

Japan Tobacco Inc. Clinical development (as of July 29, 2010)

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) obtained 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 triglycerides via inhibition of MTP -MTP: Microsomal Triglyceride Transfer Protein	
JTK-303 (oral)	Phase 1 (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)	Phase 2 (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.) obtained the rights to develop and commercialize this compound worldwide, with the exception of Japan.
JTS-653 (oral)	Phase 2 (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 (Japan) Phase 2 (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	
JTT-751 (oral)	Phase 2 (Japan)	Hyperphosphatemia	Phosphate binder	Decreases serum phosphorous level by binding phosphate derived from dietary in the gastrointestinal tract	JT obtained the rights to develop and commercialize this compound in Japan from Keryx Biopharmaceuticals (U.S.) (Developed jointly with Torii)
JTK-853 (oral)	Phase 1 (Overseas)	Hepatitis C	HCV RNA polymerase inhibitor	Treatment of Hepatitis C by inhibiting HCV RNA- polymerase which relates to viral proliferation	

*Based on the first dose

Updates since the previous announcement on April 29, 2010: JTS-653 advanced from Phase 1 to Phase 2 clinical trial in Japan.