

Supplementary

Table S1 Univariate and multivariate analyses of VASARI features for differentiating intracranial extraventricular ependymoma from glioblastoma

Feature name	Characteristic	Univariate analysis			Multivariate analysis		
		OR	(95% CI)	P value	OR	(95% CI)	P value
F1	Tumor location	0.97	(0.87–1.08)	0.570			
F2	Side of tumor epicenter	1.20	(0.91–1.59)	0.192			
F3	Eloquent brain	0.67	(0.53–0.86)	0.001	0.26	(0.13–0.52)	<0.001
F4	Enhancement quality	4.19	(2.22–7.93)	<0.001	4.91	(1.04–23.26)	0.045
F5	Proportion enhancing	1.48	(1.15–1.91)	0.002			
F6	Proportion nonenhancing	0.68	(0.53–0.88)	0.003			
F7	Proportion necrosis	0.23	(0.16–0.34)	<0.001	0.12	(0.05–0.27)	<0.001
F8	Tumor cysts	0.43	(0.21–0.89)	0.023	0.10	(0.01–0.71)	0.021
F9	Multifocal or multicentric	0.18	(0.07–0.42)	<0.001			
F10	T1/FLAIR ratio	2.17	(1.4–3.37)	0.001			
F11	Thickness of margin	9.97	(3.73–26.67)	<0.001	14.24	(3.15–64.29)	0.001
F12	Definition of the enhancing margin	0.67	(0.36–1.27)	0.219			
F13	Definition of the non-enhancing margin	0.88	(0.52–1.48)	0.631			
F14	Proportion of edema	0.52	(0.41–0.66)	<0.001			
F15	Edema crosses midline	0.66	(0.40–1.09)	0.104			
F16	Hemorrhage	0.63	(0.36–1.09)	0.097			
F17	Diffusion	1.45	(0.97–2.16)	0.072			
F18	Pial invasion	0.59	(0.34–1.02)	0.058			
F19	Ependymal invasion	1.73	(1.02–2.94)	0.043			
F20	Cortical involvement	1.28	(0.64–2.57)	0.488			
F21	Deep white matter invasion	0.30	(0.16–0.55)	<0.001			
F22	Non-enhancing tumor crosses midline	3.17	(1.44–6.98)	0.004			
F23	Enhancing tumor crosses midline	2.63	(1.31–5.25)	0.006			
F24	Satellites	0.07	(0.02–0.24)	<0.001			
F25	Calvarial remodeling	0.80	(0.28–2.29)	0.671			
F29	Tumor size	1.37	(1.25–1.50)	<0.001	1.77	(1.42–2.21)	<0.001

VASARI, Visually AcceSAble Rembrandt Images; OR, odds ratio; CI, confidence interval; FLAIR, fluid-attenuated inversion recovery.

Table S2 Univariate and multivariate analyses of clinical features for differentiating IEE from GBM

Characteristic	Univariate analysis			Multivariate analysis		
	OR	(95% CI)	P value	OR	(95% CI)	P value
Alb (Albumin)	1.01	(0.95–1.08)	0.674			
Age	0.95	(0.93–0.96)	<0.001	0.95	(0.94–0.97)	<0.001
ALT (Alanine aminotransferase)	1.00	(0.99–1.01)	0.749			
APTT (Activated partial thromboplastin time)	1.05	(1.00–1.09)	0.033			
AST (Aspartate Transaminase)	1.02	(1.00–1.04)	0.036			
Ddimer	1.06	(0.57–1.98)	0.844			
Eos (Eosinophil count)	138.13	(13.57–1,406.50)	<0.001	166.02	(8.73–3,159.01)	0.001
GlB (Globulin)	0.93	(0.88–1.00)	0.04			
Gender	0.86	(0.49–1.53)	0.616			
HGB (Hemoglobin)	0.98	(0.97–0.99)	0.004			
INR (International normalized ratio)	0.14	(0.01–2.73)	0.194			
KPS (Karnofsky Performance Status)	0.98	(0.97–0.99)	<0.001	0.97	(0.96–0.99)	<0.001
Lym (Lymphocyte count)	1.56	(1.20–2.04)	0.001			
Mono (Monocyte count)	4.08	(1.66–10.01)	0.002	2.63	(0.85–8.14)	0.093
MPV (Mean platelet volume)	0.69	(0.58–0.81)	<0.001			
Neu (Neutrophile granulocyte)	0.93	(0.86–1.01)	0.068			
PCT(Platelet crit)	5.77	(0.31–107.60)	0.24			
PT (Prothrombin time)	0.93	(0.77–1.11)	0.413			
RBC (Red blood cell)	0.78	(0.51–1.22)	0.28			
Scr (Serum creatinine)	0.96	(0.94–0.97)	<0.001	0.98	(0.96–0.99)	0.003
WBC (White blood cell)	0.98	(0.91–1.05)	0.511			

IEE, intracranial extraventricular ependymoma; GBM, glioblastoma; OR, odds ratio; CI, confidence interval.