Vemlidy®
tenofovir alafenamide 25mg tablets

GILEAD

VEMLIDY

ONE OF THE PREFERRED/FIRST-LINE HBV THERAPIES

Chronic hepatitis B management recommendations from 3 guidelines

✓ AASLD 2018 ✓ AATA 2018 ✓ EASL 2017

INDICATION

VEMLIDY is indicated for the treatment of chronic hepatitis B virus (HBV) infection in adults with compensated liver disease.

IMPORTANT SAFETY INFORMATION

BOXED WARNING: POSTTREATMENT SEVERE ACUTE EXACERBATION OF HEPATITIS B

- **Discontinuation of anti-hepatitis B therapy, including VEMLIDY, may result in severe acute exacerbations of hepatitis B. Hepatic function should be monitored closely with both clinical and laboratory follow-up for at least several months in patients who discontinue anti-hepatitis B therapy, including VEMLIDY. If appropriate, resumption of anti-hepatitis B therapy may be warranted.**

Click here for VEMLIDY full Prescribing Information, including **BOXED WARNING**.

HBV TREATMENT CRITERIA RECOMMENDATIONS

RECOMMENDED CRITERIA FOR TREATING CHRONIC HBV INFECTION BASED ON DISEASE STATUS

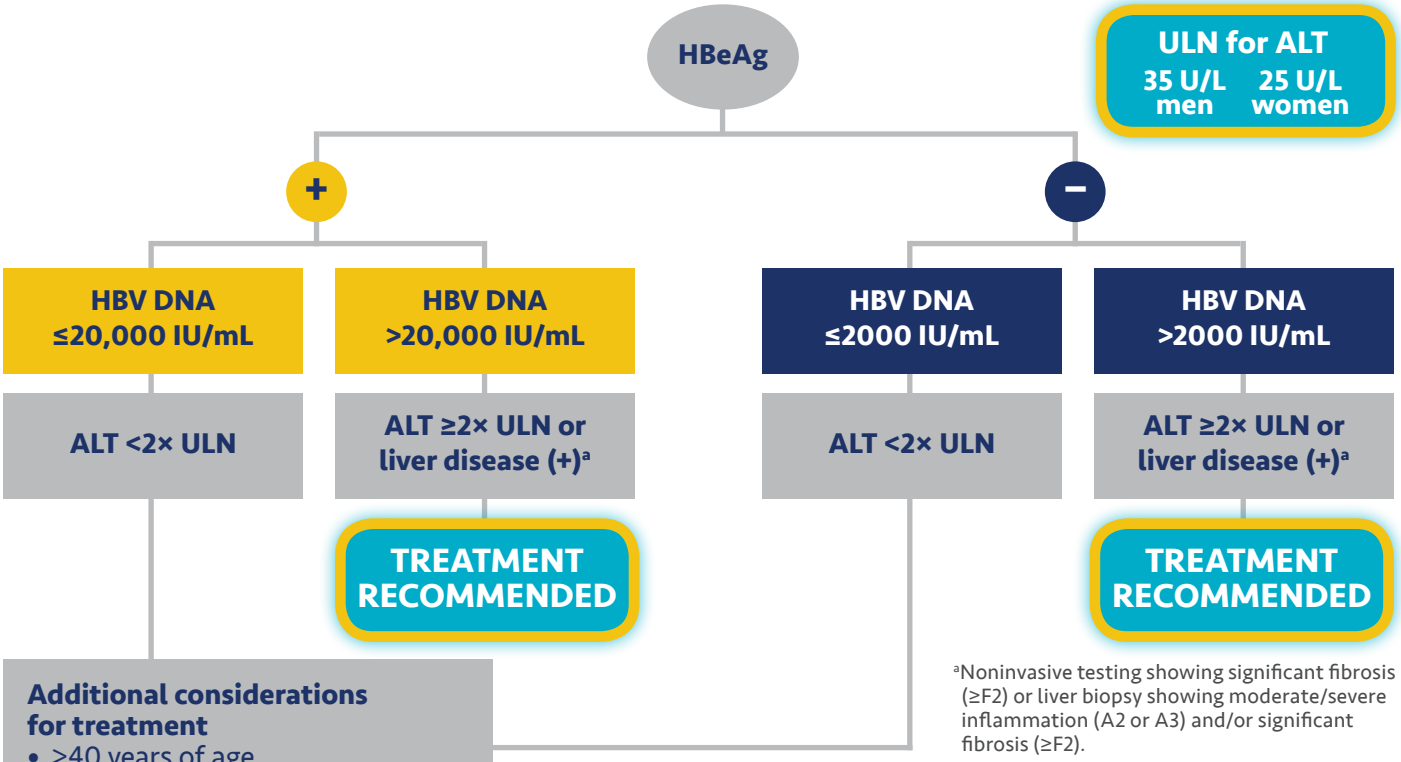
	HBeAg+		HBeAg−		Cirrhosis (HBeAg±)	
	HBV DNA (IU/mL)	ALT (U/L)	HBV DNA (IU/mL)	ALT (U/L)	HBV DNA (IU/mL)	ALT (U/L)
AASLD 2018[1]	>20,000	≥2× ULN[a] or liver disease (+)[b,c]	>2000	≥2× ULN[a] or liver disease (+)[b,c]	Detectable	Any
AATA 2018[2]	>2000	>ULN[a] or liver disease (+)[b] / other risk factors[d]	>2000	>ULN[a] or liver disease (+)[b] / other risk factors[d]	Detectable	Any
EASL 2017[3]	>2000 >20,000	>ULN[a] and/or liver disease (+)[b,e] >2× ULN	>2000 >20,000	>ULN[a] and/or liver disease (+)[b,e] >2× ULN	Detectable	Any

