### **Annual Flash Report (unaudited)**

Fiscal Year ended March 31, 2014

**Supplemental Information** 

## **Status of Development Pipeline**

as of May 13, 2014

### **Developments in Japan**

NDA filed (New Chemical Entities):
ONO-4538 / BMS-936558 (injection) Melanoma [human anti-human PD-1 monoclonal antibody]

NDA filed (New Formulation):

Opalmon® Tablets (Co-development with Dainippon Sumitomo Pharma Co., Ltd.)

Thromboangitis obliterans and lumbar spinal canal stenosis [Blood vessel dilation]

NDA filed (Additional Formulation):

■ Onoact® Intravenous Infusion 150 mg (ONO-1101) \*1 Post operative tachyarrhythmia under monitoring hemodynamics, Tachyarrhythmia in low cardiac function [Short acting beta 1 blocker]

NDA filed (Additional Indication):

■ Glactiv® Tablets (ONO-5435 / MK-0431) (Co-development with Merck & Co., Inc.) Type 2 diabetes: combination therapy with a rapid-acting insulin secretagogue [DPP-4 inhibitor]

- Ongoing clinical studies (New Chemical Entities):
  ONO-4538 / BMS-936558 (injection) Renal cell cancer (Phase III) [human anti-human PD-1 monoclonal antibody]
- ONO-7057 / Carfilzomib (injection) \*2 (In-licensed from Onyx Pharmaceuticals, Inc.) Multiple Myeloma (Phase III) [Proteasome inhibitor]
- ONO-2745 / CNS 7056 (injection) (In-licensed from PAION AG) Short acting general anesthetic (Phase II / III) [GABA<sub>A</sub> receptor modulator]
- ONO-7165 / EMD531444 (injection) (Co-development with Merck KGaA) Non-small cell lung cancer (Phase II) [Therapeutic cancer peptide vaccine targeting the tumor antigen MUC-1]
- ONO-4641 (tablet) Multiple sclerosis (Phase II) [S1P receptor agonist]
- ONO-3849 / Methylnaltrexone bromide (injection) (In-licensed from Progenics Pharmaceuticals, Inc.) Opioid-induced constipation (Phase II) [Mu-opioid receptor antagonist]
- ONO-7643 / RC-1291 (tablet) (In-licensed from Helsinn Therapeutics (U.S.), Inc.) Cancer anorexia / cachexia (Phase II) [Ghrelin mimetic]
- ONO-4538 / BMS-936558 (injection) Esophageal cancer (Phase II) [human anti-human PD-1 monoclonal antibody]
- ONO-4538 / BMS-936558 (injection) Non-small cell lung cancer (Phase II) [human anti-human PD-1 monoclonal antibody]
- ONO-1162 / Ivabradine (tablet) (In-licensed from Les Laboratoires Servier) Chronic heart failure (Phase II) [If channel inhibitor]
- ONO-5163 / AMG-416 (injection) (In-licensed from Amgen Inc.) Secondary hyperparathyroidism (Phase I / II) [Calcium

sensing receptor agonist]

- ONO-6950 (tablet) Bronchial asthma (Phase I) [LT receptor antagonist]
- ONO-7056 / Salirasib (tablet) (In-licensed from Kadmon Corporation LLC) Solid tumor (Phase I) [Ras signal inhibitor]
- ONO-7268 MX1 (injection) (In-licensed from OncoTherapy Science, Inc.) Hepatocellular carcinoma (Phase I) [Therapeutic cancer peptide vaccines]
- ONO-7268 MX2 (injection) (In-licensed from OncoTherapy Science, Inc.) Hepatocellular carcinoma (Phase I) [Therapeutic cancer peptide vaccines]
- ONO-2160/CD (tablet) Parkinson's disease (Phase I) [levodopa pro-drug]
- ONO-4053 (tablet) \*3 Allergic rhinitis (Phase I) [PGD2 receptor antagonist]

- Ongoing clinical studies (Additional Indications):

  Proemend® for i.v. infusion (ONO-7847 / MK-0517) (In-licensed from Merck & Co., Inc.) Chemotherapy-induced nausea and vomiting in pediatric patients (Phase III) [NK1 receptor antagonist]
- Orencia® IV (ONO-4164IV / BMS-188667IV) (Co-development with Bristol-Myers Squibb Company) Juvenile Rheumatoid Arthritis (Phase III) T-cell activation inhibitor]
- Orencia® IV (ONO-4164IV / BMS-188667IV) (Co-development with Bristol-Myers Squibb Company) Lupus nephritis (Phase III) [T-cell activation inhibitor]

Ongoing clinical studies (Additional Dosing Regimen):

• Rivastach® Patch (ONO-2540 / ENA713D) (Co-development with Novartis Pharma AG) Alzheimer's disease (Phase III) [dual inhibitor of AChE and BuChE1

In the case of clinical development of the anticancer compound in the same indication, the most advanced clinical phase is

### **Developments abroad**

- Ongoing clinical studies (New Chemical Entities):

