

5.20 LISDEXAMFETAMINE

Capsule containing lisdexamfetamine dimesilate, 20 mg, 40 mg and 60 mg, Vyvanse[®], Shire Australia Pty Ltd

1 Purpose of Application

- 1.1 The minor submission requested Authority Required listings for three new strengths of lisdexamfetamine (LDX) for the treatment of attention deficit hyperactivity disorder (ADHD).
- 1.2 There are three strengths of LDX currently available on the PBS; 30 mg, 50 mg and 70 mg capsules (PBS item numbers: 10474G, 10486X and 10492F).

2 Requested listing

- 2.1 The submission requested listing of 20 mg, 40 mg and 60 mg strength capsules of LDX. The proposed new listings are consistent with the PBS-listings for the three existing strengths of LDX (30 mg, 50 mg and 70 mg capsules).
- 2.2 Suggestions and additions proposed by the Secretariat to the requested listing are added in italics and suggested deletions are crossed out with strikethrough.

Name, Restriction, Manner of administration and form	Max. Qty packs	No. of Rpts	Dispensed Price for Max. Qty Published (Effective)	Proprietary Name and Manufacturer
LISDEXAMFETAMINE				Vyvanse
<i>lisdexamfetamine dimesilate 20 mg 1 5</i>			<i>\$ [REDACTED]</i>	Shire Australia Pty Ltd
<i>lisdexamfetamine dimesilate 40 mg</i>				
<i>lisdexamfetamine dimesilate 60 mg</i>				

Category / Program:	GENERAL – General Schedule (Code GE)
Prescriber type:	<input type="checkbox"/> Dental <input checked="" type="checkbox"/> Medical Practitioners <input checked="" type="checkbox"/> Nurse practitioners <input type="checkbox"/> Optometrists <input type="checkbox"/> Midwives
Condition:	Attention deficit hyperactivity disorder

Restriction Level / Method:	<input type="checkbox"/> Restricted benefit <input type="checkbox"/> Authority Required – In Writing <input checked="" type="checkbox"/> Authority Required – Telephone/Electronic/Emergency <input type="checkbox"/> Streamlined
Clinical criteria:	Patient must require continuous coverage over 12 hours.
Population criteria:	Patient must be or have been diagnosed between the ages of 6 and 18 years inclusive.
Administrative Advice:	<p>Note: Special Pricing Arrangements apply.</p> <p>Note: Care must be taken to comply with the provisions of State/Territory law when prescribing this drug.</p> <p>Note: No increase in the maximum quantity or number of units may be authorised.</p> <p>Note: No increase in the maximum number of repeats may be authorised.</p> <p>Note: <i>The treatment must not exceed a maximum daily dose of 70 mg.</i></p> <p>Note: Continuing Therapy Only: For prescribing by nurse practitioners as continuing therapy only, where the treatment of, and prescribing of medicine for, a patient has been initiated by a medical practitioner. Further information can be found in the Explanatory Notes for Nurse Practitioners.</p>

- 2.3 The Pre-PBAC Response accepted the proposed change to the administrative note to specify that the maximum daily dose should not exceed 70 mg. This is aligned with the TGA-approved product information.

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

3 Background

- 3.1 LDX (30, 50 and 70mg strengths) was TGA registered on 22 July 2013 for the treatment of Attention Deficit Hyperactivity Disorder (ADHD).
- 3.2 At its July 2014 meeting, the PBAC recommended the listing of LDX (30, 50 and 70mg strengths) on a cost-minimisation basis with long-acting methylphenidate (MPH-OROS) for use in both children and adolescents. The PBAC accepted that a modest clinical need existed for alternative treatments for ADHD in children and adolescents as the patient response to one treatment over another appears to be highly individualised.
- 3.3 In 2017, the TGA registered 20 mg, 40 mg and 60 mg strengths of LDX. The extended TGA approval was based on data from a phase III open-label, dose optimisation study

(SPD489-310) which assessed the efficacy and tolerability of six dose strengths of LDX when children aged 6-12 years diagnosed with ADHD were dosed to optimal effect.

- 3.4 The submission stated that the additional strengths aimed to provide greater dosing flexibility to achieve optimal efficacy and tolerability for patients. Based on the approved TGA product information, LDX should be administered orally at the lowest possible dosage and should then be slowly adjusted to the lowest effective dose for each individual.

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

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 and welcomed the input from individuals (116), health care professionals (5) and organisations (1) via the Consumer Comments facility on the PBS website. The comments described a range of benefits of treatment with lower strengths of LDX including increasing flexibility in drug titration; promoting treatment adherence and improving ADHD management for patients.
- 4.3 The PBAC noted the advice received from Attention Deficit Hyperactivity Disorder (ADHD) Australia highlighting that many adults with ADHD were not afforded the benefit of diagnosis in their early life (childhood and adolescence). Under the current PBS reimbursement criteria, these patients are unable to access long-acting medications to treat their core symptoms. The organisation was of the opinion that the current "age of diagnosis" criterion for allowing access to long acting medications should be removed as people from lower socioeconomic groups have poorer access to accurate diagnosis in childhood. The PBAC considered that this was outside of the scope of the submission's request, and that a minor submission including financial impacts would be required for the PBAC to review the age of diagnosis in the restriction.

