

Supplementary materials

A Pooled Analysis of TNF Inhibitor Biosimilar Studies Comparing Radiographic Progression by Disease Activity States in Rheumatoid Arthritis

Supplementary Table 1. Disease activity cut-off values

Disease activity measure	Remission	LDA	MDA	HDA
DAS28 (ESR)	< 2.6	≥ 2.6 to < 3.2	≥ 3.2 to ≤ 5.1	> 5.1
SDAI	≤ 3.3	> 3.3 to ≤ 11.0	> 11.0 to ≤ 26.0	> 26.0
CDAI	≤ 2.8	> 2.8 to ≤ 10.0	> 10.0 to ≤ 22.0	> 22.0

CDAI, Clinical Disease Activity Index; DAS28, disease activity score based on 28-joint count; ESR, erythrocyte sedimentation rate; HDA, high disease activity; LDA, low disease activity; MDA, moderate disease activity; SDAI, Simplified Disease Activity Index.

Supplementary Table 2. Number of patients in each disease activity measure in all treatments combined group.

Disease activity measure	Remission		LDA		MDA		HDA	
	Week 12/14	Week 24/30	Week 12/14	Week 24/30	Week 12/14	Week 24/30	Week 12/14	Week 24/30
DAS28 (ESR)	141	228	152	160	652	638	315	238
SDAI	86	144	377	440	558	507	234	170
CDAI	80	140	356	422	481	467	343	236

CDAI, Clinical Disease Activity Index; DAS28, disease activity score based on 28-joint count; HDA, high disease activity; LDA, low disease activity; MDA, moderate disease activity; SDAI, Simplified Disease Activity Index.

Supplementary Table 3 Change in mTSS at 1 year and proportion of patients with no rapid radiographic progression (1-year mean change in mTSS ≤ 1 or ≤ 5) stratified by baseline mTSS score (≤ 5 versus > 5) in all treatments combined group

	Baseline mTSS score ≤ 5				Baseline mTSS score > 5			
	DAS28 at Week 24/30				DAS28 at Week 24/30			
	Remission	LDA	MDA	HDA	Remission	LDA	MDA	HDA
Change in mTSS at 1 year Mean (SD)	0.10 (0.61)	-0.02 (0.29)	0.06 (0.61)	0.18 (0.71)	-0.04 (2.77)	0.59 (2.65)	0.38 (2.72)	1.61 (4.98)
% of patients with no rapid radiographic progression (change in mTSS at 1 year ≤ 1) n/n' (%)	98 /103 (95.1)	56 /56 (100.0)	218 /225 (96.9)	49 /56 (87.5)	105 /125 (84.0)	81 /104 (77.9)	329 /413 (79.7)	124 /182 (68.1)
% of patients with no rapid radiographic progression (change in mTSS at 1 year ≤ 5) n/n' (%)	103 /103 (100.0)	56/56 (100.0)	225 /225 (100.0)	56/56 (100.0)	120 /125 (96.0)	98 /104 (94.2)	396 /413 (95.9)	161 /182 (88.5)

N: Patients who completed Week 52 or 54 and have available mTSS data both at baseline and Week 52 or 54; n: number of patients within the category; n': number of patients with available assessment at each timepoint

