

Supplementary table S1 The predictive value of baseline Δ TSJ on remission: Subgroup analyses of different treatment regimens (logistic regression analyses)

		months	DAS28ESR < 2.6	SDAI \leq 3.3	CDAI \leq 2.8	ACR/EULAR Boolean	DAPSA < 4
TNFi	RA	3	0.96 [0.94, 0.99] p=0.009	0.96 [0.92, 0.99] p=0.008	0.95 [0.92, 0.98] p=0.002	0.95 [0.91, 0.99] p=0.01	0.95 [0.92, 0.98] p=0.004
		6	0.97 [0.94, 0.997] p=0.03	0.96 [0.93, 0.99] p=0.02	0.95 [0.92, 0.98] p=0.002	0.95 [0.92, 0.99] p=0.008	0.94 [0.91, 0.98] p=0.002
	PsA	3	0.89 [0.84, 0.94] p<0.001	0.91 [0.86, 0.97] p=0.004	0.94 [0.89, 0.99] p=0.02	0.91 [0.85, 0.97] p=0.006	0.90 [0.84, 0.96] p=0.001
		6	0.92 [0.87, 0.98] p=0.005	0.91 [0.85, 0.98] p=0.007	0.91 [0.85, 0.97] p=0.006	0.90 [0.83, 0.98] p=0.01	0.93 [0.87, 0.99] p=0.02
MTX	RA	3	0.97 [0.95, 0.99] p=0.009	0.96 [0.93, 0.99] p=0.004	0.95 [0.93, 0.98] p<0.001	0.96 [0.94, 0.99] p=0.02	0.96 [0.93, 0.98] p=0.002
		6	0.96 [0.94, 0.99] p=0.001	0.96 [0.94, 0.99] p=0.002	0.96 [0.94, 0.98] p=0.001	0.97 [0.94, 0.99] p=0.01	0.96 [0.94, 0.99] p=0.003
	PsA	3	0.94 [0.89, 0.99] p=0.01	0.88 [0.81, 0.95] p=0.001	0.90 [0.84, 0.97] p=0.004	0.95 [0.88, 1.02] p=0.15	0.91 [0.84, 0.98] p=0.01
		6	0.94 [0.89, 0.99] p=0.02	0.95 [0.90, 1.01] p=0.09	0.94 [0.89, 0.995] p=0.03	0.93 [0.87, 0.995] p=0.03	0.93 [0.88, 0.99] p=0.02

Data are displayed as OR [95% CI]. Logistic regression analyses adjusted for age, sex, disease duration and smoking. RA, rheumatoid arthritis; PsA, psoriatic arthritis; DAS28, 28 joint disease activity score; SDAI, Simplified Disease Activity Index; CDAI, Clinical Disease Activity Index; DAPSA, Disease Activity Index for Psoriatic Arthritis; TNFi, Tumor necrosis factor inhibitor naïve patients treated with TNFi with or without concomitant methotrexate (RA, n=1213; PsA, n=536); MTX, DMARD naïve patients treated with methotrexate (RA, n=1522; PsA, n=700)

Supplementary table S2 The predictive value of baseline Δ PEG on remission: Subgroup analyses of different treatment regimens (logistic regression analyses)

	months	DAS28ESR < 2.6	SDAI \leq 3.3	CDAI \leq 2.8	ACR/EULAR Boolean	DAPSA < 4	
TNFi	RA	3	0.96 [0.94, 0.99] p=0.009	1.00 [0.99, 1.01] p=0.37	0.99 [0.99, 1.00] p=0.09	0.99 [0.98, 0.996] p=0.004	0.99 [0.98, 0.999] p=0.03
		6	1.00 [0.99, 1.01] p=0.61	0.99 [0.98, 1.00] p=0.07	0.99 [0.98, 0.999] p=0.03	0.99 [0.98, 1.00] p=0.18	0.99 [0.98, 1.00] p=0.05
	PsA	3	0.89 [0.84, 0.94] p<0.001	0.99 [0.98, 0.998] p=0.03	0.99 [0.98, 0.998] p=0.03	0.98 [0.97, 0.998] p=0.03	0.99 [0.98, 0.999] p=0.03
		6	1.00 [0.99, 1.01] p=0.57	0.99 [0.97, 0.998] p=0.02	0.98 [0.97, 0.995] p=0.006	0.98 [0.97, 0.997] p=0.02	0.99 [0.98, 1.00] p=0.121
MTX	RA	3	0.97 [0.95, 0.99] p=0.009	0.99 [0.98, 0.998] p=0.01	0.99 [0.98, 0.998] p=0.02	0.99 [0.98, 0.99] p=0.001	0.99 [0.98, 0.99] p<0.001
		6	0.99 [0.98, 0.995] p<0.001	0.99 [0.98, 0.99] p<0.001	0.99 [0.98, 0.99] p<0.001	0.99 [0.98, 0.99] p<0.001	0.99 [0.98, 0.99] p<0.001
	PsA	3	0.94 [0.89, 0.99] p=0.01	0.98 [0.97, 0.99] p=0.004	0.98 [0.97, 0.995] p=0.008	0.99 [0.97, 1.00] p=0.11	0.98 [0.97, 0.998] p=0.03
		6	1.00 [0.99, 1.01] p=0.59	0.99 [0.98, 0.998] p=0.02	0.99 [0.98, 0.996] p=0.006	0.99 [0.97, 0.997] p=0.02	0.98 [0.97, 0.99] p=0.001

