Appointed by Order of the Rector of Medical University-Varna

N: P-109-259/6.06.2025

REVIEW

By Assoc. Prof. Dr. Irina Ivanova Ivanova, MD, PhD, Head of the Department of Gastroenterology, Hepatology and Nutrition at the Second Department of Internal Medicine, Faculty of Medicine, "Dr. P. Stoyanov" Medical University, Varna

Regarding: announced procedure for the academic position "Associate Professor" in the field of higher education 7. Health care and sports, professional direction 7.1 Medicine in the scientific specialty "Gastroenterology", promulgated in the D.V, 30/08.04.2025.

By order of the Rector of MU-Varna P-109-259/6.06.2025, I was appointed as a member of the Scientific jury for the mentioned procedure, and by the decision of the Scientific jury reflected in Protocol N.1 of 17.6.2025, I was assigned to prepare that reviews.

According to the announced procedure, two candidates submitted documents: Dr. Savi Rinaldiev Shishkov, MD, PhD, and Dr. Radina Stoyanova Dimitrova, MD, PhD.

I declare that I have no conflict of interest with the candidates.

I received all the necessary documents for the preparation of the review from the "Career Development", MU-Varna, precisely described and arranged by the candidates. I prepared the review, in accordance with the requirements of the Law of the Development of the Academic Staff in the Republic of Bulgaria, the Regulations for its implementation and the Regulations for the development of the academic staff of MU-Varna.

1. A brief biographical reference of D-r Savi Shishkov.

Savi Rinaldiev Shishkov was born on November 28, 1991 in Varna. He graduated with a Master's degree in Medicine in 2017 at the Medical University of Varna and in the same year started working at the Clinic of Endocrinology and Metabolic Diseases of the University Hospital "St. Marina" and the Medical University of Varna, initially as a resident physician, and currently as a specialist physician. He obtained the specialties "Endocrinology" and "Health Management and Medical and Social Care" in 2021. He defended his Doctor's degree in Endocrinology in 2023 with a dissertation on the topic "Androgen levels in men with acute and chronic coronary syndrome". Dr. Shishkov has completed training at the Leiden University Medical Center in the field of growth hormone treatment and the transition and care of sick children to those

for adults, the "Europit" course and the Highly specialize procedure course "Ultrasound of the neck". In his clinical work, he participates in expert committees for endocrine and rare diseases. In his academic work as an assistant, and after 2023 and senior assistant, he teaches Bulgarian and English-speaking students in "Medicine" - seminars and a lecture course and participates in the examination committees for semester and state examination sessions, participates in 2 scientific projects as a coresearcher at the Faculty of Medicine of MU-Varna and in 12 scientific forums with a report. The candidate is fluent in English and German.

2. Scientific activity of D-r Savi Shishkov.

The overall scientific activity of Dr. Savi Rinaldiev Shishkov includes a total of over 30 publications: a dissertation for the acquisition of the PhD degree on the topic "Androgen levels in men with acute and chronic coronary syndrome", a monograph - habilitation work from 2025 with the title "Organized transition to care for adults with rare endocrine diseases", a book based on a defended dissertation with the title "Androgens and coronary artery disease", participation as a co-author in the collective monograph "Affective disorders", 14 publications and reports published in scientific journals and 12 participations in scientific forums with oral presentation or poster.

For this procedure, Dr. Shishkov presents the following scientific publications: the described dissertation, monograph and a chapter in a collective monograph; 8 publications and reports published in publications that are referenced and indexed in world-renowned databases; 11 publications in non-refereed journals with scientific review. A total of 10 of the publications are in a foreign language (English).

According to the provided academic report, D-r Shishkov scientific production exceeds the minimum quantitative scientometric requirements for occupying the academic degree "Associate Professor" provided by the Regulations for development of academic staff of MU-Varna in all indicators:

- A1: 50 points
- B3: 100 points
- Γ6: 40 points
- Γ7: 94.14 points
- Γ8: 66 points; summary indicator of publication activity is 205.1.
- According to indicator Д10-12 6 citations has been stated (60 points).

The publication activity for the purposes of the competition is in the period of the last 5 years and excludes the publications of the candidate for the purposes of the previous degree "Doctor". In 58% (11 out of 19) of the publications, Dr. Shishkov is the first author. Therefore, the candidate is a leading author in the publication activity with lasting scientific interests in the field of the specialty "Endocrinology".