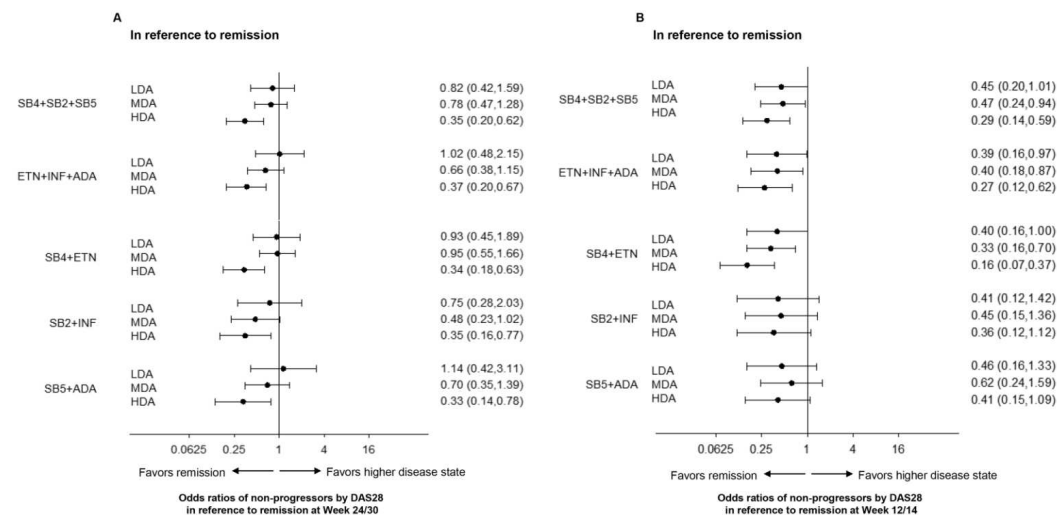
DAS28, disease activity score based on 28-joint count; HDA, high disease activity; LDA, low disease activity; MDA, moderate disease activity; mTSS, modified Total sharp Score.

Supplementary Table 4. HAQ-DI, PhGA, and PGA score at Week 52/54 by disease activity status at Week 24/30

Disease activity measure	DAS28			SDAI			CDAI		
	HAQ-DI	PhGA	PGA	HAQ-DI	PhGA	PGA	HAQ-DI	PhGA	PGA
Remission	0.44 (0.52)	9.3 (9.45)	15.5 (15.48)	0.36 (0.51)	6.8 (7.35)	9.7 (11.57)	0.31 (0.46)	6.8 (8.05)	9.4 (12.87)
LDA	0.58 (0.54)	14.9 (13.69)	23.2 (20.84)	0.62 (0.54)	14.7 (12.77)	23.1 (17.95)	0.64 (0.55)	14.4 (12.72)	22.9 (17.76)
MDA	0.88 (0.60)	21.7 (14.84)	32.2 (20.94)	1.02 (0.59)	25.7 (15.30)	37.8 (21.07)	0.97 (0.59)	24.6 (14.83)	36.6 (21.09)
HDA	1.26 (0.57)	35.7 (18.53)	45.5 (19.69)	1.27 (0.61)	37.5 (18.79)	46.5 (19.65)	1.23 (0.60)	25.4 (18.48)	44.7 (20.16)

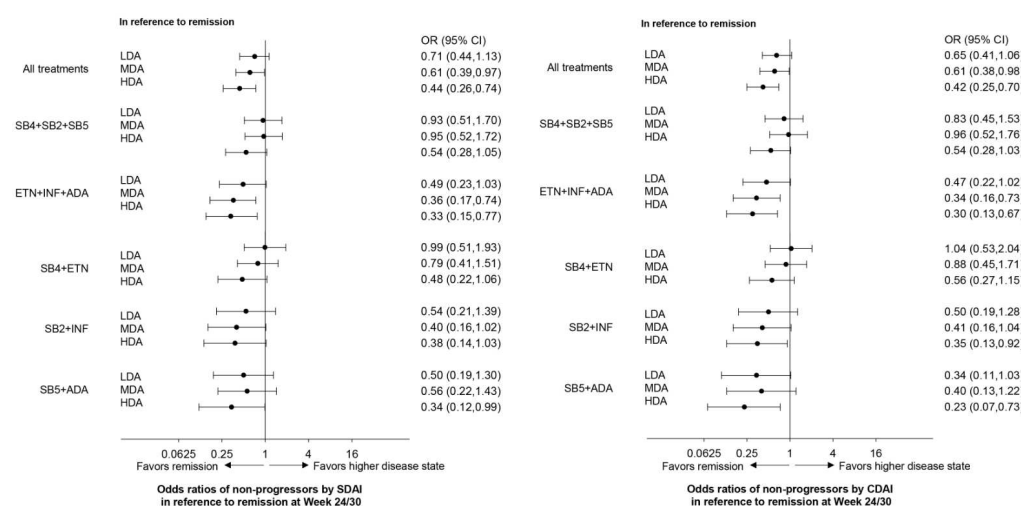
CDAI, Clinical Disease Activity Index; DAS28, disease activity score based on 28-joint count; HAQ-DI, Health Assessment Questionnaire Disability Index; HDA, high disease activity; LDA, low disease activity; MDA, moderate disease activity; PGA, Patient Global Assessment Score; PhGA, Physician Global Assessment Score; SDAI, Simplified Disease Activity Index.

