## Supplementary (online only) materials

Supplementary Table 1 Correlation analysis performed

## Variables

## Changes in DAS28 up to week 12 vs week 24

Changes in GLOESS (22 paired joints, reduced 9 paired joint set) from baseline up to week 12 vs baseline to week 24

Changes in GLOESS (MCPs 2–5, 22 paired joints, reduced 9 paired joint set) from baseline up to week 12 and lower levels of synovitis\* at week 24

Changes in GLOESS at week 1 and changes in GLOESS during the entire treatment period (baseline to week 24)

Changes in DAS28 and changes in GLOESS (MCPs 2–5, 22 paired joints, reduced 9 paired joint set, 28 joints<sup>†</sup>) or component scores (SH, PD, JE) from baseline

GLOESS (MCPs 2-5) or component scores (SH, PD, JE) vs SJC

GLOESS (MCPs 2-5) or component scores (SH, PD, JE) vs TJC

GLOESS (MCPs 2-5) or component scores (SH, PD, JE) vs SJC + TJC combined

Changes in GLOESS (MCPs 2–5, 22 paired joints, reduced 9 paired joint set) week or components (SH, PD, JE) up to week 4 vs change in the sum of swollen joints (MCPs 2–5, 22 paired joints, reduced 9 paired joint set) at weeks 12 and 24

\*Defined by a GLOESS at week 24 that was less than the median GLOESS at that time point. <sup>†</sup>The 28 joints assessed for tenderness and swelling as part of the DAS28. DAS28, Disease Activity Score 28; GLOESS, Global OMERACT-EULAR Synovitis Score; JE, joint effusion; MCPs, metacarpophalangeal joints; PD, power Doppler assessed synovial vascularization; SH, hypoechoic synovial hyperplasia; SJC, swollen joint count; TJC, tender joint count. **Supplementary Table 2** Correlation between changes in GLOESS up to week 12 and achieving lower levels of synovitis at week 24 (defined as having a GLOESS at week 24 that is less than the median value at that time point)

	Spearman's correlation coefficient						
	(95% CI)						
	MCPs (2–5)	22 paired	Reduced 9 paired				
		joint set	joint set				
Baseline to week 1	-0.36	-0.01	0.07				
	(-0.53,-0.14)	(-0.23, 0.21)	(-0.16, 0.30)				
Baseline to week 2	-0.20	-0.02	-0.01				
	(-0.39, 0.02)	(-0.23, 0.19)	(-0.23, 0.20)				
Baseline to week 4	-0.44	-0.19	-0.08				
	(-0.59,-0.24)	(-0.39, 0.03)	(-0.30, 0.14)				
Baseline to week 8	-0.31	-0.15	0.09				
	(-0.49,-0.10)	(-0.36, 0.07)	(-0.14, 0.31)				
Baseline to week 12	-0.55	-0.30	-0.16				
	(-0.68,-0.37)	(-0.49,-0.09)	(-0.37, 0.06)				

CI, confidence interval; GLOESS, Global OMERACT-EULAR Synovitis Score; MCPs, metacarpophalangeal joints.

Measure	Time	n	Mean change	SE	SD	SRM*
	point		from baseline			
DAS28	Week 1	91	-0.55	0.078	0.743	-0.734
	Week12	103	-1.77	0.113	1.149	-1.542
	Week 24	103	-2.13	0.136	1.379	-1.541
GLOESS	Week 1	86	-0.70	0.282	2.615	-0.268
(MCPs 2–5)	Week12	95	-3.80	0.454	4.425	-0.859
	Week 24	95	-4.80	0.473	4.610	-1.041
GLOESS	Week 1	87	-1.70	0.852	7.947	-0.214
(22 paired joints)	Week12	95	-11.70	1.39	13.548	-0.864
	Week 24	95	-15.70	1.65	16.082	-0.976
GLOESS	Week 1	81	-0.60	0.362	3.258	-0.184
(reduced 9 paired	Week12	91	-5.30	0.583	5.561	-0.953
joint set)	Week 24	91	-6.40	0.725	6.916	-0.925

**Supplementary Table 3** Standardized response means for changes in DAS28 and GLOESS using the MCP 2–5, 22 paired, and reduced 9 paired joint sets

\*SRM was calculated by dividing the mean change from baseline by the SD of the change. DAS28, Disease Activity Score 28; GLOESS, Global OMERACT-EULAR Synovitis Score; MCP, metacarpophalangeal; SD, standard deviation; SE, standard error; SRM, standardized response mean.