

Supplemental Table 1. Characteristics of study patients based on 2010 ACR/EULAR criteria for RA*

	UA>>UA	RA	UA>>RA	SpA	p-value
	(n=2)	(n=35)	(n=6)	(n=7)	
Age (years)	33	50	52	43	0.19
Female (n)	2	22	4	1	0.06
Disease duration (m)	8	5	5	2	0.25
VAS (0-100)	73	50	39	20	0.29
TJC68 (n)	2	11	3	4	<0.001
SJC66 (n)	2	7	1	2	0.001
ESR (mm/h)	21	29	31	11	0.50
CRP (mg/l)	16	15	14	7	0.60
IgM-RF pos. (n)	0	16	0	0	0.01
ACPA pos. (n)	0	15	0	0	0.02

UA>>UA = undifferentiated arthritis at baseline and at two years follow-up; RA = rheumatoid arthritis at baseline; UA>RA = classified as UA at baseline and diagnosed as RA at two year follow-up; SpA = spondyloarthritis; VAS = visual analog scale of global disease activity; TJC68 = 68 tender joint count; SJC66 = 66 swollen joint count; ESR = erythrocyte sedimentation rate; CRP = C-reactive protein; IgM-RF pos. = immunoglobulin M rheumatoid factor positive; ACPA pos. = anti-citrullinated protein antibody positive. Patients were classified as RA based on 2010 ACR/EULAR criteria. Data represent patient numbers (n) or median values.

Supplemental Table 2. Characteristics of RF seropositive and seronegative RA patients*

	RF+ n=14	RF- n=13	p-value
Age (years)	53 (30-75)	57 (27-71)	0.53
Disease duration (months)	7 (1-12)	5 (1-11)	0.23
VAS (0-100)	36 (20-75)	23 (3-43)	0.23
TJC68 (n)	12 (5-38)	4 (3-14)	0.07
SJC66 (n)	7 (1-41)	3 (1-17)	0.07
DAS 28	3.7 (1.1-6.3)	2.7 (1.3-3.4)	0.22
ESR (mm/h)	31 (14-91)	30 (3-77)	0.86
CRP (mg/l)	20 (3-133)	20 (3-42)	0.96

RF+ = rheumatoid factor seropositive; RF- = rheumatoid factor seronegative; RA = rheumatoid arthritis diagnosis at two years of follow-up; VAS = visual analog scale of global disease activity; TJC68 = 68 tender joint count; SJC66 = 66 swollen joint count; DAS28 = disease activity score 28; ESR = erythrocyte sedimentation rate; CRP = C-reactive protein. Patients were classified as RA based on 1987 ACR criteria.

Supplemental Table 3. Characteristics of ACPA seropositive and seronegative RA patients*

	ACPA+ n=13	ACPA- n=14	p-value
Age (years)	54 (40-75)	56 (30-71)	0.75
Disease duration (months)	8 (1-12)	6 (1-11)	0.23
VAS (0-100)	35 (0-75)	22 (3-43)	0.11
TJC68 (n)	11 (5-38)	7 (3-17)	0.44
SJC66 (n)	6 (2-41)	3 (1-17)	0.43
DAS 28	3.6 (1.1-6.3)	3.2 (1.2-6.2)	0.72
ESR (mm/h)	31 (14-91)	30 (3-77)	0.86
CRP (mg/l)	23 (3-133)	16 (3-42)	0.49

ACPA+ = anti-citrullinated protein antibody seropositive; ACPA- = anti-citrullinated protein antibody seronegative; RA = rheumatoid arthritis diagnosis at two years of follow-up; VAS = visual analog scale of global disease activity; TJC68 = 68 tender joint count; SJC66 = 66 swollen joint count; DAS28 = disease activity score 28; ESR = erythrocyte sedimentation rate; CRP = C-reactive protein. Patients were classified as RA based on 1987 ACR criteria.