Supplementary Figure 1. Odds ratios of radiographic non-progressors in reference to remission by disease activity score based on 28-joint count (per erythrocyte sedimentation rate) at (A) week 24/30 and (B) 12/14 in different combinations of treatment groups.



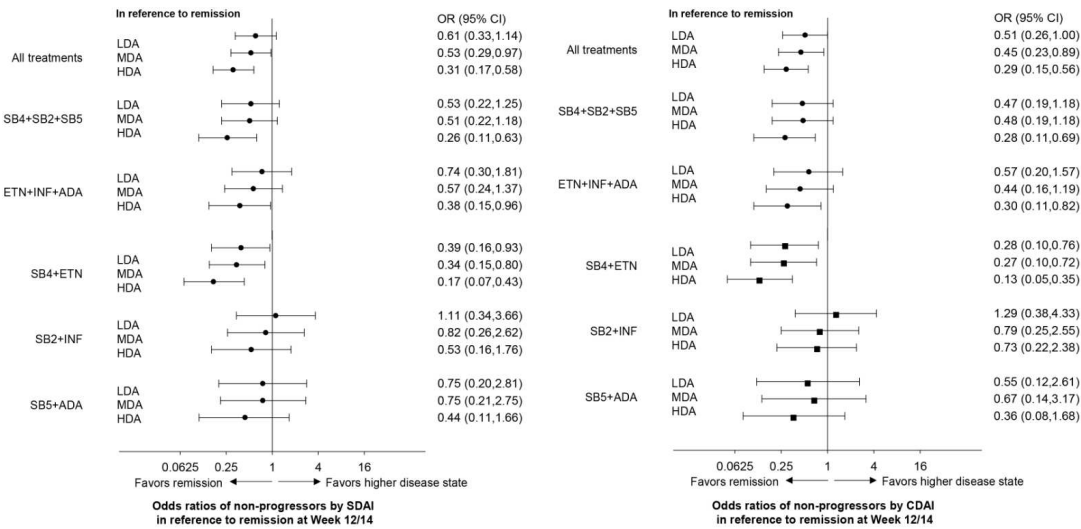
ADA, adalimumab reference product; DAS28, disease activity score based on 28-joint count (per erythrocyte sedimentation rate); ETN, etanercept reference product; HDA, high disease activity; INF, infliximab reference product; LDA, low disease activity; MDA, moderate disease activity; OR, odds ratio.

Supplementary Figure 2A . Odds ratios of radiographic non-progressors in reference to remission by SDAI scores and CDAI scores at week 24/30.



ADA, adalimumab reference product; CDAI, Clinical Disease Activity Index; CI, confidence interval; ETN, etanercept reference product; HDA, high disease activity; INF, infliximab reference product; LDA, low disease activity; MDA, moderate disease activity; OR, odds ratio; SDAI, Simplified Disease Activity Index.

Supplementary Figure 2B. Odds ratios of radiographic non-progressors in reference to remission by SDAI scores and CDAI scores at week 12/14.



ADA, adalimumab reference product; CDAI, Clinical Disease Activity Index; CI, confidence interval; ETN, etanercept reference product; HDA, high disease activity; INF, infliximab reference product; LDA, low disease activity; MDA, moderate disease activity; OR, odds ratio; SDAI, Simplified Disease Activity Index.