SUPPLEMENTAL MATERIAL

Supplemental methods

Radiographic progression based on change in van der Heijde modified total Sharp score (mTSS)

The mTSS change from baseline was scored in Campaign A, which included baseline and week 24 radiographs, and Campaign B, comprising all radiographs from patients for whom new radiographs were taken after week 24, including re-reading of radiographs taken at baseline and week 24. Change from baseline in mTSS at week 24 is reported in Campaign A only and analysed as described for other continuous endpoints in the main text. For mTSS change from baseline at week 52 in the overall population and in patients with 4 poor prognostic factors, combined Campaign A and Campaign B data were analysed using a linear mixed-effects model (multilevel) to evaluate the repeated measurements at different time points within different campaigns (levels) with treatment, visit (as categorical), treatment by visit, stratification factors (overall population only) and baseline value in the model and nested in each campaign; campaign was a random effect. Missing change scores were not imputed using the MMRM approach. For proportions of patients with no radiographic progression at week 24, the 95% confidence interval for response rate and difference in response rates were based on a normal approximation method with a continuity correction; missing data were not imputed. For the overall population, *P* values were calculated from the logistic regression with treatment groups and stratification factors in the model; Fisher's exact test was used for comparisons between each filgotinib treatment arm vs methotrexate monotherapy in patients with 4 poor prognostic factors. Proportions of patients with no radiographic progression at week 52 are presented as odds ratios and 95% CI for filgotinib treatment vs MTX monotherapy from a generalised linear mixed-effects model (multilevel) to evaluate the repeated measurements at different time points within different campaigns (levels).

Supplemental Table 1. Patients with 4 poor prognostic factors and the overall population with no radiographic progression from baseline at week 24

	FIL 200 mg + MTX		FIL 100 mg + MTX		FIL 200 mg		MTX	
	PPF	**Overall**	**PPF**	**Overall**	**PPF**	**Overall**	**PPF**	**Overall**
n	151	355	74	184	70	173	145	356
ΔmTSS ≤0								
%	77.5	80.6	59.5	76.6	77.1	82.7	61.4	72.5
(95% CI)	(70.5 to 84.5)	(76.3 to 84.8)	(47.6 to 71.3)	(70.2 to 83.0)	(66.6 to 87.7)	(76.7 to 88.6)	(53.1 to 69.6)	(67.7 to 77.3)
Difference vs MTX	16.1	8.1	−1.9	4.2	15.8	10.2		
(95% CI)	(5.1 to 27.1)	(1.6 to 14.6)	(−16.6 to 12.8)	(−3.9 to 12.2)	(2.1 to 29.5)	(2.5 to 17.9)		
Nominal *P*	0.004	0.015	0.88	0.33	0.030	0.013		

Campaign A data.

Δ, change from baseline; CI, confidence interval; FIL, filgotinib; mTSS, van der Heijde modified total Sharp score; MTX, methotrexate; PPF, patients with 4 poor prognostic factors.

