

## **5.23 RUXOLITINIB**

**Tablet, 10 mg, 56**

**Jakavi®, Novartis Pharmaceuticals Australia Pty Ltd**

### **1 Purpose of Application**

- 1.1 The minor submission requested a new Authority Required PBS listing of ruxolitinib 10 mg strength for first-line or second-line management of myelofibrosis in patients satisfying certain clinical criteria.

### **2 Requested Listing**

- 2.1 The submission did not request any changes be made to the current PBS restriction wording for ruxolitinib, i.e. proposed PBS listing of ruxolitinib 10 mg would be in line with the current restrictions for ruxolitinib 5, 15 and 20 mg on the PBS.
- 2.2 The Pre-PBAC response (on page 1) noted that all patients previously prescribed ruxolitinib through the compassionate use program have now transitioned to the PBS through the existing grandfathering restriction since the PBS listing of ruxolitinib 5 mg, 15 mg and 20 mg.

*For more detail on PBAC's view see section 5 'PBAC outcome'*

### **3 Background**

- 3.1 Ruxolitinib 5 mg, 15 mg and 20 mg were TGA registered on 5 November 2013 for treatment of disease-related splenomegaly or symptoms in patients with primary myelofibrosis, post-polycythemia vera myelofibrosis or post-essential thrombocythemia myelofibrosis.
- 3.2 In December 2015, a new strength of ruxolitinib (10 mg) was TGA registered for treatment of disease-related splenomegaly or symptoms in patients with primary myelofibrosis, post-polycythemia vera myelofibrosis or post-essential thrombocythemia myelofibrosis.
- 3.3 Further, in December 2015 ruxolitinib 5 mg, 10 mg, 15 mg and 20 mg were TGA registered for treatment of adult patients with polycythaemia vera who are resistant to or intolerant of hydroxyurea.
- 3.4 Ruxolitinib has previously been considered by the PBAC three times, in July 2013, July 2014 and March 2015.
- 3.5 At its March 2015 meeting, the PBAC recommended the listing of ruxolitinib for the treatment of myelofibrosis.

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- 3.6 Ruxolitinib 5 mg, 15 mg and 20 mg were listed on the PBS General schedule on 1 February 2016.

### **4 Consideration of the evidence**

#### ***Sponsor hearing***

- 4.1 There was no hearing for this item as it was a minor submission.

#### ***Consumer comments***

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

#### ***Clinical trials***

- 4.3 As a minor submission, no clinical trials were presented in the submission.

#### ***Estimated PBS usage and financial implications***

- 4.4 The PBS pricing arrangements currently in place for the existing strengths of ruxolitinib would also be applied to the 10 mg strength. Consistent with the March 2015 recommendation, a flat pricing arrangement would cover the 10 mg strength of ruxolitinib, which supports the proposed effective ex-manufacturer price of \$ [REDACTED] per pack containing 56 tablets. The Pre-PBAC response (on page 1) requested that the published price should be equivalent to that of the 15 and 20 mg strengths.
- 4.5 The minor submission estimated there to be no financial implications to the PBS, as the sponsor proposed that ruxolitinib 10 mg will not incur additional costs beyond those outlined in the submission for the March 2015 PBAC meeting.
- 4.6 It was estimated in the sponsor's submission for PBAC's consideration in March 2015 that [REDACTED]% of all ruxolitinib patients would take the 10 mg dose (twice daily; in the form of two 5 mg tablets). It was assumed in this submission that the proportion of total patients would remain unchanged from 2015 to 2020.

*For more detail of the PBAC's view, see section 5 'PBAC outcome'.*

### **5 PBAC outcome**

- 5.1 The PBAC recommended the PBS listing of ruxolitinib 10 mg for first-line or second-line management of myelofibrosis under the same PBS listing conditions as for the 5 mg, 15 mg and 20 mg strengths of ruxolitinib.
- 5.2 The PBAC noted that it will be timely to remove the existing grandfathering restriction for PBS-listed ruxolitinib 5 mg, 15 mg and 20 mg when the PBS listing of ruxolitinib 10 mg is implemented.

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- 5.3 The PBAC accepted that the proposed price was consistent with the current flat pricing arrangement.
- 5.4 The PBAC agreed with the submission that this listing was likely to have no financial impact to the PBS.
- 5.5 The PBAC advised that ruxolitinib 10 mg is not suitable for prescribing by nurse practitioners.
- 5.6 The PBAC advised that the PBS early supply rule should apply for the continuation restrictions.
- 5.7 The PBAC noted that this submission is not eligible for an Independent Review as it received a positive recommendation.

