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Heterogeneity of definition of upper gastrointestinal tract in different guidelines of Crohn's disease: A scoping review

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Abstract

Crohn's Disease (CD) can affect any part of the gastrointestinal (GI) tract, including the upper GI tract (UGIT). However, the definitions and classifications of upper GI CD (UGICD) vary. We conducted a scoping review to explore how UGIT and UGICD are defined and to assess the heterogeneity of these definitions in published CD guidelines, aiming to inform future initiatives for harmonizing definitions. We conducted a search of MEDLINE and Embase for English-language guidelines on CD that mentioned upper GI-related terms in the titles, abstracts, or keywords from inception until 26 July 2024. Definitions of UGIT and UGICD were summarized descriptively. Of 1132 citations, only 19 records met our inclusion criteria. Only eight were identified as CD guidelines. None of them focuses on UGICD. Among these, five diagnostic guidelines explicitly mentioned "upper GI" in their abstracts. Only the joint European Crohn's and Colitis Organisation and European Society of Gastrointestinal and Abdominal Radiology guidelines clearly defined the UGIT. Most guidelines mentioned UGI terms related to upper endoscopy or biopsy only. It was unclear whether these guidelines typically included the esophagus, stomach, and duodenum in the definition of UGICD while excluding the distal small intestine. Although the latest guideline related to pediatric-onset IBD cited the 2011 Paris classification, none of the three guidelines published after that explicitly mentioned the proposed subdivided location of the upper disease. There is a lack of consistent reporting in defining UGICD according to disease location. It is unclear whether there is a consensus on excluding the small intestine beyond the duodenum. Additionally, there is no indication that the subdivided location of UGIT was considered in CD guideline development. Greater consistency in definitions would aid in diagnosis, clinical care, epidemiological research and inclusion into clinical trials. These findings underscore the need for developing a framework to standardize the classification of UGICD, especially for clinical trials.

KEYWORDS
Crohn's disease, definitions, duodenum, guidelines, inflammatory bowel disease, small intestine, upper gastrointestinal tract

INTRODUCTION

Crohn's Disease (CD) is a heterogenous condition with multifactorial etiology that can involve the gastrointestinal (GI) tract anywhere from the mouth to the anus, typically with discontinuous and transmural inflammation. While the predominant disease location is in the ileum and colon, changes in the upper GI tract (UGIT) can occur and were first described by Gottlieb and Alpert in 1937.[1] Since the evolution of endoscopy, involvement of the esophagus/stomach/duodenum has been reported to have a prevalence of up to 5% in symptomatic adult CD patients. However, the true prevalence may be higher since upper endoscopy is not routinely performed in adults with CD, unlike in the pediatric setting.[2,3] In two recent meta-analyses, the prevalence of upper GI CD (UGICD) was reported to be present in 13%–15%.[4,5] The recognition of pediatric CD involving the UGIT has grown due to the implementation of routine upper endoscopy with biopsies and the enhanced accessibility of small intestine evaluation.[6]

One of the challenges in describing the epidemiology and management strategies for UGICD is heterogeneity in disease definitions according to location. UGICD could describe disease only affecting the esophagus, stomach and duodenum; alternatively, it could describe any active disease anywhere proximal to the distal ileum. However, the latter may be too broad a definition, especially since the disease phenotype and prognosis vary according to location. For example, CD affecting the esophagus, stomach and duodenum is more likely to present at a younger age and less likely to require surgery.[3] Conversely, CD affecting the jejunum is more likely to present with a stricturing disease phenotype and require surgical resection.

