Table S1. Baseline demographic and disease characteristics.

		Ustekinumab + MTX		Guselkumab + MTX		Total
	Placebo + MTX (N = 55)	90 mg every 8 weeks (N = 55)	90 mg every 12 weeks (N = 55)	50 mg every 8 weeks (N = 55)	200 mg every 8 weeks (N = 54)	(N = 274)
Characteristic						
Demographics						
Female sex—no. (%)	48 (87.3)	46 (83.6)	47 (85.5)	45 (81.8)	42 (77.8)	228 (83.2)
White race—no. (%)	44 (80.0)	43 (78.2)	48 (87.3)	44 (80.0)	46 (85.2)	225 (82.1)
Age—yr	51.1± 10.6	50.8 ± 13.0	51.4 ± 13.6	49.9 ± 12.9	54.6 ± 11.3	51.5 ± 12.3
Weight—kg	74.9 ± 15.1	70.3 ± 13.7	73.2 ± 14.0	71.9 ± 14.5	71.1 ± 15.9	72.3 ± 14.7
Disease duration—yr	8.5 ± 8.7	5.6 ± 5.5	6.8 ± 5.9	6.1 ± 7.1	8.9 ± 9.6	7.2 ± 7.6
Concomitant medications						
MTX						
No. (%)	55 (100)	55 (100)	55 (100)	55 (100)	54 (100)	274 (100)
Dose—mg/week	14.5 ± 4.6	14.8 ± 4.2	14.9 ± 4.9	15.6 ± 3.6	14.5 ± 4.6	14.9 ± 4.4
Oral glucocorticoids						
No. (%)	30 (54.5)	33 (60.0)	30 (54.5)	37 (67.2)	35 (64.8)	165 (60.2)
Dose—mg/day	6.9 ± 2.3	6.8 ± 2.7	7.1 ± 2.7	6.8 ± 2.5	7.2 ± 2.6	7.0 ± 2.5
NSAIDs						
No. (%)	41 (74.5)	41 (74.5)	42 (76.4)	43 (78.2)	44 (81.5)	211 (77.0)
Disease characteristics						
Number of swollen joints (0-66)	14.7 ± 6.5	15.2 ± 8.6	17.2 ± 9.3	15.5 ± 6.6	17.6 ± 9.1	16.0 ± 8.1

Number of tender joints (0-68)	26.7 ± 11.3	26.4 ± 14.2	27.4 ± 12.3	26.1 ± 12.1	28.0 ± 13.7	26.9 ± 12.7
Patient's assessment of pain (cm)	6.4 ± 1.9	6.6 ± 2.0	6.5 ± 2.2	6.6 ± 2.1	6.5 ± 1.9	6.5 ± 2.0
Patient's global assessment (cm)	6.5 ± 1.8	6.8 ± 1.9	6.8 ± 2.0	6.8 ± 1.7	6.7 ± 1.7	6.7 ± 1.8
Physician's global assessment (cm)	6.8 ± 1.3	6.3 ± 1.3	6.4 ± 1.5	6.6 ± 1.6	6.7 ± 1.4	6.5 ± 1.4
HAQ-DI (0-3)	1.7 ± 0.5	1.8 ± 0.6	1.7 ± 0.6	1.7 ± 0.7	1.8 ± 0.6	1.7 ± 0.6
CRP	1.9 ± 1.6	2.3 ± 2.5	2.0 ± 2.2	2.3 ± 2.3	2.3 ± 2.2	2.2 ± 2.2
—mg/dL (ULN≤ 0.287 mg/dL)						
ESR—mm/hr	46.9 ± 22.3	46.9 ± 28.8	43.3 ± 23.8	43.1 ± 22.5	44.2 ± 20.6	44.9 ± 23.6
DAS28-CRP	6.1 ± 0.8	6.0 ± 0.8	6.1 ± 0.7	6.1 ± 0.8	6.1 ± 0.9	6.1 ± 0.8
CDAI	41.9 ± 11.0	40.2 ± 10.9	43.2 ± 11.0	41.1 ± 10.6	42.8 ± 13.0	41.8 ± 11.3
SDAI	43.8 ± 11.2	42.6 ± 11.1	45.2 ± 10.9	43.4 ± 11.4	45.1 ± 13.7	44.0 ± 11.7
Rheumatoid factor						
No. (%)	48 (87.3)	47 (87.0)	51 (92.7)	53 (96.4)	50 (92.6)	249 (91.2)
kIU/L	270.4 ± 409.9	198.9 ± 232.7	286.1 ± 375.4	402.2 ± 599.8	358.5 ± 534.9	303.0 ± 451.2
Anti-CCP—no. (%)	53 (96.4)	47 (87.0)	51 (92.7)	53 (96.4)	53 (98.1)	257 (94.1)

Data presented as mean ± standard deviation unless otherwise noted. No significant differences ($\alpha = 0.05$) were observed among treatment groups.

