

## Supplementary Figure legends

Fig. S1 Distribution of risk scores in gliomas with different clinicopathological features

- (A) Comparisons of risk scores in LGG vs. GBM patients.
- (B) Comparisons of risk scores in IDH (wt) vs. IDH (mut) glioma patients.
- (C) Comparisons of risk scores in 1p19q non-codeletion (Non) vs. co-deletion (Codel) glioma patients. \*\*\*,  $p < 0.001$  (Wilcoxon test).

**Fig. S2** Establishment of the nomogram using the CGGA\_693 or CGGA\_325 cohort.

(A, B, D, E) Forest plot illustrating the results of univariate (A, D) and multivariate (B, E) Cox regression analyses for the indicated parameters using the CGGA\_693 (A, B) or CGGA\_325 (D, E) cohort.

(C, F) Construction of the nomogram plot using the CGGA\_693 (C) or CGGA\_325 (F) dataset, incorporating the indicated parameters. IDH, IDH mutation status; grade, WHO grade; 1p19q, 1p19q codeletion status.

**Fig. S3** Differential expressed genes between the low and high-risk groups

(A) Volcano plots depicting the upregulated (UP) and downregulated (DOWN) genes in the low vs. high-risk groups across three datasets. The cutoffs for identifying differentially expressed genes (DEGs) are indicated by dashed lines: adjusted p-value (adj. p)  $< 0.05$  and |fold change (FC)|  $\geq 1$ .

(B) Intersection analysis of the UP and DOWN genes identified in the three cohorts.

## Supplementary tables

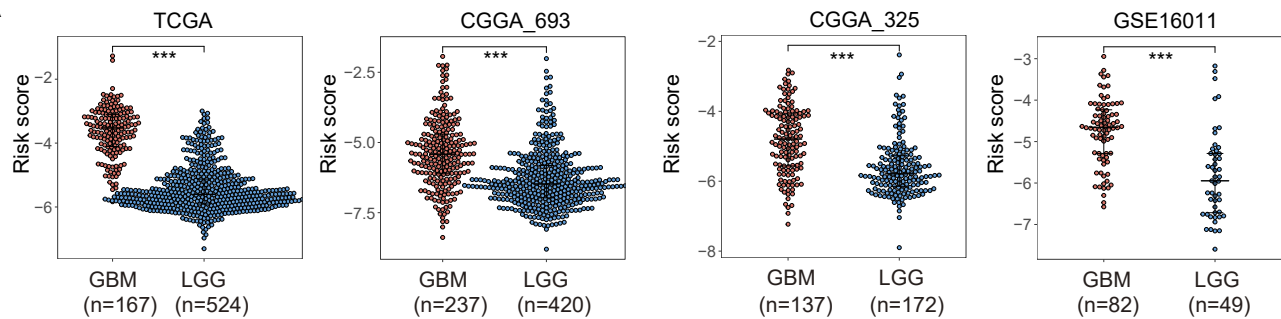
### Table S1-S4

The clinicopathological characteristics of glioma patients in the TCGA (Table S1), CGGA\_693 (Table S2), CGGA\_325 (Table S3), and GSE16011 (Table S4) cohorts were indicated.

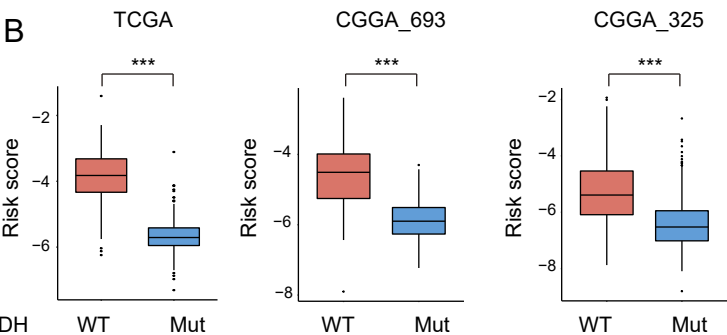
The events "1" and "0" denote the deceased and alive status, respectively. Time indicated the duration (days) for which the patients are monitored to assess their survival outcomes. Risk score for each patient was calculated based on the expression and coefficient of the genes within the PEX5 dependent signature, as described in methods and materials.