The Vienna classification of CD developed by Gasche and colleagues in 2000 classified involvement of the UGIT at any segment proximal to the lower ileum.[7] In the subsequent Montreal classification developed by Satsangi and colleagues in 2006,[8] the location in the UGIT (L4) was considered a modifier of the disease and may or may not be associated with other locations (L1–L3). However, given the differing prognosis of patients with disease confined the esophagus/stomach/duodenum compared to the more distal small intestine, it may be more intuitive to adapt the Montreal classification in adults to subdivide the L4 location into (a) proximal to the ligament of Treitz and; (b) below the Treitz ligament until proximal to the distal third of the ileum, as is done in the pediatric population, outlined in the Paris Classification in 2011.[9]

The varied definitions and classifications of UGICD complicate its management. Due to the lack of consensus on UGICD definitions in the literature, we aimed to perform a scoping review and summarize definitions in published CD guidelines or consensus statements. Specifically, we focused on how upper GI was defined, whether the definitions were heterogeneous, and provided recommendations for future research in this area.

METHODS

We performed a scoping review following the Joanna Briggs Institute guidance for scoping reviews,[10,11] and the Preferred Reporting Items for Systematic Reviews and Meta-analysis extension for scoping reviews (PRISMA-ScR) (Figure S1).[12]

We conducted a literature search for fully published English-language guidelines or consensus statements/exercises that focused on CD in MEDLINE and Embase (via Ovid) from inception to 26 July 2024, by applying a validated filter for guidelines (search strategy in Figure S2). We were aware of the very large number of CD guidelines in the literature (over 1000 potential records in our preliminary search for CD guidelines at the protocol stage), making it infeasible to screen all CD guidelines for statements related to UGICD and the definition of UGICD. It is a common practice to screen a sample of guidelines in scoping reviews of guidelines.[13] Instead of using a random sampling of guidelines we elected to limit the search of CD guidelines to records that mentioned "(upper gastro* or upper GI or UGI or esophag* or oesophag* or stomach or gastric* or duoden*)" in titles, abstracts, or keywords. Our aim was to study how these guidelines defined UGI if they mentioned these terms in the three commonly searchable syntax fields. Our search was not limited to diagnostic or intervention guidelines or consensus.

References were imported into Covidence (https://www.covidence.org/); each record was screened independently by two authors that randomly assigned by Covidence. Consensus was discussed with conflict resolved.

Records that were not guidelines or guidelines not focused on inflammatory bowel disease (IBD) were excluded at the abstract screening stage. We reviewed the full text of all identified IBD guidelines. No IBD guideline was excluded based solely on titles and abstract screening.

A data extraction form was developed and tested at the protocol stage. Data extracted included the organization that developed the guideline, publication year, topic area (diagnostic or therapeutic), age group (children or adults), quotes of UGI terms in the abstract, and definitions of UGICD in the main text. Reasons for excluding guidelines are reported in a Supporting Information S1. Data were extracted independently by two authors, with conflicts resolved through discussion. We summarized the definitions of UGICD in selected guidelines descriptively. No statistical analysis was performed.

Since we only aimed to explore the definitions of UGICD in the published guidelines, we did not conduct a critical appraisal of the quality of the guidelines nor compare their recommendations in other aspects. We did not register a protocol. However, an internal protocol was developed prior to developing the search strategies and the data extraction form.

RESULTS

In the literature search of fully published English-language guidelines or consensus statements, 1132 records were potential CD-related guidelines. Among them, only 29 mentioned terms related to UGI in titles, abstracts, or keywords (Figure S2). After removing 10 duplicates, 19 unique records were assessed for eligibility. 11 records were excluded due to not guidelines ($n = 9$) or guidelines not focused on IBD ($n = 3$) (Table S1). We reviewed eight full records for CD guidelines or consensus statements.

