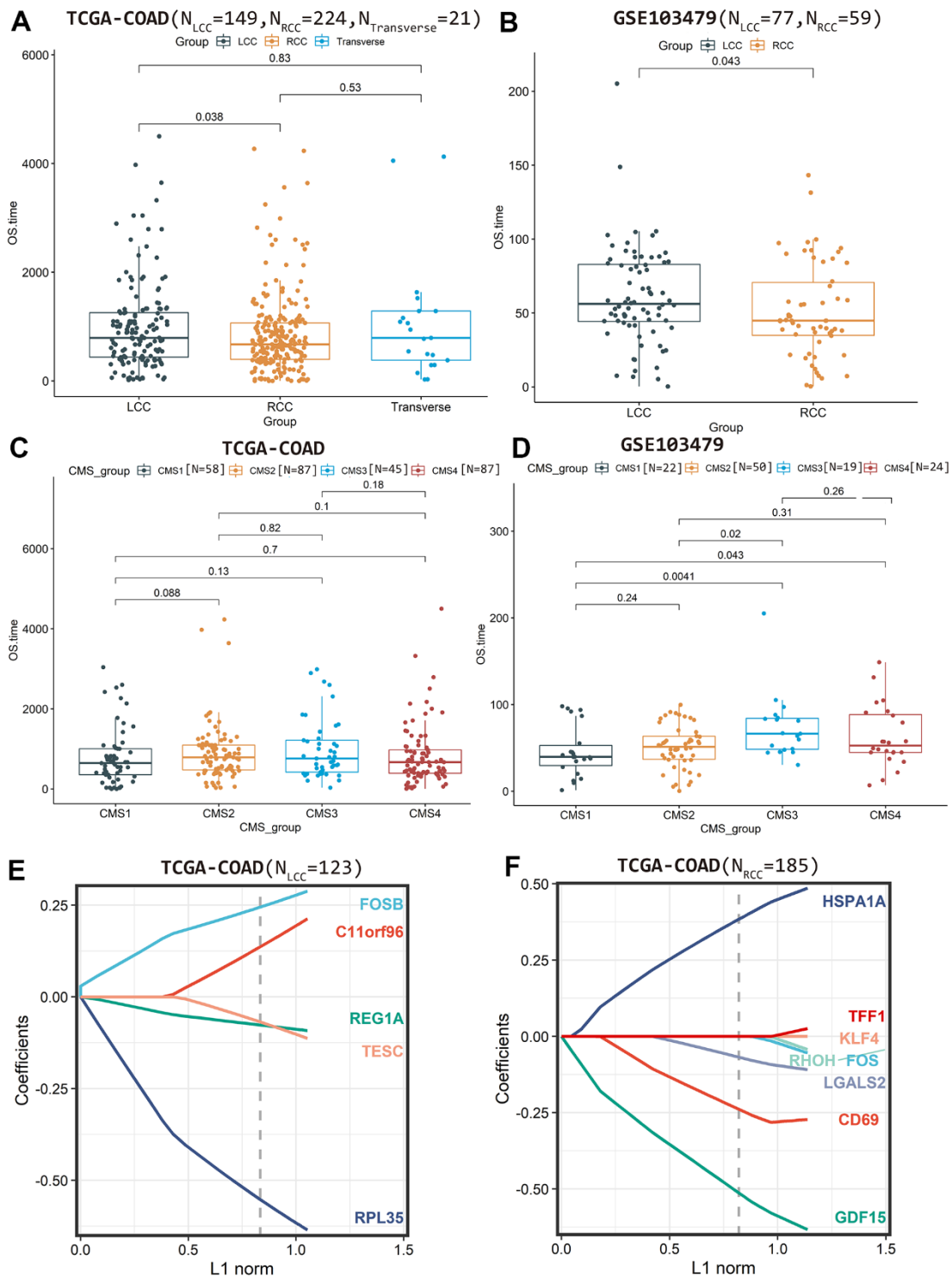
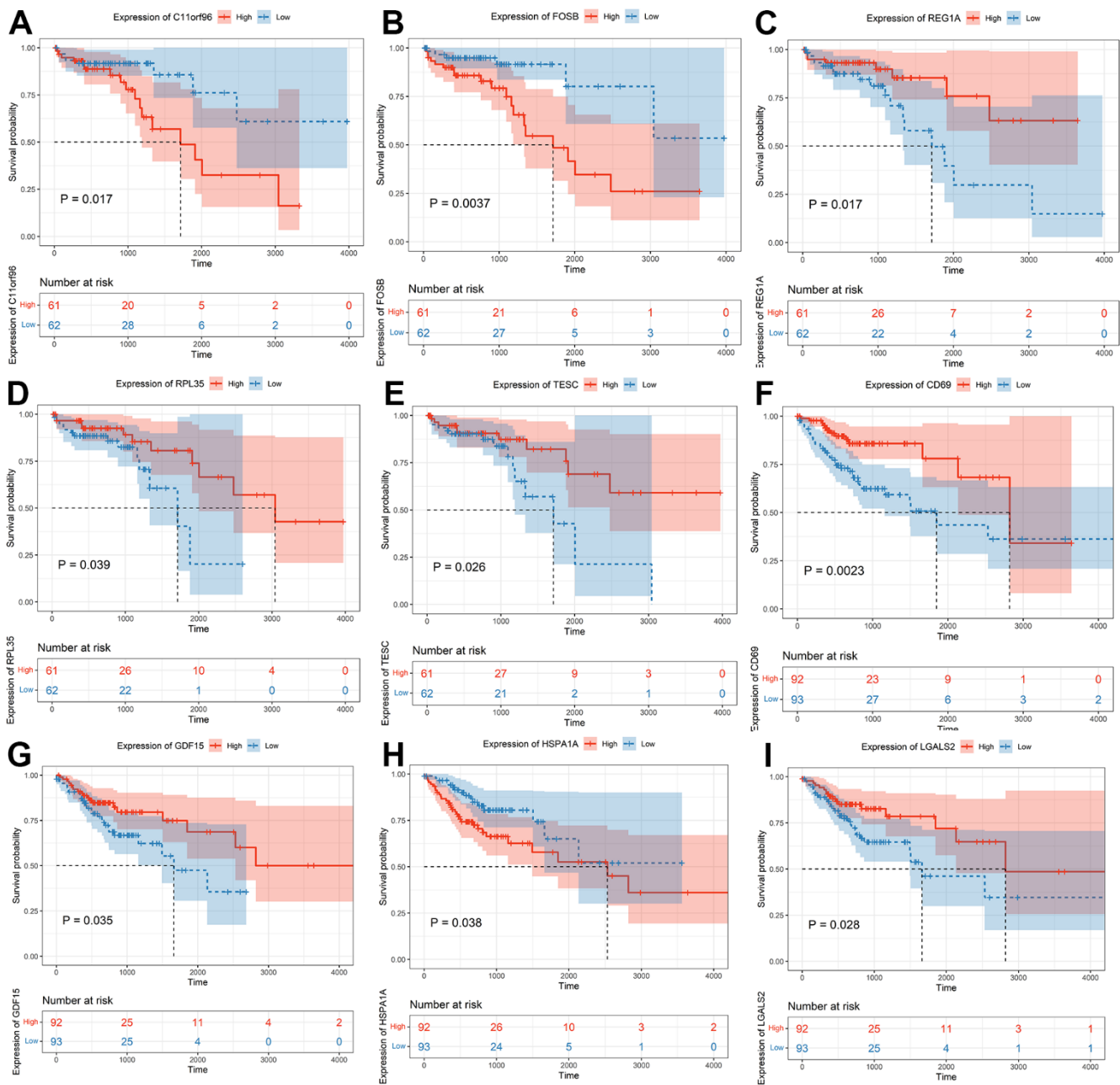


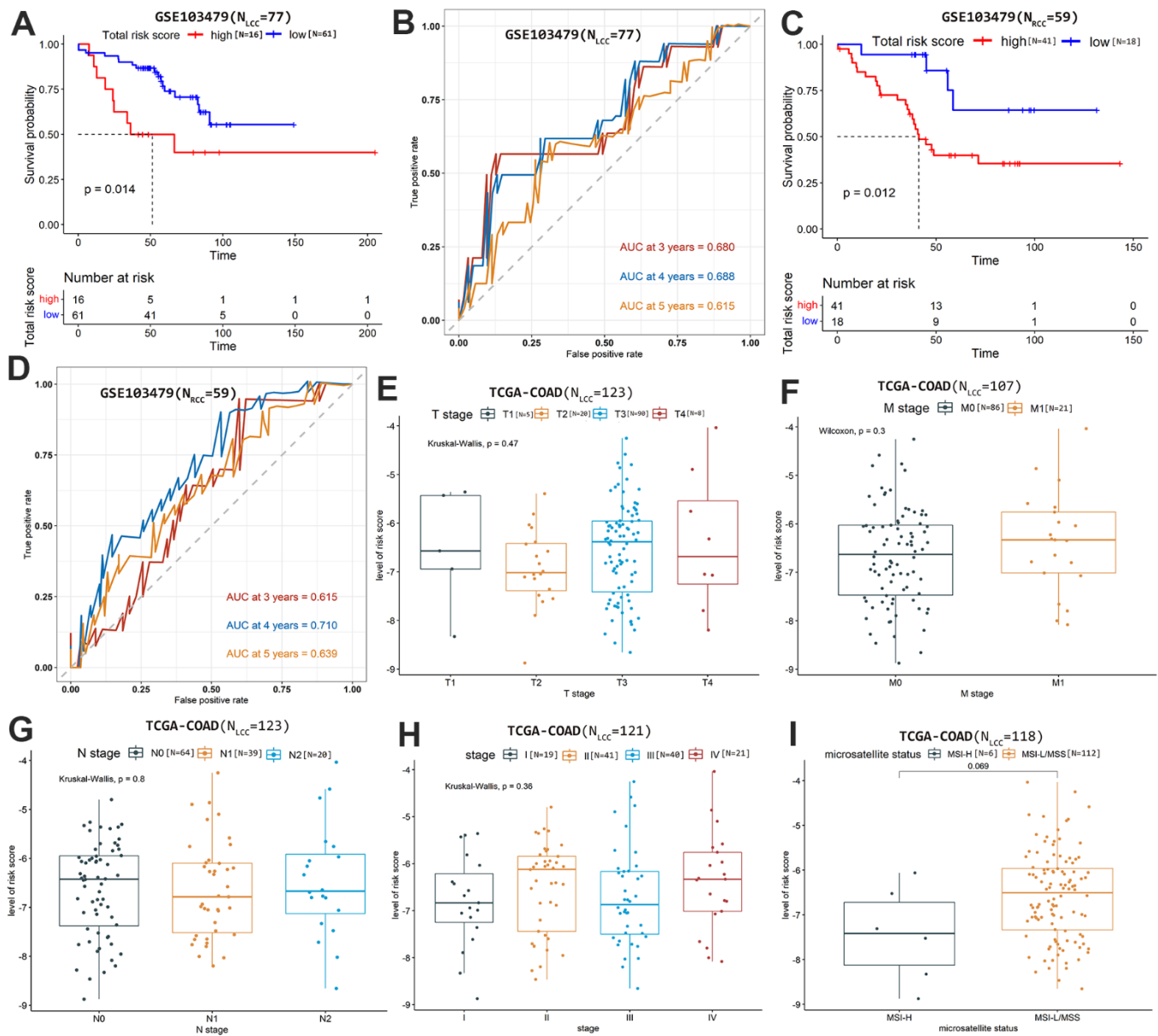
SUPPLEMENTARY FIGURES



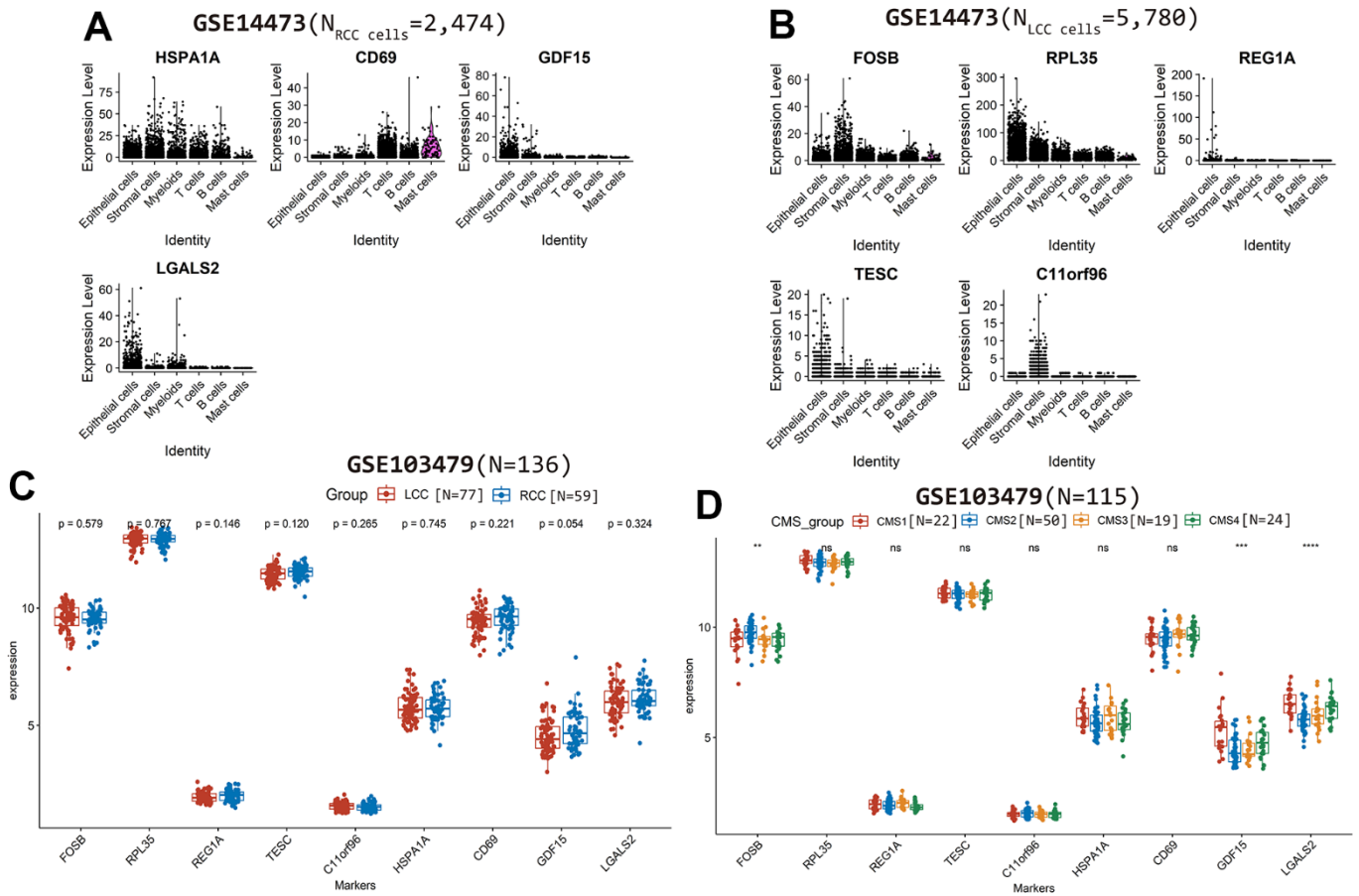
Supplementary Figure 1. Survival time comparison between patients with LCC and RCC, based on (A) TCGA-COAD cohort, (B) GSE103479 cohort. Survival time comparison between patients in CMS subtypes, based on (C) TCGA-COAD cohort, (D) GSE103479 cohort. Candidate prognostic signature coefficients for (E) LCC patients, (F) RCC patients based on TCGA-COAD cohort.



