Press Release

SHIONOGI TO PRESENT CLINICAL DATA ON MULPLETA® (lusutrombopag) AT THE LIVER MEETING ® 2018 OF THE AMERICAN ASSOCIATION FOR THE STUDY OF LIVER DISEASES (AASLD)

OSAKA, Japan and FLORHAM PARK, N.J., November 7, 2018 - Shionogi & Co., Ltd. (hereafter "Shionogi") announced it will present four posters on Mulpleta® (lusutrombopag), a once-daily, orally administered, small molecule thrombopoietin (TPO) receptor agonist, at The Liver Meeting®, the premiere annual meeting in the science and practice of hepatology from the American Association for the Study of Liver Diseases (AASLD) to be held in San Francisco, November 9-13, 2018.

Mulpleta was recently approved by the U.S. Food and Drug Administration (FDA) for the treatment of thrombocytopenia in adult patients with chronic liver disease (CLD) who are scheduled to undergo a procedure.

All poster presentations will take place in the Moscone Convention Center, North and South Buildings, Hall C. The full schedule of research to be presented includes:

Friday, November 9 (12:00pm-1:30pm PDT)

- Poster Session: Varices and Bleeding
  - Poster #0805: Pharmacokinetic/Pharmacodynamic Modeling and Simulation of Lusutrombopag, a Novel Thrombopoietin Receptor Agonist, for Treatment of Thrombocytopenia in Patients with Chronic Liver Disease Undergoing Invasive Procedures

    Presenter: Takayuki Katsube

Saturday, November 10 (5:30pm-7:00pm PDT)

- Poster Session: Clinical and Translational Hepatobiliary Cancer I
  - Poster #0949: Use of the Thrombopoietin Receptor Agonist Lusutrombopag for Management of Thrombocytopenia in Patients with Hepatocellular Carcinoma Undergoing Planned Invasive Procedures

    Presenter: Naim Alkhouri, M.D.

Monday, November 12 (12:30pm-2:00pm PDT)

- Poster Session: Complications of Cirrhosis II
  - Poster #2016: Lusutrombopag Is a Safe and Efficacious Treatment Option for Thrombocytopenia in Patients with Chronic Liver Disease Undergoing Invasive Procedures: A Pooled Analysis of Two Phase 3 Trials

    Presenter: Markus Peck-Radosavljevic, M.D.

  - Poster #2069: Lusutrombopag Reliably Increases Platelet Counts for up to 3 Weeks in Chronic Liver Disease Patients with Thrombocytopenia Undergoing Invasive Procedures Regardless of Baseline Platelet Counts: Results from Two Phase 3 Trials

    Presenter: Robert S. Brown Jr., M.D.

About Thrombocytopenia in Chronic Liver Disease

Thrombocytopenia is a common complication of CLD, which may be caused by multiple factors including decreased production of TPO. Thrombocytopenia is frequently observed in patients with CLD, with studies suggesting that it occurs in up to 78% of patients with cirrhosis.[1] CLD-associated thrombocytopenia is defined as a platelet count of less than 150,000/μL and is the most common hematologic complication of CLD.[2,3,4] Patients with CLD and thrombocytopenia are at increased risk for bleeding, requiring recurrent platelet transfusions, increased ambulatory visits and inpatient hospital stays compared with patients with CLD without thrombocytopenia.[5] The annual health care cost of a patient with CLD with thrombocytopenia is more than three times that of a patient with CLD without thrombocytopenia.[5] In addition to the potential of thrombocytopenia, especially severe thrombocytopenia (platelet count less than 50,000/μL), to aggravate surgical or traumatic bleeding, it may also significantly complicate routine diagnostic procedures and patient care, such as liver biopsy and medically indicated or elective procedures for cirrhotic patients, resulting in delayed or cancelled curative treatment.[6]

About Mulpleta

Mulpleta (lusutrombopag) is a once-daily, orally administered, small molecule TPO receptor agonist for the treatment of thrombocytopenia in adult patients with CLD who are scheduled to undergo a procedure.

Mulpleta is an orally bioavailable, small molecule TPO receptor agonist that interacts with the transmembrane domain of human TPO receptors expressed on megakaryocytes to induce the proliferation and differentiation of megakaryocytic progenitor cells from hematopoietic stem cells and megakaryocyte maturation.

Mulpleta was approved by the Ministry of Health, Labor and Welfare in Japan in September 2015 for the improvement of thrombocytopenia associated with CLD in patients undergoing an elective invasive procedure. The European Medicines Agency has validated for review Shionogi's standard Marketing Authorization Application for lusutrombopag and approval is expected in 1H 2019.

Please see Important Safety Information, including Warnings & Precautions and Adverse Reactions below.

INDICATION

Mulpleta® (lusutrombopag) is indicated for the treatment of thrombocytopenia in adult patients with chronic liver disease who are scheduled to undergo a procedure.

IMPORTANT SAFETY INFORMATION

WARNINGS AND PRECAUTIONS

Mulpleta is a thrombopoietin (TPO) receptor agonist, and TPO receptor agonists have been associated with thrombotic and thromboembolic complications in patients with chronic liver disease. Portal vein thrombosis has been reported in patients with chronic liver disease treated with TPO receptor agonists. Portal vein thrombosis was reported in 1% of Mulpleta-treated patients and 1% of placebo-treated patients.

Consider the potential increased thrombotic risk when administering Mulpleta to patients with known risk factors for thromboembolism, including genetic prothrombotic conditions (Factor V Leiden, Prothrombin 20210A, Antithrombin deficiency, or Protein C or S deficiency). Monitor platelet counts and for thromboembolic events and institute treatment promptly.

Mulpleta should not be administered to patients with chronic liver disease in an attempt to normalize platelet counts.

ADVERSE REACTIONS

The most common adverse reaction (≥3%) with Mulpleta was headache.

To report suspected Adverse Reactions, contact Shionogi at 1-800-849-9707 or FDA at 1-800-FDA-1088 or www.fda.gov/medwatch.

Please see accompanying Full Prescribing Information or visit www.mulpleta.com/pi.

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 target 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 disease and oncology/immunology. Contributing to the health and quality of life 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/. 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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6. *Hayashi H, et al. World J Gastroenterol. 2014; 20: 2595-2605.*