

(2) State of New Product Development (As of July 31, 2015)

i. New Drugs

| Development code (Generic name) | Category (Indications) | Region | Stage | Origin |
|--|---|-------------------------------------|-----------------------|---------------------------|
| TA-650 (infliximab) | Anti-human TNF α monoclonal antibody (Crohn's disease, ulcerative colitis, pediatric Crohn's disease, pediatric ulcerative colitis) | Taiwan | Filed (Sep., 2013) | US:Janssen Biotech |
| TA-7284 (canagliflozin) | SGLT2 inhibitor (Type 2 diabetes mellitus) | Taiwan | Filed (Mar., 2015) | In-house |
| MP-513 (teneligliptin) | DPP-4 inhibitor (Type 2 diabetes mellitus) | Indonesia | Filed (Apr., 2015) | In-house |
| | | Europe | Phase 2 | |
| | | US | Phase 1 | |
| MCI-186 (edaravone) | Free radical scavenger (Amyotrophic lateral sclerosis ^{*1}) | Korea | Filed (Jun., 2015) | In-house |
| MT-4666 (encenicline) | α 7nACh receptor agonist (Dementia of Alzheimer's type) | Global clinical trial ^{*2} | Phase 3 | US: FORUM Pharmaceuticals |
| MT-2412 (teneligliptin, canagliflozin) | Fixed-dose combination of DPP-4 inhibitor and SGLT2 inhibitor (Type 2 diabetes mellitus) | Japan | Phase 3 | In-house |
| MP-214 (cariprazine) | Dopamine D3/D2 receptor partial agonist (Schizophrenia) | Japan,Asia | Phase 2b/3 | Hungary: Gedeon Richter |
| MT-3995 | Selective mineralocorticoid receptor antagonist (Diabetic nephropathy) | Europe | Phase 2 | In-house |
| | | Japan | Phase 2 | |
| | | US | Phase 1 | |
| MT-1303 | 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 | Phase1 | |
| MT-2301 | Haemophilus influenza type b (Hib) vaccine (Prophylaxis of pediatric Hib infection) | Japan | Phase 2 | US: Nuron Biotech |
| 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 |
| GB-1057 (Recombinant human serum albumin) | Blood and Blood forming organs | US | Phase 1 | In-house |
| MP-124 | Nervous system | US | Phase 1 | In-house |
| MP-157 | Cardiovascular system | Europe | Phase 1 | In-house |
| MT-0814 | Ophthalmologicals | Japan | Phase 1 | In-house |
| MT-8554 | Nervous system etc. | Europe | Phase 1 | In-house |

*1:Orphan drug designated

*2:Co-developed with FORUM Pharmaceuticals.

ii. Additional Indications

| Product name (Generic name) | Category (Indications) | Region | Stage | Origin | Notes |
|--|--|--------------------------|----------------------------|--|--|
| Remicade (infliximab) | Anti-human TNF α monoclonal antibody (Behcet's disease with special lesions*) | Japan | sNDA filed (Oct., 2014) | US:Janssen Biotech | |
| | (Refractory Kawasaki disease*) | | sNDA filed (May, 2015) | | |
| | (Pediatric Crohn's disease) | | Phase 3 | | |
| | (Pediatric ulcerative colitis) | | Phase 3 | | |
| | (Psoriasis: increased dose) | | sNDA filed (Jul., 2015) | | |
| Tribik (Adsorbed Diphtheria-purified Pertussis-tetanus Combined Vaccine) | Vaccine (Prophylaxis of pertussis, diphtheria, and tetanus; Stage 2 vaccination) | Japan | sNDA filed (Apr., 2015) | Japan:The Research Foundation for Microbial Diseases of Osaka University | Co-developed with The Research Foundation for Microbial Diseases of Osaka University |
| Telavic (telaprevir) | NS3-4A protease inhibitor (Chronic hepatitis C, [combination with Feron]) | Japan | Phase 3 | US:Vertex Pharmaceutic als | |
| Imusera (fingolimod) | S1P receptor functional antagonist (Chronic inflammatory demyelinating polyradiculoneuropathy) | Global clinical trial | Phase 3 | In-house | Co-developed with Novartis Pharma in Japan, licensed to Novartis overseas |
| Canaglu (canagliflozin) | SGLT2 inhibitor (Diabetic nephropathy) | Global clinical trial | Phase 3 | In-house | Sponsor: Janssen Research & Development, LLC |

