

Efficacy was assessed using standard outcome measures for RA (including RAPID3) at week 24. B cell depletion (CD19 levels in peripheral blood by flow cytometry) was studied at baseline, week 1 and week 12.

**Results:** Total number of patients in Arm 1=14 and in Arm 2=13.

In Arm 1: 28% (4/14) achieved EULAR remission while 78% (11/14) had EULAR good response. In Arm 2: 70% (9/13) had EULAR good response. All patients achieved complete B-cell depletion (defined as <0.01%) at week 1 after just single dose of 100 mg RTX remained so at 6 weeks only to start rising again at week 12. There were no adverse events noted. Steroid doses were reduced in most patients at follow up visits with delta change in steroid dose- 2.2 mg/day. Results comparable with other studies using both low dose and conventional dose of RTX. Limitations of the study includes small sample size and short follow-up.

**Conclusions:** Very Low dose RTX is efficacious in conventional DMARD refractory RA patients. Single dose (100 mg) is as good as 400 mg upto week 24. Complete B cell depletion can be achieved even with 100 mg RTX as early as week 1.

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**Disclosure of Interest:** None declared

**DOI:** 10.1136/annrheumdis-2018-eular.6390

#### AB0459 REMISSION RATE OF TOCILIZUMAB IN CONTROLLED TRIALS AND OBSERVATIONAL STUDIES: SYSTEMATIC REVIEW OF RHEUMATOID ARTHRITIS

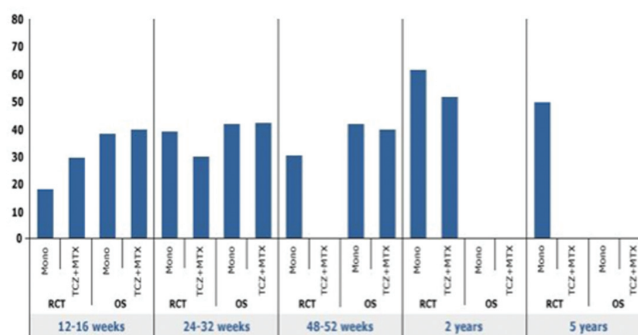
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**Background:** In concept, the state of remission constitutes a clinical condition in which no active disease is present. Target of rheumatoid arthritis (RA) is achieve to remission. Tocilizumab (TOC) is a humanised monoclonal antibody that binds to the interleukin-6 receptor

**Objectives:** The aim of this study was to assess the remission rate of TOC for the treatment of RA patients in randomised controlled trials (RCTs) and longitudinal observational studies (LOS).

**Methods:** In January 2017, a systematic Review (SR) was performed in PUBMED MEDLINE. Publications were identified using the MeSH terms: ("rheumatoid arthritis and Tocilizumab") with a limitation to "humans", "all adults: 19 +years", "English" and "clinical trials". All available studies describing the retention rate of TOC were recruited to SR. Retention rate of TOC were calculated according to route (SC or IV), dosage (4 mg/kg vs 8 mg/kg), monotherapy or combination with methotrexate. Of the 662 publications identified by the literature search, 42 were recruited in the analysis. Retention rates of TOC at 12–16 weeks, 24–32 weeks, 48–52 weeks, 2. Years, 3. Years and 5. years were analysed. Open label extension period of RCTs included to LOS. The causes of withdraw of TOC were recorded as inefficacy, adverse event, and others.

**Results:** Of the 34 studies, 13 (38%) were RCTs and 21 (62%) were LOSs. Totally 12 043 patients (9834 (81%) female) were pooled to analysis that 6190 patients (51%) were from RCTs. The mean age was 53 years and mean disease duration was 9 years. Seropositivity was 73.6% for rheumatoid factor and 72.2% for ACPA. Overall, 5493 (54.6%) of patients were biologic-naïve. TOC was used as monotherapy (2469/6077, 35.4%), or concomitant with methotrexate (8037/11429, 70.3%). Available baseline DAS-28 score, CDAI, SDAI, and HAQ-DI score were 6.2, 32.1, 33.3, and 1.49 respectively. Remission rate of TOC according to study type were shown in table 1.



