

Monitoring for HBV Reactivation in PWH Following Antiretroviral Switch to Cabotegravir/Rilpivirine

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Background

- People with HIV (PWH) and resolved hepatitis B virus (HBV) are at risk of HBV reactivation (HBVr) when switching to antiretroviral therapy (ART) without HBV activity
- Absolute risk of HBVr with this ART switch is unclear
- Best practices for HBVr monitoring are unknown

Aims

- Define risk of HBVr in PWH with resolved HBV switching from HBV-active ART to cabotegravir/rilpivirine (CAB-RPV)
- Describe baseline laboratory assessment and monitoring frequency for HBVr following initiation of CAB-RPV

Methods

Study Design/Patients

- Retrospective cohort study across two clinic sites
- PWH & resolved HBV (HBsAg negative, anti-HBc Ab positive)
- Switch from HBV-active ART to CAB-RPV Jan 2021-Jun 2023
- Follow-up through Dec 2023

Definition of HBVr

 ≥1 lab assay with 1) any detectable HBV DNA, 2) newly + HBsAg, or 3) newly + HBeAg

Analysis

- Crude incidence rate of HBVr
- Cumulative frequency of testing by lab: HBV DNA, HBsAg, HBeAg, alanine aminotransferase

Abbreviations: HBsAg, HBV surface antigen; anti-HBc Ab, anti-HBV core antibody; HBeAg, HBV e antigen

Table 1. Baseline Characteristics

Characteristic	Patients (n = 41)
Median age, yrs (IQR)	55 (40-61)
Male sex	27 (66%)
Median BMI, kg/m ² (IQR)	28.5 (24.3-33.0
Median time since HIV diagnosis, yrs (IQR)	15 (11-21)
HIV RNA <200 copies/mL	39 (95%)
CD4+ cell count (cells/mm ³)	584 (420-1051
Alanine aminotransferase (IU/L)	15 (11-23)
Reactive anti-HBs Ab	35 (85%)
HBV-active agent TAF TDF 3TC	29 (71%) 4 (10%) 8 (20%)
Timing of HBV labs*, yrs HBsAg anti-HBc Ab anti-HBs Ab	4.1 (0.9-5.9) 4.6 (1.1-6.4) 3.6 (1.0-5.6)

Abbreviations: IQR, interquartile range; anti-HBs Ab, anti-HBV surface antibody; TAF tenofovir alafenamide; TDF, tenofovir disoproxil fumarate; 3TC, lamivudine *Prior to first dose (PO or IM) of CAB-RPV)

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