  ONO-4538 / BMS-936558 (injection)
  (Out-licensed to Bristol-Myers Squibb Company)
  Renal cell cancer (Phase III) [human anti-human PD-1 monoclonal antibody]
- ONO-4538 / BMS-936558 (injection) (Out-licensed to Bristol-Myers Squibb Company) Non-small cell lung cancer (Phase III) [human anti-human PD-1 monoclonal antibody]
- ONO-4538 / BMS-936558 (injection) (Out-licensed to Bristol-Myers Squibb Company) Melanoma (Phase III) [human anti-human PD-1 monoclonal antibody]

- ONO-4538 / BMS-936558 (injection) \*4
   (Out-licensed to Bristol-Myers Squibb Company)
   Glioblastoma (Phase II) [human anti-human PD-1 monoclonal antibody]
- ONO-4538 / BMS-936558 (injection) \*5
  (Out-licensed to Bristol-Myers Squibb Company)
  Diffuse large B cell lymphoma (Phase II) [human anti-human PD-1 monoclonal antibody]
- ONO-4538 / BMS-936558 (injection) \*6
   (Out-licensed to Bristol-Myers Squibb Company)
   Follicular lymphoma (Phase II) [human anti-human PD-1 monoclonal antibody]
- ONO-4641 (tablet) (Out-licensed to Merck KGaA) Multiple sclerosis (Phase II) [S1P receptor agonist]
- ONO-6950 (tablet)
   Bronchial asthma (Phase II) [LT receptor antagonist]
- ONO-4053 (tablet)
   Allergic rhinitis (Phase II) [PGD2 receptor antagonist]
- ONO-2952 (tablet)
   Irritable bowel syndrome (Phase II) [TSPO antagonist]
- ONO-9054 (eye drop)
   Glaucoma, ocular hypertension (Phase II) [PG receptor (FP / EP3) agonist]
- ONO-4538 / BMS-936558 (injection) \*7
   (Out-licensed to Bristol-Myers Squibb Company)
   Colon cancer (Phase I/II) [human anti-human PD-1 monoclonal antibody]
- ONO-4538 / BMS-936558 (injection)
   (Out-licensed to Bristol-Myers Squibb Company)
   Solid tumors (triple negative breast cancer, stomach cancer, pancreatic cancer, small cell lung cancer (Phase I/II) [human anti-human PD-1 monoclonal antibody]
- ONO-4538 / BMS-936558 (injection)
   (Out-licensed to Bristol-Myers Squibb Company)
   Hepatocellular carcinoma (Phase I) [human anti-human PD-1 monoclonal antibody]
- ONO-4538 / BMS-936558 (injection)
   (Out-licensed to Bristol-Myers Squibb Company)
   Hepatitis C (Phase I) [human anti-human PD-1 monoclonal antibody]
- ONO-4059 (capsule)
   B cell lymphoma (Phase I) [Bruton's tyrosine kinase (Btk) inhibitor]
- ONO-8055 (tablet)
   Underactive bladder (Phase I) [PG receptor (EP2 / EP3) agonist]
- ONO-8539 (tablet)
   Gastroesophageal reflux disease (GERD) (Phase I) [PG receptor (EP1) antagonist]
- ONO-1266 (capsule)
   Portal hypertension (Phase I) [S1P receptor antagonist]
- ONO-4232 (injection)
   Acute heart failure (Phase I) [PG receptor (EP4) agonist]

In the case of clinical development of the anticancer compound in the same indication, the most advanced clinical phase is described.

# Changes from Third Quarter Flash Report for the Fiscal Year ending March 2014 announced on February 4, 2014

- \*1:High content formulation of Onoact<sup>®</sup> Intravenous Infusion 150 mg (ONO-1101) was filed for the purpose of improvement in convenience.
- \*2:Phase III clinical study of ONO-7057 / Carfilzomib (proteasome inhibitor) was initiated for the treatment of multiple myeloma.
- \*3: Phase I clinical study of ONO-4053 (PGD2 receptor antagonist) was initiated for the treatment of allergic rhinitis.
- \*4:Phase II clinical study of ONO-4538/BMS-936558 (human anti-human PD-1 monoclonal antibody) was initiated for the treatment of glioblastoma.
- \*5:Phase II clinical study of ONO-4538/BMS-936558 (human anti-human PD-1 monoclonal antibody) was initiated for the treatment of diffuse large B cell lymphoma.
- \*6:Phase II clinical study of ONO-4538/BMS-936558 (human anti-human PD-1 monoclonal antibody) was initiated for the treatment of follicular lymphoma.
- \*7:Phase I/II clinical study of ONO-4538/BMS-936558 (human anti-human PD-1 monoclonal antibody) was initiated for the treatment of colon cancer.
- \*:Phase I clinical study of ONO-7746 (TPO receptor agonist) for the treatment of thrombocytopenia was terminated from strategic points of view and the license was returned to Nissan Chemical Industries, Ltd..