

REVIEW

by **ACAD. PROF. DR. DRAGA IVANOVA TONCHEVA - MITEVA**, MD, PhD, DSc, Medical University - Sofia, elected reviewer on 20.04.2022 at a meeting of the scientific jury in two competitions for the award of two academic positions "Associate Professor", in the National Center of Public Health and Analysis / NCPHA /, field of higher education 7. "Health and Sports", professional field 7.1. "Medicine", in the scientific specialty "Social Medicine and Health Management", for the needs of the Department "Analysis of Health Policies and Accreditation Procedures" at NCPHA

Common part

The two competitions for associate professor of medicine, scientific specialty "Social Medicine and Health Management" have been announced for the needs of the National Center for Public Health and Analysis / NCPHA /. One of the candidates is Dr. Atanas Radinoff Radinoff, MD. A review of his documents showed that the procedure for opening and announcing the competition had been followed. The materials for the competition are prepared in accordance with the requirements of the Law for the development of the academic staff in the Republic of Bulgaria and the Regulations for its application in the NCPHA

Brief biographical data

Dr. Atanas Radinoff Radinoff was born in 1962 in the village of Pchelarovo, district Varna.

He has a rich biography and educational training. He graduated from the Higher Medical Institute - Varna (1982 - 1988), Master Degree in Medicine, Diploma Series A, No. 000977, PLAB Part 1 - 12.03.2003 (pass), PLAB Part 2 - 24.10.2005 (pass). He has acquired specialties at the Medical Academy, Sofia: in Internal Medicine (1989 - 1994, Specialist in Internal Medicine from January 1995, Diploma №43777 from 1995); in Clinical Hematology (1995 - 1997, Specialist in Clinical Hematology since 1998, Diploma Series AC, №004340) and at the University of National and World Economy - Sofia: Master in Health Management (2014 - 2015, Diploma № 032417).

He obtained the educational and scientific degree "Doctor" in the scientific specialty "Social Medicine and Health Management" at NCPHA - Sofia with a dissertation on "Organization and management of the elimination of the consequences of radiation contamination of the population as a result of terrorist acts and other radiation incidents"(Diploma № 37 of 22.01.2021).

He has gained significant work experience as Head of Medical Center (1989-1990 in Pomorie), Head of the Laboratory of Immunology, MMA Sofia (1990-1995), Assistant, Senior and Chief Assistant at the Clinic of Hematology, Chemotherapy and Oncology, MMA Sofia (1995) -2003), therapist at IV MHAT, Sofia and hematologist at XXV DCC, Sofia (2005-2006), Tokuda Hospital Sofia (2006-2014), where he initially headed the hematology department, and in 2008 established an independent Department of Hematology, which later grew into the Clinic of Hematology and Oncology, modeled on that of the Military Medical Academy, and from 2011 to 2014 he combined the positions of Head of Hematology, Medical Director and Member of the Board of Directors of Tokuda Hospital and Head Department of Hematology at the University Hospital "St. Ivan Rilski" from 2014 until now.

Fluent in English (IELTS: OVERALL BAND 7.0 (CERTIFICATE NR.02BG0083RADA001A / 08.07.2002)) and Russian.

Specializations and professional skills:

He specialized in:

- ✓ Aviation Medicine at the Military Medical Academy, Aviation Medical Institute - Sofia (1990);
- ✓ Flow Cytometry at the Medical University of Antwerp, Belgium (1992), Flow Cytometry Certificate;
- ✓ Organization and tactics of military medicine, Military Medical Academy - Sofia;
- ✓ International Law of Armed Conflict, ICMM and Swiss Government - Spiez, Switzerland.

He participated in the NATO-SFOR mission in Bosnia and Herzegovina as a doctor of the Bulgarian contingent. He has served as an OSCE international observer in Bosnia and Herzegovina and Kosovo. He passed the exams for a license to work in the UK (IELTS, PLAB 1 and PLAB 2).

