

São Paulo, 28 de julho de 2023
Carta 0025/2023

Carta de Apoio da Sociedade Brasileira de Medicina Nuclear (SBMN) a resolução proposta no fórum de experts em Medicina Nuclear dos BRICS a ser apresentada aos ministros da Saúde dos BRICS tendo em vista estabelecer cooperação multilateral para área da medicina nuclear.

A Sociedade Brasileira de Medicina Nuclear (SBMN) tendo honrosamente participado presencialmente no Fórum de Experts em Medicina Nuclear dos BRICS, sendo representado por dois membros, Rafael Willain Lopes e Diego Bromfman Pianta, respectivamente, Presidente e Primeiro-Secretário da SBMN, dos quatro integrantes da delegação brasileira, revisaram o teor da resolução proposta, juntamente com os demais membros da diretoria e decidiram por unanimidade apoiar seu conteúdo.

Esperamos apoio de suas proposições pelos senhores ministros de saúde dos países integrantes dos **BRICS** por ocasião de seu encontro, no melhor espírito de cooperação multilateral, que pode ser expressado pelo provérbio africano: ***“Se quiser ir rápido, vá sozinho, se quiser ir longe, vá junto.”***

A diretoria da Sociedade Brasileira de Medicina Nuclear (SBMN).

Resolutions
The International Expert Forum
on Nuclear Medicine of BRICS Countries

The International Expert Forum on Nuclear Medicine of BRICS Countries (hereinafter the Forum) was held in Moscow and Obninsk on July 20-21, 2023.

On behalf of the Russian Federation, the Organizers of the Forum were the Ministry of Health of the Russian Federation, Russian Research Center for Radiology and Surgical Technologies of the Ministry of Health of the Russian Federation named after A.M. Granov, National Medical Research Radiological Center of the Ministry of Health of the Russian Federation (Medical Research Radiological Center named after A.F. Tsyb) and State Atomic Energy Corporation Rosatom (ROSATOM).

The event brought together more than 200 representatives of all countries, which are currently members of BRICS: Brazil, Russia, India, China, South Africa.

The main purpose of the event was to facilitate the exchange of experience between nuclear medicine Experts from the BRICS countries on the following topics:

- use of advanced scientific developments in radionuclide diagnostics and therapy of various diseases;
- exchange of technologies in the field of development and production of innovative radiopharmaceuticals;
- training personnel in the sphere of nuclear medicine;
- development of a legal framework at the national and international levels.

At the Forum, the Experts succeeded in developing a set of proposals and recommendations to initiate effective cooperation and collaboration within BRICS for the benefit of the common goal of improving the quality of life and reducing mortality of patients with oncological and non-oncological diseases, and reached the decision to establish a BRICS Working Group on Nuclear Medicine.

It was noted that there had been a steady oncological morbidity increase in the world, as well as high mortality and disability rates among the working-age population of the BRICS countries, while modern nuclear medicine technologies are becoming more and more in demand in national healthcare systems.

The BRICS countries have considerable potential in the development and application of nuclear medicine technologies and tools to diagnose and treat oncological diseases. Now we need to consolidate our efforts to implement the nuclear medicine achievements into clinical practice.

In radiopharmacy experts consider that it is vital to jointly address issues associated with the development and export of innovative radiopharmaceuticals both within the BRICS countries and to other states. It is also advisable to ensure the availability of radiopharmaceuticals and nuclear medicine products for medical and scientific purposes through joint development of associated logistics and the establishment of cooperation between the BRICS countries in the field of regulatory compliance.

In oncology, it seems appropriate to implement comprehensive measures aimed at promoting early detection and effective treatment of malignant tumors. High priority should be given to ensuring interaction between the BRICS medical centers specializing in the diagnostics and treatment of malignant tumors to facilitate sharing experience and collecting relevant information. Such interaction will allow a large-scale implementation of modern methods of early detection of oncology diseases, development of methods and tools for combating oncology diseases, development of methods and tools for effective treatment of cancer in its early stages, development of methods and tools for effective rehabilitation and palliative care of cancer patients. In addition, the collected statistical data will help more effectively identify the most urgent demand, enable the manufacturers of radiopharmaceuticals and medical devices for the nuclear medicine to assess the volume and range of their products, both in the short term and over a longer planning horizon.

