Symbicort®: A better way to treat asthma?

The Bottom Line
Last year the US Food and Drug Administration approved Symbicort® (budesonide/formoterol) for the long-term maintenance treatment of asthma in patients aged 12 years and older.¹ Symbicort has been available in pharmacies since June 2007 as a pressurized metered-dose inhaler (MDI). It will compete for market share with Advair® (fluticasone/salmeterol).

Key Points
- Symbicort (budesonide/formoterol) is a new, combination, long-acting beta-agonist (LABA) and inhaled corticosteroid (ICS) alternative to Advair (fluticasone/salmeterol)
- Comparator trials between Advair and Symbicort have yet to prove a superior product

The Pitch
Symbicort offers an alternative combined LABA and ICS to Advair. In addition to being slightly less expensive (TABLE), Symbicort may offer a pharmacokinetic advantage. The bronchodilator component of Symbicort (formoterol) has a quicker onset of action than the bronchodilator component of Advair (salmeterol).

Context
Current asthma guidelines suggest the preferred treatment for moderate-persistent and severe-persistent asthma include both an ICS and LABA.²³ Recent evidence has shown that the addition of a LABA to an ICS is more beneficial for asthma control than an ICS alone.⁴⁵ Until recently, Advair Diskus has been the only combination of LABA/ICS available for use in the United States. Symbicort, much like Advair, is intended only for patients who are not adequately controlled on other asthma controller medications, generally low- to medium-dose ICS.⁶ Patients currently receiving medium to high doses of ICS should begin Symbicort with the 160/4.5 formulation, while patients currently taking medium to low doses of ICS should begin on the 80/4.5 formulation.⁶

Outside of the United States, Symbicort has been approved for both maintenance and reliever therapy. AstraZeneca is calling this new therapy SMART, which stands for Symbicort Maintenance and Reliever Therapy. The Symbicort inhaler is designed to be used twice daily for maintenance therapy; then when asthma symptoms worsen the inhalations can be increased to cover the acute symptoms. This regimen is possible because formoterol has a rapid onset of action, similar to albuterol, while budesonide has a rapid onset of effect and a wide dose range.

This new approach to asthma therapy has already been approved and implemented in 37 other countries, including the United Kingdom and Canada.⁷ Symbicort is not yet approved for SMART therapy in the United States.

However, one practical advantage of Advair over Symbicort is the fact that the Advair Diskus itself keeps track of remaining inhalations. The Symbicort MDI has no way of tracking inhalations used; the user must maintain a log in order to know how many inhalations are remaining in the device.

The Data
Several studies show better outcomes with SMART therapy than with Advair plus rescue albuterol, with fewer exacerbations, fewer hospitalizations, and reduced need for oral steroids.⁸⁹ These results indicate that Symbicort can be used safely for maintenance and relief with better outcomes than conventional therapy. These data resulted in the approval of SMART therapy in many countries outside of the United States.

The only study to date comparing Symbicort to Advair head to head as maintenance therapy is the 6-month EXCEL study.¹⁰ There were 1,391 adult patients with asthma receiving 1,000 to 2,000 µg of ICS daily randomized to either Advair 250/50 one puff BID or a formoterol/budesonide product 200/6 two puffs BID. The annualized rate
TABLE

Cost of a month’s supply of Symbicort vs Advair*

<table>
<thead>
<tr>
<th>Drug/strength</th>
<th>Cost</th>
<th>Potency</th>
<th>Inhalations per inhaler</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advair 100/50</td>
<td>$165.93</td>
<td>Low</td>
<td>60</td>
</tr>
<tr>
<td>Advair 250/50</td>
<td>$196.00</td>
<td>Medium</td>
<td>60</td>
</tr>
<tr>
<td>Advair 500/50</td>
<td>$253.99</td>
<td>High</td>
<td>60</td>
</tr>
<tr>
<td>Symbicort 80/4.5</td>
<td>$102.99</td>
<td>Low to medium</td>
<td>120</td>
</tr>
<tr>
<td>Symbicort 160/4.5</td>
<td>$173.98</td>
<td>Medium to high</td>
<td>120</td>
</tr>
</tbody>
</table>

*Cost obtained from drugstore.com, prices per unit may vary depending on retailer.

of asthma exacerbations was 2.69 in the Advair group and 2.79 in the budesonide/formoterol group \( (P=.571) \).

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REFERENCES


