

To the Chairman of the Scientific Jury,
appointed by Order of the
Rector of the Medical University - Varna
N: P-109-398 / 20.09.2021

SCIENTIFIC OPINION

by Assoc. Prof. Dr. Atanas Angelov Atanasov, PhD
First Department of Internal Medicine
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Member of the scientific jury for the competition (SN no. 61 / 23.07.2021)
for acquiring the academic position "**Associate Professor**" in the field of higher
education 7. "Health and Sports", professional field 7.1. "Medicine" and
scientific specialty "**Rheumatology**" for the needs of the Faculty of Medicine,
First Department of Internal Medicine and Clinic of Rheumatology at the
University Hospital "St. Marina" Varna

By Order of the Rector of MU-Varna P-109-398/20.09.2021, I was elected as a
member of the Scientific Jury (SJ), and under protocol no. 1 of the first meeting
of the SJ, I was elected to prepare an opinion on the procedure for acquisition of
academic position "Associate Professor" for the needs of the Faculty of
Medicine, First Department of Internal Medicine and the Clinic of
Rheumatology at the University Hospital "St. Marina" Varna.

The procedure for announcing the competition is in compliance with the legal
requirements, no procedural violations have been established. Documents for the
competition were submitted by one candidate - **Dr. Tsvetoslav Antonov
Georgiev, PhD.**

1. Brief biographical data about the candidate

Dr. Tsvetoslav Georgiev graduated from the Medical University of Sofia in
2012. Until 2013 he worked in the Executive Agency for Transplantation, and
since 2014 he has been a fellow in rheumatology at the University Hospital "St.
Ivan Rilski" Sofia. In 2018 he acquired the specialty Rheumatology. Since 2019
he has been working at the Clinic of Rheumatology at the University Hospital
"St. Marina" Varna and as a part-time assistant at the Department of
Propaedeutics of Internal Medicine at MU Varna. In 2020 he was elected Chief
Assistant at the Educational Sector of Rheumatology at the First Department of
Internal Medicine, Medical University of Varna.

Dr. Tsvetoslav Georgiev has many additional professional qualifications, some
of which should be noted:

- Musculoskeletal ultrasound
- Capillaroscopy

- Imaging diagnostics in rheumatology
- Osteodensitometry
- Reviewing and editing of scientific literature

In 2018, Dr. Georgiev acquired the educational and scientific degree "Doctor" with the topic of the dissertation: „*Clinical, serological and imaging studies in patients with knee osteoarthritis treated with different therapeutic agents* ”

2. Research activity of the candidate - evaluation of the quantitative and qualitative indicators

Dr. Tsvetoslav Georgiev has submitted for review the following scientific work:

1. **Monograph:** Tsvetoslav Georgiev. Knee osteoarthritis. ISBN 978-619-7168-07-5. 157 p.
2. **Dissertation for the acquisition of ESD "Doctor"** on "Clinical, serological and imaging studies in patients with gonarthrosis treated with various therapeutic agents"
3. **Full text publications in scientific journals, referenced and indexed in a world database with scientific information** - 9 pcs.
4. **Publications in full text in scientific journals with scientific review** - 4 pcs.
5. **Publications in full text in scientific publications, referenced and indexed in a world database with scientific information, which are not included in the minimum requirements for participation in the competition** - 10 pcs.
6. **Participation in national congresses and conferences** - 19 pcs.
7. **Participation in international congresses and conferences** - 9 pcs.

Dr. Georgiev is an independent author in 5 scientific papers. He is the first author in 17 (68%) publications and respectively the second author in 5 (20%). In 12% of the publications, Dr. Georgiev is a third or subsequent author. Most of the scientific papers (80%) have been published in English or in bilingual journals. Eight of the publications are in journals with an impact factor - total IF 17,468.

Citations: There are over 200 citations of the scientific works of Dr. Tsvetoslav Georgiev. As evidence covering the minimum requirements, 10 citations are presented, all of which are in scientific journals, referenced and indexed in a global database of scientific information.

Dr. Georgiev is the author of an impressive number of reviews - 289 reviews in 29 scientific journals, 26 of which are referenced in the Web of Science. For his work as a reviewer, he was awarded in 2018 and 2019 by Publons, in 2019 by the Korean Journal of Medical Science for the best reviewer in the field of

Rheumatology, and received a certificate of distinction from the journal Rheumatology International.

