consensus CDF
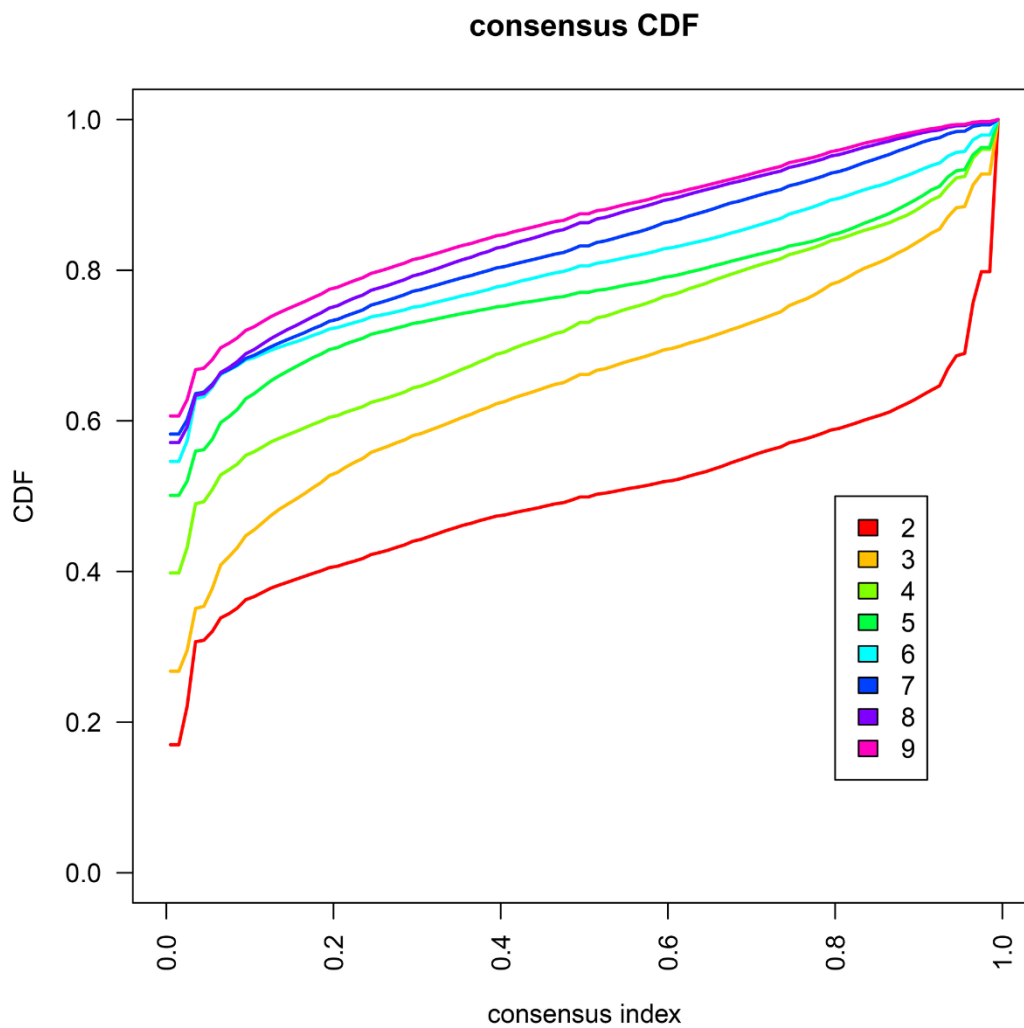