

OPINION

by Assoc. Prof. Desislava Nikolaeva Koleva-Georgieva, MD, PhD, FEBO

Department of Ophthalmology, Faculty of Medicine,

Medical University-Plovdiv

External member of the Scientific Jury, appointed by Order No. P-109-404/20.11.2024. of the Rector of the Medical University "Prof. Dr. Paraskev Stoyanov"-Varna.

Subject: Defense of a dissertation for the award of an educational and scientific degree "Doctor" in the field of higher education 7. Health care and sports, professional direction 7.1. Medicine, in the doctoral program "Ophthalmology", with topic

Dissertation topic: "Place and role of nutritional supplements in ophthalmology practice".

Author: Konstantina Grigorova Kancheva-Bandramalieva, M.D., гд-р Константина Григорова Кънчева-Бандрамалиева, doctoral student of independent training in the doctoral program "Ophthalmology" at the Department of Eye Diseases and Vision Sciences, Medical University "Prof. Dr. Paraskev Stoyanov" - Varna.

Scientific supervisor: Prof. Zornica Zlatarova, MD, PhD

Dear members of the Scientific Jury,

according to Order No. R-109-404/20.11.2024 of the Rector of the Medical University Prof. Dr. Paraskev Stoyanov" - Varna, I was elected as a member of the Scientific Jury, and on the basis of Protocol No. 1/27.11.2024, I was appointed to prepare an opinion on the procedure for acquiring the educational and scientific degree "Doctor" under a doctoral program " Ophthalmology", professional direction 7.1. Medicine, field of higher education 7. Health care and sports at the Department of "Eye Diseases and Vision Sciences" of the Medical University "Prof. Dr. Paraskev Stoyanov" - Varna to candidate Dr. Konstantina Grigorova Kancheva-Bandramalieva.

The candidate, Dr. Konstantina Grigorova Kancheva-Bandramalieva, is a self-taught doctoral student in the doctoral program "Ophthalmology", professional direction 7.1. Medicine, field of higher education 7. Health care and sports at the Department of "Eye Diseases and Vision Sciences" of the Medical University "Prof. Dr. Paraskev Stoyanov" - Varna, registered with Order No. R-109-492/04.11.2020 and was dismissed with the right of defense by Order of the Rector of the Medical University - Varna No. R-109-459/07.11.2023, according to the Report with entry No. P-102-3034/29.10.2024 by Assoc. Dr. Yana Manolova, MD, Head of the Department of Eye Diseases and Visual Sciences and decision of the Faculty Council with report No. 103-

7411/18.11.2024. By Prof. Dr. Yoto Yotov, MD - Dean of the Faculty of Medicine at the Medical University "Prof. Dr. Paraskev Stoyanov" - Varna.

The administrative documents and materials presented to me for consideration have been prepared and presented in accordance with the Law on the Development of the Academic Staff in the Republic of Bulgaria (ZRASRB) and the Regulations for its Application, as well as the Regulations on the Development of the Academic Staff of the Medical University "Prof. Dr. Paraskev Stoyanov" - Varna.

Brief data on the career development and qualifications of the doctoral student:

Dr. Konstantina Grigorova Kancheva-Bandramalieva was born on 28.11.1985. in the city Petrich. He finished his primary education at "Kyril and Methodius" Secondary School, Burgas. In 2005 graduated from the "Johann Wolfgang von Goethe" German language high school, Burgas with excellent success and obtained a German language certificate - "Das Deutsche Sprachdiplom der KMK II", ranking fifth in success in Bulgaria.

In 2006 began studying Medicine at the University of Duisburg-Essen, in the city of Essen, Germany. In 2012 acquired a professional master's qualification "Physician" at the same university. He practices at the Specialized Eye Clinic "Provisus" - city of Essen, Germany and at University Clinic for Eye Diseases "Inselspital" - city of Bern, Switzerland.

In 2013 she returned to the city of Burgas and started working as a doctor in SOBAL "Burgas" and MCSPOB "Dr. Ivanovi", city Burgas. At the beginning of 2014 began his studies to acquire a specialty in Ophthalmology at the Medical University "Prof. Dr. Paraskev Stoyanov"-Varna and Specialized Hospital for Eye Diseases for Active Treatment - Varna, and in the month of December 2020. acquires the specialty "Eye Diseases".

