## **OPINION**

of Assoc. Prof. Dr. Yana Manolova Manolova, PhD
Department of Ophthalmology and Vision Sciences
Medical University - Varna

Regarding the dissertation for the award of an educational and scientific degree "Doctor" in the field of higher education 7. Healthcare and Sport, professional field 7.1. Medicine, doctoral program "Ophthalmology"

by Dr. Silvia Nikolaeva Nikolova

on the topic: "APPROACH TO UVEITIS IN BULGARIA"

Order No. R-109-411/22.11.2024

The submitted set of materials, both in printed and electronic formats, complies with the requirements of the Law on the Development of the Academic Staff in the Republic of Bulgaria (ZRASRB) and the Regulations for the Development of Academic Staff at the Medical University "Prof. Dr. Paraskev Stoyanov" – Varna.

Dr. Silvia Nikolaeva Nikolova was born on August 18, 1983, in Aytos, Bulgaria. She completed her secondary education at Ivan Vazov High School in Burgas in 2001. Between 2002 and 2009, she studied medicine at the Medical University "Prof. Dr. Paraskev Stoyanov" in Varna, where she graduated successfully.

Her professional career began in the pharmaceutical sector as a medical representative (2009–2018) at companies such as Libra JSC, FinoHealth Ltd., and PHOENIX Pharma Ltd. Simultaneously, she worked in obstetrics and gynecology as a resident physician at MBAL-Burgas.

After specializing in "Ophthalmic Diseases" (code 03.01.36) at SBAL-Varna, Dr. Nikolova earned her specialty in 2018 from the Medical University of Varna. Since then, she has gained clinical experience at Joy Optics, Joy Fashion Ltd., and as an ophthalmologist at St. Ekaterina Medical Center in Varna.

Since 2021, Dr. Nikolova has been an adjunct assistant professor at the Department of "Ophthalmic Diseases and Vision Sciences" at the Medical University of Varna, where she also serves as a lecturer at the "Medical Optics" educational unit. Simultaneously, she works as an ophthalmologist at SBAL-Varna, the Varna Eye Medical Center, and the Vision Center "Prof. Grupcheva."

Dr. Nikolova's scientific interests include:

She continuously enhances her qualifications by attending annual courses and conferences, including:

• "Lasers in Ophthalmology – Treatment of Eye Diseases," 2019;

Dr. Nikolova is a member of the Bulgarian Medical Association and the Bulgarian Ophthalmological Society.

She is fluent in Russian and English and possesses excellent computer skills. Currently, Dr. Nikolova works as an ophthalmologist at SBAL-Varna and the Vision Center "Prof. Grupcheva."

Uveitis has always been a challenging field in ophthalmology due to its frequent recurrences, unclear etiology, occasional resistance to treatment, and potential complications. This justifies the sustained interest in studying and analyzing the condition. Despite its wide diversity, uveitis shows correlations with factors such as climatic conditions, the age structure of the population, the state of the economy, and the quality of the healthcare system.

Currently, uveitis is characterized by changes in etiology and presentation, with anterior uveitis being predominant, moderate to severe cases often linked to autoimmune causes, and a shift in the age group of affected individuals to younger populations. The incidence and distribution of different types of uveitis vary across regions worldwide.

Each study on this disease contributes to advancing our understanding, even if by small steps. The uveitis pattern within a community may differ from others and can also evolve over time. This underlines the need for national and regional studies, as well as repeated epidemiological surveys over time. Comparing such studies can help identify predisposing factors specific to different regions and provide new insights into the disease's pathogenesis. Understanding the epidemiology and causes of uveitis across regions further aids clinicians in developing targeted approaches for managing patients who present diagnostic challenges.

An analysis of uveitis patients treated at SBAL-Varna will refine diagnostic and treatment practices for this group of patients.

