5.21 IMATINIB,   
Tablet 600 mg,   
Imatab®,  
Juno Pharmaceuticals Pty Ltd

1. Purpose of Submission
   1. The Committee Secretariat submission sought to request the listing of imatinib (Imatab®) 600 mg tablets under the same circumstances as the existing PBS listed imatinib 100 mg and 400 mg tablets.
2. Background

Registration status

* 1. Imatab 600 mg was TGA registered on 29 August 2019 for the following indications:
* Treatment of patients with chronic myeloid leukaemia (CML)
* Treatment of adult and paediatric patients with newly diagnosed Philadelphia chromosome positive acute lymphoblastic leukaemia (Ph+ ALL) integrated with chemotherapy
* Treatment of adult patients with relapsed or refractory Ph+ ALL as monotherapy
* Treatment of adult patients with myelodysplastic/myeloproliferative diseases (MDS/MPD) associated with platelet-derived growth factor receptor (PDGFR) gene re-arrangements, where conventional therapies have failed
* Treatment of adult patients with aggressive systemic mastocytosis (ASM), where conventional therapies have failed
* Treatment of adult patients with hypereosinophilic syndrome (HES) and/or chronic eosinophilic leukaemia (CEL)
* Treatment of adult patients with unresectable, recurrent and/or metastatic dermatofibrosarcoma protuberans (DFSP).
  1. The following indications were subsequently approved:
* Treatment of patients with KIT (CD117) positive unresectable and/or metastatic malignant gastrointestinal stromal tumours (GIST)
* Adjuvant treatment of adult patients at high risk of recurrence following complete gross resection of KIT (CD117)-positive primary GIST.

Current status

* 1. Imatinib 100 mg and 400 mg tablets are currently listed on the PBS General Schedule for the following indications:
* CML
* Ph+ ALL
* MDS or MPD
* ASM with eosinophilia
* CEL or HES
* DFSP
* GIST
* Malignant GIST

Previous PBAC consideration

* 1. Imatinib was first recommended by the PBAC at its July 2007 meeting and has since been considered for various indications.
  2. The PBAC has not previously considered imatinib 600 mg tablets.

1. Requested listing
   1. The submission requested that imatinib 600 mg be listed under the same restriction criteria as the current listings of imatinib 100 mg and 400 mg.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **MEDICINAL PRODUCT**  **Medicinal Product Pack** | **PBS item code** | **Max. qty packs** | **Max. qty units** | **№.of**  **Rpts** | **Available brands** |
| IMATINIB 600 mg tablet, 30  imatinib 600 mg tablet, 30 | NEW | 1 | 30 | 2 | Imatab |
| imatinib 600 mg tablet, 30 | NEW | 1 | 30 | 5 | Imatab |

* 1. The PBAC noted that, at present, prescribers may request an authority to increase the maximum quantity of the imatinib 100 mg and 400 mg listings to provide patients a one-month supply of up to 800 mg per day (the maximum daily dose). The PBAC noted the 400 mg listings do not allow for an increase in the maximum number of repeats. The PBAC considered increases to the maximum quantity of the 600 mg listing would not be required as this would result in patients receiving a supply greater than the maximum daily dose.

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

1. Comparator
   1. The submission nominated the currently listed 100 mg and 400 mg strengths of imatinib as the comparators. The PBAC considered this to be appropriate.

*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.

Consumer comments

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

Clinical

* 1. The submission did not provide any clinical data and claimed non-inferior safety of imatinib 600 mg tablets versus the comparators.
  2. The TGA approval letter noted that the application for registration of the generic imatinib (as mesilate) tablets included data that established, to the TGA's satisfaction, that the product can be considered bioequivalent to GLIVEC tablets sponsored by Novartis Australia Pty Ltd.
  3. The submission did not anticipate any alterations to the current clinical treatment algorithm; other than to offer more flexible dosing through the PBS and reduce the pill burden for patients who have been prescribed a dose of 600 mg per day. The PBAC considered this to be reasonable as the introduction of a new strength was not expected to change the recommended dose for any of the indications.
  4. The PBAC considered that the claim of non-inferior comparative effectiveness and safety was reasonable.

Economic analysis

* 1. The submission presented a cost-minimisation analysis of imatinib 600 mg compared with imatinib 100 mg and 400 mg.
  2. As a Committee Secretariat submission, the cost-minimisation analysis was not independently evaluated.
  3. A 2019 DUSC analysis of imatinib utilisation between April 2017 and March 2018 reported that patients used mean doses of 400 mg per day in the chronic phase, 600 mg per day in the accelerated phase, and 700 mg per day in the blast phase of CML treatment. In 2020, 62.13% of imatinib scripts were prescribed for the treatment of CML. This analysis, while focussed on one indication of imatinib, indicated that the most used dose was 400 mg. As such, the estimated savings of introducing a 600 mg dose form may be overestimated*.*

Pricing consideration

* 1. The sponsor proposed an approved ex-manufacturer price (AEMP) of $1,248.53 for the 600 mg strength, which was equivalent to the ex-manufacturer price per milligram of the 100 mg and 400 mg strengths listed on the PBS at the time of submission.
  2. The submission requested listing imatinib 600 mg on a cost-minimisation basis to the 100 mg and 400 mg at a 1:1 unit (per mg) equivalence (per Table 1).

