Guidance to support the stepwise review of combination inhaled corticosteroid therapy for adults (≥18yrs) in asthma

This document has been produced to support prescribers in managing patients with asthma, giving guidance on stepping down treatment where it is appropriate to do so.

In general:

- The BTS/SIGN guidance[1] on the management of asthma should be used to treat patients with the most appropriate treatment and dosage for the initial severity of their asthma.
- When reviewing asthma therapy remember the three "T's": Adherence with Treatment, inhaler Technique and Trigger factors.
- Inhaled corticosteroids (ICS) are safe and effective for most patients with asthma, although the risk of systemic side effects is greater when higher doses are used. The dose of ICS should be titrated to the lowest dose at which effective asthma control is maintained.[2]
- If asthma is controlled with a combination ICS/long-acting beta2 agonist (LABA) inhaler, the preferred approach is to reduce the ICS by approximately 25-50% whilst continuing the LABA at the same dose.[1]
- When decreasing maintenance therapy the potential risks and benefits should be discussed with the person (or family/carer where appropriate).[5]
- The decision to use a combination device or the two agents in separate devices should be made on an individual basis, taking into consideration therapeutic need and the likelihood of treatment adherence.[4]
- If control is maintained after stepping-down, further reductions in the ICS should be attempted at 12 week intervals until a low dose is reached, when the LABA may be stopped.[3]
- Only consider stopping ICS treatment completely for people who are using low dose ICS alone as maintenance therapy and are symptom free.
- Asthma UK produce a patient self-management plan which should be completed for all patients with asthma. Click here to obtain an editable electronic copy of the Asthma UK patient self-management plan
- **Complete asthma control** needs to be achieved for at least 12 weeks before attempting to step patients down[1] (See Table 1 below). The decision to step-down/up therapy should be jointly made between the clinician and the patient. When stepping patients down/up or switching therapy, prescribers should keep device changes to a minimum, consider the cost and beclometasone dipropionate (BDP) equivalence of different inhaler devices[1] (See Table 2 below).

Table 1: Levels of asthma control – Assessment of current clinical control (over 4 weeks)

	Level of asthma control		
Symptom	**Completely controlled**	**Partly controlled**	**Uncontrolled**
Daytime symptoms	**Twice or less per week**	**>Twice per week**	**Three or more features of partly controlled asthma**
Limitation on activities	**None**	**Any**	
Nocturnal symptoms / awakening	**None**	**Any**	
Need for reliever / rescue treatment	**Twice or less per week**	**>Twice per week**	
Lung function (PEF or FEV_1)	**Normal**	**<80% predicted or personal best**	

Table 2: Corticosteroid equivalence to beclometasone

Inhaled corticosteroid	Equivalent beclometasone dipropionate (BDP) dose
400mcg Clenil® (Beclometasone)	400mcg BDP
200mcg Qvar® (Beclometasone – extra fine)	400mcg BDP
200mcg Fostair® (Beclometasone – extra fine)	500mcg BDP
400mcg budesonide	400mcg BDP
200mcg fluticasone propionate	400mcg BDP
250mcg fluticasone	500mcg BDP

References

1. British Thoracic Society. Scottish Intercollegiate Guidelines Network. British Guideline on the Management of Asthma. Published September 2016 https://www.brit-thoracic.org.uk/document-library/clinical-information/asthma/btssign-asthma-guideline-2016/
2. NPC MeReC Bulletin 2008;Vol. 19 no.2
3. Global Initiative for Asthma. Global Strategy for Asthma Management and Prevention. 2012 update http://www.ginasthma.org/local/uploads/files/GINA_Report_March13.pdf
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. National Institute for Health and Clinical Excellence. Asthma: Diagnosis, Monitoring and Chronic Asthma Management. November 2017 https://www.nice.org.uk/guidance/ng80/chapter/Recommendations#decreasing-maintenance-therapy

Guidance for stepping patients down

Has the patient achieved good asthma control for at least 3 months?

Yes

Step the patient down

1. Identify the current BDP equivalent dosage of inhaled corticosteroid treatment using the table included with the asthma treatment algorithm.
2. Consider using the most appropriate product with the lowest acquisition cost when stepping down patients.
3. It may be more cost effective to change products during step down. If appropriate, prescribe the dose suitable to that step and ensure the patient is shown how to use any potentially new device.

Note:
If the patient is prescribed additional add-on therapies (e.g. montelukast, oral prednisolone) consider reducing/stopping these one by one before attempting to reduce

Review the patient in 3 month

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

If you previously stepped the patient up to cover the hay fever season and wish to step them down again, review the patient in 1 month rather than 3 months.

