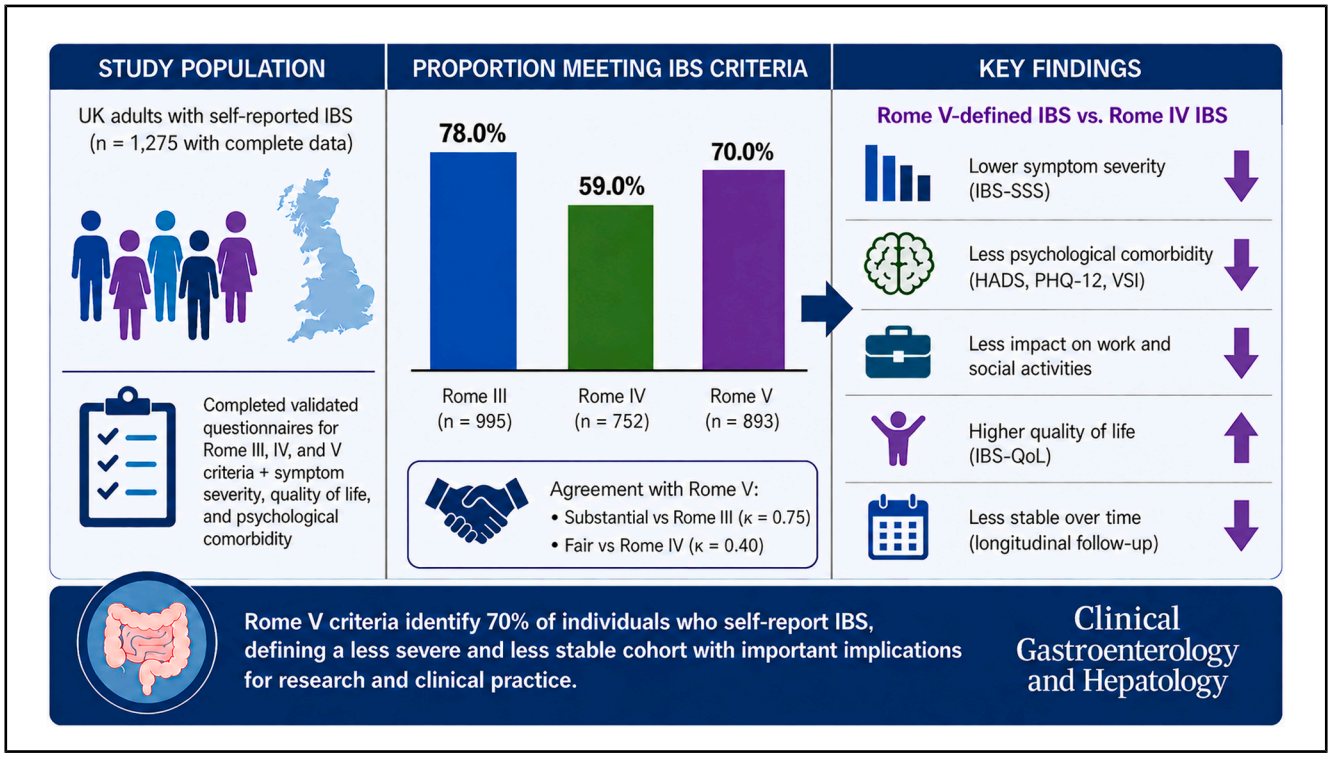
Clinical Gastroenterology and Hepatology 2026;■:■–■

Epidemiologic, Clinical, and Psychological Characteristics of Individuals With Self-Reported Irritable Bowel Syndrome Based on the Rome V vs Rome IV Criteria

Kyle Staller,[1] Vivek C. Goodoory,[2] Cho Ee Ng,[3] Alexander C. Ford,[2,4,§] and Christopher J. Black[2,4,§]

[1]Center for Neurointestinal Health, Division of Gastroenterology, Massachusetts General Hospital and Harvard Medical School, Boston, Massachusetts; [2]Leeds Gastroenterology Institute, St. James's University Hospital, Leeds, United Kingdom; [3]County Durham and Darlington NHS Foundation Trust, Durham, United Kingdom; and [4]Leeds Institute for Medical Research at St. James's, University of Leeds, Leeds, United Kingdom



BACKGROUND & AIMS: **The Rome V process altered diagnostic criteria for irritable bowel syndrome (IBS) compared with Rome IV, by modifying the requirement for frequency and persistence of symptoms. We compared epidemiologic, clinical, and psychological characteristics of people with Rome V–defined IBS, vs Rome III or IV, in the community.**

METHODS: **We conducted a survey of adults in the United Kingdom with self-reported IBS. Participants completed validated questionnaires assessing the Rome III, IV, and V criteria, gastrointestinal symptom severity, quality of life, and psychological comorbidity. The proportions of people meeting criteria for IBS were compared across definitions, including a sensitivity analysis related to the exclusion of individuals with continuous pain from the Rome V definition of IBS.**

[§]Authors share co-senior authorship.

Abbreviations used in this paper: DGBI, disorder of gut-brain interaction; IBS, irritable bowel syndrome; IBS-SSS, Irritable Bowel Syndrome Severity Scoring System.

© 2026 The Author(s). Published by Elsevier Inc. on behalf of American Gastroenterological Association Institute. This is an open access article under the CC BY license (http://creativecommons.org/licenses/by/4.0/).

1542-3565
https://doi.org/10.1016/j.cgh.2026.07.022

Agreement between the various criteria was evaluated using a Kappa statistic. The characteristics of those meeting the 3 iterations of the criteria, and the stability of the criteria during longitudinal follow-up, were compared.

RESULTS: **In the main analysis, excluding those who reported continuous abdominal pain on every day of the week from the Rome V definition of IBS, among 1275 respondents with complete data, 995 (78.0%) met the Rome III, 752 (59.0%) the Rome IV, and 893 (70.0%) the Rome V criteria for IBS. Agreement between the Rome V criteria and the Rome III or the Rome IV criteria was substantial to fair (Kappa = 0.75 and 0.40, respectively). Compared with individuals meeting the Rome IV criteria, those meeting the Rome V criteria reported significantly lower symptom severity, less psychological comorbidity, a reduced impact on ability to work and participate in social activities, and higher quality of life scores. Rome V IBS was less stable than Rome IV IBS during longitudinal follow-up.**

CONCLUSIONS: **Applying the Rome V criteria changes the population classified as having IBS, mainly due to the exclusion of those with continuous pain, identifying a clinically less severe cohort. This may have implications for research and clinical practice.**

Keywords: Incontinence; Irritable Bowel Syndrome; Rome IV Criteria; Rome V Criteria; Urgency.