Awards:

- ✓ Medal from the Secretary General of NATO - Javier Solana - 1999
- ✓ Medal from NATO Secretary General George Robertson - 1999

Experience in clinical trials:

- ✓ 2 clinical trials of solid tumors - phase III
- ✓ 2 clinical trials of recurrent chronic lymphocytic leukemia - phase III
- ✓ 3 clinical trials of Primary Immune Thrombocytopenia - Phase III
- ✓ Lung cancer - phase II

- ✓ Advanced follicular lymphoma - phase III
- ✓ Multiple myeloma - phase III
- ✓ Essential thrombocythemia - phase III

Scientific works

Overview of scientific papers

Dr. Atanas Radinoff participated in the competition for associate professor with a large number of publications - 42, of which 26 were published in refereed Bulgarian journals, 13 in prestigious foreign scientific journals (International Journal of Immunopharmacology, 1997; Archive of Oncology, 1999, 1999; Leukemia 2018, 2021, 2021; Macedonian Journal of Medical Sciences 2018, 2018; British Journal of Haematology 2019; Molecular and Clinical Oncology 2019; Balkan Journal of Medical Genetics 2019; Lancet.2020; Biotechnology & Biotechnological Equipment, 2021) and 3 are chapters from textbooks. One article was published in an unreferred journal; one project was added to the report.

Dr. Atanas Radinoff has a total IF 229,905 and a number of cited papers - 711 citations found in Scopus and 719 in WEB of Science and 10 in Bulgarian journals.

The results of the research have been reported at regional scientific meetings (7 communications), national congresses and conferences (37) at international congresses (17): XV International Congress of Allergology and Clinical Immunology, Stockholm, Sweden (1994); Eight International Congress of Mucosal Immunology, San Diego, CA, USA (1995); IX International Congress of Immunology San Francisco, CA, USA (1995); Macedonian Immunological Congress, Ohrid (1996); VI World Congress of Otorhinolaryngology Head and Neck Surgery, Sydney (1997); 3rd Congress of the Balkan Military Medical Committee, Athens, Greece (1998); EHA Learning Center (2016); ASCO (2019); EHA-2019, Amsterdam (2019); Balkan Congress of Human Genetics, Edirne, Turkey (2019); EHA-2020 - Virtual (2020); ASCO (2020); EHA-2020 Virtual (2020); ASH-2021, Atlanta, GA (2021).

Dr. Radinoff has participated with 37 reports at scientific meetings in Bulgaria.

Evaluation of scientific contributions

His dissertation on "Organization and management of the elimination of the consequences of radiation contamination of the population as a result of terrorist acts and other radiation incidents" is extremely relevant with the scientific and scientific contributions to the organization of medical care, with a proposal for an algorithm for organizational behavior in the Department of Hematology at the University Hospital "St. Ivan Rilski "and

organizational behavior of the specialists for rendering first aid in case of sudden disruption of the hematopoietic system of large groups of people in case of nuclear pollution.

The scientific contributions of Dr. Radinoff have been received in the following 5 main areas: 1. Clinical studies and their importance for patients' access to innovative therapy; 2. Fundamental and clinical immunology, implementation and application of immunological methods in clinical practice; 3. Quality of life in patients with cancer and management of the side effects of chemotherapy; 4. Main problems in the diagnosis and treatment of patients with oncohematological diseases; 5. Public health, crises and pandemics, the Covid-19 pandemic.