**Outcome:**  
Recommended

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**6 Recommended Listing**

6.1 Add new item:

Intermediate-2 and high risk initiation

| Name, Restriction, Manner of administration and form | Max. Qty | No. of Rpts | Proprietary Name and Manufacturer |    |
|--|----------|-------------|-----------------------------------|----|
| RUXOLITINIB<br>Tablet 10 mg                          | 56       | 0           | Jakavi®                           | NM |

|                                    |   |
|------------------------------------|---|
| <b>Category / Program</b>          | GENERAL – General Schedule (Code GE)  |
| <b>Prescriber type:</b>            | <input type="checkbox"/> Dental <input checked="" type="checkbox"/> Medical Practitioners <input type="checkbox"/> Nurse practitioners <input type="checkbox"/> Optometrists<br><input type="checkbox"/> Midwives   |
| <b>Episodicity:</b>                | Chronic   |
| <b>Severity:</b>                   | High risk and Intermediate-2 risk   |
| <b>Condition:</b>                  | Myelofibrosis   |
| <b>PBS Indication:</b>             | Myelofibrosis   |
| <b>Treatment phase:</b>            | Initial treatment   |
| <b>Restriction Level / Method:</b> | <input type="checkbox"/> Restricted benefit<br><input checked="" type="checkbox"/> Authority Required - In Writing<br><input type="checkbox"/> Authority Required - Telephone<br><input type="checkbox"/> Authority Required – Emergency<br><input type="checkbox"/> Authority Required - Electronic<br><input type="checkbox"/> Streamlined  |
| <b>Clinical criteria:</b>          | The condition must be primary myelofibrosis or post-polycythemia vera myelofibrosis or post-essential thrombocythemia myelofibrosis.  |
| <b>Prescriber instructions</b>     | The authority application must be made in writing and must include:<br>(1) A completed authority prescription form; and<br>(2) A completed Myelofibrosis Authority Application Supporting Information Form, which includes all of the following:<br>(a) A copy of the bone marrow biopsy report confirming diagnosis of myelofibrosis; and<br>(b) A classification of risk of myelofibrosis according to either the IPSS, DIPSS, or the Age-Adjusted DIPSS. |

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|------------------------------|--|
| <b>Administrative Advice</b> | <p>Risk of myelofibrosis is defined in accordance with the Myelofibrosis International Prognostic Scoring System (IPSS) OR the Dynamic International Prognostic Scoring System (DIPSS) OR the Age-Adjusted DIPSS.</p> <p>No increase in the maximum quantity may be authorised for the 15 mg and 20 mg dose strengths.</p> <p>Written applications for authority to prescribe should be forwarded to:<br/>                 Department of Human Services<br/>                 Complex Programs<br/>                 Reply Paid 9826<br/>                 HOBART TAS 7001</p> <p>Special Pricing Arrangements apply.</p> |
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Intermediate-2 and high risk continuation

| Name, Restriction,<br>Manner of administration and form | Max.<br>Qty | No. of<br>Rpts | Proprietary Name and Manufacturer |    |
|---|-------------|----------------|-----------------------------------|----|
| RUXOLITINIB<br>Tablet 10 mg                             | 56          | 0              | Jakavi®                           | NM |

|                                    |  |
|------------------------------------|--|
| <b>Category / Program</b>          | GENERAL – General Schedule (Code GE)   |
| <b>Prescriber type:</b>            | <input type="checkbox"/> Dental <input checked="" type="checkbox"/> Medical Practitioners <input type="checkbox"/> Nurse practitioners <input type="checkbox"/> Optometrists<br><input type="checkbox"/> Midwives  |
| <b>Severity:</b>                   | High risk and Intermediate-2 risk  |
| <b>Condition:</b>                  | Myelofibrosis  |
| <b>PBS Indication:</b>             | High risk and Intermediate-2 risk myelofibrosis  |
| <b>Treatment phase:</b>            | Continuing treatment   |
| <b>Restriction Level / Method:</b> | <input type="checkbox"/> Restricted benefit<br><input type="checkbox"/> Authority Required - In Writing<br><input checked="" type="checkbox"/> Authority Required - Telephone<br><input type="checkbox"/> Authority Required – Emergency<br><input type="checkbox"/> Authority Required - Electronic<br><input type="checkbox"/> Streamlined |
| <b>Clinical criteria:</b>          | The condition must be primary myelofibrosis or post-polycythemia vera myelofibrosis or post-essential thrombocythemia myelofibrosis.<br><br>AND<br><br>Patient must have previously been treated with PBS-subsidised ruxolitinib for this condition.   |
| <b>Prescriber instructions</b>     | Authority applications for continuing treatment may be made by telephone to the Department of Human Services on 1800 700 270 (hours of operation 8 a.m. to 5 p.m. EST Monday to Friday).   |

