

Figure S1

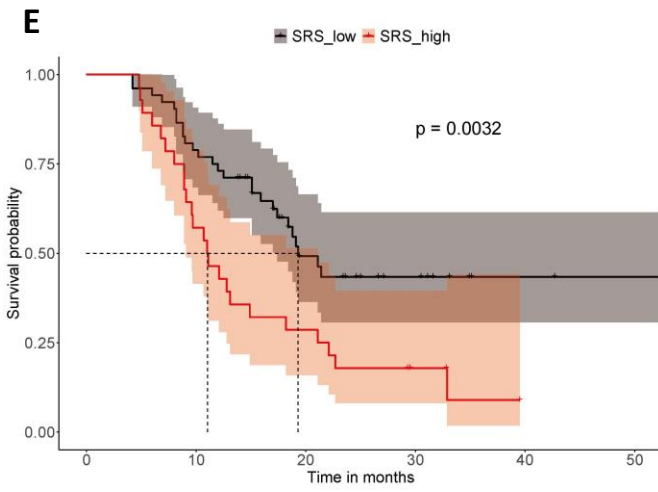
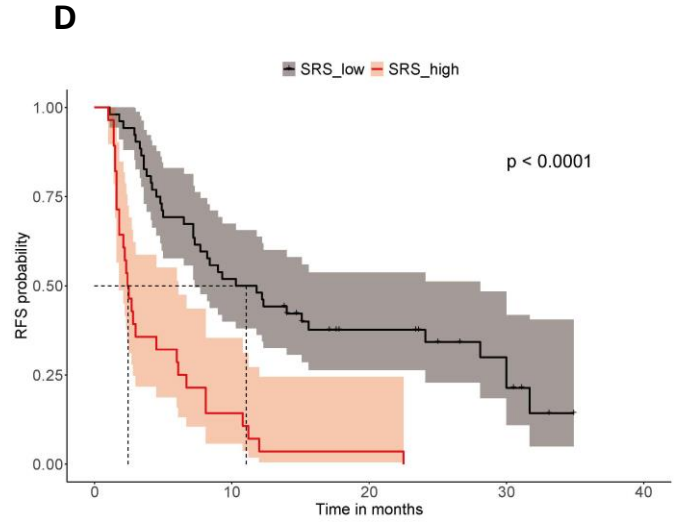
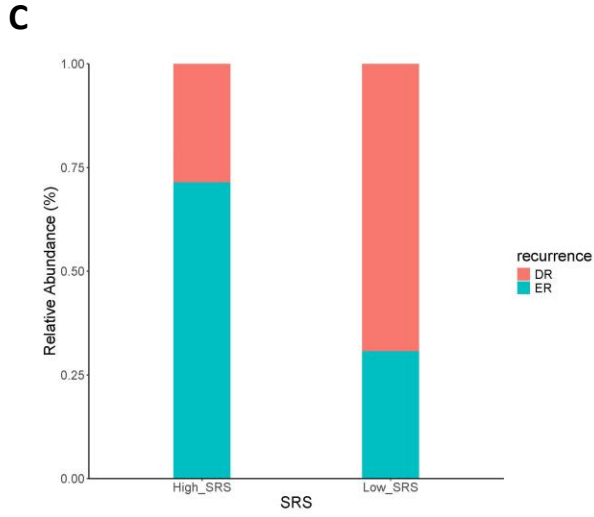
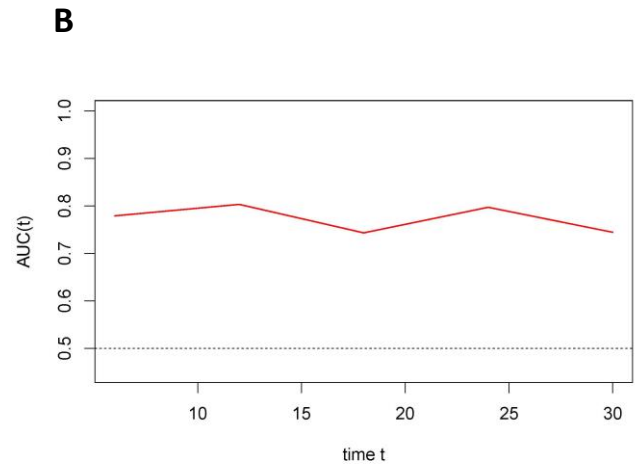
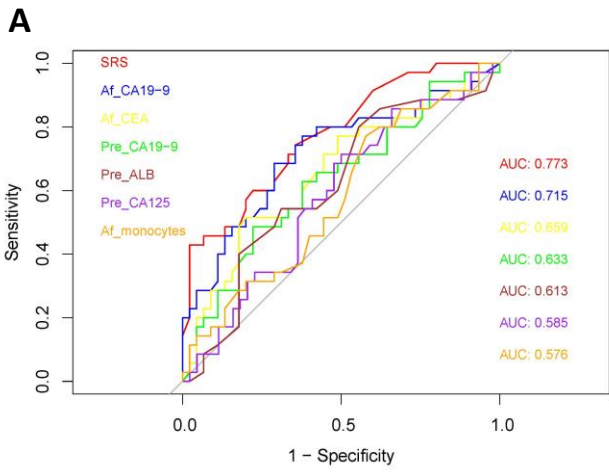


