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An HIV Information Site & HIV Educational Resource Site (HIS & HERS)

Crixivan - indinavir

General Information

Indinavir (Crixivan) is almost always used as one component of a multidrug combination to suppress the human immunodeficiency (HIV) viral load.

Specifics

Indinavir is one of the oldest antiviral drugs against HIV, and it is still being taken by many persons who started using it as long as 6-8 years ago.

Indinavir works by inhibiting the production of HIV's proteins. It is classified as a protease inhibitor (PI).

Dosing

Generally indinavir is taken as two of the 400 mg capsules every 8 hours on an empty stomach. It is very important to take unboosted (without boosting from **ritonavir**) indinavir **on an empty stomach** or the drug will not be absorbed into the body as well and that could result in poor effect and possibly resistance by HIV to indinavir and to other protease inhibitors. **An empty stomach is defined as either at least 1 hour before you have anything to eat or at least 2 hours after you have eaten anything.**

However, very frequently indinavir is taken with 100-200 mg of **ritonavir** (Norvir) twice a day, and the dose of indinavir is changed to 2 of the 400 mg capsules twice a day **with or without food.**

This combination of **ritonavir** and indinavir is termed "boosted indinavir" because **ritonavir** increases the levels of indinavir in the bloodstream. This boosted dosing is used when atazanavir is combined with **nevirapine** (Viramune) or **efavirenz** (Sustiva) or one must increase the dose of indinavir.

Other medications may not mix well with indinavir including anticholesterol drugs, drugs for erection problems, blood thinners, herbal products, and antibiotics. Make sure your healthcare providers knows all the medications you are taking including any herbal and over the counter medications.

Avoid drinking grapefruit juice while you are taking indinavir.

Adherence

(this refers to your willingness, ability, and actual performance in taking your medications)

For further information and tips on adherence, go to the [Adherence section](#) of this site.

As with any antiviral drug or antibiotic, try not to ever miss a dose. If you miss a dose and notice that you have done so within a few hours of its scheduled time, you may take the dose as usual and take the next dose at its regular time.

If you miss more than one dose, look at the reasons why you missed them and come up with a plan to avoid it in the future. For example, if you fell asleep too early, take the medicine earlier in the evening, with your later meal, set an alarm, or have someone appointed to wake you up for your medicine.

It is strongly recommended that you consider using weekly pill boxes and arrange all of your doses a week in advance. Buy a small pill box so that you can carry a dose or two of your medicines with you in case you are away from home.

Possible Side Effects

The package insert for most drugs including indinavir is often overwhelming and scary with perhaps an overemphasis on side effects. We

Most people take indinavir without many side effects.

Possible side effects include dry or chapped lips, kidney stones, stomach upset, diarrhea, nausea, liver problems, increased fat (cholesterol and triglycerides) in the blood, turning yellow with jaundice, and possibly diabetes. Rarely some people also report ingrown toenails or hair loss. The chapped lips can be treated with a usual lip balm or in really bad cases with "bag balm" which is used to treat chapped cow udders or nipples; you can get bag balm in the drugstore now.

Usually you will have blood tests done in the first month to look for the beneficial effects of atazanavir and any side effects.

Many minor side effects will either stay constant or get better with time. It is mainly the side effects that are severe or get worse that may cause significant health risks for you.

Far and away the most common side effect of indinavir is elevated blood bilirubin levels. Bilirubin is a pigment that the liver secretes to help it digest food. When bilirubin is elevated in the blood due to atazanavir, it can be seen early on and in milder forms only in blood tests. If the bilirubin goes higher, you may notice yellowing of your eyes and/or your skin. While annoying, this condition is not particularly dangerous to the liver or harmful in any other way.

One of the most annoying possible side effects of indinavir is crystallization of the drug in the urinary tract (kidneys, kidney tubes, bladder) and this can lead to large stones in the kidneys or bladder or

have summarized the important and more common problems here.

tubes of the kidneys. These stones are usually very painful, they can produce bleeding, and they can block the flow of urine. Most people can drink extra fluids and prevent these stones completely. It is recommended that anyone on indinavir drink at least 48-64 ounces of fluid per day and more if you are losing fluid through sweating, vomiting, or diarrhea. Any type of fluid will do as long as its not an alcoholic beverage including wine coolers, wine, beer, mixed drinks, or liquor. If you cannot or will not drink the minimum amount of fluid, then indinavir might not be a good drug for you. If you feel pain over your middle back to one side or another or traveling down your groin toward your genital organs, you may have a stone or you are beginning to have a stone. You should immediately increase your fluid intake dramatically and you should inform your healthcare provider or go to an Emergency Room.

All drugs of this type can cause or contribute to abnormal fat redistribution characterized by an enlarged belly, thinning of the face, arms, or legs. In most cases this would be also accompanied by elevated cholesterol levels, elevated triglyceride levels, and perhaps a tendency to develop diabetes.

Many other drugs have interactions with nelfinavir that may be helpful, harmful, or even deadly.

Make sure that you tell your healthcare provider about all of your medications including over-the-counter ones.

Some medications should NOT be taken at all with indinavir:

- Certain antihistamines: terfenadine (Seldane), astemizole (Hismanal)
- Drugs to regulate heart rhythm: amiodarone (Carderone, Pacerone)
- Ergot derivatives for migraine headaches: dihydroergotamine (D.H.E. 45), ergonovine, ergotamine, methylergonovine (Methergine)
- Drugs to treat mental health problems (Tourette's syndrome): pimozide (Orap)
- Sedatives/sleeping pills: midazolam (Versed), triazolam (Halcion)
- Statins (drugs to decrease cholesterol) other than atorvastatin (Lipitor), pravastatin (Pravachol)
- St John's wort
- Tuberculosis treatment: rifampin (Rifadin, Rimactane, Rifamate), rifapentene (Priftin)
- Drugs to prevent seizures: carbamazepine (Tegretol)
- One other protease inhibitor: **atazanavir** (Reyataz)

Certain drugs should be used only very cautiously:

- Drugs to prevent seizures: phenytoin (Dilantin)
- All erectile dysfunction drugs: sildenafil (Viagra), tadalafil (Cialis), vardenafil (Levitra)
- Drugs to prevent rejection of transplanted organs or bone marrow: cyclosporine

Interactions

This refers to the way that indinavir affects other medications

(Neoral, Sandimmune), tacrolimus (FK506, Prograf), sirolimus (Rapamune)
Drugs to treat mycobacteria or TB-like infections: Rifabutin (Mycobutin)
Calcium channel blocker for heart or blood pressure problems: amlodipine (Norvasc)

Also it is recommended to avoid grapefruit juice while taking indinavir.

Report to you healthcare provider or go to an Emergency Room if you have severe side effects, increasing side effects, shortness of breath, uncontrollable diarrhea, back pain, groin pain, fever, weakness, jaundice (eyes and skin turn yellow,) muscle pain, nausea and vomiting so that you cannot hold down your food and liquids.

You can download this handout in PDF format by clicking [HERE](#).

You can download the Merck handout for indinavir [Download the PDF version](#).

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