

# Development Pipeline Progress Status

**May 12, 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>{1L-RCC} with Cabozantinib (C) CheckMate-9ER Oct 2020</p>			
<p>{1L-Malignant pleural mesothelioma} with YERVOY (C) CheckMate-743 Oct 2020</p>		<p>ONOACT&lt;Pediatric&gt; {Tachyarrhythmia in low cardiac function}</p>	<p>{Adjuvant-RCC} with YERVOY (C) CheckMate-914</p>
<p>{1L-Gastric cancer} with Chemo (C) CheckMate-649 Dec 2020</p>	<p>{Cancer of unknown primary} investigator-initiated trial (M) Apr 2021</p>	<p>{Adjuvant-Gastric cancer} with Chemo (C) ATTRACTION-5</p>	<p>{Adjuvant- Hepatocellular carcinoma} (C) CheckMate-9DX</p>
<p>{Hodgkin's lymphoma, pediatric} investigator-initiated trial (M) Jan 2021</p>	<p>{1L-NSCLC} with Chemo and AVASTIN* (C) ONO-4538-52</p>	<p>{1L-Urothelial cancer} with YERVOY (C) CheckMate-901</p>	<p>{Biliary tract cancer} (M) ONO-4538-91</p>
<p>{Adjuvant-Esophageal cancer} (M) CheckMate-577 Feb 2021</p>	<p>FOIPAN (Camostat Mesilate) {COVID-19}</p>	<p>{1L-Head and neck cancer} with YERVOY (C) CheckMate-651</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>{Neoadjuvant-NSCLC} with Chemo (C) CheckMate-816</p>	<p>KYPROLIS {2L-Multiple myeloma} (Rd Once weekly)</p>
<p>2020 (results)</p>	<p>2021 (1H)</p>	<p>2021 (2H)</p>	<p>2022</p>

As of May 6, 2021

\* Revision of labeling

# Development status of OPDIVO (1)

As of May 6, 2021

Target disease	Line of Therapy	Treatment	Phase				
			Japan	Korea	Taiwan	US	EU
Melanoma	Adjuvant · 1st · 2nd	Monotherapy, with Ipi (1 <sup>st</sup> 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	III	–	–	–
		with Chemo (NSQ)	Consultation on 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	1st	with Ipi	III	III	III	III	III
	2nd	Monotherapy	Approved	Approved	Approved	Approved	Approved
Malignant pleural mesothelioma	1st	with Ipi	Filed	–	–	Approved	Filed
	SOC refractory	Monotherapy	Approved	–	–	–	–

Red: Update after May 2020

# Development status of OPDIVO (2)

As of May 6, 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	III	III	Approved	Filed
		with Ipi	III	III	III	III	III
	3rd	Monotherapy	Approved	Approved	Approved	–	–
Esophageal cancer	Adjuvant	Monotherapy	Filed	III	III	Filed	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	Filed*
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 2020

\* 2nd line  
 \*\* Monotherapy and with Ipi (US),  
 Monotherapy only (Taiwan)

# Development status of OPDIVO (3)

As of May 6, 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
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 2020

# Clinical trials in combination therapy OPDIVO & other Immuno-Oncology compounds

As of May 6, 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-4483 (Lirilumab) Anti-KIR antibody	Solid tumor	I	I / II	-
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 2020

