

Figure S1 Missing value distribution.

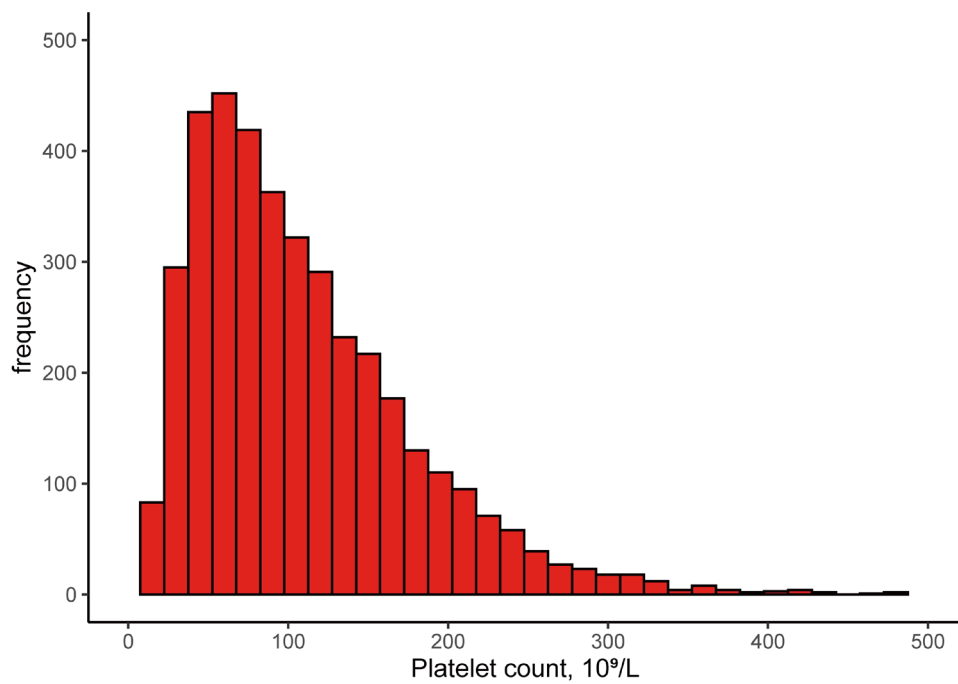
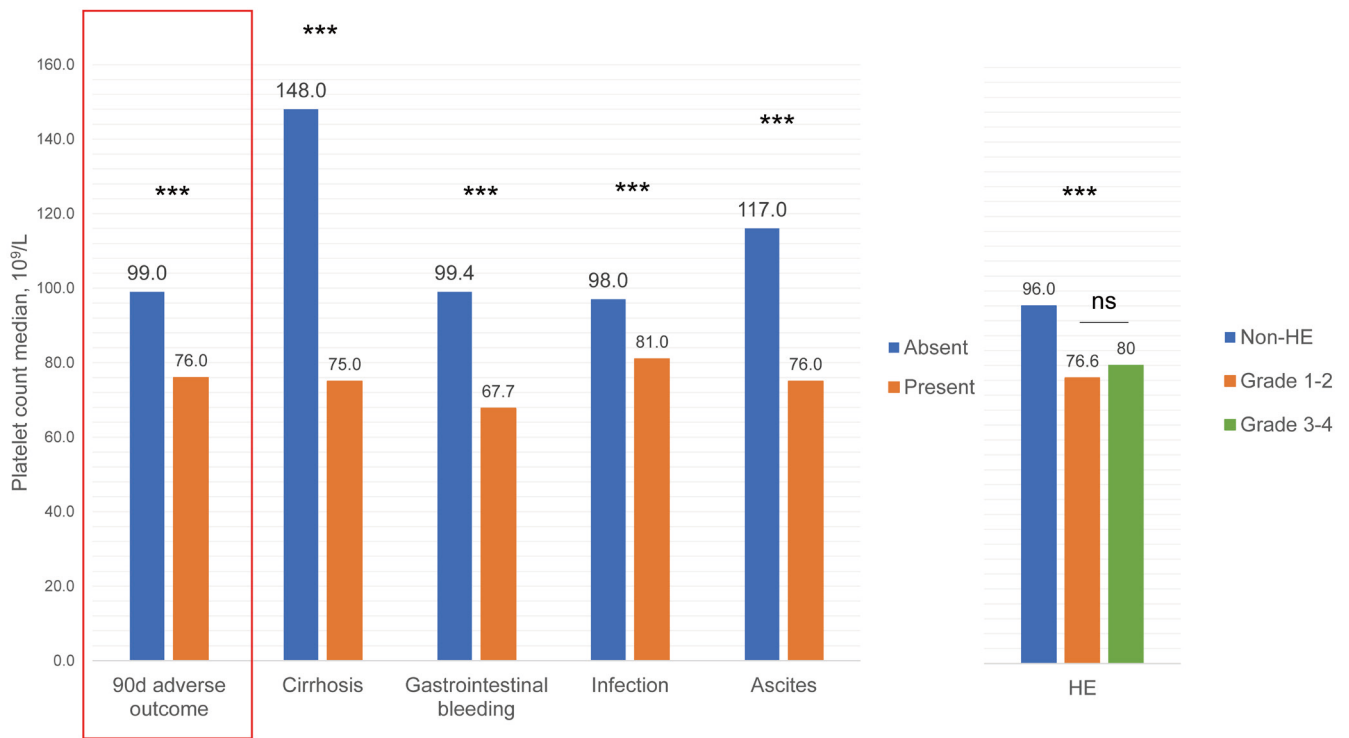


