

Figure 1.

PsAID12 was evaluated in 156 patients and we saw that patients with $DAPSA_{\leq 14}$ had significantly lower PsAID12 (mean $1.7 \pm SD 1.7$ vs. 3.9 ± 2.1), $p < 0.0001$. PsAID12 of less than 4 is considered a good outcome and all items of PsAID12 (Figure 1, mean values for NRS) were less than 4 in patients with $DAPSA_{\leq 14}$. All components of PsAID12 except item 3 (skin problems) were associated with $DAPSA_{\leq 14}$ on univariate analysis but only pain remained independent predictor on multiple regression analysis ($p < 0.0001$).

Conclusion: In these PsA patients, DAPSA VLDA/LDA was associated with higher disease duration and with lower PsAID12. Pain is dominant symptom in patients with psoriatic arthritis, even in those with $DAPSA_{\leq 14}$, and skin problems are not good represented in DAPSA index.

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AB0772 OSTEOPOROSIS AND ITS RELATIONSHIP WITH THE SERUM URIC ACID LEVEL IN PATIENTS WITH PSORIATIC ARTHRITIS

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Background: Although osteoporosis is an inherent comorbidity in inflammatory rheumatic disease and the risk of bone loss is high in patients with several rheumatic diseases, evidence is limited in psoriatic arthritis (PsA). One of the most prominent features in PsA is increased serum urate (SU) levels. Due to its antioxidant effects and protective role against osteoporosis, high SU levels are associated with increased bone mineral density (BMD) and reduced bone loss in the healthy population, and in patients with rheumatoid arthritis. However, whether this association is also present in patients with PsA has not been investigated.

Objectives: The aim of this study was to evaluate PsA patients with respect to the presence of osteoporosis and its association with SU levels.

Methods: This ongoing study included 86 patients (68 female, 18 male) who were diagnosed with PsA according to the CASPAR criteria and had indications for BMD testing according to the National Osteoporosis Foundation. Clinical characteristics including body mass index (BMI), pain VAS, patient global VAS, enthesitis, and tender and swollen joint counts were recorded. Evaluations included the PASI, PsAQoL, and HAQ. Disease activity was assessed using the DAPSA, BASDAI, and MDA. Osteoporosis was defined as a BMD T-score of -2.5 or less and osteopenia as a BMD T-score between -1 and -2.5 (WHO osteoporosis).

Results: The mean age of the study group was 55.4 (SD:9.2) years and the mean disease duration was 84.5 (SD:91.6) months. Indicators of secondary osteoporosis were type-1 diabetes mellitus (1%), hyperthyroidism (2.3%), early menopause (<age 40) (8.1%), and chronic liver disease (9.3%). As for the steroid use, the rates of never, previous and current users were 33.7%, 20.9% and 22.1%, respectively. Osteoporosis was found in 9.3% and osteopenia in 33.7% of the patients. A history of vertebral compression fractures or any fracture was

present in 20.9% of the patients, half of whom were in postmenopausal. BMD L_1-L_4 T- and Z-scores were lower in female patients ($p < 0.05$). DAPSA remission and MDA rates were 6% and 15%, respectively. Bone mineral density was similar across DAPSA disease activity categories (remission-low-moderate-high) ($p > 0.05$). The frequency of osteoporosis did not differ significantly between patients with DAPSA remission and non-remission ($p > 0.05$). The mean L_1-L_4 T- and Z-scores, and BMD g/cm^2 were significantly higher in patients with MDA than those without MDA ($p < 0.05$). The mean SU level was 5 (SD:1.3) mg/dl, and 18.6% of the patients had a SU level of 6 mg/dl or higher. There was no significant correlation between SU and BMD ($p > 0.05$). BMI showed a weak correlation with femur total T-score ($r = 0.244$). PASI showed weak inverse correlations with femur neck T-score ($r = -0.286$) and total femur T-score ($r = -0.245$). BMD variables showed no correlations with disease duration, acute phase reactants, BASDAI, PsAQoL, and cumulative steroid dose.

Conclusion: Patients with PsA did not have an increased prevalence of low BMD despite fractures. Osteoporosis was associated with MDA and the severity of psoriasis, but not with DAPSA, SU level, functional impairment, and quality of life.

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AB0773 THE INCIDENCE OF RESIDUAL DISEASE ACTIVITY FOLLOWING DIVERSE DISEASE ACTIVITY MEASUREMENTS FOR PSORIATIC ARTHRITIS

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Background: Due to the complex nature of psoriatic arthritis (PsA), diverse disease activity measures have been developed, the most common of which include Disease Activity Score for Psoriatic Arthritis (DAPSA), Minimal Disease Activity (MDA) and Very Low Disease Activity (VLDA). Recently, new composite measures have been developed such as Psoriatic Arthritis Disease Activity Score (PASDAS) and GRACE index. Due to different domains and assessments, even though these measures may indicate remission or low disease activity, residual disease activity (RDA) may persist.

Objectives: The aim of this study was to evaluate RDA in patients with PsA.