Abstract AB0459 – Figure 1

**Conclusions:** These systematic literature results show that treatment with TOC has a high likelihood of inducing a clinically important benefit in terms of different remission criteria. Remission achieved both RCTs and real life results. Moreover, remission rate of TOC in LOSs was comparable with other biologic DMARDs, as well.

**Disclosure of Interest:** None declared

**DOI:** 10.1136/annrheumdis-2018-eular.3874

#### AB0460 LONG-TERM DRUG SURVIVAL OF ETANERCEPT VS OTHER TNF INHIBITOR THERAPIES IN PATIENTS WITH RHEUMATOID ARTHRITIS

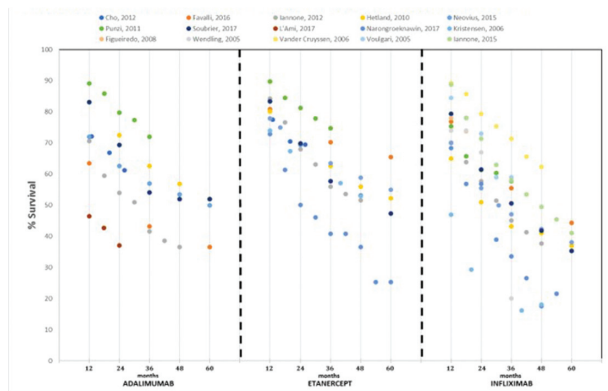
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**Background:** TNF $\alpha$  inhibitors have profoundly altered outcomes for patients with rheumatoid arthritis (RA) since they were introduced >15 years ago, by reducing disease activity and radiographic progression and improving quality of life. As a chronic disease, RA often requires life-long treatment, understanding drug survival in real-world settings can be beneficial in optimising disease management.

**Objectives:** To compare the long-term drug survival of adalimumab (ADA), certolizumab pegol (CZP), etanercept (ETN), golimumab (GLM), and infliximab (IFX) in patients with RA based on systematic literature review (SLR).

**Methods:** In this SLR, the goal was to identify full-text articles containing registry data or systematic reviews on TNF $\alpha$  inhibitors, following Cochrane dual-reviewer methodology. Searches were conducted in November 2017 with no date restriction, using Embase<sup>®</sup>, MEDLINE<sup>®</sup>, the Cochrane Central Trials Register and Database of Systematic Reviews, other Cochrane Library databases, and PubMed. Outcomes extracted included drug survival data that were analysed and reported using Kaplan-Meier or Cox regression methods.

**Results:** Of 3688 non-duplicated publications initially identified, 3299 were excluded based on titles or abstracts and 344 based on full-text screening, leaving 26 publications published between 2005 and 2017 included in the analysis. The number of studies (range of sample size) for each drug were ADA: 15 (25–2349), ETN: 17 (20–3892), IFX: 21 (26–2898), GLM: 4 (2–88) and CZP: 1 (N/A). Among the analysed studies, the mean disease duration in years (range) was ADA: 10.7 (8.2–15.1); ETN: 15.9 (5.0–18.5); IFX: 14.2 (8.5–19.3); CZP: 10.3 (N/A); GLM: 8.9 (8.1–11.5) and mean baseline DAS28 (range) was ADA: 5.0 (4.2–5.9), ETN: 5.2 (4.3–6.3), IFX: 5.3 (4.1–6.4); CZP: 4.7 (N/A) and GLM: 4.7 (4.1–5.1). Trends for survival rates of first-line ETN were slightly higher than ADA at time points  $\geq$ 36 months; ADA and ETN had higher survival rates than IFX at >48 months (figure 1).



**Abstract AB0460 – Figure 1.** Survival of First-Line Anti-TNF Therapies in Patients with Rheumatoid Arthritis

**Conclusions:** Long-term survival rates for ADA, ETN, and IFX were similar and relatively high for treatment periods up to 36 months. After 36 months, there was a noticeable decline in drug survival for all three TNF $\alpha$  inhibitors. Heterogeneity in study size and design may contribute to the range of survival data for each agent.

