Conclusions: In PsA, across independent European cohorts, HAQ is higher for women, and significantly decreases for both genders when anti-inflammatory treatment is initiated. HAQ does not depend on CRP, VAS-pain or disease duration during longitudinal follow-up. However, a significant increasing trend was identified with ageing.

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THU0285 THE EFFECT OF FAMILY HISTORY ON DISEASE PHENOTYPES IN 1393 PSORIATIC ARTHRITIS PATIENTS

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Background: Psoriatic arthritis (PsA) has a genetic background, approximately 40% of patients having a family history of psoriasis or PsA in first-degree relatives, which may impact the disease features.

Objectives: The aim of this study was to evaluate the effects of family history of psoriasis or PsA on the disease phenotypes.

Methods: The demographic and clinical data were retrieved from the longitudinal, multicenter PsArt-ID (Psoriatic Arthritis-International Database). Family history of psoriasis and PsA were investigated for 1st and 2nd degree relatives separately. The effect of the family history of psoriasis and/or PsA on disease phenotypes and severity were analysed, calculating the relative risks (RR).

Results: 1393 patients had the data for family history, 444 (31.9%) of whom was positive for psoriasis and/or PsA. The majority of the family history was only psoriasis (333/444; 75%) and 58.5% (260/444) of the patients had first-degree relatives affected. There was no differences in maternal or parental transmission rates however women had more psoriasis and/or PsA in their family (67.3% vs 32.7% p: 0.028). Patients with a family history had an earlier onset of age for psoriasis (29±14.8 vs 31±14.9 p: 0.007), more frequent nail involvement (50.7% vs 29.6% p: 0.032), more frequent enthesitis (28.2% vs 17.7% p<0.001) and deformities (25.2% vs 19.9% p: 0.05) and were able to achieve minimal disease activity (MDA) less often. (38.6% vs 49.5% p: 0.045). Plaque psoriasis was more common if the family history was positive for psoriasis whereas pustular psoriasis was more frequent when the family history was positive for PsA (figure 1). Family history of psoriasis were found as a risk factor for a younger onset (RR: 1.138), for nail disease (RR: 1.179), for enthesitis (RR: 1.504) and for not achieving MDA (RR: 1.246) whereas family history of PsA was a risk factor for having deformities (RR: 1.215) (table 1).

Abstract THU0285 – Table 1. Relative Risks in patients with or without family history of psoriasis or PsA

	Family history	p	RR	95% CI
Onset of psoriasis before 40 years age	Psoriasis	<0.05	1.138	1.063–1.219
	PsA	>0.05	1.023	0.879–1.191
Nail involvement (ever)	Psoriasis	<0.05	1.179	1.04–1.335
	PsA	>0.05	1.157	0.917–1.461
Enthesitis (ever)	Psoriasis	<0.05	1.504	1.192–1.898
	PsA	>0.05	1.350	0.871–2.092
Not achieving MDA	Psoriasis	<0.05	1.246	1.003–1.547
	PsA	>0.05	1.044	0.655–1.666
Presence of deformities	Psoriasis	>0.05	1.215	0.928–1.592
	PsA	<0.05	1.786	1.170–2.727

PsA: Psoriatic Arthritis; MDA: Minimal Disease Activity

Figure: Distribution of skin lesions according to the family history in patients with PsA. Numbers are given as percentages. PsO: Psoriasis; PsA: Psoriatic Arthritis

Conclusions: The family history of psoriasis and PsA has impacts on skin phenotypes, musculoskeletal features and the disease severity. The differences between family history of psoriasis and PsA and pustular vs plaque phenotypes may point out to a different genetic background and pathogenic mechanisms in these subsets.

