OPEN ACCESS

Original research

2-year outcomes of filgotinib in ulcerative colitis in a large real-world cohort

Clara Ramos-Belinchon ,[1,2] Magdalena Staworko ,[3] Beatriz Gros ,[4,5,6] Jack Nicholls,[1] Marina Orti Cuerva,[4] Eksha Gupta,[1] Nathan Constantine-Cooke,[2] Elliot Gemmell,[2] Claire O'Hare,[1] Ian D Arnott,[1] Charlie W Lees,[1,2] Nikolas Plevris [1]

► Additional supplemental material is published online only. To view, please visit the journal online (https://doi.org/10.1136/flgastro-2026-103779).

[1]The Edinburgh IBD Unit, Western General Hospital, Edinburgh, UK
[2]Institute of Genetics and Cancer, The University of Edinburgh, Edinburgh, UK
[3]Edinburgh Medical School, The University of Edinburgh Medical School, Edinburgh, UK
[4]Department of Gastroenterology and Hepatology, Reina Sofia University Hospital, Cordoba, Spain
[5]Biomedical Research Center in Hepatic and Digestive Disease, CIBEREHD, Madrid, Community of Madrid, Spain
[6]Maimónides Institute of Biomedical Research (IMIBIC), Cordoba, Spain

Correspondence to
Dr Charlie W Lees; charlie.lees@ed.ac.uk

CR-B and MS are joint first authors.

Received 29 April 2026
Accepted 26 August 2026

Check for updates

© Author(s) (or their employer(s)) 2026. Re-use permitted under CC BY. Published by BMJ Group.

To cite: Ramos-Belinchon C, Staworko M, Gros B, *et al*. *Frontline Gastroenterology* Epub ahead of print: [please include Day Month Year]. doi:10.1136/flgastro-2026-103779

ABSTRACT

Background and objective While short-term real-world studies on filgotinib in ulcerative colitis support its effectiveness, long-term data are lacking. We aimed to assess the 2-year effectiveness and safety of filgotinib.

Methods All patients with ulcerative colitis treated with filgotinib in National Health Service Lothian with a minimum of 12 months since filgotinib commencement were included. The primary outcome was drug persistence at 2 years. Secondary outcomes included steroid-free clinical remission at 1 and 2 years (partial Mayo score <2 in the absence of steroid treatment), C-reactive protein (≤5 mg/L) and faecal calprotectin (<250 µg/g) remission at 1 and 2 years.

Results Of 193 patients receiving filgotinib, 170 were included in the effectiveness analysis, with a median follow-up of 735 days (487-937). Filgotinib persistence was 50.2% at 2 years. Proctitis (adjusted HR (aHR) 1.88 (95% CI 1.01 to 3.51)) and previous exposure to advanced therapies (aHR 1.91 (95% CI 1.08–3.37)) were associated with a greater risk of drug cessation. Steroid-free clinical remission was achieved in 40% (49/123) and 32% (25/77) at 1 and 2 years. C-reactive protein remission was achieved in 53% (62/116) and 45% (34/75) at 1 and 2 years. Faecal calprotectin remission was achieved in 46% (51/111) and 45% (34/76) at 1 and 2 years. Severe adverse events occurred in 4.7% (9/193) and 1% (2/193) were diagnosed with malignancies.

Conclusions Our study, with the longest follow-up reported to date, demonstrates promising effectiveness in the long-term, especially in advanced-therapy-naïve patients. Proctitis was identified as a phenotype associated with poorer persistence.

WHAT IS ALREADY KNOWN ON THIS TOPIC

⇒ Filgotinib, a preferential Janus kinase 1 inhibitor, is approved for the treatment of ulcerative colitis in multiple regions, including the UK. Long-term extension data from the SELECTION trial show sustained efficacy for up to 4 years; however, real-world follow-up has rarely extended beyond 12 months.

WHAT THIS STUDY ADDS

⇒ This study evaluates the 2-year effectiveness and safety of filgotinib. Proctitis and prior exposure to advanced therapies increase the risk of drug cessation. The cohort demonstrates an acceptable safety profile over 2 years.

HOW THIS STUDY MIGHT AFFECT RESEARCH, PRACTICE OR POLICY

⇒ The findings support long-term real-world use of filgotinib and highlight the need to include proctitis in randomised clinical trials.

INTRODUCTION

The development of Janus kinase (JAK) inhibitors has expanded the therapeutic landscape in ulcerative colitis (UC), offering an oral alternative to biological therapies. Unlike monoclonal antibodies, JAK inhibitors do not induce anti-drug antibodies and demonstrate more predictable pharmacokinetics, potentially reducing variability in treatment response.[1]

Filgotinib is a preferential JAK1 inhibitor.[2] Its selectivity is hypothesised to mitigate adverse events associated with broader JAK inhibition while maintaining therapeutic efficacy, thereby

Frontline Gastroenterol: first published as 10.1136/flgastro-2026-103779 on 28 September 2026. Downloaded from http://fg.bmj.com/ on October 29, 2026 by guest. Protected by copyright, including for uses related to text and data mining, AI training, and similar technologies.

distinguishing it from less selective agents such as tofacitinib.[3] Following favourable results from the phase 2b/3 SELECTION trial programme, filgotinib was approved for the treatment of moderate-to-severe UC in multiple regions, including the European Union, the UK and Japan, and was first accepted for use in Scotland in May 2022.[4] Long-term extension data from SELECTION-LTE demonstrate sustained efficacy and a favourable safety profile for up to 4 years of treatment.[1]

Real-world evidence is essential to define the optimal positioning of JAK inhibitors within the evolving UC treatment algorithm. Previously published data from National Health Service (NHS) Lothian demonstrated encouraging short-term (24 weeks) effectiveness and low rates of adverse events with filgotinib.[5] Similar findings have been reported in other real-world cohorts.[6–8] However, follow-up in these studies has rarely extended beyond 12 months. Given ongoing concerns regarding long-term safety, durability of response and treatment persistence with JAK inhibitors, extended follow-up data are critically important. To date, no real-world studies have evaluated outcomes beyond 2 years in patients with UC treated with filgotinib.

