



IMPORTANT SAFETY INFORMATION

For Prescribers About Emtricitabine/Tenofovir disoproxil fumarate for a Pre-exposure Prophylaxis (PrEP) Indication

Emtricitabine/Tenofovir disoproxil fumarate is indicated in combination with safer sex practices for PrEP to reduce the risk of sexually acquired HIV-1 infection in adults and adolescents at high risk.

Key Safety Information Regarding the Use of Emtricitabine/Tenofovir disoproxil fumarate for PrEP

- Emtricitabine/Tenofovir disoproxil fumarate should only be used to reduce the risk of acquiring HIV-1 in individuals confirmed to be HIV-negative prior to initiating Emtricitabine/Tenofovir disoproxil fumarate for PrEP. HIV-negative status should be re-confirmed at frequent intervals (e.g. at least every 3 months) while taking Emtricitabine/Tenofovir disoproxil fumarate for PrEP, using a combined antigen/antibody test
- HIV-1 resistance mutations have emerged in individuals with undetected HIV-1 infection who were only taking Emtricitabine/Tenofovir disoproxil fumarate
- Emtricitabine/Tenofovir disoproxil fumarate should only be used as part of a comprehensive prevention strategy because Emtricitabine/Tenofovir disoproxil fumarate is not always effective in preventing the acquisition of HIV-1 infection
- Do not initiate (or re-initiate) Emtricitabine/Tenofovir disoproxil fumarate for PrEP if signs or symptoms of acute HIV-1 infection are present unless negative infection status is confirmed
- Counsel HIV-1-uninfected individuals to strictly adhere to the recommended Emtricitabine/Tenofovir disoproxil fumarate dosing schedule
- Do not prescribe Emtricitabine/Tenofovir disoproxil fumarate to uninfected adults with an estimated creatinine clearance (CrCl) below 60 mL/min and only use Emtricitabine/Tenofovir disoproxil fumarate in adults with CrCl <80 mL/min if the potential benefits are considered to outweigh the potential risks
- Renal function should be regularly monitored in all individuals while taking Emtricitabine/Tenofovir disoproxil fumarate for PrEP

Important additional information for the use of Emtricitabine/Tenofovir disoproxil fumarate for PrEP in adolescents:

- The use of Emtricitabine/Tenofovir disoproxil fumarate for PrEP in adolescents has to be carefully considered on an individual basis, including considerations of competence, the individual's understanding of the need for adherence to Emtricitabine/Tenofovir disoproxil fumarate for PrEP to be effective, and the risk of acquiring other sexually transmitted infections

- Adherence in adolescents and young adults has been shown to be lower than in older adults and no data is available on the use of PrEP in female adolescents. A Reminder Card is available to support adherence in both adults and adolescents
- At each visit individuals should be reassessed to ascertain whether they remain at high risk of HIV-1 infection. The risk of HIV-1 infection should be balanced against the potential for renal and bone effects with long-term use of Emtricitabine/Tenofovir disoproxil fumarate
- Emtricitabine/Tenofovir disoproxil fumarate should not be used in adolescents with renal impairment (i.e. CrCl <90 mL/min/1.73m²)

Factors to help identify individuals at high risk of acquiring HIV-1

- Has partner(s) known to be HIV-1 infected who is not on antiretroviral treatment, or
- Engages in sexual activity within a high prevalence area or social network and one or more of the following:
 - Inconsistent or no condom use
 - Diagnosis of a sexually transmitted infection (STI)
 - Exchange of sex for commodities (such as money, food, shelter or drugs)
 - Use of illicit drugs or alcohol dependence
 - Incarceration
 - Partner(s) of unknown HIV-1 status with any of the factors listed above

Risk of Development of HIV-1 Drug Resistance in Undiagnosed HIV-1-Infected Individuals

Emtricitabine/Tenofovir disoproxil fumarate for a PrEP indication is contraindicated in individuals with unknown or HIV-1-positive status.

- Use Emtricitabine/Tenofovir disoproxil fumarate for to reduce the risk of acquiring HIV-1 infection only in individuals confirmed to be HIV-1 negative. Emtricitabine/Tenofovir disoproxil fumarate alone does not constitute a complete treatment regimen for HIV-1 infection and HIV-1 resistance substitutions may emerge in individuals with undetected HIV-1 infection who are taking only Emtricitabine/Tenofovir disoproxil fumarate
- **Before starting Emtricitabine/Tenofovir disoproxil fumarate for PrEP:**
 - Confirm a negative HIV-1 test, using a combined antigen/antibody test
 - If clinical symptoms consistent with acute viral infection are present and recent (<1 month) exposures are suspected, delay starting Emtricitabine/Tenofovir disoproxil fumarate for a PrEP indication for at least 1 month and reconfirm HIV-1 status
- **During use of Emtricitabine/Tenofovir disoproxil fumarate for PrEP:**
 - Screen for HIV-1 infection at **frequent intervals (e.g. at least every 3 months)** using a combined antigen/antibody test
 - If symptoms consistent with acute HIV-1 infection develop following a potential exposure event, If symptoms consistent with acute HIV-1 infection develop following a potential exposure event, If symptoms consistent with acute HIV-1 infection develop following a potential exposure event, Emtricitabine/Tenofovir disoproxil fumarate should be discontinued until negative infection status is confirmed should be discontinued until negative infection status is confirmed should be discontinued until negative infection status is confirmed

