Retention and clinical response to abatacept in patients with rheumatoid arthritis: an Italian perspective

Sirs.

Country differences are important considerations when assessing the impact of patient characteristics on clinical response to anti-rheumatic drugs (1). In Italy, the proportion of people aged ≥65 years is one of the highest in Europe (2) and is likely to be accompanied by an increased burden of rheumatoid arthritis (RA) (3). Abatacept is approved as a first-line biologic after disease-modifying anti-rheumatic drug failure in Italy (4). Lower abatacept retention rates have been reported in European countries with easier access to biologics (1). However, Italian patients are among the least likely to discontinue abatacept in the large, 2-year, non-interventional, international ACTION cohort study (NCT02109666) in which prescribing guidelines and reimbursement were uniform across participating countries (5).

To provide a local perspective on the impact of patient characteristics on retention rate and clinical response to abatacept, we analysed the 12-month data in the Italian cohort of ACTION (n=441). Patients ≥18 years old with moderate-to-severe RA were enrolled prospectively at initiation of intravenous abatacept or retrospectively within 3 months of the first abatacept dose according to local requirements (6). Baseline rheumatoid factor (RF)/anti-citrullinated protein antibody (ACPA) serostatus was available for 371/441 patients: 183/371 (49%) were double RF/ACPA-positive; 112/371 (30%) were single RF- or ACPA-positive; and 76/371 (20%) were double RF/ACPA-negative. Baseline body mass index (BMI) was reported in 435/441 patients: 224/435 (51%) were underweight / normal; 130/435 (30%) were overweight; and 81/435 (19%) were obese. Baseline seropositivity had a significant impact on the crude abatacept retention and clinical response, also consistent with the overall ACTION study and an international registry analysis (7). Baseline BMI did not impact abatacept retention or clinical response with RF/ACPA positivity and are consistent with 2-year results for the overall international population (5), and for a European RA registry analysis (7). Baseline BMI did not impact abatacept retention or clinical response, also consistent with the overall ACTION study and an international registry analysis (5, 8). These findings highlight the relevance of abatacept real-world data in different patient subpopulations to the management of RA in Italy.

**Fig. 1.** Crude retention rate of abatacept by a) RF/ACPA serostatus and b) body mass index, in the Italian cohort of ACTION. ACPA: anti-citrullinated protein antibody; CI: confidence interval; pt: patient; RF: rheumatoid factor.

<table>
<thead>
<tr>
<th>Subgroup</th>
<th>Retention Rate (95% CI)</th>
<th>Discontinuation Rate (95% CI)</th>
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<tbody>
<tr>
<td>RF/ACPA-positive</td>
<td>83.7% (76.5, 90.8)</td>
<td>6.3% (3.2, 10.1)</td>
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<tr>
<td>RF-or ACPA-positive</td>
<td>73.1% (63.2, 82.9)</td>
<td>26.9% (20.3, 34.2)</td>
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<tr>
<td>RF-or ACPA-negative</td>
<td>73.3% (60.4, 86.3)</td>
<td>26.7% (19.3, 34.9)</td>
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</table>

**Fig. 1A.** Retention rate at 6 months (95% CI). (A) Retention rate of abatacept. (B) Retention rate of abatacept by BMI group. (C) Retention rate of abatacept by RF/ACPA status.

**Fig. 1B.** Retention rate at 12 months (95% CI). (A) Retention rate of abatacept. (B) Retention rate of abatacept by BMI group. (C) Retention rate of abatacept by RF/ACPA status.
Letters to the Editors

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References