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Questions and answers

Withdrawal of the marketing authorisation application for Beprana (naproxcinod)

On 19 April 2011, NicOx S. A. officially notified the Committee for Medicinal Products for Human Use (CHMP) that it wishes to withdraw its application for a marketing authorisation for Beprana in adults for the relief of signs and symptoms of osteoarthritis of the knee and hip.

What is Beprana?

Beprana is a medicine that contains the active substance naproxcinod. It was to be available as capsules.

What was Beprana expected to be used for?

Beprana was expected to be used to relieve the signs and symptoms of osteoarthritis (swelling and pain in the joints) of the knee and hip in adults.

How is Beprana expected to work?

The active substance in Beprana, naproxcinod, is converted in the body into the drug naproxen and a chemical that releases nitric oxide.

Naproxen is a non-steroidal anti-inflammatory drug (NSAID). It works by blocking an enzyme called cyclo-oxygenase, which produces prostaglandins, substances that are involved in the inflammation process. By reducing the production of prostaglandins, Beprana is expected to reduce the inflammation and pain seen in osteoarthritis.

Nitric oxide is a vasodilator, a substance that causes the widening of blood vessels. It is expected to counterbalance the effect of Naproxen of increasing blood pressure.

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What did the company present to support its application?

The effects of Beprana were first tested in experimental models before being studied in humans.

Three main studies in patients were carried out, comparing Beprana with naproxen (another medicine used in osteoarthritis) and placebo (a dummy treatment). Two of the studies involved 1,929 patients with knee osteoarthritis while the third study involved 810 patients with hip osteoarthritis. The main measure of effectiveness was based on how patients rated their pain and disease activity after 13 weeks of treatment.

How far into the evaluation was the application when it was withdrawn?

The application was withdrawn after 'day 181'. This means that the CHMP had evaluated the documentation provided by the company and formulated a list of questions. After the CHMP had assessed the company's responses to the last round of questions, there were still some unresolved issues.

What was the recommendation of the CHMP at that time?

Based on the review of the data and the company's response to the CHMP lists of questions, at the time of the withdrawal, the CHMP had some concerns and was of the provisional opinion that Beprana could not have been approved for the relief of signs and symptoms of osteoarthritis of the knee and hip.

The CHMP noted that while there was evidence showing that Beprana was effective in relieving the signs and symptoms of osteoarthritis of the knee and hip, its benefits were not sufficient to outweigh the identified risks. The Committee had concerns about its effect on blood pressure and the potential risk of toxic effects in the liver.

What were the reasons given by the company for withdrawing the application?

The letter from the company notifying the Agency of the withdrawal of the application is available under the tab 'All documents'.

What consequences does this withdrawal have for patients in clinical trials or compassionate use programmes?

The company informed the CHMP that there are no consequences for patients currently included in clinical trials. If you are in a clinical trial or compassionate use programme and need more information about your treatment, contact the doctor who is giving it to you.