NEWS RELEASE

NIPPON SHINYAKU CO., LTD.

18th June, 2019

Marketing approval of Defitelio® by MHLW for the treatment of sinusoidal obstruction syndrome / hepatic veno-occlusive disease

Nippon Shinyaku Co., Ltd (HQ: Minami-ku, Kyoto, President: Shigenobu Maekawa) announced as of today that the Ministry of Health, Labour and Welfare (MHLW) has approved marketing authorization of Defitelio® injection 200mg (defibrotide sodium/NS-73) for the treatment of sinusoidal obstruction syndrome (SOS) /hepatic veno-occlusive disease (VOD).

SOS/VOD is a rare, life-threatening complication caused by the intensive therapy a patient receives before hematopoietic stem cell transplantation (HSCT), chemotherapy, or radiation therapy. Features of SOS/VOD include elevation of bilirubin level, weight gain, tender hepatomegaly, ascites, and jaundice. In severe cases, SOS/VOD can cause multi-organ dysfunction or failure, leading to a high mortality rate. Since no clinically effective drug is currently available in Japan, medical specialists as well as patients have been longing for a new treatment option over the years.

Nippon Shinyaku licensed in the product from Jazz Pharmaceuticals plc (Jazz) in March, 2017 and obtained the marketing approval based on the results from the Japanese investigator sponsored clinical studies and the global studies conducted by Jazz. Defitelio is thought to work by protecting vascular endothelium and normalizing the coagulation/fibrinolysis balance. Jazz obtained marketing approval by the European Medicines Agency (EMA) in 2013 and by the U.S. Food and Drug Administration (FDA) in 2016, as the first approved therapy for the treatment of severe hepatic SOS/VOD, a rare and life-threatening liver condition which develops in patients following HSCT. Defibrotide is commercially available in 35 countries. MHLW granted an orphan drug designation of Defitelio.

Nippon Shinyaku will contribute to the treatment of SOS/VOD in Japan by appropriately delivering Defitelio to patients as early as possible.

Summary of Defitelio

Brand Name	Defitelio Injection 200mg
Generic Name	defibrotide sodium
Dosage Forms and Strengths	Aqueous Injection fluid: defibrotide sodium 200 mg/2.5 mL in a vial
Indications and Usage	sinusoidal obstruction syndrome (SOS)/ hepatic veno-occlusive disease (VOD)
Dosage and administration	Administer defibrotide sodium 6.25 mg/kg as a 2-hour intravenous infusion 4 times a day
Planned launch Date	Late August – Early September in 2019

ABOUT JAZZ PHARMACEUTICALS PLC

Jazz Pharmaceuticals plc (Nasdaq: JAZZ), a global biopharmaceutical company, is dedicated to developing life-changing medicines for people with limited or no options. As a leader in sleep medicine and with a growing hematology/oncology portfolio, Jazz has a diverse portfolio of products and product candidates in development, and is focused on transforming biopharmaceutical discoveries into novel medicines. For more information, please visit www.jazzpharmaceuticals.com.