

REVIEW BY

By Prof. Asen Rachev Gudev, PhD.
Head of Cardiology Clinic, "Tsaritsa Ioanna University Hospital – ISUL" Sofia

Subject: Competition for the academic position of "Professor" in the field of higher education 7. Health and Sports, professional field 7.1 Medicine, in the scientific specialty "Cardiology" for the needs of the Cardiology Clinic at "Acibadem City Clinic University Hospital Tokuda" EAD, published in the State Gazette No. 31/11.04.2025.

By order № 15-05-141/11.06.2025 of the Executive Director and the Procurator of "Acibadem City Clinic University Hospital Tokuda" EAD, I have been appointed as an external member of the Scientific Jury. I am appointed to present a review at the first non-presidential meeting.

The peer review has been prepared in accordance with the requirements of the RDAIRB Act, its Implementing Regulations and the Regulations on Academic Staff Development at "Acibadem City Clinic University Hospital Tokuda" EAD. The conduct of the procedure is in compliance with the above mentioned regulatory framework.

Only one candidate submitted documents for participation in the competition - Assoc. Prof. Valeri Lyubenov Gelev, Ph.

I declare that I have no conflict of interest and do not find any evidence of plagiarism.

1. Professional data of the candidate

Dr. Valery Gelev was born in 1964. In 1990 he graduated from the Medical University of Sofia. In 1995 he obtained a specialty in Internal Medicine and in 2000 - in Cardiology. He obtained a certificate in Invasive Cardiology in 2003 and since 2016 he has been a Master in Health Management at the Medical University of Sofia, Bulgaria.

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

The candidate worked successively as a station doctor in Kyustendil (1990), a doctor in the Clinic of Cardiology of the University Hospital "N.I. Pirogov" (1991 - 2001), the Department of Invasive Cardiology of the National Hospital of Cardiology Sofia (2001 - 2009), Head of the Department of Invasive Cardiology at the University Hospital "N.I. Pirogov" (2009 - 2013). Since March 2013 he has been the Deputy Head and since 01.03.2023 the Head of the Cardiology Clinic at "Acibadem City Clinic Tokuda University Hospital" EAD.

Associate Professor Dr. Gelev is a lecturer at the Faculty of Medicine of Sofia University "St. Kliment Ohridski" since the academic year 2019/2020 and continues to teach medical students. Since 2021, the candidate has been an Associate Professor of Cardiology at the Clinic of Cardiology of "Acibadem City Clinic Tokuda University Hospital" EAD.

He has had a number of specializations in invasive cardiology in Paris (France), New York (USA), Novosibirsk (Russia).

2. Evaluation of the quantitative and qualitative indicators of the candidate

Associate Professor V. Gelev participated in the competition with a **total of 131 scientific works**, of which 130 are post-doctoral: 1 dissertation for the degree of "Doctor of Education and Science", 50 scientific articles in peer-reviewed scientific journals, participation with a chapter in 1 book with peer review and 79 participations in scientific forums. 29 scientific articles have been published in refereed and indexed journals in Scopus and Web of Science databases, of which 21 have IF in one of 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. Assoc. Gelev is one of the reviewers of the ESC Guidelines for chronic coronary syndrome. 21 articles have been published in Bulgarian journals of the National Reference List. He is first and last author in 55% of the publications and second author in 2%. Regardless of his place in the author collective, he actively participated in conducting the research, processing the data and writing the articles. The scientific activity includes 79 participations in scientific forums, as a participant, organizer and by presenting papers and scientific communications, of which 28 are international and 51 national. Participated as principal investigator in over 15 international research projects testing new drugs and therapeutic manipulations.

A reference from the CMB, MU - Sofia for a **total of 10 288 citations** registered after holding the position of Associate Professor, of which in Scopus - 1871 and in Web of Knowledge - 8413. There are 4 citations found in Bulgarian sources from the CMB library collection.

The total impact factor of the scientific works after holding the position of "Associate Professor" of Associate Professor V. Gelev is **616,438**. H index 11.

The number and quality of the scientific papers submitted by Associate Professor V. Gelev are sufficient for participation in the competition.

