GPIAG
GENERAL PRACTICE AIRWAYS GROUP
OPTIMAL RESPIRATORY HEALTH

Opinion

GPIAG Opinion Nº 9

# Discontinuation of CFC-containing beclometasone metered dose inhalers - planning for change

**Introduction**
Inhaled corticosteroids are the key to successful management of persistent asthma symptoms, and are also used in the management of patients with chronic obstructive pulmonary disease (COPD). Many patients continue to use beclometasone dipropionate by metered dose inhaler (MDI). CFC propellants in MDIs are harmful to the environment and their supply is being phased out worldwide under the terms of the Montreal protocol. A new milestone has been reached in this process with the launch of a second CFC-free formulation of beclometasone - Clenil® Modulite® - in addition to Qvar® which has been available for some time. All CFC-containing beclometasone MDIs will eventually be withdrawn, but Allen and Hanburys/GSK have announced that Becotide and Becloforte MDIs will cease to be available in September 2007. A date for phasing out all CFC-containing beclometasone inhalers has not yet been fixed, but this will eventually occur, and other manufacturers may cease production in advance of this requirement. Environmental considerations favour an early transition to the use of CFC-free inhalers. We might as well get on with it.

The two available CFC-free beclometasone preparations have differing lung deposition: Clenil® Modulite® is equipotent with CFC-MDI beclometasone and the dosage is therefore the same; however, Qvar® is twice as potent due to smaller particle size and therefore the dosage should be halved when converting from CFC-MDI.

**MHRA Advice**
The MHRA wrote to all doctors and pharmacists in August 2006 advising that doctors should therefore prescribe CFC-free beclometasone inhalers by brand name.[1] Pharmacists are advised to check any generic prescription for beclometasone, to see whether or not a CFC-free product is required. This recommendation means that prescribers will save time and trouble by making appopriate alterations to repeat prescriptions for generic beclometasone as soon as possible.

**Managing the transition for patients**
Patients currently receiving CFC-MDI beclometasone should be advised of the transition to CFC-free beclometasone when they consult at the practice or when ordering repeat prescriptions, and a plan should be made for continuing treatment.

For patients with asthma the opportunity should be taken to review disease control so that any step up or down in the dosage of inhaled steroid and other agents can be implemented if necessary. The RCP 3 questions[2] or the GPIAG/Allergy UK Asthma Assessment Tool[3] may be used to assess asthma control.

Problems with inhaler technique and adherence should be carefully assessed before deciding on the need for any change in inhaled steroid dosage.

Management should be staged according to agreed guidelines,[2] with long-acting beta-agonists (LABAs) being used in preference to an increase in the daily inhaled steroid dosage above 800mcg beclometasone equivalent in adults or 400mcg in children. Combination inhalers should be considered for patients demonstrating a continued long-term requirement for both ICS and LABA.

CFC-free inhalers may taste and "feel" differently compared to the patient's previous CFC-containing inhaler, and patients should be advised about this - although many patients will already be familiar with these issues following the switch to CFC-free salbutamol.

**Good asthma control**
For patients whose asthma is generally well controlled on CFC-MDI beclometasone, a CFC-free alternative can be prescribed by brand name - either at equivalent dosage (Clenil®Modulite®) or at half the previous beclometasone dosage (Qvar®). Qvar®is not licensed for children under 12 years of age. If the patient uses a spacer the recommended product is the Volumatic® for Clenil® and the Aerochamber® for Qvar®· Clenil® Modulite® is available as an MDI, while Qvar® is available in a range of inhaler types (MDI, Autohaler, Easi-breathe).

The disadvantage of explicitly prescribing a CFC-containing beclomatasone inhaler now is that a further change will be necessary when all CFC-containing MDIs become unavailable. Changing now is also better for the ozone layer!

Remember that if asthma control is really good a step down in inhaled steroid dosage should be considered. BTS/SIGN guidelines emphasise the importance of titrating inhaled steroid dosage down to the lowest dose that provides good symptom control.

**Poor asthma control**
If asthma control is poor:

- Undertake a full clinical assessment checking adherence and inhaler technique including spacer use, exploring allergic triggers, checking for rhinitis and revisiting the diagnosis if necessary.
- Consider the treatment options
  - ~ addition of a further therapeutic agent such as an LABA
  - ~ maintaining or increasing the dose of inhaled steroid by prescribing a CFC-free beclometasone formulation by brand name - as above.
  - ~ changing to an alternative inhaler type or therapeutic agent; alternative inhaled steroids are budesonide, ciclesonide, fluticasone and mometasone.

Changes of inhaler type or therapeutic agent may have significant cost

implications. The clinical effectiveness of different inhaler types for any particular steroid agent and dosage is broadly similar.[4] Factors influencing choice of inhaler type include the availability of the drug/device combination, the patient's ability and willingness to use the device and the cost of treatment. Fluticasone, like Qvar®, should be prescribed at half the intended beclometasone dose and ciclesonide at about ¾ of this dose. Estimated daily equipotent doses of inhaled steroids are available on the GINA guidelines at http://www.ginasthma.org, see Fig 3.1, page 29 and Fig 3.4, page 46 for adults and children respectively.

After any change in asthma treatment, patients should be monitored closely, ideally using peak flow diaries, and offered early review if they experience problems according to self-management plans.

