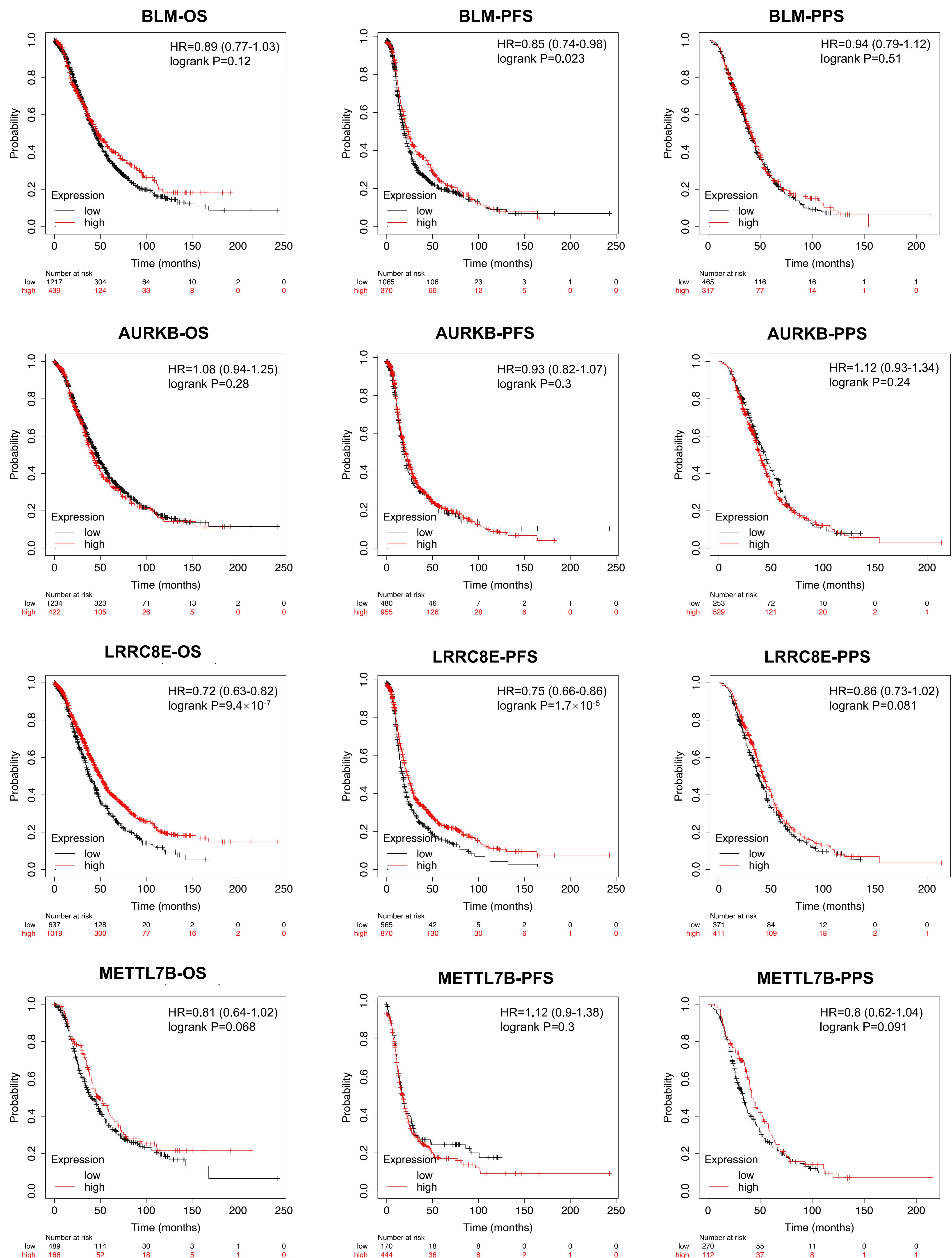
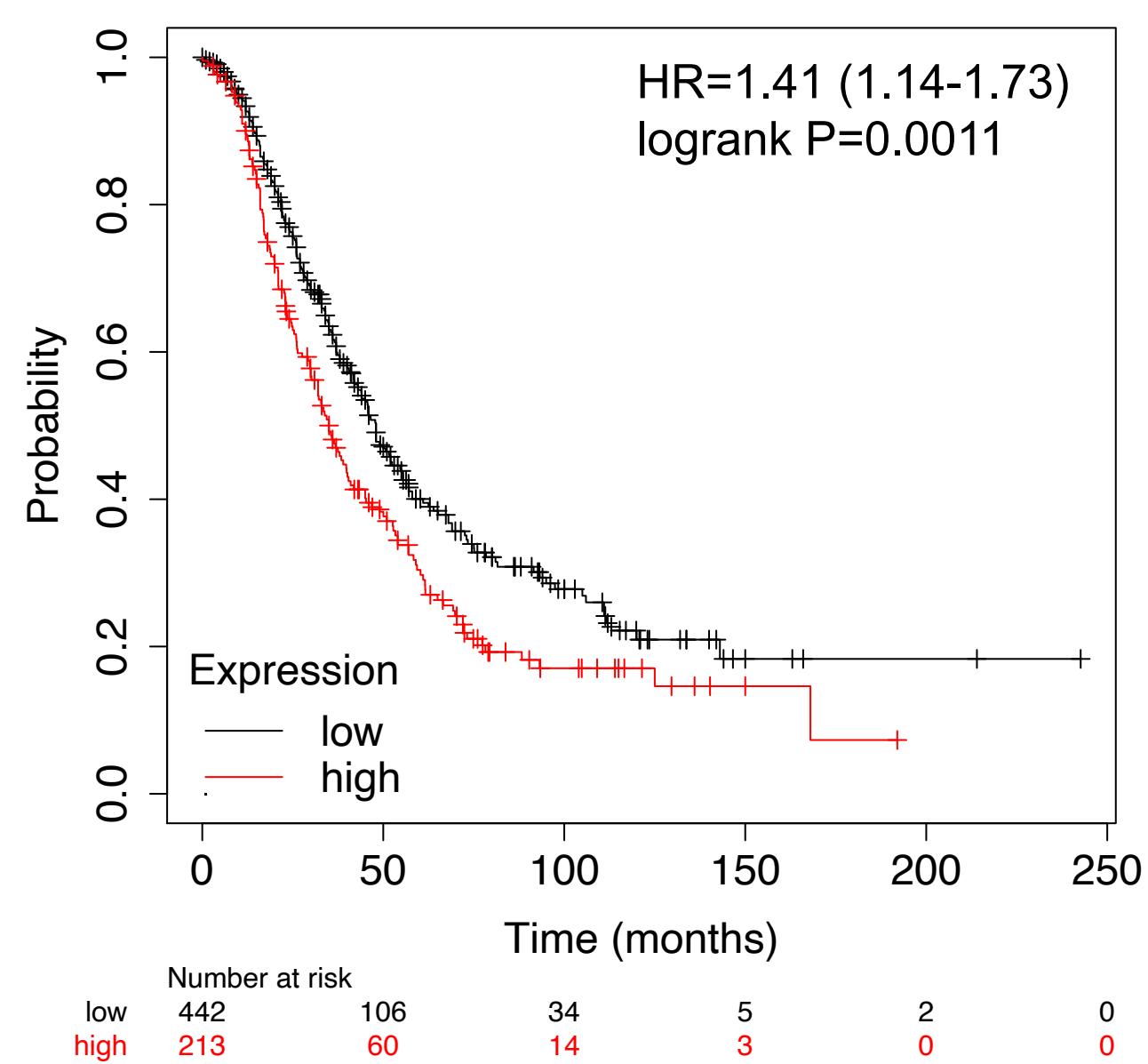
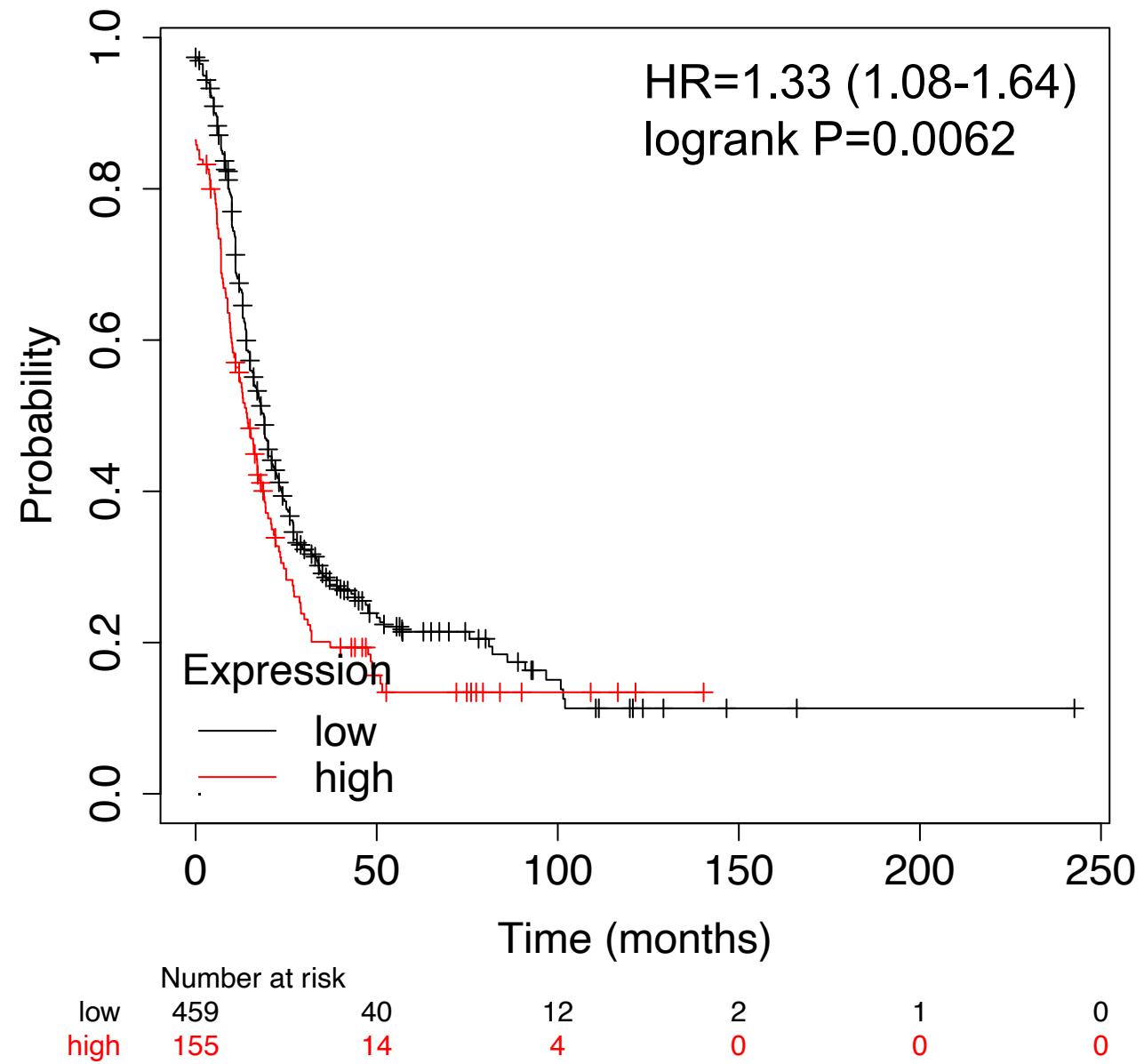
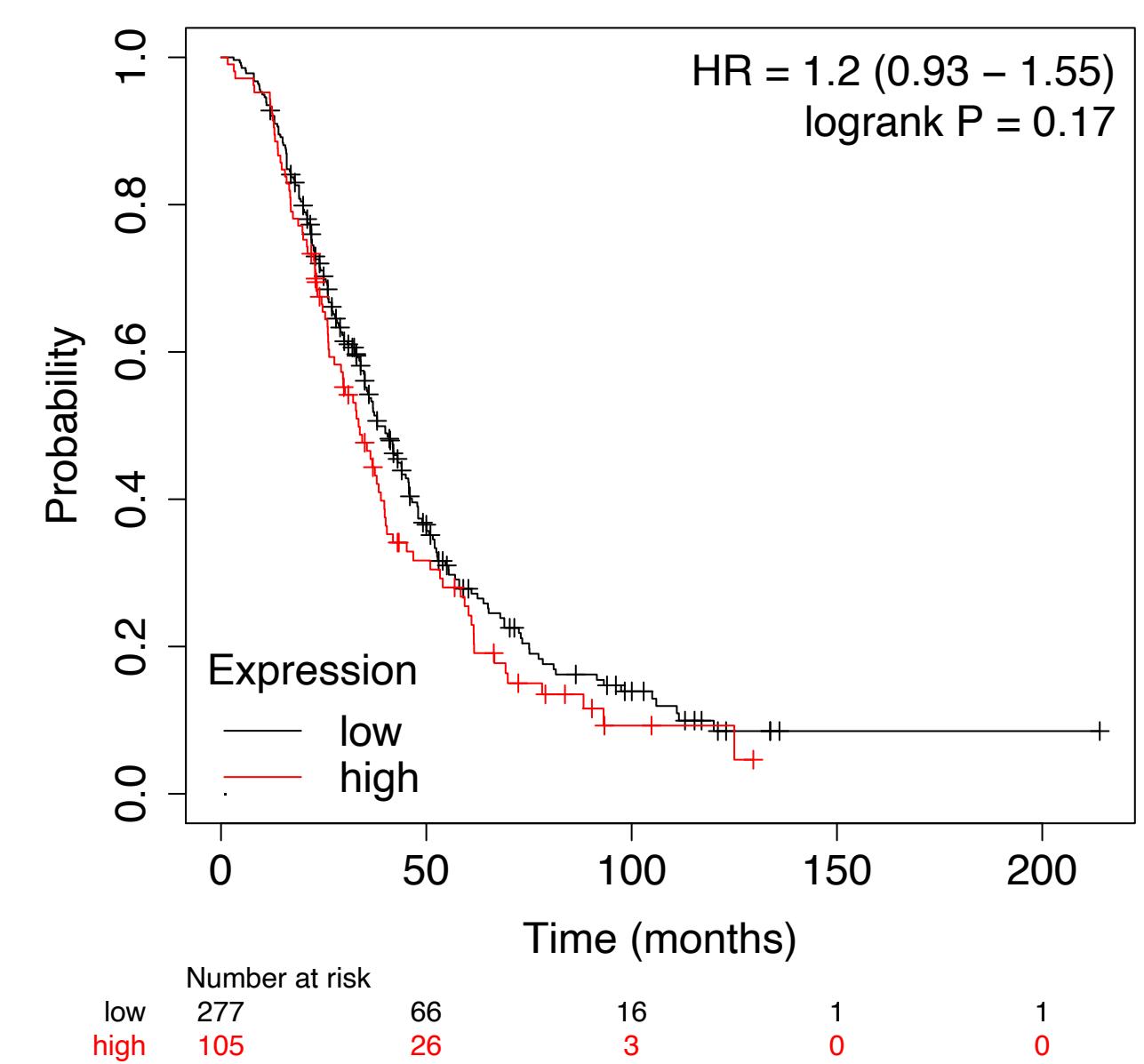
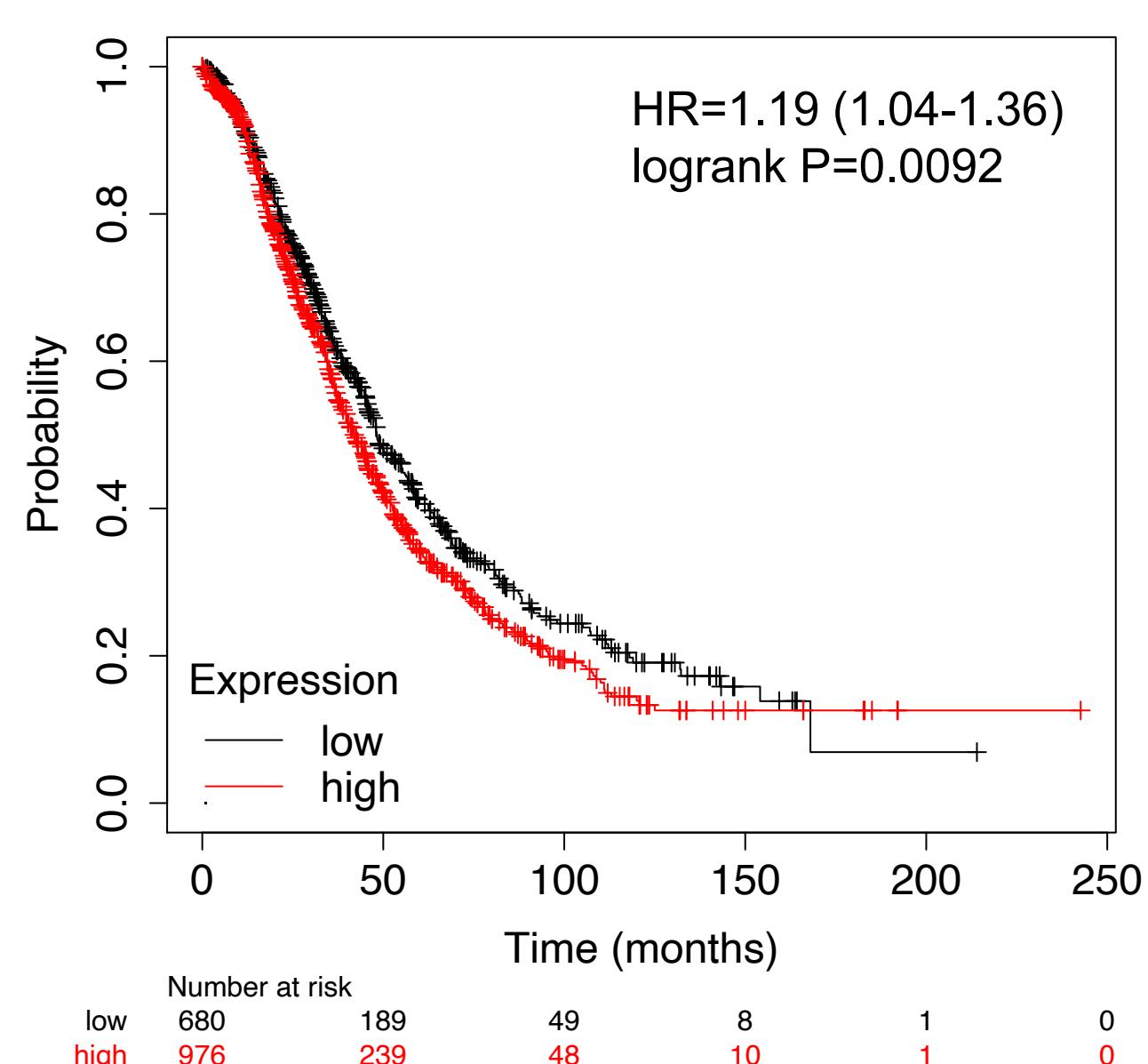
