



# TRIZIVIR (zidovudine + lamivudine + abacavir)

## WHAT IS TRIZIVIR?

Trizivir is a pill that contains three antiretroviral drugs (ARVs) used to fight HIV: zidovudine (Retrovir, AZT), lamivudine (EpiVir, 3TC), and (abacavir (Ziagen). Trizivir is manufactured by GlaxoSmithKline. Generic versions have been tentatively approved under PEPFAR (see fact sheet 475.)

The drugs in Trizivir are called nucleoside analog reverse transcriptase inhibitors, or nukes. 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 TRIZIVIR?

Trizivir was approved in 2000 as an ARV for people with HIV infection. Children under 12 years old, people who weigh less than 40 kg (88 lbs.), and people with kidney problems should not take Trizivir.

There are no absolute rules about when to start antiretroviral therapy (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 Trizivir 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.

Trizivir provides three drugs in one pill. It can be more convenient to use Trizivir than some other combinations of drugs. This could mean fewer missed doses and better control of HIV.

Trizivir can be an effective combination of ARVs in one pill. However, it is less effective than combinations that include a protease inhibitor or a non-nucleoside reverse transcriptase inhibitor. It should only be used by itself in special situations.

Some people with HIV had their hepatitis B get worse after they stopped taking lamivudine, which is part of Trizivir. Get tested for hepatitis B before you start taking Trizivir to treat HIV. If you have hepatitis B and stop taking Trizivir, 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."

**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 TRIZIVIR TAKEN?

Trizivir is taken by mouth as a tablet. The normal adult dose is one tablet, two times a day. Each tablet includes 300 milligrams (mg) of zidovudine, 150 mg of lamivudine and 300 mg of abacavir.

Trizivir can be taken with food, or between meals.

The dosage of lamivudine should be reduced for people who weigh less than 50 kilograms (110 pounds). People who weigh less than 110 pounds should normally not take Trizivir.

## 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 Trizivir are the same as with the drugs it contains: zidovudine, lamivudine and abacavir. They include headache, upset stomach, nausea, and fatigue. Fact Sheet 551 has more information on fatigue.

The most serious side effects of zidovudine are anemia and muscle problems. Very few people have these side effects. If they occur, your health care provider will probably have you stop using Trizivir. See Fact Sheet 411 for more information on these side effects and Fact Sheet 552 on anemia.

The most serious side effect of abacavir is a **hypersensitivity reaction**. The FDA recommends a genetic test before using abacavir. This blood test identifies people at high risk of developing the hypersensitivity reaction. People who have this reaction have to stop taking abacavir and **cannot take it again**. If they do, they will have a serious and possibly fatal reaction. **See Fact Sheet 416 for more information on the abacavir hypersensitivity reaction.**

The reaction usually starts within two weeks of starting abacavir. Patients had the following symptoms: fever, rash, headache, feeling bad, no energy, nausea, vomiting, diarrhea, stomach pain, cough, shortness of breath, and sore throat. **If you develop any of these symptoms while taking Trizivir, call your health care provider immediately.**

## HOW DOES TRIZIVIR REACT WITH OTHER DRUGS?

Trizivir 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 health care provider knows about ALL drugs and supplements you are taking.**

**Trizivir should not be taken with stavudine (d4T, Zerit) or with emtricitabine (Emtriva, FTC).**

**Blood levels of lamivudine may be increased by bactrim or sepra.** See Fact Sheet 535 for more information on these drugs.

**Zidovudine's side effects may be worse if you are taking several other drugs.**

**Methadone** may increase blood levels of zidovudine. If you take Trizivir and methadone, watch for zidovudine side effects.

*Revised September 18, 2009*