Supplementary Appendix

Table S1. Baseline patient characteristics by subgroup

	FIL200 (n=255)	**FIL100 (n=46)**	**FIL monotherapy (n=220)**	**FIL + GCs/MTX (n=81)**	**Prior advanced DMARD (n=228)**	**No prior advanced DMARD (n=73)**
Age, mean (SD), years	**57.1 (11.3)[a]**	**70.6 (12.2)[a]**	59.7 (12.7)	57.8 (11.7)	58.7 (12.2)	60.7 (13.0)
Age group, n (%)						
<65 years	192 (75.3)	10 (21.7)	140 (63.6)	62 (76.5)	159 (69.7)	43 (58.9)
≥65 to 74 years	50 (19.6)	12 (26.1)	52 (23.7)	10 (12.3)	41 (18.0)	21 (28.8)
≥75 years	13 (5.1)	24 (52.2)	28 (12.7)	9 (11.1)	28 (12.3)	9 (12.3)
Female, n (%)	203 (79.6)	41 (89.1)	179 (81.4)	65 (80.3)	183 (80.3)	61 (83.6)

CDAI, mean (SD)	n=195 22.5 (12.8)	n=36 25.9 (10.5)	n=169 25.9 (11.2)	n=62 24.0 (10.2)	n=170 24.9 (11.0)	n=61 26.8 (10.7)
DAS28-CRP, mean (SD)	n=36 4.9 (1.4)	n=178 5.1 (1.2)	n=162 5.2 (1.2)	n=52 4.9 (1.2)	n=155 5.0 (1.3)	n=59 5.3 (1.1)
Disease duration, n (%)						
<1 year	10 (3.9)	1 (2.2)	10 (4.5)	1 (1.2)	**0[a]**	**11 (15.1)[a]**
1–5 years	76 (29.8)	10 (21.7)	56 (25.5)	30 (37.0)	**58 (25.4)[a]**	**28 (38.4)[a]**
5–10 years	79 (31.0)	10 (21.7)	65 (29.6)	24 (29.6)	**72 (31.6)[a]**	**17 (23.3)[a]**
>10 years	90 (35.3)	25 (54.4)	89 (40.5)	26 (32.1)	**98 (43.0)[a]**	**17 (23.3)[a]**
Serologic status,[b] n (%)						
RF positive only	17 (6.7)	4 (8.7)	16 (7.3)	5 (6.2)	15 (6.6)	6 (8.2)
ACPA positive only	21 (8.2)	3 (6.5)	18 (8.2)	6 (7.4)	17 (7.5)	7 (9.6)

RF and ACPA positive	143 (56.1)	24 (52.2)	118 (53.6)	49 (60.5)	128 (56.1)	39 (53.4)
RF and ACPA negative	71 (27.8)	15 (32.6)	66 (30.0)	20 (24.7)	66 (29.0)	20 (27.4)
No previous HZ infection, n (%)	234 (91.8)	38 (82.6)	200 (90.9)	72 (88.9)	202 (88.6)	70 (95.9)
HZ vaccination, n (%)						
Yes	67 (26.3)	13 (28.3)	63 (28.6)	17 (21.0)	56 (24.6)	24 (32.9)
Unknown	70 (27.5)	15 (32.6)	59 (26.8)	26 (32.1)	71 (31.1)	14 (19.2)
Smoking status, n (%)						
Current smoker	42 (16.5)	1 (2.2)	27 (12.3)	16 (19.8)	32 (14.0)	11 (15.1)
Former smoker	39 (15.3)	7 (15.2)	31 (14.1)	15 (18.5)	36 (15.8)	10 (13.7)
Nonsmoker	114 (44.7)	26 (56.5)	107 (48.6)	33 (40.7)	106 (46.5)	34 (46.6)

Unknown	60 (23.5)	12 (26.1)	55 (25.0)	17 (21.0)	54 (23.7)	18 (24.7)
Follow-up period, mean (SD), months	**8.2 (4.0)[a]**	**6.2 (3.3)[a]**	7.8 (4.2)	8.3 (3.3)	7.8 (3.9)	8.4 (4.1)

