

RITONAVIR

Other NAMES: Norvir®, Norvir® Sec

WHY is this drug prescribed?

Ritonavir is an antiretroviral (anti-HIV) drug that belongs to a class of drugs called **protease inhibitors**. Protease inhibitors interfere with a different step in virus reproduction than other classes of drugs previously available to fight HIV. Ritonavir is used together with other antiretrovirals to delay the progression of HIV infection. By doing this, your immune system should improve (increase in CD4⁺ count) and you will be better protected against infections.

Ritonavir does not cure AIDS or completely kill the HIV virus, but helps to prevent further damage by slowing down the production of new viruses. Treatment with ritonavir does not reduce the risk of passing infection on to others. You will still be able to pass HIV by sexual contact, by blood transfer or by sharing needles. You should always use appropriate precautions to prevent passing HIV on to others.

HOW should this drug be taken?

The recommended dose of ritonavir is 600 mg twice daily. If given with another protease inhibitor, the dose of ritonavir can vary between 100 to 400 mg twice daily.

Some people experience nausea when beginning treatment with ritonavir. Thus, it may be helpful to start at a lower dose and increase slowly (e.g., start at 300 mg twice daily for 3-4 days, then 400 mg twice daily for 3-4 days, 500 mg twice daily for 3-4 days, then 600 mg twice daily) to reach the full dose by 10-14 days.

Your dosage is:

It is preferable to take ritonavir with food to obtain better absorption and to decrease stomach upset. The taste of the oral solution may be improved by mixing with chocolate milk, Ensure®, or Advera®. Mix only one dose at a time, and take the whole dose within 1 hour of mixing.

Capsules should be swallowed unchewed, with water or some other non-alcoholic drink. You should avoid excessive consumption of alcohol during your treatment.

What should you do if you FORGET a dose?

If you miss a dose of ritonavir, take it as soon as possible. However, if it is time for your next dose, do not double the dose, just carry on with your regular schedule.

Why should you not forget to take this drug?

If you miss doses of ritonavir, the amount of HIV virus in your blood (known as the viral load) will start increasing again and your immune system will be further damaged. A few missed doses can be enough for ritonavir to stop being active. A phenomenon known as **resistance**. When this happens, other antiretrovirals that work in a similar way as ritonavir may also become inactive. **Therefore, missing doses of ritonavir can decrease treatment options for the future.** Even if you do not feel well, you should always take your doses of ritonavir. Please do not stop ritonavir without talking to your doctor first.

What ADVERSE EFFECTS can this drug cause? What should you do about them?

The most commonly reported adverse effects include: **feeling weak/tired, nausea, vomiting, diarrhea, loss of appetite, abdominal pain, taste disturbance (with oral solution),**

tingling sensation or numbness in hands, feet, or around lips, headache, or dizziness. If these effects occur and bother you, please call the clinic or discuss them at your next visit.

Regular blood tests will be done to detect any changes in your liver or pancreas function. Also, your doctor will look for increases in your cholesterol, triglyceride and blood sugar level.

The long-term effects of ritonavir are unknown at this time. Further studies are being carried out. Abnormal weight gain or changes in body shape have been reported, but it is uncertain if ritonavir is responsible for these changes.

It is important that you keep your doctor appointments and come for your laboratory tests so that your progress can be followed.

What other PRECAUTIONS should you follow while using this drug?

You must make sure that you are taking the right dose. If you take higher doses of ritonavir than what is prescribed, you may increase the chance of having adverse effects. If you take lower doses of ritonavir than what is prescribed, the HIV virus may become resistant to ritonavir.

Certain drugs can increase or decrease the effect of ritonavir. Also, ritonavir might influence the effect of other drugs you are taking. Inform your doctor and pharmacist of all prescribed and non-prescribed drugs you are taking. As well, you should inform them of natural products you are taking. If you wish to start a new drug or natural product, please consult with your pharmacist before doing so.

Do NOT take the following medications with ritonavir:

- Alprazolam (Xanax®)
- Astemizole (Hismanal®)
- Bepridil (Vascor®)
- Bupropion (Wellbutrin® SR, Zyban®)
- Cisapride (Prepulsid®)
- Clorazepate (Tranxene®)
- Clozapine (Clozaril®)
- Diazepam (Valium®)
- Encainide (Enkaid®)
- Ergot derivatives [Ergotamine (Cafergot®, Bellergal®, Ergodryl™, Gravergol®), ergonovine, dihydroergotamine (Migranal®), methylergonovine (Methergine®)]
- Estazolam (Prosom®)
- Flecainide (Tambocor™)
- Flurazepam (Dalmane®)
- Midazolam (Versed®)
- Pimozide (Orap®)
- Piroxicam (Feldene™)
- Propafenone (Rythmol®)
- Propoxyphene (Darvon®)
- Quinidine (Biquin Durules®)
- Rifabutin (Mycobutin®)
- Triazolam (Halcion®)
- Terfenadine (Seldane®)

Please inform your physician or pharmacist if you are taking any of the above medications so that an alternative medication may be selected.

The efficacy of birth control pills or other hormones used to prevent becoming pregnant may decrease if you are taking ritonavir. A second method of contraception should **always** be used. In general, even if you are not taking ritonavir, the use of condoms is always recommended to decrease the risk of passing HIV on to others.

The safety of ritonavir has not been established during pregnancy. Please inform your doctor if you are pregnant. Your doctor can recommend the appropriate treatment to help reduce the risk of passing the HIV virus on to your baby.

Breastfeeding is NOT recommended if you have HIV as you can transmit the virus to your baby through your breast milk.

How should this drug be STORED?

Ritonavir capsules (Norvir® Sec) should be stored in a cool (2 - 25°C) dry place, protected from light and well out of the reach of children. The drug is stable for 30 days when kept at room temperature. Ritonavir oral solution (Norvir®) can be kept at room temperature (20 - 25°C). **Shake well before each use.**

Ensure that the drug has not expired by checking the expiry date ("EXP") shown on the outside of the package.

Do not store where there is heat and moisture (for example, in the bathroom or near the stove) as the drug may become less active and the soft gel capsules may stick together.

If you have any questions or concerns about this drug or if you are experiencing adverse effects, please discuss them with your pharmacist, doctor or nurse.

Write questions or concerns down to ensure they are addressed.

The following pharmacist is available to answer questions:

Pharmacist: _____

Telephone: _____

Reference: Product Monograph Norvir® / Norvir® Sec (ritonavir). Saint-Laurent, Qc, Canada: Abbott Laboratories Limited, 2002. Prepared by the Ontario HIV Pharmacy Professional Specialty Group, 2003.

Additional medication fact sheets and updates may be found at: www.tthivclinic.com

