

P-HO-1413/07.10.2026

To the Chair of the Scientific Jury
appointed by Order No P-4740/31.08.2026
of the Rector at MU – Plovdiv

STATEMENT

by

Assoc. Prof. Boris Seriozhev Mladenov, MD
Head of the Second Department of Adult Urology,
UMHATEM "N.I. Pirogov", Sofia

regarding the dissertation of
Blagovest Peshkov Petrov, MD

on the topic:

“Clinical and Epidemiological Studies on Trichomonas in Infertile Men”

for the award of the scientific and educational degree

"DOCTOR"

in the scientific specialty "Urology" in the professional field 7.1. Medicine in the area of higher
education 7. Healthcare and sports

Dr. Blagovest Petrov's dissertation, titled "Clinical and Epidemiological Studies on Trichomoniasis in Infertile Men," is an in-depth investigation and systematization of the prevalence of sexually transmitted diseases associated with trichomoniasis, the influence of certain clinical and epidemiological factors on its spread, and, separately, the significance of *T. vaginalis* infection in male infertility. The choice of topic is timely and appropriate, given the lack of recent studies in this area in Bulgaria and the growing epidemiological significance of the problem.

The dissertation defense procedure has thus far been conducted in accordance with the relevant regulations, and I find no omissions or inconsistencies in the documentation provided to me.

1. Brief information about the doctoral student

Dr. Blagovest Petrov was born on May 17, 1994. He completed his medical education in 2019 at the Medical University of Plovdiv. He has been specializing in urology at St. George University Hospital since 2021, and since 2023, he has also been working as a resident at "Pazardzhik." Dr. Petrov is writing his dissertation at the Medical University of Plovdiv, with patients included from three centers in Plovdiv and Pazardzhik, where he practices. He is fluent in English and German.

2. Relevance and significance of the dissertation topic

It is well known that, in half of all cases today, reproductive problems are attributable to the male partner, and these problems in themselves represent a global issue. Along with a range of anatomical, genetic, immunological, and hormonal issues, infections of the genital tract also play a significant role. Among these, the most common sexually transmitted protozoan infection in humans is trichomoniasis. A study of this scope, examining the prevalence of urogenital trichomoniasis, its association with other etiological agents of sexually transmitted infections in infertile men, and the corresponding changes in semen parameters, has high practical value.

I consider the choice of topic to be appropriate, given its significance for contemporary urology and andrology and the undoubted relevance of the issues raised and investigated.

3. Doctoral Thesis

The dissertation consists of 121 pages in Bulgarian, contains all the standard sections, and is illustrated with 21 figures, 15 tables, and 3 diagrams. There are 262 citations, of which 254 are in the Latin alphabet and 8 in the Cyrillic alphabet; the majority are articles from the last 5 years, confirming their relevance.

The literature review is presented concisely, analytically, and coherently. It addresses current clinical and epidemiological issues related to *Trichomonas*—pathogenicity, pathogenesis, genetic characteristics, and various diagnostic methods. The review systematically describes the relationship between *Trichomonas* and male infertility, as well as the characteristics of infertility in general.

The objective is clearly formulated and well-grounded scientifically. The four objectives formulated correspond to the unresolved issues in the modern literature identified in the review and are comprehensive in scope—including not only the study of clinical and epidemiological aspects and changes in semen parameters but also the development of a diagnostic algorithm for patients with *Trichomonas* infection and infertility.

Materials and Methods—Data from a sufficient number of patients (359) from three centers were used; 1,076 samples were analyzed using a standardized approach, and the statistical methods and data processing were reliable. Inclusion and exclusion criteria were established and adhered to, and requirements for ethics and good medical practice were met.

The results and the discussion of them are presented sequentially, as the dissertation covers various aspects of the topic. The statistical results presented and illustrated in this manner provide a basis for this work to be considered comprehensive and to make a well-founded claim to both confirmatory and original contributions, namely:

- A comprehensive clinical-epidemiological analysis is presented of a very large cohort of outpatient patients with infertility, including both demographic data and specific microbiological findings regarding co-infections and microbial load
- Data on the prevalence of urogenital trichomoniasis among infertile men—as a risk group for reproductive complications—have been collected and analyzed
- The prevalence of positive test results for sexually transmitted infections was analyzed by age group and duration of infertility, as well as potential age-related behavioral and/or biological risk modifiers.
- A statistical relationship was established between the duration of trichomoniasis and the presence of mono- and mixed infections
- The urological complaints of patients were assessed according to the type of sexually transmitted infection (mono- and mixed infection), and differences in their clinical manifestations were identified, as well as the high relative proportion of asymptomatic monotrachomoniasis.

- The statistically significant adverse effect of T. vaginalis in T. vaginalis-positive infertile men on the physicochemical and functional parameters of the ejaculate was determined.

Dr. Petrov has authored four publications related to his dissertation and is also a participant in a research project funded by the Medical University of Plovdiv — "A Study of the Relationship Between Uncultivable and Difficult-to-Culture Microorganisms and Fertility in Men with Symptomatic and Asymptomatic Infections of the Lower Urogenital Tract."

In conclusion:

I consider that the scientific work presented by Dr. Blagovest Petrov possesses high-quality scientific characteristics, is sufficient in scope, and meets the conditions and requirements of the set of criteria and indicators for the award of the academic and educational degree of "Doctor" in accordance with the Law on the Development of Academic Staff in the Republic of Bulgaria and the Regulations on the Development of Academic Staff at the respective scientific institution. Based on the foregoing, I express my positive assessment and opinion and propose that the distinguished academic jury vote in favor of awarding the academic and educational degree of "Doctor" to Dr. Blagovest Petrov.

05.10.2026

Sofia

Yours sincerely,

/ Assoc. Prof. Boris Mladenov, MD/

Заличено на основание
Чл.5 §1, 6."В" Регламент (ЕС)2016/679