

On-line Table 1: Univariate analysis of DCE-MRI parameters as predictors of overall and progression-free survival

Parameters	Overall Survival			Progression-Free Survival		
	Cutoff Value	HR (95% CI)	P Value	Cutoff Value	HR (95% CI)	P Value
K^{trans} _mean	>0.191	2.30 (0.96–5.55)	.061	>0.265	1.85 (0.93–3.70)	.080
K^{trans} _skewness	>0.147	2.06 (0.61–6.90)	.242	>0.305	0.71 (0.36–1.41)	.326
K^{trans} _kurtosis	>0.042	6.63 (1.42–31.06)	.016	>0.042	3.09 (1.10–8.69)	.033
K^{trans} _min	>0.001	4.31 (1.49–12.49)	.007	>0.005	2.49 (1.26–4.91)	.008
K^{trans} _p5	>0.079	3.37 (1.48–7.66)	.004	>0.146	2.46 (1.09–5.52)	.029
K^{trans} _p25	>0.158	2.72 (1.21–6.07)	.012	>0.138	2.13 (1.02–4.42)	.043
K^{trans} _p50	>0.182	2.71 (1.07–6.86)	.023	>0.235	1.89 (0.94–3.82)	.076
K^{trans} _p75	>0.254	2.31 (0.96–5.55)	.061	>0.254	1.64 (0.80–3.36)	.179
K^{trans} _p95	>0.447	1.65 (0.76–3.60)	.206	>0.190	0.38 (0.13–1.10)	.073
K^{trans} _max	>0.374	3.90 (0.91–16.79)	.068	>0.552	0.72 (0.38–1.37)	.316
v_e _mean	>66.9	2.34 (1.03–5.27)	.034	>66.9	1.94 (0.97–3.89)	.061
v_e _skewness	>3.9	0.89 (0.47–4.87)	.078	>3.9	3.26 (0.87–5.89)	.067
v_e _kurtosis	>50.3	12.19 (2.65–56.02)	.005	>27.8	3.87 (1.55–9.63)	.004
v_e _min	>5.1	1.85 (0.85–4.06)	.116	>5.1	1.83 (0.94–3.57)	.077
v_e _p5	>16.0	4.33 (1.28–14.64)	.005	>16.0	2.38 (1.01–5.59)	.046
v_e _p25	>44.6	2.28 (1.01–5.16)	.040	>44.6	1.87 (0.93–3.76)	.077
v_e _p50	>64.4	2.59 (1.11–6.02)	.027	>64.4	2.17 (1.07–4.41)	.031
v_e _p75	>89.5	2.34 (1.03–5.27)	.041	>98.6	1.88 (0.96–3.70)	.066
v_e _p95	>94.0	4.07 (1.22–13.61)	.023	>94.0	2.68 (1.11–6.50)	.029
v_e _max	>97.2	3.63 (0.49–27.02)	.208	>80.8	0.58 (0.08–4.31)	.590

Note:—max indicates maximum; HR, hazard ratio.

On-line Table 2: Univariate analysis of clinical and imaging parameters and molecular biomarkers as predictors of survival

Parameters	Overall Survival			Progression-Free Survival		
	Cutoff Value	HR (95% CI)	P Value	Cutoff Value	HR (95% CI)	P Value
Age	>68	2.23 (1.01–4.92)	.047	>68	2.66 (1.32–5.39)	.006
Sex	Female	1.94 (0.89–4.23)	.095	Female	1.18 (0.62–2.26)	.614
KPS	≤70	2.43 (1.02–5.78)	.045	≤60	1.41 (0.67–2.96)	.362
Extent of resection	Subtotal or partial	1.62 (0.74–3.55)	.227	Subtotal or partial	1.79 (0.92–3.51)	.088
Enhancing tumor volume (cm ³)	>30.00	3.06 (1.41–6.61)	.005	>30.00	2.65 (1.30–5.40)	.008
Edema	Mild-to-severe	0.78 (0.31–1.95)	.592	Mild-to-severe	0.71 (0.31–1.63)	.423
nCET	Positive	1.30 (0.61–2.79)	.502	Positive	1.32 (0.67–2.60)	.416
MGMT	Unmethylated	6.02 (2.03–17.86)	.001	Unmethylated	3.29 (1.48–7.31)	.003
EGFR	>2+	3.88 (1.68–8.99)	.002	>2+	1.68 (0.87–3.27)	.125
p53	>2	1.75 (0.77–3.99)	.182	>2	1.83 (0.90–3.72)	.093
Ki-67	>15	0.70 (0.32–1.50)	.358	>15	0.72 (0.37–1.39)	.331

Note:—nCET indicates non-contrast-enhancing tumor; HR, hazard ratio.

On-line Table 3: Comparison of the performance of prognostic models

Classification Model	Included Parameters	Harrell C-Index (95% CI)	P Value ^a
OS_preoperative models			
Model 0	Volume of enhancing tumor, age, KPS	0.73 (0.64–0.82)	—
Model 1	Model 0 + K^{trans}_{p5}	0.75 (0.65–0.85)	.557
Model 2	Model 0 + $v_{e_kurtosis}$	0.75 (0.66–0.84)	.367
Model 3	Model 0 + K^{trans}_{p5} + $v_{e_kurtosis}$	0.80 (0.71–0.88)	.152
OS_postoperative models			
Model 0	Volume of enhancing tumor, age, KPS, MGMT, EGFR	0.80 (0.72–0.88)	—
Model 1	Model 0 + $K^{trans}_{kurtosis}$	0.82 (0.73–0.90)	.457
Model 2	Model 0 + $v_{e_kurtosis}$	0.80 (0.72–0.89)	.693
PFS_preoperative models			
Model 0	Volume of enhancing tumor, age	0.66 (0.55–0.76)	—
Model 1	Model 0 + K^{trans}_{min}	0.72 (0.61–0.82)	.136
Model 2	Model 0 + K^{trans}_{p5}	0.70 (0.60–0.80)	.161
Model 3	Model 0 + $v_{e_kurtosis}$	0.67 (0.56–0.78)	.368
Model 4	Model 0 + K^{trans}_{min} + $v_{e_kurtosis}$	0.74 (0.63–0.84)	.034
Model 5	Model 0 + K^{trans}_{p5} + $v_{e_kurtosis}$	0.74 (0.63–0.84)	.046
PFS_postoperative models			
Model 0	Volume of enhancing tumor, age, MGMT	0.69 (0.59–0.79)	—
Model 1	Model 0 + $v_{e_kurtosis}$	0.72 (0.63–0.82)	.229

Note:— — indicates no value.

^aP values for comparison with the C-index of Model 0.