**Disclosure of Interest:** P. Emery Consultant for: Pfizer, MSD, Abbvie, BMS, UCB, Roche, Novartis, Samsung, Sandoz and Lilly, B. Vlahos Shareholder of: Pfizer, Employee of: Pfizer, P. Szczypa Shareholder of: Pfizer, Employee of: Pfizer, M. Thakur Shareholder of: Pfizer, Employee of: Pfizer, H. Jones Shareholder of: Pfizer, Employee of: Pfizer, J. Woolcott Shareholder of: Pfizer, Employee of: Pfizer, P. Santos Estrella: None declared, A. Gibofsky Shareholder of: AbbVie, Angen, Celgene, Pfizer, GSK, J and J, Regeneron, Consultant for: AbbVie, Celgene, MSD, Pfizer, Iroko, Horizon, Samumed, Relburn, Sandoz, Speakers bureau: Amgen, AbbVie, Pfizer, Celgene, Iroko, Horizon, MSD, Novartis, C. Rolland Employee of: Envision Pharma Group, G. Citera Consultant for: Pfizer, AbbVie, Bristol Myers Squibb, Novartis, Roche, L. Marshall Shareholder of: Pfizer, Employee of: Pfizer

DOI: 10.1136/annrheumdis-2018-eular.2504

AB0461

**EXPERIENCE WITH SUBCUTANEOUS ABATACEPT IN ROUTINE CLINICAL PRACTICE: 6-MONTH INTERIM ANALYSIS OF A 2-YEAR, PROSPECTIVE, NON-INTERVENTIONAL, MULTICENTRE STUDY IN PATIENTS WITH RA**

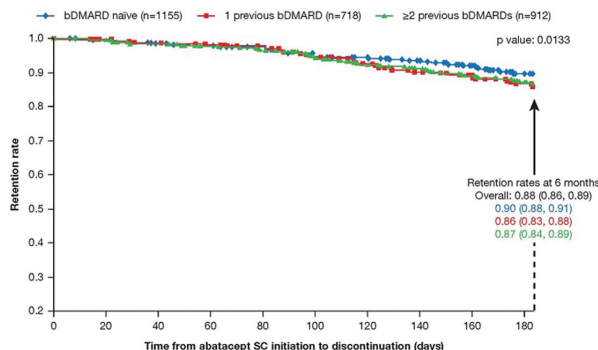
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**Background:** ASCORE (Abatacept SubCutaneOus in Routine clinical practicE; NCT02090556) is an ongoing, prospective, non-interventional, multicentre study of patients (pts) with RA receiving SC abatacept (ABA). In a similar real-world setting, IV ABA retention was >88% at 6 months (M).<sup>1</sup>

**Objectives:** To present baseline (BL) pt characteristics and 6M interim retention rates and clinical outcomes for SC ABA by biologic (b)DMARD treatment line.

**Methods:** Pts ( $\geq 18$  years) with active, moderate-to-severe RA, naïve to ABA and who initiated SC ABA 125 mg weekly were enrolled across 10 countries (March 2013–January 2017) in 2 cohorts: biologic-naïve pts and pts who had failed  $\geq 1$  prior bDMARD. In some countries, an IV loading dose was administered according to local practice. Pt demographics and disease characteristics at SC ABA initiation were recorded. The retention rate (95% CI) of SC ABA over 6M was estimated by Kaplan–Meier analysis. Good/moderate EULAR response rates based on DAS28 (ESR, otherwise CRP), low disease activity (LDA) or remission according to DAS28 (ESR), CDAI, SDAI and Boolean criteria were assessed at 6M.

