

Supplementary Table 1 Missing values for 10,646 patients

Parameter	T0		T1		T2		T3	
	n	%	n	%	n	%	n	%
Satisfaction with efficacy of therapy	860	8.1	n.a.	n.a.	n.a.	n.a.	2153	20.2
Satisfaction with tolerability of therapy	1037	9.7	n.a.	n.a.	n.a.	n.a.	2273	21.4
DAS28-ESR	910	8.5	2126	20.0	2272	21.3	2747	25.8
ESR	785	7.4	1899	17.8	2050	19.3	2511	23.6
Patient global health assessment	115	1.1	922	8.7	1052	9.9	1570	14.8
Swollen joint count	11	0.1	690	6.5	838	7.9	1333	12.5
Tender joint count	8	0.1	693	6.5	840	7.9	1329	12.5
Pain level	86	0.8	920	8.6	1035	9.7	1558	14.6
Fatigue level	97	0.9	923	8.7	1033	9.7	1560	14.7
Level of sleeping disorders	126	1.2	928	8.7	1041	9.8	1585	14.9
% of full physical function	178	1.7	985	9.3	1104	10.4	1623	15.3
Disease duration	0	0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Glucocorticoid dose (T0, T3: last 6 months, T1, T2: last 3 months)	22	0.2	698	6.6	854	9.0	1333	12.5
Rheumatoid factor	217	2.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
ACPA	1748	16.4	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Joint erosions	468	4.4	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Smoking	526	4.9	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Shown are missing values for four time points: at baseline (T0), three (T1), six (T2), and twelve months (T3) after treatment start (n.a. = not applicable).

Supplementary Table 2 Results from logistic regression model considering reduction of glucocorticoid dose within 12 months

	effectiveness			tolerability		
	OR	95% CI	p-value	OR	95% CI	p-value
<i>Baseline parameter</i>						
Satisfaction at baseline	<b>3.11</b>	<b>2.70;3.58</b>	<b>&lt;.0001</b>	<b>2.44</b>	<b>2.07;2.88</b>	<b>&lt;.0001</b>
Seropositivity (RF and/or ACPA)	<b>1.31</b>	<b>1.13;1.51</b>	<b>0.0003</b>	<b>1.19</b>	<b>1.01;1.39</b>	<b>0.0321</b>
≥1 bDMARD prior to enrolment	<b>0.79</b>	<b>0.67;0.93</b>	<b>0.0047</b>	0.98	0.79;1.22	0.8552
Depression	<b>0.65</b>	<b>0.52;0.81</b>	<b>0.0001</b>	<b>0.55</b>	<b>0.43;0.69</b>	<b>&lt;.0001</b>
Fibromyalgia	<b>0.72</b>	<b>0.52;0.98</b>	<b>0.0401</b>	0.81	0.58;1.13	0.2144
Obesity (BMI ≥30, reference <30)	<b>0.86</b>	<b>0.74;0.99</b>	<b>0.0374</b>	0.93	0.78;1.11	0.4151
Heart failure	1.19	0.75;1.89	0.4611	0.90	0.57;1.42	0.6645
Diabetes	0.93	0.74;1.17	0.5237	0.86	0.70;1.07	0.1809
Chronic kidney disease	0.97	0.72;1.32	0.8596	1.05	0.71;1.54	0.8086
Malignant neoplasm	1.01	0.71;1.44	0.9520	0.92	0.63;1.34	0.6645
Degenerative spine disease	0.92	0.76;1.11	0.3722	0.86	0.71;1.54	0.1316
Osteoarthritis	0.91	0.76;1.08	0.2768	0.94	0.78;1.13	0.5171
Osteoporosis	0.91	0.75;1.09	0.2961	0.95	0.77;1.19	0.6762
Age at onset (10 years)	1.04	0.98;1.09	0.2102	1.00	0.94;1.06	0.9432
Female sex	1.03	0.88;1.22	0.6819	1.08	0.89;1.30	0.4396
Former smoking	0.91	0.76;1.08	0.2604	0.96	0.79;1.16	0.6759
Current smoking	0.94	0.79;1.13	0.5299	0.98	0.82;1.18	0.8395
No information on smoking	1.11	0.76;1.60	0.5886	0.92	0.65;1.30	0.6499
<i>Parameter after 12 months</i>						
DAS28-ESR reduction by 1 point	<b>1.39</b>	<b>1.32;1.47</b>	<b>&lt;.0001</b>	<b>1.32</b>	<b>1.25;1.40</b>	<b>&lt;.0001</b>
Pain reduction by 1 point	<b>1.27</b>	<b>1.22;1.31</b>	<b>&lt;.0001</b>	<b>1.13</b>	<b>1.09;1.17</b>	<b>&lt;.0001</b>
Increase in physical capacity by 10 points	<b>1.23</b>	<b>1.17;1.29</b>	<b>&lt;.0001</b>	<b>1.11</b>	<b>.05;1.18</b>	<b>0.0003</b>
Fatigue reduction by 1 point	1.01	0.98;1.05	0.3837	<b>1.04</b>	<b>1.00;1.07</b>	<b>0.0328</b>
Sleeping disorder reduction by 1 point	1.01	0.98;1.05	0.3373	1.03	1.00;1.06	0.0639
Reduction in glucocorticoids by 5mg/d	<b>1.19</b>	<b>1.11;1.27</b>	<b>&lt;.0001</b>	<b>1.11</b>	<b>1.03;1.21</b>	<b>0.0095</b>
≥1 change of therapy after enrolment	<b>0.61</b>	<b>0.53;0.70</b>	<b>&lt;.0001</b>	<b>0.63</b>	<b>0.54;0.73</b>	<b>&lt;.0001</b>
b/tsDMARD therapy	1.08	0.92;1.26	0.3541	1.13	0.96;1.34	0.1397