[a]$p<0.05$. For continuous variables, nonparametric Mann–Whitney U-tests and independent (unpaired) t-tests were considered. Categorical variables were compared using Chi-squared and Fisher exact tests

[b]FIL200: RF positive but ACPA unknown (n=1, 0.4%), ACPA positive but RF unknown (n=1, 0.4%), ACPA negative but RF unknown (n=1, 0.4%). FIL monotherapy: ACPA positive but RF unknown (n=1, 0.5%), ACPA negative but RF unknown (n=1, 0.5%). FIL + GCs/MTX: RF positive but ACPA unknown (n=1, 1.2%). Prior advanced DMARD: ACPA positive but RF unknown (n=1, 0.4%), ACPA negative but RF unknown (n=1, 0.4%). No prior advanced DMARD: ACPA positive but RF unknown (n=1, 1.4%)

ACPA, anti-cyclic citrullinated peptide antibody; CDAI, Clinical Disease Activity Index; DAS28-CRP, Disease Activity Score in 28 joints using C-reactive protein; DMARD, disease-modifying antirheumatic drug; FIL(100/200), filgotinib (100/200 mg); GC, glucocorticoid; HZ, herpes zoster; MTX, methotrexate; RF, rheumatoid factor; SD, standard deviation

Table S2. Baseline comorbidities by subgroup

n (%)	FIL200 (n=255)	FIL100 (n=46)	FIL monotherapy (n=220)	FIL + GCs/MTX (n=81)	Prior advanced DMARD (n=228)	No prior advanced DMARD (n=73)
CV disease						
Any CV risk factor[a]	113 (44.3)	27 (58.7)	101 (45.9)	39 (48.1)	110 (48.2)	30 (41.1)
Arterial hypertension	79 (31.0)	24 (52.2)	31 (14.1)	72 (88.9)	83 (36.4)	20 (27.4)
Dyslipidemia	37 (14.5)	2 (4.3)	4 (1.8)	35 (43.2)	28 (12.3)	11 (15.1)
Diabetes mellitus	22 (8.6)	10 (21.7)	7 (3.2)	25 (30.9)	28 (12.3)	4 (5.5)
Cardiac arrhythmias	11 (4.3)	5 (10.9)	6 (2.7)	10 (12.3)	11 (4.8)	5 (6.8)
Coronary heart disease	9 (3.5)	4 (8.7)	3 (1.4)	10 (12.3)	12 (5.3)	1 (1.4)
Condition following myocardial or cerebral infarction	5 (2.0)	4 (8.7)	4 (1.8)	5 (6.2)	9 (3.9)	0
Condition following deep vein thrombosis or pulmonary embolism	6 (2.4)	2 (4.3)	4 (1.8)	4 (4.9)	8 (3.5)	0
Heart failure	4 (1.6)	3 (6.5)	4 (1.8)	3 (3.7)	7 (3.1)	0
Metabolic syndrome						

Obesity (body mass index ≥30 kg/m^2)	34 (13.3)	1 (2.2)	12 (5.5)	23 (28.4)	23 (10.1)	12 (16.4)
Cancers						
Other cancers	6 (2.4)	3 (6.5)	1 (0.5)	8 (9.9)	8 (13.6)	1 (1.4)
Nonmelanoma skin cancer	2 (0.8)	1 (2.2)	2 (0.9)	1 (1.2)	2 (0.9)	1 (1.4)
Gastroenterological diseases						
Liver disease	10 (3.9)	1 (2.2)	2 (0.9)	9 (11.1)	10 (4.4)	1 (1.4)
Gastroesophageal reflux disease	8 (3.1)	0	4 (1.8)	4 (4.9)	6 (2.6)	2 (2.7)
Inflammatory bowel disease	6 (2.4)	0	0	6 (7.4)	5 (2.2)	1 (1.4)
Pulmonary diseases						
Bronchial asthma	12 (4.7)	3 (6.5)	0	15 (18.5)	14 (6.1)	1 (1.4)
Chronic obstructive pulmonary disease	12 (4.7)	3 (6.5)	6 (2.7)	9 (11.1)	12 (5.3)	3 (4.1)
Interstitial lung disease	2 (0.8)	0	1 (0.5)	1 (1.2)	1 (0.4)	1 (1.4)
Diseases of the musculoskeletal system and connective tissue						
Osteoarthritis (arthritis)	73 (28.6)	18 (39.1)	23 (10.5)	68 (84.0)	70 (30.7)	21 (28.8)
Osteoporosis/osteopenia	46 (18.0)	19 (41.3)	17 (7.7)	48 (59.3)	50 (21.9)	15 (20.5)