[a]ULN criteria (men, women): AASLD 2018: 35 U/L, 25 U/L; AATA 2018: local laboratory range; EASL 2017: ~40 U/L for both men and women.
[b]Noninvasive testing showing significant fibrosis (≥F2) or liver biopsy showing moderate/severe inflammation (A2 or A3) and/or significant fibrosis (≥F2).
[c]Treatment can be considered for those >40 years of age, family history of cirrhosis or HCC, previous treatment history, or extrahepatic manifestations (presence of extrahepatic manifestation is an indication for treatment, independent of liver disease severity).
[d]Albumin <3.5 g/dL, platelet count <130,000/mm^3, presence of BCP mutation, HCC in first degree relative, or elevated AFP in the absence of HCC.
[e]HBeAg+ CHB patients with persistently high HBV DNA and normal ALT may be treated if they are >30 years old, regardless of the severity of liver histologic lesions. HBeAg+ or HBeAg− CHB patients with family history of HCC or cirrhosis and extrahepatic manifestations can be treated even if typical treatment indications are not fulfilled.

The development of the 2018 Asian American Treatment Algorithm (AATA) was supported, in part, by an independent grant from Gilead Sciences, Inc.

AASLD=American Association for the Study of Liver Diseases; AATA=Asian American Treatment Algorithm (also referred to as an Expert Consensus for the Management of Chronic Hepatitis B in Asian Americans); AFP=alpha fetoprotein; ALT=alanine aminotransferase; BCP=basal core promoter; CHB=chronic hepatitis B; EASL=European Association for the Study of the Liver; HBeAg=hepatitis B envelope antigen; HCC=hepatocellular carcinoma; HIV=human immunodeficiency virus; ULN=upper limit of normal.

AASLD 2018 HEPATITIS B GUIDANCE[1]



[a]Noninvasive testing showing significant fibrosis (≥F2) or liver biopsy showing moderate/severe inflammation (A2 or A3) and/or significant fibrosis (≥F2).

