Therapeutic Switch From Omalizumab to Mepolizumab in Patients With Uncontrolled Severe Eosinophilic Asthma: Treatment Effect by Exacerbations in Previous Year and Maintenance Use of OCS

Poster No. 077

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Aims

1. Mepolizumab is approved for the treatment of patients with severe eosinophilic asthma.1

Methods

In the OSMO study,103 omalizumab-treated patients with uncontrolled severe eosinophilic asthma were switched to mepolizumab treatment and experienced significant and clinically relevant improvements in asthma control, health-related quality of life and asthma exacerbations. The aim of this post hoc analysis of the OSMO study was to determine the relationship between prior exacerbation history (previous 12 months) and maintenance and concomitant (OCS) use at baseline on the treatment response to mepolizumab.

Results

Baseline demographics and characteristics

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Number of exacerbations in prior 12 months</th>
<th>No maintenance OCS</th>
<th>Maintenance OCS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age, years (BD)</td>
<td>30.7 (14.5)</td>
<td>31.0 (14.8)</td>
<td>30.4 (14.2)</td>
</tr>
<tr>
<td>FEV1 (% predicted)</td>
<td>80.5 (18.2)</td>
<td>80.7 (18.1)</td>
<td>80.3 (18.3)</td>
</tr>
<tr>
<td>Annual exacerbation rate</td>
<td>6.3 (1.7)</td>
<td>6.4 (1.8)</td>
<td>6.2 (1.7)</td>
</tr>
</tbody>
</table>

Proportion of patients in each subgroup

Results of the post hoc analysis are shown in the following charts.

Conclusions

Patients with severe eosinophilic asthma previously controlled by omalizumab experienced greater improvements in asthma control and exacerbation rates when switched to mepolizumab 100 mg SC treatment. Regardless of prior exacerbation history and maintenance OCS use, clinically significant improvements were observed in all ACQ5 and SGRQ total scores. Improvements in FEV1 were observed regardless of prior exacerbation history (no trend was observed); greater improvements in FEV1 were observed in patients not using OCS. Reductions in exacerbations were observed regardless of prior exacerbation history and maintenance OCS use, with a trend for higher exacerbation reductions in patients not using OCS in those not using maintenance OCS. These data should be interpreted with caution given that there is no controlled randomized trial analysis.

References


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