

On-line Table 1: VASARI MRI features among telomere maintenance glioblastoma subtypes

VASARI MRI Feature	Telomere Maintenance Subtype			Pearson χ^2 and P Values ^a
	ALT+/M- (n = 24)	ALT-/M- (n = 85)	ALT-/M+ (n = 51)	
F1 Tumor location				
Frontal	33%	27%	25%	NS
Temporal	42%	39%	30%	NS
Insular	0	4%	4%	NS
Parietal	13%	16%	22%	NS
Occipital	8%	5%	9%	NS
Other	4%	8%	9%	NS
F2 Side of lesion center				
Right	17%	41%	54%	9.8, <.001
Center/bilateral	4%	5%	8%	
Left	77%	54%	38%	
F3 Eloquent % none	65%	67%	60%	NS
F4 Enhancement % marked/avid	74%	85%	92%	NS
F5 Proportion enhancing % >33%–95%	39%	47%	61%	NS
F6 Proportion nCET % >33%–68%	91%	91%	88%	NS
F7 Proportion necrosis % >5%	42%	49%	71%	7.3, .026
F8 Cysts	30%	12%	4%	9.9, .007
F9 Multifocal or multicentric	13%	18%	18%	NS
F10 T1/FLAIR ratio				
Expansive	79%	41%	37%	16.2, <.001
Mixed	13%	24%	25%	
Infiltrative	8%	35%	37%	
F11 Thickness of enhancing margin				
Thin <3 mm	26%	49%	47%	NS
Thick/nodular >3 mm	48%	22%	26%	
Solid	26%	29%	27%	
F12 Enhancing margin % poorly defined	26%	32%	27%	NS
F13 Nonenhancing margin % poorly defined	26%	36%	37%	NS
F14 Proportion of edema				
Grade ≥ 3	30%	16%	23%	12.8, .002
Grade 4	56%	52%	24%	
Grade 5	14%	32%	53%	
F15 Edema cross midline	22%	12%	11%	NS
F16 Hemorrhage	13%	13%	10%	NS
F17 Diffusion characteristics				
Facilitated	26%	12%	20%	NS
Restricted	30%	34%	33%	
Mixed	44%	54%	47%	
F18 Pial invasion	13%	28%	27%	NS
F19 Ependymal extension	30%	60%	49%	6.6, .036
F20 Cortical involvement	74%	82%	86%	NS
F21 Deep white matter				
None	61%	54%	53%	NS
Internal capsule invasion	22%	29%	20%	
Corpus callosum invasion	17%	17%	27%	
F22 nCET crosses midline	26%	19%	31%	NS
F23 CET crosses midline	96%	96%	92%	NS
F24 Satellites	22%	19%	20%	NS
F25 Calvarial remodeling	0	0	0	NS

Note:—NS indicates not significant; nCET, non-contrast enhancing tumor; CET, contrast enhancing tumor.

^a Statistical comparisons were made between 3 groups: ALT+/M-, ALT-/M-, and ALT-/M+.

On-line Table 2: VASARI MRI features among *IDH1* and *IDH2* mutant tumors

VASARI MRI Feature	Tumor Type		
	<i>IDH1</i> and <i>IDH2</i> Mutant (<i>n</i> = 30)	Wild-Type <i>IDH1</i> and <i>IDH2</i> (<i>n</i> = 134)	Pearson χ^2 and <i>P</i> Values
F1 Tumor location			
Frontal	32%	27%	NS
Temporal	36%	36%	NS
Insular	7%	4%	NS
Parietal	14%	18%	NS
Occipital	7%	6%	NS
Other	4%	9%	NS
F2 Side of lesion center			
Right	30%	45%	NS
Center/bilateral	3%	6%	
Left	67%	48%	
F3 Eloquent % none	60%	67%	NS
F4 Enhancement % marked/avid	80%	85%	NS
F5 Proportion enhancing % >33%–95%	40%	51%	NS
F6 Proportion nCET % >33%–68%	83%	89%	NS
F7 Proportion necrosis % [mt]5%	50%	59%	NS
F8 Cysts	23%	10%	NS
F9 Multifocal or multicentric	10%	18%	NS
F10 T1/FLAIR ratio			
Expansive	80%	40%	16, <.0001
Mixed	13%	23%	
Infiltrative	7%	37%	
F11 Thickness of enhancing margin			
Thin <3 mm	40%	43%	NS
Thick/nodular >3 mm	40%	48%	
Solid	20%	9%	
F12 Enhancing margin % poorly defined	27%	31%	NS
F13 Nonenhancing margin % poorly defined	27%	33%	NS
F14 Proportion of edema			
Grade ≥ 3	23%	22%	5.1, .024
Grade 4	60%	40%	
Grade 5	17%	38%	
F15 Edema cross midline	20%	23%	NS
F16 Hemorrhage	10%	12%	NS
F17 Diffusion characteristics			
Facilitated	23%	16%	NS
Restricted	23%	38%	
Mixed	54%	46%	
F18 Pial invasion	13%	31%	NS
F19 Ependymal extension	40%	54%	NS
F20 Cortical involvement	73%	85%	NS
F21 Deep white matter			
None	48%	52%	NS
Internal capsule invasion	26%	19%	
Corpus callosum invasion	26%	29%	
F22 nCET crosses midline	30%	22%	NS
F23 CET crosses midline	97%	94%	NS
F24 Satellites	17%	20%	NS
F25 Calvarial remodeling	0	0	NS

Note:—NS indicates not significant; nCET, non-contrast enhancing tumor; CET, contrast enhancing tumor.