1.36)) than females (1.09 (1.03–1.17)). Among those with psoriasis, 4.1% were also diagnosed with PsA. An increased risk of 45% was found in those exposed to both psoriasis and PsA compared to the unexposed group (1.45 (1.09–1.94)).

Conclusions: This study reports for the first time, an increase in fracture risk in patients with psoriasis. A higher risk was found in males than females and the risk was further increased if the patient also had PsA. These findings suggest that fracture risk assessment needs to be considered for individuals with psoriasis and PsA.

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SAT0673 RISK AGE AND RELATIVE RISK OF CVD IN INFLAMMATORY JOINT DISEASES

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Background: Individuals with inflammatory joint diseases (IJD) [rheumatoid arthritis (RA), axial spondyloarthritis (axSpA) and psoriatic arthritis (PsA)] have increased risk of cardiovascular disease (CVD). In the European guidelines for CVD prevention, calculation of relative risk and risk age is advised in patients with low absolute risk of fatal CVD events the next 10 years estimated by the systematic coronary risk evaluation [SCORE] algorithm; the rationale being that low absolute risk may conceal high relative risk and risk ages far beyond chronological age. Thus, more patients needing intensive CVD prevention may be identified. Relative risk is a ratio comparing absolute CVD risk in a specific patient to the risk given optimal CVD risk factor levels (CVDRFs). Risk age denotes the age with similar CVD risk and optimal CVDRFs. To this date, no studies have evaluated relative risk and risk age across IJD entities, neither has the agreement between different risk age models been investigated.

Objectives: 1) Estimate relative risk and risk age across IJD entities. 2) Investigate agreement between different risk age models.

Methods: RA/axSpA/PsA patients aged 40–65 years with low/moderate 10-year risk of fatal CVD were included from a nationwide quality assurance project implementing CVD risk assessment. Relative risk and cardiovascular risk age was calculated in accordance with risk charts published by the European Society of Cardiology (2016) and Cooney et al (2012), respectively. Vascular age was calculated by matching SCORE to estimated risk ages in accordance with Cuende et al (2010). Four different vascular age estimations were calculated, depending on whether the EULAR 1.5 multiplication factor in RA was applied (mSCORE) and if SCORE version with HDL-c (SCORE-HDL-c) was used: SCORE, SCORE-HDL-c, mSCORE and mSCORE-HDL-c. Risk years beyond chronologic age, were calculated. Linear regression models were used to investigate agreement between risk age estimations.

Results: Relative risk was increased in 53% of all patients and 20% had three

times the risk or higher compared to individuals with optimal CVDRF levels. In total, 42% and 20% had a risk age ≥ 5 years higher than their chronologic age, according to the cardiovascular risk age model and the vascular age model derived from SCORE, respectively. There were minor differences between RA, axSpA and PsA patients in terms of relative risk and risk age. Agreement between cardiovascular risk age and various vascular age models varied (Figure). Discrepancies ≥ 5 years in estimated risk age were observed in 14–43% of estimations. The largest observed difference in calculated risk age was 24 years. Similarly, linear regression models yielded a R^2 of 0.81–0.96. Across all models, median difference between risk age and age increased with advancing relative risk. Moreover, several patients had high relative risk despite a risk age close to their chronologic age.

Conclusions: Relative risk and risk age may identify several patients at high need of intensive CVD preventive efforts despite low estimated absolute risk. However, there are considerable discrepancies between risk age models.

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SAT0674 EARLY TREATMENT RESPONSE TO CONVENTIONAL DMARD THERAPY IN RHEUMATOID ARTHRITIS IS A BETTER PREDICTOR OF LOW DISEASE ACTIVITY OR TREATMENT ESCALATION AT 12 AND 24 MONTHS THAN AUTOANTIBODIES OR EROSIONS

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Background: The EULAR guidelines recommend using the presence of seropositivity or erosions to support treatment decisions. The prognostic value of these factors regarding the primary treatment target in rheumatoid arthritis, remission or low disease activity (LDA), is unclear.

Objectives: To investigate biomarkers, csDMARD treatments and response to treatment regarding their usefulness to predict LDA or the need to escalate treatment within 24 month.

Methods: The control group in RABBIT (Rheumatoid Arthritis: Observation of biologic therapy) comprises N=2,228 patients who were enrolled at treatment start with conventional-synthetic (cs)DMARDs after failure of at least one csDMARD therapy, mostly methotrexate (MTX) monotherapy. We excluded patients with a DAS28-ESR < 3.2 at enrollment and those with ≥ 2 csDMARD failures (n=618). 102 patients were excluded due to enrollment less than 12 month prior to closure of the data base (April 30th, 2016). The DAS28-ESR, physical function, age, seropositivity (RF+/ACPA+), comorbidities (≥ 3 vs. < 3) and the presence of erosions at baseline were evaluated as prognostic factors. Concomitant treatment with glucocorticoids (mg/d) and csDMARDs, response to treatment (3–6 month after enrollment) were additionally examined. We applied a multinomial generalized-estimating-equation (GEE) model to investigate: (1) achievement of LDA at month 12/24 or (2) treatment escalation (biologic treatment) in year one and two after enrollment.

Results: More than one third of patients (34.2%) were treated with a combination of MTX and leflunomide (LEF), 23.6% with LEF mono, 20.8% with MTX + hydroxychloroquine (HCQ) or sulfasalazine (SSZ), 16.5% with MTX mono, and 4.9% with SSZ mono. We found no major differences across treatment regimens except for patients treated with MTX+HCQ who had a lower DAS28, better physical function and shorter disease duration at treatment start. Significant predictors for achieving LDA were low DAS28 at baseline, improvement in DAS28 within 3–6 month, better physical function and less than 3 comorbidities (table). Escalation to bDMARD therapy was significantly more frequent in younger patients, those with no improvement in DAS28 or concomitant glucocorticoid treatment, and in patients with less than 3 comorbidities. There were no differences between treatments regarding achievement of LDA. However, switching to bDMARDs was

Table: Results of the multinomial GEE-model in odds-ratios (OR) and 95% confidence interval (CI).

	Achievement of LDA at month 12 or 24	Escalation of Therapy within 12 or 24 month
	OR [95% CI]	OR [95% CI]
Age (per 10 years)	0.97 [0.87; 1.07]	0.77 [0.70; 0.86]
DAS28 improvement ≤ 6 month (per unit)	1.68 [1.51; 1.87]	0.86 [0.76; 0.97]
Erosions (Yes vs. No)	0.95 [0.75; 1.20]	1.16 [0.86; 1.55]
Seropositivity (Yes vs. No)	0.83 [0.67; 1.02]	0.89 [0.68; 1.17]
DAS at Baseline	0.67 [0.59; 0.76]	1.14 [1.00; 1.30]
Physical function	1.13 [1.07; 1.19]	1.04 [0.97; 1.11]
≥ 3 Comorbidities (vs. < 3 comorbidities)	0.73 [0.55; 0.97]	0.69 [0.49; 0.98]
Glucocorticoids (per 5mg/d)	0.96 [0.79; 1.16]	1.45 [1.23; 1.71]
MTX monotherapy (Reference)		
LEF	0.81 [0.58; 1.13]	1.55 [1.01; 2.39]
MTX + HCQ SSZ	1.20 [0.86; 1.66]	1.19 [0.74; 1.90]
MTX + LEF	0.81 [0.59; 1.11]	1.85 [1.24; 2.77]
SSZ	0.89 [0.50; 1.59]	1.47 [0.74; 2.89]
Year 2 vs. Year 1	1.20 [0.92; 1.56]	1.47 [1.11; 1.96]