



# EFAVIRENZ (Sustiva, Stocrin)

## WHAT IS EFAVIRENZ?

Efavirenz is a drug used as part of antiretroviral therapy (ART). It is also called Sustiva or Stocrin. It is manufactured by Bristol-Myers Squibb. Generic versions have been tentatively approved under PEPFAR (see fact sheet 475.)

Efavirenz is a non-nucleoside reverse transcriptase inhibitor (a "non-nuke" or NNRTI). These drugs stop HIV from multiplying by preventing the reverse transcriptase enzyme from working. This enzyme changes HIV's genetic material (RNA) into the form of DNA. This step has to occur before HIV's genetic code gets inserted into an infected cell's genetic codes.

## WHO SHOULD TAKE IT?

Efavirenz was approved in 1998 as an antiretroviral drug (ARV) for people with HIV infection. It is not recommended for children under 3 years old.

There are no absolute rules about when to start 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 HIV medications. Fact Sheet 404 has more information about guidelines for the use of ARVs.

If you take efavirenz 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.

Efavirenz seems to get into the central nervous system (spinal fluid). It may help prevent mental problems such as dementia.

## 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." Cross-resistance among NNRTIs develops very easily. If you develop resistance to one NNRTI, you probably won't be able to use any of them in your ART.

**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 IT TAKEN?

Efavirenz is taken by mouth as a capsule. The normal adult dose is 600 milligrams (mg) once a day at bedtime. Efavirenz is available in capsules of 50 mg, 100 mg, and 200 mg. Most adults will take 3 of the 200 mg capsules at a time. A 600 mg tablet of efavirenz was approved in early 2002.

It is recommended that you take efavirenz on an empty stomach, at bedtime. This dosing should result in the fewest side effects. High-fat foods increase efavirenz levels and should be avoided before taking a dose.

## WHAT ARE THE SIDE EFFECTS?

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

The most common side effects are fatigue (see fact sheet 551), rash, nausea, dizziness, diarrhea, headache and insomnia. Taking efavirenz with food increases drug levels and may increase side effects. Some people see changes in body fat (see fact sheet 553.)

To avoid dizziness after taking efavirenz, take it before you go to sleep. Some people have vivid dreams. For most people, these side effects disappear within the first two weeks.

About 5% of patients taking efavirenz had serious psychiatric symptoms. If you are taking efavirenz and experience serious depression, thoughts of suicide or other

psychiatric symptoms, talk to your health care provider right away.

There have been a few reports of serious liver problems, even in people with no previous liver disease. Liver function tests should be done regularly, especially for patients who have had hepatitis B or C or other liver problems.

Studies in monkeys showed that efavirenz is likely to cause birth defects. Pregnant women should not take it, especially during the first 3 months of pregnancy. However, recent studies have shown no increase in birth defects in pregnant women taking efavirenz.

People who take efavirenz may falsely test positive for marijuana use. To prove that the results are false, you would have to identify the drug that you are taking. This would mean disclosing that you have HIV infection.

## HOW DOES IT REACT WITH OTHER DRUGS?

Efavirenz can interact with other drugs or supplements that you are taking. **These interactions can change the amount of each drug in your bloodstream and cause an under- or overdose. New interactions are being identified all the time.**

Drugs to watch out for include other ARVs, drugs to treat tuberculosis (see fact sheet 518), especially rifampin, which may require that you take a higher dose of efavirenz. Other drugs to watch out for include medications for erectile dysfunction (such as Viagra), for heart rhythm (antiarrhythmics), and for migraine headaches. Interactions are also possible with several antihistamines (allergy medications), sedatives, drugs to lower cholesterol, and anti-fungal drugs. **Make sure that your health care provider knows about ALL drugs and supplements you are taking.**

Efavirenz decreases blood levels of **methadone**. Efavirenz can lower concentrations of **buprenorphine**.

The herb **St. John's Wort** (See Fact Sheet 729) lowers the blood levels of some nonnucleoside reverse transcriptase inhibitors. Do not take it with efavirenz.

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