SEE PIVOTAL AND 8-YEAR DATA INSIDE

Are you keeping renal and bone health in mind when treating your patients with chronic HBV?

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.**

Warnings and Precautions

- **New Onset or Worsening Renal Impairment:** Postmarketing cases of renal impairment, including acute renal failure, proximal renal tubulopathy (PRT), and Fanconi syndrome have been reported with TAF-containing products. 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 full Prescribing Information for VEMLIDY, including **BOXED WARNING** on posttreatment severe acute exacerbation of hepatitis B.

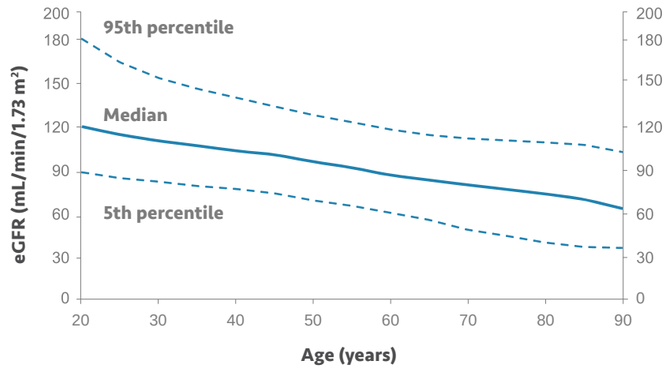
Vemlidy®
tenofovir alafenamide 25mg tablets

Consider renal and bone risk factors when treating your patients with chronic hepatitis B

Renal function may decline over time due to various factors, and patients with chronic HBV face a higher risk of chronic kidney disease than uninfected people[7]

Decline in eGFR with age in the general population (NHANES III)[8,a]

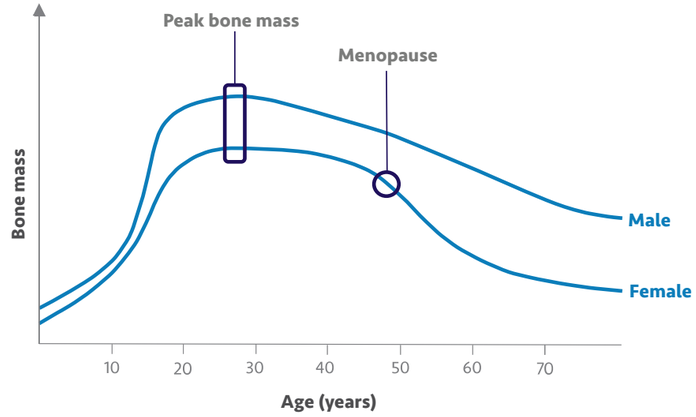
After age ~30, eGFR declines by ~1 mL/min/1.73 m² per year[2,8]



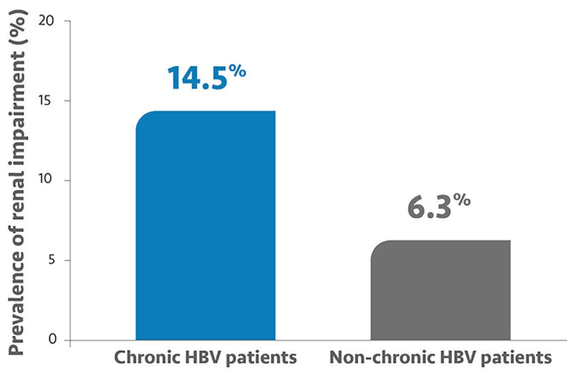
Bone density may decline over time due to various factors, and patients with chronic HBV have a higher prevalence of osteoporosis and/or bone fracture than uninfected people[7]

Bone mass throughout the life course[9]

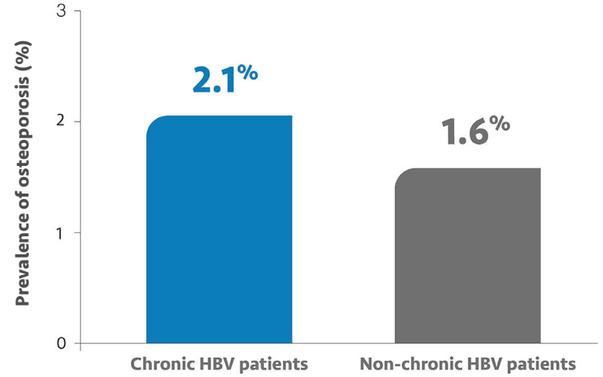
After age ~40, BMD declines each year[9]



Proportions of chronic hepatitis B patients with renal impairment, compared with the general population (Commercial, Medicare, and Medicaid, 2015)[7,b]



Proportions of chronic hepatitis B patients with osteoporosis, compared with the general population (Commercial, Medicare, and Medicaid, 2015)[7,b]



BMD=bone mineral density; eGFR=estimated glomerular filtration rate; NHANES=National Health and Nutrition Examination Survey.

