December 14, 2023 Andrzej S Tarnawski, DSc, MD, PhD, Professor Editor-in-Chief *World Journal of Gastroenterology*

Dear Editor:

All authors would like to submit the revised manuscript entitled "Development and validation of a prediction model for early screening of people at high risk for colorectal cancer." (The manuscript NO: 88945).

We appreciate the reviewers' thoughtful suggestions and insights. The manuscript has benefited from these suggestions. Therefore, the manuscript has been adjusted, and all the necessary changes have been made in accordance with the reviewer's suggestions, which are indicated in yellow text in the revised manuscript. The responses to all comments have been prepared and attached herewith/given below, which are indicated in black text.

All authors have read and approved the final revised the manuscript.

Thank you for your consideration. We look forward to hearing from you.

Sincerely, Xiaoyu Dai, Prof. Department of Anorectal Surgery, Ningbo No.2 Hospital, Ningbo, Zhejiang, China. E-mail: daixiaoyu1968@163.com **Response to Reviewer Comments**

Review 1: Scientific Quality: Grade C (Good) Language Quality: Grade B (Minor language polishing) **Conclusion: Minor revision** Specific Comments to Authors: What is novel and significant about this study is the development of a colorectal cancer (CCR) risk prediction model. This model has the potential to revolutionize primary detection by accurately identifying groups at high risk of developing CCR. The innovation lies in the possibility for physicians to use this model to design early detection strategies specific to those at higher risk. The combination of multiple risk factors with ROC curve analysis can enhance the accuracy of early diagnosis. By establishing specific thresholds on ROC curves, physicians can more efficiently identify those who might benefit from additional tests or preventive interventions. This approach could not only enhance early detection capabilities but also contribute to the customization of prevention and treatment strategies, optimizing medical resources and improving outcomes for patients. However, it is crucial to validate these models in different populations to ensure their widespread applicability and clinical effectiveness.

Response: First of all, thank you for pointing the language issue of our manuscript and affirming the innovation and novelty of our research. Accordingly, the manuscript has been edited using a professional language editing service (recommended by the journal). The changes are indicated in yellow in the revised manuscript. As for the validation of our model in different populations, although the model was based on a large sample size, we hope the model can be applied to different populations within China according to the various geography and cultures, and populations from worldwide. Therefore, the model can be further verified. We hope that the revised manuscript meets the reviewers' expectations.

Reviewer #2:

Scientific Quality: Grade B (Very good) Language Quality: Grade A (Priority publishing) Conclusion: Accept (General priority)

Specific Comments to Authors: This is a clinically relevant topic, well written, with satisfactory methodology. Given its importance and lack of obvious flaws, should be published - accept.

Response: We appreciate your kind comment. We will continue to investigate on colorectal cancer-related diseases in the future research.