patients and HCs. In this study we demonstrated for the first time that plasma concentration of miR-22 may be considered as a potential molecular marker of RA exacerbation.

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Table 1. Spearman's rank correlation between micro-RNA-22 and micro-RNA-26 and the clinical variables.

miRs \ clinical variable	Age	Disease duration	ESR	CRP	SJC	TJC	DAS-28	ACPA	RF
miR-22	0.09	-0.27	0.41	0.49	0.26	0.21	0.33	0.24	0.16
miR-26a	0.2	0.14	0.49	0.41	0.43	0.74	0.63	0.26	0.16

The significant correlations were bolded and indicated by red. Abbreviations: ACPA, anti-citrullinated protein antibodies; CRP, C-reactive protein; SJC, swollen joint count; TJC, tender joint count; DAS-28, disease activity score 28; ESR, erythrocyte sedimentation rate; RF, rheumatoid factor.

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PsA treatment: what is new?

POS0192

PROGNOSTIC FACTORS ASSOCIATED WITH ACHIEVING MINIMAL DISEASE ACTIVITY IN EARLY PSORIATIC ARTHRITIS PATIENTS

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Background: The goal of treat to target strategy (T2T) in psoriatic arthritis (PsA) is attaining remission or minimal disease activity (MDA). The benefits of T2T have been seen recently [1]. But prognostic factors for MDA achievement in PsA patients (pts) at an early-stage hasn't been studied yet.

Objectives: to determine the prognostic factors associated with MDA achievement within 12 months (mos.) of treatment according to T2T strategy in early PsA pts.

Methods: 77 pts (M/F=36/41) with early active PsA fulfilling the CASPAR criteria were included. Mean age 36.9±10.45 years (yrs.), PsA duration 11.1±10.0 mos., Psoriasis (PsO) duration 82.8±92.1 mos. At baseline (BL) and at 12 mos. of therapy PsA activity by tender joint count (TJC)/68, swelling joint count (SJC)/66, Pain (VAS), Patient global assessment disease activity (PiGA, VAS), CRP mg/l, dactylitis, enthesitis by LEI and plantar fascia, BSA (%), HAQ and fatigue by FACIT (Functional Assessment of Chronic Illness Therapy) Fatigue Scale (Version 4) were evaluated. A score FACIT <30 indicates severe fatigue and > 30 – less fatigue. All pts was given therapy with Methotrexate (MTX) s/c. After 3-9 mos. of ineffectiveness of MTX treatment 29 pts were given biologic DMARDs. By 12 mos. of therapy, the proportion of pts who had reached MDA (5/7) were calculated. Pts were split into 2 groups: MDA + (n=45) and MDA - (n=32). The one-factor model of logistic regression was used to identify a group of features that are associated with MDA achievement. M±SD, Me [Q25; Q75], Min-Max, %, t-test, Pierson-γ2, Manna-Whitney tests, ORs with 95% CI were performed. All p<0.05, were considered to indicate statistical significance.

Results: Comparative analysis in both groups and one-factor model of logistic regression showed the following features at BL were associated with MDA achievement: TJC/SJC < 3 (p<0.001), PGA ≤ 20mm (p<0.001), Pain (VAS) ≤ 15mm (p<0.001), CRP ≤ 5mg/l (p< 0.03), HAQ ≤ 0.5 (p< 0.001), FACIT > 30 (p< 0.021), absent of entesitis (p< 0.003), dactylitis (p< 0.029) and nail damage (p< 0.012). Early PsA pts with combination of these features at first visit have more chance to achieve MDA within 12 mos in comparison to PsA pts without them, OR=9.684 [CI 95% 4.6-20.4]. (Figure 1).

Conclusion: It is a combination of features at first visit to clinic – TJC, SJC < 3, PGA ≤ 20mm, pain ≤ 15mm, CRP ≤ 5mg/l, HAQ ≤ 0.5, FACIT > 30 points, absent of entesitis, dactylitis and nail PsO - that constitutes a clinical prognostic factors for MDA achievement within 12 mos of T2T strategy in early PsA pts.

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Figure 1. The prognostic factors associated with achievement MDA within 12 months in early PsA pts

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POS0193

DAS28-CRP GUIDED TREAT-TO-TARGET TAPERING OF TUMOR NECROSIS FACTOR INHIBITORS IN PSORIATIC ARTHRITIS: A RETROSPECTIVE COHORT STUDY.