[a]**Percentiles of eGFR regressed on age (NHANES III). GFR estimates from serum creatinine clearance using Modification of Diet in Renal Disease (MDRD) study equation based on age, gender, and race. Age ≥20 years; n=15,600.[8]**

[b]**Based on claims from national insurance databases covering Commercial, Medicare, and Medicaid beneficiaries (2006-2015) in 44,026 chronic HBV patients and 121,568 non-chronic HBV patients. The databases contained medical and pharmacy claims for healthcare services performed in both inpatient and outpatient settings. The 2015 cohort included 11,372 patients and 32,110 non-chronic HBV patients.[7]**

Consider other risk factors that may impact renal function

General population | Patients with chronic HBV

HYPERTENSION

In the United States, hypertension is the second leading cause of kidney failure
Men are at greater risk than women of CKD and end-stage renal disease associated with hypertension[10,11]
(CDC, 2021; N=785,883 [Source: US Renal Data System data from 2018, all ages]; Weldegiorgis M, et al, 2020; N=2,382,712)

>1 in 3 chronic HBV patients had hypertension, based on a retrospective, observational study of data gathered in 2015[7]
(Nguyen MH, et al, 2019; n=11,372)

DIABETES

Diabetes is the leading cause of kidney failure.
~1 in 3 adults with diabetes may have CKD[10,12]
(CDC, 2021, N=785,883 [Source: US Renal Data System data from 2018, all ages])

>1 in 6 chronic HBV patients had diabetes, based on a retrospective, observational study of data gathered in 2015[7]
(Nguyen MH, et al, 2019; n=11,372)

OBESITY

Obesity was strongly associated with both the **development and progression** of CKD, according to a 2017 review of 14 population-based studies[13]
(Kovesdy CP, et al, 2017)

~1 in 8 chronic HBV patients were obese or overweight, based on a retrospective, observational study of data gathered in 2015[7]
(Nguyen MH, et al, 2019; n=11,372)

SMOKING

Smoking increased the odds of developing kidney disease by 42% in a longitudinal cohort study of 2585 participants[14]
(Fox CS, et al, 2004; baseline examination in 1978-1982 and follow-up examination in 1998-2001)

>1 in 10 chronic HBV patients were current smokers, based on a prospective, observational study of tobacco consumption in people with chronic HBV infection[15]
(Brahmania M, et al, 2020; data gathered between January 2011 and May 2016; n=1330)

EXCESSIVE ALCOHOL CONSUMPTION

Regular heavy drinking may double the risk of CKD[16]
(National Kidney Foundation, 2014)

~1 in 12 chronic HBV patients were heavy drinkers, based on a prospective, observational study of alcohol consumption in people with chronic HBV infection[15]
(Brahmania M, et al, 2020; data gathered between January 2011 and May 2016; n=1330)

SEDENTARY BEHAVIOR

Sedentary behavior is associated with increased risk of **obesity, cardiovascular disease, diabetes, and overall mortality,** according to a cross-sectional study based on NHANES data from 2001-2016[17]
(Yang L, et al, 2019; N=51,896)

>1 in 2 adults have a high prevalence of daily sedentary behavior, according to a cross-sectional study based on NHANES data from 2001-2016[17]
(Yang L, et al, 2019; N=51,896)

NSAIDs

~1 in 4 Americans used NSAIDs regularly in a 2017 longitudinal analysis of NHANES data from 1999-2004[18]
(Davis JS, et al, 2017; n=13,744)

The risk of CKD progression increased by **26%** with high-dose NSAID use, based on a meta-analysis of 3 observational general practice or population studies[19]
(Nderitu P, et al, 2013; pooled odds ratio = 1.26 [95% CI: 1.06-1.50]; a limitation of this systematic review included the lack of a standardized measure of "high-dose" NSAID use and the unknown duration of safe NSAID use)

PROTON PUMP INHIBITORS

PPI use was shown to increase the risk for CKD, CKD progression, and end-stage kidney disease, according to a 2020 review of multiple large cohort studies[20]
(Al-Aly Z, et al, 2020; sampling period between 1993-2012)

~1 in 10 adults used a PPI[21]
(Devraj R, et al, 2020; N=18,504; NHANES data from 2009-2013)

CDC=Centers for Disease Control and Prevention; CKD=chronic kidney disease; NHANES=National Health and Nutrition Examination Survey; NSAID=nonsteroidal anti-inflammatory drug; PPI=proton pump inhibitor.

