

REVIEW

By Prof. Dr. Plamen Georgiev Panayotov, D.M.

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Member of the scientific jury appointed by Order No. 15-05-74/18.03.2025
of the Executive Director and the Procurator of "Acibadem City Clinic Tokuda University
Hospital" JSC,
regarding the dissertation for awarding the educational and scientific degree "Doctor" on the
topic:

"CARDIAC SURGERY IN ELDERLY PATIENTS"

Dissertation author: Dr. Georgi Yosifov Vasilev

Cardiac Surgeon at "Acibadem City Clinic Tokuda Hospital", Sofia

Assistant in Cardiac Surgery at the Faculty of Medicine, Sofia University "St. Kliment Ohridski"

Scientific Supervisor: Prof. Dr. Dimitar Petrov Nikolov, D.M.

1. General Presentation of the Procedure and the Doctoral Candidate

The submitted set of materials by Dr. Georgi Vasilev, in both paper and electronic form, complies with the requirements of the Law on the Development of Academic Staff in the Republic of Bulgaria, the Higher Education Act, and the regulations of the Medical University – Sofia concerning the conditions and procedures for acquiring the educational and scientific degree "Doctor."

2. Career Profile of the Doctoral Candidate

Dr. Georgi Vasilev graduated from the Medical University of Pleven in 2009. In 2017, he obtained a specialty in cardiac surgery. Since 2022, he has been a doctoral candidate and assistant at the Department of Cardiovascular Surgery at Tokuda Hospital, Sofia. He is a member of the Bulgarian Medical Association, the Bulgarian Association of Thoracic, Cardiac and Vascular Surgery, and the Bulgarian Society of Cardiac Surgery.

The presented data demonstrate that the doctoral candidate possesses the necessary competencies for successfully developing the dissertation within the doctoral program “Cardiovascular Surgery,” professional field 7.1 Medicine.

3. Relevance of the Topic and Feasibility of the Objectives and Tasks

The topic of the dissertation is relevant and addresses a significant medical issue related to the specific challenges of cardiac surgery in elderly patients. Demographic changes and the increased average life expectancy make this topic of great importance for both medical science and practice.

4. Structure of the Dissertation

The dissertation is well-structured and meets academic standards. It consists of 125 standard typed pages, divided into 5 main chapters and a bibliography comprising 102 sources. The work is illustrated with 14 figures and 11 tables.

5. Understanding of the Problem

The literature review spans 44 pages and presents an in-depth analysis of current scientific data. The doctoral candidate clearly defines the unresolved issues and substantiates the need for conducting the dissertation research.

6. Research Methodology and Evaluation of the Dissertation

The main objective of the dissertation is:

“To analyze the experience of the Department of Cardiac Surgery at ‘Acibadem City Clinic Tokuda University Hospital,’ Sofia, in the field of cardiac surgery in patients over the age of 75, aiming to ensure success and safety of surgical procedures based on an algorithm for applying an individualized approach to elderly patients undergoing cardiac surgical interventions.”

The study includes 135 patients operated on at “Acibadem City Clinic Tokuda University Hospital” between 2019 and 2024. The investigated indicators are thoroughly described.

The doctoral candidate has presented convincing results, supported by appropriate statistical analysis. The discussion is analytical and compares the results with current scientific literature. The conclusions are clearly formulated and correspond to the set objectives and tasks.

7. Contributions and Significance of the Work

The scientific and applied contributions of the dissertation include:

- Analysis of cardiac surgery in elderly patients over 75 years of age;
- Evaluation of the main operative risks in this patient category;
- Development of an algorithm for individualized approach;
- Optimization of postoperative management.

8. Evaluation of Publications Related to the Dissertation

Two scientific articles have been published in Bulgarian journals on the dissertation topic. The number and quality of the publications are sufficient for awarding the “Doctor” degree.

9. Personal Contribution of the Doctoral Candidate

The dissertation has been independently developed by the doctoral candidate and demonstrates his competence on the topic.

10. Abstract

The abstract accurately reflects the content of the dissertation, includes the main results and conclusions, as well as the list of publications.

Conclusion

The dissertation of Dr. Georgi Yosifov Vasilev represents an in-depth study of the surgical treatment of elderly patients with cardiovascular diseases. The work has significant scientific and practical value.

Based on this, I give my positive assessment and recommend that the esteemed Scientific Jury award Dr. Georgi Yosifov Vasilev the educational and scientific degree "Doctor" in the scientific specialty "Cardiovascular Surgery."

Prof. Dr. Plamen Georgiev Panayotov, D.M.

