

Development Pipeline Progress Status

July 30, 2021

Cautionary Notes

Forecasts and other forward-looking statements included in this document are based on information currently available and certain assumptions that the Company deems reasonable.

Actual performance and other results may differ significantly due to various factors. Such factors include, but are not limited to:

- (i) failures in new product development***
- (ii) changes in general economic conditions due to reform of medical insurance system***
- (iii) failures in obtaining the expected results due to effects of competing products or generic drugs***
- (iv) infringements of the Company's intellectual property rights by third parties***
- (v) stagnation of product supply from the delay in production due to natural disasters, fires and so on***
- (vi) onset of new side effect of post-licensure medical product***
- and, (vii) currency exchange rate fluctuations and interest rate trend.***

Information about pharmaceutical products (including products currently in development) included in this document is not intended to constitute an advertisement of medical advice.

Plan for Submissions in Japan

OPDIVO

Non-OPDIVO
Oncology

Non-
Oncology

OPDIVO
M=Mono
C=Combo

| | | | |
|---|--|--|---|
| <p>{1L-Gastric cancer} with Chemo (C) ATTRACTION-4 May 2020</p> | | | <p>{Neoadjuvant-NSCLC} with Chemo (C) CheckMate-816</p> |
| <p>{1L-RCC} with Cabozantinib (C) CheckMate-9ER Oct 2020</p> | | | <p>{Adjuvant-Gastric cancer} with Chemo (C) ATTRACTION-5</p> |
| <p>{1L-Malignant pleural mesothelioma} with YERVOY (C) CheckMate-743 Oct 2020</p> | | | <p>{Adjuvant-RCC} with YERVOY (C) CheckMate-914</p> |
| <p>{1L-Gastric cancer} with Chemo (C) CheckMate-649 Dec 2020</p> | | | <p>{Adjuvant- Hepatocellular carcinoma} (M) CheckMate-9DX</p> |
| <p>{Hodgkin's lymphoma, pediatric} investigator-initiated trial (M) Jan 2021</p> | <p>{Cancer of unknown primary} investigator-initiated trial (M) Apr 2021</p> | | <p>{Biliary tract cancer} (M) ONO-4538-91</p> |
| <p>{Adjuvant-Esophageal cancer} (M) CheckMate-577 Feb 2021</p> | <p>{1L-NSCLC} with Chemo and AVASTIN (C) ONO-4538-52 Jun 2021 (Revision of labeling)</p> | <p>ONOACT<Pediatric> (Tachyarrhythmia in low cardiac function)</p> | <p>{1L-Urothelial cancer} with Chemo (C) CheckMate-901</p> |
| <p>{Adjuvant-Urothelial cancer} (M) CheckMate-274 Mar 2021</p> | <p>{1L-Esophageal cancer} with YERVOY / with Chemo (C) CheckMate-648</p> | <p>{1L-Urothelial cancer} with YERVOY (C) CheckMate-901</p> | <p>KYPROLIS (2L-Multiple myeloma) KRd Once weekly</p> |
| <p>2020 (results)</p> | <p>2021 (1H)</p> | <p>2021 (2H)</p> | <p>2022</p> |

As of July 26, 2021

Development status of OPDIVO (1)

As of July 26, 2021

| Target disease | Line of Therapy | Treatment | Phase | | | | |
|--------------------------------|----------------------|---|----------------------|----------|----------|----------|----------|
| | | | Japan | Korea | Taiwan | US | EU |
| Melanoma | Adjuvant · 1st · 2nd | Monotherapy, with Ipi (1 st line only) | Approved | Approved | Approved | Approved | Approved |
| Non-small cell lung cancer | Neo-adjuvant | with Chemo | III | III | III | III | III |
| | 1st | with Ipi | Approved | Approved | Approved | Approved | – |
| | | with Ipi + Chemo | Approved | Approved | Approved | Approved | Approved |
| | | with Chemo | Approved | – | – | – | – |
| | | with Chemo (NSQ) | Revision of labeling | III | III | – | – |
| 2nd | Monotherapy | Approved | Approved | Approved | Approved | Approved | |
| Renal cell carcinoma | Adjuvant | with Ipi | III | – | – | III | III |
| | 1st | with Ipi | Approved | Approved | Approved | Approved | Approved |
| | | with TKI | Filed | III | III | Approved | Approved |
| | | with Ipi + TKI | – | III | III | III | III |
| 2nd | Monotherapy | Approved | Approved | Approved | Approved | Approved | |
| Hodgkin's lymphoma | Relapsed /Refractory | with Brentuximab | III | – | – | III | – |
| | | Monotherapy | Approved | Approved | Approved | Approved | Approved |
| Head and neck cancer | 2nd | Monotherapy | Approved | Approved | Approved | Approved | Approved |
| Malignant pleural mesothelioma | 1st | with Ipi | Approved | Approved | – | Approved | Approved |
| | SOC refractory | Monotherapy | Approved | – | – | – | – |