Figure S2 Platelet count frequency.



***p<0.001, ns: non-significant

Figure S3 Median Platelet count across acute decompensation subgroups.

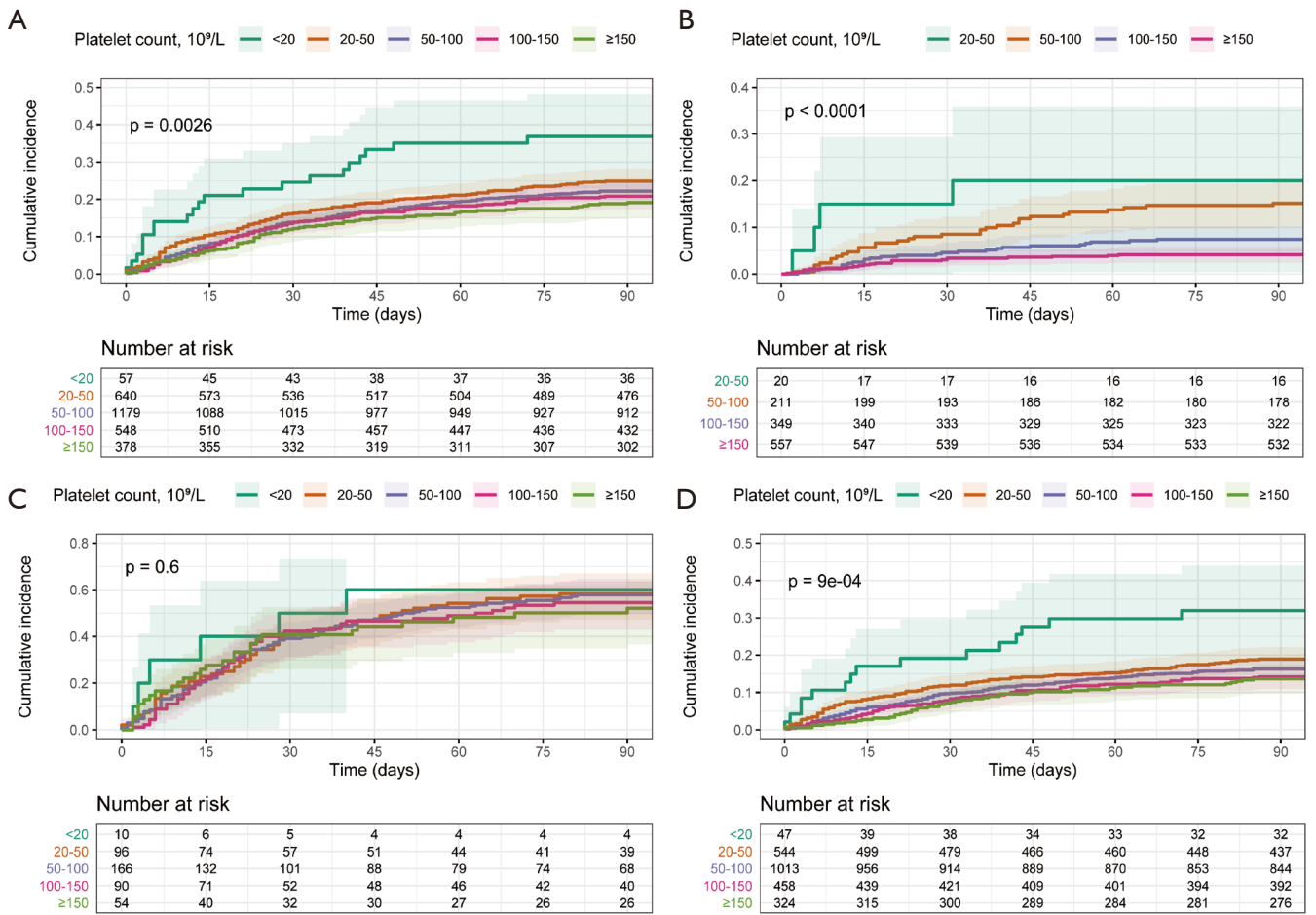


Figure S4 Kaplan-Meier graph of 90-day adverse outcome. A Patients with cirrhosis. B Patients without cirrhosis. C Patients with ACLF. D Patients without ACLF.

Table S1 Univariate and multivariate analysis of 90-day adverse outcome (Patients with ACLF and non-ACLF)

Variables, 10 ⁹ /L	90-day adverse outcome, n (%)	PLT median, 10 ⁹ /L	Unadjusted model	Model 3 ^a
			Odds ratio (95% Confidence interval)	
ACLF patients	243(58.4)	80.0		
PLT<20	6(60.0)	15.0	1.29(0.33–5.11)	
20≤PLT<50	57(59.4)	36.0	1.26(0.64–2.47)	
50≤PLT<100	98(59.0)	73.5	1.24(0.67–2.30)	
100≤PLT<150	53(58.9)	119.5	1.23(0.63–2.44)	
PLT≥150	29(53.7)	170.5	1 [Reference]	
P value for trend ^b			0.540	
PLT (Continuous- per 10×10 ⁹ /L decrease)			1.01(0.97–1.05)	
Non-ACLF patients	398(16.7)	74.0		
PLT<20	15(31.9)	15.0	2.98(1.50–5.95)	3.35(1.55–7.25)
