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**Bishkek Department of Nuclear Medicine received its first patients**

*An important milestone of the nuclear medicine development program in Kyrgyzstan has been reached with Rosatom involvement*

The Department of Nuclear Medicine of the National Center for Oncology and Hematology under the Ministry of Health of the Kyrgyz Republic opened its doors for the first patients in the modern history of the country.

The Department started clinical services due to the support provided to the country as part of the IAEA (International Atomic Energy Agency) technical cooperation program under the national project KIG6007 ‘Restoring nuclear medicine in Kyrgyzstan’ and KIG9008 ‘Improving radiation protection of patients and personnel in diagnostics and interventional radiology’.

The National Center for Oncology and Hematology was the base for the use of medical isotopes for clinical and scientific purposes since 1961, Kyrgyzstan being a leader in the use of nuclear medicine technologies. The nuclear medicine laboratory stopped operating in the 1990s. Since 2011, with the support of the IAEA, the Center has received the radiopharmaceutical pharmacy equipment for radiopharmaceuticals production based on technetium-99m generators, a single-photon emission computed tomograph supplied by Mediso (Hungary), and the Department’s employees have undergone the necessary training.

In 2023, an important milestone was passed in preparation for the Department startup – with expert support from State Specialized Design Institute, Joint-Stock Company (belongs to Rosatom) the Department obtained permitting documents confirming its compliance with radiation safety requirements and standards. In June 2024, with the involvement of experts from several countries, the Department passed the final preparation stage to start providing clinical services. As part of the agreement with the IAEA, the Department procured a technetium-99m generator manufactured by the Institute of Nuclear Physics of the Ministry of Energy of the Republic of Kazakhstan, and the Department’s personnel received instructions on how to operate the generator from the Center for Radiochemistry and Isotope Production. Isotope JSC (belongs to Rosatom) donated ‘cold kits’ for the preparation of radiopharmaceuticals based on technetium-99m.

Furthermore, the International Atomic Energy Agency organized an expert mission including the Department personnel training for calculating radiation doses for patients, using radiopharmaceuticals preparation methods based on technetium-99m, and complying with radiation safety standards (Russian specialists from JSC State Specialized Design Institute were invited experts of the mission). The Hungarian Mediso (manufacturer of the SPECT camera) repaired, adjusted and tested performance of the equipment.

The Department of Nuclear Medicine offers a modern imaging method to the population of the republic, which allows scanning both the entire system and individual organs to diagnose cancer in the early stages in real time. With SPECT imaging, doctors can identify the dynamics of disease treatment and evaluate its effectiveness.

The National Center for Oncology and Hematology under the Ministry of Health of the Kyrgyz Republic is the only state-owned medical facility in the country with a nuclear medicine department. The director of the center, Baktygul Sultangazieva, noted: “In the republic, we have more than 30 thousand cancer cases registered, about 6 thousand patients newly diagnosed, 80% of patients need a radioisotope research method. The Department’s equipment can be used not only for diagnosing cancer, but also in programs for managing patients with cardiological, neurological, endocrinological and other socially significant diseases.”

**For reference:**

Technetium-99m is the most popular isotope in nuclear medicine used in more than 80% of SPECT procedures. Technetium-99m generators are used to diagnose oncological, cardiac, neuroendocrine and other diseases.

Russia is consistently developing its international trade and economic relations, focusing on long-term win-win cooperation. Notwithstanding external restrictions, the national economy is increasing its export potential with goods and service supplies around the world.