

Additional File**Table S1: SDAI (Simplified disease activity index) base line disease activity**

Category	n	Median	IQR
Mild ≤ 11	3	5.73	5.01
Moderate $>11 \leq 26$	25	20.00	8.52
High >26	112	45.31	19.47

Table S2: changes in SDAI and circulating biomarker concentrations following 6 months of synthetic DMARD therapy.

Variable	n	median	min	max	iqr	p value
SDAI b*	140	41.39	5.28	77	23.67	
SDAI 6**	140	16	0.1	69.77	15.805	0.0001
CRP b	140	17.1	1	303	42.25	
CRP 6	140	8.9	1	83.9	17.35	0.0001
ACPA b	100	516.6	1.9	2526.8	1027.75	
ACPA 6	100	255.65	1.1	1420.3	677.2	0.0001
IL-1 β b	51	6.23	0.12	191.32	13.69	
IL-1 β 6	51	3.8	0.35	199.74	18.17	NS
IL-1Ra b	123	80.06	0	5012.27	288.51	
IL-1Ra 6	123	80.54	0	12084.64	427.81	NS
IL-2 b	32	0	0	216.91	7.41	
IL-2 6	32	0	0	267.6	13.88	NS
IL-4 b	32	4.7	0	904.79	10.28	
IL-4 6	32	1.42	0	62.61	5.31	0.0075
IL-6 b	123	24.35	0	791.93	67.93	
IL-6 6	123	14.23	0	778.82	51.89	NS
IL-7 b	123	20.32	0	6825.1	82.22	
IL-7 6	123	16.69	0	3596	23.46	0.0013
IL-8 b	123	8.79	0	36698.94	12.65	
IL-8 6	123	5.7	0	1618.59	7.09	0.0001
IL-10 b	32	11.435	0	1172.06	29.09	
IL-10 6	32	8.145	1.8	1111	21.71	NS
IL-12 b	123	11.93	0.63	3557.84	64.8	
IL-12 6	123	17.75	0.41	8144.25	74.79	NS

IL-17 b	32	0	0	23.9	0	
IL-17 6	32	0	0	13.87	0	NS
G-CSF b	123	13.82	0	4817.44	60.02	
G-CSF 6	123	7.23	0	1328.97	51.61	0.0083
GM-CSF b	123	1.08	0	1458.59	44.37	
GM-CSF 6	123	0	0	2571.87	82.37	NS
IFN γ b	123	42.64	0	11151.66	264.72	
IFN γ 6	123	27.19	0	6394.31	444.72	NS
TNF b	123	11.67	0.55	2951.68	69.55	
TNF 6	123	12.15	1.33	3107.1	93.82	NS
VEGF b	123	168.56	0	4503.15	441.33	
VEGF 6	123	92.62	0	5007.35	167.21	0.001
CCL-2 b	32	10.65	0	521.48	100.955	
CCL-2 6	32	50.65	0	566.52	81.59	NS
CCL-4 b	32	100.905	26.67	344.72	91.10001	
CCL-4 6	32	96.275	27.26	326.37	62.46	NS
IL-1/IL1-ra b	37	0.050012	0.0057609	0.9042904	0.0487324	
IL-1/IL-1ra 6	37	0.0282269	0.0029457	0.4552684	0.0622231	0.013
IL-17/IL-10 b	30	10.41581	0.3762998	118.3059	15.60833	
IL-17/ IL-10 6	30	3.723691	0.6393507	22.96679	5.373202	0.0001
IFN γ / IL-4 b	24	25.17977	0	179.2	28.12688	
IFN γ / IL-4 6	24	21.07841	1.105882	83.55289	33.04997	NS
IL-8/ IL-10 b	30	0.8005226	0.0097521	45.19495	2.059342	
IL-8/ IL-10 6	30	0.796825	0.0068947	27.28358	1.268058	NS
IL-6/ IL-10 b	30	1.046355	0	33.66154	2.474186	
IL-6/ IL-10 6	30	1.834637	0	37.93333	6.346017	NS

*b – baseline *6 – 6 months *NS – not significant

SDAI, Simplified disease activity index; CRP, C-reactive protein; ACPA, Anti-cyclic citrullinated peptide antibodies; IL-, Interleukin; G-CSF, Granulocyte colony-stimulating factor; GM-CSF, Granulocyte and macrophage colony-stimulating factor; IFN, Interferon; TNF, Tumour necrosis factor; VEGF, Vascular endothelial growth factor; CCL-, Chemokine (C-C motif) ligand-.

Table S3: SDAI (Simplified disease activity index) response at 6 months

Response	n
< 50% (no response)	58
≥50%<70% (minor response)	40
≥70%<85% (moderate response)	22
≥ 85% (major response)	20

Table S4: SDAI (Simplified disease activity index) response at 6 months treatment sub-groups

Response	n (Methotrexate plus prednisone)	n (Methotrexate only)
< 50% (no response)	14	16
≥50%<70% (minor response)	12	14
≥70%<85% (moderate response)	4	8
≥ 85% (major response)	3	5

Table S5: SDAI (Simplified disease activity index) response at 6 months risk allele sub-groups

Response	n (risk allele positive)	n (risk allele negative)
< 50% (no response)	27	21
≥50%<70% (minor response)	21	13
≥70%<85% (moderate response)	11	6
≥ 85% (major response)	9	7