20≤PLT<50	105(19.3)	38.0	1.52(1.04–2.23)	1.83(1.16–2.86)
50≤PLT<100	168(16.6)	70.0	1.27(0.88–1.81)	1.37(0.91–2.06)
100≤PLT<150	66(14.4)	119.5	1.07(0.71–1.62)	1.12(0.71–1.77)
PLT≥150	44(13.6)	196.0	1 [Reference]	1 [Reference]
P value for trend ^b			0.005	0.002
PLT (Continuous- per 10×10 ⁹ /L decrease)			1.01(0.99–1.03)	1.01(0.99–1.03)

Abbreviations: ACLF, acute-on-chronic liver failure; PLT, platelet count; ALT, aspartate aminotransferase; WBC, white blood cell; INR, international normalized ratio; AD, acute decompensation; HE, hepatic encephalopathy; Model 1: adjusted for age, sex, cirrhosis, and etiology; Model 2: adjusted for model 1 plus laboratory variables (ALT, WBC, hemoglobin, sodium, total bilirubin, INR, and creatinine); ^aModel 3: adjusted for model 2 plus AD (gastrointestinal bleeding, infection, ascites, and HE); ^bTest for trend based on variable containing median value for each group.

Table S2 Univariate and multivariate sensitivity analysis of 90-day adverse outcome

