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Table 1. Demographics, Treatment Profiles, Disease Activity, Quality of Life, and Work Productivity at Enrollment for Patients With Multidomain vs Single-Domain PsA Disease Presentations

Characteristic*	Multidomain (N = 1698)	Single Domain† (N = 617)	P Value‡
Age, years	53.5 (13.2) [1678]	54.5 (12.9) [607]	0.20
Female, n/m (%)	907/1689 (53.7)	314/610 (51.5)	0.35
Race, n (%)	n = 1655	n = 596	0.04
White	1548 (93.5)	572 (96.0)	
Black	9 (0.5)	4 (0.7)	
Other	98 (5.9)	20 (3.4)	
BMI, kg/m ²	32.0 (7.4) [1658]	31.3 (7.6) [600]	< 0.01
Symptom duration, years	11.3 (10.7) [1651]	11.0 (9.7) [594]	0.51
Disease duration, years	7.7 (8.8) [1662]	8.5 (8.1) [598]	< 0.01
Select comorbidities, n (%)			
Psoriasis	1537 (90.5)	520 (84.3)	< 0.01
Nail psoriasis	602 (35.5)	81 (13.1)	< 0.01
Depression	280 (16.5)	57 (9.2)	< 0.01
Fibromyalgia	114 (6.7)	23 (3.7)	< 0.01
Anxiety	65 (3.8)	12 (1.9)	0.03
History of biologic use, n (%)	561 (33.0)	151 (24.5)	< 0.01
History of csDMARD use, n (%)	478 (28.2)	151 (24.5)	0.08
History of prednisone use, n (%)	230 (13.5)	83 (13.5)	0.95
Current biologic use, n (%)	980 (57.7)	378 (61.3)	0.13
Current csDMARD use, n (%)	859 (50.6)	339 (54.9)	0.06
Current prednisone use, n (%)	122 (7.2)	42 (6.8)	0.75
Physician global assessment (VAS 0-100)	24.3 (21.4) [1686]	10.9 (15.0) [612]	< 0.01
Physician global assessment of psoriasis (VAS 0-100)	28.0 (22.6) [1661]	12.9 (15.0) [594]	< 0.01
Patient pain (VAS 0-100)	44.8 (29.2) [1590]	28.6 (26.9) [580]	< 0.01
Patient-reported fatigue (VAS 0-100)	45.9 (29.2) [1676]	33.8 (28.4) [602]	< 0.01
Patient global assessment (VAS 0-100)	43.1 (28.4) [1669]	36.8 (31.5) [605]	< 0.01
HAQ-DI (0-3)	0.8 (0.7) [1600]	0.5 (0.6) [586]	< 0.01
EQ-5D (0-1)	0.7 (0.2) [1592]	0.8 (0.2) [579]	< 0.01
EQ VAS (0-100)	67.4 (29.1) [1667]	75.5 (19.8) [606]	< 0.01
WPAI domains			
Current employment, n/m (%)	987/1646 (60.0)	381/595 (64.0)	0.08
% Work time missed	6.2 (17.5) [842]	2.7 (11.3) [323]	< 0.01
% Impairment while working	22.9 (24.4) [887]	12.4 (18.9) [344]	< 0.01
% Overall work impairment	26.2 (26.8) [798]	13.0 (19.5) [306]	< 0.01
% Activity impairment	34.7 (29.9) [1530]	19.1 (24.3) [549]	< 0.01

BMI, body mass index; csDMARD, conventional synthetic disease-modifying antirheumatic drug; EQ-5D, EuroQol-5 Dimensions; EQ VAS, EuroQol visual analogue scale; HAQ-DI, Health Assessment Questionnaire Disability Index; PsA, psoriatic arthritis; WPAI, Work Productivity and Activity Impairment questionnaire; VAS, visual analogue scale.

* All values were calculated based on available data and are presented as "mean (SD) [n]" unless otherwise stated.

† Single-domain disease presentations for PsA overall (N = 617) included skin disease (53.8%), peripheral arthritis (29.0%), nail psoriasis (10.9%), axial disease (3.4%), enthesitis (1.8%), and dactylitis (1.1%).

‡ Test or Wilcoxon rank-sum test for continuous variables and χ^2 or Fisher's exact test for categorical variables.

