

5.22 CARFILZOMIB

Powder for I.V. infusion 10 mg, Kyprolis®, Amgen Australia Pty Ltd

Purpose of Application

- 1.1 The minor submission sought listing of a new strength of the currently listed drug carfilzomib.

Requested listing

- 1.2 The submission requested the same Section 100 Efficient Funding of Chemotherapy (EFC) listing as the 30 and 60 mg strengths of carfilzomib for the treatment of multiple myeloma.
- 1.3 The Secretariat had no suggested changes to the requested listing.

Name, restriction, manner of administration, form	Max. Amt	No. of Rpts	Dispensed Price for Max. Amt	Proprietary Name and Manufacturer
CARFILZOMIB Powder for injection, 10 mg	120	17	Published Public: \$2,621.14 Private: \$2,694.75 Effective Public: \$ Private: \$	KYPROLIS® Amgen Australia Pty Ltd

Category / Program	Section 100 – Efficient Funding of Chemotherapy
Prescriber type:	<input type="checkbox"/> Dental <input checked="" type="checkbox"/> Medical Practitioners <input type="checkbox"/> Nurse practitioners <input type="checkbox"/> Optometrists <input type="checkbox"/> Midwives
Condition:	Multiple myeloma
PBS Indication:	Multiple myeloma

Background

- 1.4 Carfilzomib 30 mg and 60 mg are TGA registered as part of combination therapy with dexamethasone or lenalidomide and dexamethasone, for the treatment of patients with relapsed or refractory multiple myeloma who have received at least one prior therapy. The 10 mg form was TGA registered for the same indication in February 2018.
- 1.5 The PBAC rejected a Major submission of carfilzomib at the November 2016 meeting based on an unclear clinical place in therapy, uncertain modelled overall survival gains with carfilzomib and a number of assumptions in the economic model which

favoured carfilzomib and hence considered that the base case ICERs were likely to be substantially underestimated.

- 1.6 The PBAC recommended at its July 2017 meeting the listing of carfilzomib for use in combination with dexamethasone (Cd) in patients with relapsed or refractory multiple myeloma (RRMM), on the basis that the claim of superior comparative effectiveness of Cd over bortezomib with dexamethasone was supported by updated clinical trial data, with a clinically meaningful overall survival advantage, and many of the economic concerns from the previous submission were addressed. The July 2017 economic model included the 10 mg form of the drug, however the PBAC was only able to consider the 30 and 60 mg forms, as no submission for registration of the 10 mg form had been submitted to the TGA at the time of consideration by the PBAC.
- 1.7 The PBAC was requested to consider the listing of the 10 mg form based on the data submitted in the July 2017 submission.

2 Consideration of the evidence

Sponsor hearing

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

Consumer comments

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

Clinical trials

- 2.3 As a minor submission, no clinical trials were presented in the submission.
- 2.4 The PBAC noted that the TGA had approved registration of the 10 mg form for the same indications as the currently listed 30 and 60 mg forms at the time of consideration. The PBAC also recalled that they previously accepted that the 10 mg form, once listed, would reduce wastage.

Estimated PBS usage & financial implications

- 2.5 The financial implications of listing the 10 mg form of carfilzomib were considered in the July 2017 consideration of the 30 and 60 mg forms. No further information was provided for consideration.
- 2.6 While not a matter for the PBAC to consider, it noted that the listing of the lower strength vial of carfilzomib would require a revision of the current Deed of Agreement.

3 PBAC Outcome

- 3.1 The PBAC recommended the listing of a 10 mg form of carfilzomib as a Section 100 – Efficient Funding of Chemotherapy benefit on the basis of the same cost per mg and

restriction conditions as the currently listed 30 and 60 mg forms of carfilzomib for the treatment of multiple myeloma.

- 3.2 The PBAC considered that the 10 mg vial form of carfilzomib should be listed for use in combination with dexamethasone for the treatment of patients with multiple myeloma who have failed at least one prior line of treatment.
- 3.3 The PBAC noted that the financial considerations for this listing had been considered in the July 2017 recommendation for the 30 and 60 mg vial listing and remained unchanged in the minor submission.
- 3.4 The PBAC recommended that the same conditions as currently apply to the 30 and 60 mg vial presentations should apply to the 10 mg vial presentation.
- 3.5 The PBAC noted that this submission is not eligible for an Independent Review as it received a positive recommendation.

