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Table 1. RDA in patients with LDA according to diverse activity scores

RDA, n (%)	Remission and LDA according to disease activity scores, n (%)					
	MDA-5 n:35	MDA-6 n:13	VLDA n:3	DAPSA LDA n:72	PASDAS LDA n:22	GRACE LDA n:22
RDA_TJC	4 (11.4)	1 (7.7)	0	25 (34.7)	3 (13.6)	1 (4.5)
RDA_SJC	1 (2.9)	0	0	3 (4.2)	0	0
RDA_dactylitis	2 (5.7)	0	0	2 (2.8)	1 (4.5)	1 (4.5)
RDA_PASI	4 (11.4)	1 (7.7)	0	23 (31.9)	5 (22.7)	5 (22.7)
RDA_VAS pain	23 (65.7)	3 (23.1)	0	56 (77.8)	13 (59.1)	13 (59.1)
RDA_VAS	21 (60)	4 (30.8)	0	56 (77.8)	10 (45.5)	11 (50)
Global						
RDA_physician	26 (83.9)	8 (61.5)	1 (33.3)	64 (88.9)	15 (71.4)	16 (72.7)
VAS						
RDA_HAQ	1 (2.9)	1 (7.7)	0	16 (22.2)	1 (4.5)	0
RDA_LEI	1 (2.9)	1 (7.7)	0	24 (33.3)	3 (13.6)	2 (9.1)

RDA: residual disease activity, MDA: Minimal disease activity, VLDA: Very Low disease activity, LDA: Low disease activity, TJC: Tender joint count, SJC: Swollen joint count

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AB0774

TIME TO RESPONSE FOR CLINICAL AND PATIENT-REPORTED OUTCOMES IN PATIENTS WITH PSORIATIC ARTHRITIS TREATED WITH TOFACITINIB, ADALIMUMAB OR PLACEBO

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Background: With multiple disease domains affected in PsA, clinical and patient-reported outcome (PRO) measures are important to assess disease improvement following treatment. Rapid, meaningful improvements in disease activity are a priority for physicians and patients (pts). Tofacitinib is an oral Janus kinase inhibitor for the treatment of PsA. Higher proportions of pts achieved responses in PROs and clinical measures when treated with tofacitinib for 3 months vs placebo (PBO).¹⁻⁵ Proportions of responders were also similar between tofacitinib and adalimumab (ADA) after 3, 6 and 12 months.^{2,3,5}

Objectives: To determine the time to initial response using responder definitions for selected PROs and clinical endpoints in pts with active PsA treated with tofacitinib, ADA or PBO switching to tofacitinib.

Methods: In this post hoc analysis, data were collected from two Phase 3 studies (OPAL Broaden [12 months; NCT01877668]; OPAL Beyond [6 months; NCT01882439]).^{3,4} Pts receiving tofacitinib 5 or 10mg twice daily (BID), subcutaneous ADA 40mg once every two weeks (Q2W; OPAL Broaden only), or PBO switching to tofacitinib 5 or 10mg BID at Month (M)3, were included. Responder definitions included: HAQ-DI ≥ 0.35 -point improvement from baseline (BL), Functional Assessment of Chronic Illness Therapy-Fatigue (FACIT-F) total score ≥ 4 -point improvement from BL, minimal disease activity (MDA) yes/no composite response (meeting at least 5 of 7 criteria) and PsA Disease Activity Score (PASDAS) post-BL score of ≤ 3.2 and >1.6 -point improvement from BL. First post-BL data were collected at Week 2 (eg for HAQ-DI) or M1. Time-to-event analyses were performed using the Kaplan-Meier (KM) method, with pts censored at the last observed visit. Log-rank tests compared time to initial response across treatment groups.

Results: KM analyses show days to initial response (Figure 1, Figure 2). Time to initial HAQ-DI response was significantly different between treatment groups in OPAL Broaden ($p < 0.01$): faster response in pts receiving tofacitinib 5mg BID, tofacitinib 10mg BID and ADA 40mg Q2W vs pts who switched from PBO to tofacitinib at M3 (Figure 1a). A similar, but not significant (ns), trend was observed for HAQ-DI responses in OPAL Beyond (Figure 1b). Generally, initial FACIT-F responses were achieved faster (ns) in pts receiving tofacitinib 5mg BID vs other treatment in both studies (Figure 1c, Figure 1d). Times to initial MDA and PASDAS responses were similar between tofacitinib and ADA treatment groups (Figure 2).

Conclusion: Times to initial response in functional ability and disease activity were similar in pts treated with either tofacitinib or ADA. Time to initial response prior to first post-BL observation (Week 2 or M1) was not estimable in this analysis. These results may help physicians better understand the time frame for a meaningful response in pts receiving tofacitinib.