Supplementary Table 3 Results from logistic regression model considering components of DAS28-ESR

	effectiveness			tolerability		
	OR	95% CI	p-value	OR	95% CI	p-value
<i>Baseline parameter</i>						
Satisfaction at baseline	<b>3.04</b>	<b>2.64;3.51</b>	<b>&lt;.0001</b>	<b>2.43</b>	<b>2.05;2.88</b>	<b>&lt;.0001</b>
Seropositivity (RF and/or ACPA)	<b>1.37</b>	<b>1.19;1.59</b>	<b>&lt;.0001</b>	<b>1.23</b>	<b>1.05;1.44</b>	<b>0.0093</b>
≥1 bDMARD prior to enrolment	<b>0.76</b>	<b>0.64;0.90</b>	<b>0.0014</b>	0.95	0.77;1.18	0.6474
Depression	<b>0.63</b>	<b>0.51;0.79</b>	<b>&lt;.0001</b>	<b>0.54</b>	<b>0.43;0.68</b>	<b>&lt;.0001</b>
Fibromyalgia	<b>0.70</b>	<b>0.51;0.97</b>	<b>0.0302</b>	0.80	0.57;1.12	0.1870
Obesity (BMI ≥30, reference <30)	<b>0.85</b>	<b>0.74;0.99</b>	<b>0.0306</b>	0.93	0.78;1.10	0.3994
Heart failure	1.19	0.75;1.91	0.4581	0.91	0.57;1.44	0.6779
Diabetes	0.92	0.74;1.16	0.4789	0.86	0.69;1.07	0.1825
Chronic kidney disease	0.98	0.72;1.33	0.8879	1.06	0.72;1.56	0.7756
Malignant neoplasm	1.00	0.71;1.43	0.9781	0.92	0.63;1.34	0.6650
Degenerative spine disease	0.91	0.75;1.11	0.3446	0.86	0.70;1.05	0.1271
Osteoarthritis	0.90	0.75;1.07	0.2233	0.93	0.77;1.12	0.4557
Osteoporosis	0.92	0.77;1.11	0.4068	0.98	0.78;1.21	0.8197
Age at onset (10 years)	1.04	0.98;1.10	0.1647	1.00	0.95;1.07	0.8786
Female sex	1.09	0.93;1.29	0.2923	1.12	0.93;1.36	0.2229
Former smoking	0.92	0.77;1.09	0.3014	0.96	0.80;1.17	0.7102
Current smoking	0.95	0.79;1.14	0.5899	0.98	0.81;1.18	0.8317
No information on smoking	1.11	0.77;1.59	0.5838	0.91	0.65;1.29	0.5985
<i>Parameter after 12 months</i>						
Tender joints count reduction by 1 joint	<b>1.03</b>	<b>1.01;1.04</b>	<b>&lt;.0001</b>	<b>1.02</b>	<b>1.00;1.03</b>	<b>0.0086</b>
Swollen joints count reduction by 1 joint	<b>1.03</b>	<b>1.02;1.05</b>	<b>0.0003</b>	<b>1.03</b>	<b>1.01;1.05</b>	<b>0.0017</b>
Global health improvement by 1 point	<b>1.12</b>	<b>1.07;1.17</b>	<b>&lt;.0001</b>	<b>1.11</b>	<b>1.06;1.17</b>	<b>&lt;.0001</b>
ESR reduction by 10 points	<b>1.05</b>	<b>1.02;1.08</b>	<b>0.0014</b>	<b>1.06</b>	<b>1.02;1.10</b>	<b>0.0011</b>
Pain reduction by 1 point	<b>1.23</b>	<b>1.18;1.29</b>	<b>&lt;.0001</b>	<b>1.10</b>	<b>1.05;1.15</b>	<b>0.0001</b>
Increase in physical capacity by 10 points	<b>1.23</b>	<b>1.17;1.29</b>	<b>&lt;.0001</b>	<b>1.11</b>	<b>1.05;1.17</b>	<b>0.0003</b>
Fatigue reduction by 1 point	1.00	0.97;1.04	0.7899	1.03	0.99;1.06	0.1255
Sleeping disorder reduction by 1 point	1.01	0.98;1.05	0.3736	1.03	1.00;1.06	0.0824
Glucocorticoids 5- <10mg/d, ref. <5mg	<b>0.80</b>	<b>0.70;0.92</b>	<b>0.0014</b>	<b>0.84</b>	<b>0.72;0.98</b>	<b>0.0292</b>
Glucocorticoids 10- <15mg/d, ref. <5mg	<b>0.43</b>	<b>0.32;0.59</b>	<b>&lt;.0001</b>	<b>0.47</b>	<b>0.35;0.64</b>	<b>&lt;.0001</b>
Glucocorticoids ≥ 15 mg/d, ref. <5mg	<b>0.23</b>	<b>0.16;0.34</b>	<b>&lt;.0001</b>	<b>0.45</b>	<b>0.29;0.69</b>	<b>0.0003</b>
≥1 change of therapy after enrolment	<b>0.63</b>	<b>0.54;0.72</b>	<b>&lt;.0001</b>	<b>0.64</b>	<b>0.55;0.75</b>	<b>&lt;.0001</b>
b/tsDMARD therapy	1.17	1.00;1.37	0.0554	<b>1.19</b>	<b>1.01;1.40</b>	<b>0.0380</b>