We further excluded two IBD guidelines that were not related to UGICD, although they mentioned "upper GI" in the abstract.[14,15] They focused on the use of video capsule endoscopy to investigate diseases, including IBD, but no statements related to UGICD were made. Guideline statements related to CD did not mention UGI terms but did mention the small bowel. In the sentences that mentioned UGI, CD was not explicitly discussed, although capsule endoscopy is recommended after a negative upper and lower GI endoscopy.[14,15] The third excluded guideline was a consensus from an IBD working group proposing the classification of dysplasia in IBD. Although the title mentioned colorectal dysplasia, the new classification system now encompasses three broad categories and nine sub-categories: intestinal dysplasia, gastric dysplasia (tubular/villous and serrated), and mixed intestinal-gastric dysplasia.[16] While "gastric dysplasia" is noted, the authors did not define the UGIT (Table S2). In total, five guidelines or consensus that mentioned "upper GI" in the abstract were included in our scoping review (Figure S3). All five included guidelines mentioned "upper GI," but none of them mentioned "esophagus" or "duodenum" in the titles, abstracts, or keywords. None of them focused on UGI CD.

Adult-onset IBD

We reviewed and summarized the full text of the five guidelines or consensus that mentioned upper GI-related terms in the abstract published between 2005 and 2014, all of which focused on the diagnosis of IBD[17–21] (Table 1). Two guidelines included all age groups,[17,21] two focused on children and adolescents or children but from the same organization[18,22], while one was aimed at children and young adults.[20]

The sole guideline that distinctly defined the UGIT was the Joint European Crohn's and Colitis Organisation and European Society of Gastrointestinal and Abdominal Radiology evidence-based consensus guidelines.[21] This guideline aimed to establish standards for imaging in IBD using magnetic resonance imaging, computed tomography, ultrasonography (US), and other radiologic procedures for all age groups. The consensus organization identified seven main topics on the use of imaging in IBD; the second one clearly defining the UGIT as encompassing the "esophagus, stomach, [and] duodenum." The guideline featured a dedicated section for the "upper GI tract and small bowel" with the small intestine separated from the UGIT.

The second guideline for all age groups was the British Society of Gastroenterology (BSG) 2013 guideline, focusing on histopathological assessment of biopsies for IBD, divided its content into sections, one for ileal biopsy and one for upper GI biopsy. The guideline concluded that "Upper GI involvement may be more common in children than in adults." Under the upper GI biopsy section, discussions included esophageal, gastric, and duodenal biopsies for CD.[17] The authors reported that "Upper GI inflammation may raise the possibility of a new diagnosis of CD but is rarely diagnostic in isolation. ulcerative colitis (UC) should not be diagnosed on the basis of upper GI tract abnormalities." The BSG guidelines recommendations regarding upper GI biopsies in IBD suggest that upper GI involvement by CD is considerably more frequent than involvement by UC. In the setting of IBD, upper GI granulomas strongly favor CD over UC. This guideline did not clearly define UGIT or UGICD.

Pediatric-onset IBD (PIBD)

A guideline from the European Society for Paediatric Gastroenterology Hepatology and Nutrition (ESPGHAN) for the diagnosis of IBD in children and adolescents proposed the Porto criteria in 2005[18] and then presented an update in 2014.[22] In the 2005 guideline, although some statements mentioned upper endoscopy without a clear definition of UGIT, we could not deduce the definition of UGICD from recommendations to perform endoscopy or descriptions of endoscopic findings: "Upper endoscopy is advocated in all children irrespective of the presence or absence of upper gastrointestinal symptoms. Thus, gastric or duodenal pathology such as ulcers may be identified and biopsies can be obtained." "All patients have to undergo endoscopic evaluation (ileocolonoscopy and upper gastrointestinal endoscopy)."

In the 2014 updated version for Pediatric-onset IBD (PIBD), no clear UGIT or UGICD definition is noted. In the abstract, the guideline "Recommend upper GI endoscopy and ileocolonscopy for all suspected patients with PIBD with small bowel imaging by MR enterography or wireless Capsule Endoscopy" This guideline mentioned the Paris classifications for CD, which was published before the guideline in 2011 by the same authors as indicated in our introduction, when discussing the diagnosis of CD: "Typical features of pediatric CD have been fully described in the Paris classification," followed by the table of "Macroscopic and microscopic features of untreated pediatric luminal C," without any terms related to UGICD. It is noted that this guideline did not mention the subdivided location of the upper disease "as L4 location into (a) proximal to the ligament of Treitz and; (b) below the Treitz ligament until proximal to the distal

TABLE 1 Key information of IBD guidelines or consensus statements included in the scoping review (n = 5).