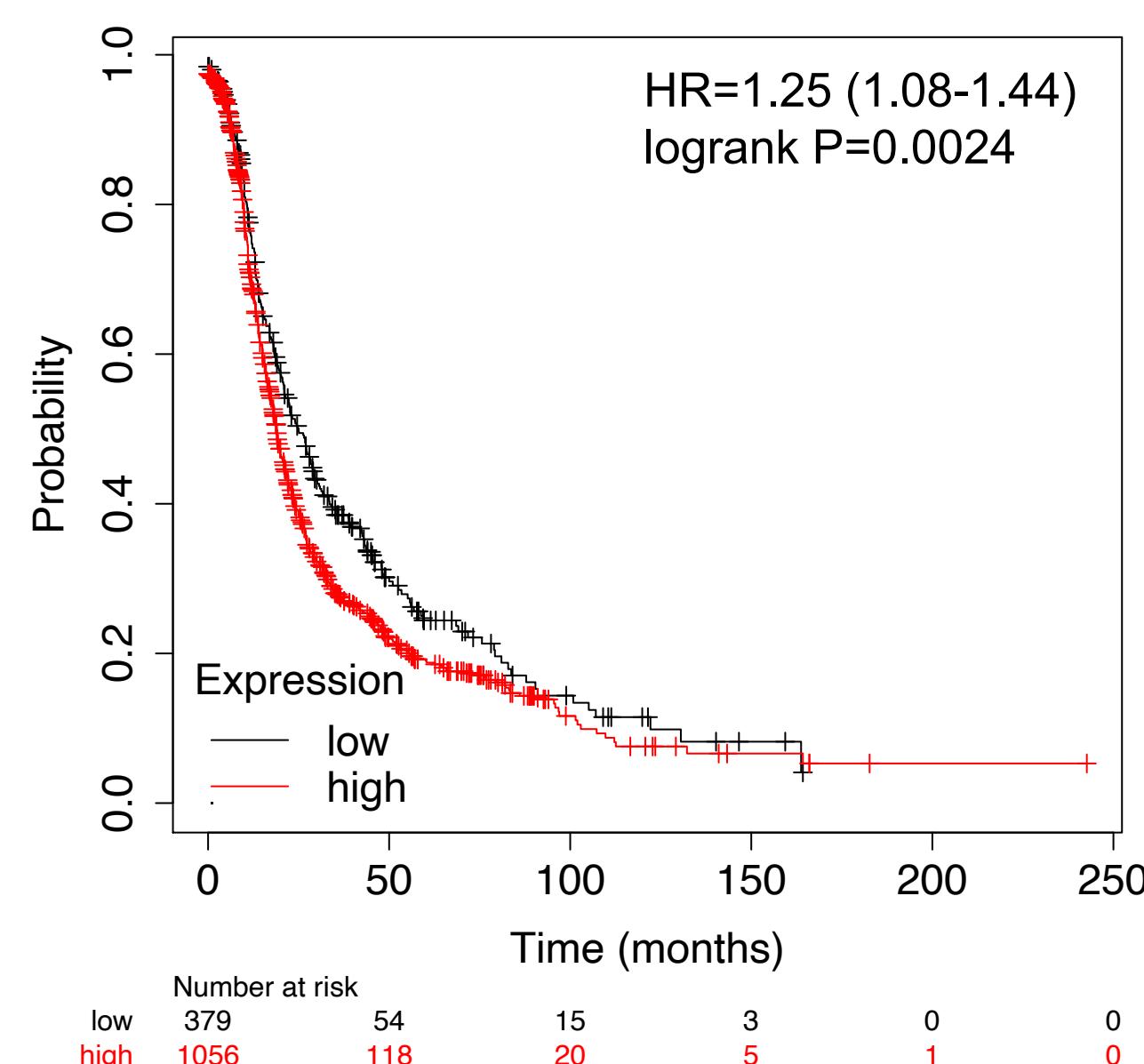
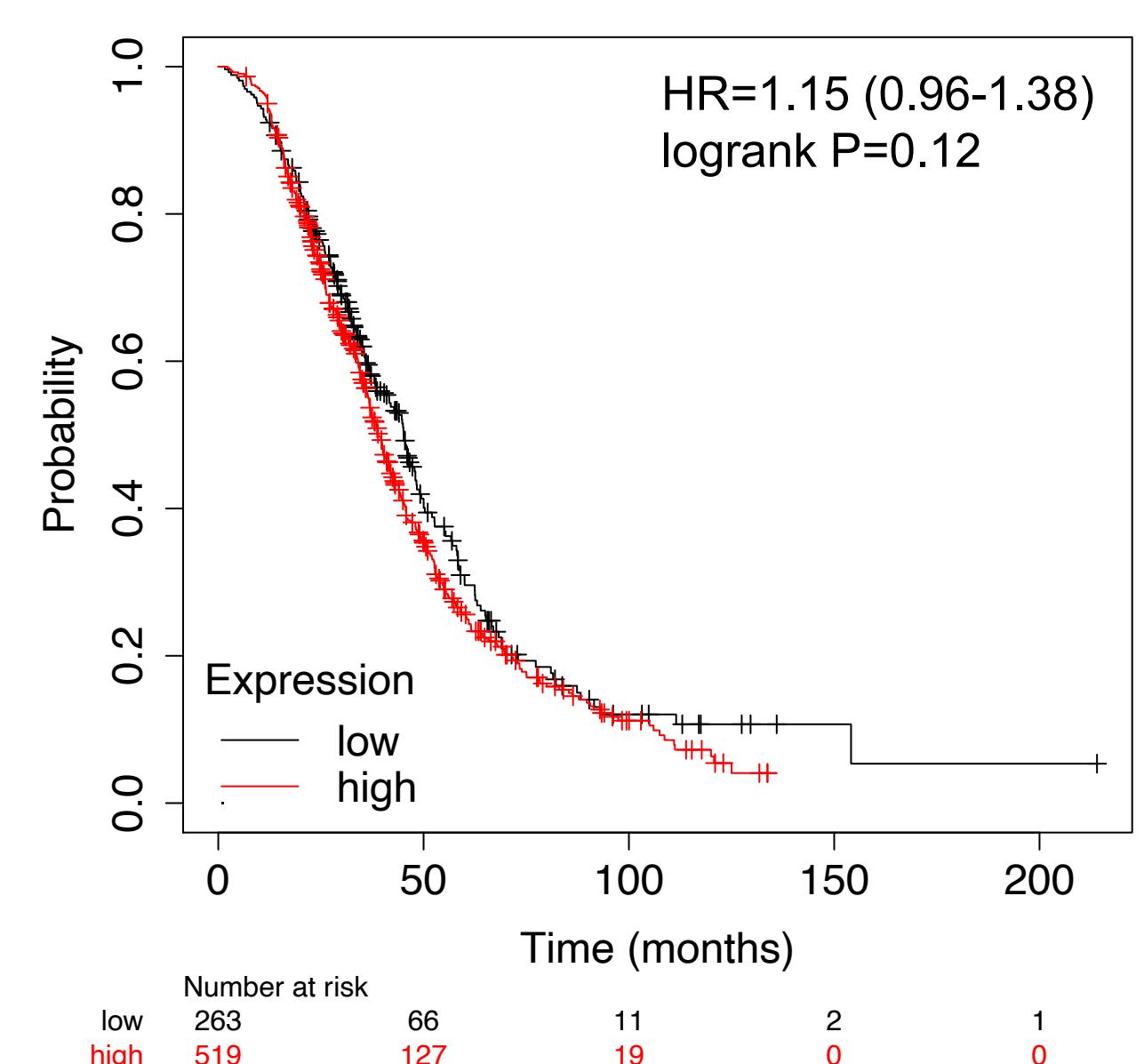
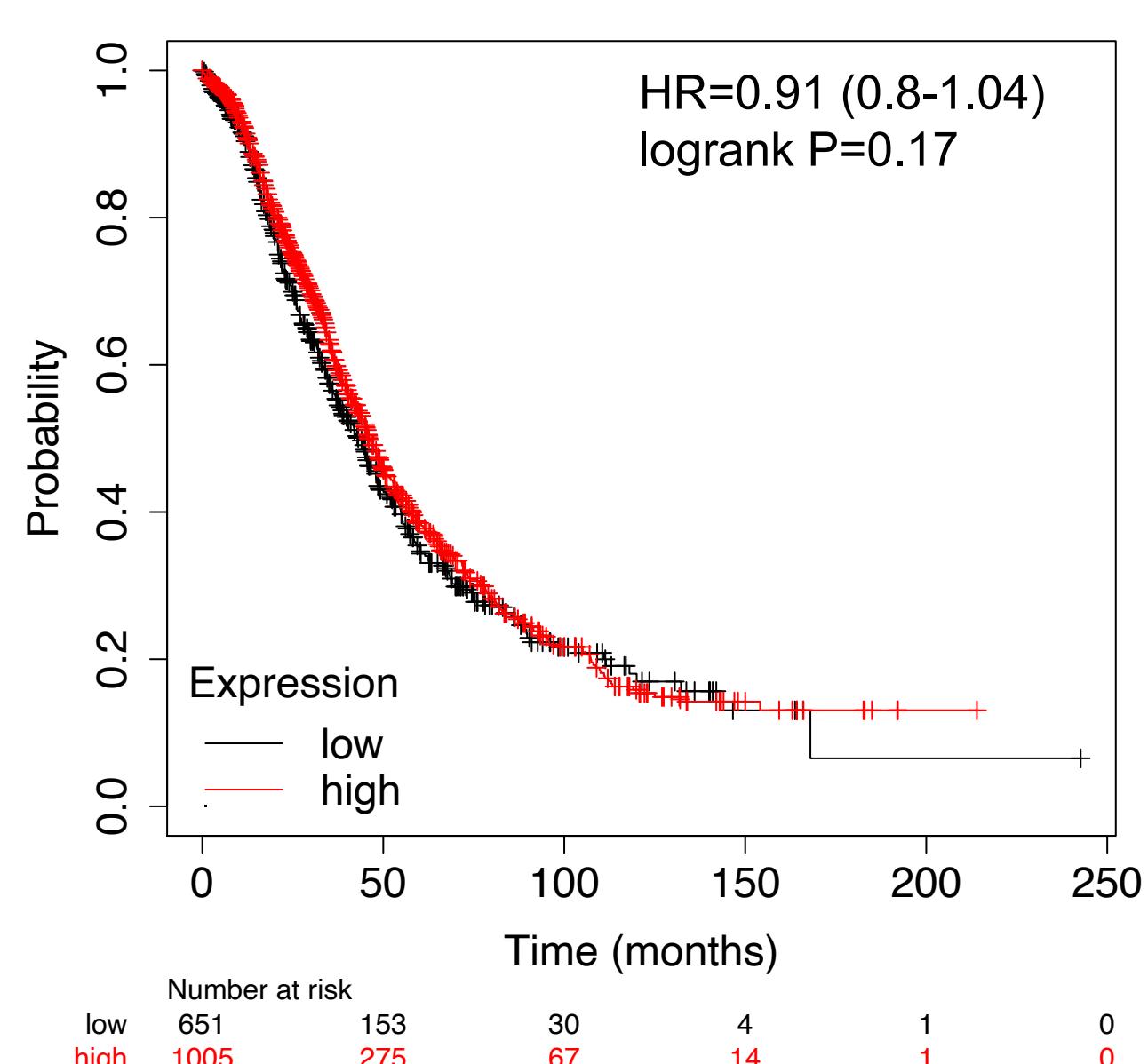
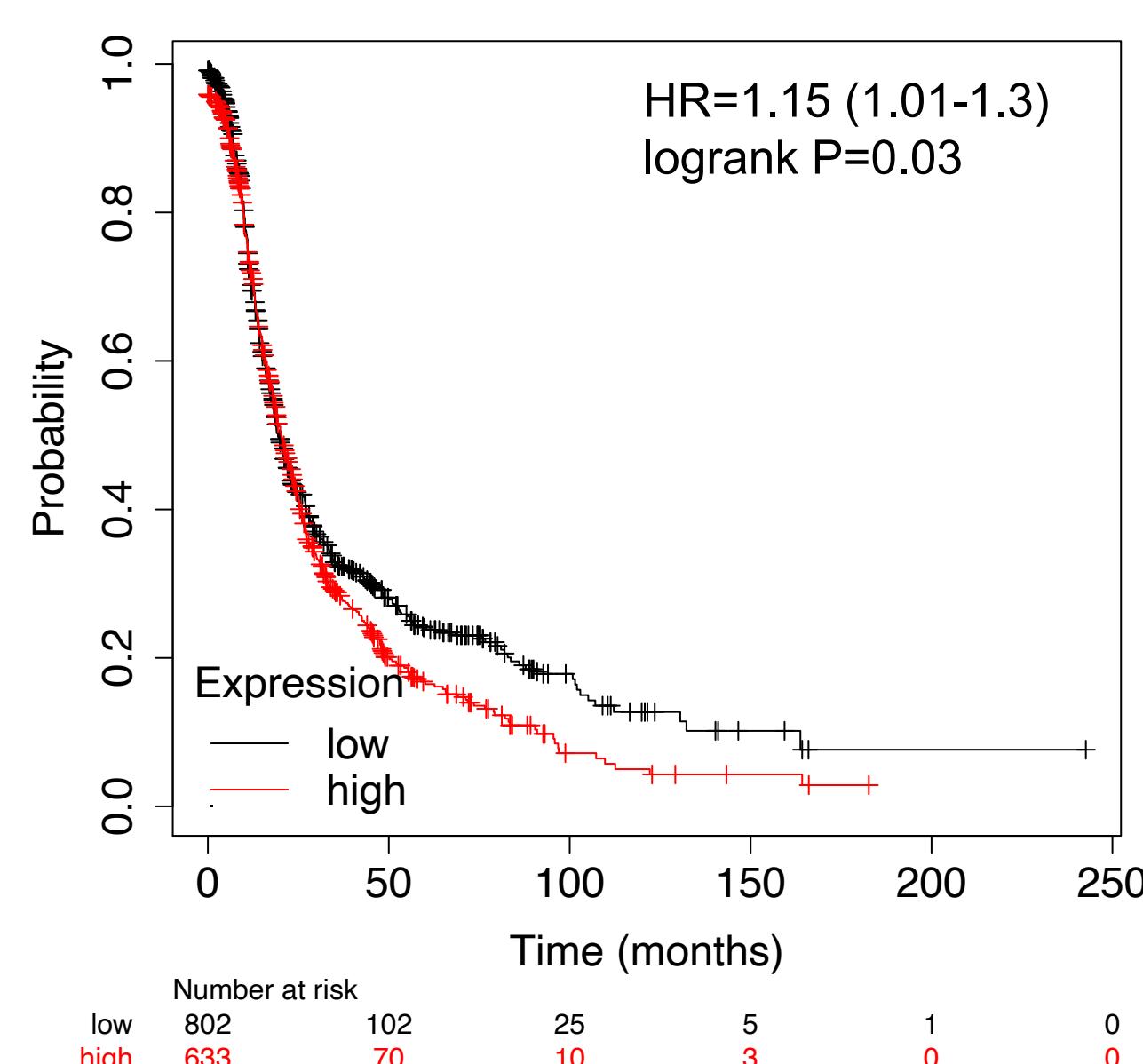
