

# Ritonavir (Norvir<sup>®</sup>)

This leaflet is designed to give you a general idea of the most important things you need to know about your new medicine. It is not supposed to replace the patient information leaflet (PIL) that comes with the medicine, but is designed to be read in conjunction with it. If you have any questions or are unsure about anything, ask your doctor, nurse or pharmacist.

## What is ritonavir?

Ritonavir belongs to a group of antiretroviral drugs called protease inhibitors, often referred to as 'PIs'.

Ritonavir is used in combination with other antiretrovirals for the treatment of the human immunodeficiency virus (HIV). Ritonavir is always taken with another protease inhibitor as it is used as a 'pharmacokinetic enhancer' to boost levels of protease inhibitors in your body. Without ritonavir, other protease inhibitors may not be effective at controlling the virus. Please speak to your clinic doctor, nurse or pharmacist if you would like more information about how these drugs work.

## How should I take ritonavir?

There are a number of different doses of ritonavir. The most common dose is one 100mg tablet taken once daily with food. Sometimes ritonavir is taken twice daily, or at higher doses. The dose depends on which protease inhibitor you are taking it with. When taking ritonavir to 'boost' the levels of another protease inhibitor, the two drugs must be taken at the same time each day.

## How much food do I need to take with ritonavir?

There are no specific types or amounts of food that need to be taken with ritonavir. You can take ritonavir with a substantial snack, or up to 30 minutes after a main meal.

## What are the common side effects with ritonavir?

Ritonavir, like all other medicines, has some side effects. Most of these are minor and will settle within a few days or weeks. Make sure you read the leaflet that came with ritonavir for a complete list. Bear in mind that most of the studies with ritonavir were using much higher doses than we do now so not all of these may be relevant. Some examples of the most common side effects are listed below.

- 'Stomach' side effects: Feeling sick (nausea), being sick (vomiting), diarrhoea, stomach pain or discomfort, indigestion.
- 'Head' side effects: Headache.
- Changes in blood test: Changes in some of your liver or kidney tests, or changes in cholesterol.
- Other side effects: Rash.

If you experience any side effects, and either they are troubling you or you develop any new symptoms after you start ritonavir, tell your doctor, nurse or pharmacist who will tell you what to do.

If you decide to take stop taking ritonavir, it is important that you tell your doctor first so that they can discuss other treatment options with you.

If you have a question about ritonavir or any of your medicines, speak to your doctor, pharmacist or nurse.

Contact: [kobler.pharmacy@chelwest.nhs.uk](mailto:kobler.pharmacy@chelwest.nhs.uk)

Telephone: 020 3315 5604

### What medicines should I avoid with ritonavir?

It is always important to make your doctor and pharmacist aware of any medicines you take, including herbal, complementary or over the counter medicines to ensure that they are compatible with ritonavir and your other antiretrovirals. Make sure you read the patient information leaflet you received with ritonavir for a full list, but always tell your doctor or pharmacist if you are taking any of the following before you take either ritonavir or the new medicine:

| Medicine  | Why do your doctor & pharmacist need to know about this?   |
|---|--|
| Cholesterol medicines called statins                                      | Statins are affected by ritonavir which may lead to more side effects. Your clinic doctor will help choose the right statin for you.   |
| Inhalers or nasal sprays  | Some inhalers and nasal sprays contain steroids which can build up in your body if taken with ritonavir, leading to side effects.  |
| St John's Wort for depression   | This can reduce the levels of some antiretrovirals within your body, meaning they may be less effective at suppressing the virus.  |
| Calcium or iron supplements, multivitamins, or other indigestion remedies | Medicines or supplements containing calcium, iron, magnesium, or aluminium can stop you from absorbing some antiretrovirals properly. Speak to your doctor or pharmacist before taking any of these. |
| Contraceptives (birth control)  | Some antiretrovirals can reduce the amount of contraceptive in your body, making it less effective. Your clinic will help choose the right method of contraception for you.                          |

### What if I:

#### **Get a headache or just need a pain killer?**

Paracetamol can be taken with ritonavir. Ibuprofen can also be taken, as long as you don't have any problems such as stomach ulcers or asthma, or unless your doctor has advised you to avoid NSAIDs (non-steroidal anti-inflammatory drugs) for any reason.

#### **Get hayfever or have other allergies?**

The antihistamines cetirizine and chlorphenamine can be taken with ritonavir. If your allergy is related to ritonavir (such as a rash) or any other medicines, speak to your doctor or pharmacist before taking any medicines. You should speak to your doctor or pharmacist before using any nasal sprays or getting any injections, to check for possible interactions with ritonavir and any other medicines you are taking.

#### **Get diarrhoea?**

For short-term diarrhoea relief, you can use loperamide. Remember to drink plenty of fluids. If you get a lot of diarrhoea and it lasts more than a few days, contact your clinic to ask for advice.

#### **Get heartburn, reflux, indigestion or need medicines for stomach ulcers?**

Antacids and proton pump inhibitors (used to treat stomach ulcers) can be taken with ritonavir but may affect other antiretrovirals such as rilpivirine, raltegravir, dolutegravir or elvitegravir, so you should check with your doctor or pharmacist before taking them.

#### **Am prescribed or take something for my mood, such as an antidepressant or St John's wort?**

Check with your clinic doctor or pharmacist before taking these. St John's wort can reduce the levels of some antiretrovirals within your body, meaning they may be less effective at suppressing the virus.

#### **Currently take, or would like to take supplements, including calcium or iron?**

Most supplements can be taken with ritonavir, but always check with your doctor or pharmacist before taking them. However, if you also take the antiretrovirals atazanavir, rilpivirine, raltegravir, dolutegravir or elvitegravir, check with your doctor or pharmacist before taking the supplement.

#### **Miss my ritonavir!**

Antiretrovirals work best if there is a constant amount of the drugs in your body. It is really important that you take them regularly. However, occasionally you may forget a dose. Don't worry if this happens, just follow the guidance below. If you are having problems remembering to take your medicines, speak with your clinic now and they may be able to help you.

- If you take ritonavir **ONCE** daily: If you notice **within 12 hours** of the time you usually take ritonavir, you must take the tablet(s) as soon as possible. Always take the tablet with food and with a dose of your other protease inhibitor. Then take the next dose as usual. If you notice **12 hours or more after** the time you usually take ritonavir, then do not take the missed dose. Wait and take the next dose, with food, at your usual time.
- If you take ritonavir **TWICE** daily: If you notice **within 6 hours** of the time you usually take ritonavir, you must take the tablet as soon as possible. Always take the tablet with food and with a dose of your other protease inhibitor. Then take the next dose as usual. If you notice **6 hours or more after** the time you usually take ritonavir, then do not take the missed dose. Wait and take the next dose, with food, at your usual time.
- **Never** take a double dose to make up for missing one.