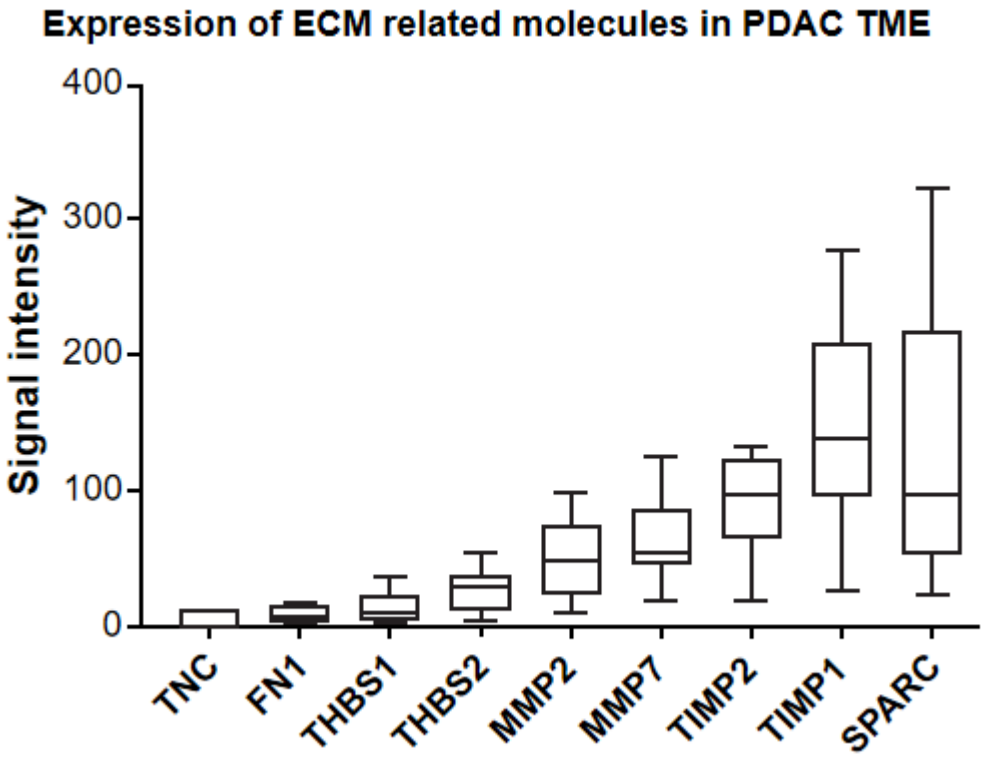
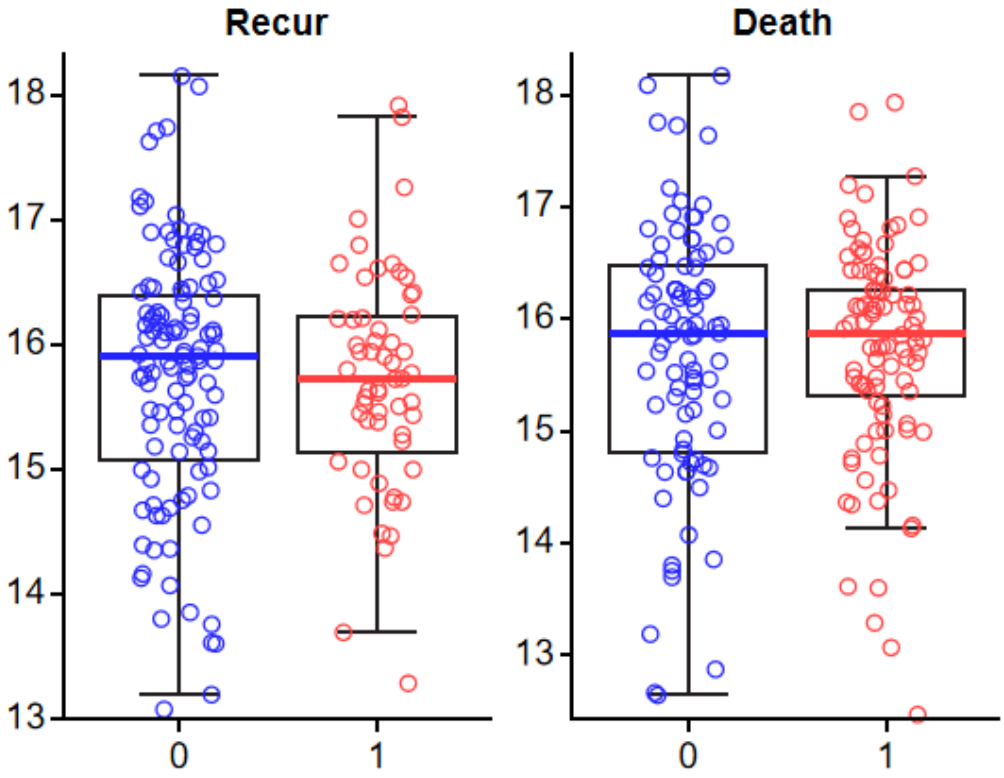
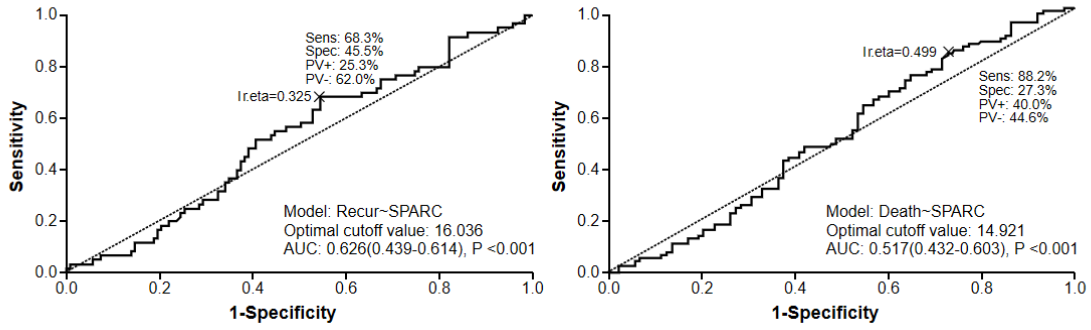


