

pain vs. PaGI -35.7 and 23.3 [-6.3]. LLoA and ULoA remained constant over the whole range of the VAS-scales.

**Conclusions:** In patients with SpA, fatigue, pain and PaGI scores were poorly associated and only poorly explained by other potential explanatory variables. On the individual level, disagreements between the scores were substantial. The findings emphasize the complexity of understanding patient-reported outcome measures and their diverging interplay across individuals.

**References:**

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## Psoriatic arthritis

### FRI0482 INSULIN RESISTANCE IN PATIENTS WITH PSORIATIC ARTHRITIS

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**Background:** inflammation and, levels of inflammatory markers, CRP and other cytokines are important for enhancing insulin resistance in PsA patients.

Inflammation and, levels of inflammatory markers, CRP and other inflammatory cytokines are important players for enhancement and development of insulin resistance in psoriatic arthritis patients.

**Objectives:** To investigate the relation between insulin resistance and psoriatic arthritis presence and disease activity.

To investigate the relation between insulin resistance and disease activity in patients with psoriatic arthritis.

**Methods:** *Patients Inclusion criteria:* all patients in this study had psoriatic arthritis with disease duration 5 years or more. All under conventional DMARDs treatment in the form of methotrexate 12.5 mg/wk, hydroxychloroquine 400mg/day. With no treatment with glucocorticoids, 3 months prior to enrollment in the study and no previous treatment with biologics. All patients were Postmenopausal females with 3 or more years since menopause.

*Exclusion Criteria:* DM, ischemic heart disease, hypertension, or any other chronic diseases, Smoking, on medications Medications that affect blood lipids, or body composition and metabolic functions. Postmenopausal females who were on hormonal replacement therapy.

*Grouping:* G I: Included 50 postmenopausal females with psoriatic arthritis. G II: Included 25 normal postmenopausal females, as a control group.

*Methods:* 1. Full medical history and Complete clinical examination 2. Anthropometric measurements: Body mass index (BMI), Waist-hip ratio (WHR). 3. The following laboratory investigations were done: C-reactive protein (CRP), Fibrinogen, Fasting insulin. 4. Measures of insulin resistance: Homeostasis model assessment of insulin resistance (HOMA-IR): (a) HOMA 1-IR: It is calculated according to the following equation: Fasting insulin ( $\mu$ U/ml) x FBS (mg/dL)/405. (2). Insulin resistance was defined as HOMA-IR >3. 8. (3), (4). (b) HOMA 2-IR: it is the updated (or computer) model with nonlinear solutions, which also uses paired fasting glucose and insulin values, were calculated using the computer model (HOMA calculator version 2.2).

**Results:** Comparing means of age, BMI, and WHR of both groups' shows no significant difference, which indicates that both groups was matched and valid for comparison. G I have significantly higher values than the control group in the laboratory parameters Insulin, CRP and Fibrinogen as  $p > 0.05$ , and the insulin resistance parameters (HOMA1, HOMA2). G I was significantly higher than the control group as  $p > 0.05$ . Significant positive correlation also found between *Index for Psoriatic Arthritis (DAPSA)* and insulin, HOMA1, and HOMA2.

**Conclusions:** Psoriatic arthritis is associated with increased risk of insulin resistance. PsA activity is strongly associated with developing insulin resistance in psoriatic arthritis patients.

**Disclosure of Interest:** None declared

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### FRI0483 WORK CAPACITY AND QUALITY OF LIFE IN A COHORT OF PATIENTS WITH EARLY PSORIATIC ARTHRITIS IN ARGENTINA

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**Objectives:** To evaluate work capacity and quality of life in patients with early Psoriatic Arthritis (PsA).

**Methods:** Multi-center study in which patients with recent onset of PsA (disease duration <3 years) who met the CASPAR criteria established by the Early Spondyloarthritis Committee (CONEART) were enrolled. Work loss and lost workdays within six months prior to the baseline visit attributable to their baseline condition were evaluated, as well as quality of life, measured by PsAQoL. Statistical analysis: descriptive statistics, Spearman's correlation, multiple linear regression model.