Psoriasis	8 (3.1)	3 (6.5)	2 (0.9)	9 (11.1)	11 (4.8)	0
Gout (arthritis urica)	5 (2.0)	1 (2.2)	2 (0.9)	4 (4.9)	5 (2.2)	1 (1.4)
Other connective tissue diseases[b]	4 (1.6)	0	2 (0.9)	2 (2.5)	4 (1.8)	0
Other comorbidities						
Renal insufficiency (creatinine clearance <60 mL/min)	6 (2.4)	10 (21.7)	2 (0.9)	14 (17.3)	14 (6.1)	2 (2.7)
Anemia	10 (3.9)	4 (8.7)	3 (1.4)	11 (13.6)	10 (4.4)	4 (5.5)
Thyroid dysfunction	9 (3.5)	2 (4.3)	6 (2.7)	5 (6.2)	9 (3.9)	2 (2.7)
Vitamin D deficiency	9 (3.5)	1 (2.2)	3 (1.4)	7 (8.6)	9 (3.9)	1 (1.4)
Depression / anxiety / panic	7 (2.7)	3 (6.5)	3 (1.4)	7 (8.6)	8 (3.5)	2 (2.7)
Fibromyalgia	4 (1.6)	1 (2.2)	4 (1.8)	1 (1.2)	5 (2.2)	0 (0)
Aneurysm	3 (1.2)	0 (0)	1 (0.5)	2 (2.5)	3 (1.3)	0 (0)
Sigmoid diverticulitis	3 (1.2)	0 (0)	0 (0)	3 (3.7)	2 (0.9)	1 (1.4)
Allergies	1 (0.4)	2 (4.3)	0 (0)	3 (3.7)	3 (1.3)	0 (0)
Epilepsy	2 (0.8)	0 (0)	0 (0)	2 (2.5)	2 (0.9)	0 (0)
No comorbidities reported	57 (22.4)	5 (10.9)	15 (6.8)	47 (58.0)	45 (19.7)	17 (23.3)

[a]Patients may have ≥1 CV risk factor

[b]For example, myositis, systemic lupus erythematous, systemic sclerosis, Sjögren's syndrome

CV, cardiovascular; DMARD, disease-modifying antirheumatic drug; FIL(100/200), filgotinib (100/200 mg); GC, glucocorticoid; MTX, methotrexate

Table S3. Reasons for initiating filgotinib by subgroup (primary objective)

n (%)	FIL200 (n=255)	FIL100 (n=46)	FIL monotherapy (n=220)	FIL+ GCs/MTX (n=81)	Prior advanced DMARD (n=228)	No prior advanced DMARD (n=73)
Oral administration	197 (77.3)	39 (84.8)	**164 (74.5)[a]**	**72 (89.0)[a]**	176 (77.2)	60 (82.2)
Fast onset of action	172 (67.5)	29 (63.0)	**139 (63.2)[a]**	**62 (76.5)[a]**	154 (67.5)	47 (64.4)
Administration as monotherapy	162 (63.5)	35 (76.1)	**155 (70.5)[a]**	**42 (51.9)[a]**	153 (67.1)	44 (60.3)
Good controllability	144 (56.5)	32 (69.6)	130 (59.1)	46 (56.8)	129 (56.6)	47 (64.4)
Good benefit/risk ratio	127 (49.8)	28 (60.9)	**101 (46.0)[a]**	**51 (63.0)[a]**	115 (50.4)	37 (50.7)
Low potential for drug–drug interactions	81 (31.8)	16 (34.8)	75 (34.1)	22 (27.2)	75 (32.9)	22 (30.1)
Lower risk of herpes zoster infection	38 (14.9)	7 (15.2)	28 (12.7)	17 (21.0)	30 (13.2)	15 (20.5)