Figure S2

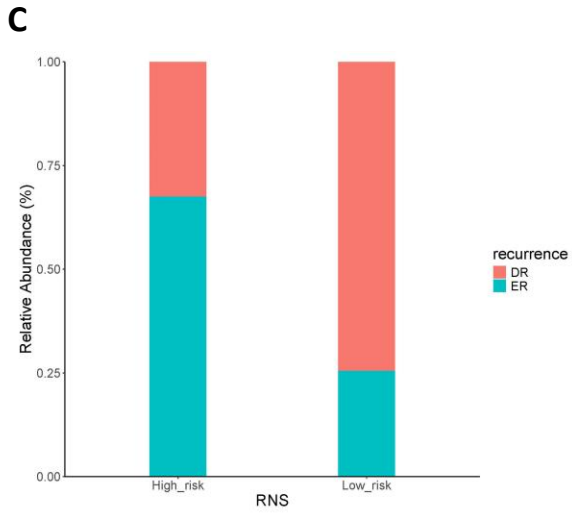
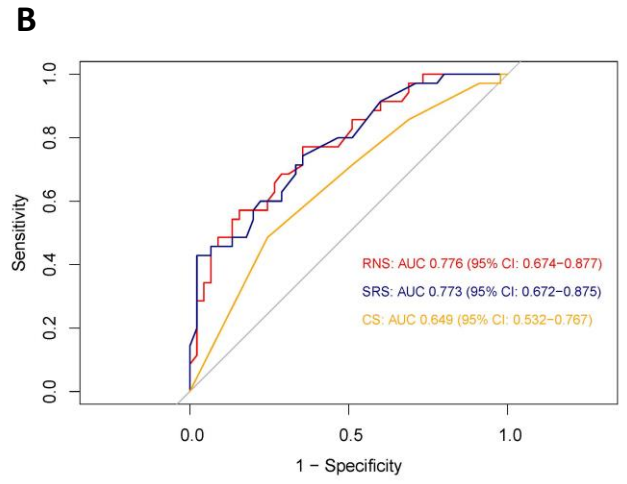
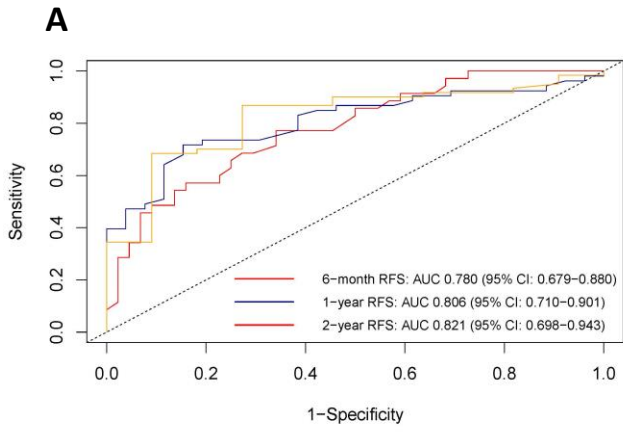