Disclosure of Interest: None declared

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THU0286 PREDICTORS FOR ORTHOPAEDIC SURGERY IN PATIENTS WITH PSORIATIC ARTHRITIS. RESULTS FROM A RETROSPECTIVE COHORT STUDY OF 590 PATIENTS DIAGNOSED 1954–2011, AND FOLLOWED UP UNTIL 2017

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Background: Psoriatic arthritis with peripheral joint affection is a progressive disease in most patients, and erosions are seen in 47% within the first two years.¹ Synthetic disease modifying anti rheumatic drugs (DMARDs) are generally prescribed, to inhibit inflammation, but have not been proven to slow or prevent radiographic changes. Biologic treatment is recommended when other agents are not efficient, and has been shown to give better control of structural damage.² Orthopaedic corrective surgery has been a necessary part of treating patients with psoriatic arthritis, when medication fails to prevent joint destruction. Surgery can be considered a proxy for joint damage, and studying time trends in orthopaedic surgery thus gives valuable information regarding the prognosis of patients with inflammatory arthritis. In patients with rheumatoid arthritis there has, over time, been a declining incidence of orthopaedic interventions. The change in available medical treatment is believed to be responsible for this.³ As synthetic

DMARDs may be less efficient in patients with psoriatic arthritis, it is uncertain whether a decline of the same magnitude can be expected among these patients.

Objectives: We wished to investigate trends in the incidence of orthopaedic procedures in patients with psoriatic arthritis, and to explore how patient characteristics, time of diagnosis and treatment affect the need for surgery.

Methods: We reviewed the medical history of 1432 patients with possible psoriatic arthritis at Haukeland University Hospital in Bergen, Norway from 1954–2011, of which 590 (mean age 49, 52% women) had a confirmed diagnosis of psoriatic arthritis, and sufficient journal information, and were included in the present study. Relevant orthopaedic procedures were obtained from the Norwegian Arthroplasty Register and the hospital's administrative patient records. 171 procedures (25% joint synovectomies, 15% arthrodeses and 53% prostheses) were performed in 117 patients. Survival analyses were completed to evaluate the impact of different factors such as year of diagnosis, age, sex, radiographic changes, disease activity and treatment, on the risk of undergoing surgery.

Results: Female sex, older age (≥ 70) and maximum ESR 30–59 significantly increased the risk of surgery whereas time period of diagnosis had no effect on the outcome. Anti-rheumatic treatment changed significantly over time.

Abstract THU0286 – Figure 1. Cumulative percent operated depending three separate time periods of diagnosis

Conclusions: 20% of patients with psoriatic arthritis needed surgery during disease course. In our material, the prognosis of patients with psoriatic arthritis has not changed, with regard to the risk of orthopaedic surgery, despite significant changes in treatment. This is contrary to what is seen for patients with rheumatoid arthritis.

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THU0287 THE PREVALENCE OF REMISSION IN A REAL-LIFE COHORT OF PSORIATIC ARTHRITIS PATIENTS TREATED WITH SYNTHETIC OR BIOLOGIC DISEASE MODIFYING DRUGS

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Background: The treat-to-target (T2T) strategy for the management of psoriatic arthritis (PsA) recently proposed by EULAR recommendations suggests to ideally achieve remission/Low Disease Activity (LDA) in all treated patients, but nowadays data on remission/LDA rate in a real-world setting are still lacking.

Objectives: To evaluate the disease activity state in a real-life cohort of PsA patients treated with synthetic and/or biologic disease modifying drugs (DMARDs).

Methods: We undertook a cross-sectional analysis of all PsA consecutive patients enrolled in a large Italian multicentric registry including 7 Italian tertiary rheumatology centres. Disease activity defined as number of swollen (SJ) and

tender (TJ) joints, Leeds Enthesitis Index (LEI), number of dactylitis, Body Surface Area (BSA), patient global assessment (PGA), patient pain (PP), Health Assessment Questionnaire Disability Index (HAQ-DI), and C-reactive protein (CRP, mg/L) were computed and the rates of patients achieving Disease Activity in Psoriatic Arthritis (DAPSA) remission/LDA and Minimal Disease Activity (MDA) were calculated. Subanalysis after stratification according to ongoing treatment (sDMARDs or bDMARDs) were also performed.

