

## Salmeterol/Fluticasone Propionate Combination

### A Viewpoint by Eric Bateman

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The goal of asthma treatment has shifted from symptom relief to disease control. This is achieved by regular use of the 'controller' category of drugs, of which inhaled corticosteroids are the most effective. The benefits of adding a long-acting  $\beta$ -agonist to inhaled corticosteroid therapy have been demonstrated in many studies, including some that are described in the preceding review.<sup>[1]</sup> With combination therapy a significant proportion of previously symptomatic patients attain the outcomes viewed as 'ideal control' in asthma guidelines. It is therefore a logical development to propose a 'controller cocktail' – a combination of these 2 classes of drug in a single inhaled formulation.

Potential advantages of the combined formulation are improved compliance (use of 1 rather than 2 inhalation devices), cost (the combination is likely to be cheaper than each individual drug) and convenience. An additional interesting observation in several studies has been the greater improvement (although not statistically significant) in lung function obtained with the combination treatment when compared with concurrent treatment with 2 devices. This observation is likely to give rise to further studies of the site and mechanisms of drug interactions with this inhaled preparation.

Several practical issues relating to the clinical use of combination treatment have yet to be addressed:

1. The recommended dose for each preparation is determined by the fixed dose of salmeterol (1

inhalation twice daily) in the 3 formulations (50/100, 50/250 and 50/500 $\mu$ g). It must be questioned whether these 3 doses will provide sufficient flexibility for dose titration of fluticasone propionate as recommended in asthma guidelines. Relatively small changes in corticosteroid dosage will necessitate dispensing of an additional inhaler and may lead to wastage and confusion.

2. Exacerbations of asthma are significantly reduced by this treatment, but when they occur, simple doubling of the inhaled corticosteroid dose cannot be performed without also increasing the salmeterol dose or changing/adding an inhaler. More liberal use of systemic (usually oral) corticosteroids is likely to result. Physicians and patients will require clear instructions on how to modulate treatment during and after exacerbations.

3. Patients, including those with 'ideal' asthma control, will need to continue to carry a short-acting  $\beta$ -agonist inhaler for rescue use, as is already the case.

4. It is not clear what advice should be given to patients who reach complete symptom control on the lowest dose of combination therapy. Should the patient be switched to a low dose inhaled corticosteroid alone?

The introduction of combination preparations will prompt several changes to current asthma treatment guidelines, and may initially cause some confusion. However, such preparations represent a significant step forward in asthma management and are likely to become a popular choice with patients and physicians. ▲

## Reference

1. Spencer CM, Jarvis B. Salmeterol/fluticasone propionate combination. *Drugs* 1999 Jun; 57 (6): 933-40