Maintenance and symptom relief with budesonide plus formoterol reduced severe asthma exacerbations


In patients with asthma, is budesonide (BUD) plus formoterol (FORM) (BUDFORM) for both maintenance and symptom relief more effective than fixed dosing using BUDFORM or a 4 fold higher dose of BUD, both with a short acting β2 agonist (SABA), for reducing the rate of severe asthma exacerbations?

METHODS

Q In patients with asthma, is budesonide (BUD) plus formoterol (FORM) (BUDFORM) for both maintenance and symptom relief more effective than fixed dosing using BUDFORM or a 4 fold higher dose of BUD, both with a short acting β2 agonist (SABA), for reducing the rate of severe asthma exacerbations?

CONCLUSION

In patients with asthma, budesonide plus formoterol (BUDFORM) for both maintenance and symptom relief was more effective than fixed dosing using BUDFORM or a 4 fold higher dose of budesonide, both with a short acting β2 agonist, for reducing severe asthma exacerbations.

A modified version of this abstract appears in Evidence-Based Medicine.

MAIN RESULTS

Time to first severe exacerbation was longer in the BUDFORM-for-all group than in the BUDFORM plus SABA group or BUD plus SABA group (p values <0.001). Fewer patients in the BUDFORM-for-all group than in the BUDFORM plus SABA group or BUD plus SABA group had >1 severe asthma exacerbation (table).

For correspondence: Dr P M O’Byrne, St Joseph’s Hospital, Hamilton, Ontario, Canada. obyrnep@mcmaster.ca


Budesonide (BUD) plus formoterol (FORM) for both maintenance and symptom relief (BUDFORM for all) v fixed dosing using BUDFORM or a 4 fold higher dose of BUD, both with a short acting β2 agonist (SABA) in asthma*

<table>
<thead>
<tr>
<th>Outcome at 1 year</th>
<th>Comparisons</th>
<th>Event rates</th>
<th>RRR (95% CI)</th>
<th>NNT (CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;1 severe asthma exacerbation</td>
<td>BUDFORM for all v BUDFORM plus SABA</td>
<td>16% v 27%</td>
<td>41% (30 to 52)</td>
<td>10 (8 to 13)</td>
</tr>
<tr>
<td></td>
<td>BUDFORM for all v BUD plus SABA</td>
<td>16% v 28%</td>
<td>43% (31 to 53)</td>
<td>9 (7 to 12)</td>
</tr>
</tbody>
</table>

*Abbreviations defined in glossary; RRR, NNT, and CI calculated from Cox proportional hazard ratios in article.