Rheumatic disease patients’ preferences in adverse drug reaction information regarding biologics

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No conflicts of interest

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Patient-reported outcomes (PROs) and study results

The pilot ‘Dutch Biologic Monitor’

- Prospective cohort event monitoring system for patient reported adverse drug reactions (ADRs) attributed to biologics \(^1\)\(^2\)
  - Inclusion criteria: use of a biologic, >18 years
  - Bimonthly web-based questionnaires on ADRs
  - Type and course of ADRs and actions taken to treat ADRs
  - The experienced burden on a five-point Likert-type scale
  - Whether patients like to receive the results of the monitor

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OBJECTIVES

To obtain insight in which results patients with immune-mediated inflammatory diseases (IMIDs), including inflammatory rheumatic disease patients, prefer to receive after participating in the Dutch Biologic Monitor.
METHODS

- Substudy of the Dutch Biologic Monitor
- Online survey May 2018
- Patients that wished to receive the results of the Dutch Biologic Monitor (70.6%)
- Five-point Likert-type scale for relevance and importance
METHODS

Survey content

- Preferences for the results per type of IMID over aggregated results
- Interest in ADRs experienced by patients with similar and other IMIDs
- Interest in baseline characteristics of all patients participating in the Dutch Biologic Monitor
- Interest in biologic-specific information
- Interest in ADR-specific information
METHODS

Subgroup analysis:

- inflammatory rheumatic disease (IRD) patients vs. the entire respondent population
- inflammatory bowel disease (IBD) patients vs. the entire respondent population
- IBD patients vs. IRD patients
- males vs. females
- patients that reported ≥ 1 ADR in the Dutch Biologic Monitor vs. patients that had not reported an ADR

Statistical analysis:

Mann-Whitney U Tests
**RESULTS respondent characteristics**

<table>
<thead>
<tr>
<th>Characteristics</th>
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</thead>
<tbody>
<tr>
<td>Respondents</td>
<td>591 (67.6%)</td>
</tr>
<tr>
<td>Age, median (IQR), years</td>
<td>59.0 (51.0-67.0)</td>
</tr>
<tr>
<td>Gender (Female)</td>
<td>353 (59.7%)</td>
</tr>
<tr>
<td>ADR reported</td>
<td>256 (43.3%)</td>
</tr>
<tr>
<td><strong>Biologic</strong></td>
<td></td>
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<tr>
<td>Adalimumab</td>
<td>220 (37.2%)</td>
</tr>
<tr>
<td>Etanercept</td>
<td>196 (33.2%)</td>
</tr>
<tr>
<td><strong>Inflammatory rheumatic disease</strong></td>
<td></td>
</tr>
<tr>
<td>Rheumatoid arthritis</td>
<td>277 (46.9%)</td>
</tr>
<tr>
<td>Psoriatic arthritis</td>
<td>111 (18.8%)</td>
</tr>
</tbody>
</table>
RESULTS preferences in ADR information

Information per IMID vs. aggregated results

- Important to see results per IMID: 4.3
- Important to see aggregated results: 3.8

$p < 0.001$
RESULTS preferences in ADR information

Interest in ADR information: most interesting

Interest in experienced ADRs by patients with the same IMID
- Average interest: 4.5

Interest in which ADRs are attributed to what biologics
- Average interest: 4.4

Interest in whether the experienced ADRs disappeared
- Average interest: 4.4
RESULTS preferences in ADR information

Interest in ADR information: less interesting

- Interest in experienced injection site reactions: Average interest 3.8
- Interest in information on participant characteristics: Average interest 3.7
- Interest in experienced ADRs by people with other IMIDs: Average interest 3.5
RESULTS preferences in ADR information

No differences found in preferences per statement between:

- IRD patients vs. the entire respondent population
- IBD patients vs. the entire respondent population
- IBD patients vs. IRD patients
- males vs. females
- patients that reported ≥ 1 ADR in the Dutch Biologic Monitor vs. patients that had not reported an ADR
First study on patient preferences regarding ADR information attributed to biologics

Patients are mostly interested in which biologics lead to what kind of ADRs, whether patients with the same IMID experience the same ADRs and whether ADR(s) disappear(s) or not.

In line with previous studies focused on the spontaneous reporting system.

DISCUSSION

Limitations

Generalizability and selection bias

- No information on ethnicity or education level
- Proficiency in Dutch and web-access were required
- Participants of the Dutch Biologic Monitor that wished to be informed
CONCLUSION

- IMID patients prefer to receive information on ADRs focused on their disease and biologic
- IMID patients wish to obtain information on the outcomes of ADRs
- Study outcomes on ADRs should be communicated to patients and tailored to their interests
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Thank you for your attention

For questions email: g.weits@lareb.nl