Only Use Emtricitabine/Tenofovir disoproxil fumarate for PrEP as Part of a Comprehensive Prevention Strategy

Emtricitabine/Tenofovir disoproxil fumarate for a PrEP indication should be used only as part of an overall HIV-1 infection prevention strategy including the use of other HIV-1 infection prevention measures, such as safer sex practices, because Emtricitabine/Tenofovir disoproxil fumarate is not always effective in preventing the acquisition of HIV-1 infection. The time to onset of protection after commencing Emtricitabine/Tenofovir disoproxil fumarate is unknown.

- **Counsel uninfected individuals at high risk about safer sex practices, including:**
 - Using condoms consistently and correctly
 - Knowing their HIV-1 status and that of their partner(s)
 - Being regularly tested for other sexually transmitted infections that can facilitate HIV-1 transmission (e.g. syphilis and gonorrhoea)

The Importance of Strict Adherence to the Recommended Dosing Regimen

The effectiveness of Emtricitabine/Tenofovir disoproxil fumarate for a PrEP indication in reducing the risk of acquiring HIV-1 infection is strongly correlated with adherence as demonstrated by measurable drug levels in blood.

- The recommended dose of Emtricitabine/Tenofovir disoproxil fumarate in adults and adolescents aged 12 years and older, weighing at least 35kg, is one tablet, once daily
- All uninfected individuals at high risk taking Emtricitabine/Tenofovir disoproxil fumarate for a PrEP indication should be counselled at frequent intervals to strictly adhere to the recommended Emtricitabine/Tenofovir disoproxil fumarate dosing schedule to reduce the risk of acquiring HIV-1 infection. It is also recommended individuals add a reminder to their mobile phone or any other device that can alert them when it is time to take Emtricitabine/Tenofovir disoproxil fumarate
- All uninfected individuals at high risk taking Emtricitabine/Tenofovir disoproxil fumarate for a PrEP indication should be supplied with a PrEP educational brochure prior to initiation of treatment and a PrEP reminder card when each new bottle of Emtricitabine/Tenofovir disoproxil fumarate is supplied to the individual

Emtricitabine/Tenofovir disoproxil fumarate related renal toxicity

Renal failure, renal impairment, elevated creatinine, hypophosphatemia and proximal tubulopathy (including Fanconi syndrome) have been reported with the use of tenofovir disoproxil fumarate (TDF), a component of Emtricitabine/Tenofovir disoproxil fumarate.

- Assess estimated creatinine clearance (CrCl) in all individuals before prescribing Emtricitabine/Tenofovir disoproxil fumarate
- In individuals without renal risk factors, renal function (CrCl and serum phosphate) should also be monitored after 2 to 4 weeks of use, after 3 months of use and every 3 to 6 months thereafter. In individuals at risk for renal impairment, a more frequent monitoring of renal function is required
- Avoid administering Emtricitabine/Tenofovir disoproxil fumarate with concurrent or recent use of nephrotoxic drugs. If concomitant use of Emtricitabine/Tenofovir disoproxil fumarate and nephrotoxic agents is unavoidable, renal function should be monitored weekly
- Cases of acute renal failure have been reported after initiation of high-dose or multiple non-steroidal anti-inflammatory drugs (NSAIDs) in HIV-1-infected patients treated with TDF and with risk factors for renal dysfunction. If Emtricitabine/Tenofovir disoproxil fumarate is co-administered with an NSAID, renal function should be monitored adequately

Adults taking Emtricitabine/Tenofovir disoproxil fumarate for PrEP:

- **Do not prescribe Emtricitabine/Tenofovir disoproxil fumarate for PrEP to adults with an estimated CrCl below 60 mL/min**
- Emtricitabine/Tenofovir disoproxil fumarate should only be used in individuals with CrCl <80mL/min if the potential benefits are considered to outweigh the potential risks
- If serum phosphate is <1.5 mg/dL (0.48 mmol/L) or CrCl is decreased to <60 mL/min in any individual receiving Emtricitabine/Tenofovir disoproxil fumarate for PrEP, renal function should be re-evaluated within 1 week, including measurements of blood glucose, blood potassium and urine glucose concentrations
- Consideration should be given to interrupting use of Emtricitabine/Tenofovir disoproxil fumarate in individuals with CrCl decreased to <60 mL/min or decreases in serum phosphate to <1.0 mg/dL (0.32 mmol/L)
- Interrupting use of Emtricitabine/Tenofovir disoproxil fumarate should also be considered in case of progressive decline of renal function when no other cause has been identified

Adolescents taking Emtricitabine/Tenofovir disoproxil fumarate for PrEP:

- **Emtricitabine/Tenofovir disoproxil fumarate should not be used in adolescents with renal impairment (i.e. CrCl <90 mL/min/1.73m²)**
- There are no data on the long-term renal effects of Emtricitabine/Tenofovir disoproxil fumarate when used for PrEP in uninfected adolescents. Moreover, the reversibility of renal toxicity after cessation of Emtricitabine/Tenofovir disoproxil fumarate for PrEP cannot be fully ascertained
- At each visit the individual should be reassessed to ascertain whether they remain at high risk of HIV-1 infection. The risk of HIV-1 infection should be balanced against the potential risk for adverse renal effects with long-term use of Emtricitabine/Tenofovir disoproxil fumarate
- If serum phosphate is <3.0 mg/dl (0.96 mmol/l), renal function should be re-evaluated within one week, including measurements of blood glucose, blood potassium and urine glucose
- If renal abnormalities are suspected or detected then consultation with a nephrologist should be obtained to consider interruption of treatment
- Interrupting Emtricitabine/Tenofovir disoproxil fumarate should also be considered in case of progressive decline of renal function when no other cause has been identified

Bone effects

Adults taking Emtricitabine/Tenofovir disoproxil fumarate for PrEP:

- Small decreases in bone mineral density (BMD) have been seen in uninfected individuals receiving Emtricitabine/Tenofovir disoproxil fumarate
 - If bone abnormalities are suspected in uninfected adults taking Emtricitabine/Tenofovir disoproxil fumarate for PrEP then appropriate consultation should be obtained

Adolescents taking Emtricitabine/Tenofovir disoproxil fumarate for PrEP:

- TDF may cause a reduction in BMD. The effects of TDF-associated changes in BMD on long-term bone health and future fracture risk are uncertain. At each visit the individual should be reassessed to ascertain whether they remain at high risk of HIV-1 infection. The risk of HIV-1 infection should be balanced against the potential risk for adverse bone effects with long-term use of Emtricitabine/Tenofovir disoproxil fumarate
 - If bone abnormalities are detected or suspected in adolescents, consultation with an endocrinologist and/or nephrologist should be obtained

HBV Infection

There is a risk of severe acute exacerbation of hepatitis when individuals with hepatitis B infection stop taking Emtricitabine/Tenofovir disoproxil fumarate
As a result, it is recommended that:

- All individuals be tested for the presence of current HBV before initiating Emtricitabine/Tenofovir disoproxil fumarate
- HBV-uninfected individuals should be offered vaccination
- Individuals infected with HBV who discontinue Emtricitabine/Tenofovir disoproxil fumarate should be closely monitored with both clinical and laboratory follow-up for at least several months after stopping treatment

Use of Emtricitabine/Tenofovir disoproxil fumarate for a PrEP Indication in Pregnancy

The balance of risks and benefits for women who may be pregnant or may want to become pregnant should be evaluated, if applicable. Prescribers are encouraged to enroll women exposed to Emtricitabine/Tenofovir disoproxil fumarate for PrEP during pregnancy to the Antiretroviral Pregnancy Registry at www.apregistry.com. The Registry aims to detect any major teratogenic effects involving antiretroviral agents to which pregnant women are exposed.

Reporting of side effects

Please report suspected adverse drug reactions (ADRs) to the MHRA through the Yellow Card scheme. You can report via:

- the Yellow Card website www.mhra.gov.uk/yellowcard
- the free Yellow Card app available from the **Apple App Store** or **Google Play Store**
- some clinical IT systems (EMIS/SystmOne/Vision/MiDatabank) for healthcare professionals

Alternatively you can report a suspected side effect to the Yellow Card scheme by calling 0800 731 6789 for free, Monday to Friday between 9am and 5pm. You can leave a message outside of these hours.

When reporting please provide as much information as possible. By reporting side effects, you can help provide more information on the safety of this medicine.

Any suspected adverse reactions to Emtricitabine/Tenofovir disoproxil fumarate should be reported to Macleods via email to uksafety@macleodspharma.com.