

ATTN:  
THE CHAIRMAN OF THE SCIENTIFIC JURY  
AT THE MEDICAL UNIVERSITY  
'PROFESSOR PARASKEV STOYANOV'  
VARNA

## **STANDPOINT**

by

**Assoc. Prof. Dimitar Petkov Petkov, MD, PhD**  
**Head, Division of Vascular Surgery,**  
**Trakiya Hospital of Stara Zagora,**  
**Medical Faculty of Trakiya University of Stara Zagora**

of the dissertation work entitled

Delayed revascularization in patients with acute arterial ischemia of the  
extremities

of Rumen Dimitrov Runkov, MD, PhD student in the doctoral program of  
'Vascular surgery' at the Department of Cardiovascular Surgery and Angiology of  
the Medical University "Prof. Paraskev Stoyanov" of Varna

for the acquisition of the educational and scientific degree of 'doctor of  
philosophy' in the field of higher education No 7. Public health and sports,  
professional trend No 7.1. Medicine and  
scientific speciality of 'Surgery'

Adviser: Prof. Veselin Petrov Petrov, MD, PhD

According to the decision of the Scientific jury (Protocol No 1/January 20,  
2023) for the public defense of the dissertation work appointed according to  
Order of the Rector of the Medical University 'Prof. Paraskev Stoyanov' of Varna  
No R-109-14/January 12, 2023, to the Statute-book for the application of the Law

for development of the academic staff in the Republic of Bulgaria and the Statute-book for development of the academic staff in the Medical University of Varna, I am assigned to prepare the present standpoint.

The dissertation work presented by Rumen Dimitrov Runkov, MD, contains 179 standard type-written pages. Its structure contains the necessary sections and completely meets all the necessary requirements.

The dissertation is illustrated with 80 tables and 43 figures. The reference list includes 182 source titles, of which there are 7 in Cyrillic and 175 in Latin. The prevailing part of the cited sources is dated during the last several years. The PhD student has published two independent articles and one co-authored article in two Bulgarian scientific journals on the theme of the dissertation in 2022.

The dissertation work is distinguished by a considerable actuality and medico-social significance for the country. The acute arterial insufficiency of the extremities continues to be a very serious medical problem worldwide and in our country. It is mainly due to acute thrombosis, embolism or injury of these arteries and requires not only an urgent and precise diagnosis but also an adequate treatment within the shortest terms possible. Unfortunately, commonly, the performance of delayed revascularization procedures is imposed which unfavorably influences upon the postoperative results. For all that during the recent years, a considerable advance in terms of the operative treatment by using of modern and effective surgical methods was achieved.

The comprehensive review of the literature presented makes a profound analysis of the relevant publications on the theme of the dissertation.

The purpose of the dissertation work is clearly determined, namely, to study in a comparative aspect PhD student's results from the application of the early and late revascularization in the patients with acute arterial ischemia of the extremities. For its accomplishment, six main tasks are defined.

In the course of the retrospective study within a ten-year period, attention is paid to the concrete results from the operative treatment of a total of 273

patients. Of them, 102 are with thrombosis, 117 with embolism, 21 with injuries of the arteries, and 33 with amputations of the extremities. Contemporary imaging diagnostic methods such as contrast peripheral angiography, echography, and Doppler sonography are made use of. The PhD student introduces the wrist-ankle index of the arteries of the upper extremities and applies it along with ankle-brachial index of the arteries of the lower extremities when assessing the angiological status.

A special attention is devoted to the serious comorbidity among the patients covered in the dissertation work, too.

We should extraordinarily positively evaluate the multi-aspect analysis of the results obtained that is systematized in four single chapters. In a comparative plan, the results from the application of three types of operative interventions such as early revascularization with standard accesses, delayed revascularization with standard accesses and delayed revascularization with standard and distal vascular accesses.

The original algorithm elaborated for diagnostic and therapeutic behavior in the patients with acute arterial ischemia of the extremities in whom the delayed revascularization after the 10<sup>th</sup> hour from the onset of the disease is carried out represents a definite interest.

In four chapters, the results obtained by the PhD student are commented and they are juxtaposed to data from the newly-published medical literature pertaining to the theme of the dissertation work.

Five concrete conclusions are formulated in which, the main PhD student's achievements are generalized. The effectiveness and safety of the surgical methods used are outlined. Six contributions - two original scientifically applicable and four of confirmatory nature are determined.


The author's dissertation abstract presented completely meets the requirements and it exactly displays the contents of the dissertation work.

I think that that the dissertation work given for standpoint and entitled 'Delayed revascularization in patients with acute arterial ischemia of the

extremities' is an original author's elaboration. It is distinguished by a series of merits such as accuracy, thoroughness and reliability. PhD student's results are undoubted contribution to the research and practical clinical activity in vascular surgery and can be enriched in future investigations in this field. The PhD student Rumen Dimitrov Runkov, MD, has sound theoretical knowledge and professional skills in vascular surgery and with this dissertation work he proves that he can independently perform complex scientific investigations.

Proceeding from the ascertainties presented, I evaluate completely positively the present dissertation work and I would like to propose to the honoured members of the Scientific jury to award the educational and scientific degree of 'doctor of philosophy' to Rumen Dimitrov Runkov, MD.

February 15, 2023  
Stara Zagora

Standpoint prepared by:   
(Assoc. Prof. Dimitar Petkov Petkov, MD, PhD)