Background: Spondylarthritis are diseases with a pathophysiological focus in entheses with a different extent of synovial component. In the event of therapeutic failure with DMARDs, the clinician may consider biological therapy with anti-TNF drugs or other targets such as IL23. Despite this, most patients receive first-line anti-TNFs. Given that IL19 and IL23 activity is recognized at the level of the entheses.

Objectives: To evaluate whether the presence of dactylitis/entesitis could be useful in the choice of a particular biological therapy.

Methods: A secondary analysis of a previous study was performed based on an electronic survey completed by patients with PsA and distributed among members of the patient association "Acción Psoriasis". Records from 191 respondents who had received at least one biological therapy were included. Patients were grouped according to the presence or absence of dactylitis or enthesitis. The rate of need to progress to the next therapeutic biologic line was compared.

Results: 61 patients reported dactylitis and 155 enthesitis. Distribution of treatments in patients with dactylitis: 33 patients received an anti-TNF-alpha, 11 Secukinumab and 12 Ustekinumab. 15 patients in the group receiving an anti-TNF-alpha had to substitute another treatment within 2 years (45.4%). 3 patients in each of the remaining groups had to substitute treatment within 2 years (27.2% and 25%, respectively). Compared to those receiving anti-TNF-alpha therapy, patients treated with Secukinumab or Ustekinumab had greater therapeutic persistence at 2 years ($P < 0.001$, in both cases). Distribution of treatments in patients with enthesitis (not including dactylitis): 115 received an anti-TNF-alpha, 25 received Secukinumab and 18 received Ustekinumab. 38 patients who received an anti-TNF-alpha had to substitute it within 2 years (24.5%). 4 patients who received Secukinumab and 3 who received Ustekinumab had to substitute their treatments in less than 2 years (16% and 16.6%, respectively). Compared to patients receiving anti-TNF-alpha therapy, patients treated with Secukinumab and Ustekinumab had a higher proportion of therapeutic persistence at 2 years ($P < 0.05$ for both cases).

Conclusion: The presence of dactylitis more than enthesitis, is associated with a higher proportion of therapeutic persistence in those patients treated with anti-IL17 or anti-IL23 therapies. Although there are multiple factors that condition the choice of biological therapies in patients with PsA, the presence of enthesitis and dactylitis (understood as polyenthesitis) should be considered among the most important ones.

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AB0780

TREATMENT PERSISTENCE OF BIOLOGICS AMONG PATIENTS WITH PSORIATIC ARTHRITIS (PSA)

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Background: Persistence in biologic therapy in psoriatic arthritis is critical to optimize symptom remission, functional capacity and health care costs.

Objectives: To estimate the persistence to biologic treatment prescribed to PsA patients in a real-life setting as well as factors associated with improved biologic drug survival in these patients.

Methods: Patients with PsA from a large health care provider database with at least two consecutive dispensed prescriptions of a biologic agent indicated for PsA from January 1st, 2002 until December 31st, 2018 were identified and followed until medication stop date or the end of observation period. Patients were considered non-persistent whenever a new prescription was dispensed and a permissible gap of 6 months was exceeded prior to starting on this biologic agent from the prescription date. Treatment changes were based on physician decisions and patient preferences. Demographic data including age, sex, BMI, ethnicity, smoking history and socioeconomic status as well as Charlson comorbidity index were retrieved. Data regarding use of steroids and non-biologic disease-modifying anti-rheumatic drugs were also extracted. Descriptive statistics, including means (standard deviations) for continuous variables and frequencies (%) for categorical variables, were used. Persistence estimates were derived using non-parametric survival analysis using Kaplan-Meier functions, with treatment discontinuations as failure events. Cox regression hazard ratio models were conducted to investigate factors associated with drug persistence.

