

To the Chair of the Scientific Jury  
appointed by Order No. P-109-151/26.03.2026  
of the Rector of the Medical University of Varna

## **REVIEW**

by Prof. Sergey Dimitrov Iliev, MD, PhD

Dean of the Faculty of Medicine, Medical University – Pleven

Head of the Department of Propaedeutics of Surgical Diseases

Elected as a member of the Scientific Jury (Protocol No. 1/30.03.2026) on the basis of Order No. P-109-151/26.03.2026 of the Rector of the Medical University of Varna. At the first non-attendance session of the Scientific Jury, I was appointed to prepare a review of the dissertation and the abstract on the topic: **“SURGICAL DISEASES OF THE SPLEEN”** for the award of the educational and scientific degree **“Doctor”** in the higher-education area 7. Healthcare and Sport, professional field 7.1 “Medicine”, doctoral programme “Surgery”.

**Author:** Dr. Vladislav Krasimirov Velikov

**Form of doctoral studies:** full-time

**Topic:** *“Surgical Diseases of the Spleen”*

**Department:** “Surgical Diseases”, Faculty of Medicine, Medical University of Varna

**Scientific Supervisor:** Prof. Vasil Markov Bozhkov, MD, DSc

**Scientific Consultant:** Prof. Ilina Dimitrova Micheva, MD, PhD

### **Career profile of the doctoral candidate**

Dr. Vladislav Velikov was born on 21 December 1995 in the town of Silistra. In 2020 he completed his higher education at the Master’s level at the Medical University “Prof. Dr. Paraskev Stoyanov” – Varna. From 14 January 2021 to 14 January 2026 he held the position of Assistant in the Clinic of Surgical Diseases

at the Medical University of Varna. He is a specialty trainee in Surgery and conducts classes in the disciplines Fundamentals of Surgery and Surgical Diseases.

### **General description of the materials submitted**

I have been provided, in both electronic and printed form, with the dissertation and the abstract, which conform to the requirements of the Act on the Development of the Academic Staff in the Republic of Bulgaria (ZRASRB) and to the Regulations for its implementation at the Medical University of Varna. I have also been provided with electronic copies of three of the publications related to the dissertation.

**The topic** of Dr. Vladislav Krasimirov Velikov's dissertation is fully topical and suitable for a doctoral thesis. The spleen is an organ with multilayered biology and a central role in immune and haematological regulation. The diagnostic and therapeutic approach to its diseases rests on precise morphological and functional assessment, strict risk stratification, and a priority on organ preservation whenever this is feasible. Analysis of the clinical results and of the international literature underscores the importance of timely diagnosis, sound indications for surgical treatment, and interdisciplinary cooperation between surgeons, haematologists, anaesthesiologists and intensivists. The combination of accurate imaging, interdisciplinary expertise, and preventive measures against infectious and thrombotic complications is decisive for an optimal outcome across a wide range of conditions — from trauma and infarction to benign and malignant haematological disorders, systemic storage diseases, and rare structural anomalies. At present, laparoscopic and robotic surgical interventions are taking an increasingly established place in the treatment of splenic diseases, offering, in selected patients, lower operative trauma, faster recovery, and comparable therapeutic efficacy. In view of the high incidence of road-traffic trauma and the rising share of malignant and benign haematological diseases that require surgical treatment, the timeliness and relevance of the dissertation submitted to me for review are clearly demonstrated.

**The dissertation** is presented on 139 standard pages. Its main sections are as follows: Introduction – 1 page; Literature Review – 30 pages; Aim and Tasks – 2 pages; Material and Methods – 14 pages; Results – 23 pages; Discussion – 17

pages; Conclusions – 1 page; References – 14 pages; List of Publications related to the dissertation – 1 page; and Contributions of the dissertation – 1 page. The bibliography includes 288 titles, of which 4 are in Cyrillic and 283 in Latin script. The dissertation is illustrated with a total of 81 tables, 18 figures, and 40 diagrams.

Of the five contributions stated by the author, two are of an original and applied scientific character, while three are of a confirmatory character.

In the **introduction**, the doctoral candidate substantiates the medical and social significance of splenic diseases, the change in indications for splenectomy, current trends in therapeutic approaches, the increasing role of minimally invasive surgery, and the available organ-preserving therapeutic alternatives.

