5.29 TADALAFIL,  
20 mg tablets,  
Tadalis 20™,  
Cipla Australia Pty Ltd

1. Purpose of Submission
   1. The Category 4 submission sought to list a new pack size (60 tablets) of tadalafil 20 mg (Tadalis 20™, herein referred to as Tadalis 60-tablet pack) on the PBS for the treatment of pulmonary arterial hypertension (PAH) at the same cost per tablet as the currently listed pack size (56 tablets). It was unclear from the submission if the intention was to delist the 56‑tablet pack size of Tadalis 20 (herein referred to as Tadalis 56-tablet pack) if Tadalis 60-tablet pack listed.
2. Background
   1. Tadalis 56-tablet pack was TGA registered on 27 March 2017 for the treatment of PAH. Tadalis 60‑tablet pack was registered on 17 February 2023.
   2. Tadalis 56-tablet pack was listed on the PBS on 1 December 2020 as a generic of the originator brand, Adcirca® (tadalafil 20 mg, 56), which was recommended by the PBAC at its November 2011 meeting and listed on the PBS on 1 April 2012.
   3. There are currently three brands of tadalafil 20 mg, 56 tablets listed: Tadalis 20, Adcirca and Tadalca™.
3. Requested listing
   1. The submission requested to list Tadalis 60‑tablet pack in addition to the existing listings of Tadalis 56‑tablet pack (item codes: 12150L, 12151M, 1304P and 1308W). As there were no changes to the restriction wording requested, a summarised version of the restrictions is presented below.
   2. Suggested additions are in italics and deletions are in strikethrough.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **MEDICINAL PRODUCT**  **medicinal product pack** | **PBS item code** | **Max. qty packs** | **Max. qty units** | **№.of**  **Rpts** | **Available brands** |
| TADALAFIL | | | | | |
| Tadalafil 20 mg tablet, 56 | 12150L (Private)  MP | 1 | 56 | 5 | aAdcrica  aTadalis 20  aTadalca |
| Tadalafil 20 mg tablet, 56 | 12151M  (Public)  MP | 1 | 56 | 5 | aAdcrica  aTadalis 20  aTadalca |
| Tadalafil 20 mg tablet, 60 | New (HSD Private)  MP | 1 | 60 | 5 | Tadalis 20 |
| Tadalafil 20 mg tablet, 60 | New (HSD Public)  MP | 1 | 60 | 5 | Tadalis 20 |
| **Category / Program:** Section 100 – Highly Specialised Drugs Program (HSD) | | | | | |
| **Prescriber type:** Medical Practitioners | | | | | |
| **Restriction type:** Authority Required | | | | | |
| Benefit Type 56971: Authority Required | | | | | |
| Restriction Summary 13485 / ToC: 13629: Authority Required | | | | | |
| Restriction Summary 13568 / ToC: 13573: Authority Required | | | | | |
| Restriction Summary 13486 / ToC: 13569: Authority Required | | | | | |
| Restriction Summary 13574 / ToC: 13570: Authority Required | | | | | |
| Restriction Summary 13487 / ToC: 13671: Authority Required | | | | | |
| Restriction Summary 13480 / ToC: 11229: Authority Required | | | | | |
|  | | | | | |
| **MEDICINAL PRODUCT**  **medicinal product pack** | **PBS item code** | **Max. qty packs** | **Max. qty units** | **№.of**  **Rpts** | **Available brands** |
| TADALAFIL | | | | | |
| Tadalafil 20 mg tablet, 56 | 1304P  (Private)  MP | 1 | 56 | 5 | aAdcrica  aTadalis 20  aTadalca |
| Tadalafil 20 mg tablet, 56 | 1308W  (Public)  MP | 1 | 56 | 5 | aAdcrica  aTadalis 20  aTadalca |
| Tadalafil 20 mg tablet, 60 | New (HSD Private)  MP | 1 | 60 | 5 | Tadalis 20 |
| Tadalafil 20 mg tablet, 60 | New (HSD Public)  MP | 1 | 60 | 5 | Tadalis 20 |
| **Category / Program:** Section 100 – Highly Specialised Drugs Program (HSD) | | | | | |
| **Prescriber type:** Medical Practitioners | | | | | |
| **Restriction type:** Authority Required | | | | | |
| Benefit Type 57003: Authority Required | | | | | |
| Restriction Summary 13670 / ToC: 13484: Authority Required | | | | | |
| Restriction Summary 13481 / ToC: 13482: Authority Required | | | | | |
| Restriction Summary 13669 / ToC: 13572: Authority Required | | | | | |

* 1. Currently, Tadalis 56-tablet pack is listed as equivalent to Tadalca and Adcirca for the purposes of substitution (i.e. ‘a’ flagged in the Schedule). It was noted that Tadalis 60‑tablet pack would be the only tadalafil item available in a 60-tablet pack size if listed and with a maximum quantity of 60 units it would not be eligible for substitution with the other tadalafil products listed with a maximum quantity of 56 units.

