

## **5.23 AMINO ACID FORMULA WITH VITAMINS AND MINERALS WITHOUT PHENYLALANINE**

### **Oral liquid 125 mL, 30 (PKU Lophlex Select LQ)**

### **PKU Lophlex Select LQ**

### **Nutricia Australia Pty Limited**

#### **1 Purpose of Submission**

- 1.1 The Category 3 submission requested a General Schedule Restricted Benefit listing of amino acid formula with vitamins and minerals without phenylalanine (PKU Lophlex Select LQ) pouches containing 125 mL oral liquid equivalent to 20 g protein for the dietary management of phenylketonuria (PKU) particularly for those requiring a lower-calorie option.

#### **2 Background**

- 2.1 The submission stated that that PKU Lophlex Select LQ will largely be used to treat adults and adolescents but can be used from the age of 4. The product is designed with fewer calories compared to other dietary treatments for PKU, to allow people with PKU to supplement their diet with other foods while still meeting their protein requirements.

#### **Registration status**

- 2.2 The submission stated that PKU Lophlex Select LQ complies with the standard 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*.
- 2.3 As PKU Lophlex Select LQ is marketed as a nutritional product and not a therapeutic good, it is not registered in the Australian Register of Therapeutic Goods.

#### **Previous PBAC consideration**

- 2.4 PKU Lophlex Select LQ has not been considered by the PBAC previously.

#### **3 Requested listing**

- 3.1 The submission requested the following new listing:

*Add new medicinal product as follows:*

Public Summary Document – March 2024 PBAC Meeting

MEDICINAL PRODUCT medicinal product pack	PBS item code	Max. qty packs	Max. qty units	No. of Rpts	Available brands
AMINO ACID FORMULA WITH VITAMINS AND MINERALS WITHOUT PHENYLALANINE					
amino acid formula with vitamins and minerals without phenylalanine oral liquid, 30 x 125 mL pouches	NEW	4	4	5	PKU Lophlex Select LQ
<b>Category / Program:</b> GENERAL – General Schedule (Code GE)					
<b>Prescriber type:</b> <input checked="" type="checkbox"/> Medical Practitioners <input checked="" type="checkbox"/> Nurse practitioners					
<b>PBS Indication:</b> Phenylketonuria					
<b>Restriction Level / Method:</b> <input checked="" type="checkbox"/> Restricted benefit					

3.2 The sponsor is seeking to list PKU Lophlex Select LQ on a cost minimisation basis per gram of protein equivalent (PE) compared to nominated main comparator PKU Lophlex LQ 20. The requested approved ex-manufacturer price (AEMP) of \$1,531.08 and DPMQ of \$1,672.49 is equivalent to that of PKU Lophlex LQ 20.

3.3 The original submission requested an ex-manufacturer price (AEMP) per max quantity of \$1,549.48 and a DPMQ of \$1,691.81, equivalent to that of PKU Cooler 20, but this was changed by the sponsor during the evaluation.

## 4 Comparator

4.1 The submission initially nominated PKU Cooler 20 as the main comparator and PKU Lophlex LQ 20 as an alternative comparator for nutritional comparison purposes.

4.2 The sponsor later indicated that their intention was for PKU Lophlex LQ 20 to be the main comparator for nutritional comparison and cost minimisation purposes. The sponsor provided the rationale that as PKU Lophlex Select LQ is intended to expand the range of flavours for PKU Lophlex LQ 20 patients, that PKU Lophlex LQ 20 is the appropriate main comparator.

4.3 The submission stated the differences between the PKU Lophlex Select LQ and the two nominated comparators are fewer calories per serve of 20 g PE in PKU Lophlex Select LQ, mostly through reduction of carbohydrate ingredients compared to the comparators.

## 5 Consideration of the evidence

### *Sponsor hearing*

5.1 There was no hearing for this item.

### *Consumer comments*

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

## Clinical trials

- 5.3 No clinical trials were presented in the submission that directly compared PKU Lophlex Select LQ to the comparators.
- 5.4 The submission claimed the nutrition composition of PKU Lophlex Select LQ is equivalent to PKU Cooler 20 and PKU Lophlex LQ 20. The details of the nutritional profile of PKU Lophlex Select LQ and the nominated comparators are provided in Table 1.