In this retrospective cohort study, we aimed to evaluate the 2-year effectiveness and safety of filgotinib in patients with UC in routine clinical practice.

METHODS

Study design

We conducted a retrospective, observational cohort study across three hospitals within NHS Lothian: Western General Hospital, Royal Infirmary of Edinburgh and St John's Hospital. Clinical data were collected retrospectively from electronic health records. Electronic medical records were reviewed up to 30 October 2025.

Participants

All consecutive adult patients (≥18 years) with active UC or inflammatory bowel disease-unclassified (IBDU) favouring UC who initiated filgotinib within NHS Lothian from July 2022 with a minimum of 12 months since drug commencement were included. Exclusion criteria included Crohn's disease, IBDU favouring Crohn's disease, microscopic colitis and prior colectomy. Patients who initiated filgotinib therapy following hospitalisation for acute severe UC (ASUC) that was steroid responsive were excluded from the primary effectiveness analysis and analysed separately; however, they were included in the primary safety assessment.

Data collection

Clinical data were extracted from electronic medical records (TrakCare; InterSystems, Cambridge, Massachusetts, USA). Baseline variables included demographics, disease extent and phenotype, extraintestinal manifestations, prior IBD therapies and herpes zoster vaccination status.

Clinical disease activity was assessed using the Partial Mayo Score (PMS) assessed at baseline and at 12, 24 and 36 months (±60 days). A Physician Global Assessment (PGA) score was also collected at the same time points. Biochemical activity was assessed using C-reactive protein (CRP) and faecal calprotectin (FC). The lower detection limit for CRP was 1 mg/L; values <1 mg/L were recorded as 1 mg/L. FC was measured using an ELISA based assay (Calpro AS, Norway), with a detection range of 25–1250 µg/g. Values <25 µg/g were recorded as 25 µg/g and values>1250 µg/g as 1250 µg/g. Additional laboratory parameters included albumin and total cholesterol.

Endoscopic assessments performed during follow-up were reviewed. Where available, Mayo Endoscopic subscore or Ulcerative Colitis Endoscopic Index of Severity scores were recorded.

Steroid prescriptions during follow-up, dose adjustments and all adverse events were extracted. For patients who discontinued filgotinib, the stop date and reason for discontinuation were recorded.

Primary and secondary outcomes

The primary outcome was filgotinib persistence at 2 years. Secondary outcomes included: steroid-free clinical remission at 1, 2 and 3 years; CRP remission at 1, 2 and 3 years; FC remission at 1, 2 and 3 years; changes in PMS, PGA, CRP and FC over time; baseline predictors of drug persistence and adverse events.

Definitions

Active disease was defined as any of the following: PMS ≥2, CRP >5 mg/L, FC ≥250 µg/g or endoscopic/radiological evidence of active inflammation. Steroid-free clinical remission was defined as PMS <2 without systemic corticosteroid use at the relevant time point. PGA was scored from 0 to 3 (0=remission; 3=severe disease). CRP remission was defined as a value ≤5 mg/L while FC remission was defined as a value <250 µg/g. Normal albumin was defined as ≥36 g/L.

Systemic steroid exposure during follow-up was defined as any prescription of oral budesonide, oral prednisolone or parenteral methylprednisolone after filgotinib initiation. Topical corticosteroids were not considered systemic exposure.

Primary non-response was defined as persistent disease activity (PMS ≥2, CRP >5 mg/L or FC ≥250 µg/g) leading to treatment discontinuation. Loss of response was defined as initial clinical or biochemical remission followed by recurrence of disease activity resulting in treatment discontinuation.

Steroid response during an ASUC admission was defined as clinical improvement with intravenous steroids without the need for medical rescue therapy or colectomy.

Frontline Gastroenterol: first published as 10.1136/flgastro-2026-103779 on 28 September 2026. Downloaded from http://fg.bmj.com/ on October 29, 2026 by guest. Protected by copyright, including for uses related to text and data mining, AI training, and similar technologies.

Table 1 Baseline demographics, clinical characteristics and disease activity of the effectiveness cohort

Characteristic	N=170 n (%); median (Q1–Q3)
Sex (male)	88 (52)
Age (years)	42 (32–53)
Smoking status	
Person who smokes	103 (64)
Person who has quit smoking	47 (29)
Person who currently smokes	11 (6.8)
Missing	9
Disease duration (years)	9 (4–14)
Disease extension	
E1: Proctitis	38 (22)
E2: Left-sided UC	66 (39)
E3: Extensive UC	66 (39)
Extraintestinal manifestations	47 (28)
Type of IBD	
UC	149 (88)
IBDU favouring UC	21 (12)
Previous therapies	
Immunomodulator	67 (39)
Advanced therapy	49 (29)
Infliximab	19 (11)
Adalimumab	14 (8.2)
Golimumab	2 (1.2)
Certolizumab	1 (0.6)
Vedolizumab	33 (19)
Ustekinumab	5 (2.9)
Tofacitinib	4 (2.4)
Start dose	
200 mg	169 (99)
100 mg	1 (0.6)
Baseline clinical, biochemical and endoscopic parameters	
Concomitant steroids at baseline	66 (39)
Physician Global Assessment	
Remission (0)	7 (4.3)
Mild (1)	41 (25)
Moderate (2)	83 (51)
Severe (3)	32 (20)
Missing	7
Partial Mayo Score	5 (4–7)
Missing	7
Faecal calprotectin (µg/g)	599 (314–1056)
Missing	10
C-reactive protein (mg/L)	3 (1–9)
Missing	6
Albumin (g/L)	37 (35–40)
Missing	7
Cholesterol (mmol/L)	4.8 (4.1–5.5)
Missing	18
UCEIS	4 (2.5–5.5)
Missing	126
Mayo endoscopic subscore	1 (1–2)
Missing	119

IBDU, inflammatory bowel disease unclassified; UC, ulcerative colitis; UCEIS, Ulcerative Colitis Endoscopic Index of Severity.

