

(2) State of New Product Development (As of January 31, 2018)

i. Autoimmune diseases

Development code Product name (Generic name)	Category (Indications)	Region	Stage	Origin/licensee
FTY720 Imusera/Gilenya (Fingolimod)	S1P receptor functional antagonist (Pediatric multiple sclerosis)	Europe	Filed (Nov., 2017)	Licensed to Novartis (Switzerland)
		US	Filed (Nov., 2017)	
MT-5547 (Fasinumab)	Fully human anti-NGF monoclonal antibody (Osteoarthritis)	Japan	Phase 2/3	Licensed from Regeneron (US)
MT-1303 (Amiselimod)	S1P receptor functional antagonist (Multiple sclerosis)	Europe	Phase 2	In-house
	(Psoriasis)	Europe	Phase 2	
	(Crohn's disease)	Japan, Europe	Phase 2	
	(Inflammatory diseases, autoimmune diseases)	Japan, US, Europe	Phase 1	
MT-7117	Dermatologicals, etc. (Inflammatory diseases, autoimmune diseases, etc.)	Europe	Phase 1	In-house
MT-2990	Inflammatory diseases, autoimmune diseases, etc.	Europe	Phase 1	In-house

ii. Diabetes and kidney diseases

Development code Product name (Generic name)	Category (Indications)	Region	Stage	Origin/licensee
TA-7284 Canaglu/ INVOKANA (Canagliflozin)	SGLT2 inhibitor (Type 2 diabetes mellitus)	Indonesia	Filed (Aug., 2017)	In-house
	(Reduce the risk of death in type 2 diabetes with established, or risk for, cardiovascular disease (CANVAS/CANVAS-R))	US	Filed (Sep., 2017)	Licensed to Janssen Pharmaceuticals (US)
		Europe	Filed (Oct., 2017)	
	(Diabetic nephropathy)	Japan, US, Europe, and others	Phase 3 (Global clinical trial)	Discovered in-house Sponsor: Janssen Research & Development (US)
MP-513 (Teneligliptin)	DPP-4 inhibitor (Type 2 diabetes mellitus)	Indonesia	Filed (Apr., 2015)	In-house
		China	Phase 3	
		Europe	Phase 2	
		US	Phase 1	
MT-6548 (Vadadustat)	Hypoxia inducible factor prolyl hydroxylase inhibitor (Renal anemia)	Japan	Phase 3	Licensed from Akebia (US)
MT-3995 (Apararenone)	Selective mineralocorticoid receptor antagonist (Diabetic nephropathy)	Europe	Phase 2	In-house
		Japan	Phase 2	
		US	Phase 1	
	(Non-alcoholic steatohepatitis: NASH)	Japan	Phase 2	

iii. Central nervous system diseases

Development code Product name (Generic name)	Category (Indications)	Region	Stage	Origin/licensee
MP-214 (Cariprazine)	Dopamine D3/D2 receptor partial agonist (Schizophrenia)	Korea	Filed (Dec., 2017)	Licensed from Gedeon Richter (Hungary)
		Taiwan	Filed (Dec., 2017)	
MCI-186 Radicut/Radicava (Edaravone)	Free radical scavenger (Amyotrophic lateral sclerosis)	Switzerland	Filed (Dec., 2017)	In-house
MT-210	5-HT2A/Sigma 2 receptor antagonist (Schizophrenia)	US, Europe	Phase 3	Licensed to Minerva Neurosciences (US)
MT-5199 (Valbenazine)	Vesicular monoamine transporter type 2 inhibitor (Tardive dyskinesia)	Japan	Phase 2/3	Licensed from Neurocrine Biosciences (US)
Wf-516	Multiple mechanisms on several receptors* (Major depressive disorder)	Europe	Phase 2	Licensed to Minerva Neurosciences (US)
MT-8554	Nervous system, etc. (Painful diabetic peripheral neuropathy) (Vasomotor symptoms associated with menopause)	Europe	Phase 2	In-house
		US	Phase 2	
ND0612 (Levodopa/Carbidopa)	Continuous SC pump/patch pump (Parkinson's disease)	US, Europe	Phase 2	In-house
ND0801 (Nicotine/Opipramol)	Transdermal (CNS disease cognition disorders)	Israel	Phase 2	In-house
MP-124	Nervous system	US	Phase 1	In-house
ND0701 (Apomorphine)	Continuous SC pump (Parkinson's disease)	Europe	Phase 1	In-house

