Period and Point Prevalence and Incidence Rate of New Use of Biologic Anti-inflammatory Agents Among 2.6 Million Commercial Members Continuously Insured for Three Years

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Background

In the United States, there are currently no new biologic anti-inflammatory agents (biologics; adalimumab, abatacept, etanercept, golimumab, rituximab, tocilizumab, ustekinumab) available with new or improved safety and efficacy for the treatment of inflammatory diseases. However, a number of new biologics are in development and may become available in the near future. Therefore, it is crucial to understand the current utilization of biologic agents to inform decision-makers about the potential impact of new biologics on health plan benefits design.

Methods

From a sample of commercial members with integrated pharmacy and medical data claims, all members identified as being under 65 years of age were included from January 1, 2009 through December 31, 2011 who had biologic therapy claims for the years 2009 through 2011. The biologics evaluated were etanercept, golimumab, infliximab, tocilizumab, and ustekinumab. Each biologic was assigned to the appropriate disease category based on the International Classification of Diseases, 9th Revision (ICD-9) diagnosis codes. The number of members assigned to the different diagnosis categories by diagnosis is presented in Table 1. The time period for measuring biologic therapy use was the three-year interval from January 1, 2009 through December 31, 2011.

Results

A total of 2,629,658 members were identified who were continuously enrolled throughout this three-year period, of whom 1,205 newly initiated biologic therapy during the two years of 2010–2011.

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Table 1: Number of members new to any biologic therapy for RA, Psoriasis, Crohn’s, JIA, Ank, and UC

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>Total</th>
<th>New Biologic Users</th>
</tr>
</thead>
<tbody>
<tr>
<td>RA</td>
<td>4,548</td>
<td>38.3%</td>
</tr>
<tr>
<td>Psoriasis</td>
<td>591.9</td>
<td>20.1%</td>
</tr>
<tr>
<td>Crohn’s</td>
<td>237.8</td>
<td>25.5%</td>
</tr>
<tr>
<td>JIA</td>
<td>220.0</td>
<td>6.5%</td>
</tr>
<tr>
<td>Ank</td>
<td>37.7</td>
<td>59.1%</td>
</tr>
<tr>
<td>UC</td>
<td>18.2</td>
<td>36.6%</td>
</tr>
</tbody>
</table>

The total number of newly initiate biologic therapy users for each diagnosis is presented in Table 1. The percentage of newly initiating biologic therapy users for each diagnosis is presented in Table 2. The percentage of newly initiating biologic therapy users for each diagnosis is presented in Table 2. The percentage of newly initiating biologic therapy users for each diagnosis is presented in Table 2. The percentage of newly initiating biologic therapy users for each diagnosis is presented in Table 2. The percentage of newly initiating biologic therapy users for each diagnosis is presented in Table 2. The percentage of newly initiating biologic therapy users for each diagnosis is presented in Table 2.

Limitations

This study relies on absolute and relative frequency of medical claims data on administrative claims and may capture the use of biologics only for individual members.

Conclusions

During 2010 through 2011, the overall prevalence of biologic use to treat autoimmune inflammatory diseases increased by a percent, with increases for all the studied diagnoses. New biologic use comprised only a small fraction of members using biologic therapy within the follow-up period. However, members newly initiating and continuing therapy accounted for an increasing proportion of all biologic users. Health plans should be aware of this increasing burden in initiating and maintaining biologic use. Biologics are expensive, and health plans should be aware of the potential burden on their pharmacy benefit cost.

References


Figure 1. Quarterly incidence rate of newly starting any BAI

Figure 2. A total of 2,629,658 members were identified who were continuously enrolled throughout this three-year period, of whom 1,205 newly initiated biologic therapy during the two years of 2010-2011.

Figure 3. Point prevalence of BAI therapy by diagnosis: all agents combined.