REVIEW

By prof. Ara Garabed Kaprelyan, MD, DSC.

Member of the Scientific Jury as announced by the Medical University "Prof. dr. Paraskev Stoyanov" - Varna, competition for the academic position of Associate Professor to the Department of Nervous Diseases and Neurosciences (SG, issue 54/23. 06. 2023)

Order P-109-375/22.08.2023 of the Rector of Medical University- Varna.

Subject: The nomination of Dr. Mihael Emilov Tsalta-Mladenov, PhD in a competition for the academic position of Associate Professor in the field of higher education 7. Health and Sport, professional field 7.1. Medicine in the specialty "Nervous Diseases" for the needs of the Faculty of Medicine, Department of Nervous Diseases and Neurosciences at the Medical University -Varna and the Second Clinic of Nervous Diseases at the University Hospital "St. Marina" - Varna.

The review of the documents submitted to me shows that the notice of competition is legal and announced in SG No.54/23.06.2023. The only candidate is Dr. Mihael Emilov Tsalta-Mladenov, PhD. All the required documents have been prepared by the candidate, in full compliance with the requirements of the Regulations for the Application of the Law for the Development of Academic Staff in the Republic of Bulgaria and the Regulations for the Development of Academic Staff of Medical University -Varna.

For the competition Dr. Mihael Tsalta, PhD has submitted correctly prepared lists of his scientific works and abstracts, participation in scientific forums, reports on teaching hours, work experience, etc.

I. Biographical data and professional career:

Dr. Mihael Tsalta was born in 1991. in the town of. Varna. In 2010. graduated from the Third Natural and Mathematical High School - Varna. Graduated in medicine in 2016 at the Medical University "Prof. Dr. Paraskev Stoyanov" - Varna. Since 2016 he works as a resident physician at the Second Clinic of Nervous Diseases of the University Hospital "St. Marina." In

2018 he started specialization in "Nervous Diseases" at the University Hospital "St. Marina". In 2023, he obtained a specialty in Nervous Diseases. Since 01.2018 he is a part-time assistant professor and since 09.2018 a full-time assistant at the Department of Nervous Diseases and Neurosciences at MU-Varna. From 01.01.2018 to 04.2022 he is a PhD candidate at the same department. Since April 2021 he has acquired the PhD degree in the scientific specialty "Nervous Diseases" at MU-Varna. From November 2021 and currently he is a senior assistant at the department.

Dr. Mihael Tsalta has a HSA diploma in evoked potentials. He has completed training courses in Switzerland, Hungary, Croatia, the Netherlands, Spain and Germany.

He is a member of the BMA, the Bulgarian Society of Neurology, the European Stroke Organization, the World Stroke Organization, the International Society of Parkinson's Disease and Movement Disorders, the European Academy of Neurology, the International Headache Society.

He has the necessary computer literacy and proficiency in English.

Dr. Mihael Tsalta's research and applied scientific activities are diverse in nature, but can be systematized as follows: main interests in the field of vascular diseases of the nervous system, and additional areas - inflammatory diseases of the CNS, Parkinson's disease, neurological complications of systemic diseases, hereditary diseases of the nervous system, epidemiological studies and casuistry.

II. Scientific production:

The scientific criteria specified in the Regulations for the Development of the Academic Staff of MU-Varna have been fulfilled by Dr. Mihael Tsalta as follows: a total of 31 scientific works, including one dissertation and an abstract, ten articles equivalent to a habilitation thesis, thirteen publications and reports published in scientific journals, referred and indexed in world-renowned databases of scientific information; six publications and papers published in non-referred peer-reviewed journals or published in edited collective volumes; and one full-text publication beyond the minimum scientific requirements of this competition.

Dr. Mihael Tsalta-Mladenov is the first author of a total of 21 of the presented scientific papers (67.7%).

According to the academic reference provided, Dr. Mihael Tsalta's publications have an overall Impact Factor of 71.348, and 13 citations of the research papers are provided.

The scientific works are available in the scientific profiles of the candidate - GoogleScholar, ResearchGate, ORCID, Web of Science and Scopus.

A reference for participation in various scientific projects is presented: project №19020 fund "Science": "Electronic registry of stroke, diabetes and diabetic retinopathy for studying the epidemiology of the diseases and the effectiveness of their management"; Project No. 19013 Science Fund - "Continuous glucose monitoring in type 2 diabetes mellitus - relation to diabetic retinopathy and diabetic nephropathy" and Project No. 21015 Science Fund - "Molecular mechanisms of action of cytodeox: new evidence in support of neuroprotective and antioxidant effects".

The scientific activity is divided into the following main areas: risk factors, quality of life (QoL) epidemiology after ischemic stroke and QoL-related predictive factors, Parkinson's disease, neurological complications of systemic diseases, hereditary diseases of the nervous system, casuistry.

Dr. Mihael Tsalta's leading and original scientific contributions are in the field of ischemic stroke. Major articles and reports are devoted to this disease. Studies of quality of life after ischemic stroke are of substantial theoretical and basic-applied interest.

Publications addressing risk factors for stroke (B4.1, Γ 7.3, Γ 7.9, Γ 7.12, Γ 8.1), stroke epidemiology (B4.3, Γ 7.4, Γ 7.10), tracking of quality indicators in stroke treatment (Γ 7.1, Γ 7.2, Γ 7.6), the impact of the COVID-19 pandemic on stroke care (Γ 6.5), research on outcomes and quality of life after stroke (A1, B4.4, B4.6, B4.7, B4.8, Γ 8.4), and summarised recommendations for stroke therapeutic approaches in carotid stenosis and endovascular treatment (Γ 8.2, Γ 8.5, Γ 8.6) represent the main scientific interests of the candidate and are of great scientific and applied interest.

Theoretical and practical contributions are presented in rare cases of multiple ischemic strokes in the course of bacterial meningitis (B4.9), sinus cavernous thrombosis in purulent sphenoid sinusitis (Γ 7.13), Guillain-Barre syndrome in the course of COVID-19 infection (Γ 7.7), application of assisted therapy with deep brain stimulation in a patient with late Parkinson's disease

 $(\Gamma 7.8)$, and neurological manifestations in Behcet's disease (B4.2); diabetic striatopathy, in type II diabetes mellitus (B4.7); recurrent strokes due to antithrombin III deficiency ($\Gamma 7.5$.); heriditary spastic paraplegia with a variant in the RTN2 gene ($\Gamma 7.11$); acute ischemic stroke (AIS) due to myxoma (B4.1).

The applicant has submitted data on participation in a large number of national and international forums - over 65, including 11 participations with a paper or poster in international congresses, and 10 participations with a paper or poster in national scientific events, as well as in 13 international training courses.

III. Scientific and applied contributions:

- The leading scientific and applied contributions of Ch.assit.prof. Dr. Mihael Tsalta, PhD
 can be summarized as follows:
- For the first time, conducted a study of quality of life in patients who have had an acute ischemic stroke, assessing factors that affect quality of life after stroke up to the third month.
- Conducts a comparative analysis on quality of life in patients treated with intravenous thrombolysis and those with conservative therapy.
- Demonstrates and describes the recovery process after ischemic stroke, and despite a trend towards improved quality of life in the first three months after stroke, it remains permanently worse.
- Conducts research focused on the epidemiology of ischemic stroke.
- Describes the initial experience of applying deep brain stimulation to a patient with advanced Parkinson's disease.

IV. Teaching activity:

The teaching activity of Dr. Mihael Tsalta, PhD complies with the Regulations for the Development of the Academic Staff of the Medical University - Varna, with a total of 1284 hours

in the last five years, with a total norm of 1100 hours for the said period. He teaches English and

Bulgarian language students. Dr. Mihael Tsalta's total teaching experience exceeds the minimum

required experience of 5 years.

V. Conclusion:

Dr. Mihael Emilov Tsalta-Mladenov, PhD has established a reputation as a dedicated doctor

and specialist - neurologist. He has earned the trust of his colleagues and patients. According to

the scientific-metric criteria he meets the requirements of the Law and the Regulations for the

Development of the Academic Staff of MU-Varna. Adding to these arguments and my personal

impressions of the candidate, give me motives to give a positive review and I propose to the

distinguished members of the Scientific Jury also to vote positively, Dr. Mihael Emilov Tsalta-

Mladenov to occupy the academic position of "Associate Professor" in Neurology in the

Department of Nervous Diseases and Neurosciences at the Faculty of Medicine of the Medical

University - Varna.

Date:

Prepared the review:

26.10.2023

(Prof. Dr. Ara Kaprelyan, DSC)