Abstract THU0300 – Table 1. Fixed-effect NMA data for ACR20 and ΔHAQ-DI in TNFi-N patients with PsA – comparison of bDMARDs or apremilast vs tofacitinib 5 and 10 mg BID^{a,b}

Treatment	ACR20, OR (95% CrI) ^{a,c}		Difference in ΔHAQ-DI (95% CrI) ^{a,c}	
	vs tofacitinib 5 mg BID	vs tofacitinib 10 mg BID	vs tofacitinib 5 mg BID	vs tofacitinib 10 mg BID
Abatacept 125 mg	1.0 (0.4, 2.4)	0.7 (0.3, 1.6)	NA	NA
Adalimumab 40 mg Q2W	1.4 (0.8, 2.2)	0.9 (0.5, 1.5)	-0.1 (-0.2, 0.1)	0.0 (-0.1, 0.1)
Apremilast 30 mg BID	0.9 (0.5, 1.6)	0.6 (0.3, 1.0)	0.04 (-0.1, 0.2)	0.1 (-0.1, 0.3)
Apremilast 20 mg BID	0.7 (0.4, 1.3)	0.5 (0.3, 0.8)	NA	NA
Certolizumab 400 mg Q4W + 200 mg Q2W	1.6 (0.8, 3.2)	1.1 (0.5, 2.1)	NA	NA
Etanercept 25 mg BW	3.7 (1.7, 8.1)	2.4 (1.1, 5.3)	-0.9 (-1.3, -0.6)	-0.9 (-1.2, -0.5)
Golimumab 50 mg Q4W	4.9 (1.7, 19.4)	2.7 (1.1, 6.9)	-0.1 (-0.2, 0.1)	-0.03 (-0.2, 0.1)
Golimumab 100 mg Q4W	3.2 (1.4, 8.4)	2.1 (0.9, 5.5)	-0.2 (-0.3, 0.02)	-0.1 (-0.3, 0.1)
Infliximab 5 mg/kg	3.6 (1.7, 7.9)	2.4 (1.1, 5.0)	NA	NA
Ixekizumab 80 mg Q4W	1.4 (0.7, 2.7)	0.9 (0.5, 1.8)	-0.1 (-0.2, 0.1)	-0.01 (-0.2, 0.2)
Ixekizumab 80 mg Q2W	1.6 (0.8, 3.1)	1.0 (0.5, 2.1)	-0.2 (-0.3, 0.01)	-0.1 (-0.3, 0.1)
Secukinumab 150 mg QW three Q4W	2.5 (1.2, 4.9)	1.6 (0.8, 3.3)	-0.01 (-0.2, 0.2)	0.04 (-0.2, 0.3)
Secukinumab 300 mg QW then Q4W	2.2 (1.0, 5.3)	1.5 (0.6, 3.5)	-0.1 (-0.3, 0.2)	0.0 (-0.2, 0.2)
Ustekinumab 45 mg Q12W	1.0 (0.5, 1.8)	0.6 (0.3, 1.2)	-0.03 (-0.2, 0.1)	0.02 (-0.1, 0.2)
Ustekinumab 90 mg Q12W	1.2 (0.6, 2.3)	0.8 (0.4, 1.5)	-0.1 (-0.2, 0.1)	-0.02 (-0.2, 0.1)

^aResults which do not include the null value are bold and italicized

^bSLR-identified clinical manuscripts published between earliest available record from each database and 9 Oct 2017

^cA binary outcome, where an OR of 1 indicates that there was no difference in the odds of an ACR20 response between tofacitinib and comparator, an OR <1 favours tofacitinib and an OR >1 favours comparator

^dA continuous outcome (higher score indicates worse disability), where a value of 0 indicates that there was no difference in the mean change in HAQ-DI from baseline between tofacitinib and comparator, a difference <0 favours comparator and a difference >0 favours tofacitinib

^eTo ensure robustness, each outcome was 50 000 burn-in and 150 000 samples (from three chains), and it was confirmed that all models converged

