

WeMeReC Bulletin
WELSH MEDICINES RESOURCE CENTRE
CANOLFAN ADNODDAU MODDION CYMRU

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to general practitioners and pharmacists in Wales

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Chlorofluorocarbon-free metered-dose inhalers: update

Metered-dose inhalers (MDIs) deliver medication from aerosols to the lungs of patients with asthma and COPD. Approximately 80% of prescriptions for inhalation devices are for MDIs (20% are for dry powder inhalers).¹ Historically, the propellants used in the aerosols for MDIs were chlorofluorocarbons (CFCs) but production of these is being phased out.

The European Commission proposes that most CFC-containing MDIs be phased out by 2003 and a UK strategy for achieving this is in place.² The issues surrounding the change to CFC-free propellants in MDIs were discussed in a previous WeMeReC Bulletin (Vol. 6 No. 2, September 1999). Managing the transition of patients using salbutamol MDIs to CFC-free products was also discussed and information on the availability of other bronchodilator products was presented.

The timeframe for switching MDIs for various drugs differs and prescribers should be aware that not all MDIs are being reformulated. Before CFC-containing MDIs are withdrawn, the CFC-free alternatives must cater for all patient groups at an adequate range of doses, and undergo 12 months post-marketing surveillance.

Corticosteroid MDIs

At present CFC-containing budesonide and beclometasone (rINN) / beclomethasone MDIs are not being withdrawn; however, a CFC-free beclometasone formulation is available (see over) and GPs wishing to switch appropriate patients can do so. Fluticasone is now only available in CFC-free formulations.

The opportunity to switch patients to CFC-free corticosteroid MDIs may have arisen when changing to CFC-free bronchodilator inhalers. Alternatively, it may be appropriate to co-ordinate the change with any review of drug therapy for symptom management.³ GPs should consider prescribing CFC-free inhalers to all new patients to avoid the need to change later.

Summary

- ◆ Over the next 1-2 years, most CFC-containing MDIs will be phased out. This process has begun for bronchodilator MDIs and the transition to CFC-free salbutamol MDIs has been made.
- ◆ CFC-containing **beclometasone** and **budesonide** MDIs are not yet being withdrawn. However, there is a beclometasone CFC-free formulation available and GPs wishing to switch appropriate patients can do so (this formulation is not licensed for use in children). **Fluticasone** is now only available in CFC-free MDIs.
- ◆ Information about the availability and costs of corticosteroid MDIs is given on page 2.

Also see WeMeReC Bulletin
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Chlorofluorocarbon-free metered-dose inhalers

When prescribing CFC-free MDIs, doctors should use approved (generic) names for products and write "CFC-free", **or** use brand names.⁴ (Although generic prescribing is generally encouraged, it is important to use brand names for the currently available CFC-free beclometasone MDIs as doses are not equipotent with the CFC-containing MDIs).

There are a number of issues relating to the new CFC-free inhalers that should be discussed with patients (for example, they may be associated with a different taste). Furthermore, the compatibility of the new MDIs with spacers must be checked. Resources are available to help educate patients about the transition (see the previous WeMeReC Bulletin for more information.)

New CFC-free MDIs carry the inverted black triangle symbol (▼) as part of postmarketing surveillance. All suspected adverse reactions to these products should be reported through the Yellow Card Scheme to CSM Wales, Freepost, Cardiff CF4 1ZZ.

Beclometasone dosing

Beclometasone is available in two CFC-free MDIs, *Qvar*[®] and *Qvar Autohaler*[®]. However, these products and CFC-containing MDIs are not all equipotent. Switching adult patients to *Qvar*[®] may necessitate adjustment of doses depending on whether a patient's asthma is well controlled or not. For this reason *Qvar*[®] products need to be prescribed by brand name.

In a patient with well-controlled asthma, *Qvar*[®] should initially be prescribed at a lower dose than CFC-containing beclometasone products (for example, 100 micrograms compared with 200-250 micrograms). When transferring a patient with poorly-controlled asthma to *Qvar*[®], the initial dose should be the same as for

CFC-containing beclometasone products. The dose may be gradually reduced if the asthma becomes well controlled. It should be noted that the maximum daily dose for the *Qvar*[®] products is 800 micrograms and they are not currently licensed for use in children under 12 years.

References

1. Prescribing Information & Pricing Services, Health Solutions Wales, 2000.
2. UK transition strategy for CFC based MDIs. Department of the Environment Transport and the Regions, London, August 1999.
3. The British Guidelines on Asthma Management 1995 Review and Position Statement. *Thorax* 1997; 52 (Suppl 1): S1-S21.
4. The phase out of CFC containing metered dose inhalers for the treatment of asthma and COPD. Welsh Office, Cardiff, WHC (1999) 28.

Availability and cost of corticosteroid MDIs

Dry powder inhalers are available for these corticosteroids; these are generally more expensive than MDIs.

Beclometasone		Cost for 28 days at the doses shown* §		
		0	£5	£10
CFC-containing (4 x 100 microgram per day) ♦	<i>Beclazone</i> [®]			
	<i>Becotide</i> [®]			
	<i>Filair</i> [®]			
	Breath-actuated MDIs:			
	<i>AeroBec Autohaler</i> [®]			
	<i>Beclazone Easi-Breathe</i> [®]			
CFC-free † (4 x 50 microgram per day)	<i>Qvar</i> [®]			
	Breath-actuated MDI <i>Qvar Autohaler</i> [®]			
Fluticasone (4 x 50 microgram per day) ♦ §				
CFC-free	<i>Flixotide Evohaler</i> [®]			
	Fluticasone with salmeterol †			
	<i>Seretide 50 Evohaler</i> [®]			
Budesonide (2 x 200 microgram per day) ♦				
CFC-containing	<i>Pulmicort</i> [®]			
CFC-free	planned for 2003			

* Costs calculated from Chemist & Druggist and Drug Tariff, July 2001.

§ The cost of 125-microgram fluticasone inhalers is approximately **four** times the cost of 50-microgram inhalers, whereas beclometasone inhalers (CFC-containing or CFC-free) that are **twice** the strength of those shown only cost approximately twice the amounts shown.

♦ Available in higher-dose inhalers and in lower strengths for children.

† Only higher-dose inhalers available; **not** licensed for use in children.

Manufacturers' data sheets and summaries of product characteristics should be consulted for full prescribing information.