# ATTN: THE CHAIRMAN OF THE SCIENTIFIC JURY ANNOUNCED BY ORDER NO R- 109-414/25.11.2024 OF THE RECTOR OF THE MEDICAL UNIVERSITY "PROF. PARASKEV STOYANOV" OF VARNA

# STANDPOINT

by

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Concerning: The dissertation of Dr. Polina Petrova Ivanova on the topic "Postoperative Period in Rhinosurgery – Packings, Splints, Postoperative Care – Types, Necessity, Effectiveness" for the awarding of the educational and scientific degree "Doctor" in the field of higher education 7. Healthcare and Sports, professional direction 7.1. Medicine, and scientific specialty "Otorhinolaryngology" for the needs of the Department of Neurosurgery and ENT Diseases at the Medical University "Prof. Dr. Paraskev Stoyanov," Varna.

Based on Order No. R-109-414/25.11.2024 of the Rector of the Medical University "Prof. Dr. Paraskev Stoyanov," Varna, I have been appointed to prepare a standpoint (in Bulgarian and English) for the dissertation titled "Postoperative Period in Rhinosurgery – Packings, Splints, Postoperative Care – Types, Necessity, Effectiveness".

The standpoint has been prepared in accordance with the requirements of the Law for Development of the Academic Staff of the Republic of Bulgaria and the Rules for the Development of the Academic Staff at the Medical University "Prof. Dr. Paraskev Stoyanov," Varna.

### 1. Biographical Data of the Doctoral Candidate

Dr. Polina Ivanova is from the city of Dobrich. She graduated with honors from the Fourth Language High School "Frédéric Joliot-Curie" in Varna. In 2019, she completed her medical degree with distinction at the Medical University of Varna. During her studies, she actively participated as a student demonstrator at the Department of Neurosurgery and ENT Diseases, assisting with practical exercises for both Bulgarian and international students.

In 2020, after successfully passing a competitive selection, she began her specialization in ENT diseases at the ENT Department of the "St. Anna" Hospital, Varna. That same year, she won a competition for a full-time doctoral position at the Department of Neurosurgery and ENT Diseases with the dissertation topic:

"Postoperative Period in Rhinosurgery - Packings, Splints, Postoperative Care - Types, Necessity, Effectiveness"

Between 2020 and 2021, Dr. Ivanova was seconded to work as a COVID physician in the newly established COVID department at "St. Anna" Hospital, Varna. In 2022, she successfully completed a specialized course in reconstructive and aesthetic surgery of the nose and face in the Netherlands ("22nd International Course on Reconstructive and Aesthetic Surgery of the Nose and Face").

In 2023, as part of the Municipal Program "Prevention of Sleep Apnea" conducted at the ENT Department of "St. Anna" Hospital, Varna, Dr. Ivanova was appointed as the program coordinator.

She is a member of the Bulgarian Medical Association, the Bulgarian National Association of Otorhinolaryngology, Head and Neck Surgery, the European Rhinologic Society, and the Junior Confederation of European ORL-HNS. Dr. Ivanova is fluent in English and Spanish, enabling her to actively participate in international forums and stay updated on global trends in the field.

# 2. Characteristics, Scope, and Structure of the Dissertation

Dr. Polina Ivanova's dissertation is structured in compliance with the requirements of the Law for Development of the Academic Staff of the Republic of Bulgaria. The dissertation spans 125 pages, with 105 pages dedicated to the main text. It is systematically organized into six core sections: an introduction (3 pages), a literature review (39 pages), a chapter outlining objectives, tasks, hypothesis, and methodology (2 pages), results (39 pages), a discussion (10 pages), and conclusions (3 pages).

The bibliography comprises 185 references, showcasing relevant and significant studies in the field. The dissertation is further enriched with 10 tables and 56 figures, providing clear and comprehensive visual representation of the data.

### 2.1 Relevance of the Topic

The dissertation focuses on a highly relevant and practical issue within otorhinolaryngology: evaluating the effectiveness and impact of postoperative intranasal packing and splints. This topic holds particular importance due to the ongoing lack of consensus regarding the optimal materials to use during the postoperative period.

By addressing critical aspects such as patient comfort, complication prevention, and the restoration of mucociliary function, the study provides valuable insights into essential considerations in rhinological surgery. Its significance extends beyond practical medical applications, offering substantial contributions to the broader scientific community in Bulgaria and abroad.

Moreover, the topic's relevance is further underscored by the publication of a related article, "Nasal Packing in Septal Surgery: A Narrative Review," in 2023. This publication, which has already been cited 12 times, highlights the growing interest and importance of this area of research.

#### 2.2 Literature Review

The literature review in the dissertation is thorough and systematically organized, providing a detailed overview of the historical context of intranasal packing and splints, their types, and mechanisms of action. It delves into the evolution of these devices and explores contemporary trends in their use during rhinological procedures. Dr. Ivanova underscores the importance of conducting a comprehensive comparative analysis, particularly in light of the lack of consensus on the advantages and limitations of various postoperative approaches.

# 2.3 Aim and objectives

The dissertation's objective is explicitly defined: to perform a comparative analysis of different types of intranasal packing and splints, focusing on their effectiveness in preventing complications, enhancing patient comfort, and facilitating the restoration of mucociliary clearance. To achieve this, the study encompasses a systematic literature review, a clinical trial involving 98 patients, and detailed data analysis. The results are used to compare the outcomes of different approaches and form conclusions, leading to practical recommendations tailored for rhinologists in Bulgaria.

#### 2.4 Methods and Materials

The methodology of the study is rigorously defined and well-justified. The research involves 98 patients, divided into four groups based on the intranasal packings and splints used. For each group, key parameters were analyzed, including pain intensity (measured using a visual analog scale – VAS), the presence of postoperative complications (such as synechiae, infections, and secondary bleeding), also the recovery of mucociliary clearance, which was assessed using the saccharin test, and microbiology testing using a nasal swab. Statistical analysis was conducted using standard methods to determine the significance of differences between the groups, ensuring the reliability and validity of the results.

#### 2.5 Results and Discussion

The results of the study are clearly and systematically presented, with appropriate use of charts and tables to visualize the data. Dr. Ivanova demonstrates statistically significant differences in the effectiveness of the materials used. Some materials show a lower risk of complications and higher patient comfort. The analysis of the results is in-depth, and the discussion includes a critical review of the obtained data in the context of existing literature. Furthermore, the conclusions drawn are logical and align with the study's objectives and research conducted. A particularly valuable contribution of the dissertation is the clarification of the parameters affecting the restoration of mucociliary clearance and the prevention of complications.

#### 2.6 Conclusion and Contribution

Dr. Polina Ivanova's dissertation presents both scientifically applicable and original results, making a significant contribution to the field of otorhinolaryngology. The presented data and analyses align with contemporary research standards, and the conclusions are consistent with the study's findings. The author demonstrates a deep theoretical understanding, high professionalism, and the ability to conduct independent

research. The contributions of the dissertation include both theoretical and practical aspects that can be applied in clinical practice.

# **Critical Remarks**

I have no critical remarks regarding the dissertation.

# Conclusion

In light of the above, I recommend that the esteemed jury confer the academic degree of "Doctor" upon Dr. Polina Petrova Ivanova in the doctoral program in the scientific specialty "Otorhinolaryngology."

Date:14.01.2025

Signed:

Varna

Associate Professor Dr. Galen Dimitrov Shivarov, PhD

Заличено на основание чл. 5, §1, б. "В" от Регламент (ЕС) 2016/679