5.21 ISOTRETINOIN,

 **Capsule 30 mg,**

 **Oratane®,**

 **Oraderm Pharmaceuticals Pty Ltd**

1. Purpose of Application
	1. The minor submission requested the Authority Required (STREAMLINED) listing of a new form of isotretinoin, capsule 30 mg, under the same conditions as the currently listed strengths (5 mg, 10 mg, 20 mg and 40 mg).
2. Requested listing

The submission requested the following new listing. Suggestions and additions proposed by the Secretariat to the requested listing are in italics and deletions are in strikethrough.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name, Restriction,Manner of administration and form | Max.Qty | №.ofRpts | Dispensed Price for Max. Qty | Proprietary Name and Manufacturer |
| isotretinoin~~oral~~ 30mg capsule, 60  | 1 | 3 | $'''''''''''''' | Oratane® | Arrow Pharma Pty Ltd |
| **Category / Program:** | GENERAL – General Schedule (Code GE) |
| **Prescriber type:** | [ ] Dental [x] Medical Practitioners [ ] Nurse practitioners [ ] Optometrists[ ] Midwives |
| **PBS Indication:** | Severe cystic acne |
| **Treatment phase:** | ~~Initial and continuing~~  |
| **Restriction Level / Method:** | [ ] Restricted benefit[ ] Authority Required – In Writing[ ] Authority Required – Telephone/Electronic/Emergency[x] Streamlined |
| **Clinical criteria:** | The condition must be unresponsive to other therapy.  |
| **Administrative Advice:** | *Care must be taken to comply with the provisions of State/Territory law when prescribing this drug.*  |
| **Cautions:** | *This drug causes birth defects.* *This drug has been reported to cause other frequent and potentially serious toxicity.*  |

The administrative advice ‘care must be taken to comply with the provisions of State/Territory law when prescribing this drug’; and cautions ‘this drug causes birth defects’ and ‘this drug has been reported to cause other frequent and potentially serious toxicity’ was added to the restriction for consistency with current PBS listings for isotretinoin.

*For more detail on PBAC’s view, see section 6 PBAC outcome*

1. Background

## Regulatory status

Isotretinoin 30mg was TGA registered on 30 April 2019 for the treatment of severe cystic acne. The registered indication is the same as for the currently listed strengths of Oratane, specifically:

‘Treatment of severe cystic acne. A single course of therapy has been shown to result in complete and prolonged remission of disease in many patients. If a second course of therapy is needed, it should not be initiated until at least eight weeks after completion of the first course, since experience has shown that patients may continue to improve while off the drug. Because of significant adverse effects associated with its use, isotretinoin should be reserved for patients with severe cystic acne who are unresponsive to conventional therapy, including systemic antibiotics.’

***Previous PBAC consideration***

Isotretinoin 10mg and 20mg capsules were listed on the PBS in April 1986.

PBAC recommended the listing of isotretinoin 40mg at the November 2006 meeting, at approximately 10% lower price per milligram to the 20 mg strength.

At the November 2018 meeting, PBAC recommended the listing of isotretinoin 5mg, stating that it allowed dose optimisation for patients who required a lower dose. The PBAC recommended the 5 mg strength of isotretinoin at the same price per mg as the 10 mg strength (paragraph 7.3, November 2018 PSD).

1. Population and disease
	1. Therapeutic response to isotretinoin is dose-related, requiring adjustment of individual dose according to the response of the patient’s condition and the patient’s tolerance of the drug. Recommended dosing is based on body weight, with an initial dose of up to 0.5mg/kg day.
	2. The submission stated that a 60 kg (i.e. the average weight of a 15-16 year old) patient requiring a single daily dose of 30 mg must currently take one 10 mg and one 20 mg capsule based on the currently listed strengths. The submission claimed that the addition of a 30mg strength would allow these patients to achieve an accurate dose without combining multiple capsule strengths or taking a higher dose than required. The submission claimed this would minimising the risk of medication errors and adverse events and would lead to greater compliance and improved clinical outcomes.