Adverse events (AEs) of special interest included herpes zoster reactivation, venous thromboembolism, major adverse cardiovascular events (MACE) and malignancy. Serious AEs (SAEs) were defined as events resulting in hospitalisation, permanent treatment discontinuation, disability or death. Hospitalisations or surgeries due to disease progression were recorded separately and not classified as SAEs.

Statistical analysis

Categorical variables are presented as frequencies and percentages. Continuous variables are presented as mean±SD or median with IQR, depending on distribution. Normality was assessed using the Shapiro-Wilk test. Changes in PMS, CRP and FC over time were analysed using the Wilcoxon signed-rank test.

Kaplan-Meier survival curves were constructed to evaluate overall treatment persistence and persistence stratified by variables of interest. Patients were censored at last follow-up. Comparison of persistence was performed using the log-rank test. Cox proportional hazards regression models were used to identify baseline predictors of treatment persistence. Clinically relevant variables such as age, gender, disease duration, extraintestinal manifestations, prior therapies, baseline disease activity and baseline steroid use were included in the multivariable model a priori. Given its association with treatment persistence in the univariable analysis, disease extent was modelled as proctitis versus non-proctitis (online supplemental table 1).

For effectiveness outcomes, complete-case analysis was performed. Patients who discontinued treatment were classified as treatment failures at all subsequent time points. Additionally, a non-responder imputation (NRI) analysis was conducted, whereby missing data were considered treatment failure.

A two-sided p value <0.05 was considered statistically significant. All analyses were performed using R V.4.4.1 (R Foundation for Statistical Computing, Vienna, Austria).

RESULTS

Study population

A total of 193 patients with active disease received filgotinib in NHS Lothian with a minimum of 12 months follow-up since drug commencement. Of these, 23 received filgotinib during ASUC admission, therefore leaving 170 patients included in the main cohort for assessment of effectiveness outcomes.

Frontline Gastroenterol: first published as 10.1136/flgastro-2026-103779 on 28 September 2026. Downloaded from http://fg.bmj.com/ on October 29, 2026 by guest. Protected by copyright, including for uses related to text and data mining, AI training, and similar technologies.

Online supplemental figure 1 depicts the study flowchart. Of our cohort, 52% (88/170) were male and the median age was 42 years old (IQR 32–53 years). The median disease duration at treatment initiation was 9 years (IQR 4–14 years). Although most patients had extensive (66/170, 39%) or left-sided (66/170, 39%) disease, almost a quarter of the cohort had proctitis (38/170, 22%). The majority of the cohort was advanced-therapy-naïve (121/170, 71%). Regarding previous exposure to JAK inhibitors, four patients had previously received tofacitinib (2.4%), and no patients had received upadacitinib. Baseline characteristics of the study population are described in table 1. At treatment commencement, median PMS was 5 (IQR 4–7),