Red: Update after May 2021

Development status of OPDIVO (2)

As of July 26, 2021

| Target disease | Line of Therapy | Treatment | Phase | | | | |
|--------------------------|---------------------|--------------------------|----------|----------|------------|------------|-----------|
| | | | Japan | Korea | Taiwan | US | EU |
| Gastric cancer | Adjuvant | with Chemo | III | III | III | – | – |
| | 1st | with Chemo | Filed | Approved | III | Approved | Filed |
| | | with Ipi | III | III | III | III | III |
| | 3rd | Monotherapy | Approved | Approved | Approved | – | – |
| Esophageal cancer | Adjuvant | Monotherapy | Filed | III | III | Approved | Filed |
| | 1st | with Ipi, with Chemo | III | III | III | III | III |
| | 2nd | Monotherapy | Approved | Approved | Approved | Approved | Approved |
| Colorectal cancer | 1st | with Chemo | II / III | – | – | II / III | II / III |
| | MSI-H/dMMR (1st) | with Ipi | III | – | – | III | III |
| | MSI-H/dMMR (3rd) | Monotherapy | Approved | – | Approved | Approved | – |
| | | with Ipi | Approved | – | Approved | Approved | Approved* |
| Hepatocellular carcinoma | Adjuvant | Monotherapy | III | III | III | III | III |
| | 1st | with Ipi | III | III | III | III | III |
| | 2nd | Monotherapy, with Ipi | II | II | Approved** | Approved** | II |
| Biliary tract cancer | 2nd | Monotherapy | II | – | – | – | – |

Red: Update after May 2021

* 2nd line
 ** With Ipi (US),
 Monotherapy only (Taiwan)

Development status of OPDIVO (3)

As of July 26, 2021

| Target disease | Line of Therapy | Treatment | Phase | | | | |
|------------------------------------|------------------------|---|----------|----------|----------|----------|----------|
| | | | Japan | Korea | Taiwan | US | EU |
| Urothelial cancer / Bladder cancer | Adjuvant /Neo-adjuvant | with IDO1 inhibitor + Chemo, with Chemo | III | III | III | III | III |
| | Adjuvant | Monotherapy | Filed | III | III | Filed | Filed |
| | 1st | with Ipi, with Chemo | III | III | III | III | III |
| | 2nd | Monotherapy | II | Approved | Approved | Approved | Approved |
| Ovarian cancer | 1st | with Rucaparib | III | III | III | III | III |
| Cancer of unknown primary | – | Monotherapy | Filed | – | – | – | – |
| Dosage and Administration | 240 mg (every 2 weeks) | | Approved | Approved | III | Approved | Approved |
| | 360 mg (every 3 weeks) | | Approved | Approved | Approved | Approved | Approved |
| | 480 mg (every 4 weeks) | | Approved | Approved | III | Approved | Approved |

Red: Update after May 2021

Clinical trials in combination therapy

OPDIVO & other Immuno-Oncology compounds

As of July 26, 2021

| Development code (Generic name) Pharmacological action | Cancer type | Japan | US/EU | KR/TW |
|---|-----------------------------|--------|----------|-------|
| ONO-7701 (Linrodostat) IDO1 inhibitor | Bladder cancer | III | III | III |
| ONO-4686 Anti-TIGIT antibody | Solid tumor | I / II | I / II | - |
| ONO-7807 Anti-TIM-3 antibody | Solid tumor | I / II | I / II | - |
| ONO-4482 (Relatlimab) Anti-LAG-3 antibody | Melanoma | I / II | II / III | - |
| ONO-4578 PG receptor (EP4) antagonist | Solid tumor, Gastric cancer | I | I / II | - |
| | Colorectal cancer | I | - | - |
| | Pancreatic cancer | I | - | - |
| | Non-small cell lung cancer | I | - | - |
| ONO-7475 Axl/Mer inhibitor | Solid tumor | I | - | - |
| ONO-7911 (Bempegaldesleukin) PEGylated IL-2 | Solid tumor | I | I / II | - |
| | Melanoma | - | III | - |
| | Renal cell carcinoma | - | III | - |
| | Bladder cancer | - | III | - |

