## Third Quarter (April 1 – December 31, 2016) Flash Report (unaudited) Nine months ended December 31, 2016

## ONO PHARMACEUTICAL CO., LTD.

February 2, 2017

Ono Pharmaceutical Co., Ltd. ("The Company") has announced its consolidated financial results for nine months ended December 31, 2016.

The consolidated financial statements have been prepared in accordance with International Financial Reporting Standards ("IFRSs").

This Third Quarter Flash Report 2017 (unaudited) is summary information extracted from the financial statements announced, and the financial statements and the figures contained herein are prepared for reference only for the convenience of readers outside Japan with certain modifications and reclassifications made from the original financial statements presented in Japanese language.

The translations of Japanese yen amounts into U.S. dollar amounts are included solely for the convenience of readers outside Japan using the rate of 116 to \$1, the approximate rate of exchange at December 30, 2016.

Amounts of less than one million yen and one thousand U.S. dollars have been rounded to the nearest million yen and one thousand U.S. dollars in the presentation of the accompanying consolidated financial statements.

## **Financial Highlights**

Ono Pharmaceutical Co., Ltd. and Consolidated Subsidiaries

			N	Millions of yen			Thousa			
	3	rd Quarter		Annual	3r	d Quarter	3	rd Quarter		
		9 months		12 months	9	9 months		9 months		
	end	ded Dec. 31,	end	ended Mar. 31,		ded Dec. 31,	ended Dec. 31,			
		2015		2016		2016	_	2016		
Revenue	¥	112,419	¥	160,284	¥	188,845	\$	1,627,977		
Profit		10 101		24.070		40.450		266440		
(Owners of the parent compar	ny)	19,181		24,979		42,472		366,140		
Total equity		483,313		476,255		509,342		4,390,881		
Total assets		531,365		540,450		583,405		5,029,353		
				Yen				US\$		
Basic earnings per share	¥	36.19	¥	47.13	¥	80.13	\$	0.69		
Diluted earnings per share	¥	36.19	¥	47.13	¥	80.13	\$	0.69		

(Note) The company conducted a stock split of common stocks at a ratio of 1:5 with an effective date of April 1, 2016. As for "Basic earnings per share" and "Diluted earnings per share", it is calculated assuming that the stock split was conducted at April 1, 2015.

Nine months ended December 31, 2016

### **Revisions of Consolidated Financial Forecasts**

Ono Pharmaceutical Co., Ltd. and Consolidated Subsidiaries

# (1) Revisions to the full-year Consolidated Financial Forecasts Ending March 2017 (April 1, 2016 ~ March 31, 2017)

(Unit: Millions of yen, except basic earnings per share)

	Revenue	Operating Profit	Profit before Tax	Profit	Profit (Owners of the Parent Company)	Basic earnings per share (Owners of the Parent Company)
Previous Forecast (A) *	240,000	54,000	56,000	42,000	41,800	78.86
Revised Forecast (B)	240,000	68,500	70,500	52,500	52,300	98.68
Change (B – A)	_	14,500	14,500	10,500	10,500	
Change (%)	_	26.9%	25.9%	25.0%	25.1%	_
(Reference) Results of the previous period	160,284	30,507	33,272	25,192	24,979	47.13

(Note) The company conducted a stock split of common stocks at a ratio of 1:5 with an effective date of April 1, 2016. As for "Basic earnings per share", it is calculated assuming that the stock split was conducted at the beginning of the previous period.

#### (2) Reasons for the revisions

Although there was a dispute by filing a patent infringement litigation against sale of the anti-PD-1 antibody product by Merck (USA) and its subsidiaries, it was settled in January 2017. One will receive an initial payment and estimates the amount of the initial payment after deducting litigation costs and others as "Other income".

Consequently, operating profit is forecasted to be ¥68.5 billion (an increase by ¥14.5 billion from the previous forecast), profit before tax to be ¥70.5 billion (an increase by ¥14.5 billion from the previous forecast), profit for the year attributable to owners of the parent company to be ¥52.3 billion (an increase by ¥10.5 billion from the previous forecast).

