

REVIEW

FROM PROF. DR. DOBRIN YOTKOV VASSILEV, M.D., Ph.D.

MEDICAL DIRECTOR OF MEDICA COR - RUSE

Subject. Health and Sport, professional field, 7.1 Medicine, in the scientific specialty "Cardiology" for the needs of the Clinic of Cardiology of "Acibadem City Clinic of Tokuda University Hospital" EAD, published in the Official Gazette No. 31/11.04.2025.

1. Information about the procedure

By order No. 15-05-141/11.06.2025 of the Executive Director and the Prosecutor of Acibadem City Clinic University Hospital Tokuda EAD, I have been appointed as an external member of the Scientific Jury.

All the procedural requirements for the announcement of the competition, the deadline for submission of documents and the selection of the Scientific Jury were met. Only one candidate - Assoc. Prof. Dr. Valeri Lyubenov Gelev, Ph.D., who meets all the requirements of the Law on Research and Development of Academic Staff at "Acibadem City Clinic, Tokuda University Hospital", has submitted documents for participation in the competition.

In connection with the materials provided to me for the preparation of the review, I declare that I do not find any evidence of plagiarism and I have no conflict of interest.

2. Professional data of the applicant

Assoc. Prof. Valeri Gelev, MD was born in 1964. In 1990 he graduated from the Medical University of Sofia. Assoc. Dr. Gelev started working in 1990 as a district physician in the town of. In 1990 he started working as a doctor at the hospital in Kostenets. From 1991 - 2001 he was a doctor at the Cardiology Clinic of the University Hospital "N.I. Pirogov". From 2001 - 2009 he was a cardiologist at the Department of Invasive Cardiology of the National Heart Hospital in Sofia. From 2009 - 2013 he was the Head of the Department of Invasive Cardiology at the University Hospital "N.I. Pirogov". Since March 2013 he has been the Deputy Head and since 01.03.2023 the Head of the Cardiology Clinic at "Acibadem City Clinic of Tokuda University Hospital" EAD.

He received his specialty training in Internal Medicine in 1995 and Cardiology in 2000, as well as a highly specialized fellowship in Invasive Cardiology in 2003. In 2016 she graduated with a Master's degree in Public Health and Health Management at the Faculty of Public Health, Medical University Sofia.

In 2021, Dr. V. Gelev acquired the educational and scientific degree "Doctor" after successfully defended dissertation on "Retrograde access in recanalization of chronic coronary artery occlusions".

Assoc. Prof. Gelev is a lecturer at the Faculty of Arts of Sofia University "St. Kliment Ohridski" since 2019 and continues to participate in the training of medical students.

In 2021, he was elected associate professor of cardiology.

By 16.04.2025 Assoc. Prof. Gelev has 36 years, 1 month and 16 days of work experience. Assoc. Gelev has undergone a number of qualification courses and trainings in Bulgaria and abroad in the field of cardiology and interventional cardiology. She speaks English and Russian.

3. Evaluation of the quantitative and qualitative indicators of the applicant

Assoc. Gelev is presented at the competition with a total of **131 scientific papers**, of which 130 are after the "Associate Professor". Of these: one dissertation for the degree of Doctor of Education and Science, 51 scientific papers and 79 participations in congresses and symposia at home and abroad.

The scientific production of Assoc. Prof. Gelev after holding the academic position of Associate Professor, which is subject to review, includes:

- 1 chapter in a peer-reviewed book
- 21 scientific publications in IF journals (Thomson Reuters)
- 8 - refereed and indexed journals (Scopus, Web of Science);
- 21 publications in Bulgarian journals (National reference list);

Assoc. Prof. Gelev is the Bulgarian reviewer of the European recommendations for chronic coronary syndrome (2024).

Some of the articles have been published in the most authoritative journals in the field of cardiology with high impact factor such as European Heart Journal, New England Journal of Medicine, Lancet, Eurointervention, etc.

Single or first author was in 5 (10%) of the actual publications, last author in 23 (45%), second author in 1 (2%), and third and subsequent author in 22 (43%). Regardless of his place in the author collective, Assoc. Prof. Gelev actively participated in the preparation and writing of the articles.

The candidate's scientific activity after holding the position of Associate Professor includes participation as an organizer, moderator and/or lecturer in 79 scientific forums in the country and abroad, of which 28 are international.

From the submitted reference from the CMB, MU - Sofia and the attached documents it is established that the candidate after holding the position of AD "Associate Professor" has a total of **10 288 citations**, of which in Scopus - 1871 citations and in Web of Science - 8413 citations and 4 citations in Bulgarian scientific publications.

The total impact factor of the scientific works after taking the position of Associate Professor of Assoc. Prof. Gelev is 616,438, H-index 11.

The number and quality of the scientific papers presented by Prof. Gelev are quite sufficient for participation in the competition.

The table compares the quantitative criteria - the minimum national required points and the points of "ASC TOKUDA UMHAT" and the submitted by the applicant.