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Figure 1. Times to initial response for (a, b) HAQ-DI and (c, d) FACIT-F total score responses

Responder definitions: HAQ-DI ≥ 0.35 -point improvement from baseline. FACIT-F total score ≥ 4 -point improvement from baseline. PBO group began treatment with tofacitinib at Month 3. BID, twice daily; Q, confidence interval; MDA, Minimal Disease Activity Score; NE, not evaluable; Q2W, once every two weeks; SC, subcutaneous

Figure 2. Times to initial response for (a, b) MDA and (c, d) PASDAS responses

Responder definitions: MDA, yes/no composite response meeting at least 5 of 7 criteria; PASDAS, post-BL score ≤ 3.2 and >1.6 -point improvement from baseline. PBO group began treatment with tofacitinib at Month 3. BID, twice daily; Q, confidence interval; MDA, Minimal Disease Activity Score; NE, not evaluable; Q2W, once every two weeks; SC, subcutaneous

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AB0775

PERIPHERAL JOINT INFLAMMATION IS ASSOCIATED WITH MORE PROATHEROGENIC CARDIOVASCULAR RISK PROFILE IN PATIENTS WITH PSORIATIC ARTHRITIS

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Background: We have previously found that: (i) patients with spondyloarthritis (SpAs) have higher circulating levels of IL-18 and osteoprotegerin (OPG) than healthy controls (1), (ii) psoriatic arthritis (PsA) patients present with more proatherogenic lipid profile and higher IL-18 levels than ankylosing spondylitis (AS) patients (2)

Objectives: To investigate the relationship between disease phenotype, i.e. peripheral arthritis (perPsA n=45), axial PsA (axPsA n=16) and ankylosing spondylitis (AS n=94), cardiovascular risk factors and serum concentrations of IL-18, IL-17.

Methods: A group of 155 SpA patients (94 AS/61 PsA), of similar age (44.5 versus 44.9 years), disease duration (4.8 versus 6.8 years), and matched with high disease activity (AS ASDAS-CRP 3.62±0.94; PsA DAPSA 26.75±26.61) were included in the study. The lipid profile comprised triglycerides (TG), total cholesterol (tChol), low- and high-density lipoprotein (LDL and HDL, respectively) measurement. Ischemic Heart Disease (IHD) diagnosis was established from patient's medical history. Serum concentrations of IL-17AF, IL-18 were measured by specific commercially available enzyme-linked immunosorbent assays (ELISA) and were expressed as medians (pg/ml). The Mann-Whitney test was applied for intergroup comparison, correlation was assessed using Spearman's Rank tests (r value is shown) with linear regression model.

Results: Patients with perPsA had higher rate of IHD than axPsA and AS patients (27% vs 0% vs 7.8%, respectively). perPsA patients had significantly higher diastolic blood pressure than AS patients (perPsA 131±13mmHg vs AS 121±14 mmHg), more severe cardiovascular burden than patients with axial disease, were characterised by higher occurrence of obesity (perPsA 42% vs axPsA 18% vs 18% AS) and hypertriglyceridemia (perPsA 48% vs axPsA 14% vs 16%AS) as well as higher TG concentration (perPsA 165± 87 mg/dl vs axPsA 111± 63mg/dl vs 110± 57 AS mg/dl). Moreover, patients with perPsA had significantly higher serum concentrations of IL-18 than axPsA and AS groups (132.5pg/ml vs 79.2pg/ml vs 84.9pg/ml), but there were no differences between them in IL-17 concentrations. Interestingly, in patients with perPsA, but no other patients' groups, statistically significant associations between IL-18 concentrations and proatherogenic risk factors were found, as IL-18 correlated positively with TC (r=0.31), TG (r=0.53) atherogenic index (r=0.6), and uric acid (r=0.3) concentrations, while negatively with HDL levels (r=-0.47). Although patients groups differ in cardiovascular risk profiles, there were no significant differences in CV risk estimation using SCORE scale (perPsA 2.3% vs 1.6% axPsA vs 2.1%AS)

Conclusion: We conclude that in PsA peripheral joints inflammation is associated with more proatherogenic cardiovascular risk profile and higher IL-18 serum levels, that seem to be interrelated, while patient's disease activity is associated with metabolic syndrome. Generally recommended SCORE scale is practically unable to indicate SpA patients with higher CV risk

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AB0776

ACCESSORY STAGE IN THERAPY OF PSORIATIC ARTHRITIS WITH ENGINEERED BIOLOGICAL PREPARATIONS

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Objectives: increasing the sorption capacity of medications based on interleukin-12 and interleukin-23 in patients with psoriatic arthritis

Methods: To reduce the concentration of anti-inflammatory cytokines (IL-12, IL-23) we ran the blood from psoriatic arthritis patients through granules which had been obtained preliminarily by emulsion polymerization. Antibodies to IL-12 and IL-23 were obtained from the commercial formulation Ustekinumab with a concentration of monoclonal antibodies -0,2mg in 1 ml of saline solution. They were of spherical shape, with gel particle size 10 – 100 mcm. Specific sorption capacity of magnetocontrollable polyacrylamide granules (MPG) was determined using a mini-column with working chamber capacity of 0,2ml, filled

with MPG through which IL-12 and IL-23 solutions (1 ml) were run in increasing concentrations.