Consider other risk factors that may impact bone mineral density

General population | Patients with chronic HBV

GENDER

~1 in 2 women and **>1 in 3** men over 50 have low bone mass at femoral neck or lumbar spine, according to an observational study performed on NHANES data gathered from 2010[22]

(Wright NC, et al, 2014; N=99,048,838)

ETHNICITY

Asian adults over 50 have a higher prevalence of osteoporosis than other ethnicities, such as Hispanic or non-Hispanic White/Black adults, according to an observational study of NHANES data from 2005-2014[23]

(Looker AC, et al, 2017; N=7,954)

LOW BMI

~2X higher prevalence of low BMI in Asian adults vs other ethnicities, such as Hispanic or non-Hispanic White/Black adults, according to the cross-sectional study analyses of adults aged 18 years or older in the US Behavioral Risk Factor Surveillance System surveys (2013-2020)[24]

(Shah NS, et al, 2022; N=2,882,158)

SMOKING

Smoking was shown to **increase the risk of bone fracture and reduce bone mass,** according to a 2018 review of 27 studies[25]

(Al-Bashaireh AM, et al, 2018)

>1 in 10 chronic HBV patients were current smokers, based on the prospective, observational study of tobacco consumption in people with chronic HBV infection[15]

(Brahmania M, et al, 2020; data gathered between January 2011 and May 2016; n=1330)

EXCESSIVE ALCOHOL CONSUMPTION

Increased alcohol consumption is associated with higher risk of osteoporotic hip fractures[26]

(Godos J, et al, 2022; meta-analysis of 11 studies including 46,916 individuals with BMD assessment and 8 studies including 240,871 individuals)

~1 in 12 chronic HBV patients were heavy drinkers, based on a prospective, observational study of alcohol consumption in people with chronic HBV infection[15]

(Brahmania M, et al, 2020; data gathered between January 2011 and May 2016; n=1330)

SEDENTARY BEHAVIOR

Replacing sedentary time with physical activity provides health benefits for people living with chronic conditions, **including improved bone health**[27]

(World Health Organization, 2022)

>1 in 2 adults have a high prevalence of daily sedentary behavior, according to a cross-sectional study based on NHANES data from 2001-2016[17]

(Yang L, et al, 2019; N=51,896)

ANTIDEPRESSANTS

An association between SSRI use and reduced BMD was observed in a 2012 review of 19 studies[28]

(Sansone RA, et al, 2012; review of studies related to bone fractures and osteoporosis in patients on SSRIs)

>1 in 8 adults used antidepressants[29]

(NCHS Data Brief, 2020; N=11,848; NHANES data from 2015-2018)

PROTON PUMP INHIBITORS

Chronic PPI use may increase the risk of vertebral fracture by 40% to 60%, according to a 2012 review of 14 observational studies from 1980-2011[30]

(Lau YT, et al, 2012)

~1 in 10 adults used a PPI, according to NHANES data from 2009-2013[21]

(Devraj R, et al, 2020; N=18,504)

BMD=bone mineral density; BMI=body mass index; NCHS=National Center for Health Statistics; NHANES=National Health and Nutrition Examination Survey; PPI=proton pump inhibitor; SSRI=selective serotonin reuptake inhibitor.