Irritable bowel syndrome (IBS) affects between 5% and 10% of the population worldwide.[1] It is a disorder of gut–brain interaction (DGBI) defined by symptom-based criteria, derived via a consensus-driven approach, rather than a clear pathophysiologic construct.[2,3] The lack of definitive biomarkers for IBS, and its higher prevalence among women and those with psychological comorbidities, creates a perceived stigma around a diagnosis, such that some doctors view people with IBS as being overly anxious or neurotic.[4] The emergence of the Rome process, in 1990,[5] led to a more uniform approach to how IBS was defined. The criteria derived from this process remain the standard by which the diagnosis is made, for research purposes, today.

The Rome criteria have evolved over time to incorporate newer understandings of the disease state and nuances of language in the hopes of improving their specificity for the diagnosis of IBS, subgrouping patients to target treatment, and avoiding unnecessary investigations. All definitions include the presence of recurrent abdominal pain, or discomfort, associated with a change in the frequency and/or form of stool. The Rome V criteria were proposed in 2026,[6] as an update to the Rome IV criteria (Table 1).[7] The Rome IV criteria made notable changes from the Rome III criteria,[8] with the removal of abdominal discomfort from the definition, thus including only abdominal pain, as well as an increase in the frequency threshold required for abdominal pain, from 3 days per month to 1 day per week. As a result of these changes, people with Rome IV–defined IBS exhibit a more severe form of the condition, with an associated increase in psychological comorbidities.[9–11] As part of the Rome V criteria, the presence of abdominal discomfort was reintroduced to the definition of IBS, and the symptom frequency threshold at which abdominal pain or discomfort needed to be experienced to meet criteria for IBS was reduced back to 3 days per month.[6] However, abdominal pain cannot be present continuously, to differentiate IBS from centrally mediated abdominal pain syndrome.

How these latest changes affect epidemiologic, clinical, and psychological characteristics of people meeting criteria for IBS is, as yet, unknown. Despite the perception that people with IBS are highly likely to seek medical care, a substantial proportion may never consult a doctor with their condition.[12] Thus, a large number of people with IBS are not characterized in the literature, which mostly focuses on secondary or tertiary clinic populations. We, therefore, applied the Rome III, IV, and V criteria simultaneously to a previous survey of individuals from the community who self-identified as having IBS. Given that the changes in the Rome V criteria may lead to a less restrictive definition, we hypothesized that the Rome V criteria would apply to a larger proportion of people with IBS than the preceding Rome IV criteria. We also expected that they would exhibit less severe gastrointestinal symptoms and lower levels of psychological comorbidity.

Materials and Methods

Participants and Setting

We recruited individuals registered with ContactME-IBS, a national United Kingdom registry of 4280 members with IBS who have expressed an interest in participating in IBS-related research. We have reported data from this cohort previously.[13–16] Individuals find out about the ContactME-IBS registry via numerous sources, including primary care practices, specialist hospital clinics, posters in pharmacies, or social media. Individuals enroll online by completing a short questionnaire about their bowel symptoms and providing

contact details. Among all registrants, 2268 (53%) have seen their general practitioner, and 1455 (34%) have seen a gastroenterologist for IBS. The registry is run by the County Durham and Darlington NHS Foundation Trust. The only exclusion criterion for this study was an inability to understand written English. We contacted all registered individuals, via electronic mailshot, in July 2021, directing them to a website where they could access study information. Those willing to participate completed an online questionnaire, with responses stored in an online database. We sent reminder emails to all nonresponders in August 2021 and completed recruitment in September 2021. Participants were given a chance to win 1 of 3 gift cards (worth £200, £100, or £50) in return for completing the questionnaire. The University of Leeds research ethics committee approved the study in March 2021 (MREC 20–051). All individuals were approached to complete the same questionnaires 12 months after the baseline questionnaire.

What You Need to Know

Background

The Rome V criteria were introduced to broaden the diagnostic criteria for IBS compared with the Rome IV criteria, but their impact on the epidemiology of the condition has not been previously characterized.

Findings

Among individuals with self-reported IBS, between 50% and 70% met the Rome V criteria, compared with 60% to 80% for the Rome III and the Rome IV criteria. Rome V–defined IBS was associated with lower symptom severity, reduced psychological comorbidity, and less functional impairment than Rome III or IV IBS.

Implications for patient care

The Rome V criteria for IBS identify a less severe phenotype of people with IBS, with implications for diagnosis, counseling, and the applicability of prior clinical trial evidence.

Data Collection and Synthesis

We collected basic demographic data, including age, sex, lifestyle (tobacco and alcohol consumption), ethnicity, marital status, educational level, and annual income. We acquired symptom data using questions from the Rome III and IV questionnaires for IBS.[7,8] As the symptom items that make up the Rome V criteria are, for the most part, included in the Rome III and IV questionnaires (Supplementary Materials), we were able to assign the presence of Rome III–, Rome IV–, or Rome V–defined IBS according to the scoring algorithms proposed (Table 1) without commencing an entirely new study. The presence of continuous abdominal pain was assessed using the following question item from the Rome IV questionnaire: "Has this pain in your abdomen been continuous or almost continuous? (Continuous means that it never goes away during waking hours)," with a binary "Yes/No" response, as recommended.[6] Those reporting continuous pain on this question and who reported that pain was present on every day of the week were excluded from the Rome V definition of IBS, as recommended.[17] However, as there appeared to be a proportion of individuals who reported continuous pain, even when abdominal pain was not present every day of the week, in the Rome V diagnostic questionnaire validation study,[17] we conducted a sensitivity analysis excluding any individual who reported continuous abdominal pain from the Rome V definition of IBS. We categorized the IBS subtype according to the proportion of

Table 1. The Rome III, Rome IV, and Rome V Diagnostic Criteria for IBS[a]

Rome III IBS diagnostic criteria	Rome IV IBS diagnostic criteria	Rome V IBS diagnostic criteria[b]
(1) Recurrent abdominal pain **or discomfort** at least **3 d per mo** and associated with 2 or more of the following: (a) **Improvement** with defecation; (b) Onset associated with a change in frequency of stool; (c) Onset associated with a change in form of stool.	(1) Recurrent abdominal pain, on average, at least **1 d per wk** in the last 3 mos and associated with 2 or more of the following: (a) **Related** to defecation; (b) Associated with a change in frequency of stool; (c) Associated with a change in form of stool.	(1) Recurrent**, but not continuous,** abdominal pain **or discomfort** at least **3 d per mo** and associated with 2 or more of the following: (a) **Related** to defecation; (b) Onset associated with a change in frequency of stool; (c) Onset associated with a change in form of stool.
(2) Criteria fulfilled for the last 3 mos with symptom onset at least 6 mos prior to diagnosis.	(2) Criteria fulfilled for the last 3 mos with symptom onset at least 6 mos prior to diagnosis.	(2) Criteria fulfilled for the last 3 mos with symptom onset at least 6 mos prior to diagnosis.