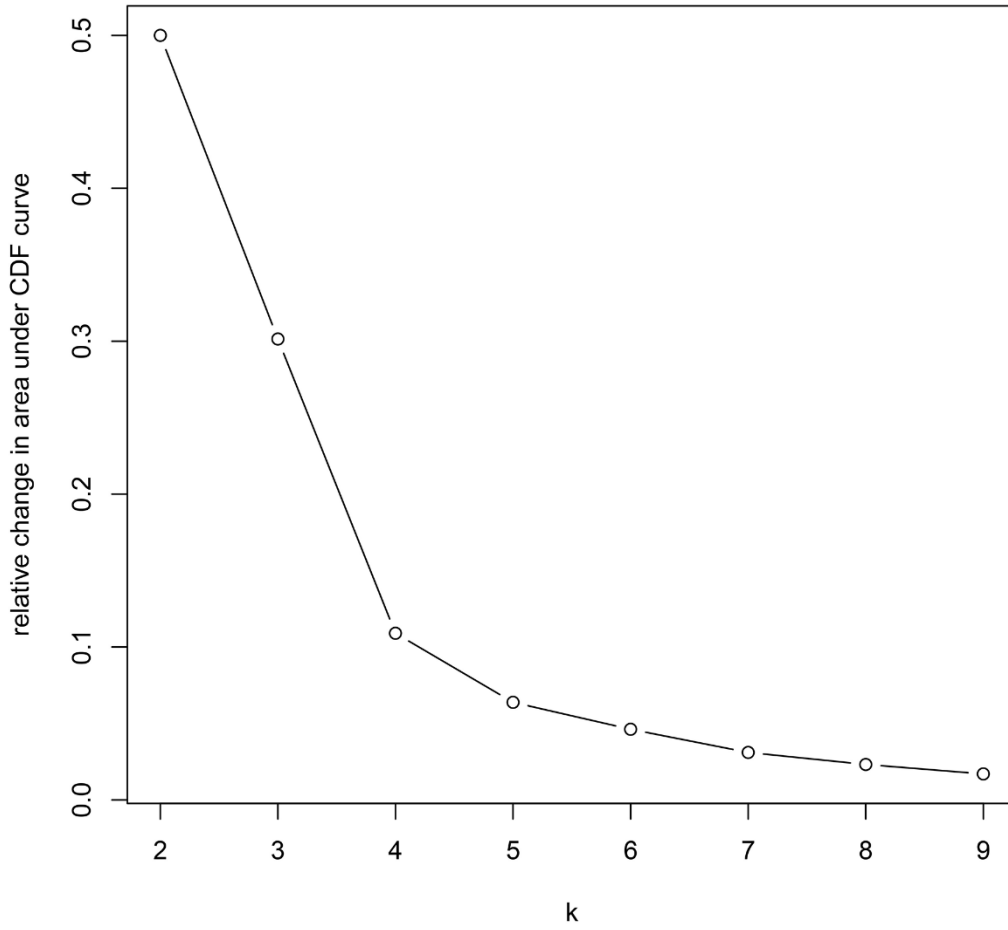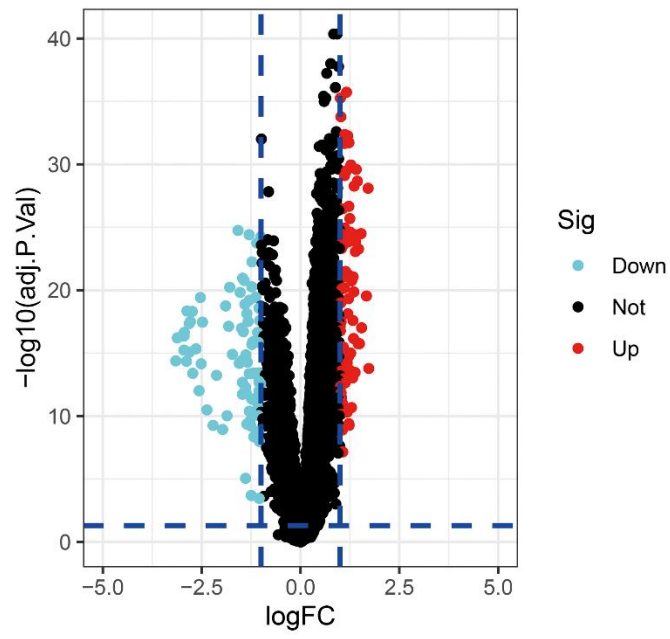

