STATEMENT

From Prof. Svetoslav Zhivkov Georgiev, MD, PhD Member of the Scientific Jury, appointed by order No. R-109-140/23.02.2023

<u>Regarding:</u> Procedure for acquirement of the academic position "Associate Professor" in 7.1. "Medicine" – professional field, scientific speciality – "Cardiology", opened for the First Department of Internal Diseases, Faculty of Medicine, Medical University – Varna, published in SG 102/23.12.2022.

The contest for acquirement of the academic position "Associate Professor" is in concordance with the requirements of the Academic Staff Development in the Republic of Bulgaria Act (DASRBA), the Implementation Rules of DASRBA, and the Rules and Regulations for Academic Staff Development in Medical University – Varna.

Dr. Yavor Dimitrov Peychev, MD, PhD, has submitted documentation for participation in the procedure. Currently, he is a principal assistant professor in cardiology at the First Department of Internal Diseases, Division of Cardiology, Faculty of Medicine, Medical University – Varna. He is the only candidate for filling the academic position of "Associate Professor".

I have found no irregularities in the conduct of the competition so far. The applicant has submitted all relevant documents specified in the minimum requirements defined in the Academic Staff Development in the Republic of Bulgaria Act (DASRBA), the Implementation Rules of DASRBA and the Rules and Regulations for Academic Staff Development in MU-Varna. I have been appointed as a member of the Scientific Jury pursuant to Order No. R-109-140/23.02.2023 of the Rector of the Medical University – Varna, and there is no conflict of interest in my participation as such. I have found no plagiarism in the research papers for review.

Academic and career profile

Dr. Yavor Dimitrov Peychev graduated as a Master of Medicine from the Medical University – Varna with honours in 1988. In 1994, he obtained a Certificate of completion of special training in *Internal Diseases* and in 1998 – a Certificate of completion of special training in *Cardiology*. His doctoral thesis on "*Prognosis and Prognostic Factors in Aortic Valve Replacement for Aortic Stenosis*" earned him a doctoral degree (PhD) in 2018. Dr. Peychev has been working as a physician from 1988 to 2023. He started his career in 1988 as a resident physician in the Third Polyclinic of the Primary District General Hospital – Ruse. Since 1990, he has been an attending physician at St. Marina University Hospital – Varna. From 1990 to 2005, he worked at the Clinic of Cardiology, and since 2005 he has been a cardiologist at the Cardiac Surgery Clinic. Since 1990, Dr. Peychev has been successively an assistant professor, senior assistant professor and chief assistant professor at the Department of Internal Diseases, Medical University of Varna.

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Research contributions

Dr. Yavor Peychev's research defines him as a clinician with a prevention-oriented approach and manifested affinity for diagnostics, therapy and the integration of invasive and non-invasive methods of heart examination. The presented research works reflect a number of issues, which I would summarise in several areas:

- Modern pharmacotherapy of heart diseases (New antiarrhythmic medications entering the clinical practice; Modern antithrombotic therapy of acute myocardial infarction; Inhibitors of angiotensin-converting enzyme and role of the endothelium; Modern views on the treatment with nitrates and on nitrate tolerance).
- Non-invasive electrocardiology (Electropathogenesis and diagnosis of severe ventricular ectopic activity in ischemic heart disease; "Electrical" disease of the hypertrophic myocardium, which is currently defined as "electrical hypertrophy" of the left ventricle; Electrocardiologic aspects of the heart failure syndrome).
- Diagnosis and treatment of diseases of the operated heart with a focus on calcific aortic stenosis (Prognosis and prognostic factors in surgical aortic valve replacement due to aortic stenosis; Comorbid conditions in patients with aortic stenosis; Sex-specific differences in patients with aortic stenosis; Left ventricular hypertrophy in patients with aortic stenosis with its inseparable "anatomical" and "electrical" aspects, on which comorbidity [arterial hypertension] and sex-specific differences are probably built up).
- Sudden cardiac death (Risk of sudden death, sudden death and the operated heart, principles of cardiopulmonary resuscitation in non-operated patients and patients undergone cardiac surgery).