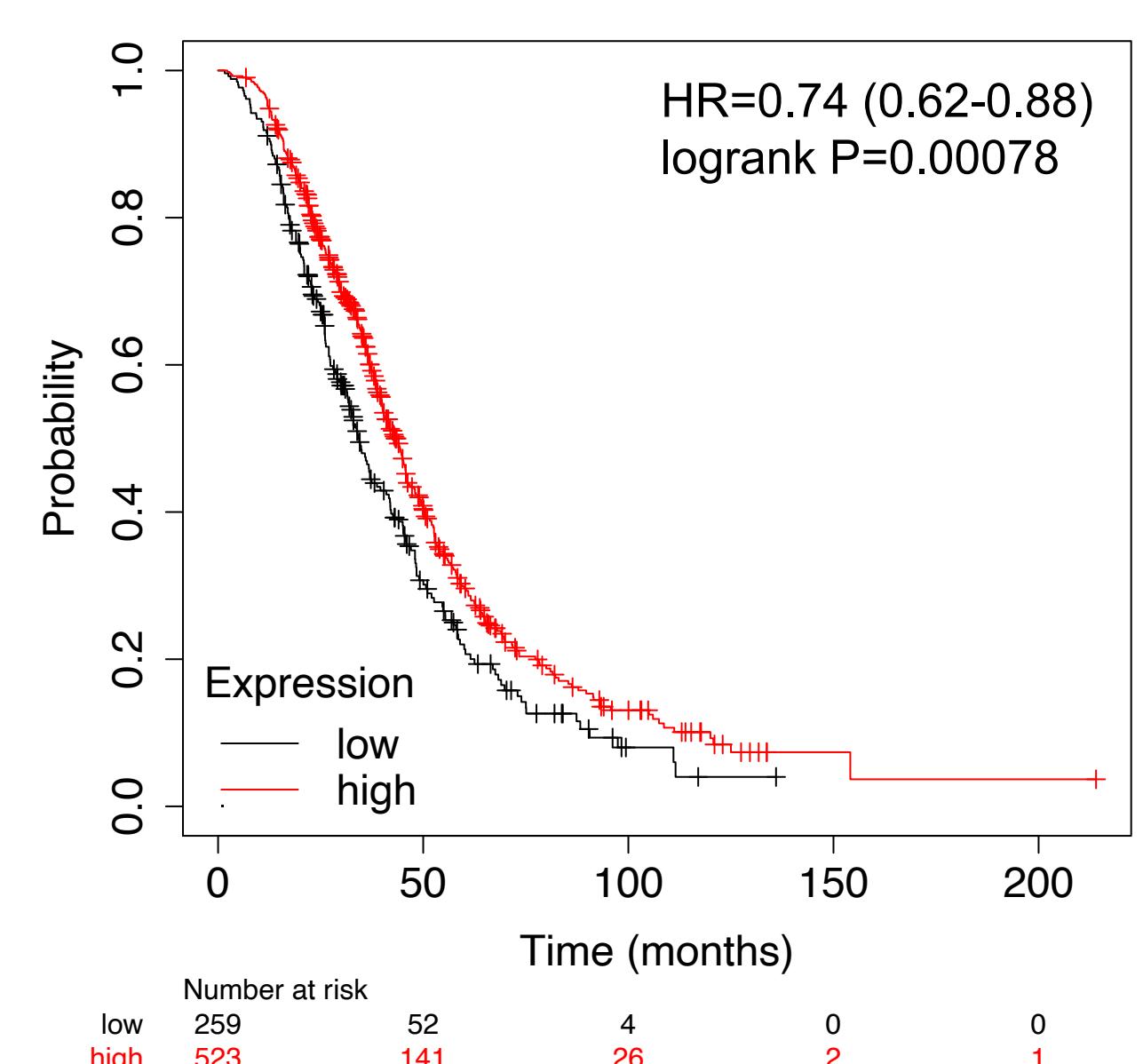
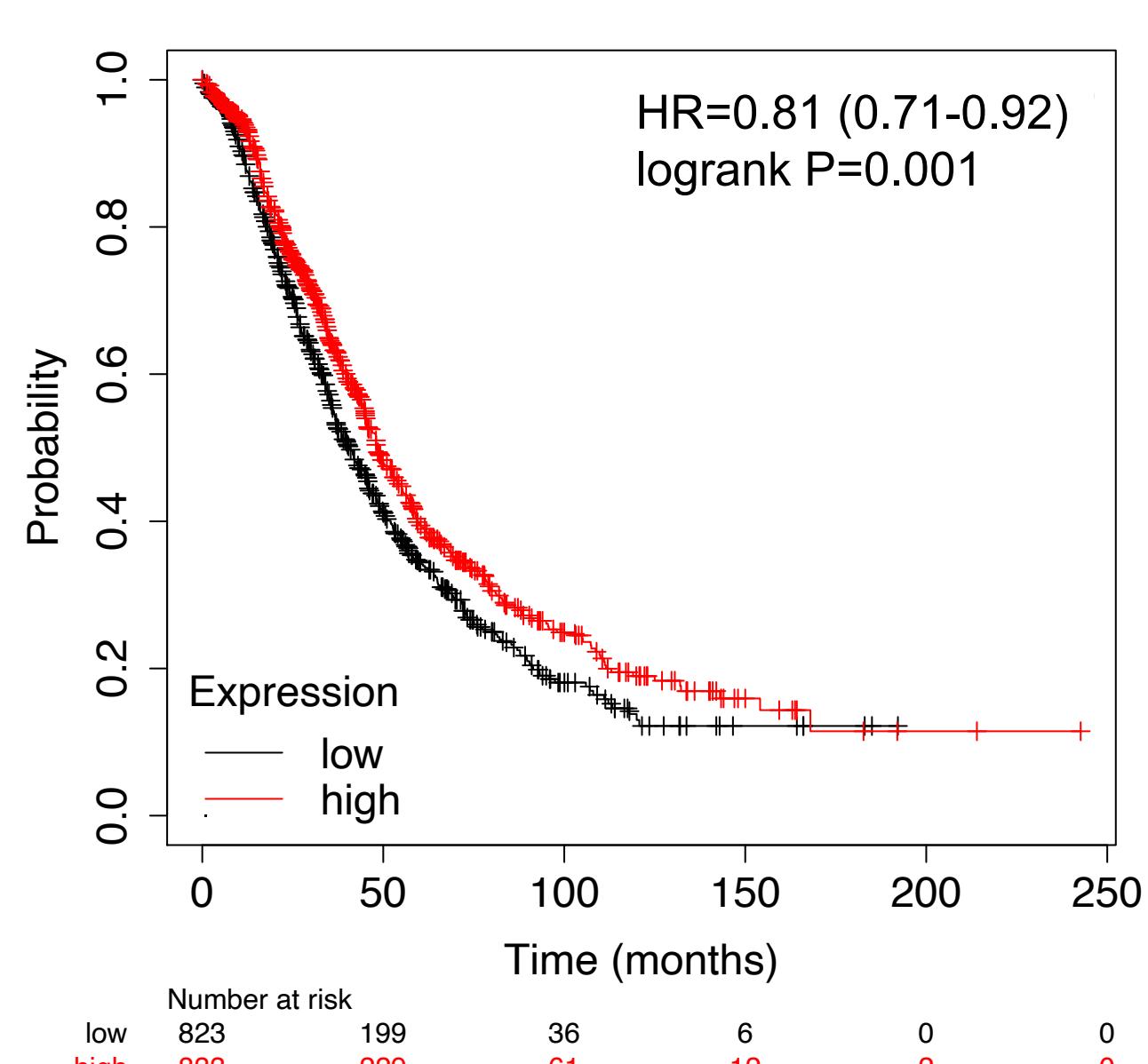
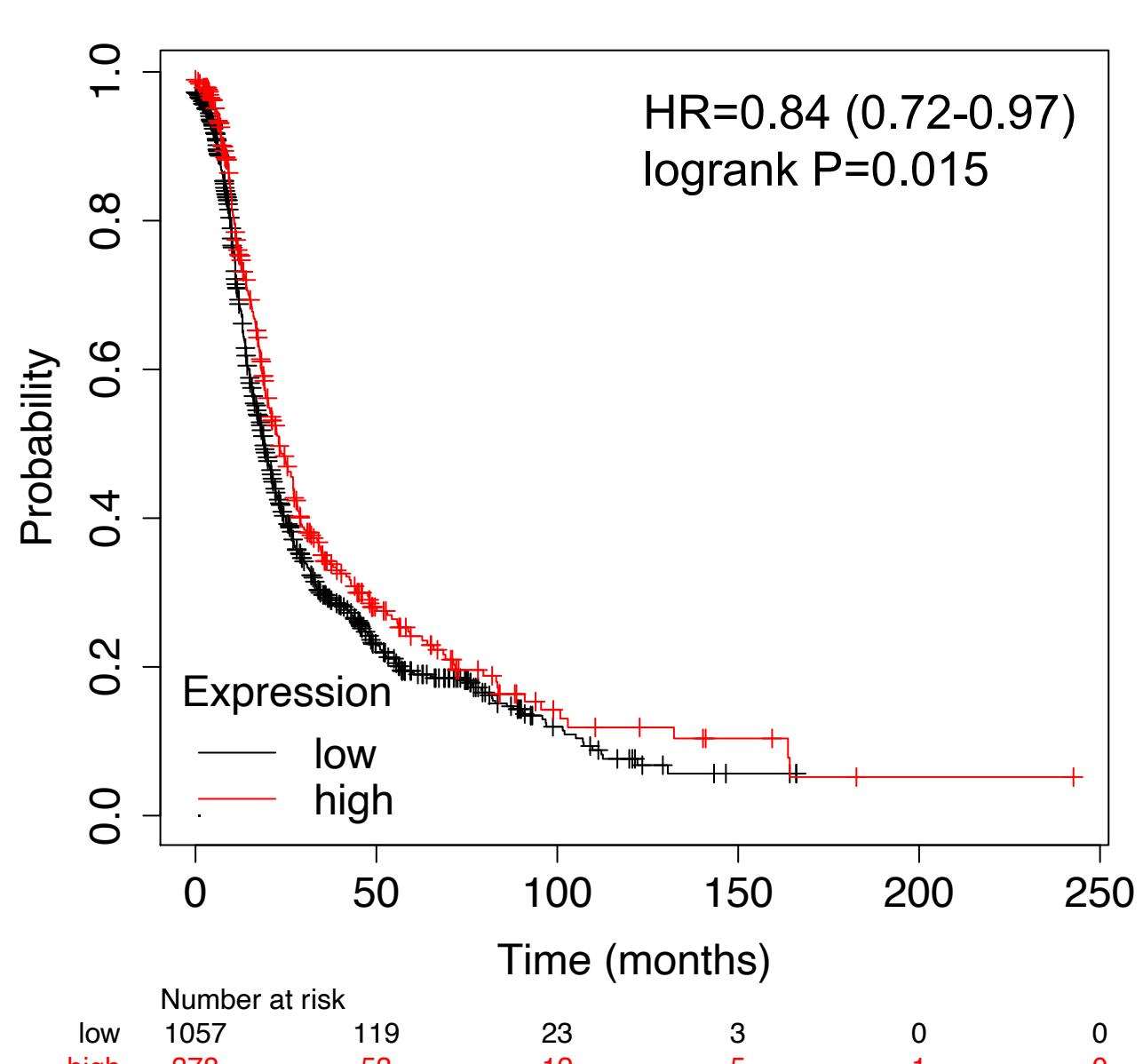
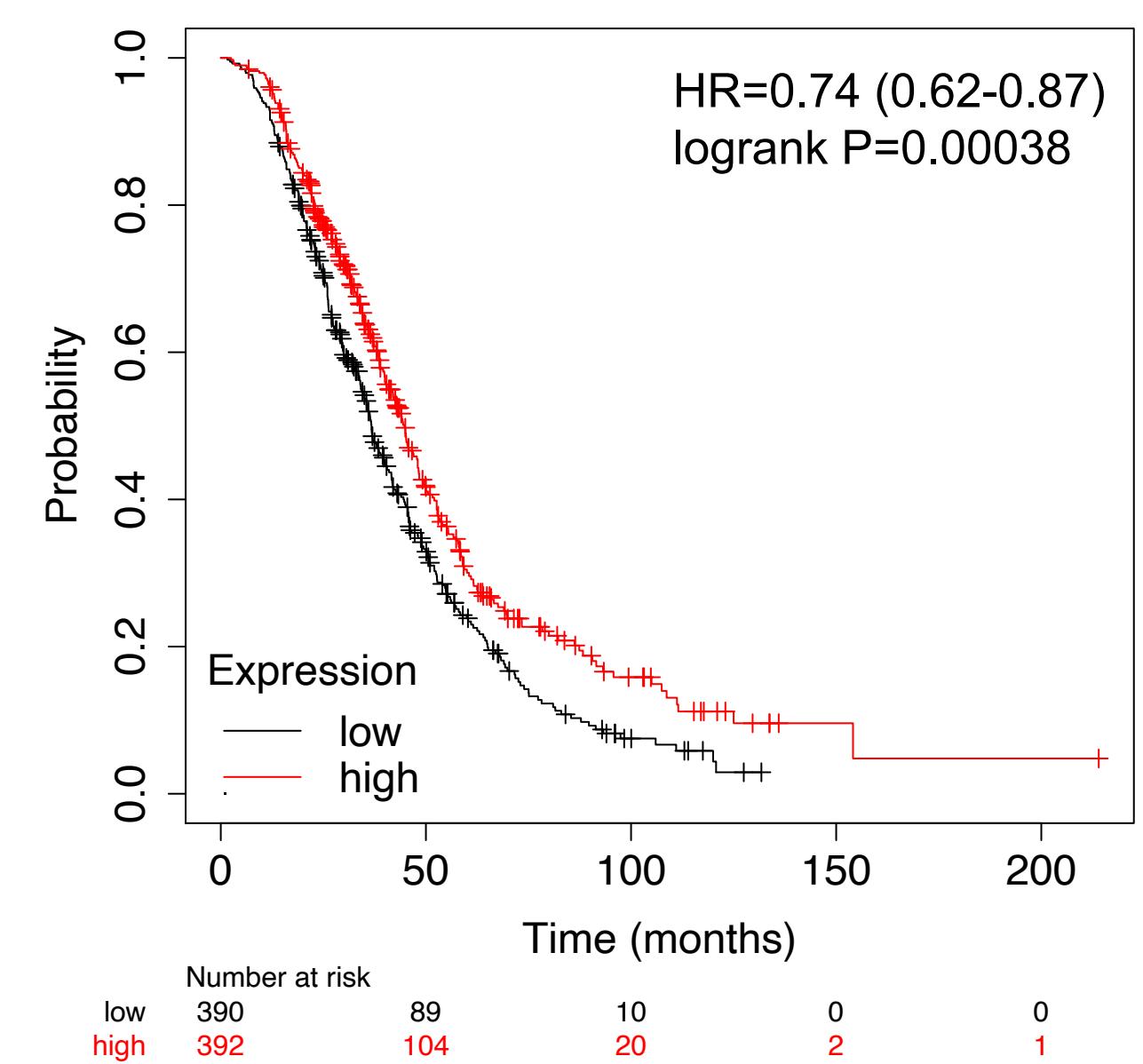
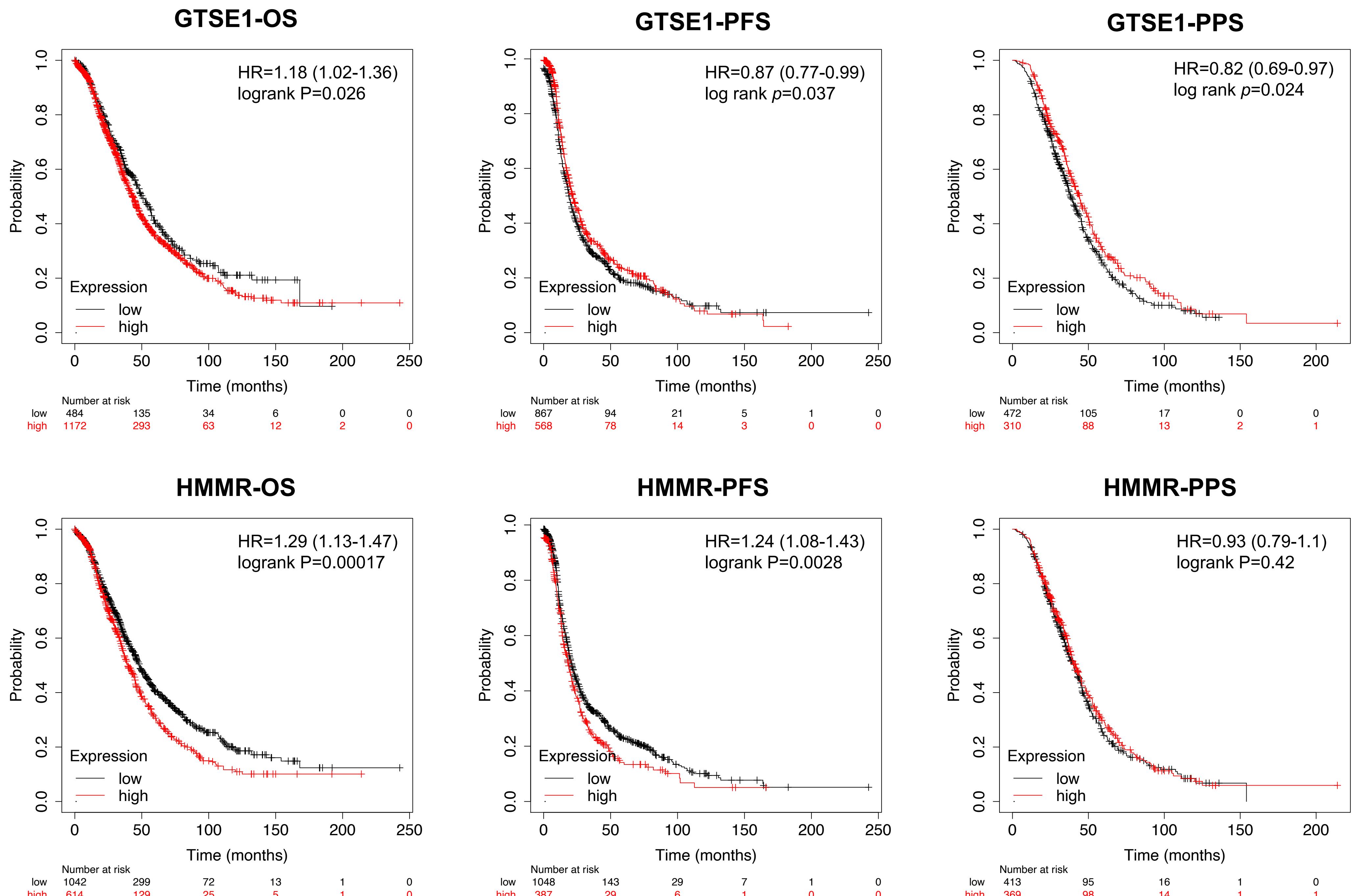