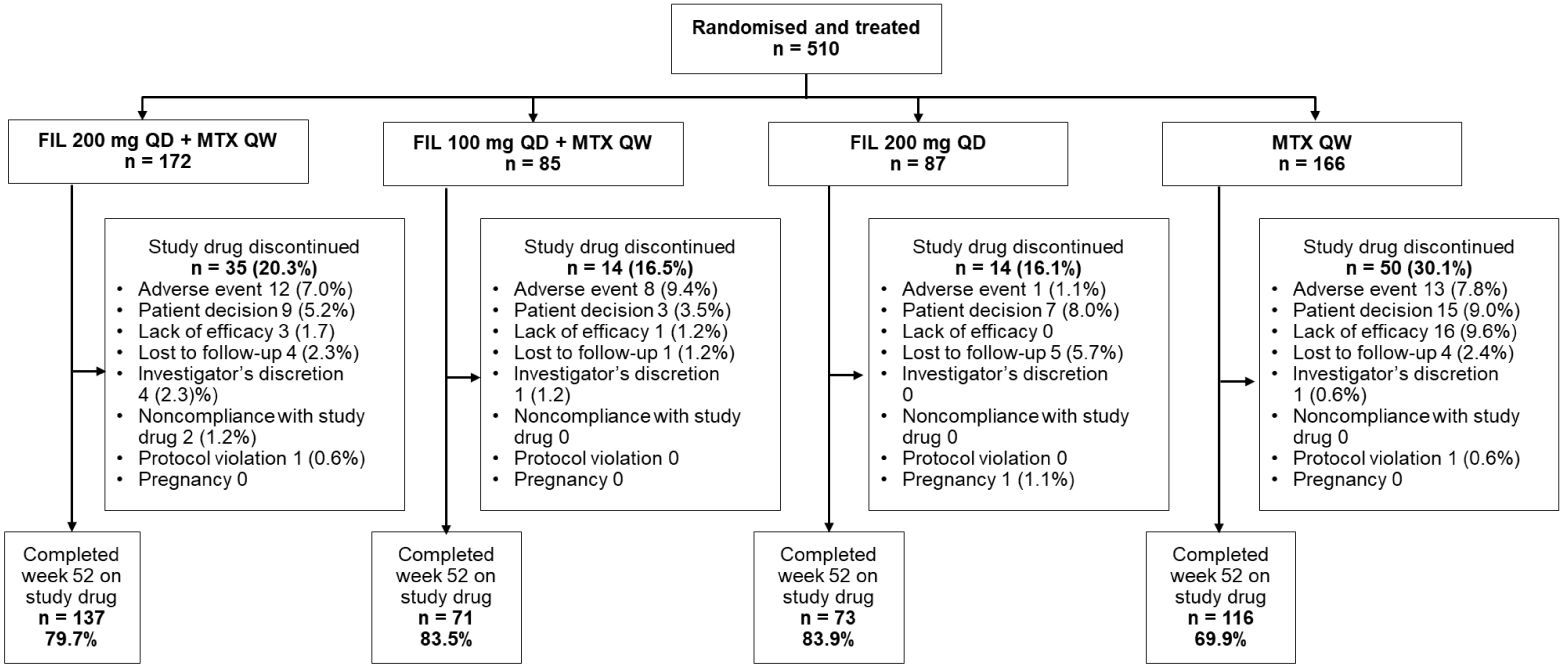
Supplemental Table 2. Odds ratios and 95% CI for no radiographic progression at week 52 following treatment with filgotinib vs MTX monotherapy

	FIL 200 mg + MTX		FIL 100 mg + MTX		FIL 200 mg	
	PPF	**Overall**	**PPF**	**Overall**	**PPF**	**Overall**
ΔmTSS ≤0						
Odds ratio vs MTX	2.3	1.9	1.8	1.5	1.8	1.5
(95% CI)	(1.3–4.1)	(1.3–2.9)	(0.96–3.5)	(0.96–2.4)	(0.93–3.5)	(0.93–2.4)
Nominal *P*	0.004	0.001	0.068	0.072	0.078	0.099

Combined Campaign A and Campaign B data.

Δ, change from baseline; CI, confidence interval; FIL, filgotinib; mTSS, van der Heijde modified total Sharp score; MTX, methotrexate; PPF, patients with 4 poor prognostic factors.

