

Step down guidance

Stepping-down combination ICS/LABA asthma inhaler therapy: Adults ≥18yrs

Important

Complete asthma control needs to be achieved for at least 3 months before attempting to step patients down^{2,3}. Stepping patients down before 3 months of complete asthma control can lead to exacerbations and hospital admissions. Table 1 (below) defines the levels of asthma control.

NICE guidance² recommends that clinicians should stop or reduce the dose of medicines in an order that takes into account their clinical effectiveness when introduced, side effects and the patient's preference. This local step down guidance only refers to ICS/LABA inhalers, but other drugs (e.g. montelukast, tiotropium) may be stopped first if deemed appropriate.

When stepping patients down or switching therapy, prescribers should keep device changes to a minimum and consider the beclometasone dipropionate (BDP) equivalence of different inhaled corticosteroids^{2,3,4}. Table 2 demonstrates the variation in BDP equivalence across different inhaled corticosteroids.

What do the guidelines say about stepping-down inhaled corticosteroids?

The decision to step down therapy should be jointly made between the clinician and the patient. Reductions should be considered every three months, but only if patients have complete asthma control^{1,2}. When reducing inhaled corticosteroids (ICS) clinicians should remember that patients deteriorate at different rates. If asthma is controlled with a combination ICS/LABA inhaler, the preferred approach is to reduce the ICS by approximately 25-50% whilst continuing the LABA at the same dose. Clinicians should note that low dose inhalers are not available for all product ranges e.g. Fostair[®] and Relvar Ellipta[®] and so the prescribing of additional LABA in a separate device is required to ensure no reduction in LABA dose.

BTS guidance advises that combination devices may increase adherence to therapy¹. As LABA monotherapy can increase the risk of asthma-related deaths, prescribers should consider each patient on an individual basis taking into account patient preference, therapeutic need and the likelihood of adherence with all asthma therapy. Any decision should be taken after having a full discussion with the patient covering the potential consequences; such as a reappearance of symptoms and what to do if they occur¹.

If control is maintained after stepping-down, further reductions in the ICS should be attempted. The dose of ICS should be adjusted to achieve the lowest dose required for effective asthma control²

TABLE 1

LEVELS OF ASTHMA CONTROL				
Assessment of current clinical control (preferably) over 4 weeks				
Characteristic		Completely Controlled	Partly Controlled	Uncontrolled Three or more features of partly controlled asthma
RCP 3 Questions	Daytime symptoms	None (twice or less/week)	>Twice/week	
	Limitation on activities	None	Any	
	Nocturnal symptoms/awakening	None	Any	
Need for reliever/rescue treatment		None (twice or less/week)	>Twice/week	
Lung Function (PEF or FEV ₁)		Normal	<80% predicted or personal best (if known)	

TABLE 2

VARIATIONS IN BDP EQUIVALENCE	
Inhaled Corticosteroid	Equivalence to 400mcg beclometasone dipropionate (BDP)/day
Beclometasone - Clenil [®] and Easyhaler [®]	400mcg
Beclometasone - Fostair [®]	No 400mcg equivalent: 200mcg Fostair [®] = 500mcg BDP
Beclometasone - Qvar [®]	200mcg Qvar [®] = 400-500mcg BDP (refer to SPC)
Budesonide - Pulmicort [®] /DuoResp [®] /Symbicort [®] / Easyhaler [®]	400mcg
Fluticasone propionate Flixotide [®] /AirFluSal [®] /Seretide [®] /Sereflo [®] /Sirdupla [®]	200mcg
Fluticasone furoate – Relvar Ellipta [®]	92mcg approx. equivalent to 500mcg fluticasone propionate/1000mcg BDP ⁵

Algorithm for stepping down patients

In line with Table 1 (page 1), ascertain if asthma has been completely controlled for at least 3 months?

Does the patient have an up to date asthma action plan? Has inhaler use (patient reported and Px history), inhaler technique, smoking status, adherence, trigger factors, medication side-effects and use of rescue medication been checked?

YES

NO

Does the patient have any exclusion criteria?

- Patient does not agree to step down
- Exacerbation, oral steroid course, GP/hospital visit due to worsening asthma in past 6 months
- Under respiratory specialist review or pregnant (only step down if agreed with specialist)
- Significant adverse outcomes from previous step down attempts. Consider 25% dose reduction if previously unable to step down by 50%
- Seasonal exacerbations. Reschedule step down review after season has ended
- Lifestyle considerations where stability crucial e.g. impending exam
- Maintenance and Reliever Therapy (MART) regime

YES

DO NOT step patient down

1. Check inhaler technique
2. Check exposure to trigger factors e.g. smoking status, pets, pollen or stress
3. Check adherence to therapy and consider any issues which may affect patient compliance.

