

Astellas, iota Biosciences enter into collaborative R&D agreement

17 September 2019 | News

Astellas and iota Biosciences Enter into Collaborative Research and Development Agreement -Companies to explore new biosensing and treatment measures using ultra-small implantable medical devices



Japanese firm Astellas Pharma and iota Biosciences, Inc. have announced a joint research and development agreement to explore new biosensing and treatment measures using ultra-small implantable medical devices. Under this collaboration, Astellas and iota will jointly design detailed specifications of implantable medical devices and conduct preclinical studies for several diseases with high unmet medical needs.

iota is a California-based start-up company specializing in the bioelectronics field that develops millimeter-sized implantable medical devices. iota's proprietary technology uses ultrasound as a tool for power supply and wireless communication resulting in the ability to develop battery-free and wireless ultra-small implantable medical devices.

Conventional implantable medical devices have faced challenges related to their size, imposed by the need for batteries, wires and large electronic circuits. It is expected that the battery-free and wireless ultra-small implantable medical devices we will develop will enable new classes of biosensors to monitor the condition of tissues and organs, as well as new treatment devices by providing stimulation to nerves and muscles.

"We envision a future in which our ultra-small implantable devices will be used in combination with, or as an alternative to, conventional diagnostics and therapies," said Carmena and Maharbiz. "Through our collaboration with Astellas, we expect to make our innovative technologies available to patients around the world."

"We are very pleased to be able to collaborate with iota, led by pioneers in the field of bioelectronics," said Naoki Okamura, Representative Director Corporate Executive Vice President, Chief Strategy Officer, Astellas. "With our Rx+^{TM(1)} strategy, we aim to create innovative healthcare solutions that combine our strengths in the prescription drug (Rx) business developed over many years with technologies and knowledge from fields outside of the traditional Rx space. This agreement is part of our efforts, and we will continue to actively invest in this field."

In May 2018, Astellas Pharma invested in iota through its U.S. subsidiary Astellas Venture Management LLC.

The impact of this agreement on Astellas' financial results in the fiscal year ending March 31, 2020 will be limited.