Table 1: Listing price for imatinib

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Medicine | Pricing quantity | AEMP | AEMP Price per Milligram | DPMQ |
| Imatinib 100 mg tablets | 60 | $416.18 | $0.0694 | $476.93 |
| Imatinib 400 mg tablets | 30 | $832.35 | $0.0694 | $937.89 |
| Imatinib 600 mg tablets | 30 | $1,248.53 | $0.0694 | $1,374.88 |

Source: Table 3.1-3.2, p 22 of submission – current as at 1 July 2021

* 1. In October 2021, the price of imatinib was subject to price disclosure reductions. Based on current pricing at time of consideration, the cost-minimised price for the 600 mg tablet form at the same price per mg is outlined below:

Table 2: Current listing price for imatinib

|  |  |  |  |
| --- | --- | --- | --- |
| Medicine | Pricing quantity | AEMP | AEMP Price per Milligram |
| Imatinib Tablet 100 mg | 60 | $290.33 | $0.0484 |
| Imatinib Tablet 400 mg | 30 | $580.65 | $0.0484 |
| Imatinib Tablet 600 mg | 30 | $870.98 | $0.0484 |

Source: ex-manufacturer-prices-non-efc-2021-11-01.XLSX (current at 1 November 2021)

Estimated PBS utilisation and financial implications

* 1. Table 3 presents the estimated extent of use, and financial implications to the PBS/RPBS of the proposed imatinib 600 mg listing. The financial impact to Services Australia will be determined by that agency as part of the post PBAC process.
  2. The submission estimated that 5,000 to < 10,000 scripts would be supplied over the first six years of listing (500 to < 5,000 scripts in Year 1 to 500 to < 5,000 scripts in Year 6).
  3. The submission claimed that the cost of imatinib 600 mg to the PBS/RPBS is expected to be $0 to < $10 million over six years ($0 to < $10 million in Year 1 to $0 to < $10 million in Year 6).
  4. The submission stated that the estimated net financial impact to the PBS/RPBS for the listing of imatinib 600 mg would be a net cost saving over six years ($0 to < $10 million in Year 1 to $0 to < $10 million in Year 6).
  5. As a Committee Secretariat submission, the financial estimates were not independently evaluated.

Table 3: Estimated use and financial implications for imatinib

|  | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
| --- | --- | --- | --- | --- | --- | --- |
| Estimated extent of use | | | | | | |
| Number of scripts dispensed imatinib 600 mg | ''''''''''1 | '''''''''1 | '''''''''1 | ''''''''1 | ''''''''1 | '''''''''1 |
| Number of script affected imatinib 100 mg | -''''''''''2 | -''''''''2 | -'''''''''2 | -''''''''''2 | -''''''''2 | -'''''''''2 |
| Number of scripts affected imatinib 400 mg | -''''''''''''''1 | -'''''''''''''1 | -''''''''''''1 | -'''''''''''''1 | -''''''''''''''1 | -''''''''''''''1 |
| PBS | | | | | | |
| New listing | '''''''''''''''''''''''''''3 | ''''''''''''''''''''''''''3 | ''''''''''''''''''''''''3 | '''''''''''''''''''''''''3 | '''''''''''''''''''''''''3 | ''''''''''''''''''''''''''''3 |
| Changed listing | -'''''''''''''''''''''''''''3 | -'''''''''''''''''''''''''''3 | -''''''''''''''''''''''''3 | -''''''''''''''''''''''''3 | -'''''''''''''''''''''''''3 | -'''''''''''''''''''''''''''3 |
| Net cost to PBS | -'''''''''''''''''''''''3 | -''''''''''''''''''''''''3 | -'''''''''''''''''''''3 | -''''''''''''''''''''3 | -''''''''''''''''''''3 | -'''''''''''''''''''''''3 |
| RPBS | | | | | | |
| New listing | ''''''''''''''''''''3 | ''''''''''''''''''''3 | ''''''''''''''''''''3 | ''''''''''''''''''''3 | ''''''''''''''''''3 | ''''''''''''''''''3 |
| Changed listing | -'''''''''''''''''''''3 | -'''''''''''''''''''''3 | -''''''''''''''''''''3 | -'''''''''''''''''''3 | -'''''''''''''''''''''3 | -'''''''''''''''''''3 |
| Net cost to RPBS | -'''''''''''''''3 | -'''''''''''''''3 | -'''''''''''''''''3 | -'''''''''''''''3 | -'''''''''''''''''3 | -''''''''''''''''3 |
| Net cost PBS / RPBS | -''''''''''''''''''''''3 | -''''''''''''''''''''''3 | -''''''''''''''''''''3 | -'''''''''''''''''''''''3 | -'''''''''''''''''''''''3 | -'''''''''''''''''''''3 |

