#### **OPINION**

by Assoc. Prof. Dr. Rumen Pavlov Nikolov, MD

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### **Medical University of Sofia**

member of the scientific jury for AD "Associate Professor" (published in SG, issue 61 / 23.07.2021), approved by an order of the Rector № P-109-396 / 20.09.2021, field of higher education 7. Healthcare and sport, professional field 7.1. Medicine, specialty "Pharmacology (incl. Pharmacokinetics and chemotherapy)" - one full-time position for the needs of the Department of Pharmacology and Clinical Pharmacology and Therapy, Faculty of Medicine.

One candidate participates in the competition - Ch. Assistant Professor Dr. Silvia Gancheva, MD

## I. Biographical data and career profile of the candidate

Ch. Assistant Professor Dr. Silvia Gancheva Marinova, MD was born in Silistra and graduated from the High School of Natural Sciences and Mathematics - Silistra in 2001. In 2007 she graduated in medicine at MU "Prof. Dr. Paraskev Stoyanov "- Varna. Since 2008 Dr. Gancheva has been an assistant at the Department of Pharmacology and Clinical Pharmacology and Therapy at MU-Varna. In 2018 he successfully defended his doctoral dissertation in the specialty: "Pharmacology (including pharmacokinetics and chemotherapy)". He has acquired the specialty "Pharmacology". In 2019, the candidate acquires the academic position of "chief assistant".

Ch. Assistant Professor Dr. Silvia Gancheva has over 10 years of teaching experience in the disciplines of pharmacology and clinical pharmacology at the Medical University - Varna in the field of. Since 2018 he has held the position of Administrative Assistant at the Department of Pharmacology and Clinical Pharmacology and Therapy at MU-Varna.

The candidate has participated in 5 research projects of national character.

### II General description of the submitted materials in the competition

Ch. Assistant Professor Dr. Silvia Gancheva has attached a complete set of documents, in accordance with the Regulations of the Medical University - Varna: application to the Rector of the Medical University - Varna, for admission to the competition with a description of the documents; creative CV in European format; diplomas for completed higher education (diplomas for completed medical education, certificate for acquired specialty in pharmacology)

from MU - Varna, diploma for acquired scientific and educational degree "Doctor" from 2018 from MU - Varna,), certificate of internship in the respective specialty and reference for the academic positions held so far. The documents are presented on paper and electronic media.

# III. Evaluation of the candidate's scientific works for the overall academic development

Ch. Assistant Professor Dr. Silvia Gancheva has significant publishing activity. He is the author of 1 monograph, 4 textbooks, a total of 22 scientific articles and 48 summaries of scientific events in the field of pharmacology.

The candidate participates in the competition with 1 monograph and 16 scientific papers, as follows:

• Monograph on the topic: Kochia scoparia - the health benefits of an "ordinary" plant, which is presented as the main habilitation work - 150 pages;

• Presented 10 articles and reports in indexed publications, in world-famous databases with scientific information (Scopus and Web of Science) according to the Academic Reference for minimum requirements, 4 publications in journals with IF ";

• Presented 6 publications in unreferred journals with scientific review or published in edited collective volumes;

In 8 of the presented articles Dr. Silvia Gancheva is the first author. In his self-assessment, the candidate has divided the points for each submitted scientific work, in proportion to the number of co-authors, as the candidate's points by groups of indicators that I recognize are as follows: indicator A - 50 points, indicator B - 100 points and indicator G - 204 points.

# IV. Evaluation of the monographic work or equivalent publications submitted for participation in the competition

The candidate has presented a monographic paper examining the pharmacological effects of the active principles of the plant Kochia scoparia (summer cypress; also known as fireweed). The monograph has a volume of 150 pages and contains an introduction, 6 chapters, conclusion and literature. 392 literature sources were used. In the first chapter an in-depth morphological description of the biologically active substances in the fruits and seeds of the plant, the places of distribution of the plant and its use is made. The second chapter discusses the biological activity of momordin Ic and oleanolic acid. The effects of the biologically active substances contained in the plant are described in detail: effects on the gastrointestinal tract and the immune system, hepatoprotective effect, antitumor effect, effect on the metabolic

syndrome and antihypertensive effect. The monograph describes the effects of oleic acid in experimental models of multiple sclerosis, Parkinson's disease, osteoporosis, a model of Alzheimer's disease, which may have practical application in the treatment of these socially significant diseases. Chapter 3 discusses the biological activity of 20-hydroxyecdysone, which is found in all parts of Kochia scopria, incl. the seeds. The fourth chapter of the monograph discusses the biological activity of hydroxytyrosol, which was recently discovered in the seeds of Kochia scopria in the study of their potential antitumor activity. The pharmacokinetics of hydroxytyrosol have been well studied in both animals and humans, which supports the study of the various effects of hydroxytyrosol. Chapter 5 discusses the biological activity of Kochia scoparia fruit / seed extract. Chapter 6 describes our own studies of an aqueous infusion of Kochia scoparia seeds. The effects of healthy male white rats in rats with a model of metabolic syndrome, as well as influencing memory and behavior, were studied.

The monographic work of the candidate is of important scientific and applied significance.

# V. Citation of the candidate's publications in the national and foreign literature

14 citations are presented (210 points according to the Academic reference). The candidate meets the normative requirements for citing scientific papers (60 points according to the Academic Reference).

### VI. Evaluation of teaching activities

From 2008 to the present, the candidate conducts practical classes for students in the disciplines of pharmacology and clinical pharmacology at the Medical University - Varna. During the last five academic years Dr. Silvia Gancheva has a significant classroom employment (average 562 hours/academic year).

### VII. Critical remarks and recommendations

I have no critical remarks about the candidate. My recommendation is to continue my publishing activity.

VIII. General assessment of the candidate's compliance with the mandatory conditions and the mandatory quantitative criteria and scientometric indicators according to regulation for holding academic positions at the Medical University - Varna Field of higher education 7. Healthcare and sports, professional field 7.1. Medicine, specialty "Pharmacology (including pharmacokinetics and chemotherapy)"

Content	Assoc. prof.	Ch. Assistant Professor Dr. Silvia Gancheva
Indicator 1	50	50
Indicator 2	-	
Indicators 3 or 4	100	100
Sum of indicators 5 to 9	200	204
Sum of indicators 10 to 12	50	210
	Indicator 1 Indicator 2 Indicators 3 or 4 Sum of indicators 5 to 9 Sum of indicators	Indicator 150Indicator 2-Indicators 3 or 4100Sum of indicators 5200Sum of indicators50

Table 1. Minimum required points by groups of indicators for the different scientific degrees and academic positions

### **IX.** Conclusion

My complex assessment of the teaching and research activities of Ch. Assistant Professor Dr. Silvia Gancheva is positive. The candidate meets the mandatory and specific conditions and scientometric criteria in ZRASRB and the Regulations of the Medical University - Varna, for holding the academic position "Associate Professor".

The materials submitted by the candidate show that Dr. Silvia Gancheva meets the requirements for the academic position of "Associate Professor", according to the Law on the Development of Academic Staff of the Republic of Bulgaria, the Rules for its implementation and the Rules of MU - Varna. The presented scientific papers and evidence for the scientific activity meet the quantitative and qualitative criteria and show a high contribution character. I give my positive assessment to Ch. Assistant Professor Dr. Silvia Gancheva in the competition and I propose to the esteemed members of the Scientific Jury to award Dr. Silvia Gancheva, MD, the academic position "Associate Professor" in the field of higher education 7. Health and Sports, professional field 7.1. Medicine, specialty "Pharmacology (including pharmacokinetics and chemotherapy)".

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