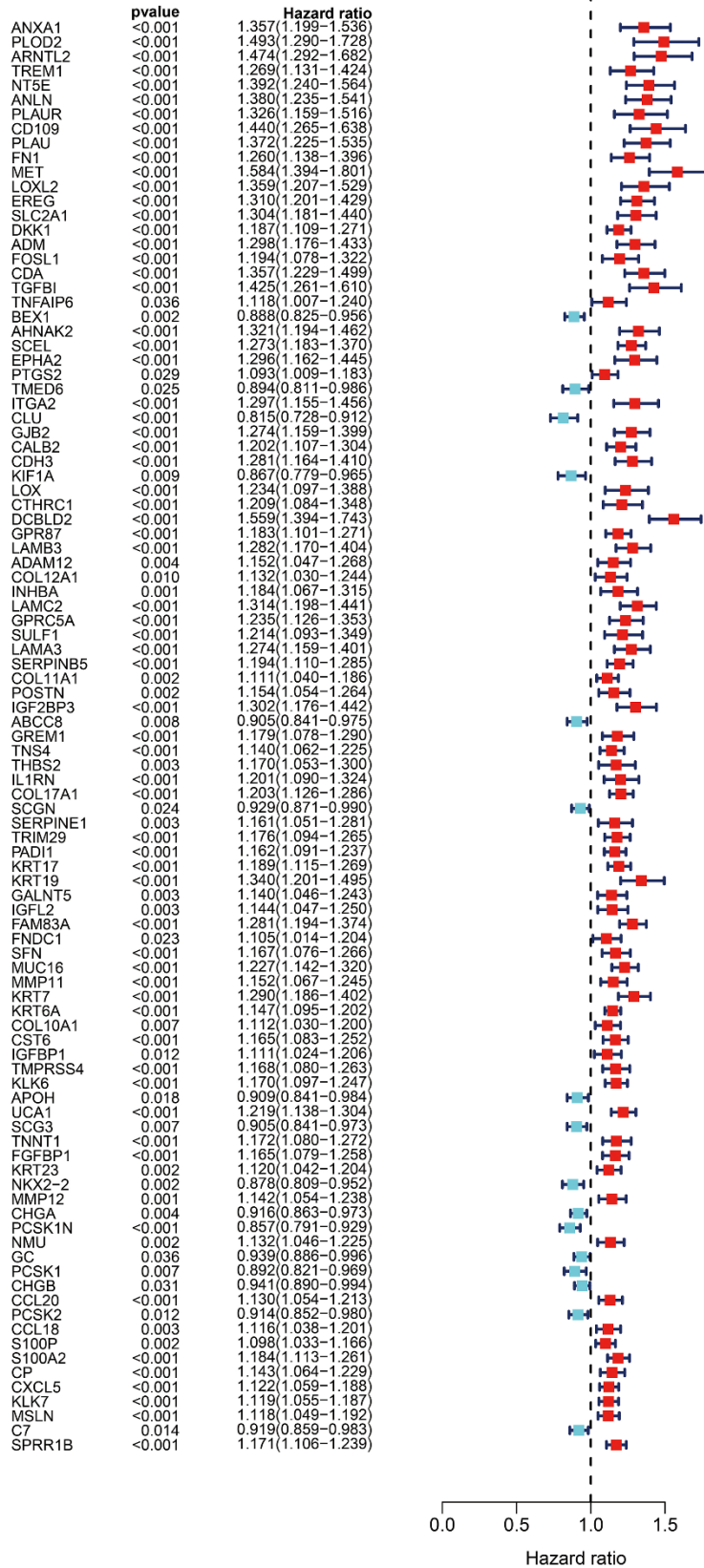Supplementary Figure 1. Cumulative distribution function curve when cluster number k = 2–9.
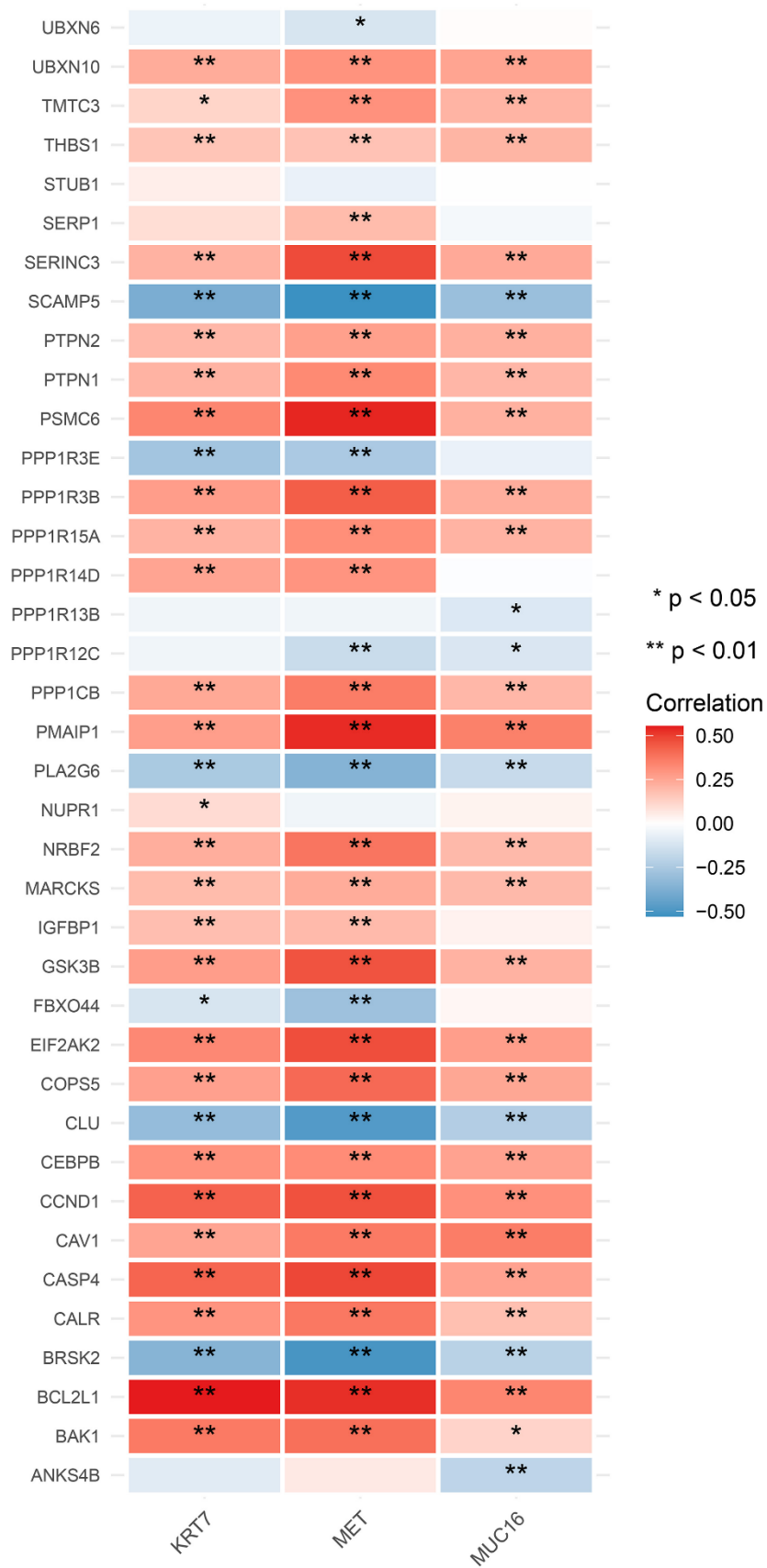
Delta area

