

Supplementary Table S1. Population attributes and HRQoL domains of included patients per disease (n=401).

Characteristic	OA* (n= 70)	RA (n=69)	PsA (n=58)	SLE (n=41)	DM (n=55)	SSc (n=25)	Sjo (n=83)	p
Mean age (SD)	63.9 (12.5)	50.7 (15.3)	53.1 (16.1)	55.3 (12.2)	52.9 (14.3)	54.3 (14.9)	54.5 (15.9)	0.63
Female, n (%)	52 (74)	59 (86)	46 (79)	34 (83)	45 (82)	21 (84)	68 (82)	0.97
Race, n (%) [‡]								
White	53 (76)	47 (68)	38 (66)	27 (66)	36 (65)	14 (56)	54 (65)	0.10
Black	10 (14)	16 (23)	15 (26)	5 (12)	8 (15)	5 (20)	10 (12)	
Other	2 (3)	1 (1)	2 (3)	6 (15)	3 (5)	4 (16)	7 (8)	
Not identified	5 (7)	5 (7)	3 (5)	3 (7)	8 (15)	2 (8)	12 (14)	
Disease duration, mean months (SD)	*	42.9 (52.2)	47.5 (47.6)	46.4 (53.7)	43.5 (48.3)	51.5 (65.1)	42.8 (47.1)	0.97
Comorbidities n (%)								
Diabetes mellitus	9 (13)	5 (8)	5 (10)	4 (11)	4 (8)	2 (9)	9 (12)	0.98
HLD	34 (49)	18 (28)	13 (25)	15 (39)	15 (28)	4 (17)	3 (37)	0.31
CVD/CHF/Stroke	0 (0)	16 (23)	12 (21)	8 (20)	6 (11)	4 (16)	14 (17)	0.61
COPD	4 (6)	0 (0)	5 (10)	1 (3)	2 (4)	0 (0)	5 (6)	0.13
Anxiety	19 (28)	14 (22)	12 (21)	5 (13)	12 (23)	0 (0)	19 (23)	0.16
Depression	5 (7)	3 (5)	4 (7)	4 (11)	4 (8)	0 (0)	6 (8)	0.68
Fibromyalgia [§]	39 (57)	30 (45)	26 (47)	19 (48)	27 (49)	8 (32)	45 (55)	0.49
Current medication use n (%)								
Hydroxychloroquine	*	22 (32)	22 (38)	14 (34)	21 (38)	12 (48)	30 (36)	0.81
cDMARD	*	48 (70)	51 (88)	34 (83)	51 (93)	22 (88)	74 (89)	0.67
bDMARD	*	9 (13)	11 (19)	9 (22)	10 (18)	3 (12)	23 (28)	0.73
JAKi	*	5 (7)	3 (5)	1 (2)	3 (5)	2 (8)	2 (2)	0.69
Glucocorticoids	*	23 (33)	29 (50)	16 (39)	14 (25)	12 (48)	31 (37)	0.11
Opioids	*	6 (9)	6 (10)	8 (20)	6 (11)	2 (8)	8 (10)	0.57
Mood medications	*	20 (29)	18 (31)	10 (24)	17 (31)	4 (16)	27 (33)	0.67
Patient-reported outcomes mean (SD)								
PROMIS domains								
Fatigue	55.6 (9.3)	55.1 (10.9)	57.7 (11.6)	55.3 (10.4)	53.9 (10.1)	56.0 (9.6)	56.6 (10.2)	0.48
Sleep disturbance	53.6 (7.6)	54.5 (8.7)	55.4 (9.9)	53.1 (9.7)	54.0 (6.2)	54.9 (10.1)	53.4 (8.3)	0.72
Anxiety	53.5 (10.1)	53.7 (10.4)	53.2 (10.4)	52.0 (10.0)	50.6 (7.3)	54.9 (10.6)	55.2 (9.5)	0.11
Depression	51.3 (8.9)	51.9 (9.4)	50.5 (9.5)	49.8 (8.8)	48.3 (7.5)	51.2 (8.7)	50.9 (8.2)	0.32
Pain interference	60.2 (8.4)	57.9 (10.1)	59.6 (10.3)	56.4 (9.4)	55.2 (9.4)	57.5 (10.0)	58.5 (8.4)	0.18
Physical function	41.1 (8.7)	43.3 (8.6)	40.5 (8.5)	44.5 (9.6)	45.4 (8.3)	43.9 (9.9)	44.0 (8.8)	0.078
Social participation	46.5 (8.6)	47.5 (8.5)	46.4 (9.7)	49.0 (9.4)	49.4 (7.6)	48.4 (10.0)	47.3 (8.5)	0.47
PROMIS Self-Efficacy for Symptoms	44.7 (8.5)	44.6 (9.0)	43.3 (9.3)	46.3 (7.8)	46.1 (7.7)	44.9 (7.6)	44.6 (7.3)	0.45
PROMIS Self-Efficacy for Emotions	47.3 (8.0)	46.8 (8.4)	47.8 (8.9)	48.3 (6.7)	49.7 (6.9)	47.5 (8.2)	46.5 (7.7)	0.25
RAPID-3	*	10.4 (6.2)	11.2 (6.9)	9.9 (6.6)	9.5 (6.7)	10.8 (7.9)	10.5 (5.9)	0.81