Red: Update after May 2021

Development pipeline in Japan (Oncology area other than OPDIVO)

As of July 26, 2021

| Product name/ Development code (Generic name) | Target indication | Pharmacological action |
|--|-----------------------------|------------------------------|
| 【Phase II】 | | |
| BRAFTOVI (Encorafenib) | BRAF-mutant thyroid cancer | BRAF inhibitor |
| MEKTOVI (Binimetinib) | BRAF-mutant thyroid cancer | MEK inhibitor |
| 【Phase I】 | | |
| ONO-4578 * | Solid tumor, Gastric cancer | PG receptor (EP4) antagonist |
| | Colorectal cancer | |
| | Pancreatic cancer | |
| | Non-small cell lung cancer | |
| ONO-7475 | Solid tumor * | Axl / Mer inhibitor |
| | Non-small cell lung cancer | |
| ONO-7913 | Solid tumor | Anti-CD47 mAb |
| | Myelodysplastic syndrome | |
| | Pancreatic Cancer * | |
| | Colorectal Cancer * | |
| ONO-7912 | Pancreatic Cancer | Cancer metabolism inhibitor |

Red: Update after May 2021

* Combination with Opdivo.

Development pipeline in Japan (Non-oncology)

As of July 26, 2021

| Product name/ Development code (Generic name) | Target indication | Pharmacological action |
|--|---|--|
| 【Phase III】 | | |
| ORENCIA (Abatacept) | Polymyositis/Dermatomyositis | T-cell activation inhibitor |
| 【Phase II / III】 | | |
| ONOACT (Landiolol hydrochloride) | Tachyarrhythmia in low cardiac function <Pediatric> | Short-active selective β 1 blocker |
| 【Phase II】 | | |
| JOYCLU/ ONO-5704 · SI-613 | Enthesopathy | Hyaluronic acid-NSAID |
| VELEXBRU (Tirabrutinib) | Pemphigus | BTK inhibitor |
| ONO-2910 | Diabetic polyneuropathy | Schwann cell differentiation promoter |
| 【Phase I】 | | |
| VELEXBRU (Tirabrutinib) | Generalized scleroderma | BTK inhibitor |
| ONO-4685 | Autoimmune disease | PD-1 × CD3 bispecific antibody |
| ONO-2909 | Narcolepsy | PG receptor (DP1) antagonist |
| ONO-2808 | Neurodegenerative diseases | S1P5 receptor agonist |

Red: Update after May 2021

Global development projects (Other than OPDIVO)

As of July 26, 2021

| Product name/ Development code (Generic name) | Target indication | Pharmacological action | Area |
|--|---|-----------------------------|------|
| 【Phase III】 | | | |
| BRAFTOVI (Encorafenib) | BRAF-mutant colorectal cancer | BRAF inhibitor | KR |
| | BRAF-mutant melanoma | | KR |
| MEKTOVI (Binimetinib) | BRAF-mutant colorectal cancer | MEK inhibitor | KR |
| | BRAF-mutant melanoma | | KR |
| ONO-7912 · CPI-613 (Devimistat) | Pancreatic cancer | Cancer metabolism inhibitor | KR |
| | Acute myeloid leukemia | | KR |
| 【Phase II】 | | | |
| ONO-4059 (Tirabrutinib) | Primary central nervous system lymphoma | BTK inhibitor | US |
| 【Phase I / II】 | | | |
| ONO-7475 | Acute leukemia | Axl / Mer inhibitor | US |
| 【Phase I】 | | | |
| ONO-7684 | Thrombosis | FXIa inhibitor | EU |
| ONO-2808 | Neurodegenerative disease | S1P5 receptor agonist | EU |

Red: Update after May 2021



ONO PHARMACEUTICAL CO.,LTD.

Dedicated to the Fight against Disease and Pain