Table 2. Multidomain vs Single-Domain Impact on Outcomes—Multivariable Regression Coefficients Estimating the Association of Presence of Multidomain Presentations With Selected PsA Disease Activity, Quality of Life, and Work Productivity and Activity Measures Relative to Single-Domain Presentations in Patients With PsA

Outcomes*	β Coefficient (95% CI)	P Value
Physician global assessment	12.16 (10.30, 14.01)	< 0.001
Physician global assessment of psoriasis	14.03 (12.03, 16.04)	< 0.001
Patient pain	14.02 (11.26, 16.78)	< 0.001
Patient-reported fatigue	10.09 (7.38, 12.81)	< 0.001
Patient global assessment	5.65 (2.81, 8.49)	< 0.001
HAQ-DI	0.26 (0.20, 0.32)	< 0.001
EQ-5D	-0.07 (-0.09, -0.06)	< 0.001
% Work time missed	2.71 (0.57, 4.84)	0.013
% Impairment while working	8.63 (5.72, 11.55)	< 0.001
% Overall work impairment	11.02 (7.69, 14.36)	< 0.001
% Activity impairment	13.47 (10.65, 16.29)	< 0.001

BMI, body mass index; csDMARD, conventional synthetic disease-modifying antirheumatic drug; EQ-5D, EuroQol-5 Dimensions; HAQ-DI, Health Assessment Questionnaire Disability Index; PsA, psoriatic arthritis.

* Single-domain disease is the reference group. Adjusted for age, sex, race, BMI, disease duration, and current and prior biologic, csDMARD, and prednisone use.

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GENETIC ANALYSIS OF THE NF-KB PATHWAY CAN BE USEFUL TO DISTINGUISH PATIENTS AT RISK OF PSORIATIC ARTHRITIS WITHIN THE SPECTRUM OF PSORIATIC DISEASE

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Background: Psoriasis and psoriatic arthritis (PsA) are the main manifestations of what is now known as psoriatic disease. Both entities share common genetic pathways, but they also differ. The NF-Kb pathway has been implicated in the genesis of psoriatic disease, but the differential contribution of this genetic pathway to the risk of psoriasis and PsA is not fully understood¹.

Objectives: Our aim was to study the association of common polymorphisms at genes of the NF-Kb pathway in patients with psoriatic disease.

Methods: The study involved a total of 690 psoriatic disease patients (187 of them with PsA) and 550 controls. We genotyped three common polymorphisms in *NFKB1* (rs230526), *NFKBIA* (rs7152376) and *NFKBIZ* (rs3217713 indel) and compared allele and genotype frequencies between cases and controls.

Results: The rare *NFKBIA* rs7152376 C was significantly more frequent in the PsA group vs. controls (0.42 vs. 0.36; p=0.04, OR=1.29, 95% CI=1.02-1.63). Compared to skin psoriasis, PsA patients showed a significantly higher frequency of the rs7152376 C (0.42 vs. 0.31; p<0.001). In reference to the genotypes, carriers of rs7152376 C (CC+CT) were non-significantly more frequent in PsA compared to controls (0.66 vs. 0.58; p=0.06). However, the frequency of these carriers was significantly higher in PsA vs. skin psoriasis (p=0.004). Thus, our data showed significant association between the rare *NFKBIA* rs7152376 C allele and PsA, and a trend toward the opposite effect for skin psoriasis. Neither *NFKB1* rs230526 or *NFKBIZ* rs3217713 indel were associated with the risk of developing psoriasis or PsA.

Conclusion: We found a significant association between *NFKBIA* variants and PsA. Our study shows that alterations in the same genetic pathway may have differential effects on different manifestations of psoriatic disease. Additional studies from larger cohorts and different populations are necessary to validate these results.

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UNDERSTANDING MEDIATORS OF PAIN REDUCTION IN PSORIATIC ARTHRITIS PATIENTS TREATED WITH TOFACITINIB: ROLE OF INFLAMMATION

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Background: Pain is a priority for patients (pts) with psoriatic arthritis (PsA) and physicians. Tofacitinib is an oral Janus kinase inhibitor for the treatment of PsA. As pain is a multidimensional phenomenon, there is growing interest in understanding mechanisms of pain relief during treatment.

Objectives: To examine the potential role of inflammation in the effect of tofacitinib on pain in pts with PsA, using mediation modelling.

Methods: Data were from the Phase 3 OPAL Broaden (NCT01877668) and OPAL Beyond (NCT01882439) studies of pts with active PsA treated