Results: 2301 PsA patients with 2958 treatment periods were identified and included in the analyses. The mean age was 50.9±14 years of whom 54% were females, 70.4% of the study population had a BMI>25, and 36% were obese (BMI>30), 40% were current smokers, and 76% had a Charlson comorbidity index higher than 1. The most commonly prescribed drug was etanercept, followed by adalimumab, golimumab, secukinumab, ustekinumab and infliximab at 33%, 29%, 12%, 10%, 8% and 8%, respectively. Only about 20% of patients remained on a particular biologic agent after 5 years, whereas about 40% persisted on therapy following 20 months of treatment. A Kaplan-Meier survival analysis with pairwise comparisons of all treatment choices with respect to lines of therapy was conducted. When analyzing the data for all treatment periods and taking into account all lines of therapy, secukinumab had a higher

persistence than adalimumab, infliximab and ustekinumab, with a Log Rank of 0.022, 0.047 and 0.001, respectively, as is shown in figure 1. Female sex and smoking were associated with lower drug persistence (HR=1.25, 95%CI 1.13-1.38 and HR=1.109, 95%CI 1.01-1.21, respectively). When analyzing the data regarding second-line biologic agents, secukinumab was found to be superior to adalimumab, etanercept, infliximab and ustekinumab but not to golimumab with a Log-Rank P value of 0.001, 0.004, 0.025 and 0.002, respectively (figure 2). On analyzing the data using only the first indicated biologic line, no superiority of any single anti-Tumor Necrosis Factor-alpha (anti-TNFα) agent was observed.

Conclusion: In this large observational cohort, in the era of biologic therapy, a relatively low persistence was observed, with female sex and smoking having a negative impact on persistence. None of the anti-TNFα agents as first line therapy was found to be more persistent than others, while secukinumab was found to be superior to other biologics when indicated as second line of therapy.

References: None

Figure 1.

Figure 2.

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AB0781

OPTIMIZATION OF APREMILAST USE IN DAILY PRACTICE BY EXPECTATION MANAGEMENT

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Background: Apremilast is an oral phosphodiesterase 4 inhibitor and approved drug for treatment of Psoriatic Arthritis (PsA). Previous studies show apremilast to be efficacious and safe. (1) However, physician are sometimes reluctant to prescribe apremilast in clinical practice due to its perceived side effects, and relatively small effect size (1).

Objectives: In this study we investigated the occurrence and frequencies of adverse events, and the effects of patient expectation management on drug survival for PsA patient starting apremilast.

Methods: From March 2017 to December 2019, 21 consecutive patients have been included in the apremilast PsA cohort at Reade in Amsterdam, the Netherlands. The initial high dropout rate that was observed with usual care led to a revision in the baseline visit with more emphasis placed on patient expectation management.

Results: From the usual care group (UCG; n=12), 10 patients (83%) stopped apremilast within the first year: 6 (50%) due to adverse events, 4 (33%) due to inefficacy. Only 2 patients (17%) completed one year of follow-up. In contrast, in the expectation management group (EMG; n=9), only 1 patient (11%) dropped out due to adverse events, and none stopped due to inefficacy. 2 patients (22%) completed one year of follow-up, the other 6 patients (67%) are within the first year of treatment (median 5 months, range 1-10; figure 1). In total 55 adverse event were reported during the study, of which 40% were gastro-intestinal (table 1). There was one serious adverse event (within in the EMG group, stroke leading to hospitalization) which was considered not related to apremilast, and the patient remained on drug.

Conclusion: The most common adverse event for apremilast are gastrointestinal side effects that subsided during prolonged use. Managing patient expectations before start of apremilast increases drug survival and is helpful for optimizing apremilast use in daily practice.

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Table 1. Patient reported adverse events apremilast

Adverse events	Mild	Moderate	Severe	SAE	Total
Gastro-intestinal AE	15	7	0	0	22(40%)
Mood complaints	2	1	0	0	3 (5%)
Infections	8	1	0	0	9 (17%)
Headache	4	1	0	0	5(9%)
Others	15	1	1	1	16(29%)
Total	44	11	1	1	55(100%)

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AB0782

EXPLORING OCCURRENCE AND CORRELATES OF SLEEP DISTURBANCES AND FATIGUE IN PSORIATIC ARTHRITIS PATIENTS

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Background: Psoriatic arthritis (PsA) patients have been reported to suffer from increased sleep disturbances (1) and fatigue (2). Sleep disturbances and fatigue in PsA may not only be influenced by skin and musculoskeletal manifestations, but also by psychosocial consequences of the disease and the patients' mental status (3).