OA: osteoarthritis; RA: rheumatoid arthritis; PsA: psoriatic arthritis; SLE: systemic lupus erythematosus; DM: dermatomyositis; SSc: systemic sclerosis; Sjo: Sjögrens disease; HLD: Hyperlipidaemia; CVD: cardiovascular disease; CHF: congestive heart failure; COPD: chronic obstructive pulmonary disease. **cDMARD (conventional DMARD):** methotrexate, sulfasalazine, azathioprine, mycophenolate mofetil, mycophenolic acid, leflunomide, cyclophosphamide, cyclosporine, tacrolimus, voclosporin.

bDMARD (biologic DMARD): adalimumab, certolizumab, etanercept, golimumab, abatacept, tocilizumab, sarilumab, belimumab, anifrolumab, ustekinumab, guselkumab, ixekisumab, secukinumab, infliximab, rituximab, golimumab, abatacept, tocilizumab

Janice Kinase (JAK) inhibitors: tofacitinib, baricitinib, upadacitinib

Glucocorticoids: prednisone, methylprednisolone, dexamethasone

Opioids: tramadol, morphine, codeine, oxycodone, oxymorphone, hydrocodone, hydromorphone, fentanyl, tapentadol

Mood medications: citalopram, escitalopram, fluoxetine, paroxetine, sertraline, desvenlafaxine, duloxetine, levomilnacipran, milnacipran, venlafaxine, amitriptyline, amoxapine, desipramine, doxepin, imipramine, nortriptyline, protriptyline, trimipramine, trazodone, acepromazine, acetophenazine, benperidol, bromperidol, butaperazine, carfenazine, chlorprothazine, chlorpromazine, chlorprothixene, clopenthixol, cyamemazine, dixyrazine, droperidol, fluanisone, flupentixol, fluphenazine, fluspirilene, haloperidol, levomepromazine, lenperone, loxapine, mesoridazine, metitepine, molindone, moperone, oxypertine, oxyprothepine, penfluridol, perazine, pericazine, perphenazine, pimozide, pipamperone, piperacetazine, pipotiazine, prochlorperazine, promazine, prothipendyl, spiperone, sulforidazine, thioproperazine, thioridazine, thiothixene, timiperone, trifluoperazine, trifluoperidol, triflupromazine, zuclopenthixol, amoxapine, amisulpride, aripiprazole, asenapine, blonanserin, brexpiprazole, cariprazine, caripramine, clocapramine, clorotepine, clotiapine, clozapine, iloperidone, levosulpride, lumateperone, lurasidone, melperone, mosapramine, nemonapride, olanzapine, paliperidone, perospirone, quetiapine, remoxipride, reserpine, risperidone, sertindole, sulpride, sultopride, tiaprie, veralipride, ziprasidone, zotepine, bupropion

*Missing data..

*Other is defined as Native American, Alaskan, Asian, and “other” per patient report.

Not identified is defined as missing or listed as “patient declined” per chart review.

[§]Extracted via chart review and not necessarily confirmed by rheumatologist.

[§]Higher PROMIS measures reflect more of a concept and lower PROMIS measures reflect less of a concept (e.g. higher PROMIS physical function T-scores denote better physical function).

Self-Efficacy for Managing Chronic Conditions – Managing Emotions

Please respond to each question or statement by marking one box per row.

	CURRENT level of confidence...	I am not at all confident	I am a little confident	I am somewhat confident	I am quite confident	I am very confident
SEMEM001	I can keep anxiety from becoming overwhelming.....	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
SEMEM002	I can use relaxation to deal with worries ...	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
SEMEM003	I can relax my body to reduce my anxiety .	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
SEMEM004	I can manage anxiety about injuring myself or others (for example: falling, dropping a child, a driving accident).....	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
SEMEM005	I can focus on something else to decrease anxiety	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
SEMEM006	I can prevent my illness from making me feel discouraged.....	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
SEMEM007	I can avoid feeling helpless	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
SEMEM008	When I'm feeling down, I can find ways to make myself feel better	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
SEMEM009	I can manage my frustration.....	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
SEMEM010	I can bounce back from disappointment	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
SEMEM011	I can avoid becoming angry	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
SEMEM012	I can avoid feeling discouraged.....	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
SEMEM013	I can hear about symptoms and side effects without getting discouraged.....	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
SEMEM014	I can avoid upsetting thoughts.....	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5

CURRENT level of confidence...		I am not at all confident	I am a little confident	I am somewhat confident	I am quite confident	I am very confident
SEMEM015	I can handle negative feelings.	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
SEMEM016	I can handle upsetting situations	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
SEMEM017	I can keep emotional distress from interfering with things I want to do	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
SEMEM018	I can find ways to manage stress	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
SEMEM019	I can handle the stress of going for treatment of my medical conditions	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
SEMEM021	I can manage the loss of my ability to do things that are important to me (for example: parenting, work, hobbies, attend school)	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
SEMEM022	I can manage my anxiety about telling others I have health problems.....	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
SEMEM023	I can manage my anger when others make insensitive comments about my health problems	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
SEMEM024	I can manage my anger when others don't understand what I am going through.....	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
SEMEM025	I can stay positive when I feel like I am the only one going through this.....	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
SEMEM026	I can use a strategy (for example: humor, leaving a situation) to keep from getting upset	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5