

# **Standpoint**

of the dissertation work and author's dissertation abstract entitled

## **Delayed revascularization in patients with acute arterial ischemia of the extremities**

presented for public defence at a Scientific jury

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'

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The standpoint is prepared by Prof. Vasil Yordanov Chervenkov, MD, PhD  
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Tokuda Hospital of Sofia

I am assigned to prepare the present standpoint according to the decision of the  
Scientific jury appointed according to Order of the Rector of the Medical University  
"Prof. Paraskev Stoyanov" of Varna No R-109-14/January 12, 2023.

The dissertation work is type-written on 179 standard pages and it is structured  
correctly as it contains all the sections inherent to a similar work. The reference list  
contains total of 182 source titles, of which there are 7 in Cyrillic. The greater part of  
the publications cited have been printed during the last three years.

The dissertation work is devoted to the topical and socially significant problem  
of the acute arterial insufficiency of the extremities presents - not only worldwide but  
also in our country. It imposes the application of increasingly newer and various  
methods of conservative and surgical treatment. In many cases, it deals with delayed  
adult patients' hospitalization. This hampers the precise diagnosis of the disease and  
reduces the therapeutic effectiveness. Nowadays not only early but also delayed



revascularization of the damaged arteries of the lower and upper extremities are made use of. When implementing the delayed revascularization, the PhD student applies not only standard but also distal vascular accesses and, in this way, he considerably enhances its effectiveness and safety. The practical diagnostic value of the introduction of the wrist-ankle index as a supplementation to the ankle-brachial index of the arteries should be outlined, too.

The review of the literature represents a good analysis of the literature and it is an appropriate basis for the substantiation of the necessity for the performance of the investigation.

The purpose is clearly presented: 'To study in a comparative aspect our results from the application of the early and late revascularization in the patients with acute arterial ischemia of the extremities'. The PhD student has formulated six tasks for the achievement of this purpose the fulfilment of which sheds light on the advantages of the delayed revascularization with standard and distal vascular accesses over the delayed revascularization with standard accesses only in the patients with acute arterial ischemia of the extremities because of thrombosis, embolism or injury hospitalized for treatment after the 10<sup>th</sup> hour from the onset of the disease.

The dissertation is completely up to standard in methodological respect.

A total of 273 patients for a 10-year period are described in the dissertation work. The own results are presented in 4 chapters. Patients' demographic characteristics are studied. The values of the wrist-ankle index of the arteries of the upper extremities and of the ankle-brachial index of the arteries of the lower extremities are followed-up prior to and following the early revascularization with standard accesses, the delayed revascularization with standard accesses only and the delayed revascularization with standard and distal vascular accesses in dependence on the cause for the damage of the arteries. The localizations of these lesions and the numerous serious accompanying diseases are analyzed.

The results achieved are juxtaposed to those published by other contemporary authors on the topic in four chapters of the section 'Discussion'.

From the investigation performed, five conclusions are formulated which correspond to the results presented.

Two scientifically applicable contributions and four contributions of confirmatory nature are presented. Based on the contents of the dissertation work and the rich professional practical experience, I accept that the contributions are PhD student's personal deed and merit and can, really, promote the further development of research related to the surgical treatment of the patients with acute arterial ischemia of the lower and upper extremities.





The author's dissertation abstract meets the requirements for volume, structure, and contents and objectively and adequately reflects the primary results and scientific contributions in the dissertation work.

The PhD student has published three scientific articles on the topic of the dissertation work in two Bulgarian journals. He is the only author of two articles and the first author of one article.

### **Conclusion**

The dissertation of Rumen Dimitrov Runkov, MD, given to me for the standpoint entitled 'Delayed revascularization in patients with acute arterial ischemia of the extremities' completely meets the requirements of the Law for development of the academic staff in the Republic of Bulgaria and of the Statute-book for its application in the Medical University 'Prof. Paraskev Stoyanov' of Varna. This is a topical, well-planned and accomplished scientific work.

Because of the aforementioned, I give completely convinced my positive evaluation of the dissertation work.

I propose to the honoured members of the Scientific jury to award the educational and scientific degree of '**doctor of philosophy**' in the scientific speciality of 'Surgery' to Rumen Dimitrov Runkov, MD.

February 16, 2023  
Sofia

Standpoint prepared by:



(Prof. Vasil Yordanov Chervenkov, MD, PhD)