To
the Chair of the Scientific Jury,
appointed by Order No 15-05-31/11.02.2025
of the Executive Director and the Procurator of
"ACİBADEM CITY CLINIC UMBAL TOKUDA" Ltd

REVIEW

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MEMBER OF THE SCIENTIFIC JURY, ACCORDING TO ORDER No. 15-05-31/11.02.2025 according to Article 4, paragraph 2 and art 29a of the Law on the Development of Academic Staff in the Republic of Bulgaria. Art. 2, para. 2, art. 57, para.1 and para. 2 of the Regulations for the Development of Academic Staff in "Acibadem City Clinic UMBAL Tokuda" Ltd, decision of the Academic Council (protocol No. 55/28.11.2024) to hold a competition for the position of "associate professor".

Subject: Competition for the academic position of "Associate Professor" - one place in the field of higher education 7 - "Health and Sports" in the professional field 7.1 - "Medicine" and scientific specialty "Pediatrics" for the needs of the Pediatrics Clinic of "Acibadem City Clinic UMBAL TOKUDA" Ltd, announced in the State Gazette newspaper issue No. 105/13.12.2024.

All the documents were submitted according to the requirements of the Regulations, with the necessary supporting material.

Dr Vesselina Ivanova Kenderova, MD, is the only participant in the competition.

Biographical data and professional development

Dr. Vesselina Kenderova graduated from the "Tsanko Tserkovski" Secondary School in the town of Polski Trambesh. She graduated with honors in Medicine from the Sofia Medical University in 1997 (Diploma No. 1933/10.12.1997, series MUS No. 003191). She worked as a doctor at the Clinic of Pediatric Surgery, N. Pirogov University Hospital and Medical Center, Sofia. She subsequently specialized in pediatric diseases at the Alexandrovska University Hospital, Pediatrics Clinic, and since 2005 has had a recognized specialty in Pediatrics (Diploma No. 10567/23.01.2006, series AS No. 010444). From 2001 to 2004, she was a full-time doctoral student at the Sofia Medical University, at the Alexandrovska University Hospital, Pediatrics Clinic.

In 2005, she defended her doctoral thesis on the topic "Clinical and

immunological studies in immune thrombocytopenic purpura in childhood" and obtained the scientific and educational degree "Doctor" - 30135/09.01.2006. In 2006, she began her work experience at the Pediatrics Clinic, ACC UMBAL Tokuda, Sofia, where she continues to work to this day. In the period 2012-2014, she was enrolled in specialization in pediatric pneumology and phthisiology, and acquired this specialty in 2014. (Diploma No. 018709/05.03.2015, series AS No. 014586). Subsequently, Dr. Kenderova also acquired a Master of Public Health and Health Management qualification from Mu-Sofia (Diploma No. 26962/25.05.2015, series MUS No. 035140).

Dr. Kenderova has completed numerous qualification courses in Bulgaria, such as: Certificate in Spirometry, Certificate in Maintenance of Basic Vital Functions - beginner level and advanced level.

Dr. Vesselina Kenderova has the necessary computer literacy. She speaks English in writing and speaking - at an excellent level.

Dr. Kenderova is a member of the Bulgarian Pediatric Association, a member of the Bulgarian Pediatric Respiratory Society, the Bulgarian Medical Union, and the European Respiratory Society (ERS).

Dr. Vesselina Kenderova is distinguished by a thorough diagnostic and therapeutic approach with a strong affinity for intensive care and pulmonary pathology. Demonstrates the ability to make independent, timely decisions. She has mastered all diagnostic and therapeutic manipulations in pediatrics, and after a number of highly specialized courses - has mastered sufficient high-level techniques in pediatric pulmonology.

Dr. Veselina Kenderova is distinguished by an in-depth diagnostic and therapeutic approach with a marked affinity for intensice care and pulmonary pathology. She demonstrates ability to make independent, timely decisions. She has mastered all diagnostic and therapeutic manipulations in pediatrics, and after a number of highly specialized courses - has mastered enough high-level techniques in pediatric pulmonology.

She shows initiative in difficult diagnostic, clinical cases.

