Table S16. Multivariate cox regression analysis of previously reported prognostic genes for glioma in training and validation cohorts of other tumors.

Tumor type	Cohort	Covariate	35 genes P value	35 genes HR (CI95%)	44 genes P value	44 genes HR (CI95%)	47 genes P value	47 genes HR (CI95%)
Breast	GIS	cluster	0.141	1.35 (0.91-2.01)	0.16	1.17 (0.94-1.45)	0.666	1.16 (0.60-2.25)
		grade	0.002	1.93 (1.28-2.91)	0.02	1.72 (1.09-2.73)	0.001	2.09 (1.37-3.19)
		age	0.965	1.00 (0.98-1.02)	0.925	1.01 (0.98-1.02)	0.997	1.00 (0.98-1.02)
	CRCM	cluster	<0.0001	2.34 (1.59-3.44)	0.003	1.63 (1.18-2.25)	<0.0001	5.36 (2.60-11.09)
		grade	<0.0001	3.75 (2.09-6.73)	<0.0001	2.93 (1.69-5.07)	<0.0001	4.18 (2.28-7.66)
		age	0.916	1.01 (0.97-1.04)	0.974	1.00 (0.97-1.03)	0.731	1.00 (0.96-1.03)
	SUSM	cluster	0.077	1.37 (0.99-1.90)	0.089	1.25 (0.97-1.62)	0.293	1.29 (0.81-2.05)
		grade	<0.0001	2.42 (1.70-3.46)	<0.0001	2.28 (1.57-3.32)	<0.0001	2.48 (1.72-3.56)
		age	0.022	0.96 (0.92-0.99)	0.019	0.96 (0.91-0.99)	0.022	0.96 (0.92-0.99)
	NCI	cluster	0.656	1.09 (0.74-1.62)	0.001	1.59 (1.20-2.11)	0.099	1.87(0.89-3.91)
	EMC	cluster	0.036	1.34 (1.02-1.75)	0.062	1.16 (0.99-1.36)	0.339	1.24 (0.80-1.91)
Lung	DFCI	cluster	0.276	1.24 (0.84-1.83)	0.14	1.28 (0.92-1.79)	0.86	1.07 (0.52-2.20)
		stage	0.099	1.96 (0.88-4.37)	0.072	2.14 (0.93-4.88)	0.133	1.85(0.83-4.12)
		age	0.104	1.03 (0.99-1.07)	0.203	1.03 (0.99-1.07)	0.091	1.03 (1.00-1.08)
	PCH	cluster	0.092	1.59 (0.93-2.72)	0.126	1.35 (0.92-1.99)	0.564	1.28 (0.56-2.92)
		age	0.262	1.02 (0.98-1.06)	0.216	1.03 (0.98-1.07)	0.346	1.02 (0.98-1.06)
	CAN/DF	cluster	0.854	1.06 (0.59-1.88)	0.349	1.15 (0.86-1.52)	0.942	1.03 (0.50-2.12)
		stage	0.003	2.82 (1.43-5.54)	0.004	2.71 (1.37-5.53)	0.003	2.82 (1.44-5.55)
		age	0.002	1.07 (1.03-1.12)	0.001	1.07 (1.03-1.12)	0.002	1.07 (1.03-1.12)
	MSK	cluster	0.019	2.06 (1.13-3.77)	0.301	1.23 (0.83-1.84)	0.325	1.55 (0.65-3.70)
		stage	0.342	1.56 (0.62-3.92)	0.187	1.84 (0.74-4.54)	0.253	1.71 (0.68-4.30)
		age	0.759	1.01 (0.96-1.06)	0.388	1.02 (0.97-1.07)	0.454	1.02 (0.97-1.07)
	UM-HLM	cluster	0.773	1.04 (0.82-1.13)	0.713	1.04 (0.83-1.31)	0.231	1.26 (0.86-1.85)
		stage	<0.0001	2.31 (1.56-3.42)	<0.0001	2.31 (1.56-3.42)	<0.0001	2.31 (1.57-3.42)
		age	0.002	1.03 (1.01-1.05)	0.002	1.02 (1.01-1.05)	0.003	1.03 (1.01-1.05)
Bladder	AUH	cluster	0.587	1.13 (0.73-1.76)	0.27	1.25 (0.84-1.84)	0.882	1.07 (0.46-2.46)
Ovarium	MNI	cluster	0.015	2.24 (1.17-4.29)	0.01	1.99 (1.18-3.36)	0.082	2.77 (0.88-8.70)
		age	0.044	1.07 (1.01-1.14)	0.059	1.06 (1.00-1.13)	0.066	1.06 (1.00-1.13)

The direction of the hazard ratio are as follows: cluster, the short-term versus long-term survival group; grade, lower versus higher; age, older versus younger.