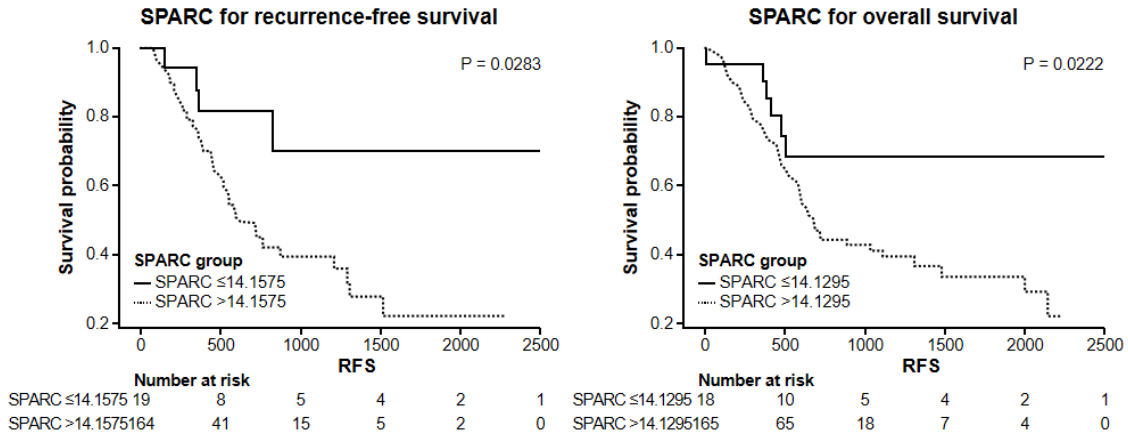
Supplementary Figure 1 Expression of extracellular matrix related molecules in PDAC TME.