Scientific research

Publications

Dr Veselina kenderova has submitted 26 publications, all of them published after obtaining her PhD degree, and 1 -in journal with impact factor (Thomson Reuters). , 10 are in national journals that are referenced and indexed in world-renowned databases with scientific information, 14 are in Bulgarian journals with scientific review and 1 publication in other printed publications. The total impact factor of her publications is 9.775

Participation in Scientific forums

Dr. Kenderova has 27 participations in scientific forums - 16 reports and 11 posters in the country and abroad. She is the first author in 40.74% of her participations in scientific forums.

Citations/cited by

Dr. Vesselina Kenderova's publications have a total of 396 citations - mainly in foreign databases (SCOPUS, Web of Science), which is proof of their high scientific value and 18 citations in Bulgarian sources. The calculated h-index in Scopus is 2, and for Web of Science – h-index is 3. In this competition, 7 articles were used from all citations, of which 1 article is in the Scopus database, 1 article in monographs and collective volumes with scientific review and 5 are in non-refereed journals with scientific review in Bulgaria.

Habilitation thesis

Dr. Kenderova has presented 10 refereed articles united as a habilitation thesis. The majority of them are related to systemic diseases, including rare clinical cases with systemic involvement. Such is the work, for example, on Vogt-Koyanagi-Harada disease in a 3-year-old girl, in which specific examinations and almost a year of wandering of the patient from doctor to doctor were necessary for its diagnosis (5). Another described rare pathology is Mucha-Habermann disease or pityriasis lichenoides et varioliformis acuta (PLEVA) in two children with a good therapeutic outcome after therapy with antibiotics and low doses of steroids and ultraviolet irradiation in one and only with ultraviolet irradiation in the second (1). Childhood myositis are of interest in practice. One part of them is benign childhood myositis. Acute muscle pain and difficulty walking are symptoms associated with both benign and severe degenerative diseases. A clinical case of a 12-year-old boy with myositis and rhabdomyolysis is described (2), as well as a case of a 7-year-old boy with the development of COVID-19-induced myositis with a favorable outcome (7). Syndrome of macrophageal activation (SMA) most often develops as a complication of autoimmune rheumatic diseases, although a number of infectious agents can also lead to the development of SMA. Two clinical cases of children with allergy to corticosteroids in SMA and the clinical course of SMA in another child are the subject of two other publications from the habilitation thesis (3,4). Kawasaki disease (KD) is an acute febrile disease characterized by arteritis of medium-sized vessels, most often affecting the coronary arteries, which determines its social significance. The subject of KD with the contribution of two cases is also publication number 6 in the habilitation thesis.

In addition to these interesting clinical cases requiring an interdisciplinary approach, the habilitation work also includes two reviews addressing interdisciplinary problems – the first is on childhood masturbation (8), and the second is hypothermia, a rather neglected pathology in children (9).

The last article included in the habilitation work is the result of Dr. Kenderova's tireless work with children with immune thrombocytopenia over the years (10). This publication emphasizes that long-term follow-up of children with immune thrombocytopenia (ITP) in most of them occurs in remission and severe thrombocytopenia is rare. Remission occurred in 37% of patients between 28 days and 6 months, 16% between 6 and 12 months and 24% between 12 and 24 months. There are no reports of intracranial hemorrhage and the most common site of bleeding is the skin. In patients with severe thrombocytopenia, a trend towards more treatment with an increase in the number of bleeding sites is observed. These data support the

hypothesis of the benign nature of ITP in most affected children and that massive bleeding, even with prolonged severe thrombocytopenia, is rare (10).

Evaluation of the scientific works of Dr Kenderova for her overall academic development:

Outside of her habilitation work, Dr. Kenderova has made an academic contribution with her doctoral studies, within which the topic of immune thrombocytopenic purpura in childhood was studied for the first time in Bulgaria and the importance of surface-bound antiplatelet autoantibodies was proven, both as a prognostic sign and as a diagnostic test.

Dr. Kenderova's other publications can be divided into three main areas: **pediatric hematology** (expected due to the nature of her dissertation work); pediatric pulmonology (reflecting her expertise in her second scientific specialty) and **pediatric rheumatology** (as a result of the expertise of Dr. Kenderova's supervisor). This demonstrates the broad scientific knowledge, professional curiosity and tireless pursuit of development of Dr. Kenderova, who is an established pediatrician with extensive knowledge in more than one subspecialty.