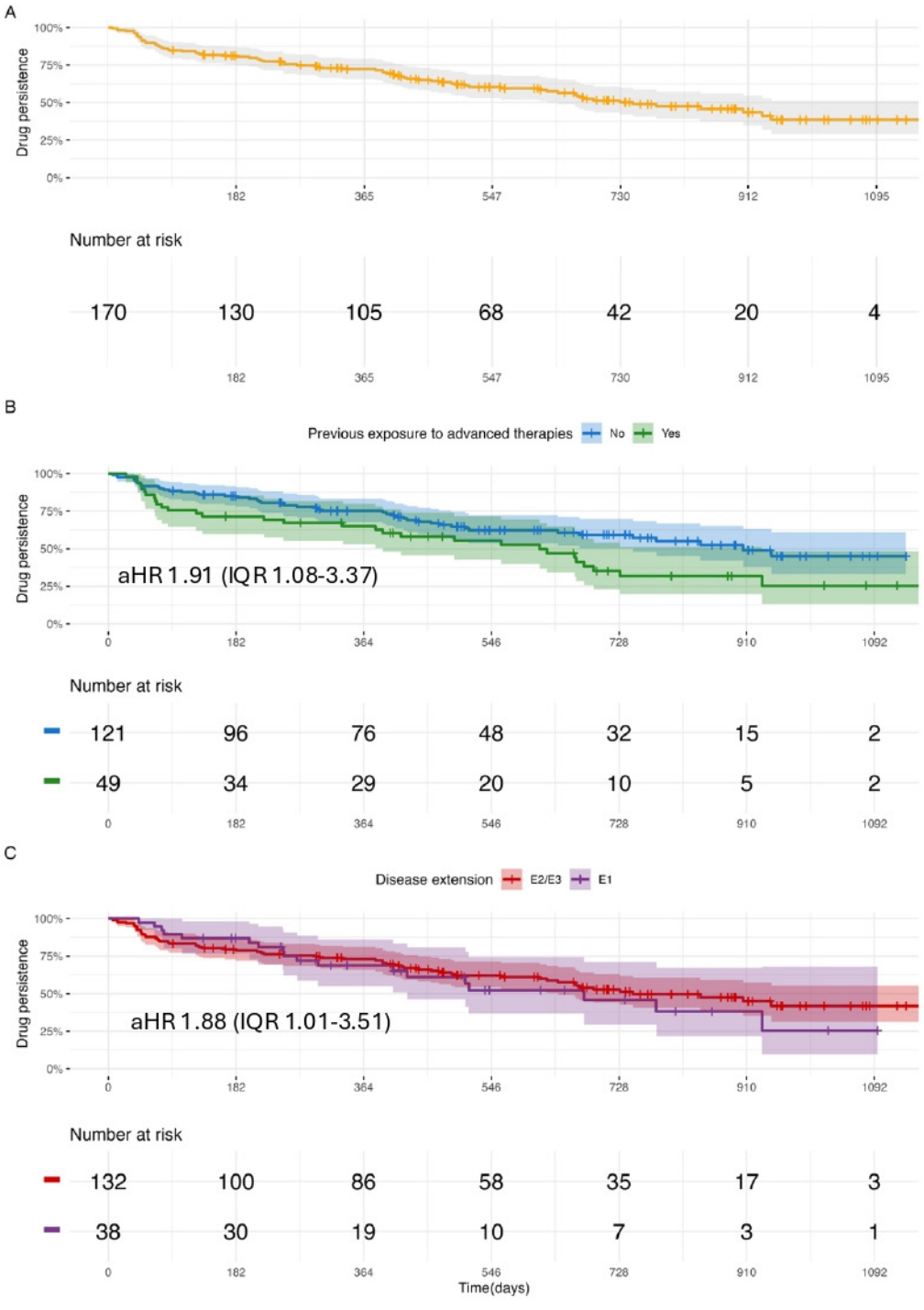

Figure 1 Kaplan-Meier curves showing filgotinib persistence. (A) Overall persistence; (B) persistence stratified by previous exposure to advanced therapies; (C) persistence stratified by disease extension. aHR, adjusted HR.

Frontline Gastroenterol: first published as 10.1136/flgastro-2026-103779 on 28 September 2026. Downloaded from http://fg.bmj.com/ on October 29, 2026 by guest. Protected by copyright, including for uses related to text and data mining, AI training, and similar technologies.

median CRP was 3 mg/L (IQR 1–9) and median FC was 599 µg/g (IQR 314–1056). Baseline disease activity is described in table 1.

Persistence

The median follow-up of our cohort was 735 days (IQR 487–937). After 1 year, 72.2% of the cohort were still on the drug. This number decreased to 50.2% after 2 years and to 38.6% after 3 years (figure 1A). At the end of follow-up, 78 patients had discontinued filgotinib (46%). The main reason for treatment discontinuation was primary non-response (32/78) followed by secondary loss of response (25/78). Table 2 shows reasons for discontinuation stratified by timing of discontinuation.

In the multivariable Cox regression analysis, previous exposure to an advanced therapy (adjusted HR (aHR) 1.91 (95% CI 1.08 to 3.37); p=0.026) and proctitis (aHR 1.88 (95% CI 1.01 to 3.51); p=0.047) were associated with a greater risk of drug cessation (online supplemental table 1). Stratifying by these parameters, drug persistence in advanced-therapy-naïve patients was 75.1%, 59.3% and 45% after 1, 2 and 3 years, respectively. Conversely, filgotinib persistence in advanced-therapy-exposed patients was 65%, 31.7% and 25.4% after 1, 2 and 3 years (figure 2B). Patients with proctitis discontinued the treatment earlier with 68.8%, 45.8% and 25.5% persistence rate at 1, 2 and 3 years, respectively. In contrast, patients with left-sided or extensive colitis showed persistence of 73%, 51.2% and 41.7% at 1, 2 and 3 years, respectively (figure 2C).

Effectiveness outcomes

Approximately one-third of the cohort were in steroid-free clinical remission at 2 years (25/77; 32%). At 1 year, steroid-free clinical remission rate was 40% (49/123), and at 3 years this rate was 33% (4/12). CRP remission was achieved in 53% (62/116), 45% (34/75) and 18% (2/11) and FC remission was reached in 46% (51/111), 45% (34/76) and 33% (4/12) after 1, 2 and 3 years, respectively (figure 3). PMS, PGA, CRP and FC significantly changed from baseline to 1 year (figure 2). The changes in albumin and endoscopic scores are available in online supplemental figure 2). Effectiveness was also assessed following a NRI approach showing clinical remission rates of 35% (53/154), 28% (25/88) and 31% (4/13) at 1, 2 and 3 years. CRP and FC remission rates following a NRI approach were 42% and 34% at 1 year, 39% and 39% at 2 years and 15% and 31% at 3 years, respectively (online supplemental table 2).

Table 2 Reasons for filgotinib discontinuation, stratified by timing of discontinuation

Reasons for discontinuation	n (%)
Discontinuation ≤365 days	N=48
Primary non-response	27 (56)
Secondary loss of response	5 (10)
Adverse event	10 (21)
Current/planned pregnancy	2 (4)
Patient's choice	2 (4)
Active EIM	1 (2)
Other	1 (2)
Discontinuation >365 days	N=30
Secondary loss of response	20 (67)
Primary non-response	5 (17)
Patient's choice	2 (7)
Adverse event	1 (3)
Active EIM	1 (3)
Active IMID	1 (3)

EIM, extraintestinal manifestation; IMID, immune-mediated inflammatory disease.

Steroid prescription, IBD-associated hospitalisations and surgeries

Steroids were prescribed in 7.6% (8/105) of the patients who were on filgotinib after 1 year of treatment. This percentage was stable at 2 years (7.3%; 3/41). However, none of the four patients who were on filgotinib after 3 years were receiving steroids at that time point.

During follow-up, eight patients (4.7%) were hospitalised due to worsening of their disease (median 58 days, IQR 30–219). One patient (0.6%) required a planned pan-proctocolectomy after secondary loss of response to filgotinib.

Effectiveness on inpatient starters

A cohort of n=23 patients with ASUC who responded to steroids were prescribed filgotinib as a maintenance therapy in Lothian. The cohort consisted of 52% (12/23) males, with a median age at filgotinib initiation of 36 years (IQR 30–51 years) and a median disease duration of 5 years (IQR 3–12 years). As the main cohort, 70% of these patients (16/23) were naïve to advanced therapies. All of them were on steroids at filgotinib initiation. Baseline demographics and disease characteristics are shown in online supplemental table 3. Persistence of inpatient starters was 36.5% and 30.4% after 1 and 2 years, respectively. Unadjusted comparison showed that the persistence rates were lower than for the main cohort (p=0.022; online supplemental figure 3).