Methods: A total of 148 patients (105 female, 43 male; mean age 47.5 (SD:12.6) years) who met the CASPAR criteria for PsA were recruited. Demographic and clinical characteristics of patients were recorded, including pain visual analog scale (VAS), joint VAS, patient global VAS, and tender and swollen joint counts. Evaluations included the Leeds Enthesitis Index (LEI), Psoriasis Area and Severity Index (PASI), Psoriatic Arthritis Quality of Life (PsAQoL), Short-Form 36 Health Survey (SF-36) and Health Assessment Questionnaire (HAQ). Disease activity and remission were assessed using the DAPSA, MDA, VLDA, PASDAS and GRACE Index. MDA was calculated with 5 and 6 positivity criteria separately. Low disease activity (LDA) was defined as follows: $DAPSA_{\leq 14}$, $PASDAS_{\leq 3.2}$ and $GRACE_{\leq 2.3}$. RDA was defined as the presence of at least one of the following criteria despite remission or LDA: tender and/or swollen joints > 1 , dactylitis > 1 , $LEI > 1$, $HAQ > 0.5$, $PASI > 1$, $PtGA > 20$, physician $VAS > 20$, or pain $VAS > 15$.

Results: The mean duration of disease was 68.2 (SD:80.2) months. DAPSA-LDA, PASDAS-LDA, GRACE-LDA, MDA and VLDA were observed in 48.6%, 14.6%, 14.9%, 23.6% and 2% of PsA patients, respectively. RDA as determined by at least one domain was identified in 91%, 95%, 86% and 86% of patients who were classified as having MDA, DAPSA-LDA, PASDAS-LDA and GRACE-LDA, respectively. Undetected RDA was most common with DAPSA, whereas VLDA completely ruled out RDA. PASDAS and GRACE resulted in similar rates of RDA (Table-1). With DAPSA-LDA, the incidence of RDA in the pain domain was significantly lower with older age. Female patients had higher rates of RDA with the LEI and HAQ ($p < 0.05$).

Conclusion: VLDA was the most and DAPSA was the least sensitive method to detect remission/LDA. RDA should be kept in mind in patients with PsA when using current measures to assess remission or LDA.

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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.

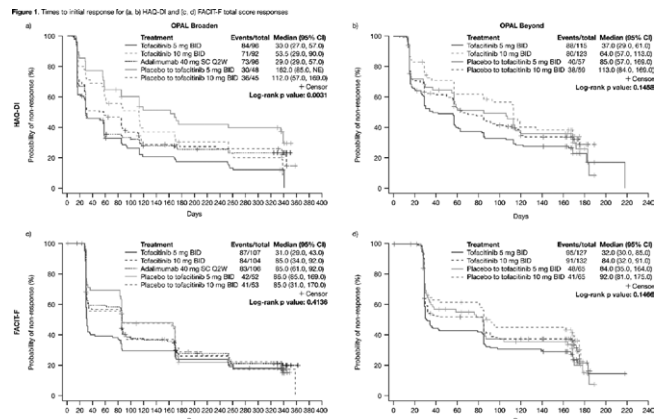
Methods: In this post hoc analysis, data were collected from two Phase 3 studies (OPAL Broaden [12 months; NCT01877668]; OPAL Beyond [6 months; NCT01882439]).^{3,4} Pts receiving tofacitinib 5 or 10 mg twice daily (BID), subcutaneous ADA 40 mg once every two weeks (Q2W; OPAL Broaden only), or PBO switching to tofacitinib 5 or 10 mg 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 5 mg BID, tofacitinib 10 mg 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 5 mg 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).

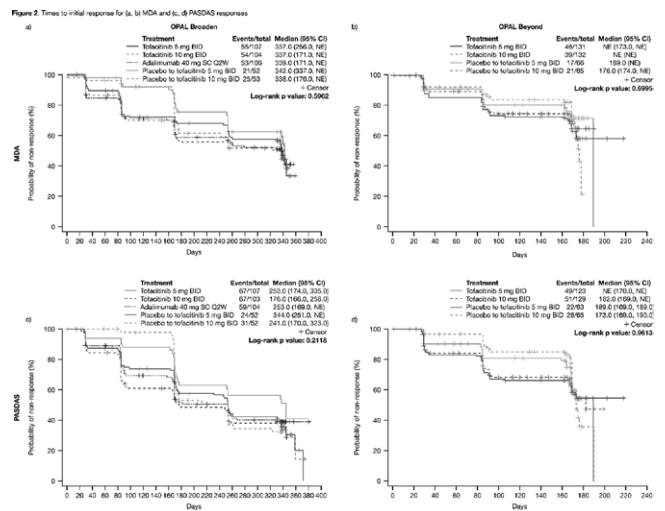
Conclusion: Times to initial response in functional ability and disease activity were similar in pts treated with either tofacitinib or ADA. Time to initial response prior to first post-BL observation (Week 2 or M1) was not estimable in this analysis. These results may help physicians better understand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

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



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: placebo; 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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