

To

The Chairman of the Scientific Jury

Appointed by an order of the

Rector of MU – Varna

№ P-109-140/23.02.2023

## STATEMENT

From Prof. Plamen Georgiev Panayotov, MD, PhD, Head of the Clinic of Cardiac surgery at „St. Marina“ University Hospital – Varna. Head of the Department of Cardiovascular surgery and angiology, Medical University “Prof. Dr. Paraskev Stoyanov” – Varna. Member of the Scientific Jury, appointed to the procedure for acquirement of the academic position “Associate Professor” in higher education area 7. “Healthcare and sports”, professional division 7.1. “Medicine”, scientific speciality “Cardiology”. The opening of the procedure is published in the State Gazette, № 102/23.12.2022.

The documents presented by the candidate are in compliance with the requirements for holding an academic position of “Associate Professor” according to the Development of Academic Staff in the Republic of Bulgaria Act (DASRBA) and the Rules and Regulations for acquirement of scientific degrees and holding academic positions at Medical University “Prof. Dr. Paraskev Stoyanov” – Varna. I find no omissions in the submitted documentation.

**Brief biographical data.** Dr. Yavor Dimitrov Peychev graduated the Medical University – Varna in 1988 and during the same year, he started his professional career as a physician on general practice at the Polyclinic of the Primary District General Hospital in Ruse. His academic pursuit started in 1990 as an “assistant professor” at the Department of Internal Diseases and Therapy, Medical University – Varna and the Clinic of Cardiology at “St. Marina” University Hospital – Varna. He continued his career development at the same institutions successively as an attending physician, “senior assistant professor” and “chief assistant professor” until 2005. Since 2005 he works as a cardiologist at the Clinic of Cardiac Surgery, “St. Marina” University Hospital – Varna. Currently, he occupies the position of a “principal assistant professor” at the Clinic of Cardiac Surgery, “St. Marina” University Hospital – Varna. Dr. Peychev is still working as a “principal assistant professor” at the First Department of Internal Diseases at MU – Varna. He gives lessons and seminars to Bulgarian and English-speaking medical students in cardiology.

Dr. Peychev has acquired two Certificates of Completion of Special Training – in “Internal Diseases” (since 1994) and in “Cardiology” (since 1988). From 2014 to 2017, Dr. Y. Peychev used to work as an independent graduate on his doctoral thesis. In 2018, he acquired the educational and

scientific degree “Philosophy Doctor” (PhD) in the speciality of “Cardiology”. His doctoral thesis was on “Prognosis and Prognostic Factors in Aortic Valve Replacement for Aortic Stenosis“. Dr. Y. Peychev has published one monograph, 25 papers and 56 reports at scientific journals and supplements.

## **1. Scientific and research activities**

### **1.1. Publications**

For the competition, Dr. Peychev has submitted 15 research papers and reports, above and beyond those submitted for acquiring the educational and scientific degree “Philosophy Doctor”: a monograph (habilitation thesis) – “Calcific aortic stenosis. Sex-Specific Differences and Their Clinical Significance”, 10 publications in peer-reviewed journals not refereed in the world academic research databases, or in edited collective volumes. Four of the submitted publications are in English, as 2 of them are published in scientific journals with Impact Factor, and 4 are written in Bulgarian and English. There are also 2 full-text papers, submitted in scientific journals and supplements, beyond the minimum scientometric requirements for filling the academic position of “Associate Professor”.

The total number of scientific publications in peer-reviewed journals, refereed and indexed in world research databases as well as in non-refereed peer-reviewed journals and edited collective volumes amounts to 61.

There are 4 publications published in Impact Factor journals with a total IF of 38.202.

### **1.2. Authorship and citations**

The scientometric citation reference, issued by the Medical University of Varna, reveals 4 citations, 3 of which are refereed and indexed in the world databases Web of Science and Scopus (self-citations are not reflected in the count).

## **2. Profile of scientific and research activity**

The research activity of Dr. Peychev is entirely in the field of cardiology and cardiac surgery. According to the subject of the presented scientific publications, the scientific research activity of the candidate could be classified into the following areas:

1. Current pharmacotherapy of heart disease – 3 publications (№ in the attached list: G8.2, G8.3, №1);

2. Noninvasive electrocardiology – 3 publications (№ in the attached list: G7.1, G8.6, G8.7, G8.8, G8.9 and G8.10). There are 3 areas of research in this field:

- Electrogenesis of severe ventricular ectopic activity in ischemic heart disease;
- The idea of “electrical” disease of the hypertrophic myocardium, which is now defined as “electrical hypertrophy” of the left ventricle;

- Electrocardiological aspects of the heart failure syndrome.

