5.03 BUDESONIDE WITH FORMOTEROL,
Powder for oral inhalation in breath actuated device containing budesonide 200 micrograms with formoterol fumarate dihydrate 6 micrograms per dose, 60 doses,
Powder for oral inhalation in breath actuated device containing budesonide 400 micrograms with formoterol fumarate dihydrate 12 micrograms per dose, 60 doses,
Bufomix® Easyhaler®,
Orion Pharma (Aus) Pty Limited

1. Purpose of Submission
	1. The Category 4 submission requested General Schedule Authority Required (STREAMLINED) Pharmaceutical Benefits Scheme (PBS) listings for budesonide with formoterol, under the same circumstances as the PBS listings for Symbicort® Turbuhaler® 200/6 and 400/12, for the following two forms:
* powder for oral inhalation in breath actuated device containing budesonide 200 micrograms with formoterol fumarate dihydrate 6 micrograms per dose, 60 doses (herein referred to as Bufomix® Easyhaler® 200/6), for the treatment of asthma.
* powder for oral inhalation in breath actuated device containing budesonide 400 micrograms with formoterol fumarate dihydrate 12 micrograms per dose, 60 doses (herein referred to as Bufomix Easyhaler 400/12), for the treatment of asthma and chronic obstructive pulmonary disease (COPD).
1. Background
	1. Symbicort Turbuhaler 200/6 microgram and 400/12 microgram are currently listed on the PBS as Authority Required (STREAMLINED) listings for asthma (both strengths) and COPD (400/12 microgram strength only).
	2. In addition to Symbicort Turbuhaler, the following generic brands are included under these PBS-listings:
* BiResp Spiromax®
* DuoResp Spiromax®
* Rilast Turbuhaler®.
	1. Bufomix Easyhaler is a new brand of budesonide with formoterol powder for oral inhalation, with a new delivery device (Easyhaler).

Registration status

* 1. Bufomix Easyhaler 200/6 and 400/12 were TGA registered on 28 October 2022 for:
* use in adults and adolescents (12 years and older), for the treatment of asthma, to achieve overall asthma control, including the relief of symptoms and the reduction of the risk of exacerbations.
* the symptomatic treatment of moderate to severe COPD (forced expiratory volume in 1 second (FEV1) ≤50% predicted normal) in adults with frequent symptoms despite long-acting bronchodilator use, and/or a history of recurrent exacerbations.

Bufomix Easyhaler is not indicated for the initiation of bronchodilator therapy in COPD.

* 1. The submission stated that the TGA-registered indications for Bufomix Easyhaler were the same as those for Symbicort Turbuhaler.
	2. The submission noted that for the other generic products, the TGA-registered indication is the same as that for Symbicort Turbuhaler for the indication for COPD. However, for the indication for asthma, BiResp Spiromax and DuoResp Spiromax are indicated for use in adults only (aged 18 years or older) and are not indicated in children and adolescents <18 years as the 100/6 strength is not available in those brands. Rilast Turbuhaler has the same TGA-registered indication for asthma as Symbicort Turbuhaler.

Previous PBAC consideration

* 1. Bufomix Easyhaler 200/6 and 400/12 have not been considered by the PBAC previously.
1. Requested listing
	1. The submission requested Bufomix Easyhaler 200/6 be listed under the same circumstances as Symbicort Turbuhaler 200/6 for the following indications:
* mild asthma
* asthma
* asthma in patients who have failed fluticasone propionate and salmeterol.
	1. The submission requested Bufomix Easyhaler 400/12 be listed under the same circumstances as Symbicort Turbuhaler 400/12 for the following indications:
* asthma
* COPD.
	1. The submission stated that, as Bufomix Easyhaler comes in a 60 dose pack for both the 200/6 and 400/12 strengths, it requested a maximum quantity of 2 packs for each listing to align with the current PBS-listings for budesonide with formoterol 200/6 which have a maximum quantity of 1 pack (containing 120 doses), and the current PBS-listings for budesonide with formoterol 400/12 which have a maximum quantity of 2 x 60 doses*.*
	2. The submission requested that Bufomix Easyhaler be marked as equivalent in the Schedule of Pharmaceutical Benefits for the purposes of substitution (‘a’-flagged) to Symbicort Turbuhaler, BiResp Spiromax, DuoResp Spiromax and Rilast Turbuhaler.
	3. Add new item as follows:

Suggestions and additions proposed by the Secretariat are added in italics and suggested deletions are crossed out with strikethrough.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **MEDICINAL PRODUCT****medicinal product pack** | **PBS item code** | **Max. qty packs** | **Max. qty units** | **№.of****Rpts** | **Available brands** |
| BUDESONIDE + FORMOTEROL |
| budesonide 200 microgram/actuation + formoterol fumarate dihydrate 6 microgram/actuation powder for inhalation, 60 actuations | NEW | 2 | 2 | 2 | Bufomix Easyhaler |
|  |
| **Restriction Summary / Treatment of Concept** |
|  | **Category / Program:** GENERAL – General Schedule (Code GE)  |
| **Prescriber type:** [x] Medical Practitioners [x] Nurse practitioners |
| **Restriction type:** [x] Authority Required (Streamlined) *[10464]*  |
|  | **Indication:** Mild asthma |
|  | **Clinical criteria:**  |
|  | Patient must have asthma and require an anti-inflammatory reliever therapy, |
|  | **AND** |
|  | **Clinical criteria:** |
|  | Patient must not be on a concomitant single agent long-acting-beta-2-agonist (LABA). |
|  | **~~Caution~~ *Prescribing Instructions:*** Device (inhaler) technique should be reviewed at each clinical visit and before initiating treatment with this medicine. |
|  | **Administrative Advice:** Pharmaceutical benefits that have the brand BiResp Spiromax 200/6 powder for inhalation, 120 actuations, *Bufomix Easyhaler 200/6 powder for inhalation, 2 x 60 actuations,* DuoResp Spiromax 200/6 powder for inhalation, 120 actuations, Symbicort Turbuhaler 200/6 powder for inhalation, 120 actuations and Rilast TURBUHALER 200/6 powder for inhalation, 120 actuations are equivalent for the purposes of substitution. |
|  | **Administrative Advice:** Patient must be aged 12 years or over. |
|  | **Administrative Advice:** This drug is not PBS-subsidised for the treatment of chronic obstructive pulmonary disease (COPD) or for allergen-induced or exercise-induced bronchoconstriction in the absence of asthma. |
|  | **Administrative Advice:**A LABA includes olodaterol, indacaterol, salmeterol, formoterol or vilanterol. |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **MEDICINAL PRODUCT****medicinal product pack** | **PBS item code** | **Max. qty packs** | **Max. qty units** | **№.of****Rpts** | **Available brands** |
| BUDESONIDE + FORMOTEROL |
| budesonide 200 microgram/actuation + formoterol fumarate dihydrate 6 microgram/actuation powder for inhalation, 60 actuations | NEW | 2 | 2 | 5 | Bufomix Easyhaler |
|  |
| **Restriction Summary / Treatment of Concept** |
|  | **Category / Program:** GENERAL – General Schedule (Code GE)  |
| **Prescriber type:** [x] Medical Practitioners [x] Nurse practitioners  |
| **Restriction type:** [x] Authority Required (Streamlined) *[7970]*  |
|  | **Indication:** Asthma |
|  | **Clinical criteria:**  |
|  | Patient must have previously had frequent episodes of asthma while receiving treatment with oral corticosteroids or optimal doses of inhaled corticosteroids; |
|  | **OR** |
|  | Patient must have experienced frequent asthma symptoms while receiving treatment with oral or inhaled corticosteroids and require single maintenance and reliever therapy; |
|  | **OR** |
|  | Patient must have experienced frequent asthma symptoms while receiving treatment with a combination of an inhaled corticosteroid and long acting beta-2 agonist and require single maintenance and reliever therapy |
|  | **Administrative Advice:** Pharmaceutical benefits that have the brand BiResp Spiromax 200/6 powder for inhalation, 120 actuations, *Bufomix Easyhaler 200/6 powder for inhalation, 2 x 60 actuations,* DuoResp Spiromax 200/6 powder for inhalation, 120 actuations, Symbicort Turbuhaler 200/6 powder for inhalation, 120 actuations and Rilast TURBUHALER 200/6 powder for inhalation, 120 actuations are equivalent for the purposes of substitution. |
|  | **Administrative Advice:** Patient must be aged 12 years or over. |
|  | **Administrative Advice:** This product is not indicated for the initiation of treatment in asthma |
|  | **Administrative Advice:** This drug is not PBS-subsidised for the treatment of chronic obstructive pulmonary disease (COPD). |
|  | **Administrative Advice:**The patient must not be on a concomitant single agent long-acting-beta-2-agonist (LABA) |
|  | **Administrative Advice:** A LABA includes olodaterol, indacaterol, salmeterol, formoterol or vilanterol. |
|  | ***Administrative Advice:****Adherence to current treatment and device (inhaler) technique should be reviewed at each clinical visit and before "stepping up" a patient's medication regimen.* |
|  |
| **Restriction Summary / Treatment of Concept** |
|  | **Category / Program:** GENERAL – General Schedule (Code GE)  |
| **Prescriber type:** [x] Medical Practitioners  |
| **Restriction type:** [x] Authority Required (STREAMLINED) [*10538*]  |
|  | **Indication:** Asthma |
|  | **Clinical criteria:**  |
|  | Patient must have failed PBS-subsidised fluticasone propionate and salmeterol as a fixed dose combination for this condition |
|  | **Treatment criteria:** |
|  | Must be treated by a respiratory physician; |
|  | **OR** |
|  | Must be treated by a paediatrician |
|  | **Administrative Advice:** Pharmaceutical benefits that have the brand BiResp Spiromax 200/6 powder for inhalation, 120 actuations, *Bufomix Easyhaler 200/6 powder for inhalation, 2 x 60 actuations,* DuoResp Spiromax 200/6 powder for inhalation, 120 actuations, and Symbicort Turbuhaler 200/6 powder for inhalation, 120 actuations are equivalent for the purposes of substitution. |
|  | **Administrative Advice:** This product is not indicated for the initiation of treatment in asthma |
|  | **Administrative Advice:** This drug is not PBS-subsidised for the treatment of chronic obstructive pulmonary disease (COPD). |
|  | **Administrative Advice:**The patient must not be on a concomitant single agent long-acting-beta-2-agonist (LABA) |
|  | **Administrative Advice:** A LABA includes olodaterol, indacaterol, salmeterol, formoterol or vilanterol. |
|  | **Administrative Advice:**Adherence to current treatment and device (inhaler) technique should be reviewed at each clinical visit and before "stepping up" a patient's medication regimen. |