(Note) The financial forecasts and statements contained in this announcement are made based on information that are available as of the date the announcement is made. Actual results may differ materially from those set forth in the announcements due to various uncertain factors.

<sup>\*</sup> The previous forecast was announced on December 21, 2016

Nine months ended December 31, 2016

## **Consolidated Statement of Financial Position**

		Mil	lions of yer	1	Thousands of US\$			
ASSETS	As of March 31, 2016		As of December 31, 2016		As of December 31, 2016			
Current assets								
Cash and cash equivalents	¥	110,485	¥	108,503	\$	935,368		
Trade and other receivables		62,043		88,007		758,680		
Marketable securities		21,583		19,584		168,829		
Other financial assets		800		800		6,897		
Inventories		23,232		24,562		211,738		
Other current assets		5,430		4,409		38,005		
Total current assets		223,573	245,864		245,864			2,119,517
Non-current assets								
Property, plant, and equipment		80,094		82,151		708,198		
Intangible assets		38,324		43,211		372,512		
Investment securities		182,396		179,335		1,545,990		
Investments in associates		982		1,008		8,693		
Other financial assets		6,753		26,747		230,579		
Deferred tax assets		5,179		1,802		15,538		
Other non-current assets		3,149		3,286		28,327		
Total non-current assets		316,877		337,541		2,909,836		
Total assets	¥	540,450	¥	583,405	\$	5,029,353		

			lions of yen		Thousands of US\$		
LIABILITIES AND EQUITY	M	As of March 31, 2016		As of December 31, 2016		As of cember 31, 2016	
Current liabilities							
Trade and other payables	¥	31,250	¥	31,182	\$	268,809	
Borrowings		328		403		3,474	
Other financial liabilities		3,068		7,509		64,734	
Income taxes payable		6,585		10,259		88,435	
Provisions		1,355		1,409		12,144	
Other current liabilities	9,607			11,697		100,836	
Total current liabilities	52,194		_	62,458		538,432	
Non-current liabilities							
Borrowings		515		631		5,440	
Other financial liabilities		19	10			87	
Retirement benefit liabilities		4,093	3,860			33,276	
Provisions		30		30		259	
Deferred tax liabilities		885		878		7,573	
Long-term advances received	5,814			5,495		47,368	
Other non-current liabilities		643		700		6,038	
Total non-current liabilities		12,000		11,605		100,041	
Total liabilities		64,195		74,063		638,472	
Equity							
Share capital		17,358		17,358		149,640	
Capital reserves		17,103		17,133		147,700	
Treasury shares		(59,358)		(59,381)		(511,905)	
Other components of equity		43,307		51,138		440,844	
Retained earnings		452,983		478,122		4,121,739	
Equity attributable to owners of the parent company		471,393		504,370		4,348,019	
Non-controlling interests		4,862		4,972		42,862	
Total equity		476,255	_	509,342		4,390,881	
Total liabilities and equity	¥	540,450	¥	583,405	\$	5,029,353	

Nine months ended December 31, 2016

## **Consolidated Statement of Income**

		Millio	ons of ye	n	Thousands of US\$		
	9	d Quarter months d Dec. 31, 2015	9	ed Quarter 9 months led Dec. 31, 2016		ord Quarter 9 months ded Dec. 31, 2016	
Revenue	¥	112,419	¥	188,845	\$	1,627,977	
Cost of sales		(29,981)		(50,268)		(433,345)	
Gross profit		82,438		138,577		1,194,632	
Selling, general, and administrative expenses		(30,391)		(45,159)		(389,306)	
Research and development costs		(29,400)		(38,980)		(336,035)	
Other income		341		261		2,252	
Other expenses		(664)		(1,396)		(12,032)	
Operating profit		22,324		53,303		459,511	
Finance income		3,081		2,937		25,320	
Finance costs		(257)		(75)		(645)	
Share of profit (loss) from investments in associates		(37)		27		232	
Profit before tax		25,112		56,193		484,419	
Income tax expense		(5,829)		(13,611)		(117,340)	
Profit for the period		19,283	· —	42,581	· —	367,079	
Profit for the period attributable to:							
Owners of the parent company		19,181		42,472		366,140	
Non-controlling interests		101		109		940	
Profit for the period		19,283	_	42,581	_	367,079	
Earnings per share:			Yen			US\$	
Basic earnings per share		36.19		80.13		0.69	
Diluted earnings per share		36.19		80.13		0.69	