The topics of the developments of Dr. Savi Shishkov and the scientific contributions can be summarized in the following areas:

- In-depth study of the relationship between male gonadal function and the risk of occurrence and aggravated course of acute and chronic coronary syndrome and chronic kidney disease. The candidate's research work begins with the project set out in the dissertation and develops into a book and seven scientific publications, two of which in refereed journals. Dr. Shishkov published data on the relationship between androgen hormones and metabolic dysfunction (dyslipidemia), changes in renal function (reflected in eGFR) and establishes the role of endocrine disorders as predictors of the risk of acute coronary syndrome. Thus, free testosterone is associated with CVD risk, reflected by GRACE. On the other hand, the role of possible hormone replacement therapy with its possible benefits and disadvantages is also discussed. The issue in the world literature is open, relevant and sets new requirements for the study of hormonal disorders in the pathogenesis of heart and vascular diseases, in particular the higher value of the cortisol/DHEA-S ratio.
- Rare endocrine diseases and the organized transition from pediatric to adult medical care. In this area, Dr. Shishkov has published interesting data in the monograph "Organized Transition to Adult Care in Rare Endocrine Diseases", summarizing little-known, but well-established facts in the field and his own results and experience. Under the leadership of Dr. Shishkov, the first national survey on awareness of the transition from pediatric to adult medical care in rare endocrine diseases was conducted; scales and algorithms for assessing readiness and transition were developed. Dr. Shishkov's monograph discusses international survey studies, outlining the lack of standardized protocols for transition, i.e. justifying the need to create and test own assessment tools. A retrospective analysis of growth hormone treatment was conducted. Specific clinical cases are also included, highlighting the diagnostic and therapeutic challenges. The proposed algorithms can be recommended as the basis for a national program for rare endocrine diseases in Bulgaria.
- Thyroid pathology. In this area, Dr. Shishkov participates as a leading author of scientific publications on intrathyroid malignant lesions based on autoimmune thyroid pathology. The candidate is a graduate of a leading clinical center for diagnostics and management of thyroid lesions and logically continues the tradition of the Clinic of Endocrinology and Metabolic Diseases with work in this scientific and practical area.
- Diabetes mellitus. In this area, Dr. Shishkov works together with a team of pathologists on the interesting topic of maternal diabetes and related fetal damage, presented in a publication of an interesting clinical case. Histological changes in the retina in complications of diabetes mellitus have been analyzed.
- Psychosomatics. Dr. Shishkov is the author of a chapter in a book on psychological problems in people with endocrine diseases. His contributions in this area are of a practical and applied nature.

Evidence of Dr. Shishkov's research activity is his participation in 2 scientific projects at the Science Fund of MU-Varna. Also, the candidate presents his research and summarizes his knowledge in scientific conferences, for example: in the ESE, ESPE and Endo-ERN Rare Disease webinar with the topic "Essential insights for the transition from pediatric to adulthood care in rare pituitary disorders", as well as in the VII-th ISPAD/VAPES Postgraduate Course and Conference "Diabetes and rare endocrine diseases" with the topic "Growth hormone treatment in transition age - case series" and in the "Europit" course in France in 2023 with a clinical case of Nelson syndrome.

3. Teaching and educational activity of D-r Savi Shishkov.

Dr. Shishkov is a teacher at MU-Varna, at the beginning of 2018 he was an assistant, and since 2023 after a competition he has been appointed as a chief assistant at the Second Department of Internal Medicine. The total teaching experience of the candidate (as of 04.2025) is 7 years and 1 month. Dr. Shishkov leads seminars and exercises and participates in the lecture course of training of 5th-year students of "Medicine", Bulgarian- and English-language training and intern doctors at the Faculty of Medicine. His excellent education and scientific activity are practically reflected in the daily work with students, interns and specialists and the post-graduate training of doctors at the Clinic of Endocrinology and Metabolic Diseases. It should be noted his participation in examination committees of students of "Medicine" and in the committee for the state exam in "Internal Medicine". In the submitted study load report of Dr. Shishkov, issued by MU-Varna, it is clear that the candidate meets the study load requirements according to the PRAS of MU-Varna.

4. Therapeutic-diagnostic activity of D-r Savi Shishkov.

Dr. Shishkov has extensive clinical experience part of team of the Clinic of Endocrinology and Metabolic Diseases, starting in October 2017, for a total of over 7 years, with more than 3 years of work experience as a specialist. He has completed numerous post-graduate courses in the specialty "Endocrinology" and has a qualification in VSD "Ultrasound of the Neck". Part of the candidate's medical activity is his participation in expert committees at the University Hospital "St. Marina" for the treatment of patients with type 1 and 2 diabetes mellitus, growth hormone deficiency, treatment with calcitriol, patients with hyperprolactinemia, acromegaly. Dr. Shishkov is part of multidisciplinary teams for comprehensive medical care of patients with hypopituitarism, hypoglycemia and rare forms of diabetes, rare endocrine diseases, such as patients with Prader-Willi syndrome. The candidate is a member of the Bulgarian Society of Endocrinology, the European Society of Endocrinology, the European Neuroendocrine Association and the European Thyroid Association. Last but not least, in the daily work of a doctor at St. Marina University Hospital, I know and recognize the competence, erudition, responsiveness and kindness of Dr. Shishkov.

In conclusion,

Dr. Savi Rinaldiev Shishkov has extensive research and is a recognized, established physician with excellent skills as a clinician, endocrinologist and academic teacher. His development in all the indicated areas, proven by the materials provided by the candidate and my personal impressions, give grounds for a positive assessment of the proposal for awarding the academic position of "Associate Professor" to Dr. Savi Rinaldiev Shishkov.

Aug 20, 2025.

Varna

Заличено на основание чл. 5, §1, б. "В" от Регламент (ЕС) 2016/679

/Assoc. Prof. D/r Irina Ivanova/