* 1. Amend existing listing as follows:

Suggestions and additions proposed by the Secretariat are added in italics.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **MEDICINAL PRODUCT****medicinal product pack** | **PBS item code** | **Max. qty packs** | **Max. qty units** | **№.of****Rpts** | **Available brands** |
| BUDESONIDE + FORMOTEROL |
| budesonide 400 microgram/actuation + formoterol fumarate dihydrate 12 microgram/actuation powder for inhalation, 60 actuations | 13258T | 2 | 2 | 5 | *Bufomix Easyhalera*DuoResp SpiromaxaRilast TURBUHALER 400/12aSymbicort TURBUHALER 400/12a |
|  |
| **Restriction Summary / Treatment of Concept** |
|  | **Category / Program:** GENERAL – General Schedule (Code GE)  |
| **Prescriber type:** [x] Medical Practitioners [x] Nurse practitioners  |
| **Restriction type:** [x] Authority Required (Streamlined) *[7979]*  |
|  | **Indication:** Asthma |
|  | **Clinical criteria:**  |
|  | Patient must have previously had frequent episodes of asthma while receiving treatment with oral corticosteroids or optimal doses of inhaled corticosteroids; |
|  | **Administrative Advice:** Pharmaceutical benefits that have the form budesonide 400 microgram/actuation + formoterol (eformoterol) fumarate dihydrate 12 microgram/actuation powder for inhalation, 2 x 60 actuations and pharmaceutical benefits that have the form budesonide 400 microgram/actuation + formoterol (eformoterol) fumarate dihydrate 12 microgram/actuation powder for inhalation, 60 actuations are equivalent for the purposes of substitution. |
|  | ***Administrative Advice:****For prescriptions written for the Maximum Quantity of 2 inhalers (units), item code 11301T (2x60 pack) and item code 13258T (1x60 pack) are substitu* *when dispensing 2 inhalers.* |
|  | **Administrative Advice:** Patient must be aged 18 years or older. |
|  | **Administrative Advice:** Budesonide/formoterol fumarate dihydrate powder for inhalation 400/12 microgram strength inhalers are not recommended nor PBS-subsidised for use as 'maintenance and reliever' therapy. |
|  | **Administrative Advice:**This product is not indicated for the initiation of treatment in asthma |
|  | **Administrative Advice:**The patient must not be on a concomitant single agent long-acting-beta-2-agonist (LABA) |
|  | **Administrative Advice:** A LABA includes olodaterol, indacaterol, salmeterol, formoterol or vilanterol. |
|  | **Administrative Advice:**Adherence to current treatment and device (inhaler) technique should be reviewed at each clinical visit and before "stepping up" a patient's medication regimen. |
|  |
| **Restriction Summary / Treatment of Concept** |
|  | **Category / Program:** GENERAL – General Schedule (Code GE)  |
| **Prescriber type:** [x] Medical Practitioners  |
| **Restriction type:** [x] Authority Required (STREAMLINED) [*10121*]  |
|  | **Indication:** Chronic obstructive pulmonary disease (COPD) |
|  | **Clinical criteria:**  |
|  | Patient must have significant symptoms despite regular beta-2 agonist bronchodilator therapy |
|  | **AND** |
|  | **Clinical criteria:** |
|  | Patient must have experienced at least one severe COPD exacerbation, which required hospitalisation, or two or more moderate exacerbations in the previous 12 months |
|  | **Administrative Advice:** Pharmaceutical benefits that have the form budesonide 400 microgram/actuation + formoterol (eformoterol) fumarate dihydrate 12 microgram/actuation powder for inhalation, 2 x 60 actuations and pharmaceutical benefits that have the form budesonide 400 microgram/actuation + formoterol (eformoterol) fumarate dihydrate 12 microgram/actuation powder for inhalation, 60 actuations are equivalent for the purposes of substitution. |
|  | ***Administrative Advice:****For prescriptions written for the Maximum Quantity of 2 inhalers (units), item code 11301T (2x60 pack) and item code 13258T (1x60 pack) are substitutable when dispensing 2 inhalers.* |
|  | **Administrative Advice:** This product is not indicated for the initiation of bronchodilator therapy in COPD. |
|  | **Administrative Advice:** The treatment must not be used in combination with LABA monotherapy or LAMA/LABA combination therapy. |
|  | **Administrative Advice:** A LAMA/LABA includes aclidinium/formoterol, glycopyrronium/indacaterol, tiotropium/olodaterol, or umeclidinium/vilanterol. |
|  | **Administrative Advice:**Diagnosis of COPD should include measurement of airflow obstruction using spirometry, with confirmation of post-bronchodilator airflow obstruction. |