Dosage adjustment in elderly patients	**13 (5.1)[a]**	**22 (47.8)[a]**	26 (11.8)	9 (11.1)	25 (11.0)	10 (13.7)
Lack of effectiveness of previous therapies	10 (3.9)	NA	5 (2.3)	5 (6.2)	10 (4.4)	0
Adverse events of previous therapies	2 (0.8)	1 (2.2)	3 (1.4)	NA	3 (1.3)	NA
Previous DMARD not available[b]	1 (0.4)	NA	1 (0.5)	NA	1 (0.4)	NA
Approved for ulcerative colitis	1 (0.4)	NA	1 (0.5)	NA	1 (0.4)	NA

[a]$p<0.05$. Categorical variables were compared using Chi-squared and Fisher exact tests

[b]Previous treatment included MTX, leflunomide, adalimumab and tocilizumab

DMARD, disease-modifying antirheumatic drug; FIL(100/200), filgotinib (100/200 mg); GC, glucocorticoid; MTX, methotrexate; NA, not available

Table S4. Reasons for discontinuing filgotinib by subgroup

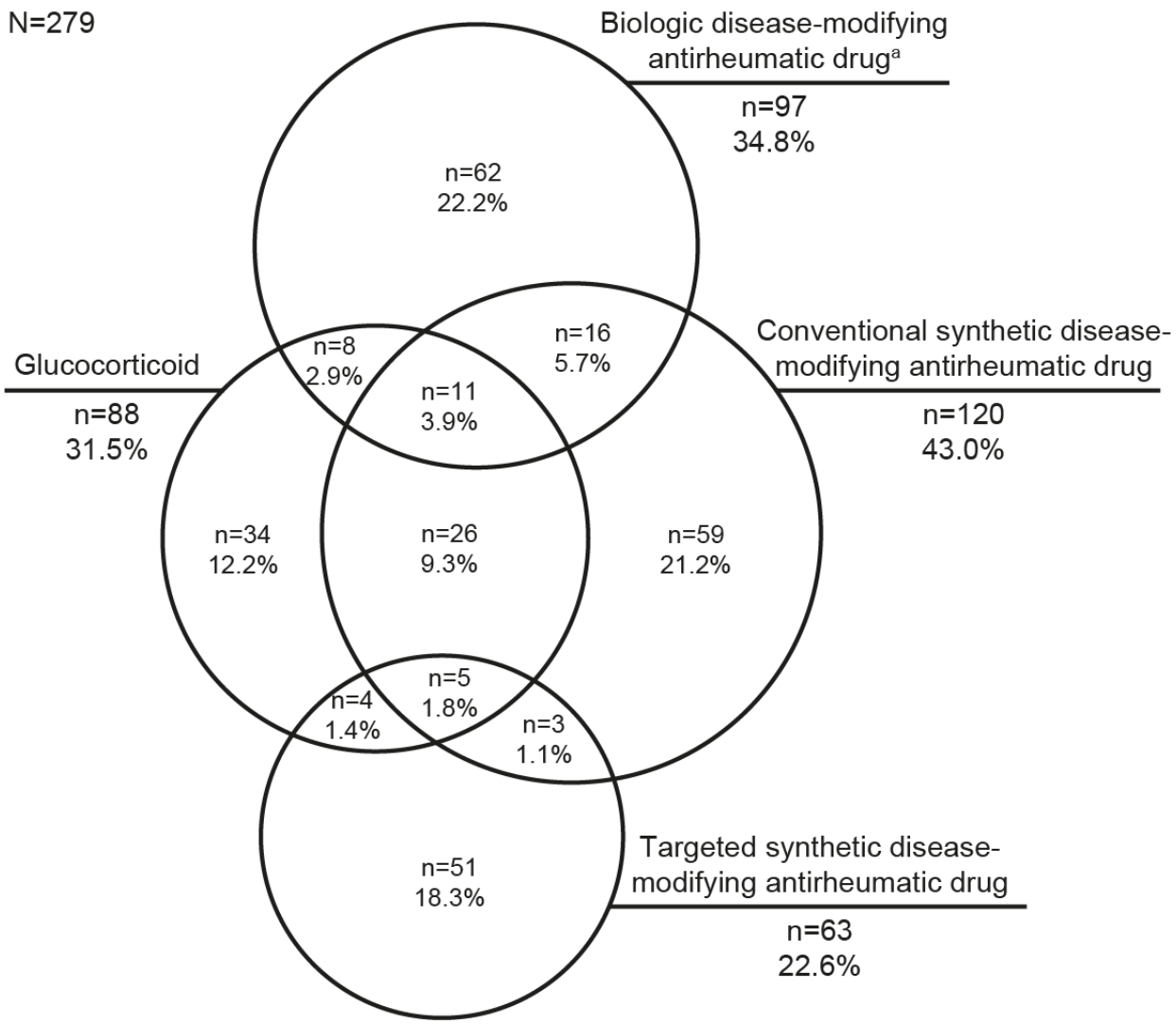
n (%)	FIL200 (n=255)	FIL100 (n=46)	Prior advanced DMARD (n=228)	No prior advanced DMARD (n=73)
Lack of effectiveness	22 (8.6)	4 (8.7)	22 (9.6)	4 (5.5)
Adverse events[a]	8 (3.1)	4 (8.7)	8 (3.5)	4 (5.5)
Gastrointestinal complaints	3 (37.5)	2 (50.0)	3 (42.9)	2 (50.0)
Dizziness / vertigo	2 (25.0)	1 (25.0)	3 (42.9)	0 (0)
Infections	1 (12.5)	1 (25.0)	1 (14.3)	1 (25.0)
Fever	1 (12.5)	0 (0)	0 (0)	1 (25.0)
Genital inflammation	1 (12.5)	0 (0)	1 (14.3)	0 (0)
Globus pharyngeus	1 (12.5)	0 (0)	1 (14.3)	0 (0)
Polyuria	1 (12.5)	0 (0)	1 (14.3)	0 (0)
Rhinorrhea	1 (12.5)	0 (0)	1 (14.3)	0 (0)
Sweating	1 (12.5)	0 (0)	1 (14.3)	0 (0)
Urinary incontinence	0 (0)	1 (25.0)	1 (14.3)	0 (0)
Lack of drug adherence	4 (1.6)	0	4 (1.8)	0