3. Diagnosis and treatment of diseases of the operated heart with a focus on calcific aortic stenosis – 2 publications (№ in the attached list: B3 and G7.2);

4. Sudden cardiac death. Risk of sudden death. Sudden death and the operated heart. Principles of cardiopulmonary resuscitation – 6 publications (№ in the attached list: B3, G7.2, G8.8, G8.9, G8.10 and №2);

5. Participation in scientific research projects – Euro Heart Survey (EHS) on Atrial Fibrillation (EHS-AF), and in randomised and controlled international clinical trials – CONVINC (Controlled ONset Verapamil INvestigation of Cardiovascular Endpoints); HERO (Hirulog and Early Reperfusion or Occlusion) – 2; ESTEEM (Efficacy and Safety of the oral direct Thrombin inhibitor ximElagatran in patients with rEcent Myocardial damage) and CORONA (COntrolled ROsuvastatiN Multinational Trial in Heart Failure).

### **3. Major scientific and applied contributions**

The contributions of Dr. Peychev, reflected in his research papers, are presented and summarised by subject.

1. A study on the prognosis in patients with calcific aortic stenosis, with 10-year follow-up after surgical aortic valve replacement. To the best of the author's knowledge, no such data have been published until now in this country.

2. In his monograph Dr. Peychev investigates, for the first time in this country, the impact of sex-specific differences in patients with calcific aortic stenosis.

3. In certain number of his studies, Dr. Y. Peychev rationally quested a “pure” model of left ventricular hypertrophy, deprived as much as possible from any impact of comorbidities – young athletes, isolated aortic stenosis. The ultimate aim of the author is to study the effect of the hypertrophy process of the left ventricle on short-term and long-term prognosis.

4. Investigation of the clinical significance of some non-invasive electrocardiologic indicators – ventricular late potentials (signal-averaged ECG) and QT interval dispersion (standard ECG), as markers of risk for severe ventricular arrhythmias and sudden cardiac death in patients with heart failure, myocardial ischemia and hypertrophy of the left ventricle.

### **4. Educational activity**

Dr. Yavor Peychev is a lecturer at the “First Department of Internal Diseases” at Medical University – Varna. He conducts exercise courses and seminars for fourth-year medical students in Bulgarian and English. His average annual horarium has been 220 hours/year during the last 4 years and over 140 hours per year prior to that. He is in charge with the education and training in cardiology of trainee physicians and postgraduate students during their specialisation modules in cardiac surgery. Since obtaining PhD degree, Dr. Peychev is involved in the lecture courses on

cardiology given to fourth-year medical students, students studying cardiology as an optional discipline, as well as to postgraduate physicians specialising in cardiology. Dr. Peychev also gives lectures within the training programme “Highly Specialised Module – Expert Level in Echocardiography” for cardiologists. Academic mentor in the project BG05M2OP001-2.002-0001, Student Practices – Phase I.

### **5. Membership in scientific organisations**

Dr. Peychev is a member of the following scientific organisations: Bulgarian Medical Association, Bulgarian Society of Cardiology, Association of specialists in Echocardiography “Varna – Echo”, “Heart – Lung” Association, American Heart Association and International Society of Electrocardiology.

Yavor Dimitrov Peychev, DM, PhD, meets the minimum national requirements of DASRBA – Article 1, Section 4, the Implementation Rules of DASRBA and the Rules and Regulations for acquirement of scientific degrees and holding academic positions at Medical University “Prof. Dr. Paraskev Stoyanov” – Varna. At a minimum score of 400 points, the candidate scores 407.5 points.

### **6. Conclusion**

The analysis of the scientific and research profile, the educational and therapeutic activity, as well as the scientific contributions of Dr. Y. Peychev presents him as a scholar with extensive knowledge and attention to detail, an educator and a physician with comprehensive expertise in cardiology.

I consider that Yavor Dimitrov Peychev, MD, PhD, meets all the requirements of DASRBA and the Rules and Regulations for acquirement of scientific degrees and holding academic positions at Medical University “Prof. Dr. Paraskev Stoyanov” – Varna.

I vote in the affirmative and recommend the esteemed Scientific Jury to award him the academic degree of “Associate Professor“ in higher education area – 7.1. “Medicine” and scientific speciality “Cardiology”.

04/05/2023

Varna

Prepared by:

Prof. Plamen Panayotov, MD, PhD

