

Supplement Table S1.**Comparison of patients at baseline with or without serum samples available.**

	Valid values	Patients with baseline serum samples n=236	Valid values	Patients without serum samples n=113	P value
Gender (females,%)	236	Females 164, 69.5%	113	Females 79, 69.9%	0.936
Age at onset	236	6.0 (2.9-10.4)	111	6.8 (3.2-10.2)	1.00
ANA positive	208	82 (39.4)	96	35 (36.5)	0.621
RF positive	229	9 (3.8)	106	5 (4.7)	0.738
ESR	194	12 (6-24)	81	11 (8-23)	0.620
CRP	196	0 (0-10)	71	0 (0-12)	0.339
Active joints	236	1 (0-3)	111	1 (0-4)	0.835
Cumulative joints	236	3 (1-7)	111	3 (2-8)	0.556
JADAS71	159	5.0 (2.0-11.0)	58	5.1 (2.0-10.3)	0.907
DMARDs	236	45 (19.1)	111	19 (17.1)	0.363
Subcategory	236		113		0.980
Systemic JIA		10 (4.2)		6 (5.3)	
Oligoarticular persistent		113 (47.9)		57 (50.4)	
Oligoarticular extended		8 (3.4)		3 (2.7)	
Polyarticular RF positive		5 (2.1)		3 (2.7)	
Polyarticular RF negative		46 (19.5)		22 (19.5)	
Psoriatic arthritis		2 (0.8)		1 (0.9)	
Enthesitis-related arthritis		20 (8.5)		6 (5.3)	
Undifferentiated		32 (13.6)		15 (13.3)	

Variables are expressed as median with interquartile range (IQR) in parenthesis or as absolute numbers with % in parenthesis.

ANA: Antinuclear antibodies; RF: Rheumatoid factor; ESR: Erythrocyte sedimentation rate; CRP: C-reactive protein; JADAS: Juvenile Arthritis Disease Activity Score; DMARDs: Disease-modifying antirheumatic drugs.

Supplement Table S2.

Serum levels of biomarkers at baseline visit comparing patients treated with DMARDs or not.

	Baseline levels	DMARD-naïve	DMARDs-previous	DMARDs-ongoing	Naïve versus ongoing	Naïve versus non-naïve
	236	180	11	45		
IL-1β	16.5 (6.7-30.5)	14.1 (3.6-30.5)	19.3 (8.9-28.2)	21.3 (11.7-36.0)	0.024	0.022
IL-4	88.6 (55.4-132.7)	82.4 (54.1-126)	126 (88.6-182.9)	109.2 (72.0-152.0)	0.047	0.009
IL-6	6.7 (3.2-13.0)	5.9 (3.2-10.5)	13.9 (5.6-31.1)	8.9 (3.7-17.3)	0.032	0.006
IL-10	5.3 (2.3-7.1)	4.9 (1.6-6.8)	6.4 (4.5-8.2)	6.4 (4.3-7.5)	0.009	0.003
IL-12p70	13.4 (0.5-72.5)	13.2 (0.5-61.4)	28.4 (0.5-93.7)	34.0 (0.5-108.3)	0.156	0.114
IL-13	497 (387-621)	481 (385-607)	595 (385-711)	505 (461-693)	0.026	0.017
IL-17	10.3 (0.8-16.2)	8.0 (0.8-16.0)	16.0 (11.0-25.6)	12.1 (1.9-19.5)	0.136	0.024
IL-18	205 (136-291)	199 (135-274)	242 (126-420)	212 (143-320)	0.245	0.130
TNFα	9.2 (1.7-16.6)	8.1 (1.0-15.8)	16.0 (6.7-25.7)	11.2 (2.3-19.1)	0.306	0.105
MMP-3	5174 (1747-17493)	4170 (1699-13946)	8954 (2160-65192)	12950 (2528-31869)	0.016	0.012
CCL-2	180 (112-251)	178 (112-256)	159 (121-230)	184 (94-244)	0.490	0.532
sCD25	587 (420-766)	588 (414-751)	473 (305-727)	594 (458-834)	0.331	0.720
GM-CSF	0.4 (0.4-3.8)	0.4 (0.4-3.7)	0.4 (0.4-4.6)	0.5 (0.4-7.5)	0.037	0.086
MPO	2294 (1579-3572)	2263 (1606-3774)	1716 (976-2342)	2945 (1718-3458)	0.384	0.930
S100A9	511 (314-1277)	496 (296-1039)	1997 (186-5435)	582 (393-1307)	0.079	0.032
S100A12	924 (434-1610)	851 (416-1566)	1632 (185-2973)	1472 (698-2002)	0.005	0.003

Values are in picograms (pg)/ milliliter (ml) expressed as median (interquartile range (IQR)).

IL: interleukin, TNF α : tumor necrosis factor alpha; MMP-3: matrix metalloproteinase 3; CCL-2: chemokine ligand 2; GM-CSF: granulocyte-macrophage colony-stimulating factor; MPO: myeloperoxidase; S100A9/A12: S100 calcium-binding protein A9/A12.

Supplement Fig S1 A-D

Serum biomarker levels at baseline according to juvenile idiopathic arthritis categories.