## Third Quarter (April 1 – December 31, 2016) Flash Report (unaudited) Nine months ended December 31, 2016

## **Consolidated Statement of Comprehensive Income**

			s of yen		Thousands of US\$		
	3rd Qua 9 mon ended De 201:	ec. 31,	9	Quarter months ed Dec. 31, 2016	3rd Quarter 9 months ended Dec. 31, 2016		
Profit for the period	¥ 1	9,283	¥	42,581	\$	367,079	
Other comprehensive income:							
Items that will not be reclassified to profit or loss:							
Net gain (loss) on financial assets measured at fair value through other comprehensive income		9,662		10,246		88,326	
Remeasurement of defined benefit plans	(	1,704)		373		3,218	
Share of net gain (loss) on financial assets measured at fair value through other comprehensive income of investments in associates		(1)		1		11	
		7,957		10,620		91,555	
Items that may be reclassified subsequently to profit or loss:							
Exchange differences on translation of foreign operations		(32)		23		199	
		(32)		23		199	
<b>Total other comprehensive income (loss)</b>		7,925		10,643		91,754	
Total comprehensive income for the period	2	7,208		53,225		458,834	
Comprehensive income for the period attributable	e to:						
Owners of the parent company	2	7,080		53,112		457,861	
Non-controlling interests		128		113		972	
Total comprehensive income for the period	2	7,208		53,225		458,834	

## Consolidated Statement of Changes in Equity Ono Pharmaceutical Co., Ltd. and Consolidated Subsidiaries

				Millions	s of yen			
		Equity attrib	outable to own	ers of the parer	nt company			
	Share capital	Capital reserves	Treasury shares	Other components of equity	Retained earnings	Equity attributable to owners of the parent company	Non- controlling interests	Total equity
Balance at April 1, 2015	¥17,358	¥17,080	(¥59,308)	¥45,756	¥449,690	¥470,575	¥4,638	¥475,213
Profit for the period					19,181	19,181	101	19,283
Other comprehensive income				7,899		7,899	26	7,925
Total comprehensive income for the period	-	-	_	7,899	19,181	27,080	128	27,208
Purchase of treasury shares			(40)			(40)		(40)
Cash dividends					(19,081)	(19,081)	(3)	(19,084)
Share-based payments		16				16		16
Transfer from other components of equity to retained earnings				999	(999)	-		-
Total transactions with the owners	-	16	(40)	999	(20,080)	(19,105)	(3)	(19,108)
Balance at December 31, 2015	¥17,358	¥17,095	(¥59,348)	¥54,654	¥448,791	¥478,550	¥4,763	¥483,313

				Millions	of yen			
		Equity attrib	outable to own	ers of the parer	nt company			
	Share capital	Capital reserves	Treasury shares	Other components of equity	Retained earnings	Equity attributable to owners of the parent company	Non- controlling interests	Total equity
Balance at April 1, 2016	¥17,358	¥17,103	(¥59,358)	¥43,307	¥452,983	¥471,393	¥4,862	¥476,255
Profit for the period					42,472	42,472	109	42,581
Other comprehensive income				10,640		10,640	4	10,643
Total comprehensive income for the period	-	-	-	10,640	42,472	53,112	113	53,225
Purchase of treasury shares			(23)			(23)		(23)
Cash dividends					(20,142)	(20,142)	(3)	(20,145)
Share-based payments		30				30		30
Transfer from other components of equity to retained earnings				(2,809)	2,809	-		-
Total transactions with the owners	-	30	(23)	(2,809)	(17,333)	(20,135)	(3)	(20,138)
Balance at December 31, 2016	¥17,358	¥17,133	(¥59,381)	¥51,138	¥478,122	¥504,370	¥4,972	¥509,342

