

Review

by Prof. Dimitrichka Duchevea Bliznakova, MD, PhD
Medical University "Prof. Dr. Paraskev Stoyanov" – Varna

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. "Healthcare and Sports", professional field 7.1. "Medicine", specialty "Nephrology", according to the announcement in State Gazette No. 15/21.02.2025,

by Dr. Snezhana Atanasova Atanasova, MD.

Dr. Snezhana Atanasova Atanasova was born on January 25, 1988, in the city of Varna. In 2007, she graduated from the Third High School of Mathematics and Natural Sciences "Acad. Metodi Popov" – Varna. She completed her higher education in 2013 at the Medical University – Varna.

Professional Development:

- From 2015 to 2019 – resident physician in nephrology at the "Clinic of Nephrology and Dialysis", University Hospital "St. Marina" – Varna.
- Since January 1, 2020 – practicing nephrologist at the same clinic.

Academic Development:

- Since 2018 – full-time assistant at MU – Varna, Department II of "Internal Medicine, Nephrology, Dialysis, and Toxicology".
- Since 2019 – full-time PhD student at MU "Prof. Dr. Paraskev Stoyanov" – Varna.
- Dissertation: "Assessment and dynamic monitoring of hyperphosphatemia – a predictor of bone-mineral disorders in dialysis patients."
- Acquired educational and scientific degree "Doctor" in April 2022.

Publications:

- Teaching aids: co-author of 2 textbooks totaling 272 pages
- Studies: 10
- Articles: 30 articles totaling 186 pages
- Conference papers: 15 papers totaling 269 pages

Participation in scientific forums and research projects:

- National Congress of Nephrology
- Nephrology Academy
- World Kidney Day
- ERA-EDTA Congress

Membership in professional organizations:

- Bulgarian Medical Association
- Bulgarian Society of Nephrology
- European Renal Association (ERA)

Languages:

- Bulgarian
- English

Personal skills and competencies:

Since 2019 – completed a training course on working with the 5008 V4.5 ONLINE plus hemodialysis machine.

Dr. Snezhana Atanasova Atanasova is a recognized nephrology specialist with well-established qualifications and diverse scientific interests in various aspects of nephrology and extracorporeal treatment methods.

She defended her dissertation titled: "Assessment and dynamic monitoring of hyperphosphatemia – a predictor of bone-mineral disorders in dialysis patients."

Dr. Atanasova is actively engaged in scientific and publishing activities. She has authored 30 scientific works – 19 co-authored and 11 as a sole author. She also co-authored two manuals in Bulgarian and English. She regularly participates in scientific forums, including annual national nephrology congresses, the Nephrology Academy, interdisciplinary meetings, round tables, and corporate events. She has attended the Balkan Congress BANTAO, as well as masterclasses and training seminars for the prevention and management of CKD in Poland, Spain, and North Macedonia.

As part of her application for associate professor, Dr. Atanasova submitted 10 full-text scientific publications published in journals indexed in international scientific databases (Scopus), recognized by the National Centre for Information and Documentation (NACID). These publications reflect her research activity from 2015 to 2024. They are equivalent in content and scope to a monographic work. 80% of the presented works contain original research and results, with only 20% (2 articles) being literature reviews.

Two of the publications focus on dialysis patients. Extracorporeal treatments are essential for patients with chronic kidney disease (CKD-G5). Success in such treatment depends heavily on communication and relationships between staff and patients. The role of teamwork in dialysis centers is emphasized as a leading factor in treatment outcomes. Other publications explore new specific biomarkers in dialysis patients, such as sclerostin, Klotho, FGF-23, and Galectin-3. Contemporary approaches to managing renal anemia in CKD are also discussed, including the innovative therapeutic use of Monofer in dialysis patients. One publication addresses the importance and perception of physical exercise in dialysis patients, and another examines their psychological challenges and adaptation to extracorporeal treatment.

An analysis of Dr. Atanasova's publications identifies both theoretical and practical contributions in five research areas:

1. Patient-staff relations in hemodialysis centers (HDC):

- *Theoretical contribution:* Demonstrates that communication is essential in team-based care and comprehensive patient management.
- *Practical contribution:* Emphasizes the psychosomatic status of patients, shaped by their interaction with staff. The medical team helps patients accept the need for dialysis, overcome fear, maintain social integration, and resist isolation and despair.

2. Innovative biomarkers and bone-mineral disorders in CKD patients on dialysis:

- *Theoretical contribution:* Highlights new biomarkers – sclerostin, Galectin-3, FGF-23, and Klotho – with diagnostic and prognostic value.
- *Practical contribution:* Investigates how biomarker levels can guide individualized diagnostic and therapeutic approaches, with implications for cardiovascular disease prevention.

3. Role of physical exercise in dialysis patients:

- *Theoretical contribution:* For the first time in Bulgaria, aerobic intradialytic cycling exercises were introduced and their effects on emotional status assessed.

4. Psychological challenges in adaptation to extracorporeal treatment:

- *Practical contribution:* Demonstrates that CKD patients often experience anxiety, insomnia, suspicion, despair, and depression. Effective support requires not only medical but also psychological interventions.

5. Renal anemia in CKD – current perspectives and treatment strategies:

- *Practical contribution:* Reviews treatment guidelines and presents a study on Monofer use in dialysis patients, showing high efficacy, rapid response, and fewer side effects.

The materials submitted by Dr. Snezhana Atanasova Atanasova reflect her profound clinical expertise, scientific curiosity, and academic competence. She is a well-established nephrology specialist. Chronic kidney disease is a serious condition with significant consequences, including disability and mortality. Dr. Atanasova's scientific contributions enrich our understanding of CKD, both theoretically and practically. Her emphasis on patient communication, teamwork, biomarker discovery, and innovative therapeutic approaches is of high academic and clinical value. Notably, the introduction of aerobic intradialytic exercises in Bulgaria marks a significant advancement. Her analysis of the psycho-emotional state of dialysis patients provides actionable insights into improving their care.

Dr. Snezhana Atanasova Atanasova demonstrates ambition, dedication, and professional competence. Based on the submitted materials, I give a positive evaluation. Knowledge is a treasure that follows its owner everywhere.

I recommend that the esteemed scientific jury confer the academic rank of „Associate Professor“ in Nephrology to Dr. Snezhana Atanasova Atanasova.

June 18, 2025

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

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