Association Between Adherence to Multiple Sclerosis (MS) Disease Modifying Drug (DMD) Therapy and Moderate to Severe Relapses in a Cohort of Commercial Members Followed for Three Years

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Background

Relapses are an important outcome in clinical trials of multiple sclerosis (MS) treatments. Adherence to disease-modifying drugs (DMDs) is important in preventing new lesions and reducing the rate of relapses.

Methods

Four hundred members of a commercially insured population who received DMD therapy and had claims evidence of at least one relapse during three years of follow-up were included in this study. DMD adherence was calculated using the proportion of days covered (PDC).

Results

Thirty percent of MS members with a DMD claim between October 2013 and September 2017 (year 0) was non-adherent. In addition, the adherence cut point of 60% was associated with a lower risk of having at least one relapse over three years.

Conclusions

The findings of this study indicate that non-adherence to DMD therapy for 15 not adherent MS members between October 2013 and September 2017 reduces the number needed to treat (NNT) of 15 members. If all members were adherent, the annualized relapse rate (ARR) would be 0.00.

Table 1. Multiple Sclerosis MS Members with Claims Evidence of a Relapse During Three Years of Follow-up

<table>
<thead>
<tr>
<th>Adherent to DMD (%)</th>
<th>Adherent to DMD (ARR)</th>
<th>Not adherent (ARR)</th>
<th>Number of relapses</th>
<th>Annualized relapse rate (ARR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>80%</td>
<td>0.00</td>
<td>0.00</td>
<td>300</td>
<td>0.00</td>
</tr>
<tr>
<td>52%</td>
<td>0.01</td>
<td>0.02</td>
<td>300</td>
<td>0.01</td>
</tr>
</tbody>
</table>

References