Dr. Nikolova's work focuses on characterizing uveitis in Northeastern Bulgaria by analyzing socio-demographic factors, etiological factors, diagnostic and therapeutic algorithms, and complications in patients with uveitis. This is based on a retrospective analysis covering the period 2014–2018 and prospective monitoring from 2019–2021, amounting to a total of eight years of data.

Dr. Nikolova's research is of significant relevance and clinical importance due to the absence of a reference center for uveitis in Bulgaria. The findings from this study are critical for establishing management algorithms tailored to the region.

The presented dissertation spans 212 pages, illustrated with 22 tables and 60 figures. The bibliography includes 217 references. The dissertation is structured into five chapters, corresponding to the research objectives and tasks, and adheres to the formatting requirements for academic dissertations.

The literature review is comprehensive and incorporates contemporary sources on the topic. It examines the anatomy and inflammatory processes of the uvea, the epidemiology, and risk factors associated with uveitis. It also addresses the specific ophthalmological requirements for patients with uveitis, diagnostic algorithms, laboratory investigations, treatment approaches, and emerging therapeutic trends.

The review highlights the wide variety of etiological causes, the complex, stepwise, and interdisciplinary approach required to manage the condition, and the necessity of identifying the specific causative agent, which ultimately determines the choice of treatment.

The objective of the dissertation is to evaluate the socio-demographic characteristics, diagnostic and therapeutic algorithms, and complications in patients with uveitis, based on a retrospective analysis and prospective follow-up over an 8-year period.

To achieve the objective, the dissertation sets out six tasks:

The dissertation is based on a study that covers two periods: a retrospective period (2014-2018) and a prospective period (2019-2021) at the University Specialized Eye Hospital for Active Treatment (USEHAT) in Varna. The study includes 219 patients who were treated at the medical facility, with patient selection based on well-defined inclusion and exclusion criteria.

*The methodology of the study includes:* 

The collected data were processed using the following statistical methods:

For all the conducted analyses, a significance level of p<0.05, p<0.01, and p<0.001 was accepted, with a 95% confidence interval (CI). The data were statistically processed using SPSS v.20, and descriptive indicators for quantitative and qualitative variables were used, presented in tabular and graphical forms.

The focus is on clarifying the characteristics of uveitis in Northeastern Bulgaria with the goal of developing algorithms for managing the problem both at the specialized level and in primary care.

The results obtained from the study are presented in an appropriate format, illustrated with numerous figures and tables. The socio-demographic characteristics, etiological causes, and diagnostic methods of the patients have been analyzed. A treatment analysis was also conducted, as well as an analysis of the disease progression (relapses). A risk profile was created for the patients with uveitis, and the risk of disease relapse was predicted. An algorithm for managing patients with infectious and non-infectious uveitis was also developed.

In the "Discussion" chapter, the results are sequentially presented and compared with studies by various foreign authors, with an analysis of the similarities and differences in the reported data.

Dr. Nikolayeva makes 10 well-founded conclusions in her dissertation. The most important contributions of the dissertation, with scientific, cognitive, and practical significance, are as follows:

Dr. Nikolayeva has presented 3 publications related to her dissertation work.

The abstract provides a concise yet comprehensive presentation of the dissertation.

Dr. Nikolayeva is a very precise and meticulous young ophthalmologist. She is attentive to her patients and colleagues, goal-oriented, and focused on her career as an ophthalmologist.

The presented dissertation is a comprehensive, well-structured, and in-depth scientific work addressing the issues related to uveitis patients and the management algorithms for this complex pathology. It fully meets the requirements of the Law for the Development of Academic Staff in the Republic of Bulgaria, the regulations for its implementation, and the corresponding regulations of the Medical University of Varna.

All of this provides me with grounds to cast a positive vote and recommend to the Scientific Jury to vote positively for awarding the scientific and educational degree of "Doctor" in the scientific specialty "Ophthalmology" to Dr. Silvia Nikolaeva Nikolova.

2 6 a it a a 2 0

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

assoc.prof. Yana M.Manolova