Figure S3

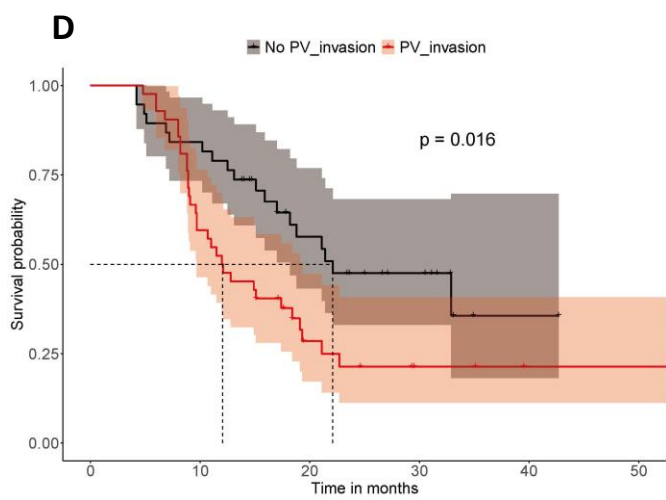
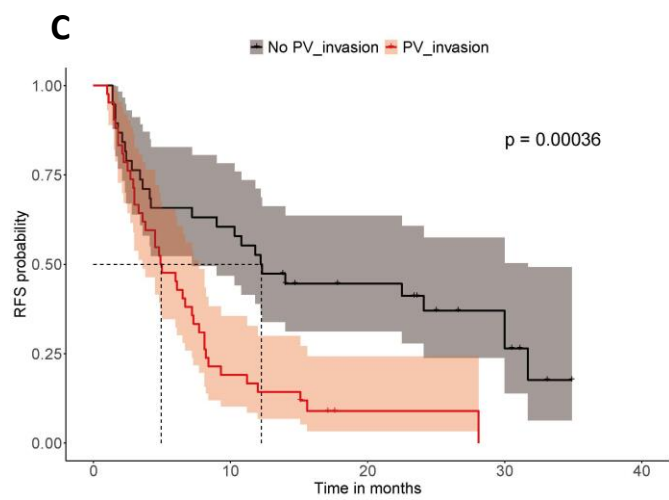
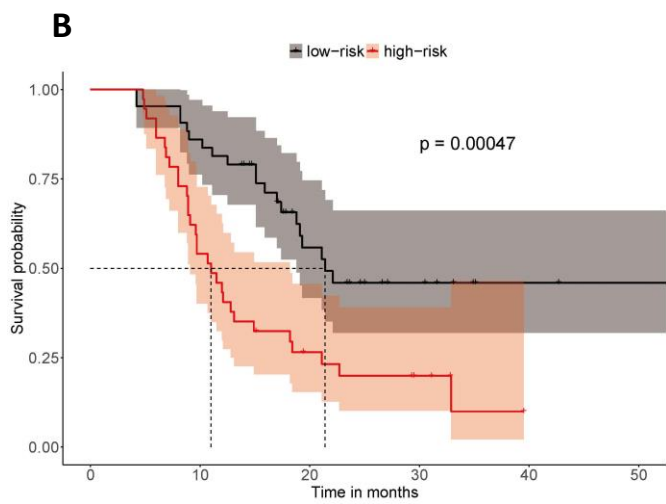
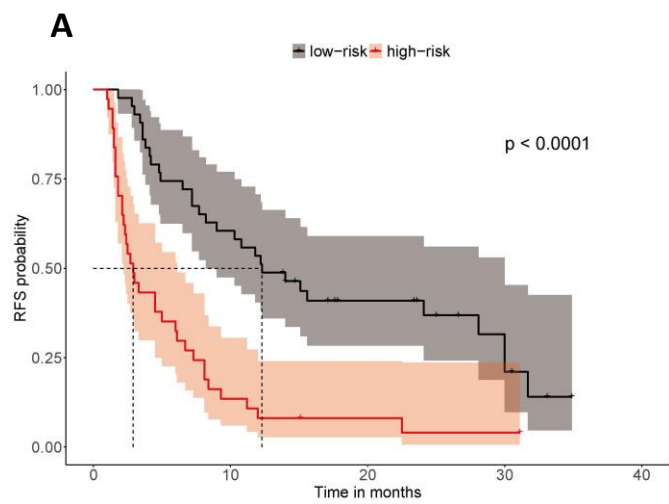