In the field of pediatric hematology, Dr. Kenderova's publication activity is focused on anemias and thrombocytopenias; in the field of pediatric pulmonology, the emphasis is on Acute respiratory infections; Bronchial asthma; Foreign bodies in the lung; Non-traumatic chest pain; and in the field of pediatric rheumatic cardiology SMA, myositis in childhood, vasculitis and the interdisciplinary topic of pulmonary manifestations in rheumatic diseases.

There are two publications in the direction of **hematology**: An extremely instructive and complex case of a child with cerebral hemorrhage and hemophilia B with a good final outcome (13) and a review of hemolytic anemias, which are characterized by a shortened survival of erythrocytes circulating in the peripheral blood. Some of the hemolytic anemias are due to enzyme deficiencies, the most common of which is glucose-6-phosphate dehydrogenase deficiency. The clinical course of the disease can be chronic non-spherocytic hemolytic anemia, neonatal jaundice, infectious-induced hemolysis, favism, drug-induced hemolysis, hemolytic crises caused by other factors. The treatment of this disease is carried out with hemotransfusion and depends on the hemoglobin values and the absence or absence of hemoglobinuria (12).

Seven other publications are devoted to respiratory pathology.

A comprehensive review of the most common cause of morbidity and mortality worldwide – acute respiratory infections (ARI) (20), as well as a clinical case of a 4-year-old child with clinical manifestations of acute respiratory syncytial virus (RSV) bronchiolitis and the manifestation of transient ventricular arrhythmia /from bigeminia to quadrigeminia/ within the framework of the underlying disease. Complex treatment, aimed at influencing the respiratory manifestations and rhythm disturbances, led to permanent stabilization of the child's condition and complete recovery (19). Although it is now known that COVID-19 affects children systemically, it is still often referred to as an acute respiratory infection. Therapeutic options and trends in COVID-19 among the pediatric population are also discussed in a publication under number 25,

and the effect of infection on capillary permeability in children is the subject of another scientific analysis (21).

The most common chronic lung disease - bronchial asthma - is the subject of two extensive reviews - one on the main points in etiopathogenesis, diagnosis and treatment (15), and the other on possible risk factors for the development of the disease among the pediatric population. Depending on the period of fetal and child development during which these risk factors exert their impact, they are: prenatal (with the greatest influence is parental asthma, especially in the mother), perinatal (birth by cesarean section, premature birth, low birth weight children, etc.) and postnatal /infections with respiratory syncytial virus, overweight, air pollution, household allergens, etc./. The possibilities for prevention are related to the implementation of control of maternal asthma, limiting smoking, as well as the intake of antibiotics and paracetamol by the pregnant woman, term birth per vias naturalis, consumption of food rich in polyunsaturated fatty acids, vitamins D and E, fresh fruits and vegetables (22).

Aspiration of foreign bodies into the bronchial tree is in fourth place as a cause of sudden death in children under 5 years of age. The relevance of this problem has remained over the years and is also part of the candidate's publication activity (14). Another interesting, significant and little discussed problem in pediatric pulmonology is the problem of non-traumatic chest pain, which is a common symptom in children and adolescents. Because of its association with fatal heart disease in adults, it is considered a harbinger of serious heart disease and therefore causes considerable anxiety for patients and their families. This problem has also been discussed and published by Dr. Kenderova (24).

Due to the wide differential diagnosis of **rheumatological diseases**, it is not by chance that a large part of Dr. Kenderova's publications are in this area, with an interdisciplinary approach and systematic scientific review. The majority of the articles in the habilitation work fall into this field. In addition to them, Dr. Kenderova has also worked on the problems of febrile conditions in childhood (16).

SMA is the subject of two articles in the habilitation work and two more scientific reports - a review of the main characteristics, diagnostic and therapeutic approach (17) and a clinical case of a child with pronounced SMA after Mycoplasma infection (26). Another article concerning acute myositis (11) and a clinical case of Felty syndrome (23) are among Dr. Kenderova's scientific contributions.