CCP, cyclic citrullinated peptide; CDAI, clinical disease activity index; CRP, C-reactive protein; DAS28-CRP, 28-joint count disease activity score using CRP; ESR, erythrocyte sedimentation rate; HAQ-DI, Health Assessment Questionnaire-Disability Index; MTX, methotrexate; NSAIDS, nonsteroidal anti-inflammatory drugs; SDAI, simplified disease activity index; ULN, upper limit of normal

Table S2. Secondary efficacy assessments at week 12 and week 28.

		Ustekinumab + MTX			Guselkumab + MTX		
	Placebo + MTX (N = 55)	90 mg every 8 weeks (N = 55)	90 mg every 12 weeks (N = 55)	Combined	50 mg every 8 weeks (N = 55)	200 mg every 8 weeks (N = 54)	Combined
Patients—no.	55	54	55	109	55	54	109
Week 12							
ACR20—no. (%)	16 (29.1)	20 (37.0)	19 (34.5)	39 (35.8)	11 (20.0)	18 (33.3)	29 (26.6)
ACR50—no. (%)	3 (5.5)	9 (16.7)	5 (9.1)	14 (12.8)	2 (3.6)	7 (13.0)	9 (8.3)
ACR70—no. (%)	1 (1.8)	4 (7.4)	1 (1.8)	5 (4.6)	0	3 (5.6)	3 (2.8)
DAS28-CRP							
Change from baseline	-0.6 (-0.9, -0.3)	-0.9 (-1.2, -0.6)	-1.0 (-1.4,-0.7)*	-1.0 (-1.2, -0.8)*	-1.1 (-1.3,-0.8)	-0.7 (-1.0, -0.4)	-0.8 (-1.0, -0.6)
DAS28-CRP Response—no. (%)	17 (30.9)	21 (38.9)	23 (41.8)	44 (40.4)	20 (36.4)	27 (50.0)	47 (43.1)
CDAI							
Change from baseline	-8.3 ± 13.2	-10.4 ± 15.0	-14.3±13.2*	-12.4 ± 14.2*	-9.2 ± 10.8	-14.3 ± 13.4	-11.7 ± 12.3
SDAI							
Change from baseline	-8.3 ± 13.7	-10.9 ± 15.6	-14.4 ± 13.8*	-12.7 ± 14.8*	-9.3 ± 12.1	-14.5 ± 13.8	-11.9 ± 13.1
HAQ-DI							
Change from baseline	-0.2 (-0.3, -0.1)	-0.4 (-0.5, -0.2)	-0.3 (-0.4, -0.1)	-0.3 (-0.4, -0.2)	-0.3 (-0.4, -0.1)	-0.2 (-0.4, -0.1)	-0.2 (-0.3, -0.1)
SF-36 PCS							
Change from baseline	3.2 (1.5, 4.9)	3.6 (1.8, 5.5)	3.8 (2.0, 5.7)	3.8 (2.5, 5.0)	1.9 (0.3, 3.5)	3.6 (2.0, 5.2)	2.7 (1.5, 3.9)
SF-36 MCS							
Change from baseline	2.7 (0.4, 5.1)	6.6 (4.2, 8.9)	2.4 (0.0, 4.7)	4.7 (3.0, 6.4)	2.5 (0.0, 4.9)	4.1 (1.7, 6.5)	3.1 (1.4, 4.8)
Week 28							
ACR20—no. (%)	22 (40.0)	29 (53.7)	30 (54.5)	59 (54.1)	21 (38.2)	24 (44.4)	45 (41.3)
ACR50—no. (%)	8 (14.5)	12 (22.2)	8 (14.5)	20 (18.3)	12 (21.8)	12 (22.2)	24 (22.0)
ACR70—no. (%)	3 (5.5)	8 (14.8)	3 (5.5)	11 (10.1)	3 (5.5)	4 (7.4)	7 (6.4)
Percent change in ACR core components							
SJC	-26.7 [-75.0, 7.1]	-65.2[-91.2,-28.6]	-71.9 [-86.7, -40.0]	-69.7 [-87.5, -34.8]	-50.0 [-86.7, -25.0]	-58.6 [-86.7, -40.0]	-57.1 [86.7,-27.3]
TJC	-23.7 [-68.0, 13.6]	-43.7 [-79.2, -16.7]	-50.0 [-72.2,-25.0]	-45.8 [-75.0, -21.4]	-50.0 [-77.8, -15.8]	-45.0 [-71.4, -20.8]	-50.0 [-73.3, -20.5]
Pain, VAS	-25.8 [-56.5, 11.1]	-31.9 [-48.5, -8.8]	-20.8 [-47.7, 2.2]	-23.5 [-48.3, -5.7]	-15.6 [-45.3, 2.5]	-19.9 [-38.5, 1.2]	-19.7 [-40.0, 2.0]
Patient's global assessment of disease activity	-22.8 [-50.0, 4.6]	-31.0 [-58.3, -12.2]	-25.0 [-46.8, -4.2]	-30.1 [-49.3, -6.3]	-17.0 [-58.6, 3.7]	-16.7 [-38.9, 1.2]	-16.9 [-41.3, 2.4]
Physician's global assessment of disease activity	-26.4 [-59.4, -5.7]	-41.4 [-82.0, -16.7]	-49.4 [-64.7, -25.7]	-45.5 [-73.9, -23.3]	-52.0 [-71.9, -24.6]	-44.8 [-68.1, -20.4]	-49.2 [-71.0, -20.4]
HAQ-DI	-14.3 [-36.8, 6.3]	-21.1 [-57.1, -4.5]	-20.0 [-40.0, -7.1]	-20.0 [-45.5, -5.9]	-26.3 [-45.0. 0.0]	-18.8 [-45.0, 5.6]	-23.8 [-45.0, 0.0]
CRP	-28.4 [-60.6, 37.8]	-24.8 [-76.6, 26.1]	-29.1 [-69.1, 50.5]	-24.8 [-72.8, 40.8]	0.0 [-40.2, 141.2]	-36.0 [-69.3, 51.4]	-7.2 [-55.3, 88.4]
DAS28-CRP							
Change from baseline	-0.9 (-1.3, -0.6)	-1.5* (-1.9, -1.2)	-1.5* (-1.9, -1.1)	-1.5** (-1.8, -1.3)	-1.4 (-1.8, -1.1)	-1.2 (-1.5, -0.9)	-1.3 (-1.6, -1.1)
DAS28-CRP Response—no. (%)	24 (43.6)	36 (66.7)	33 (60.0)	69 (63.3)	31 (56.4)	32 (59.3)	63 (57.8)
CDAI							
Change from baseline	-11.3 ± 16.4	-17.2±16.8	-19.9±10.9**	-18.6 ± 14.2**	-16.7±12.8	-18.6±14.9*	-17.6±13.8*