Safety

Of the 193 patients included in the whole cohort, four patients (2%) developed herpes zoster reactivation, none of whom had received the recombinant zoster vaccination. Two patients (1%) were diagnosed with malignancies: the first was diagnosed with an upper gastrointestinal cancer and the second with a non-melanoma skin cancer. No MACE or venous thrombosis events were diagnosed. Nine patients (4.7%) experienced an SAE during treatment with filgotinib

Frontline Gastroenterol: first published as 10.1136/flgastro-2026-103779 on 28 September 2026. Downloaded from http://fg.bmj.com/ on October 29, 2026 by guest. Protected by copyright, including for uses related to text and data mining, AI training, and similar technologies.

including non-MACE cardiovascular complications, serious infections, malignancy, deranged liver function tests, retinal detachment and Stevens-Johnson syndrome. One death occurred in a patient with sepsis in the context of a disseminated malignancy unknown at time of filgotinib commencement.

DISCUSSION

This large real-world cohort provides long-term effectiveness data for filgotinib with follow-up to 3 years. In this study, steroid-free clinical remission was observed in 40%, 32% and 33% of patients at 1, 2 and 3 years, respectively, calculated using a conservative treatment-failure imputation approach. Clinical disease activity indices (PMS/PGA), CRP and FC also significantly improved over time (figure 2). Drug persistence on filgotinib was 72.2%, 50.2% and 38.6% at 1, 2 and 3 years, respectively. Multivariable regression analysis identified prior advanced therapy exposure and ulcerative proctitis (E1) as independent predictors of lower treatment persistence. To date, this represents the largest real-world cohort reporting long-term clinical and objective outcomes with filgotinib and identifies some key parameters to help risk stratify patients.

A key methodological strength of our study is the use of treatment-failure imputation. Patients who discontinued filgotinib for any reason were classified as treatment failures for all subsequent time points and

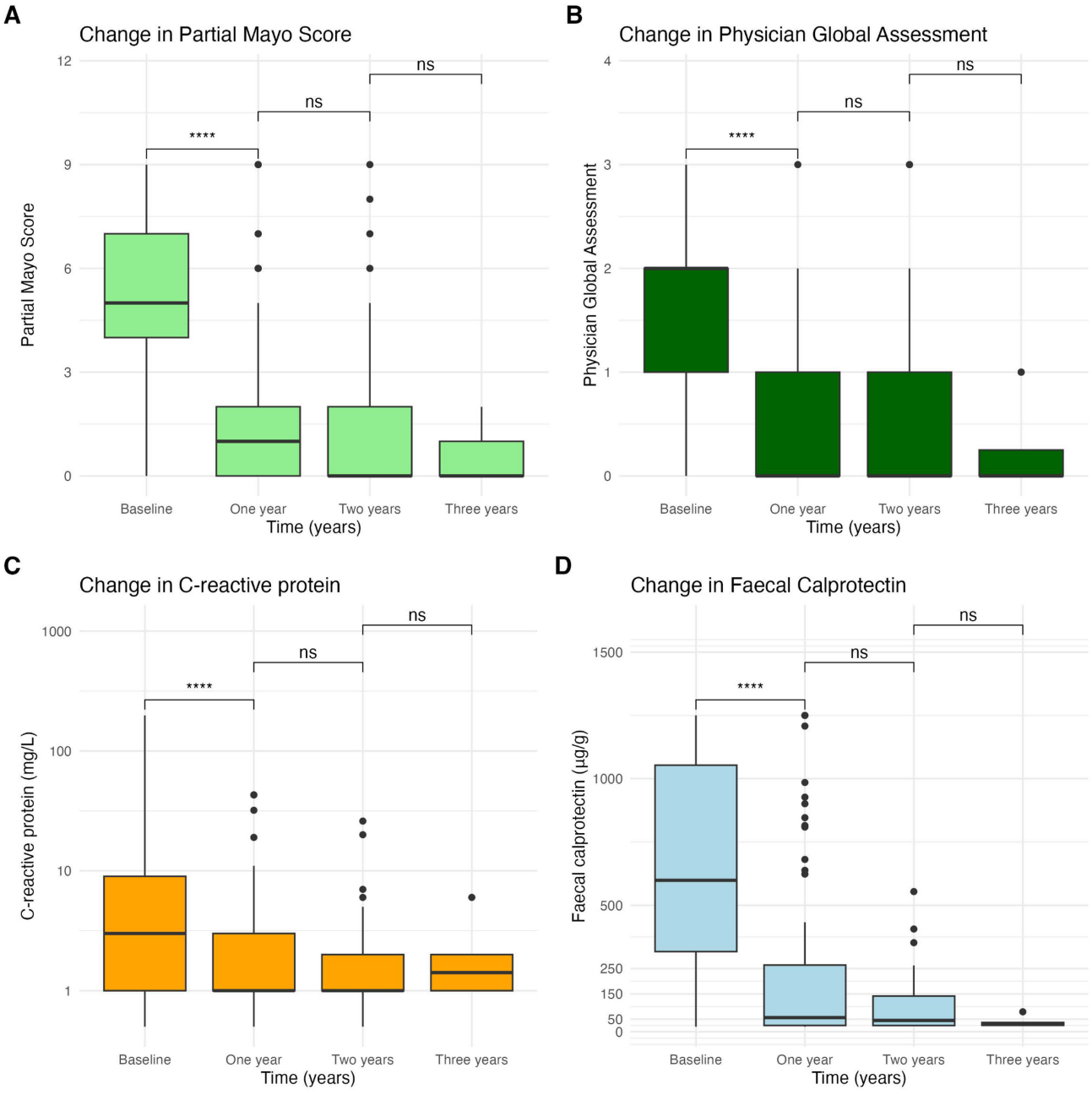

Figure 2 Change in Partial Mayo Score, Physician Global Assessment, C-reactive protein and faecal calprotectin since filgotinib initiation. ****, p<0.0001; ns, not significant.