Yes

Step the patient down again and repeat the cycle

No

No

Do not step the patient down

1. Check inhaler technique
2. Check exposure to trigger factors
3. Check adherence to therapy and consider any issues which may affect compliance

If these have been excluded, step-up therapy

Clinicians should consider:
Patients achieve complete asthma control at different rates. Clinicians should have a discussion with the patient to decide whether to trial the current therapy for longer or to step-up again.

Suggested discussion points with patient:

1. Are there any factors affecting adherence to therapy e.g. polypharmacy, social reasons or beliefs?
2. Are there any issues affecting compliance e.g. dexterity?
3. Is the patient exposed to trigger factors e.g. smoking, pets, pollen or stress?
4. Are there any lifestyle points to consider where asthma stability is crucial e.g. impending exam
5. How long did it take the patient to achieve complete asthma 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 the patient has an up to date self-management plan

Action:
Clinicians should use their professional judgement to decide whether to continue trialing the current therapy, or to step-up again. If continuing on the current therapy for longer, the clinician should advise the patient to monitor their symptoms and short-acting bronchodilator use, and review the patient again in 1 month. Patients should be advised to follow their self-management plan if their symptoms become problematic within this time. Refer to a specialist if necessary.

Guidance on the choice of inhalers when stepping down can be found on the following page.

Barnsley Hospital NHS Foundation Trust | South West Yorkshire Partnership NHS Foundation Trust | Barnsley Clinical Commissioning Group

Guidance on choice of inhaler when stepping up or down: *Please note: The following are examples of ICS step down that may be undertaken. This list is not exhaustive. The drugs in BOLD are on the Barnsley formulary for use in adult patients with asthma.*

HIGH DOSE (1600-2000mcg BDP equivalent) & LABA add-on therapy	**MEDIUM DOSE (800-1000Mcg BDP equivalent) & LABA add-on therapy**	**LOW DOSE (400-500Mcg BDP equivalent) & LABA add-on therapy**	**LOW DOSE (400-500Mcg BDP equivalent)**
Fostair 200/6 inhaler **2 puffs bd**	**Fostair 100/6 inhaler** **2 puffs bd**	**Fostair 100/6 inhaler** **1 puff bd**	**Clenil 100mcg mdi** **2 puffs bd** **Qvar 50mcg** **2 puffs bd**
ICS alone: **Clenil 200mcg mdi** **4 puffs bd** **Qvar 100mcg** **4 puffs bd**	**ICS alone:** **Clenil 200mcg mdi** **2 puffs bd** **Qvar 100mcg** **2 puffs bd**		
Seretide 500 Accuhaler 1 puff bd **Airflusal Forspiro 500** **1 puff bd**	Seretide 250 Accuhaler 1 puff bd	Seretide 100 Accuhaler 1 puff bd	**Fluticasone 50mcg Evohaler** **2 puffs bd**
Flutiform 250/10 2 puffs bd	Flutiform 250/10 inhaler 1 puff bd	Flutiform 125/5 inhaler 1 puff bd	
	Flutiform 125/5 inhaler 2 puffs bd	Flutiform 50/5 inhaler 2 puffs bd	Fluticasone 125mcg Evohaler 1 puff bd
Seretide 250 Evohaler 2 puffs bd **Airflusal 250 MDI ****** **2 puffs bd**	Seretide 125 Evohaler 2 puffs bd **Airflusal 125 MDI** **2 puffs bd*****	Seretide 50 Evohaler 2 puffs bd	
ICS alone: Fluticasone 250mcg evohaler 2 puffs bd	ICS alone: Fluticasone 125mcg evohaler 2 puffs bd		
Symbicort 400/12 2 puffs bd	Symbicort 400/12 Turbohaler 1p bd Symbicort 200/6 Turbohaler 2p bd	Symbicort 100/6 Turbohaler 2 puffs bd Symbicort 200/6 Turbohaler 2 puffs bd	Pulmicort Turbohaler 100mcg 2 puffs bd Pulmicort Turbohaler 200mcg 1 puff bd
DuoResp Spiromax 320/9** **2 puff bd** ICS alone: Pulmicort 400 2 puffs bd	**DuoResp Spiromax 320mcg/9mcg** 1p bd or 160mcg/4.5mcg 2p bd**	**DuoResp Spiromax 160mcg/4.5mcg*** **1 puff bd**	**Easyhaler budesonide 100mcg** **2 puffs bd** **Easyhaler budesonide 200mcg** **1 puff bd**
	ICS alone: Pulmicort 200 2 puffs bd **Easyhaler budesonide 200 2 puffs bd**		

***Equivalent to Seretide 125 Evohaler
****Equivalent to Seretide 250 Evohaler

*Equivalent to Symbicort 200/6
**Equivalent to Symbicort 400/12

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