



University of Texas Rio Grande Valley
Department of Medical Education

June 06, 2026

To Whom It May Concern

REVIEW for the dissertation of Japparkulova Aigerim Bugenbaevna on the topic: "Clinical pathogenetic population features of inflammation of intestinal disease in populations of Kazakhstan", submitted for the degree of Doctor of Philosophy (PhD) in the educational program 6D110100. Doctoral student Aigerim Japparkulova has demonstrated a strong sense of responsibility in conducting research, collecting and analyzing data, and producing publications in international peer-reviewed journals to fulfill the requirements of her doctoral program.

The theoretical value of the dissertation is demonstrated through a comprehensive analysis of both national and international scientific literature, which highlights the thorough knowledge of Aigerim Japparkulova of the subject area. The research findings were subjected to rigorous statistical analysis and critically discussed in the context of existing scientific evidence. This comprehensive approach confirms the scientific validity of the results and supports the originality and novelty of the research.

Following a thorough statistical analysis of the data, the application of advanced research methods enabled Aigerim Japparkulova to identify important genetic patterns associated with inflammatory bowel disease (IBD). This study investigated the genetic characteristics of IBD and their potential associations with the TLR2 rs11938228 and TLR2 rs4696480 polymorphisms, as well as variants of the TNF- α and CD14 genes, in the Kazakh population. These findings demonstrated that immunogenetic factors play a significant role in the development and progression of intestinal inflammation. Variations in the TNF- α gene were associated with enhanced proinflammatory cytokine responses, whereas polymorphisms in the CD14 gene were linked to the recognition of bacterial components of the intestinal microbiota.

M. S. Razzaque, MBBS, PhD

Professor of Medical Education,

School of Medicine, University of Texas Rio Grande Valley,

1204 W Schunior Street, Edinburg, TX 78541, USA

Tel: (956) 296 2314; e-mail: mohammed.razzaque@utrgv.edu

These genetic variations may influence susceptibility to IBD, the nature of the inflammatory response, and the clinical manifestations of the disease. Overall, the results highlight the importance of genetic factors in the pathogenesis of IBD in the Kazakh population. This dissertation therefore provides a valuable scientific foundation for the development of a comprehensive conceptual model of the pathogenesis of inflammatory bowel diseases.

Dissertation research was carried out using contemporary scientific methodologies. The substantial volume of the investigated material, the robust evidence-based research methods employed, and the rigorous statistical analysis of the obtained data confirm the validity, reliability, and scientific soundness of the results. Consequently, the scientific positions, conclusions, and recommendations formulated by Aigerim Japparkulova are well founded and adequately substantiated.

The scientific novelty, applied significance, and impactful presentations and publications of the research confirm that Aigerim Japparkulova's dissertation meets the basic requirements for a PhD degree. Therefore, it is recommended that the defense be awarded the Doctor of Philosophy (PhD) degree to Aigerim Japparkulova in the specialty in direction Medicine (6D110100 - Medicine). Thank you.

With warm regards,



M. S. Razzaque, MBBS, PhD