

To
The Chairman of the Scientific Jury,
appointed by Order No. R-109-151 of March 26, 2026,
of the Rector of MU-Varna

REVIEW

By Prof. Dr. Plamen Milchev Chernopolsky, DSc
Chairman of the Scientific Jury

Re: Procedure for the award of the educational and scientific degree “Doctor” in the specialty “Surgery,” with the dissertation topic “Surgical Diseases of the Spleen,” by candidate Dr. Vladislav Krasimirov Velikov, at MU-Varna, in the field of higher education 7. Healthcare and Sports, professional field 7.1. Medicine, specialty “Surgery”.

Information on the procedure:

In view of Report No. 102-706/March 18, 2026, by Prof. Dr. Vasil Markov Bozhkov, MD, PhD—Head of the Department of “Surgical Diseases,” pursuant to the decision recorded in Minutes No. 56/March 23, 2026, of the Faculty Council, and Report No. 103-1958/March 24, 2026, by Prof. Dr. Yoto Yotov, MD – Dean of the Faculty of Medicine at Medical University – Varna, pursuant to Article 24, paragraph 6 and Article 30, paragraph 3 of the Regulations for the Implementation of the Law on Scientific Research and Development, Article 68, paragraph 1 of the Regulations on Academic Staff at MU – Varna, I have been elected as a member of the Scientific Jury (SJ), and by Protocol No. 1 of the first meeting of the SJ, I have been elected as its chair and designated to prepare a review.

Only one candidate submitted documents for participation in the competition – Dr. Vladislav Krasimirov Velikov.

I received all the materials necessary for preparing this review in accordance with the established procedure.

My review complies with the Law on the Development of Academic Staff in the Republic of Bulgaria (LDASRB), its implementing regulations, and the regulations of MU – Varna.

Candidate's professional background:

Dr. Vladislav Krasimirov Velikov was born on December 21, 1995, in Silistra
2014–2020 – Master of Medicine, Medical University of Varna, Diploma No. 007794/November 20, 2020

January 14, 2021–present: Resident Surgeon at the Second Clinic of Surgery, “UMBAL St. Marina” EAD

2021–present: Specialization in General Surgery

Since 2021 – Assistant Professor at the Department of Surgical Diseases – Medical University of Varna and Full-time PhD student at the Department of Surgical Diseases – Medical University of Varna

Member of the Bulgarian Surgical Society (BSS) and BAMIRH.

Participation in a project – Researcher R1, Project BG16RFPR002-1.014-0002 “COMPETENCE CENTER FOR PERSONALIZED MEDICINE, 3D AND TELEMEDICINE, ROBOTIC AND MINIMALLY INVASIVE SURGERY”

Instructor for the course “Surgery” – medical students – 3rd, 4th, and 5th years, Bulgarian and English-language programs

For participation in the competition, Dr. Velikov submits the following documents:

1. Dissertation

1 copy

- 2. Abstract – Bulgarian language 1 copy
- 3. Abstract – English language 1 copy
- Exam – doctoral minimum in the field of study
- Exam – doctoral minimum in a foreign language
- List of publications
- Report on profiles in scientific databases
- Similarity report
- Articles related to the dissertation

Assessment of the relevance of the topic: Dr. Vladislav Velikov’s dissertation addresses a timely and important issue related to one of the most underestimated pathologies in abdominal surgery, which requires state-of-the-art diagnostic and treatment methods and is often associated with prolonged hospitalization and complications.

Since ancient times, the spleen has been a subject of interest due to the mysteries surrounding its existence, and to this day, it remains one of the organs about which we know the least. As far back as the time of Hippocrates, the role of the spleen has been a subject of debate; Galen referred to it as the “organ of mystery.” The development of splenic surgery, which began in antiquity with the first descriptions of splenectomy aimed at improving endurance, continued through the Middle Ages with Malpighi’s discovery of the spleen’s structure, and has reached the present day with the performance of minimally invasive and robotic procedures, reflects surgeons’ desire to save patients’ lives and improve their quality of life for those with this type of disease, as well as their utmost desire to preserve this organ in whole or in part.

Traditionally, the spleen is often surgically removed without a full understanding of the potential consequences. It is important to be familiar with the anatomical relationships and functions of the spleen, as well as the possible

complications and consequences of its removal. This dissertation provides a detailed examination of the indications for splenectomy, potential complications, and preventive measures. A patient scheduled for elective surgery must be informed of the consequences of splenectomy. Preservation of the spleen should be considered if it is safe and feasible.

The advent of laparoscopic surgery has not bypassed the treatment of splenic diseases. The conventional approach to treating these conditions has not been relegated to the background; on the contrary, it still presents new challenges, particularly for young surgeons who must become thoroughly familiar with this increasingly significant pathology. Dr. Velikov has sought to address these challenges in a comprehensive study on this topic, and I can say with full confidence that he has succeeded.

Volume and Structure: The dissertation submitted to me for review comprises 139 standard pages. It is illustrated with 81 tables, 18 figures, and 40 diagrams. The bibliography contains 288 references, of which 4 are in Cyrillic and 284 in Latin script. The material is structured in the correct sequence.

