

OPINION

By Prof. Dr. Ivan Tomov Gruev, PhD
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In relation to the competition for the academic position of "Professor" in Higher Education Area 7. Healthcare and Sports, Professional Field 7.1. Medicine, in the scientific specialty Cardiology, for the needs of the Cardiology Clinic at "Acibadem City Clinic Tokuda University Hospital", announced in State Gazette No. 31 of 11.04.2025.

I was appointed as a member of the Scientific Jury by Order No. 15-05-141/11.06.2025 of the Executive Director of "Acibadem City Clinic Tokuda University Hospital". I was assigned to prepare an expert opinion as an external member of the Scientific Jury.

In connection with the materials provided to me for the preparation of the opinion, I hereby declare that I have no conflict of interest and have not identified any indications of plagiarism.

The sole candidate is Assoc. Prof. Dr. Valeri Lyubenov Gelev, PhD.

Brief Biography: Assoc. Prof. Valeri Gelev graduated from the First English Language School and subsequently obtained his medical degree from the Medical University of Sofia in 1990. He acquired the specialties in Internal Medicine (1995), Cardiology (2000), and a High Specialization Diploma (HSD) in Invasive Cardiology (2003). In 2016, he completed a Master's degree in Healthcare Management, and in 2021 he was awarded the educational and scientific degree "Doctor". Since 2019, he has served as a part-time lecturer at the Faculty of Medicine of Sofia University "St. Kliment Ohridski," where he continues to teach medical students. In 2021, he was promoted to the academic position of Associate Professor in Cardiology. He has completed international specializations in Invasive Cardiology in France, the United States, and Russia.

Professional Career: He began his medical career as a general practitioner in the town of Kostenets. Subsequently, he served as a cardiologist at the University Emergency Hospital "N. I. Pirogov," and later as an interventional cardiologist at the National Heart Hospital. He went on to become Head of the Department of Invasive Cardiology at "Pirogov," and since 2013 has held the position of Deputy Head of the Cardiology Clinic at "Acibadem City Clinic Tokuda University Hospital," where in 2023 he was appointed Head of the Clinic.

Academic and Professional Positions: He is a member of the Bulgarian Society of Cardiology (BSC) and served on its Governing Board from 2020 to 2024. He is a member of the European Society of Cardiology (ESC), the European Club for Chronic

Total Occlusions, and the Bulgarian Society of Invasive Cardiology, where he has been serving as Vice-Chair since 2023. He is also one of the directors of the Bulgarian Bifurcation Course (BBC) and a member of the Expert Council on Cardiology at the Ministry of Health.

Scientific Activity: A total of 131 scientific works have been submitted for the competition, 130 of which were produced after the candidate's habilitation as Associate Professor. These include one dissertation for the acquisition of the educational and scientific degree "PhD," 50 scientific articles in peer-reviewed journals, one chapter in a peer-reviewed book, and 79 participations in scientific forums (see Table I). The publications are listed in Document No. 9, and the congress participations in Document No. 10, as part of the required application materials for the competition.

Table I. Types of Scientific Publications

Type of Scientific Work	Number / Detail
Total number of publications	131
Dissertation for the degree of Doctor of Science	1
Articles in Bulgarian and international journals	50
• Articles in Bulgarian journals (NAC list)	21
• Articles indexed in Scopus/Web of Science	29
• Of which with Impact Factor	21
• Total Impact Factor	616.438
Peer-reviewed book chapter	1
Author roles among 51 selected works:	
• First author	5 out of 51 (10%)
• Last author	23 out of 51 (45%)
• Second author	1 out of 51 (2%)
• Third or later author	22 out of 51 (43%)
Total citations	10,288

Main Scientific Contributions: The scientific works of Assoc. Prof. Valeri Gelev can be grouped in the following thematic areas:

1. Recanalization of Chronic Total Coronary Occlusions (CTOs)

The publications in this area address the epidemiology and anatomical characteristics of CTO lesions, as well as the indications and interventional techniques for revascularization. Several review articles chronicle the evolving trends in this rapidly developing field of

interventional cardiology. Special focus is placed on the retrograde approach, its clinical significance, and technical nuances, which have proven crucial for procedural success in complex interventions. The author has also contributed to publications exploring various aspects and evolving trends in the recanalization of chronic total occlusions, through analysis of data from the world's largest registry of chronic coronary occlusions — the European Registry of Chronic Total Occlusion — established by members of the European CTO Club. The European Club for Chronic Total Occlusions initiated, successfully conducted, and published the first randomized study in the world comparing the effectiveness of interventional therapy versus medical treatment in patients with chronic total coronary occlusions.

2. Percutaneous Coronary Interventions for Left Main Coronary Artery Stenosis

With advancements in technology, the introduction of increasingly effective, safe, and accessible drug-eluting stents, intravascular imaging techniques, and the overall development of interventional cardiology, percutaneous revascularization of the left main coronary artery has become highly effective and safe. As a result, it is now recommended by all major clinical guidelines as a viable alternative to the traditional “gold standard” of coronary artery bypass grafting. Due to the significant interest and unresolved clinical challenges, this topic remains highly relevant.

