

11.01 MILK POWDER -- SYNTHETIC, Low calcium oral powder 400 g (Locasol), Locasol[®], NUTRICIA AUSTRALIA PTY LIMITED

1 Purpose of Submission

- 1.1 The Committee Secretariat submission requested that the new formulation of milk powder synthetic low calcium oral powder 400 g (Locasol[®]) continue to be listed on the Pharmaceutical Benefits Scheme (PBS) for the dietary management of hypercalcaemia under the existing conditions.
- 1.2 The submission stated that the changes to the nutritional profile of Locasol were made to comply with the European standards for the nutritional composition of food for special medical purposes (FSMPs) (Commission Delegated Regulation (EU) 2016/128). As the majority of the sponsor's products are manufactured in Europe, the nutrient composition of Locasol was modified to meet the European regulatory requirements. These changes to the formulation were also applied for Locasol sold in the Australian market.

2 Background

- 2.1 Locasol is currently listed on the PBS as a General Schedule Restricted Benefit listing for the dietary management of hypercalcaemia in patients under 4 years of age.
- 2.2 Locasol is the only PBS-listed nutritional product indicated for the dietary management of hypercalcaemia.

Registration status

- 2.3 The submission confirmed the revised formulation of Locasol continues to meet the requirements for infant formula products that have special medical purposes as set out under *the Australia New Zealand Food Standards Code* — Standard 2.9.1: Infant formula products and Standard 2.9.5: Food for special medical purposes.
- 2.4 As this product 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

- 2.5 At its July 2020 meeting, the PBAC recommended continuing the Restricted Benefit listing of Locasol, for the dietary management of hypercalcaemia of patients under the age of four years (inclusive), based on new European compositional standards (paragraph 6.1, milk powder synthetic low calcium, Public Summary Document (PSD), July 2020 PBAC Meeting). The purpose of the July 2020 submission was the same as this submission, which sought PBAC consideration for formulation changes to Locasol.

These changes were made to comply with the European compositional standards for FSMPs, which were developed to satisfy the nutritional requirements of infants (Commission Delegated Regulation (EU) 2016/128) and became effective from February 2020.

- 2.6 The PBAC noted the Nutritional Products Working Party (NPWP) considered the new formulation complied with Food Standards Australia New Zealand (FSANZ) and had no concerns that the changes to formulation would pose a risk to the health and safety of patients (paragraphs 5.5 and 6.2, milk powder synthetic low calcium, PSD, July 2020 PBAC Meeting).

3 Requested listing

- 3.1 As the submission did not request any changes to the existing listing of Locasol (PBS item code: 3092R), the full restriction has not been reproduced here.

4 Consideration of the evidence

Sponsor hearing

- 4.1 There was no hearing for this item.

Consumer comments

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

Nutritional profile

- 4.3 Details of the nutritional profile of the new formulation and current formulation of Locasol are provided in Table 1.

Table 1: Nutritional composition changes to Locasol

Parameter	Unit per 100 g	Current formulation	New formulation
Energy	kJ	2144	2149
	kcal	512	514
Carbohydrate	g	55.2	53.7
Sugars	g	54.8	52.8
Lactose	g	54.8	52.7
Polysaccharides	g	0.28	0.53
Organic Acids	g	0.12	0.37
Fat	g	25.8	26.7
Saturated Fat	g	9.8	11.9
Monounsaturated fat	g	12.9	10.8
Polyunsaturated fat	g	3.2	4.1
Sodium	mg	227	223
Potassium	mg	466	512
Chloride	mg	310	384
Calcium	mg	<29.1	<40
Phosphorus	mg	172	171
Molybdenum	µg	19.5	19.4
Iodine	µg	69.3	96.3
Selenium	µg	12.4	20.6
Alpha-Tocopherol	mg	10.1	10.3
Vitamin B6	mg	0.30	0.29
Pantothenic acid (B5)	mg	2.71	3.17
Folic acid	µg	54.3	69.8
Folate	µg	90.5	120
Choline	mg	90.6	160
C18:2 (n-6) Linoleic acid (LA)	g	2.57	3.23
C18:3 (n-3) Alpha linolenic acid (ALA)	g	0.45	0.33
C22:6 (n-3) Docosahexaenoic acid (DHA)	g	-	0.13
(n-6)/(n-3) ratio		5.77	6.79
LA / ALA ratio		5.77	9.91
Ca /P ratio		<0.17	<0.23
Potential renal solute load	mOsmol/L	311	159
Osmolarity	mOsmol/L	270	261
Osmolality	mOsmol/kg water	310	290
Allergens		Milk and products thereof (including lactose)	Milk and products thereof (including lactose) Fish and products thereof present due to addition of Tuna Fish Oil (DHA)