Clinical trials and patients' access to innovative therapies

Dr. Radinoff has 15 years of experience as a researcher in dozens of clinical studies in the field of clinical hematology and oncology - herpes vaccines in patients with hematological and oncological diseases, epoetin alfa in anemic patients with low-risk myelodysplastic syndrome (publication in *Leukemia*) of anagrelide in patients with essential thrombocythemia (published in the *British Journal of Hematology*) and others. Dr. Radinoff is a highly valued researcher at the international level and he is included in the teams of world-renowned scientists such as Gisliger, Fenaux, Cervantes, Grosicki, Sekeres, Dimopoulos and many others. Significant is his contribution to the study of the effect of selinexor in combination with bortezomib and dexamethasone in patients with multiple myeloma, the efficacy and safety of ruxolitinib in patients with myelofibrosis and anemia, the study of the effect of pevonedistad in patients with high risk MDS, HMML or AML with a low blast rate. These contributions of Dr. Radinoff characterize him as a professional with enviable qualities and exceptional management skills for managing and solving important health issues related to socially significant diseases and innovative therapies.

Fundamental and clinical immunology

Dr. Radinoff masters and applies modern for the period 1990 - 1995 immunological methods for diagnosis (including flow cytometric DNA analysis with propidium iodide using laser flow cytometer "FACSort") of diseases in the field of clinical hematology, medical oncology, otorhinolaryngology and others. He introduced precise immunophenotyping of lymphocyte populations using monoclonal antibodies conjugated to various dyes such as fluorescein isothiocyanate (FITC) and phycoerythrin (PE) and categorized them according to surface receptor expression in the CD (cluster of designation) system. Dr. Radinoff effectively applies this innovative approach in his research in developing a research project (№ MU-14-MED. / 1993) on the topic: "Correlative relationships between the immunophenotype of the

main lymphocyte populations and DNA status during the neoplastic process “; in a study of the effectiveness of the oral polybacterial immunomodulator Dentavax (developed by NCIPD); in the study of the phagocytic activity of peripheral blood immune cells and tonsillar suspension in otorhinolaryngology.

Quality of life in cancer patients and management of chemotherapy side effects

Dr. Radinoff's research on the side effects of chemotherapy - emesis, as well as the most effective means of controlling it, has a high scientific and social effect. EORTC-QoL-Q30 was evaluated before and 7 days after highly emetic chemotherapy in patients with lung, head, neck and genital carcinoma. High efficiency and advantage of metoclopramide and setrons (ondansetron, tropisetron, granisetron) compared to metoclopramide have been proven, especially on a psychological level.

Main problems in the diagnosis and treatment of patients with oncohematological diseases

Dr. Radinoff has achieved positive results in characterizing cytogenetic disorders in patients with multiple myeloma; in chronic myeloid leukemia, myelofibrosis, myelodysplastic syndrome and chronic lymphocytic leukemia. He described interesting cases of patients with rare diseases such as Gaucher disease, osteopetrosis and others. He analyzed the effect of treatment with different therapeutic approaches in acute leukemias, in B-cell chronic lymphocytic leukemia and in Hodgkin's lymphoma; made a description of the advantages of targeted therapy; has published interesting rare cases of Philadelphia positive and JAK2 negative of the V617F mutation with hyperdiploid karyotype and of the Janus Kinase V617F mutation in patients with myelofibrosis.

Public health, crises and pandemics, the Covid pandemic 19

Dr. Radinoff is a researcher with a high affinity for research on crisis events with a negative impact on public health and the formulation of organizational decisions. This topic is the focus of his dissertation and was later continued in other research. In our time, the topic emerges as realistic and becomes extremely relevant. In a pandemic, the author studied the impact of COVID 19 on clinical trials, on the treatment of multiple myeloma and other haematological diseases.

Scientific and applied contributions

- ✓ The polybacterial immunostimulating effect of Dentavax has been proven; The effectiveness of different doses of ondansetron in cancer patients treated with cisplatin-containing chemotherapy has been determined.

