Step down guidance for controlled asthma in adults (18 years and over)

Based on a combination of the NICE 2021 Asthma , Guidance BTS / SIGN British Guideline on the Management of Asthma July 2019 and GINA guidance April 2021

Important

Recent studies confirm that approximately 30-35% of adult patients within the community diagnosed with asthma do not have current asthma and may be overdiagnosed[1]. Symptoms alone should not be used to diagnose asthma[3] except when patients are acutely unwell. If treatment is started without tests to confirm diagnosis and the clinical response is poor, then treatment should not be escalated without first performing tests to confirm the diagnosis[2,4] (spirometry, peak flow and/or FeNO) as this can lead to misdiagnosis. Over prescribing of pMDIs due to misdiagnosis will also have a detrimental environmental effect.

Complete asthma control is defined when no symptoms are noted for 12 weeks. Assess control using e.g. ACT or Ardens. Stepping patients down before 12 weeks can lead to exacerbations and hospital admissions. Table 1 (below) defines the levels of asthma control.

NICE guidance[2] recommend stepping down treatment takes into account the clinical impacts, side effects and patient engagement.

When stepping patients down or switching therapy, prescribers should consider:

- beclometasone dipropionate (BDP) equivalence of different inhaled corticosteroids2,3,4. (Refer to Table 2).
- consider maintaining current device (or DPI if appropriate) when step down. Once stable, consider change to DPI (first line choice)
- when ICS/LABA step down using same strength inhaler i.e. 2 puffs BD to 1 puff BD – note in addition to ICS dose reduction the LABA dose is also reduced which may affect asthma control

What do the guidelines say about stepping-down?

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].

Options for stepping down:

1. Reduce the ICS by 25-50% whilst continuing the LABA at the same dose.
2. Half the daily dose of combination treatment.

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 control.[2] High dose ICS over a long period of time use can lead to serious side effects such as pneumonia, low bone mineral density, adrenal suppression and psychological and behavioural effects.

Table 1:

LEVELS OF ASTHMA CONTROL				
Assessment of current clinical control (preferably) over 4 weeks (consider using the Asthma Control Test™ to assess symptom control)				
Characteristic		**Completely Controlled**	**Partly Controlled**	**Uncontrolled**
RCP 3 Questions	Daytime symptoms	None (twice or less/week)	>Twice/week	Three or more features of partly controlled asthma
	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 FEV1)		Normal	<80% predicted or personal best (if known)	

Table 2:

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

Step Down algorithm

In line with Table 1, check if asthma has been completely controlled for at least 12 weeks? 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 (if used) been checked?

YES

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

NO

DO NOT step patient down unless control is achieved.

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

NO

STEP the patient DOWN: -

- Consider reducing add on therapies before reducing ICS **if appropriate** (**LTRA (montelukast)**, LAMA, **SR Theophylline [Specialist initiation ONLY, Specialist reduction ONLY, annual monitoring required]**)
- Identify ICS/LABA combination inhaler currently prescribed.
- Refer to the relevant Step DOWN/Switch algorithm (see page 2) for the inhaler and prescribe the next recommended step.
- Reduce the ICS by 25-50% whilst continuing the LABA at the same dose as appropriate to the individual clinical situation, day to day symptoms, frequency of exacerbations and previous step down attempts.
- Further advice should be sought from the Community Respiratory Services EPUT
- Ensure the patient is trained and can demonstrate they can use any potential new device.

- Check & reinforce inhaler technique +/- spacer
- Jointly decide on preferred device and rationalise number of inhalers if possible
- Advise patients of importance of adherence
- Ensure patient has current asthma action plan
- Ensure patient understands if symptoms worsen to contact asthma nurse/clinician
- Agree a review date for 3 months'

Consider:

- Patient's ability to reliably co-ordinate pressing the canister and inhaling for pMDIs & ability to take fast and deep breath in for DPIs (check with a placebo or inhaler training device if any concerns)
- Preference for once-daily or twice-daily dosing
- If the patient wants (and will use) a spacer
- The inhaler carbon footprint (this is significantly higher for pMDIs)

