

**Supplementary Table 1.** Multivariate analysis of patient characteristics and remission<sup>a</sup>

Factors by patient background	Level	Cases for DAS28-4CRP evaluation			No. of multiple logistics regression analysis cases amongst cases for DAS28-4CRP evaluation			Standard	Odds ratio	Two-sided 95% Wald confidence interval of odds ratio			
		All cases	Remission cases <sup>b</sup>	%	All cases	Remission cases <sup>b</sup>	%						
		N	N		N	N							
No. of cases		145	99	68.3	128	86	67.2		—	—			
Gender, n	Male	50	36	72.0	44	32	72.7	*	—	—			
	Female	95	63	66.3	84	54	64.3		0.66	0.26–1.65			
Age, years	Child(<15)	0	0	—	0	0	—		—	—			
	Adult (≥15 to <65)	97	63	64.9	88	56	63.6	*	—	—			
	Elderly(≥65)	48	36	75.0	40	30	75.0		—	—			
Weight, kg	<30	0	0	—	0	0	—		—	—			
	≥30 to <40	5	1	20.0	3	1	33.3		—	—			
	≥40 to <50	27	17	63.0	25	15	60.0	*	—	—			
	≥50 to <60	36	27	75.0	30	21	70.0		—	—			
	≥60	42	29	69.0	39	27	69.2		—	—			
	Unknown	35	25	71.4									
Duration of RA, months	<3	55	41	74.5	52	40	76.9	*	—	—			
	≥3 to <6	53	33	62.3	45	26	57.8		0.34	0.12–0.99			
	≥6	32	21	65.6	31	20	64.5		0.63	0.19–2.05			
DAS28-4CRP at the time of drug initiation	≤5.1	73	54	74.0	69	51	73.9	*	—	—			
	>5.1	61	36	59.0	59	35	59.3		0.57	0.23–1.40			
	Unknown	11	9	81.8									
Complication: Hepatopathy	Absent	131	90	68.7	114	77	67.5	*	—	—			
	Present	14	9	64.3	14	9	64.3		0.76	0.17–3.54			
Complication: Renal disorder	Absent	144	98	68.1	127	85	66.9	*	—	—			
	Present	1	1	100.0	1	1	100.0		—	—			
Complication: Cardiac disorder	Absent	119	77	64.7	108	69	63.9	*	—	—			
	Present	26	22	84.6	20	17	85.0		4.11	0.91–18.53			

Complication: Blood disorder	Absent	140	97	69.3	125	84	67.2	*	—	—
	Present	5	2	40.0	3	2	66.7		2.86	0.10–83.48
Complication: Respiratory disorder	Absent	130	88	67.7	115	77	67.0	*	—	—
	Present	15	11	73.3	13	9	69.2		1.37	0.31–6.04
Complication: Diabetes	Absent	135	93	68.9	119	80	67.2	*	—	—
	Present	10	6	60.0	9	6	66.7		0.98	0.17–5.56
Complication: Malignancy	Absent	145	99	68.3	128	86	67.2	*	—	—
	Present	0	0	—	0	0	—		—	—
Past medical history: Tuberculosis	Absent	142	97	68.3	125	84	67.2	*	—	—
	Present	3	2	66.7	3	2	66.7		1.15	0.07–17.74
Past medical history: Nontuberculous mycobacterial infection	Absent	145	99	68.3	128	86	67.2	*	—	—
	Present	0	0	—	0	0	—		—	—
Past medical history: Interstitial pneumonia	Absent	145	99	68.3	128	86	67.2	*	—	—
	Present	0	0	—	0	0	—		—	—
Past medical history: Bacterial bronchitis	Absent	145	99	68.3	128	86	67.2	*	—	—
	Present	0	0	—	0	0	—		—	—
Past medical history: Obstructive lung disease	Absent	145	99	68.3	128	86	67.2	*	—	—
	Present	0	0	—	0	0	—		—	—
Past medical history: Hypoplastic anemia	Absent	145	99	68.3	128	86	67.2	*	—	—
	Present	0	0	—	0	0	—		—	—
Past medical history: Pancytopenia	Absent	145	99	68.3	128	86	67.2	*	—	—
	Present	0	0	—	0	0	—		—	—
Past medical history: Malignancy	Absent	142	96	67.6	125	83	66.4	*	—	—
	Present	3	3	100.0	3	3	100.0		—	—
History of allergy to drug	Absent	138	94	68.1	123	82	66.7	*	—	—
	Present	7	5	71.4	5	4	80.0		1.58	0.10–25.22
History of smoking	Absent	82	55	67.1	71	46	64.8	*	—	—
	Present	43	30	69.8	40	27	67.5		—	—
Laboratory test before drug initiation: Peripheral white blood cell count, /mm <sup>3</sup>	Unknown	20	14	70.0						
	≥4000	141	96	68.1	126	85	67.5		6.45	0.22–193.30

