

Prezista

Summary

Prezista contains one medicine—darunavir. Darunavir belongs to the class of drugs called protease inhibitors. Prezista is used as part of combination HIV treatment (ART) in adults and is usually taken at a dose of one pill once daily with food. Overall, Prezista was well-tolerated in clinical trials. General side effects included diarrhea and nausea; these were usually of mild to moderate intensity, and temporary.

What is Prezista?

Prezista contains one medicine—darunavir. Darunavir belongs to the class of drugs called protease inhibitors.

How does Prezista work?

Darunavir in Prezista works by interfering with enzymes needed by HIV called protease. Using darunavir alone is not enough to suppress HIV. Therefore, Prezista is meant to be used with other anti-HIV drugs, including ritonavir, as part of combination therapy against HIV. Using Prezista together with other anti-HIV drugs greatly reduces HIV's ability to infect cells and make copies of itself.

How do people with HIV use Prezista?

Prezista is meant to be used together with other anti-HIV drugs. It is always taken with ritonavir, together with food. The type of food does not matter. Prezista is taken once or twice daily; your doctor will tell you which schedule of Prezista is right for you.

For more information about HIV treatment, see CATIE's *Your Guide to HIV Treatment*.

For many people with HIV, the use of ART (HIV treatment or antiretroviral therapy) has increased their CD4+ cell counts and decreased the amount of HIV in their blood (viral load). These beneficial effects help to greatly reduce the risk of developing a life-threatening infection or an AIDS-related cancer. Neither Prezista nor any other treatment regimen is a cure for HIV. It is therefore important that you see your doctor for checkups and lab tests on a regular basis.

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Evidence shows that HIV-positive people who are on ART, engaged in care, and have an ongoing undetectable viral load are substantially less likely to transmit HIV to others, be it through sex, when sharing equipment to use drugs or during pregnancy and birth. In fact, the evidence for sexual transmission shows that people on ART who maintain an undetectable viral load do not pass HIV to their sexual partners. For further information see the CATIE fact sheet *HIV treatment and an undetectable viral load to prevent HIV transmission*. However, it is still a good idea to use condoms because they can reduce your risk for getting and passing on other sexually transmitted infections.

Warnings

Special populations

1. Pregnant women

A clinical trial with 31 pregnant women with HIV has found that levels of darunavir, even when used with the booster ritonavir, were lower in the blood compared with levels in these women after they gave birth. However, no cases of HIV transmission to infants occurred and all the women were able to suppress HIV during pregnancy. Increasing the dose of darunavir + ritonavir to 800 mg + 100 mg taken twice daily does not appear to change the effect of pregnancy on darunavir levels. Despite this finding, darunavir + ritonavir has been prescribed by doctors caring for pregnant people with HIV. If you are taking Prezista and are pregnant or want to have a baby, speak to your doctor right away.

2. Older people

Prezista has not been formally studied in large numbers of people aged 65 and older.

3. Hemophiliacs

HIV-positive people who are hemophiliacs and who use protease inhibitors (including darunavir in Prezista) may experience more frequent bleeding under the skin and/or in the joints. It is not certain why this may occur. However, Janssen recommends

“the frequency of bleeding episodes should be closely monitored in patients on Prezista.”

Cholesterol and blood sugar

Levels of cholesterol and sugar in your blood may increase when you take Prezista or other anti-HIV drugs. The manufacturer suggests regular monitoring of cholesterol and sugar (glucose) levels in the blood.

Liver health

Prezista has not been tested in people with underlying liver injury.

In rare cases, the liver may become injured in some people who take darunavir (in Prezista). According to the manufacturer of Prezista, liver injury among darunavir users has “generally occurred” in patients with one or more of the following:

- advanced HIV infection
- infection with hepatitis B virus or hepatitis C virus
- immune reconstitution inflammatory syndrome

In cases of new or worsening liver dysfunction (including clinically significant elevation of liver enzymes and/or symptoms such as fatigue, anorexia, nausea, jaundice, dark urine, liver tenderness and swollen liver), you should contact your doctor right away.

Pancreatic health

In rare cases, inflammation of the pancreas gland (in the abdomen) has occurred in people who were using darunavir. It is not clear if darunavir caused this problem.

General risk factors for inflammation of the pancreas gland include the following:

- smoking tobacco
- excess intake of alcohol
- elevated levels of a fatty substance in the blood called triglycerides

- having disorders such as inflammatory bowel disease, lupus (SLE) and other diseases whereby the immune system attacks the body

Symptoms of an acute inflamed pancreas gland can include pain that:

- begins slowly or suddenly in your upper abdomen
- sometimes spreads to your back
- can be mild or severe
- may last for several days

Other symptoms may include the following:

- fever
- nausea and vomiting
- fast heartbeat
- swollen or tender abdomen

According to the U.S. National Institute of Diabetes and Digestive and Kidney Diseases, "People with acute pancreatitis usually look and feel seriously ill and need to see a doctor right away."