IBS, irritable bowel syndrome.
[a]Key differences between criteria are highlighted in bold.
[b]Supportive criteria: abdominal pain or abdominal discomfort should not be only related to menses.

time stools were abnormal on the Bristol stool form scale for Rome IV and Rome V IBS,[6,7] and according to the proportion of time stools were hard or lumpy or loose or watery for Rome III IBS,[8] as recommended. We asked all participants to report their annual income, the number of years since their diagnosis of IBS, and their most troublesome symptom from a list of 5 possibilities, including abdominal pain, constipation, diarrhea, bloating, or urgency. Details of the assessment of IBS symptom severity, psychological symptoms, somatoform symptom reporting, gastrointestinal symptom–specific anxiety, impact on work and activities of daily living, IBS-specific and generic health-related quality of life, and annual direct costs of IBS over the 12 months prior to recruitment to the study are provided in the Supplementary Materials.

Statistical Analysis

We calculated the proportions of individuals who self-identified as having IBS who met the Rome III criteria only, the Rome IV criteria only, or the Rome V criteria for IBS. We measured the agreement between the Rome III and IV criteria and the Rome V criteria for the presence of IBS using the modified Kappa statistic, where values of 0–0.20 indicate slight agreement, 0.21–0.40 fair agreement, 0.41–0.60 moderate agreement, 0.61–0.80 substantial agreement, and 0.81–1 almost perfect agreement. We then compared the characteristics of individuals meeting either only the Rome III criteria or only the Rome IV criteria with those meeting the Rome V criteria. Categorical variables were compared using a χ^2 test, and continuous data using an independent samples t test. The stability of the Rome III, IV, and V criteria for IBS was also assessed at 12 months using a modified Kappa statistic. Due to multiple comparisons, a 2-tailed P value of $< .01$ was considered statistically significant for all analyses, which were performed using SPSS for Windows version 30.0 (SPSS Inc).

Results

There were 1278 individuals who self-identified as having IBS recruited into the study. The mean age of recruited subjects was 47.2 years (range, 18–89 years), 1086 (85.0%) were women, and 1235 (96.6%) of the respondents were White Caucasian. There were 148 (11.6%) individuals who stated that their IBS symptoms commenced after an acute enteric infection.

The Proportion of Individuals With Self-Reported Irritable Bowel Syndrome Meeting the Rome III, IV, and V Criteria and the Level of Agreement in the Main Analysis

In total, 1275 individuals with IBS provided complete Rome III, IV, and V symptom data. Overall, 1008 (79.1%) of 1275 individuals met 1 or more of the 3 different criteria for IBS, with 995 (78.0%) meeting the Rome III (mean age, 46.5 years; 852 [85.7%] women), 752 (59.0%) the Rome IV (mean age, 45.3 years; 655 [87.1%] women), and 893 (70.0%) the Rome V (mean age, 46.8 years; 765 [85.7%] women) criteria (Figure 1). Among the 893 individuals meeting the Rome V criteria for IBS, 883 (98.9%) also met the Rome III criteria, and 644 (72.1%) also met the Rome IV criteria. In total, 635 (71.1%) individuals meeting the Rome V criteria for IBS also met both the Rome III and Rome IV criteria. Among the 382 individuals with self-reported IBS not meeting the Rome V criteria, 112 (29.3%) met the Rome III criteria and 108 (28.3%) the Rome IV criteria. Among

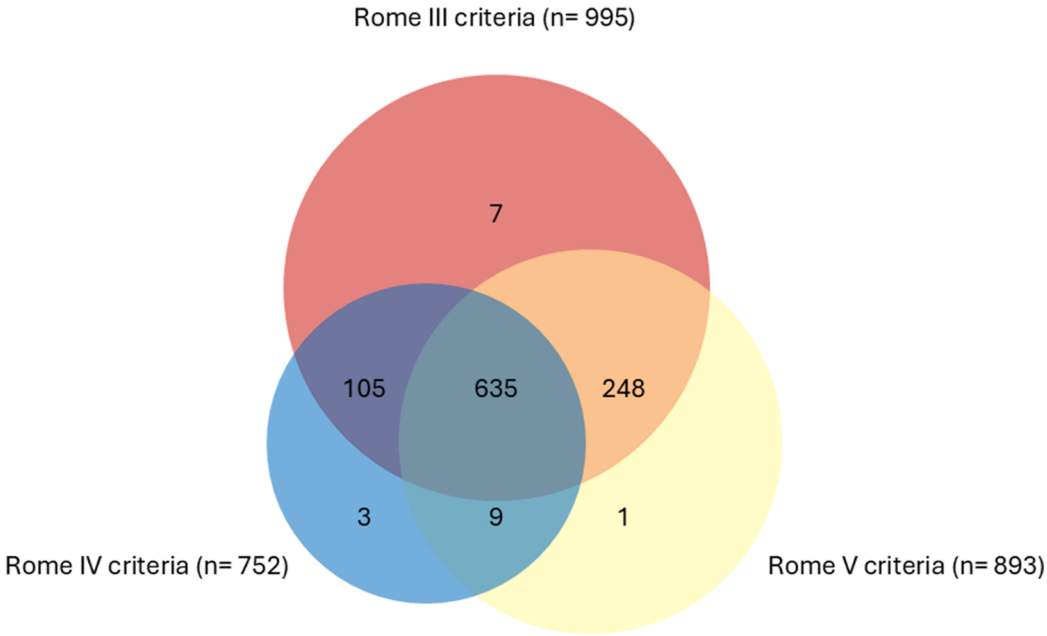


Figure 1. Agreement between the Rome III, Rome IV, and Rome V criteria for IBS in the main analysis.

the 112 who met the Rome III criteria for IBS but did not meet the Rome V criteria, 105 (93.8%) reported continuous abdominal pain every day of the week. The Kappa statistic for the level of agreement between the Rome III and Rome V criteria was 0.75, indicating substantial agreement, and for the Rome IV and Rome V criteria, it was 0.40, indicating only fair agreement.

