

ONLINE SUPPLEMENTARY DATA

Supplementary Table 1. Disease activity outcomes improvement as continuous variables.

Outcome improvement	All	P	Men	P	Women	P
CRP (median, IQR)	3 (11)	0.001	8 (28.5)	0.005	6.5 (14.3)	0.108
ESR (median, IQR)	7 (18.5)	<0.001	4 (21)	0.001	1 (6)	0.003
ASDAS-CRP (mean, SD)	1 (1.3)	<0.001	1.3 (1.4)	<0.001	0.6 (1.1)	0.052
BASDAI (mean, SD)	1.3 (2.2)	0.001	1.6 (2.2)	0.001	0.7 (2.1)	0.191

CRP= C-reactive protein, ESR= erythrocyte sedimentation rate, ASDAS= Ankylosing Spondylitis Disease Activity Score, BASDAI= Bath Ankylosing Spondylitis Disease Activity Index.

Supplementary Table 2. Univariate logistic regression analysis results.

Outcome	Variable	OR (95% CI)
Clinically important or major improvement of ASDAS-CRP	BMI baseline	0.79 (0.63-0.98)
	BF% baseline	0.91 (0.84-0.99)
	FM baseline	0.9 (0.81-0.99)
	FMI baseline	0.78 (0.62-0.99)
	FMI percentile ^a baseline	0.97 (0.94-0.997)
BASDAI MCII ^b	BMI baseline	0.73 (0.56-0.95)
	BF% baseline	0.88 (0.8-0.98)
	FM baseline	0.88 (0.78-0.98)
	FMI baseline	0.7 (0.52-0.93)
	FMI percentile ^a baseline	0.96 (0.93-0.99)

^aPercentiles according to the reference population tables, stratified by ethnicity, age and gender. ^bOnly for patients with a BASDAI ≥ 4 at baseline. CRP= C-reactive protein, ASDAS= Ankylosing Spondylitis Disease Activity Score, BASDAI= Bath Ankylosing Spondylitis Disease Activity Index, MCII= minimum clinically important improvement, BMI= Body Mass Index, BF%= Body fat percentage, FM= Fat Mass, FMI=Fat Mass Index.

Supplementary Table 3. Univariate linear regression analysis results.

Outcome	Variable	β -Coefficient	95% CI	P
BASDAI improvement	Age baseline	-0.068	-0.134 to -0.003	0.04
	BMI baseline	-0.254	-0.422 to -0.087	0.004
	BF% baseline	-0.102	-0.172 to -0.032	0.005
	BF% percentile ^a baseline	-0.028	-0.053 to -0.002	0.036
	FM baseline	-0.101	-0.178 to -0.023	0.012
	FMI baseline	-0.272	-0.45 to -0.094	0.004
	FMI percentile ^a baseline	-0.038	-0.066 to -0.011	0.008
ASDAS-CRP improvement	BMI baseline	-0.145	-0.245 to -0.046	0.005
	BF% baseline	-0.064	-0.105 to -0.024	0.003
	FM baseline	-0.064	-0.109 to -0.019	0.006
	FMI baseline	-0.168	-0.272 to -0.065	0.002
	FMI percentile ^a baseline	-0.022	-0.038 to -0.005	0.012

^aPercentiles according to the reference population tables, stratified by ethnicity, age and gender. BASDAI= Bath Ankylosing Spondylitis Disease Activity Index, ASDAS= Ankylosing Spondylitis Disease Activity Score, CRP= C-reactive protein, BMI= Body Mass Index, BF%= Body fat percentage, FM= Fat Mass, FMI=Fat Mass Index.