* 1. The submission noted that in the Product Information for Bufomix Easyhaler the recommended dose for asthma states: ‘The maintenance dose should be titrated to the lowest dose at which effective control of asthma is maintained.’ The submission stated that although Bufomix Easyhaler does not have a 100/6 dose available, this strength is available in other brands. Therefore, the submission claimed that patients initiated on Bufomix Easyhaler who achieve effective control of their asthma symptoms and are able to use a lower dose can then be switched to an alternative brand which has the lower dose form available.
1. Comparator
	1. The submission nominated Symbicort Turbuhaler 200/6 and 400/12as the main comparator. This was appropriate, however any of the brands of budesonide + formoterol powder of inhalation, 200/6 and 400/12, that are currently PBS-listed could also be considered comparators. This includes BiResp Spiromax, DuoResp Spiromax and Rilast Turbuhaler.
	2. As part of its evaluation for registration, the TGA was satisfied that Bufomix Easyhaler 200/6 and 400/12 could be considered bioequivalent to Symbicort Turbuhaler 200/6 and 400/12, respectively.
	3. The submission stated that the TGA also considered the generic products BiResp Spiromax and DuoResp Spiromax to be bioequivalent to the corresponding strengths of Symbicort Turbuhaler, based on information provided in the relevant Product Information. The Product Information for Rilast Turbuhaler does not provide information on bioequivalence, however the submission claimed that the clinical evidence used for this product was the same as that for Symbicort Turbuhaler.

# 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 organisations (2) via the Consumer Comments facility on the PBS website. The comments noted the high burden of disease and costs to the healthcare system due to asthma and COPD. Comments also noted that correct inhaler technique was essential for asthma and COPD management and poor technique can lead to worsening of symptoms. Asthma Australia noted that there is a high proportion of patients who use their inhaler devices incorrectly. Comments considered that the PBS listings of a new device could provide an option for patients who have difficulty using other inhaler devices.
	2. The PBAC noted the consumer comments stated that there are multiple inhaler devices available, and the availability of a new device has the potential to cause confusion in practice. Both Asthma Australia and Lung Foundation Australia considered it was important to have adequate education, and education materials, available for both health care professionals and patients on how to appropriately use the Easyhaler device.
	3. Asthma Australia stated that the carbon emissions of Bufomix Easyhaler are estimated to be lower compared to some other dry powder inhalers, and lower than metered dose inhalers. It noted that climate change can contribute to increasing triggers for people with asthma, and having low carbon emission alternatives for asthma management is beneficial.

Clinical evidence

* 1. The submission provided evidence from the published papers outlined in Table 1.

Table 1: Publications provided in the submission

| Trial ID | Protocol title/ Publication title | Publication citation |
| --- | --- | --- |
| Publication 1 | Chrystyn H, Lavorini F. The dry powder inhaler features of the Easyhaler that benefit the management of patients. | Expert Rev Respir Med 2020; 14(4): 345-51 |
| Publication 2 | Lavorini F, Chudek J, Gálffy G, et al. Switching to the dry-powder inhaler Easyhaler®: A narrative review of the evidence. | Pulm Ther 2021; 7(2): 409-27. |
| Publication 3Trial registration no: OGYÉI/13,942-5/2016 | Tamási L, Szilasi M, Gálffy G. Clinical effectiveness of budesonide/formoterol fumarate Easyhaler® for patients with poorly controlled obstructive airway disease: a real-world study of patient-reported outcomes. | Adv Ther 2018; 35(8): 1140-52. |

* 1. The submission stated the Easyhaler is a multi-dose dry powder inhaler (DPI), and releases the drug dose by force generated by the patient’s inhalation, which leads to consistent high drug delivery. It claimed that dose emission is consistent irrespective of the inhalation flow used by each patient.
	2. The submission claimed an advantage of DPIs is that they mitigate the clinical consequences of poor coordination since the drug release relies on inhalation, rather than the pressurised release of an aerosol (Lavorini et al, 2021).
	3. The submission stated the Easyhaler differs from other DPIs available in appearance, mechanism of action and usability.
	4. The submission claimed the use of the Easyhaler is associated with high patient satisfaction and acceptance, is easy to learn and teach, and is associated with patient adherence (Lavorini et al, 2021).
	5. The submission cited a study conducted in 1,043 patients with asthma or COPD who switched to the Easyhaler (Tamasi et al, 2018). It claimed 72.4% of patients self-reported very high satisfaction with the Easyhaler (score of one on a six-point scale) compared with 17.3% with the Turbuhaler (Figure 1). In addition, more than 90% of physicians described the Easyhaler as easy to teach, with 73.8% of their patients having learned the technique within 5 minutes and 98.9% within 10 minutes of teaching.

**Figure 1: Patient satisfaction by inhaler type**



Source: Submission main body, Figure 2, page 9

Note: The Easyhaler was assessed following 12 weeks’ treatment, whereas the other inhalers were assessed at baseline

Abbreviations: MDI = metered dose inhaler

Reference: [Tamasi et al.](#_ENREF_3)

* 1. As a Category 4 submission, no evaluation of the clinical evidence was undertaken.

Clinical claim

* 1. The submission claimed non-inferior comparative effectiveness and non-inferior comparative safety of Bufomix Easyhaler 200/6 and 400/12 compared with Symbicort Turbuhaler 200/6 and 400/12.
	2. The PBAC considered that the claims of non-inferior comparative effectiveness and non-inferior comparative safety were reasonable.