For more detail on PBAC’s view, see section 6 PBAC outcome

# Consideration of the evidence

## Sponsor hearing

* 1. There was no hearing for this item as it was a minor submission.

## Consumer comments

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

## Economic analysis

* 1. The prices for the current 5 mg, 10 mg, 20 mg and 40 mg strengths and the proposed pricing for the 30 mg strength are provided in Table 1. The submission requested the ''''''''''' ''''''''' ''''''' ''''''''''''''''''' '''' '''''' ''''' ''''''' ''''''''''''''''' and noted that the requested price per milligram is lower than the 10 mg capsule.

**Table 1: Oratane (isotretinoin) current and proposed PBS pricing**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Oratane capsule strength** | **Capsules per pack** | **Total milligrams per pack** | **AEMP** | **Price per milligram** |
| 5 mg | 60 | 300 | $11.01 | $0.0367 |
| 10 mg | 60 | 600 | $22.02 | $0.0367 |
| 20 mg | 60 | 1,200 | $34.32\* | $0.0286 |
| 30 mg | 60 | 1,800 | $''''''''''''' | $''''''''''''''' |
| 40 mg | 30 | 1,200 | $30.98 | $0.0258 |

Abbreviations: AEMP = approved ex-manufacturer price.

\*Price in the table for the 20 mg is the proportional ex-manufacturer price (PEMP); the pricing quantity (of 30 capsules) differs from the pack quantity of (60 capsules). The AEMP for the 20 mg is $17.16 for a pricing quantity of 30 capsules.

Source: Minor submission for isotretinoin (tables 3.1 and 3.2, page 14) and http://www.pbs.gov.au/info/industry/pricing/ex-manufacturer-price (accessed 3 October 2019).

## Drug cost/patient/course: $'''''''''''''

* 1. The estimated drug cost/patient/course would be $'''''''''''''', based on a 16-week course at 0.5 mg/kg/day for a 60 kg patient and a DPMQ of $'''''''''''.

## Estimated PBS usage & financial implications

* 1. The submission used a market share approach to estimate the eligible patient population. The submission expects that listing the 30 mg strength would not grow the market, instead it is expected to replace a proportion of the currently PBS listed 10 mg, 20 mg and 40 mg strengths.
	2. The minor submission estimated a net cost to the PBS of less than $10 million in Year 6 of listing, with a total net cost to the PBS of less than $10 million over the first 6 years of listing. This is summarised in the table below as well as the expected patient and prescription numbers. The net cost to PBS/RPBS is due to reduced patient co-payments.

**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 dispenseda | ''''''''''''' | ''''''''''''''' | '''''''''''''' | '''''''''''''' | '''''''''''' | ''''''''''''''' |
| **Estimated financial implications of isotretinoin 30mg** |
| Cost to PBS/RPBS | '''''''''''''''''''''''' | ''''''''''''''''''''' | '''''''''''''''''''''' | ''''''''''''''''''''''' | ''''''''''''''''''''''' | ''''''''''''''''''''' |
| Co-payments | ''''''''''''''''''''' | ''''''''''''''''''''' | ''''''''''''''''''' | ''''''''''''''''''' | '''''''''''''''''' | '''''''''''''''''' |
| Cost to PBS/RPBS less co-payments | ''''''''''''''''' | '''''''''''''''''''' | ''''''''''''''''''''' | ''''''''''''''''''' | ''''''''''''''''''' | ''''''''''''''''''''' |
| **Estimated financial implications for isotretinoin 10mg, 20mg and 40mg** |
| Cost to PBS/RPBS | ''''''''''''''''''''''' | '''''''''''''''''''' | '''''''''''''''''''''' | ''''''''''''''''''''' | ''''''''''''''''''''''' | '''''''''''''''''''''''' |
| Co-payments | ''''''''''''''''''''''' | ''''''''''''''''''''''' | ''''''''''''''''''''' | ''''''''''''''''''''' | '''''''''''''''''''''' | '''''''''''''''''''''''' |
| Cost to PBS/RPBS less co-payments | '''''''''''''''''''' | ''''''''''''''''' | ''''''''''''''''''''' | ''''''''''''''''''''' | ''''''''''''''''' | '''''''''''''''''''''' |
| **Net financial implications**  |
| Net cost to PBS/RPBS | ''''''''''''''''''''' | '''''''''''''''''' | '''''''''''''''''''' | '''''''''''''''''' | '''''''''''''''''' | ''''''''''''''''' |