# Comparator

* 1. The submission nominated Tadalis 56‑tablet pack as the comparator for Tadalis 60‑tablet pack and claimed the non-inferior comparative effectiveness and safety on a per tablet basis. This was appropriate.

1. Consideration of the evidence

Sponsor hearing

* 1. There was no hearing for this item.

Consumer comments

* 1. The PBAC noted and welcomed the input from an individual, the Pulmonary Hypertension Society of Australia and New Zealand, and Lung Foundation Australia, via the Consumer Comments facility on the PBS website. The input expressed support for listing Tadalis 60‑tablet pack for the treatment of PAH.

Justifications

* 1. The submission noted that Tadalis is often taken in combination therapy with an endothelin receptor agonist such as bosentan, selexipag, ambrisentan and/or macitentan. The submission noted that when a patient uses Tadalis in combination with these drugs, the patient would finish the Tadalis and the brand of combination therapy in 28 and 30 days, respectively; and require a new prescription after 168 and 180 days, respectively. The submission stated that many PAH patients are elderly and suffer co-morbidities, therefore finishing the supply of one medicine earlier than the other could result in confusion or anxiety. The submission also considered that the use of dosing aids with such patients may compound their anxiety, confusion, and non-adherence due to the difference in quantity. While this may be true for patients who prepare their own dosing aids, most dosing aids do not contain more than 28 days-worth of doses and are prepared by a pharmacist or trained staff.
  2. The submission argued that the current 56-pack of Tadalis imposes an added burden to patients (many of whom struggle to walk without breathlessness) as it requires an appointment with the doctor at least 12 days earlier (amounting to at least 24 days earlier every year) than would have been necessary if a 60-pack of tadalafil were available. The submission further noted that PAH is treated by a small community of specialist doctors, mostly working in capital cities, thus more frequent appointments would be difficult for rural patients. The submission considered that some patients may become non-adherent on tadalafil due to delaying the specialist appointment until the other combination medications are exhausted. The submission argued non-adherent PAH patients have a poorer prognosis and a higher risk of hospitalisation and death. It was noted that the existing restriction criteria includes an administrative note stating “Authority applications for each agent in combination therapy should be made at the same time to reduce administrative handling. However, dosing of each agent need not occur simultaneously to be considered as 'combination therapy”. It was noted that a prescriber could prescribe the other PAH medicines earlier than when the supply is due to be finished in order to supply all the prescriptions in a single appointment and then adjust the number of repeats as needed to align the prescriptions so as not to encourage the stockpiling of medicines.

Pricing consideration

* 1. The submission proposed an approved ex-manufacturer price (AEMP) of $509.51 for Tadalis 60-tablet pack. The proposed AEMP reflects an adjustment proportionate to the change in pack size from the current Tadalis 56‑tablet pack which has an AEMP of $475.54. The proposed price per tablet is $8.49, which is equal to the price per tablet of Tadalis as at 1 February 2024.

**Table 1: Essential element for Tadalis**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Strength, form** | **Pack Quantity (Units)** | **Price per tablet** | **AEMP** | **DPMQ (HB)** | **DPMQ (HS)** |
| **Proposed Listing** | 20 mg tablet | 60 | $8.49 | $509.51 | $509.51 | $538.26 |
| **Current Listing** | 20 mg tablet | 56 | $8.49 | $475.54 | $475.54 | $502.38 |

Source: Cost minimisation model Tadalis 20.xlsx.

Estimated PBS usage and financial implications

* 1. The submission stated that the change in pack size is likely to result in a saving to the PBS up to $0 to < $10 million per patient per year.
  2. Table 2 presents the estimated use and financial implications of the new pack size of Tadalis. The submission estimated that the cost of the new pack size to the PBS/RPBS was expected to be $60 million to < $70 million over six years ($0 to < $10 million in year 1 and $10 million to < $20 million in year 6).
  3. The submission estimated:
* an impact of -$60 million to < $70 million on the utilisation of all existing PBS/RPBS listings of tadalafil (Adcirca, Tadalis 20, and Tadalca brands) over six years (-$0 to < $10 million in year 1 and -$$10 million to < $20 million in year 6),
* a net save to the PBS/RPBS of $0 to < $10 million over six years (-$0 to < $10 million in year 1 and -$0 to < $10 million in year 6) for the Tadalis 60-tablet pack.

The submission noted this did not factor in the reduced number of patient co-payments which would reduce the net saving.

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 | |　1 | |　1 | |　1 | |　2 | |　2 | |　2 |
| **Cost of new PBS listing** | | | | | | |
| Cost to PBS/RPBS less co-payment | |　3 | |　3 | |　3 | |　4 | |　4 | |　4 |
| **Cost of affected PBS listing** | | | | | | |
| Cost to PBS/RPBS less co-payment | |　5 | |　5 | |　5 | |　5 | |　5 | |　5 |
| **Net financial implications** | | | | | | |
| Net cost to PBS/RPBS | |　5 | |　5 | |　5 | |　5 | |　5 | |　5 |

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

Source: Utilisation and cost model workbook from the submission. Note that the workbook has not been externally evaluated.