**Results:** Of 2943 pts enrolled, 2785 (94.6%) were evaluable: 1155 (41.5%) biologic naïve; 718 (25.8%) had failed 1; and 912 (32.7%) had failed  $\geq 2$  prior biologics. At BL, there was a higher proportion of females and pts with longer disease duration among those who had failed  $\geq 2$  vs 1 or no prior bDMARDs; disease activity was similar across treatment lines; CRP was higher in biologic-naïve vs -failure pts; 402 (48.4%) biologic-naïve pts had erosive disease vs 261 (53.7%) or 390 (63.8%) who had received 1 or  $\geq 2$  prior bDMARDs, respectively. Probability of overall SC ABA retention at 6M was 0.88 (95% CI 0.86, 0.89); retention was higher in pts receiving ABA as a first or second vs later bDMARD (figure 1). At 6M, 335 pts had discontinued ABA, 172 (51.3%) of whom due to inefficacy and 140 (41.8%) due to safety. At 6M, among pts continuing ABA, good/moderate EULAR response rates were 83.5%, 75.1% and 72.0% for biologic-naïve pts and pts with 1 and  $\geq 2$  prior bDMARD failures, respectively. DAS28 (ESR), CDAI or SDAI LDA/remission, or Boolean remission rates were higher with earlier vs later treatment lines. The safety profile was consistent with IV ABA studies.<sup>1,2</sup>



**Abstract AB0461 – Figure 1.** Abatacept Retention (Time to Discontinuation of SC Abatacept) Over 6 Months by Treatment Line

**Conclusions:** In this first observation of SC abatacept in a real-world setting, overall retention of SC abatacept at 6M was high and similar to that observed with IV abatacept.<sup>1</sup> Better retention and response rates were achieved with abatacept as an earlier bDMARD treatment line. Good/moderate EULAR response rates at 6M were consistently >70%, irrespective of treatment line and higher BL radiographic erosion in biologic-failure pts.

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**Disclosure of Interest:** R. Alten Grant/research support from: Bristol-Myers Squibb, Speakers bureau: Bristol-Myers Squibb, X. Mariette Grant/research support from: Biogen, Pfizer, UCB, Speakers bureau: Bristol-Myers Squibb, LFB, GSK, Pfizer, UCB, M. Buch Grant/research support from: AbbVie, AstraZeneca, Eli Lilly, Pfizer, Roche, Sandoz, UCB, Consultant for: AbbVie, AstraZeneca, Eli Lilly, Pfizer, Roche, Sandoz, UCB, R. Caporali Speakers bureau: Bristol-Myers Squibb, AbbVie, Celgene, Eli Lilly, MSD, Pfizer, Roche, UCB, R.-M. Flipo Consultant for: Bristol-Myers Squibb, A. Forster Consultant for: AbbVie, Bristol-Myers Squibb, Pfizer, Celgene, Roche, Novartis, UCB Pharma, Speakers bureau: AbbVie, Bristol-Myers Squibb, Pfizer, Celgene, Roche, Novartis, UCB Pharma, H. Griffiths Grant/research support from: AbbVie, Janssen, and Sanofi, Consultant for: Bristol-Myers Squibb and Janssen, Paid instructor for: Novartis, M. Nurmohamed Grant/research support from: Pfizer, AbbVie, Roche, Bristol-Myers Squibb, MSD, Mundipharma, UCB, Janssen, Menarini, Eli Lilly, Sanofi, Celgene, Consultant for: Pfizer, AbbVie, Roche, Bristol-Myers Squibb, MSD, Mundipharma, UCB, Janssen, Menarini, Eli Lilly, Sanofi, Celgene, Speakers bureau: Pfizer, AbbVie, Roche, Bristol-Myers Squibb, MSD, Mundipharma, UCB, Janssen, Menarini, Eli Lilly, Sanofi, Celgene, Y. Patel Grant/research support from: Bristol-Myers Squibb, Pfizer, AbbVie, Speakers bureau: Bristol-Myers Squibb, Pfizer, AbbVie, P. Peichl Consultant for: Bristol-Myers Squibb, Eli Lilly, R. Sanmarti Grant/research support from: Bristol-Myers Squibb, MSD, Mundipharma, UCB, Janssen, Menarini, Eli Lilly, Sanofi, Celgene, J. Heitzman Employee of: Bristol-Myers Squibb, C. Rauch Employee of: Bristol-Myers Squibb, S. Connolly Employee of: Bristol-Myers Squibb

DOI: 10.1136/annrheumdis-2018-eular.1992