HIV Life-cycle and antiretroviral site of action

What are the treatment objectives?

Different antiretroviral (anti-HIV) drugs act at different stages of HIV replication.

When taken regularly, according to the instructions, antiretroviral therapy lowers the level of virus in the blood (viral load) and improves your immune function (CD4+ T lymphocytes).

Our aim is to:
- lower your viral load to below 20 copies/mL
- raise your CD4 count as much as possible

The objective is to maintain your health and reduce the risk of developing infections which appear when your immune defences are down.

Why do I need to take the drug regularly?

Most HIV drugs can interact with other drugs. It is important to let your pharmacist or doctor know about all other prescription drugs, over-the-counter medications, natural products and recreational drugs you are using.

Why don't I need to take the drug regularly?

Why do I need to take the drug regularly?

Most of the antiretroviral therapies are well tolerated.

However, each individual is different and some people may have side effects. You will find here the effects that could be observed with the therapy that has been prescribed to you.

Before you consider discontinuing your therapy or if you have any side effects, talk to your doctor or pharmacist; they can help you with tips to manage them.

- **Systemic effects**: Fatigue, headache, minor aches and pains, muscle pain. These effects generally subside after the first weeks of treatment. They disappear when your body becomes accustomed to the drugs. Try to start your therapy when you are well rested. If possible, try to start when you have few days off. For headache and muscle pain, acetaminophen (Tylenol) may be useful. You should, however, notify your doctor if these symptoms are accompanied by fever, a rash, shortness of breath, or if you become pale or experience gastrointestinal effects including a loss of appetite, abdominal pain accompanied by nausea, vomiting or any other unusual and persistent adverse effects.

- **Gastrointestinal effects**: Diarrhea, loss of appetite, nausea sometimes with vomiting. Taking medications with food often helps to reduce digestive effects. First, make sure your medication may be taken with food. Sometimes changing your schedule can help to better control digestive effects. Certain people may require medications for the treatment of nausea, such as dimenhydrinate (Gravol), or diarrhea (modium, calcium or other medication). Be sure to notify your doctor if you vomit every day, if you have more than three diarrheal stools a day, if you have a fever if there is blood in your stool and, finally, if the digestive symptoms are accompanied by intense fatigue or if these symptoms persist and become worse. It is essential to avoid dehydration, so you should seek advice without delay.

- **Skin reactions**: Eruptions (redness) may develop during the first few weeks of treatment, especially with antiretrovirals in the NNRTI class. Most of the time, the eruptions are not severe and you will be offered to continue your medication. At any time, if eruptions occur, it is important to have a doctor assess the severity of your symptoms. When needed, taking an antihistamine may help reduce the itching. In rare cases, the reaction may be severe and treatment may have to be discontinued.

- **Increase of the bilirubine**: jaundice is a yellow coloring of your skin and the white of your eyes. This effect, if it shows itself, tends to decrease over time.

Jaundice is not dangerous and does not require to stop the therapy. However, if the jaundice bothers you, discuss it with your healthcare professional.

- **Central nervous system**: Abnormal dreams, drowsiness or insomnia, dizziness, changes in mood, etc. These effects can appear in various degrees with certain antiretrovirals, but especially with efavirenz (Sustiva, Atripla). These effects disappear after two weeks in most people.

Talk to your doctor if they persist beyond 4 weeks.

- **Mixing medication!**

Most HIV drugs can interact with other drugs. It is important to let your pharmacist or doctor know about all other prescription drugs, over-the-counter medications, natural products and recreational drugs you are using.

Why do I need to take the drug regularly?

Medications must be taken regularly (at the same time each day) and as directed by your doctor or pharmacist to ensure there is always a sufficient amount in your blood.

If the concentration is too low, the virus will begin to replicate itself and your treatment will no longer be effective.

1. Try to integrate taking your medication into your lifestyle, not the other way around.

2. Combine the intake of drugs with daily activities: taking your medication after supper, before bedtime or before brushing your teeth, for example, is a systematic way to remember to take it.

3. It is usually easier to take medications at home, where you are less likely to forget.

4. Changes in routine (trips, weekends, shift changes): before a change occurs, determine which strategies you will use to avoid forgetting your dose of medication.

5. Think ahead: always have an extra daily dose on hand. Renew your prescriptions a week early.

6. Use tools to adhere to your regimen, such as a pill organizer or a timer or watch with an alarm, or use a journal to keep track of your medications.

7. Establish a network (friends / family) that will help you in taking your medicines.

Keep in mind that anyone can have trouble adhering to treatment. Don’t hesitate to consult your healthcare team and ask for help.

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With food

Hours

* Avoid taking with high-fat meals.
** Meal with approximately 390 calories. Taking this medication with a nutritional drink (Boost, Ensure, etc.) is not sufficient to absorb rilpivirine adequately.

** In the presence of a virus with 3 mutations or more on the protease gene.

Notes

This is why it is important to regularly do your blood tests and attend your medical appointments.

Persons to contact

Schedule of your medication

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<tr>
<th>Name</th>
<th>With food</th>
<th>Hour</th>
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<tr>
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