Frontline Gastroenterol: first published as 10.1136/flgastro-2026-103779 on 28 September 2026. Downloaded from http://fg.bmj.com/ on October 29, 2026 by guest. Protected by copyright, including for uses related to text and data mining, AI training, and similar technologies.

outcomes. This conservative strategy likely explains why our remission rates appear lower than those reported in other real-world cohorts, where clinical remission rates range from 37.2% to 71.9% at 8–12 weeks[5 7–10], 46.1% to 76.4% at 24–26 weeks[5 7 8 10] and 44.7% to 64.6% at 52–58 weeks.[8 10] Our endpoint was also steroid-free clinical remission rather than clinical remission alone. In comparison, Akiyama *et al* reported steroid-free remission rates of 60.9% at 58 weeks,[8] whereas Naber *et al*, using a similar failure imputation approach in a medically refractory Dutch cohort (71% exposed to ≥2 advanced therapies), demonstrated a steroid-free remission rate of 39.5% at 52 weeks—closely aligned with our findings.[10]

In real-world studies, drug persistence is considered a pragmatic surrogate marker of both effectiveness and tolerability. In our cohort, persistence was 72.2% at 1 year, with similar rates of 58.6–66% reported in other real-world studies.[9 10] At 2 years, 50.2% of patients remained on therapy. Interim data from the SELECTION open-label extension study demonstrate approximately 54% persistence at 4 years, with an as-observed clinical remission rate of 80% at 144 weeks.[1] While cross-study comparisons should be interpreted cautiously, our findings suggest comparable long-term treatment durability in routine clinical care.

Multivariable regression analysis demonstrated that prior advanced therapy exposure was an independent predictor of drug persistence. Advanced-therapy-naïve patients demonstrated greater persistence at 1 (75.1%), 2 (59.3%) and 3 years (45%), consistent with prior real-world observations. In the SELECTION programme, remission rates following 10 weeks of filgotinib 200 mg were higher in biologically naïve patients (26.1% vs 15.3% placebo; absolute difference 10.8%) than in biologically experienced patients (11.5% vs 4.2% placebo; absolute difference 7.2%).[4] Robust head-to-head data to guide optimal positioning of advanced therapies remains limited, however our data do show that using filgotinib early on may allow for better outcomes.

Ulcerative proctitis represents a particularly underrepresented phenotype in clinical trials, including the SELECTION programme.[4] Approximately 30% of patients diagnosed with UC present with proctitis, which can be very symptomatic and have a substantial impact on quality of life.[11–13] Despite its prevalence, this phenotype is frequently excluded from randomised trials and often grouped with left-sided disease in observational studies,[7 8] resulting in limited phenotype-specific data. In our cohort, 38 patients with ulcerative proctitis were treated with filgotinib, representing the largest published proctitis subcohort to date.[5 9 10] Multivariable Cox regression demonstrated an almost twofold increased risk of treatment discontinuation in patients with proctitis compared with those with left-sided or extensive colitis. These findings highlight a potential differential response pattern and underscore the need to include patients with proctitis in phase 2 and phase 3 trials.

Filgotinib was initiated in a subcohort of 23 steroid-responders patients with ASUC. Despite being