Note: **HBV DNA >10^6 IU/mL + ALT <ULN:** Treat, if aged >40 years and significant necroinflammation or fibrosis on liver biopsy
HBV DNA <2000 IU/mL + ALT >ULN: Consider other causes for ↑ ALT

SELECT CHANGES IN THE AASLD 2018 HEPATITIS B GUIDANCE UPDATE

1. **VEMLIDY is a PREFERRED/FIRST-LINE HBV therapy for CHB patients**
   "TAF [tenofovir alafenamide] is more stable than TDF [tenofovir disoproxil fumarate] in plasma and delivers the active metabolite to hepatocytes more efficiently, allowing a lower dose to be used with similar antiviral activity, [and] less systemic exposure...."
2. **VEMLIDY can be considered in patients with, or at risk for, renal dysfunction or bone disease**

IMPORTANT SAFETY INFORMATION (CONT.)

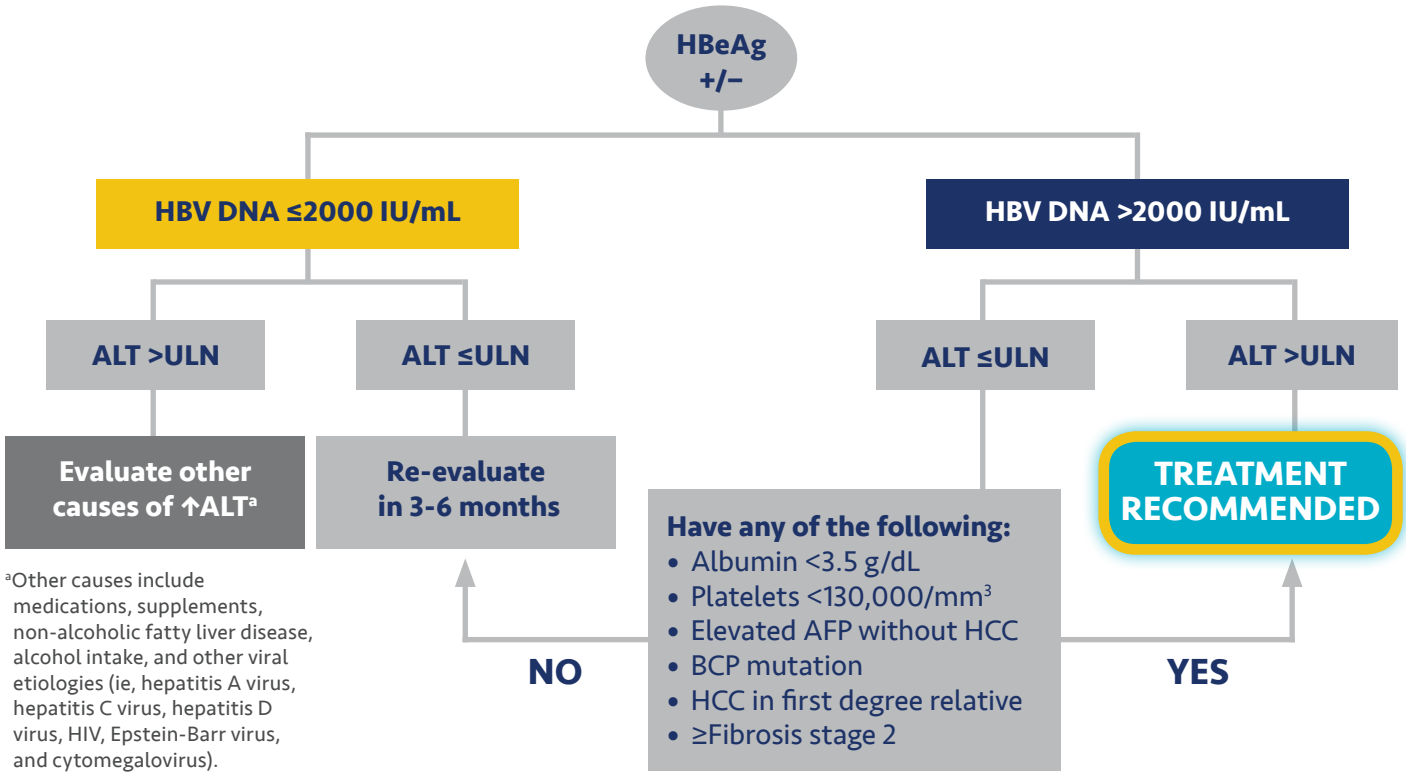
Warnings and Precautions

- **Risk of Development of HIV-1 Resistance in HBV/HIV-1 Coinfected Patients:** Due to this risk, VEMLIDY alone should not be used for the treatment of HIV-1 infection. Safety and efficacy of VEMLIDY have not been established in HBV/HIV-1 coinfected patients. HIV antibody testing should be offered to all HBV-infected patients before initiating therapy with VEMLIDY, and, if positive, an appropriate antiretroviral combination regimen that is recommended for HBV/HIV-1 coinfected patients should be used.

Click here for VEMLIDY full Prescribing Information, including **BOXED WARNING**.

Vemlidy
tenofovir alafenamide 25mg tablets

2018 ASIAN AMERICAN HEPATITIS B MANAGEMENT RECOMMENDATIONS (AATA)[2]



[a]Other causes include medications, supplements, non-alcoholic fatty liver disease, alcohol intake, and other viral etiologies (ie, hepatitis A virus, hepatitis C virus, hepatitis D virus, HIV, Epstein-Barr virus, and cytomegalovirus).

ALT ULN is based on local laboratory range.

SELECT CHANGES IN THE 2018 AATA GUIDELINES

1. **VEMLIDY is a PREFERRED/FIRST-LINE HBV therapy for CHB patients**
   "Based on... [the] safety profile and non-inferiority of efficacy endpoints, TAF represents an attractive alternative to TDF in the treatment of CHB"
2. **The 2018 algorithm no longer has the "gray zone"[a]; instead, various risk factors (eg, albumin, platelets, BCP mutation, etc.) are used as parameters to support treatment recommendations**

