#### **OPINION**

# by Assoc. Prof. Kiril Svetoslavov Nenov, MD, PhD

Member of the scientific jury appointed by order of the Rector of MU - Varna

Order No. R-109-198/16.04.25 and Protocol of the Faculty Council No. 38/14.04.2025

**Subject**: Competition for the academic position of *"Associate Professor"* in the field of higher education 7. "Health and Sports," professional field 7.1. "Medicine," specialty "Nephrology," announced in State Gazette No. 15/21.02.2025, for Dr. Snejana Atanasova Atanasova, MD, PhD

#### 1. Biographical data and professional development

Dr. Snejana Atanasova Atanasova was born on January 25, 1988, in Varna. In 2007, she graduated from the Third High School of Mathematics and Natural Sciences "Acad. Metodi Popov" – Varna, and in 2013 – from the Medical University "Prof. Dr. Paraskev Stoyanov" – Varna. I have known Dr. Atanasova since her time as a student, as I was one of her instructors. In 2015, she began her specialization in Nephrology as a resident physician in the Dialysis Clinic, and in 2019, she successfully passed the state examination for the specialty.

Her scientific interests are focused on various aspects of nephrology and extracorporeal treatment methods. Her first scientific publication was in 2015, and in 2022, she defended her doctoral dissertation on the topic: "Evaluation and Dynamic Monitoring of Hyperphosphatemia – a Predictor for Bone-Mineral Disorders in Dialysis Patients."

After receiving the academic degree "Doctor," she was appointed as Chief Assistant Professor at the Second Department of Internal Medicine. Dr. Atanasova is actively involved in the diagnostic and therapeutic care of chronic dialysis patients and, since 2023, has also been serving as the administrative physician responsible for dialysis treatment. She is a member of hospital committees related to treatment and transplantation at University Hospital "St. Marina" – Varna.

#### 2. Teaching activity

Dr. Atanasova actively participates in the training of medical students in both Bulgarian and English, as well as in the education of doctoral students and residents. She delivers lectures, leads practical classes, participates in examination committees, and contributes to teaching and methodological development. She is a co-author of teaching aids and a member of the editorial board of the specialized journal "*Current Nephrology*."

#### 3. Scientific output

The materials submitted by Dr. Atanasova for the competition include a total of **25 scientific** works, reflecting her research activity in the period 2015–2024.

# By type:

- Dissertation: 1
- Textbooks/teaching aids: 2
- Publications in journals and proceedings: 25

### By language:

- Publications in Bulgarian: 23
- Publications in English: 2

### By authorship:

- Sole author: 2
- Co-author: 23, including:
  - First author: 10
  - Second author: 7
  - Third author: 5
  - Fourth author: 3

### 4. Main research directions:

- 1. Patient-staff communication in dialysis centers
- 2. Innovative biomarkers in CKD and mineral-bone disorders in hemodialysis patients
- 3. The role of physical activity in hemodialysis patients
- 4. Psychological issues during adaptation to extracorporeal therapy
- 5. Renal anemia in CKD and hemodialysis current aspects and therapeutic approach

### 5. Contributions

### Scientific contributions:

 Study and introduction of novel biomarkers (FGF-23, α-Klotho, sclerostin, Galectin-3) in CKD patients, revealing their prognostic value for mineral-bone disorders and cardiovascular complications.

- 2. Development of a scientifically justified model of the relationship between sclerostin and secondary hyperparathyroidism in hemodialysis patients, proposed as a new pathogenic concept and therapeutic target.
- 3. Investigation of the dynamics of traditional and innovative markers (PTH, BAP, osteocalcin, vitamin D) to improve assessment of mineral-bone metabolism in CKD.
- 4. Research on the psycho-emotional status of patients in the pre-dialysis stage, emphasizing anxiety and depression as prognostic factors for clinical deterioration.
- 5. Analysis of communication models in dialysis centers and their influence on treatment effectiveness and patient adaptation a contribution of theoretical and sociological value.
- 6. Critical analysis of international guidelines (KDIGO, 2021) for the treatment of renal anemia, with interpretation adapted to Bulgarian nephrology practice.

# **Practical contributions:**

- 1. Introduction of intradialytic aerobic exercise (using cycle ergometer) into clinical practice, demonstrating improvements in physical function and quality of life among hemodialysis patients.
- 2. Application and monitoring of intravenous iron therapy (Monofer) in clinical practice contributing to the optimization of anemia management in dialysis.
- 3. Development of a practical strategy for personalized therapeutic approaches based on biomarker monitoring in patients with CKD and secondary hyperparathyroidism.
- 4. Proposals to improve patient-staff communication aimed at enhancing psychosocial adaptation directly applicable in dialysis unit management.
- 5. Development of an interdisciplinary model for assessing and supporting the psychoemotional condition of CKD patients – useful for nephrologists, psychologists, and social workers.
- 6. Practical implementation of international guidelines for anemia management in CKD with evaluation of safety, efficacy, and cost-effectiveness.

### Conclusion

The materials submitted for the competition demonstrate in-depth research grounded in both current international literature and the extensive clinical experience of Dr. Atanasova. She exhibits strong methodological competence, critical appraisal of available evidence, and successfully integrates theoretical knowledge with practical applications. This makes her work highly valuable to both clinical and academic communities.

Particularly noteworthy is her focus on individualized patient approaches in chronic kidney disease, including risk assessment, therapeutic algorithms, and strategies for slowing disease

progression. Dr. Atanasova also emphasizes the interdisciplinary approach, which is essential for effective CKD management. Her scientific and professional dedication deserves full recognition.

I wholeheartedly support her habilitation work and give it a positive evaluation.

I propose that the esteemed scientific jury award the academic position of Associate Professor in the specialty "Nephrology" to Dr. Snejana Atanasova Atanasova, MD, PhD.

	$\sim$	
N 10	Заличено на основание чл. 5, §1, б. "В" от Регламент (ЕС) 2016/679	/

June 17, 2025

Assoc. Prof. Kiril Svetoslavov Nenov, MD, PhD