The diseases that are the subject of pediatric rheumatology have systemic manifestations. Pulmonary involvement may be the main clinical manifestation, as in granulomatosis with polyangiitis (Wegener's granulomatosis) and eosinophilic granulomatosis with polyangiitis (Churg-Strauss syndrome). In others, pulmonary manifestations are of variable frequency and clinical presentation. In granulomatosis with polyangiitis, pulmonary infiltrates, nodules and cavitations, diffuse alveolar hemorrhages are most often described; in eosinophilic granulomatosis with polyangiitis, there is a combination of asthma, extreme eosinophilia, pulmonary infiltrates, mono- or polyneuropathy. Of the other rheumatic diseases, the most significant lung involvement is observed in systemic scleroderma in the form of pulmonary interstitial fibrosis, pulmonary hypertension, and the development of cor pulmonale. In systemic lupus erythematosus, juvenile idiopathic arthritis,

dermatomyositis and vasculitic syndromes, pulmonary involvement varies from the presence of pulmonary infiltrates and granuloma formation, pleurisy with/without pleural effusions, pneumonitis, diffuse alveolar hemorrhages, interstitial pulmonary fibrosis. Treatment of pulmonary manifestations is specific to the underlying systemic disease and is often effective in reducing lung involvement. The prognosis of systemic inflammatory diseases is improving. Increasing emphasis is placed on the early detection and treatment of pulmonary manifestations in them. Extensive scientific training, clinical experience and critical thinking allow Dr. Kenderova to make a comprehensive interdisciplinary review on the topic "Pulmonary manifestations in rheumatic diseases in childhood" (18)

Teaching activities

Dr. Vesselina Kendreova has six years of teaching experience. She participates in teaching pediatrics residents. She lectures at basic and thematic courses at ACC Tokuda. For 2022/2023 and 2023/2024, she has a total of 780 teaching hours.

Treatment and diagnostic activity

Dr. Vesselina Kenderova is a clinician with 20 years of experience in the field of pediatrics and 10 years of experience in the field of pediatric pulmonology. She actively participates in the treatment and diagnostic and consultative activities of the Pediatrics Clinic of "Acibadem City Clinic UMBAL TOKUDA" Ltd, Dr. Kenderova is a very well-prepared doctor who uses her knowledge in daily clinical activities.

Summary

Subordination with the requirements of Appendix 3 of the Regulations on the terms and conditions for acquiring scientific degrees and occupying the academic position "Assistant Professor", Professional direction 7.1. Medicine - medical-clinical field

Indicators - groups	Required number of points	Number of points based on evidence provided – Dr Veselina Ivanova kenderova
Group A	50	50
Group C		
Habilitation thesis 10 articles/monography	100	220,7
Group D	200	235
Group E	50	55
Group F		33
Group G		560.7
TOTAL POINTS	50	50

Conclusion:

Dr. Vesselina Ivanova Kenderova is a well-established pediatricianpulmonologist and teacher, proven in her practice. She is a colleague with high morals, hard work, responsibility and collegiality. In her medical and scientific activities, she has an exceptional sense of the most current problems in medicine. Her high language culture and academic behavior allow contacts with international centers and popularization of Bulgarian achievements in the field of pediatric pulmonology.

In conclusion, Dr. Vesselina Kenderova meets all mandatory conditions, exceeding the minimum requirements for scientific and teaching activities for holding the academic position of "Associate Professor" in Professional Field 7 - "Healthcare and Sports" in Professional Field 7.1 - "Medicine" and scientific specialty "Pediatrics" for the needs of the Pediatrics Clinic of "Acibadem City Clinic UMBAL TOKUDA" Ltd, announced in the Official Gazette No. 105/13.12.2024.

Based on the above, I recommend that the members of the scientific jury, appointed by Order No. 15-05-31/11.02.2025, to award Dr. Vesselina Kenderova, MD, the academic position of "Associate Professor", in the field of higher education 7. Healthcare and Sports, in Professional Field 7.1 Medicine and scientific specialty Pediatrics for the needs of the Clinic in Pediatrics at Acibadem City Clinic UMBAL TOKUDA Ltd.

26.02.2025 г.

Reviewer:

Prof. Guergana Petrova Stoyanova, MD, PhD