

**Supplementary Table 1 Comparison of baseline data between modeling and verification cohorts, mean ± SD/*n* (%)**

Index	Total cases ( <i>n</i> = 1070)	Modeling queue ( <i>n</i> = 749)	Verification queue ( <i>n</i> = 321)	<i>t</i> / $\chi^2$ / <i>Z</i>	<i>P</i> value
Allergy history	66 (6.17)	44 (5.87)	22 (6.85)	0.372	0.542
Disease history					
Hypertension	50 (4.67)	41 (5.47)	9 (2.80)	1.546	0.462
Diabetes	43 (4.02)	38 (5.07)	5 (1.56)		
Heart disease	33 (3.08)	30 (4.01)	3 (0.93)		
Operation history	154 (14.39)	99 (13.22)	55 (17.13)	2.797	0.094
Smoking history	128 (11.96)	95 (12.68)	33 (10.28)	1.232	0.267
Drinking history	135 (12.62)	90 (12.02)	45 (14.02)	0.817	0.366
Family history of disease	801 (74.86)	572 (76.37)	229 (71.34)	3.020	0.082
Treatment regimen					
Monotherapy	861 (80.47)	623 (83.18)	258 (80.37)	1.215	0.270
Combination therapy	209 (19.53)	126 (16.82)	63 (19.63)		
HDLC (mmol/L)	1.26±0.37	1.25±0.37	1.26±0.37	0.405	0.686
LDL (mmol/L)	2.78±0.83	2.76±0.84	2.84±0.82	1.438	0.151
LP(A) (mg/L)	1.18±0.42	1.18±0.23	1.20±0.69	0.707	0.480

LP(B) (mg/L)	1.94±0.25	0.94±0.23	0.94±0.25	0.000	1.000
PAB (mg/L)	182.37±75.26	177.31±143.77	194.17±87.25	1.952	0.051
CK (U/L)	93.52±121.06	93.37±136.02	93.87±75.56	0.062	0.951
LAP (U/L)	37.72±16.45	37.89±14.95	37.31±19.56	0.528	0.598
TG (mmol/L)	1.29±0.72	1.30±0.74	1.28±0.65	0.420	0.675
DBIL (µmol/L)	9.95±21.32	10.24±21.46	9.27±21.02	0.682	0.496
GGT (U/L)	98.37±160.94	96.87±130.72	101.87±215.80	0.466	0.642
HBsAg (IU/mL)	237.08±62.24	236.11±63.74	239.33±58.61	0.775	0.438
HBsAb (logU/mL)	1.94±11.68	1.86±10.18	2.13±14.62	0.346	0.729
Anti -HBe (IU/mL)	11.21±17.89	11.39±18.19	10.81±17.22	0.486	0.627
HBcAb-IgG (S/CO)	8.17±4.21	8.26±4.25	7.98±4.13	0.996	0.320
BUN (mmol/L)	4.82±1.36	4.74±2.57	5.01±1.14	1.807	0.071
TC (mmol/L)	4.35±0.90	4.33±0.91	4.40±0.87	1.168	0.243
TB (µmol/L)	19.19±26.12	19.69±26.27	18.01±25.75	0.964	0.335
TBA (µmol/L)	20.43±36.58	21.68±38.52	17.53±31.48	1.702	0.089

Alb: Albumin; LDH: Lactate dehydrogenase; CHE: Cholinesterase; WBC: White blood cell; RBC: Red blood cell; HGB: Hemoglobin;  
 ANC: Absolute neutrophil count; ALC: Absolute lymphocyte count; PTA: Prothrombin activity; GOT: Aspartate aminotransferase;

GPT: Alanine aminotransferase; HBeAg: Hepatitis B E antigen; INR: International normalized ratio; PT: Plasma prothrombin time; HA: Hyaluronic acid; LN: Laminin; PLT: Platelet count.

**Supplementary Table 2 Comparison of clinical data between the hepatitis group and the hepatitis cirrhosis group in the modeling cohort, mean  $\pm$  SD**

index	Total cases (n=749)	Hepatitis group (n=688)	Hepatitis group (n=61)	Hepatitis cirrhosis	t/ $\chi^2$ /Z	P
TB ( $\mu\text{mol/L}$ )	19.69 $\pm$ 26.27	19.76 $\pm$ 26.99	18.95 $\pm$ 16.20		0.231	0.818
TBA ( $\mu\text{mol/L}$ )	21.68 $\pm$ 38.52	21.47 $\pm$ 39.14	24.04 $\pm$ 30.79		0.499	0.618
BUN (mmol/L)	4.74 $\pm$ 1.27	4.75 $\pm$ 1.26	4.68 $\pm$ 1.39		0.412	0.680
TC (mmol/L)	4.33 $\pm$ 0.91	4.33 $\pm$ 0.91	4.35 $\pm$ 0.86		0.165	0.869
HDLC (mmol/L)	1.25 $\pm$ 0.37	1.25 $\pm$ 0.37	1.27 $\pm$ 0.37		0.405	0.686
LDL (mmol/L)	2.76 $\pm$ 0.84	2.75 $\pm$ 0.84	2.84 $\pm$ 0.75		0.809	0.419
LP(A) (mg/L)	1.18 $\pm$ 0.23	1.18 $\pm$ 0.23	1.21 $\pm$ 0.23		0.976	0.329
LP(B) (mg/L)	0.94 $\pm$ 0.23	0.94 $\pm$ 0.25	0.92 $\pm$ 0.21		0.606	0.545
PAB (mg/L)	177.31 $\pm$ 73.77	178.10 $\pm$ 74.10	168.48 $\pm$ 69.99		0.976	0.329
CK (U/L)	93.37 $\pm$ 136.02	93.20 $\pm$ 141.03	95.26 $\pm$ 54.00		0.113	0.910

LAP (U/L)	37.89±14.95	37.90±15.14	37.88±12.63	0.010	0.992
TG (mmol/L)	1.30±0.74	1.31±0.75	1.21±0.59	1.014	0.311
DBIL (μmol/L)	10.24±21.46	10.33±22.02	9.20±13.70	0.394	0.694
GGT (U/L)	96.87±130.72	95.75±131.54	109.51±121.29	0.788	0.431
HBsAg (IU/mL)	236.11±63.74	236.82±62.89	228.16±72.75	1.017	0.310
HBsAb (logU/mL)	1.86±10.18	1.92±10.57	1.14±3.26	0.574	0.566
Anti-HBe (IU/mL)	11.39±18.19	11.84±21.47	6.22±21.53	1.959	0.051
HBcAb-IgG (S/CO)	8.26±4.25	8.31±4.19	7.67±4.83	1.129	0.259

Alb: Albumin; LDH: Lactate dehydrogenase; CHE: Cholinesterase; WBC: White blood cell; RBC: Red blood cell; HGB: Hemoglobin; ANC: Absolute neutrophil count; ALC: Absolute lymphocyte count; PTA: Prothrombin activity; GOT: Aspartate aminotransferase; GPT: Alanine aminotransferase; HBeAg: Hepatitis B E antigen; INR: International normalized ratio; PT: Plasma prothrombin time; HA: Hyaluronic acid; LN: Laminin; PLT: Platelet count.