Remission	1 (0.4)	0	0	1 (1.4)

[a]Patients may have discontinued due to >1 adverse event

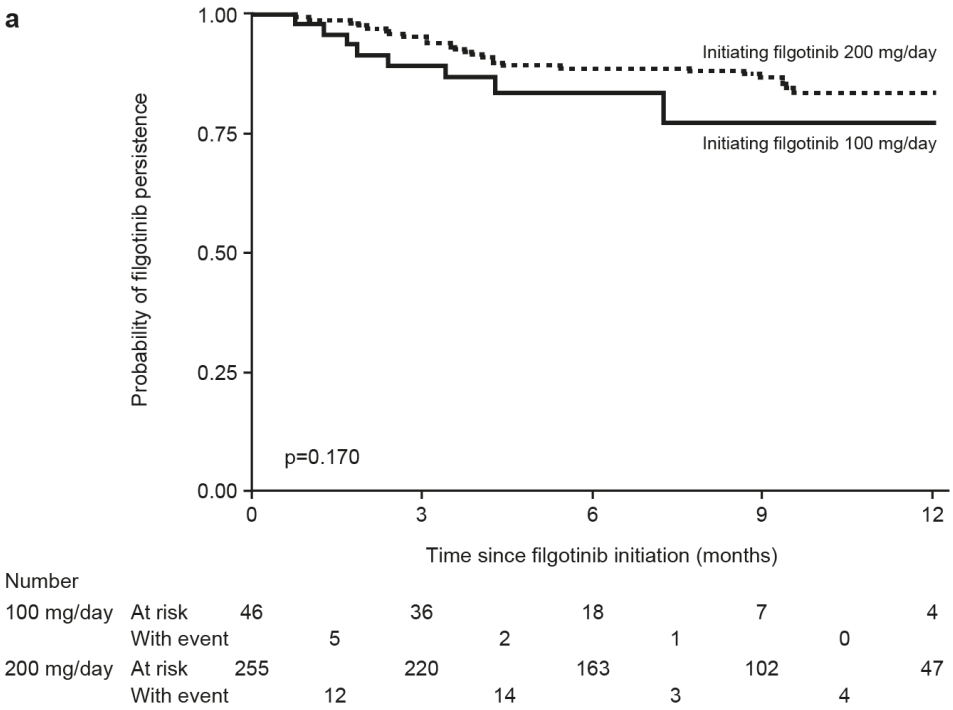
DMARD, disease-modifying antirheumatic drug; FIL(100/200), filgotinib (100/200 mg)

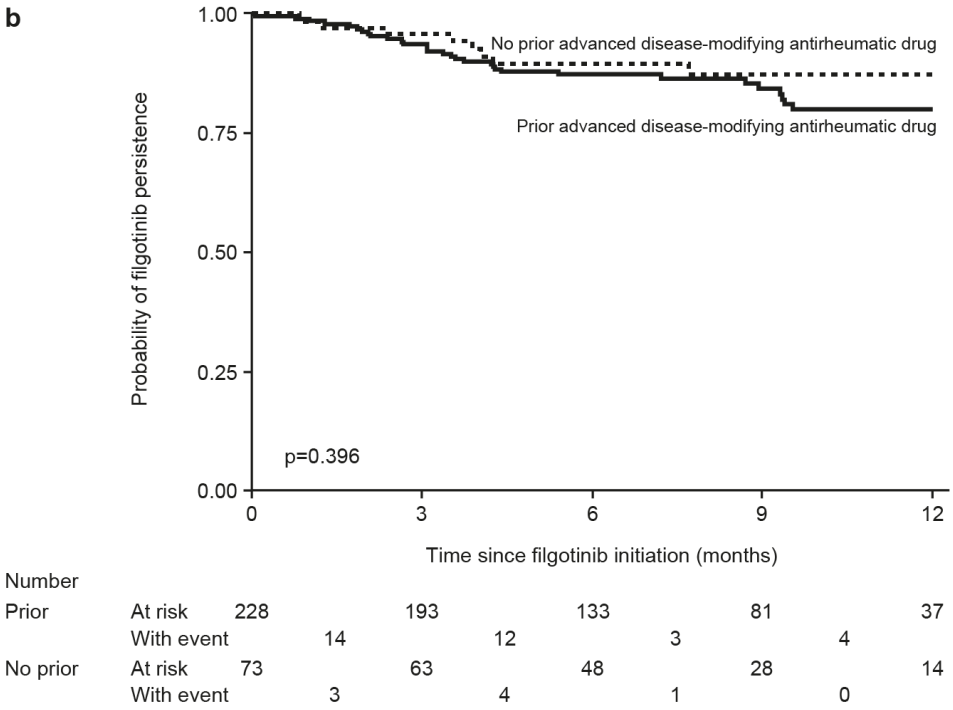
Fig. S1 Last treatment before initiating filgotinib



[a]One patient with ulcerative colitis was treated with ustekinumab before starting filgotinib