Figure S4

Supplementary Table 1 Predictive accuracy for early recurrence in validating cohort

Validating cohort	AUC	95%CI	P value
SRS	0.773	(0.672 - 0.875)	-
Af_CA19-9	0.715	(0.597 - 0.833)	0.183
Af_CEA	0.659	(0.536 - 0.782)	0.0481
Pre_CA19-9	0.633	(0.508 - 0.757)	0.0242
Pre_ALB	0.613	(0.487 - 0.74)	0.0367
Pre_CA125	0.585	(0.458 - 0.713)	0.0105
Af_monocytes	0.576	(0.449 - 0.704)	0.024
Af_lymphocytes	0.556	(0.424 - 0.688)	0.00882
Af_CA125	0.552	(0.420 - 0.684)	0.0066
Af_NAR	0.531	(0.399 - 0.664)	0.0104
Pre_CEA	0.522	(0.392 - 0.652)	0.00235
Pre_NLR	0.503	(0.374 - 0.633)	0.00224
Af_PAR	0.493	(0.358 - 0.628)	0.00184
Pre_monocytes	0.484	(0.352 - 0.616)	0.00143
Af_neutrophils	0.482	(0.351 - 0.612)	0.00059
Af_platelets	0.474	(0.343 - 0.605)	0.000759
Pre_LMR	0.470	(0.339 - 0.602)	0.0063
Af_LMR	0.466	(0.335 - 0.597)	0.00617
Pre_PLR	0.464	(0.332 - 0.596)	0.00228
Af_PLR	0.441	(0.311 - 0.571)	0.000307
Pre_platelets	0.439	(0.306 - 0.572)	0.00676
Af_NLR	0.434	(0.306 - 0.562)	0.0113
Pre_neutrophils	0.432	(0.304 - 0.560)	0.0102
Pre_lymphocytes	0.427	(0.293 - 0.560)	0.0214
Af_ALB	0.426	(0.294 - 0.558)	0.0136
Pre_NAR	0.409	(0.284 - 0.535)	0.021

Pre_PAR 0.409 (0.278 - 0.541) 0.0128

Supplementary Table 2 Time-dependent AUCs of SRS in validating cohort

Time intervals (months)	AUC	95%CI
6	0.7792208	(67.90 - 87.94)
12	0.8033382	(70.72 - 89.95)
18	0.7433604	(60.70 - 87.98)
24	0.7972468	(66.35 - 93.10)
30	0.7446049	(52.86 - 96.06)

Supplementary Table 3 Cut-off values

Variables	cut-off value
SRS	0.53
Af_CA199	25.20 U/ml
Af_CEA	2.92 ng/ml
Af_CA125	44.20 U/ml
Pre_ALB	39.00 g/L
Pre_PAR	3.96
Af_PLR	102.09
RNS	4.23

Supplementary Table 4 Correlations between SRS and clinicopathological variables

Variables	P value (Wilcox test)
SRS	-
Operation	0.317
Age	0.358
Gender	0.231
Smoking	0.443

Alcohol_consumption	0.841
BMI	0.95
DM	0.3
Pain	0.427
Weight_loss	0.102
Chemotherapy	0.866
Jaundice	0.922
Tumor_site	0.0068
Tumor_size	0.204
Tumor_differentiation	0.000738
Perineural_invasion	0.0801
Portal_vein_invasion	0.725
Lymphnode_metastasis	0.65
pTNM_stage	0.00527
Complications	0.919