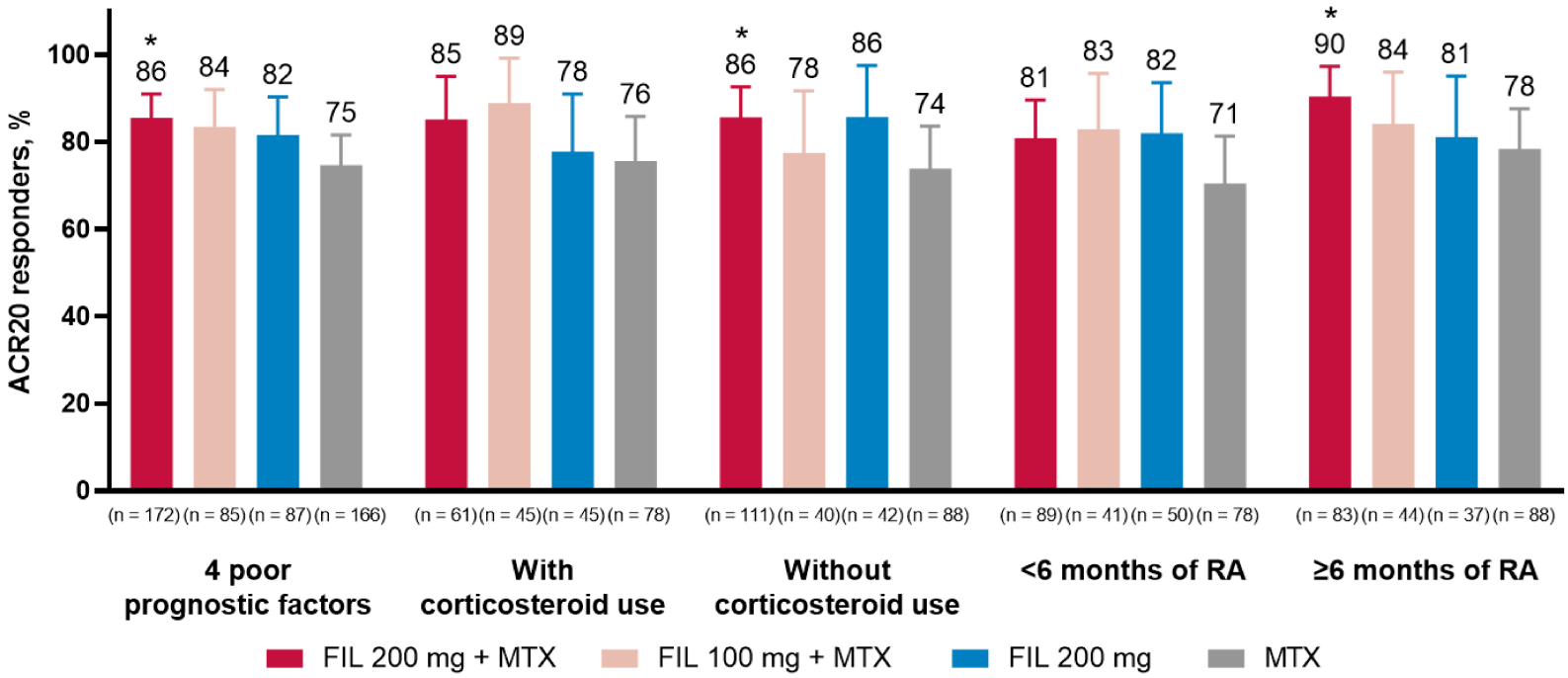
Supplemental Figure 1. Disposition of patients with 4 poor prognostic factors