Authors year	Organization	Topic area	Age group	Quotes of upper GI terms in the abstract	Whether defined UGIT or UGIB, and quotes of upper GI terms in the main text
Levine 2014[22]	ESPGHAN/ Revised porto criteria	Diagnosis/PIBD	Children and adolescents	"Recommend **upper GI endoscopy** and ileocolonscopy for all suspected patients with PIBD, with **small bowel** imaging by MR enterography or wireless Capsule Endoscopy"	Did not clearly define UGIT or UGICD, but cited the Paris classification for PIBD The authors also stated the diagnostic yield of an **upper EGD** with multiple biopsies to diagnose CD in patients with an otherwise normal workup (ileocolonoscopy and small bowel imaging) is ~7.5% (number needed to treat = 13) When discussing the diagnosis of CD: "Typical features of pediatric CD have been fully described in the Paris classification," but did not mention the subdivided location of the upper disease proposed in the Paris classification for PIBD
Panes 2013[21]	Joint ECCO and ESGAR	Diagnosis/ assessment/ IBD	All age groups	"...for different clinical situations that include general principles, **upper GI tract**, colon and rectum, perineum, liver and biliary tract, emergency situation, and the postoperative setting"	The consensus organization identified seven main topics on the use of imaging in IBD, the second one is: "**Upper GI tract (including esophagus, stomach, duodenum)**"
Feakins 2013[17]	BSG	Diagnosis/ reporting/ biopsies/IBD	All age groups	"the role of ileal and **upper gastrointestinal** biopsies"	Did not clearly define UGIT or UGICD A section for "ileal and **upper gastrointestinal** biopsies." Under the UGI biopsy section, **esophageal, gastric and duodenal biopsies** for CD were discussed. Also mentioned "**Upper gastrointestinal** inflammation may raise the possibility of a new diagnosis of CD but is rarely diagnostic in isolation. UC should not be diagnosed on the basis of **upper Gastrointestinal (GI) tract** abnormalities"
Bousvaros 2007[20]	NASPGHAN/ CCFA	Diagnosis/UC versus CD	Children and young adults	"an initial evaluation for IBD will often undergo a series of diagnostic tests, including barium **upper gastrointestinal series** with small bowel follow-through, abdominal CT, upper endoscopy, and colonoscopy with biopsies"	Did not clearly define UGIT or UGICD, In Table 7, which summarized three references of **upper endoscopic findings** in children with UC and CD, the authors listed "**esophagitis, esophageal ulcer, non-specific gastritis, duodenitis, duodenal ulcer upper GI granulomas**," but not ileitis
Escher 2005[18]	ESPGHAN/-the Porto criteria	Diagnosis/IBD	Children and adolescents	"Each child suspected of inflammatory bowel disease should undergo a complete diagnostic program consisting of colonoscopy with ileal intubation, **upper gastrointestinal endoscopy** and (in all cases except in definite ulcerative colitis) radiologic contrast imaging of the small bowel"	Did not clearly define UGIT or UGICD, Statement: "**Upper endoscopy** is advocated in all children irrespective of presence or absence of upper gastrointestinal symptoms. Thus, **gastric or duodenal** pathology such as ulcers may be identified and biopsies can be obtained." "All patients have to undergo endoscopic evaluation (ileocolonoscopy and **upper gastrointestinal** endoscopy)"

Note: No guideline or consensus mentioned terms related to esophagus or duodenum in the title, abstract or keywords.