Results: Perfusion of the blood through a magnetocontrollable adsorbent was done using a column of 10 ml capacity equipped with an electric magnet; magnetocontrollable polyacrylamide granules with immobilized antibodies to IL-12 and IL-23 were added to the column. This device was used for in vitro processing of heparinized blood from 10 patients with psoriatic arthritis of varying degree of activity who had not received parenteral administration of cytokine IL-12 and IL-23 inhibitors (Ustekinumab) for 12 months. Blood from 10 apparently healthy donors was used as control; the perfusion procedure was the same. The concentration of cytokines (IL-12 and IL-23) in the blood plasma was determined with immunoenzyme assay commercial kits: Bender Med. Systems, USA for IL-12, and Bender Med. Systems, Vienna Austria for IL-23. The parameters under study were determined twice for each sample: prior to and after perfusion. It was established that perfusion through a magnetocontrollable adsorbent leads to a considerable decrease in IL-12: by 99,8% from baseline (in apparently healthy individuals), and by 99,9% in psoriatic arthritis patients; the concentration of IL-23 decreased by 99,9% in psoriatic arthritis patients. That is why decreasing the cytokine level as much as possible is of great practical importance as the cytokines play the leading role in psoriatic arthritis pathogenesis. When comparing data on carbon-based adsorbents found in literature we saw that the cytokine concentration decreased by 92,64% from baseline. Elimination of the cytokines did not bring about any statistically important change in the content of blood corpuscles, which is an additional advantage of the method.

Conclusion: The obtained findings demonstrate high effectiveness of the method of simultaneous sorption of interleukin-12 and interleukin-23 using an original magnetocontrollable adsorbent based on Ustekinumab. The proposed adsorbent shows little traumatism in relation to blood corpuscles, as well as low nonspecific sorption. Extracorporeal elimination of cytokines from the blood flow can be a promising preparatory step in genetically designed treatment of patients with psoriatic arthritis.

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AB0777

EPIDEMIOLOGY, CLINICAL FEATURES AND BIOLOGICAL TREATMENT OF UVEITIS IN 320 PATIENTS WITH PSORIATIC ARTHRITIS. STUDY FROM A SINGLE UNIVERSITY CENTER.

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Background: Uveitis is an extra articular manifestation of psoriatic arthritis (PsA). Biological therapy, especially monoclonal TNF inhibitors, are useful to prevent and to treat refractory non-infectious uveitis. However, other biologics had been related to paradoxical uveitis

Objectives: Our aim was to assess **a)** the epidemiological and clinical features of uveitis associated to PsA and **b)** its relationship with biological treatment used in PsA.

Methods: Observational study of unselected consecutive patients studied in a single reference University Hospital with: **a)** diagnosis of PsA by CASPAR criteria and **b)** diagnosis of uveitis by ophthalmologist exploration. Demographics features, clinical findings, complementary tests and treatment were recorded.

Results: We studied 320 (182 women/138 men) patients with PsA; mean age at PsA diagnosis of 41.7±15.79 years and with a delay of diagnosis from the onset of symptoms of 2.6±2.01 years.

Ten patients (4 men/6 women) out of 320 patients (prevalence 3.13%) with a mean age of 42.2 ± 16.8 years were diagnosed of uveitis after a mean follow-up of 10±7.9 years. In all cases, the uveitis had an anterior pattern. Only 1 (10%) of them had a bilateral affection, acute onset in 10 patients (100%), and 4 of them (40%) had a recurrent pattern. The diagnosis of uveitis preceded the one of PsA in 5 (50%) patients in 1.6±0.87 years. In those with a previous diagnosis of PsA, it was done 13.3±10.4 years before the uveitis onset. Only 1 patient (10%) with recurrent unilateral uveitis presented vitritis. In 10 patients the mean number of anterior chamber cells was 2±0.4. Comparison of baseline characteristics and clinical features between patients who developed uveitis and those who did not is shown in **table**.

Only 2 patients (20%) with uveitis received biological therapy. The first one developed its first episode of uveitis after 29 months with etanercept. After the episode, a switch to adalimumab was done, without any other episode of uveitis after 22 months of treatment. The second one was a patient with multiple episodes of recurrent uveitis, who developed new flares with adalimumab, certolizumab and golimumab.

Conclusion: Most of the uveitis had an anterior and unilateral pattern. The onset of uveitis in patients with PsA can either precede or go after the diagnosis of the PsA. HLA B27+ was more frequent in patients with uveitis. Biological therapy did not achieve good answer in patients with recurrent uveitis.