How do these medications work?

Indinavir and ritonavir are antiretroviral drugs that act by preventing multiplication of the human immunodeficiency virus (HIV). Indinavir and ritonavir are potent protease inhibitors. They inhibit viral replication by preventing maturation of new copies of the human immunodeficiency virus (HIV).

Indinavir is used in combination with ritonavir and other antiretroviral drugs to slow progression of the disease and reduce the risk of opportunistic infections (AIDS-related infections).

Indinavir and ritonavir do not cure AIDS nor kill the virus. There is a permanent risk of transmitting HIV either through sexual or blood contact. It is therefore essential that precautions always be taken (latex condoms, clean syringes, etc.).

Fertile women must use an effective means of birth control.

How do I take these medications?

Your dosage

<table>
<thead>
<tr>
<th>Ritonavir</th>
<th>Indinavir</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) From to</td>
<td>From capsule(s) at mg or mg</td>
</tr>
<tr>
<td>______ mL at 80 mg/mL</td>
<td>100-mg capsule(s)</td>
</tr>
<tr>
<td>2) From to</td>
<td>capsule(s) at 200 mg</td>
</tr>
<tr>
<td>______ mL at 80 mg/mL</td>
<td>100-mg capsule(s)</td>
</tr>
<tr>
<td>3) From and the following days</td>
<td>capsule(s) at 400 mg</td>
</tr>
<tr>
<td>______ mL at 80 mg/mL</td>
<td>100-mg capsule(s)</td>
</tr>
<tr>
<td>______ times per day</td>
<td>times per day</td>
</tr>
</tbody>
</table>

Indinavir

A good hydration, that is, at least 1.5 litres (48 oz.) of water or other liquid (8 to 10 glasses), is required every day to eliminate indinavir properly from your system and prevent formation of kidney stones (nephrolithiasis).

It is recommended, in particular, that you drink after every dose of indinavir and continue drinking for the next two hours.

Drink even larger quantities if the weather is hot, if you exercise, if you are feverish or if you take anything dehydrating, such as alcohol, recreational drugs or food or beverages containing caffeine.

Oral solution of ritonavir

The oral solution of ritonavir must be shaken well before taking the recommended amount.

The oral solution of ritonavir may be taken alone or mixed with 240 mL (1 cup) of Ensure®, Advera®, chocolate milk, chocolate or vanilla pudding, or ice cream to improve the taste. Ritonavir must be consumed within 60 minutes of being mixed. The taste of ritonavir can also be improved by swallowing a spoonful of peanut butter before taking it.

Other suggestions include taking ritonavir with molasses, honey, table syrup, maple syrup, chocolate syrup, mint ice cream, V8 Splash® or coffee, or eating chips after your dose.
It is also best not to mix ritonavir with too much liquid and to use a straw to drink it. Chewing gum after your dose can also help to disguise the taste.

**Indinavir and ritonavir (capsule and solution)**

In combination, indinavir and ritonavir may be taken **twice a day with food**. For example, you can take them at breakfast and at supper.

It is important to take your antiretroviral medicine properly - i.e. never forget a dose, follow the instructions on how to take the medicine, and always keep on with your treatment.

It is important to take indinavir and ritonavir regularly, at the same time each day, and to keep to this schedule as closely as possible. Adherence to therapy will help **prevent resistance** (HIV’s ability to recognize and defeat the effect of the medication) and **avoid treatment failure** (loss of efficacy of the antiretroviral treatment), which would result in an increased viral load and a lower number of CD4 cells, which are the ones that help your body fight infection.

Nearly everyone tends to relax their compliance with the treatment at some point. The key to success is motivation. Consult members of your care team so that they can explain the benefits of the treatment you are having. They can also suggest ways that will help you maintain it properly.

**Never stop your treatment without first speaking to your doctor.**

**What if I forget to take a dose?**

Take the dose you missed as soon as possible and then continue with your regular schedule.

If it is nearly time for your next dose, however, just take that one at the usual time. Do not double up doses.

**What are the side effects of this combination?**

**Ritonavir**

Side effects such as gastrointestinal effects, numbness and tingling around the mouth in the hour after taking ritonavir (peribuccal paresthesia), increased sensitivity to touch, dizziness and a feeling of being “drugged”, generally disappear after the first four weeks of treatment.

