

Japan Tobacco Inc. Clinical development (as of October 30, 2008)

Code	Stage	Key Indication	Mechanism	Characteristics	Rights
JTT-705 (oral)	Phase 2 (Japan)	Dyslipidemia	CETP inhibitor	Decreases LDL and increases HDL by inhibition of CETP  -CETP: Cholesteryl Ester Transfer Protein, facilitates transfer of cholesteryl ester from HDL to LDL -HDL: High-density lipoprotein ("good cholesterol") -LDL: Low-density lipoprotein ("bad cholesterol")	Roche (Switzerland) obtains the rights to develop and commercialize the compound worldwide, with the exception of Japan.  *Development stage by Roche: Phase 3
JTT-130 (oral)	Phase 2 (Japan) Phase 2 (Overseas)	Dyslipidemia	MTP inhibitor	Treatment of dyslipidemia by reducing absorption of cholesterol and triglyceride via inhibition of MTP  -MTP: Microsomal Triglyceride Transfer Protein	
JTK-303 (oral)	Phase1 (Japan)	HIV infection	Integrase inhibitor	Integrase inhibitor which works by blocking integrase, an enzyme that is involved in the replication of HIV  -HIV: Human Immunodeficiency Virus	Gilead Sciences (U.S.) obtained the rights to develop and commercialize this compound worldwide, with the exception of Japan.  *Development stage by Gilead Sciences: Phase 3
JTT-302 (oral)	Phase 2 (Overseas)	Dyslipidemia	CETP inhibitor	Decreases LDL and increases HDL by inhibition of CETP  -CETP: Cholesteryl Ester Transfer Protein, facilitates transfer of cholesteryl ester from HDL to LDL -HDL: High-density lipoprotein ("good cholesterol") -LDL: Low-density lipoprotein ("bad cholesterol")	
JTT-305 (oral)	Phase2 (Japan)	Osteoporosis	CaSR antagonist	Increases BMD and decreases new vertebral fractures by accelerating endogenous PTH secretion via antagonism of circulating Ca on CaSR in parathyroid cells  -BMD: Bone Mineral Density -PTH: Parathyroid Hormone -CaSR: Calcium-Sensing Receptor	Merck (U.S.) obtains the rights to develop and commercialize this compound worldwide, with the exception of Japan.
JTT-552 (oral)	Phase2 (Japan)	Hyperuricemia	URAT1 inhibitor	Decreases serum urate concentration by increasing urinary urate excretion via inhibition of URAT1.  -URAT 1: Urate Transporter 1	
JTT-651 (oral)	Phase1 (Japan)	Type 2 diabetes mellitus	GP inhibitor	Decreases blood glucose by suppression of glucose output from liver via inhibition of GP  -GP: Glycogen Phosphorylase	
JTS-653 (oral)	Phase 1 (Japan)	Pain Overactive bladder	TRPV1 antagonist	Improves pain and overactive bladder via antagonism of TRPV1 on sensory neurons  - TRPV1: Transient Receptor Potential Vanilloid subtype 1	
JTT-654 (oral)	Phase 1 (Overseas)	Type 2 diabetes mellitus	HSD-1 inhibitor	Improves type 2 diabetes through reducing excessive glucocorticoid action by inhibiting HSD-1  - HSD1: 11beta-hydroxysteroid dehydrogenase type 1	
JTK-656 (oral)	Phase 1 (Overseas)	HIV infection	Integrase inhibitor	Integrase inhibitor which works by blocking integrase, an enzyme that is involved in the replication of HIV  -HIV: Human Immunodeficiency Virus	

Updates since the previous announcement on July 31, 2008:

1. JTK-656 entered into clinical trial overseas.
2. Exclusive worldwide rights were licensed to Merck (excluding Japan) for the development and commercialization of JTT-305.