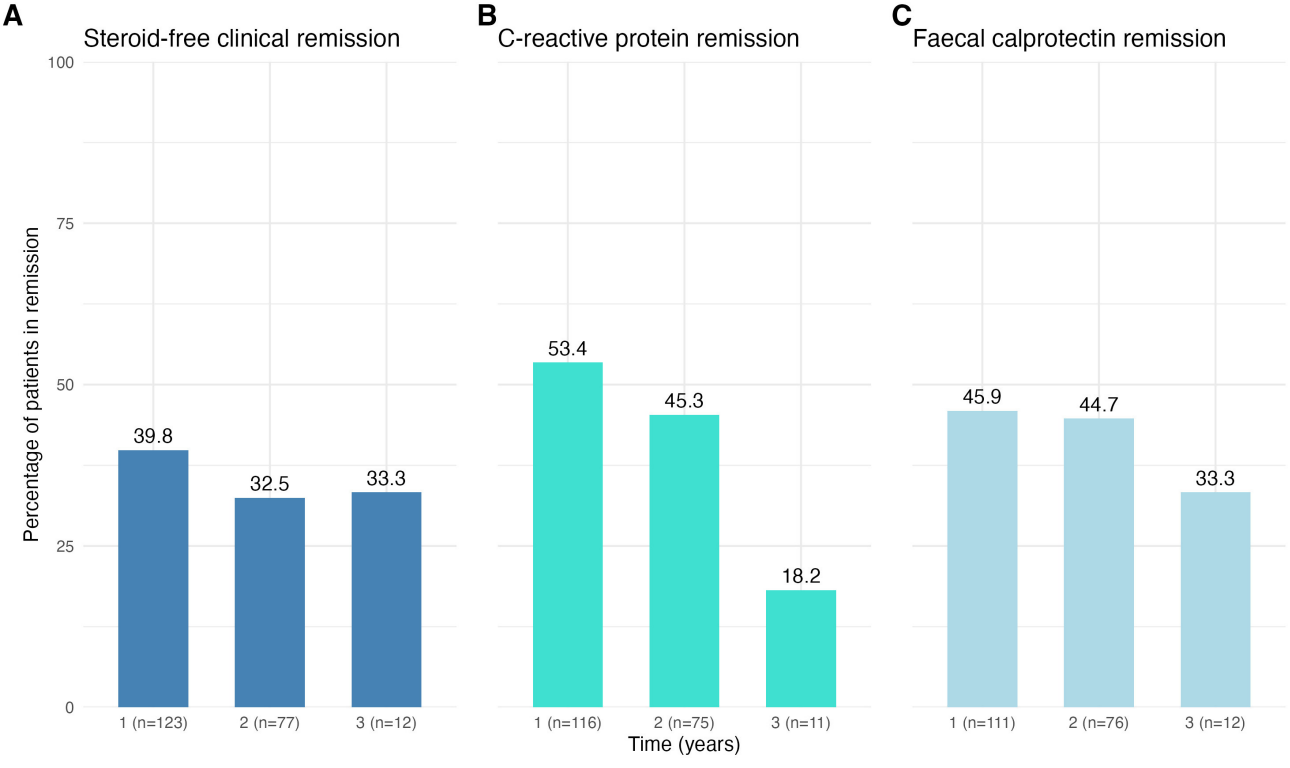

Figure 3 Steroid-free clinical, C-reactive protein and faecal calprotectin remission rates at 1, 2 and 3 years.

Frontline Gastroenterol: first published as 10.1136/flgastro-2026-103779 on 28 September 2026. Downloaded from http://fg.bmj.com/ on October 29, 2026 by guest. Protected by copyright, including for uses related to text and data mining, AI training, and similar technologies.

steroid-responders, these patients had lower drug persistence compared with the main cohort in whom therapy was initiated in the outpatient setting. Our findings support the fact that ASUC often represents a more refractory disease phenotype regardless of steroid responsiveness. This observation is consistent with the findings of Vuyyuru *et al*, who reported similar colectomy and hospitalisation rates after 12 months in steroid responders and non-responders.[14]

Safety remains central to the evaluation of JAK inhibitors following warnings raised by the findings in the Oral Rheumatoid Arthritis Trial (ORAL) Surveillance trial.[15] However, a recent meta-analysis in immune-mediated inflammatory diseases did not demonstrate a significantly increased risk of serious infections, malignancy or MACE compared with antitumour necrosis factor therapy.[16] Filgotinib, as a selective JAK1 inhibitor, may offer a better safety profile compared with less selective agents such as tofacitinib, although definitive comparative safety data are lacking.[2] In our study, with a median follow-up of 735 days, two malignancies were diagnosed (including one non-melanoma skin cancer), and no MACE were observed.

This study has several strengths. The large cohort size and extended follow-up period provides meaningful long-term safety and effectiveness data reflective of routine clinical practice. Our conservative treatment-failure imputation approach reduces the risk of overestimating efficacy. Furthermore, we performed a secondary NRI analysis, enhancing robustness. Limitations include the retrospective design and potential missing clinical assessments. Although we included objective parameters, not all patients had biochemical markers and endoscopic assessment available. Furthermore, the study was conducted within a single health board, which may impact generalisability.

In conclusion, this real-world cohort demonstrates sustained long-term effectiveness and reassuring safety of filgotinib, particularly in advanced-therapy-naïve patients. Reduced persistence among patients with proctitis reinforces the importance of including this phenotype in future clinical trials and dedicated real-world studies.

Acknowledgements Parts of this study were previously presented as a poster at the 21st Congress of ECCO (European Crohn's and Colitis Organisation) and at the Congress BSG (British Society of Gastroenterology) Live'26. The corresponding abstracts were published as: Ramos Belinchon C, Staworko M M, Gros B, Nicholls J, Orti Cuerva M, Gupta E, *et al*. P0723 One and two year outcomes of filgotinib in Ulcerative Colitis in a large real-world cohort, Journal of Crohn's and Colitis, Volume 20, Issue Supplement_1, January 2026, jjaf231.904. Ramos-Belinchon C, Staworko M, Gros B, Nicholls J, Orti Cuerva M, Gupta E, et al. P182 One and two year outcomes of filgotinib in ulcerative colitis in a large real-world cohort Gut 2026;75:A194-A195.

Contributors CR-B, NP and CWL contributed to the design of the study. MS, BG, JN, MOC and EG collected the data. CR-B analysed the data. CR-B and MS drafted the first version of the manuscript. CR-B, BG, NC-C, EG, CO'H, IDA, CWL and NP critically revised the manuscript. All authors have approved the final version of this manuscript. Guarantor: CWL.

Funding CWL is funded by a UKRI (UK Research and Innovation) Future Leaders Fellowship 'Predicting outcomes in IBD' (MR/S034919/1).

Competing interests Conflicts of interest: CR-B has served as a speaker for AbbVie. BG has served as a speaker for AbbVie, Johnson and Johnson, Takeda, Roche, Gilead, Pfizer, MD education and Galapagos and has served as an advisor for Roche, Gilead, AbbVie, Galapagos, MSD and Takeda. IDA has served as a speaker for Alphasigma/Galapagos, Bristol Myers Squibb, Takeda, Lilly, Pfizer, Vifor Pharma, Dr Falk and Ferring. CWL has acted as a consultant to AbbVie, Janssen, Takeda, Pfizer, Galapagos, Bristol Myers Squibb, B.I., Sandoz, Novartis, GSK, Gilead, Vifor Pharma, Dr Falk, Eli Lilly and Iterative Health; he has received speaking fees and travel support from Pfizer, Janssen, AbbVie, Eli Lilly, Galapagos, MSD, Takeda, Shire, Ferring, Hospira and Dr Falk. NP has served as a speaker for AbbVie, Janssen, Pfizer and Fresenius Kabi and served as a consultant for AbbVie and Janssen.

Patient consent for publication Not applicable.

Ethics approval As this study analysed data collected as part of routine clinical care, it was classified as a service evaluation. In accordance with NHS Lothian and UK Health Research Authority guidance, formal research ethics committee approval and written informed consent were not required. Caldicott guardian approval was granted for data collection and dissemination (NHS Lothian).