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| <b>Administrative Advice</b> | <p>Risk of myelofibrosis is defined in accordance with the Myelofibrosis International Prognostic Scoring System (IPSS) OR the Dynamic International Prognostic Scoring System (DIPSS) OR the Age-Adjusted DIPSS.</p> <p>No increase in the maximum quantity may be authorised for the 15 mg and 20 mg dose strengths.</p> <p>Special Pricing Arrangements apply</p> |
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**Intermediate-1 risk initiation**

| Name, Restriction, Manner of administration and form | Max. Qty | No. of Rpts | Proprietary Name and Manufacturer |    |
|--|----------|-------------|-----------------------------------|----|
| RUXOLITINIB<br>Tablet 10 mg                          | 56       | 0           | Jakavi®                           | NM |

|                                    |   |
|------------------------------------|---|
| <b>Category / Program</b>          | GENERAL – General Schedule (Code GE)  |
| <b>Prescriber type:</b>            | <input type="checkbox"/> Dental <input checked="" type="checkbox"/> Medical Practitioners <input type="checkbox"/> Nurse practitioners <input type="checkbox"/> Optometrists<br><input type="checkbox"/> Midwives   |
| <b>Severity:</b>                   | Intermediate-1 risk   |
| <b>Condition:</b>                  | Myelofibrosis   |
| <b>PBS Indication:</b>             | Intermediate-1 risk myelofibrosis   |
| <b>Treatment phase:</b>            | Initial treatment   |
| <b>Restriction Level / Method:</b> | <input type="checkbox"/> Restricted benefit<br><input checked="" type="checkbox"/> Authority Required - In Writing<br><input type="checkbox"/> Authority Required - Telephone<br><input type="checkbox"/> Authority Required – Emergency<br><input type="checkbox"/> Authority Required - Electronic<br><input type="checkbox"/> Streamlined  |
| <b>Clinical criteria:</b>          | <p>The condition must be primary myelofibrosis or post-polycythemia vera myelofibrosis or post-essential thrombocythemia myelofibrosis.</p> <p>AND</p> <p>Patient must have severe disease-related symptoms that are resistant, refractory or intolerant to available therapy.</p>  |
| <b>Prescriber instruction</b>      | <p>The authority application must be made in writing and must include:</p> <p>(1) A completed authority prescription form; and</p> <p>(2) A completed Myelofibrosis Authority Application Supporting Information Form, which includes all of the following:</p> <p>a) A copy of the bone marrow biopsy report confirming diagnosis of myelofibrosis;</p> <p>b) A classification of risk of myelofibrosis according to either the IPSS, DIPSS, or the Age-Adjusted DIPSS; and</p> <p>c) A confirmation that the patient's disease related symptoms are resistant, refractory or intolerant to available therapy.</p> |

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| <b>Administrative Advice</b> | <p>Risk of myelofibrosis is defined in accordance with the Myelofibrosis International Prognostic Scoring System (IPSS) OR the Dynamic International Prognostic Scoring System (DIPSS) OR the Age-Adjusted DIPSS.</p> <p>No increase in the maximum quantity may be authorised for the 15 mg and 20 mg dose strengths.</p> <p>Written applications for authority to prescribe should be forwarded to:<br/>                 Department of Human Services<br/>                 Complex Programs<br/>                 Reply Paid 9826<br/>                 HOBART TAS 7001</p> <p>Special Pricing Arrangements apply.</p> |
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Intermediate-1 risk continuation

| Name, Restriction, Manner of administration and form | Max. Qty | №.of Rpts | Proprietary Name and Manufacturer |    |
|--|----------|-----------|-----------------------------------|----|
| RUXOLITINIB<br>Tablet 10 mg                          | 56       | 0         | Jakavi®                           | NM |

