

STATEMENT

From Prof Dr Boryana Varbanova

Department of Pediatrics, Medical University- Varna

Regarding: Announced competition for the academic position of associate professor in the field of higher education 7. Healthcare and Sports, professional field 7.1 Medicine, scientific specialty Pediatrics, for the needs of the Faculty of Medicine, Department of Pediatrics, at MU - Varna published in the State Gazette, issue. 17 of February 26, 2021

The procedure for acquiring the academic position "Associate Professor" is based on Order of the Rector of MU - Varna №109 /176 from 23.04.2021. According to Protocol # 1 from the meeting of the selected scientific jury, held on 05.05.2021, I was assigned to prepare a Statement.

Dr. Milena Ivanova Belcheva, MD is admitted to the competition after a review of the documentation and evaluation of her scientific production.

Biographical data and professional development:

Dr. Milena Ivanova Belcheva was born on August 23, 1960 in the town of Shumen. In 1979 she graduated from the IV French Language High School in Varna. In 1985 he graduated from the Higher Medical Institute in Varna. He began his professional career at the Regional Hospital in Shumen as a pediatrician. Since 1992 she has been appointed as an assistant in the Department of Pediatrics at MU-Varna, where she still works. Since 1993 he has been a member of the team of the Clinic of Pediatric Oncohematology at the University Hospital "St. Marina" Varna. From 1998-2000 she specialized in pediatric oncology in France at the Gustave Roussy Institute in Paris. During this period she gained experience in antitumor therapy, pain management and palliative care in patients with malignant diseases. Dr. Belcheva has acquired specialties in pediatrics, oncology, pediatric hematology and oncology. She has additional qualifications in various fields of pediatrics, DXA osteoporosis scanning and stem cell transplantation. In 2019 she defended a dissertation on "Cardiovascular changes, cardiometabolic risk and bone health after successful therapy of malignant hematological diseases in childhood" and obtained the scientific and educational degree of Doctor.

Dr Belcheva is a member of: Bulgarian Medical Union, Bulgarian Pediatric Association, Bulgarian Society of Pediatric Hematology and Oncology, SIOPE, SFCE. He speaks French, English and Russian.

Analysis of scientific research and contributions:

Assessment of the scientific weight of the publications

Dr. Milena Belcheva participates in the competition with one dissertation, 45 scientific papers and co-authorship in one manual.

The candidate has presented a dissertation "Cardiovascular changes, cardiometabolic risk and bone health after successful therapy of malignant hemopathy in childhood" for obtaining the scientific and educational degree of Doctor (weight 100 points), as well as 4 publications on the topic of the dissertation (weight 43.57 points) (minimum required 30 points).

As an equivalent of a habilitation thesis, 10 full-text articles in indexed scientific journals are presented (weight 187 points).

Seven publications in indexed scientific journals are presented (of which 3 full-text publications and 4 abstracts in foreign journals), as well as 14 articles in non-indexed peer-reviewed journals are also submitted for evaluation. The total score on these scientometric parameters (G5-9) is 259.07 points with a minimum required of 200 points.

Nine full-text publications in scientific journals, over the minimum scientometric requirements and are evaluated at 143.5 points.

Dr. Milena Belcheva is single author of 7 publications, first author of 16; second author of 10 and third and subsequent author of 10 publications.

According to the documents submitted by the Medical Library of MU Varna, Dr. Belcheva has 15 citations in foreign language journals with a total score of 210 points. The impact factor of journals in which the author has publications is 18.48.

Scientific directions and contributions:

The main directions in the research work and contributions of Dr. Belcheva are related to pediatric oncology and hematology.

Direction 1: Late effects of childhood malignancy therapy and follow-up of patients in long-term remission: B 4-1; B 4-3; G 7-1, G 7-2; G 7-3, G 7-4; 3, 4, 9

The first Bulgarian comprehensive study of children and young adults in long-term remission of acute lymphoblastic leukemia and Hodgkin's lymphoma treated in childhood was conducted by the candidate. The most common and significant late effects of the therapy were evaluated, and for the first time in the country modern research methods such as Tissue Doppler Imaging (TDI) and Dual-energy X-ray absorptiometry (DEXA) were applied to this target group. The articles and scientific reports in this field present the first in Bulgaria analysis of cardiometabolic risk, bone health and subclinical heart damage in individuals who have survived malignant hematological diseases. For the first time in the world literature survivors of malignant hematological diseases are categorized into 4 phenotypes of body composition. Specific recommendations have been formulated for optimizing the monitoring after the end of the therapy.