In November 2020 she started her doctoral work as full-time doctoral student in Ophthalmology at the Department of Eye Diseases and Vision Sciences, Medical University "Prof. Dr. Paraskev Stoyanov" - Varna.

She has attended numerous congresses and courses in the country and abroad, taking part with scientific announcements in national ophthalmology forums.

In the course of her studies, Dr. Kancheva acquired the skills to work in an ophthalmology outpatient clinic, hospital and eye operating room, with the necessary diagnostic and therapeutic equipment: fluorescein angiography, optical coherence tomography, echography, optical and ultrasound biometry, computer perimetry, excimer laser, corneal topographer, cyclophoto- and cyclocryocoagulation and others. She is an assistant during cataract and vitreal surgery, a technical assistant during refractive surgery with an excimer laser and performs independent surgical

interventions on the anterior segment of the eye and the appendages of the eyeball. In addition to Bulgarian, he speaks German and English at an excellent level. Has good computer skills as well as Microsoft Word, Excel, Power Point. Отличава се с добри комуникативни умения и бърза адаптация, приспособимост към високо ниво на натоварване, добра работа в екип, поемане на отговорност, адекватна решителност, позитивно мислене, лоялност, креативност, коректност, организираност, съпричастност, съчувствие и индивидуално отношение към всеки пациент.

She is married, has two children and a promising future in clinical and surgical ophthalmology, with a desire to develop scientific and academic activity

Dr. Konstantina Kancheva laid the foundations of her academic development in 2020. with the beginning of his work on the current dissertation work "Place and role of nutritional supplements in ophthalmological practice" under the supervision of Prof. Zornitsa Zlatarova, MD, PhD.

Characteristics and evaluation of the dissertation work:

The dissertation has a volume of 173 pages, of which: Contents - 2 pages, Abbreviations used - 4 pages, Introduction - 2 pages, Literature review - 53 pages, Aim and tasks - 1 page, Materials and methods - 12 p., Results – 21 p., Discussion – 15 p., Summary – 3 p., Conclusions and contributions – 4 pp., Appendices – 21 pp. (in which 22 more tables have been added), Bibliography - 36 pages.

The work is illustrated with 28 figures and 18 tables. The bibliography includes 465 literary sources, of which 5 are in Cyrillic and 460 are in Latin.

The scientific work of PhD student Krasimira Dimitrova is properly structured in terms of sequence and volume of sections.

The exposition is presented clearly and in a very good scientific style.

The abstract is written on 68 pages and reflects the content of the dissertation very well.

Relevance of the topic:

The topic of the presented dissertation is undeniably relevant. It is aimed at searching for new therapeutic options in the fight against glaucoma - a chronically progressive, socially significant eye disease, potentially leading to irreversible blindness. In recent years, a number of trials have been conducted to develop new therapeutic strategies in the fight against socially significant eye diseases. Neuroprotection is a therapeutic approach aimed at preventing, delaying or reducing the death of nerve cells. A large amount of preclinical and clinical studies have shown promising results for the effectiveness of several neuroprotective molecules in reducing retinal ganglion cell loss in glaucoma. In the presented dissertation, two nutritional supplements with neuroprotective properties are investigated - Myeloptic (containing Curcumin 100mg,

Uridine monophosphate 50mg, Lutein 10mg, Vitamin B3 10mg NE, Vitamin B6 6mg, Vitamin B1 4mg, Folic acid 400µg, Vitamin B12 10µg) and Cytisine (contains 250 mg of citicoline).

The positive results of the study of the application of these supplements to the main therapeutic plan of treatment of glaucoma patients would have a practical value in their appointment as an easily applicable concomitant therapy.

All this determines the considered problematic of the presented dissertation work as particularly relevant and significant.