Abbreviations: BSG, British Society of Gastroenterology; CCFA, Crohn's and Colitis Foundation of America; ECCO, European Crohn's and Colitis Organisation; EGD, esophagogastroduodenoscopy; ESGAR, European Society of Gastrointestinal and Abdominal Radiology; ESPGHAN, The European Society for Paediatric Gastroenterology Hepatology and Nutrition; NASPGHN, North American Society for Pediatric Gastroenterology, Hepatology; PIBD, pediatric-onset inflammatory bowel disease; SAR-AGA, Society of Abdominal Radiology-American Gastroenterological Association; UC, ulcerative colitis; UGIB, upper gastrointestinal bleeding.

third of the ileum" that was proposed in the Paris classification for PIBD.[9]

The last guideline mentioning the UGIT was from the North American Society for Pediatric Gastroenterology and Hepatology and Crohn's and Colitis Foundation, proposing differentiation in the diagnosis of UC from CD for children and young adults. The guideline did not clearly define UGICD, although in a table that summarized three references of upper endoscopic findings in children with UC and CD, the authors listed "esophagitis, esophageal ulcer, non-specific gastritis, duodenitis, duodenal ulcer upper GI granulomas." The questions in the proposed algorithm to assist clinicians in differentiating UC from CD, including the upper GI series demonstrated "a normal caliber ileum with a widely patent ileocecal valve." suggesting probable UC with backwash.[20]

DISCUSSION

In this review of 5 guidelines or consensus documents, we found a lack of a clear definition of UGICD. Even among the five guidelines that explicitly mentioned "upper GI" or "upper GI" in the abstract, most did not provide clear definitions. It is not clear whether the definition of UGICD only involves the esophagus, stomach and duodenum; or includes the small intestine beyond the duodenum. There are insufficient data for us to discuss whether there is heterogeneity in UGICD definitions. While the widely used Montreal[8] and Vienna[7] classifications for CD typically include the esophagus, stomach, and duodenum in the UGIT, the rising prevalence of "small intestinal CD" complicates matters.[23–25] It remains uncertain in clinical practice whether the "upper" GI encompasses solely the esophagus, stomach, and duodenum up to the duodenojejunal junction, and whether disease in the jejunum and proximal ileum should be considered a distinct entity or belong to the broad classification of UGICD. In three guidelines that published after the Paris classification in 2011, none of them explicitly mentioned the proposed subdivided location of the upper disease.

In addition, a clear difference in approach between the pediatric and adult populations emerges regarding the role of gastroscopy with biopsies at diagnosis. CD can affect any part of the GI tract. Generally, when the UGIT is involved in CD, there is often concurrent involvement of the lower GI tract. UGIT predominant CD presents challenges, often exhibiting non-specific symptoms that can lead to delayed diagnosis. A study suggested that the absence of UGI lesions (ulcers and erosion in the antrum, and erosion and notched signs in the duodenum) at diagnosis was significantly associated with a favorable 10-year disease course, without the need for bowel resection or anti-TNF treatment.[26] Conversely, a consensus statement indicated that UGI disease and esophageal involvement were not significant risk factors for predicting surgery, while the presence of small intestine disease (isolated or combined with colonic disease) increased the risk of surgery.[27] A standardized definition of UGICD is essential not only for accurately assessing disease incidence and prevalence but also for guiding optimized diagnostic and therapeutic approaches.

A previous study showed that upper involvement in pediatric-onset CD patients presents a more severe disease. This impact is substantial, as at least half of pediatric-onset CD patients have an UGI localization.[28] A recent study included 102 patients with CD and 96 with UC aged 2–17 years who had both upper and lower endoscopy at diagnosis with biopsy specimens taken from the duodenum, gastric antrum and body, esophagus, terminal ileum, and colon; the results revealed that the UGIT macroscopic changes were common in pediatric IBD, especially in CD.[29] Patients with acute inflammation of the UGIT were significantly more common in CD (61.8%) than in UC (46.8%). Most frequently involved gastric antrum (46.1%), gastric body (28.3%) and least often in the duodenum (14.7%) and esophagus (7.8), with acute deep inflammation only found in 6% of patients with CD. Similarly, patients with chronic inflammation of the UGIT were also significantly more common in CD (88.2%) than patients with UC (62.5%). And most commonly involved gastric antrum (76.5%), gastric body (61.8%) and least often in the duodenum (25.5%) and esophagus (24.6%), with chronic deep (42%), superficial (60%), and diffuse inflammation (50%) were more common in patients with CD than UC.[29]