In rare cases, ritonavir causes peripheral neuropathy: numbness, burning sensation, pain or weakness in the hands or feet. **This effect maybe reversible if you contact your doctor without delay.**

Ritonavir can cause a skin rash, generally at the beginning of therapy. Sometimes the rash is mild, in which case your doctor can treat it with an anti-inflammatory agent (cream) or an antihistamine (Benadryl®, Atarax®, etc.). In other cases, however, treatment must be stopped.

If the reaction is strong (i.e., you have one or more of the following symptoms: fever, swelling, blisters, mouth ulcers, bloodshot eyes, muscle and joint aches), **your doctor will stop ritonavir.**

**If you get a rash, contact your doctor immediately.**

**Indinavir**

The main side effect of indinavir is the formation of kidney stones (nephrolithiasis), associated with pain in the back or side, or blood in the urine. **If you experience these symptoms, contact your doctor.**

Drinking large quantities of liquids could help prevent this problem (see advice above).

Indinavir may cause an increase in bilirubin (yellow pigment) levels in your blood (hyperbilirubinemia). This can occur without symptoms. Your doctor will monitor your bilirubin level by taking regular blood tests.
Indinavir and Ritonavir
Gastrointestinal effects such as nausea, diarrhea, vomiting, abdominal pain and loss of appetite are the most frequent side effects of ritonavir and indinavir.

Take ritonavir and indinavir with food to help lessen these side effects. If these effects persist, consult your pharmacist, your doctor or your dietician. They can help you find ways to better manage these side effects.

Indinavir and ritonavir may cause taste changes. If you have a bad or bitter taste in your mouth, use hard candy or chewing gum (both sugar-free).

Adverse effects related to antiretroviral therapy have recently been reported, such as diabetes, elevated cholesterol and triglyceride concentrations (blood fat levels), ingrowing toenails, dry skin, an accumulation of fat around the waist and, more rarely, the neck, accompanied by thinning of the legs, arms, buttocks and face. The medications responsible for these effects and the underlying mechanism are as yet unknown.

Inform your doctor or pharmacist of any troublesome side effects.

Can I take indinavir and ritonavir with my other medications?

- **Oral contraceptives ("the pill")**
  Ritonavir can decrease the efficacy of oral contraceptives. *Additional protective measures, such as latex condoms, are recommended.*

- **St. John's wort**
  St. John's wort can decrease the efficacy of indinavir and ritonavir and possibly allow the virus to develop resistance. *Do not take St. John's wort while you are taking indinavir and ritonavir.*

Consult your doctor or pharmacist before taking any new prescription or non-prescription medication, natural product or recreational drug.

Can I drink alcohol if I’m on indinavir and ritonavir?

Avoid excessive or regular consumption of alcoholic beverages (beer, wine, spirits), as this may increase the risk of hepatitis (inflammation of the liver) or interact with some of your medications.

However, do not miss a dose of your medication because you want to have an alcoholic drink. Unless your doctor tells you otherwise, reasonable (social) consumption should not damage your health.

What if I’m pregnant or breast-feeding?

We do not yet know the effects of indinavir or ritonavir in pregnant women. Talk to your doctor if you want to take indinavir and ritonavir and are pregnant or want to become pregnant.

Since the virus can be transmitted through maternal milk, breast-feeding is not recommended in HIV-positive women.

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Storage

**Indinavir** must be kept away from light and humidity. Keep indinavir in the original bottle, in a dry place, at room temperature (15-30°C or 59-86°F). Avoid humidity (bathrooms, etc.). Keep the desiccant in the bottle.

If you use a pill case or the small container provided by Merck Frosst, do not keep your indinavir in it for more than 24 hours before taking it.

The **capsules of ritonavir** should be kept in the refrigerator (2 to 8°C or 36 to 46°F). They can also be kept at room temperature (less than 25°C or 77°F) for no more than 30 days.

The **ritonavir oral solution** must be kept at room temperature (15-25°C or 59-77°F).

Keep out of sight and reach of children.

General Advice

Always keep your appointments with your doctor and the care team, so that your health can be closely monitored.

If you have any questions about your medications or need help to schedule when to take them, please contact your doctor or pharmacist, who is familiar with what you are taking.

**Contact person:**

**Telephone:**

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