Economic analysis

* 1. The submission presented a cost-minimisation analysis of Bufomix Easyhaler compared with Symbicort Turbuhaler (Table 1).

**Table 1: Cost Minimisation Analysis**

|  |  |  |
| --- | --- | --- |
|  | **Bufomix Easyhaler *x 2*** | **Budesonide with formoterol fumarate dihydrate****(BiResp Spiromax, DuoResp Spiromax, Rilast Turbuhaler, Symbicort Turbuhaler)** |
| **Bufomix Easyhaler 200/6 versus budesonide with formoterol fumarate dihydrate 200/6** |
| AEMP | $22.33 | $22.33 |
| Administrations per day | 2 | 2 |
| Cost of medicine per day | $0.37 [[$22.33/ [60 x 2]] x 2] | $0.37 [[$22.33/ 120] x 2] |
| Total medicine cost per month | $11.33 [$0.37 x [365.25/12]] | $11.33 [$0.37 x [365.25/12]] |
| Difference in cost per month | $0.00 |
| **Bufomix Easyhaler 400/12 versus budesonide with formoterol fumarate dihydrate 400/12** |
| AEMP | $44.14 | $44.14 |
| Administrations per day | 2 | 2 |
| Cost of medicine per day | $0.74 [[$44.14/ [60 x 2]] x 2] | $0.74 [[$44.14/ [60 x 2]] x 2] |
| Total medicine cost per month | $22.39 [$0.74 x [365.25/12]] | $22.39 [$0.74 x [365.25/12]] |
| Difference in cost per month | $0.00 |

Source: Submission main body

AEMP = Approved ex-manufacturer price

* 1. As a Category 4 submission, the economic analysis has not been independently evaluated.

Drug cost/patient/year: $444 for Bufomix Easyhaler 200/6 and $725.40 for Bufomix Easyhaler 400/12

* 1. The estimated drug cost/patient per year would be $444 for Bufomix Easyhaler 200/6 and $725.40 for Bufomix Easyhaler 400/12, based on a Dispensed Price for Maximum Quantity (DPMQ) of $37 and $60.45 respectively and 12 prescriptions per year for ongoing treatment.

Estimated PBS usage and financial implications

* 1. The requested price was based on the AEMP of Symbicort Turbuhaler 200/6 and 400/12 and generic brands listed in the PBS in August 2023.
	2. Refer to Table 2 which presents the estimated extent of use, cost of Bufomix Easyhaler 200/6 and 400/12 to the PBS/RPBS and the net financial implications to the PBS/RPBS.
	3. The submission claimed that the cost of Bufomix Easyhaler 200/6 to the PBS/RPBS is expected to be $70 million to < $80 million over six years (Year 1 $0 to < $10 million to Year 6 $10 million to < $20 million). The submission claimed that the cost of Bufomix Easyhaler 400/12 to the PBS/RPBS is expected to be $40 million to < $50 million over six years (Year 1 $0 to < $10 million to Year 6 $0 to < $10 million). This would be completely offset by reductions in currently PBS-listed medicines, resulting in an estimated nil financial impact to the PBS/RPBS for the listing of Bufomix Easyhaler over six years.

Table 2: Estimated use and financial implications

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
| Substituted prescriptions |
| Prescriptions | |1  | |1  | |2  | |2  | |2  | | 3 |
| Bufomix Easyhaler |
| Cost R/PBS  | |4 | |4 | |5 | |5 | |5 | |5 |
| Co-payment | |6 | |6 | |6 | |6 | |6 | |6 |
| Total R/PBS  | |7 | |7 | |4 | |4 | |4 | |4 |
| Budesonide with formoterol fumarate dihydrate (BiResp Spiromax, DuoResp Spiromax, Rilast Turbuhaler, Symbicort Turbuhaler) |
| Cost R/PBS  | |6 | |6 | |6 | |6 | |6 | |6 |
| Co-payment | |7 | |7 | |7 | |7 | |7 | |7 |
| Total R/PBS  | |6 | |6 | |6 | |6 | |6 | |6 |
| Net impact to the R/PBS |
| Cost R/PBS  | |7 | |7 | |7 | |7 | |7 | |7 |
| Co-payment | |7 | |7 | |7 | |7 | |7 | |7 |
| Net R/PBS  | |7 | |7 | |7 | |7 | |7 | |7 |

Source: Submission main body

PBS = Pharmaceutical Benefits Schedule; RPBS = Repatriation Pharmaceutical Benefits Schedule