Source: Table 1, of the submission

Abbreviations LA: linoleic acid ARA: arachidonic acid; DHA: Docosahexaenoic acid; Ca /P ratio: calcium to phosphorus ratio

Blue shading represents information previously considered by the PBAC

4.4 The key differences in the nutritional composition of the new formulation compared to the current formulation of Locasol were:

- Increases in calcium, polysaccharides, organic acids, polyunsaturated fat, potassium, chloride, molybdenum, selenium, folate, folic acid, choline, linoleic acid
- Decreases in monounsaturated fat, alpha linoleic acid

- Addition of docosahexaenoic acid (DHA)

4.5 The submission stated that there were no changes to the brand name, pack size, or shelf life. The submission further noted that the label was revised to include changes in the nutrition information and allergen content due to the addition of fish oil.

4.6 A comparison of the nutritional composition of Locasol with each FSANZ Standard 2.9.5: FSMPs and Standard 2.9.1: Infant formula products is provided in Table 2 and Table 3, respectively.

Table 2: Comparison of Locasol with FSANZ Standard 2.9.5 - FSMPs

Nutrient	Unit	Minimum amount per 1000 kJ	Maximum amount per 1000 kJ	LOCASOL per 1000 kJ	Compliant / Modified
VITAMINS					
Vitamin A	µg RE	84	430	274	Compliant
Vitamin D	µg	1.2	7.5	0.0	Modified
Vitamin C	mg	5.4		33.0	Compliant
Thiamin	mg	0.15		0.22	Compliant
Riboflavin	mg	0.2		0.36	Compliant
Niacin	mg NE	2.2		2.2	Compliant
Vitamin B6	mg	0.2	1.2	0.14	Modified
Folate	µg	25		55.6	Compliant
Pantothenic acid	mg	0.35		1.5	Compliant
Vitamin B12	µg	0.17		0.5	Compliant
Biotin	µg	1.8		6.5	Compliant
Vitamin E	mg α-TE	1		4.2	Compliant
Vitamin K	µg	8.5		11.8	Compliant
MINERALS					
Calcium	mg	120	600	<18.6	Modified
Phosphorus	mg	72		79.7	Compliant
Magnesium	mg	18		19.8	Compliant
Iron	mg	1.2		3.6	Compliant
Iodine	µg	15.5	84	44.6	Compliant
Copper	mg	0.15	1.25	0.18	Compliant
Zinc	mg	1.2	3.6	1.8	Compliant
Manganese	mg	0.12	1.2	0.024	Modified
Selenium	µg	6	25	9.6	Compliant
Molybdenum	µg	7		9.1	Compliant
Chromium	µg	3		7	Compliant
ELECTROLYTES					
Sodium	mg	72		104	Compliant
Potassium	mg	190		238	Compliant
Chloride	mg	72		179	Compliant

Source: FSANZ and EU FSMP Standards for LOCASOL 2024.xlsx

Abbreviations: FSANZ = Food Standards Australia and New Zealand, FSMPs = Foods for special medical purposes

Table 3: Comparison of Locasol with FSANZ Standard 2.9.1 - Infant Formula Products

