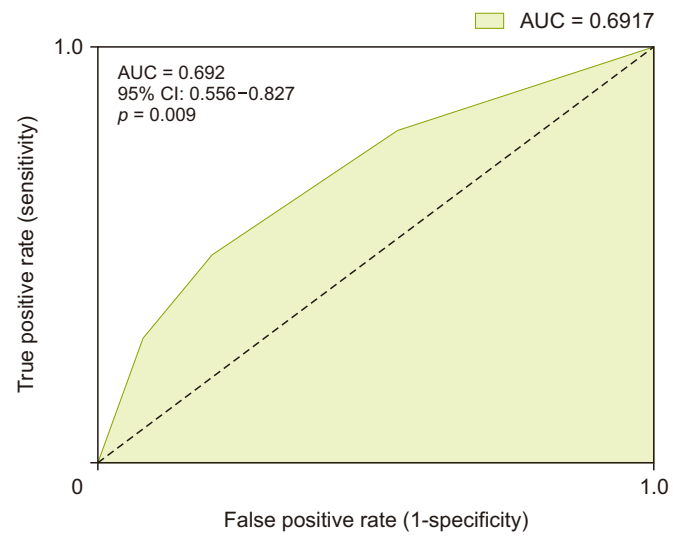


Supplementary Table 1. Multivariate Cox regression analysis for overall, disease-free and liver recurrence-free survivals

Variable	Hazard ratio	95% confidence interval	p-value
Overall survival			
Location of primary			
Right	2.151	0.875–5.288	0.095
Left	0.471	0.164–1.353	0.162
Rectum	Reference		
Clinical T stage			
T2	Reference		
T3	1.990	0.422–9.387	0.384
T4	7.308	1.264–42.444	0.026
Signet Histology	3.914	1.068–14.346	0.039
CEA > 200 ng/mL	11.903	3.416–41.474	0.000
Disease-free survival			
Location of the primary			
Right	1.648	0.943–2.881	0.079
Left	1.180	0.697–2	0.537
Rectum	Reference		
Clinical T stage			
T2	Reference		
T3	1.069	0.504–2.27	0.861
T4	2.764	1.104–6.921	0.029
Size of largest metastasis > 5 cm	2.235	1.215–4.109	0.009
pN stage			
N0	Reference		
N1	2.023	1.199–3.415	0.008
N2	1.977	1.059–3.693	0.032
Liver recurrence-free survival			
Location of the primary			
Right	1.289	0.562–2.955	0.552
Left	0.414	0.149–1.152	0.091
Rectum	Reference		
CEA > 200ng/ml	5.174	1.665–16.074	0.004
pN stage			
N0	Reference		
N1	2.368	1.098–5.108	0.027
N2	2.718	0.498–10.638	0.284
Comorbidity	1.920	0.947–3.895	0.070

Variables entered: age, sex, body mass index, hemoglobin, albumin, comorbidities, clinical T stage, paN stage, histologic subtype, neoadjuvant chemotherapy, location of primary tumour, distribution, number, size of liver metastasis, extrahepatic disease, CEA levels, and KRAS mutation. CEA, carcinoembryonic antigen; pN stage, pathological N stage.



Supplementary Fig. 1. Receiver operating characteristic curve for the prediction model. AUC, area under the ROC curve; CI, confidence interval.