OP0148 IMPACT OF A CARDIOVASCULAR EVENT ON DMARD TREATMENT AMONG PATIENTS WITH RHEUMATOID ARTHRITIS, PSORIATIC ARTHRITIS, OR PSORIASIS

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Background: Chronic inflammatory diseases such as rheumatoid arthritis (RA), psoriatic arthritis (PsA), and psoriasis (PsO) increase the risk of cardiovascular (CV) disease. However, a gap in knowledge exists regarding detailed information on changes in immunosuppressive (DMARD) treatments after a CV event.
Objectives: We describe treatment patterns among patients with RA, PsA, or PsO who were being treated with DMARDs prior to a CV event.
Methods: Patients with RA, PsA, or PsO, who experienced a CV event (acute myocardial infarction, stroke, or cardiac revascularization) between 1/1/2006 and 6/30/2015 were identified in an administrative claims database. Index date was defined as the hospital discharge date for the first CV event during the study period. Patients were required to: be continuously enrolled for 12 months prior to index date; have ≥1 TNFi claim, or a conventional synthetic (cs)DMARD claim, or another biologic DMARD claim within 6 months prior to the index date; and have ≥30 days of follow-up after index date. Treatment patterns were assessed after index date and patients were classified as remaining on ("persistent"), switching, or discontinuing pre-index DMARD medication.
Results: We identified 9,529 patients with RA, PsA, or PsO; prior to the index date, 3,274 (34.4%) patients were on TNFi, 5,177 (54.3%) were on only csDMARDs as monotherapy or combination, and 1,078 (11.3%) were on non-TNFi biologics. Patients on csDMARDs at index date were older (69.4 yrs) than those on TNFi (64.1 yrs) or other biologic DMARDs (66.0 yrs). Approximately 73% of patients were persistent on their pre-CV event treatment, with higher persistence among csDMARD alone (76.0%) and TNFi + csDMARD combo (76.7%) groups and lower in the non-TNFi biologic + csDMARD combo group (60.8%, Table 1). Across all treatment groups, 95% of persistent patients resumed treatment within 90 days after the index CV event. Combination therapy users switched their pre-CV event treatment more than monotherapy users, with non-TNFi biologic users more likely to discontinue all therapy after index CV event. Patients that discontinued all therapy after an index CV event tended to be slightly older females (68.7 yrs vs 67.1 yrs), with a history of PsO (24.4% vs 16.1%), and stroke as index event (49.3% vs 41.3%) compared to those that continued therapy.
Conclusions: In a large US database reflective of typical clinical practice, nearly one-quarter of patients with RA, PsA, or PsO discontinued or switched the pre-event DMARD treatment after a CV event. Further research is needed on whether these DMARD treatment patterns after initial CV event affect risk of repeat CV event.
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OP0149 MORTALITY IN NEW-ONSET RHEUMATOID ARTHRITIS - HAS MODERN RHEUMATOLOGY HAD AN IMPACT?

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Background: A wealth of studies have linked rheumatoid arthritis (RA) with an excess mortality compared to the general population. With increasingly effective anti-rheumatic treatment strategies there is, however, considerable uncertainty whether this mortality gap still exists and, if so, how soon after RA onset it occurs.
Objectives: To assess the mortality in RA compared to the general population with specific focus on when during the course of the disease the risk is increased and if it also applies to patients diagnosed in recent years.
Methods: We performed a population-based cohort study of 17,512 patients with new-onset RA (identified from the Swedish Rheumatology Quality Register) 1997 through 2015, and 78,847 individually matched general population comparator subjects. We followed all individuals using nationwide census registers with full coverage to identify all deaths through 2015. We calculated mortality rates with 95% confidence intervals (CI) and compared the mortality in RA to that in the general population using Cox proportional hazards models adjusted for age, sex, year of diagnosis, and residential area.
Results: During a mean follow-up from RA diagnosis of 7 years, 2,386 RA patients and 9,850 population comparator subjects died (crude incidence: 19 per 1000 in RA and 18 per 1000 in the general population), with only a marginal decline (in the RA and in the general population cohort) during the study period. The overall HR was 0.99 (0.95–1.04), but whereas there was no increase in mortality during the first five years after RA diagnosis; the HR ≥10 years after RA onset was 40% increased. The overall pattern of HRs was similar for patients diagnosed 1997–2001, 2002–2006, and 2007–2011 (table).
Conclusions: The five-year mortality in RA is not increased, neither for patients diagnosed in the past nor for those diagnosed during the most recent five years. By contrast, at least in the most recent inception cohort for which ten-year mortality currently can be calculated (those diagnosed up to 2006), RA is still associated with an increased risk of death.
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OP0150 PARADOXICAL EFFECT OF BIOLOGICAL DMARDS IN RHEUMATOID ARTHRITIS PATIENTS WITH OVERWEIGHT AND OBESITY: LESS OFTEN CLINICAL REMISSION, BUT ALSO LESS RADIOLOGICAL DAMAGE