The Characteristics of Individuals With Rome III, IV, and V Irritable Bowel Syndrome in the Main Analysis

Compared with the 108 individuals who met the Rome IV criteria, those meeting the Rome V criteria were significantly less likely to smoke ($P < .001$), more likely to use alcohol ($P < .001$), more likely to be married or cohabiting ($P = .008$), and more likely to have attained a university or postgraduate level of education ($P < .001$) (Table 2). There were no other significant demographic differences between the 2 groups.

As would be expected, based on the differences between definitions, abdominal pain was the most common troublesome symptom in more individuals with Rome IV IBS than with Rome V IBS, whereas those meeting the Rome V criteria were more likely to identify bloating or distention, or diarrhea or urgency, as their most troublesome symptom, although these differences were not significant ($P = .024$). Those with Rome IV IBS were more likely to report severe symptoms on the IBS Severity Scoring System (IBS-SSS) ($P < .001$), and the mean IBS-SSS scores were significantly higher in those with Rome IV IBS ($P < .001$). This was reflected by significantly higher proportions of those meeting the Rome IV criteria reporting IBS limiting activities, urgency most days, fecal incontinence at least weekly, and IBS-related absenteeism, and significantly lower quality of life scores.

Psychological symptoms were similarly more severe in Rome IV IBS, with significantly higher anxiety, depression, somatoform symptom reporting, and gastrointestinal-specific anxiety scores compared with Rome V IBS ($P < .001$ for all). Finally, these higher levels of gastrointestinal symptom severity and psychological symptoms translated into significantly higher IBS-related direct costs in the 12 months prior to study recruitment ($P < .001$).

Characteristics of the 112 individuals who met the Rome III criteria, but not the Rome V criteria, were not compared with the 893 individuals who met the Rome V criteria as, among individuals who did not meet the Rome V criteria for IBS, only 7 individuals who met the Rome III criteria did not also meet the Rome IV criteria.

The Stability of Irritable Bowel Syndrome Symptoms According to Rome III, IV, and V Criteria in the Main Analysis

Of the 603 individuals providing complete Rome III, IV, and V symptom data at 12 months, 469 (77.8%) still met 1 or more of the 3 different criteria for IBS at follow-up. Among 431 individuals meeting the Rome V criteria at baseline, 337 (78.2%) still met the Rome V criteria at 12 months, and among 172 not meeting the Rome V criteria at baseline, 79 (45.9%) met the Rome V criteria at 12 months (Kappa = 0.31). Among 480 individuals meeting the Rome III criteria at baseline, 402 (83.8%) still met the Rome III criteria at 12 months, and among 122 not meeting the Rome III criteria at baseline, 62 (50.8%) met the Rome III criteria at 12 months (Kappa = 0.31). Finally, among 352 individuals meeting the Rome IV criteria at baseline, 259 (73.6%) still met the Rome IV criteria at 12 months, and among 251 not meeting the Rome IV criteria at baseline, 81 (32.3%) met the Rome IV criteria at 12 months (Kappa = 0.41).

The Proportion of Individuals With Self-Reported Irritable Bowel Syndrome Meeting the Rome III, IV, and V Criteria and the Level of Agreement in a Sensitivity Analysis

Overall, 1007 (79.0%) met 1 or more of the 3 different criteria for IBS in a sensitivity analysis, with 994 (78.0%) of 1275 meeting the Rome III (mean age, 46.5 years; 852 (85.7%) women), 752 (59.0%) the Rome IV (mean age, 45.3 years; 655 (87.1%) women), and 598 (46.9%) the Rome V (mean age, 47.8 years; 516 (86.3%) women) criteria (Figure 2). Among the 598 individuals meeting the Rome V criteria for IBS, 593 (99.2%) also met the Rome III criteria, and 407 (68.1%) also met the Rome IV criteria. In total, 403 (67.4%) individuals meeting the Rome V criteria for IBS also met both the Rome III and Rome IV criteria. Among the 677 individuals with self-reported IBS not meeting the Rome V criteria, 401 (59.2%) met the Rome III criteria, and 345 (51.0%) met the Rome IV criteria. Among the 401 who met the Rome III criteria for IBS but did not meet the Rome V criteria, 395 (98.5%) reported continuous abdominal pain, irrespective of whether this was present every day of the week. The Kappa statistic for the level of agreement between the Rome III and the Rome V criteria was 0.38, indicating fair agreement, and for the Rome IV and the Rome V criteria, it was 0.17, indicating only slight agreement.

The Characteristics of Individuals With Rome III, IV, and V Irritable Bowel Syndrome in a Sensitivity Analysis

We examined the characteristics of the 345 individuals who met the Rome IV criteria, but not the Rome V criteria, and compared them with all 598 individuals who met the Rome V criteria (Table 3). Those meeting the Rome V criteria were significantly older ($P < .001$), less likely to smoke ($P < .001$), more likely to use alcohol ($P < .001$), more likely to be married or cohabiting ($P = .003$), and more likely to have attained a university or postgraduate level of education ($P = .007$).

Table 2. Characteristics of Individuals Meeting the Rome IV Criteria, but not the Rome V Criteria for IBS, Compared With Those Meeting the Rome V Criteria for IBS in the Main Analysis