Group of indicators	Contents	Minimum point: required by NACID "Professor" for	Submitted by points from Assoc. B. Gelev, Ph.
A	Indicator 1	50	50
B	Indicator 2	-	-
B	Indicators 3 or 4	100	132.53
Г	Sum of indicators 5 to 9	200	238
Д	Sum of indicators 10 to 12	100	168 920
Е	Sum of indicators from 13 to the end	100	260
Total points		550	169 601.1 r

The comparison of the indicators according to the normative requirements for the scientific and teaching activity for the position of AD "Professor" of Assoc. V. Gelev shows that he meets them, and in almost all points significantly exceeds them. 169 601.1 points were submitted, against the required 550 points.

4. Main scientific contributions

The scientific contributions of Assoc. Prof. Gelev are mainly related to coronary interventions - recanalization of chronic coronary occlusions (CTO), percutaneous interventions in stem stenosis, bifurcation stenosis, treatment of high-risk patients. Research and applied contributions can be grouped into several sections:

4.1 Recanalization of chronic coronary occlusions

Scientific publications in the field of CTO are related to the epidemiology of this type of coronary lesions, anatomical features, and indications and techniques for interventional revascularization. The European Chronic Occlusions Club, in which Assoc. Prof. Gelev, initiated, successfully conducted and published the world's first randomized trial comparing the effectiveness of interventional versus medical therapy in patients with chronic coronary occlusions. The candidate has conducted one of the few studies of patients with CTO in the country and in the world, in which the results of the application of the retrograde method of CTO recanalization were analyzed among a large number of patients, and the evolution of the techniques over time was followed. For the first time in Bulgaria, the retrograde approach methodology for the treatment of chronic coronary occlusions is presented in theoretical and scientifically applied terms. Epidemiological, clinical and anatomical characteristics that appear as predictors of failure in recanalization of chronic coronary occlusions are presented. The retrograde approach to the treatment of CHD has been shown to be highly effective and

contributes to achieving very high procedural success, even in occlusions of very high complexity where the success rate with the classic antegrade approach is unacceptably low. The significant commitment of Assoc. Prof. Gelev on the topic of recanalization of chronic coronary occlusions, such as participation in various international publications, both combining experience and data from large international studies on the topic.

4.2. Percutaneous interventions for trunk stenosis .

For the first time in Bulgaria, the candidate analyzed the results of his own prospective study, with a large number of patients after left coronary artery revascularization, whom he followed up long-term. Different aspects of the indications and indications for interventional treatment of the left coronary artery trunk, as well as the techniques to achieve optimal results are discussed. Predictors of major complications of left coronary artery trunk interventions are analyzed. The importance of the soon systems, Euroscore and Syntax score, as factors to assess immediate procedural outcomes, short-term and long-term adverse events is highlighted.

A management algorithm for percutaneous left coronary artery bypass grafting interventions has been created .

4.3. Complex coronary interventions

The publications review the significance and management of massive coronary calcinosis and the global trends in the treatment of this type of lesion. The place of rotational atherectomy in the treatment of calcific lesions is also discussed, as well as an analysis of our own results in the treatment of patients with rotablation.

For the first time in Bulgaria, intravascular lithotripsy was introduced in the treatment of coronary lesions with significant calcinosis. The rapidly accumulated experience and results are the basis for publications and presentations at international and national scientific events. They review the possibilities of this new technique, its specific features and the results achieved, as well as the optimal ways of its combined use with other methods for the treatment of severely calcified coronary lesions, such as ablative techniques - rotablation and/or the treatment of lesions with high and ultra-high pressure balloons.

The experience in the treatment of stented areas with suboptimal stent expansion is also interesting in a scientific-practical aspect.

4.4. Non-obstructive Coronary Disease

For the first time in the country, the clinic has an invasive coronary microcirculation auscultation system to diagnose the different phenotypes of ANOCA. Since the introduction of this new methodology, some experience has been gained and shared in presentations and publications, leading to timely diagnosis and enabling individualization of therapy for these patients and significant improvement in their quality of life.

Recognizing the importance of the problem and the need to popularize it, coronary physiology and in particular the assessment of the microcirculation a, it is the focus of the annual, international BBC - Bulgarian Course on Bifurcations and Complex Coronary Interventions, in January 2025.

4.5. *Lp (a) its role as a risk factor for cardiovascular disease*

Considering the role of Lp(a) in the pathogenesis of atherosclerosis and its early manifestation in patients with significantly elevated levels of this lipoprotein, routine measurement of its levels was initiated in all patients with evidence of cardiovascular disease in the clinic. Approximately 2000 patients have been studied and analysed, and the first results have been presented at various scientific events. This is a contribution of high scientific-theoretical and scientific-practical value. It shows us the proportion of patients with the presence of highly elevated values of this marker of high risk for the development of CVD. In patients with elevated values, the atherosclerotic involvement in general and the atherosclerotic burden of the coronary tree should be assessed. In practical terms, the presence of elevated Lp(a) values necessitates a very detailed assessment of other risk factors, as well as optimization of medical therapy in these patients to reduce adverse events.

