## **SUPPLEMENTARY TABLES**

Table S1. Baseline characteristics after inverse probability weighting

Characteristic	LAM/ETV-R group	LAM/ADV-R group	LAM/ETV/ADV-R group	P value <sup>*</sup>	
	( <i>n</i> =45)	( <i>n</i> =28)	(n=20)		
Age (years)	53 (32–71)	50 (23–68)	47 (29–67)	0.433	
Gender, male	32.2 (74.9)	14.8 (50.9)	10.4 (79.2)	0.063	
Serum HBV DNA $(\log_{10} IU/mL)^{\dagger}$	3.32 (0.87–7.37)	3.20 (1.88–6.71)	2.51 (2.02–8.23)	0.801	
Serum ALT (IU/L) <sup>†</sup>	25 (9–275)	29 (11–843)	26 (14–57)	0.441	
Serum creatinine (mg/dL) <sup>†</sup>	0.88 (0.53–1.26)	0.80 (0.53–1.31)	0.85 (0.54–1.14)	0.328	
HBeAg, positive	31.8 (74.0)	22.2 (76.4)	11.1 (83.8)	0.763	
Liver cirrhosis <sup>‡</sup>	12.0 (27.9)	7.5 (25.7)	2.5 (18.8)	0.805	
Lines of prior antiviral treatment	3 (1–5)	3 (2–5)	4 (3–5)	0.065	
Duration of previous treatment	16.9 (2.7–78.7)	15.4 (2.7–85.7)	18.2 (1.4–40.2)	0.507	
(months) <sup>†</sup>	10.3 (2.7 70.7)	13.7 (2.7 03.7)	10.2 (1.7 40.2)	0.007	

Time point of rescue therapy

Virologic breakthrough	18.4 (42.9)	8.3 (28.5)	2.3 (17.3)	0.170
Biochemical breakthrough	11.1 (25.8)	9.7 (33.6)	2.1 (15.6)	0.462

Note.—Unless otherwise indicated, data are number of patients and data in parentheses are percentages.

Abbreviations: LAM, lamivudine; ETV, entecavir; ADV, adefovir; HBV, hepatitis B virus; ALT, alanine aminotransferase; HBeAg, hepatitis B e antigen

 $<sup>^{*}</sup>$  Kruskal-Wallis test and  $\chi^{2}$  test (or the Fisher's exact test) were used to analyze the differences among the groups.

<sup>&</sup>lt;sup>†</sup> Data are medians, and data in parentheses are ranges.

<sup>&</sup>lt;sup>‡</sup> Liver cirrhosis was diagnosed when the platelet count was below 100,000/mm<sup>3</sup> and associated splenomegaly or esophageal-gastric varices were detected.

Table S2. Univariate and multivariate analysis of the clinical factors predictive of complete virologic suppression during rescue therapy after inverse probability weighting

Variable	Univariate analysis		Multivariate analysis	
	Hazard ratio	P value*	Adjusted hazard ratio	<i>P</i> value <sup>*</sup>
Age (per year)	1.016 (0.987–1.046)	0.271		
Baseline serum HBV DNA (per 1 log <sub>10</sub> IU/mL)	0.667 (0.566–0.785)	<0.001	0.676 (0.557–0.820)	<0.001
Baseline serum ALT (per IU/L)	0.992 (0.983–1.000)	0.045	1.000 (0.995–1.006)	0.914
HBeAg (positive versus negative)	0.628 (0.369–1.068)	0.086		
Liver cirrhosis (positive versus negative) <sup>†</sup>	1.438 (0.852–2.427)	0.174		
Time point of rescue therapy				
Virologic breakthrough (yes versus no)	1.308 (0.800-2.138)	0.284		
Biochemical breakthrough (yes versus no)	0.437 (0.236–0.807)	0.008	0.874 (0.401–1.904)	0.735
Drug resistance		0.510		
LAM/ETV-R versus LAM/ADV-R	0.846 (0.496–1.445)	0.541		
LAM/ETV-R versus LAM/ETV/ADV-R	0.690 (0.364–1.308)	0.255		

Note.—Data in parentheses are 95% Cls.

Abbreviations: HBV, hepatitis B virus; ALT, alanine aminotransferase; HBeAg, hepatitis B e antigen; LAM, lamivudine; ETV, entecavir; ADV, adefovir

<sup>\*</sup> P values were determined with Cox proportional hazards regression models. P < 0.05 indicated a significant difference.

<sup>&</sup>lt;sup>†</sup> Liver cirrhosis was diagnosed when the platelet count was below 100,000/mm<sup>3</sup> and associated splenomegaly or esophageal-gastric varices were detected.