**Figure S1**



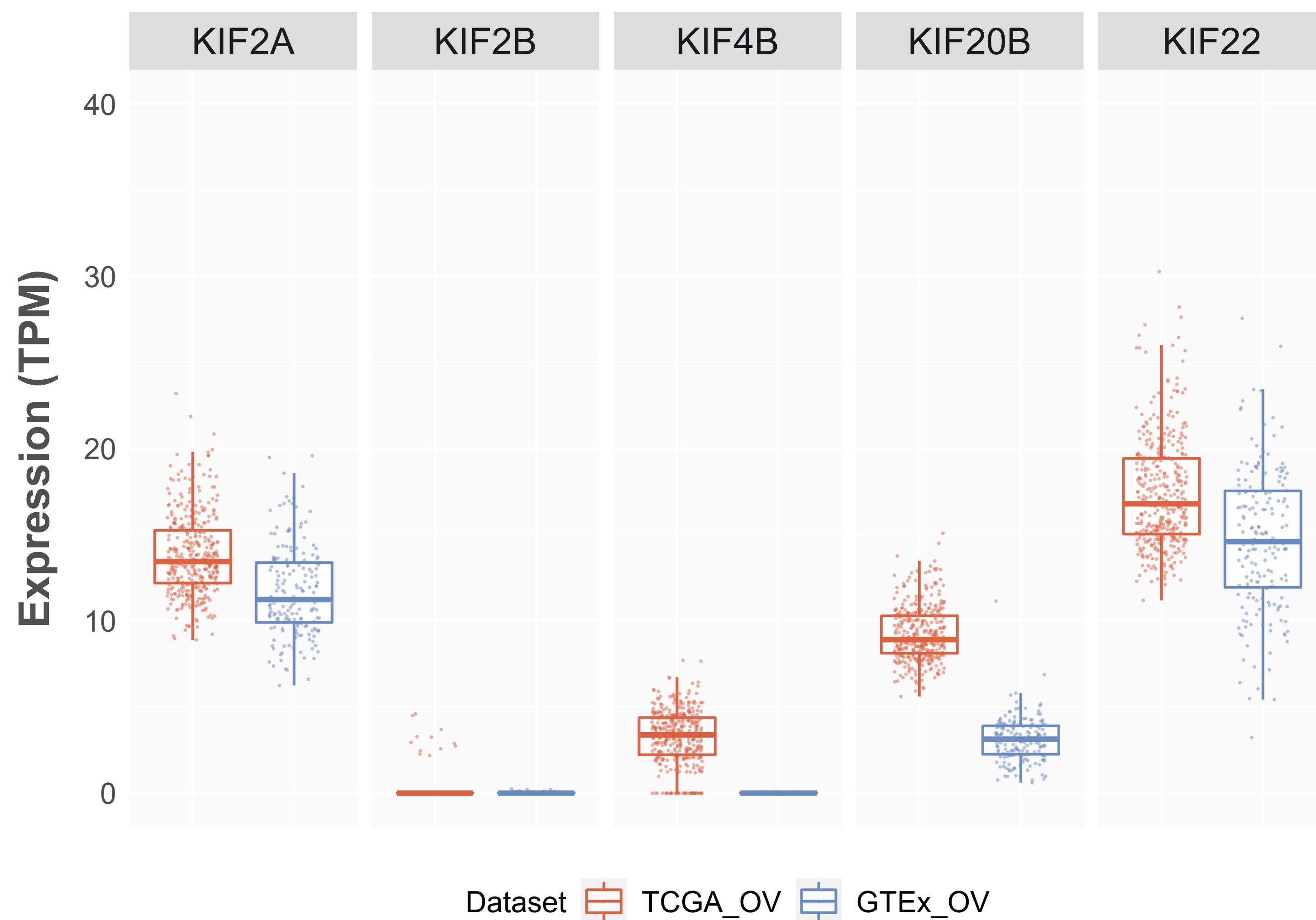
**GPRIN1-OS****GPRIN1-PFS****GPRIN1-PPS****E2F8-OS****E2F8-PFS****E2F8-PPS****MYCL-OS****MYCL-PFS****MYCL-PPS****ICAM3-OS****ICAM3-PFS****ICAM3-PPS**



**Figure S1.**

Survival analysis of DEGs regarding OS (overall survival), PFS (post-free survival), and PPS (post-progression survival) using TCGA-OV dataset. Red, high-expression group; Black, low-expression group. *p*-value is log-ranked. Auto-selected best cutoff was used

