

Rakuten Medical to further develop its photo-immunotherapy

05 August 2019 | News

Photoimmunotherapy (PIT) is an investigational, anti-cancer treatment platform that is comprised of a drug and device combination that utilizes monoclonal antibodies conjugated to a dye



Rakuten Medical, Inc., a clinical-stage, global biotechnology company developing precision-targeted cancer therapies based on its proprietary Photoimmunotherapy (PIT) platform, has raised approximately US \$100 million recently in a Series C-1 Preferred Stock financing from Rakuten, Inc., a global leader in internet services headquartered in Japan. This investment is increasing Rakuten's equity share of Rakuten Medical to 22.6 percent.

Rakuten Medical intends to use the additional injection of capital to expand the development of the company's oncology-focused PIT platform, strengthen its business and commercial functions, and provide resources to further identify and evaluate new investigational compounds and indications for the potential treatment of other types of cancers using PIT.

Mickey Mikitani, chairman and CEO of Rakuten Medical said, "The additional investment from Rakuten solidifies our commitment to accelerating Rakuten Medical's business and commercial development. I believe we can cultivate a sustainable health care ecosystem to provide patients with safe and easy access to, and better care in, the treatment of cancer, regardless of their nationality or income. Culturally, the technology industry has revolutionized society by being bold, action-driven and innovative; and we hope to do the same at Rakuten Medical by exploring opportunities that will combine Rakuten's technology expertise with Rakuten Medical's first-in-class Photoimmunotherapy platform."

Based on the additional investment, Rakuten Medical will become an equity-method affiliate of Rakuten in the third quarter of this fiscal year.

Photoimmunotherapy (PIT) is an investigational, anti-cancer treatment platform that is comprised of a drug and device combination that utilizes monoclonal antibodies conjugated to a dye (IRDye® 700DX). Transient excitation of IRDye 700DX with non-thermal red light (690 nm) is believed to result in anti-cancer activity, which is mediated by biophysical processes that may compromise the membrane integrity of cells.

The requirement of targeted binding of antibody-IR700 conjugate to a specific antigen on the cell surface and subsequent illumination is believed to result in rapid and selective cell killing and tumor necrosis with minimal effects on surrounding normal tissue. PIT may also lead to the systemic induction of innate and adaptive immunity.