VEMLIDY demonstrated powerful antiviral efficacy with viral suppression at Week 48 through Week 384 (Year 8)

Trial 108 (HBeAg- patients)[6,a]

VEMLIDY	TDF
94% (268/285)	93% (130/140)

Week 48

Trial 110 (HBeAg+ patients)[6,a]

VEMLIDY	TDF
64% (371/581)	67% (195/292)

Week 48

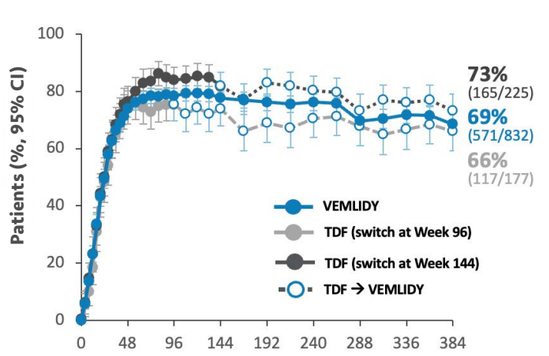
Mean baseline plasma HBV DNA was 5.8 log_{10} IU/mL in Trial 108 and 7.6 log_{10} IU/mL in Trial 110.[6]

Primary efficacy endpoint: The proportion of patients with HBV DNA <29 IU/mL and noninferiority to TDF (10% margin, 95% CI approach) at Week 48 for both trials.[1,3,6]

[a]Patient populations analyzed included all treatment-naïve and treatment-experienced patients who were randomized into the trial and received at least 1 dose of study drug.[6]

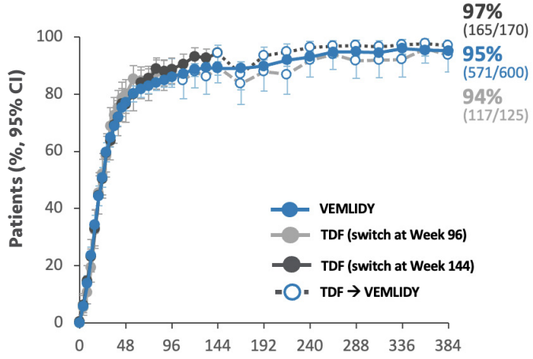
Pooled Week 384 analysis: Pooled efficacy analysis from Trials 108 and 110 was assessed at Week 384 analysis for patients in the full analysis set. This analysis included 866 patients who continued on VEMLIDY (pooled), 207 patients who switched from TDF to VEMLIDY at Week 96, and 225 patients who switched from TDF to VEMLIDY at Week 144.[2,b,c]

Missing=Failure (M=F) analysis from Trials 108/110: HBV DNA <29 IU/mL at Year 8[2,5]



VEMLIDY (n)	640/866	680/866	673/866	635/832	634/832	580/832	597/832	571/832
TDF (W96 switch) (n)	154/207	156/207	153/207	122/177	125/177	120/177	118/177	117/177
TDF (W144 switch) (n)	172/225	189/225	184/225	187/225	181/225	165/225	171/225	165/225

Missing=Excluded (M=E) analysis from Trials 108/110: HBV DNA <29 IU/mL at Year 8[2,5]



VEMLIDY (n)	640/830	680/791	673/755	635/706	634/681	580/611	597/622	571/600
TDF (W96 switch) (n)	154/193	156/177	153/171	122/139	125/136	120/131	118/128	117/125
TDF (W144 switch) (n)	172/225	189/213	184/195	187/200	181/188	165/170	171/176	165/170

Due to early study discontinuations, which were mainly not attributable to lack of efficacy or adverse events, an M=E approach was performed. In the M=E approach, all missing data were excluded in the computations from this analysis.

Limitations: The M=E data are not powered to show statistical significance and should be considered as descriptive only. Neither the M=E data nor the 8-year data are presented in the VEMLIDY full Prescribing Information.

In an M=E analysis, any patients with missing data are excluded from the final analysis. This approach assumes that the missing data are random and not related to treatment outcomes.

In an M=F analysis, missing values are included. This approach accounts for missing data points as a "failure" in the final analysis.

The 8-year analysis is not presented in the VEMLIDY full Prescribing Information.

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

VEMLIDY demonstrated a well-established safety profile from pivotal trials through 8 years

Trials 108 and 110 (pooled)

The proportion of patients who discontinued treatment at Week 96 due to adverse reactions (ARs) of any severity was 1.5% with VEMLIDY and 0.9% with TDF.[6]

Most common adverse reactions (incidence ≥5%; all grades) at Week 96 were headache, upper respiratory tract infection, abdominal pain, cough, back pain, fatigue, nausea, arthralgia, diarrhea, dyspepsia, and pyrexia.[5,6,31]

Most common adverse reactions (incidence ≥5%; all grades) at Week 384 open-label extension (OLE) were headache, upper respiratory tract infection, nasopharyngitis, arthralgia, hypertension, cough, and back pain.[2]