Consider **STEP UP** therapy for uncontrolled symptoms

NO

Considerations for Clinician

Patients achieve complete asthma control at different rates. Discuss with the patient to decide whether to trial the current therapy for longer or to step up-again.

Suggested discussion points with patient:

1. Any factor affecting adherence e.g. polypharmacy, social reasons or beliefs?
2. Any issues affecting ability to use inhaler e.g. dexterity?
3. Trigger factors e.g. smoking, pets, pollen, stress?
4. Any lifestyle points to consider where stability crucial e.g. impending exams
5. How long did it take the patient to achieve complete control last time?
6. What would be the potential consequences of an exacerbation and does the patient know what to do if this occurs?
7. What would the patient prefer to do?
8. Ensure patient has up to date self-management/action plan.

ACTION

Clinicians should use their professional judgement to decide whether to continue trialling current therapy or to step up again. If continuing on current therapy, advise patient to monitor symptoms and reliever use and review again in one month. Advise patient to follow self-management plan if symptoms become problematic within this time.

Refer to specialist service as necessary

STEP the patient DOWN – refer to Mid Essex Adult Asthma Guidelines and Step DOWN Algorithms: -

1. Where relevant consider reducing add on therapies before reducing ICS
2. Identify the combination inhaler and dose which is currently prescribed.
3. Refer to the relevant Step DOWN/Switch algorithm for the ICS product and locate where this dose is positioned within the flowchart.
4. Follow the arrow and prescribe the next recommended step.
 - Reduce dose by 25% - 50%. The dose decrease is an individual clinical decision based on history of stability with respect to day to day symptoms, frequency of exacerbations and previous step down attempts.
 - Consideration should be given to the current ICS dose and the inhaler product and strength that the patient is using.
 - Keep the LABA dose the same when ↓ICS dose when possible
 - Dose reductions of less than 50% may be complicated and may involve using combinations of separate inhalers. Further advice may be sought from respiratory specialist
5. Ensure the patient is trained and can demonstrate they can use any potential new device.

Note: for patients at step 3, 4 and 5: if also taking add-on therapies (e.g. montelukast, oral steroids), consider reducing/stopping these before attempting to reduce ICS dose. Seek further advice from specialist services.

Patient review at 3 months

Has the patient achieved complete asthma control in the last 3 months? (see Table 1)