	Met Rome IV criteria but not Rome V criteria (n = 108)	Met Rome V criteria (n = 893)	*P* value[a]
Age, *y*	43.7 (13.3)	46.8 (15.6)	.028
Female sex	95 (88.0)	765 (85.7)	.52
Tobacco user	24 (22.2)	66 (7.4)	<.001
Alcohol user	48 (44.4)	574 (64.3)	<.001
Married or cohabiting	60 (55.6)	610 (68.3)	.008
University or postgraduate level of education	24 (22.2)	419 (46.9)	<.001
White Caucasian ethnicity	103 (95.4)	864 (96.8)	.45
Annual income of ≥£30,000[b]	20 (19.6)	251 (31.4)	.015
IBS after acute enteric infection	16 (14.8)	106 (11.9)	.38
IBS diagnosed for ≥5 y	91 (84.3)	700 (78.4)	.16
Most troublesome symptom			
Abdominal pain	35 (32.4)	170 (19.0)	
Constipation	7 (6.5)	83 (9.3)	
Diarrhea	14 (13.0)	153 (17.1)	
Bloating/distension	28 (25.9)	243 (27.2)	
Urgency	24 (22.2)	244 (27.3)	.024
IBS subtype			
Constipation	21 (19.4)	169 (18.9)	
Diarrhea	48 (44.4)	367 (41.1)	
Mixed stool pattern	38 (35.2)	345 (38.6)	
Unclassified	1 (0.9)	12 (1.3)	.87
IBS-SSS symptom severity			
Remission	0 (0.0)	27 (3.0)	
Mild	1 (0.9)	180 (20.2)	
Moderate	15 (13.9)	396 (44.3)	
Severe	92 (85.2)	290 (32.5)	<.001
IBS-SSS score	385.0 (79.9)	252.6 (95.8)	<.001
IBS limits activities ≥50% of the time	98 (90.7)	598 (67.0)	<.001
Urgency at least most days	61 (56.5)	204 (22.8)	<.001
Fecal incontinence at least once a wk	31 (28.7)	116 (13.0)	<.001
HADS-A categories			
Normal	21 (19.4)	289 (32.4)	
Borderline	20 (18.5)	227 (25.4)	
Abnormal	67 (62.0)	377 (42.2)	<.001
HADS-A score	12.6 (5.0)	9.8 (4.6)	<.001
HADS-D categories			
Normal	42 (38.9)	556 (62.3)	
Borderline	16 (14.8)	184 (20.6)	
Abnormal	50 (46.3)	153 (17.1)	<.001
HADS-D score	10.0 (5.2)	6.6 (4.1)	<.001
PHQ-12 severity			
Minimal	3 (2.8)	68 (7.6)	
Low	14 (13.0)	250 (28.0)	
Medium	29 (26.9)	384 (43.0)	
High	62 (57.4)	191 (21.4)	<.001
PHQ-12 score	13.1 (5.0)	9.2 (4.0)	<.001
VSI score	60.2 (15.0)	47.2 (17.1)	<.001

Table 2. Continued

	Met Rome IV criteria but not Rome V criteria (n = 108)	Met Rome V criteria (n = 893)	*P* value[a]
WPAI:IBS (%)			
Any IBS-related absenteeism	28 (50.9)	128 (22.7)	<.001
Any IBS-related presenteeism	46 (92.0)	429 (80.8)	.050
Any IBS-related work impairment	49 (89.1)	437 (77.5)	.045
Any IBS-related activity impairment	101 (93.5)	776 (86.9)	.049
IBS-QOL score	32.0 (22.0)	54.7 (21.4)	<.001
EQ-5D-5L score	0.34 (0.34)	0.65 (0.25)	<.001
Annual IBS-related direct costs, £*UK*[b]	1046 (1213)	415 (871)	<.001

NOTE. Data are presented as number (%) or mean (standard deviation).
HADS, Hospital Anxiety (A) and Depression (D) Scale; IBS, irritable bowel syndrome; IBS-SSS, Irritable Bowel Syndrome Severity Scoring System; IBS-QOL, Irritable Bowel Syndrome–Quality of Life; PHQ-12, Patient Health Questionnaire-12; UK, United Kingdom; VSI, Visceral Sensitivity Index; WPAI-IBS, Worker Productivity Activity Index–Irritable Bowel Syndrome.
[a]*P* value for independent samples *t* test for continuous data and Pearson χ^2 for comparison of categorical data.
[b]£1 = $1.34.

There were no other significant demographic differences between the 2 groups.

Again, abdominal pain was the most common troublesome symptom in more individuals with Rome IV IBS than with Rome V IBS, whereas those meeting the Rome V criteria were more likely to identify urgency as their most troublesome symptom ($P < .001$). Those with Rome IV IBS were more likely to report severe symptoms on the IBS-SSS ($P < .001$), and the mean IBS-SSS scores were significantly higher in those with Rome IV IBS ($P < .001$). Similar to the main analysis, those meeting the Rome IV criteria reported IBS limiting activities; urgency most days; fecal incontinence at least weekly; IBS-related absenteeism, presenteeism, and work and activity impairment; and significantly lower quality of life scores.

Psychological symptoms were once again more severe in the Rome IV group, with anxiety, depression, somatoform symptom reporting, and gastrointestinal-specific anxiety scores all higher compared with those with Rome V IBS ($P < .001$ for all). Finally, IBS-related direct costs were significantly higher in the Rome IV group in the 12 months prior to study recruitment ($P < .001$). Characteristics of the 401 individuals who met the Rome III criteria, but not the Rome V criteria, compared with the 598 individuals who met the Rome V criteria are provided in Supplementary Table 1. Similar differences were observed in terms of demographics,

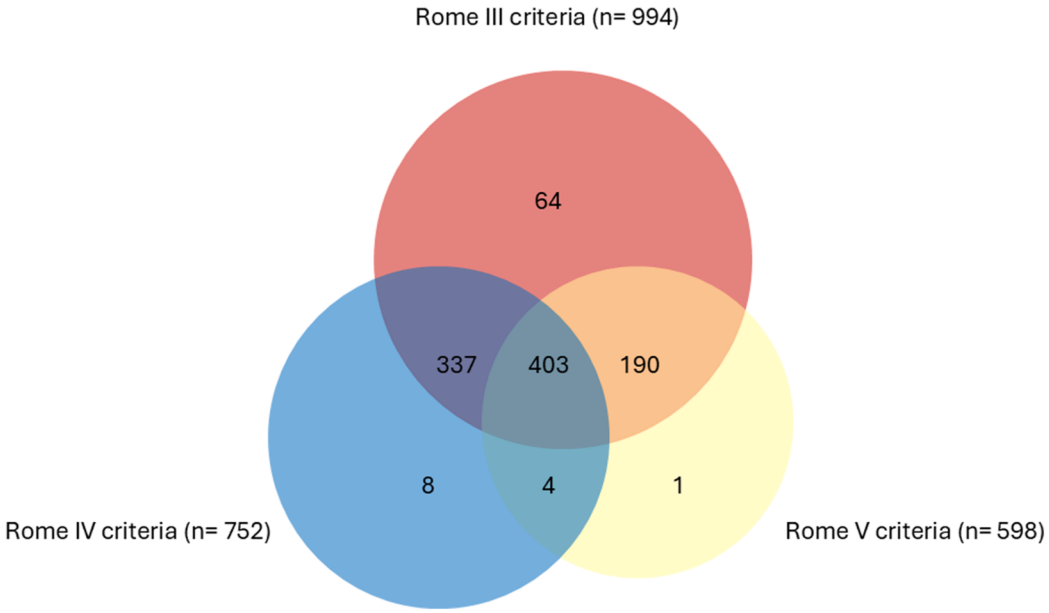


Figure 2. Agreement between the Rome III, Rome IV, and Rome V criteria for IBS in a sensitivity analysis.

