Impact of Antirheumatic Treatments on the Individual Components of the ACR Composite Score in Patients with Rheumatoid Arthritis.

Movahedi M, Besette L, Choquette D, Coupal L, Bombardier C and other OBRI and RHUMADATA investigators.

Background

Standard criteria for measuring treatment efficacy in patients with RA include ACR response rates, which require meeting a threshold of ≥ 20/50/70% improvement in several physician- and patient-reported measures, including tender and swollen joint counts (TJC and SJC, respectively; primary criteria) and at least 3 of 5 secondary criteria (Physician (Ph) global assessment (GA), Patient (Pt) GA, Pain, HAQ-DI, and CRP).

Objectives

The purpose of the analysis was to evaluate the impact of csDMARDs, TNF inhibitors (TNFi), and tofacitinib (TOFA) on each ACR score component in real-life practice.

Methods

Clinical data of RA patients with a CDAI $>$ 10 at the time they started a csDMARDs (all biologic naïve), TNFi or TOFA were pooled from two registries: Ontario Best Practices Research Initiative (OBRI) and RHUMADATA. Endpoints summarized descriptively included proportions of pts achieving ACR20/50/70 responses, ≥ 20/50/70% improvements and mean percent improvement in individual ACR components (TJC, SJC, PhGA, PtGA, Pain, HAQ-DI, and CRP) at month 6 (M6).

Results

A total of 669 pts were included (csDMARD, n=157, TNFi, n=252; TOFA, n=260). At baseline, patients starting TOFA had longer disease duration, failed more bDMARDs and used more corticosteroids than csDMARDs and TNFi. The CDAI was similar between the 3 groups. ACR50 response rates were numerically lower for the TOFA group (Table). The ACR70 response was similar in the 3 groups. An overall higher proportion of patients in all three-medication groups achieved ≥20/50/70% improvement in primary ACR components vs secondary components. Among secondary components, ≥20/50/70% improvement rates were numerically highest for PhGA and lowest for HAQ-DI and pain. The improvement in the SJC and TJC were numerically similar between all groups (table). Among ACR20/50/70 responders for all medications, mean percent improvement was more than 80% for primary components, and ranged from 30% to 80% for secondary components.

Conclusions

In this real-world practice analysis, physician-reported measures (TJC, SJC, and PhGA) contribute slightly more to overall ACR20/50/70 responses, compared with Pt-reported outcomes (PROs; PtGA, Pain and HAQ-DI). In the ACR20 response group, a lower-level outcome, the improvement of the SJC and TJC,

exceeded 80%. Pain was the most important factor in achieving an ACR50 for pts treated with TOFA, possibly reflecting the different effects of JAKi on pain.