Study Design

Pivotal trials and open-label extension (OLE) study design of Trials 108 and 110: The efficacy and safety of VEMLIDY 25 mg once daily in the treatment of chronic HBV infection in adults with compensated liver disease were evaluated in 2 randomized, double-blind, active-controlled, noninferiority trials: Trial 108 (n=425 HBeAg– treatment-naïve and treatment-experienced patients) and Trial 110 (n=873 HBeAg+ treatment-naïve and treatment-experienced patients).[3,6,31,d]

The primary endpoint for both studies was HBV DNA <29 IU/mL and noninferiority to TDF (10% margin; 95% confidence interval [CI] approach) at Week 48.[3,31]

The primary safety endpoint for both studies was to compare the safety and tolerability of TAF 25 mg once daily versus TDF 300 mg once daily at Week 48.[6]

Additional safety endpoints evaluated at Week 48, Week 96, and Week 144 for both studies include:

- To evaluate the comparative OL safety of TAF 25 mg QD in participants initially randomized to TAF 25 mg QD and in participants sequentially treated with TDF 300 mg QD and then switched to OL TAF 25 mg QD[2,6]
- To determine the percent change from baseline in hip and spine bone mineral density[2,6]
- To determine the change in serum creatinine levels from baseline[2,6]

The original protocol was amended to extend the double-blind phase from 96 weeks to 144 weeks. However, before implementation of the amendment protocol, 540 patients entered the open-label phase at Week 96 (360 remained on VEMLIDY and 180 switched from TDF to VEMLIDY).[5,31]

- By Week 144, a total of 1157 patients had entered the open-label phase[2]
- At Week 384, the full analysis set included 1298 patients who were enrolled in the study[2]

HBeAg=hepatitis B envelope antigen; OL=open-label; QD=once daily; TAF=tenofovir alafenamide; TDF=tenofovir disoproxil fumarate.
[b]The Week 144 analysis did not include the 66 patients from the TDF group in Trial 108 and the 114 patients from the TDF group in Trial 110 who had rolled over from double-blind TDF to open-label VEMLIDY at Week 96 prior to the study amendment.[5]
[c]One site did not participate in Protocol amendment 3, and all patients from this site (n=64) discontinued the study on or before Year 3 (Week 144). Therefore, those patients who completed the planned study treatments were excluded from the M=F analysis for all visits after Year 3.[2]
[d]Key inclusion criteria: HBV DNA ≥20,000 IU/mL; ALT >60 U/L (males) or >38 U/L (females) and ≤10x ULN by central laboratory range.[3,31]

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.**

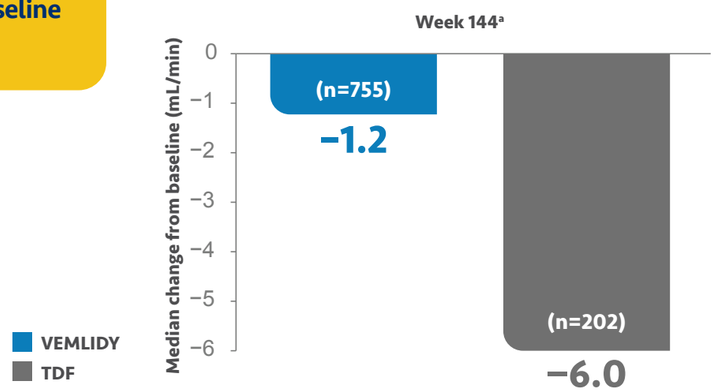
Vemlidy® tenofovir alafenamide 25mg tablets

VEMLIDY showed reduced impact on renal safety parameters at Week 96 and Week 144

Renal effects of VEMLIDY and TDF were compared in Trials 108 and 110[6]

- **Median change from baseline to Week 96 in $eGFR_{CG}$ was -1.2 mL/min in the VEMLIDY group (n=790) and -4.8 mL/min in those receiving TDF (n=390)[5,6]**
- Median baseline $eGFR_{CG}$ was 106 mL/min and 105 mL/min for VEMLIDY and TDF, respectively[6]

Change in $eGFR_{CG}$ from baseline at Week 144 (pooled)[5]



In adult patients with chronic HBV, the mean increase in serum creatinine was <0.1 mg/dL in both treatment groups at both Week 96 and Week 144.[5,6]

The median change in $eGFR_{CG}$ from baseline was smaller for VEMLIDY vs TDF.[5]

The long-term clinical significance of these renal laboratory changes on adverse reaction frequencies between VEMLIDY and TDF is not known.[6]

$eGFR_{CG}$=estimated glomerular filtration rate by Cockcroft-Gault method, also referred to as eCrCl (estimated creatinine clearance); HBeAg=hepatitis B envelope antigen; TDF=tenofovir disoproxil fumarate.