# Development pipeline in Japan (Oncology area other than OPDIVO)

As of May 6, 2021

Product name/ Development code (Generic name)	Target indication	Pharmacological action
<b>【Approved】</b>		
<b>BRAFTOVI (Encorafenib)</b>	<b>BRAF-mutant colorectal cancer</b>	<b>BRAF inhibitor</b>
<b>MEKTOVI (Binimetinib)</b>	<b>BRAF-mutant colorectal cancer</b>	<b>MEK inhibitor</b>
<b>VELEXBRU (Tirabrutinib)</b>	<b>Waldenstrom macroglobulinemia / Lymphoplasmacytic lymphoma</b>	<b>BTK inhibitor</b>
<b>ADLUMIZ (Anamorelin)</b>	<b>Cancer cachexia (non-small cell lung cancer, gastric cancer, pancreatic cancer, colorectal cancer)</b>	<b>Ghrelin mimetic</b>
<b>【Phase II】</b>		
<b>BRAFTOVI (Encorafenib)</b>	<b>BRAF-mutant thyroid cancer</b>	<b>BRAF inhibitor</b>
<b>MEKTOVI (Binimetinib)</b>	<b>BRAF-mutant thyroid cancer</b>	<b>MEK inhibitor</b>
<b>【Phase I】</b>		
<b>ONO-4578 * , **</b>	<b>Solid tumor, Gastric cancer</b>	<b>PG receptor (EP4) antagonist</b>
	<b>Colorectal cancer</b>	
	<b>Pancreatic cancer</b>	
	<b>Non-small cell lung cancer</b>	
<b>ONO-7475 *</b>	<b>Solid tumor</b>	<b>Axl / Mer inhibitor</b>
<b>ONO-7913</b>	<b>Solid tumor</b>	<b>Anti-CD47 mAb</b>
<b>ONO-7912</b>	<b>Pancreatic Cancer</b>	<b>Cancer metabolism inhibitor</b>

**Red: Update after May 2020**

\* Combination with Opdivo.

\*\* ONO-4578 was out-licensed to BMS in 2017, but the rights were returned.



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# Development pipeline in Japan (Non-oncology) (1)

As of May 6, 2021

Product name/ Development code (Generic name)	Target indication	Pharmacological action
<b>【Approved】</b>		
JOYCLU / ONO-5704 · SI-613	Osteoarthritis (knee joint and hip joint)	Hyaluronic acid-NSAID
ONGENTYS (Opicapone)	Parkinson's disease	Long acting COMT inhibitor
ONOACT (Landiolol hydrochloride)	Tachyarrhythmia associated with sepsis	Short-active selective $\beta$ 1 blocker
<b>【Phase III】</b>		
ORENCIA (Abatacept)	Polymyositis/Dermatomyositis	T-cell activation inhibitor
FOIPAN (Camostat mesilate)	Novel coronavirus infection	Protease enzyme inhibitor
<b>【Phase II / III】</b>		
ONOACT (Landiolol hydrochloride)	Tachyarrhythmia in low cardiac function <Pediatric>	Short-active selective $\beta$ 1 blocker

Red: Update after May 2020

# Development pipeline in Japan (Non-oncology) (2)

As of May 6, 2021

Product name/ Development code (Generic name)	Target indication	Pharmacological action
<b>【Phase II】</b>		
JOYCLU / ONO-5704 · SI-613	Enthesopathy	Hyaluronic acid-NSAID
VELEXBRU (Tirabrutinib)	Pemphigus	BTK inhibitor
<b>ONO-2910</b>	<b>Peripheral neuropathy</b>	<b>Schwann cell differentiation promoter</b>
<b>【Phase I】</b>		
<b>VELEXBRU (Tirabrutinib)</b>	<b>Generalized scleroderma</b>	<b>BTK inhibitor</b>
ONO-4685	Autoimmune disease	PD-1×CD3 bispecific antibody
<b>ONO-2909</b>	<b>Narcolepsy</b>	<b>PG receptor (DP1) antagonist</b>
<b>ONO-2808</b>	<b>Neurodegenerative diseases</b>	<b>S1P5 receptor agonist</b>

Red: Update after May 2020

# Global development projects (Other than OPDIVO)

As of May 6, 2021

Development code (Generic name)	Target indication	Pharmacological action	Area
<b>【Phase III】</b>			
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
<b>【Phase I / II】</b>			
<b>ONO-7475</b>	<b>Acute leukemia</b>	<b>Axl / Mer inhibitor</b>	<b>US</b>
<b>【Phase I】</b>			
ONO-7684	Thrombosis	FXIa inhibitor	EU
ONO-2808	Neurodegenerative disease	S1P5 receptor agonist	EU

Red: Update after May 2020



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Dedicated to Man's Fight against Disease and Pain