

To the Scientific Jury

Designated by order № P-109-166 / 03.06.2020 of

The Rector of the Medical University Prof. Dr. P. Stoyanov

Varna

## REVIEW

onprocedure for holding the academic position "ASSOCIATE PROFESSOR" in the field of higher education 7. Healthcare and sports, professional field 7.1. Medicine, specialty "RHEUMATOLOGY", for the needs of the Clinic of Rheumatology, University Hospital "St. Marina" EAD - Varna and Rheumatology Department at the First Department of Internal Medicine, Faculty of Medicine, MU "Prof. Dr. Paraskev Stoyanov" - Varna, published in the State Gazette, issue 8 / 28.01.

Candidate-one: Dr. Tanya Kirilova Shivacheva, PhD, Assistant Physician at the Clinic of Rheumatology, University Hospital - "St. Marina" EAD - Varna and Assistant Head of the Rheumatology Department at the First Department of Internal Medicine, Faculty of Medicine, MU "Prof. Paraskev Stoyanov" - Varna.

Reviewer: Prof. Dr. Nikolay Yordanov Penkov, Doctor of Medical Sciences, Executive Director of SBALK - Varna, Bulgarian Institute of Cardiology.

**Dr. Tanya Shivacheva was born on March 24, 1958** in the city of Varna. She graduated in Medicine in 1982 and worked as a head of SZU and a doctor at DNZSG. Since 1987 she has been working at the Clinic of Rheumatology, University Hospital - "St. Marina" successively as resident, assistant, senior assistant and since 2000 as chief assistant.

**Dr. Shivacheva** is fluent in written and spoken English and German.

**Acquire specialties.** There are two recognized specialties - "Internal Medicine" from 1989 and "Rheumatology" from 1997.

**Postgraduate training and specializations:** Ultrasound diagnostics of the musculoskeletal system; Pedagogical competence - level I; Pedagogical bases of academic teaching; Project management; Work with electronic platform Blackboard Learn, level I -2019; Methodology of

the research activity; Acquisition of key competencies for working with electronically based applications; Quality management; Development of a system for accumulation of credits and a rating system for universities; Interaction of university structures and hospital bases in R&D; Formation and development of research teams; MU-Varna International Forum; Good clinical practice.

**Acquired scientific degree.** In 2019, Dr. Shivacheva defended a dissertation for obtaining the educational and scientific degree "DOCTOR" on "Study of the clinical activity of rheumatoid arthritis in patients conducting treatment with biological agents".

**Membership and positions in scientific organizations:** She is a member of the Bulgarian Scientific Society of Rheumatology and the expert council to the same. In addition, he is a member of the Bulgarian Medical Society of Osteoporosis and Osteoarthritis, of the Bulgarian Medical Union and is a reviewer at the Rheumatology International Journal.

**Research activity.** Dr. Shivacheva participates in the competition for the academic position of "ASSOCIATE PROFESSOR ON RHEUMATOLOGY" with a total of 63 scientific papers, distributed as follows:

- **Dissertation** for awarding an educational and scientific degree "DOCTOR" - 1 (50 points);
- **Monograph**- 1 (100 points);
- **Full-text publications in scientific journals, referenced or indexed by a world-famous database (WOS or Scopus) - a total of 7 (212 points).**
- **Outside the required minimum state requirements according to ZRASRB from 2018 and PRAS of MU-Varna from 2019:**
  - Full-text publications in scientific journals, peer-reviewed journals peer-reviewed or indexed by world-renowned databases (WOS or Scopus) - 3 issues
  - Full-text publications in scientific journals, unreferenced and indexed in world-famous databases with scientific information - 4 issues;
  - Participation in national congresses, symposia, conferences - 30;
  - Participation in international congresses, symposia, conferences - 17 pieces.



Total -

63 pieces

In addition, Dr. Shivacheva in the documentation has attached two publications related to the dissertation, with which the scientific works become a total of 65.

In 5 of the works Dr. Shivacheva is the sole author, and the remaining 60 are co-authors - first author in 16, second - in 11, third - in 15 and subsequent - in 18.

These data show that in the scientific production presented in the competition for the academic position "ASSOCIATE PROFESSOR" Dr. Shivacheva has a decisive role.

The scientific papers included in the reference according to a sample proving the fulfillment of the minimum requirements for holding the academic position "ASSOCIATE PROFESSOR", they collect a **total of 437 points**.

The scientific directions in which Dr. Shivacheva worked and respectively the most important contributions in them are the following:

#### **1. Rheumatoid arthritis.**

The 10-year survival of patients with rheumatoid arthritis treated with expensive biological molecules was tested. Patients with a poor prognosis for the next 10 years were analyzed. The factors influencing the prognosis were examined and the key predictors were determined, which determine up to 57% of the predicted survival.