[a]The Week 144 analysis did not include the 180 patients (HBeAg−: 66 patients; HBeAg+: 114 patients) who had rolled over from double-blind TDF to open-label VEMLIDY at Week 96 prior to the trial amendment.[5]

IMPORTANT SAFETY INFORMATION (CONT.)

Warnings and Precautions

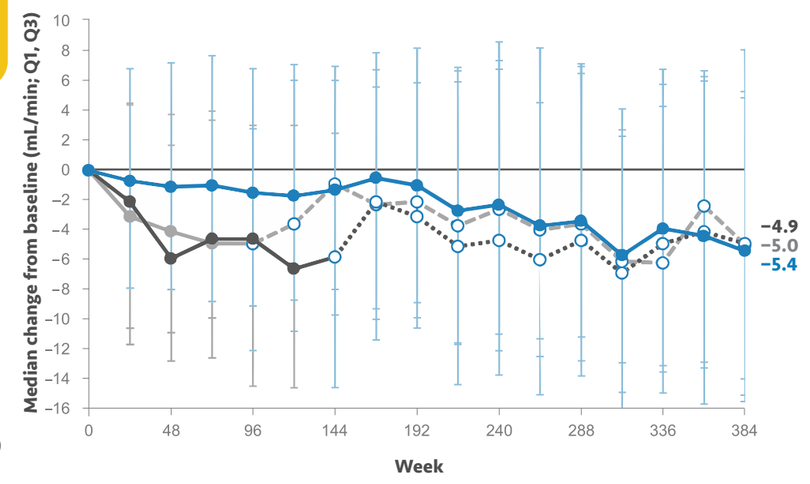
- **Risk of Development of HIV-1 Resistance in HBV/HIV-1 Coinfected Patients:** Due to this risk, VEMLIDY alone should not be used for the treatment of HIV-1 infection. Safety and efficacy of VEMLIDY have not been established in HBV/HIV-1 coinfected patients. HIV antibody testing should be offered to 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.
- **New Onset or Worsening Renal Impairment:** Postmarketing cases of renal impairment, including acute renal failure, proximal renal tubulopathy (PRT), and Fanconi syndrome have been reported with TAF-containing products. 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.
- **Lactic Acidosis and Severe Hepatomegaly with Steatosis:** Fatal cases have been reported with the use of nucleoside analogs, including tenofovir disoproxil fumarate (TDF). 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.

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

Long-term renal safety parameters remained stable through 8 years in chronic HBV patients taking VEMLIDY

Pooled safety analysis (Week 384): Pooled safety analysis (observed data) from Trials 108 and 110 was assessed at Week 384. This analysis included 866 patients who initiated VEMLIDY at baseline, 207 patients who switched from TDF to VEMLIDY at Week 96, and 225 patients who switched from TDF to VEMLIDY at Week 144.[2,b]

Changes in $eGFR_{CG}$ from baseline[2,5]



VEMLIDY (n)	828	789	753	703	677	610	623	592
TDF (W96 switch) (n)	193	177	172	138	135	130	127	123
TDF (W144 switch) (n)	225	213	197	198	185	167	174	167

Median change in $eGFR_{CG}$ from Week 96 to 120: −0.6 mL/min in patients who remained on VEMLIDY and +1.8 mL/min in patients who switched from TDF to VEMLIDY.[6]

The long-term clinical significance of these renal laboratory changes on adverse reaction frequencies between VEMLIDY and TDF is not known.[6]

The 8-year analysis is not presented in the VEMLIDY full Prescribing Information.

Dosing information for patients with renal impairment: VEMLIDY is 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.

[b]VEMLIDY group includes VEMLIDY patients who rolled over to open-label VEMLIDY at Week 96 or Week 144.

IMPORTANT SAFETY INFORMATION (CONT.)