Fig. S1

A



B



C

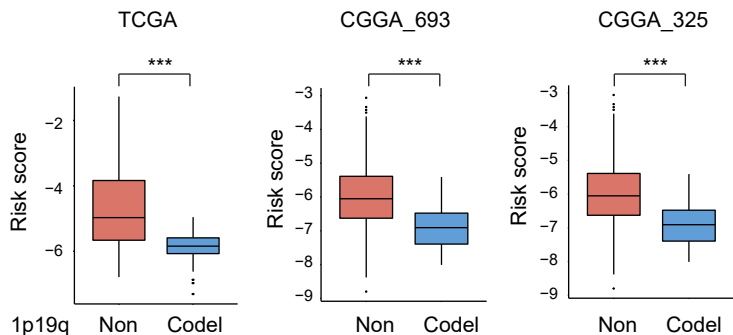


Fig. S2

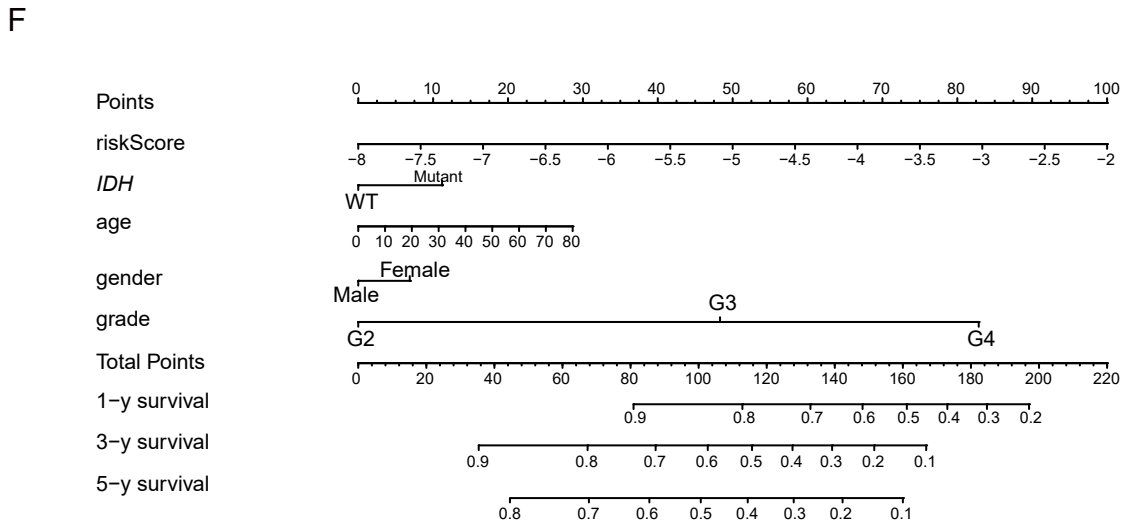