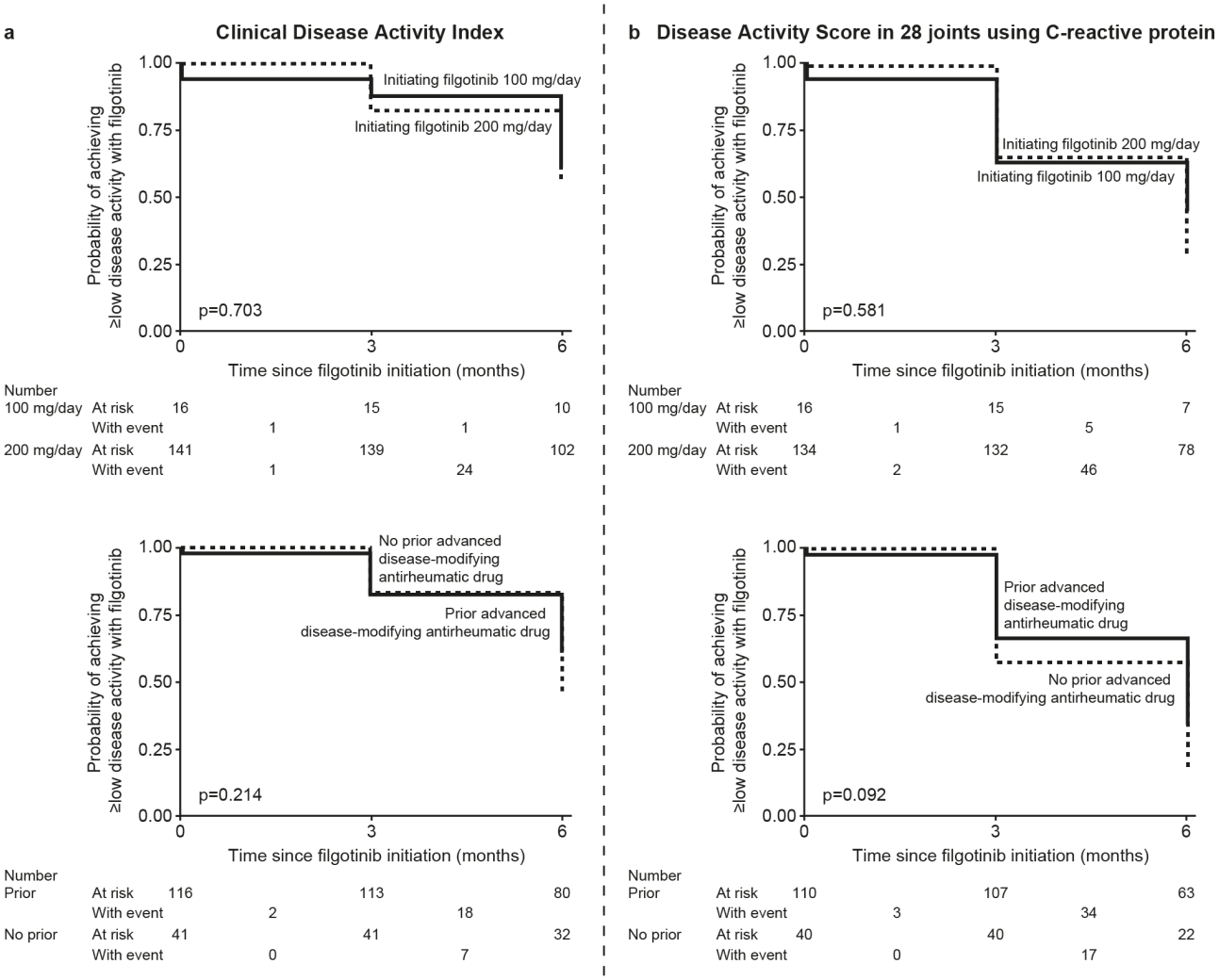
Fig. S2 Persistence rates of filgotinib by subgroup: initiating filgotinib 200 versus 100 mg/day **(a)** and prior versus no prior advanced disease-modifying antirheumatic drug **(b)**





Patients without event (e.g., those lost to follow-up) were censored at the last visit or at the last available date. Discontinuation rates were compared using the log-rank test

Fig. S3 Clinical Disease Activity Index **(a)** and Disease Activity Score in 28 joints using C-reactive protein **(b)** ≥low (i.e., low, moderate, or high) disease activity rates with filgotinib by subgroup



Patients with three consecutive measures of Clinical Disease Activity Index or Disease Activity Score in 28 joints using C-reactive protein, i.e., at baseline, 3 and 6 months, were included. Patients without event (e.g., those lost to follow-up) were censored at the last visit or at the last available date. Remission rates were compared using the log-rank test