

**Supplementary Table 3.** Risk factors for HCC recurrence and mortality in cirrhotic patients by univariate analysis

Variable	HCC recurrence		Mortality	
	OR (95% CI)	P-value	OR (95% CI)	P-value
Female sex	1.099 (0.516–2.339)	0.807	0.739 (0.273–1.999)	0.551
Age	1.013 (0.979–1.048)	0.449	0.989 (0.940–1.040)	0.663
Anatomical resection	0.684 (0.348–1.343)	0.270	1.592 (0.700–3.621)	0.268
Operation extent, major	0.608 (0.236–1.566)	0.303	1.528 (0.641–3.646)	0.339
HCV RNA viremia	0.636 (0.265–1.533)	0.313	0.285 (0.066–1.240)	0.094
ICG-R15	0.971 (0.933–1.012)	0.161	1.005 (0.967–1.045)	0.800
Tumor size	1.049 (0.894–1.232)	0.556	1.162 (0.999–1.352)	0.052
Encapsulation, complete	0.539 (0.219–1.325)	0.178	0.806 (0.307–2.112)	0.660
Microvascular invasion	0.907 (0.436–1.888)	0.795	0.972 (0.383–2.466)	0.953
Free resection margin	1.003 (0.978–1.029)	0.810	0.998 (0.970–1.027)	0.893
Laparoscopic liver resection	0.464 (0.202–1.063)	0.070	0.488 (0.140–1.701)	0.260
Operation time	1.001 (0.997–1.004)	0.607	1.001 (0.997–1.004)	0.607
Intraoperative RBC transfusion	7.118 (1.880–26.955)	0.004	7.118 (1.880–26.955)	0.004
Estimated blood loss	1.001 (0.999–1.002)	0.449	1.001 (0.999–1.002)	0.449
Liver stiffness measurement	1.022 (0.957–1.092)	0.516	1.022 (0.957–1.092)	0.516
Hospitalization	0.995 (0.978–1.012)	0.533	1.023 (1.010–1.038)	0.001
Antiviral therapy	0.576 (0.282–1.173)	0.128	0.226 (0.067–0.764)	0.017
FIB-4 grade				
1	1	0.284	1	0.512
2	0.554 (0.256–1.200)	0.134	0.624 (0.197–1.970)	0.421
3	0.927 (0.411–2.089)	0.854	1.041 (0.319–3.394)	0.947
APRI, >1	0.867 (0.446–1.683)	0.673	0.643 (0.263–1.574)	0.334
ALBI grade				
1	1	0.570	1	0.746
2	0.703 (0.344–1.458)	0.349	0.718 (0.307–1.679)	0.444
3	0.623 (0.146–2.661)	0.523		
Tumor grade, 3 or 4	2.319 (1.040–5.170)	0.040	2.099 (0.894–4.926)	0.088
$\alpha$ -FP, >40 ng/mL	1.493 (0.718–3.105)	0.284	1.515 (0.603–3.808)	0.377
PIVKA-II, >75 mAU/mL	1.095 (0.437–2.745)	0.847	0.846 (0.182–3.933)	0.831

HCC, hepatocellular carcinoma; OR, odds ratio; CI, confidence interval; ICG-R15, indocyanine green retention rate at 15 minutes; FIB-4, fibrosis-4; APRI, AST-to-platelet ratio index; ALBI, albumin-bilirubin; PIVKA-II, protein induced by vitamin K absence II.