EMA/123532/2013
EMEA/H/C/002500

EPAR summary for the public

Pheburane

sodium phenylbutyrate

This is a summary of the European public assessment report (EPAR) for Pheburane. It explains how the Agency 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 Pheburane.

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

What is Pheburane and what is it used for?

Pheburane is a medicine that contains the active substance sodium phenylbutyrate. It is used to treat patients who have urea cycle disorders. These patients are not able to get rid of waste nitrogen from the body because they lack some enzymes that are usually found in the liver. In the body, waste nitrogen is in the form of ammonia, which is toxic when it accumulates, especially for the brain. Pheburane is used in patients who lack one or more of the following enzymes: carbamylphosphate synthetase, ornithine transcarbamylase, or argininosuccinate synthetase. It can be used in patients with the following forms of the disease:

- 'early-onset' disease in patients who show a complete lack of one or more of these enzymes within the first month of life;
- 'late-onset' disease in patients who show a partial lack of one or more of these enzymes after the age of one month and have had high blood ammonia levels that affected the brain's activity.

Pheburane is a 'hybrid medicine'. This means that it is similar to a 'reference medicine' containing the same active substance, but Pheburane granules are available at a lower strength and contain different excipients (inactive ingredients) to mask the unpleasant taste of the active substance. The reference medicine for Pheburane is Ammonaps.

7 Westferry Circus ● Canary Wharf ● London E14 4HB ● United Kingdom
Telephone +44 (0)20 7418 8400 **Facsimile** +44 (0)20 7418 8416
E-mail info@ema.europa.eu **Website** www.ema.europa.eu
An agency of the European Union

How is Pheburane used?

Pheburane is available as granules (483 mg/g). It can only be obtained with a prescription and treatment should be supervised by a doctor who has experience in treating patients with urea cycle disorders.

Pheburane is used with a special low-protein diet to reduce the intake of nitrogen. The daily dose of Pheburane is adjusted for each patient individually and depends on the patient's diet, height and weight. Regular blood tests are needed to find the correct daily dose.

The daily dose of Pheburane should be divided into equal amounts and given with each meal. The granules can be sprinkled onto food immediately before being swallowed or placed in the mouth and swallowed immediately with a drink.

Pheburane may be a life-long treatment unless the patient has a successful liver transplant.

How does Pheburane work?

Eating protein brings nitrogen into the body, which is then transformed into ammonia. Patients with urea cycle disorders cannot get rid of ammonia from the body, so it can reach high levels, leading to serious problems including disability, brain damage and death. The active substance in Pheburane, sodium phenylbutyrate, is converted into a substance called phenylacetate in the body. Phenylacetate combines with the amino acid glutamine, which contains nitrogen, to form a substance that can be removed from the body by the kidneys. This allows the levels of nitrogen in the body to decrease, reducing the amount of ammonia produced.

How has Pheburane been studied?

Studies in patients have been limited to tests to determine that Pheburane is bioequivalent to the reference medicine, Ammonaps. Two medicines are bioequivalent when they produce the same levels of the active substance in the body.

What are the benefits and risks of Pheburane?

Because Pheburane is a hybrid medicine and is bioequivalent to the reference medicine, its benefits and risks are taken as being the same as the reference medicine's.

Why is Pheburane approved?

The Agency's Committee for Medicinal Products for Human Use (CHMP) concluded that Pheburane has been shown to have comparable quality and to be bioequivalent to Ammonaps. Therefore, the CHMP's view was that, as for Ammonaps, the benefit outweighs the identified risk. The Committee recommended that Pheburane be approved for use in the EU.

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

Safety information has been included in the summary of product characteristics and the package leaflet for Pheburane, including the appropriate precautions to be followed by healthcare professionals and patients.

Other information about Pheburane

The European Commission granted a marketing authorisation valid throughout the European Union for Pheburane on 31 July 2013.

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

This summary was last updated in 08-2013.