Supplemental Table 4. Characteristics of RA patients classified using 2010 ACR/EULAR criteria in relation to disease outcome*

	RA persistent erosive n=12	RA persistent non-erosive n=17	RA self-limiting n=10	p-value
Age (years)	53 (24-82)	52 (22-58)	45 (20-67)	0.83
Disease duration (months)	5 (1-10)	4 (1-12)	4 (1-10)	0.70
DAS 28	5.0 (2.9-6.6)	5.9 (4.3-6.8)	3.2 (2.3-5.2)	<0.001
ESR (mm/h)	37 (3-91)	27 (7-85)	26 (7-68)	0.85
CRP (mg/l)	9 (3-114)	16 (3-133)	11 (2-58)	0.76
VAS (0-100)	27 (11-76)	50 (25-98)	38 (11-76)	0.27
IgM-RF pos. (%)	66	41	10	0.09
ACPA pos. (%)	44	47	10	0.11
TJC68 (n)	8 (2-23)	18 (4-38)	3 (0-3)	<0.001
SJC66 (n)	7 (1-16)	8 (1-5)	1 (1-5)	<0.001

RA = rheumatoid arthritis at two years follow-up; DAS28 = disease activity score 28; ESR = erythrocyte sedimentation rate; CRP = C-reactive protein; VAS = visual analog scale of global disease activity; IgM-RF pos. = immunoglobulin M rheumatoid factor positive; ACPA pos. = anti-citrullinated protein antibody positive. TJC= tender joint count, SJC=swollen joint count. **Patients were classified as RA based on 2010 ACR/EULAR criteria.**

Supplemental table 5. Gene expression in patients with self-limiting and persistent RA*.

gene	Self-limiting RA		Persistent RA		P value
	RQ	SD	RQ	SD	
ADAMTS1	0.74	0.26	0.67	0.49	0.2601
ADAMTS13	0.92	0.59	0.74	0.38	0.6573
ADAMTS8	2.50	1.00	3.20	1.87	0.6087
CD44	1.22	0.34	1.76	0.63	0.0222
CDH1	0.61	0.84	1.10	1.36	0.5618
CNTN1	1.01	1.04	1.09	0.97	0.8112
COL11A1	0.51	0.37	0.38	0.56	0.0945
COL12A1	0.44	0.28	0.28	0.19	0.0945
COL14A1	1.26	0.63	0.86	0.51	0.1246
COL15A1	0.63	0.28	0.48	0.21	0.1832
COL16A1	0.42	0.26	0.24	0.15	0.0185
COL1A1	0.28	0.31	0.13	0.18	0.0441
COL4A2	0.49	0.25	0.31	0.19	0.0441
COL5A1	0.46	0.26	0.28	0.24	0.0374
COL6A1	0.50	0.25	0.32	0.14	0.0222
COL6A2	0.44	0.33	0.32	0.17	0.3568
COL7A1	0.96	0.25	0.78	0.52	0.2323
COL8A1	0.33	0.29	0.18	0.13	0.1246
VCAN	0.56	0.26	0.46	0.20	0.3568
CTGF	1.20	0.53	1.05	0.89	0.3568
CTNNA1	0.81	0.28	0.92	0.29	0.3568
CTNNB1	0.74	0.19	0.71	0.12	0.6573
CTNND1	0.69	0.22	0.67	0.20	0.9728
ECM1	0.63	0.35	0.55	0.33	0.6573
FN1	0.40	0.26	0.43	0.20	0.6573
HAS1	0.43	0.38	0.25	0.27	0.1832
ICAM1	0.67	0.25	1.10	0.58	0.1246
ITGA1	0.51	0.27	0.43	0.34	0.4325
ITGA2	0.44	0.28	0.39	0.26	0.5167
ITGA3	0.88	0.42	0.75	0.40	0.3936
ITGA4	0.51	0.29	0.77	0.62	0.5167
ITGA5	0.56	0.23	0.52	0.16	0.7587
ITGA6	1.73	1.39	1.68	0.88	0.6087
ITGA7	0.76	0.47	0.70	0.85	0.2323
ITGA8	0.75	0.38	0.71	0.55	0.5167
ITGAL	0.69	0.50	1.26	1.25	0.6087
ITGAM	1.55	0.54	2.53	2.55	0.1832
ITGAV	0.83	0.25	0.70	0.23	0.2323
ITGB1	0.63	0.25	0.64	0.23	0.8645
ITGB2	1.55	0.59	3.36	2.86	0.2601
ITGB3	0.87	0.44	0.72	0.42	0.3936
ITGB4	1.24	0.52	0.96	0.84	0.2067
ITGB5	0.80	0.30	0.70	0.33	0.4736
KAL1	0.83	0.62	0.59	0.31	0.5167
LAMA1	0.42	0.35	0.38	0.24	0.9728
LAMA2	1.24	0.74	1.39	1.16	0.8112