Skin and hypersensitivity reactions

In one analysis, the manufacturer has reported that out of 3,063 people who used darunavir (in Prezista), 0.4% developed "severe skin reactions [...] accompanied by fever and/or elevations of liver enzymes." Furthermore, Janssen noted that life-threatening skin reactions (called "Stevens-Johnson Syndrome") were rare, occurring in less than 0.1% of people who used darunavir.

Signs or symptoms of severe skin reactions can include severe rash or rash accompanied by one or more of the following symptoms:

- fever
- generally feeling unwell and in discomfort
- muscle or joint pain/ache
- blisters
- lesions in the mouth and on the lips

- the tissue lining the eyelids and whites of eyes becomes inflamed
- liver inflammation

If these problems occur, contact your doctor right away.

Side effects

1. General

In clinical trials, Prezista was generally well-tolerated and effective. However, as with any treatment, there were side effects including the following:

- diarrhea
- nausea
- rash
- lack of energy

2. The skin

Rash is a common side effect of darunavir-containing medicines such as Prezista. According to Janssen, such rashes are "mostly mild to moderate, often occurring within the first four weeks of treatment and resolves with continued dosing."

Drug interactions

Some drugs (including prescribed and over-the-counter), herbs and supplements can interfere with the absorption and/or effectiveness of Prezista. Such interference is called a drug interaction. Some drugs can reduce the levels of Prezista in your blood. This can make Prezista less effective and lead to treatment failure, reducing your future treatment options. Other drugs can raise the levels of Prezista in your blood, resulting in enhanced side effects or new side effects. Therefore, it is important to disclose to your doctor and pharmacist all the supplements, drugs, and herbs you are taking.

This factsheet is not comprehensive and only lists some of the potential and actual drug interactions with Prezista. Speak to your pharmacist to find out more about drug interactions with Prezista.

Not to be used

Janssen recommends that people taking Prezista should not use the following drugs:

- for prostate problems – alfuzosin (Xatral)
- for treatment of abnormal heart rhythm – amiodarone, dronedarone, lidocaine (injected into the body), quinidine
- for reducing the risk of blood clots – apixaban, rivaroxaban; ticagrelor
- anti-seizure drugs – carbamazepine, phenobarbital, phenytoin
- for the treatment of gout – colchicine
- anti-histamines – astemizole, terfenadine
- antibiotics – rifampin
- for treatment of migraine and severe headaches – dihydroergotamine, ergonovine, ergotamine, methylergonovine
- for treating hepatitis C virus infection – Zepatier (elbasvir + grazoprevir)
- for treating high cholesterol – lovastatin, simvastatin
- for treating asthma and other lung issues – salmeterol (Advair, Advair Diskus, Serevent Diskhaler Disk, Serevent Diskus)
- for treating psychosis – lurasidone (Latuda), pimozone
- for treating pulmonary arterial hypertension – sildenafil (Revatio)
- for treating sleeping problems – midazolam, triazolam

Herbs

The herb St. John's wort (and its extracts—hypericin and hyperforin) can significantly reduce levels of darunavir in the blood. The manufacturer of darunavir recommends that people who take darunavir not take St. John's wort (or its extracts).

Antacids

Prezista does not interfere (or vice versa) with acid-reducing agents, including those containing aluminum, calcium or magnesium.

Resistance and cross-resistance

Over time, as new copies of HIV are made in the body, the virus changes its structure. These changes, called mutations, can cause HIV to resist the effects of anti-HIV drugs, which means those drugs will no longer work for you.

To reduce the risk of developing drug resistance, all anti-HIV drugs should be taken every day exactly as prescribed and directed. If doses are delayed, missed or not taken as prescribed, the level of darunavir in the blood may fall too low. If this happens, the HIV in your body can become resistant to the medication. If you find you are having problems taking your medications as directed, speak to your doctor, nurse or pharmacist about this. They can find ways to help you.

When HIV becomes resistant to one drug in a class, it sometimes becomes resistant to other drugs in that class. This is called cross-resistance. Feel free to talk with your doctor about your current and future treatment options. To help you decide what these future options might be, at some point your doctor can have a small sample of your blood analyzed to test for resistance.

Dosage

Prezista is usually supplied as oval-shaped tablets in different doses and colours. The usual recommended adult dose of Prezista is one pink 800 mg pill taken once or twice daily with food; your doctor will tell you which schedule of Prezista is right for you. Prezista must be taken with food so that it is absorbed. The type of food does not matter. It is always taken with ritonavir, another HIV drug.

If you forget to take a dose, here is advice from Janssen:

- If you notice within 12 hours of the time you usually take Prezista, take the tablet immediately with food. Then take the next dose at your usual time.
- If you notice after 12 hours of the time you usually take Prezista, do not take the missed dose. Wait to take the next dose with food at your usual time.
- Do not take a double dose (two doses together).
- Call your doctor or pharmacist if you are not sure what to do.

Availability

Prezista is licensed in Canada. Your doctor or pharmacist can tell you more about the availability and coverage of Prezista in your region. CATIE's online module *Federal, Provincial and Territorial Drug Access Programs* also contains information about Canadian drug coverage.

References

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