3. Scientific fields in which the candidate has mainly worked and where the scientific publications are concentrated:

- Osteoarthritis
- Biomarkers
- Imaging diagnostics of the musculoskeletal system
- Rheumatic diseases and COVID 19
- Inflammatory joint diseases

4. Scientific and applied contributions

The main part of the scientific developments of Dr. Tsvetoslav Georgiev are in the field of osteoarthritis. Various aspects of the disease have been studied in his scientific works:

- Analysis of clinical parameters and biomarkers determining the functional deficit;
- A protocol for modification of potentially modifiable risk factors for knee osteoarthritis has been proposed;
- The effectiveness of two different regimens for intra-articular administration of high molecular weight hyaluronic acid has been studied for the first time in Bulgaria.
- The connection between osteoarthritis and polycystic ovary syndrome was analyzed for the first time in Bulgaria and an early biomarker for cartilage degeneration in women with this disease was identified.

In the field of biomarkers in rheumatology the main scientific contributions are:

- The relationship between the levels of MMP-3 and the progression of cartilage degeneration in people with knee osteoarthritis followed by magnetic resonance imaging has been studied, which is a novelty for the world.
- Study of cartilage oligomeric matrix protein levels in young women with hyperandrogenism.
- For the first time in Bulgaria, the application of the biomarkers MMP-3, COMP and VEGF was assessed in patients with psoriatic arthritis
- A connection between the magnetic resonance finding and the levels of cartilage oligomeric matrix protein in patients with knee osteoarthritis was sought for the first time in Bulgaria.

The following scientific contributions can be noted in the field of imaging diagnostics of the musculoskeletal system:

- For the first time in Bulgaria, the influence of the structural changes in knee osteoarthritis, assessed by radiography and ultrasound, on the intensity of pain has been analyzed.
- The morphological changes of the muscles in the lumbosacral area were assessed by magnetic resonance imaging for the first time in the Bulgarian population of patients with axial spondyloarthritis.
- For the first time in Bulgaria, a comparison of the area of the paravertebral muscles was performed in patients with axial spondyloarthritis and a control group of persons with chronic low back pain.

Some of Dr. Georgiev's publications are in an area that is particularly relevant in the last two years - rheumatic diseases and COVID 19. For the first time in our country a study was conducted on the prevalence and type of rheumatic manifestations in patients with COVID 19 infection. An analysis of the efficacy and safety of COVID 19 vaccines in patients with autoimmune inflammatory diseases has been performed.

In the field of inflammatory joint diseases, Dr. Geogriev has publications analyzing the publication activity of Bulgarian authors in the field of inflammatory joint diseases, as well as an article analyzing the benefits of applying pharmacoeconomic cost-effectiveness analysis in the treatment of rheumatoid arthritis.

5. Membership in scientific and professional organizations

Dr. Georgiev is a member of the Bulgarian Society of Rheumatology and the Bulgarian Medical Society of Osteoporosis and Osteoarthritis.

Dr. Georgiev participates in the editorial boards of several scientific journals: Rheumatology International; World Journal of Clinical Cases; SN Comprehensive Clinical Medicine and the official journal of the Scientific Society of Rheumatology – Rheumatology (Bulgaria).

6. Participation in research projects

Dr. Georgiev has participated in two research projects:

- 2015 Medical University of Sofia. Topic "Study of serum levels COMP, COLL2-1 and MMP-3 as markers of disease activity in patients with knee osteoarthritis"
- 2016 Medical University Sofia. Topic "Evaluation of the effectiveness of intra-articular administration of autologous platelet-rich plasma in patients with knee osteoarthritis."

7. Teaching activity

Dr. Georgiev performs seminars in Internal Medicine with medical students Bulgarian and English language training. During the period 2013-2018, as a full-time doctoral student, he taught students in the Department of Internal Medicine at the Medical University of Sofia. In the academic year 2019/2020 he was a part-time assistant at the Department of Propaedeutics of Internal Medicine at MU Varna - 140 hours of exercises with English-speaking students. During the academic year 2020/2021, his teaching load at the First Department of Internal Medicine is 152 hours.

Dr. Georgiev teaches trainee doctors during their state internship in Internal Medicine. He participates in the training of rheumatology residents in the specialty "Rheumatology".

In conclusion, Dr. Tsvetoslav Georgiev, MD is a rheumatologist with a serious volume and quality of scientific production. A significant part of it has been published in renowned international journals with an impact factor. Moreover, Dr. Georgiev is a member of the editorial boards of several scientific journals, and his nearly 300 reviews in numerous peer-reviewed journals are highly valued.

The scientific production and the educational workload of Dr. Tsvetoslav Georgiev, PhD fully meet the requirements of the Rules for the Development of the Academic Staff and the Regulations on the terms and conditions for acquiring scientific degrees and holding academic positions at the Medical University of Varna. This gives me the reason to confidently propose to the esteemed scientific jury to vote positively for the award of the academic position of "Associate Professor" to Dr. Tsvetoslav Georgiev, MD in Rheumatology for the needs of the First Department of Internal Medicine at the Faculty of Medicine at MU Varna.

24.10. 2021

Varna

Assoc. Prof. Dr. Atanas Angelov, PhD

