Tenofovir Alafenamide (TAF)

WHAT IS TENOFOVIR ALAFENAMIDE?

Tenofovir alafenamide, also known as TAF, is a drug used as part of antiretroviral therapy (ART). The FDA first approved TAF in 2015. TAF is a prodrug of tenofovir, developed to deliver the active drug more efficiently into HIV-target cells. It is manufactured by Gilead Sciences and is available in several fixed-dose combination pills.

TAF is a nucleoside reverse transcriptase inhibitor (NRTI). Like other NRTIs, it blocks the HIV enzyme reverse transcriptase, preventing the virus from replicating.

When used with other antiretroviral drugs to treat HIV infection, TAF:

- Reduces the amount of HIV in your blood (viral load).
- Increases the number of CD4 cells in your blood, which help fight infection.

By reducing viral load and increasing CD4 cells, TAF may improve your immune system and reduce your risk of illness or death from opportunistic infections.

TAF does not cure HIV or AIDS. You must continue taking HIV medications as prescribed to control the infection.

WHO SHOULD TAKE TENOFOVIR ALAFENAMIDE?

TAF is prescribed for adults and children weighing at least 25 kg (about 55 lbs) in combination with other ARVs to treat HIV-1 infection. TAF has also been approved as part of a two-drug combination (Descovy) for HIV pre-exposure prophylaxis (PrEP) in certain populations.

All people living with HIV should be on ART to stay healthy and reduce transmission risk. Your healthcare provider will work with you to select the most appropriate regimen based on your medical history, lab values, and personal preferences.

WHO SHOULD NOT TAKE TENOFOVIR ALAFENAMIDE?

Do not take TAF if you are allergic to TAF or any of the ingredients in the medication.

WHAT SHOULD I TELL MY HEALTHCARE PROVIDER BEFORE TAKING TENOFOVIR ALAFENAMIDE?

Tell your provider if you:

- Have or had liver problems, including hepatitis B (HBV).
- Have kidney disease.
- Are pregnant or planning to become pregnant.
- Are breastfeeding or planning to breastfeed.

TAF passes into breast milk. Because of the risk of HIV transmission, people with HIV are generally advised not to breastfeed in the U.S.

WHAT ABOUT DRUG RESISTANCE?

Resistance occurs when HIV changes in a way that reduces a drug's effectiveness. This can happen quickly if medications are not taken correctly. It's important to take all HIV medicines exactly as prescribed to avoid developing resistance or cross-resistance.

HOW IS TENOFOVIR ALAFENAMIDE TAKEN?

TAF is taken by mouth, typically once daily. It is not used alone, but is part of combination HIV treatment pills, including:

- **Biktarvy** (bictegravir/emtricitabine/TAF)
- **Genvoya** (elvitegravir/cobicistat/emtricitabine/TAF)
- **Odefsey** (rilpivirine/emtricitabine/TAF)
- Descovy (emtricitabine/TAF) also approved for PrEP
- **Symtuza** (darunavir/cobicistat/emtricitabine/TAF)

TAF can be taken with or without food, depending on the formulation. Follow your provider's instructions closely.

WHAT ARE THE SIDE EFFECTS?

Most people tolerate TAF well. Common side effects include:

- Nausea
- Headache

- Diarrhea
- Fatigue

Serious but rare side effects include:

- Worsening of hepatitis B: If you have HBV and stop taking TAF, your HBV may flare up. Your provider will monitor your liver function.
- **Kidney problems**: Although less nephrotoxic than TDF, monitoring is still recommended in patients with kidney disease.
- Immune Reconstitution Inflammatory Syndrome (IRIS): As your immune system improves, you may have an inflammatory response to previously hidden infections.
- Lactic acidosis and hepatomegaly with steatosis: Very rare but serious complications. Seek immediate medical attention if you have symptoms such as severe fatigue, abdominal pain, or jaundice.

TAF is generally associated with **fewer effects on kidney function and bone mineral density** compared to TDF.

HOW DOES TENOFOVIR ALAFENAMIDE REACT WITH OTHER DRUGS?

TAF may interact with certain medications, especially those that affect drug metabolism in the liver. Tell your provider about all medications, supplements, or herbal remedies you use.

- Co-administration with **rifampin**, **St. John's Wort**, or certain anticonvulsants may lower TAF levels.
- Some boosting agents (like cobicistat or ritonavir) are required in certain TAF-based combinations to optimize effectiveness.

MORE INFORMATION

- Download the full Prescribing Information
- Download the Patient Information Leaflet
- Learn about the Gilead Advancing Access Program

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