-high	480	16	0	Mutant	non-codel	Methylated	No combined CNA	WT
TCGA.VV.A7QS	35	Female	1.279174108	3.32968333	Gain	Oligodendrogloma	III	Anaplastic oligodendrogloma, IDH-mutant	Codel	696	23.2	0	Mutant	codel	Methylated	No combined CNA	WT
TCGA.VV.A8FI	66	Male	4.707397788	4.316283342	Gain	Astrocytoma	III	Anaplastic astrocytoma, IDH-wildtype	Classic-like	243	8.1	1	WT	non-codel	Unmethylated	Gain chr 7 & loss chr 10	WT
TCGA.W3.A837	47	Male	0.677801374	4.736518289	diploid	Oligodendrogloma	II	Oligodendrogloma, IDH-mutant and 1p/19	Codel	1533	51.1	0	Mutant	codel	Methylated	No combined CNA	WT
TCGA.WH.A868	65	Male	2.2347159	2.772751358	diploid	Astrocytoma	III	Difuse astrocytoma, IDH-mutant	G-CIMP-high	399	13.3	0	Mutant	non-codel	Methylated	No combined CNA	WT
TCGA.WY.A858	32	Female	3.94964983	3.147420677	diploid	Astrocytoma	III	Anaplastic astrocytoma, IDH-mutant	G-CIMP-high	1320	44	0	Mutant	non-codel	Methylated	No combined CNA	Mutant
TCGA.WY.A859	34	Female	3.3492945	5.851609137	diploid	Astrocytoma	II	Difuse astrocytoma, IDH-mutant	G-CIMP-high	1197	39.9	0	Mutant	non-codel	Methylated	No combined CNA	WT
TCGA.WY.A85A	20	Male	2.772751358	4.138544184	diploid	Astrocytoma	II	Difuse astrocytoma, IDH-mutant	G-CIMP-high	1302	43.4	0	Mutant	non-codel	Methylated	No combined CNA	Mutant
TCGA.WY.A85B	24	Male	3.436561644	3.855581142	diploid	Astrocytoma	II	Difuse astrocytoma, IDH-mutant	G-CIMP-high	1374	45.8	0	Mutant	non-codel	Methylated	No combined CNA	Mutant
TCGA.WY.A85C	36	Male	2.197425095	3.266861484	diploid	Astrocytoma	II	Difuse astrocytoma, IDH-mutant	G-CIMP-high	1407	46.9	0	Mutant	non-codel	Methylated	No combined CNA	WT
TCGA.WY.A85D	60	Male	3.30287467	3.538451252	diploid	Oligoastrocytoma	II	Difuse astrocytoma, IDH-mutant	G-CIMP-high	1131	37.7	0	Mutant	non-codel	Unmethylated	No combined CNA	Mutant
TCGA.WY.A85E	48	Female	1.9644356	4.997996871	Gain	Oligoastrocytoma	II	Difuse astrocytoma, IDH-mutant	G-CIMP-high	624	20.8	0	Mutant	non-codel	Methylated	No combined CNA	Mutant

Table S3: Univariate and multivariable Cox regression analyses of factors associated with overall survival in glioma patients(n=610)

Variable	Univariate analysis		Multivariable analysis	
	HR (95% CI)	P	HR (95% CI)	P
Age	5.57(4.11 to 7.55)	<0.01	1.724(1.23 to 2.42)	<0.01
Gender	0.96(0.72 to 1.27)	0.78	\	\
Grade	5.01(3.97 to 6.31)	<0.01	4.67(1.23 to 2.42)	<0.01
Histology	1.91(1.64 to 2.23)	<0.01	\	\
Integrated diagnosis	1.47(1.37 to 1.57)	<0.01	0.81(0.66 to 0.98)	<0.05
Subtype	1.61(1.48 to 1.72)	<0.01	\	\
IDH.status	0.08(0.06 to 0.11)	<0.01	0.19(0.13 to 0.30)	<0.01
Chr.1p/19q.codeletion	0.23(0.15 to 0.37)	<0.01	\	\
MGMT.promoter.status	0.28(0.21 to 0.37)	<0.01	\	\
Chr.7.gain/Chr.10.loss	8.42(6.10 to 11.62)	<0.01	\	\
ATRX.status	0.45(0.33 to 0.63)	<0.01	\	\
ATG9B expression	2.34(1.75 to 3.13)	<0.01	\	\
ATG9B CNV	3.50(2.61 to 4.70)	<0.01	\	\

Table S4: the clinicopathologic information of patients whose samples were used in Figure S6.