**Figure S2**



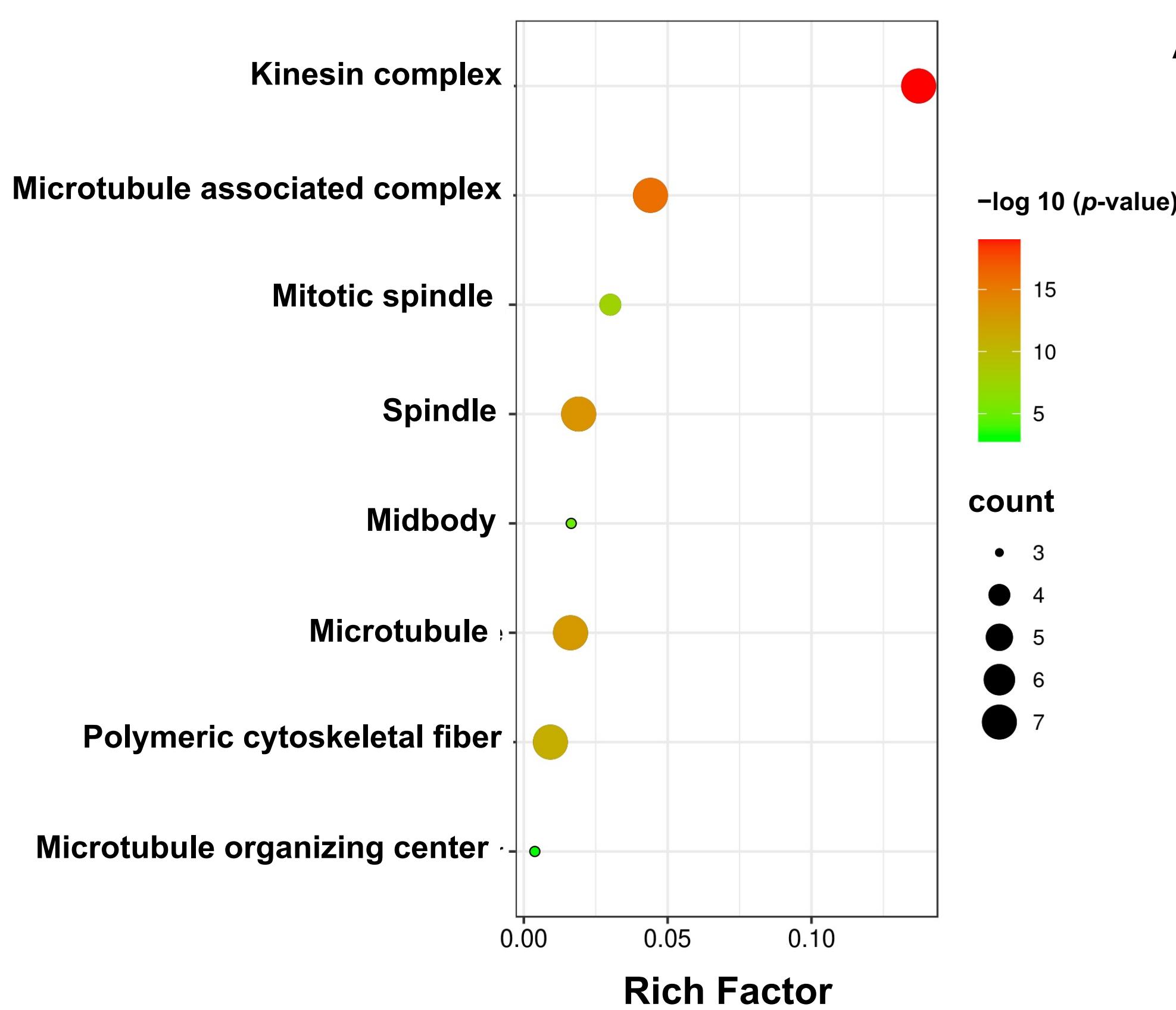
**Figure S2.**

Expression profiles of mitotic KIFs in OC.

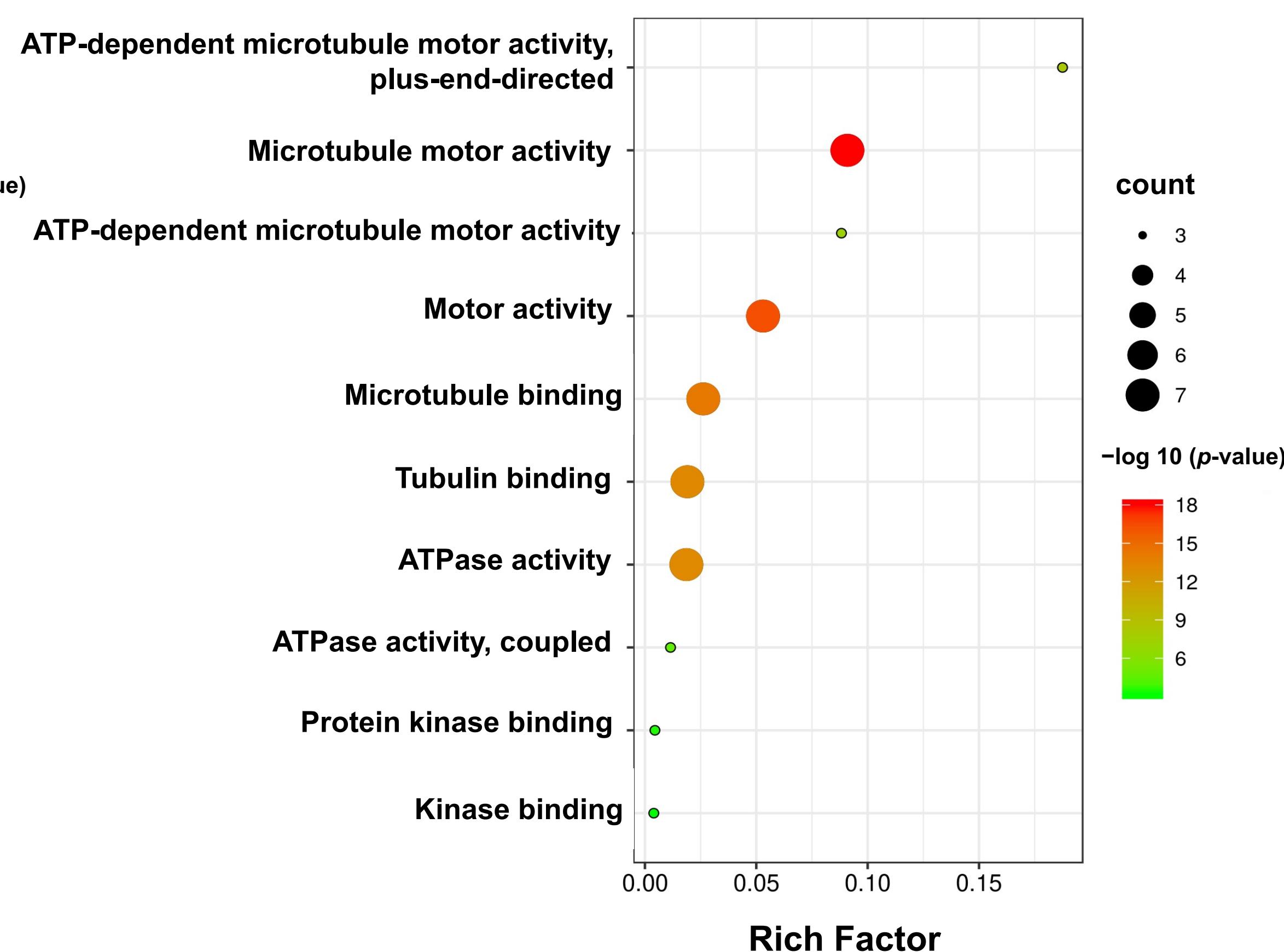
No significant difference was obtained of mitotic KIFs (2A, 2B, 4B, 20B, and 22) between ovarian cancer and normal ovarian tissues from TCGA-OV (n=426) and GTEx-OV (n=88) dataset, respectively; TPM, transcripts per million; Expression of KIF10 was not detected in either ovarian cancer nor normal ovarian tissues.