YES

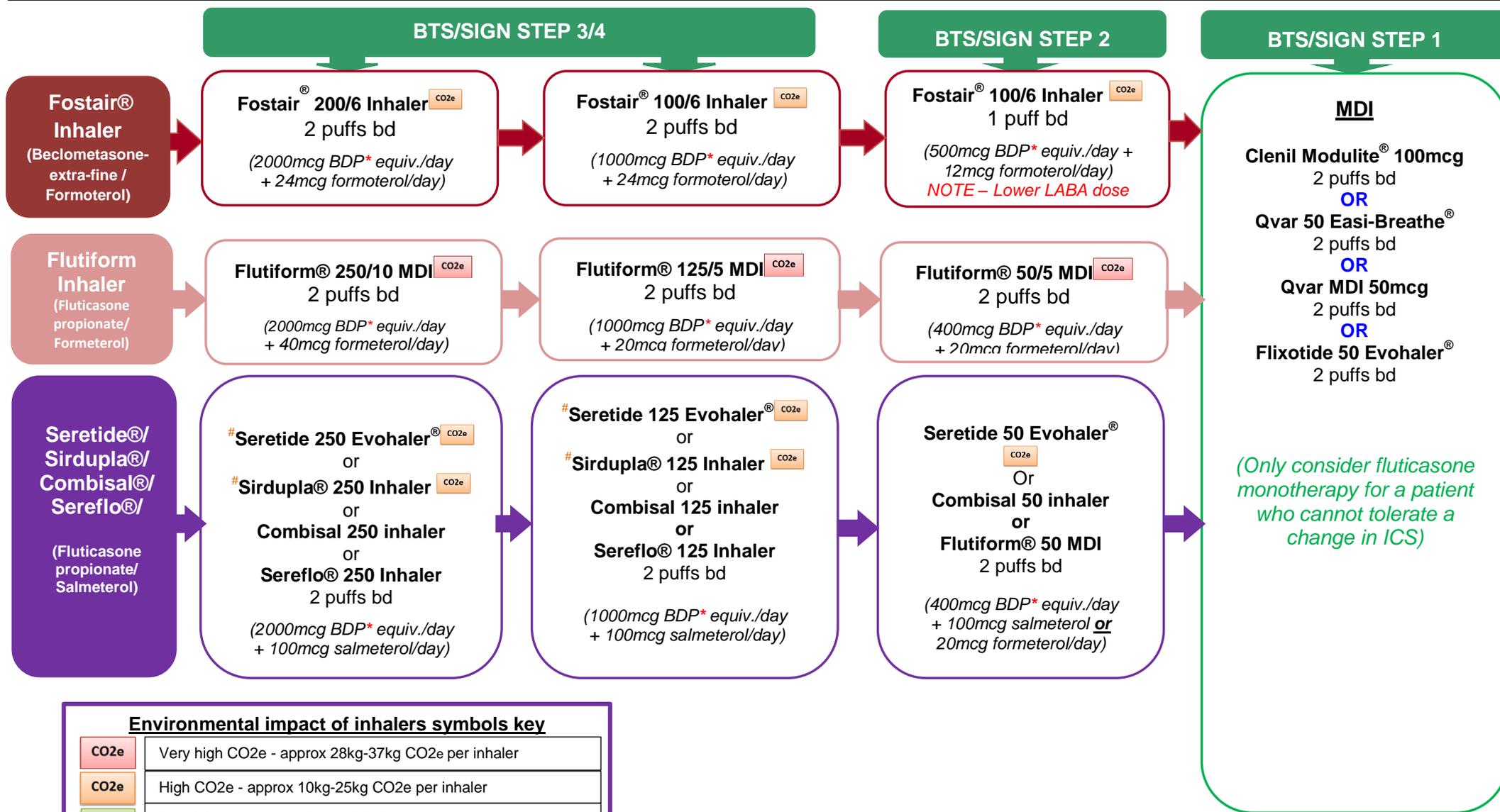
STEP the patient DOWN and repeat cycle

- Check & reinforce inhaler technique + /- spacer
- Advise patient of importance of adherence
- Ensure patient has current asthma action plan
- Ensure patient understands if symptoms worsen when to increase dose and seek medical advice
- Agree a review date for 3 months' time

Asthma Step-down Guide: Fostair®, Flutiform®, Seretide®, Sirdupla®, Sereflo® and Combisal

Note: all doses as for asthma maintenance therapy, not asthma maintenance and reliever therapy (MART)

If patient is at high dose Step 3, consider respiratory specialist advice on how to manage step down process, particularly if a more gradual ICS dose reduction (<50%) is required than the combination devices in the algorithms allow. This may involve using combinations of different inhalers. **If under respiratory specialist review - do not attempt step down without agreement of**



Environmental impact of inhalers symbols key

^{CO₂e}	Very high CO ₂ e - approx 28kg-37kg CO ₂ e per inhaler
^{CO₂e}	High CO ₂ e - approx 10kg-25kg CO ₂ e per inhaler
^{CO₂e}	Low CO ₂ e – approx 1kg per inhaler

* Total daily dose inhaled corticosteroid, in terms of beclometasone dipropionate (BDP) equivalent.

