

5.18 AMINO ACID FORMULA WITH FAT, CARBOHYDRATE, WITHOUT VALINE, LEUCINE AND ISOLEUCINE Tablets 1.25 g, 462 MSUD Easy Tablet[®], Orpharma Pty Ltd

1 Purpose of Application

- 1.1 The minor submission requested a Restricted Benefit listing for for a new form of amino acid formula with fat, carbohydrate without valine, leucine and isoleucine (MSUD Easy Tablet[®]) for the dietary management of maple syrup urine disease (MSUD).

2 Requested listing

- 2.1 The submission requested the following new listing:

Name, Restriction, Manner of administration and form	Max. Qty	№.of Rpts	Dispensed Price for Max. Qty	Proprietary Name and Manufacturer
AMINO ACID FORMULA WITH FAT, CARBOHYDRATE, WITHOUT VALINE, LEUCINE AND ISOLEUCINE TABLET Tablet: modified releases, 6 x 77g	5	5	\$2,952.29*	MSUD Easy Tablet [®] Orpharma Pty Ltd

* The DPMQ proposed in the minor submission for MSUD Easy (\$3,609.89) is derived from the AEMP for MSUD Express 20 for the dietary management of MSUD prior to the application of any relevant Statutory Price Reductions. In the overview, the relevant F1 Statutory Price Reductions have been applied to the requested listing to enable a relevant comparison to be made with MSUD Express 20 (see paragraphs 5.4-6).

Category / Program:	GENERAL – General Schedule (Code GE)
Prescriber type:	<input type="checkbox"/> Dental <input checked="" type="checkbox"/> Medical Practitioners <input checked="" type="checkbox"/> Nurse practitioners <input type="checkbox"/> Optometrists <input type="checkbox"/> Midwives
PBS Indication:	Maple syrup urine disease
Restriction Level / Method:	<input checked="" type="checkbox"/> Restricted benefit <input type="checkbox"/> Authority Required – In Writing <input type="checkbox"/> Authority Required – Telephone/Electronic/Emergency <input type="checkbox"/> Streamlined
Administration Advice:	<i>This product does not contain any vitamins, minerals or trace elements</i>

For more detail on PBAC's view, see section 7 PBAC outcome.

3 Background

- 3.1 The sponsor of MSUD Easy confirmed it meets the requirements for foods for medical purposes as set out under *The Australia New Zealand Food Standards Code – Standard 2.9.5: Food for Special Medical Purposes*.
- 3.2 The minor submission claimed that MSUD Easy provides an additional therapy option for patients with MSUD. The convenient, palatable, slow release tablet formulation is likely to enhance adherence to therapy.

4 Comparator

- 4.1 The minor submission nominated MSUD Express 20 as the main comparator as it is the most commonly used amino acid formula without valine, leucine and isoleucine for MSUD based on the 2018 PBS item utilisation.
- 4.2 The Submission indicated MSUD Easy may also substitute other amino acid products without valine, leucine and isoleucine for MSUD, including MSUD Cooler 10 and 15, and other brands. However, these products are equivalently priced for their protein contents. Hence, the submission claimed replacement of formulations other than the comparator by MSUD Easy would not have significant impact on the cost to the PBS.

For more detail on PBAC's view, see section 7 PBAC outcome.

5 Consideration of the evidence

Sponsor hearing

- 5.1 There was no hearing for this item as it was a minor submission.

Consumer comments

- 5.2 The PBAC noted that no consumer comments were received for this item.

Clinical trials

- 5.3 As a minor submission, no clinical trials were presented in the submission.

Drug cost/patient/year: \$35,427.

- 5.4 The submission determined the proposed Dispensed Price for Maximum Quantity (DPMQ) based on a cost minimisation analysis versus MSUD Express 20, based on cost per protein equivalent (PE) content (see Table 1).
- 5.5 The estimated drug cost/patient/year would be \$35,427, based on a DPMQ of \$2,952.29 and 12 scripts per year.

Table 1: Calculation of DPMQ based on cost equivalence to comparator

Product (PBS item number)	PBS pack size	PE per PBS pack (g)	PE per PBS max qty (g)	AEMP ^a	AEMP per g of PE	PBS Max. Qty.	DPMQ ^a
MSUD Easy	77 tablet pack x 6 packs	420	2,102	\$561.71	\$1.34	5	\$2,952.29
MSUD Express 20 (1914R)	sachets, 30 x 34g	600	2,400	\$801.64	\$1.34	4	\$3,358.71

^a Cost-minimised to price of MSUD Express 20 on 1 August 2019.