3. Main scientific contributions

The scientific production of Dr. Gelev is diverse and is of original character and high value. A number of significant cardiovascular diseases, their therapy, diagnostics and prevention have been studied, which have proven scientific-theoretical and scientific-applied contributions. The main directions are:

1) Chronic coronary occlusions, epidemiology, anatomical features, and indications and techniques for interventional revascularization. The place and importance of retrograde access is analyzed, as well as various aspects and trends for successful recanalization of chronic occlusions. An algorithm for the indications and how to apply the retrograde approach in recanalizations of CTOs was developed and validated (Dissert., 1,14,31). Associate Professor Gelev has remained significantly involved in the topic of recanalization of Chronic Coronary Disease, contributing to various international publications that bring together the experience and data from large international studies on the topic. To promote the benefits and indications for revascularization in Chronic Coronary Syndrome amongst interventional cardiologists, cardiologists and patients, at his suggestion, a working group on "Chronic Coronary Syndrome Recanalization" was established at the Society of Invasive Cardiology, of which he is chairman.

2) Percutaneous interventions in Left Main Stenosis. The various aspects of indications for interventional treatment of left main coronary artery stenosis are reviewed, as well as techniques to achieve optimal results. The results of an own prospective study, which followed a large number of patients after percutaneous revascularization of the left coronary artery stenosis over a long period of time, were analyzed. An algorithm for the management of percutaneous interventions on the left main coronary artery stenosis has been developed. (8,14,23,31)

3) Complex coronary interventions. Scientific publications (14,23,48,49) have addressed the management of high-risk patients with complex coronary artery lesions. One of the major challenges in patients with complex interventions is the presence of significant coronary calcinosis. Intra-vascular lithotripsy has been introduced in the clinic for the first time in the country in the treatment of coronary lesions with significant calcinosis. The possibilities of this new technique, its specific features and the results achieved are discussed, 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 team at the clinic shares its knowledge and experience of treating patients with calcified and complex lesions from its participation in EURO 4C, (Cardiac Care of Calcified and Complex patients) and as a group of cardiologists at EAPCI (European Association of Percutaneous Cardiovascular Interventions).

4) Ischemia with Non-Obstructive Coronary Artery Disease (INOCA). At the beginning of 2024, the clinic became the first in the country to launch the only available system for invasive assessment of coronary microcirculation for the diagnosis of the different phenotypes of ANOKA. The accumulated known experience about coronary physiology and in particular microcirculation assessment and its clinical relevance has been shared in publications and presentations. This issue is the focus of the annual, international course “BBC” - Bulgarian course on bifurcations and complex coronary interventions, which took place in January 2025. Associate Professor V. Gelev is one of the course directors. (14,49)

5) Lp (a) its role as a risk factor for cardiovascular disease. The independent and heritable role of Lp(a) as a risk factor for cardiovascular disease has been analyzed in a number of publications. It is a key predictor of coronary heart disease, aortic stenosis, stroke and recurrent CV events despite optimal LDL control. In patients with elevated values of LDL, atherosclerotic involvement in general and the atherosclerotic burden of the coronary tree were assessed. In practical terms, the presence of elevated values necessitates a very detailed assessment of other risk factors, as well as optimization of medical therapy in these patients to reduce adverse events. (14,34,46,51)

6) Radial access in coronary interventions.

Associate Professor V. Gelev made a significant contribution to the introduction of radial access in coronary interventions. These works have been mainly reviewed and highly

evaluated in the procedure for becoming a "Associate Professor". These works are among the most highly appreciated Bulgarian developments in cardiology at the world level. I believe that their mention and consideration in this procedure will also contribute to the overall evaluation of Associate Professor V. Gelev as a leading cardiologist with worldwide recognition.

7) Miscellaneous:

- A number of publications and presentations have analyzed the importance of **heart rate variability and its changes** in patients with Chronic Coronary Disease before and after revascularization, as well as changes in heart rate variability in patients with degenerative aortic stenosis (43,44)
- Challenges in the **diagnosis and treatment of HF with preserved LV fraction** have been analyzed (13,32,33,40).
- A case report of **endovascular treatment for life-threatening conditions in urology** is shared (28).
- Two publications analyzed **contrast-induced neurotoxicity** after interventional treatment of cerebral aneurysm (3,10), which is a very rare, but severe postprocedural complication.
- A review discusses the presentation of arrhythmias in patients with COVID-19 and provides practical guidelines for the prevention of proarrhythmia on antiviral medications (11).
- In the area of **drug therapy in cardiology**, review articles are presented on new developments in the treatment of ACS (33,36,39,45,47), heart failure, the use of antihypertensive therapy(37,38,42), dyslipidemia (34,41,46), chronic coronary syndrome (13,35,48), anticoagulant therapy for atrial fibrillation (15), and DAPT after PCI (16,18,19).