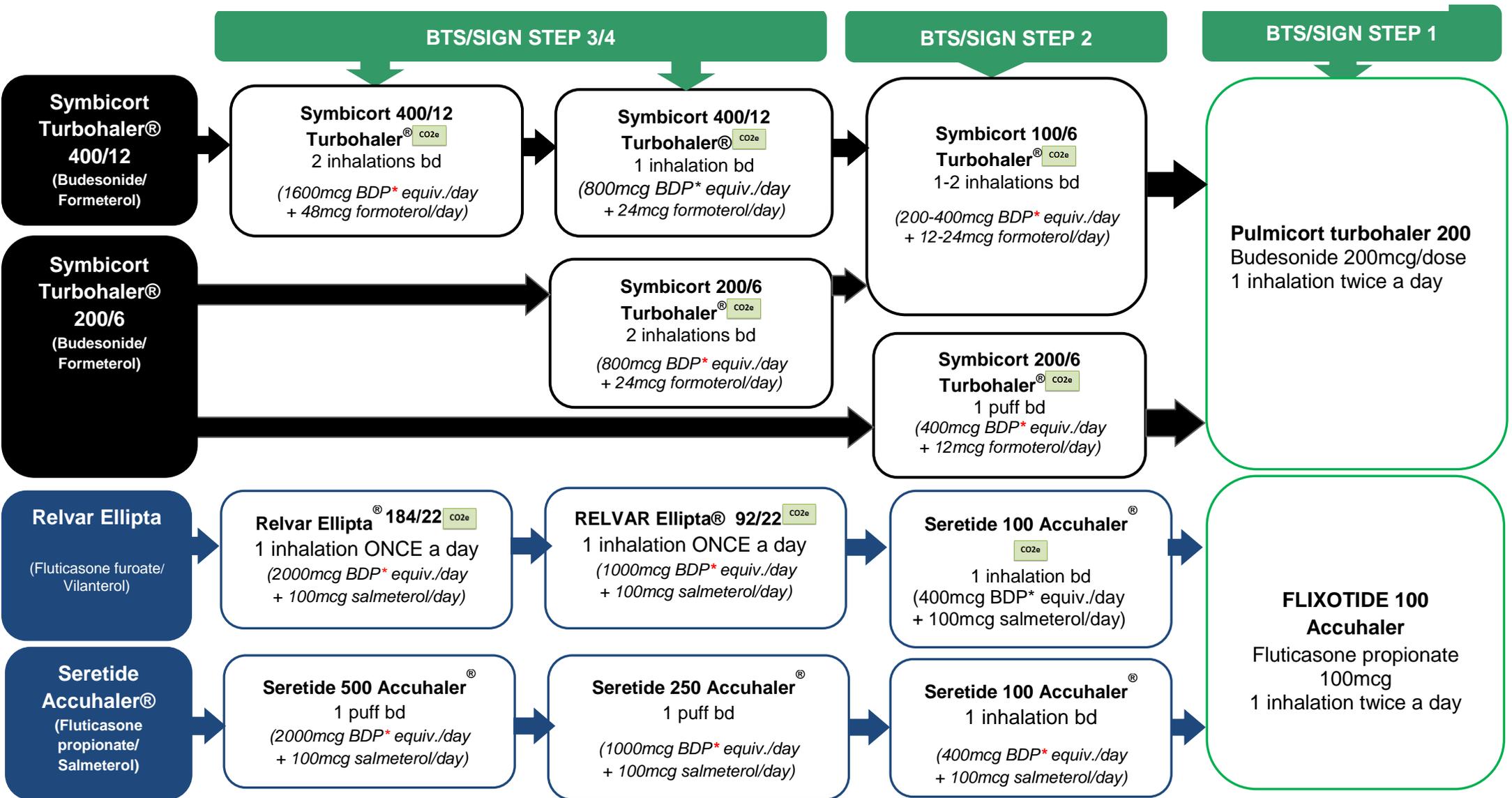
Not included on the asthma pathway

All patients with asthma should be provided with a short-acting beta₂ agonist (salbutamol or terbutaline) to aid in the event of an acute exacerbation.

Asthma Step-down Guide – Dry powder inhalers Symbicort Turbohaler® and DuoResp Spiromax®

Note: all doses as for asthma maintenance therapy, not asthma maintenance and reliever therapy (MART)

To step down from Symbicort 400/12 or DuoResp 320/9 at a dose of **2 puffs bd**, start at the left of the algorithm below. Both LABA and ICS will be reduced



* Total daily dose inhaled corticosteroid, in terms of beclometasone dipropionate (BDP) equivalent.

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Title	Stepping down in asthma
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Consulted with	Dr Steve Jenkins, Consultant Physician in Respiratory Medicine, Broomfield Hospital
Acknowledgements	Adapted for use in mid Essex with thanks to Derbyshire JAPC guidelines.
Reference:	<ol style="list-style-type: none"> 1. British Thoracic Society. Scottish Intercollegiate Guidelines Network. British guideline on the management of asthma. 2016. https://www.brit-thoracic.org.uk/standards-of-care/guidelines/btssign-british-guideline-on-the-management-of-asthma/ 2. NICE guideline NG80: Asthma: Diagnosis, monitoring and chronic asthma management. November 2017 3. Global Initiative for Asthma. Global Strategy for Asthma Management and Prevention. 2018 update. http://ginasthma.org/2018-gina-report-global-strategy-for-asthma-management-and-prevention/ (accessed 05/04/18) 4. National Institute for Health and Clinical Excellence. Inhaled corticosteroids for the treatment of chronic asthma in adults and in children aged 12 years and over. NICE technology appraisal guidance 138.2008 Mar. http://www.nice.org.uk/TA138 5. Asthma: fluticasone furoate/vilanterol (Relvar Ellipta) combination inhaler. Evidence summary [ESNM34] March 2014 https://www.nice.org.uk/advice/esnm34/chapter/key-points-from-the-evidence 6. greeninhaler.org
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Previous version	Key Changes
-	New guidance