In pediatric patients with CD, accurate phenotype classification is essential for risk stratification. UGI involvement is more prevalent in pediatric CD than in adults,[6,30] with at least half of pediatric-onset CD patients exhibiting UGI involvement.[28] This increase in reported UGICD prevalence is likely in part attributable to the ESPGHAN Revised Porto Criteria recommendation for routine performance of UGI endoscopy in pediatric patients suspected of IBD.[18] It also may reflect the increasing use of MR enterography and video capsule endoscopy in the evaluation of disease. While these modalities capture images from the UGIT, they lack histological assessment.[31] The Paris Classification, which was a pediatric modification of the Montreal classification for IBD, outlined L4 as isolated upper disease and further justified the need to distinguish IBD above the distal ileum as L4a (proximal to ligament of Treitz) and L4b (ligament of Treitz to above distal ileum) in children.[9] Despite this, practice guidelines for pediatric CD lack clear definitions for UGICD. This was in response to the need outlined by the NIDDK genetics consortium to distinguish the disparate disease locations included in L4.[19] Disease distribution is pertinent in pediatric IBD as significant small intestine involvement may be associated with poorer outcomes, including growth failure and stricturing disease. Of the five guidelines that mentioned "upper GI" in the abstract, three were related to pediatric CD.[18,20,22] However, none of them clearly defined UGICD, perhaps illuding to the phenotypic locations described within the Paris Classification of CD. This is important to describe further as debate exists in the literature, with some studies suggesting pediatric onset CD patients with UGIT involvement present earlier and with a more severe disease phenotype, often necessitating a more aggressive therapeutic approach[28] In the expert consensus to standardize the assessment of histological disease activity in CD, the panellists indicated that clinical trials involving children should also include biopsies from the UGIT.[32]

In adult-onset IBD, the differing prognosis of patients according to disease location is well established. For example, accruing data over the past decade including clinical phenotype, epidemiology, genetics, and gut microbiota suggest that ileal and colonic CD should be regarded as at least distinct phenotypes. However, neither clinical trials nor guidelines differentiate between small-intestinal and colonic CD for medical interventions. In a recent meta-analysis describing prevalence of adult UGICD, no significant difference was found in prevalence between studies using the Montreal classification (16%) and those using the Vienna classification (12%).[5] Interestingly, while the most common concurrent location for UGICD was the ileocolon (prevalence of 47%), isolated UGICD without lower GI involvement was less common, reported in only 29%.[5]

Our scoping review has limitations inherent in the nature of the study design. Since it is infeasible to screen the full text of all IBD guidelines that might include CD statements, we could only review guidelines that mentioned UGI terms in depth. This represents only a very small proportion of the potentially relevant literature identified using comprehensive search strategies; in particular, none of our five included guidelines was intervention guidelines for CD. Therefore, we may have not captured guidelines that clearly define UGICD if it was not reported in the title, abstract, or keywords.

We attempted to reduce sampling errors by performing a recursive search to look for relevant guidelines during the screening stage. When we encountered excluded studies indicating that UGICD definitions might be reported in the guidelines they cited, we reviewed those as well. For instance, a retrospective study was not a guideline but rather studied the inter-reader agreement of radiologists in the Society of Abdominal Radiology-American Gastroenterological Association (SAR-AGA) consensus reporting for key phenotypes at MR enterography in adults with CD. The authors reported the "presence of active bowel inflammation (stomach, proximal small bowel, ileum, colon)" in the abstract. According to a statement in the discussion, UGICD might exclude proximal small intestine disease: "The readers in our study did not describe upper gastrointestinal and proximal small bowel disease with high frequency; upper endoscopic evaluation should still be utilized in patients with CD"[33] (Table S1). We then recursively reviewed the SAR-AGA consensus recommendations in 2018, which defined key imaging features of small intestine CD and standardized terminology for reporting these findings. The SAR-AGA did not explicitly mention the UGIT although they proposed a suggested template for reporting, with the finding location defined as "Disease location (stomach, duodenum, jejunum, mid or distal ileum, terminal ileum, colon, rectum, anus)."[34,35]

