ONLINE SUPPLEMENTARY MATERIAL

Supplementary Table 1. Demographics, clinical characteristics, and treatment profiles of

patients with PsA and without fibromyalgia in the Corrona PsA/SpA Registry at their enrollment

visit, stratified by location of SPARCC enthesitis sites.

| | | Patients With Enthesitis | | | |
|-----------------------------------|---|---|---------------------------------|----------------------------------|--|
| Characteristic | Patients Without Enthesitis (n = 1557) | All Patients With Enthesitis (n = 349) | Upper Sites Only (n = 71) | Lower Sites Only (n = 120) | Both Upper and Lower Sites (n = 158) |
| Age, mean (SD), years | 53.8 (13.3)) | 52.6 (12.8) | 51.9 (12.8) | 50.4 (12.5)* | 54.6 (12.7) |
| Female, n (%) | 745 (48.4) | 209 (60.2)* | 35 (49.3) | 64 (53.8) | 110 (70.1)* |
| White, n (%) | 1418 (94.5) | 320 (93.6) | 66 (97.1) | 110 (92.4) | 144 (92.9) |
| BMI, mean (SD), kg/m ² | 31.5 (7.3) | 31.4 (7.0) | 29.9 (5.9) | 31.1 (6.1) | 32.4 (7.8) |
| Marital status, n (%) | | | | | |
| Single | 238 (15.5) | 43 (12.5) | 10 (14.5) | 16 (13.4) [†] | 17 (10.9) |
| Married | 1055 (68.6) | 239 (69.5) | 45 (65.2) | 82 (68.9)† | 112 (71.8) |
| Partnered | 18 (1.2) | 9 (2.6) | 1 (1.4) | 5 (4.2) [†] | 3 (1.9) |
| Widowed | 72 (4.7) | 10 (2.9) | 2 (2.9) | 1 (0.8) [†] | 7 (4.5) |
| Separated | 16 (1.0) | 2 (0.6) | 11 (15.9) | 1 (0.8)† | 1 (0.6) |
| Divorced | 140 (9.1) | 41 (11.9) | 0 | 14 (11.8) [†] | 16 (10.3) |
| Patient-reported work status, | | | | | |
| n (%) | | | | | |
| Full time | 854 (55.6) | 198 (57.2) | 44 (63.8) | 75 (62.5) [†] | 79 (50.3) |
| Part time | 130 (8.5) | 31 (9.0) | 7 (10.1) | 10 (8.3) [†] | 14 (8.9) |

| Disabled | 120 (7.8) | 33 (9.5) | 1 (1.4) | 13 (10.8) [†] | 19 (12.1) |
|--|-------------|-------------------------|------------------------|------------------------|------------------------|
| Retired | 334 (21.7) | 61 (17.6) | 12 (17.4) | 15 (12.5) [†] | 34 (21.7) |
| Other | 98 (6.4) | 23 (6.6) | 5 (7.2) | 7 (5.8)† | 11 (7.0) |
| Symptom duration, mean (SD), years | 11.4 (10.4) | 10.8 (10.0) | 10.5 (9.6) | 9.8 (9.6) | 11.8 (10.5) |
| Disease duration, mean (SD), years | 8.7 (9.0) | 7.0 (8.0)* | 6.8 (7.7) | 6.4 (7.8)* | 7.6 (8.4) |
| Physician-reported history of comorbid conditions, n (%) | | | | | |
| Psoriasis | 1358 (87.2) | 319 (91.4)* | 66 (93.0) | 110 (91.7) | 143 (90.5) |
| Cardiovascular disease | 769 (49.4) | 172 (49.3) | 36 (50.7) | 53 (44.2) | 83 (52.5) |
| Hypertension | 562 (36.1) | 126 (36.1) | 23 (32.4) | 41 (34.2) | 62 (39.2) |
| Nail psoriasis | 430 (27.6) | 153 (43.8)* | 38 (53.5)* | 36 (30.0) | 79 (50.0)* |
| Hyperlipidemia | 374 (24.0) | 79 (22.6) | 17 (23.9) | 24 (20.0) | 38 (24.1) |
| Depression | 175 (11.2) | 56 (16.0) | 7 (9.9) | 25 (20.8)* | 24 (15.2) |
| History of biologic use, n (%) | 384 (24.7) | 124 (35.5)* | 21 (29.6) | 43 (35.8)* | 60 (38.0)* |
| No. of prior biologics, n (%) | | | | | |
| 0 | 1173 (75.3) | 225 (64.5) [†] | 50 (70.4) [†] | 77 (64.2) [†] | 98 (62.0) [†] |
| 1 | 259 (16.6) | 81 (23.2) [†] | 19 (26.8) [†] | 26 (21.7)† | 36 (22.8)† |
| ≥2 | 125 (8.0) | 43 (12.3) [†] | 2 (2.8) [†] | 17 (14.2) [†] | 24 (15.2) [†] |
| History of csDMARD use, n (%) | 350 (22.5) | 113 (32.4) | 23 (32.4) | 40 (33.3)* | 50 (31.6)* |
| History of tsDMARD use, n (%) | 22 (1.4) | 12 (3.4)* | 2 (2.8) | 4 (3.3) | 6 (3.8) |
| Current csDMARD use only (no biologics or tsDMARDs), n (%) | 428 (27.5) | 77 (22.1) | 18 (25.4) | 20 (16.7)* | 39 (24.7) |

