#### **REVIEW**

#### from

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Head of the Dermatology and Venereology Clinic at Acibadem City Clinic, Tokuda Hospital

**REGARDING:** Competition for the academic position of "Professor" in the field of higher education 7. Health and sports in the professional field 7.1. Medicine - medical-clinical field and scientific specialty Dermatology and Venereology for the needs of the competition for "*Professor*" announced in the State Gazette No. 106 of 17.12.2024 for the needs of the external organization "ASMP - Group Practice in Dermatology - Clinic Euroderma" Ltd., Sofia with a single candidate who applied for participation in the competition within the legal two-month period - Assoc. Prof. Zhana Stoyanova Kazandzhieva - Tsankova , MD.

#### I. Information about the procedure

Based on order No. 15 -05- 32 of 11.02.2025, I have been appointed as the chairperson of the Scientific Jury. The review was prepared on the basis of protocol No. 55 of 28.11.2024 according to the decision of the scientific council of "Acibadem City Clinic UMBAL Tokuda EAD" for a competition published in the State Gazette No. 106/17.12. 2024 - Sofia. The competition is for the academic position of "Professor" in the field of higher education 7. Health and Sports in the professional field 7.1. Medicine - medical-clinical field and scientific specialty Dermatology and Venereology was announced in the State Gazette No. 106 of 17.12. 2024 with a single candidate - Assoc. Prof. Zhana Stoyanova Kazandzhieva - Tsankova , MD. All procedural requirements for announcing the competition, the deadline for submitting documents, and the selection of the Scientific Jury have been met.

The documents submitted by the candidate for participation in the competition meet the requirements of the Law on Academic Affairs of the Republic of Bulgaria and the Regulations on the terms and conditions for acquiring scientific degrees and occupying academic positions. I have no

comments on the materials provided to me for review. I have no conflict of interest in this competition.

## II. Brief biographical data, education and professional development:

Zhana Stoyanova Kazandzhieva - Tsankova graduated from medicine - at the VMI - Pleven / diploma № 001053/1985. Zhana Stoyanova Kazandzhieva - Tsankova graduated from medicine - at the VMI - Pleven / diploma № 001053/1985. She started working as an assistant at the Department of Dermatology and Venereology, VMI - Pleven. Since 1986, she has been working as a resident physician at the City Skin Dispensary - Sofia. In 1994, she became an assistant at the Department of Dermatology and Venereology - MF, MU - Sofia. In 2002, she was elected as a chief assistant at the same department, and in 2008. as an associate professor.

In 1992 he acquired a specialty in skin and venereal diseases - diploma No.  $39016 \, / \, 15.0 \, 1. \, 1992$  .

In 2005, he successfully defended his dissertation on the topic "Exogenous pigment disorders - dermatological aspects and therapeutic possibilities "with Diploma number: 29702 /05.05.2005, VAK

Since 2021, he has been a Master in Health Management, with a diploma TrU No. 350521/reg.6811 dated 26.10.2021.

currently works as an associate professor at the Department of Dermatology and Venereology, MF - MU - Sofia and at the 1st Department of the Clinic of Skin Diseases, University Hospital Alexandrovska.

### III. Scientific and research activities:

Assoc. Prof. Kazandzhieva participated in the competition with 281 scientific papers published after acquiring the academic title of "associate professor", of which: 251 scientific articles, 1 independent monograph, participation in 17 chapters of monographs, 7 chapters of textbooks and 5 teaching aids and manuals. Assoc. Prof. Kazandzhieva presents 79 real publications in English (outside the ONS "doctor" and "associate professor"), referenced in Scopus and Web of Science, of which 39 published in journals with an impact factor and 171 publications printed in Bulgarian journals (outside the publications under the ONS "doctor" and "associate professor"), referenced in the national reference list of NACID. From Of the 17 chapters of monographs, 13 are in English; as well as 1 textbook in English.

After acquiring the academic title of "Associate Professor", Assoc. Prof. Kazandzhieva has delivered 72 lectures abroad as an invited lecturer at prestigious international forums (including world congresses and congresses and symposia of the European Academy of Dermatology and Venereology). *h index, g index, Impact factor, citations* 

<u>h-index</u>: According to the report from NACID (12.02.2025) - its h index is 22; and g-index - 40. The total impact factor of scientific articles is 113.697 (for scientific articles after acquiring the academic title of associate professor -

94.988) according to the report from NACID (12.02.2025).

<u>Citations:</u> The NACID report from 12.02.2025 indicates 1774 citations abroad in WEB of Science and SCOPUS databases. The attached report from the Central Medical Library, Medical University - Sofia indicates 280 citations in Bulgarian sources from the Central Medical Library Depository.