The literature review spans 31 pages and demonstrates the author's broad knowledge. It is written in a good style and language, presenting historical aspects of the treatment of spleen diseases, and providing a detailed examination of anatomy and physiology, diagnostic procedures, and methods of surgical treatment. The various nosological entities leading to surgical treatment of the spleen are examined in detail. This section demonstrates the author's ability to highlight the most essential points from the significant body of literature. The review reveals that there remains an ambiguous understanding of the issue of surgical spleen diseases in the global literature. This fact gives rise to the aim of the dissertation, namely: **“To study, analyze, and apply contemporary diagnostic and therapeutic strategies and treatment methods in patients with splenic diseases, with a view to**

optimizing outcomes and reducing complications and mortality in this patient population.”

The objective, as formulated, clearly defines the scientific and practical nature of the dissertation.

To optimally address the main objective, the author has identified six tasks, which are well defined, and the development of the dissertation follows their logical resolution.

Research methodology: The study retrospectively included 117 patients with splenic diseases who were hospitalized and operated on at the Second Department of Surgery at the University Hospital “St. Marina” during the period 2008–2023. A wide range of methods was applied to process the data:

I. Diagnostic Methods

1. Medical history and physical examination findings;
2. Laboratory tests—hematological and biochemical
3. Imaging diagnostic methods
 - Abdominal and chest X-rays
 - Ultrasound
 - Computed tomography
 - Magnetic resonance imaging
4. ASA patient assessment

II. Surgical methods.

III. Pathological and histological methods

IV. Statistical methods

- Statistical grouping of data
- Descriptive analysis
- Correlation analysis

Results obtained: The results are well presented in text form and illustrated graphically through tables and figures. The statistical analysis used is appropriate, making the discussion thorough and well organized. The advantages and disadvantages of each diagnostic and therapeutic method have been carefully analyzed. Principles for surgical treatment have been formulated with regard to diagnosis, concomitant and past illnesses, and the need for intensive care. A strength of the dissertation is the application of diverse statistical methods, through which the author presents the results in a consistent, logical, and convincing manner. The results obtained indisputably demonstrate the validity of the approach applied by the author in surgical diseases of the spleen.

Demographic, clinical, and laboratory indicators were analyzed: Demographic—47.9% women, 52.1% men, mean age 57 years. Length of hospital stay – average 12 days; diagnostic distribution of patients – notably, the predominance of patients with malignant hematological diseases – 53 (45.3%) of the patients. Blood pressure, heart rate, and laboratory values for hemoglobin, white blood cells, and platelets were recorded upon admission and discharge.

A detailed analysis was conducted of imaging methods, the need for intensive care, comorbidities, and mortality. Particular emphasis was placed on hemoperitoneum and its significance for patient survival.

Statistically significant correlations were established between the presence of hemoperitoneum and mortality, the need for intensive care, ASA classification, primary diagnosis, arterial pressure values, hemoglobin levels, gender, and survival. Statistically significant associations were also found between ASA classification and age, postoperative need for intensive care, and mortality. The author has also identified other statistically significant associations between clinical symptoms, laboratory parameters, and comorbidities, which demonstrates the comprehensiveness and thoroughness of the dissertation.

The discussion chapter includes analyses that should more appropriately have been included in the previous chapter—the results chapter—which significantly diminishes the value of this important section of the dissertation. A comparison is made between the author’s own results and those of leading surgical centers, with special attention paid to the specific characteristics of our healthcare system. It is emphasized surgical intervention should not be viewed in isolation, but as part of a comprehensive treatment process aimed at optimizing short-term and long-term outcomes for the patient. A treatment algorithm with practical application in clinical practice has been derived.

Conclusions: The author’s conclusions on the topic of the research consist of five points and are based on a comprehensive analysis of the information from the literature review, clinical data, the methods used, and the analysis and discussion of the author’s own results. They are well formulated and reflect a substantial portion of the analyzed sections. They have scientific and practical value.

Contributions: The contributions of the dissertation, as identified by Dr. Vladislav Velikov, total five, and are of a scientific, applied scientific, and confirmatory nature.

In connection with the dissertation, a list of three publications has been submitted in which Dr. Vladislav Velikov is the first author.

Abstract – well-structured in 64 pages, illustrated with figures and tables, and systematically presenting the subject matter and essence of the dissertation.

Conclusion:


I consider Dr. Vladislav Velikov’s dissertation, “Surgical Diseases of the Spleen,” to be complete, in-depth, up-to-date, well formulated, and properly structured. The objectives are clearly, precisely, and comprehensively formulated and fulfilled. The conclusions, contributions, and the proposed algorithm will be of

assistance to both hospital and ambulatory practice. The doctoral candidate has submitted all necessary documents that meet the requirements of the Law on the Development of Academic Staff of the Republic of Bulgaria and the Regulations on the Development of Academic Staff at MU – Varna for the award of the academic degree of “Doctor.

All of this gives me good reason to strongly recommend that the esteemed members of the Academic Council vote in favor of awarding Dr. Vladislav Krasimirov Velikov the academic and scientific degree of “Doctor” in the scientific specialty of “Surgery.”

April 30, 2026

Sincerely


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

Prof. Dr. Plamen Milchev Chernopolsky, DSc