**Results:** 108 patients with a PsA diagnosis were enrolled. 53% (57/108) were male, of a mean age of 48.4 (SD 12.5). The mean PsA disease duration was 17.6 (SD 9.8) months. 4/60 patients (6.6%) were positive for HLA-B27. BASDAI 4.81±2.66; BASFI 3.75±2.70; PsAQoL 7.24±6.44; HAQ-A 0.72±0.61, physician global activity assessment (by Visual Numeric Scale, VNS) 3.76±2.33, and pain assessment (VNS) 5.22±2.98. The average days lost due to the condition within the past 6 months was 8.6 (SD 32.1), it was significantly associated with the presence of enthesitis, number of swollen joints, worse BASDAI, BASFI, lower level of education, and higher pain and physician global activity assessment ( $p < 0.0001$ ). Five patients lost their job due to PsA. 12% of the patients had a disability certificate and the possession of one, according to the logistic regression model, was associated with a longer PsA disease duration (OR 1.09,  $p = 0.02$ ). A poorer quality of life was significantly correlated to the physician assessment of disease activity ( $p < 0.001$ ) and pain ( $p < 0.01$ ) using a linear regression model.

**Conclusions:** In this cohort of patients with early PsA, the deterioration of work capacity expressed in lost workdays was associated with disease activity parameters and functional disability. The physician global activity assessment and pain were the main factors associated with the impact on patient's quality of life. Having a disability certificate was associated with longer disease duration. Although this is an early cohort of PsA patients, a worsening in quality of life and work disability was observed.

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### FRI0484 IMPACT OF PSORIATIC ARTHRITIS ON PATIENT-REPORTED OUTCOMES IN 5 EUROPEAN UNION COUNTRIES

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**Objectives:** This non-interventional, cross-sectional, descriptive, exploratory analysis aimed to characterise patients (pts) with psoriatic arthritis (PsA) in the 2016 National Health and Wellness Survey (NHWS) and determine the impact of treatment, or no treatment, on pt-reported outcomes.

**Methods:** The NHWS was a self-administered, web-based, voluntary, confidential questionnaire. Stratified randomised sampling produced a representative sample of EU adults in France, Germany, Italy, Spain and UK. Respondents completing the arthritis module and reporting PsA diagnosis were stratified by: advanced therapies (tumour necrosis factor inhibitors, interleukin antagonists, phosphodiesterase-4 inhibitors) ± other drugs; other therapies (eg conventional synthetic disease-modifying antirheumatic drugs, glucocorticoids, topical medications); or no current treatment. Short Form-36 health survey (SF-36), Work Productivity and Activity Impairment questionnaire and Patient Health Questionnaire-9 (PHQ-9) responses were summarised descriptively.

**Results:** NHWS was completed by 80,600 adults; 947 completed the arthritis module and self-reported PsA diagnosis. Of these, 65 (7%) reported receiving advanced therapies, 274 (29%) other therapies and 608 (64%) no current treatment. Age and gender were generally balanced between the groups (mean 51–56 years; 51–64% female). More patients on advanced therapies had a body mass index  $\geq 30$  (41%) vs other therapies (34%) and no current treatment (26%). Pts on advanced therapies reported more comorbidities (mean 2.2) vs pts on other therapies (mean 1.8) and pts with no current treatment (mean 1.7). More pts on advanced therapies were current smokers (49%) vs pts on other therapies (30%) and pts with no current treatment (32%). Prior to treatment with advanced or other therapies, 94% and 82% self-reported moderate or severe PsA, falling to 58% and 59%, respectively, after treatment, compared with 36% of pts with no current treatment. SF-36 scores and PHQ-9 scores did not widely vary across groups (Table 1). Regardless of treatment groups, pts reported >20% work loss, >45% overall work impairment and >45% activity impairment (Table 1).

