

December 23, 2023

Dear Editorial Board Members of *World Journal of Gastroenterology*

We are sincerely grateful for your thorough consideration and review of our manuscript, "Recent Trends in the Epidemiology and Clinical Outcomes of Inflammatory Bowel Disease in South Korea, 2010–2018" (Manuscript NO.: 89751, Observational Study). We understand better the critical issues of this paper through the insightful comments of the Reviewers. We did our best to achieve the level of science that is required by the Reviewers; we have revised the manuscript according to the Reviewer's suggestions. We hope that our revised manuscript will be considered and accepted for publication in *World Journal of Gastroenterology*. We acknowledge that the scientific and clinical quality of our manuscript has been improved by the diligent efforts of the Reviewers and Editors.

The changes within the revised manuscript are highlighted in yellow color, and point-by-point responses to the Reviewers' comments are provided below.

Reviewer #1:

1) Specific Comments to Authors: 1. This study provides the latest trends in the epidemiology and clinical outcomes of inflammatory bowel disease (IBD) in South Korea, which is important for understanding the development of IBD in specific regions of Northeast Asia. Given that the incidence and prevalence of IBD is on the rise in Asian countries, this study contributes to a better understanding and response to this trend by public health policy makers and medical professionals worldwide. 2. The results of the study showed that the incidence of UC (ulcerative colitis) has continued to increase in Korea, while the incidence of CD (Crohn's disease) has stabilized since 2014. This finding may indicate differences in epidemiologic characteristics and potential risk factors for different IBD subtypes, which could be instructive for future prevention and treatment strategies. 3. The study also observed an increase in the proportion of patients using immunomodulators and biologics over time, in parallel with a decrease in the proportion of hospitalizations and surgeries. This trend may

reflect changes in IBD treatment strategies and their impact on clinical outcomes, providing valuable data for evaluating the long-term effects of new treatments. Also in this study, it was observed that the peak age of onset of ulcerative colitis (UC) has shifted to a younger age group, i.e., from patients in their 50s to those in their 20s. The trend may be related to dietary habits and lifestyle factors such as increased eating out, takeaway food, and increased consumption of coffee and sugary drinks. It may also be related to the decline in natural green spaces and increased time spent in urban living and working environments. With improvements in health care in recent decades, the rate of endoscopy among young people may have increased, thus improving the rate of early diagnosis of UC.

Author's response: We are grateful to the Reviewer for these considerate comments. We completely agree with the Reviewer's point.

2) Suggestions 1: For the definition and assessment of clinical outcomes, it is recommended that a more objective and standardized approach be used, for example, through a detailed review of medical records to identify IBD-related emergency room visits, hospitalizations, and surgical events.

Author's response: We agree with the Reviewer's point and appreciate the insightful comments. As the Reviewer suggested, reviewing medical records could provide a more accurate and objective assessment of clinical outcomes in IBD patients. Unfortunately, although we devised operational definitions as described in the Methods section to assess IBD-related clinical outcomes more objectively, we could not obtain individual patient identifying information needed for medical record review since NHI provides only limited information related to claims. We specified this limitation in the discussion section as follows: "Finally, although we carefully devised an operational definition of clinical outcomes to encompass IBD-related results, inherent uncertainty remained since the NHIS does not provide detailed clinical data of individual patients or information on individual identifiers." (from page 15, lines 18-20)

3) Suggestions 2: For a better understanding of the treatment effects of IBD, it is recommended that indicators such as disease activity and quality of life, as well as long-term follow-up data, be included in future studies to assess the impact of treatment strategies on patients' long-term health.

Author's response: We appreciate the Reviewer's valuable comment and we completely agree

ee with it. We added the following information to the research perspectives section of the article highlights: “Future studies are required to evaluate the long-term prognosis of IBD according to changes in IBD treatment medications, including indicators such as disease activity and quality of life.” (from page 17, lines 20-21)

Reviewer #2:

1) Specific Comments to Authors: excellent article. appears to be an overlap with previously published data, but has a larger window.

Author’s response: We express our sincere gratitude for the Reviewer's comment on our manuscript.

We have tried our best to answer and address all the issues raised by the Reviewers and we believe the effort was worth it. We think that the comments of the Reviewers have greatly improved the quality of our manuscript. The authors are open to and welcome any additional suggestions that may improve the quality of our manuscript. Once more, we greatly appreciate your advice and decision. We thank you in advance for your generous consideration of our manuscript.

With best regards,

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