*The redacted values correspond to the following ranges:*

*1 300,000 to < 400,000*

*2 500,000 to < 600,000*

*3 400,000 to < 500,000*

*4 $10 million to < $20 million*

*5 $20 million to < $30 million*

*6 net cost saving*

*7 $0 to < $10 million*

Quality Use of Medicines

* 1. To ensure quality use of medicines and that patients can effectively use the new device, the sponsor planned to liaise with peak health bodies (e.g. Asthma Australia, National Asthma Council Australia, Lung Foundation Australia), and industry organisations (e.g. the Pharmacy Guild of Australia and Pharmaceutical Society of Australia) to develop suitable resources consistent with those available for existing inhalers. These include:
* consumer resources to ensure the correct and safe use of the new device, including a package insert, a patient education website and patient information booklets.
* resources for health care professionals to assist in appropriate patient education, including demonstration devices and information booklets.
1. PBAC Outcome
	1. The PBAC recommended the listing of the following new forms of budesonide with formoterol under the same circumstances as the currently PBS-listed Symbicort Turbuhaler 200/6 and 400/12:
* powder for oral inhalation in breath actuated device containing budesonide 200 micrograms with formoterol fumarate dihydrate 6 micrograms per dose, 60 doses (Bufomix Easyhaler 200/6), for the treatment of asthma
* powder for oral inhalation in breath actuated device containing budesonide 400 micrograms with formoterol fumarate dihydrate 12 micrograms per dose, 60 doses (Bufomix Easyhaler 400/12), for the treatment of asthma and COPD.
	1. The PBAC recommended listing Bufomix Easyhaler 200/6 and 400/12 on a cost-minimisation basis to the lowest-cost PBS-listed budesonide + formoterol powder for inhalation 200/6 and 400/12 items respectively.
	2. The PBAC noted the PBS listing of Bufomix Easyhaler 200/6 and 400/12 is expected to have no net cost to the PBS.
	3. The PBAC noted the TGA considered Bufomix Easyhaler 200/6 and 400/12 to be bioequivalent to Symbicort Turbuhaler 200/6 and 400/12, respectively.
	4. The PBAC considered Symbicort Turbuhaler 200/6 and 400/12 and currently listed generic brands to be appropriate comparators.
	5. The PBAC advised the equi-effective doses were: Bufomix Easyhaler 200/6 = Symbicort Turbuhaler 200/6, and Bufomix Easyhaler 400/12 = Symbicort Turbuhaler 400/12.
	6. The PBAC noted the consumer comments highlighting the need for adequate education for both patients and health care professionals on the use of a new inhaler device and noted the sponsor’s plans to liaise with peak health bodies and industry organisations to develop suitable education resources.
	7. The PBAC advised, under Section 101 (4AACD) of the *National Health Act*, that Bufomix Easyhaler 200/6 and 400/12 and Symbicort Turbuhaler 200/6 and 400/12 respectively and other PBS-listed generic brands should be considered equivalent for the purposes of substitution (i.e., ‘a’ flagged in the Schedule with a NOTE stating PBS of one form and PBS of another form are equivalent for the purposes of substitution).
	8. The PBAC noted that Bufomix Easyhaler comes in a 60 dose pack for both the 200/6 and 400/12 strengths, and that a maximum quantity of 2 packs for each listing is required to align with the current PBS-listings for budesonide with formoterol 200/6 which have a maximum quantity of 1 pack (120 doses), and the current PBS-listings for budesonide with formoterol 400/12 which have a maximum quantity of 2 x 60 doses. The PBAC noted that this will need to be addressed in the implementation stage to facilitate the listing of the different pack size.
	9. The PBAC noted the following flow-on changes:
* The addition of an administration advice to PBS item 12093L to facilitate substitution.
* Updates to the current administrative note (concept ID 30410) for PBS items 11273H, 12029D, 12041R and 8625Y to include Bufomix Easyhaler.
	1. The PBAC noted that its recommendation was on a cost-minimisation basis and advised that, because Bufomix Easyhaler (200/6 and 400/12) are not expected to provide a substantial and clinically relevant improvement in efficacy, or reduction of toxicity, over Symbicort Turbuhaler (200/6 and 400/12), 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 2022* for Pricing Pathway A were not met.
	2. 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 item:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **MEDICINAL PRODUCT****medicinal product pack** | **PBS item code** | **Max. qty packs** | **Max. qty units** | **№.of****Rpts** | **Available brands** |
| BUDESONIDE + FORMOTEROL |
| budesonide 200 microgram/actuation + formoterol fumarate dihydrate 6 microgram/actuation powder for inhalation, 60 actuations | NEW | 2 | 2 | 2 | Bufomix Easyhaler |
|  |
| **Restriction Summary 10463 / Treatment of Concept: 10464** |
|  | **Category / Program:** GENERAL – General Schedule (Code GE)  |
| **Prescriber type:** [x] Medical Practitioners [x] Nurse practitioners |
| **Restriction type:** [x] Authority Required (Streamlined) [10464]  |
|  | **Indication:** Mild asthma |
|  | **Clinical criteria:**  |
|  | Patient must have asthma and require an anti-inflammatory reliever therapy, |
|  | **AND** |