Communication platforms should be organized for discussing the status of cancer morbidity and methods to treat oncological patients, as well as to share experiences, scientific and innovative achievements, advanced technologies in order to introduce new tools and mechanisms for diagnostics and treatment of malignant tumors. These platforms may work in the format of events, such as those held by professional communities/associations that bring together experts in using nuclear medicine technologies in medical practice.

The First International Forum on Nuclear Medicine of BRICS Countries is proposed to be held in 2024, with the participation of the scientific and medical communities and representatives of the BRICS ministries and agencies responsible for decision-making in the healthcare sector.

Another instrument could also be periodic online consultations between

experts from manufacturing organizations and medical institutions of the BRICS countries on the development and application of new nuclear medicine methods and tools.

Implementation of joint research projects in the following areas may also be an important area of interaction between nuclear medicine Experts from the BRICS countries:

- establishing radionuclide diagnostics facilities, remote radiotherapy/brachytherapy facilities;
- development of medical devices containing radionuclides;
- R&D, preclinical and clinical studies of diagnostic and therapeutic radiopharmaceuticals;
- creating clear and convenient logistics between BRICS countries to ensure the delivery of radiopharmaceuticals and medical devices containing radionuclides, both for medical and scientific purposes.

In clinical practice, it is recommended to expand applying modern radionuclide diagnostic methods not only to oncological but also to cardiological and neuropsychiatric diseases.

The development and commercialization of advanced digital solutions aimed at individual dosimetry support of patients during radiotherapy, comprehensive monitoring of patients during outpatient treatment and rehabilitation, and other telemedicine services (second opinions, remote medical consultations, tracing systems for radioisotopes and radiopharmaceuticals, etc.) deserve attention and require proactive promotion in the BRICS countries.

Conducting multicenter clinical trials of radiopharmaceuticals and medical devices containing radionuclides, with the involvement of major centers in the BRICS countries, will make it possible to faster gather groups of patients for testing, which will potentially speed up research on rare nosologies and the introduction of effective radiopharmaceuticals into clinical practice. In the future, international clinical guidelines for treatment and diagnostics of oncology diseases using nuclear medicine methods may be developed based on these studies, which will improve the quality of life of cancer patients and reduce mortality from oncology and non-oncology diseases.

Harmonization of normative and legal regulation of nuclear medicine in the BRICS countries will unify and, as a result, simplify the procedure for conducting these multicenter clinical trials of new radiopharmaceuticals and medical devices containing radionuclides, and will lead to mutual recognition and faster procedure

for obtaining registration certificates in the member states. In addition, it opens up opportunities for multicenter randomized clinical trials of new diagnostic and therapeutic methods, on the basis of which a unified base of generally accepted standards for disease detection and treatment of patients can be created.

In the field of professional training of dedicated experts in nuclear medicine (oncologists, radiation oncologists, radiation therapists, medical physicists, etc.), it is important to ensure joint development and initiation of training programs for health care workers in advanced methods and tools for diagnosing and treating various oncological and non-oncological diseases, with the use of modern educational approaches (mentoring programs, offline and online seminars, interactive educational modules, training sessions, etc.).

Sources of funding should be provided for support and development of the above recommendations and initiatives in nuclear medicine drawn up by the BRICS Expert community. This may include, but not limited to, the involvement of the New Development Bank, which is an effective tool for promoting joint programs and projects within BRICS.

It is advisable to bring the above proposals and issues for discussion to the upcoming BRICS Health Ministers' Meeting to be held in the Republic of South Africa on August 4, 2023.

The proposed BRICS Working Group on Nuclear Medicine should be charged with elaborating the recommendations and proposals reflected in the Final Resolution of the International Expert Forum on Nuclear Medicine of BRICS Countries, as well as developing more in detail BRICS joint programs and projects.