				Thousand	s of US \$			
		Equity attrib	butable to own	ers of the pare	nt company			
	Share capital	Capital reserves	Treasury shares	Other components of equity	Retained earnings	Equity attributable to owners of the parent company	Non- controlling interests	Total equity
Balance at April 1, 2016	\$149,640	\$147,442	(\$511,711)	\$373,336	\$3,905,024	\$4,063,732	\$41,917	\$4,105,649
Profit for the period					366,140	366,140	940	367,079
Other comprehensive income				91,722		91,722	33	91,754
Total comprehensive income for the period	-	-	_	91,722	366,140	457,861	972	458,834
Purchase of treasury shares			(194)			(194)		(194)
Cash dividends					(173,638)	(173,638)	(27)	(173,665)
Share-based payments		258				258		258
Transfer from other components of equity to retained earnings				(24,214)	24,214	-		-
Total transactions with the owners	-	258	(194)	(24,214)	(149,425)	(173,574)	(27)	(173,601)
Balance at December 31, 2016	\$149,640	\$147,700	(\$511,905)	\$440,844	\$4,121,739	\$4,348,019	\$42,862	\$4,390,881

# Third Quarter (April 1 – December 31, 2016) Flash Report (unaudited) Nine months ended December 31, 2016

## **Consolidated Statement of Cash Flows**

		ions of yen	Thousands of US\$	
	3rd Quarter 9 months ended Dec. 3 2015	9 months	3rd Quarter 9 months ended Dec. 31 2016	
Cash flows from operating activities				
Profit before tax	¥ 25,11	2 ¥ <b>56,193</b>	\$ 484,419	
Depreciation and amortization	4,85	7 5,651	48,716	
Impairment losses	1,18	<b>736</b>	6,349	
Interest and dividend income	(2,66	(2 <b>,836</b> )	(24,446	
Interest expense		9 10	89	
(Increase) Decrease in inventories	2,95	9 (1,278)	(11,017	
(Increase) Decrease in trade and other receivables	(11,55	(25 <b>,959</b> )	(223,784	
Increase (Decrease) in trade and other payables	1,94	<b>6,432</b>	55,451	
Increase (Decrease) in retirement benefit liabilities	(6,01	3) 304	2,624	
(Increase) Decrease in retirement benefit assets	(8		_	
Increase (Decrease) in long-term advances received	(52	(319)	(2,754	
Other	(2,72	<b>6,788</b>	58,521	
Subtotal	12,49	45,723	394,167	
Interest received	24	2 114	985	
Dividends received	2,45	<b>2,732</b>	23,553	
Interest paid	(	<b>(9) (10)</b>	(89	
Income taxes paid	(9,92	(2) (11,401)	(98,283	
Net cash provided by (used in) operating activities	5,25	37,159	320,333	
Cash flows from investing activities				
Purchases of property, plant, and equipment	(5,70	(12,608)	(108,686	
Purchases of intangible assets	(5,81	1) (6,719)	(57,923	
Purchases of investments	(25		(21,009	
Proceeds from sales and redemption of investments	22,07	9 22,341	192,595	
Payments into time deposits	(60	(20,600)	(177,586	
Other	39		5,134	
Net cash provided by (used in) investing activities	10,11	0 (19,427)	(167,476	
Cash flows from financing activities				
Dividends paid to owners of the parent company	(18,22		(166,789	
Dividends paid to non-controlling interests		(3)	(30	
Repayments of long-term borrowings	(27		(2,499	
Net increase (decrease) in short-term borrowings		2 (37)	(319	
Purchases of treasury shares		(22)	(187	
Net cash provided by (used in) financing activities	(18,44	(19 <b>,699</b> )	(169,823	
Net increase (decrease) in cash and cash equivalents	(3,07	(1,968)	(16,966	
Cash and cash equivalents at the beginning of the period	104,22	2 110,485	952,455	
Effects of exchange rate changes on cash and cash equivalents	(4	(14)	(121	
Cash and cash equivalents at the end of the period	¥ 101,10	5 ¥ 108,503	\$ 935,368	