|  | **Clinical criteria:** |
|  | Patient must not be on a concomitant single agent long-acting-beta-2-agonist (LABA). |
|  | **Prescribing Instructions:** Device (inhaler) technique should be reviewed at each clinical visit and before initiating treatment with this medicine. |
|  | **Administrative Advice:** Pharmaceutical benefits that have the brand BiResp Spiromax 200/6 powder for inhalation, 120 actuations, *Bufomix Easyhaler 200/6 powder for inhalation, 2 x 60 actuations,* DuoResp Spiromax 200/6 powder for inhalation, 120 actuations, Symbicort Turbuhaler 200/6 powder for inhalation, 120 actuations and Rilast TURBUHALER 200/6 powder for inhalation, 120 actuations are equivalent for the purposes of substitution. |
|  | **Administrative Advice:** Patient must be aged 12 years or over. |
|  | **Administrative Advice:** This drug is not PBS-subsidised for the treatment of chronic obstructive pulmonary disease (COPD) or for allergen-induced or exercise-induced bronchoconstriction in the absence of asthma. |
|  | **Administrative Advice:**A LABA includes olodaterol, indacaterol, salmeterol, formoterol or vilanterol. |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **MEDICINAL PRODUCT****medicinal product pack** | **PBS item code** | **Max. qty packs** | **Max. qty units** | **№.of****Rpts** | **Available brands** |
| BUDESONIDE + FORMOTEROL |
| budesonide 200 microgram/actuation + formoterol fumarate dihydrate 6 microgram/actuation powder for inhalation, 60 actuations | NEW | 2 | 2 | 5 | Bufomix Easyhaler |
|  |
| **Restriction Summary 7988 / Treatment of Concept: 7970** |
|  | **Category / Program:** GENERAL – General Schedule (Code GE)  |
| **Prescriber type:** [x] Medical Practitioners [x] Nurse practitioners  |
| **Restriction type:** [x] Authority Required (Streamlined) [7970]  |
|  | **Indication:** Asthma |
|  | **Clinical criteria:**  |
|  | Patient must have previously had frequent episodes of asthma while receiving treatment with oral corticosteroids or optimal doses of inhaled corticosteroids; |
|  | **OR** |
|  | Patient must have experienced frequent asthma symptoms while receiving treatment with oral or inhaled corticosteroids and require single maintenance and reliever therapy; |
|  | **OR** |
|  | Patient must have experienced frequent asthma symptoms while receiving treatment with a combination of an inhaled corticosteroid and long acting beta-2 agonist and require single maintenance and reliever therapy |
|  | **Administrative Advice:** Pharmaceutical benefits that have the brand BiResp Spiromax 200/6 powder for inhalation, 120 actuations, *Bufomix Easyhaler 200/6 powder for inhalation, 2 x 60 actuations,* DuoResp Spiromax 200/6 powder for inhalation, 120 actuations, Symbicort Turbuhaler 200/6 powder for inhalation, 120 actuations and Rilast TURBUHALER 200/6 powder for inhalation, 120 actuations are equivalent for the purposes of substitution. |
|  | **Administrative Advice:** Patient must be aged 12 years or over. |
|  | **Administrative Advice:** This product is not indicated for the initiation of treatment in asthma |
|  | **Administrative Advice:** This drug is not PBS-subsidised for the treatment of chronic obstructive pulmonary disease (COPD). |
|  | **Administrative Advice:**The patient must not be on a concomitant single agent long-acting-beta-2-agonist (LABA) |
|  | **Administrative Advice:** A LABA includes olodaterol, indacaterol, salmeterol, formoterol or vilanterol. |
|  | **Administrative Advice:**Adherence to current treatment and device (inhaler) technique should be reviewed at each clinical visit and before "stepping up" a patient's medication regimen. |
|  |
| **Restriction Summary 10574 / Treatment of Concept: 10538** |
|  | **Category / Program:** GENERAL – General Schedule (Code GE)  |
| **Prescriber type:** [x] Medical Practitioners  |
| **Restriction type:** [x] Authority Required (STREAMLINED) [10538]  |
|  | **Indication:** Asthma |
|  | **Clinical criteria:**  |
|  | Patient must have failed PBS-subsidised fluticasone propionate and salmeterol as a fixed dose combination for this condition |
|  | **Treatment criteria:** |
|  | Must be treated by a respiratory physician; |
|  | **OR** |
|  | Must be treated by a paediatrician |
|  | **Administrative Advice:** Pharmaceutical benefits that have the brand BiResp Spiromax 200/6 powder for inhalation, 120 actuations, *Bufomix Easyhaler 200/6 powder for inhalation, 2 x 60 actuations,* DuoResp Spiromax 200/6 powder for inhalation, 120 actuations, and Symbicort Turbuhaler 200/6 powder for inhalation, 120 actuations are equivalent for the purposes of substitution. |
|  | **Administrative Advice:** This product is not indicated for the initiation of treatment in asthma |
|  | **Administrative Advice:** This drug is not PBS-subsidised for the treatment of chronic obstructive pulmonary disease (COPD). |
|  | **Administrative Advice:**The patient must not be on a concomitant single agent long-acting-beta-2-agonist (LABA) |
|  | **Administrative Advice:** A LABA includes olodaterol, indacaterol, salmeterol, formoterol or vilanterol. |
|  | **Administrative Advice:**Adherence to current treatment and device (inhaler) technique should be reviewed at each clinical visit and before "stepping up" a patient's medication regimen. |