Outcome:

Recommended

4 Recommended listing

4.1 Add new items:

Initial treatment:

Name, Restriction, Manner of administration and form	Max. Amt	No. of Rpts	Proprietary Name and Manufacturer	
CARFILZOMIB Powder for injection, 10 mg	120 mg	17	Kyprolis®	Amgen Australia Pty Ltd

Category / Program	Section 100 – Efficient funding of Chemotherapy
Prescriber type:	<input type="checkbox"/> Dental <input checked="" type="checkbox"/> Medical Practitioners <input type="checkbox"/> Nurse practitioners <input type="checkbox"/> Optometrists <input type="checkbox"/> Midwives
Condition:	Multiple myeloma
PBS Indication:	Multiple myeloma
Treatment phase:	Initial treatment
Restriction Level / Method:	<input type="checkbox"/> Restricted benefit <input type="checkbox"/> Authority Required - In Writing <input checked="" type="checkbox"/> Authority Required - Telephone <input checked="" type="checkbox"/> Authority Required - Emergency <input checked="" type="checkbox"/> Authority Required - Electronic <input type="checkbox"/> Streamlined
Clinical criteria:	The condition must be confirmed by a histological diagnosis, AND The treatment must be in combination with dexamethasone, AND

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	<p>Patient must have progressive disease after at least one prior therapy, AND Patient must have undergone or be ineligible for a stem cell transplant, AND Patient must not be receiving concomitant PBS-subsidised thalidomide, lenalidomide, bortezomib, or pomalidomide AND Patient must not receive more than three cycles of treatment under this restriction AND Patient must not have previously received this drug for this condition</p>
Prescriber Instructions	<p>Progressive disease is defined as at least 1 of the following: (a) at least a 25% increase and an absolute increase of at least 5 g per L in serum M protein (monoclonal protein); or (b) at least a 25% increase in 24-hour urinary light chain M protein excretion, and an absolute increase of at least 200 mg per 24 hours; or (c) in oligo-secretory and non-secretory myeloma patients only, at least a 50% increase of the difference between involved free light chain and uninvolved free light chain; or (d) at least a 25% relative increase and at least a 10% absolute increase in plasma cells in a bone marrow aspirate or on biopsy; or (e) an increase in the size or number of lytic bone lesions (not including compression fractures); or (f) at least a 25% increase in the size of an existing or the development of a new soft tissue plasmacytoma (determined by clinical examination or diagnostic imaging); or (g) development of hypercalcaemia (corrected serum calcium greater than 2.65 mmol per L not attributable to any other cause). Oligo-secretory and non-secretory patients are defined as having active disease with less than 10 g per L serum M protein.</p>
Administrative Advice	<p>No increase in the maximum number of repeats may be authorised. No increase in the maximum amount or number of units may be authorised. Special Pricing Arrangements apply.</p>

Continuing treatment:

Name, Restriction, Manner of administration and form	Max. Amt	No. of Rpts	Proprietary Name and Manufacturer	
CARFILZOMIB Powder for injection, 10 mg	120 mg	17	Kyprolis®	Amgen Australia Pty Ltd

Category / Program	Section 100 – Efficient funding of Chemotherapy
Prescriber type:	<input type="checkbox"/> Dental <input checked="" type="checkbox"/> Medical Practitioners <input type="checkbox"/> Nurse practitioners <input type="checkbox"/> Optometrists <input type="checkbox"/> Midwives
Severity:	Progressive
Condition:	Multiple myeloma
PBS Indication:	Multiple myeloma
Treatment phase:	Continuing treatment