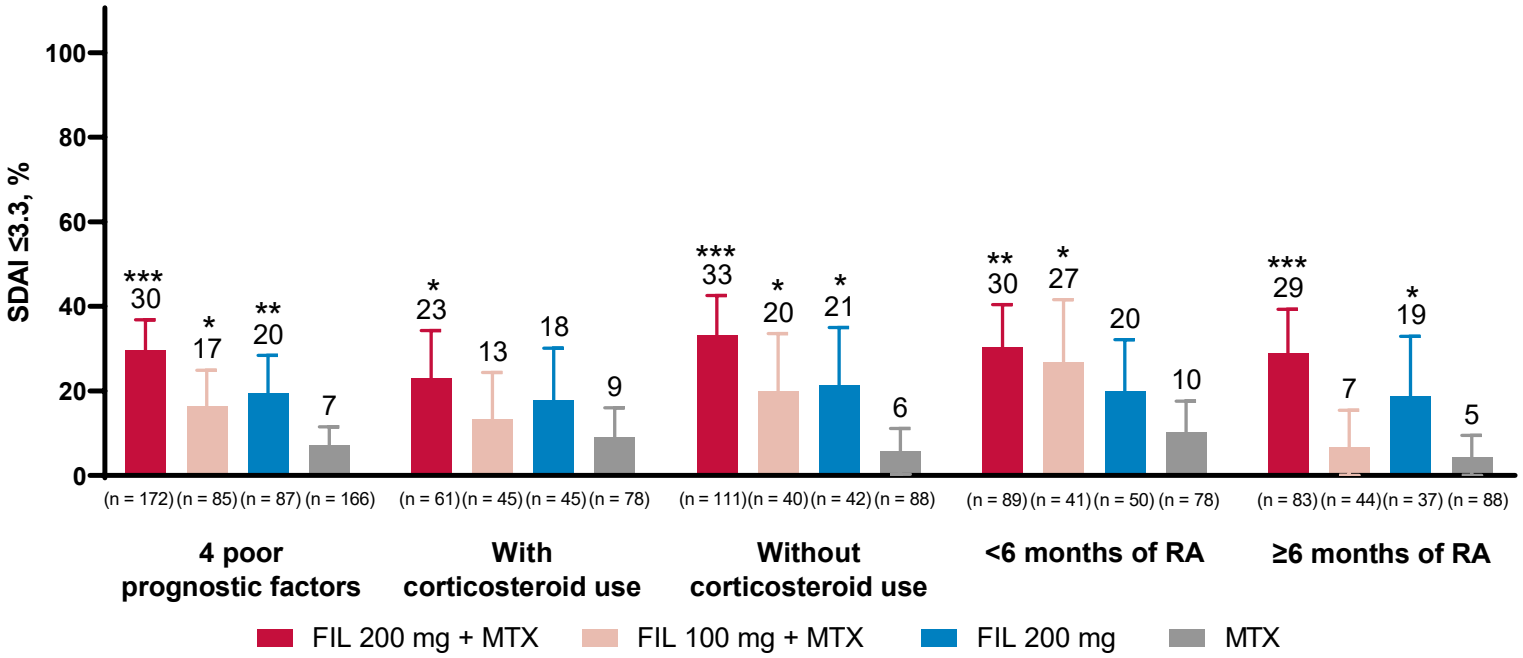
FIL, filgotinib; MTX, methotrexate; QD, once daily; QW, once weekly.

Supplemental Figure 2. Proportions of patients with 4 poor prognostic factors achieving **A)** ACR20 response and **B)** SDAI ≤3.3 at week 24 by baseline glucocorticoid use and disease duration