^fSLR-identified study population arms (including placebo arms) ranged from n=30 to n=219 for ACR20

^gSLR-identified study population arms (including placebo arms) ranged from n=30 to n=206 for ΔHAQ-DI

^hACR20, American College of Rheumatology 20 response; bDMARD, biologic disease-modifying antineoplastic drug; BID, twice daily; BW, bi-weekly; CrI, credible interval; HAQ-DI, Health Assessment Questionnaire-Disability Index; NA, not applicable; NMA, network meta-analysis; OR, odds ratio; PsA, psoriatic arthritis; Q2W, every 2 weeks; Q4W, every 4 weeks; SLR, systematic literature review; TNFi-N, tumour necrosis factor inhibitor-naïve

Conclusions: Based on the NMA of published RCTs in TNFi-N patients with PsA, tofacitinib 5 and 10 mg BID had similar efficacy vs many, but not all, bDMARDs and APR in improving ACR20 and ΔHAQ-DI.

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THU0301 A NOVEL ROLE FOR THE PSORIATIC ARTHRITIS IMPACT OF DISEASE QUESTIONNAIRE (PSAID)

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Background: Psoriatic arthritis (PsA) is an inflammatory arthritis that occurs in about 30% of patients with Psoriasis (Ps). Recently, a new Patient Reported Outcome Measure (PROM), Psoriatic Arthritis Impact of Disease (PsAID) was specifically developed for PsA Patients. The two versions of the PsAID, PsAID-9 and PsAID-12, are scored on a Numeric Rating Scale (NRS) of 0–10. The Minimal Disease Activity (MDA) is a composite outcome measure for PsA patients, which uses the Health Assessment Questionnaire (HAQ) as one criterion. However, the HAQ does not correlate well with measures of disease activity as PsA disease duration increases, and its use in the assessment of disease activity has been questioned.

Objectives: Our objectives were to 1) validate the PsAID within our patient cohort, 2) determine if the PsAID can replace any of the other PROMs administered in the clinic, and 3) determine if the PsAID can replace the HAQ in the MDA.

Methods: Patients were recruited from a large psoriatic arthritis clinic. All patients completed the PsAID and 10 other PROMs. Various measures of disease activity were recorded by a physician at each visit. Descriptive statistics (mean, median, SD, min, max) were calculated for all PROMs. PsAID cut-offs for use in the MDA were generated based on Remission (REM) and Low Disease Activity (LDA) disease states in the Clinical Disease Activity for Psoriatic Arthritis Index (cDAPSA).

Results: 115 patients completed the PsAID. There were 70 males, 45 females, with a mean PsA duration of 18.7 (±11.6) years. Mean scores of PsAID-9 and PsAID-12 were 3.4 (±2.4) and 3.2 (±2.3) respectively. The PsAID correlated moderately well with 9 of the PROMs administered in the clinic (R²=0.51–0.78). Four

PsAID cutoffs were generated for use in the MDA: REM PsAID-9, REM PsAID-12, LDA PsAID-9, and LDA PsAID-12. All four versions of the PsAID MDAs had a sensitivity greater than 85% with the HAQ MDA, and three versions of the PsAID MDA had a specificity greater than 85% with the HAQ MDA.

Conclusions: Our cohort had lower mean PsAID scores than previously reported series suggesting that our patients are monitored carefully. The only moderate correlations with other PROMs suggest that the PsAID cannot replace any of these PROMs. The high sensitivity and specificity of the PsAID MDA with the HAQ MDA suggest that the PsAID is an effective replacement for the HAQ in the MDA.

Disclosure of Interest: None declared

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THU0302 SURVIVAL OF DISEASE-MODIFYING DRUGS (DMARD) IN PATIENTS WITH RECENT DIAGNOSIS OF PSORIATIC ARTHRITIS IN DAILY CLINICAL PRACTICE

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Background: Psoriatic arthritis (PsA) is a chronic inflammatory disease that benefits from DMARDs, in this regard knowing more about these therapies is a great step forward in the management of these patients in daily clinical practice.

