

REVIEW

of the Scientific papers of Dr Svetla Emilova Dineva, PhD,

Applying for the position of Associate Professor in the domain of High education 7. Healthcare and Sport, Professional direction 7.1 Medicine, Specialty “Medical Radiology and Roentgenology”, at the Department of Diagnostic Imaging- as announced in the Official Journal N 23/14.3.23

By Professor Vassil Hadjidekov, MD, PhD

According the National Cardiology Hospital Executive Director’s

Order: № 147/24.03.2023

In the concours procedure for the position of “Associate Professor” in the domain High education 7. Health care and Sport, professional direction 7.1 Medicine Specialty Medical Radiology and Rontgenology”- for the needs of the department of Diagnostic Imaging of the National Cardiology Hospital, as announced in the Official Journal N 32 dated 14.3.23, the only candidate presented is Dr Svetla Emilova Dineva, PhD. The presented materials by the candidate are according to the Chapter three, Section three of the Regulations of the development of the Academic staff of the National Cardiology Hospital

1. Analysis of the candidate's career profile:

Dr. Svetla Dineva was born in 1984. In 2009, she graduated in medicine at the Medical University - Plovdiv. Since March 2010, she has

been a doctoral student at the Department of Diagnostic Imaging of the Medical University, Sofia, since 2011 she has been enrolled in a specialisation. In July 2014, she successfully defended a dissertation for the educational and scientific degree “doctor (PhD)” on the topic "Modern possibilities of positron emission tomography and computer tomography in secondary malignant bone dissemination". Since 2016, she obtained specialty in diagnostic imaging.

Since February 2012, she has been an assistant professor, and from June 2016 until now - a chief assistant professor at the Department of Imaging Diagnostics of the Medical University - Sofia. Since 2020, she obtained a European Diploma in Radiology.

From 2022, she has a recognised master's degree in health management from the Burgas Free University. She has covered both levels of highly specialised activity - Invasive diagnostic imaging and Interventional radiology. She followed as well continuing medical education in nuclear medicine.

She has specialisations in Vascular and non-vascular interventional radiological procedures in Brno, Rotterdam and Heraklion, as well as a number of courses in the country and abroad.

She is a member of the Bulgarian Association of Radiology, the Bulgarian Society of Interventional Radiology, the European Society of Radiology and the European Society of Cardiovascular and Interventional Radiology. In 2012, he was a laureate - scholarship holder of the Teodora Zaharieva Foundation

She is fluent in English and speaks German

2. General characteristic of the scientific papers of the candidate.

For participation in the concourse, Dr. Dineva submitted 39 (thirty-nine) titles, including 20 (twenty) articles published after obtaining the educational and scientific degree “PhD”.

7 (seven) of them were published in journals with an Impact factor, namely in: Neoplasma (IF 3,409), Indian Journal of Radiology and Imaging (IF 0,252), British Journal of Radiology (IF 3,629), European Heart Journal – Case reports (IF 0,760), Acta Cardiologica (IF 1,738), J. Clin. Med. (IF 1,738), Radiology Case Reports(IF 0.205). The rest find a place in: Radiology and Radiology, J Clin Images Med Case Rep., Medicine and Sports, Bulgarian Cardiology, Urology Endourology, International Bulletin of Otorhinolaryngology, Cardiovascular Diseases, in the ECR/ESR EPOS platform, and others.

3.Evaluation of the scientific papers of the candidate

Dr. Dineva's publications are in various areas of specialty, with cardiovascular and oncological imaging taking the main place.

The incidence of different anatomic variants of pulmonary venous drainage and their association with documented recurrence of atrial fibrillation after ablation was investigated. In a local population of patients with atrial fibrillation, the incidence of variant pulmonary venous drainage is just over 50%. No association was found between the variant anatomy and the recurrence rate of atrial fibrillation after first isolation of the pulmonary veins. A study comparing the risk profile, clinical and echocardiographic parameters, and computed tomography coronary

angiography data associated with a higher risk of major cardiovascular events in 214 patients with chronic coronary syndrome is the first to its kind in Bulgarian scientific literature.

