**To**

**The Chairman of the Scientific Jury**

**appointed by order No. 15-05-148/18.10.2022**

**of the executive director of ASK UMBAL Tokuda**

**Dr. Venelina Mileva**

**OPINION**

**by Prof. Dr. Dimitar Ivanov Bulanov, PhD**

of a dissertation for awarding the educational and scientific degree 'PhD'

Field of higher education 7. Health care and sports, direction 7.1. Medicine

Scientific specialty "General Surgery"

**Author: Dr. Anastasia Simeon Petresca**

Form of doctoral studies: independent preparation

Institution: ASK UMBAL "Tokuda", Sofia

**Topic: "Resectability of pancreatic head carcinoma - pre- and intraoperative criteria"**

Scientific supervisor: Prof. Dr. Kiril Dragatnov, DSc., ASK UMBAL "Tokuda", Sofia

*General notes and commentary on the procedure*

The set of materials presented by the doctoral student in paper and electronic media is in full compliance with the requirements of the current regulatory framework in the country, namely - the Law on the Development of the Academic Staff in the Republic of Bulgaria (ZRASRB), the Regulations for the Implementation of the ZRASRB, as well as the Development Regulations of the academic staff at Achibadem City Clinic UMBAL "Tokuda", Sofia.

The specified set of materials includes the following documents:

- application to the Director of "Acibadem City Clinic UMBAL Tokuda", Sofia for disclosure of the procedure for the defense of a dissertation work;

– curriculum vitae in European format with the doctoral student's signature;

– a notarized copy of a higher education diploma;

– orders for enrollment in doctoral studies and for deduction with the right of defense;

– an order for conducting an exam from the individual plan and a corresponding protocol for passing the doctoral minimum in the specialty;

- appointment order and protocol of the meeting of an extended scientific collegium for preliminary discussion of the dissertation work and the decisions taken for the disclosure of the procedure and for the composition of a scientific jury;

– dissertation work;

- abstract for the dissertation work;

– a list of scientific publications on the subject of the dissertation;

- copies of scientific publications on the topic of the dissertation;

- declaration of originality and authenticity of the attached documents;

In connection with the topic of the dissertation, Dr. Anastasia Petresca has attached 8 (eight) full-text publications.

The procedure for the defense of the dissertation, as well as the related documents, fully meet the requirements of the current regulatory framework in the Republic of Bulgaria.

*Brief biographical data of the PhD student*

Dr. Anastasia Simeon Petresca graduated from the Faculty of Medicine of the Sofia University in 2001. Since 2002, she has been specializing in "General Surgery" at the Clinic for Surgical Diseases "Prof. A. Stanishev", UMBAL "Alexandroska", and in 2008 acquired a specialty. Also in 2008, she was appointed as a doctor at the Clinic for Liver, Biliary, Pancreatic and General Surgery (Clinic for Liver, Biliary, Pancreatic and General Surgery), "ASK UMBAL Tokuda".

During his years of work at KCHZHPOH, Dr. Petresca demonstrated continuous professional progress, improvement and development. Both her good theoretical training and her personal qualities contribute to this. She has conducted a number of postgraduate training courses - laparoscopic surgery, hepatobiliary surgery, pancreatic surgery, and others (UMBAL "Alexandroska", MU - Sofia). He has completed a training course at the Johnson and Johnson Institute, Cincinnati, USA in the use of automatic staplers (2012), as well as two one-month specializations in liver and pancreatic surgery and transplantology with Prof. Irinel Popescu, Fundeni Hospital, Bucharest, Romania.

Dr. Anastasia Petresca's interest in pancreatic surgery motivated her to participate in a number of clinic staff studies on these issues, published as articles or presented as reports at national scientific forums. This is also the reason for choosing a topic for a dissertation work, considering the above, in reality, work on some aspects of it begins even before she is enrolled as a doctoral student of independent training. Dr. Petreska has completed all the tasks set out in the doctoral program plan, incl. and examination for the doctoral minimum. After a successful internal defense before an extended scientific collegium, she was awarded the right to an official defense.

*Actuality of the topic*

The resectability of pancreatic carcinomas is an extremely topical topic not only for Bulgarian, but also for global oncosurgery for well-known reasons: local aggressiveness, high metastatic potential, tendency to relapse and metachronous metastasis after radical resections, and as a result of all this - poor long-term results .

The finding of organ metastases and/or vascular invasion makes the patient with pancreatic head carcinoma (PHC) contraindicated for surgery or a candidate only for palliation. Despite advances in preoperative diagnosis, the question "Which case of CHP is resectable?" still does not always receive a definitive answer. As a result, "borderline resectable" cases often turn out to be incurable.

