PRESSRELEASE

SHIONOGI

The European Commission Grants Orphan Medicinal Product Designation for Zatolmilast, a Potential First-In-Class Treatment Being Investigated for Fragile X Syndrome

- *Designation offers potential hope of new treatment options for people with Fragile X and their families.*

Amsterdam, Netherlands, APRIL11, 2024 – Shionogi B.V., the European subsidiary of Shionogi & Co., Ltd. (Head Office: Osaka, Japan; Chief Executive Officer: Isao Teshirogi, Ph.D.; hereafter "Shionogi") announced that the European Commission has granted Orphan Medicinal Product designation for zatolmilast (BPN14770), an investigational treatment for Fragile X syndrome (FXS), a leading cause of inherited intellectual disability and autism.[1]

Orphan Medicinal Product designation is granted to treatments that potentially offer significant benefit for life-threatening or chronically debilitating conditions with a prevalence of fewer than 5 in 10,000 individuals in Europe. While there are more than 30 million people in Europe impacted by rare diseases, they are often denied diagnosis, treatment and the benefits of research, making this designation a significant milestone for disorders like FXS.[2]

FXS is a neurodevelopmental disorder that can cause a range of cognitive, behavioral, and physical challenges,[1,3] including those that persist across many aspects of daily life, such as an individual's ability to care for themselves and communicate with others.[4] Despite the sometimes profound impact of FXS on individuals, there are no pharmacological treatments specifically approved by the European Medicines Agency for the treatment of FXS, highlighting the currently unmet need for innovative medicines for this community.[5]

Shionogi is dedicated to the research and development of innovative medicines that address unmet medical needs, particularly for patients who currently have limited treatment options. In alignment with this global vision, Shionogi acquired Tetra Therapeutics, the developer of zatolmilast, in 2020. Zatolmilast, if approved, aims to become the first cognitive treatment developed specifically for this rare genetic disorder.

Pete Richardson, Managing Director, UK Fragile X Society: "Fragile X Syndrome (FXS) is a frequently misunderstood condition and too often individuals and families struggle to gain access to the support they need from health and social care systems. Individuals with FXS can

face wide-ranging challenges both from the condition itself, where there is a range of symptoms which can limit their ability to independently care for themself or communicate with others, as well as a lack of awareness and understanding by healthcare professionals and the broader public. This Orphan Medicinal Product designation offers potential hope for a new treatment option which, although not necessarily suitable for all those with FXS, could improve the wellbeing of individuals and families living with the condition. Therefore, the UK FXS Society welcomes this announcement."

Juan-Carlos Gomez, MD, Chief Medical Officer, Shionogi adds: "We are committed to bringing to market new and innovative medicines that improve lives and create solutions for rare pediatric and orphan diseases that are often overlooked. We welcome this regulatory designation in Europe, which recognises the potential clinical benefit of zatolmilast. This is a significant step forward in helping to bring this medicine to those who may benefit from it."

About Fragile X Syndrome (FXS)

FXS is a leading genetic cause of inherited intellectual disability and autism.[1] FXS is known to have a greater effect on males than females because the mutation of the Fragile X Messenger Ribonucleoprotein 1 (*FMR1)* gene is carried on the X chromosome.[1] An important clinical feature abnormality associated with FXS is global developmental delay and intellectual disability.[7] Other common symptoms of FXS include behavioral problems, attention deficits and anxiety.[1] FXS can cause challenges across many aspects of daily life, such as an individuals' ability to care for themselves and communicate with others.[4]

About Tetra Therapeutics

Tetra Therapeutics, a Shionogi Group Company, is a clinical stage biotechnology company focused on developing a portfolio of therapeutic products to address unmet needs in central nervous system diseases and disorders. In addition to advancing the zatolmilast clinical program, Tetra also has a PDE4B Inhibitor in pre-clinical development. Tetra Therapeutics is headquartered in Grand Rapids, Michigan. For more information, visit tetratherapeutics.com.

About Shionogi & Co. Ltd.

Shionogi & Co., Ltd. is a 145-year-old global, research-driven pharmaceutical company headquartered in Osaka, Japan, that is 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." The company currently markets products in several therapeutic areas including anti-infectives, pain, CNS disorders, cardiovascular diseases and gastroenterology. Shionogi's research and development currently target two therapeutic areas: infectious diseases, and pain/CNS disorders.

For more information on Shionogi & Co., Ltd., please visit https://www.shionogi.com/global/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, lack of availability 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.

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