**COPD**

For patients with COPD, current UK treatment guidelines recommend use of inhaled steroids for patients with an $FEV_1$ less than 50% predicted suffering two or more exacerbations per year.[5] When consulting with COPD patients to discuss a change to the type of steroid inhaler being prescribed for them, there should also be a thorough clinical review - to check inhaler technique and to consider suggesting use of a spacer.

Current bronchodilator therapy should also be reviewed to ensure that symptomatic benefit has been maximised with a trial of LABA for persistent symptoms. Strictly speaking, inhaled corticosteroids are currently only licensed for use in COPD in combination with an LABA, though in practice many patients continue to use separate inhalers for their inhaled steroid treatment.

**Planning for the change in practice**

There are three possible approaches to the CFC-free beclometasone transition:

- Opportunistic - change patients' prescriptions as they attend routinely
- Invitation for review - ask patients to come in to the practice
- Managed change - inform patients by letter of the change, offer a review but alter their repeat prescriptions.

The approach taken in general practice will be influenced by a number of factors including the number of patients being treated with beclometasone MDIs, since it is preferable to make the change at the time of a face-to-face consultation.

Notices in the waiting room and in local pharmacies can be used to advise patients who use beclometasone MDIs to discuss the eventual need for change with their doctor or asthma nurse at the next routine visit, or to invite earlier attendance. Similar notices may be printed on computer prescription side-slips

Ensure that all clinical staff who see asthma and COPD patients are aware of these issues, and adopt a consistent approach to the transition. Inform practice reception staff - in particular emphasising the non-urgent nature of the change and the fact that CFC-containing inhalers are perfectly safe but less environmentally friendly.

Discuss the practice's plans for transition with local pharmacists, who can play a key role in advising and informing patients about the change, whether or not this is part of a formal Medicines Use Review (MUR) under the new pharmacy contract.

Ensure patients are given the time they need to understand the reasons for the change; we know that many patients with asthma feel that they do not receive adequate explanation about their treatment. Produce or provide written patient information materials. Asthma UK have produced an excellent patient information leaflet for patients available at http://www.asthma.org.uk/document.rm?id=224

**Impact on prescribing costs**

Cost differences between CFC-free and CFC-containing beclometasone MDIs are small, with the exception that Becotide® - which is now being phased out - has for some time been significantly less expensive than other preparations. There will therefore be some unavoidable increased prescribing costs with the transition to CFC-free beclometasone - from about £26 to about £56 per patient for a year's treatment at 400mcg per day of CFC-beclometasone equivalent when comparing with the cost of Becotide®. Costs are similar, though at the time of writing Clenil® is slightly cheaper than QVAR® (source BNF).

**Conclusion**

The transition to CFC-free metered dose inhalers for bronchodilators took place with much less difficulty than forecast, and prior experience with this transition will help patients and practices in dealing with the same change for beclometasone MDIs. It is important for patients and practitioners to be aware of the need for dose reduction if switching to Qvar® and hence the requirement that CFC-free beclometasone inhalers should be prescribed by brand name. There is no reason why this change should in itself necessitate a reduction in the use of beclometasone which remains an effective treatment for asthma with an excellent safety record when prescribed with the proper precautions.[6,7] We should use the transition process to review and optimise the control of patients' symptoms - a process which will also contribute to achieving QOF targets in asthma and COPD.

**References**


1. http://www.mhra.gov.uk/home/idcplg?IdcService=SS_GET_PAGE&useSecondary=true&ssDocName=CON2024437&ssTargetNodeId=389
2. British Thoracic Society/ Scottish Intercollegiate Guideline Network . British Guideline on the Management of Asthma. Revised ed. SIGN Publication no 63. 2005; Edinburgh SIGN [cited Nov 2006]
3. http://www.gpiag.org/pubs/asthma_assessment_tool.pdf
4. Dolovich MB, Ahrens RC, Hess DR *et al.* Device selection and outcomes of aerosol therapy: Evidence-based guidelines: American College of Chest Physicians/American College of Asthma, Allergy, and Immunology. *Chest.* 2005 Jan;**127(1)**:335-71
5. http://www.nice.org.uk/pdf/CG012_niceguideline.pdf
6. Adams NP, Bestall JB, Malouf R, Lasserson TJ, Jones PW. Beclomethasone versus placebo for chronic asthma. Cochrane Database of Systematic Reviews 2005, Issue 1. Art. No.:CD002738. DOI: 10.1002/14651858.CD002738.pub2
7. Adams N, Bestall JM, Lasserson TJ, Jones PW. Fluticasone versus beclomethasone or budesonide for chronic asthma in adults and children. Cochrane Database of Systematic Reviews 2005, Issue 2. Art. No.: CD002310. DOI: 10.1002/14651858.CD002310.pub3.



**Date of Preparation:** January 2007



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This series of opinion sheets has been sponsored by educational grants from Merck Sharpe and Dohme Limited, Novartis Pharmaceuticals Limited, AstraZeneca UK Limited and Boehringer-Ingelheim Ltd/Pfizer Ltd. The sponsors have reviewed this opinion sheet to advise on matters of factual accuracy related to their product licence but they have not contributed to, nor have they influenced, the contents of this opinion sheet. The views expressed in this publication are not necessarily those of either the sponsors or the General Practice Airways Group (GPIAG).



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