### Evaluation of habilitation thesis for participation in the competition:

The habilitation thesis contains 10 articles published in prestigious international journals with an impact factor. The description of scientific contributions in the habilitation report is structured according to the candidate's articles cover contributions The in the field dermatoallergology (articles B 5, B6, B8, B9, B10 from the report on compliance with the minimum national criteria, presented in the competition documents); therapy of infantile hemangiomas (articles B1, B4, B10) and specific aspects of certain skin diseases (B2, B3, B7). The scientific articles are focused on important allergic diseases and summarize the candidate's experience in the study of contact allergy and angioedema, the specificity of individual allergens, the features of patch testing and the therapy of contact dermatitis. A unifying link between the two main areas is the very rare case of allergic contact dermatitis to timolol gel, applied for the treatment of infantile hemangioma, published in 2024 - B10). The application of local treatment for infantile hemangiomas is a significant contribution to the rapidly developing therapeutic strategy of beta-blocker treatment in recent years and Assoc. Prof. Kazandzhieva is undoubtedly one of the experts on this topic on an international and national scale. The other scientific articles from the habilitation work are part of Assoc. Prof. Kazandzhieva's numerous publications in the field of drug-induced dermatoses (B3), systemic skin diseases (B2, B5, B7) and the impact of the COVID-pandemic on the skin (B6).

### Main areas of scientific activity and contributions:

The candidate's main contributions are in the areas of contact dermatitis, atopic dermatitis, chronic urticaria and angioedema, infantile hemangiomas, systemic skin diseases, and drug-induced diseases.

### 1. Scientific contributions in the field of dermatoallergology

Contact dermatitis: Assoc. Prof. Kazandzhieva has 106 scientific papers in the field of contact dermatitis, 97 of which are after obtaining the academic title of associate professor. Assoc. Prof. Kazandzhieva is the first and leading author in 4 national consensuses of the Bulgarian Dermatological Society on the topic - 2 consensuses on contact dermatitis and 2 consensuses on hand eczema - 2014 and 2024. She is the scientific supervisor of 3 dissertations on the topic: "Study of contact allergy in aesthetic practice" Dr. K. Gospodinova, "Study on allergodermatoses in the Varna region "Dr. Y. Velevska (together with Prof. S. Marina), "Allergic contact dermatitis in childhood - features in etiopathogenesis, clinical picture, diagnosis and prophylaxis" Dr. B. Kotevska (together with Prof. Z. Demerdzhieva). He is a scientific advisor to two doctoral students with dissertation topics related to hand eczema — Dr. M. Gergovska ("Contactallergic reactions in dyshidrotic eczema", defended in 2018) and Dr. A. Angelova ("Hand eczema", the dissertation is in the process of being defended in 2025).

Atopic dermatitis: In the field of atopic dermatitis, Assoc. Prof. Kazandzhieva has published 30 papers since acquiring the academic title of Associate Professor - 6 articles in English and 14 in Bulgarian, 1 material in a textbook; 4 teaching aids - 2 for doctors and 2 for patients. Assoc. Prof. Kazandzhieva participates as a lead author in all national consensuses and other important scientific documents on the topic of "atopic dermatitis".

Urticaria: The main publications on the topic of urticaria are in Clinics in Dermatology, with urticaria and angioedema being considered as systemic diseases. Assoc. Prof. Kazandzhieva is the first author in the consensus article "Algorithm for therapeutic behavior in urticaria", which reflects the main trends in the treatment of the disease. Another important contribution on the topic is the participation in a team that described the first case of occupational urticarial dermatitis in Bulgaria. Assoc. Prof. Kazandzhieva is the author (together with Dr. Gergovska) of the only booklet to date for patients with urticaria and angioedema, which contains accessible information about the disease.

### 2. Scientific contributions in the field of infantile hemangiomas

Publications in this field (after acquiring the academic title of "associate professor") include 13 articles in English, 15 in Bulgarian; 1 chapter in the monograph "Skin and the Heart". Springer, 202 1. The article published in 2023 on the topic of contact allergy to propranolol is the second case in the world and the first case in Bulgaria describing an allergy to propranolol.

Assoc. Prof. Kazandzhieva is the first and lead author in the first National Consensus for the Treatment of Hemangiomas in Infants and Young Children, which was created in 2017 and is a joint effort of the Bulgarian Dermatological Society and the Society of Pediatrics.

Assoc. Prof. Kazandzhieva is the supervisor (together with Prof. S. Marina) of the dissertation "Hemangiomas in infancy and childhood - epidemiological characteristics and therapeutic behavior" by Dr. Kristina Semkova, successfully defended in 2021 at the Medical University - Varna.