The influence of concomitant diseases in patients suffering from RA and treated with expensive biological molecules, cardiovascular diseases and the overall cardiovascular risk in them has been studied.

Studies have been performed to evaluate the activity of RA and the therapeutic response to biological target molecules, and the efficacy of biological and synthetic slow-acting disease-modifying drugs has been studied. The treatment with corticosteroids in patients with RA undergoing active biological therapy was analyzed and the effectiveness of apheresis in the complex treatment of this disease condition was tested. In addition, the importance of some new immunological markers in RA has been studied.

## **2. Reactive arthritis.**

Clinical and microbiological studies have been performed in patients with reactive arthritis. The etiopathogenesis, clinical manifestations and effectiveness of the treatment are analyzed. High sensitivity, specificity and satisfactory diagnostic value of serum antibodies against *Yersinia enterocolitica* and *Chlamydia trachomatis* have been established. The therapeutic activity of Ofloxacin, Sulfasalazine, Diclofenac, DONA-S and others was tested.

A model for estimating the prognosis in patients with reactive arthritis has also been proposed.

## **3. Non-steroidal anti-inflammatory drugs.**

The therapeutic activity and side effects of a number of non-steroidal anti-inflammatory drugs (Feloran, Movalis, Arcoxia, Aulin) in inflammatory and degenerative joint diseases have been tested and confirmed in practice.

## **4. Slow-acting disease-modifying agents.**

A register of RA patients undergoing long-term treatment with biological disease-altering drugs has been established. Some regularities have been established in this treatment: delay of treatment compared to the diagnosis, long-term use of corticosteroids and non-compliance with the established scheme for combining biological agents with Methotrexate. Therapeutic activity and tolerability of the disease-modifying drugs Tocilizumab, Arava and Lobenzarit were studied and analyzed.

## **5. Studies in patients with osteoporosis.**

The average duration of treatment of osteoporosis in menopausal women was studied and specified, the degree of impact of concomitant diseases was assessed and the reasons for premature discontinuation of these drugs were analyzed.

## **6. Studies in autoimmune vascular diseases.**

A case of Systemic lupus erythematosus with CNS involvement has been presented, which has created serious diagnostic difficulties. Systolic and diastolic function in a group of patients with



Systemic Lupus was studied and evaluated. The frequency of myocardial damage in patients with progressive systemic scleroderma has been specified. Depending on the degree of the tricuspid gradient, a modified screening algorithm has been proposed for patients with pulmonary hypertension. A case of Systemic Scleroderma has been described with a characteristic immunological constellation in an elderly woman over 70 and a number of concomitant diseases, which create difficulties in recognizing the underlying disease.

#### **Citations and reviews.**

According to the presented Academic Reference - document № 105 / 16.03.2020 of MU-Varna, 5 citations or reviews were found in scientific journals, referenced and indexed in world-famous databases with scientific information or in monographs and collective volumes. The reference materials are stored in the library of MU-Varna.

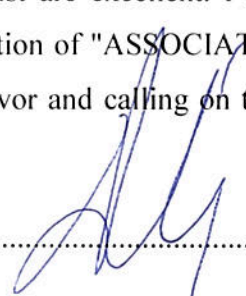
#### **Educational and teaching activity.**

According to reference № 112 - 42 / 04.02.2020 from the Rector's Office of MU-Varna Dr. Shivacheva has a teaching experience of a total of 33 years starting from 01.03-1987. Her teaching load in the last 5 years is an average of 249 hours per year.

**CONCLUSION.** Dr. Shivacheva is a very well-prepared doctor - a specialist in internal medicine and rheumatology with 33 years of experience in the Clinic of Rheumatology at the University Hospital "St. Marina". She is the first assistant in the specialty "Rheumatology". She actively participates and is a leader in the diagnostic and treatment work in the practical and theoretical training of students and specialists in rheumatology. Respected and sought-after consultant in rheumatology on the territory of the hospital, the city and Northeastern Bulgaria. Excellently trained ultrasound scanner, using the method in diagnosing diseases of the musculoskeletal system. She is a member of the most popular Bulgarian and international scientific societies in rheumatology. She is also a member of the expert council at the Bulgarian Society of Rheumatology and a reviewer at the Rheumatology international journal. Fluent in written and spoken English and German. There is a sufficient volume of scientific production that fully meets the requirements of MU-Varna.

Her teaching load is sufficient in volume. My personal impressions of Dr. Shivacheva as a doctor, teacher and scientist are excellent. I believe that she fully meets the requirements for holding the academic position of "ASSOCIATE PROFESSOR IN RHEUMATOLOGY". That is why I will be voting in favor and calling on the other members of the Scientific Jury to do the same.

09. 08. 2020. Reviewer: .....

A handwritten signature in blue ink, appearing to be 'N. Penkov', is written over the dotted line of the reviewer's name.

Varna (Prof. Dr. Nikolay Penkov, MD, PhD)