

Table S1. Forty-joint sonography of fibromyalgia patients receiving subcutaneous tocilizumab.

Patient number	Baseline			12 weeks after tocilizumab therapy		
	Gray scale	Power	Synovitis	Gray scale	Power	Synovitis
	score	Doppler score	score	score	Doppler score	score
1	4	0	4	11	0	11
2	18	0	18	16	0	16
3	13	0	13	12	0	12
4	3	2	3	4	2	4
5	4	0	4	4	0	4
6	15	0	15	15	4	16

Table S2. Differentially expressed genes in neutrophils from primary fibromyalgia patients when compared with matched healthy controls.

Gene	Fold change (Fibromyalgia/Control)	P Value	False discovery rate
<i>TSPAN13</i>	0.179522125	2.15E-12	6E-08
<i>C3AR1</i>	3.830945028	7.41E-09	0.000103
<i>PI3</i>	1.980829949	1.02E-07	0.000953

Table S3. Overlapping differentially expressed genes in neutrophils from primary fibromyalgia patients before and after tocilizumab treatment.

Patient 1				Patient 2		
Gene	Fold change	P value	False discovery rate	Fold change	P value	False discovery rate
LGALS2	7.028383767	0.003394436	0.014616555	186.5038397	7.447E-07	0.000128
LY86	88.42916002	0.001268294	0.006574814	13.65099679	0.0007946	0.033025
CD19	5.534619948	0.000672116	0.003929602	12.01058567	1.743E-05	0.001759
MS4A7	2.937024377	0.005100126	0.020145058	11.74482265	3.369E-07	6.08E-05
HLA-DQA2	5.55926675	9.45135E-06	0.00011219	11.53253312	2.951E-05	0.002664
NAPSB	3.229500209	0.00179023	0.00878318	10.37625069	9.198E-08	2.21E-05
SLC38A7	21.18231508	4.812E-06	6.31868E-05	8.818694785	2.847E-05	0.002635
CTSL	5.534619948	0.000672116	0.003929602	8.664217877	0.000701	0.030535
IRF8	2.057811348	0.014866261	0.047401704	6.937961735	2.825E-09	1.08E-06
LOXL1	4.32228728	4.42692E-08	1.0676E-06	6.681354442	0.0001036	0.007366
NR4A1	2.78402977	7.01099E-07	1.20406E-05	6.490927845	4.847E-06	0.000633
SH3TC1	3.80297192	6.84948E-06	8.49806E-05	6.144091736	6.969E-07	0.000121
CD79A	2.779812595	0.000187747	0.001372543	5.733523958	2.489E-07	4.68E-05
CD22	2.500925728	0.000847044	0.004740266	5.674941111	1.054E-07	2.41E-05
TCL1A	4.647143286	0.001177692	0.006198807	3.892775041	0.0008778	0.035427
CPVL	3.836499308	5.41541E-05	0.000483162	3.800321003	0.0006087	0.02773
INF2	2.44716507	0.000269375	0.001852816	2.843950711	0.0013391	0.048356
IGKC	3.115647819	2.51314E-07	4.89848E-06	2.479709094	2.145E-07	4.27E-05
IGHG1	3.475272749	0.001279284	0.00662106	2.198487339	0.0008683	0.035253

FCRL1	2.745142635	3.59433E-05	0.000344221	2.171076012	0.0009875	0.038496
GGT5	2.050867393	0.012050518	0.040242688	2.090456466	0.0003108	0.016856
S100A10	2.832958633	1.4312E-06	2.23685E-05	2.014238077	0.0008519	0.034687
SPP1	0.441432763	0.002500939	0.011391689	0.461834234	8.811E-05	0.006431

Figure S1. Venn diagram of numbers of differentially expressed genes in neutrophils of patient 1 and 2 before and after tocilizumab treatment by pairwise comparisons.

