

Supplementary Table 1

Characteristic	N	Low-neural glioblastoma (n=213)	High-neural glioblastoma (n=150)	P value
Age, mean (SD), years	61.4 (10.0)	60.9 (10.2)	61.8 (9.7)	0.41
Sex, n (%)				
Female	139 (38.3)	83 (39.0)	56 (37.3)	0.83
Male	224 (61.7)	130 (61.0)	94 (62.7)	
Location, n (%)				
Frontal	106 (29.2)	68 (31.9)	38 (25.3)	0.19
Parietal	145 (39.9)	80 (37.6)	65 (43.3)	0.31
Temporal	141 (38.8)	71 (33.3)	70 (46.7)	0.02
Occipital	55 (15.2)	30 (14.1)	25 (16.7)	0.55
Hemisphere, n (%)				
Left	166 (45.7)	99 (46.5)	67 (44.7)	0.55
Right	174 (47.9)	103 (48.4)	71 (47.3)	
Both	23 (6.3)	11 (5.2)	12 (8.0)	
Karnofsky prior surgery, mean (SD), %	84.6 (12.4)	83.0 (12.9)	86.7 (11.4)	< 0.01
Extent of resection, n (%)				
Gross total	142 (39.1)	92 (43.2)	50 (33.3)	0.08
Near gross total	99 (27.3)	59 (27.7)	40 (26.7)	
Partial	122 (33.6)	62 (29.1)	60 (40.0)	
MGMT promoter methylation status, n (%)				
Non-methylated	174 (47.9)	107 (50.2)	67 (44.7)	0.38
Methylated	189 (52.1)	106 (49.8)	83 (55.3)	
Karnofsky prior adjuvant treatment, mean (SD), %	85.4 (12.7)	84.4 (13.0)	86.7 (12.1)	0.09

Supplementary Table 2

Feature	N	Univariate		Multivariate	
		HR (95% CI)	P value	HR (95% CI)	P value
Age	363	1.02 (1.00-1.03)	0.04	1.00 (0.98-1.02)	0.95
Sex					
Female	139	<i>Ref.</i>			
Male	224	1.11 (0.84-1.47)	0.46		
KPS prior surgery	363	0.99 (0.98-1.00)	0.16		
Frontal					
No	257	<i>Ref.</i>			
Yes	106	1.08 (0.78-1.24)	0.53		
Temporal					
No	222	<i>Ref.</i>			
Yes	141	0.96 (0.72-1.27)	0.77		
Parietal					
No	219	<i>Ref.</i>		<i>Ref.</i>	
Yes	145	1.49 (1.11-1.97)	< 0.01	1.26 (0.93-1.71)	0.46
Occipital					
No	308	<i>Ref.</i>		<i>Ref.</i>	
Yes	55	1.46 (1.01-2.11)	0.04	1.04 (0.71-1.52)	0.86
Side					
Left	166	<i>Ref.</i>			
Right	174	1.13 (0.85-1.50)	0.39		
Both	23	1.12 (0.59-2.11)	0.72		
Extent of resection					
GTR	142	<i>Ref.</i>		<i>Ref.</i>	
Near GTR	99	1.38 (0.99-1.94)	0.04	1.14 (0.80-1.63)	0.46
Partial	122	2.26 (1.61-3.18)	< 0.01	1.84 (1.28-2.64)	< 0.01
MGMT promoter methylation status					
Non-methylated	174	<i>Ref.</i>		<i>Ref.</i>	
Methylated	189	0.52 (0.39-0.69)	< 0.01	0.47 (0.35-0.64)	< 0.01
KPS prior treatment	363	0.97 (0.96-0.99)	< 0.01	0.98 (0.96-0.99)	0.02
CE volume	288	0.99 (0.98-1.01)	0.46		
FLAIR volume	288	1.00 (0.99-1.01)	0.59		
Methylation subclass					
<i>RTK I</i>	101	<i>Ref.</i>			
<i>RTK II</i>	147	0.95 (0.66-1.36)	0.77		
MES	115	0.71 (0.48-1.06)	0.09		
Neural subclass					
Low	213	<i>Ref.</i>		<i>Ref.</i>	
High	150	1.86 (1.41-2.45)	< 0.01	1.96 (1.45-2.64)	< 0.01

Supplementary Table 3

Feature	N	Univariate		Multivariate	
		HR (95% CI)	P value	HR (95% CI)	P value
Age	363	1.00 (0.99-1.02)	0.67		
Sex					
Female	139	<i>Ref.</i>			
Male	224	0.99 (0.75-1.33)	0.97		
KPS prior surgery	363	1.01 (0.99-1.02)	0.22		
Frontal					
No	257	<i>Ref.</i>			
Yes	106	1.19 (0.89-1.61)	0.25		
Temporal					
No	222	<i>Ref.</i>			
Yes	141	0.95 (0.71-1.27)	0.71		
Parietal					
No	219	<i>Ref.</i>			
Yes	145	1.17 (0.88-1.56)	0.28		
Occipital					
No	308	<i>Ref.</i>			
Yes	55	1.23 (0.82-1.84)	0.32		
Side					
Left	166	<i>Ref.</i>		<i>Ref.</i>	
Right	174	1.13 (0.82-1.54)	0.46	1.24 (0.93-1.66)	0.14
Both	23	1.99 (1.03-3.86)	0.04	1.71 (0.89-3.26)	0.10
Extent of resection					
GTR	142	<i>Ref.</i>		<i>Ref.</i>	
Near GTR	99	1.18 (0.88-1.58)	0.27	1.39 (0.98-1.96)	0.07
Partial	122	2.29 (1.22-4.29)	0.01	1.73 (1.19-2.49)	< 0.01
MGMT promoter methylation status					
Non-methylated	174	<i>Ref.</i>		<i>Ref.</i>	
Methylated	189	0.51 (0.38-0.69)	< 0.01	0.49 (0.37-0.68)	< 0.01
KPS prior treatment	363	0.99 (0.98-1.01)	0.91		
CE volume	363	1.42 (0.67-3.03)	0.36		
FLAIR volume	363	1.00 (0.99-1.01)	0.23		
Methylation subclass					
<i>RTK I</i>	101	<i>Ref.</i>			
<i>RTK II</i>	147	1.11 (0.76-1.62)	0.60		
MES	115	1.19 (0.80-1.75)	0.39		
Neural subclass					
Low	213	<i>Ref.</i>		<i>Ref.</i>	
High	150	1.39 (1.04-1.84)	0.03	1.51 (1.13-2.02)	<0.01