



# EMTRICITABINE (Emtriva)

## WHAT IS EMTRICITABINE?

Emtricitabine (Emtriva) is a drug used for antiretroviral therapy (ART). It is manufactured by Gilead Sciences. Generic versions have been tentatively approved under PEPFAR (see fact sheet 475.) Emtricitabine is also known as FTC. Emtricitabine is also active against hepatitis B.

Emtricitabine is a nucleoside analog reverse transcriptase inhibitor, or nuke. These drugs block the reverse transcriptase enzyme. This enzyme changes HIV's genetic material (RNA) into the form of DNA. This has to occur before HIV's genetic code gets inserted into an infected cell's own genetic codes.

## WHO SHOULD TAKE EMTRICITABINE?

Emtricitabine was approved in 2003 as an antiretroviral drug (ARV) for people with HIV infection. It has not been carefully studied in the elderly. In 2005 the FDA approved a liquid version for use in children over 3 months old.

There are no absolute rules about when to start antiretroviral treatment (ART). You and your health care provider should consider your CD4 cell count, your viral load, any symptoms you are having, and your attitude about taking ART. Fact Sheet 404 has more information about guidelines for the use of ART.

If you take Emtricitabine with other ARVs, you can reduce your viral load to extremely low levels, and increase your CD4 cell counts. This should mean staying healthier longer.

Emtricitabine was approved for use by people 3 months old or older.

Emtricitabine has not been approved to fight hepatitis B. Some people with HIV had their hepatitis B get worse after

they stopped taking emtricitabine. Get tested for hepatitis B before you start taking emtricitabine to treat HIV. If you have hepatitis B and stop taking emtricitabine, your health care provider should carefully monitor your liver function for several months.

## WHAT ABOUT DRUG RESISTANCE?

Many new copies of HIV are mutations. They are slightly different from the original virus. Some mutations can keep multiplying even when you are taking an ARV. When this happens, the drug will stop working. This is called "developing resistance" to the drug. See Fact Sheet 126 for more information on resistance.

Sometimes, if your virus develops resistance to one drug, it will also have resistance to other ARVs. This is called "cross-resistance." For example, if HIV is resistant to the drug 3TC (Epivir) it will almost certainly be resistant to emtricitabine. If you have already taken 3TC, your health care provider may want to do a resistance test (see Fact Sheet 126) to see whether emtricitabine will work for you.

**Resistance can develop quickly. It is very important to take ARVs according to instructions, on schedule, and not to skip or reduce doses.**

## HOW IS EMTRICITABINE TAKEN?

Emtricitabine is available in 200 mg tablets. The normal dose of emtricitabine is 200 mg daily: one tablet once a day. Emtricitabine can be taken with food or between meals.

Be sure your health care provider knows if you have had kidney problems: your dose of Emtricitabine may need to be lowered.

Emtricitabine is also available in Truvada, a combination of tenofovir and emtricitabine (see Fact Sheet 421).

## WHAT ARE THE SIDE EFFECTS?

When you start any ART, you may have temporary side effects such as headaches, high blood pressure, or a general sense of feeling ill. These side effects usually get better or disappear over time.

The most common side effects of Emtricitabine are headache, diarrhea, nausea, and rash. Levels of lactic acid in the blood (lactic acidosis, see Fact Sheet 556) increase in some people taking nucleoside analog drugs. Liver problems including "fatty liver" may also occur. In rare cases, people had some limited changes in skin color.

## HOW DOES EMTRICITABINE REACT WITH OTHER DRUGS?

Emtricitabine can interact with other drugs or supplements you are taking. **These interactions can change the amount of each drug in your bloodstream and cause an under- or overdose. New interactions are constantly being identified. Make sure that your doctor knows about ALL drugs and supplements you are taking.** However, no significant interactions have been identified yet between emtricitabine and several other ARVs.

**Emtricitabine** should not be combined with **lamivudine (3TC)** because these drugs are very similar. There is no added benefit.

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