

Supplementary Table 1. Correlations between pain variables and disease-related indicators in RA

	Pain intensity	Pain catastrophizing	Pain interference
Disease duration	0.139 (0.110)	0.162 (0.064)	0.004 (0.962)
Pain duration	0.181 (0.036)	0.179 (0.039)	0.071 (0.420)
Depressive symptom	0.432 (<0.001)	0.384 (<0.001)	0.522 (<0.001)
WBC	-0.066 (0.449)	-0.113 (0.198)	0.040 (0.651)
Hemoglobin	-0.232 (0.007)	-0.076 (0.385)	-0.188 (0.031)
Hematocrit	-0.246 (0.004)	-0.090 (0.303)	-0.190 (0.028)
Platelet	0.093 (0.287)	0.034 (0.703)	0.167 (0.054)
ESR	0.007 (0.934)	0.060 (0.497)	-0.030 (0.728)
Total protein	-0.086 (0.322)	-0.065 (0.457)	-0.063 (0.468)
Albumin	0.008 (0.928)	-0.028 (0.751)	0.069 (0.429)
Alkaline phosphatase	-0.050 (0.569)	0.024 (0.781)	-0.056 (0.524)
CRP	0.124 (0.154)	0.141 (0.106)	0.067 (0.444)
RF titer	-0.031 (0.723)	-0.070 (0.428)	-0.123 (0.159)
Anti-CCP titer	-0.040 (0.660)	-0.001 (0.987)	-0.048 (0.599)
Tender joint count	0.326 (<0.001)	0.152 (0.082)	0.185 (0.033)
Swollen joint count	0.098 (0.262)	-0.023 (0.792)	0.004 (0.962)
DAS28	0.212 (0.015)	0.103 (0.239)	0.077 (0.380)
DAS28-CRP	0.076 (0.383)	0.045 (0.609)	0.130 (0.137)
Steroid (mg/d)	0.179 (0.039)	0.151 (0.085)	0.018 (0.836)

The data are presented as r (p-value). The correlations between pain variables and RA disease activity markers were assessed using Pearson's correlation coefficients. RA: rheumatoid arthritis, WBC: white blood cell, ESR: erythrocyte sedimentation rate, CRP: C-reactive protein, RF: rheumatoid factor, Anti-CCP: anti-citrullinated peptide, DAS28: Disease Activity Score 28.

Supplementary Table 2. Univariable regression analysis of biopsychosocial factors and pain intensity, pain catastrophizing and pain interference in RA

	Pain intensity			Pain catastrophizing			Pain interference		
	β	95% CI	p-value	β	95% CI	p-value	β	95% CI	p-value
Age (yr)	0.014	-0.016, 0.044	0.360	0.117	-0.066, 0.300	0.209	0.020	-0.257, 0.297	0.887
Gender (female)	0.740	-0.036, 1.515	0.061	3.449	-1.310, 8.208	0.154	11.286	4.316, 18.257	0.002
Education (ref: $\leq$ middle school graduate)									
$\leq$ High school graduate	-0.286	-1.049, 0.477	0.460	-2.700	-7.243, 1.843	0.242	-3.255	-10.284, 3.774	0.361
$\geq$ College graduate	-1.010	-1.832, -0.188	0.016	-8.715	-13.596, -3.833	0.001	-8.591	-16.164, -1.018	0.027
Religion	0.163	-0.445, 0.772	0.597	1.521	-2.204, 5.247	0.421	-0.440	-6.053, 5.173	0.877
Marital status (married)	0.062	-0.624, 0.748	0.859	1.389	-2.795, 5.573	0.512	4.690	-1.580, 10.959	0.141
Residency type (ref: living alone)									
Living as a couple	0.251	-0.761, 1.263	0.625	1.848	-4.307, 8.004	0.554	7.991	-1.113, 17.095	0.085
Living with children	0.293	-0.650, 1.236	0.540	-1.535	-7.247, 4.177	0.596	2.355	-6.127, 10.838	0.584
Else (e.g., living with parents, with friends)	-0.638	-2.131, 0.855	0.399	-5.066	-14.111, 3.978	0.270	-8.221	-21.652, 5.211	0.228
Economic status (ref: high)									
Middle	0.767	-0.299, 1.834	0.157	4.446	-2.083, 10.975	0.180	2.871	-7.084, 12.826	0.569
Low	1.792	0.644, 2.939	0.002	10.503	3.483, 17.522	0.004	11.934	1.224, 22.645	0.029
Pain duration (yr)	0.229	0.014, 0.444	0.037	1.377	0.065, 2.689	0.040	0.822	-1.188, 2.831	0.420
Comorbidity (ref: none)									
1	-0.216	-0.920, 0.488	0.545	-0.620	-4.890, 3.649	0.774	-3.622	-10.080, 2.836	0.269
2 or more	0.070	-0.910, 1.050	0.888	4.218	-1.720, 10.156	0.162	-3.413	-12.403, 5.577	0.454
Disease duration (yr)	0.048	-0.011, 0.106	0.110	0.336	-0.020, 0.692	0.064	0.013	-0.531, 0.558	0.962
BMI	-0.033	-0.137, 0.071	0.531	-0.012	-0.662, 0.637	0.970	-0.093	-1.048, 0.861	0.847
Depressive symptom	0.161	0.103, 0.219	<0.001	0.868	0.506, 1.230	<0.001	1.790	1.285, 2.296	<0.001
WBC	-0.061	-0.221, 0.098	0.449	-0.634	-1.605, 0.336	0.198	0.338	-1.136, 1.811	0.651
Hemoglobin	-0.318	-0.550, -0.087	0.007	-0.638	-2.086, 0.809	0.385	-2.377	-4.528, -0.226	0.031
Hematocrit	-0.110	-0.184, -0.035	0.004	-0.245	-0.713, 0.224	0.303	-0.780	-1.477, -0.084	0.029
Platelet	0.026	-0.022, 0.073	0.287	0.056	-0.234, 0.347	0.703	0.424	-0.008, 0.856	0.055
CRP	0.058	-0.022, 0.139	0.154	0.403	-0.086, 0.892	0.106	0.289	-0.455, 1.033	0.444
RF	-0.004	-0.024, 0.016	0.723	-0.049	-0.171, 0.073	0.428	-0.131	-0.314, 0.052	0.159
DAS28	0.440	0.089, 0.792	0.015	1.313	-0.882, 3.508	0.239	1.473	-1.833, 4.778	0.380
DAS28-CRP	0.078	-0.098, 0.253	0.383	0.278	-0.795, 1.352	0.609	1.216	-0.392, 2.824	0.137
Extra-articular manifestation	0.077	-0.633, 0.786	0.831	2.688	-1.624, 7.001	0.220	-2.753	-9.280, 3.775	0.406
Tender joint count	0.302	0.151, 0.454	<0.001	0.858	-0.109, 1.824	0.082	1.582	0.132, 3.033	0.033
Steroid dose	0.217	0.011, 0.423	0.039	1.109	-0.155, 2.373	0.085	0.202	-1.725, 2.129	0.836

RA: rheumatoid arthritis, CI: confidence interval, BMI: body mass index, WBC: white blood cell, CRP: C-reactive protein, RF: rheumatoid factor, DAS28: Disease Activity Score 28.