Preferences of German Physicians for Features of Injectable, Oral and Infused Disease-Modifying Treatments for Relapsing-Remitting Multiple Sclerosis

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Conclusions

- These findings suggest that physicians’ age, experience, patient volume and beliefs about treatment may influence their treatment preferences and recommendations.

Background

- The treatment landscape for multiple sclerosis (MS) has transformed in recent years.
- With the addition of new therapies, patients and physicians may consider more treatment features when identifying the best treatment for each patient’s disease and lifestyle.

Objectives

- This study quantified German physician preferences for attributes of disease-modifying treatments (DMTs) for MS and identified subgroups (or classes) with distinct preferences.

Methods

- A discrete choice experiment (DCE) survey was developed following best practices, pre-tested and administered online.
- Respondents were recruited from an internet panel of physicians who were willing to participate in online surveys.
- Eligibility criteria: licensed physician and practicing in Germany, treating people with MS, able to read and understand German to provide informed consent and complete the survey online.
- Each respondent answered 2 series of DCE choice questions, 1 for each of 2 prototypical patient profiles: more advanced and less advanced.
- Each choice question (Figure 1) asked the respondent to choose between a pair of hypothetical DMTs, where each DMT is characterised by 7 attributes with varying levels (Table 1).
- Latent-class logit regression analysis3 was used to analyse the choice data.

Results

- Three hundred eight physicians completed the survey.
- Average respondent age was 53 years; 77% were male; 50% were recruited; 50% were internists or general practitioners; and 56% of respondents treated ≥10 patients with MS each week.
- Physician preferences did not vary significantly by the prototypical patient profile considered when answering the DCE questions. Data on treatment recommendations for the prototypical patient profile considered when identifying the best treatment for each patient’s disease and lifestyle was collected.

Table 1. The weights indicate the strength of preference for the corresponding attribute level.

Methods section

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Median Weight</th>
<th>Level 1</th>
<th>Level 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of relapses in the next 10 years</td>
<td>6 relapses</td>
<td>5 relapses</td>
<td>3 relapses</td>
</tr>
<tr>
<td>Risk of severe side effect</td>
<td>None</td>
<td>5 relapses</td>
<td>3 relapses</td>
</tr>
<tr>
<td>Dosing frequency</td>
<td>52 times/year</td>
<td>3 times/year</td>
<td>2 times/year</td>
</tr>
<tr>
<td>Risk of moderate side effect</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Risk of a mild side effect</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>No. of years until disability progression</td>
<td>5 years</td>
<td>6 years</td>
<td>7 years</td>
</tr>
<tr>
<td>Risk of mild side effect</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Medication feature</td>
<td>Tablet</td>
<td>Intragroup infusion</td>
<td>Subcutaneous injection</td>
</tr>
</tbody>
</table>

Figure 1. Three parallel attribute levels for DCE. The table above shows the median attribute weights for each scenario. The higher the weight, the more important the attribute.

Table 2. A physician's profile

- A woman in her early 40s
- Has an active lifestyle
- A woman in her early 40s
- Has an active lifestyle
- No noticeable walking problems (Expanded Disability Status Scale < 3.0)
- No noticeable walking problems (Expanded Disability Status Scale < 3.0)
- No walking problems
- Walking problems, but no cane
- No walking problems
- Walking problems, but no cane
- No walking problems
- Walking problems, but no cane
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Figure 2. Preferences for DMTs by physician subgroups.

- The treatment landscape for multiple sclerosis (MS) has transformed in recent years.
- With the addition of new therapies, patients and physicians may consider more treatment features when identifying the best treatment for each patient’s disease and lifestyle.

References


Figure 2. Physician's relative importance of attributes.

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References