a As estimated in Oratane (isotretinoin) 30mg minor submission November 2019 – Section 4 Workbook

Source: Oratane (isotretinoin) 30mg Minor Submission November 2019- Section 4 Workbook (Sheet 3b. Impact-new (PUB), Sheet 4b. Impact-changed (PUB), Sheet 5. Impact-net)

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

* 1. In addition, the submission anticipated an improvement in administrative efficiency for the Department of Human Services due to reduced PBS and RPBS script numbers.
	2. As a minor submission, the financial estimates have not been independently evaluated.

For more detail on PBAC’s view, see section 6 PBAC outcome

1. PBAC Outcome

The PBAC recommended the Authority Required (STREAMLINED) listing of isotretinoin, in the form of 30mg capsule, for the treatment of patients with severe cystic acne. The PBAC considered that the new listing may reduce the pill burden for patients.

* 1. The PBAC noted the submission requested the price of the 30 mg strength of isotretinoin be based on the '''''''''' ''''''''' '''''' ''''''''''''''''' '''' ''''''' ''''' ''''''' '''''''''''''''''. The PBAC noted that the 40 mg capsule is less costly on a per milligram basis compared with the 20 mg capsule. The PBAC considered it would be appropriate to list the 30 mg strength at a price per milligram equivalent to the lowest price per milligram capsule currently listed on the PBS.
	2. The PBAC considered there would be a small net cost to the PBS because of the listing, due to reduced patient co-payments. The PBAC noted the net cost would be smaller than estimated by the submission based on the recommended lower price per milligram than requested in the submission.
	3. The PBAC recommended that isotretinoin should not be treated as interchangeable on an individual patient basis with any other drugs.
	4. The PBAC advised that isotretinoin is not suitable for prescribing by nurse practitioners.
	5. The PBAC recommended that the Early Supply Rule should not apply.
	6. The PBAC noted that this submission is not eligible for an Independent Review as it received a positive recommendation.
	7. The PBAC advised that, because isotretinoin 30 mg is not expected to provide a substantial and clinically relevant improvement in efficacy, or reduction of toxicity, over currently listed forms of isotretinoin, 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 2009 for Pricing Pathway A were not met.

**Outcome:**

Recommended

1. Recommended listing

Add new item:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name, Restriction,Manner of administration and form | Max.Qty | №.ofRpts |  | Proprietary Name and Manufacturer |
| isotretinoin30 mg capsule, 60  | 1 | 3 |  | Oratane® | Arrow Pharma Pty Ltd |
| **Category / Program:** | GENERAL – General Schedule (Code GE) |
| **Prescriber type:** | [ ] Dental [x] Medical Practitioners [ ] Nurse practitioners [ ] Optometrists[ ] Midwives |
| **PBS Indication:** | Severe cystic acne |
| **Restriction Level / Method:** | [ ] Restricted benefit[ ] Authority Required – In Writing[ ] Authority Required – Telephone/Electronic/Emergency[x] Streamlined |
| **Clinical criteria:** | The condition must be unresponsive to other therapy.  |
| **Administrative Advice:** | Care must be taken to comply with the provisions of State/Territory law when prescribing this drug.  |
| **Cautions:** | This drug causes birth defects. This drug has been reported to cause other frequent and potentially serious toxicity. |

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

1. 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.

1. Sponsor’s Comment

Oraderm is pleased that the 30mg will now be available to patients on the PBS.