## **SUPPLEMENTARY FIGURES**

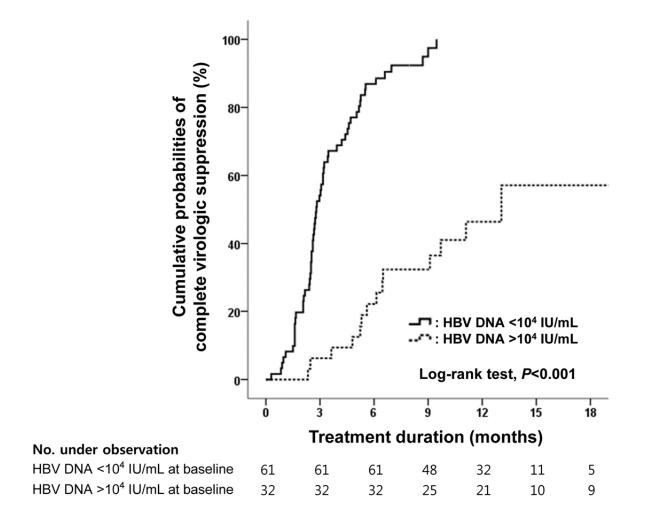
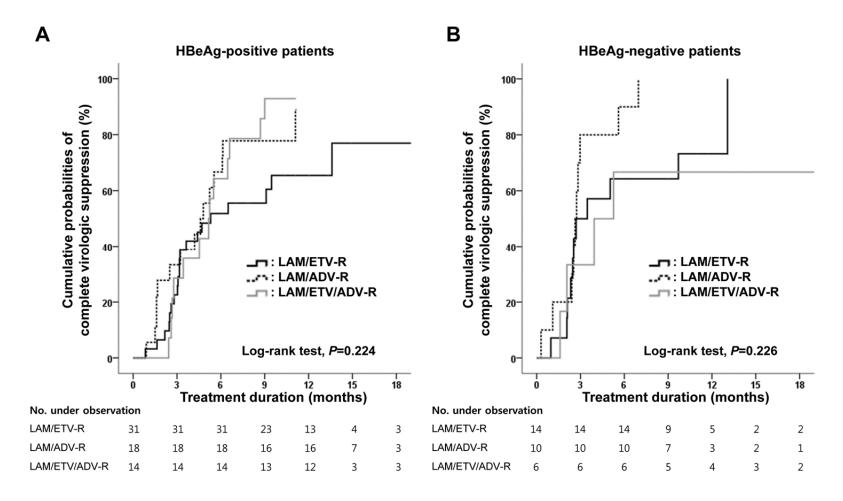


Fig. S1. Cumulative probability of complete virologic suppression during the rescue therapy. Cumulative probabilities of complete virologic suppression, undetectable levels of HBV DNA according to PCR assays, during the treatment period, are plotted for those with low ( $<10^4$  IU/mL), and high HBV DNA levels ( $>10^4$  IU/mL) at baseline.



**Fig. S2.** Cumulative probability of complete virologic suppression during the rescue therapy. Cumulative probabilities of complete virologic suppression are shown for each group. (A) Data for patients who were positive for HBeAg at baseline. (B) Data for patients who were negative for HBeAg at baseline.

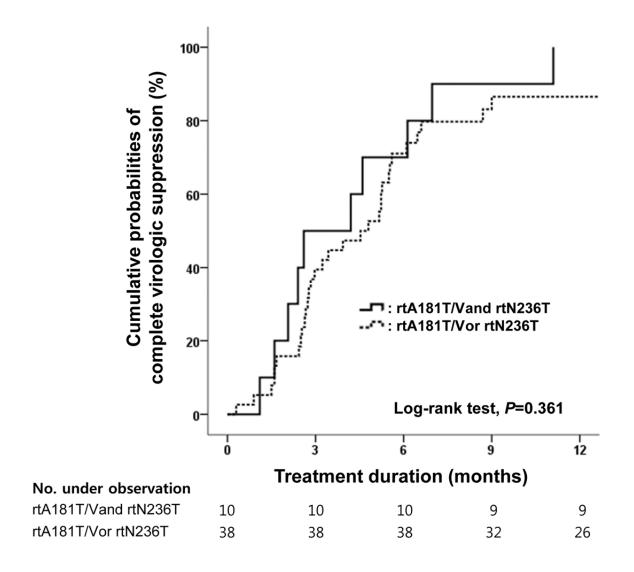


Fig. S3. Cumulative probability of complete virologic suppression in patients harboring substitutions associated with ADV-resistance at baseline. Cumulative probabilities of complete virologic suppression during the treatment period are shown according to amino acid substitution profiles.