Objectives: To evaluate the survival of DMARDs used in recent diagnosis PsA patients as well as the causes of discontinuation and to analyse the possible associated factors.

Methods: Retrospective longitudinal observational study. **Subjects:** Inception cohort of patients from January 2010 to , December 2014 and followed up to December 2016, diagnosed with PsA according to ICD-10 code. **Main outcome:** discontinuation of conventional synthetic DMARDs (csDMARDs) and biological originator DMARDs (boDMARDs) due to: Adverse drug reactions (ADRs); Improvement or remission; Inefficacy; Patient's decision and Physician's decision. **Covariables:** sociodemographic and clinical. **Statistical analysis:** To estimate DMARDs discontinuation rates, survival techniques were used, expressing the incidence rate (IR) per 100 patients*year with their respective CI at 95%. Multivariate Cox regression models were performed to analyse the factors associated with DMARDs discontinuation and the results were expressed in Hazard ratio (HR) and 95% CI.

Results: 191 patients with recent diagnosis of PsA were included, with a 379.70 Patients*year follow-up. 50.3% were male, the mean age at diagnosis was 50 ±14.6 years old. 46.6% of the patients had a history of cutaneous psoriasis. The HLA-B27 was positive in 20% of patients. 50% of the patients started a DMARDs at the first visit. Throughout the follow-up, all patients received csDMARDs and 23 used boDMARDs. The median DMARD per patient was 2¹⁻³. Methotrexate (MTX) was the most used drug 69.7%. According to the treatment regimen, 30% were on combination therapy, the most frequent was antiTNF +MTX (33%). 103 discontinuations were recorded with a IR 27.13 [22.36–32.90] within these, 44 were related with ADRs (IR 11.59 [8.62–15.57]), 24 (IR 6.32 [3.58–11.13]) were due to inefficiency, 9 (IR 2.37 [1.23–4.55]) were registered after remission, 12 (IR 3.16 [1.79–5.56]) by decision of the patient and 12 (IR 3.16 [1.79–5.56]) by doctor's decision. The DMARDs median survival was 1.8 years [1.4–2.7]. Table 1 shows the discontinuation rates for each type of DMARDs and the multivariate analysis for the factors associated with DMARDs discontinuation is in table 2.

Table 1:

Table 1	Patients*year	Events(n)	IR	95%CI
MTX orally	243.46	53	21.77	16.63–28.49
Sc MTX	49.90	18	36.07	22.73–57.25
Salazopyrine	84.80	30	35.37	24.73–50.59
Leflunomide	21.83	10	45.80	24.64–85.13
Antimalarials	25.34	8	31.56	15.78–63.12
boDMARDs	57.56	25	43.43	29.35–64.28

Table 2

	HR	95% CI	P
Women	1.51	0.61–3.09	0.436
Age at diagnosis	0.97	0.97–1.01	0.267
Distress level	1.87	1.00–3.48	0.049
C Reactive protein≥1.05gr/dL	1.85	0.99–3.48	0.055
Combination therapy	2.36	1.46–3.80	0.000
boDMARDs	1.05	0.52–2.11	0.886
MTX vs rest DMARDs	0.53	0.31–0.91	0.021

Conclusions: In our study, the DMARD discontinuation rate was 27.13, mainly related with ADRs. We have also found some psychological, clinical and therapy regimen factors that can modify the DMARDs survival on PsA. We observed that MTX, presented the longest survival independent of the rest of the factors.

Disclosure of Interest: None declared

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THU0303

THE EARLY PSORIATIC ARTHRITIS SCREENING QUESTIONNAIRE IDENTIFIES PATIENTS WITH PSORIATIC ARTHRITIS AMONGST TREATED PATIENTS WITH PSORIASIS

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Background: Studies suggest a high prevalence (approximately 15%) of undetected psoriatic arthritis (PsA) amongst patients with psoriasis¹. A number of screening questionnaires have been designed to allow detection of such patients. This includes the Early Psoriatic Arthritis Screening Questionnaire (EARP) which detects early PsA in untreated patients with psoriasis, with a sensitivity of 85.2% and specificity of 91.6%². Little is known about whether such questionnaires are also able to detect PsA in treated patients with psoriasis.

