

## Supplementary

**Table S1** Risk factors associated with long-term overall survival of patients with ICC in AJCC T1–2 stage

Characteristics	Univariate			Multivariable		
	HR	95% CI	P value	HR	95% CI	P value
Old age	0.99	0.66–1.48	0.956			
Male gender	0.81	0.57–1.16	0.248			
Smoking	1.00	0.70–1.42	0.985			
Drinking	1.32	0.92–1.90	0.136			
Diabetes	1.22	0.77–1.95	0.394			
Hypertension	1.08	0.72–1.61	0.709			
Liver cirrhosis	1.15	0.80–1.66	0.439			
AFP >400 ng/mL	1.34	0.55–3.28	0.519			
CA19-9 >40 U/mL	1.22	0.87–1.72	0.245			
CEA >5 ng/mL	1.25	0.83–1.87	0.285			
HBV(+)	1.37	0.98–1.93	0.066			
HCV(+)	1.31	0.76–2.23	0.330			
Tumor size, cm						
Diameter ≤5		Reference			Reference	
Diameter >5	1.68	1.19–2.36	0.003	1.60	1.13–2.26	0.008
Multiple tumors	1.46	1.04–2.06	0.031	1.30	0.91–1.86	0.148
Stone history	0.82	0.38–1.75	0.600			
Nerve invasion	1.33	0.70–2.54	0.385			
Vascular invasion	1.55	1.07–2.25	0.020	1.42	0.97–2.07	0.074
Liver steatosis	1.06	0.59–1.92	0.843			
PAI	1.81	1.29–2.55	0.001	1.73	1.22–2.44	0.002
Liver schistosome	0.57	0.23–1.39	0.216			
Poor differentiation	1.08	0.65–1.80	0.759			

ICC, intrahepatic cholangiocarcinoma; AJCC, American Joint Committee on Cancer; HR, hazard ratio; CI, confidence interval; AFP, alpha fetoprotein; CA19-9, carbohydrate antigen 19-9; CEA, carcinoembryonic antigen; HBV, hepatitis B virus; HCV, hepatitis C virus; PAI, portal area inflammation.

**Table S2** Risk factors associated with recurrence-free survival of patients with ICC in AJCC T1–2 stage

Characteristics	Univariate			Multivariable		
	HR	95% CI	P value	HR	95% CI	P value
Old age	1.11	0.78–1.58	0.574			
Male gender	1.01	0.73–1.40	0.954			
Smoking	0.93	0.67–1.28	0.638			
Drinking	1.03	0.73–1.45	0.867			
Diabetes	1.17	0.77–1.78	0.464			
Hypertension	1.24	0.87–1.77	0.229			
Liver cirrhosis	1.12	0.80–1.57	0.493			
AFP >400 ng/mL	1.89	0.83–4.28	0.129			
CA19-9 >40 U/mL	1.13	0.83–1.53	0.446			
CEA >5 ng/mL	1.32	0.91–1.91	0.144			
HBV(+)	1.31	0.97–1.78	0.081			
HCV(+)	0.92	0.53–1.59	0.766			
Tumor size, cm						
Diameter ≤5		Reference			Reference	
Diameter >5	1.47	1.09–2.00	0.013	1.46	1.08–1.98	0.015
Multiple tumors	1.27	0.92–1.75	0.140			
Stone history	0.86	0.45–1.63	0.639			
Nerve invasion	1.35	0.75–2.43	0.318			
Vascular invasion	1.24	0.87–1.77	0.227			
Liver steatosis	1.37	0.82–2.30	0.229			
PAI	1.58	1.16–2.15	0.004	1.56	1.15–2.13	0.005
Liver schistosome	0.69	0.34–1.41	0.312			
Poor differentiation	1.05	0.67–1.66	0.826			

ICC, intrahepatic cholangiocarcinoma; AJCC, American Joint Committee on Cancer; HR, hazard ratio; CI, confidence interval; AFP, alpha fetoprotein; CA19-9, carbohydrate antigen 19-9; CEA, carcinoembryonic antigen; HBV, hepatitis B virus; HCV, hepatitis C virus; PAI, portal area inflammation.