Associate Professor V. Gelev's research has proven scientific and applied contributions and helps introduce and improve endovascular and drug treatment for people with cardiovascular diseases.

4. Educational and teaching activities

Certificate No. 19-329/02.06.2025, issued by the Training Department of "*Acibadem City Clinic Tokuda University Hospital*" EAD certifies the total training load from 01.01.2020 - 31.12.2024. **total 1896,5 eq. hours**, including training of residents 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 at "St. Kliment Ohridski University"* certifies the teaching load as a honorary lecturer for the academic years 2021/2022 to winter semester 2024/2025 including a **total of 960 teaching hours**.

The teaching load of Associate Professor Valeri Gelev for the period 01.01.2020-31.12.2024 is well represented.

Associate Professor V. Gelev carries out practical activities with medical students in Bulgarian III course "Internal Medicine" (Cardiology), with students IV course and trainee doctors in the discipline of Internal Medicine (Cardiology) in Bulgarian and English at the Faculty of Medicine at Sofia University "St. Kliment Ohridski".

Associate Professor V. Gelev is a supervisor of the residency of 5 graduate students in cardiology.

Scientific supervisor of 1 PhD student.

He actively participates in scientific forums in cardiology with review and scientific reports.

5. Treatment and diagnostic activity

The medical-diagnostic activity of Associate Professor V. Gelev includes diagnostics of cardiovascular diseases, endovascular treatment of coronary lesions and bifurcation stenoses, medical treatment of high-risk patients in cardiology, as well as interventional treatment of vascular diseases.

He performs the full range of complex endovascular coronary and peripheral procedures.

He is actively involved in consultative cardiology activities as Head of the Cardiology Clinic.

6. Expert activity

Associate Professor V. Gelev is a member of a number of national and international scientific societies and organizations, at some of which he holds leadership positions, which is convincing proof of the great authority he enjoys among his peers in Bulgaria and abroad. He is a member of the SCB, and from 2020-2024 he is a member of the Board of Directors; he is a member of the European Society of Cardiology; the European Club of Chronic Occlusions; the Bulgarian Society of Invasive Cardiology - President for two terms (2015-2017 ; 2017-2019), Vice President - from 2023 up to date; One of the directors of the Bulgarian Bifurcation Course (BBC) 2013-2025.

Member of the Expert Council on Cardiology at the Ministry of Health.

Member of the Editorial Board of the journal "Bulgarian Cardiology".

7. Comparative evaluation (number of points) by indicators,

according to the requirements for the scientific and teaching activity of the candidates for the academic position of "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 of Tokuda University Hospital" EAD.

The table compares the quantitative criteria - the minimum national required points and the " Acibadem City Clinic University Hospital Tokuda " and the submitted by the candidate.

Group of indicators	Content	Minimum required points of NACID for "Professor"	Submitted points from Associate Prof. V. Gelev, Ph.
A	Indicator 1	50	50
B	Indicator 2	-	-
C	Indicators 3 or 4	100	132,53
D	Sum of indicators 5 to 9	200	238
E	Sum of indicators 10 to 12	100	168 920
F	Sum of indicators 13 to end	100	260
Total points		550	169 601.1 r

The comparative assessment according to the normative requirements for the scientific and teaching activity for the academic position "Professor" of Associate Professor V. Gelev shows that he meets them, and in all indicators significantly exceeds them. 169 601.1 points have been submitted against the required 550 points.

CONCLUSION

Associate Professor Valeri Gelev, MD, presents materials that fully meet the requirements of the ZRASRB, the Regulations for the Implementation of the ZRASRB, and the Regulations of "Acibadem City Clinic Tokuda" EAD for appointment to the academic position of "Professor."

Associate Professor V. Gelev is an eminent physician with extensive clinical, scientific, teaching and administrative experience. I highly appreciate his theoretical and practical contributions to the development of cardiology and interventional cardiology, as well as the high level of his scientific production.

In conclusion, on the basis of the presented scientific metrics, the overall scientific, teaching and public activities, I confidently recommend to the esteemed members of the Scientific Jury to vote positively for the election of Associate Professor Valeri Lyubenov Gelev, MD for the academic position of "Professor" in the scientific specialty of "Cardiology" for the needs of the Clinic of Cardiology at "Acibadem City Clinic Tokuda University Hospital" EAD.

28.06.2025

City of Sofia

Prepared the review:

(Professor Dr. Asen Gudev, MD, PhD)