YES

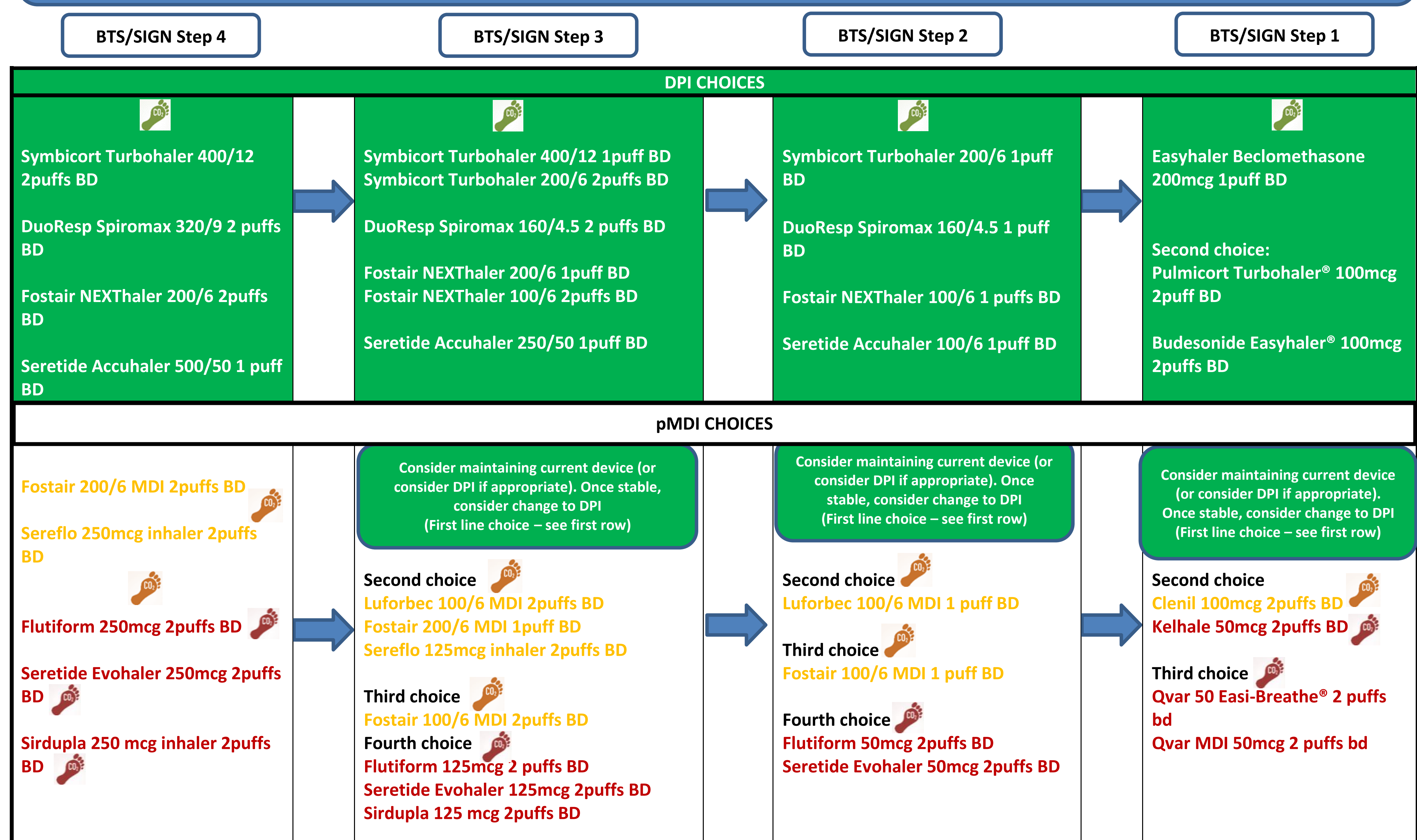
Patient review at 12 weeks
Has the patient achieved complete asthma control in the 12 weeks? (see Table 1)

Step patient down and repeat cycle

Asthma Stepdown Algorithm

Note: all doses are for asthma maintenance, NOT MART. The below are formulary choice examples and not exhaustive of step down plans*.

If patient is at Step 3/4, 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 specialist



When step down using same strength inhaler i.e. 2 puffs BD to 1 puff BD – in addition to ICS reduction, LABA dose also reduced which may affect control

References

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Other References

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Version	1.1 Harmonisation of Hertfordshire Medicines Management Committee (HMMC) guidance and West Essex Medicines Optimisation Programme Board (WEMOPB) guidance updates include: • Rebadging with HWE ICB and removal of CCG headers • Removal of link to CCGs • Review date removed and replaced with standard statement.
Developed by	HWE ICB PMOT
Approved by	WEMOPB and HMMC
Date approved/updated	WEMOPB June 2022 and HMMC May 202
Review date:	The recommendation is based upon the evidence available at the time of publication. This recommendation will be reviewed upon request in the light of new evidence becoming available.
Superseded version	1.0