* p < 0.05 for comparison between the overall or location enthesitis groups and the no enthesitis

group.[†] p < 0.05 for comparison of overall distribution across categories between the overall or

location enthesitis groups and the no enthesitis group. BMI: body mass index; csDMARD:

conventional synthetic disease-modifying antirheumatic drug; SPARCC: Spondyloarthritis

Research Consortium of Canada; tsDMARD: targeted synthetic disease-modifying

antirheumatic drug.

Supplementary Table 2. Disease activity, QOL, and work productivity of patients with PsA and

without fibromyalgia in the Corrona PsA/SpA Registry at their enrollment visit, stratified by

location of SPARCC enthesitis sites.

| Characteristic* | Patients | Patients With Enthesitis | | | |
|--|-------------------------------------|---|---------------------------------|----------------------------------|---|
| | Without Enthesitis (n = 1557) | All Patients With Enthesitis (n = 349) | Upper Sites Only (n = 71) | Lower Sites Only (n = 120) | Both Upper and Lower Sites (n = 158) |
| Modified MDA, n (%) | 407 (31.7) | 27 (9.0) | 6 (9.8) [†] | 13 (12.5) [†] | 8 (5.9) [†] |
| Tender joint count (0-68) | 2.7 (5.4) | 11.7 (12.2) | 8.4 (9.2) [†] | 7.1 (9.3) [†] | 16.5 (13.4) [†] |
| Swollen joint count (0-66) | 1.8 (3.5) | 3.7 (6.0) | 3.7 (6.1) [†] | 3.9 (7.0) [†] | 3.6 (5.0)† |
| SPARCC Enthesitis Index (1-16) | 0 | 3.9 (3.0) | 2.1 (1.1) | 2.1 (1.4) | 6.2 (3.0) [†] |
| Dactylitis, n (%) | 128 (8.2) | 50 (14.3) | 9 (12.7) | 22 (18.3) [†] | 19 (12.0) |
| Dactylitis count (1-20) | 2.2 (1.7) | 2.5 (1.9) | 2.3 (1.4) | 3.1 (2.5) | 1.8 (1.0) |
| CDAI | 10.8 (7.6) | 16.8 (11.3) | 14.4 (10.0)† | 16.2 (12.3) [†] | 18.4 (10.8) [†] |
| BSA, % affected | 5.7 (11.5) | 6.0 (12.2) | 5.3 (8.8) | 5.7 (12.6) | 6.5 (13.1) |
| DAPSA | 14.9 (13.1) | 28.4 (18.8) | 26.8 (19.0) [†] | 22.8 (16.2) [†] | 34.2 (19.5) [†] |
| cDAPSA | 12.0 (10.2) | 25.4 (18.3) | 21.7 (16.7) [†] | 21.0 (17.1) [†] | 30.5 (18.7) [†] |
| Physician global assessment (VAS 0-100) | 16.0 (18.4) | 28.2 (21.2) | 22.3 (18.9) [†] | 29.0 (22.8) [†] | 30.3 (20.5) [†] |
| Patient-reported pain (VAS 0-100) | 35.0 (29.1) | 49.8 (27.2)) | 42.8 (27.2) [†] | 50.7 (28.7) [†] | 52.3 (25.7) [†] |
| Patient-reported fatigue (VAS 0-100) | 37.4 (29.1) | 49.4 (27.6) | 43.8 (28.6) [†] | 48.0 (29.2) [†] | 52.9 (25.5) [†] |