A number of factors have been studied in patients with pancreatic cancer and their role as prognostic for resectability - demographic, clinical, laboratory, imaging-diagnostic. Data from the literature are controversial, even contradictory, and the established dependencies of some authors are rejected by others.

*Knowing the problem*

All these debatable problems are presented in detail by Dr. Anastasia Petresca in the literature review, which represents about 1/4 of the total volume of the dissertation (pages 6-37 inclusive). Logical highlights in it are the possibilities of all modern diagnostic methods with their specificity and sensitivity, as well as key moments of the surgical procedure to guarantee radicality - total mesopancreatic excision, adequate lymphatic dissection, achievement and histological proof of R0, etc. The overview ends with seven conclusions, which are the main argument for conducting the study. The volume and content of this chapter of the dissertation prove that Dr. Petresca is well versed in the issues surrounding the resectability of the CHP.

Research methodology

The aim of the study, the working hypothesis and the tasks to achieve the aim and confirm or reject the hypothesis are precisely and clearly formulated.

Striving for homogeneity and comparability of the cases included in the study, Dr. Petresca used inclusion and exclusion criteria. In this way, a series of 400 cases was obtained in which 7 groups of methods were applied. The detailed description of the methods and their rich illustration with figures is another proof of the good preparation and research qualities of the doctoral student. On the other hand, the detailed and in-depth methodology of the research is the main guarantee for obtaining sufficiently adequate information for the needs of statistical processing and thus reaching reliable results.

*Characterization and evaluation of the dissertation work and contributions*

The dissertation has a volume of 144 standard stations. Illustrated with 38 tables and 15 figures. The bibliography includes 199 sources.The own results are presented on 29 pages, and their analysis and discussion on 30 pages – descriptively, in tabular and graphic form.

Interesting from a scientific-theoretical point of view and important from a practical point of view are the proven dependencies of the resectability of KGP on the size of the tumor and the diameter of the main pancreatic duct.

The significance of EUS in determining vascular infiltration, resp. determination of the resectability of CHP is undisputed. The availability and possibility of using the method in the doctoral student's institution is an indisputable advantage, but unfortunately such a possibility exists in single health institutions in the country.

The "ABC" approach, in my opinion, should become routine not only in CGP, but in general in oncosurgery. In this line of thought, I share and positively evaluate the experience of the doctoral student and the team of ASK UMBAL Tokuda for its popularization among the surgical community in the country.

The inclusion in the chapter "Analysis and discussion of the results" of short discussions after each paragraph in the form of "Commentary" gives weight and greater significance to the specific information and compares it with one's own experience, one's own observations and established dependencies. This once again proves the clear position of the doctoral student and the depth of his knowledge on the subject.

The logical conclusion of the dissertation work is the 13 conclusions and 5 contributions formulated at the end, some of which are confirmatory and others of an original nature. E.g. ..

*Assessment of the PhD student's publications and personal contributions*

Dr. Anastasia Petresca presents a list of eight publications related to the topic of the dissertation, all eight of which are full-text articles or full-text reports printed in proceedings of national scientific forums.

*Critical remarks and recommendations*

My only critical note to the dissertation is that no Bulgarian sources are included in the bibliography.

*Abstract*

The abstract to the dissertation work of Dr. Anastasia Petresca meets the requirements in terms of volume and content and gives a sufficiently clear idea of ​​the essence of the development, reflects in sufficient detail the results achieved and the formulated conclusions.

*CONCLUSION*

After a detailed review of the dissertation and the publications related to it, I give an extremely high assessment of the overall work of Dr. Anastasia Simeon Petresca on the prediction of the resectability of CGP.

The dissertation entitled "Resectability of carcinoma of the head of the pancreas - pre- and intraoperative criteria" contains scientific and scientific-applied achievements that represent an original contribution to science and meet all the requirements of ЗАРСРБ, the Regulations for the application of ЗРАСРБ and the АСК Regulations UMBAL Tokuda.

The presented materials and dissertation results fully correspond to the specific requirements, are original in nature and no plagiarism is detected.

The dissertation work shows that Dr. Anastasia Petresca possesses in-depth theoretical knowledge and professional skills, demonstrating qualities and skills for independent conduct of scientific research. Obtained results, their analysis, conclusions and contributions prove the personal merits of the doctoral student.

Due to the above, I confidently give my positive assessment of the conducted research and propose to the honorable scientific jury to award the fully deserved educational and scientific degree "PhD" to Dr. Anastasia Simeon Petresca in the doctoral program in "General Surgery", for which I confidently vote "Yes".

Prepared the opinion:

06.11.2022

(Prof. Dr. Dimitar Bulanov, PhD)