Table 1: Nutritional composition PKU Lophlex Select LQ, PKU Cooler 20 and PKU Lophlex LQ 20 per 100 mL liquid

Nutrient	Unit	PKU Lophlex Select LQ	PKU Lophlex LQ 20	PKU Cooler 20
Energy	kJ	342	407	316
	kcal	81.7	96	75
Protein	g	16	16	11.5
Carbohydrate	g	4.1	7	5.1
Sugars	g	0.35	7	3.4
Fat	g	0.3	0.35	0.9
Saturates	g	0.08	0.08	0.2
DHA	mg	120	120	77
Dietary fibre	g	0.34	0.4	0
Vitamin A	ug-RE	228	228	150
Thiamin	mg	0.34	0.34	0.4
Riboflavin	mg	0.4	0.4	0.44
Niacin	mg-NE	5.7	5.7	6.8
Vitamin B6	mg	0.46	0.46	0.5
Folic acid	ug	80	96	58
Vitamin B12	ug	1.4	1.4	0.9
Vitamin C	mg	14.2	14.2	21
Vitamin E	mg	2.5	2.5	3
Pantothenic acid	mg	1.5	1.4	1.1
Biotin	ug	42.7	42.7	7.5
Choline	mg	122	122	115
Vitamin D	ug	6.4	6.4	5.8
Vitamin K	ug	19.9	19.9	14
Zinc	mg	3.1	3.1	3.2
Iron	mg	4.2	4.2	4.2
Iodine	ug	46.7	46.7	49
Magnesium	mg	85.6	85.6	63
Calcium	mg	278	285	230
Phosphorus	mg	249	221	205
Selenium	ug	21.4	21.4	15
Sodium	mg	<20	<20	60
Potassium	mg	<20	80	140
Chloride	mg	<20	<20	80
Chromium	ug	8.5	8.5	8
Copper	mg	0.42	4.2	0.42
Fluoride	mg	0	0	0
Manganese	mg	0.42	0.42	0.29
Molybdenum	ug	20	20	13

Source: Appendix D of the submission, DHA = docosahexaenoic acid.

**Clinical claim**

5.5 The submission claimed non-inferior comparative effectiveness and non-inferior comparative safety of PKU Lophlex Select LQ compared to PKU Cooler 20 and PKU Lophlex LQ 20.

**Economic analysis**

5.6 As a Category 3 submission, the economic analysis has not been independently evaluated.

5.7 The sponsor presented a cost-minimisation approach of PKU Lophlex Select LQ compared with PKU Lophlex LQ 20, based on the same price per gram PE of \$0.638 as the AEMP for This results in a requested AEMP equivalent to PKU Lophlex LQ 20 of \$1,531.08 (Table 2).

5.8 The submission had initially presented this CMA to PKU Cooler 20 which had resulted in a larger requested AEMP of \$1,549.48.

5.9 The Nutritional Products Working Party (NPWP) advised that PKU Air 20 was an appropriate comparator. The Secretariat noted that PKU Air 20 is not the lowest cost alternative, with an AEMP equivalent to PKU Cooler 20 of \$1,549.48.

**Table 2: Calculated costs versus comparators**

	PKU Lophlex Select LQ	PKU Lophlex LQ 20
<b>Presentation</b>	30 x 125 mL pouches 20 g PE/serve	30 x 125 mL pouches 20 g PE/serve
<b>g protein equivalent (PE) per carton</b>	(30 x 20 g PE = 600 g)	(30 x 20 g PE = 600 g)
<b>AEMP per carton</b>	\$382.77	\$382.77
<b>g protein equivalent (PE) per maximum quantity</b>	2400 g PE= 4 x 600 g	2400 g PE= 4 x 600 g
<b>AEMP per maximum quantity</b>	\$382.77 x 4 = \$1,531.08 (2400 g PE)	\$382.77 x 4 = \$1,531.08 (2400 g PE)
<b>AEMP per g PE</b>	\$0.638	\$0.638
<b>DPMQ</b>	<b>\$1672.49</b>	<b>\$1672.49</b>

Source: PKU LOPHLEX SELECT LQ Cost minimisation analysis summary.pdf provided in the submission and Additional Information PKU LOPHLEX SELECT LQ Submission.pdf.