**Figure S3**

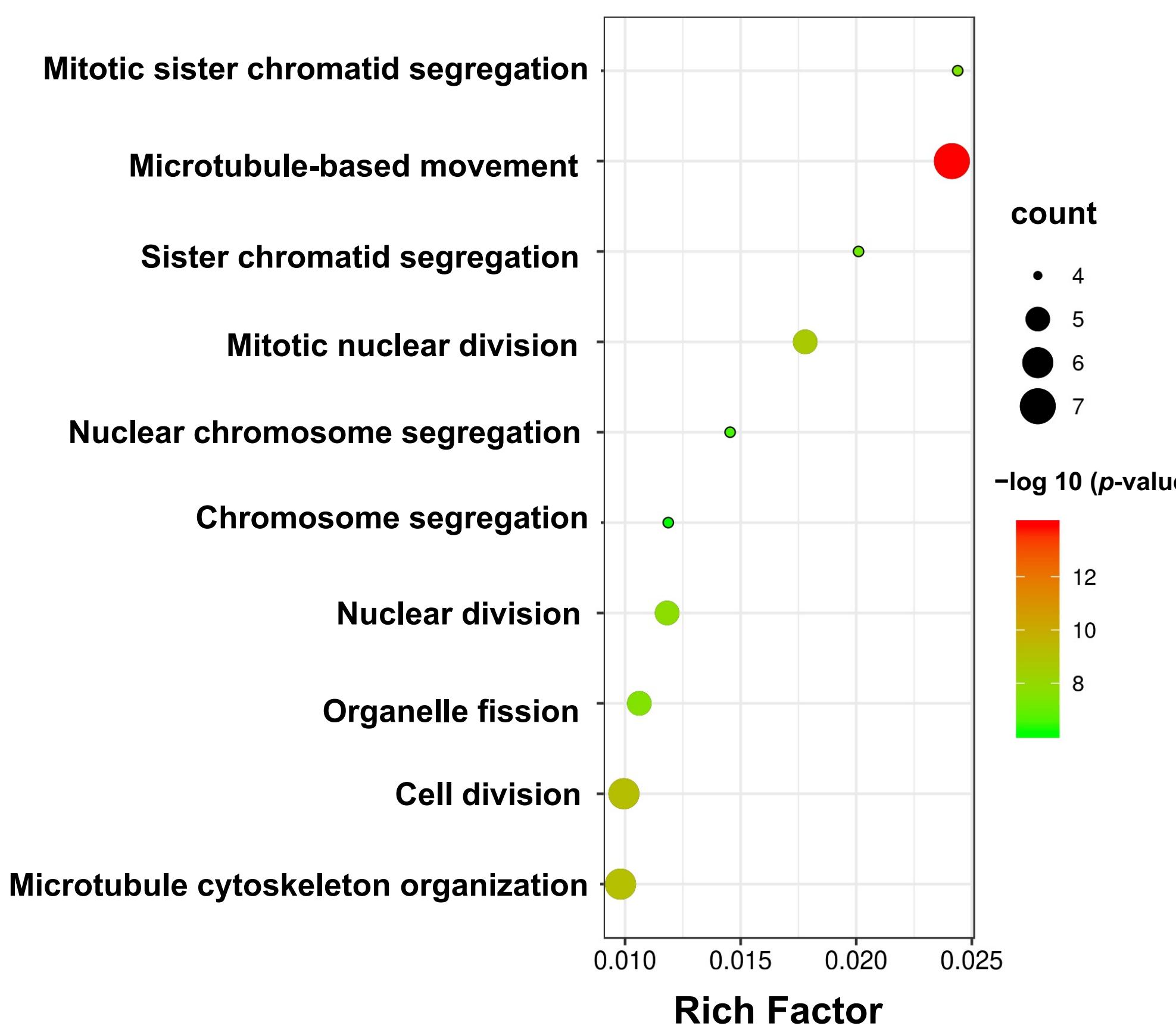
**(A)**



**(B)**

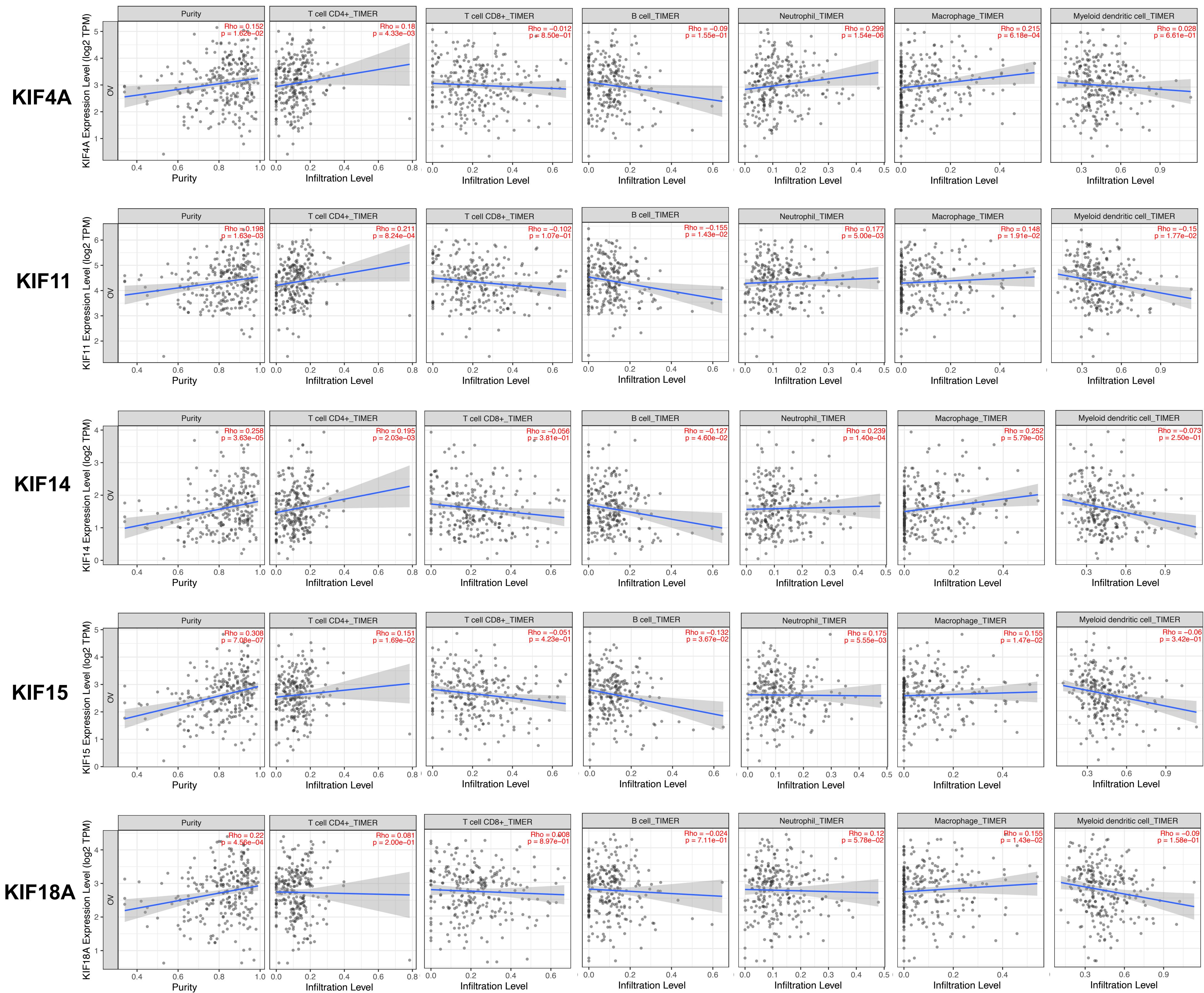


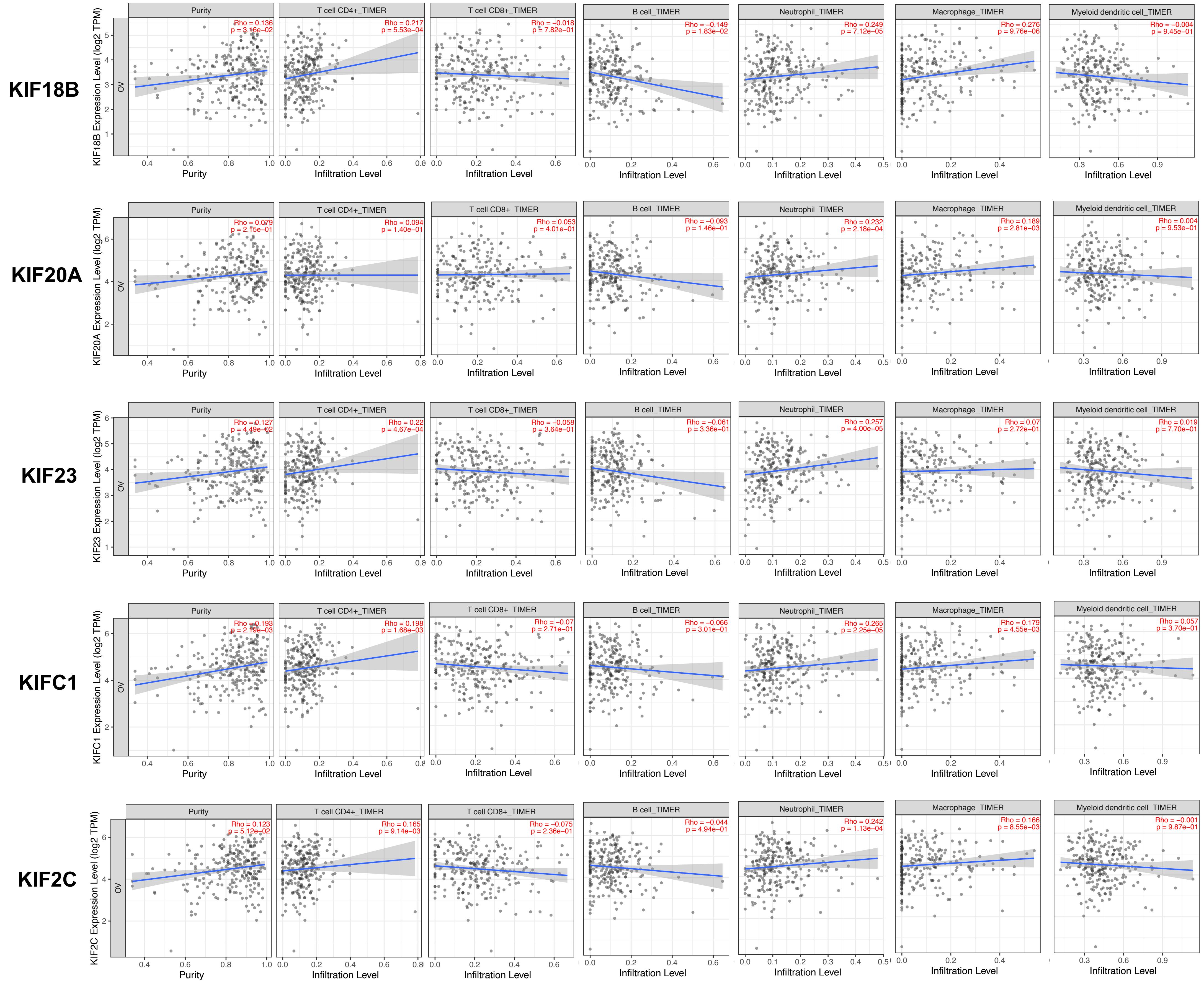
**(C)**



**Figure S3.** Top 10 GO functional enrichment analysis of overexpressed mitotic KIFs. **(A)** Cellular components; **(B)** Molecular function; **(C)** Biological pathways. Rich factor is the ratio of the DEGs number to the total gene numbers in a certain pathway. The color and size of the dots represent the range of *p*-value (hypergeometric test and Benjamini–Hochberg methods) and the number of DEGs mapped to the indicated results.