Nine months ended December 31, 2016

## **Sales of Major Products**

**Supplemental Data** 

For information purpose only

					H	undreds of	Mill	ions of y	en		
				Quarter Decemb						ending 31, 201	7
		Re	esults	Inci	rease	/Decrease	I	orecast		Increase/	Decrease
Opdivo	Agent for treatment of unresectable melanoma, unresectable, advanced or recurrent non-small cell lung cancer, unresectable or metastatic renal cell carcinoma, and relapsed or refractory classical Hodgkin lymphoma	¥	826	¥ +	769	+1,360.4 %	¥	1,050	¥	+838	+396.4 %
Glactiv	Agent for type II diabetes		227	Δ	26	Δ 10.4 %		295		Δ 19	Δ 6.1 %
Opalmon	Circulatory system agent		134	Δ	48	Δ 26.3 %		175		Δ 52	Δ 22.9 %
Recalbon	Agent for osteoporosis		87		Δ1	Δ 1.3 %		115		+2	+1.8 %
Orencia SC	Agent for rheumatoid arthritis		87		+27	+44.3 %		115		+35	+43.5 %
Emend/Proemend	Agent for Chemotherapy-induced nausea and vomiting		76		+3	+3.9 %		100		+5	+5.6 %
Rivastach	Agent for Alzheimer's disease		68		+7	+12.1 %		90		+12	+14.9 %
Forxiga	Agent for type II diabetes		58		+28	+92.2 %		85		+42	+98.9 %
Onon	Agent for bronchial asthma and allergic rhinitis		48	Δ	17	Δ 26.2 %		65		Δ 25	Δ 27.4 %
Onoact	Agent for tachyarrhythmia during and post operation		44		Δ1	Δ 3.2 %		65		+8	+13.9 %
Staybla	Agent for overactive bladder (pollakiuria and urinary incontinence)		37		Δ3	Δ 8.6 %		50		Δ2	Δ 3.2 %
Onon dry syrup	Agent for pediatric bronchial asthma and allergic rhinitis		31	Δ	12	Δ 27.3 %		45		Δ 11	Δ 19.7 %
Foipan	Agent for chronic pancreatitis and postoperative reflux esophagitis		30	Δ	11	Δ 27.5 %		40		Δ 12	Δ 22.4 %
Kinedak	Agent for diabetic peripheral neuropathy		23	Δ	10	Δ 30.9 %		30		Δ 11	Δ 26.6 %
Kyprolis	Agent for relapsed or refractory multiple myeloma		11	Launch	ed in	August 2016		20		+20	-

Nine months ended December 31, 2016

#### **Breakdown of Revenue**

**Supplemental Data** 

For information purpose only

(Hundreds of Millions of yen)

	3rd Quarter	3rd Quarter
	9 months	9 months
	ended December 31,	ended December 31,
	2015	2016
Revenue of Goods and Products	1,041	1,671
Royalty and Other Revenue	83	218
Total	1,124	1,888

Note: In "Royalty and Other Revenue", royalty revenue of "Opdivo Intravenous Infusion" is included, which is 48 hundreds of millions of yen for 3rd quarter 9 months ended December 31, 2015 and 189 hundreds of millions of yen for 3rd quarter 9 months ended December 31, 2016.

#### Information about Revenue by Geographic Area

**Supplemental Data** 

For information purpose only

(Hundreds of Millions of yen)

	3rd Quarter 9 months ended December 31, 2015	3rd Quarter 9 months ended December 31, 2016
Japan	1,042	1,671
Americas	63	194
Asia	17	21
Europe	2	3
Total	1,124	1,888

Note: Revenue by geographic area is attributable to countries or regions based on the customer location.

Nine months ended December 31, 2016

#### **Consolidated Statement of Income**

### excluding the Impact of Retirement Benefits Plan Revision

Ono Pharmaceutical Co., Ltd. and Consolidated Subsidiaries

**Supplemental Data** 

For information purpose only

The Retirement Benefits Plan Revision was agreed between labor and management in April 2015. For previous 1st quarter ended June 30, 2015, the company computed actuarial calculations based on the revised retirement benefits plan and past service costs of retirement benefits obligations. As a result, for previous 1st quarter ended June 30, 2015, cost of sales decreased by 4 hundreds of millions of yen, research and development costs decreased by 22 hundreds of millions of yen, and selling, general, and administrative expenses decreased by 37 hundreds of millions of yen respectively, due to the effect of past service costs by the retirement benefits plan revision. Operating profit increased by 63 hundreds of millions of yen. The consolidated statement of income for the quarter ended December 31, 2015 excluding this impact and the quarter ended December 31, 2016 are as follows.

