## OPINION

from PROF. DR. ILIYA PETROV LOZEV, PhD of medical science

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IN CONNECTION WITH THE CONTEST for academic position "associate professor" In the field of higher education 7. "HEALTH AND SPORT" PROFESSIONAL DIVISION 7.1. "HEALTH" AND SCIENTIFIC STUDIES "VASCULAR SURGERY" FOR THE NEEDS OF THE CLINIC of Vascular Surgery, Hospital "NHH "JSC, ANNOUNCED IN SG NO. 17 ON 26.02.2021

According to the announcement, for the academic position of "Associate Professor", there is only one candidate, Dr. Nadelin Krasimirov Nikolov, MD, assistant at the Clinic of Vascular Surgery at MHAT "National Cardiology Hospital", Sofia.

Due to ORDER № 138 / 02.04.2021 of the EXECUTIVE DIRECTOR of MHAT MBAL "NHH" JSC, SOFIA I was elected as a member of the scientific jury.

The submitted documents have been prepared in accordance with the requirements of the Academic Staff Development Act in the Republic of Bulgaria, the Regulations for its implementation and the Regulations on the terms and conditions for acquiring scientific degrees and holding academic positions at MHAT NHH JSC.

I have prepared this opinion in accordance with the Law for the Development of the Academic Staff in the Republic of Bulgaria and the regulations for its implementation.

Dr. Nadelin Nikolov was born in 1978. He completed his higher medical education in 2003 at the Medical University, Sofia. In September 2004 he started working as an intern in vascular surgery at the Clinic of Vascular Surgery and Angiology at SBALSSZ - Sofia. In November 2006 he was appointed to the Clinic as an Assistant in Vascular Surgery, and in 2015 Dr. Nikolov became Head of the Operating Unit at the Clinic of Vascular Surgery and Angiology at MHAT "NHH" JSC, Sofia. In 2016, Dr. Nikolov defended his dissertation on "Opportunities to reduce the overall risk in the surgical treatment of carotid stenosis", for which he was awarded the educational and scientific degree "Doctor" in "Cardiovascular Surgery" (Diploma No 11 / 18.01.2016). Dr. Nadelin Nikolov has a recognized clinical specialty in Vascular Surgery since 2014 and a Certificate of Professional Qualification in Endovascular Vascular Surgery since 2015.

He specializes in the following areas: endovascular therapy of aortic aneurysms, peripheral and carotid arteries; mini-invasive endovenous procedures and critical ischemia of the limbs in leading centers in the field of endovascular, vascular surgery and phlebology in Europe.

Dr. Nadelin Nikolov is a member of many Bulgarian and international scientific societies: Bulgarian National Society of Vascular, Endovascular Surgery and Angiology, Bulgarian Association of Thoracic, Cardiovascular and Vascular Surgery, National Society of Phlebology and Angiology, Bulgarian Cardiovascular Society, European Society for Vascular Surgery, International Society of Endovascular specialists, The Balkan Venous Forum.

He was awarded second prize for best clinical case at the Fifth Scientific Conference of the Bulgarian Cardiovascular Association - November 27-29, 2015, Sofia.

Fluent in English and German.

To participate in the contest, Dr. Nikolov submitted for review 35 scientific papers: a dissertation for the acquisition of educational and scientific degree "Doctor", "Opportunities to reduce the overall risk in surgical treatment of carotid stenosis" and an independent monograph in Bulgarian Carotid revascularization.

He is a co-author in the development of a manual for methodological purposes and author or coauthor of 32 scientific publications (27 full-text publications and 5 announcements at scientific forums abroad with published abstracts). Dr. Nikolov presented 5 citations in the Web of Knowledge and Scopus databases. He participates as a lecturer at prestigious scientific forums at home and abroad.

Dr. Nikolov has an average annual teaching workload of 250 hours. Participates in the training of residents in vascular surgery and angiology with thematic practical classes and lectures. Participates in commissions for conducting colloquia in vascular surgery and angiology.

Dr. Nikolov meets the requirements of NACID for the minimum national requirements with a scientometric indicator of 478 points with a minimum of 400 points for the academic position of "Associate Professor".

The thematic works of Dr. Nikolov are in the field of cerebrovascular diseases, peripheral arterial disease, diagnosis and treatment of deep vein thrombosis, diagnosis and treatment of varicose veins, diagnosis of rare vascular diseases. Studies in the field of cerebrovascular diseases are reflected in the works №1,2,5,6,7,10,12,16,17,30,31,32,33,34.

As a result of ten years of experience in standardized CEA and three years of experience in the application of all methods for carotid revascularization, Dr. Nikolov et al. introduce a multimodal approach and develop an algorithm for the treatment of asymptomatic and symptomatic carotid stenoses. Researchers find that good results in the treatment of carotid disease are achieved by following a few basic rules:

- Proper selection of patients (CEA / CAS / hybrid) who really need carotid intervention, especially those without symptoms;
- Pre- and postoperative antiplatelet prophylaxis as part of BMT (with emphasis on potent statins);
- Endotracheal (CEA) and local (CAS / hybrid) anesthesia and control of vital signs;
- Conventional CEA with routine shunting (strict control of the introduction, swelling and patency of the shunt), fixation of the intima, constant rinsing of the desobliterated surface and mandatory patch plastic;
- With the introduction of CAS (mandatory with distal / proximal protection) in the daily
  practice of vascular, it is possible for each patient with carotid pathology to be treated
  optimally and safely.
- The treatment of extracranial MSDs includes not only carotid revascularization (CEA, CAS and hybrid techniques), but also optimal drug therapy-best medical treatment (BMT).

The monograph "Carotid revascularization" is aimed at adequate and safe treatment of patients with extracranial cerebrovascular disease. Much of the current evidence for the advantages and disadvantages of different methods of carotid revascularization has been collected both alone and in

combination with BMT. The monograph describes the two types of treatment - surgical and endovascular, as complementary methods in the arsenal of the modern vascular surgeon. Exposed in detail are all types of surgical techniques with their advantages and disadvantages, types of anesthesia, methods of intraoperative monitoring of cerebral perfusion, as well as early and late complications. The rapid development of carotid stenting, the types of consumables and stents, protection systems, as well as variations of the endovascular technique itself are covered in detail. The ten-year experience of the clinic in the surgical treatment of carotid stenoses is described and the results are extremely good and comparable with the world practices.

- 2. Studies in the field of peripheral arterial disease (PAD) are reflected in the works №3,4,8,9,13,20,21,22,23,24,29,35. For the first time in Bulgaria a comparative analysis of the three main methods for treatment of aorto-iliac occlusive disease was made: angioplasty with stenting, hybrid surgery and open surgery. They have similar results, but endovascular therapy brings additional benefits to the patient - shortened hospital stay, less or no surgical trauma, rapid recovery and return to normal life. In the presented Clinical Guide Dr. Nikolov and experts in the field of arterial diseases have collected, processed and presented the published evidence for diagnosis, treatment and prevention of PAD. The place of beta-blockers in the treatment of patients with PAD has been studied. A review of the current literature on antithrombotic therapy and prevention of this disease has been made. Clinical cases of application of endoprostheses in emergency and lifethreatening conditions in vascular surgery, open surgery in case of rupture of the aneurysm of the abdominal aorta to the retroaortically located left renal vein, have been described. The location of hybrid procedures in patients with thromboangiitis obliterans was also discussed. Emphasis is placed on the features of PAD in diabetics, medical and invasive (open surgery or endovascular) treatment of diabetic foot, as well as the factors that determine which of them to choose a patient. The practice and the X-ray dose of the patient in endovascular and hybrid revascularization of the lower extremities were studied.
- 3. Studies in the field of diagnosis and treatment of deep vein thrombosis (DVT) are reflected in papers No14,18,19,25,26,27,28. For the first time in Bulgaria in several publications clinical cases have been reported in which in acute symptomatic proximal DVT, threatening with phlegmasia cerulea dolens, mechanical or pharmaco-mechanical thrombaspiration was performed after catheter thrombolysis with tPA. Rapid pain relief, reduction of edema, prevention of pulmonary thromboembolism, recurrent venous thrombosis and the development of post-thrombosis syndrome. The role of direct oral anticoagulants as an increasingly common alternative to traditional anticoagulant therapy and their establishment as preferred by physicians and patients is considered.
- 4. Studies in the field of diagnosis and treatment of varicose veins are reflected in papers № 15 and 18. Dr. Nikolov introduces and uses for the first time in Bulgaria two of the minimally invasive methods for the treatment of reflux in the great superficial vein cyanoacrylate embolization and mechano -chemical ablation. One of the publications reviews the modern invasive treatment of varicose veins.
- 5. Publication № 30 discusses the role of non-invasive imaging methods in the diagnosis of Takayasu's arteritis with bilateral aneurysms and carotid artery stenosis.

Dr. Nikolov skillfully uses ultrasound diagnostics in diseases of the abdominal aorta, peripheral and carotid arteries, as well as in the diagnosis of pathology in the deep and superficial venous system of the limbs. Dr. Nikolov is a complex vascular surgeon who applies innovative approaches in both open surgery and endovascular procedures. He is the first certified vascular surgeon in Bulgaria for implantation of a Supera stent.

## Conclusion

After my acquaintance with the documents, scientific papers and references submitted for this competition for the scientific, teaching and implementation activities of Dr. Nedelin Nikolov, as well as with the requirements of ZRASRB and the Regulations for the terms and conditions for acquiring scientific degrees and holding academic positions in MHAT "NKB" for the academic position of "Associate Professor" and after my comprehensive assessment, I believe that his candidacy fully meets the requirements for holding this prestigious position. Lappreciate his authorial, monographic work. The scientific publications and achievements of the candidate contain scientific and practical contributions.

Dr. Nadelin Nikolov, MD is an erudite vascular surgeon and researcher with high prestige and competence. He has indisputable qualities, proven in many years of successful scientific and surgical practice. The constant scientific activity and the systematic nature of the publications present Dr. Nikolov as an in-depth and serious researcher in the field of vascular surgery.

All this gives me reason, taking into account the professional development, scientific achievements and authority gained by the candidate, as well as my personal impressions of his in-depth and systematic training, to recommend to the esteemed jury to recognize his merits and choose Dr. Nadelin Nikolov. md. to take the academic position of "Associate Professor" in the scientific specialty Vascular Surgery, for the needs of the Clinic of Vascular Surgery at MHAT "NKB" EAD.

30.05.2021

Sofia

Prepared the opinion:

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