Table 3. Characteristics of Individuals Meeting the Rome IV Criteria, but not the Rome V Criteria for IBS, Compared With Those Meeting the Rome V Criteria for IBS in a Sensitivity Analysis

	Met Rome IV criteria but not Rome V criteria (n = 345)	Met Rome V criteria (n = 598)	*P* value[a]
Age, *y*	44.1 (14.3)	47.8 (15.9)	<.001
Female sex	296 (85.8)	516 (86.3)	.834
Tobacco user	51 (14.8)	35 (5.9)	<.001
Alcohol user	186 (53.9)	392 (65.6)	<.001
Married or cohabiting	209 (60.6)	419 (70.1)	.003
University or postgraduate level of education	130 (37.7)	279 (46.7)	.007
White Caucasian ethnicity	336 (97.4)	576 (96.3)	.38
Annual income of ≥£30,000[b]	83 (26.6)	174 (32.3)	.082
IBS after acute enteric infection	44 (12.8)	70 (11.7)	.63
IBS diagnosed for ≥5 y	270 (78.3)	482 (80.6)	.39
Most troublesome symptom			
Abdominal pain	104 (30.1)	90 (15.1)	
Constipation	25 (7.2)	55 (9.2)	
Diarrhea	46 (13.3)	114 (19.1)	
Bloating/distension	102 (29.6)	149 (24.9)	
Urgency	68 (19.7)	190 (31.8)	<.001
IBS subtype			
Constipation	71 (20.6)	100 (16.7)	
Diarrhea	130 (37.7)	267 (44.6)	
Mixed stool pattern	139 (40.3)	223 (37.3)	
Unclassified	5 (1.4)	8 (1.3)	.18
IBS-SSS symptom severity			
Remission	0 (0.0)	26 (4.3)	
Mild	20 (5.8)	146 (24.4)	
Moderate	102 (29.6)	275 (46.0)	
Severe	223 (64.6)	151 (25.3)	<.001
IBS-SSS score	330.1 (88.2)	235.1 (95.4)	<.001
IBS limits activities ≥50% of the time	291 (84.3)	360 (60.2)	<.001
Urgency at least most days	123 (35.7)	135 (22.6)	<.001
Fecal incontinence at least once a wk	71 (20.6)	71 (11.9)	<.001
IBS-QOL score	41.7 (22.0)	57.5 (21.1)	<.001
EQ-5D-5L score	0.48 (0.31)	0.68 (0.23)	<.001
HADS-A categories			
Normal	72 (20.9)	219 (36.6)	
Borderline	72 (20.9)	152 (25.4)	
Abnormal	201 (58.3)	227 (38.0)	<.001
HADS-A score	11.6 (4.8)	9.4 (4.5)	<.001
HADS-D categories			
Normal	157 (45.5)	399 (66.7)	
Borderline	81 (23.5)	106 (17.7)	
Abnormal	107 (31.0)	93 (15.6)	<.001
HADS-D score	8.7 (4.6)	6.1 (4.0)	<.001
PHQ-12 severity			
Minimal	9 (2.6)	56 (9.4)	
Low	53 (15.4)	199 (33.3)	
Medium	135 (39.1)	244 (40.8)	
High	148 (42.9)	99 (16.6)	<.001

Table 3. Continued

	Met Rome IV criteria but not Rome V criteria (n = 345)	Met Rome V criteria (n = 598)	*P* value[a]
PHQ-12 score	11.6 (4.4)	8.7 (3.9)	<.001
VSI score	55.8 (15.5)	44.8 (17.2)	<.001
WPAI:IBS			
Any IBS-related absenteeism	76 (37.4)	73 (19.5)	<.001
Any IBS-related presenteeism	168 (89.8)	278 (78.3)	<.001
Any IBS-related work impairment	174 (85.7)	281 (74.9)	.003
Any IBS-related activity impairment	325 (94.2)	504 (84.3)	<.001
Annual IBS-related direct costs, £*UK*[b]	759 (116)	342 (766)	<.001

NOTE. Data are presented as number (%) or mean (standard deviation).
HADS, Hospital Anxiety (A) and Depression (D) Scale; IBS, irritable bowel syndrome; IBS-SSS, Irritable Bowel Syndrome Severity Scoring System; IBS-QOL, Irritable Bowel Syndrome–Quality of Life; PHQ-12, Patient Health Questionnaire-12; UK, United Kingdom; VSI, Visceral Sensitivity Index; WPAI-IBS, Worker Productivity Activity Index–Irritable Bowel Syndrome.
[a]*P* value for independent samples *t* test for continuous data and Pearson χ^2 for comparison of categorical data.
[b]£1 = $1.34.

symptom severity, and psychological symptom reporting between individuals who met the Rome V and the Rome III criteria.

The Stability of Irritable Bowel Syndrome Symptoms According to the Rome III, IV, and V Criteria in a Sensitivity Analysis

Among 604 (47.3%) individuals followed up successfully at 12 months, 603 provided complete Rome III, IV, and V symptom data. Of these, 469 (77.8%) still met 1 or more of the 3 different criteria for IBS at follow-up. Among 296 individuals meeting the Rome V criteria at baseline, 186 (62.8%) still met the Rome V criteria at 12 months, and among 307 not meeting the Rome V criteria at baseline, 103 (33.6%) met the Rome V criteria at 12 months (Kappa = 0.29). Among 480 individuals meeting the Rome III criteria at baseline, 402 (83.8%) still met the Rome III criteria at 12 months, and among 122 not meeting the Rome III criteria at baseline, 62 (50.8%) met the Rome III criteria at 12 months (Kappa = 0.31). Finally, among 352 individuals meeting the Rome IV criteria at baseline, 259 (73.6%) still met the Rome IV criteria at 12 months, and among 251 not meeting the Rome IV criteria at baseline, 81 (32.3%) met the Rome IV criteria at 12 months (Kappa = 0.41).

Discussion

In this large, community-based study of over 1200 individuals who self-reported IBS, between 50% and 70% met the Rome V criteria, depending on the definition used. This compares with almost 60% who met the Rome IV criteria, with its more stringent requirements for defining IBS, and almost 80% with the Rome III criteria. Although very few of those with Rome V IBS in our main and sensitivity analyses did not meet the Rome IV or III definitions, agreement between the Rome V criteria and their 2 predecessors varied from slight to substantial. There were significant differences in demographic, lifestyle, and clinical characteristics of IBS between both the Rome III and IV groups, in comparison with the Rome V group. Individuals with Rome V IBS were less likely to report severe symptoms compared with Rome IV IBS, and compared with Rome III IBS in our sensitivity analysis, including lower IBS symptom severity, urgency, fecal incontinence, absenteeism, presenteeism, work impairment, and activity impairment, and higher quality of life. The degree of psychological comorbidity was also lower in those with Rome V IBS. Finally, individuals with Rome V and III IBS were less stable than those with Rome IV IBS during longitudinal follow-up.