*SSRI, 5-HT1A, dopamine transporter, and alpha-1A and B

iv. Vaccines

Development code	Category (Indications)	Region	Stage	Origin/licensee
MT-2355	Combined vaccine (Prophylaxis of pertussis, diphtheria, tetanus, poliomyelitis and prophylaxis of Hib infection in infants)	Japan	Phase 3	Co-developed with The Research Foundation for Microbial Diseases of Osaka University (Japan)
MT-2271	Plant-based VLP vaccine (Prophylaxis of seasonal influenza)	US, Europe, Canada, and others	Phase 3	In-house
MT-8972	Plant-based VLP vaccine (Prophylaxis of H5N1 influenza)	Canada	Phase 2	In-house
MT-7529	Plant-based VLP vaccine (Prophylaxis of H7N9 influenza)	Canada	Phase 1	In-house

v. Other diseases

Development code (Generic name)	Category (Indications)	Region	Stage	Origin/licensee
MT-4580 (Evocalcet)	Ca sensing receptor agonist (Secondary hyperparathyroidism in chronic kidney disease patients on maintenance dialysis)	Japan	Filed (Apr., 2017)	Licensed to Kyowa Hakko Kirin(Japan)
	(Hypercalcemia in patients with parathyroid carcinoma or primary hyperparathyroidism)	Japan	Phase 3	
MCC-847 (Masilukast)	Leukotriene D4 receptor antagonist (Asthma)	Korea	Phase 2	Licensed to SAMA Pharma (Korea)
Y-803	Bromodomain inhibitor (Cancer)	Europe, Canada	Phase 2	Licensed to Merck (US)
GB-1057 (Recombinant human serum albumin)	Blood and blood forming organs	US	Phase 1	In-house
MT-0814	Ophthalmologicals	Japan	Phase 1	In-house
sTU-199 (Tenatoprazole)	Alimentary tract and metabolism	Europe	Phase 1	Licensed to Negma/Sidem (France)
MT-4129	Cardiovascular system, etc.	Europe	Phase 1	In-house
MT-2765	Cardiovascular system, etc.	China	Phase 1	Co-researched with Shanghai Pharmaceuticals Holding (China)

Changes Since Previous Announcement on Nov 1, 2017

Development code Product name (Generic name)	Category (Indications)	Region	As of Nov 1, 2017	As of Jan 31, 2018	Origin / licensee
Novastan (Argatroban)	Selective antithrombin agent (Acute cerebral thrombosis)	China	Filed (Feb., 2017)	Approved (Dec., 2017)	In-house
FTY720 Imusera/Gilenya (Fingolimod)	S1P receptor functional antagonist (Pediatric multiple sclerosis)	Europe	None	Filed (Nov., 2017)	Licensed to Novartis (Switzerland)
		US	None	Filed (Nov., 2017)	
MP-214 (Cariprazine)	Dopamine D3/D2 receptor partial agonist (Schizophrenia)	Korea	None	Filed (Dec., 2017)	Licensed from Gedeon Richter (Hungary)
		Taiwan	None	Filed (Dec., 2017)	
MCI-186 Radicut/Radicava (Edaravone)	Free radical scavenger (Amyotrophic lateral sclerosis)	Switzerland	None	Filed (Dec., 2017)	In-house
MT-6548 (Vadadustat)	Hypoxia inducible factor prolyl hydroxylase inhibitor (Renal anemia)	Japan	Phase 2	Phase 3	Licensed from Akebia (US)
MT-210	5-HT2A/ Sigma 2 receptor antagonist (Schizophrenia)	US, Europe	Phase 2	Phase 3	Licensed to Minerva Neurosciences (US)
MT-5547 (Fasinumab)	Fully human anti-NGF monoclonal antibody (Osteoarthritis)	Japan	None	Phase 2/3	Licensed from Regeneron (US)
MT-8554	Nervous system, etc. (Vasomotor symptoms associated with menopause)	US	None	Phase 2	In-house
MP-157	Cardiovascular system	Europe	Phase 1	Deleted (Discontinued)	In-house