					(Hui	(Hundreds of Millions of yen)			
	3rd Quarter 9 months			r			3rd Quarte	Brd Quarter	
					9 months				
		ended	d Decemb	er 31,			ended Decembe	er 31,	
			2015				2016		
		Actual	the l Retiren	l excluding impact of nent Benefits Revision		Actual	Changes	Changes excluding the Impact of Retirement Benefits Plan Revision in previous year	
Revenue	¥	1,124	¥	1,124	¥	1,888	68.0 %	68.0 %	
Cost of sales		(300)		(304)		(503)	67.7 %	65.3 %	
Gross profit		824		820		1,386	68.1 %	69.0 %	
Selling, general,									
and administrative expenses		(304)		(340)		(452)	48.6 %	32.7 %	
Research and development costs		(294)		(316)		(390)	32.6 %	23.3 %	
Operating profit		223		160		533	138.8 %	232.6 %	
Profit before tax		251		188		562	123.8 %	198.7 %	
Income tax expense		(58)		(44)		(136)	133.5 %	210.7 %	
Profit for the period	_	193		144		426	120.8 %	195.0 %	
Profit for the period attributable to:									
Owners of the parent company		192		143		425	121.4 %	196.3 %	

Nine months ended December 31, 2016

#### **Supplemental Information**

## **Status of Development Pipeline**

as of January 31, 2017

#### I. Main Pipelines Other than ONO-4538

#### i. Developments Status in Japan

#### Approved

## PARSABIV<sup>®</sup> Intravenous Injection for Dialysis (ONO-5163) / AMG-416 / Etelcalcetide Hydrochloride \*1

- **New chemical entities**
- Secondary hyperparathyroidism [Calcium sensing receptor agonist]
- Injection
- In-license (Amgen Inc.)

#### Filed

#### KYPROLIS® Intravenous Injection (ONO-7057) / Carfilzomib

- **Additional Dosage and Administration**
- Multiple Myeloma [Proteasome inhibitor]
- Injection
- In-license (Onyx Pharmaceuticals, Inc.)

#### Ongoing clinical studies

### Orencia® IV (ONO-4164) / BMS-188667

- **Additional indication**
- Juvenile Rheumatoid Arthritis [T-cell activation inhibitor] / Phase III
- Injection
- In-license (Bristol-Myers Squibb Company)

#### Orencia® IV (ONO-4164) / BMS-188667

- Additional indication
- Lupus nephritis[T-cell activation inhibitor] / Phase III
- Injection
- In-license (Bristol-Myers Squibb Company)

#### Orencia® SC (ONO-4164) / BMS-188667

- **Additional indication**
- Rheumatoid Arthritis [T-cell activation inhibitor] / Phase III
- Injection
- In-license (Bristol-Myers Squibb Company)

#### Orencia<sup>®</sup> SC (ONO-4164) / BMS-188667 \*2

- Additional indication
- Primary sjögren syndrome [T-cell activation inhibitor
- / Phase III
- Injection
- In-license (Bristol-Myers Squibb Company)

#### KYPROLIS<sup>®</sup> Intravenous Injection (ONO-7057) / Carfilzomib

- **Additional Dosage and Administration**
- Multiple Myeloma [Proteasome inhibitor] / Phase III
- In-license (Onyx Pharmaceuticals, Inc.)

#### ONO-1162 / Ivabradine

- New chemical entities
- Chronic heart failure [If channel inhibitor] / Phase III
- Tablet
- In-license (Les Laboratoires Servier)

#### ONO-7643 / Anamorelin

- New chemical entities
- Cancer anorexia/cachexia [Ghrelin mimetic] / Phase III
- Tablet
- In-license (Helsinn Healthcare, S.A.)