Results: The study population included 362 PsA patients (56.6% men; mean $\pm$ standard deviation, SD) age 53.3 ± 12.4 years; mean $\pm$ SD) disease duration 9.4 ± 8.2 years), treated with sDMARDs (15.8%, mainly methotrexate [66.6%]) or bDMARDs (79.6%, mainly anti-TNF agents [72.9%], as monotherapy [78.1%] or in combination with sDMARDs [21.9%]). Oligoarthritis (32%), polyarthritis (42%), axial involvement (11.9%), enthesitis (10.5%), and dactylitis (3.6%) were the reported predominant subsets of PsA. In the overall population the mean values $\pm$ SD) of disease activity measures were: SJ count 1.4 ± 2.6 , TJ count 1.9 ± 3 , LEI 0.5 ± 1.1 , number of dactylitis 0.1 ± 0.3 , BSA 2.6 ± 6.9 , PGA 1.4 ± 2.6 , PP 3 ± 2.6 , HAQ-DI 0.4 ± 0.5 , CRP level 3.4 ± 8 , and DAPSA 9.3 ± 9.2 . The rates of DAPSA LDA and remission were 46.9% and 31.7%, respectively. We found 51.6% of patients achieving MDA, without significant difference according to ongoing treatment (53.4% and 51% in bDMARD versus sDMARD treated patients, respectively; $p=0.87$).

Conclusions: In our real-life cross-sectional analysis, an acceptable comprehensive disease control was reported only in half of patients, irrespectively of ongoing therapy. These findings suggest the need to further improve the real-world application of T2T strategy for the management of PsA.

Disclosure of Interest: None declared

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THU0288 IMPLEMENTATION OF THE TREAT TO TARGET CONCEPT IN EVALUATION OF PSORIATIC ARTHRITIS PATIENTS

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Background: Minimal disease activity (MDA) in psoriatic arthritis (PsA) is a composite outcome measure that represents the multifaceted domains of psoriatic disease including the joints, enthesitis and skin, as well as patient's reported outcomes (PRO). MDA is currently used as a goal of treatment in the "treat-to-target" (T2T) approach in PsA management.

Objectives: To assess the implementation of the T2T concept in PsA patients.

Methods: A retrospective analysis of all the patients included in a PsA registry during 2016–2017 was performed. Medical charts were reviewed by an independent rheumatologist and the following data were collected: patient demographics, duration of PsA and psoriasis, alcohol and tobacco use, treatment changes, as well as items that constitute the MDA including the tender and swollen joint count, enthesitis, psoriasis area skin score (PASI), physician and patient evaluation of disease activity and pain and the health assessment questionnaire (HAQ) score. Medical records were reviewed to assess whether T2T concept was indeed followed by the treating rheumatologist to determine whether MDA was achieved and medication changes were made. The associations between T2T concept implementation and categorical and continuous variables were assessed by Chi square test, or t-test as appropriate. The association between the physician's assessment at each visit with each of the MDA parameters (active versus inactive) was assessed by Chi square test.

Results: The records of 117 consecutive patients were evaluated, one patient was excluded due to lack of data. The mean age was 58.4 ± 13 years, of whom 76 (65.5%) were women. The T2T approach was implemented in 76 (65.5%) patients. There was no correlation between the T2T implementation and patient age, gender, alcohol and tobacco use, disease activity parameters at the patient's visit and the various treatment regimens. The physician assessment of disease activity did not correlate with the MDA score in 40 (34.5%) patients. In most cases 30 (75%), this discrepancy occurred because physicians labelled patients as having inactive disease while disregarding the PRO category of the MDA score, including 29 patients who reported a high VAS pain score, 22 patients reporting a high patient global disease activity and 25 patients reporting a high HAQ score. In the other 10 (25%) of cases, the treating rheumatologists made treatment changes because they considered patients as having active disease based on one tender or swollen joint or enthesitis, despite these patients actually meeting MDA criteria.

Conclusions: In our cohort, the T2T concept was implemented in 65.5% of the visits in accordance with other PsA studies. The main obstacle that we encountered in implementation of MDA concept was in physicians' overlooking the PRO components of the score. Efforts are needed to increase the accurate use of the MDA score and treat to target concept in daily practice.