Significantly higher chance of ‘functional remission’ or physical independence in RA patients receiving biologics. Results from the German biologics register

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Introduction

The German prospective cohort study RABBIT (German acronym for: rheumatoid arthritis – observation of biologic therapy) was established in May 2001 to investigate the long-term safety, effectiveness and costs of biologic therapies in comparison to conventional DMARD therapy in rheumatoid arthritis (RA).

Objective

To investigate how often significant improvements in function can be achieved.

We compared patients treated in routine care with either biologic or conventional DMARD therapy:

- New prescription of etanercept, adalimumab, infliximab, or anakinra at study entry.
- New prescription of a DMARD after at least two DMARD failures including MTX (control group).

A total of 1,083 patients who were enrolled between May 2001 and December 2003, fulfilled the inclusion criteria. As expected, the patients in the biologics group had significantly more active disease and more previous DMARD failures (see Tab. 1 at poster FR0140).

Assessments at baseline, 3, 6 and 12 months

- 28 joint counts of tender (TJC) and swollen joints (SJC)
- CRP, ESR
- treatment (DMARD and/or biologic therapy, glucocorticoids)
- previous treatment failures and treatment terminations during follow up with recording of reasons for terminating
- functional capacity (Funktionsfragebogen Hannover, FFbH).

The FFbH measures limitations in activities of daily living. Scores are given in percent of full function (range is 0 to 100) and can be transformed in HAQ values.

Patients and Methods

- RA patients enrolled into the German biologics register RABBIT.
- New prescription of etanercept, adalimumab, infliximab, or anakinra at study entry.
- New prescription of a DMARD after at least two DMARD failures including MTX (control group).

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Endpoints

- Physical independence at 12 months (FFbH ≥ 67) according to Westhoff et al. (Arthr Care Res 2000; 13:11-21).
- Functional remission at 12 months (FFbH > 83). This cut-off point was derived from data of 12,303 patients recorded in the German rheumatologic database in 2003.

Functional remission

Table 1: Improvement of functional status; * difference significant with p<0.001

<table>
<thead>
<tr>
<th>% of patients with...</th>
<th>Biologics</th>
<th>Controls</th>
</tr>
</thead>
<tbody>
<tr>
<td>... functional status &gt; 83% at baseline</td>
<td>11.6 *</td>
<td>19.9</td>
</tr>
<tr>
<td>... functional status &gt; 83% at 12 months</td>
<td>26.7</td>
<td>30.1</td>
</tr>
<tr>
<td>... functional status &gt; 83% at 12 months when baseline function was &lt; 67%</td>
<td>13.2</td>
<td>8.3</td>
</tr>
</tbody>
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Characteristics of patients treated with biologics (BIOL) differed significantly from those receiving conventional DMARDs with respect to important predictors of functional improvement e.g. DMARD failures, disease activity, and propensity scores. Adjusted for these baseline differences we found an adjusted OR of 2.18 [95% CI: 1.71-8.79] for the achievement of functional remission in BIOL patients compared to the control group.

The chance of achieving physical independence for patients severely disabled at baseline is nearly four times higher in patients receiving biologics [OR = 3.88 [95% CI: 1.71-8.79]].

Disclosures

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