**Conclusions:** More than 60% of pts reporting PsA diagnosis reported no current

**Table 1. Mean (SD) outcome scores by treatment type**

	Advanced therapies N=65	Other therapies N=274	Not treated N=608
SF-36 MCS	38.0 (11.0)	40.1 (11.6)	39.8 (10.5)
SF-36 PCS	36.0 (9.9)	37.6 (9.6)	43.9 (8.4)
PHQ-9 total score <sup>a</sup>	7.7 (7.0)	9.1 (6.8)	7.8 (7.1)
WPAI domain scores <sup>b</sup>			
% work missed	26.8 (29.7)	27.8 (35.4)	20.8 (27.8)
% impairment at work	55.8 (31.1)	42.8 (29.6)	44.5 (29.3)
% overall work impairment	61.4 (34.2)	49.0 (33.2)	51.1 (32.6)
% activity impairment	62.0 (26.1)	57.8 (26.5)	48.3 (28.9)

<sup>a</sup>N = 22, 45, 137 for advanced therapies, other therapies, not treated, respectively

<sup>b</sup>N for WPAI % work missed = 33, 113, 338, respectively for advanced therapies, other therapies, not treated; N for WPAI % impairment at work and overall work impairment = 33, 99, 328, respectively, for advanced therapies, other therapies and not treated

MCS, mental component summary; PCS, physical component summary; PHQ-9, Patient Health Questionnaire-9; SD, standard deviation; SF-36, Short Form-36 health survey; WPAI, Work Productivity and Activity Impairment questionnaire

treatment. Regardless of treatment group, pts reported >20% work loss and >45% work impairment. Among treated pts, >50% reported moderate or severe PsA, suggesting a need for overall better management of PsA to reduce the disease impact and improve quality of life. Our results are limited by self-reported PsA diagnosis, which may differ from physician-reported PsA diagnosis, and the survey being conducted in the EU only, which may differ from other parts of the world. Further statistical analyses are needed to determine differences between groups and correlation to other health indicators.

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#### FRI0485 IN PERIPHERAL PSORIATIC ARTHRITIS DKK-1 AND PTH ARE LOWER THAN IN RHEUMATOID ARTHRITIS AND HEALTHY CONTROLS

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**Background:** The recent characterization of the canonical WNT pathway in the regulation of bone modeling and remodeling provided important insights for our understanding of the pathophysiology of bone involvement in chronic arthritis [1]. Dkk-1 and sclerostin are the main regulators of WNT/b-catenin signaling, regulating both bone formation and resorption [2]. In a previous our study we showed that in patients with Rheumatoid Arthritis (RA) Dkk-1 is significantly increased and associated with the presence of typical erosions and lower BMD [3].

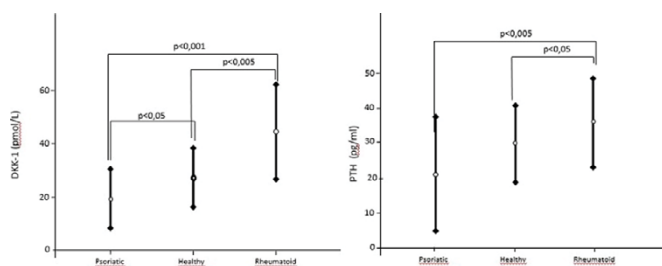
**Objectives:** we decided to perform this study in order to compare the serum levels of WNT-pathway regulators alongside bone turnover markers (BTM) and Parathyroid Hormone (PTH) between a group of female patients with PsA and healthy controls (HC) or patients with Rheumatoid Arthritis (RA).

**Methods:** this is a cross-sectional study including 18 patients with PsA classified with the CASPAR criteria, 35 HC, and 28 patients with RA classified with the ACR/EULAR 2010 criteria. Intact N-propeptide of type I collagen (PINP), C-terminal telopeptide of type I collagen (CTX-I), Dickkopf-related-protein 1 (Dkk-1), sclerostin, PTH and 25OH-Vitamin D serum levels were dosed. All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards. Informed consent was obtained from all individual participants included in the study.