Laboratory test before drug initiation:	<4000	4	3	75.0	2	1	50.0	*	—	—
	≥1000	131	91	69.5	117	79	67.5		1.28	0.25–6.70
Peripheral blood lymphocyte count, /mm <sup>3</sup>										
Stage and degree of progression of Steinbrocker	<1000	12	7	58.3	11	7	63.6	*	—	—
	Not conducted	2	1	50.0						
Stage I + II	129	90	69.8	114	78	68.4	*	—	—	
Degree of Steinbrocker dysfunction	Stage III + IV	16	9	56.3	14	8	57.1		0.63	0.15–2.64
	Class I + II	117	85	72.6	104	73	70.2	*	—	—
	Class III + IV	28	14	50.0	24	13	54.2		0.45	0.14–1.42
At the time of drug initiation: MTX administration dose (mg/week)	<8	75	51	68.0	63	42	66.7	*	—	—
	≥8	70	48	68.6	65	44	67.7		1.23	0.51–2.94
Concomitant use: Adrenal corticosteroid	Absent	98	64	65.3	85	54	63.5	*	—	—
	Present	47	35	74.5	43	32	74.4		1.80	0.68–4.76
Concomitant use: DMARDs other than MTX	Absent	132	92	69.7	115	79	68.7	*	—	—
	Present	13	7	53.8	13	7	53.8		0.37	0.08–1.71

DAS28-4CRP, Disease Activity Score based on 28-joint count and using C-reactive protein; DMARD, disease-modifying antirheumatic drug; MTX, methotrexate; RA, rheumatoid arthritis.

<sup>a</sup>The Hosmer-Lemeshow Goodness-of-Fit Test:  $P=0.0918$  (DF: 8).

<sup>b</sup>The denominator of the ratio is the total number of cases of each level/standard of each study group.

**Supplementary Table 2.** Univariate analysis of patient characteristics and remission

Factors by patient background	Level	Cases for DAS28-4CRP evaluation			Standard	Odds ratio	Two-sided 95% Wald confidence interval of odds ratio
		All cases		Remission cases <sup>a</sup>			
		N	N	%			
No. of cases		145	99	68.3	—	—	—
Gender	Male	50	36	72.0	*	—	—
	Female	95	63	66.3		0.77	0.36–1.62
Age, years	Child (<15)	0	0	—		—	—
	Adult (≥15 to <65)	97	63	64.9	*	—	—
	Elderly (≥65)	48	36	75.0		1.62	0.75–3.51
Weight, kg	<30	0	0	—		—	—
	≥30 to <40	5	1	20.0		0.15	0.01–1.51
	≥40 to <50	27	17	63.0	*	—	—
	≥50 to <60	36	27	75.0		1.76	0.60–5.23
	≥60	42	29	69.0		1.31	0.47–3.63
	Unknown	35	25	71.4		—	—
Duration of RA, months	<3	55	41	74.5	*	—	—
	≥3 to <6	53	33	62.3		0.56	0.25–1.28
	≥6	32	21	65.6		0.65	0.25–1.68
	Unknown	5	4	80.0		—	—
DAS28-4CRP at the time of drug initiation	≤5.1	73	54	74.0	*	—	—
	>5.1	61	36	59.0		0.51	0.24–1.05
	Unknown	11	9	81.8		—	—
Complication: Hepatopathy	Absent	131	90	68.7	*	—	—
	Present	14	9	64.3		0.82	0.26–2.60
Complication: Renal disorder	Absent	144	98	68.1	*	—	—
	Present	1	1	100.0		Complete separation	Complete separation
Complication: Cardiac disorder	Absent	119	77	64.7	*	—	—
	Present	26	22	84.6		3.00	0.97–9.28
Complication: Blood disorder	Absent	140	97	69.3	*	—	—
	Present	5	2	40.0		0.30	0.05–1.83

