



EUROPEAN MEDICINES AGENCY  
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## **EPAR summary for the public**

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# **Aptivus**

## tipranavir

This document is a summary of the European public assessment report (EPAR) for Aptivus. It explains how the Committee for Medicinal Products for Human Use (CHMP) assessed the medicine to reach its opinion in favour of granting a marketing authorisation and its recommendations on the conditions of use for Aptivus.

### **What is Aptivus?**

Aptivus is a medicine that contains the active substance tipranavir. It is available as capsules (250 mg) and as an oral solution.

### **What is Aptivus used for?**

Aptivus is used to treat patients aged two years and above who have human immunodeficiency virus type 1 (HIV-1), a virus that causes acquired immune deficiency syndrome (AIDS). Aptivus is used in combination with low-dose ritonavir (another HIV-medicine) and other HIV-medicines.

Aptivus should only be used in patients who have no other treatment options. It is used in patients who have already been treated with other antiviral medicines for HIV infection, and in whom many other medicines in the same class as Aptivus (protease inhibitors) do not work. Doctors should only prescribe Aptivus once they have looked at the HIV-medicines that the patient has taken before and the likelihood that the virus will respond to the medicine.

The medicine can only be obtained with a prescription.

### **How is Aptivus used?**

Treatment with Aptivus should be started by a doctor who has experience in the treatment of HIV-1 infection.



In patients aged 12 years and above, the recommended dose of Aptivus is 500 mg (two capsules) twice a day. Children aged between two and 12 years should use the oral solution. The dose of the oral solution depends on body surface area (calculated using the child's height and weight). Each dose of Aptivus must be taken with ritonavir and food. For more information, see the package leaflet.

## **How does Aptivus work?**

The active substance in Aptivus, tipranavir, is a protease inhibitor. It blocks an enzyme called protease that is involved in the reproduction of HIV. When the enzyme is blocked, the virus does not reproduce normally, slowing down the spread of infection. Ritonavir is another protease inhibitor that is used as a 'booster'. It slows down the rate at which tipranavir is broken down, increasing the levels of tipranavir in the blood. This allows a lower dose of tipranavir to be used for the same antiviral effect.

Aptivus, taken in combination with other HIV medicines, reduces the amount of HIV in the blood and keeps it at a low level. Aptivus does not cure HIV infection or AIDS, but it may delay the damage to the immune system and the development of infections and diseases associated with AIDS.

## **How has Aptivus been studied?**

Aptivus capsules have been studied in two main studies involving a total of 1,483 adults who had received many different HIV-medicines in the past, and were not responding to their current treatment combination including a protease inhibitor. Both studies compared the effects of Aptivus with those of another protease inhibitor that was chosen on the basis of the patient's previous treatments and predicted response. The main measures of effectiveness were the number of patients who responded to treatment, and how long it took before treatment stopped working, during the first 48 weeks of treatment. A 'response' was defined as a fall in the levels of HIV in the blood (viral load) by 90% or more that was maintained until the end of the 48 weeks.

Aptivus has also been studied in one study involving 63 children aged between two and 12 years, and 52 adolescents aged between 12 and 18 years, almost all of whom had taken HIV treatments in the past. All of the patients started treatment with the oral solution, but adolescents taking the full adult dose could switch to the capsules after four weeks. The study looked at the safety and effectiveness of Aptivus, and at the levels of the medicine in the patients' blood.

In all three studies, the patients also took ritonavir and a combination of other HIV-medicines that were chosen as they had the best chances of reducing the levels of HIV in their blood.

## **What benefit has Aptivus shown during the studies?**

Aptivus capsules, taken in combination with ritonavir, were more effective than the comparator medicines in patients with few remaining options for successful HIV treatment. In the two adult studies taken together, 34% of the patients taking Aptivus (251 out of 746) responded to treatment, compared with 16% of the patients taking the comparator protease inhibitors (113 out of 737). On average, it took 113 days for treatment to stop working in adults taking Aptivus. This was compared with an average of zero days in those taking the comparator, meaning that most of the patients taking the comparator did not respond to their treatment at all.

In the study of children and adolescents, 31% of the adolescents taking the capsules (9 out of 29) and 50% of the children taking the oral solution (31 out of 62) had reached and maintained viral loads below 400 copies/ml after 48 weeks.

## What is the risk associated with Aptivus?

In adults, the most common side effects when taking Aptivus with ritonavir (seen in more than 1 patient in 10) are diarrhoea and nausea (feeling sick). Similar side effects were seen in children and adolescents, although vomiting, rash and pyrexia (fever) were seen more commonly than in adults. For the full list of all side effects reported with Aptivus, see the package leaflet.

Aptivus with ritonavir must not be used with colchicine (a medicine used to treat gout) in patients with kidney or liver impairment. Aptivus with ritonavir must not be used in patients with moderate or severe problems with their liver or who are taking any of the following medicines:

- rifampicin (used to treat tuberculosis);
- St John's wort (a herbal preparation used to treat depression);
- medicines that are broken down in the same way as Aptivus or ritonavir and are harmful at high levels in the blood. See the package leaflet for the full list of these medicines.

## Why has Aptivus been approved?

The CHMP noted that the studies supported the use of Aptivus capsules in adults. Although the Committee had some concerns over how the study in children and adolescents was designed, the Committee noted that its results supported the use of the capsules in adolescents and the oral solution in children between the ages of two and 12 years. Therefore, the CHMP decided that the benefits of Aptivus capsules are greater than their risks for the treatment of adults and adolescents 12 years of age or older. The Committee also decided that the benefits of Aptivus oral solution are greater than its risks for children from two to 12 years of age. However, the available information does not support the use of the oral solution in patients aged 12 years or above.

The Committee recommended that Aptivus be given marketing authorisation. However, it concluded that the medicine should only be considered for use as 'last line' therapy, when no other protease inhibitors are predicted to work.

## What measures are being taken to ensure the safe and effective use of Aptivus?

A risk management plan has been developed to ensure that Aptivus is used as safely as possible. Based on this plan, safety information has been included in the summary of product characteristics and the package leaflet for Aptivus, including the appropriate precautions to be followed by healthcare professionals and patients.

## Other information about Aptivus:

The European Commission granted a marketing authorisation valid throughout the European Union for Aptivus on 25 October 2005.

The full EPAR for Aptivus can be found on the Agency's website: [ema.europa.eu/Find\\_medicine/Human\\_medicines/European\\_Public\\_Assessment\\_Reports](http://ema.europa.eu/Find_medicine/Human_medicines/European_Public_Assessment_Reports). For more information about treatment with Aptivus, read the package leaflet (also part of the EPAR) or contact your doctor or pharmacist.

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