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慢性B型肝炎患者停用韋立德(TAF)後復發的發生率和預測因子

Incidences and Predictors of Off-therapy Relapses after Cessation of Tenofovir Alafenamide in Patients with Chronic Hepatitis B

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BACKGROUND & AIMS

- Cessation of Nuc in patients with CHB is commonly followed by off-therapy relapse and knowledge about the relapse pattern for each NA is essential to inform clinical practice.
- In patients treated by TAF, however, the incidences and predictors of off-therapy relapse remained largely unknown.
- This study aims to evaluate the incidences of virological and clinical relapse among CHB patients after cessation of TAF and analyze associated predictors.

METHODS

- Multicenter retrospective cohort study
- Patients enrollment criteria: CHB patients who had received TAF for more than 12 months and discontinued the antiviral therapy with negative HBeAg and undetectable HBV viral load in serum at treatment cessation.
- Definition: Virological relapse was defined by HBV viral load >2000 IU/mL, and the clinical relapse was defined by VR in combination with an alanine aminotransferase > two times the upper limit of normal (with the conventional upper limit at 40 U/L).
- The incidences of VR and CR were estimated by the Kaplan Meier method and the associated risk factors were explored using the Cox proportional hazards model.

RESULTS

- From July 1, 2019 to February 1, 55 eligible patients were enrolled and the baseline characteristics were shown in **Table 1**.

Table 1: Characteristics of enrolled patients

	55 Patients
Age (at treatment end)	51.7 (44.4-60.9)
Male	43 (78.2%)
Pre-treatment status	
Viral load (log IU/mL)	5.5 (4.5-6.7)
Cirrhosis	
HBeAg(+)	18 (32.7%)
Initial Nuc	
ETV	17 (30.9%)
TDF	28 (50.9%)
TAF	8 (14.6%)
LdT	1 (1.8%)
LAM	1 (1.8%)
End of treatment status	
HBsAg (log IU/mL)	2.9 (2.4-3.2)
Total treatment duration (month)	46.9 (36.4-63.9)
Follow-up duration (month)	5.6 (2.8-11.3)

Continuous variables were expressed in median value with interquartile range (IQR)

Abbreviation:

CHB: chronic hepatitis B, CR: clinical relapse, ETV: entecavir, HBeAg: hepatitis B e antigen, HBsAg: hepatitis B surface antigen, LAM: lamivudine, LdT: telbivudine, Nuc: nucleos(t)ide analogue, TAF: tenofovir alafenamide, TDF: tenofovir disoproxil fumarate, VR: virological relapse

- 27 and 18 patients encountered VR and CR, respectively. The cumulative incidences of VR at 6 months and 12 months were 43.1% [95% confidence interval (CI), 30.8-57.8%] and 58.3 (95% CI, 42.7-74.6%), respectively, and those of CR were 31.9% [95% CI, 20.6-47.4%] and 40.3 (95% CI, 26.3-58.1%), respectively. **(Figure 1)**
- A higher serum level of hepatitis B surface (HBsAg) at treatment cessation was predictive of clinical relapse (hazard ratio, 1.82 per log IU/mL, 95% CI, 1.08-3.07; *P*=0.02). **(Table 2)**

Figure 1: Cumulative incidence of virological and clinical relapse during follow-up period

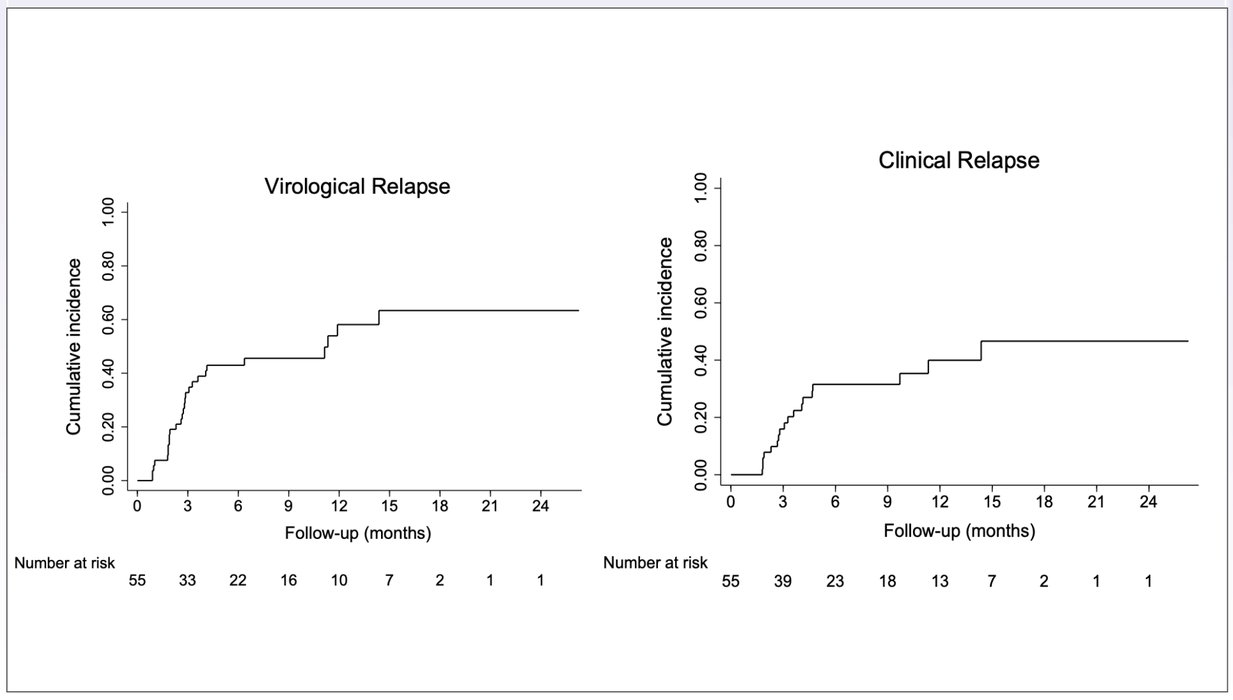

Table 2: Age-adjusted Cox model to explore the association between serum hepatitis B surface antigen level and clinical relapse after tenofovir alafenamide withdrawal

	Hazard ratio	95% CI	P value
HBsAg, per log IU/mL	2.10	1.18-3.72	0.012
Age at treatment end, per year	1.04	0.99-1.10	0.090

COCLUSIONS

- Approximately half and one third of patients with CHB who discontinued TAF would develop VR and CR, respectively, within one year after treatment cessation.
- Serum level of HBsAg at the end of TAF therapy was a risk predictor for CR.

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