### 3. Scientific contributions in the field of drug-induced dermatoses

The articles dedicated to drug-induced psoriasis, lupus and acne have a total of 324 citations in Web of Science and 373 in Scopus, respectively. The specifics of drug-induced acne are described in a chapter of a monograph in English. Assoc. Prof. Kazandzhieva describes a case of Recall dermatitis (№3) after treatment with paclitaxel. The article is among the top 10 in the world and the first in Bulgaria describing the so-called. skin "recall" reactions or immunological memory reactions.

Assoc. Prof. Kazandzhieva, together with Dr. B. Kamuna, published a series of cases with the appearance of granulomas in the lips after injection of vitamins E, A and D, as these cases are the only ones described in the world literature and are part of Dr. Kamuna's doctoral thesis "Aesthetic procedures in the therapy of skin diseases and their complications " - defended in 2015 at the Medical University - Sofia, of which Assoc. Prof. Kazandzhieva is the scientific supervisor.

### 4. Scientific contributions in the field of exogenous pigment disorders.

Assoc. Prof. Kazandzhieva describes for the first time in Bulgaria the cross-reactivity of pigments with azo dyes and the clinical manifestation of allergen autotransfer in temporary tattoos. In 2025, she is part of the author team of an article about a new trend in this type of tattoos. The article "Skin

Cryobranding" for the first time in the world describes skin changes in a new "technique" for tattooing.

# 5. Scientific contributions in the field of the skin as a target organ in multisystem diseases

Dermatoses as a mirror of systemic internal diseases have been discussed in 12 publications in English and these publications are undoubtedly some of the first in the world to provide accurate evidence for the systemic nature of skin diseases. The systemic nature of skin diseases is also reflected in 2 monographs and 1 textbook in English and 4 contributions to textbooks on internal diseases in Bulgarian.

# 6. Scientific contributions in the field of COVID pandemic and dermatological changes

The thirteen articles address important aspects of dermatological issues related to COVID. They have been cited a total of 75 times abroad, with the article on vaccine side effects alone, published in Clinics in Dermatology , having 62 citations (reference NACID ).

### 7. Scientific contributions in the field of "Rare syndromes in dermatology"

1 chapter in a monograph on the topic "Pyoderma gangrenosum" has been published in English . A number of casuistic cases of congenital and acquired syndromes have been described, some of which for the first time in Bulgaria: maple syrup disease; Berardinelli-Seip Syndrome; Acrodermatitis enteropathica – like syndrome in a child with leucinosis; Tufted hair folliculitis, Ambras Syndrome .

### 8. Scientific contributions in the field of photodermatoses

3 articles have been written on the topic - 1 in English and 2 in Bulgarian; 1 chapter of a monograph (European Handbook of Dermatological Treatments. Springer, 202 3) and 1 poster presented at EADV 2011, in which the data from the national survey on the use of photoprotection and solariums were presented. For the first time in Bulgaria, a clinical case of phytophotodermatitis from Dictamnus albus and a case of Lyme dermatitis were described.

### 9. Scientific contributions in the fields of acne and rosacea

9 scientific papers have been published after acquiring the academic title of "associate professor". Of these, 1 article is in English; 7 in Bulgarian and 1 monograph in English. For the first time in the world in her publications (chapter in the monograph Acne and Rosacea - Pathogenesis and Treatment, Springer, Berlin (2015) and article Drug induced acne. Clin D ermatol, 2017) Assoc. Prof. Kazandzhieva divides drug-induced acne into 3 groups, which are today accepted and accordingly supplemented in a large number of newer publications on the topic, as the article in Clin D ermatol from 2017 has 59 citations (reference NACID).

# 10. Scientific contributions in the field of "Skin infections and life-threatening conditions"

Rare forms and syndromes such as necrotizing fasciitis, malignant leishmaniasis, skin manifestations in malignant hemopathies have been reviewed. For the first time in Bulgaria, 2 cases of zoophilic mycotic infection transmitted by a pet (African hedgehog) and caused by Nannizzia gypsea have been described.

### **IV. EDUCATIONAL - TEACHING ACTIVITIES:**

According to the certificate issued by the Faculty of Medicine-MU-Sofia during the last 5 academic years, the study load in the specialty of skin and venereal diseases includes exercises with students in Bulgarian and English, lectures and participation in the SDO. For the last 2 years (202 3 and 2024) the teaching workload is a total of 870 hours, and for **the 6-year period from 2019** - a total of 4272 hours. Assoc. Prof. Kazandzhieva also participates in the training of specializing dermatologists in the organized basic courses at KDV-MU-Sofia, as well as being responsible and respectively head of the one-month specialization in dermatoallergology for specializing allergists, finally conducting the colloquium for the module.