SDAI							
Change from baseline	-11.4 ± 17.0	-17.9 ± 17.5	-20.4±11.6**	-19.2±14.8**	-16.5±13.1	-19.1 ± 15.5*	-17.8±14.3*
Patients in remission—no. (%)	0	3 (5.6)	1 (1.8)	4 (3.7)	0	1 (1.9)	1 (0.9)
HAQ-DI							
Change from baseline	-0.3 (-0.4, -0.1)	-0.4 (-0.6, -0.3)	-0.5 (-0.6, -0.3)	-0.5 (-0.6, -0.4)	-0.4 (-0.5, -0.2)	-0.4 (-0.6, -0.3)	-0.4 (-0.5, -0.3)
SF-36 PCS							
Change from baseline	3.2 (1.6, 4.8)	5.5 (3.8, 7.1)	4.9 (3.2, 6.5)	5.0 (3.9, 6.2)	3.3 (1.7, 5.0)	3.5 (2.0, 5.1)	3.6 (2.5, 4.8)
SF-36 MCS							
Change from baseline	3.5 (1.1, 5.9)	7.1 (4.7, 9.5)*	4.7 (2.3, 7.1)	5.9 (4.2, 7.6)	4.1 (1.7, 6.6)	3.8 (1.4, 6.2)	3.7 (2.0,5.4)

*p<0.05; **p<0.01

Data presented as least squares mean (95% confidence interval), mean ± standard deviation, or median [interquartile range] unless otherwise noted.

ACR20/50/70, ≥20%/50%.70% improvement in the American College of Rheumatology criteria; CDAI, clinical disease activity index; CRP, C-reactive protein; DAS28-CRP; 28-count disease activity score with CRP; HAQ-DI, Health Assessment Questionnaire-Disability Index; MTX, methotrexate; SDAI, simplified disease activity index; SF-36 PCS/MCS, 36-item short-form health survey physical/mental component summary; SJC, swollen joint count; TJC, tender joint count; VAS, visual analogue scale