

Supplementary Table 1. Risk factors for hepatocellular carcinoma recurrence in all patients by univariate analysis

Risk factor	OR (95% CI)	P-value
Group 1 status	2.475 (1.065–5.747)	0.035
Male sex	1.030 (0.465–2.278)	0.942
Age	1.019 (0.937–1.109)	0.656
WBCs	1.049 (0.862–1.276)	0.636
Hemoglobin	0.973 (0.799–1.185)	0.784
Platelet	0.997 (0.992–1.003)	0.318
Total bilirubin	0.995 (0.983–1.007)	0.430
AST	1.001 (1.001–1.002)	0.001
ALT	1.002 (1.001–1.003)	<0.001
INR	15.246 (1.952–119.070)	0.009
Albumin	0.298 (0.123–0.725)	0.008
Creatinine	2.367 (1.204–4.654)	0.013
CRP	1.055 (0.701–1.587)	0.797
ICG-R15	1.043 (0.993–1.094)	0.092
ALBI grade		
1	1 (1)	0.369
2	1.651 (0.803–3.392)	0.173
3	1.574 (0.366–6.763)	0.542
APRI > 1.0	3.088 (1.477–6.480)	0.003
AFP > 40 ng/mL	2.120 (1.043–4.308)	0.038
PIVKA-II > 75 mAU/mL	1.539 (0.687–3.449)	0.295
Extent of operation (major liver resection)	0.664 (0.332–1.329)	0.664
Anatomical liver resection	0.541 (0.275–1.062)	0.074
Laparoscopic liver resection	1.317 (0.634–2.734)	0.460
Operation time	1.001 (0.997–1.005)	0.532
Intraoperative RBC transfusion	0.757 (0.181–3.171)	0.704
Blood loss during operation	1.000 (0.998–1.001)	0.540
Hospitalization	1.017 (0.984–1.052)	0.319
Tumor size	0.984 (0.882–1.098)	0.776
Tumor grade 3 or 4	0.665 (0.234–1.889)	0.444
Encapsulation	1.106 (0.456–2.681)	0.824
Microvascular invasion	0.989 (0.495–1.975)	0.975
PVTT	3.800 (0.892–16.194)	0.071
Satellite nodule	19.911 (6.502–60.970)	<0.001
Free resection margin	1.004 (0.969–1.041)	0.820
Cirrhosis	1.060 (0.516–2.178)	0.874

OR, odds ratio; CI, confidence interval; INR, international normalized ratio; ICG-R15, indocyanine green at 15 minutes; ALBI, albumin-bilirubin; APRI, AST to platelet ratio index; AFP, alpha-fetoprotein; PIVKA-II, proteins induced by vitamin K absence or antagonist-II; PVTT, portal vein tumor thrombosis.

Group 1, the patients who underwent liver resection before 2016 (n = 68); group 2, the patients who underwent liver resection during or after 2016 (n = 62).