## **Pharmaceutical Business** Clinical Development as of October 30, 2020

<In-house development> Code Potential Indication/Dosage form (Generic Mechanism Phase (Region) Origin Note Name) Increases red blood cells by stimulating production of Anemia associated with JTZ-951 HIF-PH erythropoiesis-stimulating chronic kidney disease Phase1 (Overseas) In-house Co-development with Torii (enarodustat) inhibitor /Oral hormone, via inhibition of HIF-PH. Atopic dermatitis , (pediatric) NDA filed (Japan) Co-development with Torii /Topical Suppresses overactive immune Atopic dermatitis JTE-052 response via inhibition of Janus kinase (JAK) related to immune JAK (infant) /Topical Phase3 (Japan) In-house Co-development with Torii inhibitor (delgocitinib) signal. Autoimmune/allergic Phase1 (Japan) diseases /Oral, Topical Suppresses overactive immune Autoimmune/allergic Interleukin-2 response via inhibition of the signal to activate T cells related diseases inducible T cell Phase2 (Overseas) JTE-051 In-house /Oral kinase inhibitor to immune response. Autoimmune/allergic diseases Phase2 (Overseas) /Oral Suppresses overactive immune RORv JTE-451 response via inhibition of ROR  $\gamma$  related to Th 17 activation. In-house antagonist Autoimmune/allergic diseases Phase1 (Japan) /Topical Decreases blood glucose by PDHK activation of pyruvate dehydrogenase (PDH) related to carbohydrate metabolism. Type 2 diabetes mellitus JTT-251 Phase1 (Overseas) In-house /Oral inhibitor Suppresses postprandial Type 2 diabetes mellitus SGLT1 hyperglycemia and normalizes blood glucose level via inhibition JTT-662 Phase1 (Overseas) In-house inhibitor /Oral of SGLT1. Autoimmune/allergic Suppresses overactive immune RORy JTE-761 diseases response via inhibition of ROR y Phase1 (Overseas) In-house antagonist /Oral related to Th 17 activation. Licensed from Keryx JTT-751 Corrects iron-deficiency anemia Oral iron Iron-deficiency Biopharmaceuticals (ferric citrate by using absorbed iron for synthesis of hemoglobin. NDA filed (Japan) In-license anemia/Oral replacement Co-development with Torii hydrate) Additional indication

· Clinical trial phase presented above is based on the first dose

· We are also conducting additional studies to examine the potential for use in additional dosage forms

<Licensed compounds>

Compound (JT's code)	Licensee	Mechanism		Note
trametinib	Novartis	MEK inhibitor	Inhibits cellular growth by specifically inhibiting the activity of MAPK/ERK pathway.	
Anti-ICOS monoclonal antibody	AstraZeneca	ICOS antagonist	Suppresses overactive immune response via inhibition of ICOS which regulates activation of T cells.	
delgocitinib	LEO Pharma ROHTO Pharmaceutical	JAK inhibitor	Suppresses overactive immune response via inhibition of Janus kinase (JAK) related to immune signal.	
enarodustat	JW Pharmaceutical Salubris	HIF-PH inhibitor	Increases red blood cells by stimulating production of erythropoietin, an erythropoiesis- stimulating hormone, via inhibition of HIF-PH.	

Updates since the previous announcement on July 31, 2020:

• JTZ-951: Manufacturing and Marketing Approval of ENAROY® Tablets 2 mg • 4 mg for the Treatment of Anemia Associated with Chronic Kidney Disease in Japan (September 25, 2020)

· JTE-052(Infants) : advanced to Phase3 in Japan