

A

Training set (N=340)

Subgroup	No. of patients (%)	Hazard Ratio (95%CI)	P value
All patients	340 (100)	4.811(3.067–7.561)	*
Age, years			
<40	139 (40.9)	5.099(5.051–5.147)	*
40–59	150 (44.1)	3.054(3.003–3.111)	*
60–79	47 (13.8)	3.057(3.009–3.105)	*
>=80	4 (1.2)	NA	NA
Sex			
Male	182 (53.5)	5.013(4.621–5.405)	*
Female	158 (46.5)	4.398(4.006–4.790)	*
New event			
None or NA	151 (44.4)	4.798(4.406–5.190)	*
Yes	189 (55.6)	4.973(4.581–5.365)	*
KPS			
<80	25 (7.4)	3.728(3.336–4.120)	*
>=80	172 (50.6)	4.833(4.441–5.225)	*
NA	143 (42.0)	4.711(4.319–5.103)	*
Histology			
Astrocytoma	127 (0.37)	4.719(4.327–5.111)	*
Oligoastrocytoma	85 (0.25)	4.538(4.146–4.930)	*
Oligodendroglioma	128 (0.38)	4.976(4.584–5.368)	*
WHO grade			
Grade II	163 (0.48)	4.877(4.485–5.269)	*
Grade III	177 (0.52)	4.198(3.806–4.591)	*
Pharmaceutical therapy			
TMZ	155 (0.46)	4.810(4.418–5.202)	*
PCV	22 (0.06)	6.211(5.819–6.603)	*
TMZ+PCV	3 (0.01)	NA	NA
Others	11 (0.03)	2.179(0.379–3.452)	*
No or NA	149 (0.44)	7.165(6.773–7.557)	*
Radiation therapy			
Yes	113 (0.33)	4.813(4.421–5.205)	*
No	184 (0.54)	4.808(4.416–5.201)	*
NA	43 (0.13)	0.977(0.585–1.369)	*
IDH mutation status			
Mutant	262 (0.77)	4.800(4.408–5.192)	*
Wildtype	78 (0.23)	5.215(4.823–5.607)	*
TP53 mutation status			
Mutant	174 (0.51)	4.810(4.418–5.202)	*
Wildtype	166 (0.49)	4.817(4.425–5.209)	*
PTEN mutation status			
Mutant	17 (0.05)	1.750(0.819–3.097)	*
Wildtype	323 (0.95)	4.811(4.419–5.203)	*
EGFR mutation status			
Mutant	20 (0.06)	3.782(3.390–4.174)	*
Wildtype	320 (0.94)	4.811(4.419–5.203)	*
ATRX mutation status			
Mutant	132 (0.39)	4.803(4.411–5.195)	*
Wildtype	208 (0.61)	4.829(4.437–5.221)	*

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Hazard Ratio and 95%CI

B

Validation set (N=170)

Subgroup	No. of patients (%)	Hazard Ratio (95%CI)	P value
All patients	170 (100)	3.638(1.704–7.765)	*
Age, years			
<40	95 (55.9)	3.819(3.427–4.211)	*
40–59	54 (31.8)	3.511(3.119–3.903)	*
60–79	21 (12.4)	3.502(3.11–3.894)	*
>=80	N/A	NA	NA
Sex			
Male	102 (60)	3.631(3.239–4.023)	*
Female	68 (40)	3.417(3.025–3.809)	*
New event			
None or NA	82 (48.2)	4.125(3.733–4.517)	*
Yes	88 (51.8)	3.16(2.768–3.552)	*
KPS			
<80	15 (8.8)	2.188(1.796–2.58)	*
>=80	91 (53.5)	3.64(3.248–4.032)	*
NA	64 (37.6)	3.641(3.249–4.033)	*
Histology			
Astrocytoma	67 (39.4)	3.531(3.139–3.923)	*
Oligoastrocytoma	45 (26.5)	3.602(3.21–3.994)	*
Oligodendroglioma	58 (34.1)	4.078(3.686–4.47)	*
WHO grade			
Grade II	84 (49.4)	3.636(3.244–4.028)	*
Grade III	86 (50.6)	3.642(3.25–4.034)	*
Pharmaceutical therapy			
TMZ	82 (48.2)	3.143(2.751–3.535)	*
PCV	8 (4.7)	NA	NA
TMZ+PCV	2 (1.2)	NA	NA
Others	3 (1.8)	NA	NA
No or NA	75 (44.1)	4.715(4.323–5.107)	*
Radiation therapy			
Yes	53 (31.2)	3.599(3.207–3.991)	*
No	93 (54.7)	3.659(3.267–4.051)	*
NA	24 (14.1)	2.901(2.509–3.293)	*
IDH mutation status			
Mutant	133 (78.2)	3.639(3.247–4.031)	*
Wildtype	37 (21.8)	2.165(1.773–2.557)	*
TP53 mutation status			
Mutant	72 (42.4)	4.013(3.621–4.405)	*
Wildtype	98 (57.6)	3.396(3.004–3.788)	*
PTEN mutation status			
Mutant	9 (5.3)	NA	NA
Wildtype	161 (94.7)	3.638(3.246–4.03)	*
EGFR mutation status			
Mutant	17 (10)	1.133(0.741–1.525)	*
Wildtype	153 (90)	3.637(3.245–4.029)	*
ATRX mutation status			
Mutant	63 (37.1)	3.661(3.269–4.053)	*
Wildtype	107 (62.9)	3.303(2.911–3.695)	*

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Hazard Ratio and 95%CI