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**Opinion of External Scientific Consultant  
on a doctoral student's research work titled «Improvement of Pulmonology  
Services in the Republic of Kazakhstan» presented for a PhD degree (8D139) «Public  
Health» by Galiya Bazarbekova**

The relevance of the dissertation topic is well substantiated. Respiratory diseases remain a major public health burden globally and in Kazakhstan, requiring effective organization of pulmonology services, improved accessibility, and quality of care. Therefore, the study is of significant importance to modern science and healthcare practice as it addresses systemic challenges and proposes evidence-based solutions to strengthen healthcare delivery and improve population health outcomes.

During the period of scientific supervision, the doctoral candidate demonstrated a high level of academic competence, independence in research, and strong analytical thinking. The dissertation is grounded in sound scientific and methodological approaches, including principles of public health, health systems research, epidemiological analysis, and evidence-based medicine. The candidate applied appropriate quantitative and analytical methods, ensuring the reliability and validity of the findings.

The research is methodologically sound, with a clear study design, appropriate use of statistical tools, and well-structured interpretation of results. The scientific results obtained by the doctoral candidate are well substantiated, logically consistent, and supported by empirical data. The study provides a comprehensive analysis of pulmonology services and identifies key gaps and areas for improvement.

Particular attention should be given to the study's practical significance. The author provides evidence-based recommendations to strengthen healthcare delivery, improve early diagnosis and management of respiratory diseases, and enhance organizational efficiency within the healthcare system. These findings have strong potential for implementation at both regional and national levels.

The dissertation demonstrates strong structural and content integrity. It is logically organized, with a clear introduction, methodology, results, discussion, and conclusions that are coherent and interconnected.



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The doctoral candidate has made a substantial personal contribution to the research, including study design, data collection, analysis, and interpretation of results. The scope of the research is comprehensive and reflects significant independent work.

As part of the doctoral training, an international research internship was successfully organized at Marmara University (Istanbul, Türkiye) under the supervision of Prof. Dr. M. Tuncay Duruöz and me. This internship significantly contributed to the candidate's scientific competencies, international collaboration skills, and practical experience with modern research methodologies.

Throughout the research process, Galiya Bazarbekova demonstrated strong qualities as a researcher, including critical thinking, responsibility, perseverance, and the ability to apply modern scientific methods. She has acquired substantial experience conducting scientific research and analyzing data.

The dissertation is written in clear scientific language, demonstrates originality, and meets international academic standards for PhD research in public health. The objectives of the study have been fully achieved, and the conclusions are well substantiated by the results.

In conclusion, in my professional opinion, Galiya Bazarbekova has successfully completed her doctoral research and deserves to be awarded the degree of Doctor of Philosophy (PhD) under the educational program 8D139 – “Public Health.”

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