Supplementary Figure 2. Relative change of the area under the cumulative distribution function curve.
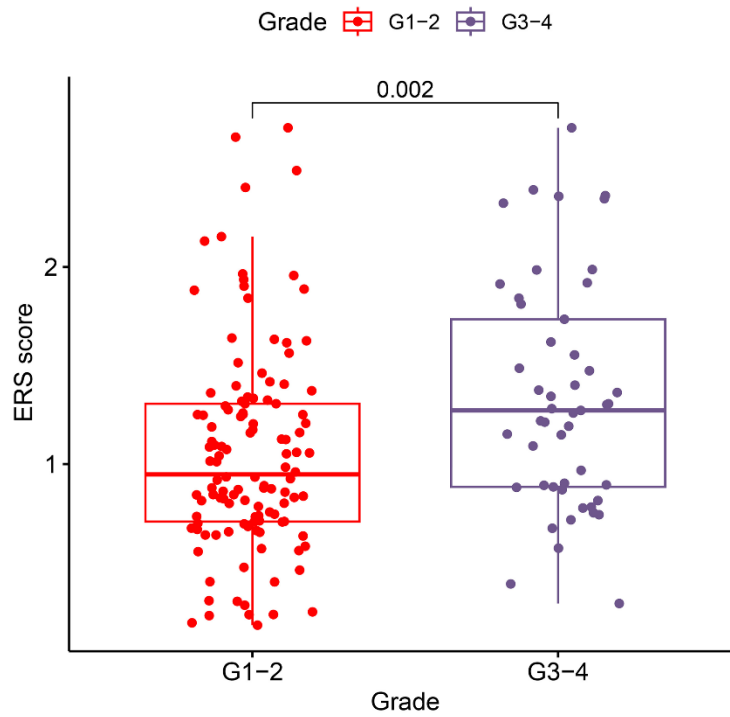
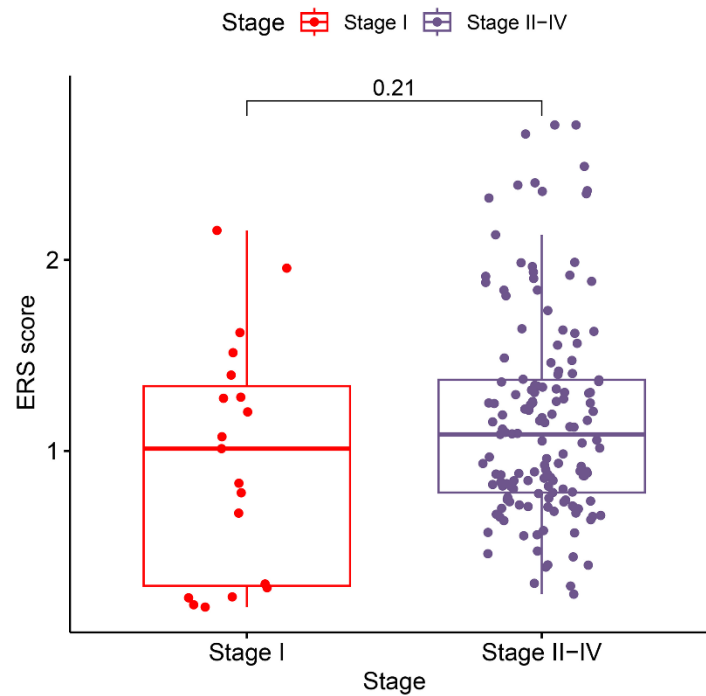**Supplementary Figure 3. The differentially expressed genes between ERGcluster A and B.**