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Background: The relationship between treatment with biological disease-modifying antirheumatic drugs (DMARDs), including TNF-blocking agents, and disease activity in overweight and obese rheumatoid arthritis (RA) patients has not been clarified yet.
Objectives: The aim of this review is to assess the effect of overweight/obesity on the therapeutic efficacy of these drugs. Secondly, we aimed to assess the influence of overweight/obesity on the occurrence of joint destruction.
Methods: A systematic review of all articles published on these subjects using PubMed and EMBASE was executed. For the first research question, studies were eligible when focused on the clinical efficacy of biological DMARDs only in overweight/obese RA patients versus patients with normal body weight. For the second research question studies were eligible when questioning the relation between overweight and joint destruction in patients with RA. Overweight and obesity were defined according to the following body mass index (BMI) categories; BMI <20 kg/m^2 for underweight, BMI 20–25 kg/m^2 for normal weight, BMI 25–30 kg/m^2 and BMI >30 kg/m^2 for overweight.
Results: A total of 6782 articles were found, of which 12 were eligible for this review. A total of 3647 RA patients were treated with adalimumab, etanercept, infliximab, golimumab, or certolizumab pegol, or TNF blockers, rituximab, or tocilizumab.
Ten studies used disease activity as outcome. In general, these studies showed that higher BMI is associated with poor response, based on either outcome or percentages on remission or improvement defined according to EULAR guidelines. In addition, four studies showed that higher BMI is also associated with higher Health Assessment Questionnaire (HAQ)-scores.
Two articles (of which one article described the results of studies in two different RA cohorts) focused on the association between BMI and joint destruction. These articles showed that higher BMI values were associated with lower odds for having joint destruction. One study also showed that having a BMI <20 kg/m^2 was associated with a higher odds ratio (OR =4.12) for joint destruction.
Conclusions: Higher BMI levels in RA patients treated with biological DMARDs

Abstract OP0148 – Table 1. DMARD treatment patterns for RA, PsA, or PsO patients following an initial CV event (N=9,529)

Treatment prior to CV event	N	DMARD treatment persisted, n (%)	DMARD treatment switched, n (%)	All DMARDs treatment discontinued, n (%)
Entire study sample	9,529	6,985 (73.3%)	1,498 (15.7%)	1,046 (11.0%)
TNFi monotherapy	1,760	1,323 (75.2%)	232 (13.2%)	205 (11.6%)
TNFi + csDMARD combination therapy	1,514	1,160 (76.7%)	299 (19.7%)	55 (3.6%)
csDMARD monotherapy	4,369	3,320 (76.0%)	528 (12.1%)	521 (11.9%)
≥2 csDMARDs combination therapy	808	518 (64.1%)	248 (30.7%)	42 (5.2%)
Non-TNFi biologic monotherapy	718	445 (62.0%)	63 (8.8%)	210 (29.2%)
Non-TNFi biologic + csDMARD combination therapy	360	219 (60.8%)	128 (35.6%)	13 (3.6%)

Abstract OP0149 – Table 1. Hazard ratio (HR) and 95% confidence intervals (CI) adjusted for sex, residential area, year of diagnosis, and age. Overall and stratified by calendar period of RA diagnosis and time since RA diagnosis

		RA duration categories HR (95% CI)			
Calendar period of RA diagnosis	Total follow-up	<1 year	1-<5 years	5–10 years	>10 years
Total study period	1.01 (0.96–1.06)	0.57 (0.48–0.67)	0.90 (0.83–0.97)	1.11 (1.02–1.20)	1.43 (1.28–1.59)
1997–2001	1.09 (1.01–1.18)	0.58 (0.39–0.87)	0.81 (0.68–0.96)	1.06 (0.92–1.21)	1.41 (1.25–1.60)
2002–2006	1.02 (0.94–1.10)	0.37 (0.24–0.57)	0.88 (0.76–1.01)	1.15 (1.03–1.30)	1.48 (1.20–1.82)
2007–2011	0.95 (0.86–1.05)	0.65 (0.49–0.87)	0.98 (0.86–1.11)	1.09 (0.90–1.31)	–
2012–2015	0.77 (0.63–0.95)	0.63 (0.46–0.88)	0.87 (0.67–1.12)	–	–