Objectives: To determine the case finding ability of EARP in a tertiary centre cohort of treated psoriasis patients.

Methods: All patients attending a tertiary centre psoriasis clinic were invited to complete the EARP. EARP comprises a 10 point patient reported questionnaire regarding symptoms of joint disease. Scores of 3 or more are considered positive. All patients who completed the questionnaire and received a positive score were assessed by a rheumatologist. Diagnosis of PsA was made by clinician impression and CASPAR criteria. Disease activity was assessed using psoriasis area severity index (PASI), 66/68 swollen and tender joint count, SPARCC enthesitis index, CRP and Health associated quality of life disability index (HAQ-DI). The composite disease activity measure DAPSA and the OMERACT definition of minimal disease activity were determined.

Results: 133 patients were invited to complete the EARP questionnaire and 119 participated. Fifty patients had a positive result (42%). Of these, 8 were known to have PsA and under rheumatologic care. A further 21 attended for formal rheumatologic assessment. Thirteen of the 21 patients (61.9%) were found to have psoriatic arthritis and were not under the care of a rheumatologist. This represents 10% of the initial 133 patients screened. Ten of those patients were further assessed. The average age was 52.8 and BMI 33.2. Seven patients were male. All 10 were on biologic agents but only 3 on concurrent conventional DMARDs. Average tender joint count was 16, swollen joint count 3.6, SPARCC 6.2 and PASI score 3.42. Only 1 patient was in minimal disease activity.

Conclusions: The EARP tool can identify patients with active PsA amongst patients with psoriasis, even those on treatment with biologic agents. Such a tool may be useful in identifying patients who may benefit from rheumatology care.

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THU0304

ASSOCIATION OF ANXIETY, DEPRESSION AND FATIGUE WITH DISEASE ACTIVITY, JOINTS EROSION AND SKIN LESION SEVERITY IN EARLY PSORIATIC ARTHRITIS PATIENTS

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Background: Depression is one of the precursors of psoriasis and psoriatic arthritis (PsA) development. It was found that depression and anxiety negatively affect the achievement of remission in PsA. B. Michelsen 2017] Interrelation of anxiety, depression and fatigue (according to patient-reported outcomes) with disease activity, erosive arthritis and skin lesion severity in early PsA hadn't been sufficiently studied.

Objectives: To study anxiety, depression and fatigue disorders (according to patient-reported outcomes) and their correlation with disease activity, erosive arthritis and severity of psoriasis in early PsA patients (pts).

Methods: 78 pts (M/F=39/39) with early PsA according to CASPAR criteria were included; all pts had peripheral arthritis for ≤2 years; mean age 36.5±10.7 years, disease duration 12.2±10.3 mo. It was a treatment naïve cohort. All pts underwent

standard clinical examination of PsA activity. Mean disease activity indexes (DAS)=4.0±1.4, DAS28=4.2±1.1. 78 patients were studied for fatigue (according to FACIT), patient global disease activity (PGA), patients pain measured by VAS, and Health Assessment Questionnaire (HAQ); 66 patients (M/F=33/33) were studied for anxiety and depression (according to HADS). At HADS score ≥8 patients had anxiety and depression disorders. Higher scores for FACIT scales indicate better quality of life (less fatigue). Skin lesion severity was evaluated in terms of body surface area (BSA) affected and Psoriasis Area Severity Index (PASI). When BSA was ≥3%, PASI was calculated. PASI≥11 indicates moderate and severe psoriasis. Descriptive statistics was used, M±SD, Me [Q25;Q75], U-test were performed; p<0.05 was considered to indicate statistical significance.