*Orphan drug designated

iii. Licensing-out

| Development code (Generic name) | Category (Indications) | Region | Stage | Licensee (Notes) |
|------------------------------------|---|-----------------------|---------|---|
| TA-7284 (canagliflozin) | SGLT2 inhibitor (Type2 diabetes mellitus / fixed dose combination with metformin, XR) | US | Phase 3 | US: Janssen Pharmaceuticals, Inc |
| | (Diabetic nephropathy) | Global clinical trial | Phase 3 | |
| | (Type 1 Diabetes Mellitus) | US, Canada | Phase 2 | |
| | (Obesity / co-administration with phentermine) | US | Phase 2 | |
| FTY720 (fingolimod) | S1P receptor functional antagonist (Chronic inflammatory demyelinating polyradiculoneuropathy) | Global clinical trial | Phase 3 | Switzerland: Novartis (Co-developed with Novartis Pharma in Japan) |
| Y-39983 | ROCK (rho-kinase) inhibitor (Glaucoma) | Japan | Phase 2 | Japan: Senju Pharmaceutical |
| MT-210 | 5-HT2A/ Sigma 2 receptor antagonist (Schizophrenia) | Europe | Phase 2 | US: Minerva Neurosciences |
| TA-7906 | PDE4 inhibitor (Atopic dermatitis) | Japan | Phase 2 | Japan: Maruho |
| MCC-847 (masilukast) | Leukotriene D4 receptor antagonist (Asthma) | Korea | Phase 2 | Korea: SAMA Pharma |
| TA-8995 | CETP inhibitor (Dyslipidemia) | Europe | Phase 2 | Netherlands: DEZIMA Pharma |
| MT-4580 | Ca sensing receptor agonist (Secondary hyperparathyroidism in hemodialysis patients) | Japan | Phase 2 | Japan: Kyowa Hakko Kirin |
| Wf-516 | Multiple mechanisms on several receptors* (Depression) | Europe | Phase 2 | US: Minerva Neurosciences |
| Y-803 | Bromodomain inhibitor (Cancer) | Europe, Canada | Phase 2 | US: Merck |
| sTU-199 (tenatoprazole) | Alimentary tract and metabolism | Europe | Phase 1 | France: Negma/Sidem |

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

iv. Changes Since Previous Announcement on May 8, 2015

In-house Development

| Development code/ product name (Generic name) | Category (Indications) | Region | As of May 8, 2015 | As of July 31, 2015 |
|---|---|---------------|----------------------------|----------------------------|
| Talion (bepotastine) | Selective histamine H1 receptor antagonist, anti-allergic agent (Pediatric allergic rhinitis) | Japan | sNDA filed (May, 2014) | Approved (May, 2015) |
| | (Pediatric urticaria and pruritus accompanying dermatitis [eczema or skin inflammation, itching]) | | sNDA filed (May, 2014) | Approved (May, 2015) |
| Radicut (edaravone) | Free radical scavenger (Amyotrophic lateral sclerosis*) | Japan | sNDA filed (Oct., 2014) | Approved (Jun., 2015) |
| MCI-186 (edaravone) | Free radical scavenger (Amyotrophic lateral sclerosis*) | Korea | None | Filed (Jun., 2015) |
| Remicade (infliximab) | Anti-human TNF α monoclonal antibody (Refractory Kawasaki disease*) | Japan | Phase 3 | sNDA filed (May, 2015) |
| | (Psoriasis: increased dose) | | Phase 3 | sNDA filed (Jul., 2015) |
| MT-1303 | S1P receptor functional antagonist (Crohn's disease) | Japan, Europe | None | Phase 2 |
| MT-8554 | Nervous system etc. | Europe | None | Phase 1 |

*Orphan drug designated

Licensing-out

| Development code (Generic name) | Category (Indications) | Region | As of May 8, 2015 | As of July 31, 2015 |
|------------------------------------|---|-------------------|----------------------|------------------------|
| TA-7284 (canagliflozin) | SGLT2 inhibitor (Type 1 Diabetes Mellitus) | US, Canada | None | Phase 2 |
| | (Obesity / co-administration with phentermine) | US | None | Phase 2 |
| Wf-516 | Multiple mechanisms on several receptors* (Depression) | Europe | Phase 1 | Phase 2 |
| Y-803 | Bromodomain inhibitor (Cancer) | Europe, Canada | Phase 1 | Phase 2 |

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