The redacted values correspond to the following ranges

1 10,000 to < 20,000

2 20,000 to < 30,000

3 $0 to < $10 million

4 net cost saving

1. PBAC Outcome
   1. The PBAC recommended the listing of a new pack size (60 tablets) of tadalafil 20 mg for the treatment of PAH at the same cost per tablet as the currently listed pack size (56 tablets).
   2. The PBAC noted that the maximum quantity of 60 tablets is consistent with the likely use of the proposed medicine for one month of therapy between each dispensing by the pharmacist.
   3. The PBAC advised under Section 101(4AACD) of the *National Health Act 1953* that Tadalis 60-tablet pack should not be marked as equivalent in the Schedule of Pharmaceutical Benefits for the purposes of substitution (i.e. ‘a’ flagging) to any 56-tablet packs of tadalafil 20 mg, due to the difference in maximum quantity between the tadalafil products (i.e., 60 versus 56 tablets). The PBAC advice is not intended to impact the substitutability of the 56-tablet packs to each other.
   4. The PBAC noted that the submission estimated a small net save to the PBS/RPBS. The PBAC considered the estimated save to be uncertain and likely minor due to the reduced number of patient co-payments which would reduce the net saving.
   5. The PBAC noted that its recommendation was on a cost-minimisation basis and advised that, because the new form of tadalafil is not expected to provide a substantial and clinically relevant improvement in efficacy, or reduction of toxicity over the currently listed form, 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.
   6. The PBAC noted that it was unclear from the submission if the intention was to delist the Tadalis 56-tablet pack if Tadalis 60-tablet pack listed. The PBAC noted that a separate delisting application would be required from the sponsor should it wish to delist the 56-tablet pack.
   7. The PBAC noted that this submission is not eligible for an Independent Review as it received a positive recommendation.

**Outcome:**

Recommended

1. Recommended listing
   1. Add new medicinal product pack as follows:

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| --- | --- | --- | --- | --- | --- | --- |
| **MEDICINAL PRODUCT**  **medicinal product pack** | | **PBS item code** | **Max. qty packs** | **Max. qty units** | **№.of**  **Rpts** | **Available brands** |
| TADALAFIL | | | | | | |
|  | |  |  |  |  |  |
|  | |  |  |  |  |  |
| Tadalafil 20 mg tablet, 60 | | New (HSD Private)  MP | 1 | 60 | 5 | Tadalis 20 |
| Tadalafil 20 mg tablet, 60 | | New (HSD Public)  MP | 1 | 60 | 5 | Tadalis 20 |
| **Category / Program:** Section 100 – Highly Specialised Drugs Program (HSD) | | | | | | |
| **Prescriber type:** Medical Practitioners | | | | | | |
| **Restriction type:** Authority Required | | | | | | |
| Benefit Type 56971: Authority Required | | | | | | |
| Edit of Restriction Summary 13485 / ToC: 13629: Authority Required | | | | | | |
| Edit of Restriction Summary 13568 / ToC: 13573: Authority Required | | | | | | |
| Edit of Restriction Summary 13486 / ToC: 13569: Authority Required | | | | | | |
| Edit of Restriction Summary 13574 / ToC: 13570: Authority Required | | | | | | |
| Edit of Restriction Summary 13487 / ToC: 13671: Authority Required | | | | | | |
| Edit of Restriction Summary 13480 / ToC: 11229: Authority Required | | | | | | |
|  | | | | | | |
|  | **Indication:** Pulmonary arterial hypertension (PAH) | | | | | |
|  | ***Prescribing instruction:***  *Tadalafil 20 mg with pack size of 60 tablets may be prescribed when used in a combination with endothelin receptor antagonist to provide sufficient supply of both medicines for the same number of days.* | | | | | |
| **MEDICINAL PRODUCT**  **medicinal product pack** | | **PBS item code** | **Max. qty packs** | **Max. qty units** | **№.of**  **Rpts** | **Available brands** |
| TADALAFIL | | | | | | |
| Tadalafil 20 mg tablet, 60 | | New (HSD Private)  MP | 1 | 60 | 5 | Tadalis 20 |
| Tadalafil 20 mg tablet, 60 | | New (HSD Public)  MP | 1 | 60 | 5 | Tadalis 20 |
| **Category / Program:** Section 100 – Highly Specialised Drugs Program (HSD) | | | | | | |
| **Prescriber type:** Medical Practitioners | | | | | | |
| **Restriction type:** Authority Required | | | | | | |
| Benefit Type 57003: Authority Required | | | | | | |
| Edit of Restriction Summary 13670 / ToC: 13484: Authority Required | | | | | | |
| Edit of Restriction Summary 13481 / ToC: 13482: Authority Required | | | | | | |
| Edit of Restriction Summary 13669 / ToC: 13572: Authority Required | | | | | | |
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|  | **Indication:** Pulmonary arterial hypertension (PAH) | | | | | |
|  | ***Prescribing instruction:***  *Tadalafil 20 mg with pack size of 60 tablets may be prescribed when used in a combination with endothelin receptor antagonist to provide sufficient supply of both medicines for the same number of days.* | | | | | |

***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**

The sponsor had no comment.