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EPAR summary for the public

Tasigna

nilotinib

This is a summary of the European public assessment report (EPAR) for Tasigna. It explains how the Committee for Medicinal Products for Human Use (CHMP) assessed the medicine to recommend its authorisation in the EU and its conditions of use. It is not intended to provide practical advice on how to use Tasigna.

For practical information about using Tasigna, patients should read the package leaflet or contact their doctor or pharmacist.

What is Tasigna and what is it used for?

Tasigna is a medicine used to treat adults with chronic myelogenous leukaemia (CML), a type of cancer of the white blood cells. It is used when the patient is 'Philadelphia chromosome positive' (Ph+), which means that some of the patient's genes have re-arranged themselves to form a special chromosome called the Philadelphia chromosome. This chromosome produces an enzyme, called Bcr-Abl kinase, that leads to the development of leukaemia.

Tasigna is used to treat the 'chronic' and 'accelerated' phases of CML, in patients who cannot tolerate other treatments including imatinib (another cancer medicine), or when their disease is not responding to them. There is no information available on its effectiveness in patients whose disease is in 'blast crisis' (another phase of CML).

Tasigna is also used in newly diagnosed patients with CML in the chronic phase.

Because the number of patients with CML is low, the disease is considered 'rare', and Tasigna was designated an 'orphan medicine' (a medicine used in rare diseases) on 22 May 2006.

How is Tasigna used?

Tasigna can only be obtained with a prescription and treatment should be started by a doctor who has experience in the diagnosis and treatment of CML. The medicine is available as capsules (150 and 200 mg).

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In newly diagnosed patients with chronic phase CML, the recommended dose of Tasigna is 300 mg twice a day. In patients with chronic or accelerated phase CML who cannot tolerate other treatments or whose disease does not respond to them, the recommended dose is 400 mg twice a day.

Treatment should continue for as long as the patient continues to benefit. The dose should be reduced or treatment interrupted if the patient has certain side effects affecting the blood. Stopping treatment may be considered in patients in chronic phase after treatment with Tasigna for at least 3 years, whose disease has been well controlled for at least 1 year.

The two doses of Tasigna should be taken around 12 hours apart. The capsules should be swallowed whole with a glass of water, without eating anything for two hours before and one hour after each dose. For patients who are unable to swallow capsules, the content of the capsules may be dispersed in a teaspoon of apple puree and taken immediately. Tasigna can be given with certain other medicines if appropriate.

During treatment with Tasigna, patients are to have regular blood tests, including tests for blood fat levels. Increased blood cholesterol levels have been reported in patients receiving the medicine. If treatment is stopped because disease has been well controlled, regular tests are required to ensure the disease has not started to come back, and treatment must be restarted if this occurs.

How does Tasigna work?

The active substance in Tasigna, nilotinib, belongs to a group of medicines called 'protein kinase inhibitors'. These compounds act by blocking types of enzymes known as protein kinases. Nilotinib acts by blocking the protein kinase called Bcr-Abl kinase. This enzyme is produced by leukaemia cells, and causes them to multiply uncontrollably. By blocking Bcr-Abl kinase, Tasigna helps to control the spread of leukaemia cells.

What benefits of Tasigna have been shown in studies?

Tasigna has been studied in two main studies involving a total of 439 patients with CML, who could not tolerate imatinib or whose disease had stopped responding to it. In these studies, Tasigna was not compared with any other treatment. The first study included a total of 320 patients whose disease was in the 'chronic phase', three quarters of whom had stopped responding to imatinib. Its main measure of effectiveness was the proportion of patients who had had a 'major cytogenetic response' (when the proportion of white blood cells in the bone marrow that contained the Philadelphia chromosome had fallen to below 35%). 156 (49%) of the 320 patients had a major cytogenetic response after having received Tasigna for an average of 341 days (around eleven months).

The second study included a total of 119 patients whose disease was in the 'accelerated phase', four fifths of whom had stopped responding to imatinib. Its main measure of effectiveness was the proportion of patients who had had a 'haematological response' (a return to normal of the number of white cells in the blood). This occurred in 50 (42%) of the 119 patients, after having received Tasigna for an average of 202 days (around seven months).

In both studies, Tasigna had a similar effect in patients who could not tolerate imatinib and those whose disease had stopped responding to it.

In a third main study in 846 newly diagnosed patients with chronic phase CML, Tasigna, either as 300 mg twice a day or as 400 mg twice a day, was compared with imatinib. The main measure of effectiveness was the proportion of patients who had had a 'major molecular response' (when the

proportion of the patient's white blood cells that could produce the abnormal Bcr-Abl kinase had fallen to below 0.1%) after 12 months of treatment.

In this study, Tasigna was more effective than imatinib at producing major molecular response: it was seen in 125 (44.3%) of the 282 patients taking Tasigna 300 mg twice a day and 120 (42.7%) of the 281 patients taking Tasigna 400 mg twice a day compared with 63 (22.3%) of the 283 patients taking imatinib.

Two further studies showed that the medicine's benefits can be maintained after stopping treatment in patients whose disease had been well controlled for at least a year. One study involved 190 patients in whom initial treatment with Tasigna had resulted in a major molecular response; in 98 patients (52%) the response remained 48 weeks after stopping treatment. The second study involved patients who had switched to Tasigna after imatinib treatment: 73 out of 126 patients (58%) still had major molecular response 48 weeks after stopping.

What are the risks associated with Tasigna?

The most common side effects with Tasigna (seen in more than 1 patient in 10) are thrombocytopenia (low blood platelet counts), neutropenia (low white blood cell counts), headache, nausea (feeling sick), rash, pruritus (itching), myalgia (muscle pain) and fatigue (tiredness). For the full list of all side effects and restrictions with Tasigna, see the package leaflet.

Why is Tasigna approved?

The CHMP decided that Tasigna's benefits are greater than its risks and recommended that it be given marketing authorisation.

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

The company that makes Tasigna will provide an information pack for doctors and pharmacists who will prescribe or dispense the medicine. The pack will remind them of how Tasigna should be used safely in patients.

Recommendations and precautions to be followed by healthcare professionals and patients for the safe and effective use of Tasigna have also been included in the summary of product characteristics and the package leaflet.

Other information about Tasigna

The European Commission granted a marketing authorisation valid throughout the European Union for Tasigna on 19 November 2007.

The full EPAR for Tasigna can be found on the Agency's website ema.europa.eu/Find medicine/Human medicines/European Public Assessment Reports. For more information about treatment with Tasigna, read the package leaflet (also part of the EPAR) or contact your doctor or pharmacist.

The summary of opinion of the Committee for Orphan Medicinal Products for Tasigna can be found on the Agency's website ema.europa.eu/Find medicine/Human medicines/Rare disease designation.

This summary was last updated in 05-2017.