Direction 2 : Solid tumors in childhood: B 4-5; B 4-8, G 7-5; G 8-4, G 8-5; G 8-6; G 8-11; G 8-13; 1; 2; 5; 6; 7; 8

Some of Dr. Belcheva's articles shed light on modern understandings of biology, histogenesis, clinical manifestations, evolution, diagnostic problems and modern methods of complex treatment of some of the most common solid tumors in childhood - nephroblastoma, retinoblastoma, neuroblastoma . Another group of publications and scientific reports summarizes the author's immediate clinical experience (personal and collective) in nosological diversity, diagnosis, risk stratification, treatment and therapeutic outcomes in pediatric tumors.

Dr. Belcheva is an active participant in the establishing of the first in Bulgaria guide for neuroblastoma behavior. It presents a review of the current literature and formulates recommendations for risk stratification, treatment of relapse, approach in paraneoplastic syndromes and follow-up of patients after the end of treatment, based on evidence-based medicine.

Direction 3: Malignant hematological diseases in childhood: B 4-2; B 4-4; B 4-6; D 7-6

A significant contribution is the presentation of the first summarized data for therapeutic results in children with primary AML treated according to the unified AML BFM protocol, as well as for morphological variants, clinical stage, treatment and survival rate in malignant non-Hodgkin's lymphomas, based on the experience of the three pediatric onco-hematology centers in Bulgaria.

Of special interest is the study of patients with Hodgkin's lymphoma, diagnosed and treated over a 20-year period at the Clinic of Pediatric Oncohematology- Varna, which showed a change in the histological pattern of the disease, increasing the age of diagnosis and a clear trend towards improved survival rate as a result of the modern therapy.

The first case in the world literature with the simultaneous presence of two different fusion transcripts: ETV6-RUNX1 and BCR-ABL1 (e1a2) in a child with B-cell acute lymphoblastic leukemia has been described in co-authorship.

Direction 4: Emergencies and complications in the course of childhood malignant diseases and their therapy: B 4-7; In 4-9; In 4-10; G 7-7; G 8-7; G 8-8; G 8-9; G 8-10; D 8-14

In a series of articles, recent considerations about the predisposing factors, etiology, clinical manifestation, evolution, diagnostic challenges and the modern guidelines for therapy of mediastinal syndrome are reviewed. Authors' own clinical experience in cases with critical mediastinal syndrome has been described.

Series and single cases with complications after the introduction of modern intensive protocols for the treatment of acute leukemias and malignant lymphomas have been reported. The structure of infectious complications in febrile neutropenia in the course of therapy for malignant hematological diseases and solid tumors was analyzed. For the first time in the

country the characteristics and risk factors for tumor lysis syndrome have been analyzed and published.

Direction 5. Benign hematological diseases: D 8-1; G 8-2, G 8-3; D 8-12

Algorithms for proper approach and criteria for referral to pediatric hematologist for children with anemia and hemorrhagic syndrome have been developed for doctors in pre-hospital care.

For the first time in Bulgaria, clinical application of a protocol for induction of immune tolerance in a patient with inhibitory hemophilia has been demonstrated.

Cases of rare childhood anemia have been reported. Data from all pediatric hematology centers in the country on the incidence, clinical manifestation and diagnostic and therapeutic approach in children with Fanconi anemia have been summarized and reported.

Teaching activity:

Dr. Milena Belcheva has more than 28 years of teaching experience in the Department of Pediatrics at Medical University – Varna. She conducts practical exercises and talks for 5th year students of the Faculty of Medicine. She is also engaged in extracurricular activities such as postgraduate courses and others forms of continuing medical education. Her average annual teaching load for the period 2016-2020 is over 220 hours per year.

Conclusion:

Dr. Milena Belcheva is an erudite clinician devoted to her patients, excellent lecturer and in-depth researcher who has reached a high level in his professional growth.

The submitted materials for the competition cover and comply with the legal requirements and criteria of the Law for Academic Development, as well as the Rules of the Medical University of Varna. This gives me a definite reason to recommend to the Scientific Jury to vote positively for the award of the academic position "Associate Professor of Pediatrics" at MU-Varna to Dr. Milena Belcheva

04.06.2021

Varna

Signature:

