

Effective analysis of antiviral treatment in patients with HBeAg-seropositive chronic hepatitis B with ALT <2 upper limits of normal: A multi-center retrospective cohort study

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Table S1 Comparison of characteristics of the 102 paired chronic HBV patients before and after therapy

Characteristics	Baseline (N=102)	48 weeks (N=102)	96 weeks (N=102)	p-value
ALT (U/L)	52.69 ± 24.91	26.81 ± 10.76	21.19 ± 10.12	< 0.001
AST (U/L)	43.97 ± 23.86	24.70 ± 7.26	21.93 ± 8.08	< 0.001
ALB (g/L)	44.67 ± 5.20	47.42 ± 8.50	47.61 ± 8.50	0.027
TBIL (μmol/L)	12.49 ± 5.67	13.17 ± 7.27	12.56 ± 6.46	0.119
DBIL (μmol/L)	4.34 ± 1.90	4.72 ± 3.10	4.50 ± 6.46	0.990
HBV DNA (log ₁₀ IU/mL)	6.53 ± 1.72	1.79 ± 1.89	1.27 ± 1.11	< 0.001
qHBsAg (log ₁₀ IU/mL)	3.67 ± 0.87	3.39 ± 0.81	3.26 ± 0.97	< 0.001
HBeAg (COI)	737.51 ± 637.49	404.50 ± 576.03	307.53 ± 495.34	< 0.001
Fibroscan (kPa)	8.30 ± 3.86	6.33 ± 2.16 ^a	6.17 ± 1.91 ^b	< 0.001

Notes: continuous variable are expressed as the mean ± SD.

Abbreviations: ALT, alanine aminotransferase; AST, aspartate aminotransferase; ALB, Albumin; TBIL, total bilirubin; DBIL, direct bilirubin; HBsAg, hepatitis B surface antigen; HBeAg, hepatitis B envelope antigen. ^a n=68 ^b n=38

Table S2. Logistics proportion hazard model for HBeAg seroclearance in HBeAg-positive CHB patients

Variable	Univariate Analysis		Multivariate Analysis	
	OR (95% CI)	p value	OR (95% CI)	p value
Age (years)	1.012 (0.976-1.059)	0.605		
Male vs. Female	1.013 (0.407-2.517)	0.978		
Treatment strategy				
ETV	reference			
TDF/TAF	0.560 (0.234-1.339)	0.192		
ALT (U/L)	1.002 (0.985-1.020)	0.804		
AST (U/L)	1.017 (0.999-1.035)	0.068	1.028 (0.975-1.085)	0.308
HBV DNA (log ₁₀ IU/mL)	0.949 (0.735-1.225)	0.688		
qHBsAg (log ₁₀ IU/mL)	0.755 (0.457-1.247)	0.272		
ALB (g/L)	0.945 (0.835-1.070)	0.371		

AFP (ng/mL)	1.056 (0.987-1.130)	0.116		
Fibroscan (kPa)	1.157 (1.017-1.317)	0.027	1.041 (0.993-1.092)	0.097

Abbreviations: ETV, entecavir; TDF, tenofovir disoproxil fumarate; TAF, tenofovir alafenamide; ALT, alanine aminotransferase; AST, aspartate aminotransferase; HBsAg, hepatitis B surface antigen; ALB, Albumin; AFP, alpha-fetoprotein.

Table S3 Performance of AST, HBV DNA and HBsAg levels in predicting virological response in HBeAg-positive CHB patients

Variables	cut-off value	Sensitivity	Specificity	PPV	NPV	PLR	NLR
AST	32.00	0.663	0.813	0.950	0.690	3.53	0.42
HBV DNA	7.92	0.814	0.688	0.933	0.687	2.60	0.27
HBsAg	4.63	0.965	0.813	0.965	0.813	5.15	0.04

Abbreviations: AST, aspartate aminotransferase; HBsAg, hepatitis B surface antigen; PPV, positive predictive value; NPV, negative predictive value; PLR, positive likelihood ratio; NLR, negative likelihood ratio.

Figure S1

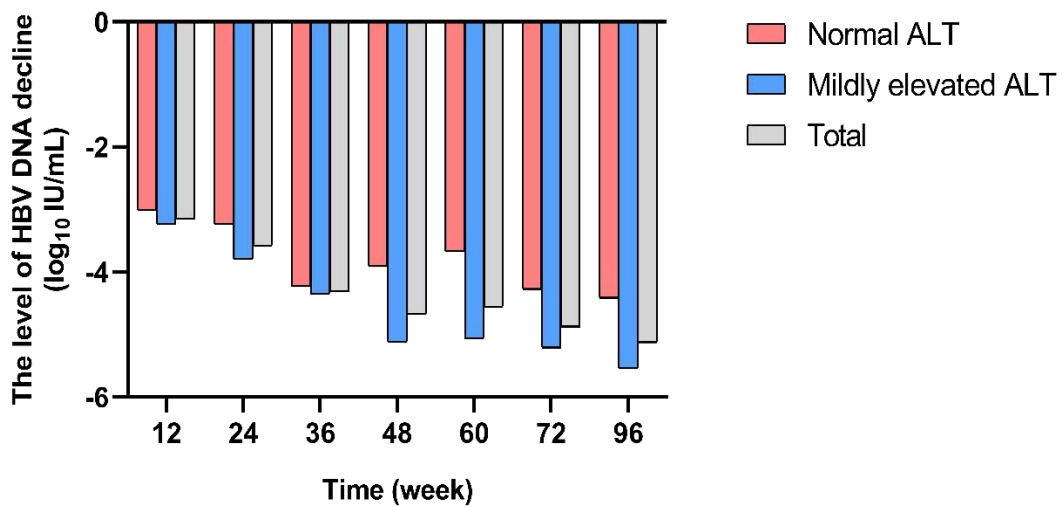


Figure S1 Hepatitis B virus (HBV) DNA decline of patients with normal or mildly elevated alanine aminotransferase (ALT) at each time point.