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Background: Tumor Necrosis Factor inhibitors (TNFi) have proven to be safe and effective in the treatment of psoriatic arthritis (PsA) [1]. However, they carry disadvantages, such as adverse effects, patient burden, and costs, which could be reduced by treat-to-target (T2T) tapering. Although there is lack of high level evidence, guidelines suggest that T2T tapering and discontinuation might be considered, but no studies comparing this strategy to continuation in PsA were published [2].

Objectives: To assess the effect of T2T TNFi tapering on disease activity and TNFi dosage in PsA patients with low disease activity (LDA).

Methods: PsA patients using TNFi who visited the clinic between April 2012 and October 2018 were included if eligible for tapering, according to local protocol: ≥ 6 months of TNFi treatment and ≥ 6 months of at least LDA (DAS28-CRP < 2.4 (or 2.9 in patients with disease duration > 3 years) or by judgement of physician and patient). Patients with concomitant inflammatory disease preventing tapering were excluded. Three different time periods were defined: i) full-dose TNFi continuation; ii) TNFi tapering; iii) stable TNFi dosage after tapering. A mixed-model analysis was used to estimate mean DAS28-CRP during these three time periods. This model included: age, gender, disease duration, and the following time-varying components: current dose reduction status (three time periods mentioned above), time since eligibility for tapering and use of concomitant conventional synthetic Disease-Modifying Antirheumatic Drugs (csDMARDs), and a random intercept to account for inter-patient variability. Furthermore, a mean percentage of the Daily Defined Dose (%DDD) was calculated as secondary outcome.

Results: 152 patients were included, with a mean of 6.5 DAS28-CRP measurements, of whom 125 attempted dose reduction during follow-up. Median follow-up duration was 41 months (Inter Quartile Range (IQR) 24-59) for patients who never attempted dose reduction and 43 months (IQR 28-58) for those who did (table 1). The mixed model showed no significant difference in DAS28-CRP between the three time periods. Adjusted for gender, age, disease duration at baseline, time since follow-up and csDMARD use, the mean DAS28-CRP was 1.91 in the continuation period (95% Confidence Interval (CI) [1.76-2.05]) and 2.0 in both the TNFi tapering (95%CI [1.90-2.12], difference with continuation: 0.11, p=0.19) and stable TNFi dosage after tapering (95%CI 1.88-2.11], difference with continuation: 0.09, p=0.31) period. The mean percentage of the DDD for the three time periods was 107% for the continuation period; 62% in the TNFi tapering period and 79% in the stable TNFi dosage period.

Conclusion: T2T tapering of TNFi appears to have no negative effects on disease activity in PsA patients compared with full dose continuation, and reduces

drug exposure. DAS28-CRP might however not capture the full disease spectrum in PsA. Trials using PsA specific endpoints are needed to investigate tapering in a prospective and randomized manner.

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Table 1. Baseline characteristics of PsA patients

Characteristic	PsA (N=152)
Female, n (%)	60(39%)
Age in years at inclusion, mean (SD)	52(11)
Disease duration at inclusion, years, median	9(3-14)
(IQR)	
Rheumatoid factor negative, n (%)*	132 (87%)
Anti-CCP negative, n (%)**	136 (89%)
Erosions on radiographic imaging, n (%)	34(22%)
Number of previous bDMARD, n (%)	
-0	102(67%)
-1	39(26%)
-2 or 3	11(7%)
Number of previous csDMARD, n (%)	
-0	21(14%)
-1	50(33%)
-≥ 2	81(53%)
Current bDMARD use, n (%)	
-Adalimumab	49(32%)
-Etanercept	81(53%)
-Golimumab	3(2%)
-Infliximab	19(13%)
Current csDMARD use, n (%)	
-None	71(46%)
-Methotrexate	65(43%)
-Leflunomide	12(8%)
-Hydroxychloroquine	1(1%)
-Sulfasalazine	3 (2%)
Duration of current bDMARD use at inclusion, years, median (IQR)	3(1-5)
Duration of follow-up, months, median (IQR)	43(28-58)

*Available for 144 of 152 patients** Available for 145 of 152 patients

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POS0194 ENTHESITIS IN PATIENTS WITH PSORIATIC ARTHRITIS TREATED WITH SECUKINUMAB OR ADALIMUMAB: A POST HOC ANALYSIS OF EXCEED

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Background: Enthesitis is a key musculoskeletal manifestation of psoriatic arthritis (PsA). EULAR guidelines recommend biologics for patients with enthesitis and an inadequate response to or intolerance of nonsteroidal anti-inflammatory drugs, although no guidance on specific biologics is offered. In the EXCEED head-to-head, double-blind study (NCT02745080), secukinumab (SEC) and adalimumab (ADA) showed a similar efficacy in joints and in resolution of enthesitis at Week 52 for patients with PsA,¹ although a detailed analysis of enthesitis was not conducted.

