To the Chairman of the Scientific Jury,
appointed by Order No. P-109-469/05.11.2021
of the Rector of Medical University - Varna
"Marin Drinov" 55 Str, 9002 - Varna

OPINION

by Assoc. Prof. Deyan Anakievski, MD, PhD

Department of Surgical Diseases,

Medical University - Varna

as a member of the Scientific Jury, on the basis of the Order of the Rector of Medical University - Varna No R-109-469

on the dissertation for the award of the educational and scientific degree "Doctor"

by Assoc. Prof. Deyan Anakievski, MD, PhD., Associate Professor at the Department of Surgical Diseases of MU "Prof. Dr. Paraskev Stoyanov" Varna

Area of higher education 7. Health and Sport. Professional field 7.1 Medicine. Scientific specialty 03.01.03 "Pathology and Cytopathology"

Subject: "Expression of tetraspanin markers in benign hyperplasia and in prostate cancer".

Author: Lyuben Lyudmilov Stoev, MD

Form of PhD: full-time

Department: General and Clinical Pathology, Forensic Medicine and Deontology

Scientific supervisor: Prof. Maria Tsaneva, MD, PhD

1. Brief presentation of the candidate

Dr. Lyuben Lyudmilov Stoev graduated from the First Language High School - Varna, Bulgaria, with English the first studied language in 2010. In 2016 he graduated with a Master's degree in Medicine at the Medical University "Prof. Dr. Paraskev Stoyanov" - Varna and in the same year he started working as a resident at the Clinic of "General and Clinical Pathology" at St. Marina Hospital, Varna. In 2017 he was appointed as a full-time assistant professor at the Department of General and Clinical Pathology, Forensic Medicine and Deontology at the Medical University "Prof. Dr. Paraskev Stoyanov"- Varna and carries out teaching activities in all taught disciplines, both in the Bulgarian and English program. In May 2021 he successfully passed the state exam for the specialty of "General and Clinical Pathology". Also, Dr. Stoev has been

working as tissue recovery specialist in the tissue donation program at OSTEO-CENTRE EAD Bulgaria since May 2018. He is fluent in two foreign languages - English (C2 level) and German (B2 level).

The candidate is a member of the Bulgarian Society of Pathology, the European Society of Pathology (ESP), the International Society of Urological Pathology (ISUP) and the Bulgarian Medical Association.

2. Relevance

Dr. Stoev's dissertation is dedicated to a disease of extremely high social importance - prostate cancer. When the tumor is confined within the prostate gland, it is considered localized and potentially curable. If the disease has spread to the bone or to other extraprostatic localizations, painkillers, bisphosphonates, hormonal treatment, chemotherapy, radiopharmaceuticals, immunotherapy, focused radiation, etc. may be used. Outcomes are largely based on age, histological features of the carcinoma and staging. In order to refine the choice of appropriate treatment and to accurately stratify patients, the identification of new prognostic markers would be beneficial, as would the identification of potential target molecules for personalized therapy in oncology.

Molecules with such potential are tetraspanins, proteins that have been the subject of research in various fields of medicine in recent years, but their exact prognostic and therapeutic value is yet to be specified.

3. Dissertation evaluation

The dissertation of Dr. Stoev complies with the requirements for structure and length set out in the regulations of MU-Varna. The proportions between the main parts have been respected: abbreviations used, literature review, aim and objectives, materials and methods, results, discussion, conclusions, contributions and bibliography. The dissertation has 115 standard pages and is illustrated with 48 tables and 38 figures, including histological images of excellent quality; the cited references include 194 titles, of which 4 in Cyrillic and 190 in Latin, most of them from the last 10 years.

The stated aim is clearly formulated: to analyze the clinicomorphological parameters of patients with non-advanced and advanced prostate cancer in relation to the immunohistochemical expression of the tetraspanins CD9 and CD151 and to elucidate their role in tumor progression. In relation to the aim, 4 specific tasks are stated. The methods used are correlated with the aim and objectives.

The results of the study comprehensively reflect the expression of the investigated markers in patients with prostate cancer with and without distant metastases, in patients without cancer, and in relation to various clinicomorphological parameters. The results are compared with the literature in the discussion, and a critical interpretation is made and conclusions are summarized for each item considered.

The conclusions are 11 in number and are based on the overall analysis of the results of the literature review, own results and the discussion.

The contributions brought out by Dr. Stoev are 6 in total, of which 2 are of original nature and 4 are of scientific and applied nature.

The abstract follows the content of the thesis. It has been prepared in a volume of 73 standard pages and is composed of parts that present the structure and content, the statement, the contributions and the publications of the thesis.

4. Conclusion

The dissertation is presented in a complete and well-structured form, meeting the requirements of the Academic Staff Development Act in the Republic of Bulgaria, the Regulations for its application and the Regulations of MU - Varna. Taking into account the significance of the topic, the volume and manner of conducting the study, the processing of the material, the results obtained, the conclusions and recommendations, the contributions of theoretical and applied nature, I confidently declare to the members of the Scientific Committee that I vote "for" (positively) the awarding of Dr. Lyuben Lyudmilov Stoev the degree of Doctor of Science in the scientific specialty of Pathology and Cytopathology.

25.11.2021

Assoc. Prof. Dr. Deyan Anaslevski, MD