Variables, 10 ⁹ /L	90-day adverse outcome, n (%)	PLT median, 10 ⁹ /L	Odds ratio (95% Confidence interval)			
			Unadjusted model	Model 1 ^a	Model 2 ^b	Model 3 ^c
All patients	728(18.5)	94.0				
PLT<20	21(36.8)	15.0	5.04(2.83–8.98)	2.98(1.66–5.36)	3.06(1.54–6.05)	3.06(1.55–6.06)
20≤PLT<50	166(25.2)	37.7	2.90(2.21–3.82)	1.76(1.31–2.35)	1.97(1.39–2.80)	1.90(1.33–2.69)
50≤PLT<100	298(21.4)	72.0	2.36(1.84–3.02)	1.57(1.21–2.04)	1.51(1.12–2.05)	1.48(1.09–2.01)
100≤PLT<150	246(16.3)	121.0	1.68(1.28–2.21)	1.38(1.04–1.83)	1.20(0.87–1.65)	1.20(0.87–1.67)
PLT≥150	97(10.4)	194.0	1 [Reference]	1 [Reference]	1 [Reference]	1 [Reference]
P value for trend ^d			<0.001	<0.001	<0.001	<0.001
PLT (Continuous- per 10×10 ⁹ /L decrease)			1.05(1.04–1.07)	1.02(1.01–1.04)	1.02(1.00–1.04)	1.02(1.00–1.04)
Cirrhosis patients 641(22.9)		75.0				
PLT<20	21(36.8)	15.0	2.44(1.34–4.42)	2.47(1.36–4.49)	2.78(1.38–5.60)	2.79(1.38–5.64)
20≤PLT<50	162(25.3)	37.0	1.42(1.04–1.93)	1.42(1.04–1.94)	1.75(1.19–2.58)	1.70(1.15–2.51)
50≤PLT<100	266(22.6)	71.0	1.22(0.91–1.63)	1.21(0.90–1.61)	1.31(0.92–1.84)	1.28(0.90–1.81)
100≤PLT<150	119(21.7)	119.5	1.16(0.84–1.61)	1.16(0.84–1.60)	1.08(0.92–1.84)	1.08(0.74–1.58)
PLT≥150	73(19.3)	192.0	1 [Reference]	1 [Reference]	1 [Reference]	1 [Reference]
P value for trend ^d			0.009	0.009	0.003	0.002
PLT (Continuous- per 10×10 ⁹ /L decrease)			1.01(1.00–1.03)	1.01(1.00–1.03)	1.02(1.00–1.03)	1.01(1.00–1.03)
Non-cirrhosis patients 87(7.7)		148.0				
PLT<20	0					
20≤PLT<50	4(20.0)	41.5	5.55(1.72–17.88)	4.27(1.31–13.98)	5.63(1.66–19.08)	5.17(2.53–10.56)
50≤PLT<100	32(15.2)	82.0	3.97(2.28–6.92)	3.63(2.07–6.35)	2.67(1.40–5.11)	2.35(1.19–4.63)
100≤PLT<150	27(7.7)	125.0	1.86(1.06–3.28)	1.84(1.04–3.25)	1.58(0.83–3.01)	1.63(0.84–3.17)
PLT≥150	24(4.3)	196.0	1 [Reference]	1 [Reference]	1 [Reference]	1 [Reference]
P value for trend ^d			<0.001	<0.001	<0.001	0.004
PLT (Continuous- per 10×10 ⁹ /L decrease)			1.09(1.05–1.14)	1.08(1.04–1.13)	1.06(1.02–1.11)	1.05(1.01–1.10)

Abbreviations: PLT, platelet count; ALT, aspartate aminotransferase; WBC, white blood cell; INR, international normalized ratio; AD, acute decompensation; HE, hepatic encephalopathy; ^aModel 1: adjusted for age, sex, cirrhosis, and etiology; ^bModel 2: adjusted for model 1 plus laboratory variables (ALT, WBC, hemoglobin, sodium, total bilirubin, INR, and creatinine); ^cModel 3: adjusted for model 2 plus AD (gastrointestinal bleeding, infection, ascites, and HE); ^dTest for trend based on variable containing median value for each group

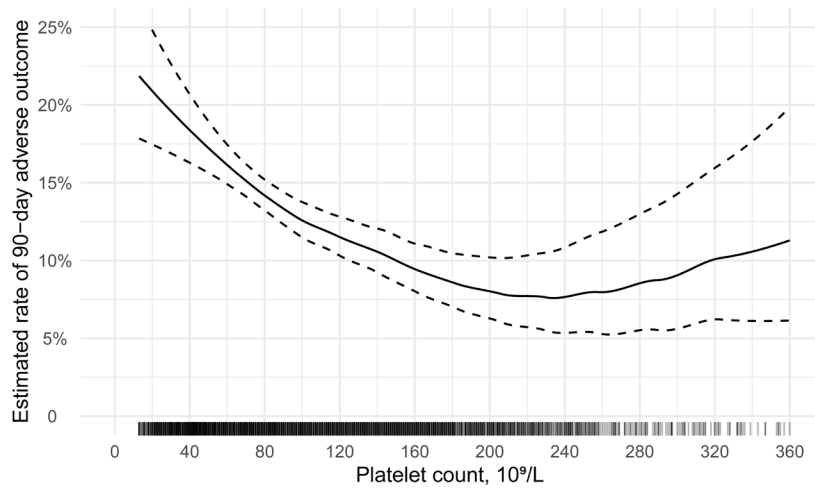


Figure S5 Association of platelet count and the incidence of 90-day adverse outcome in adjusted model 3; Model 1: adjusted for age, sex, cirrhosis, and etiology; Model 2: adjusted for model 1 plus laboratory variables (ALT, WBC, hemoglobin, sodium, total bilirubin, INR, and creatinine); Model 3: adjusted for model 2 plus AD (gastrointestinal bleeding, infection, ascites, and HE).