PE: protein equivalent

Source: MSUD Easy - Attachment 4 - financial estimates Microsoft Excel spreadsheet.

- 5.6 The submission sought MSUD Easy to be considered under the pricing arrangements agreed under Clause 5.7 of the Strategic Agreement between Medicines Australia and the Commonwealth of Australia (the Strategic Agreement). The submission requested that MSUD Easy not be subject to any statutory price reductions that have previously been applied to MSUD Express 20.
- 5.7 The application of Clause 5.7 of the Strategic Agreement is a matter for the Minister (or delegate) and is not a matter for the PBAC. In Table 2 the relevant F1 Statutory Price Reductions have been applied to the requested listing to enable a relevant comparison to be made with MSUD Express 20.
- 5.8 The DPMQ proposed in the submission for MSUD Easy (\$3,609.89) is derived from the AEMP for MSUD Express 20 for the dietary management of MSUD prior to the application of any relevant Statutory Price Reductions.

Estimated PBS usage & financial implications

- 5.9 The minor submission claimed that MSUD Easy will not have significant impact to the PBS as MSUD Easy is priced per PE at the same price as MSUD Express 20[®].
- 5.10 The minor submission claimed the volume and proportion of usage will be small as the introduction of MSUD Easy into the Australian market will not result in any new patients commencing dietary therapy.
- 5.11 The sponsor estimated that approximately 5% of the current MSUD Express 20 PBS services would be displaced by MSUD Easy the second and third year of listing, and 10% in the following years in the first 6 years forecast. The submission stated that 1.14 scripts of MSUD Easy were equivalent to 1 script of MSUD Express 20, based on the different PE content in the PBS maximum quantity for each product.
- 5.12 Based on the estimates of utilisation in the minor submission and a DPMQ of \$2,952.29, listing of MSUD Easy is expected to be cost-neutral to the PBS.

Table 2: Estimated use and financial implications

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Estimated extent of use						
Number of scripts dispensed ^a						
Estimated financial implications of MSUD Easy^b						
Cost to PBS/RPBS						
Copayments						
Cost to PBS/RPBS less copayments						
Estimated financial implications for MSUD Express 20						
Cost to PBS/RPBS						
Copayments						
Cost to PBS/RPBS less copayments						
Net financial implications^b						
Net cost to PBS/RPBS						

^a Scripts per year as estimated by the submission, adjusted by the equivalent PE amount to the comparator.

^b The relevant F1 Statutory Price Reductions have been applied to the price of the requested listing to enable a relevant comparison to be made with MSUD Express 20 (see paragraphs 5.4-6). The submission estimated that if MSUD Easy t is listed at the DPMQ proposed in the submission (of \$3,609.89), the net cost to the PBS over the first 6 years of listing would be \$[REDACTED].

Source: MSUD Easy - Attachment 4 - financial estimates Microsoft Excel spreadsheet and calculated during the preparation of the minor overview.

The redacted table shows that at Year 6, the estimated number of scripts dispensed was less than 10,000 and the net cost to the PBS would be less than \$10 million.

5.13 As a minor submission, the financial estimates have not been independently evaluated.

For more detail on PBAC’s view, see section 7 PBAC outcome.

6 NPWP Consideration (and sponsor’s further clarification)

6.1 The Nutritional Products Working Party (NPWP) accepted MSUD Express 20 as the comparator for MSUD Easy.

6.2 The NPWP noted MSUD Easy did not contain any vitamins, minerals or trace elements and therefore patients would have to achieve their recommended daily intake (RDI) of these by other means, such as through diet or supplements. Some of these vitamin, mineral and trace element supplements, such as Phlexy-Vits or Paediatric Seravit (and other alternatives), are subsidised on the PBS. Therefore, the NPWP considered that while the requested cost minimisation may be an appropriate basis for listing, this did not necessarily mean a listing would be cost neutral to either patients or the PBS as some patients would require PBS-subsidised supplements.

6.3 The NPWP considered the use of the tablet formulation was likely to be low because of the large number of tablets patients had to take and the need to obtain vitamins and minerals from other sources.

- 6.4 The NPWP supported the listings of MSUD Easy as an additional treatment option for the dietary management of maple syrup urine disease on cost-minimisation bases with MSUD Express 20 per gram of protein equivalent.
- 6.5 The NPWP supported a note to the listing stating ‘This product does not contain any vitamins, minerals or trace elements’.

