Biologic prescribing criteria: exacerbation rate (Table 1)

- Most countries (>65%) currently use total exacerbation number as a biologic prescribing criterion, ranging from 1 exacerbation in Australia to 4 in the UK.
- Omalizumab, mepolizumab, and benralizumab are used as add-on therapies for patients with ≥4 exacerbations (≥40% of countries).
- Benralizumab: 21 exacerbation is most frequently used (35.3% of countries).
- Dupilumab: No exacerbation criterion required (50% of countries). Eligibility criteria are under development for 5 (41.7%) of these countries.

Biologic prescribing criteria: current use of exacerbations experienced in the preceding year as a biologic prescribing criterion (Table 1)

- Anti-IgE (omalizumab): 21 exacerbations are most frequent (41.7% of countries).
- Anti-IL-5/5R (mepolizumab, reslizumab, benralizumab): 21 exacerbations are most frequent (41.7% of countries).
- Dupilumab: No exacerbation criterion required (50% of countries).

Conclusions

- Current, access to biologics depends on patient geographic location and is dependent upon country-specific biologic availability, reimbursement and prescription criteria.
- Prescription criteria are relatively similar across countries with all countries requiring ICS/LABA as background therapy and majority of countries requiring ≥2 exacerbations.
- Global harmonization of these factors would ensure equitable biologics access around the world.
- Future studies could explore the effect of both inter- and intra-country variation on biologic use in real-life populations and on outcomes in severe asthma.

References


Acknowledgments

SIRS is maintained by the Observational & Pharmaco-Economic Research Institute (OPRI) and is funded by GSK Global and Astellas. Presentor’s conflict of interest disclosure: Andrew Menzies-Gow discloses grants from Astellas, Boehringer Ingelheim, Gilead Sciences, and Hoffmann-LaRoche; host advisory or steering committee for Astellas, Boehringer Ingelheim, Gilead Sciences, and Hoffmann-LaRoche, and has attended international conferences for Boehringer Ingelheim and Te.

Figure 1: SIRS countries surveyed

<table>
<thead>
<tr>
<th>Country</th>
<th>Anti-IgE</th>
<th>Anti-IL-5/5R</th>
<th>Anti-IL-4/IL-13</th>
<th>Total Exacerbations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Norway</td>
<td>100.0</td>
<td>25.0</td>
<td>100.0</td>
<td>15 (15)</td>
</tr>
<tr>
<td>Ireland</td>
<td>100.0</td>
<td>25.0</td>
<td>100.0</td>
<td>15 (15)</td>
</tr>
<tr>
<td>Sweden</td>
<td>100.0</td>
<td>25.0</td>
<td>100.0</td>
<td>15 (15)</td>
</tr>
<tr>
<td>UK</td>
<td>100.0</td>
<td>25.0</td>
<td>100.0</td>
<td>15 (15)</td>
</tr>
</tbody>
</table>

Table 1: Proportion of countries which currently use exacerbations experienced in the preceding year as a biologic prescribing criterion.