



## Sechenov University and Izhevsk Radio Plant Entered into an Agreement on the Development and Production of a Domestic Device for Diagnosing Bacterial Overgrowth

On December 16, 2023, the Department of Propaedeutics of Internal Medicine, Gastroenterology and Hepatology, the Reference Center for Microbiota of the Sechenov University of the Ministry of Health of the Russian Federation and the Scientific Community for the Study of the Human Microbiome (NSOIM) organized the conference “Small Intestinal Bacterial Overgrowth Syndrome in the Clinical Practice”. The event was attended by the Main Freelance Gastroenterologist of the Ministry of Health of the Russian Federation Vladimir Ivashkin, the Chief Freelance Geriatrician of the Ministry of Health of the Russian Federation Olga Tkacheva, opinion leaders in the field of gastroenterology, and representatives of the industrial society (Fig.).

Small intestinal bacterial overgrowth (SIBO) is a disease characterized by an increased amount

and/or violation of the microbiota in the small intestine, manifested by the development of systemic inflammation, disruption of the integrity of the intestinal epithelial barrier and malabsorption.

SIBO occurs more often in women, and the frequency of its detection increases with age. A recent systematic review demonstrated the high prevalence of SIBO among patients with chronic non-communicable diseases. Complications of SIBO are predictors of high mortality in the elderly and centenarians.

The main and most common method of diagnosing SIBO is a non-invasive hydrogen breath test. Currently, Russian-made devices are urgently needed to diagnose this condition. For these purposes within the framework of the implementation of the state program of academic strategic leadership “Priority 2030”, the national project



**Figure.** Participants of the Expert Council dedicated to discussing bacterial overgrowth syndrome in the practice of doctors of various specialties, December 16, 2023.

**Рисунок.** Участники Экспертного совета, посвященного обсуждению синдрома избыточного бактериального роста в практике врачей различных специальностей, 16 декабря 2023 г.

“Science and Universities” and the strategic project “Network for the Development of best Practices in Medicine, Science and Education” I.M. Sechenov First Moscow State Medical University of the Ministry of Health of the Russian Federation and Izhevsk Radio Plant have entered into an agreement on the mutually beneficial cooperation and a business partnership. According to the document, the partners will develop and produce innovative domestic medical equipment. The first product will be the *Gastro One* device for non-invasive diagnosis of SIBO. Their presence will make a significant contribution to improving the medical care provided to the population of the Russian Federation.

On the part of Sechenov University, the agreement was signed by the rector of the Sechenov University — Academician of the Russian Academy of Sciences Pyotr Glybochko, on the part of the partner — First Deputy General Director Rustam Shikhiev. The development of the *Gastro One* device is carried out by the Innovative Scientific School of Sechenov University under the guidance of the Director of the Clinic of Propaedeutics of Internal Diseases, Gastroenterology and Hepatology, Academician of the Russian Academy of Sciences, Chief Gastroenterologist of the Ministry of Health of the Russian Federation Vladimir Ivashkin.