A



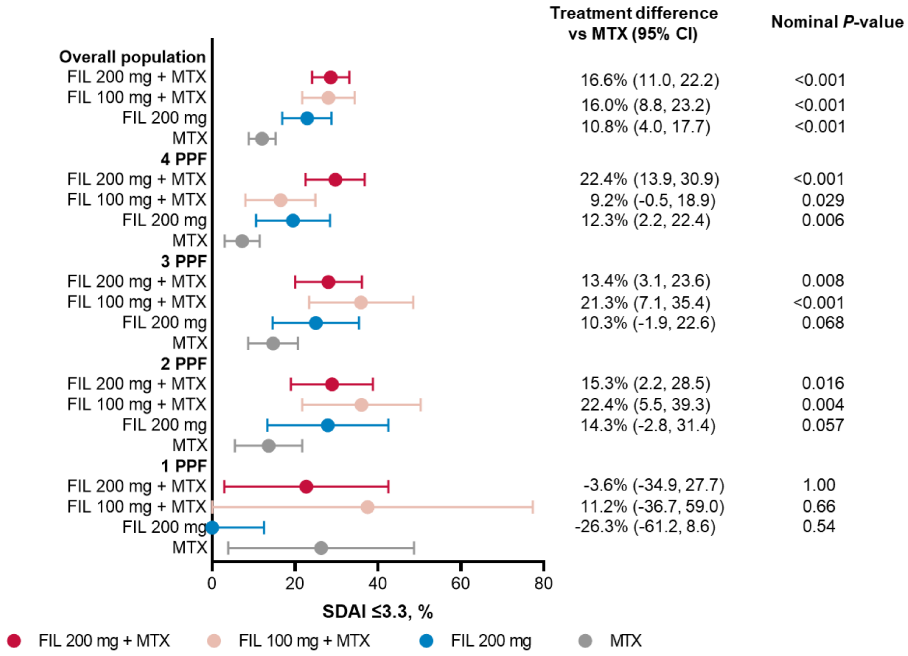
B



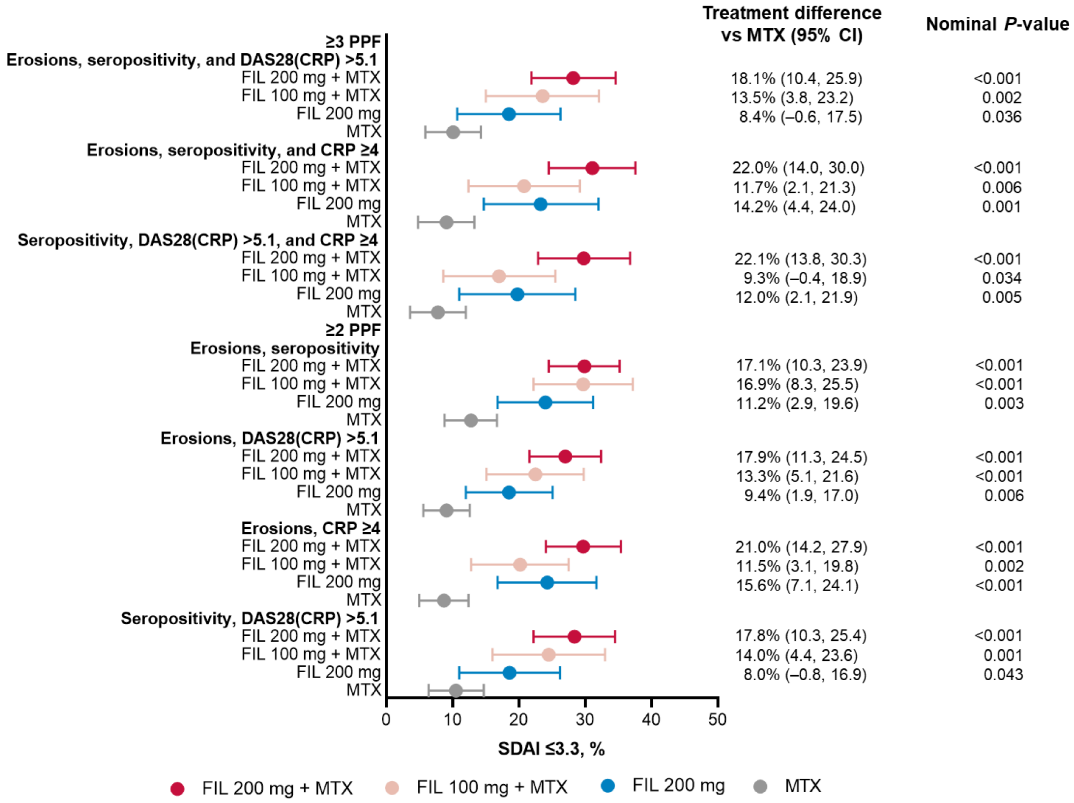
Error bars represent the 95% confidence interval.
*Nominal P <0.05, **nominal P <0.01, ***nominal P <0.001.
ACR20 response, 20% improvement from baseline by American College of Rheumatology criteria; FIL, filgotinib; MTX, methotrexate; SDAI remission, Simplified Disease Activity Index ≤3.3.

Supplemental Figure 3. Proportions of patients achieving SDAI remission at week 24 among **A**) overall population and patients with 4, 3, 2, or 1 poor prognostic factor(s) or patients with **B**) specific combinations of poor prognostic factors or **C**) ≥1 individual poor prognostic factor(s)