Objectives: To explore detailed enthesitis treatment response, including temporal and additional enthesitis assessment data, in patients with PsA treated with SEC or ADA over 52 weeks.

Methods: In this post hoc analysis, patient data from EXCEED were grouped by presence or absence of baseline enthesitis based on the Leeds Enthesitis Index (LEI) and the Spondyloarthritis Research Consortium of Canada Enthesitis Index (SPARCC). Baseline characteristics of these groups were summarized. Median time to resolution of LEI/SPARCC enthesitis score in patients receiving SEC or ADA was assessed using Kaplan-Meier analysis. Efficacy was further assessed among the enthesitis subset by LEI and SPARCC change from baseline, resolution of enthesitis (LEI/SPARCC) at Weeks 24 and 52, and resolution of enthesitis at Week 52 by baseline enthesitis severity. Relapse of enthesitis after a first resolution was evaluated at Weeks 24 and 52. Missing data were imputed by nonresponder imputation.

Results: Baseline demographics were well balanced in the LEI/SPARCC enthesitis subsets, although a higher proportion of all patients with enthesitis were women vs those with no enthesitis (LEI: 54.6% vs 40.5%; SPARCC: 53.2% vs 36.2%). Patients with baseline enthesitis had higher disease activity vs patients without enthesitis (LEI/SPARCC enthesitis vs no LEI/SPARCC enthesitis: tender joint count of 78 joints [22.8/22.1 vs 15.8/13.8], Health Assessment Questionnaire-Disability Index [1.3/1.3 vs 1.1/1.1], and mean Psoriasis Area and Severity Index [6.4/6.1 vs 5.1/5.3]). Median time to resolution of LEI and SPARCC enthesitis was similar between patients receiving either SEC or ADA (Table 1). Both treatment groups experienced a similar mean change from baseline in LEI and SPARCC enthesitis counts and a similar resolution of LEI and SPARCC at Weeks 24 and 52 (Table 1). Achievement of enthesitis resolution was similar between treatment groups irrespective of disease severity (Figure 1). The proportion of patients who experienced relapse after achieving resolution was low across both treatments (Table 1).

Conclusion: In EXCEED, patients with baseline enthesitis presented with higher disease burden, consistent with the FUTURE trials.² SEC and ADA showed similar kinetics of response and efficacy on enthesitis, irrespective of baseline enthesitis severity.

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Table 1. Clinical Improvements Among Patients With Baseline LEI or SPARCC Enthesitis Treated with Secukinumab or Adalimumab (non-responder imputation)

Outcomes ^a	Secukinumab		Adalimumab	
	300 mg		40 mg	
	LEI (n=234)	SPARCC (n=301)	LEI (n=264)	SPARCC (n=331)
Baseline enthesitis count, mean (SD)	2.6 (1.5)	5.0 (3.8)	2.8 (1.6)	5.4 (4.0)
Median time to enthesitis resolution, days (95% CI)	85 (57–113)	113 (85–169)	85 (57–86)	88 (85–114)
Enthesitis count, mean improvement from baseline (SD)				
Week 24	-1.6 (1.6)	-3.3 (3.5)	-1.6 (1.6)	-3.1 (3.5)
Week 52	-1.8 (1.6)	-3.6 (3.2)	-2.1 (1.7)	-3.9 (3.8)
Resolution of enthesitis, n (%)				
Week 24	116 (49.6)	138 (45.8)	115 (43.6)	144 (43.5)
Week 52	142 (60.7)	160 (53.2)	146 (55.3)	170 (51.4)
Enthesitis relapse, n/M (%)				
Week 24	37/210 (17.6)	38/274 (13.9)	49/232 (21.1)	47/293 (16.0)
Week 52	40/208 (19.2)	56/267 (21.0)	32/208 (15.4)	41/263 (15.6)

LEI, Leeds Enthesitis Index; M, number of evaluable patients; SPARCC, Spondyloarthritis Research Consortium of Canada Enthesitis Index. ^a Based on respective enthesitis measures.

Figure. Proportion of Patients Achieving Resolution of Enthesitis at Week 52 by Baseline (A) LEI and (B) SPARCC Enthesitis Severity^a

LEI, Leeds Enthesitis Index; SPARCC, Spondyloarthritis Research Consortium of Canada Enthesitis Index.

^a Error bars represent 95% confidence intervals.

Figure 1.