

Web Table 1. Median Cytokine Levels (pg/mL) by Number of Shared Epitope Alleles Among Anti-CCP+ RA WHI-RA Participants,^a 1993-2010, n=555^b

pg/mL	Anti-CCP+									p-value ^c
	SE = 0 (n = 185)			SE = 1 (n = 272 ^b)			SE = 2 (n = 98)			
	Median	25%-tile	75%-tile	Median	25%-tile	75%-tile	Median	25%-tile	75%-tile	
IL1b	2.06	1.22	3.95	2.32	1.63	5.26	2.49	1.57	7.07	0.04
IL2	7.99	2.96	32.33	10.75	4.83	34.85	18.20	5.62	59.38	0.02
IL4	2.01	1.13	3.23	2.29	1.46	3.70	2.28	1.47	3.18	0.18
IL5	3.74	2.70	5.42	4.17	2.94	6.58	4.05	2.89	5.94	0.20
IL6	11.31	6.26	29.20	14.71	8.22	30.28	18.89	10.42	56.46	0.001
IL7	8.11	5.75	11.16	8.72	6.49	12.74	8.19	6.08	11.45	0.15
IL8	9.19	7.12	12.29	10.16	7.39	13.59	9.84	7.34	12.67	0.14
IL10	2.81	1.88	4.62	3.21	2.36	4.89	3.23	2.31	5.67	0.07
IL12	18.90	10.64	52.64	22.93	13.95	50.80	21.57	13.40	48.58	0.19
IL13	3.51	2.13	9.95	4.36	2.66	10.03	4.14	2.34	11.34	0.13
IL17	2.96	0.00	9.51	4.71	0.00	13.08	2.83	0.00	8.61	0.06
G-CSF	168.70	111.58	224.71	171.33	116.24	229.74	163.41	124.69	218.39	0.85
MCP-1	19.82	13.23	32.08	20.84	14.83	35.71	22.80	13.42	39.94	0.41
MIP-1b	45.07	34.83	59.64	47.57	35.62	65.09	46.24	36.09	64.70	0.47
TNF-alpha	31.05	18.26	66.53	37.15	23.27	78.01	37.34	24.46	114.05	0.03
IFN-gamma	59.41	33.07	133.79	73.95	43.84	159.62	84.67	48.58	214.64	0.01

Abbreviations: %-tile, percentile; anti-CCP, antibodies to cyclic citrullinated peptides; G-CSF, granulocyte-colony stimulating factor; IL, interleukin; IFN, interferon; MCP, Monocyte chemoattractant protein; MIP; macrophage inflammatory protein; SE, shared epitope; TNF, tumor necrosis factor; RA, rheumatoid arthritis; WHI, Women's Health Initiative

^aExcluding RA reported only at follow up visit only. ^bCytokine measures were missing for 1 participant.

^cP-values were based on Kruskal-Wallis tests.

Web Table 2. Median Cytokine Levels (pg/mL) by Number of Shared Epitope Alleles Among Anti-CCP- Not RA WHI-RA Participants,^a 1993-2010, n=1069^b

pg/mL	SE =0 (n=654) ^b			SE =1 (n=359)			SE =2 (n=56)			p-value ^c
	Median	25%-tile	75%-tile	Median	25%-tile	75%-tile	Median	25%-tile	75%-tile	
IL1b	1.55	1.18	2.04	1.53	1.13	2.07	1.68	1.30	2.09	0.31
IL2	3.46	1.49	6.18	3.52	1.46	6.56	4.21	2.27	7.35	0.16
IL4	1.68	0.98	2.48	1.51	0.94	2.38	1.67	1.27	2.62	0.20
IL5	3.08	2.42	4.04	3.04	2.25	3.98	3.31	2.69	4.04	0.13
IL6	6.25	4.56	8.79	6.44	4.68	8.73	6.82	5.34	9.52	0.24
IL7	7.00	5.35	9.13	6.77	5.48	8.73	7.59	6.11	8.81	0.20
IL8	8.79	6.83	11.07	8.46	6.62	11.17	8.84	7.31	10.57	0.49
IL10	2.37	1.75	3.17	2.56	1.85	3.26	2.86	2.28	3.82	0.003
IL12	13.03	8.80	18.32	12.74	7.86	17.69	14.76	10.89	19.60	0.03
IL13	2.48	1.73	3.43	2.49	1.67	3.54	2.81	2.08	3.69	0.22
IL17	0.59	0.00	5.48	0.81	0.00	4.85	2.66	0.00	5.73	0.47
G-CSF	146.67	97.29	200.96	143.21	100.87	198.27	169.05	126.42	222.23	0.04
MCP-1	14.87	10.49	20.32	15.35	10.98	20.91	13.82	11.12	16.72	0.41
MIP-1b	42.80	33.23	58.47	41.86	32.35	55.38	42.06	32.65	56.33	0.74
TNF-alpha	22.25	15.54	31.05	21.82	15.13	31.08	24.14	17.97	33.24	0.22
IFN-gamma	45.08	27.72	64.65	40.86	23.36	62.40	46.73	31.85	64.54	0.13