**Drug cost/patient/year: \$20,349.19**

5.10 The estimated drug cost/patient per year would be \$20,349.19 based on the proposed DPMQ of \$1,672.49 and 12.167 prescriptions per year. The maximum quantity per prescription is 4 cartons (30 x 125 mL pouches per carton).

**Estimated PBS usage and financial implications**

5.11 The requested price for the financial estimates was based on the AEMP of PKU Lophlex LQ 20.

5.12 The sponsor estimated that there should be nil impact to the PBS as PKU Lophlex Select LQ was expected to take market share from PKU Lophlex LQ 20. This is shown in Table 3.

Public Summary Document – March 2024 PBAC Meeting

Table 3: Estimated use and financial

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<b>Estimated extent of use</b>						
Number of scripts dispensed <sup>a</sup>	<sup>1</sup>	<sup>1</sup>	<sup>1</sup>	<sup>1</sup>	<sup>1</sup>	<sup>1</sup>
<b>Estimated financial implications of PKU Lophlex Select LQ</b>						
Cost to PBS/RPBS less co-payment	<sup>2</sup>	<sup>2</sup>	<sup>2</sup>	<sup>2</sup>	<sup>2</sup>	<sup>2</sup>
<b>Estimated financial implications of PKU Lophlex LQ 20</b>						
Cost to PBS/RPBS less co-payment	<sup>3</sup>	<sup>3</sup>	<sup>3</sup>	<sup>3</sup>	<sup>3</sup>	<sup>3</sup>
<b>Net financial implications</b>						
Net cost to PBS/RPBS	<sup>2</sup>	<sup>2</sup>	<sup>2</sup>	<sup>2</sup>	<sup>2</sup>	<sup>2</sup>

<sup>a</sup> Assuming 12 scripts per patient per year as estimated by the submission.

Abbreviations: PBS = Pharmaceutical Benefits Scheme; RPBS = Repatriation Pharmaceutical Benefits Scheme.

Source: Re-work- UCM-Release-3-Workbook-v1081- PKU Lophlex Select LQ 190224.xlsx with Departmental corrections to Sheet 2e. Scripts - market - Cell J106 - 100% added to the cell.; Sheet 3a. Scripts - proposed - Cell L144 - The substitution rate per script was changed from 100 to 1, Sheet 3b. Impact - proposed (pub) - Cell I274 - deleted \$0.00 from the cell and Sheet 4b. Impact - affected (pub) - Cell I274 - deleted \$0.00 from the cell.

The redacted values correspond to the following ranges:

<sup>1</sup> < 500

<sup>2</sup> \$0 to < \$10 million

<sup>3</sup> net cost saving

- 5.13 The sponsor stated that PKU Lophlex Select LQ is intended to provide existing users of PKU Lophlex LQ 20 with more choices regarding flavours and calories consumed when trying to meet their protein replacement goals.
- 5.14 The sponsor provided a list of inputs used in the model. The sponsor nominated comparator PKU Lophlex LQ 20 (item 9021T) as the market where scripts would be replaced by the listing of PKU Lophlex Select LQ.
- 5.15 The sponsor estimated that there would be no change to the market growth rate if PKU Lophlex Select LQ were to be listed. This is because the nutritional formula market is well established with multiple competitors.
- 5.16 The submission predicted that PKU Lophlex Select LQ would take market share from PKU Lophlex LQ 20 at proportions of 5% in Year 1, increasing to 30% in Year 6
- 5.17 The submission stated that they expected no impacts to other Government Health budgets. This claim is reasonable considering there is no requested change to the restriction or authority levels.