Adverse Reactions

Most common adverse reactions (incidence ≥5%; all grades) in clinical studies through week 144 were headache, upper respiratory tract infection, abdominal pain, cough, back pain, arthralgia, fatigue, nausea, diarrhea, dyspepsia, and pyrexia.

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.

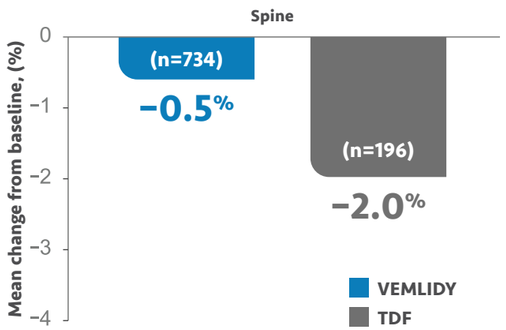
Vemlidy® tenofovir alafenamide 25mg tablets

VEMLIDY showed reduced impact on BMD at Week 96 and Week 144

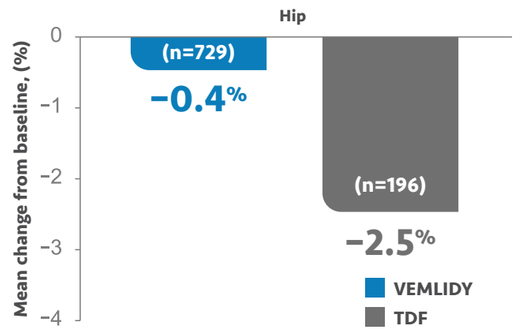
Impacts on spine and hip BMD with VEMLIDY and TDF were compared in Trials 108 and 110[6]

- **BMD declines (≥5%) at the lumbar spine:** 11% (VEMLIDY) vs 25% (TDF) at Week 96[6]
- **BMD declines (≥7%) at the femoral neck:** 5% (VEMLIDY) vs 13% (TDF) at Week 96[6]
- The mean percentage change in BMD from baseline to Week 96 was -0.7% with VEMLIDY (n=746) compared to -2.6% with TDF (n=371) at the lumbar spine, and -0.3% (n=740) compared to -2.5% (n=369) at the total hip[5,6]

Change in lumbar spine BMD from baseline at Week 144 (pooled)[5,a,b]



Change in total hip BMD from baseline at Week 144 (pooled)[5,a,b]



Patients with ≥5% BMD decline in the lumbar spine:
12% (VEMLIDY) vs 24% (TDF) at Week 144[5]

Patients with ≥7% BMD decline in the femoral neck:
9% (VEMLIDY) vs 16% (TDF) at Week 144[5]

The long-term clinical significance of these BMD changes is not known.[6]

Key baseline characteristics for pivotal Trials 108 and 110[2,31]:

• ~75% of patients were treatment-naïve • >30% of patients were osteopenic or osteoporotic • >60% of patients were male

BMD=bone mineral density; DXA=dual-energy X-ray absorptiometry; HBeAg=hepatitis B envelope antigen; SD=standard deviation; TDF=tenofovir disoproxil fumarate.

[a]Only patients with nonmissing baseline data for spine or hip BMD were included in the spine or hip DXA analysis set.[5]
[b]The Week 144 analysis did not include the 180 patients (HBeAg−: 66 patients; HBeAg+: 114 patients) who had rolled over from double-blind TDF to open-label VEMLIDY at Week 96 prior to the trial amendment.[5]

IMPORTANT SAFETY INFORMATION (CONT.)

Drug Interactions (cont.)

- 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.

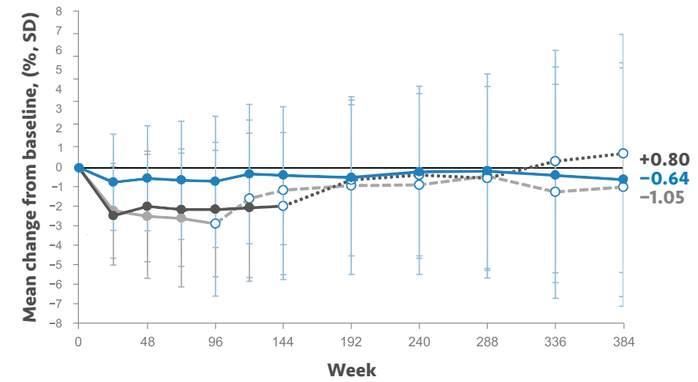
Click here for full Prescribing Information for VEMLIDY, including **BOXED WARNING**.