gene	Self-limiting RA		Persistent RA		P value
	RQ	SD	RQ	SD	
LAMA3	1.57	0.80	1.34	1.58	0.1618
LAMB1	0.52	0.24	0.40	0.22	0.1423
LAMB3	0.70	0.28	0.75	0.35	0.8112
LAMC1	0.95	0.21	0.71	0.36	0.0265
MMP1	0.18	0.35	0.32	0.33	0.7587
MMP10	0.17	0.34	0.17	0.25	0.8645
MMP11	0.46	0.30	0.33	0.40	0.1087
MMP12	1.08	0.72	0.64	0.79	0.0374
MMP13	0.17	0.35	0.05	0.05	0.7285
MMP14	0.52	0.28	0.37	0.15	0.2067
MMP15	1.20	0.67	1.04	0.73	0.5167
MMP16	0.59	0.34	0.48	0.53	0.2901
MMP2	0.48	0.31	0.26	0.11	0.0818
MMP3	0.17	0.35	0.14	0.19	0.9185
MMP7	34.24	94.03	1.69	1.21	0.5618
MMP8	0.61	0.57	0.14	0.18	0.1393
MMP9	0.48	0.67	0.16	0.16	0.2901
NCAM1	0.44	0.34	0.68	1.13	0.9702
PECAM1	0.64	0.46	0.87	0.73	0.8645
SELE	0.61	0.88	0.44	0.54	0.9185
SELL	1.00	1.06	1.84	1.63	0.1832
SELP	0.85	0.33	0.85	0.69	0.5618
SGCE	1.10	0.54	0.80	0.40	0.3223
SPARC	0.41	0.28	0.25	0.18	0.1087
SPG7	0.85	0.30	0.73	0.28	0.3936
SPP1	1.01	1.57	9.17	26.12	0.9728
TGFBI	0.53	0.21	0.74	0.54	0.4325
THBS1	0.37	0.29	0.23	0.21	0.0705
THBS2	0.41	0.29	0.30	0.27	0.2323
THBS3	0.54	0.30	0.39	0.21	0.3223
TIMP1	0.40	0.26	0.40	0.26	0.9185
TIMP2	1.09	0.44	1.04	0.50	0.7074
TIMP3	5.00	4.59	3.75	3.50	0.6353
CLEC3B	1.79	0.87	1.64	1.10	0.7074
TNC	0.47	0.27	0.46	0.35	0.7587
VCAM1	0.77	0.29	0.88	0.65	0.9728
VTN	0.93	0.42	0.84	0.46	0.4325

Comparison of expression of 83 genes involved in regulation of adhesion and extracellular matrix between patients with self-limiting RA (n = 8) and persistent RA (n = 14). Gene expression in total synovial tissue was measured by quantitative PCR. Results indicate mean expression relative to RPL13A (RQ, relative quantity) and standard deviation (SD) for each analyzed gene. Differences between groups were determined using the Mann-Whitney *U* test. P values < 0.05 are indicated in bold font.