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## Budesonide/Formoterol Combination

## A Viewpoint by Louis-Philippe Boulet

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The addition of a long acting  $\beta_2$ -agonist to a mild or moderate dose of an inhaled corticosteroid has shown comparable or improved efficacy in achieving asthma control compared with doubling the dosage of inhaled corticosteroid.[1] It appears particularly helpful in improving lung function and reducing asthma exacerbations. The Formoterol and Corticosteroids Establishing Therapy (FACET) trial has shown that in patients with persistent asthma symptoms, despite treatment with inhaled corticosteroids, adding formoterol to budesonide therapy improves both asthma symptoms and peak expiratory flow rates.<sup>[2]</sup> A subsequent analysis also suggested that long term combination treatment with formoterol and budesonide was not associated with any increase in airway inflammation.<sup>[3]</sup>

The combination of these 2 agents in the same inhaler is an attractive way of treating moderate to severe asthma as it simplifies the treatment, therefore potentially aiding compliance to therapy. It also ensures that an anti-inflammatory agent will be taken in addition to a bronchodilator. This may in part explain the increasing use of the currently available combination of fluticasone/salmeterol.

The effects of the agents formoterol and budesonide in combination are the same whether taken via the same inhaler or separate inhalers. Furthermore, the rapid onset of action of formoterol is clinically relevant for the patient as it provides a sensation of quick relief whilst coadministering a dose of inhaled corticosteroid. Compared with the short acting  $\beta_2$ -agonist terbutaline, formoterol used as 'as needed' rescue therapy delayed the time to exacerbation, with no evidence of adverse effects.[4] The relatively low dose of formoterol administered at each inhalation of the combined inhaler provides an opportunity to double the dose in some circumstances without the need to add another corticosteroid inhaler. The short term safety of this association has been shown at much higher doses, although further studies should provide information on the long term influence on asthma control, airway inflammation/remodelling and safety parameters of using variable doses of these agents.

## References

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