Long-term BMD remained stable through 8 years in chronic HBV patients taking VEMLIDY

Pooled safety analysis (Week 384): Pooled safety analysis (observed data) from Trials 108 and 110 was assessed at Week 384. This analysis included 866 patients who initiated VEMLIDY at baseline, 207 patients who switched from TDF to VEMLIDY at Week 96, and 225 patients who switched from TDF to VEMLIDY at Week 144. Only patients with nonmissing baseline data for spine or hip BMD were included in the spine or hip DXA analysis set.[2,c]

Change in lumbar spine BMD from baseline[2,5]

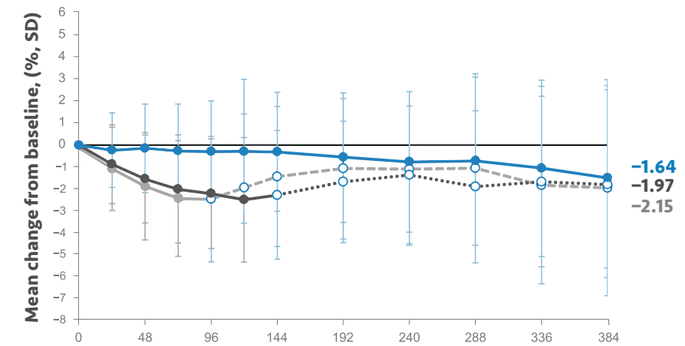
Mean % change in lumbar spine BMD from Week 96 to Week 120: +0.6% in patients who remained on VEMLIDY; +1.7% in those who switched from TDF to VEMLIDY.[6]



VEMLIDY (n)	816	758	724	685	649	603	590	547
TDF (W96 switch) (n)	189	165	169	133	131	123	119	109
TDF (W144 switch) (n)	220	207	191	190	176	165	166	157

Change in hip BMD from baseline[2,5]

Mean % change in total hip BMD from Week 96 to Week 120: 0% in patients who remained on VEMLIDY; +0.6% in those who switched from TDF to VEMLIDY.[6]



VEMLIDY (n)	808	745	716	683	645	599	588	532
TDF (W96 switch) (n)	186	164	168	133	131	123	118	105
TDF (W144 switch) (n)	220	207	187	191	176	166	165	151

Spine and hip BMD remained stable in VEMLIDY patients, and there was an improvement seen in patients who switched to VEMLIDY from TDF.[2,5]

The long-term clinical significance of these BMD changes is not known.[6]

The 8-year analysis is not presented in the VEMLIDY full Prescribing Information.

[c]VEMLIDY group includes VEMLIDY patients who rolled over to open-label VEMLIDY at Week 96 or Week 144.

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For your appropriate chronic HBV patients with compensated liver disease

Choose VEMLIDY: proven results for the moments that matter[1-6]

Summary

VEMLIDY provides antiviral efficacy and an established safety profile, along with proven renal and bone safety.

8 years

- **Long-term viral suppression** demonstrated from Week 48 through 8 years[1-3]

- **Well-established safety profile** through 8 years[2]

- **Reduced impact on renal safety parameters** at Week 96[5,6]
- Long-term renal safety parameters remained stable **through 8 years**[2,5]

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.

The long-term clinical significance of these renal laboratory changes on adverse reaction frequencies between VEMLIDY and TDF is not known.[6]

- **Reduced impact on BMD** at Week 96[6]
- Long-term BMD remained stable **through 8 years**[2]

The long-term clinical significance of these BMD changes is not known.[6]

See complete analyses of the summary data on previous pages.

BMD=bone mineral density; eCrCl=estimated creatinine clearance; ESRD=end-stage renal disease.

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.

Pregnancy and Lactation

- **Pregnancy:** A pregnancy registry has been established for VEMLIDY. Available clinical trial data show no significant difference in the overall risk of birth defects for VEMLIDY compared with the background rate of major birth defects in the U.S. reference population.
- **Lactation:** TAF and tenofovir can pass into breast milk. The developmental and health benefits of breastfeeding should be considered along with the mother's clinical need for VEMLIDY and any potential adverse effects on the breastfed infant from VEMLIDY or from the underlying maternal condition.

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

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† Data on File as of February 2025, VEMLIDY Co-pay Coupon Program. Gilead Sciences, Inc.

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