

(2) State of New Product Development (As of February 6, 2017)

i. Autoimmune diseases

Development code Product name (Generic name)	Category (Indications)	Region	Stage	Origin/licensee
Remicade (infliximab)	Anti-human TNF α monoclonal antibody (Crohn's disease:shortened administration interval)	Japan	Filed (Sep., 2016)	Licensed from Janssen Biotech (US)
Imusera/Gilenya (fingolimod)	S1P receptor functional antagonist (Chronic inflammatory demyelinating polyradiculoneuropathy)	Japan, US, Europe, and others	Phase 3 (Global clinical trial)	Discovered in-house Co-developed with Novartis Pharma (Japan) in Japan, licensed to Novartis (Switzerland) overseas
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, Europe, US	Phase 1	
MT-7117	Dermatologicals, etc. (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)	Taiwan	Filed (Mar., 2015)	In-house
	(Diabetic nephropathy)	Japan, US, Europe, and others	Phase 3 (Global clinical trial)	Discovered in-house Sponsor: Janssen Research & Development (US)
	(Type 1 Diabetes Mellitus)	US, Canada	Phase 2	Discovered in-house Licensed to Janssen Pharmaceuticals (US)
	(Obesity / co-administration with phentermine)	US	Phase 2	
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-2412 (teneligliptin, canagliflozin)	Fixed-dose combination of DPP-4 inhibitor and SGLT2 inhibitor (Type 2 diabetes mellitus)	Japan	Filed (Aug., 2016)	In-house
MT-3995	Selective mineralocorticoid receptor antagonist (Diabetic nephropathy) (Non-alcoholic steatohepatitis: NASH)	Europe	Phase 2	In-house
		Japan	Phase 2	
		US	Phase 1	
		Japan	Phase 2	
MT-6548 (vadadustat)	Hypoxia inducible factor prolyl hydroxylase inhibitor (Renal anemia)	Japan	Phase 2	Licensed from Akebia (US)

iii. Central nervous system diseases

Development code (Generic name)	Category (Indications)	Region	Stage	Origin/licensee
MCI-186 (edaravone)	Free radical scavenger (Amyotrophic lateral sclerosis)	US	NDA filed (Jun., 2016)	In-house
MP-214 (cariprazine)	Dopamine D3/D2 receptor partial agonist (Schizophrenia)	Japan, Asia	Phase 2b/3	Licensed from Gedeon Richter(Hungary)
MT-210	5-HT2A/ Sigma 2 receptor antagonist (Schizophrenia)	Europe	Phase 2	Licensed to Minerva Neurosciences(US)
Wf-516	Multiple mechanisms on several receptors* (Depression)	Europe	Phase 2	Licensed to Minerva Neurosciences(US)
MP-124	Nervous system	US	Phase 1	In-house
MT-8554	Nervous system, etc.	Europe	Phase 1	In-house
MT-5199 (valbenazine)	Vesicular monoamine transporter type 2 inhibitor (Tardive dyskinesia)	Japan	Phase 1	Licensed from Neurocrine Biosciences(US)

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

iv. Vaccines

Development code (Generic name)	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)
Influenza vaccine	Plant-based VLP vaccine (Prophylaxis of H5N1 influenza)	Canada	Phase 2	In-house
Influenza vaccine	Plant-based VLP vaccine (Prophylaxis of seasonal influenza)	US, Canada	Phase 2	In-house
Influenza vaccine	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	Ca sensing receptor agonist (Secondary hyperparathyroidism in hemodialysis patients)	Japan	Phase 3	Licensed to Kyowa Hakko Kirin(Japan)
Y-39983	ROCK (rho-kinase) inhibitor (Glaucoma)	Japan	Phase 2	Licensed to Senju Pharmaceutical (Japan)
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
MP-157	Cardiovascular system	Europe	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

Changes Since Previous Announcement on November 1, 2016

Development code (Generic name)	Category (Indications)	Region	As of Nov. 1, 2016	As of Feb. 6, 2017	Origin/licensee
TAU-284 (bepotastine)	Selective histamine H1 receptor antagonist, anti-allergic agent (Pediatric allergic rhinitis, pediatric atopic dermatitis)	China	Filed (Mar., 2016)	Approved (Dec., 2016)	Licensed from Ube Industries (Japan)
MP-513 (teneligliptin)	DPP-4 inhibitor (Type 2 diabetes mellitus)	China	None	Phase 3	In-house
MT-2355	Combined vaccine (Prophylaxis of pertussis, diphtheria, tetanus, poliomyelitis and prophylaxis of Hib infection in infants)	Japan	None	Phase 3	Co-developed with The Research Foundation for Microbial Diseases of Osaka University(Japan)
MT-2301	Haemophilus influenzae type b (Hib) vaccine (Prophylaxis of pediatric Hib infection)	Japan	Phase 2	Deleted (forward to develop MT-2355)	Licensed from Nuron Biotech (US)
MT-3995	Selective mineralocorticoid receptor antagonist (Non-alcoholic steatohepatitis: NASH)	Japan	None	Phase 2	In-house
MT-6548 (Vadadustat)	Hypoxia inducible factor prolyl hydroxylase inhibitor (Renal anemia)	Japan	None	Phase 2	Licensed from Akebia (US)
MT-4129	Cardiovascular system, etc.	Europe	None	Phase 1	In-house