Sample ID	Pathology ID	Diagnosis	Grade
II-1	B201614427	Astrocytoma	II
II-2	B201612108	Astrocytoma	II
II-3	B201617117	Oligodendrogioma	II
III-1	B201612262	Anaplastic astrocytoma	III
III-2	B201612197	Anaplastic oligodendrogioma	III
III-3	B201700698	Anaplastic oligoastrocytoma	III
III-4	B201610023	Anaplastic astrocytoma	III
IV-1	B201616230	Glioblastoma	IV
IV-2	B201510156	Glioblastoma	IV
IV-3	B201701054	Glioblastoma	IV
IV-4	B201612296	Glioblastoma	IV
IV-5	B201611388	Glioblastoma	IV

Table S5: the primers of indicated genes

Gene Name	Forward Primer	Reverse Primer
ASCL2	GCAGGAGAACAGGGCCTAC	GCTGAGGAAGTCTGGAGC
ATG9B	CCCCTCATACAAGAAGCTCCC	TGCAGGTTGAGCCTGTGTTG
NES	CTGCTACCCTTGAGACACCTG	GGGCTCTGATCTCTGCATCTAC
PROM1	AGTCGGAAACTGGCAGATAGC	GGTAGTGTGTACTGGGCCAAT
GAPDH	GGAGCGAGATCCCTCCAAAAT	GGCTGTTGTCATACTCTCATGG

Table S6: Primary antibodies information list

Primary antibodies	Company	Cat.NO	Isotype	Application	Dilution Ratio
ASCL2	Millipore	#MAB4418	Mouse	CHIP	1:200
ASCL2	R&D systems	AF6539	sheep	WB/IHC/IF	1:500/1:200/
ATG7	Santa Cruz	Sc-33211	Rabbit	WB	1:200
ATG9B	Novus Biologicals	NBP1-77169	Rabbit	IHC/WB	1:200/1:1000
PROMI	CST	#86781	Rabbit	WB	1:1000
PROMI	Millipore	MAB4399-1	Mouse	IF	1:200
ACTB	Beyotime Biotechnology	AF0003	Mouse	WB	1:1000
LC3	MBL	M186-3	Mouse	WB	1:1000
LC3	MBL	M152-3	Mouse	IF	1:100
Nestin	Abcam	ab22035	Mouse	WB/IF	1:1000/1:200
P62	MBL	PM045	Rabbit	WB	1:1000
BECN1	MBL	PD017	Rabbit	WB	1:1000
Ki-67	ZSGB-BIO	ZM-0166	Rabbit	IHC	1:1

Table S7: Second antibodies information list

second antibodies	Company	Cat.NO	Application	Dilution Ratio
sheep IgG Horseradish peroxidase-conjugated Antibody	R&D systems	HAF016	WB/IHC	1:500/1:100
Anti-sheep IgG-NL637	R&D systems	NL011	IF	1:1
Anti-sheep IgG-NL493	R&D systems	NL012	IF	1:1
Anti-mouse IgG, HRP-linked Antibody	CST	#7076	WB	1: 1000
Anti-rabbit IgG, HRP-linked Antibody	CST	#7074	WB	1: 1000
IRDYR®800CW Goat anti-rabbit	LI-COR®	926-32211	WB	1:10000
IRDYR®800CW Goat anti-mouse	LI-COR®	926-32211	WB	1:10000
Anti-mouse IgG, Alexa Fluor 555-linked Antibody	Beyotime Biotechnology	A0460	IF	1:500
Anti-rabbit IgG, Alexa Fluor 555-linked Antibody	Beyotime Biotechnology	A0453	IF	1:500
Anti-mouse IgG, Alexa Fluor 488-linked Antibody	Beyotime Biotechnology	A0428	IF	1:500
Anti-rabbit IgG, Alexa Fluor 488-linked Antibody	Beyotime Biotechnology	A0423	IF	1:500

Table S8: the clinicopathologic information of primary glioma cells.

ID	Diagnosis	Age	Sex	IDH1/2	1p/19q codeletion
GBM1	Glioblastoma	37	Female	Wildtype	NO
GBM2	Glioblastoma	21	Male	Wildtype	NO
GBM3	Glioblastoma	68	Male	Wildtype	NO

GBM4	Glioblastoma	62	Female	Wildtype	NO
GBM5	Glioblastoma	33	Male	Wildtype	NO
GBM6	Glioblastoma	55	Male	Wildtype	NO
GBM7	Glioblastoma	36	Male	Wildtype	NO
GBM8	Glioblastoma	72	Female	Wildtype	NO

Table S9: the primer of 3 predicted binding region of ATG9B

Binding Site	Name	Forward Primer	Reverse Primer
-370—-365	pATG9B-1	AAGCCATCCTCCCCACCT	AAAGAACAGCAGCCAAA
-1060—-1055	pATG9B-2	TGGTGAAACCCCATCTC	TGGCACAAATCTCGGCTC
-1721—-1716	pATG9B-3	GCCTCCAGTGAACAATC	AAAGCCCATTACTGAGATA