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Restriction Level / Method:	<input type="checkbox"/> Restricted benefit <input type="checkbox"/> Authority Required - In Writing <input checked="" type="checkbox"/> Authority Required - Telephone <input checked="" type="checkbox"/> Authority Required - Emergency <input checked="" type="checkbox"/> Authority Required - Electronic <input type="checkbox"/> Streamlined
Clinical criteria:	<p>Patient must have previously received PBS-subsidised treatment with this drug for this condition AND The treatment must be in combination with dexamethasone, AND Patient must not develop disease progression while receiving treatment with this drug for this condition AND Patient must not be receiving concomitant PBS-subsidised thalidomide, lenalidomide, bortezomib, or pomalidomide AND Patient must not receive more than 3 cycles of treatment per continuing treatment course authorised under this restriction.</p>
Prescriber Instructions	<p>Progressive disease is defined as at least 1 of the following: (a) at least a 25% increase and an absolute increase of at least 5 g per L in serum M protein (monoclonal protein); or (b) at least a 25% increase in 24-hour urinary light chain M protein excretion, and an absolute increase of at least 200 mg per 24 hours; or (c) in oligo-secretory and non-secretory myeloma patients only, at least a 50% increase of the difference between involved free light chain and uninvolved free light chain; or (d) at least a 25% relative increase and at least a 10% absolute increase in plasma cells in a bone marrow aspirate or on biopsy; or (e) an increase in the size or number of lytic bone lesions (not including compression fractures); or (f) at least a 25% increase in the size of an existing or the development of a new soft tissue plasmacytoma (determined by clinical examination or diagnostic imaging); or (g) development of hypercalcaemia (corrected serum calcium greater than 2.65 mmol per L not attributable to any other cause). Oligo-secretory and non-secretory patients are defined as having active disease with less than 10 g per L serum M protein.</p>
Administrative Advice	<p>No increase in the maximum number of repeats may be authorised. No increase in the maximum amount or number of units may be authorised. Special Pricing Arrangements apply</p>

Grandfather treatment:

Name, Restriction, Manner of administration and form	Max. Amt	No. of Rpts	Proprietary Name and Manufacturer	
CARFILZOMIB Powder for injection, 10 mg	120 mg	17	Kyprolis®	Amgen Australia Pty Ltd

Category / Program	Section 100 – Efficient funding of Chemotherapy
Prescriber type:	<input type="checkbox"/> Dental <input checked="" type="checkbox"/> Medical Practitioners <input type="checkbox"/> Nurse practitioners <input type="checkbox"/> Optometrists <input type="checkbox"/> Midwives
Condition:	Multiple myeloma
PBS Indication:	Multiple myeloma
Treatment phase:	Grandfathering
Restriction Level / Method:	<input type="checkbox"/> Restricted benefit <input type="checkbox"/> Authority Required - In Writing <input checked="" type="checkbox"/> Authority Required - Telephone <input checked="" type="checkbox"/> Authority Required - Emergency <input checked="" type="checkbox"/> Authority Required - Electronic <input type="checkbox"/> Streamlined
Clinical criteria:	<p>Patient must have received treatment with this drug for this condition prior to 1 January 2018, AND Patient must have a documented histological diagnosis, AND The treatment must be in combination with dexamethasone, AND Patient must have had documented progressive disease after at least one prior therapy prior to commencing non-PBS subsidised treatment with this drug for this condition, AND Patient must not have developed disease progression while receiving treatment with this drug for this condition AND Patient must have undergone or be ineligible for a stem cell transplant, AND Patient must not be receiving concomitant PBS-subsidised thalidomide, lenalidomide, bortezomib, or pomalidomide AND Patient must not receive more than three cycles of treatment under this restriction.</p>

<p>Prescriber Instructions</p>	<p>Progressive disease is defined as at least 1 of the following:</p> <p>(a) at least a 25% increase and an absolute increase of at least 5 g per L in serum M protein (monoclonal protein); or</p> <p>(b) at least a 25% increase in 24-hour urinary light chain M protein excretion, and an absolute increase of at least 200 mg per 24 hours; or</p> <p>(c) in oligo-secretory and non-secretory myeloma patients only, at least a 50% increase of the difference between involved free light chain and uninvolved free light chain; or</p> <p>(d) at least a 25% relative increase and at least a 10% absolute increase in plasma cells in a bone marrow aspirate or on biopsy; or</p> <p>(e) an increase in the size or number of lytic bone lesions (not including compression fractures); or</p> <p>(f) at least a 25% increase in the size of an existing or the development of a new soft tissue plasmacytoma (determined by clinical examination or diagnostic imaging); or</p> <p>(g) development of hypercalcaemia (corrected serum calcium greater than 2.65 mmol per L not attributable to any other cause).</p> <p>Oligo-secretory and non-secretory patients are defined as having active disease with less than 10 g per L serum M protein.</p> <p>Patient may qualify for PBS-subsidised treatment under this restriction once only. For continuing PBS-subsidised treatment, a Grandfathered patient must qualify under the Continuing treatment criteria.</p>
<p>Administrative Advice</p>	<p>No increase in the maximum number of repeats may be authorised.</p> <p>No increase in the maximum amount or number of units may be authorised.</p> <p>Special Pricing Arrangements apply.</p>

5 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.

6 Sponsor's Comment

The sponsor had no comment.