#### Ongoing clinical studies

- Onoact® Intravenous Infusion 50 mg / 150 mg (ONO-
  - Additional indication for pediatric use
  - Tachyarrhythmia in low cardiac function [Short acting beta 1 blocker] / Phase II/III
  - Injection
  - In-house

#### Onoact® Intravenous Infusion 50 mg / 150 mg (ONO-1101)

- **Additional indication**
- Ventricular arrhythmia [Short acting beta 1 blocker] / Phase II/III
- Injection
- · In-house

#### ONO-2370 / Opicapone

- New chemical entities
- Parkinson's disease [Long acting COMT inhibitor] / Phase II
- Tablet
- In-license (Bial)

#### ONO-5371 / Metyrosine

- New chemical entities
- Pheochromocytoma [Tyrosine hydroxylase inhibitor] / Phase I/II
- In-license (Valeant Pharmaceuticals North America LLC.)

#### ONO-7268 MX1

- New chemical entities
- Hepatocellular carcinoma [Therapeutic cancer peptide vaccines] / Phase I
- Injection
- · In-license (OncoTherapy Science, Inc.)

#### ONO-7268 MX2

- New chemical entities
- Hepatocellular carcinoma [Therapeutic cancer peptide vaccines] / Phase I
- Injection
- In-license (OncoTherapy Science, Inc.)

#### ONO-2160 / CD

- New chemical entities
- Parkinson's disease [levodopa pro-drug] / Phase I
- **Tablet**
- In-house

#### ONO-4059

- New chemical entities
- B cell lymphoma [Bruton's tyrosine kinase (Btk) inhibitor] / Phase I
- Capsule
- · In-house

#### ONO-8577

- New chemical entities
- Overactive bladder [bladder smooth muscle relaxant] / Phase I
- Tablet
- · In-house

## Ongoing clinical studies ONO-4578 \*3

- New chemical entities
- Solid tumor [PG receptor (EP4) antagonist] / Phase I
- Tablet
- In-house

Changes from Second Quarter Flash Report for the Fiscal Year ending March 2017 announced on November 7, 2016
\*1: A manufacturing and marketing approval for PARSABIV® intravenous injection for dialysis (calcium sensing receptor agonist) was obtained in Japan for the treatment of secondary hyperparathyroidism in patients on hemodialysis \*2: Phase III of Orencia® SC (ONO-4164) / BMS-188667 (T-cell activation inhibitor) was initiated for primary sjögren syndrome. \*3: Phase I of ONO-4578 (PG receptor (EP4) antagonist) was initiated for solid tumor.

Note: "In-house" compounds include a compound generated from collaborative research. In the case of clinical development of the anticancer compound in the same indication, the most advanced clinical phase is described.

#### ii . Developments Status outside Japan

## Ongoing clinical studies ONO-4474

- New chemical entities
- Osteoarthritis [Tropomyosin receptor kinase (Trk) inhibitor] / Phase II
- Capsule
- Europe
- In-house

#### ONO-4059 \*4

- New chemical entities
- B cell lymphoma [Bruton's tyrosine kinase (Btk) inhibitor] / Phase II
- Capsule
- USA & Europe
- Out-license (Gilead Sciences, Inc.)

#### ONO-8055

- New chemical entities
- Underactive bladder [PG receptor (EP2 / EP3) agonist] / Phase I
- Tablet
- Europe
- In-house

#### ONO-7475 \*5

- New chemical entities
- Acute leukemia [Axl / Mer inhibitor] / Phase I
- Tablet
- **USA**
- In-house

#### ONO-7579 \*6

- New chemical entities
- Solid tumor [Tropomyosin receptor kinase (Trk) inhibitor] / Phase I
- Tablet
- USA & Europe
- In-house

Changes from Second Quarter Flash Report for the Fiscal Year ending March 2017 announced on November 7, 2016

\*4: Phase II of ONO-4059 (Bruton's tyrosine kinase (Btk) inhibitor) was initiated for B cell lymphoma. \*5: Phase I of ONO-7475 (Axl / Mer inhibitor) was initiated for acute leukemia.