3. Complex Coronary Interventions

Due to the aging population, we are increasingly faced with the challenge of treating patients with highly complex coronary anatomy who are considered high-risk because of severe comorbidities. For the majority of these patients, surgical revascularization is not a viable option, either due to excessively high operative risk or the patient's unwillingness to undergo surgery. This section includes scientific publications addressing the management of high-risk patients with complex coronary lesions. It discusses the significance and clinical approach to massive coronary calcification, as well as global trends in managing such lesions. For the first time in Bulgaria, intravascular lithotripsy has been introduced for the treatment of severely calcified coronary lesions, particularly in patients with complex disease. The technique has been evaluated in terms of its procedural characteristics, specific features, and clinical outcomes, including recommendations for its combined use with other modalities in the treatment of heavily calcified lesions. The clinic's team actively contributes to international knowledge exchange through its participation in EURO 4C (Cardiac Care of Calcified and Complex Patients) and the European Association of Percutaneous Cardiovascular Interventions (EAPCI). Numerous publications and presentations have been dedicated to interventional strategies for complex coronary interventions, all of which demonstrate high scientific and practical value.

4. Ischemia with Non-Obstructive Coronary Arteries (INOCA)

In 2024, for the first time in Bulgaria, the clinic implemented an invasive coronary microcirculation assessment system for the diagnosis of different phenotypes of INOCA. The accumulated experience in coronary physiology and microcirculatory assessment, along with its clinical significance, has been reflected in scientific publications and presentations.

This topic is a central focus of the 2025 edition of the BBC – Bulgarian Bifurcation and Complex Coronary Interventions Course, where Assoc. Prof. Gelev serves as one of the course directors.

5. Lp(a) as a Cardiovascular Risk Factor

The independent and genetically determined role of Lp(a) as a risk factor and key predictor of cardiovascular disease has been analyzed in multiple publications. The overall extent of atherosclerotic involvement and the atherosclerotic burden of the coronary tree in patients with elevated Lp(a) levels has been evaluated. From a clinical perspective, elevated levels require comprehensive assessment of all additional risk factors and optimization of pharmacotherapy in order to reduce the risk of adverse cardiovascular events.

6. Miscellaneous Topics

- Endovascular treatment of life-threatening visceral emergencies in urology.
- A review article on the manifestation of arrhythmias in COVID-19 patients discusses the mechanisms of arrhythmogenesis and examines the various types of arrhythmias in relation to therapeutic strategies during the pandemic. Particular attention is given to the pro-arrhythmic potential of antiviral medications, with practical recommendations provided for the prevention of arrhythmic events.
- A number of review articles have addressed current therapeutic approaches in acute coronary syndrome, heart failure, arterial hypertension, and dyslipidemia.
- Several publications address a rare but severe complication — **contrast-induced neurotoxicity** following interventional treatment of cerebral aneurysms.
- A number of publications and presentations have analyzed the significance of heart rate variability (HRV) and its changes in patients with chronic coronary syndrome (CCS) before and after revascularization, as well as HRV alterations in patients with degenerative aortic stenosis.

Assoc. Prof. Gelev's scientific work provides validated theoretical and practical contributions that support the advancement of prevention, diagnosis, and treatment in cardiovascular medicine.

Teaching Activity : Assoc. Prof. Valeri Gelev actively participates in the education of cardiology residents, in high-specialization training in Interventional Cardiology, and in the continuing professional education (CME) of cardiologists and general practitioners. He is a part-time lecturer at the Faculty of Medicine of Sofia University “St. Kliment Ohridski,” teaching medical students in: 3rd year – Propaedeutics of Internal Diseases, 4th and 6th year – Internal Medicine – Cardiology. The certificates presented confirm his strong teaching engagement. He also serves as academic supervisor of one doctoral student.

Conclusion : In this competition, Assoc. Prof. Dr. Valeri Gelev, PhD, is presented as a well-established specialist with extensive clinical, research, and teaching experience. He holds recognized specialties in Internal Medicine and Cardiology, as well as certification in Invasive Cardiology. He has completed numerous additional qualifications and has produced significant scientific output. He is a leading expert in the field of Invasive Cardiology, with a distinct focus on the treatment of complex lesions and the recanalization of chronic total occlusions (CTOs). He is a respected academic instructor in the specialty and has served as former Chair and currently as Vice-Chair of the Bulgarian Society of Invasive Cardiology, a former member of the Governing Board of the Bulgarian Society of Cardiology, one of the Directors of the Bulgarian Bifurcation Course, and a member of the Expert Council on Cardiology at the Ministry of Health. His scientific contributions fully meet the requirements of the Law on the Development of the Academic Staff in the Republic of Bulgaria, its Implementing Rules, and the Internal Regulations of “Acibadem City Clinic Tokuda University Hospital” for holding the academic position of “Professor.”

For these reasons, I respectfully recommend that the esteemed members of the Scientific Jury vote in favor of appointing Assoc. Prof. Dr. Valeri Lyubenov Gelev, PhD, to the academic position of Professor in the scientific specialty Cardiology, for the needs of the Cardiology Clinic at Acibadem City Clinic Tokuda University Hospital.

26.06.2025

Sofia

Prof. Dr. Ivan Tomov Gruev, PhD