Clinical trials

- 4.4 The submission presented data from three clinical trials of LDX (SPD489-310; SPD489-325 and SPD489-405) conducted in child and/or adolescent ADHD populations where dose optimisation was included at the start of treatment.
- 4.5 SPD489-310, the single arm study considered by the TGA, is considered the pivotal evidence in this submission, as it is the only trial where all available doses (20mg-70mg in 10mg increments) were used.

- 4.6 SPD489-325 and SPD489-405 were placebo-controlled trials where only the 30mg, 50mg and 70mg doses of LDX were used for dose optimisation, reflecting current Australian clinical practice. Both studies were evaluated by the TGA and included in the product information. Study SPD489-325 was considered by the PBAC at its July 2013 meeting.

Economic analysis

- 4.7 The minor submission proposed that the flat pricing structure for the 30 mg, 50 mg and 70 mg strengths of VYVANSE currently available on the PBS be extended to include the additional 20 mg, 40 mg and 60 mg strengths.

Estimated PBS usage & financial implications

- 4.8 The minor submission estimated there to be no financial implications to the PBS as all strengths would be priced the same. Similarly, the submission expected no changes in PBS utilisation as the submission expected the new doses of LDX to substitute for current doses of LDX. The Sponsor stated that this claim was supported by international market data for LDX, which consistently showed no change in market growth following the introduction of the new doses.
- 4.9 The current Deed of Agreement for LDX encompasses a Special Pricing Arrangement rebate and a subsidisation cap arrangement.

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

5 PBAC Outcome

- 5.1 The PBAC recommended the Authority Required listing of 20 mg, 40 mg and 60 mg strength capsules of lisdexamfetamine (LDX) for the treatment of attention deficit hyperactivity disorder (ADHD). The PBAC considered that the new strengths of LDX will provide greater dosing flexibility to achieve optimal efficacy and tolerability for patients.
- 5.2 The PBAC noted that LDX 20 mg may be used in addition to other strengths to up-titrate patients to an appropriate dose. Therefore the Committee considered that it would be appropriate for the PBS restriction to include a note specifying a maximum daily dose of 70mg per day, rather than specifying that increased quantities cannot be authorised. This administrative advice should flow-on to all the existing strengths of LDX on the PBS.
- 5.3 The PBAC noted that there is a Deed of Agreement for LDX which encompasses a Special Pricing Arrangement rebate and a subsidisation cap arrangement, and advised that the cap should not be increased with the introduction of the three new strengths. The PBAC noted that there would be no financial implication to the PBS/RPBS from

the proposed listing.

- 5.4 The PBAC previously recommended that LDX is suitable for inclusion in the PBS medicines for prescribing by nurse practitioners as continuing therapy.
- 5.5 The PBAC previously considered that it is not appropriate to apply the Early Supply Rule to LDX.
- 5.6 The PBAC previously considered, under Section 101(3BA) of the *National Health Act, 1953*, that LDX should not be treated as interchangeable with any other drugs.
- 5.7 The PBAC noted that its recommendation was for new forms of an already listed drug and advised that because the recommended listing was not expected to alter the efficacy or toxicity of the treatment, or address a high and urgent unmet clinical need, the criteria prescribed by the *National Health (Pharmaceuticals and Vaccines – Cost Recovery) Regulations 2009* for Pricing Pathway A were not met.
- 5.8 The PBAC noted that this submission is not eligible for an Independent Review, as it received a positive recommendation.

Outcome:

Recommended

6 Recommended listing

6.1 Add new item:

Name, Restriction, Manner of administration and form	Max. Qty	№.of Rpts	Proprietary Name and Manufacturer	
LISDEXAMFETAMINE			Vyvanse	Shire Australia Pty Ltd
lisdexamfetamine dimesilate capsule, 30	20 mg	1	5	
lisdexamfetamine dimesilate capsule, 30	40 mg			
lisdexamfetamine dimesilate capsule, 30	60 mg			

Category / Program:	GENERAL – General Schedule (Code GE)
Prescriber type:	<input type="checkbox"/> Dental <input checked="" type="checkbox"/> Medical Practitioners <input checked="" type="checkbox"/> Nurse practitioners <input type="checkbox"/> Optometrists <input type="checkbox"/> Midwives
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Clinical criteria:	Patient must require continuous coverage over 12 hours.
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Administrative Advice:	<p>Note: Special Pricing Arrangements apply.</p> <p>Note: Care must be taken to comply with the provisions of State/Territory law when prescribing this drug.</p> <p>Note: The treatment must not exceed a maximum daily dose of 70 mg.</p> <p>Note: Continuing Therapy Only: For prescribing by nurse practitioners as continuing therapy only, where the treatment of, and prescribing of medicine for, a patient has been initiated by a medical practitioner. Further information can be found in the Explanatory Notes for Nurse Practitioners.</p>

- 6.2 Amend existing items 10474G, 10486X, and 10492F to include the administrative advice “the treatment must not exceed a maximum daily dose of 70mg” and to remove the administrative advice “No increase in the maximum quantity or number of units may be authorised” and “No increase in the maximum number of repeats may be authorised”.

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.