Clinical cases presented in the field of cardiac imaging have a didactic value. Such is the case with the description of a three-month-old infant with a total anomalous pulmonary venous inflow of the diffuse type, which argues for the role of additional imaging studies in complex congenital heart malformation in the planning of surgical correction. An interesting study is, the one showing the different factors in three groups of patients associated with a different frequency of serious cardiovascular diseases. The role of 3D printing for the representation of anatomical characters in the training process of trainees is presented.

Some of the oncology-oriented publications deal with the application of ^{18}F -FDG–PET/CT. The method has been shown to be effective in patients with metastases in the lymph nodes with an unknown primary tumour, as well as in multiple primary neoplasms. The special role of ^{18}F -FDG–PET/CT in patients with cervical lymph node metastases has been established, supporting diagnosis and treatment selection. Of interest is the published initial experience with the application of Radium-223 in patients with symptomatic bone metastases from prostate carcinoma resistant to classical treatment. A promising response to this treatment is reported. An advantage of ^{18}F -FDG PET-CT in the staging of bilateral mammary carcinoma, the application of the therapeutic response assessment method, in the diagnostic algorithm of patients with somatostatin-expressing neuroendocrine tumours, as well as brain findings on whole-body ^{18}F -

FDG PET has been demonstrated, PET in patients with malignant tumours outside the central nervous system.

Imaging findings in rare clinical cases are also described. They show the diverse diagnostic activity of Dr. Dineva. The latter, as well as the comprehensive literature reviews, have didactic importance. The importance of inferior vena cava variants in the surgical treatment of endometrial carcinoma has been demonstrated, Dr. Dineva also participated in studies on the dose burden in patients in the standard protocols of multi-detector computed tomography angiography in peripheral vascular disease, as well as in endovascular and hybrid revascularization in the aortoiliac segment. Imaging findings in rare clinical cases are also described. They show the diverse diagnostic activity of Dr. Dineva. The latter, as well as the comprehensive literature reviews, have didactic importance.

4. Citations of candidate

Reference No. 153 of 14.3.2023 of the Central Medical Library (CMB) of the Medical University - Sofia certifies four citations in Bulgarian sources from the CMB library fund and four in foreign sources. The Google Scholar site lists 12 citations.

5. Evaluation of teaching activities

The educational activity of Dr. Svetla Dineva as the chief assistant professor at the Department of Imaging Diagnostics of the Faculty of Medicine - Sofia includes teaching Bulgarian and foreign (English language teaching) medical students from the fourth medical course in diagnostic imaging, participation in student exams sessions, as well as the training of doctors specialising radiology through ongoing classes and lectures and seminars in the specialisation courses. The report submitted by the Academic Department of the Dean's Office of the Faculty of Medicine indicates that Dr. Dineva's academic workload for the last 2-3 academic years significantly exceeds that required for a non habilitated teacher.

6. Critical notes

I have no serious critical comments on the content of the proposed papers. The way of presentation and arrangement of some of them is not optimal and makes it difficult to view them.

7. Conclusions:

Dr. Svetla Emilova Dineva, MD, is a motivated young, but already experienced goal-oriented specialist and established teacher. She is recognised in professional circles in our country, being active in the national scientific radiological society and in the Bulgarian Society of Interventional Radiology. The presented publications cover a number of areas of diagnostic imaging, affect current aspects of the application of imaging methods and have scientific-practical contributions. The

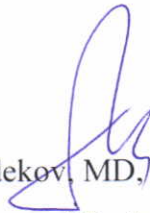
presented publications and documents cover the national requirements for occupying the academic position and those of the Regulations for the terms and conditions for the acquisition of scientific degrees and the occupation of academic positions at at the National Cardiology Hospital.

I give my positive vote and invite the respected members of the Scientific Jury to vote positive for the awarding of Dr. Svetla Emilova Dineva, PhD, chief assistant, to the academic position of "associate professor" for the educational needs of the imaging department of the National Cardiology Hospital,

Reviewer:

Vassil Hadjidekov, MD, PhD

Professor of Radiology



Sofia, the 31 of July, 2023