4.6. *Miscellaneous*

- The influence of heart rate variability and its changes in patients with CHD before and after revascularization, and in patients with degenerative aortic stenosis was analyzed.
- Reviews are made on the current treatment of acute coronary syndrome, heart failure, dyslipidemia, arterial hypertension.
- The presentation of arrhythmias in patients with COVID-19 is reviewed, indicating the mechanisms of arrhythmogenesis and discussing the different types of arrhythmias in relation to therapeutic management in the pandemic setting. The role of antiviral medications as proarrhythmogenic factors is discussed in detail, and practical guidelines for the prevention of proarrhythmia manifestation are outlined
- Challenges in the diagnosis and treatment of HF with preserved LV fraction are analyzed.
- A case report on endovascular treatment for life-threatening conditions in urology is shared.
- Shared experience of contrast-induced neurotoxicity after interventional treatment of cerebral aneurysm, which is a very rare but severe postprocedural complication.

The scientific production of the candidate is of original character and numerous scientifically applied, scientifically theoretical contributions of confirmatory character of great practical importance.

5. Teaching and learning

The teaching workload of Assoc. Prof. Dr. Valeri Gelev includes active participation in the training of medical students in Bulgarian and English, postgraduate students in cardiology and postgraduate training of cardiologists and general practitioners. His teaching load for the period is well represented.

Certificate No. 19-329/02.06.2025 has been submitted, issued by the Training Department of "Acibadem City Clinic Tokuda University Hospital" EAD, which certifies the

teaching load after holding the position of AD "Associate Professor" of a **total 1896.5 eq. hours**, including training of postgraduate students in cardiology - 1803.5 eq. hours, training in VSD - "Interventional Cardiology" - 63 eq. hours and continuing education - 30 eq. hours. Official note from the **Faculty of Medicine of St. A memo** from the Faculty of Medicine of the University of **St. Kliment Ohridski** certifies the teaching load as a visiting lecturer for the academic years 2021/2022 to winter semester 2024/2025 including a **total of 960 teaching hours**.

Assoc. Prof. Gelev teaches medical students in Bulgarian III course "Propedeutics of Internal Diseases" - Cardiology, IV course students and trainee doctors in the discipline Internal Diseases - Cardiology in Bulgarian and English at the Medical Faculty of Sofia University "St. Kliment Ohridski". He actively participates in scientific forums in cardiology with review and scientific reports.

Assoc. Prof. Gelev supervised the specialization of 5 postgraduate students in cardiology during the period.

He is a supervisor of 1 PhD student.

6. Medical diagnostic activity

The medical-diagnostic activity of Assoc. Prof. Gelev includes diagnostics of cardiovascular diseases, recanalization of STDs, endovascular treatment of coronary lesions, bifurcation stenoses, medical treatment of high-risk patients in cardiology, as well as interventional treatment of vascular diseases.

Assoc. Prof. Dr. Gelev is an accomplished internist, cardiologist, specialist in invasive cardiology and endovascular treatment of vascular diseases, with extensive clinical experience, performing a full range of complex invasive cardiovascular procedures. He is actively involved in in-clinic, inter-clinic and outpatient consultation activities in internal medicine and cardiology, as well as in the discussion of patients in intensive care and the definition of the treatment and diagnostic algorithm as Head of the Cardiology Clinic.

7. Expert activity

Assoc. Prof. Gelev is a member of national and international scientific societies and organizations, holding leadership positions in some of them.

Member of:

- SCB, and from 2020-2024 is a member of the Board;
- European Society of Cardiology;
- European Chronic Occlusion Club;
- The Bulgarian Society of Invasive Cardiology: chairman for two terms (2015-2017 ; 2017-2019) and vice-chairman from 2023 until now;
- One of the directors of the Bulgarian Bifurcation Course (BBC) 2013-2025. He is a member of the Expert Council on Cardiology at the Ministry of Health.

He is a member of the editorial board of the magazine. "Member of the Editorial Board of Bulgarian Cardiology."

CONCLUSION

The candidate Assoc. Prof. Dr. Valeri Gelev, M.D., Ph.D., fully meets the requirements of the Law on Academic Staff Development in "Ajibadem City Clinic, Tokuda UNIVERSITY Hospital" for the academic position of "Professor".

In my many years of acquaintance and professional collaboration I have become convinced that Assoc. Prof. Gelev is a professional with excellent theoretical training, broad general culture, erudition and clinical practice. He actively participates in medical congresses and symposia, has acquired numerous additional qualifications and has proven his place as a pioneer and leading expert in the field of invasive cardiology. Holding leadership positions in scientific societies is a convincing proof of the great authority he enjoys among the guild at home and abroad.

Considering the above, I confidently recommend the distinguished members of the Scientific Jury to vote in favor of the election of Assoc. Prof. Dr. Valeri Lyubenov Gelev, Ph.D., for the academic position "Professor" in the field of higher education 7. Health and Sport, professional field, 7.1 Medicine, in the scientific specialty "Cardiology" for the needs of the Clinic of Cardiology at Acibadem City Clinic, Tokuda University Hospital.

26/06/2025

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Prepared the review:

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