

## Safety of long-acting $\beta$ 2-agonists in asthma

In their review on the safety of long-acting  $\beta$ 2-agonists in asthma, Rodrigo *et al*<sup>1</sup> report that severe asthma-related complications were more frequent in patients receiving

**Table 1** Respiratory-related severe asthma exacerbations (requiring hospitalisation)

Treatments	No.	No.	%	95% CI
Formoterol, 24 µg twice daily	527	2	0.4	0 to 0.9
Formoterol, 12 µg twice daily plus on demand	517	1	0.2	0 to 0.6
Formoterol, 12 µg twice daily	527	5*	0.9	0.1 to 1.8
Placebo	514	1	0.2	0 to 0.6
Formoterol combined (three groups)	1571	8	0.5	0.2 to 0.9

\*Two patients had respiratory events that were not asthma related.

formoterol 24 µg twice daily (0.9%) than in those receiving formoterol 12 µg twice daily (0.4%) or placebo (0.2%) in a multicentre randomised trial.<sup>2</sup> The original study reports different percentages of asthma-related complications in the treatment groups (table 1), and both serious asthma exacerbations and a combined outcome including serious asthma exacerbations, asthma-related discontinuations and emergency visits for asthma did not show statistically significant differences between the treatment groups.<sup>2</sup> Consequently, the statement by Rodrigo *et al*<sup>1</sup> that higher doses of formoterol are associated with an increase in serious asthma exacerbations is disputable. Concerns about the safety of long-acting  $\beta_2$ -agonists therapy are a matter of ongoing discussion, and a recently promoted FDA study<sup>3</sup> may hopefully clarify the risk associated with the regular use of long-acting  $\beta_2$ -agonists for the treatment of asthma.

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#### REFERENCES

1. **Rodrigo GJ**, Castro-Rodriguez JA. Safety of long-acting  $\beta$  agonists for the treatment of asthma: clearing the air. *Thorax* 2012;**67**:342–9.
2. **Wolfe J**, LaForce C, Friedman B, *et al*. Formoterol 24µg bid, and serious asthma exacerbations: similar rates compared with formoterol, 12µg bid, with and without extra doses taken on demand, and placebo. *Chest* 2006;**129**:27–38.
3. **Chowdhury BA**, Seymour SM, Levenson MS. Assessing the safety of adding LABAs to inhaled corticosteroids for treating asthma. *N Engl J Med* 2011;**364**:2473–4.