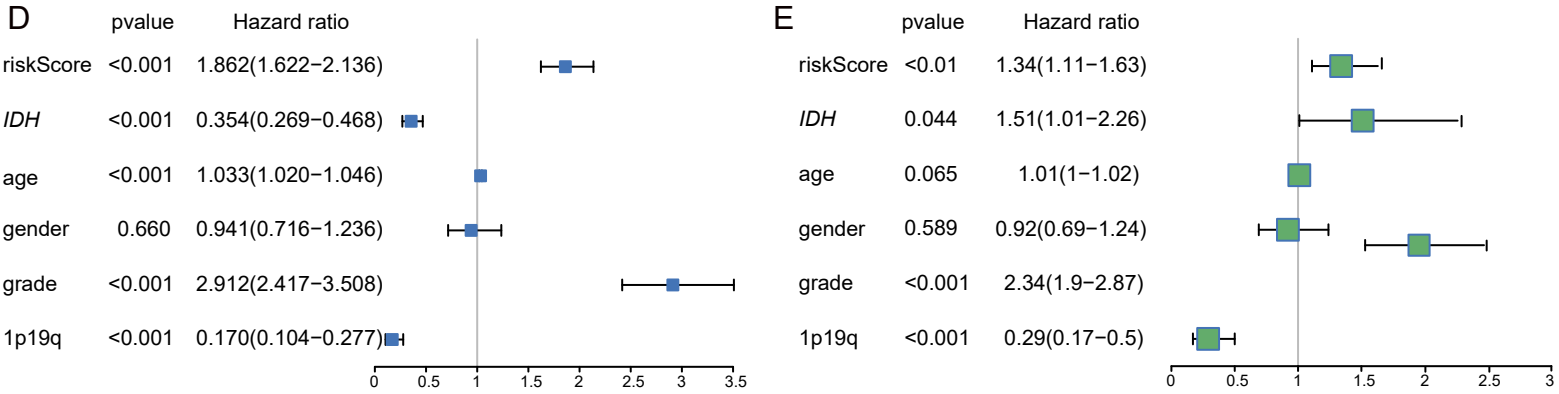
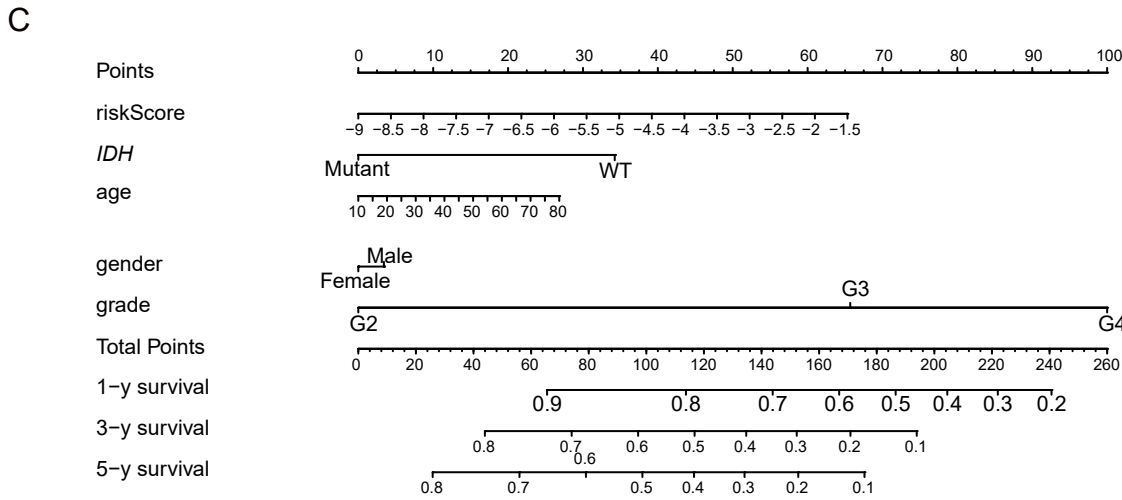
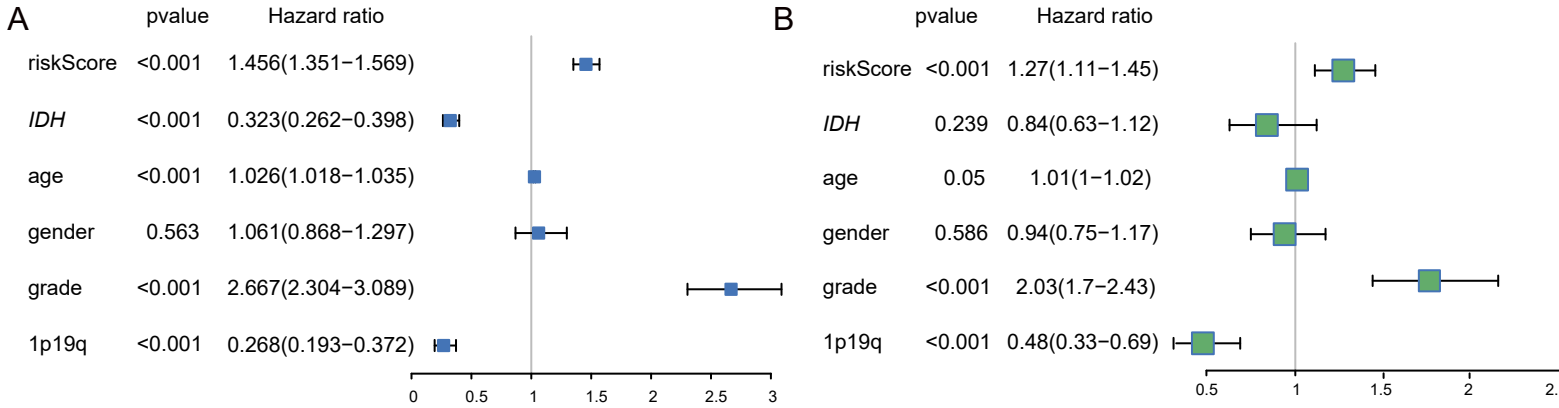


Fig. S3