Source: utilisation and cost model workbook from the submission

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

*The redacted values correspond to the following ranges:*

*1 500 to < 5,000*

*2 < 500*

*3 $0 to < $10 million*

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

1. PBAC Outcome
   1. The PBAC recommended the listing of imatinib (Imatab) 600 mg tablets on a cost-minimisation basis to PBS listed imatinib 100 mg and 400 mg tablets.
   2. The PBAC recommended the listing under the same circumstances as the imatinib 100 mg and 400 mg listings that allow for a daily dose of 600 mg, with the exception of not allowing prescribers to request an increase to the maximum quantity, as this would result in patients receiving a supply greater than the maximum daily dose.
   3. The PBAC noted that the restrictions of certain imatinib 100 mg and 400 mg listings limit the maximum daily dose to 400 mg. The PBAC noted that the submission did not request the removal of the maximum daily dose limit for these restrictions and therefore considered that it would be redundant to list imatinib 600 mg tablet with such restrictions.
   4. The PBAC recommended listing imatinib 600 mg on a cost-minimisation basis to the 100 mg and 400 mg at a 1:1 unit equivalence (i.e. the same AEMP per mg).
   5. Consistent with the existing imatinib listings, the PBAC advised that the Early Supply Rule should apply to imatinib 600 mg.
   6. The PBAC advised that because imatinib 600 mg is not expected to provide a substantial and clinically relevant improvement in efficacy, or reduction of toxicity, over currently listed form of imatinib, 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.
   7. The PBAC noted that this submission is not eligible for an Independent Review because it received a positive recommendation.

**Outcome:**

Recommended

1. Recommended listing
   1. Add new medicinal product pack (imatinib 600 mg tablet) as follows:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **MEDICINAL PRODUCT**  **Medicinal Product Pack** | | **PBS item code** | **Max. qty packs** | **Max. qty units** | **№.of**  **Rpts** | **Available brands** |
| IMATINIB 600 mg tablet, 30  imatinib 600 mg tablet, 30 | | NEW | 1 | 30 | 2 | Imatab |
| imatinib 600 mg tablet, 30 | | NEW | 1 | 30 | 5 | Imatab |
|  | **Category / Program:** GENERAL – General Schedule (Code GE) | | | | | |
| **Prescriber type:** Dental Medical Practitioners Nurse practitioners Optometrists Midwives | | | | | |
| **Restriction Level / Method:**  Authority Required - Telephone/Online PBS Authorities immediate assessment for initial and Streamlined for continuing | | | | | |
|  | ***Administrative Advice:***  *No increase in the maximum quantity or number of units may be authorised.* | | | | | |
|  | ***Administrative Advice:***  *No increase in the maximum number of repeats may be authorised.* | | | | | |

Imatinib 100 mg and 400 mg listings that limit the maximum daily dose to 400 mg have been excluded.

Concept codes 7606 and 7607 apply to the following restrictions:

* + 10025 / ToC: 10026 - Chronic Myeloid Leukaemia (CML) Continuing treatment accelerated phase
  + 10024 / ToC: 10048 - Chronic Myeloid Leukaemia (CML) Continuing treatment blast phase
  + 10049 / ToC: 10035 - Chronic Myeloid Leukaemia (CML) Initial treatment blast phase
  + 10009 / ToC: 10010 - Chronic Myeloid Leukaemia (CML) Initial treatment accelerated phase
  + 9239 / ToC: 9200 - Chronic Myeloid Leukaemia (CML) Initial treatment chronic phase
  + 9205 / ToC: 9242 - Chronic Myeloid Leukaemia (CML) First continuing treatment chronic phase
  + 9277 / ToC: 9295 - Chronic Myeloid Leukaemia (CML) Subsequent continuing treatment chronic phase
  + 9280 / ToC: 9207 - Acute lymphoblastic leukaemia Continuing treatment
  + 9273 / ToC: 9203 - Acute lymphoblastic leukaemia Initial treatment
  + 11221 / ToC: 9240 - Dermatofibrosarcoma protuberans Initial treatment
  + 10918 / ToC: 9209 - Dermatofibrosarcoma protuberans Continuing treatment

Concept code 7607 applies to the following restrictions (7606 is already included in the restriction wording):

* + 9245 / ToC: 9208 - Malignant gastrointestinal stromal tumour Continuing treatment
  + 9201 / ToC: 9319 - Malignant gastrointestinal stromal tumour Initial

***These restrictions may be subject to further review. Should there be any changes made to the restrictions 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

Juno looks forward to working with the Department to make imatinib 600 mg available to patients on the PBS at the earliest opportunity.