Supplementary Figure 4. Univariate Cox regression analysis using the differentially expressed genes between ERGcluster A and B.

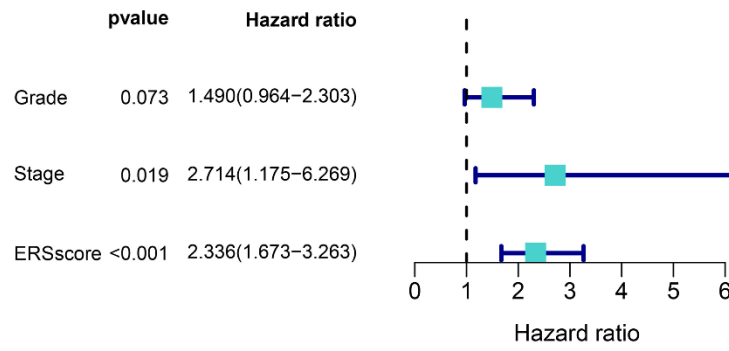**Supplementary Figure 5. The correlation of model genes and ERGs.**

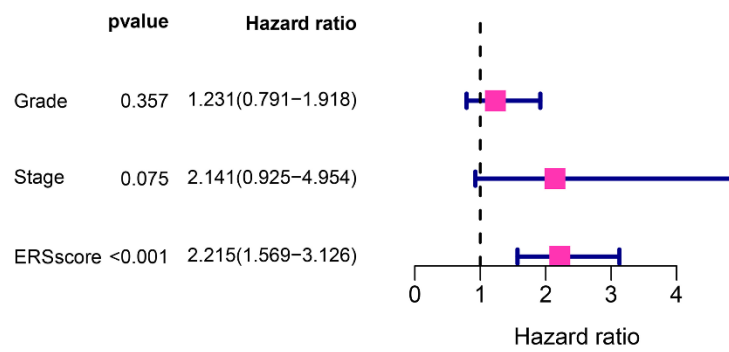**Supplementary Figure 6. The comparison of ERS score between the high and low pathological grade.**

Supplementary Figure 7. The comparison of ERS score between the high and low TNM stage.

Univariate Cox regression

	pvalue	Hazard ratio
Grade	0.073	1.490(0.964−2.303)
Stage	0.019	2.714(1.175−6.269)
ERSscore	<0.001	2.336(1.673−3.263)

Hazard ratio

Multivariate Cox regression

	pvalue	Hazard ratio
Grade	0.357	1.231(0.791−1.918)
Stage	0.075	2.141(0.925−4.954)
ERSscore	<0.001	2.215(1.569−3.126)

Hazard ratio

Supplementary Figure 8. Forest maps of univariate and multivariate Cox regression.