Nutrient	Unit	Minimum amount per 100 kJ	Maximum amount per 100 kJ	LOCASOL per 100 kJ	Compliant / Modified
COMPOSITION					
Energy	kJ/L	2500	3550	2770	Compliant
Protein	g	0.45	1.3	0.70	Compliant
Fat	g	1.05	1.5	1.24	Compliant
VITAMINS					
Vitamin A	µg	14	43	27.4	Compliant
Vitamin D	µg	0.25	0.63	0.0	Modified
Vitamin C	mg	1.7		3.3	Compliant
Thiamin	µg	10		21.5	Compliant
Riboflavin	µg	14		35.0	Compliant
Niacin (preformed)	µg	130		217	Compliant
Vitamin B6	µg	9	36	14.00	Compliant
Folate	µg	2		5.56	Compliant
Pantothenic acid	µg	70		147.51	Compliant
Vitamin B12	µg	0.025		0.05	Compliant
Biotin	µg	0.36		0.65	Compliant
Vitamin E	mg	0.11	1.1	0.42	Compliant
Vitamin K	µg	1		1.19	Compliant
MINERALS					
Calcium	mg	12		<1.86	Modified
Phosphorus	mg	6	25	7.96	Compliant
Magnesium	mg	1.2	4	1.98	Compliant
Iron	mg	0.2	0.5	0.37	Compliant
Iodine	µg	1.2	10	4.46	Compliant
Copper	µg	14	43	18.00	Compliant
Zinc	mg	0.12	0.43	0.18	Compliant
Manganese	µg	0.24	24	2.4	Compliant
Selenium	µg	0.25	1.19	0.96	Compliant
ELECTROLYTES					
Sodium	mg	5	15	10.38	Compliant
Potassium	mg	20	50	23.83	Compliant
Chloride	mg	12	35	17.87	Compliant

Source: FSANZ and EU FSMP Standards for LOCASOL 2024.xlsx

Abbreviations: FSANZ = Food Standards Australia and New Zealand

Estimated PBS usage and financial implications

4.7 The submission did not present any economic or financial analyses. The submission requested no change to the current price; pack size; or PBS restriction of Locasol. The submission therefore claimed that the changes to the formulation of Locasol are not expected to impact the market or have a financial impact to Government.

5 NPWP consideration

5.1 The NPWP advised that the new formulation of Locasol is expected to provide non-inferior clinical benefit and safety in comparison to the current formulation for the dietary management of hypercalcaemia.

- 5.2 The NPWP supported the new formulation of Locasol continuing to be listed on the PBS under the existing conditions as the current formulation.
- 5.3 The NPWP noted, despite its low usage, Locasol was the only PBS-listed nutritional product indicated for the dietary management of hypercalcaemia, therefore there is a clinical need for this product.
- 5.4 The NPWP noted the modifications to the current formulation and a decreased potential renal solute load. However, overall, the NPWP considered there were no clinical concerns arising from the formulation changes.
- 5.5 The NPWP noted the size of the scoop enclosed in the product has been changed and considered that adequate education for patients and their carers would be required to ensure correct nutritional intake as prescribed. The NPWP also noted that the current formulation's nutritional profile provided in the submission was not consistent with the nutritional profile for the existing formulation available on the sponsor's website. The pre-PBAC response noted the NPWP's advice and agreed to provide education and communication to health care professionals about the change in scoop size.
- 5.6 The NPWP supported the sponsor's estimation that the formulation change would not result in a financial impact to the PBS or RPBS.

6 PBAC Outcome

- 6.1 The PBAC recommended that the new formulation of milk powder synthetic low calcium oral powder 400 g (Locasol®) continue to be listed on the PBS under the existing conditions as the current formulation.
- 6.2 The PBAC noted and supported the NPWP's advice that the new formulation is expected to provide non-inferior clinical benefit and safety compared to the current formulation for the dietary management of hypercalcaemia.
- 6.3 The PBAC considered the modifications to the current formulation of Locasol® would neither impact the medicine's utilisation nor have financial implications to the PBS/RPBS.
- 6.4 The PBAC noted the submission is not eligible for an Independent Review as it received a positive recommendation.

Outcome:

Recommended

7 Recommended listing

- 7.1 No change to existing listing.

8 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.

9 Sponsor's Comment

The sponsor had no comment.