To our knowledge, this study represents the first characterization of people self-reporting a diagnosis of IBS in the community and meeting the Rome V criteria. Understanding the epidemiology of this group is particularly important because many people with IBS will never present for care,[12] despite the impact of symptoms on quality of life, psychological health, work, and activities of daily living. Based on the comparisons of IBS symptom severity and psychological comorbidity across the 3 sets of criteria, individuals with Rome V–defined IBS may be more representative of a community population than clinical cohorts derived from tertiary care centers. Interestingly, the findings are consistent with our group's previous assessment of Rome V IBS in a secondary care population.[18] In that study, the mean IBS severity scores, the IBS severity categories, and the levels of psychological comorbidity were comparable between that cohort and the current

study. Similarly, both measures of IBS severity and psychological comorbidity were significantly higher in those with Rome IV–defined IBS, compared with Rome V–defined IBS. Previous studies comparing people meeting the Rome III criteria with those meeting the Rome IV criteria reported similar differences to the ones described between the Rome V criteria and the Rome III and IV criteria here.[11,19,20]

Our findings have implications for clinical practice; 30%–50% of people who believe they have IBS will not meet the Rome V criteria, yet it is likely that many would still be felt to have IBS by a clinician. The shift in definition could impact the applicability of clinical trial results enrolling patients with Rome V–defined IBS to routine practice. Such mismatches between clinical trial patients and real-world populations with IBS have been observed with previous iterations of the Rome criteria.[21] In terms of symptom stability, 80% of those with Rome III–defined IBS still met the Rome III criteria, and almost three-quarters of those meeting the Rome IV criteria still met the Rome IV criteria at 12 months. This is comparable with another longitudinal follow-up study of people with IBS in the community.[22] A diagnosis of Rome V IBS appeared relatively stable, with almost 80% still meeting the Rome V criteria at 12-month follow-up in our main analysis.

Another perspective is that the 30%–50% or more of people who did not have IBS according to the Rome V criteria in this study were falsely labeled as having IBS by either self-diagnosis or based on clinician opinion, when instead they had another DGBI, such as functional diarrhea, chronic constipation, or functional abdominal bloating. The tendency to mislabel other DGBIs or medically unexplained gastrointestinal symptoms as IBS is a well-known phenomenon.[23–25] We found people with Rome V IBS to have significantly less severe disease, with a reduced impact on daily living, and lower levels of psychological comorbidity relative to Rome III or IV IBS. Thus, an advantage of using the Rome V criteria in clinical trials could be that they better reflect the type of patients with IBS presenting in primary and secondary care. The severity of Rome IV–defined IBS may have decreased the apparent efficacy of dietary interventions, drugs, or brain–gut behavioral treatments.[26]

Strengths of this study include the use of a large sample of people self-identifying as having IBS in the community, and hence who are more generalizable to a typical IBS population in the United Kingdom. Prior studies comparing previous versions of the Rome criteria recruited patients from secondary and tertiary care, who are likely to be less representative of the typical person with IBS in the community. Additionally, because of the overlap of questionnaire items, we could apply the Rome III, IV, and V IBS criteria simultaneously, allowing between-definition comparisons. In addition to simultaneous application of multiple iterations of the Rome criteria, we collected comprehensive data on disease severity, work and activity impairment, health care resource utilization, and psychological comorbidity, allowing careful characterization of individuals according to each definition.

Important limitations include the potential for selection bias from using an online questionnaire. We may have recruited a more motivated group of people with self-identified IBS with internet access and the willingness to complete comprehensive questionnaires. The study cohort was predominantly female and White Caucasian. Thus, it is likely we did not capture under-represented groups of people with IBS. Nevertheless, we believe that an online questionnaire represents one of the best ways to recruit a representative community sample without the biases of including secondary and tertiary referral populations. We used the Rome III and IV questionnaires side-by-side and these, for the most part, captured the symptom items used to define the Rome V criteria. However, there is the possibility that the differences in wording between the Rome V and the Rome IV criteria in how continuous pain is defined, “continuous or almost continuous” in the Rome IV criteria, which we applied, vs the more restrictive “continuous throughout the day” with the Rome V criteria, may have altered the characteristics of those meeting the Rome V criteria in this population. Finally, although IBS is defined by clinical criteria and limited investigation,[27] we cannot exclude the possibility that some individuals did not have an alternative, organic gastrointestinal disease such as bile acid diarrhea, celiac disease, or inflammatory bowel disease.

Conclusions

In conclusion, application of the Rome V criteria alters the characteristics of the population with IBS in the community, identifying a perhaps less severely affected group than that defined by either the Rome III or IV criteria, and omitting 30%–50% of individuals with self-reported IBS from the diagnosis. They are, therefore, less restrictive than their predecessor, the Rome IV criteria, but more restrictive than the Rome III criteria. Although the greatest degree of overlap would be expected between the Rome III and the Rome V criteria, given the similarities between them, 10%–40% of people with Rome III IBS did not meet the Rome V criteria. In the vast majority, this was because they reported continuous abdominal pain. These findings underscore that diagnostic criteria are not merely semantic, but shape the demographics, epidemiology, and severity of IBS, both in clinical practice and research. As the Rome V criteria become adopted more widely, consideration will be needed to understand how these changes influence case identification, patient expectations, and the generalizability of prior clinical trial data. Future work should focus on validating Rome V–defined IBS across diverse populations and determining whether therapeutic response, health care utilization, and long-term outcomes differ meaningfully from those observed with earlier iterations of the Rome criteria.

Supplementary Material

Note: To access the supplementary material accompanying this article, visit the online version of *Clinical Gastroenterology and Hepatology* at www.cghjournal.org, and at http://doi.org/10.1016/j.cgh.2026.07.022.