Results: Mean FACIT score was low amounting to 35.3±9.6, testifying increased fatigue; mean anxiety index was 5.7±3.1, depression index was 3.8±3.0. Anxiety disorders were detected in 16 out of 66 (24.2%) pts, depression disorders in 9 out of 66 (13.0%) pts. Negative correlation was found between FACIT score and DAS (r=-0.26), DAS28 (r=-0.26), CRP (r=-0.27), PGA (r=-0.35); and pain VAS (r=-0.25). Depression was more pronounced in pts with erosive arthritis in hands and/or feet (r=0.31). Negative correlation of FACIT score (r=-0.54), correlation of anxiety (r=0.26) and depression (r=0.33) indexes was found with health-related functional indexes according to HAQ. HADS indexes (anxiety and depression) are cross-correlating (r=0.51) and are negatively correlating with FACIT scores (r=-0.49 and r=-0.48, accordingly). An association was found of anxiety and depression indexes with the severity of psoriasis PASI index (r=0.38 and r=0.31, accordingly).

Conclusions: In early treatment-naïve PsA patients, increased fatigue and in a quarter of cases anxiety disorders, in 13% of patients depression disorders had been found. Psychological disorders are associated with PsA activity, the severity of psoriasis and joints erosion. Fatigue, anxiety and depression in early PsA patients result in the reduction of their functional capacity.

Disclosure of Interest: None declared

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THU0305

MINIMAL DISEASE ACTIVITY (MDA) ATTAINMENT AFTER STARTING BIOLOGICAL (B) DMARDs AND NON-BDMARDs TREATMENT IN PSORIATIC ARTHRITIS PATIENTS (PTS) IN ROUTINE CARE: RUSSIAN PSORIATIC ARTHRITIS REGISTRY (RU-PSART) DATA

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Background: MDA is a valid instrument for evaluating PsA treatment results. There is limited data about MDA attainment after starting bDMARDs and non-bDMARDs in routine care. RU-PSART collected data from 25 rheumatology clinics in the Russian Federation.

Objectives: evaluate MDA attainment after starting bDMARDs and non-bDMARDs treatment in PsA pts in routine care.

Methods: 294 (M/F=133/161) pts with PsA, diagnosed according to CASPAR criteria, mean age 41.2±1.9 (Min 21 – Max 72) years (yrs.), PsA duration 6.1±5.3 (Min 0 – Max 31) yrs., psoriasis duration 13.6±10.7 (Min 0.2 – Max 54.8) yrs. were included in the RU-PSART after signing consent participation forms. The present analysis included 274 pts who have data concerning PsA activity, treatment and MDA. The number of pts who reached MDA at least once were calculated. At the time of evaluation 81 out of 274 pts (29.6%) were taking bDMARDs±sDMARDs (Infliximab (25 pts), Etanercept (16 pts), Adalimumab (14pts), Ustekinumab (8pts), Golimumab (5pts), Sekukinumab (2pts)). 193 out of 274 pts (70.4%) were taking other types of treatment - sDMARDs±NSAID, mostly methotrexate (74.2%), sulfasalazine (12%), leflunomide (3.6%), hydroxychloroquine (0.4%); steroids (9.8%). All pts underwent evaluation of PsA activity by DAS28, CRP, Pt/Physician GA, Pain GA by VAS (0–100 mm), swollen/tender joints count (SJC/TJC), DAPSA and considered REM≤4/LDA≤14. M±SD, Me [Q25; Q75], Min-Max,%, U-test, ORs with 95% CI were performed. All CI >1, p<0.05 were considered to indicate statistical significance.

Results: At time of evaluation 60 out of 274 pts (21%) reached MDA at least once. Mean duration of sDMARDs and bDMARDs±sDMARDs was 11^{6/17}/Min 3 - Max 204 months and 9^{15/15}/Min 2 - Max 82 months accordingly. 28 out of 193 pts (10.4%) taking sDMARDs achieved MDA. Among 81 pts taking bDMARDs±sDMARDs MDA was seen in significantly more cases - 32 pts (30.8%), OR=3.85 [CI 95% 2.11–7.01]. REM/LDA by DAPSA was found in significantly more cases compared to pts taking other therapies – in 50 out of 81 pts (61.7%) and in 56 out of 193 pts (29%) accordingly (p<0.05, U-test). Pts who had ever