SHIONOGI & CO., LTD ANNOUNCES THAT NALDEMEDINE MEETS PRIMARY ENDPOINT IN A PHASE 3 STUDY FOR THE TREATMENT OF OPIOID-INDUCED CONSTIPATION

FLORHAM PARK, NJ (March 30, 2015) – Naldemedine, an investigational peripherally acting mu-opioid receptor antagonist (PAMORA) under development by Shionogi & Co., Ltd, met its primary and secondary endpoints in a phase III study (COMPOSE I) for the treatment of opioid-induced constipation (OIC) in adult patients with chronic non-cancer pain receiving opioid therapy. Study results showed that naldemedine (0.2 mg tablet given once daily) statistically significantly improved the frequency of spontaneous bowel movement (SBM) compared with placebo over 12 weeks. Naldemedine was generally well-tolerated with the most commonly reported side effects being gastrointestinal disorders. This is the first phase III data generated from the COMPOSE program.

"OIC is one of the most common side effects of chronic opioid therapy, and can negatively impact a person's quality of life, including limitations in daily activities, impairments in psychological well-being, and decreases in work productivity," Juan Camilo Arjona Ferreira, MD, Senior Vice President Clinical Development. "We are encouraged by the results of this study, and hope to deliver a new therapeutic solution to the millions of patients suffering from this debilitating condition."

About COMPOSE Program

The COMPOSE program is a global comprehensive development program comprised of 7 clinical studies being conducted in patients with OIC with cancer or chronic non-cancer pain.

COMPOSE I is a multicenter, randomized, double-blind, placebo-controlled, parallel-group study. The study was designed to evaluate the efficacy and safety of naldemedine therapy, versus placebo, in 547 patients receiving chronic opioid therapy, who experience OIC accompanied by chronic non-cancer pain.

About Opioid Induced Constipation (OIC)

OIC is defined as follows: "A change when initiating opioid therapy from baseline bowel habits that is characterized by any of the following: reduced bowel movement frequency, development or worsening of straining to pass bowel movements, a sense of incomplete

rectal evacuation, or harder stool consistency."[1] It is estimated that 40-50% (approximately 30M globally) of chronic opioid patients experience opioid-induced constipation, with fewer than half reporting satisfactory results with laxatives.[2] Managing OIC and its clinical consequences places a significant financial burden on the healthcare system and the patient.

[1] Camilleri. M, Drossman D.A., Becker G.,Webster L.R., Davies A.N., Mawe G.M. Emerging treatments in neurogastroenterology: a multidisciplinary working group consensus statement on opioid-induced constipation. *Neurogastroenterology Motil.* 2014. 26, 1386-1395

[2] Pappagallo M. Incidence, Prevalence, and Management of Opioid Bowel Dysfunction. *The American Journal of Surgery.* 182 (Suppl to November 2001) 11s-18s

About Shionogi

Shionogi & Co., Ltd. is a major research-driven pharmaceutical company dedicated to placing the highest value on patients. Shionogi's research and development currently targets two therapeutic areas: infectious diseases, and pain/CNS disorders. In addition, Shionogi is engaged in new research areas such as obesity/geriatric metabolic disease and oncology/immunology. Contributing to the health 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. For more information on Shionogi Inc., the U.S.–based subsidiary of Shionogi & Co., Ltd., headquartered in Florham Park, NJ, USA, please visit www.shionogi.com. For more information on Shionogi Ltd., the UK-based subsidiary of Shionogi & Co. Ltd., headquartered in London, England, please visit www.shionogi.eu.

Forward Looking Statement

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.

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