

## **REVIEW**

### **OF A DISSERTATION WORK**

**Of Tsveta Ivanova Kalinova, MD,**

entitled **“A study of hemostasis in erysipelas”**

for the acquisition of the educational and scientific degree of **“PhD”** in the field of higher education №7, ‘public health and sports’,

professional direction №7.1 ‘Medicine’ and scientific specialty of Dermatology and Venereology

#### **Scientific Advisor:**

Prof. Sonya Stoyanova Márina-Kirova, MD, PhD

#### **Reviewer:**

Assoc. Prof. Razvigor Borislavov Darlenski, MD, PhD

Department of Dermatology and Venereology, Trakia University - Stara Zagora

By decision of the Chairman of the Scientific Jury and according to Order № P-109-323/ 30.07.2021 of the Rector of Medical University of Varna, I have been defined to submit the present peer review.

#### **1. Professional data about the PhD student**

Dr. Tsveta Ivanova Kalinova is a PhD student in Dermatology and Venereology since 2018. During the period of her training in Dermatology and Venereology until present, she actively participates in the diagnostics and treatment of bacterial infections of the skin. She has a wealth of experience in the diagnostic tests and treatment regarding this specific field of Dermatology and Venereology. Dr. Kalinova has been actively participating in many scientific national and international conferences and congresses with scientific reports and posters.

At present, Dr. Tsveta Ivanova Kalinova is a full-time PhD student, deducted with the right of defense, to the Department of Infectious Diseases, Parasitology and Dermatovenereology, Faculty of Medicine, Medical University of Varna.

#### **2. Scientific data about the PhD student:**

Dr. Kalinova’s research interests in recent years have been on accurate diagnosis and therapeutic approach in patients with bacterial infections of the skin and more specifically - erysipelas.

Until the date of the defense, the candidate has 6 scientific publications (five on Bulgarian and one in English), as all of them are related to the dissertation topic. In addition, the PhD student participates as a co-author in 4 scientific presentations. There are none articles in peer-reviewed scientific journals in Web of science and Scopus.

The abstract also describes participation in national and international forums with scientific reports and posters proving the scientific activity of the candidate.

### **3. Analysis of the dissertation**

#### **3.1. Actuality of the problem**

In her dissertation, Dr. Kalinova aims to study the hemostatic indices in erysipelas, some of its epidemiological characteristics and the inflammatory marker - procalcitonin.

The dissertation of Dr. Kalinova will have a significant contribution in the field of Dermatology and Venereology. What is important is that in Bulgaria there no exist any scientific work on this issue so far. I believe that the dissertation will contribute to fulfill the missing at national level data on the prevalence, frequency and pathology of hemostasis in erysipelas.

#### **3.2. Assesment of the dissertation**

In the current research, 89 patients with erysipelas and 49 controls were examined, with representative information on the epidemiological, demographic, clinical aspects as well as markers of inflammation and hemostatic changes, assessment of the erysipelas severity in Bulgaria.

This is the first published study on the relationship of erysipelas and hemostatic changes in our country.

The dissertation was discussed at an extended Department Council and was unanimously approved for an official public defense.

The dissertation work is elaborated on 97 pages and illustrated with 7 figures, 18 tables and 3 supplements. The list of scientific publications includes 85 sources, as 18 belong to Bulgarian authors and their articles and publications. This speaks of a good knowledge of the matter and taking into account the Bulgarian contribution to the issue.

The literature review, regarding the dissertation topic, is written in a clear and adequate scientific style and shows that Dr. Kalinova has a profound knowledge of the current issue. She summarizes and analyzes scientific information, giving the reason to realize the need of prognostic markers in erysipelas.

The aim and the purposes of the dissertation are well and logically formulated based on the literature review. The materials and methods are written in details. The description of groups of studied patients is comprehensively presented in the results, as various research approaches are skillfully applied.

The results are presented in details, arranged according to the formulated tasks and including methods, results and discussion.



**The contributions made by Dr. Kalinova are significant, because:**

1. The hemostatic indices in erysipelas are studied for the first time in our country. This is of practical importance due to the need for anticoagulant therapy.
2. Procalcitonin level in erysipelas is being studied for the first time worldwide.
3. An algorithm has been introduced for conducting clinical and laboratory studies of hemostasis in patients with erysipelas, as well as the need to include and anticoagulant

**3.3. Critical remarks**

- it is recommended to indicate “epidemiological data” and “procalcitonin” in the dissertation title.
- it is recommended to print the final version of the dissertation on both sides of the page.
- there is no data on D-dimer - a major marker in the hemostatic studies.
- it is recommended Section “Algorithm” to be exported on section “Results”

The critical remarks do not reduce the value of the presented dissertation work.

**4. Conclusion**

Based on the presented dissertation work I positively evaluate the presented dissertation. The reason for this positive assessment is the relevance of the issue, the importance of the goal and objectives, the modern methodological approaches that are used, the required amount of precisely performed and interpreted research work. The dissertation topic is undoubtedly relevant, the study has a scientific and practical focus. The dissertation of Dr. Kalinova demonstrates the commitment and competence of the author and shows her serious and profound scientific and practical interest in this important issue.

The quality of the dissertation, taking into account the made critical remarks, as well as the requirements for the necessary quantitative and qualitative criteria according to the Regulations for the development of the academic staff at Medical University of Varna, give me the reason to vote positively and to propose to the respected members of the scientific jury to award Dr. Tsveta Kalinova the educational and scientific degree “DOCTOR”

Date:  
20.8.2021 r.

Signature:

