

Business Partnership with Micro Blood Science Inc. for an IgG/IgM Antibody-test Kit for COVID-19

OSAKA, Japan, March 17, 2020 – Shionogi & Co., Ltd. (Head Office: Osaka, Japan; President and CEO: Isao Teshirogi, Ph.D.; hereafter “Shionogi”) today announced Shionogi and Micro Blood Science Inc. (Head Office: Tokyo, Japan; President: Kei Ohtake; hereafter “MBS”) initiated discussions for a business partnership on March 14, 2020.

The World Health Organization on March 11, 2020 declared the 2019 novel coronavirus (SARS-CoV-2/COVID-19) outbreak a pandemic. While the number of infected patients is still increasing in the world, national measures are being taken in Japan. PCR (polymerase chain reaction) is a method currently used to confirm patients with COVID-19 by detecting viral nucleic acids in samples taken from the nasal cavity or throat. PCR is an essential test for confirming infectious patients, but it presents problems in terms of simplicity and rapidity, such as requiring dedicated measuring equipment and requiring a relatively long time to obtain test results. Shionogi will progress discussions with MBS regarding the distribution and sales of a rapid IgG/IgM antibody-test kit for the COVID-19 (hereafter “COVID-19 antibody-test kit”), which is imported by MBS from a Chinese cooperative company (Vazyme Biotech, Co., Ltd.), so that we can offer this new testing method to the medical facilities that need it as soon as possible.

MBS was established in June 2009 and is focusing on the development and provision of a laboratory test services using their original technology, including unique trace-blood collection devices. The basic principle underlying the COVID-19 antibody-test kit imported by MBS is the ability to measure both IgM antibodies produced in the body early in the course of COVID-19 infection and IgG antibodies that are produced somewhat later in the infection cycle, using a gold colloid immunochromatographic method. This test kit, which is very convenient and uses only a drop of blood, provides rapid test results in 10 minutes. It also demonstrates high performance, according to Vazyme's clinical trial data in China, with a sensitivity of 94% and a specificity of 97%.

The following indications and uses for these COVID-19 antibody-test kits are expected;

1. Pre-PCR screening tests including (1) examinations at airport and port immigration at the discretion of quarantine officers and/or physicians, (2) examinations of sites, schools, offices where COVID-19 patients were present, and other potential clustered contacts.
2. Understanding the immunity acquisition status of subacute and convalescent COVID-19 patients
3. Other epidemiological surveillance and studies of SARS-CoV-2/COVID-19

In Japan, the COVID-19 antibody-test kit was reviewed with infectious disease experts, including Professor Emeritus Dr. Naoki Aikawa of Keio University. The test kit has already been tested on a trial

basis by Professor Dr. Kazuhiro Tateda of the Department of Microbiology and Infectious Diseases, Faculty of Medicine, Toho University.

Shionogi has as its vision to “Grow sustainably as a drug discovery-based pharmaceutical company, contributing to a more vigorous society through improving healthcare”, as reflected in its current medium-term business plan. Shionogi has defined “protecting people from the threat of infectious diseases” as one of its core social missions we serve. To contribute to the early detection and treatment of novel coronavirus infections and the restoration of social security and safety through the early end of the pandemic, Shionogi will establish a supply system in collaboration with MBS after entering into an exclusive contract with MBS and Vazyme Biotech, to support delivery of this test to medical institutions, testing facilities, research laboratories, and so on as soon as possible, as well as donations to national and local authorities.

Regarding MBS, please visit <http://en.microbs.jp/> for more information.

About Shionogi

Shionogi & Co., Ltd. is a major research-driven pharmaceutical company dedicated to bringing benefits to patients based on its corporate philosophy of “supplying the best possible medicine to protect the health and wellbeing of the patients we serve.” Shionogi’s research and development currently targets two therapeutic areas: infectious diseases, and pain/CNS disorders. For over 50 years, Shionogi has developed and commercialized innovative oral and parenteral anti-infectives. In addition, Shionogi is engaged in new research areas, such as obesity/geriatric metabolic diseases and oncology/immunology. Contributing to the health and QOL of patients around the world through development in these therapeutic areas is Shionogi’s primary goal. For more details, please visit www.shionogi.co.jp/en/.

Forward-Looking Statements

This announcement contains forward-looking statements. These statements are based on expectations in light of the information currently available, assumptions that are subject to risks and uncertainties which could cause actual results to differ materially from these statements. Risks and uncertainties include general domestic and international economic conditions such as general industry and market conditions, and changes of interest rate and currency exchange rate. These risks and uncertainties particularly apply with respect to product-related forward-looking statements. Product risks and uncertainties include, but are not limited to, completion and discontinuation of clinical trials; obtaining regulatory approvals; claims and concerns about product safety and efficacy; technological advances; adverse outcome of important litigation; domestic and foreign healthcare reforms and changes of laws and regulations. Also, for existing products, there are manufacturing and marketing risks, which include, but are not limited to, inability to build production capacity to meet demand, unavailability of raw materials, and entry of competitive products. The company disclaims any

Press Release



intention or obligation to update or revise any forward-looking statements whether as a result of new information, future events, or otherwise.

For further information, contact:

Corporate Communications Department

Shionogi & Co., Ltd.

Telephone: +81-6-6209-7885