Data are displayed as OR [95% CI]. Logistic regression analyses adjusted for age, sex, disease duration and smoking. RA, rheumatoid arthritis; PsA, psoriatic arthritis; DAS28, 28 joint disease activity score; SDAI, Simplified Disease Activity Index; CDAI, Clinical Disease Activity Index; DAPSA, Disease Activity for Psoriatic Arthritis; TNFi, Tumor necrosis factor inhibitor naïve patients treated with TNFi with or without concomitant methotrexate (RA, n=1213; PsA, n=536); MTX, DMARD naïve patients treated with methotrexate (RA, n=1522; PsA, n=700)

Supplementary table S3 Comparison of the predictive value of dichotomized Δ TJSJ and Δ PEG on remission (logistic regression analyses)

		months	DAS28ESR < 2.6	SDAI \leq 3.3	CDAI \leq 2.8	ACR/EULAR Boolean	DAPSA < 4
Positive ΔTJSJ	RA	3	0.63 [0.51, 0.79] p<0.001	0.47 [0.36, 0.63] p<0.001	0.40 [0.31, 0.53] p<0.001	0.50 [0.36, 0.68] p<0.001	0.47 [0.35, 0.63] p<0.001
		6	0.66 [0.52, 0.82] p<0.001	0.57 [0.44, 0.75] p<0.001	0.61 [0.48, 0.78] p<0.001	0.60 [0.45, 0.81] p=0.001	0.52 [0.40, 0.68] p<0.001
	PsA	3	0.43 [0.31, 0.60] p<0.001	0.35 [0.24, 0.52] p<0.001	0.47 [0.33, 0.68] p<0.001	0.39 [0.25, 0.60] p<0.001	0.34 [0.23, 0.51] p<0.001
		6	0.54 [0.38, 0.77] p=0.001	0.71 [0.48, 1.03] p=0.07	0.64 [0.45, 0.92] p=0.02	0.48 [0.32, 0.74] p=0.001	0.61 [0.42, 0.90] p=0.01
Positive ΔPEG	RA	3	0.85 [0.68, 1.07] p=0.18	0.75 [0.56, 0.99] p=0.045	0.40 [0.31, 0.53] p<0.001	0.62 [0.45, 0.85] p=0.003	0.58 [0.43, 0.76] p<0.001
		6	0.79 [0.62, 0.99] p=0.04	0.60 [0.46, 0.79] p<0.001	0.67 [0.52, 0.86] p=0.002	0.62 [0.46, 0.83] p=0.001	0.60 [0.46, 0.79] p<0.001
	PsA	3	0.93 [0.64, 1.35] p=0.69	0.61 [0.39, 0.95] p=0.03	0.47 [0.33, 0.68] p<0.001	0.60 [0.38, 0.97] p=0.04	0.69 [0.44, 1.08] p=0.10
		6	0.80 [0.54, 1.18] p=0.25	0.51 [0.33, 0.76] p=0.001	0.49 [0.34, 0.73] p<0.001	0.40 [0.26, 0.63] p<0.001	0.51 [0.34, 0.77] p=0.002

Data are displayed as OR [95% CI]. Logistic regression analyses adjusted for age, sex, disease duration and smoking. RA, rheumatoid arthritis (n=2735); PsA, psoriatic arthritis (n=1236); DAS28, 28 joint disease activity score; SDAI, Simplified Disease Activity Index; CDAI, Clinical Disease Activity Index; DAPSA, Disease Activity for Psoriatic Arthritis