



Figure S1 Representative image of edema degree. The red segmentation indicates the area of edema, while the yellow line represents the degree of edema (31.78 mm). T2W FLAIR, T2-weighted fluid-attenuated inversion-recovery; T1FLAIR+C, post-contrast T1 fluid-attenuated inversion-recovery; T2W, T2-weighted.

Table S1 Histogram metrics between IDH-M and IDH-W gliomas

Quantitative maps	Parameters	IDH-M (N=41)	IDH-W (N=39)	t/Z value	P value
T1map (ms)	T1-90th ($\times 10^3$)	1.86 (1.58, 2.09)	1.98 (1.75, 2.54)	-1.661	0.097 [#]
	T1-Energy ($\times 10^{10}$)	5.46 (3.83, 11.91)	6.23 (1.93, 11.32)	-0.034	0.973 [#]
	T1-Entropy	5.56 \pm 0.48	5.70 \pm 0.52	1.256	0.213 [*]
	T1-Kurtosis	5.42 (5.24, 5.86)	5.67 (5.36, 6.04)	-0.727	0.467 [#]
	T1-Maximum ($\times 10^3$)	3.61 (3.08, 4.08)	3.96 (3.21, 4.30)	-1.534	0.125 [#]
	T1-Minimum	667.00 (612.05, 725.95)	642.90 (579.00, 693.70)	-0.929	0.353 [#]
	T1-Skewness	0.60 (0.28, 4.17)	0.73 (0.47, 1.48)	-0.544	0.587 [#]
T2map (ms)	T2-10th	97.70 (88.05, 102.70)	94.60 (88.20, 107.10)	-0.014	0.988 [#]
	T2-90th	174.00 (140.52, 230.36)	175.00 (144.40, 267.39)	-0.236	0.814 [#]
	T2-Energy ($\times 10^8$)	4.80 (2.76, 1.03)	6.01 (1.38, 1.05)	-0.534	0.593 [#]
	T2-Entropy	2.34 \pm 0.66	2.40 \pm 0.68	0.378	0.707 [*]
	T2-Kurtosis	5.13 (3.03, 10.57)	5.10 (2.92, 8.34)	-0.217	0.829 [#]
	T2-Maximum	338.20 (254.10, 439.50)	343.60 (262.60, 436.50)	-0.077	0.939 [#]
	T2-Mean	130.24 (114.40, 155.55)	131.01 (117.04, 166.56)	-0.351	0.725 [#]
	T2-Median	123.70 (110.80, 142.40)	125.10 (109.60, 143.50)	-0.250	0.802 [#]
	T2-Minimum	68.90 (62.00, 74.70)	63.20 (51.00, 74.60)	-1.718	0.086 [#]
	T2-Skewness	1.13 (0.54, 2.14)	1.17 (0.56, 1.76)	-0.563	0.573 [#]
PDmap (pu)	PD-10th	75.98 \pm 4.19	77.44 \pm 2.93	1.801	0.076 [*]
	PD-90th	92.74 \pm 3.71	94.09 \pm 3.84	1.607	0.112 [*]
	PD-Energy ($\times 10^8$)	2.08 (1.16, 2.97)	2.22 (5.67, 2.60)	-0.698	0.485 [#]
	PD-Entropy	0.58 \pm 0.26	0.55 \pm 0.20	-0.634	0.528 [*]
	PD-Kurtosis	4.33 (3.02, 5.26)	4.50 (3.36, 6.41)	-1.622	0.105 [#]
	PD-Maximum	105.60 (104.30, 107.85)	107.80 (105.10, 108.00)	-1.732	0.083 [#]
	PD-Mean	84.57 \pm 3.19	85.61 \pm 2.49	1.618	0.111 [*]
	PD-Median	84.96 \pm 2.93	85.76 \pm 2.36	1.336	0.185 [*]
	PD-Minimum	46.13 \pm 14.15	42.42 \pm 15.10	-1.134	0.260 [*]
PD-Skewness	-0.34 (-0.69, -0.14)	-0.32 (-0.93, -0.011)	-0.159	0.874 [#]	
T1map+C (ms)	cT1-90th ($\times 10^3$)	1.62 (1.50, 1.95)	1.53 (1.31, 2.03)	-1.016	0.310 [#]
	cT1-Energy ($\times 10^{10}$)	5.05 (1.85, 16.03)	3.82 (1.36, 6.14)	-1.757	0.079 [#]
	cT1-Entropy	5.66 \pm 0.54	5.80 \pm 0.64	1.077	0.285 [*]
	cT1-Kurtosis	4.73 (3.25, 8.40)	4.27 (2.75, 8.56)	-0.266	0.821 [#]
	cT1-Maximum ($\times 10^3$)	3.63 (3.03, 4.16)	3.74 (3.06, 4.33)	-0.140	0.889 [#]
T2map+C (ms)	cT1-Skewness	0.90 (0.44, 1.83)	1.05 (0.62, 2.18)	-0.813	0.416 [#]
	cT2-10th	87.90 (82.40, 98.62)	83.40 (77.60)	-1.460	0.054 [#]
	cT2-90th	159.00 (130.90, 220.65)	161.40 (120.10, 236.80)	-0.568	0.570 [#]
	cT2-Energy ($\times 10^8$)	4.51 (2.54, 9.71)	3.69 (1.15, 8.63)	-1.054	0.292 [#]
	cT2-Entropy	2.25 \pm 0.69	2.17 \pm 0.74	-0.491	0.625 [*]
	cT2-Kurtosis	5.04 (2.98, 11.41)	5.04 (3.54, 10.85)	-0.024	0.981 [#]
	cT2-Maximum	336.30 (225.35, 469.90)	294.80 (247.30, 409.40)	-0.347	0.729 [#]
	cT2-Mean	123.18 (105.77, 152.13)	122.34 (97.56, 137.80)	-1.208	0.227 [#]
	cT2-Median	116.20 (99.15, 141.30)	106.60 (91.80, 122.90)	-1.733	0.083 [#]
cT2-Minimum	53.40 (36.40, 66.20)	47.50 (23.70, 57.70)	-1.475	0.140 [#]	
PDmap+C (pu)	cT2-Skewness	1.21 (0.51, 2.43)	1.06 (0.63, 2.38)	-0.178	0.859 [#]
	cPD-Energy ($\times 10^8$)	2.10 (1.22, 3.10)	2.15 (0.66, 3.02)	-0.294	0.769 [#]
	cPD-Entropy	0.75 \pm 0.25	0.83 \pm 0.21	1.696	0.094 [*]
	cPD-Kurtosis	3.64 (3.02, 4.40)	3.69 (3.18, 4.33)	-0.563	0.573 [#]
	cPD-Minimum	49.81 \pm 10.55	46.07 \pm 14.13	-1.348	0.182 [*]
cPD-Skewness	-0.30 \pm 0.34	-0.30 \pm 0.36	-0.016	0.987 [*]	

^{*}, P value represents the comparison results of IDH-M and IDH-W gliomas using the *t*-test analysis; [#], P value represents the comparison results of IDH-M and IDH-W gliomas using the non-parametric Mann-Whitney U-test. Continuous quantitative variables as mean \pm standard deviation or median (first quartile and third quartile). IDH-M, isocitrate dehydrogenase mutant; IDH-W, isocitrate dehydrogenase wildtype; T1map+C, post-contrast T1map; T2map+C, post-contrast T2map; PDmap+C, post-contrast PDmap; 10th, 10th percentile; 90th, 90th percentile; cT1, post-contrast T1; cT2, post-contrast T2; cPD, post-contrast PD.