For more detail on PBAC’s view, see section 7 PBAC outcome.

7 PBAC Outcome

- 7.1 The PBAC recommended the Restricted Benefit listing of the amino acid formula, MSUD Easy® for the dietary management of maple syrup urine disease (MSUD) on a cost minimisation basis to the cheapest currently listed amino acid formula for the treatment of MSUD at an equivalent cost per gram of protein equivalent (PE).
- 7.2 The PBAC noted the NPWP supported the proposed listing as a treatment option for the dietary management of MSUD. The PBAC also noted the NPWP advice that MSUD Easy does not contain any vitamins, minerals or trace elements and that therefore patients would have to meet their dietary needs through other sources, which may include use of PBS-subsidised vitamin, mineral and trace element supplements included Phlexy-vits and Paediatric Seravit.
- 7.3 The PBAC noted the requested maximum quantity (MQ) of 5 provides approximately 1 month of protein therapy, equivalent to 2102 g of protein equivalent (PE). The additional 5 repeats typically allows for a total of 6 months of supply. The MQ of MSUD Easy, provides a lower PE, than the nominated comparator, MSUD Express 20, at 2400 g.
- 7.4 The PBAC agreed with the NPWP that an administrative note should be added to the restriction advising prescribers of the lack of vitamins, minerals and trace elements to note the difference from all currently listed PBS products for the treatment of MSUD.
- 7.5 The PBAC noted that use of the only similar PBS-listed formulation of amino acid formula tablets, Phlexy-10 (for dietary management of phenylketonuria) was very low. Given the large number of tablets in the standard dosage and low use of other amino acid tablet formulations, the PBAC considered it was likely the use of MSUD Easy would low.
- 7.6 The PBAC noted that there may be an additional per-patient cost impost to the PBS if additional vitamin, mineral and trace element supplements are prescribed. Given the likely low use of this product, the PBAC considered that any additional overall cost to the PBS was likely to be low. On balance, the PBAC considered the requested price was reasonable and that MSUD Easy was a suitable alternative amino acid formula for some patients.
- 7.7 The PBAC accepted MSUD Express 20 was a relevant comparator for MSUD Easy, however also considered other amino acid formula for the treatment of MSUD were also relevant comparators.

- 7.8 The PBAC recommended that, under Section 101(3BA) of the National Health Act 1953, MSUD Easy should be treated as interchangeable with MSUD Express 20, MSUD Cooler 10 and 15 and other amino acid products without valine, leucine and isoleucine on the PBS, on an individual basis.
- 7.9 The PBAC advised that MSUD Easy is suitable for prescribing by nurse practitioners, similar to other nutritional products currently listed for the dietary management of patients with MSUD.
- 7.10 The PBAC recommended that the Early Supply Rule should not apply since it has generally been the PBAC's view that in general, nutritional product listings be exempt.
- 7.11 The PBAC noted that this submission is not eligible for Pricing Pathway A under *National Health (Pharmaceutical and Vaccines – Cost Recovery) Regulations 2009* because MSUD Easy is not expected to provide a substantial and clinically relevant improvement in efficacy, or reduction of toxicity, over any alternative therapy and is not expected to address a high and urgent unmet clinical need.
- 7.12 The PBAC noted that this submission is not eligible for an Independent Review because it received a positive recommendation.

Outcome:

Recommended

8 Recommended listing

Add new item:

Name, Restriction, Manner of administration and form	Max. Qty	No. of Rpts	Proprietary Name and Manufacturer
AMINO ACID FORMULA WITH FAT, CARBOHYDRATE, WITHOUT VALINE, LEUCINE AND ISOLEUCINE TABLET, Tablet: modified release, 6 x 77g	5	5	MSUD Easy Orpharma Pty Ltd

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Administration Advice:	<i>This product does not contain any vitamins, minerals or trace elements</i>

This restriction may be subject to further review. Should there be any changes made to the restriction the Sponsor will be informed.

9 Context for Decision

The PBAC helps decide whether and, if so, how medicines should be subsidised through the Pharmaceutical Benefits Scheme (PBS) in Australia. It considers applications regarding the listing of medicines on the PBS and provides advice about other matters relating to the operation of the PBS in this context. A PBAC decision in relation to PBS listings does not necessarily represent a final PBAC view about the merits of the medicine or the circumstances in which it should be made available through the PBS. The PBAC welcomes applications containing new information at any time.

10 Sponsor's Comment

The sponsor had no comment.