## 6 NPWP consideration

- 6.1 The NPWP advised that PKU Lophlex LQ 20 was an appropriate comparator PKU Lophlex Select LQ, and PKU Air 20 and PKU Cooler 20 are also alternate comparators. The Secretariat noted that both PKU Air 20 and PKU Cooler 20 are not the lowest cost comparator with a DPMQ of \$1691.81 compared to PKU Lophlex LQ 20 (\$1672.49).
- 6.2 The NPWP advised that PKU Lophlex Select LQ is nutritionally similar to the comparators and would provide a non-inferior clinical benefit. However, the NPWP also requested that a comparison of the ingredients for PKU Lophlex Select LQ against

PKU Lophlex LQ 20 be provided to support the nutritional comparisons of the products. The NPWP considered that the comparison of the ingredients supported the claim of nutritional similarity of the products.

- 6.3 The NPWP agreed with the sponsor's estimation that listing PKU Lophlex Select LQ on the PBS would result in a nil financial impact to the PBS/RPBS.
- 6.4 The NPWP supported the listing of PKU Lophlex Select LQ as a General Schedule Restricted Benefit for the dietary management of PKU on a cost-minimisation basis to the lowest cost comparator on a price per gram of PE basis.
- 6.5 The NPWP raised that the reiterative naming conventions for PKU Lophlex and other nutritional products have the potential to cause confusion and could pose a quality use of medicines (QUM) issue.

## 7 PBAC Outcome

- 7.1 The PBAC recommended that amino acid formula with vitamins and minerals without phenylalanine (PKU Lophlex Select LQ) be listed on the PBS as a General Schedule Restricted Benefit for the dietary management of phenylketonuria (PKU) under the same circumstances as PKU Lophlex LQ 20.
- 7.2 The PBAC considered that PKU Lophlex Select LQ should be cost-minimised to the lowest cost comparator accepted by the NPWP (PKU Lophlex LQ 20, PKU Cooler 20 and PKU Air 20) at an equivalent price per gram of PE.
- 7.3 The PBAC considered the nominated main comparator, PKU Lophlex LQ 20, to be reasonable and considered that PKU Cooler 20 and PKU Air 20 are reasonable alternative comparators.
- 7.4 The PBAC noted and supported the NPWP advice that PKU Lophlex Select LQ is nutritionally similar to the comparators and would provide a non-inferior clinical benefit.
- 7.5 The PBAC considered the estimated use and estimated nil net financial impact to the PBS/RPBS over 6 years to be reasonable.
- 7.6 The PBAC advised that PKU Lophlex Select LQ is suitable for prescribing by nurse practitioners.
- 7.7 The PBAC recommended that the Early Supply Rule should not apply, as it has been the PBAC's view that general nutrients be exempt.
- 7.8 The PBAC noted that its recommendation was on a cost-minimisation basis and advised that, because PKU Lophlex Select LQ is not expected to provide a substantial and clinically relevant improvement in efficacy, or reduction of toxicity, over PKU Lophlex LQ 20, or not expected to address a high and urgent unmet clinical need given the presence of an alternative therapy, the criteria prescribed by the *National Health (Pharmaceuticals and Vaccines – Cost Recovery) Regulations 2022* for Pricing Pathway

A were not met.

- 7.9 The PBAC noted that this submission is not eligible for an Independent Review as it received a positive recommendation.

**Outcome:**

Recommended

## 8 Recommended listing

- 8.1 Add new item:

MEDICINAL PRODUCT medicinal product pack	PBS item code	Max. qty packs	Max. qty units	No. of Rpts	Available brands
AMINO ACID FORMULA WITH VITAMINS AND MINERALS WITHOUT PHENYLALANINE					
amino acid formula with vitamins and minerals without phenylalanine oral liquid, 30 x 125 mL pouches	NEW	4	4	5	PKU Lophlex Select LQ
<b>Category / Program:</b> GENERAL – General Schedule (Code GE)					
<b>Prescriber type:</b> <input checked="" type="checkbox"/> Medical Practitioners <input checked="" type="checkbox"/> Nurse practitioners					
<b>PBS Indication:</b> Phenylketonuria					
<b>Restriction Level / Method:</b> <input checked="" type="checkbox"/> Restricted benefit					

***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.