

Prior Authorization DRUG Guidelines

EPIVIR/EPIVIR-HBV (Lamivudine)

Effective Date: 1/28/14

Date Developed: 1/28/14 by Catherine Sanders, MD

Last Approval Date: 1/26/16, 1/24/17, 1/23/18, 1/22/19, 2/18/20; 8/3/21,
2/1/22, 1/31/23, 2/13/24, 2/18/25

Lamivudine is a cytosine analog. Its principle mode of action is inhibition of HIV reverse transcription via viral DNA chain termination and thus inhibits RNA- and DNA-dependent DNA polymerase activities of reverse transcriptase. In hepatitis B, lamivudine is incorporated into the viral DNA by hepatitis B virus polymerase, resulting in DNA chain termination.

Pre-Authorization Criteria: treatment of chronic hepatitis B associated with evidence of hepatitis B viral replication and active liver inflammation; HIV infection in combination with other antiretroviral agents

Note: Use only if other anti-HBV agents with more favorable resistance patterns have failed or cannot be used; has not been evaluated in patients with HBV-HIV-1 coinfection

NOTE: The formulation and dosage of Epivir-HBV® are not appropriate for patients infected with both HBV and HIV.

Off-Label: nonoccupational postexposure prophylaxis for HIV exposure (as a component of a multidrug regimen). Prevention of perinatal HIV transmission

Note: Use with caution; heightened risk of causing significant patient harm when used in error.

Dosing: Adult:

HIV: Oral (use with at least two other antiretroviral agents): 150 mg twice daily or 300 mg once daily; <50 kg: 4 mg/kg twice daily (maximum: 150 mg twice daily)

Postexposure prophylaxis for HIV exposure (unlabeled use [CDC, 2005]): Oral: 150 mg/dose twice daily or 300 mg/dose once daily (in combination with zidovudine, tenofovir, stavudine, or

didanosine, with or without a protease inhibitor depending on risk). Initiate therapy within 72 hours of exposure and continue for 28 days

Treatment of hepatitis B: Oral: 100 mg/day

Treatment duration (AASLD practice guidelines): Treatment duration for nucleos(t)ide analog-based therapy (eg, lamivudine) is variable and influenced by HBeAg status, duration of HBV suppression, and presence of cirrhosis/decompensation. Refer to current Guidelines.

Adverse Reactions:

>10%: Headache, fatigue, insomnia, nausea, diarrhea, pancreatitis, abdominal pain, vomiting, neutropenia, transaminases increased, myalgia, neuropathy, musculoskeletal pain, nasal signs and symptoms, cough, sore throat.

Other Severe Less Common Reactions: fat redistribution, immune reconstitution syndrome, lactic acidosis/hepatomegaly, HBV exacerbation, post treatment, peripheral neuropathy, rhabdomyolysis, anemia, severe, anaphylaxis, autoimmune disorders.

U.S. BOXED WARNING:

Lactic acidosis and severe hepatomegaly with steatosis, including fatal cases, associated with nucleoside analogue used alone or in combination; suspend treatment if clinical or laboratory findings suggest lactic acidosis or hepatotoxicity.

Lamivudine dosage forms contain higher dose used to treat HIV compared to lamivudine-HBV dosage forms used to treat chronic HBV; ensure patients receive correct dosage form for indicated use.

Severe acute HBV exacerbations in HBV/HIV co-infected patients upon lamivudine discontinuation; monitor hepatic function closely for at least several months in HBV/HIV co-infected patients who discontinue abacavir/lamivudine; initiate anti-HBV treatment if needed. Lamivudine-HBV is not approved for the treatment of HIV-1 infection because the lamivudine dosage in lamivudine-HBV is subtherapeutic and monotherapy is inappropriate for the treatment of HIV-1 infection. HIV-1 resistance may emerge in chronic hepatitis B-infected patients with unrecognized or untreated HIV-1 infection. HIV counseling and testing should be offered to all patients before beginning treatment with lamivudine-HBV and periodically during treatment

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21. Epivir HBV (lamivudine) [prescribing information]. Research Triangle Park, NC; GlaxoSmithKline; December 2021

REVISION HISTORY:

Date Reviewed/No Updates: 1/13/15 by C. Sanders, MD
 Date Approved by P&T Committee: 1/27/15
 Date Reviewed/Updated: 3/10/15 by C. Sanders, MD; R. Sterling, MD
 Date Approved by P&T Committee: 1/26/16
 Date Reviewed/No Updates: 1/24/17 by C. Sanders, MD; R. Sterling, MD
 Date Approved by P&T Committee: 1/24/17
 Date Reviewed/No Updates: 1/23/18 by C. Sanders, MD; R. Sterling, MD
 Date Approved by P&T Committee: 1/23/18
 Date Reviewed/No Updates: 1/22/19 by C. Sanders, MD; R. Sterling, MD
 Date Approved by P&T Committee: 1/22/19
 Date Reviewed/No Updates: 2/18/20 by H. Taekman, MD; R. Sterling, MD
 Date Approved by P&T Committee: 2/18/20
 Date Reviewed/ Updated: 8/3/21 by H. Taekman, MD; R. Sterling, MD
 Date Approved by P&T Committee: 8/3/21
 Date Reviewed/No Updates: 2/1/22 by H. Taekman, MD; R. Sterling, MD
 Date Approved by P&T Committee: 2/1/22
 Date Reviewed/No Updates: 1/31/23 by H. Taekman, MD; R. Sterling, MD
 Date Approved by P&T Committee: 1/31/23
 Date Reviewed/Updated: 2/18/25 by H. Taekman, MD; R. Sterling, MD
 Date Approved by P&T Committee: 2/18/25

Revision Date	Content Revised (Yes/No)	Contributors	Review/Revision Notes
1/24/17	No	Catherine Sanders, MD; Robert Sterling, MD	Annual review
1/23/18	No	Catherine Sanders, MD; Robert Sterling, MD	Annual review
1/22/19	No	Catherine Sanders, MD; Robert Sterling, MD	Annual review
2/18/20	No	Howard Taekman, MD; Robert Sterling, MD	Annual review
8/3/21	Yes	Howard Taekman, MD; Robert Sterling, MD	Added a Note Section. Updated references
2/1/22	No	Howard Taekman, MD; Robert Sterling, MD	Annual review

1/31/23	No	Howard Tackman, MD; Robert Sterling, MD	Annual review
2/13/24	No	Howard Tackman, MD; Robert Sterling, MD	Annual review
2/18/25	Yes	Howard Tackman, MD; Robert Sterling, MD	Replaced Epivir background to Lamivudine. Added Note: Use only if other anti-HBV agents with more favorable resistance patterns have failed or cannot be used; has not been evaluated in patients with HBV-HIV-1 coinfection. NOTE: The formulation and dosage of Epivir-HBV® are not appropriate for patients infected with both HBV and HIV. “Updated dosing & US Boxed warning sections