Scientific and applied contributions in the presented research papers:

- For the first time in this country, a study on the prognosis of patients after surgical aortic valve replacement due to calcific aortic stenosis, followed prospectively for a period of 10 years, was conducted.
- For the first time in this country, sex-specific differences in patients with calcific aortic stenosis were investigated with the assessment of their clinical significance.
- From a methodological point of view, for the purposes of correct analysis and interpretation of data, the researcher Dr. Y. Peychev quested a "pure" model of left ventricular hypertrophy (young athletes, isolated aortic stenosis) to maximally eliminate the impact of comorbidity on short-term and long-term prognosis. The search for a "pure" model is legitimate and logical from a haemodynamic and clinical perspective.
- Dr. Y. Peychev investigated the clinical significance of some non-invasive electrocardiologic indicators late potentials (signal-averaged ECG) and QT dispersion (standard ECG), as risk markers of severe ventricular arrhythmias and sudden death in patients with heart failure, myocardial ischemia and left ventricular hypertrophy.

Scientometric Indicators

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Dr. Y. Peychev has presented a list of the following published research papers:

1. Doctoral thesis for obtaining the educational and scientific degree "Philosophy Doctor" in Medicine on the subject of "Prognosis and Prognostic Factors in Aortic Valve Replacement for Aortic Stenosis", 2018;

2. A monograph – "Calcific aortic stenosis. Sex-Specific Differences and Their Clinical Significance", 2022;

3. Full-text publications:	12 items
- in Bulgarian	7 items
- in English	5 items
Among which:	
- Single or first author	3 publications
- Second or subsequent author	9 publications
4. Publications in journals with IF	2 items
5. Participation in congresses and symposia	53 times

Dr. Peychev's report on "Coexistent Arterial Hypertension in Patients with Severe Isolated Calcific Aortic Stenosis Is Associated with Worse Long-term Survival after Surgical Aortic Valve Replacement", presented at 2019 Scientific Sessions of the American Heart Association, was honoured with the "International Scholar Award" under the name of Dr. Paul Dudley White, given to the highest-ranked abstracts for scientific contribution to cardiology for the current year.

Dr. Peychev is either first or single author of 7 scientific publications. The total IF of his scientific works (papers and abstracts) is **38.202** IF.

The presented scientometric citation reference reflects the following databases: Web of Science, Scopus and Google Scholar -4 citations in international journals.

Participation in research projects/programs

Dr. Peychev has participated in 1 research project and 5 randomised and controlled international clinical trials.

Educational academic activity

Dr. Peychev teaches fourth- and sixth-year medical students and postgraduate physicians specialising in cardiology. Dr. Yavor Peychev has been an assistant professor at the Medical University of Varna for 33 years. His teaching workload accounts for 221 hours per year.

The presented educational activity positions Dr. Peychev in the professorial group of academics with extremely rich pedagogical experience.

Expertise, therapeutic and diagnostic activity

Dr. Yavor Peychev worked and conducted his training at the leading University Hospital – "St. Marina" University Hospital – Varna, Bulgaria. He held a fellowship in "Treatment of Cardiac Arrhythmias" at the Freiburg University, Freiburg, Germany, in 1992. He conducted a fellowship in "Cardiopulmonary Resuscitation" in 1993 at the Michigan State University, East Lansing, Michigan, USA – "Annual Advanced Cardiac Life Support (ACLS) and Basic Cardiac Life

Support (BCLS) Course". Since 2013, Dr. Peychev has acquired a professional qualification in the field of echocardiography – "Echocardiography – expert level, Transhtoracic echocardiography, Transesophageal echocardiography and Stress-echocardiography". He is a qualified cardiologist who has mastered the application of all non-invasive diagnostic methods in the field of cardiovascular pathology.

Membership in scientific and professional organisations

Dr. Peychev is a member of the Bulgarian Medical Association, the Bulgarian Society of Cardiology, the Association of Specialists in Echocardiography – "Varna-Echo", the "Heart Lung" Association, the American Heart Association and the International Society of Electrocardiology.

Conclusion:

Dr. Yavor Dimitrov Peychev is an experienced university professor and highly competent clinician. His constant research activity and systematicity in publications present him as a meticulous and earnest researcher in cardiology. The provided materials are in compliance with all qualitative and quantitative indicators set in the Academic Staff Development in the Republic of Bulgaria Act (DASRBA), the Implementation Rules of DASRBA, and the Rules and Regulations for Academic Staff Development in Medical University – Varna.

Considering the presented evidence and supportive materials, I recommend the honourable jury to offer the Academic Board of Medical University – Varna to adjudicate the academic position of "Associate Professor" in Cardiology to Dr. Yavor Dimitrov Peychev.

07.05.2023 Varna Prof. Svetoslav Zhivkov Georgiev, DM, PhD