Press Release



Shionogi Announces Approval of XOFLUZA® (Baloxavir Marboxil) in Taiwan for the Post-Exposure Prophylaxis of Influenza Virus Infection

OSAKA, Japan, January, 15, 2021 – Shionogi & Co., Ltd. (Head Office: Osaka, Japan; President and CEO: Isao Teshirogi, Ph.D.; hereafter "Shionogi") today announced that Shionogi has received approval of a supplemental New Drug Application (sNDA) for Xofluza[®] (baloxavir marboxil) for the post-exposure prophylaxis of influenza in adults and children 12 years of age and above following close contact with influenza patients on January 4, 2021. Post-exposure prophylaxis aims to prevent influenza in individuals following contact with someone infected with the influenza virus.

This approval was based on the Phase III study, BLOCKSTONE.¹ This study assessed Xofluza in the post-exposure prophylaxis of influenza virus infection in subjects who were household members of influenza-infected patients. The results from BLOCKSTONE show the potential of Xofluza as a single dose prophylactic treatment option for influenza. Xofluza is approved and is available in Taiwan for the treatment of acute influenza Types A and B in patients 12 years of age and older. Taiwan Shionogi & Co., Ltd., the Taiwan subsidiary of Shionogi, is responsible for selling Xofluza in Taiwan.²

Shionogi is committed to "protect people worldwide from the threat of infectious diseases" as our key focus. We are not limiting ourselves to the research and development of therapeutic medications, but are also focusing on the total care of infectious disease through awareness building, prevention, diagnosis and suppression of exacerbation. Shionogi will continue to work diligently to collect and analyze data on the efficacy and safety of Xofluza and provide information for appropriate use.

About the BLOCKSTONE Study¹

BLOCKSTONE was a Phase III, double blind, multicenter, randomized, placebo-controlled, post-exposure prophylaxis study that evaluated a single-dose of Xofluza[®] (baloxavir marboxil) compared with placebo in household members (adults and children) who were living with someone with an influenza infection confirmed by a rapid influenza diagnostic test (the 'index patient'). The study was conducted by Shionogi & Co., Ltd. during the 2018-2019 influenza season in Japan.

Those diagnosed with influenza were required to have onset of symptoms within less than 48 hours, and participants were required to have lived with those diagnosed for more than 48 hours. The participants were randomized to receive a single dose of Xofluza (dosed according to body weight) or placebo as a preventive measure against developing influenza.

Xofluza showed a statistically significant prophylactic effect on influenza after a single dose in people exposed to an infected household contact. The proportion of household members who developed influenza was 1.9% in participants treated with Xofluza and 13.6% in the placebo-treated group. Xofluza was well tolerated in this study and no new safety signals were identified. The results of the BLOCKSTONE study were published in The New England Journal of Medicine.¹

About Xofluza[®] (baloxavir marboxil)

Xofluza[®], discovered by Shionogi, has a novel mechanism of action that inhibits the cap-dependent endonuclease in the polymerase acidic (PA) protein (in the United States Prescribing Information, this enzyme is stated as polymerase acidic endonuclease), an enzyme essential for viral replication. Xofluza[®] is a first-in-class, single-dose oral treatment for influenza, which is different from all other currently available antiviral treatments. In non-clinical studies, Xofluza demonstrated an antiviral effect against a wide range of influenza viruses including oseltamivir-resistant strains and avian strains (H7N9, H5N1).^{3,4}

Shionogi and the Roche Group (hereafter "Roche") are in a license and collaboration agreement to further develop and commercialize Xofluza. Under the terms of this agreement, Roche holds worldwide rights to Xofluza excluding Japan and Taiwan, where the rights are retained exclusively by Shionogi. Xofluza is

Press Release



available in more than 30 countries for the treatment of influenza types A and B, including Japan and the U.S.

In Japan, Xofluza is available for the post-exposure prophylaxis of influenza virus infection, and in the U.S., the FDA approved a sNDA for Xofluza as a treatment to prevent influenza in people 12 years of age and older following contact with someone with influenza (known as post-exposure prophylaxis) on November 23, 2020.^{5,6}

Roche is conducting a phase III development program investigating Xofluza[®] in several populations, including children under the age of one year (NCT03653364), as well as to assess the potential to reduce transmission of influenza from an infected person to healthy people (NCT03969212).

About Taiwan Shionogi & Co., Ltd

Taiwan Shionogi & Co., Ltd was incorporated locally in Taiwan in 1963. It is a wholly owned subsidiary, and also the oldest subsidiary of Shionogi & Co., Ltd, headquartered in Osaka, Japan. Taiwan Shionogi has a long history of developing drugs especially in the field of antibiotics and anti-infective agents to save the lives and wellbeing of patients. Under the corporate mission, Taiwan Shionogi continuously strives to save the lives of patients and improving their quality of life by providing better medicines. In addition to the sales expansion of its main existing antibiotic Flumarin[®] and Finibax[®], and anti-influenza drug Rapiacta[®], Taiwan Shionogi is making its best efforts to introduce new drugs and aiming at contributing to the medium-and-long term growth of the Shionogi Group.

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 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

References

- Hideyuki Ikematsu, MD et al. Baloxavir Marboxil for Prophylaxis against Influenza in Household Contacts. N Engl J Med 2020 Jul 8 https://www.nejm.org/doi/full/10.1056/NEJMoa1915341
- Press release on August 29, 2019 Shionogi Announces XOFLUZA® Tablets 20mg for The Treatment of Influenza Types A and B in Patients 12 years of Age and older Approved in Taiwan.
- 3. T. Noshi et al. In vitro Characterization of Baloxavir Acid, a First-in-Class Cap-dependent Endonuclease Inhibitor of the Influenza Virus Polymerase PA Subunit. Antiviral Research

Press Release



2018;160:109-117

- 4. K. Taniguchi et al. Inhibition of avian-origin influenza A(H7N9) virus by the novel cap-dependent endonuclease inhibitor baloxavir marboxil. Scientific Reports volume 9, Article number: 3466 (2019)
- 5. <u>Press release on November 27, 2020</u> Shionogi Announces Supplemental New Drug Application for XOFLUZA® in Japan for the Post-Exposure Prophylaxis of Influenza Virus Infection was Approved.
- 6. <u>Press release on November 23, 2020</u> Shionogi Announces FDA Approval of XOFLUZA® (Baloxavir Marboxil) for the prevention of Influenza following contact with an infected person.