23 October 2015

Proposal to list sodium phenylbutyrate

PHARMAC is seeking feedback on a proposal to list sodium phenylbutyrate resulting from a provisional agreement formed between Max Health Limited and PHARMAC.

The provisional agreement is the second that PHARMAC has reached with a bidder from a Request for Proposals we ran in 2014, related to the supply of medicines for rare disorders.

In summary, this proposal would result in sodium phenylbutyrate granules 483 mg/g (Pheburane) being funded in the community under Special Authority criteria and in DHB hospitals subject to restrictions. Listing in the Pharmaceutical Schedule would occur subject to Medsafe approval of the pharmaceutical.

Pheburane is an oral formulation of sodium phenylbutyrate administered in the treatment of urea cycle disorders (UCDs).

Detail of the proposal and some background information is set out on the following pages.

Feedback sought

PHARMAC welcomes feedback on this proposal. To provide feedback, please submit it in writing by **6 November 2015** to:

Caroline De Luca Email: caroline.deluca@pharmac.govt.nz

Senior Therapeutic Group Manager/

Team Leader Fax: 04 460 4995

PHARMAC PO Box 10 254 Wellington 6143

All feedback received before the closing date will be considered by PHARMAC's Board (or its delegate) prior to making a decision on this proposal.

Feedback we receive is subject to the Official Information Act 1982 (OIA) and we will consider any request to have information withheld in accordance with our obligations under the OIA. Anyone providing feedback, whether on their own account or on behalf of an organisation, and whether in a personal or professional capacity, should be aware that the content of their feedback and their identity may need to be disclosed in response to an OIA request.

We are not able to treat any part of your feedback as confidential unless you specifically request that we do, and then only to the extent permissible under the OIA and other relevant laws and requirements. If you would like us to withhold any commercially sensitive, confidential proprietary, or personal information included in your submission, please clearly state this in your submission and identify the relevant sections of your submission that you would like it withheld. PHARMAC will give due consideration to any such request

Details of the proposal

Following Medsafe approval, sodium phenylbutyrate (Pheburane) would be listed in Section B (the Community) and Part II of Section H (the Hospital Medicines List) of the Pharmaceutical Schedule as follows:

Chemical	Presentation	Brand	Strength	Pack size	Price and subsidy
sodium phenylbutyrate	granules	Pheburane	483 mg/g	174 g	\$1,920.00

- It would be listed as soon as practicable following Max Health's notification to PHARMAC that Medsafe has granted registration.
- Pheburane would be listed subject to the following Special Authority criteria in the community and similar restrictions in the Hospital Medicines List.

Initial application only from a metabolic physician. Approvals valid for 12 months where the patient has a diagnosis of a urea cycle disorder involving a deficiency of carbamylphosphate synthetase, ornithine transcarbamylase or argininosuccinate synthetase.

Renewal only from a metabolic physician. Approvals valid for 12 months where the treatment remains appropriate and the patient is benefiting from treatment.

- Pheburane would have subsidy and delisting protection until 1 July 2018.
- Prior to a listing on the Pharmaceutical Schedule (i.e. until Medsafe approval is granted) net pricing would apply to any individual patient funding applications approved via the Named Patient Pharmaceutical Assessment (NPPA) Policy.

Background

Pheburane is an oral formulation of sodium phenylbutyrate administered in the treatment of urea cycle disorders (UCDs). The urea cycle involves a series of biochemical steps in which nitrogen, a waste product of protein metabolism, is removed from the blood and converted to urea which is excreted in the urine. In UCDs, nitrogen removal is blocked and accumulates in the form of ammonia. If untreated, UCDs can cause dangerously high levels of ammonia (hyperammonaemia) resulting in brain damage, coma and, if untreated, death.

UCDs are inherited metabolic diseases caused by a deficiency of one of the enzymes of the urea cycle responsible for the elimination of ammonia. UCDs can be diagnosed at any age depending on the severity of the deficit. However, if the clinical symptoms are present from the earliest days of birth, the disorder is usually extremely serious and can be fatal.

New Zealand experts estimate that the current patient population with UCDs in New Zealand is less than 10.

During the past 15 years, PHARMAC has received exceptional circumstances or NPPA applications, and has approved funding for, a total of 5 patients with urea cycle disorders. The NPPA funding pathway would remain a possibility until such time that sodium phenylbutyrate (Pheburane) was listed on the Pharmaceutical Schedule.

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Sodium phenylbutyrate is currently available in New Zealand under section 29 of the Medicines Act 1981. Sodium phenylbutyrate is listed in the HML, with any (unregistered) brand of 500 mg tablets, oral liquid 250 mg per ml and injection 200 mg per ml (10 ml ampoule) being able to be used by hospitals.

Pheburane is approved in Europe and in August 2014 in Australia, the Therapeutic Goods Administration designated Pheburane as an orphan drug. Max Health has submitted an application for registration to Medsafe and it is currently under assessment (see http://www.medsafe.govt.nz/regulatory/ProductDetail.asp?ID=17661).

This proposal would result in a registered brand of sodium phenylbutyrate granules 483 mg/g (Pheburane) being listed in Sections B and H, meaning it would be funded in the community as well as hospital setting, each subject to restrictions, without requiring a NPPA application.

Having a granule presentation for sodium phenylbutyrate offers the following benefits:

- it masks the odour and unpleasant taste associated with other forms;
- no compounding of tablets is required; and
- compounded products have a much reduced, and often variable, shelf-life (typically only 7 days). Pheburane granules have a 2 year shelf life and doses are easily tailored to patients.

PHARMAC's evaluation of sodium phenylbutyrate (Pheburane) followed the process described in Schedule 2 of the RFP for the supply of medicines for rare disorders. The RFP can be found on the PHARMAC website at: https://www.pharmac.health.nz/news/rfp-2014-08-15-rare-disorders/.

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