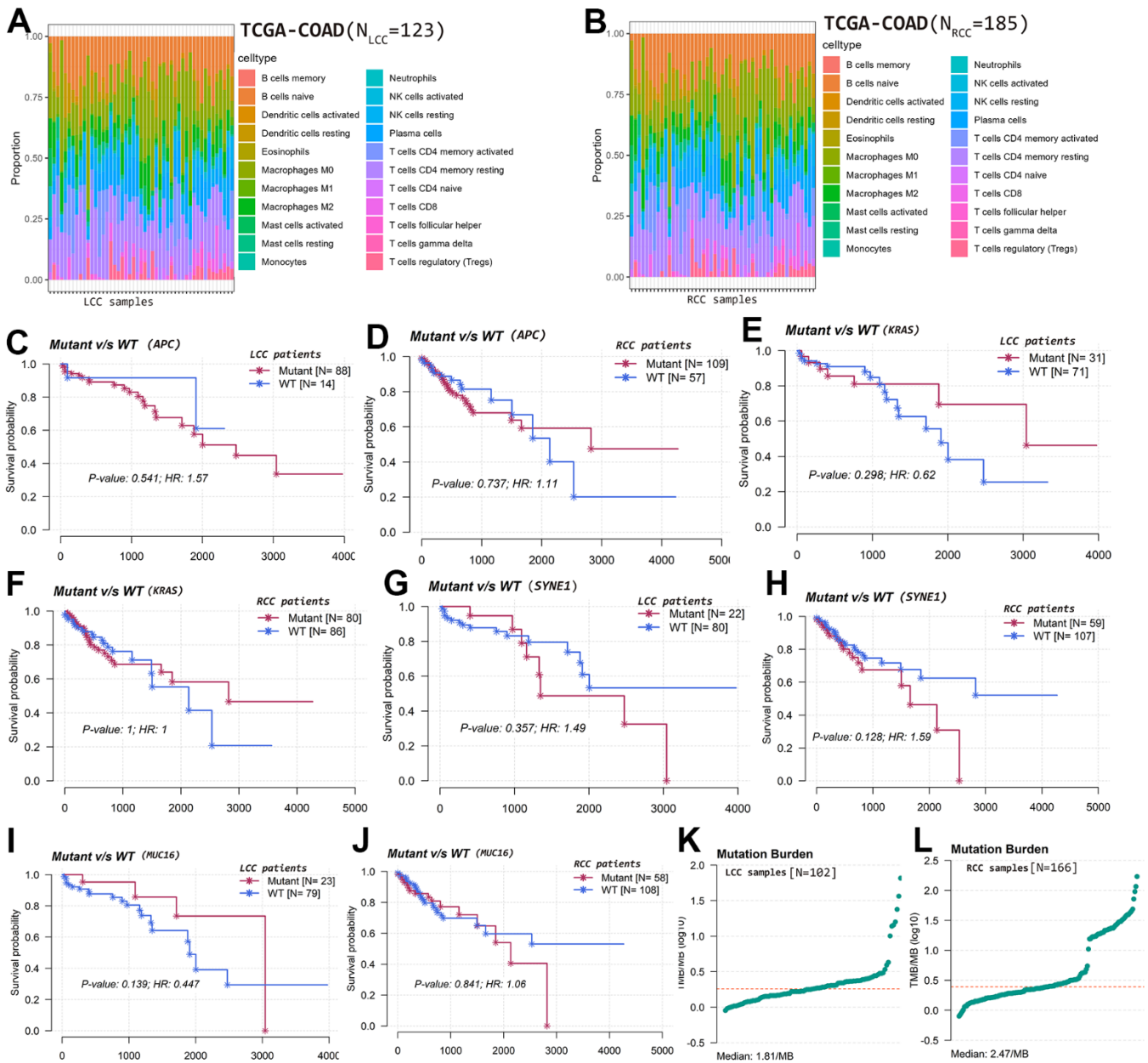
Supplementary Figure 2. The relationship between prognostic markers' expression with patients' OS, including (A) C11orf96, (B) FOSB, (C) REG1A, (D) RPL35, (E) TESC, (F) CD69, (G) GDF15, (H) HSPA1A, (I) LGALS2.



Supplementary Figure 3. Validation the identified prognostic markers based on GSE103479. (A) A Kaplan–Meier curve shows that low-risk score LCC patients had better OS than high-risk score LCC patients. (B) The AUCs of the prognostic model for LCC patients. (C) A Kaplan–Meier curve shows that low-risk score RCC patients had better OS than high-risk score RCC patients. (D) The AUCs of the prognostic model for RCC patients. The relationship between LCC patients’ risk scores and clinical features, (E) T stage, (F) M stage, (G) N stage, (H) Advanced pathological stages, (I) Microsatellite status, based on TCGA-COAD cohort.



Supplementary Figure 4. The expression level of prognostic markers in each cell types based on scRNA-seq dataset GSE14473, such as (A) RCC cells and (B) LCC cells. (C) Comparing the expression differences of markers between LCC and RCC samples based on TCGA-COAD cohort. (D) Comparing the expression differences of markers among CMS subtypes based on TCGA-COAD cohort.



Supplementary Figure 5. The mutation profiles and relationships between the status of top mutated genes and OS. (A) LCC sample mutation profiles. (B) RCC sample mutation profiles. (C) Relationships between *APC* mutation status and OS in LCC patients. (D) Relationships between *APC* mutation status and OS in RCC patients. (E) Relationships between *KRAS* mutation status and OS in LCC patients. (F) Relationships between *KRAS* mutation status and OS in RCC patients. (G) Relationships between *SYNE1* mutation status and OS in LCC patients. (H) Relationships between *SYNE1* mutation status and OS in RCC patients. (I) Relationships between *MUC16* mutation status and OS in LCC patients. (J) Relationships between *MUC16* mutation status and OS in RCC patients. (K) The median TMB value in LCC patients. (L) The median TMB value in RCC patients.