Abbreviations: %-tile, percentile; anti-CCP, antibodies to cyclic citrullinated peptides; IL, interleukin; IFN, interferon; MCP, Monocyte chemoattractant protein; MIP; macrophage inflammatory protein; RA, rheumatoid arthritis; SE, shared epitope; TNF, tumor necrosis factor; WHI, Women's Health Initiative

^aExcluding RA reported only at follow up visit only. ^bCytokine measures were missing for 1 participant.

^cP-values were based on Kruskal-Wallis tests.

Web Table 3. Median Cytokine Levels (pg/mL) by Number of Shared Epitope Alleles Among Anti-CCP-/DMARD+ RA WHI-RA Participants,^a 1993-2010, n=182^b

Anti-CCP- and BL DMARD+										
pg/ml	SE = 0 (n=101 ^b)			SE = 1 (n=71)			SE = 2 (n=10)			p-value ^c
	Median	25%-tile	75%-tile	Median	25%-tile	75%-tile	Median	25%-tile	75%-tile	
IL1b	1.63	1.22	2.22	1.58	1.14	2.33	1.83	1.50	2.08	0.86
IL2	3.41	1.27	6.56	4.39	2.33	8.61	3.17	1.25	5.51	0.14
IL4	1.52	1.09	2.46	1.69	1.13	2.79	2.46	1.32	2.73	0.57
IL5	3.18	2.33	3.98	3.19	2.31	4.53	3.57	2.50	4.22	0.69
IL6	6.97	5.09	9.93	7.78	5.31	14.64	10.44	5.15	19.46	0.26
IL7	7.24	5.67	9.49	7.42	5.31	9.57	9.09	8.23	10.31	0.41
IL8	9.11	7.18	11.36	9.37	7.78	11.74	11.56	9.73	12.93	0.35
IL10	2.37	1.72	3.20	2.43	1.81	3.54	3.01	2.29	3.99	0.44
IL12	12.41	9.43	18.34	13.43	10.00	20.34	16.65	10.04	18.65	0.64
IL13	2.61	1.66	3.52	2.61	1.88	3.92	2.85	1.85	3.29	0.89
IL17	1.05	0.00	5.43	1.76	0.00	8.78	1.93	1.08	6.10	0.54
G-CSF	144.83	92.16	197.01	150.61	106.36	195.93	136.12	126.98	171.62	0.87
MCP-1	17.30	12.44	22.34	16.67	11.45	23.17	21.82	14.88	35.24	0.36
MIP-1b	45.58	35.91	62.33	49.64	34.08	66.90	58.61	45.01	73.42	0.35
TNF-alpha	22.02	15.37	32.57	23.69	15.89	32.03	27.64	15.27	32.72	0.73
IFN-gamma	42.02	29.72	67.02	42.50	31.18	65.82	45.87	20.41	58.01	0.92

Abbreviations: %-tile, percentile; anti-CCP, antibodies to cyclic citrullinated peptides; IL, interleukin; IFN, interferon; MCP, Monocyte chemoattractant protein; MIP; macrophage inflammatory protein; RA, rheumatoid arthritis; SE, shared epitope; TNF, tumor necrosis factor; WHI, Women's Health Initiative

^aExcluding RA reported only at follow up visit only. ^bCytokine measures were missing for 1 participant. ^cP-values were based on Kruskal-Wallis tests.