[a]The "gray zone" refers to a risk impact scoring system that included independent risk factors for liver disease progression, such as age ≥40 years, male gender, ALT >30 U/L for men and >19 U/L for women, presence of BCP mutation, HCC in first degree relative, and albumin ≤3.5 g/dL or platelet count ≤130,000 mm³, each with an assigned numerical score. The "gray zone" scoring system can be used to evaluate patients who do not meet the main treatment criteria and refused liver biopsy.[4]

IMPORTANT SAFETY INFORMATION (CONT.)

Warnings and Precautions (cont.)

- **New Onset or Worsening Renal Impairment:** Cases of acute renal failure and Fanconi syndrome have been reported with the use of tenofovir prodrugs. In clinical trials of VEMLIDY, there have been no cases of Fanconi syndrome or proximal renal tubulopathy (PRT). Patients with impaired renal function and/or taking nephrotoxic agents (including NSAIDs) are at increased risk of renal-related adverse reactions. Discontinue VEMLIDY in patients who develop clinically significant decreases in renal function or evidence of Fanconi syndrome. Monitor renal function in all patients – See Dosage and Administration.

Click here for VEMLIDY full Prescribing Information, including **BOXED WARNING**.

Vemlidy® tenofovir alafenamide 25mg tablets

SCOPE OF THE UPDATED GUIDANCE AND RECOMMENDATIONS

AASLD 2018 HEPATITIS B GUIDANCE

- Consensus of an expert panel, based on
  - Formal review and analysis of published literature
  - World Health Organization guidance on managing hepatitis B
  - Authors' experience in managing hepatitis B
- Updated guidance
  - Preferred treatment options to include VEMLIDY
  - Guidance on screening, counseling, prevention, monitoring, and treatment of hepatitis B in special populations

2018 ASIAN AMERICAN HEPATITIS B MANAGEMENT RECOMMENDATIONS (AATA)

- Consensus of an expert panel for the management of Asian American patients infected with HBV, based on
  - Relevant data from medical reports on HBV from Asian countries
  - Key results from studies in HBsAg-positive Asian Americans
- Updated preferred treatment options to include VEMLIDY

IMPORTANT SAFETY INFORMATION (CONT.)