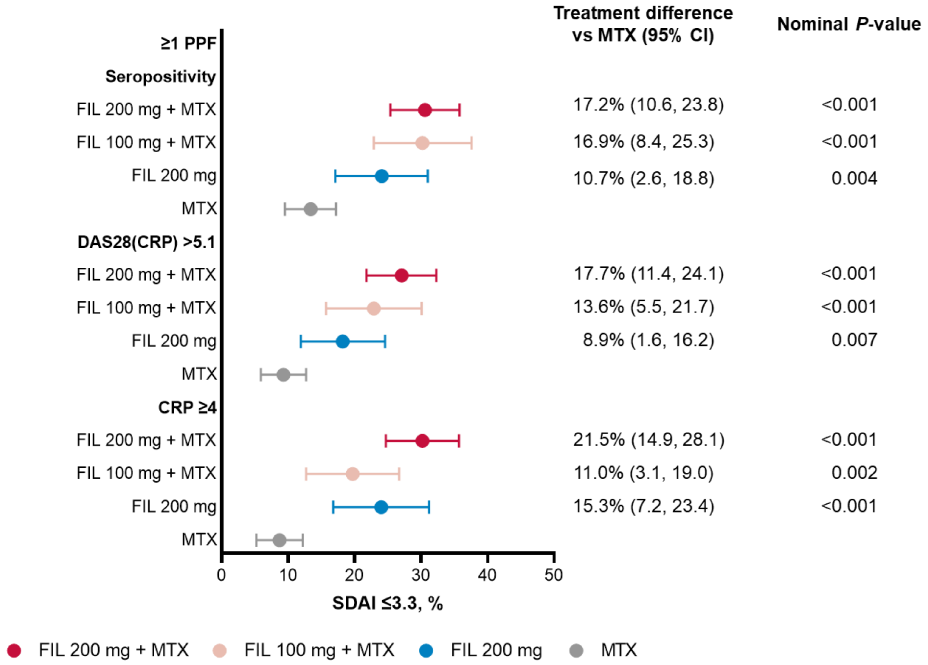
A



B


Treatment difference vs MTX (95% CI)
Nominal P-value
≥3 PPF
Erosions, seropositivity, and DAS28(CRP) >5.1
FIL 200 mg + MTX 18.1% (10.4, 25.9) <0.001
FIL 100 mg + MTX 13.5% (3.8, 23.2) 0.002
FIL 200 mg 8.4% (–0.6, 17.5) 0.036
MTX
Erosions, seropositivity, and CRP ≥4
FIL 200 mg + MTX 22.0% (14.0, 30.0) <0.001
FIL 100 mg + MTX 11.7% (2.1, 21.3) 0.006
FIL 200 mg 14.2% (4.4, 24.0) 0.001
MTX
Seropositivity, DAS28(CRP) >5.1, and CRP ≥4
FIL 200 mg + MTX 22.1% (13.8, 30.3) <0.001
FIL 100 mg + MTX 9.3% (–0.4, 18.9) 0.034
FIL 200 mg 12.0% (2.1, 21.9) 0.005
MTX
≥2 PPF
Erosions, seropositivity
FIL 200 mg + MTX 17.1% (10.3, 23.9) <0.001
FIL 100 mg + MTX 16.9% (8.3, 25.5) <0.001
FIL 200 mg 11.2% (2.9, 19.6) 0.003
MTX
Erosions, DAS28(CRP) >5.1
FIL 200 mg + MTX 17.9% (11.3, 24.5) <0.001
FIL 100 mg + MTX 13.3% (5.1, 21.6) <0.001
FIL 200 mg 9.4% (1.9, 17.0) 0.006
MTX
Erosions, CRP ≥4
FIL 200 mg + MTX 21.0% (14.2, 27.9) <0.001
FIL 100 mg + MTX 11.5% (3.1, 19.8) 0.002
FIL 200 mg 15.6% (7.1, 24.1) <0.001
MTX
Seropositivity, DAS28(CRP) >5.1
FIL 200 mg + MTX 17.8% (10.3, 25.4) <0.001
FIL 100 mg + MTX 14.0% (4.4, 23.6) 0.001
FIL 200 mg 8.0% (–0.8, 16.9) 0.043
MTX
0 10 20 30 40 50
SDAI ≤3.3, %
FIL 200 mg + MTX
FIL 100 mg + MTX
FIL 200 mg
MTX

C



CI, confidence interval; CRP, C-reactive protein; DAS28(CRP), Disease Activity Score in 28 joints with CRP; FIL, filgotinib; MTX, methotrexate; PPF, poor prognostic factors; SDAI, Simplified Disease Activity Index.