Provenance and peer review Not commissioned; externally peer reviewed.

Data availability statement No data are available.

Supplemental material This content has been supplied by the author(s). It has not been vetted by BMJ Publishing Group Limited (BMJ) and may not have been peer-reviewed. Any opinions or recommendations discussed are solely those of the author(s) and are not endorsed by BMJ. BMJ disclaims all liability and responsibility arising from any reliance placed on the content. Where the content includes any translated material, BMJ does not warrant the accuracy and reliability of the translations (including but not limited to local regulations, clinical guidelines, terminology, drug names and drug dosages), and is not responsible for any error and/or omissions arising from translation and adaptation or otherwise.

Open access This is an open access article distributed in accordance with the Creative Commons Attribution 4.0 Unported (CC BY 4.0) license, which permits others to copy, redistribute, remix, transform and build upon this work for any purpose, provided the original work is properly cited, a link to the licence is given, and indication of whether changes were made. See: https://creativecommons.org/licenses/by/4.0/.

ORCID iDs
Clara Ramos-Belinchon https://orcid.org/0000-0002-8730-2938
Magdalena Staworko https://orcid.org/0009-0004-8302-7192
Beatriz Gros https://orcid.org/0000-0002-5628-313X
Nikolas Plevris https://orcid.org/0000-0002-3229-8759

REFERENCES

1 Feagan BG, Matsuoka K, Rogler G, *et al*. Long-term safety and efficacy of filgotinib for the treatment of moderately to severely active ulcerative colitis: Interim analysis from up to 4 years of follow-up in the SELECTION open-label long-term extension study. *Aliment Pharmacol Ther* 2024;60:563–84.
2 Bonelli M, Kerschbaumer A, Kastrati K, *et al*. Selectivity, efficacy and safety of JAKinibs: new evidence for a still evolving story. *Ann Rheum Dis* 2024;83:139–60.
3 Traves PG, Murray B, Campigotto F, *et al*. JAK selectivity and the implications for clinical inhibition of pharmacodynamic cytokine signalling by filgotinib, upadacitinib, tofacitinib and baricitinib. *Ann Rheum Dis* 2021;80:865–75.
4 Feagan BG, Danese S, Loftus EV Jr, *et al*. Filgotinib as induction and maintenance therapy for ulcerative colitis

Frontline Gastroenterol: first published as 10.1136/flgastro-2026-103779 on 28 September 2026. Downloaded from http://fg.bmj.com/ on October 29, 2026 by guest. Protected by copyright, including for uses related to text and data mining, AI training, and similar technologies.

(SELECTION): a phase 2b/3 double-blind, randomised, placebo-controlled trial. *The Lancet* 2021;397:2372–84.
5 Gros B, Goodall M, Plevris N, *et al*. Real-world Cohort Study on the Effectiveness and Safety of Filgotinib Use in Ulcerative Colitis. *J Crohns Colitis* 2025;19:jjad187.
6 Nogami A, Asonuma K, Okabayashi S, *et al*. Real-World Comparative Effectiveness and Safety of Filgotinib and Upadacitinib for Ulcerative Colitis: A Multicentre Cohort Study. *UEG Journal* 2024;12:1357–66.
7 Tursi A, Mocci G, Costa F, *et al*. Filgotinib effectiveness and safety as second or third-line therapy in patients with ulcerative colitis: data from a real-world study. *Intest Res* 2026;24:341–51.
8 Akiyama S, Yokoyama K, Yagi S, *et al*. Efficacy and safety of filgotinib for ulcerative colitis: A real-world multicenter retrospective study in Japan. *Aliment Pharmacol Ther* 2024;59:1413–24.
9 Young D, Rahmany S, Taylor D, *et al*. Real-world assessment of effectiveness and safety of filgotinib in 286 patients with ulcerative colitis in 9 UK centres. *Drugs Context* 2025;14:1–14.
10 Naber MR, van der Meulen AE, Voorneveld PW, *et al*. Filgotinib Is an Effective and Safe Treatment Option for Difficult-To-Treat Ulcerative Colitis: Real-World Evidence of the Dutch Initiative on Crohn and Colitis (ICC) Registry. *UEG Journal* 2026;14.
11 Caron B, Sandborn WJ, Schreiber S, *et al*. Drug development for ulcerative proctitis: current concepts. *Gut* 2021;70:1203–9.
12 Wu H, Xie T, Yu Q, *et al*. An Analysis of the Effectiveness and Safety of Upadacitinib in the Treatment of Inflammatory Bowel Disease: A Multicenter Real-World Study. *Biomedicines* 2025;13:190.
13 Pineton de Chambrun G, Tassy B, Kollen L, *et al*. Refractory ulcerative proctitis: How to treat it? *Best Practice & Research Clinical Gastroenterology* 2018;32–33:49–57.
14 Vuyyuru SK, Alphonsus L, De Silva TA, *et al*. Day 3 Oxford criteria predict steroid non-response for acute severe ulcerative colitis in the post biologic era. *J Crohns Colitis* 2025;19:jjaf131.
15 Ytterberg SR, Bhatt DL, Mikuls TR, *et al*. Cardiovascular and Cancer Risk with Tofacitinib in Rheumatoid Arthritis. *N Engl J Med* 2022;386:316–26.
16 Solitano V, Ahuja D, Lee HH, *et al*. Comparative Safety of JAK Inhibitors vs TNF Antagonists in Immune-Mediated Inflammatory Diseases: A Systematic Review and Meta-Analysis. *JAMA Netw Open* 2025;8:e2531204.

Frontline Gastroenterol: first published as 10.1136/flgastro-2026-103779 on 28 September 2026. Downloaded from http://fg.bmj.com/ on October 29, 2026 by guest. Protected by copyright, including for uses related to text and data mining, AI training, and similar technologies.