

OS

Characteristics	N (%)	HR (95% CI)	P value
Age			
≤40	264 (50)	3.21(1.72-5.98)	<0.001
>40	264 (51)	5.85(3.10-10.06)	<0.001
Gender			
Male	289 (54.7)	7.96(4.23-14.96)	<0.001
Female	239 (45.3)	2.09(1.23-3.56)	0.006
WHO grade			
G2	224(48)	3.2(1.52-6.74)	0.002
G3	243 (52)	3.42(2.09-5.60)	<0.001
1p/19q codeletion			
codel	171(32.4)	5.70(1.84-17.62)	0.003
non-codel	357 (67.6)	2.94(1.95-4.44)	<0.001
IDH status			
WT	97(18.5)	1.56(0.89-2.76)	0.124
Mut	428 (81.5)	2.74(1.68-4.48)	<0.001
Histological type			
Astrocytoma	195(36.9)	5.14(2.65-9.95)	<0.001
Oligoastrocytoma	134(25.4)	7.09(2.12-23.68)	0.001
Oligodendroglioma	199(37.7)	3.39(1.81-6.37)	<0.001
Primary therapy outcome			
PD	110(24)	2.20(1.38-3.51)	0.001
SD	146(31.9)	4.07(1.85-8.94)	<0.001
PR	64(14)	4.47(0.62-38.33)	0.172
CR	138(30.1)	2.29(0.43-12.10)	0.328

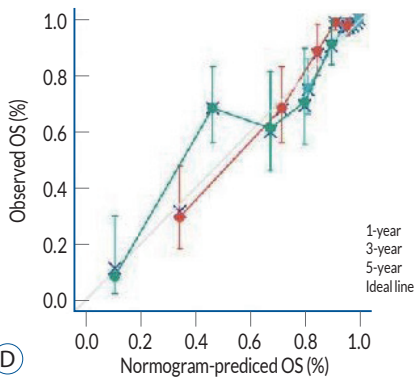
PFI

Characteristics	N (%)	HR (95% CI)	P value
Age			
≤40	264 (50)	1.86(1.21-2.86)	0.005
>40	264 (51)	3.18(2.15-4.88)	<0.001
Gender			
Male	289 (54.7)	3.19(2.11-4.82)	<0.001
Female	239 (45.3)	1.79(1.19-2.69)	0.006
WHO grade			
G2	224(48)	2.13(1.33-3.46)	0.002
G3	243 (52)	3.07(2.03-4.65)	<0.001
1p/19q codeletion			
codel	171(32.4)	1.94(1.00-3.77)	0.05
non-codel	357 (67.6)	2.14(1.57-2.93)	<0.001
IDH status			
WT	97(18.5)	1.15(0.71-1.85)	0.574
Mut	428 (81.5)	1.94(1.37-2.74)	<0.001
Histological type			
Astrocytoma	195(36.9)	2.81(1.82-4.33)	<0.001
Oligoastrocytoma	134(25.4)	1.82(0.98-3.40)	0.059
Oligodendroglioma	199(37.7)	2.88(1.72-4.74)	<0.001
Primary therapy outcome			
PD	110(24)	1.88(1.26-2.80)	0.002
SD	146(31.9)	1.86(1.01-3.42)	0.046
PR	64(14)	3.15(1.12-8.88)	0.03
CR	138(30.1)	1.72(0.77-3.83)	0.185

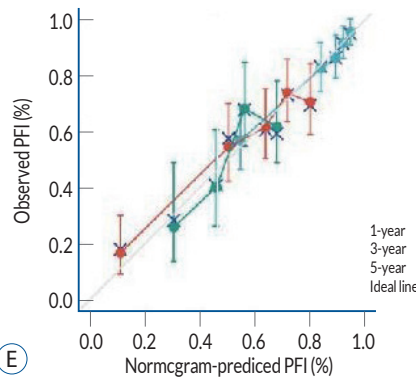
DSS

Characteristics	N (%)	HR (95% CI)	P value
Age			
≤40	264 (50)	3.22(1.64-6.31)	0.001
>40	264 (51)	6.09(3.43-10.80)	<0.001
Gender			
Male	289 (54.7)	7.89(4.07-15.30)	<0.001
Female	239 (45.3)	2.02(1.15-3.52)	0.014
WHO grade			
G2	224(48)	2.91(1.34-6.33)	0.007
G3	243 (52)	3.49(2.06-5.90)	<0.001
1p/19q codeletion			
codel	171(32.4)	4.33(1.33-14.04)	0.015
non-codel	357 (67.6)	3.20(2.06-4.97)	<0.001
IDH status			
WT	97(18.5)	1.54(0.87-2.72)	0.142
Mut	428 (81.5)	2.41(1.43-4.05)	0.001
Histological type			
Astrocytoma	195(36.9)	6.05(2.95-12.42)	<0.001
Oligoastrocytoma	134(25.4)	5.73(1.70-19.33)	0.005
Oligodendroglioma	199(37.7)	3.12(1.61-6.04)	0.001
Primary therapy outcome			
PD	110(24)	2.20(1.37-3.53)	0.001
SD	146(31.9)	3.49(1.50-8.14)	0.004
PR	64(14)	3.49(0.39-31.31)	0.265
CR	138(30.1)	1.72(0.31-9.64)	0.54

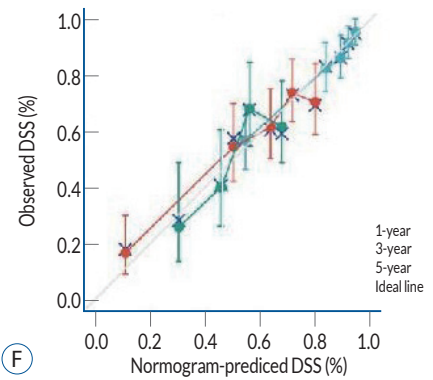
(A)



(B)



(C)



(D)

(E)

(F)

Supplementary Fig. 2. Construction and validation of a scoring model based on spermine synthase (SMS) expression. Nomogram risk scoring model for 1-year, 3-year, and 5-year overall survival (OS) (A), progression-free survival (PFI) (B), and disease-specific survival (DSS) (C) based on SMS expression. Calibration plots were generated to validate the utility of the scoring model in predicting OS (D), PFI (E), and DSS (F). HR : hazard ratio, CI : confidence interval, WHO : World Health Organization, IDH : isocitrate dehydrogenase, WT : wild type, Mut : mutation, PD : progressive disease, SD : stable disease, PR : partial response, CR : complete response.