References

1. Sperber AD, Bangdiwala SI, Drossman DA, et al. Worldwide prevalence and burden of functional gastrointestinal disorders, results of Rome Foundation Global Study. Gastroenterology 2021;160:99–114.
2. Ford AC, Sperber AD, Corsetti M, et al. Irritable bowel syndrome. Lancet 2020;396:1675–1688.
3. Holtmann GJ, Ford AC, Talley NJ. Pathophysiology of irritable bowel syndrome. Lancet Gastroenterol Hepatol 2016;1:133–146.
4. Dixon-Woods M, Critchley S. Medical and lay views of irritable bowel syndrome. Fam Pract 2000;17:108–113.
5. Drossman DA, Thompson WG, Talley NJ. Identification of subgroups of functional gastrointestinal disorders. Gastroenterol Int 1990;3:159–172.
6. Corsetti M, Shin A, Lacy BE, et al. Bowel disorders. Gastroenterology 2026;170:1261–1282.
7. Mearin F, Lacy BE, Chang L, et al. Bowel disorders. Gastroenterology 2016;150:1393–1407.
8. Longstreth GF, Thompson WG, Chey WD, et al. Functional bowel disorders. Gastroenterology 2006;130:1480–1491.
9. Black CJ, Yiannakou Y, Houghton LA, et al. Epidemiological, clinical, and psychological characteristics of individuals with self-reported irritable bowel syndrome based on the Rome IV vs Rome III criteria. Clin Gastroenterol Hepatol 2020;18:392–398.
10. Palsson OS, Whitehead W, Tornblom H, et al. Prevalence of Rome IV functional bowel disorders among adults in the United States, Canada, and the United Kingdom. Gastroenterology 2020;158:1262–1273.
11. Vork L, Weerts Z, Mujagic Z, et al. Rome III vs Rome IV criteria for irritable bowel syndrome: a comparison of clinical characteristics in a large cohort study. Neurogastroenterol Motil 2018;30.
12. Spiller R, Aziz Q, Creed FEA, et al. Guidelines on the irritable bowel syndrome: mechanisms and practical management. Gut 2007;56:1770–1798.
13. Goodoory VC, Guthrie EA, Ng CE, et al. Factors associated with lower disease-specific and generic health-related quality of life in Rome IV irritable bowel syndrome. Aliment Pharmacol Ther 2023;57:323–334.
14. Goodoory VC, Ng CE, Black CJ, et al. Willingness to accept risk with medication in return for cure of symptoms among patients with Rome IV irritable bowel syndrome. Aliment Pharmacol Ther 2022;55:1311–1319.
15. Goodoory VC, Ng CE, Black CJ, et al. Direct healthcare costs of Rome IV or Rome III-defined irritable bowel syndrome in the United Kingdom. Aliment Pharmacol Ther 2022;56:110–120.
16. Goodoory VC, Ng CE, Black CJ, et al. Impact of Rome IV irritable bowel syndrome on work and activities of daily living. Aliment Pharmacol Ther 2022;56:844–856.
17. Palsson OS, Lacy BE, Benninga MA, et al. Development of the Rome V diagnostic questionnaires. Gastroenterology 2026;170:1408–1416.
18. Staller K, Goodoory VC, Khasawneh M, et al. The Rome V criteria for the diagnosis of irritable bowel syndrome in secondary care: a diagnostic accuracy study. Lancet Gastroenterol Hepatol 2026;11:812–820.
19. Aziz I, Tornblom H, Palsson OS, et al. How the change in IBS criteria from Rome III to Rome IV impacts on clinical characteristics and key pathophysiological factors. Am J Gastroenterol 2018;113:1017–1025.
20. Bai T, Xia J, Jiang Y, et al. Comparison of the Rome IV and Rome III criteria for IBS diagnosis: a cross-sectional survey. J Gastroenterol Hepatol 2017;32:1018–1025.
21. Bijkerk CJ, Muris JW, Knottnerus JA, et al. Randomized patients in IBS research had different disease characteristics compared to eligible and recruited patients. J Clin Epidemiol 2008;61:1176–1181.
22. Barberio B, Houghton LA, Yiannakou Y, et al. Symptom stability in Rome IV vs Rome III irritable bowel syndrome. Am J Gastroenterol 2021;116:362–371.
23. Camilleri M. Irritable bowel syndrome: how useful is the term and the 'diagnosis'? Ther Adv Gastroenterol 2012;5:381–386.
24. Loosen SH, Kostev K, Jordens MS, et al. Overlap between irritable bowel syndrome and common gastrointestinal diagnoses: a retrospective cohort study of 29,553 outpatients in Germany. BMC Gastroenterol 2022;22:48.
25. Sciume GD, Berti G, Lambiase C, et al. Misinterpreting diarrhea-predominant irritable bowel syndrome and functional diarrhea: pathophysiological highlights. J Clin Med 2023;12:5787.
26. Goodoory VC, Houghton LA, Yiannakou Y, et al. Natural history and disease impact of Rome IV Vs Rome III irritable bowel syndrome: a longitudinal follow-up study. Clin Gastroenterol Hepatol 2022;20:569–577.e3.
27. Vasant DH, Paine PA, Black CJ, et al. British Society of Gastroenterology guidelines on the management of irritable bowel syndrome. Gut 2021;70:1214–1240.

Correspondence
Address correspondence to: Christopher J. Black, MBBS, PhD, Leeds Gastroenterology Institute, Room 129 4th Floor, Bexley Wing, St. James's University Hospital, Beckett Street, Leeds LS9 7TF, United Kingdom. e-mail: christopher.black3@nhs.net.

Acknowledgments
The authors are grateful to the participants who gave their time freely to answer our questionnaire.

CRediT Authorship Contributions
Kyle Staller (Conceptualization: Equal; Writing – original draft: Lead)
Vivek C. Goodoory (Conceptualization: Equal; Data curation: Lead; Writing – review & editing: Equal)
Cho Ee Ng (Conceptualization: Equal; Data curation: Supporting; Writing – review & editing: Equal)
Alexander C. Ford, MBChB (Conceptualization: Equal; Formal analysis: Lead; Investigation: Equal; Methodology: Equal; Project administration: Equal; Writing – original draft: Supporting; Writing – review & editing: Equal)
Christopher J. Black (Conceptualization: Equal; Investigation: Equal; Methodology: Equal; Project administration: Equal; Writing – review & editing: Equal)

Conflicts of interest
This author discloses the following: Kyle Staller has received research support from Ardelyx; is on the advisory board for Mindset Health; and has served as a consultant to AbbVie, Ardelyx, Atmo, Laborie, Salix, and Takea. The remaining authors disclose no conflicts.

Funding
This study was funded by unrestricted research monies provided by Tillotts Pharma UK Ltd. The funder had no input into the concept, design, analysis, or reporting of the study.