Warnings and Precautions (cont.)

Lactic Acidosis and Severe Hepatomegaly with Steatosis: Fatal cases have been reported with the use of nucleoside analogs, including tenofovir DF. Discontinue VEMLIDY if clinical or laboratory findings suggestive of lactic acidosis or pronounced hepatotoxicity develop, including hepatomegaly and steatosis in the absence of marked transaminase elevations.

Adverse Reactions

Most common adverse reactions (incidence ≥5%; all grades) were headache, abdominal pain, cough, back pain, fatigue, nausea, arthralgia, diarrhea, and dyspepsia.

Drug Interactions

- Coadministration of VEMLIDY with drugs that reduce renal function or compete for active tubular secretion may increase concentrations of tenofovir and the risk of adverse reactions.
- Coadministration of VEMLIDY is not recommended with the following: oxcarbazepine, phenobarbital, phenytoin, rifabutin, rifampin, rifapentine, or St. John's wort. Such coadministration is expected to decrease the concentration of tenofovir alafenamide, reducing the therapeutic effect of VEMLIDY. Drugs that strongly affect P-glycoprotein (P-gp) and breast cancer resistance protein (BCRP) activity may lead to changes in VEMLIDY absorption.

Consult the full prescribing information for VEMLIDY for more information on potentially significant drug interactions, including clinical comments.

Click here for VEMLIDY full Prescribing Information, including **BOXED WARNING**.

Vemlidy® tenofovir alafenamide 25mg tablets

VEMLIDY is indicated for the treatment of chronic HBV infection in adults with compensated liver disease.

Recommendations from 3 HBV guidelines

VEMLIDY is a **PREFERRED/FIRST-LINE** therapy for chronic HBV patients[1-3,a]

✓ **AASLD 2018** ✓ **AATA 2018** ✓ **EASL 2017**

[a]Other preferred/first-line HBV therapies include entecavir, TDF, and peginterferon.

IMPORTANT SAFETY INFORMATION (CONT.)

Dosage and Administration

- **Testing Prior to Initiation:** HIV infection.
- **Prior to or when initiating, and during treatment:** On a clinically appropriate schedule, assess serum creatinine, estimated creatinine clearance, urine glucose, and urine protein in all patients. In patients with chronic kidney disease, also assess serum phosphorus.
- **Dosage in Adults:** 1 tablet taken once daily with food.
- **Renal Impairment:** Not recommended in patients with end stage renal disease (ESRD; eCrCl <15 mL/min) who are not receiving chronic hemodialysis; in patients on chronic hemodialysis, on hemodialysis days, administer VEMLIDY after completion of hemodialysis treatment.
- **Hepatic Impairment:** Not recommended in patients with decompensated (Child-Pugh B or C) hepatic impairment.

Click here for VEMLIDY full Prescribing Information, including **BOXED WARNING**.

eCrCl=estimated creatinine clearance.

REFERENCES

1. Terrault NA, Lok AS, McMahon BJ, et al. Update on prevention, diagnosis, and treatment of chronic hepatitis B: AASLD 2018 hepatitis B guidance. *Hepatology*. 2018;67:1560-1599.
2. Tong MJ, Pan CQ, Han SB, et al. An expert consensus for the management of chronic hepatitis B in Asian Americans. *Aliment Pharmacol Ther*. 2018;47:1181-1200.
3. EASL. EASL 2017 Clinical Practice Guidelines on the management of hepatitis B virus infection. *J Hepatol*. 2017;67:370-398.
4. Tong MJ, Pan CQ, Hann HW, et al. The management of chronic hepatitis B in Asian Americans. *Dig Dis Sci*. 2011;56:3143-3162.

Vemlidy® tenofovir alafenamide 25mg tablets

VEMLIDYHCP.COM