|                                    |  |
|------------------------------------|--|
| <b>Category / Program</b>          | GENERAL – General Schedule (Code GE)   |
| <b>Prescriber type:</b>            | <input type="checkbox"/> Dental <input checked="" type="checkbox"/> Medical Practitioners <input type="checkbox"/> Nurse practitioners <input type="checkbox"/> Optometrists<br><input type="checkbox"/> Midwives  |
| <b>Severity:</b>                   | Intermediate-1 risk  |
| <b>Condition:</b>                  | Myelofibrosis  |
| <b>PBS Indication:</b>             | Intermediate-1 risk myelofibrosis  |
| <b>Treatment phase:</b>            | Continuing treatment   |
| <b>Restriction Level / Method:</b> | <input type="checkbox"/> Restricted benefit<br><input type="checkbox"/> Authority Required - In Writing<br><input checked="" type="checkbox"/> Authority Required - Telephone<br><input type="checkbox"/> Authority Required – Emergency<br><input type="checkbox"/> Authority Required - Electronic<br><input type="checkbox"/> Streamlined |
| <b>Clinical criteria:</b>          | The condition must be primary myelofibrosis or post-polycythemia vera myelofibrosis or post-essential thrombocythemia myelofibrosis.<br><br>AND<br><br>Patient must have previously been treated with PBS-subsidised ruxolitinib for this condition.   |
| <b>Prescriber instructions</b>     | Authority applications for continuing treatment may be made by telephone to the Department of Human Services on 1800 700 270 (hours of operation 8 a.m. to 5 p.m. EST Monday to Friday).   |

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|                              |  |
|------------------------------|--|
| <b>Administrative Advice</b> | <p>Risk of myelofibrosis is defined in accordance with the Myelofibrosis International Prognostic Scoring System (IPSS) OR the Dynamic International Prognostic Scoring System (DIPSS) (or the Age Adjusted DIPSS).</p> <p>No increase in the maximum quantity may be authorised for the 15 mg and 20 mg dose strengths.</p> <p>Special Pricing Arrangements apply</p> |
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6.2 Delete item:

| Name, Restriction, Manner of administration and form | Max. Qty | No. of Rpts | Proprietary Name and Manufacturer |    |
|--|----------|-------------|-----------------------------------|----|
| RUXOLITINIB  |          |             |                                   |    |
| Tablet 5 mg  | 56       | 0           | Jakavi®                           | NM |
| Tablet 15 mg   |          |             |                                   |    |
| Tablet 20 mg   |          |             |                                   |    |

|                                    |  |
|------------------------------------|--|
| <b>Category / Program</b>          | GENERAL – General Schedule (Code GE)   |
| <b>Prescriber type:</b>            | <input type="checkbox"/> Dental <input checked="" type="checkbox"/> Medical Practitioners <input type="checkbox"/> Nurse practitioners <input type="checkbox"/> Optometrists<br><input type="checkbox"/> Midwives  |
| <b>Severity:</b>                   | Intermediate-1 risk  |
| <b>Condition:</b>                  | Myelofibrosis  |
| <b>PBS Indication:</b>             | High risk, intermediate-2 risk and intermediate-1 risk myelofibrosis   |
| <b>Treatment phase:</b>            | Grandfathering treatment   |
| <b>Restriction Level / Method:</b> | <input type="checkbox"/> Restricted benefit<br><input type="checkbox"/> Authority Required – In Writing<br><input checked="" type="checkbox"/> Authority Required – Telephone<br><input type="checkbox"/> Authority Required – Emergency<br><input type="checkbox"/> Authority Required – Electronic<br><input type="checkbox"/> Streamlined   |
| <b>Clinical criteria:</b>          | The condition must be primary myelofibrosis or post-polycythemia vera myelofibrosis or post-essential thrombocythemia myelofibrosis.<br><br>AND<br><br>Patient must have previously received non-PBS subsidised treatment with this drug for this condition before 1 February 2016.  |
| <b>Prescriber instructions</b>     | The authority application must be made in writing and must include:<br>(1) A completed authority prescription form; and<br>(2) A completed Myelofibrosis Authority Application Supporting Information Form, which includes all of the following:<br>a) A copy of the bone marrow biopsy report confirming diagnosis of myelofibrosis; and<br>b) A classification of risk of myelofibrosis according to either the IPSS, DIPSS, or the Age Adjusted DIPSS.<br>(3) Details of previous ruxolitinib treatment, including all of the following:<br>a) The date which treatment with ruxolitinib was initiated;<br>b) A confirmation that the PBS restriction criteria for the relevant risk category was met at the time of initiation; and<br>c) The method by which ruxolitinib treatment was accessed at the time of initiation (e.g. through a compassionate use program). |
| <b>Administrative Advice</b>       | Written applications for authority to prescribe should be forwarded to:<br>Department of Human Services<br>Complex Programs<br>Reply Paid 9826<br>HOBART TAS 7001  |

**7 Context for Decision**

The PBAC helps decide whether and, if so, how medicines should be subsidised in Australia. It considers submissions in this context. A PBAC decision not to recommend listing or not to recommend changing a listing does not represent a final PBAC view about the merits of the medicine. A company can resubmit to the PBAC or seek independent review of the PBAC decision.

**8 Sponsor's Comment**

The sponsor had no comment.