

**Table.S1** Baseline characteristics of CGGA participants stratified by PRR11 expression

Characteristic	Low expression of PRR11	High expression of PRR11	P
n	162	163	
Age, median(IQR)	41.5 (28.5, 54.5)	43 (26, 60)	0.256
Gender, n(%)			0.15
Female	67 (41.4%)	55 (33.7%)	
Male	95 (58.6%)	108 (66.3%)	
WHO grade, n(%)			<0.001
WHO II	81 (50%)	22 (13.5%)	
WHO III	33 (20.4%)	46 (28.2%)	
WHO IV	48 (29.6%)	91 (55.8%)	
IDH status, n(%)			<0.001
Wildtype	57 (35.2%)	92 (56.4%)	
Mutation	104 (64.2%)	71 (43.6%)	
1p/19q codeletion, n(%)			<0.001
codel	57 (35.2%)	10 (6.1%)	
Non-codel	102 (63.0%)	148 (90.8%)	

**Table.S2** Baseline characteristics of TCGA participants stratified by PRR11 expression

Characteristic	Low expression of PRR11	High expression of PRR11	P
n	348	348	
Age, median(IQR)	42 (34, 53)	50 (35, 62)	<0.001
Gender, n(%)			0.592
Female	153 (44.0%)	145 (41.7%)	
Male	195 (56.0%)	203 (58.3%)	
WHO grade, n(%)			<0.001
WHO II	163 (46.8%)	61 (17.5%)	
WHO III	120(34.5%)	123 (35.3%)	
WHO IV	18 (5.2%)	150 (43.0%)	
IDH status, n(%)			<0.001
Wildtype	53 (15.2%)	193 (55.5%)	
Mutation	293 (84.2%)	147 (42.2%)	
1p/19q codeletion, n(%)			<0.001
codel	152 (43.7%)	19 (5.5%)	
Non-codel	195 (56.0%)	323 (92.8%)	

**Table.S3** Association between PRR11 expression and immune infiltration in glioma

Cancer	Variable	Partial.cor	P
GBM	Purity	0.411	<b>&lt;0.001</b>
GBM	B Cell	-0.075	0.406
GBM	CD8+ T Cell	-0.198	<b>0.024</b>
GBM	CD4+ T Cell	-0.033	0.707
GBM	Macrophage	-0.117	0.182
GBM	Neutrophil	0.011	0.905
GBM	Dendritic Cell	0.095	0.281
LGG	Purity	0.016	0.723
LGG	B Cell	0.465	<b>&lt;0.001</b>
LGG	CD8+ T Cell	0.415	<b>&lt;0.001</b>
LGG	CD4+ T Cell	0.282	<b>&lt;0.001</b>
LGG	Macrophage	0.361	<b>&lt;0.001</b>
LGG	Neutrophil	0.387	<b>&lt;0.001</b>
LGG	Dendritic Cell	0.403	<b>&lt;0.001</b>

LGG (n = 469), low grade glioma; GBM (n = 414), glioblastoma.

**Table.S4** Univariate analysis of the correlation among PRR11 expression, immune infiltration, and OS in patients with glioma

Cancer	Variable	<i>P</i>
GBM	B Cell	<b>0.047</b>
GBM	CD8+ T Cell	0.497
GBM	CD4+ T Cell	0.288
GBM	Macrophage	0.955
GBM	Neutrophil	0.147
GBM	Dendritic Cell	<b>0.01</b>
GBM	PRR11	0.64
LGG	B Cell	<b>&lt;0.001</b>
LGG	CD8+ T Cell	<b>0.01</b>
LGG	CD4+ T Cell	<b>&lt;0.001</b>
LGG	Macrophage	<b>&lt;0.001</b>
LGG	Neutrophil	<b>&lt;0.001</b>
LGG	Dendritic Cell	<b>&lt;0.001</b>
LGG	PRR11	<b>&lt;0.001</b>

*LGG (n = 469), low grade glioma; GBM (n = 414), glioblastoma.*

**Table.S5** Multivariate analysis of the correlation of PRR11 expression with immune infiltrates and OS in patients with GBM

	Coef	HR	95%CI_l	95%CI_u	P-value	Sig
Age	0.022	1.022	1.002	1.042	0.033	*
Gender (Male)	0.225	1.253	0.771	2.036	0.363	
Purity	-0.627	0.534	0.097	2.938	0.471	
B_cell	-0.577	0.562	0.08	3.935	0.561	
CD8_Tcell	0.568	1.764	0.498	6.25	0.379	
CD4_Tcell	3.304	27.229	2.484	298.47	0.007	**
Macrophage	0.723	2.06	0.178	23.858	0.563	
Neutrophil	-1.32	0.267	0.013	5.538	0.393	
Dendritic	0.825	2.281	0.812	6.41	0.118	
PRR11	0.138	1.148	0.864	1.523	0.341	

GBM (n = 414), glioblastoma. \*P < 0.05; \*\*P < 0.01.

**Table.S6** Multivariate analysis of the correlation of PRR11 expression with immune infiltrates and OS in patients with LGG

	Coef	HR	95%CI_l	95%CI_u	P-value	Sig
Age	0.058	1.06	1.043	1.078	0	***
Gender (Male)	0.178	1.195	0.794	1.799	0.392	
Purity	-0.554	0.575	0.222	1.486	0.253	
B_cell	-0.856	0.425	0.001	281.296	0.796	
CD8_Tcell	0.225	1.253	0.001	1498.85	0.95	
CD4_Tcell	-2.076	0.125	0	591.017	0.63	
Macrophage	5.748	313.501	4.016	24474.825	0.01	*
Neutrophil	-3.803	0.022	0	130.876	0.39	
Dendritic	1.803	6.066	0.097	380.627	0.393	
PRR11	0.568	1.764	1.401	2.221	0	***

LGG (n = 459), low grade glioma. \*P < 0.05; \*\*\*P < 0.001.

**Table.S7** Top 20 genes positively or negatively correlated with PRR11

Top 20 genes positively correlated with PRR11	Top 20 genes negatively correlated with PRR11
KIF14	AATK
BUB1	ABCC8
CDCA8	ADAP1
NCAPG	ADHFE1
NUSAP1	AIFM3
CCNB2	ALDH2
KIF2C	ANKRD24
KIF4A	ARHGDIG
MELK	ASPDH
TPX2	ATP6V1G2
ARHGAP11A	AVPI1
BIRC5	CA4
CCNA2	CACNA1I
DEPDC1	CALN1
DLGAP5	CBX7
FOXM1	CDIP1
HMMR	CORO6
KIF20A	CPE
NCAPG2	CPEB1
SKA1	LDHD