Evaluation of the structural parts of the dissertation:

The literature review is the first chapter of the dissertation work. It is presented on 53 pages and is structured logically. Here, the doctoral student systematically presents data on the considered socially significant disease - glaucoma, describing its nature, epidemiology, risk factors and pathogenesis, diagnostic methods and treatment approaches. The information presented shows in-depth knowledge of the problem presented for consideration. The exposition is in a high scientific style, presented concisely and accessible.

Purpose, tasks and methodology of the study is the second chapter of the dissertation work.

The goal is precisely and clearly formulated, logically following 4 tasks set for its resolution. The study was approved by the Ethics Committee of the Medical University "Prof. Dr. Paraskev Stoyanov"-Varna - Protocol 103/27.05.2021.

The third chapter of the dissertation is the Material and Methods section. It is described concisely and specifically. The study subject and groups were determined: Group A – glaucoma patients taking Myeloptic supplement, Group B – glaucoma patients on andart therapy, without nutritional supplements and Group C – glaucoma patients taking Cytisine. The groups were comparable in terms of age, sex, and intraocular pressure values. Inclusion and exclusion criteria are detailed. The methods used for diagnosis and follow-up of glaucoma patients are also described in detail. The statistical analyzes used are expedient and up-to-date and allow reliable conclusions to be drawn.

The fourth chapter of the dissertation is a presentation of the results.

The presentation of the results obtained from the scientific work follows the order of the set tasks. The section is described in 21 pages. The presentation of the results is consistent and precise, being extremely rich and well illustrated in figures and tables. The results are original and are the result of the doctoral student's own research work. The dissertation showed a positive effect with a decrease in MD (Mean Defect) in computer perimetry and an increase in RNFL (Retinal Nerve Fiber Layer) and GCC (Ganglion Cell Complex) in OCT in both groups with intake of nutritional supplements

for a 15-month period from time. There were better results in Group A (taking Myeloptic), and in Group C (taking Cytisine), the results at the end of the study were better, compared to those obtained after the first 6 months, which points to the thought of need for long-term citicoline administration to reveal its neuroprotective effect.

The fifth chapter of the dissertation is a discussion of the obtained results. The discussion for each task is based on the own results, considered in the light of international experience and with an assessment of their practical value. I highly appreciate both the competent analysis of the results and the used style of the exhibition and their good presentation.

In the sixth chapter, a summary of the presented dissertation work is made, which shows the ability of the doctoral student to briefly synthesize the most important aspects of her work. The conclusion logically follows the presented results and meets the objective.

The seventh chapter presents the conclusions. There are five conclusions from the conducted scientific research, they are precisely formulated and correspond directly to the set goal and tasks.

The eighth chapter lists the contributions of the dissertation work. In the self-assessment, the contributions are divided into 3 groups – contributions of a cognitive nature (2 contributions), contributions of a scientific-applied nature (3 contributions) and contributions of a confirmatory nature (3 contributions). The contributions that highlight the scientific work developed by Dr. Konstantina Kancheva are significant and have not been studied so far in Bulgaria.

I fully accept the contributions presented by the doctoral student from the completed doctoral work.

Presented publications and participation in scientific forums related to the topic of the dissertation:

In connection with her dissertation work, Krasimira Dimitrova presents 4 publications in Bulgarian scientific periodicals and 3 participations in scientific forums in Bulgaria.

Conclusion:

The presented dissertation work "Place and role of nutritional supplements in ophthalmology practice" of Dr. Konstantina Grigorova Kancheva-Bandramalieva is an up-to-date and original scientific work and is the doctoral student's own contribution to the field of ophthalmology in Bulgaria. It was developed at a very good scientific level, contains theoretical, scientific and significant practical contributions. The dissertation meets all the requirements of the ZRASRB, the Regulations for the implementation of the ZRASRB and the Regulations of the Medical University - Varna. I give my high assessment of the scientific work and I confidently vote positively for the awarding of the ONS "Doctor" in the field of higher education 7. Health care and sports,

professional direction 7.1. Medicine, in the doctoral program "Ophthalmology" of the candidate Konstantina Grigorova Kancheva-Bandramalieva, MD.

20.Dec.2024

Complied by:

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

Plovdiv

/Assoc. Prof. Desislava Koleva-Georgieva, MD, PhD, FEBO/