Complication: Respiratory disorder	Absent	130	88	67.7	*	—	—
	Present	15	11	73.3		1.31	0.39–4.37
Complication: Diabetes	Absent	135	93	68.9	*	—	—
	Present	10	6	60.0		0.68	0.18–2.53
Complication: Malignancy	Absent	145	99	68.3	*	—	—
	Present	0	0	—		—	—
Past medical history: Tuberculosis	Absent	142	97	68.3	*	—	—
	Present	3	2	66.7		0.93	0.08–10.49
Past medical history: Nontuberculous mycobacterial infection	Absent	145	99	68.3	*	—	—
	Present	0	0	—		—	—
Past medical history: Interstitial pneumonia	Absent	145	99	68.3	*	—	—
	Present	0	0	—		—	—
Past medical history: Bacterial bronchitis	Absent	145	99	68.3	*	—	—
	Present	0	0	—		—	—
Past medical history: Obstructive lung disease	Absent	145	99	68.3	*	—	—
	Present	0	0	—		—	—
Past medical history: Hypoplastic anemia	Absent	145	99	68.3	*	—	—
	Present	0	0	—		—	—
Past medical history: Pancytopenia	Absent	145	99	68.3	*	—	—
	Present	0	0	—		—	—
Past medical history: Malignancy	Absent	142	96	67.6	*	—	—
	Present	3	3	100.0		Complete separation	Complete separation
History of allergy to drug	Absent	138	94	68.1	*	—	—
	Present	7	5	71.4		1.17	0.22–6.27
History of smoking	Absent	82	55	67.1	*	—	—
	Present	43	30	69.8		1.13	0.51–2.51
	Unknown	20	14	70.0		—	—
Laboratory test before drug initiation: Peripheral white blood cell count, /mm <sup>3</sup>	≥4000	141	96	68.1		0.71	0.07–7.03
	<4000	4	3	75.0	*	—	—
Laboratory test before drug initiation: Peripheral blood lymphocyte count, /mm <sup>3</sup>	≥1000	131	91	69.5		1.63	0.49–5.43
	<1000	12	7	58.3	*	—	—
	Not conducted	2	1	50.0		—	—

Stage and degree of progression of Steinbrocker	Stage I + II	129	90	69.8	*	—	—
	Stage III + IV	16	9	56.3		0.56	0.19–1.60
Degree of Steinbrocker dysfunction	Class I + II	117	85	72.6	*	—	—
	Class III + IV	28	14	50.0		0.38	0.16–0.88
At the time of drug initiation: MTX administration dose, mg/week	<8	75	51	68.0	*	—	—
	≥8	70	48	68.6		1.03	0.51–2.07
Concomitant use: Adrenal corticosteroid	Absent	98	64	65.3	*	—	—
	Present	47	35	74.5		1.55	0.71–3.37
Concomitant use: DMARDs other than MTX	Absent	132	92	69.7	*	—	—
	Present	13	7	53.8		0.51	0.16–1.60

DAS28-4CRP, Disease Activity Score based on 28-joint count and using C-reactive protein; DMARD, disease-modifying antirheumatic drug; MTX, methotrexate; RA, rheumatoid arthritis.

<sup>a</sup>The denominator of the ratio is the total number of cases of each level/standard of each study group.