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EPAR summary for the public

Firdapse[1]

amifampridine

This document is a summary of the European public assessment report (EPAR) for Firdapse. 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 Firdapse.

What is Firdapse?

Firdapse is a medicine that contains the active substance amifampridine. It is available as tablets (10 mg).

What is Firdapse used for?

Firdapse is used to treat the symptoms of Lambert-Eaton myasthenic syndrome (LEMS) in adults. LEMS is a disease in which patients have muscle weakness because of a failure of the nerves to transmit electrical impulses to the muscles.

Because the number of patients with LEMS is low, the disease is considered 'rare', and Firdapse was designated an 'orphan medicine' (a medicine used in rare diseases) on 18 December 2002.

The medicine can only be obtained with a prescription.

How is Firdapse used?

Treatment with Firdapse should only be started under the supervision of a doctor experienced in treating LEMS.

[1] Previously known as Zenas.

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The recommended starting dose of Firdapse is 15 mg per day, which can be increased by 5 mg every four to five days up to a maximum of 60 mg per day. Firdapse is taken in divided doses, three or four times a day, and a single dose should not be more than 20 mg. Firdapse should be taken with food.

How does Firdapse work?

For muscles to contract, nerves have to transmit electrical impulses to the muscles through a chemical messenger called acetylcholine. Acetylcholine is released from the nerve endings during a period of 'depolarisation'.

The active substance in Firdapse, amifampridine, is a potassium channel blocker, which prevents charged potassium particles from leaving the nerve cells. This prolongs the period of depolarisation, allowing more time for the nerves to release acetylcholine and so stimulate the muscles to contract.

How has Firdapse been studied?

Because amifampridine-containing medicines have been used in the European Union (EU) for over 20 years, the company presented the results of studies from the scientific literature on amifampridine to support the use of Firdapse. In two published studies involving a total of 38 adults with LEMS, amifampridine was compared with placebo (a dummy treatment). The main measures of effectiveness were based on the rating of how well the muscles worked using a scoring system, either the neurological disability score (NDS) or the quantitative myasthenia gravis (QMG) score. Patients with lower NDS or QMG scores have better muscle function. Another study combined data from the two published studies and looked at compound muscle action potential (CMAP). CMAP is a measure of electrical activity in muscles. Additionally, the effect of Firdapse on the QT interval (the electrical activity of the heart) was investigated.

What benefit has Firdapse shown during the studies?

Firdapse was more effective than placebo at treating patients with LEMS. In one study, the NDS was reduced from 40 to 22 points in patients taking Firdapse compared with a drop to 35 points in patients taking placebo. The other study showed a reduction in the QMG score of 2 points in patients taking Firdapse compared with a rise of 0.25 points in patients taking placebo. In the third combined study, patients taking Firdapse had better improvements in CMAP than patients taking placebo. In the QT study, amifampridine was observed to have no effects on the activity of the heart, as shown by the electrocardiograms of healthy volunteers taking part in this study.

What is the risk associated with Firdapse?

The most common side effects reported with Firdapse are paraesthesia (unusual sensations like pins and needles) and gastro-intestinal disorders such as epigastralgia (pain around the upper part of the stomach), diarrhoea, nausea (feeling sick) and abdominal pain (stomach ache).

Firdapse must not be used in patients who have epilepsy or in patients with uncontrolled asthma or congenital QT syndromes (disruption of the heartbeat). It must not be used with sultopride (an antipsychotic medicine), or medicines known to cause QTc prolongation (an alteration of the electrical activity of the heart). It must also not be used with medicines that have a narrow therapeutic window. A medicine with a narrow therapeutic window can easily cause side effects if given at a dose a little higher than the recommended dose.

For the full list of all side effects and restrictions with Firdapse, see the package leaflet.

Why has Firdapse been approved?

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

Firdapse has been authorised under 'exceptional circumstances'. This means that because the disease is rare, it has not been possible to obtain complete information about Firdapse. Every year, the European Medicines Agency will review any new information that may become available and this summary will be updated as necessary.

What information is still awaited for Firdapse?

The company that makes Firdapse will provide further data from studies on cancer in experimental models.

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

A risk management plan has been developed to ensure that Firdapse 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 Firdapse, including the appropriate precautions to be followed by healthcare professionals and patients.

Additionally, the company that markets Firdapse has been required to set up a patient registry for patients with LEMS. The company will ensure that all healthcare professionals who are expected to use the medicine are provided with information on how to enter their patients in the registry.

Other information about Firdapse

The European Commission granted a marketing authorisation valid throughout the EU for Zenas on 23 December 2009. The name of the medicine was changed to Firdapse on 28 January 2010.

The full EPAR for Firdapse can be found 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 Firdapse, read the package leaflet (also part of the EPAR) or contact your doctor or pharmacist.

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

This summary was last updated in 04-2014.