**Results:** the PsA group showed significantly lower Dkk-1 levels when compared to the HC and RA groups. Dkk-1 in the RA group was also significantly higher than in the HC group. A similar trend was documented also for PTH, however a statistically significant difference was observed only when we comparing the PsA vs RA group (table 1, figure 1). No other statistically significant differences in the other markers were found.

Table 1. Values of bone turnover markers (CTX-I, PINP), Dkk-1 and sclerostin of PsA, RA patients and control group (mean ± SD)

	PsA	RA	HC	P (ANOVA)
PINP ng/ml	42,80±16,670	39,19±21,38	42,49±11,52	NS
CTX-I ng/ml	0,21±0,17	0,32±0,21	0,28±0,10	NS
Dkk-1 pmol/l	19,45±11,30	44,51±17,81	27,29±11,48	<0,001
Sclerostin pmol/l	30,82±11,25	30,75±10,25	34,23±17,29	NS
PTH pg/ml	21,12±16,63	35,83±13,02	29,69±11,43	<0,005



**Conclusions:** this study demonstrated for the first time that Dkk-1 levels in PsA are lower than HC, in contrast with RA where they are higher. These results might contribute to explain the different bone involvement of the two different diseases.

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#### FRI0486 INTRAVENOUS GOLIMUMAB IN ADULT PATIENTS WITH ACTIVE PSORIATIC ARTHRITIS: EFFICACY AND SAFETY THROUGH WEEK 24

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**Objectives:** The GO-VIBRANT study was designed to evaluate the safety and efficacy of intravenous (IV) golimumab (GLM) in adult patients (pts) with active PsA (biologic-naïve).

**Methods:** GO-VIBRANT is a Phase 3, multicenter, randomized, double-blind, placebo (PBO)-controlled trial. Biologic-naïve active PsA pts were randomized (1:1) to IV GLM 2mg/kg at weeks (wk) 0, 4, and every 8 wks thereafter or PBO at wks 0, 4, 12, and 20 with crossover to GLM at wk24. The primary endpoint was ACR20 response at wk14. Multiplicity-controlled endpoints were ACR50, ACR70, PASI 75, change from baseline in HAQ-DI, enthesitis, dactylitis, SF-36 PCS/MCS scores at wk14; and ACR50 and change from baseline in total modified vdH-S (structural damage) score at wk24. Efficacy analyses were based on randomized treatment. Adverse events (AE) through wk24 are reported here. Investigators remain blinded through wk60.

**Results:** 480 pts were randomized (PBO: 239; GLM: 241). The study met its primary and all controlled secondary endpoints. At wk14, significantly greater proportions of GLM pts vs PBO achieved ACR20 (75.1% vs. 21.8%). Also, GLM treatment resulted in significant change from baseline HAQ-DI score (-0.60 vs. -0.12), ACR50 (43.6% vs. 6.3%), PASI 75 (59.2% vs. 13.6%), ACR70 (24.5% vs. 2.1%), change from baseline in enthesitis and dactylitis scores (-1.8 vs. -0.8 and -7.8 vs. -2.8, respectively), and change from baseline in SF-36 PCS and SF-36 MCS scores (8.65 vs. 2.69 and 5.33 vs. 0.97, respectively) (all p<0.001) at wk14. At wk24, significantly greater proportions of GLM pts vs. PBO pts achieved ACR 50 (53.5% vs. 6.3%, p<0.001). At wk24, there was significantly less progression of structural damage for GLM pts vs PBO as measured by change from baseline in total modified vdH-S score (-0.36 vs. 1.95; p<0.001). ACR20 was significantly higher with GLM than PBO as early as wk2 (45.6% vs. 7.5%; p<0.001). 27.0% of GLM pts (vs. 4.2% PBO) achieved Minimal Disease Activity by wk14. Due to the difference in response rates in GLM vs. PBO treated pts, the number needed to treat for ACR20 at wk14 was 1.9 in a post-hoc analysis (Table). Through wk24,