- ✓ Results from clinical trials were obtained: a phase III randomized, placebo-controlled study evaluating the efficacy and safety of epoetin- α in patients with low-risk anemia; a phase III randomized, multicenter, double-blind, actively controlled study comparing the efficacy and safety of two different anagrelide formulations in patients with essential thrombocythemia; (BOSTON): a randomized phase III study of Selinexor, bortezomib and dexamethasone once weekly versus bortezomib and dexamethasone twice weekly in patients with multiple myeloma; the REALIZE phase 2 study of the efficacy and safety of a new dosing strategy for ruxolitinib in the treatment of patients with myelofibrosis and anemia; a randomized phase 2 study of pevonedistat plus azacitidine versus azacitidine for risk in MDS / CMML or AML; Molecular response to nilotinib therapy in long-term monitoring of patients with chronic myelogenous leukemia (CML)
- ✓ Evidence of genetic disorders in rare diseases: Philadelphia-positive case, negative for JAK2 V617F mutation with hyperdiploid karyotype; Janus Kinase V617F mutation in patients with myelofibrosis; thrombotic events in patients with myelofibrosis independent of the mutation status of JAK 2 V617F
- ✓ Possibilities for clinical application of flow cytometric DNA analysis in oncology practice in patients with chronic tonsillitis. Correlations between the immunophenotype of the main lymphocyte populations and the DNA status during the neoplastic process
- ✓ Effect of the COVID-19 pandemic on clinical trials and treatment of multiple myeloma and other haematological neoplasms
- ✓ Role of the microbiome in malignant hematological diseases

Pedagogical activity

Dr. Radinoff has experience as an assistant, senior and chief assistant at the Clinic of Hematology, Chemotherapy and Oncology, MMA Sofia. He has an extremely high level of competence in broad fields of medicine, proven in his scientific works and international clinical studies, which makes him a desirable, prepared and erudite lecturer with great opportunities to train students and physicians - specialists.

During the last 7 years Dr. Radinoff has organized in the Clinic of Hematology at the University Hospital "St. Ivan Rilski" training of 9 doctors specializing in clinical hematology and was the head of the specialization of 4 of them (2 have successfully passed the specialty

exam). He conducted a total of 32 colloquia of all graduates. 49 people were trained in the module "Hematology" and some of them held colloquia. According to the report on the workload of the Training Department of St. Ivan Rilski University Hospital in the period 2019-2021, Dr. Radinoff gave a total of 40 hours of lectures and 180 hours of exercises.

He is a co-author of a textbook on "Family Medicine: The most modern practical guide to the GP" ed. Assoc. Prof. Petar Panchev, MD Sofia 2000, pp.358-388 with a chapter in Hematology and in a textbook in Medical Genetics. Genomic Medicine, Resp. ed. Prof. Draga Toncheva, MD Sofia, 2010 with two chapters "General characteristics of leukemias" and "Era of targeted therapy".

Membership in scientific organizations

2019 - Member of the Expert Council on Clinical Hematology at the Ministry of Health

1999 - Member of the Bulgarian Physicians Union

1995 - Member of the Bulgarian Medical Association of Hematology

Conclusion

Dr. Atanas Radinoff Radinoff is a bright creative person, with established authority among the scientific and medical community in Bulgaria and internationally, a highly respected doctor of patients and a well-established teacher.

He has remarkable scientific and applied scientific achievements, reflected in prestigious international journals, evaluated with a very high impact factor and good citation of the results. Dr. Radinoff applies innovative technologies in his research. Participation in major international clinical trials is respectful. Professionally, he is a university lecturer with extensive experience in the diagnosis and treatment of hematological diseases and in the development of personalized therapy. Proof of his extensive erudition as a teacher is the invitation to participate in the textbook on Medical Genetics.

Dr. Radinoff meets all the criteria for holding the academic position of "Associate Professor": has a doctoral dissertation, serious publications in international journals with high overall impact factor, has achieved significant scientific and applied contributions, original results in clinical hematology, medical oncology, otorhinolaryngology, healthcare organization, etc. He implements in research and clinical practice innovative technologies for phenotyping, molecular diagnostics, genetic methods for the analysis of cancer and personalized therapy with targeted drugs. In his scientific activity, Dr. Radinoff pays special attention to the quality of life of chemotherapy patients, related to various aspects: social, financial, psychosocial and physical activities. He studies the most common and painful side