Assoc. Prof. Kazandzhieva is the scientific supervisor of 5 successfully defended doctoral students: Dr. B. Kamuna, Dr. K. Gospodinova, Dr. K. Semkova (together with Prof. S. Marina), Dr. Y. Velevska (together with Prof. S. Marina), Dr. B. Kotevska (together with Prof. Z. Demerdzhieva). She is currently the supervisor of 2 residents at the Department of Dermatology and Venereology at the Faculty of Medicine-Sofia and 1 resident at the EuroDerma Clinic.

### V. TREATMENT - DIAGNOSTIC ACTIVITY:

Assoc. Prof. Kazandzhieva is the organizer and head of the Bulgarian Dermatoallergology Network, which includes 10 centers in the country and conducts annual campaigns for free diagnostics and prevention of skin allergic diseases. The campaigns started in 2009 and 16 campaigns have been conducted so far, on the basis of which the national database for contact hypersensitivity to various allergens in Bulgaria was created. During the Covid pandemic, the focus of the campaigns was on the prevention and prophylaxis of hand eczema in medical specialists, and special instructions for prophylaxis were created, which, together with emollients (donated by cosmetic companies), were provided to the centers for vaccination and treatment of Covid.

# VI. MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS AND EDITORIAL BOARDS:

Participation in creative organizations: Assoc. Prof. Zhana Kazandzhieva is the head of the dermatoallergology section at the Bulgarian Dermatological Society – since 2010, and the head of the vascular dermatoses section at the Bulgarian Dermatological Society. She is a member of the European Academy of Dermatology and Venereology (EA DV) – board member (2012-2018); member of the Ethics Committee at the EADV (2011-2015); of the German-Bulgarian Dermatological Society – secretary of the society (2001-2012); Member of the ESHDV (European Society of History of Dermatology and Venereology) since 2005; Member of the European Organization for the Prevention of Occupational Skin Allergies (EPOS); Honorary member of the Serbian Dermatological Society; Honorary member of the Macedonian Dermatological Society; Member of the Ethics Committee at the Bulgarian Academy of Dermatology – Sofia (2016-2018); Founder and Board Member of the Eczema Foundation – Bulgaria (since 2014)

Participation in editorial boards: abroad - Serbian Journal of Dermatology, Editorial board member; 10. Clinics in Dermatology. Guest editor. Are Skin Diseases Systemic Ones?: I,II, III respectively 2019, 2015 and 2014; in Bulgaria - Dermatology and Venereology ISSN 0417-0792; Academic Edition Dermato-Oncology ISSN 2815-4223; Member of the editorial board of GPMedic and Medic Art for issues related to dermatology. Editor of monographs: Atopic Dermatitis - a book for parents and patients and Atopic Dermatitis: etiology, clinical picture and treatment. ISBN 978-619-92791-0-6; 2024.

Reviewer of textbooks - 2 textbooks on Skin and Venereal Diseases: "Dermatology and Venereology". Textbook for students of medicine, dentistry

and pharmacy. MU - Varna, 2020; "Dermatology and Venereology. Handbook for Medical, Dental and Pharmacy Students." 2018, 210 pp.; Assoc. Prof. Kazandzhieva has been a jury member in 19 competitions for awarding the educational and scientific degree "doctor" and in 6 competitions for holding an academic position - associate professor and professor.

# VII. COMPLIANCE WITH THE MINIMUM NATIONAL REQUIREMENTS AND THE REQUIREMENTS OF MU-SOFIA FOR OCCUPATION IN THE ACADEMIC POSITION OF "ASSOCIATE PROFESSOR"

D oc . Kazandzhieva meets and far exceeds the criteria for awarding the scientific and academic position of "professor" (attached reference from the candidate).

#### **CONCLUSION:**

Assoc. Prof. Dr. Zhana Stoyanova Kazandzhieva-Tsankova is a leading specialist-dermatologist, an excellent lecturer and teacher. Her scientific works are devoted to current problems related to the diagnosis, therapy and prevention of modern allergodermatoses, childhood hemangiomas and other vascular malformations, drug-induced dermatoses, rare syndromes and systemic skin diseases. Her scientific output meets and exceeds many times in volume and quality the requirements for a professor of a clinical discipline.

Based on the above, I recommend to the scientific jury to award Assoc. Prof. Zhana Stoyanov Kazandzhieva - Tsankova the Academic position "Professor" in the field of higher education 7. Health and sports in the professional field 7.1. Medicine and science specialty "Dermatology and Venereology" for the needs of the external organization "ASMP - Group Practice in Dermatology - Clinic Euroderma" Ltd.,

Sofia

28.02.2025

Reviewer:

Prof. Zdravka Demerdzhieva, MD