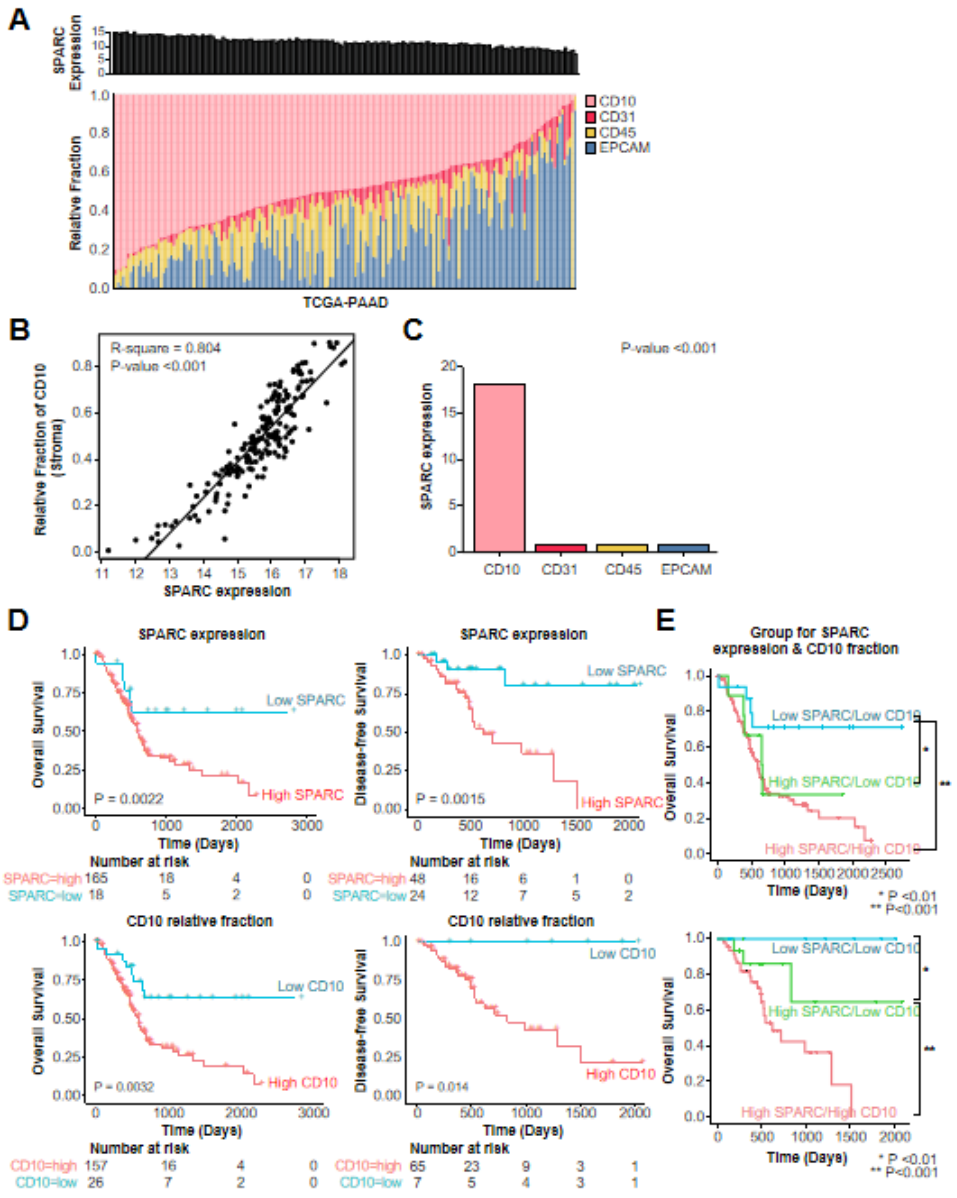
Supplementary Figure 2 Recurrence and Survival analysis between SPARC (+) and SPARC (-) groups based on TCGA-PAAD cohort.



Supplementary Figure 3 The ROC curve to find predictive power of SPARC expression for recurrence and death based on TCGA-PAAD cohort.



Supplementary Figure 4 Survival analysis according to cut off value using cox-proportional hazard model.



Supplementary Figure 5 Cell-type-specific SPARC expression and prognostic significance in TCGA-PAAD TME. A: Stacked bar plots showing the relative fraction of tumor microenvironment components in terms of CD10 (stromal component), CD31 (endothelial cell component), CD45 (immune cell component), and EPCAM (tumor component), sorted in descending order by CD10; B: Scatter plot showing the association between SPARC expression and relative fractions of the CD10 component. Pearson's correlation analysis was conducted to calculate the R^2d and p-values; C: The bar plot indicates SPARC expression specific to each TME component. The Kruskal-Wallis test

was used to estimate the p-value; D: Kaplan-Meier plots showing SPARC expression and the relative fraction of the CD10 component for overall survival and disease-free survival in the TCGA-PAAD cohort. The best cutoff was estimated using the Survminer package in the R software, and the log-rank test was used to calculate the p-value; E: Kaplan-Meier plots for survival differences according to each group for SPARC expression and CD10 fraction. The log-rank test was used to calculate *P* values.

Supplementary Table 1 Univariate and multivariate Cox regression analysis of factors affecting overall survival of patients with adjuvant chemotherapy

Variables	Adjuvant therapy (*n* = 73)	Univariate HR (95%CI)	*P* value	Multivariate HR (95%CI)	*P* value
Location		0.885 (0.417-1.878)	0.751		
Tumor size	≤ 3.0	1.00			
	> 3.0	1.065 (0.432-2.624)	0.891		
N status			0.013		0.018
	N0	1.00		1.0	
	N1	3.511 (1.479-8.332)	0.004	3.334 (1.401-7.936)	0.006
	N2	1.458 (0.301-7.059)	0.639	1.350 (0.278-6.559)	0.296
CA 19-9	≤35	1.00			
	>35	1.118 (0.494-2.531)	0.789		
Cell differentiation			0.560		
	Well	1.0			
	Moderately	0.624 (0.252-1.549)	0.310		
	Poorly	0.533 (0.107-2.646)	0.441		
Lymphovascular invasion		1.037 (0.458-2.348)	0.931		
Perineural invasion		0.891 (0.379-2.093)	0.792		
SPARC	Stroma (-)	1.0		1.0	
	Stroma (+)	3.010 (1.360-6.662)	0.007	2.866 (1.293-6.355)	0.010