The **literature review** comprises six main sections containing a total of 15 subsections, in which the current state of knowledge of this pathology and the rationale for the present study are summarised. The historical background, anatomy and embryology, physiology, diagnostic methods, and the classification of surgical diseases of the spleen are described in detail, with particular attention given to post-splenectomy complications and their prevention.

**The principal aim** of the dissertation is “to study, analyse and apply contemporary diagnostic and therapeutic strategies and methods of treatment in patients with diseases of the spleen, with a view to optimising final outcomes and reducing complications and mortality in this group of patients.” The aim is clearly defined and places the emphasis on the prospects for successful and effective surgical treatment.

The six tasks set by the doctoral candidate are specific and directly linked to the stated aim. I would highlight, in particular, his ambition to refine the indications for surgical treatment and to develop a diagnostic and therapeutic algorithm for patients with diseases of the spleen.

**The clinical material** of the dissertation comprises a retrospective, analytical and cohort study of the data of 117 patients with diseases of the spleen for the period 2008–2023 inclusive. The patients were hospitalised in the Second Clinic of Surgery of the “St. Marina” University Hospital – Varna. The demographic characteristics of the patients, the diagnostic methods, the surgical methods, and the pathological-anatomical and histological methods were analysed.

The endpoints studied were postoperative mortality (early; up to the 1st, 3rd and 5th year), postoperative complications, and the need for intensive care.

The data on the indicators investigated in the dissertation were collected and processed using appropriate contemporary methods of statistical analysis applied in medical practice.

In the section “**Results**”, Dr. Vladislav Velikov analyses and illustrates the findings of his study by means of appropriate tables and figures.

The patients are stratified according to their main epidemiological characteristics (sex, age, clinical symptoms, diagnosis, and surgical treatment). The results obtained are compared with reference to the clinical diagnosis, comorbidity, severity of the clinical presentation, presence of bacterial infection, need for intensive care, postoperative complications, and patient survival.

The results obtained are comparable with those reported by leading contemporary international authors.

In the section “**Discussion**”, the candidate’s own results are compared with those reported in publications by international authors. This concerns both the preoperative aspects (diagnosis, comorbidity, high-risk patients) and the postoperative outcomes of the treatment applied.

Of note is the candidate’s reliance on a number of randomised controlled trials and meta-analyses by international authors on this specific topic. Particular attention is given to the non-operative management of splenic trauma, the various techniques of feeding-vessel embolisation, the independent predictors of failure, and rigorous management based on clinical and imaging data. A comparison is drawn between the outcomes of conventional open splenectomy and laparoscopic techniques.

In the concluding section “**Conclusions**”, five conclusions are drawn that follow logically from the overall material and its presentation, the statistical analyses performed, and the interpretation of the data. These conclusions confirm the scientific and practical value of the aim set and of the tasks defined to achieve it.

**Contributions of an original and applied scientific character and of a confirmatory character:** I accept all five contributions described by the author as significant.

**The abstract** of the dissertation is structured in accordance with the requirements. Its content corresponds fully to that of the dissertation.

**Recommendations:** I would recommend that, in his future work, the author include more publications by Bulgarian and Russian authors, who likewise make a substantial contribution to the development of contemporary surgical science.

**Conclusion:**

The dissertation of Dr. Vladislav Velikov is a thorough and in-depth study based on a substantial body of clinical material covering a fifteen-year period. It is the candidate's own personal work. The dissertation addresses a number of particularly important and topical issues related to timely diagnosis, sound indications for surgical treatment, and interdisciplinary cooperation between surgeons, haematologists, anaesthesiologists and intensivists in the treatment of the surgical pathology of the spleen. In this context, surgical intervention should not be viewed in isolation, but as part of a comprehensive treatment process aimed at optimising the short-term and long-term outcome for the patient.

On the basis of all of the above, and given the topicality and significance of the issues investigated in the dissertation, I give my fully convinced **POSITIVE** assessment, and I propose to the Esteemed Scientific Jury to vote in favour of awarding the educational and scientific degree "**Doctor**" to Dr. Vladislav Krasimirov Velikov.

3 May 2026

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**Reviewer:** /.../

Заличено на основание чл. 5,  
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(Prof. Sergey Dimitrov Iliev, MD, PhD)