| Patient global assessment | 37.4 (29.1) | 48.5 (27.7) | 50.1 (30.0) [†] | 46.6 (26.3) [†] | 49.2 (27.7) [†] |
|----------------------------|-------------|-------------|--------------------------|--------------------------|--------------------------|
| (VAS 0-100) | | | | | |
| HAQ-DI (0-3) | 0.6 (0.6) | 0.9 (0.6) | 0.7 (0.6)† | 0.8 (0.7)† | 1.0 (0.6)† |
| EQ-5D (0-1) | 0.8 (0.2) | 0.7 (0.2) | 0.8 (0.2) [†] | 0.7 (0.2)† | 0.7 (0.2) [†] |
| EQ-VAS (0-100) | 73.6 (20.7) | 65.6 (21.1) | 70.0 (20.8)† | 65.8 (21.5) [†] | 63.6 (20.8) [†] |
| WPAI questionnaire domains | | | | | |
| Current employment, | 939 (62.9) | 210 (64.6) | 46 (71.9) | 82 (68.9) | 82 (57.7) |
| n (%) | | | , | | |
| % Work time missed | 3.8 (14.3) | 5.4 (14.0) | 2.5 (8.3) | 5.0 (15.0) [†] | 7.5 (15.3)† |
| % Impairment while | 16.1 (21.4) | 25.3 (23.9) | 21.9 (24.5) | 25.0 (24.2) [†] | 27.6 (23.3) [†] |
| working | | 2010 (2010) | 2.1.0 (2.1.0) | 2010 (2112) | 2110 (2010) |
| % Overall work | 17.7 (23.1) | 28.5 (26.0) | 23.6 (26.1) | 28.2 (25.1) [†] | 32.0 (27.0) [†] |
| impairment | | 20.0 (20.0) | 20.0 (20.1) | 20.2 (20.1) | 02.0 (21.0) |
| % Activity impairment | 24.4 (27.3) | 39.9 (29.5) | 30.3 (28.9) | 40.8 (29.3) [†] | 43.4 (29.4) [†] |

* All values are presented as mean (SD) unless otherwise stated. [†] p < 0.05 for comparison between the overall or body location between the enthesitis groups and the no enthesitis group. BSA: body surface area; CDAI: Clinical Disease Activity Index; cDAPSA: clinical Disease Activity Index for Psoriatic Arthritis; DAPSA: Disease Activity Index for Psoriatic Arthritis; EQ-5D: Euroqol 5-dimension scale; EQ-VAS: Euroqol Quality of Life visual analog scale; HAQ-DI: Health Assessment Questionnaire Disability Index; MDA: modified minimal disease activity (defined as meeting \geq 5 of the following criteria: tender joint count \leq 1, swollen joint count \leq 1, BSA \leq 3%, patient pain VAS \leq 15, patient global assessment VAS \leq 20, and HAQ-DI \leq 0.5); PsA: psoriatic arthritis; QOL: quality of life; SpA: spondyloarthritis; SPARCC: Spondyloarthritis Research Consortium of Canada; VAS: visual analog scale; WPAI: Work Productivity and Activity Impairment.

Supplementary Table 3. Spearman correlation coefficients of SPARCC score with disease

activity, QOL, and WPAI measures among patients with PsA and without fibromyalgia.

| Variables | N | Spearman Correlation Coefficient | p Values |
|-----------------------------|------|-------------------------------------|----------|
| CDAI | 1762 | 0.256 | < 0.001 |
| HAQ-DI | 1765 | 0.215 | < 0.001 |
| DAPSA | 949 | 0.380 | < 0.001 |
| Modified MDA (total score)* | 1583 | -0.291 | < 0.001 |
| Patient-reported pain | 1754 | 0.209 | < 0.001 |
| Patient-reported fatigue | 1865 | 0.172 | < 0.001 |
| Patient global assessment | 1880 | 0.270 | < 0.001 |
| BSA | 1796 | 0.027 | 0.247 |
| EQ5D | 1755 | -0.186 | < 0.001 |
| WPAI | | | |
| % Work time missed | 957 | 0.119 | < 0.001 |
| % Impairment while working | 1011 | 0.176 | < 0.001 |
| % Overall work impairment | 892 | 0.189 | < 0.001 |
| % Activity impairment | 1652 | 0.222 | < 0.001 |

* This variable is the total score of the 6 criteria for modified MDA: tender joint count \leq 1, swollen joint count \leq 1, BSA \leq 3%, patient pain VAS \leq 15, patient global assessment VAS \leq 20, and HAQ-DI \leq 0.5. BSA: body surface area; CDAI: Clinical Disease Activity Index; DAPSA: Disease Activity Index for Psoriatic Arthritis; EQ-5D: Euroqol 5-dimension scale; HAQ-DI: Health Assessment Questionnaire Disability Index; MDA: modified minimal disease activity (defined as meeting \geq 5 of the following criteria: tender joint count \leq 1, swollen joint count \leq 1, BSA \leq 3%, patient pain VAS \leq 15, patient global assessment VAS \leq 20, and HAQ-DI \leq 0.5); QOL: quality of

life; SPARCC: Spondyloarthritis Research Consortium of Canada; VAS: visual analog scale;

WPAI: Work Productivity and Activity Impairment.