After screening the 19 full papers, we also performed a recursive sampling test. We employed the machine learning function on Covidence to randomly select 35% (n = 17) of 45 potential records that mentioned "proximal colon or jejun* or ileum or ileal or small intestin* or small bowel" in the titles, abstracts, or keywords based on relevance (details not reported). After screening 17 full texts, only one guideline, the ASGE 2006 guideline, clearly defined the upper GI under the esophagogastroduodenoscopy (EGD) section: "Upper GI tract involvement (proximal to the ligament of Treitz) occurs in up to 13% of patients with CD. CD can involve the esophagus, stomach, and duodenum."[36] In the ASGE guideline, the role of EGD was evaluated. Granulomas appear more frequently in duodenal biopsy specimens than in colonic biopsy specimens. "When the upper GI tract is involved in CD, disease is usually present elsewhere, such as the terminal ileum, colon, or perianal area. Therefore, routine EGD is not recommended for all patients suspected of having CD."[36] After employing two recursive search methods, no new information was added. We are confident that our scoping review reflects the overview of the UGICD definitions reported in the published CD guidelines.

Establishing a standardized definition for UGICD in both adult and pediatric patients is essential for several reasons. First, a clear and standardized definition is critical for patients with UGICD to be included in clinical trials aimed at evaluating novel interventions targeting UGICD; a standardized definition would facilitate eligibility criteria and outcome assessment. Second, consistency in terminology ensures that clinicians can accurately identify, diagnose, and manage patients with UGICD. Third, establishing a standardized definition of UGICD is essential for improving patient outcomes by allowing for the timely initiation of appropriate treatment and monitoring strategies.

In conclusion, there is a lack of reporting in defining UGICD according to disease location in CD guidelines. This review underscores the need for the development of a framework to standardize classification for UGICD, especially for clinical trials. Achieving consensus on the definition of UGICD will require interdisciplinary collaboration and consensus-building efforts with relevant stakeholders from adult and pediatric gastroenterology, surgery, radiology, pathology, and other allied fields. Interdisciplinary collaboration and consensus-building exercises to standardize definitions, diagnosis and treatment targets for structuring CD[37] have proven successful and can serve as models for similar initiatives in UGICD.

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CONFLICT OF INTEREST STATEMENT

YY, No. RS: Has received consulting fees from Alimentiv. VS: No. ON: Has received speaker's fees from Janssen, Eli Lilly, Alfa Sigma, Ferring, Pfzer. EC: EC has received consulting/advisory board fees from Abbvie, Alimentiv Inc, Pfizer & Sanofi. EC has received an educational grant from Abbive & Pfizer. VJ: Has received has received consulting/advisory board fees from AbbVie, Alimentiv, Arena pharmaceuticals, Asahi Kasei Pharma, Asieris, Astra Zeneca, Avoro Capital, Bristol Myers Squibb, Celltrion, Eli Lilly, Endpoint Health, Enthera, Ferring, Flagship Pioneering, Fresenius Kabi, Galapagos, Gilde Healthcare, GlaxoSmithKline, Genentech, Gilead, Innomar, JAMP, Janssen, Merck, Metacrine, Mylan, MRM Health, Pandion, Pendopharm, Pfizer, Protagonist, Prometheus Biosciences, Reistone Biopharma, Roche, Roivant, Sandoz, Second Genome, Sorriso, Synedgen, Takeda,

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DATA AVAILABILITY STATEMENT

Data sharing not applicable to this article as no datasets were generated or analyzed during the current study.

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