* 1. Amend existing listing as follows:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **MEDICINAL PRODUCT****medicinal product pack** | **PBS item code** | **Max. qty packs** | **Max. qty units** | **№.of****Rpts** | **Available brands** |
| BUDESONIDE + FORMOTEROL |
| budesonide 400 microgram/actuation + formoterol fumarate dihydrate 12 microgram/actuation powder for inhalation, 60 actuations | 13258T | 2 | 2 | 5 | *Bufomix Easyhalera*DuoResp SpiromaxaRilast TURBUHALER 400/12aSymbicort TURBUHALER 400/12a |
|  |
| **Restriction Summary 13963 / Treatment of Concept: 7979** |
|  | **Category / Program:** GENERAL – General Schedule (Code GE)  |
| **Prescriber type:** [x] Medical Practitioners [x] Nurse practitioners  |
| **Restriction type:** [x] Authority Required (Streamlined) [7979]  |
|  | **Indication:** Asthma |
|  | **Clinical criteria:**  |
|  | Patient must have previously had frequent episodes of asthma while receiving treatment with oral corticosteroids or optimal doses of inhaled corticosteroids; |
|  | **Administrative Advice:** Pharmaceutical benefits that have the form budesonide 400 microgram/actuation + formoterol (eformoterol) fumarate dihydrate 12 microgram/actuation powder for inhalation, 2 x 60 actuations and pharmaceutical benefits that have the form budesonide 400 microgram/actuation + formoterol (eformoterol) fumarate dihydrate 12 microgram/actuation powder for inhalation, 60 actuations are equivalent for the purposes of substitution. |
|  | **Administrative Advice:**For prescriptions written for the Maximum Quantity of 2 inhalers (units), item code 11301T (2x60 pack) and item code 13258T (1x60 pack) are substitutable when dispensing 2 inhalers. |
|  | **Administrative Advice:** Patient must be aged 18 years or older. |
|  | **Administrative Advice:** Budesonide/formoterol fumarate dihydrate powder for inhalation 400/12 microgram strength inhalers are not recommended nor PBS-subsidised for use as 'maintenance and reliever' therapy. |
|  | **Administrative Advice:**This product is not indicated for the initiation of treatment in asthma |
|  | **Administrative Advice:**The patient must not be on a concomitant single agent long-acting-beta-2-agonist (LABA) |
|  | **Administrative Advice:** A LABA includes olodaterol, indacaterol, salmeterol, formoterol or vilanterol. |
|  | **Administrative Advice:**Adherence to current treatment and device (inhaler) technique should be reviewed at each clinical visit and before "stepping up" a patient's medication regimen. |
|  |
| **Restriction Summary 10086 / Treatment of Concept: 10121** |
|  | **Category / Program:** GENERAL – General Schedule (Code GE)  |
| **Prescriber type:** [x] Medical Practitioners  |
| **Restriction type:** [x] Authority Required (STREAMLINED) [10121]  |
|  | **Indication:** Chronic obstructive pulmonary disease (COPD) |
|  | **Clinical criteria:**  |
|  | Patient must have significant symptoms despite regular beta-2 agonist bronchodilator therapy |
|  | **AND** |
|  | **Clinical criteria:** |
|  | Patient must have experienced at least one severe COPD exacerbation, which required hospitalisation, or two or more moderate exacerbations in the previous 12 months |
|  | **Administrative Advice:** Pharmaceutical benefits that have the form budesonide 400 microgram/actuation + formoterol (eformoterol) fumarate dihydrate 12 microgram/actuation powder for inhalation, 2 x 60 actuations and pharmaceutical benefits that have the form budesonide 400 microgram/actuation + formoterol (eformoterol) fumarate dihydrate 12 microgram/actuation powder for inhalation, 60 actuations are equivalent for the purposes of substitution. |
|  | **Administrative Advice:**For prescriptions written for the Maximum Quantity of 2 inhalers (units), item code 11301T (2x60 pack) and item code 13258T (1x60 pack) are substitutable when dispensing 2 inhalers. |
|  | **Administrative Advice:** This product is not indicated for the initiation of bronchodilator therapy in COPD. |
|  | **Administrative Advice:** The treatment must not be used in combination with LABA monotherapy or LAMA/LABA combination therapy. |
|  | **Administrative Advice:** A LAMA/LABA includes aclidinium/formoterol, glycopyrronium/indacaterol, tiotropium/olodaterol, or umeclidinium/vilanterol. |
|  | **Administrative Advice:**Diagnosis of COPD should include measurement of airflow obstruction using spirometry, with confirmation of post-bronchodilator airflow obstruction. |

* 1. Flow-on changes:
* Add the following administration advice to PBS item 12093L to facilitate substitution:

‘Pharmaceutical benefits that have the brand BiResp Spiromax 200/6 powder for inhalation, 120 actuations, Bufomix Easyhaler 200/6 powder for inhalation, 2 x 60 actuations, DuoResp Spiromax 200/6 powder for inhalation, 120 actuations, Symbicort Turbuhaler 200/6 powder for inhalation, 120 actuations and Rilast TURBUHALER 200/6 powder for inhalation, 120 actuations are equivalent for the purposes of substitution.’

* 1. Amend the current administrative note (concept ID 30410) for PBS items 11273H, 12029D, 12041R and 8625Y to include Bufomix Easyhaler as follows:

‘Pharmaceutical benefits that have the brand BiResp Spiromax 200/6 powder for inhalation, 120 actuations, *Bufomix Easyhaler 200/6 powder for inhalation*, 2 x 60 actuations, DuoResp Spiromax 200/6 powder for inhalation, 120 actuations, Symbicort Turbuhaler 200/6 powder for inhalation, 120 actuations and Rilast TURBUHALER 200/6 powder for inhalation, 120 actuations are equivalent for the purposes of substitution.’

***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.