Objectives: To explore the occurrence and correlates of sleep disturbances and fatigue in PsA clinic patients.

Methods: A broad data collection was completed from 137 PsA patients including demographics, disease activity measures for both skin and musculoskeletal involvement and patient reported outcome measures. Pain was reported on a VAS scale 0-100mm and sleep and fatigue on a numeric rating scale (NRS) 0-10. Depression was scored as: 1 not, 2 moderately and 3 extremely depressed. Sleep disturbances and fatigue were defined as present if the NRS score was ≥ 5 . Descriptive statistics (mean (SD) for continuous variables and percentage for categorical variables) were applied. Associations were explored using univariate and adjusted linear regression analyses, with inclusion of variables in multivariate analysis that had a p value <0.2 in univariate analyses.

Results: Demographic patient characteristics: mean age 52.3 (SD 10.3) years, BMI 28.4 (4.3) kg/m², women 50.4%, current smoker 17.5%, living together 76.6%, working 54.8%. Musculoskeletal disease status: PsA disease duration mean 8.8 (SD 6.8) years, CRP 5.0 (8.3) mg/L, 68 tender joint count (68TJC) 10.1 (11.1), 66 swollen joint count 0.6 (1.0), MASES enthesitis score 3.0 (3.2). Psoriasis skin status: PASI 2.6 (3.7) and itching skin 23.1%. Patient reported outcome measures: pain 34.8 (23.3) mm, sleep disturbances 3.5 (2.9), fatigue 4.2 (2.6), MHAQ 0.44 (0.40) and depression 1.4 (0.4). Mean numbers of comorbidities was 0.72 (0.93) and 45.3% exercised ≥ 1 time per week and 32.4% currently used bDMARDs and 58.4% csDMARDs.

The prevalence of sleep disturbances was 38.0% and that of fatigue 44.5%.

Identified associations with impaired sleep disturbances in univariate analyses were female gender, higher BMI, smoking, not working, higher scores for 68TJC, MASES score, pain, fatigue, depression, lower MHAQ, not exercising and itching skin. For fatigue the identified associations were female gender, smoking, not working, higher scores for 68TJC, MASES score, pain, sleep disturbances, depression, lower MHAQ and itching skin.

In adjusted analysis only pain, fatigue and higher MHAQ were independently associated with sleep disturbances and pain, sleep disturbances and depression were independently associated with fatigue.

Conclusion: The prevalence of sleep disturbances and fatigue was frequently reported in our PsA patients. No measures reflecting skin involvement or objective measures of inflammatory musculoskeletal involvement were independently associated with sleep disturbances and fatigue. Our data suggest that patient's perceptions of musculoskeletal involvement (pain or MHAQ) play an important role causing sleep disturbances and fatigue in PsA patients. However, mental status also seems to play an important role in the perception of fatigue.

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AB0783

THE IMPACT OF SKIN ITCHING ON HEALTH RELATED QUALITY OF LIFE IN PSORIATIC ARTHRITIS OUTPATIENT CLINIC PATIENTS

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Background: In psoriatic arthritis (PsA) both skin and musculoskeletal involvement can contribute to reduce health related quality of life (HRQoL) (1). Although itch is considered an important symptom in psoriasis, less is known about its extent and potential impact on HRQoL in PsA.

Objectives: The aim of the study was to assess the prevalence of itchy, sore, painful or stinging skin in PsA patients and also to explore the impact of these symptoms on overall HRQoL and skin related HRQoL.

Methods: PsA patients were consecutively recruited from a rheumatology outpatient clinic. Data collection included variables listed in the table. Patients also answered the question: "Over the last week, how itchy, sore, painful or stinging has your skin been? With answer alternatives: Not at all (score 0), a little (score 1), a lot (score 2) and very much (score 3)". For analysis the variable