## Prevention and Management of Hepatitis B Virus Infection in Adults With HIV

## August 2022

Table 3: HBV Vaccine Dosing Schedule		
Vaccine	Dosing	Notes
Engerix-B	Single dose: 20 μg as one 1 mL dose containing 20 μg/mL vaccine administered as follows:  • 3 IM injections at weeks 0, 4, and 24 <i>OR</i> • 4 IM injections at weeks 0, 4, 8, and 24  Double dose: 40 μg as two 1 mL doses of 20 μg/mL vaccine administered as follows:  • 3 IM injections at weeks 0, 4, and 24 <i>OR</i> • 4 IM injections at weeks 0, 4, 8, and 24	Patients with ESRD or other immunocompromising conditions [a]: 40 µg/mL as two 1 mL doses of 20 µg/mL vaccine administered in 3 IM injections at weeks 0, 4, 8, and 24
Recombivax HB	Single dose: 10 μg as one 1 mL dose containing 10 μg/mL vaccine administered as follows:  • 3 IM injections at weeks 0, 4, and 24 <i>OR</i> • 4 IM injections at weeks 0, 4, 8, and 24  Double dose [b]: 20 μg as two 1 mL doses containing 10 μg/mL vaccine administered as follows:  • 3 IM injections at weeks 0, 4, and 24 <i>OR</i> • 4 IM injections at weeks 0, 4, 8, and 24	Patients with ESRD or other immunocompromising conditions [a]: 40 μg/mL as 1 mL of higher-strength vaccine administered in 4 IM injections at weeks 0, 4, and 24
Heplisav-B [c]	Single dose: 20 μg as one 0.5 mL dose containing 20 μg/mL vaccine administered as follows:  • 2 IM injections at weeks 0 and 4	<ul> <li>Patients with ESRD: Standard dosing [Awad, et al. 2021]</li> <li>Pregnant patients: Insufficient data to recommend use</li> </ul>
Twinrix [d]	Single dose: 1 mL administered as follows:  • 3 IM injections at weeks 0, 4, and 24	For patients who are not immune to either HBV or HAV

Abbreviations: ESRD, end-stage renal disease; HAV, hepatitis A virus; HBV, hepatitis B virus; IM, intramuscular.

## **Notes**

- a. Higher-strength regimens of both Engerix-B and Recombivax HB are approved by the U.S. Food and Drug Administration for use in patients with ESRD; these higher-strength regimens may also be considered for patients with other immunocompromising conditions.
- b. Double dosing with Recombivax HB has not been as well studied as double dosing with Engerix-B. However, Recombivax HB may be the only formulation available at some institutions.
- c. Double dosing and an accelerated schedule with Heplisav-B have not been well studied.
- d. Double dosing and use of a 4-dose series with Twinrix have not been well studied in patients with HIV and are not recommended.

## Reference

Awad AM, Ntoso A, Connaire JJ, et al. An open-label, single-arm study evaluating the immunogenicity and safety of the hepatitis B vaccine HepB-CpG (HEPLISAV-B®) in adults receiving hemodialysis. *Vaccine* 2021;39(25):3346-52. [PMID: 34001345] https://pubmed.ncbi.nlm.nih.gov/34001345