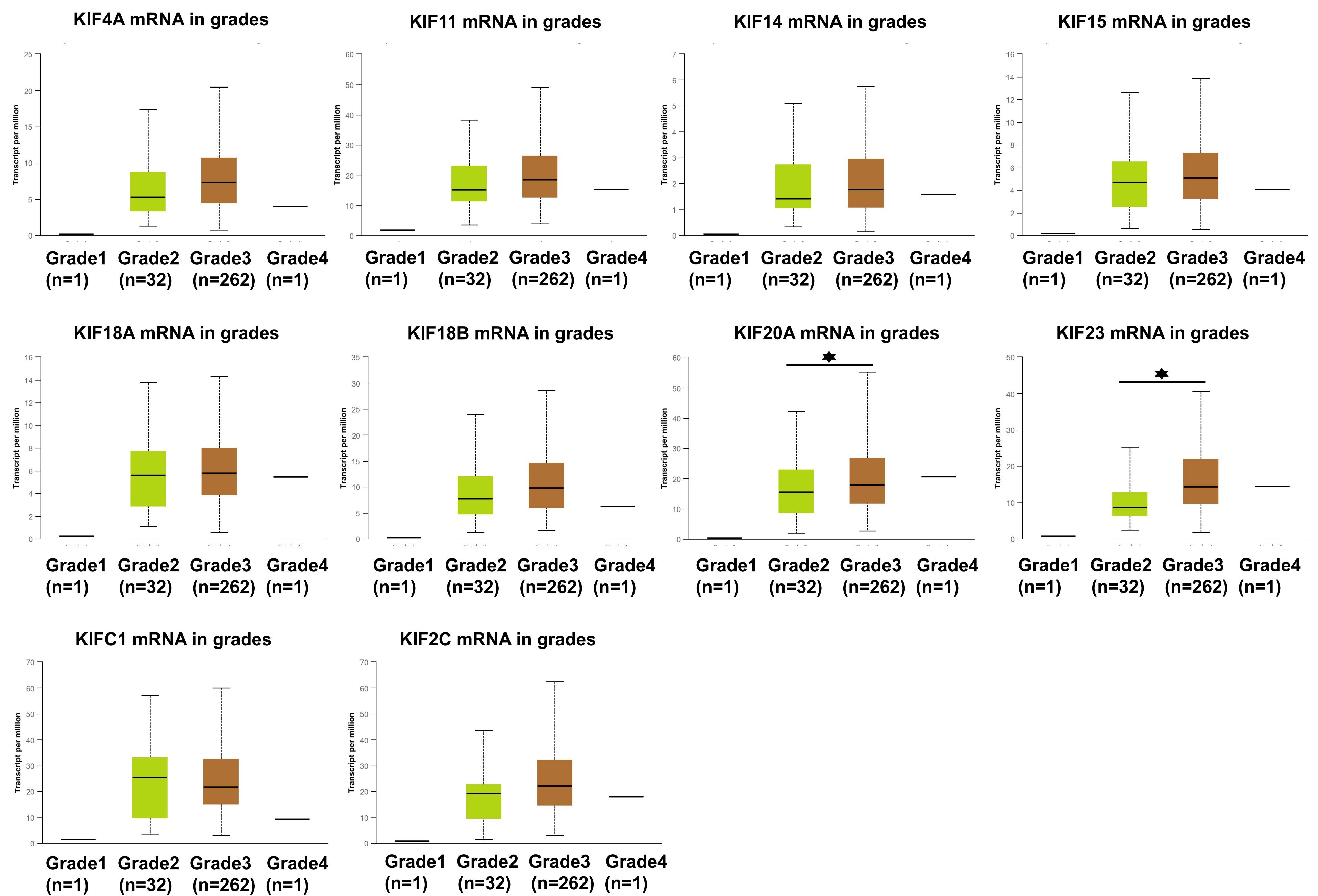
**Figure S4**



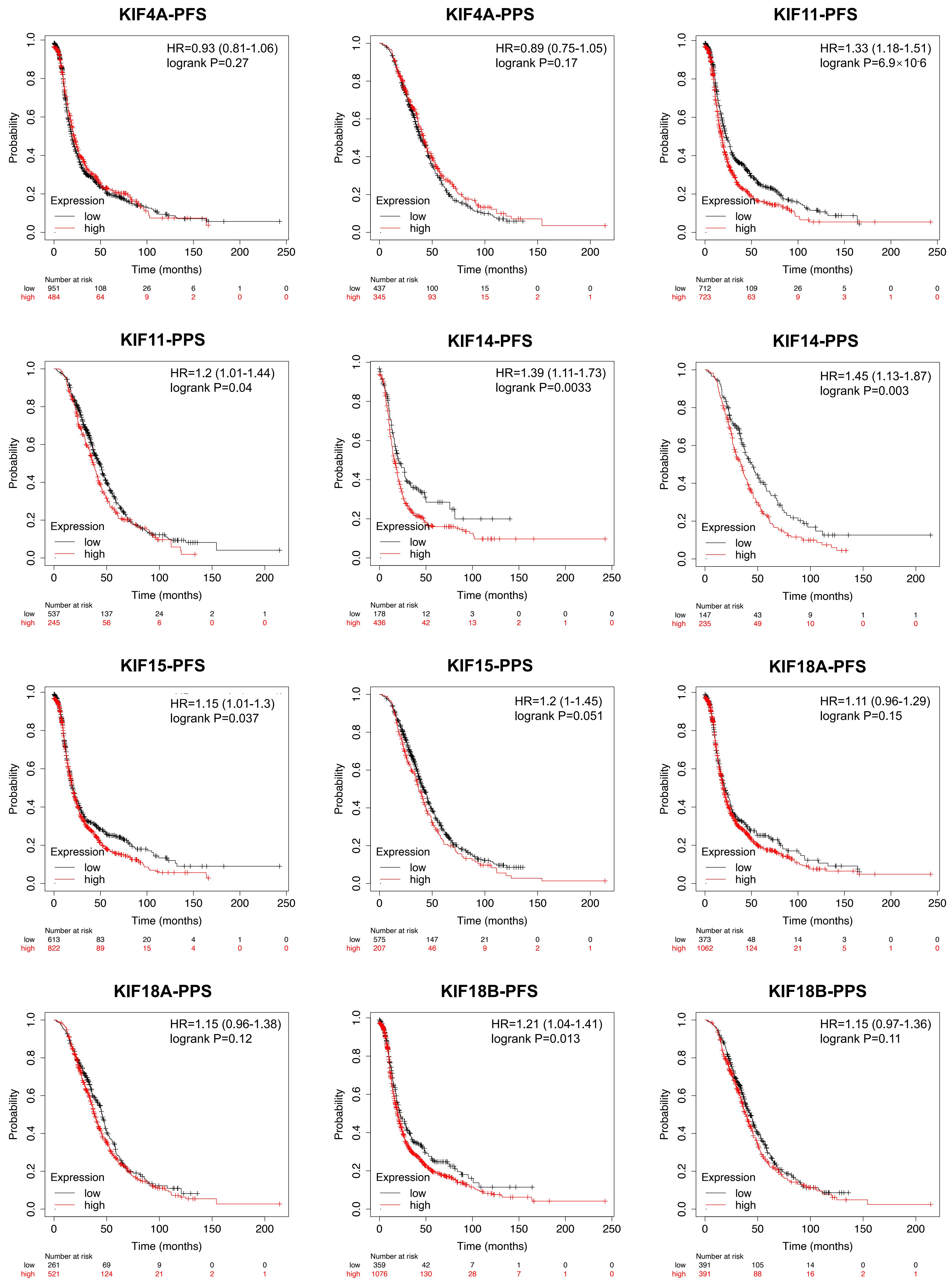


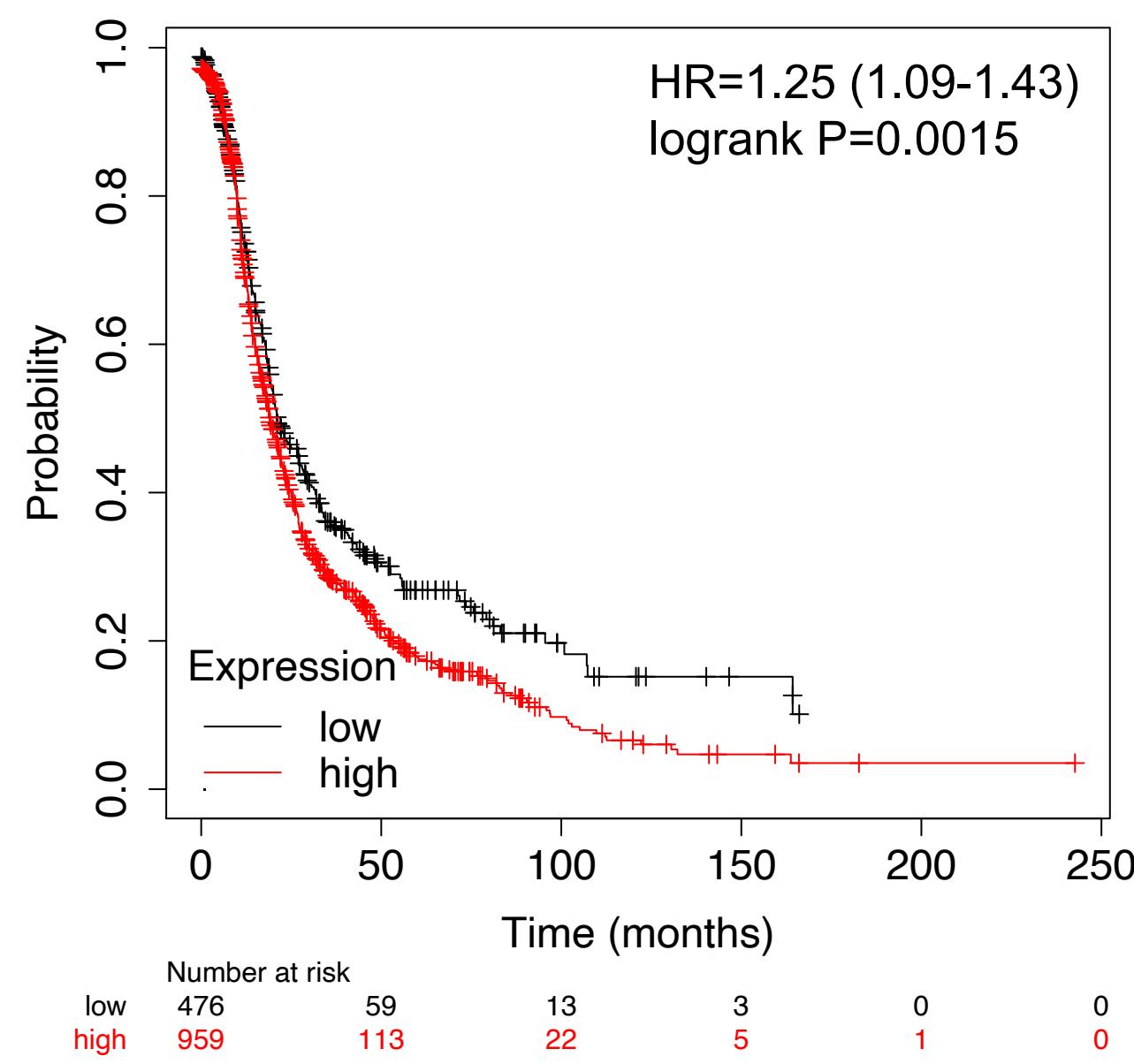
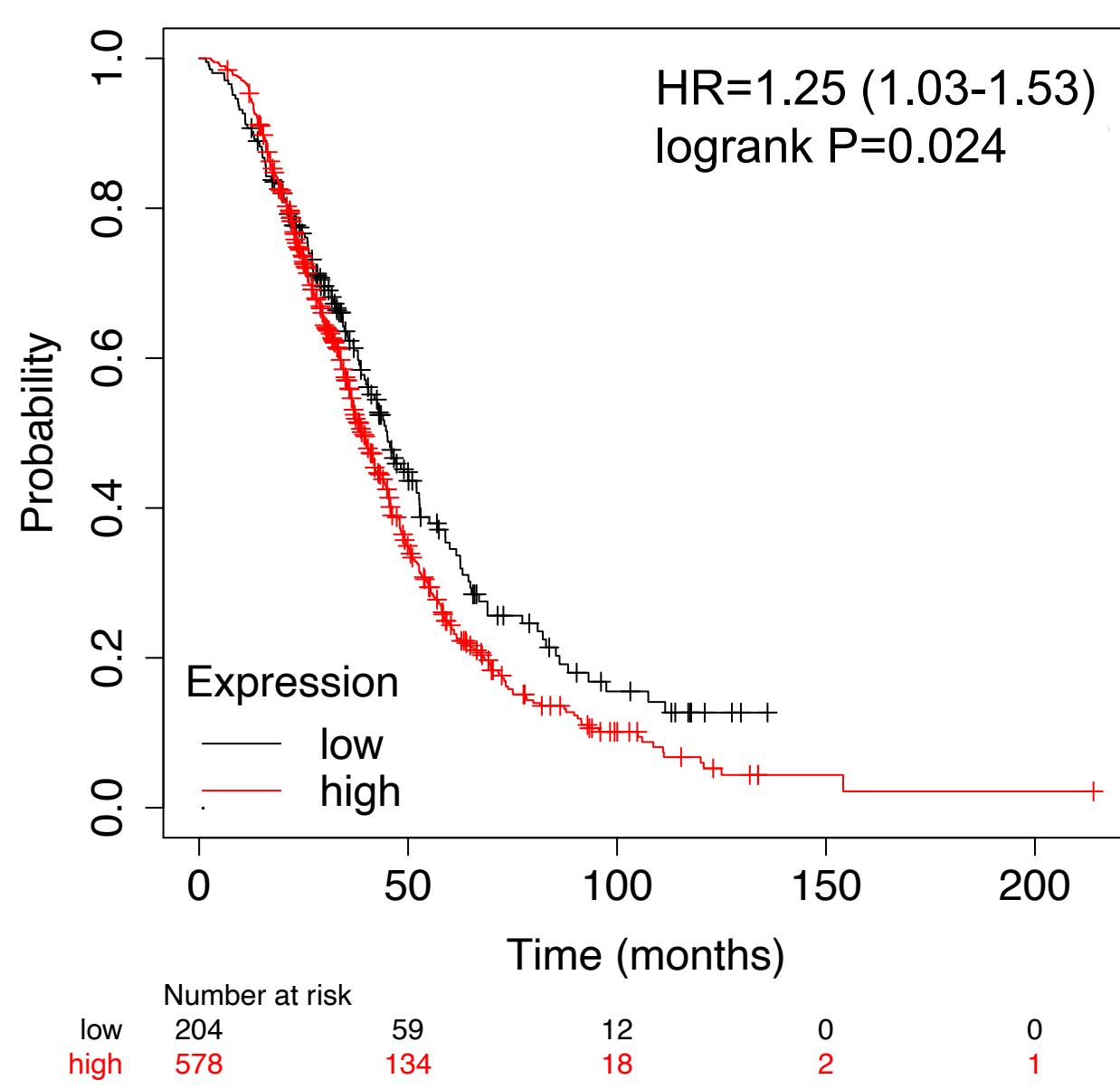
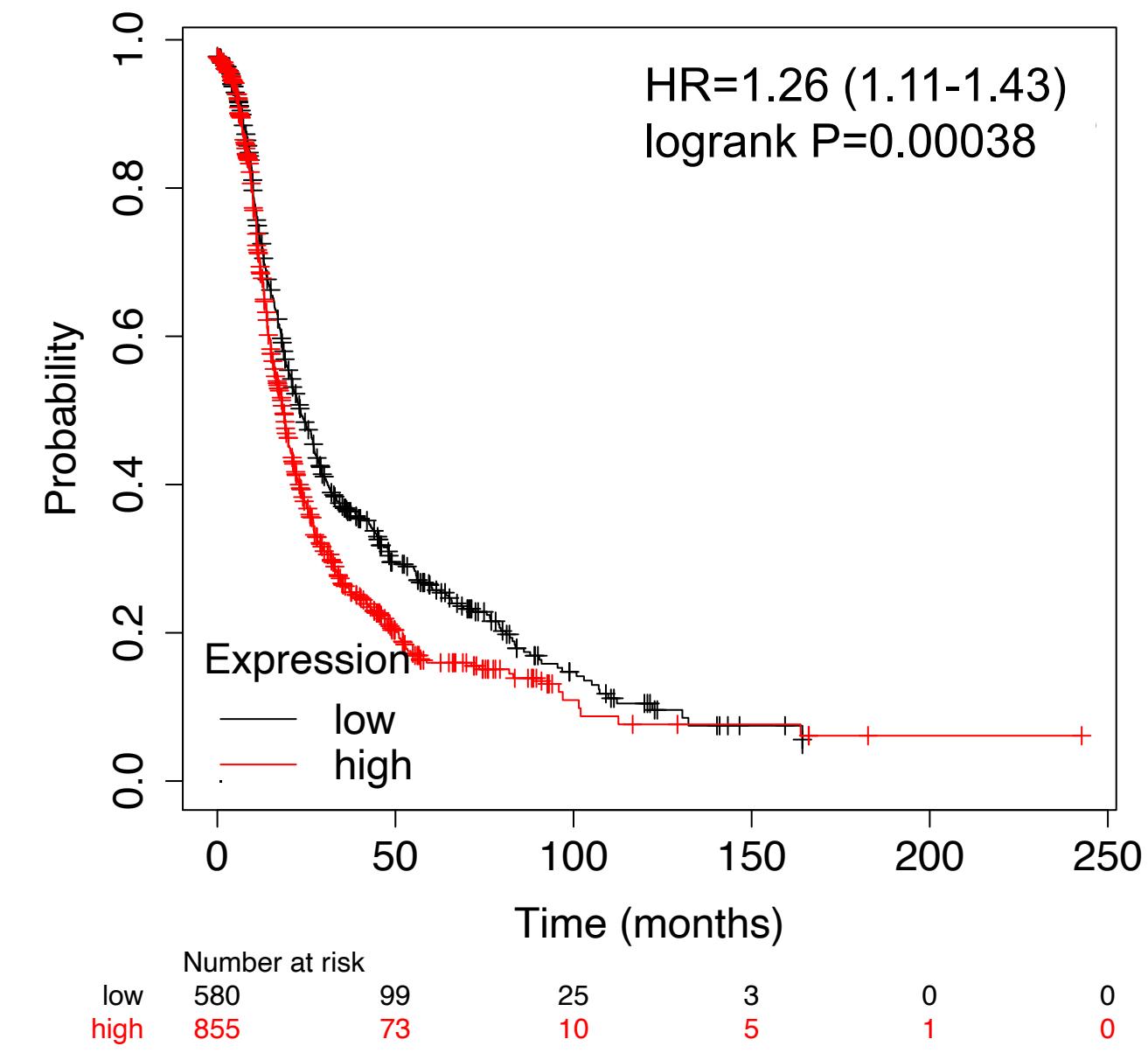
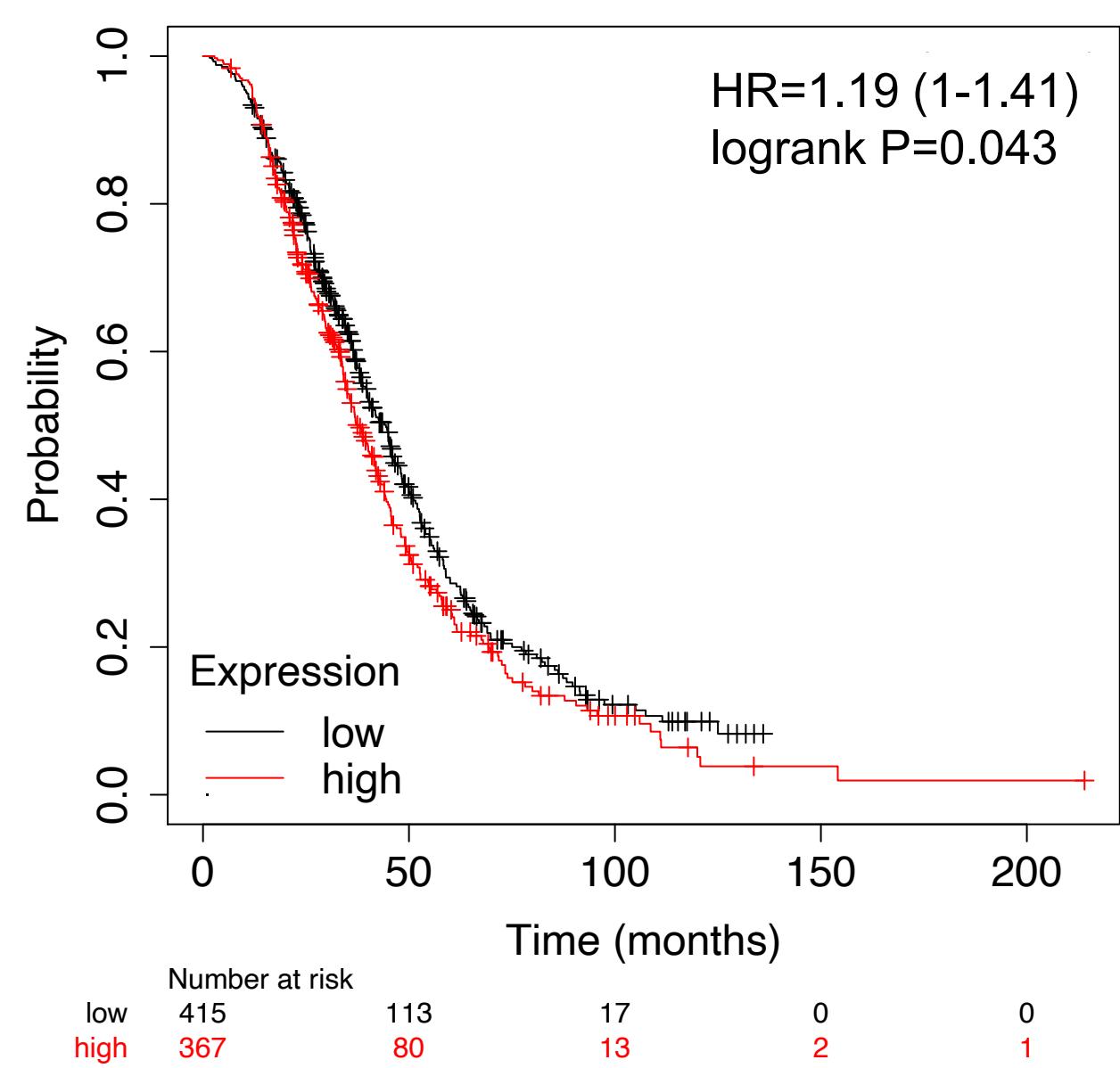
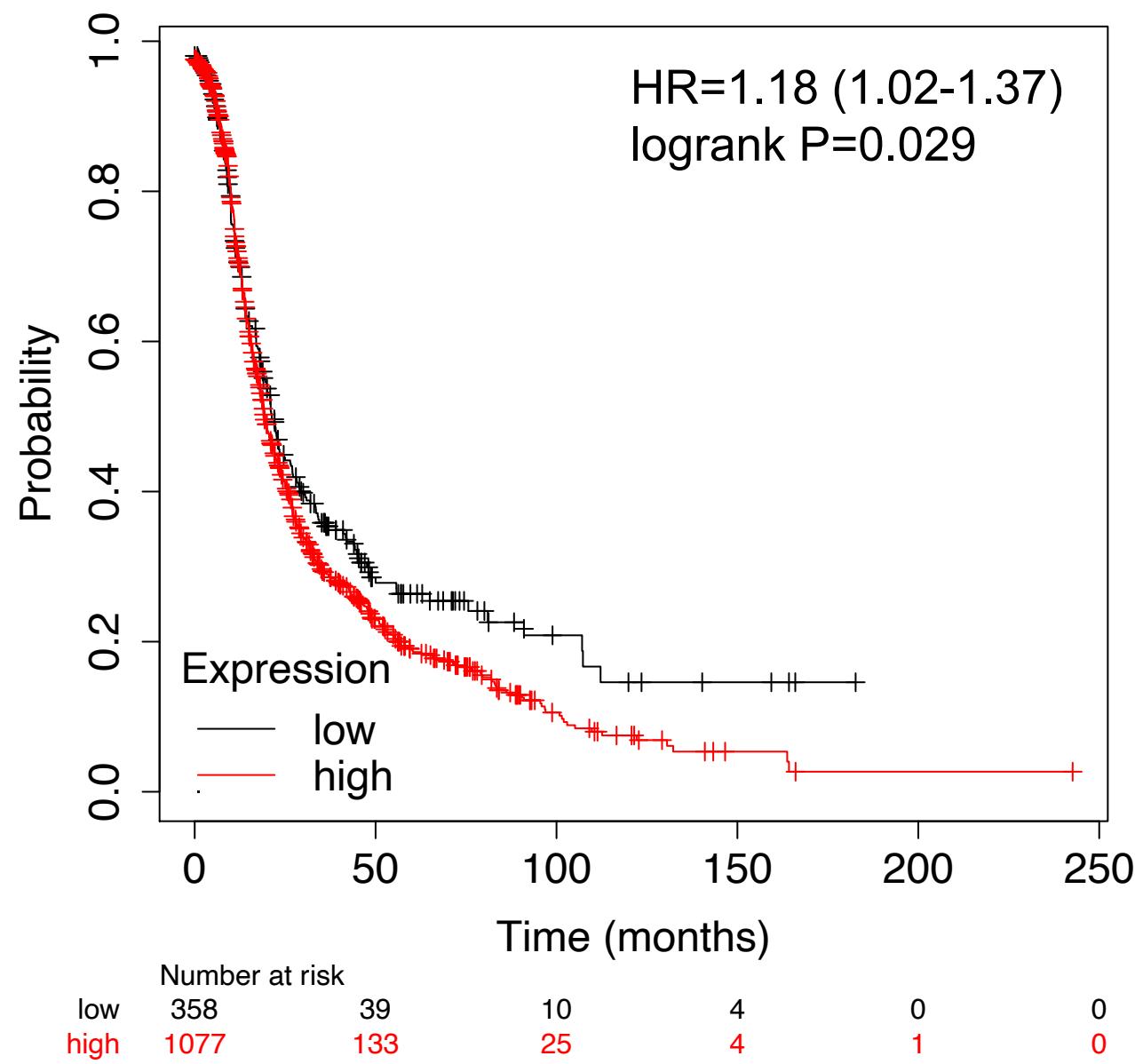
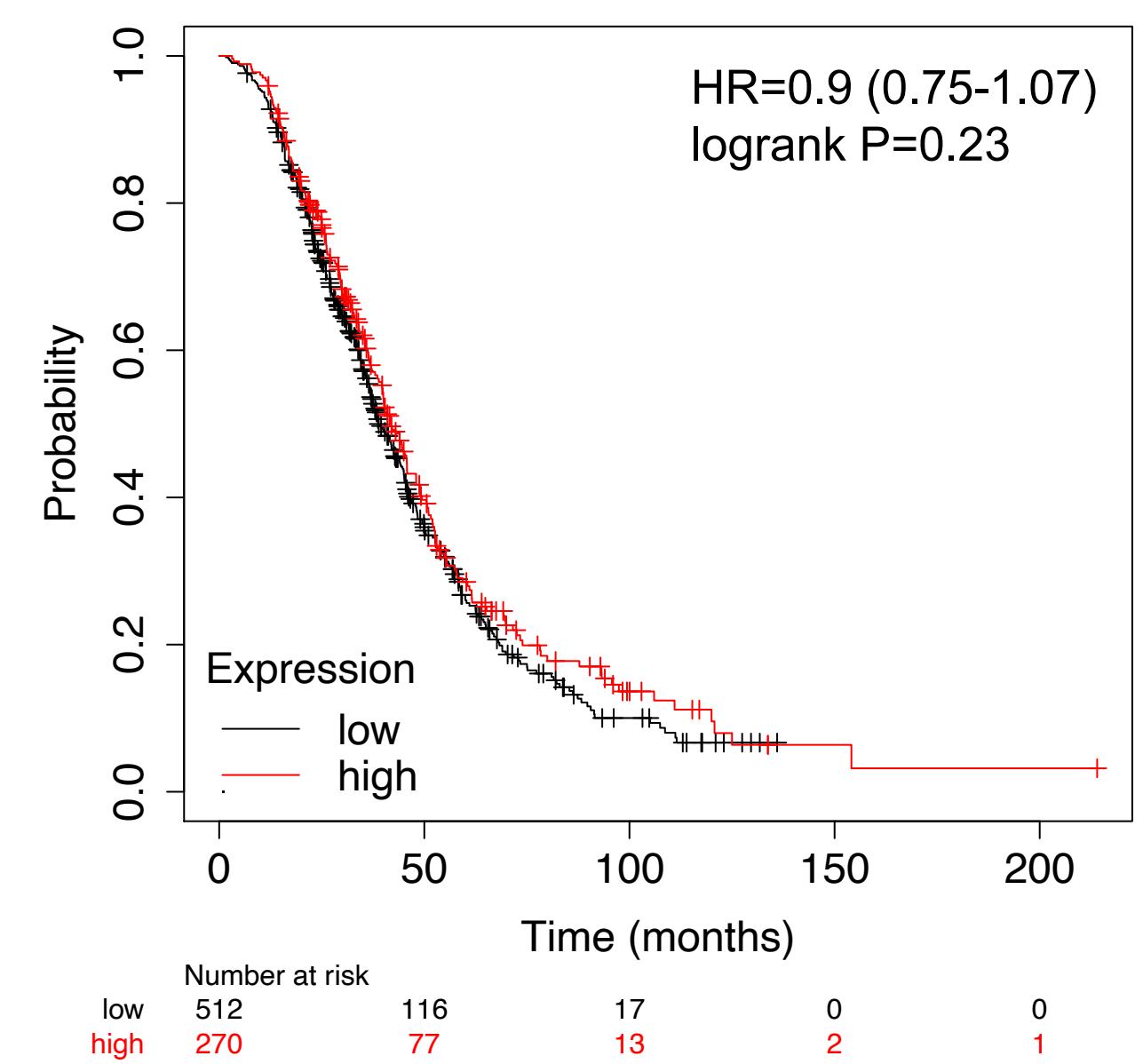
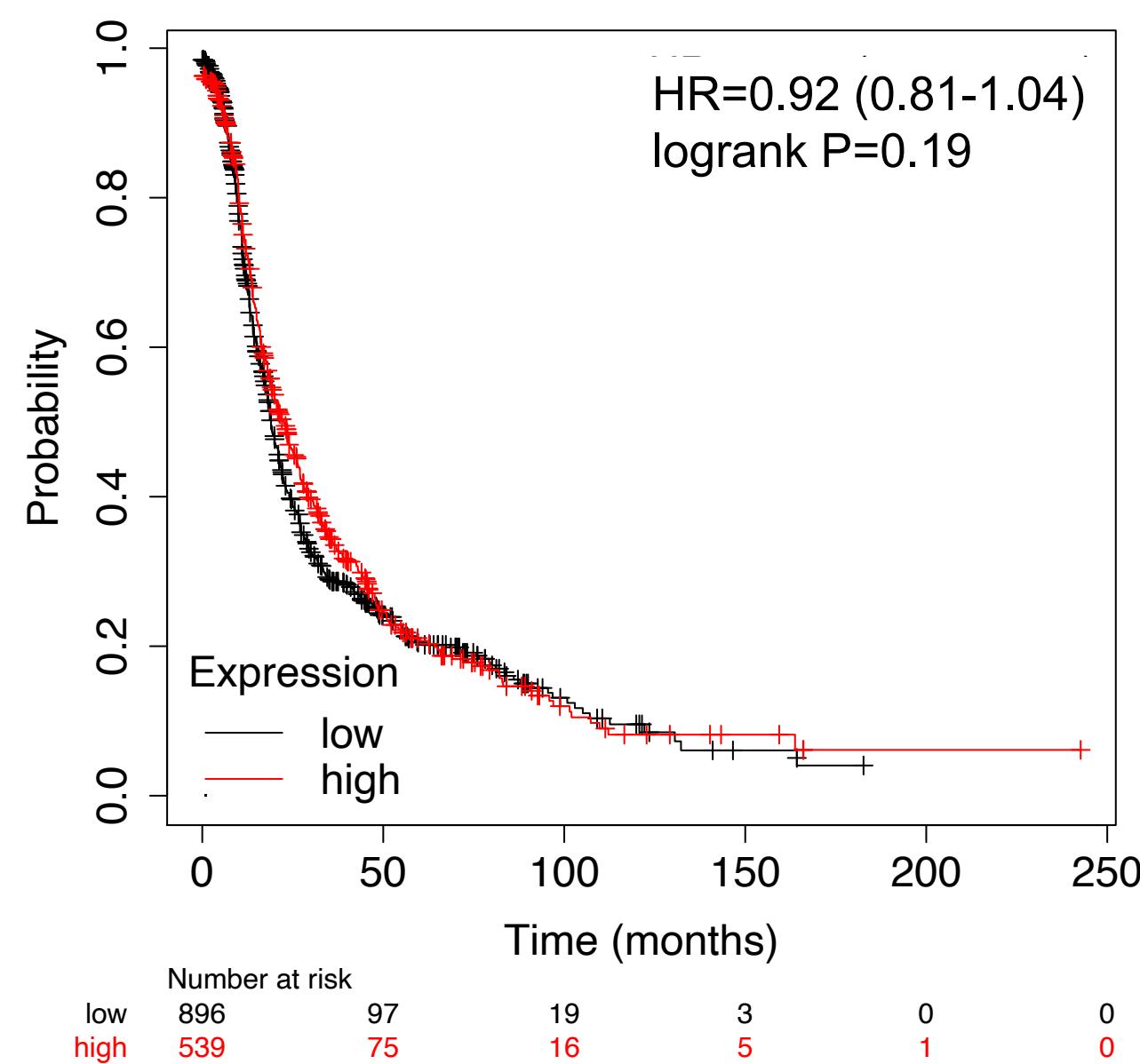
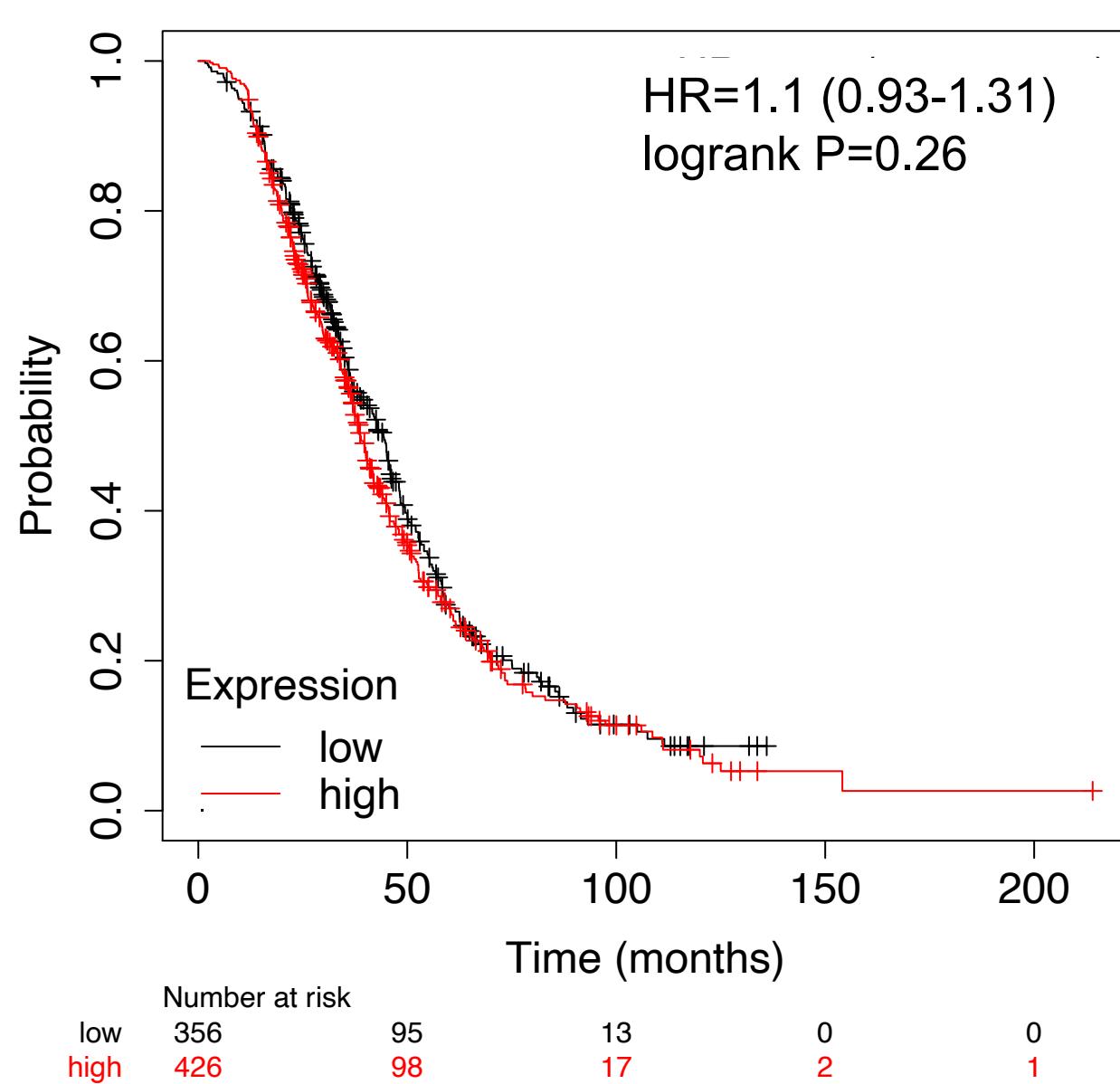
**Figure S4.** Correlation analysis between the overexpressed mitotic KIFs and common immune cells in OC using TIMER2.0 database.

**Figure S5**



**Figure S5.** Transcription profiles of ten overexpressed mitotic KIFs in OC clinicopathological subgroup analysis (UALCAN). Sample numbers of each grade: grade 1(n=1); grade 2 (n=32); grade 3 (n=262); grade 4 (n=1). \* $p<0.05$ .

**Figure S6**

**KIF20A-PFS****KIF20A-PPS****KIF23-PFS****KIF23-PPS****KIFC1-PFS****KIFC1-PPS****KIF2C-PFS****KIF2C-PPS****Figure S6.**

Survival analysis of mitotic KIFs regarding PFS (post-free survival) and PPS (post-progression survival) using TCGA-OV dataset. Red, high-expression group; Black, low-expression group. *p*-value is log-ranked. Auto-selected best cutoff was used