\*6: Phase I of ONO-7579 (Tropomyosin receptor kinase (Trk) inhibitor) was initiated for solid tumor.

\* Development of ONO-2952 (TSPO antagonist) for the treatment of irritable bowel syndrome was discontinued due to the strategic reason considering differentiation among existing product and competing product under development and others comprehensively.

\* Development of ONO-4232 (PG receptor (EP4) agonist) for the treatment of acute heart failure was discontinued due to the strategic reason considering future development period, development cost, and others comprehensively.

"In-house" compounds include a compound generated from collaborative research. In the case of clinical development of the anticancer compound in the same indication, the most advanced clinical phase is described.

#### II. Main Pipelines ONO-4538 etc

#### i . Developments Status in Japan, South Korea, and Taiwan

**Approved** 

<b>Product Name / Development Code</b>	<b>Development Indications</b>	Area	In-house / In-license
Opdivo <sup>®</sup> Intravenous Infusion (ONO-4538) / BMS-936558	Hodgkin's lymphoma *1	Japan	In-house (Co-development with Bristol- Myers Squibb Company)

Changes from Second Quarter Flash Report for the Fiscal Year ending March 2017 announced on November 7, 2016 \*1: Approval for the partial change in approved items of the manufacturing and marketing approval for Opdivo® Intravenous Infusion was obtained in Japan for the treatment of relapsed or refractory classical Hodgkin lymphoma.

Note: "In-house" compounds include a compound generated from collaborative research.

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

#### **Filed**

Product Name / Development Code	Development Indications	Area	In-house / In-license
Opdivo <sup>®</sup> Intravenous Infusion (ONO-4538) /BMS-936558	Non-small cell lung cancer (Non- Squamous)	Taiwan	In-house (Co-development with Bristol- Myers Squibb Company)
	Renal cell carcinoma	Taiwan	In-house (Co-development with Bristol- Myers Squibb Company)
	Head and neck cancer	Japan Taiwan	In-house (Co-development with Bristol- Myers Squibb Company)
	Gastric cancer *2	Japan	In-house (Co-development with Bristol- Myers Squibb Company)

Changes from Second Quarter Flash Report for the Fiscal Year ending March 2017 announced on November 7, 2016 \*2: A supplemental application for Opdivo® Intravenous Infusion was filed in Japan for the treatment of unresectable advanced or recurrent gastric cancer for a partial change in the approved items of the manufacturing and marketing approval.

Note: "In-house" compounds include a compound generated from collaborative research.

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

#### Ongoing clinical studies

Product Name / Development Code	Development Indications	Clinical Stage	Area	In-house / In-license
				In-house
	Head and neck cancer	Phase III	South Korea	(Co-development with Bristol-
				Myers Squibb Company)
			Couth Vosco	In-house
	Gastric cancer	Phase III	South Korea Taiwan	(Co-development with Bristol-
				Myers Squibb Company)
Opdivo <sup>®</sup> Intravenous Infusion	Esophageal cancer		Japan	In-house
(ONO-4538) /BMS-936558		Phase III	South Korea	(Co-development with Bristol-
(ONO-4536)/BMS-930536			Taiwan	Myers Squibb Company)
	Esophagogastric		Japan	In-house
	junction cancer and	Phase III	South Korea	(Co-development with Bristol-
	Esophageal cancer		Taiwan	Myers Squibb Company)
			Japan	In-house
	Small cell lung cancer	Phase III	South Korea	(Co-development with Bristol-
			Taiwan	Myers Squibb Company)

Ongoing clinical studies

Product Name / Development Code	Development Indications	Clinical Stage	Area	In-house / In-license
	Hepatocellular carcinoma	Phase III	Japan South Korea Taiwan	In-house (Co-development with Bristol- Myers Squibb Company)
	Glioblastoma	Phase III	Japan	In-house (Co-development with Bristol- Myers Squibb Company)
	Urothelial carcinoma	Phase III	Japan South Korea Taiwan	In-house (Co-development with Bristol- Myers Squibb Company)
	Malignant pleural mesothelioma	Phase III	Japan	In-house (Co-development with Bristol- Myers Squibb Company)
Opdivo <sup>®</sup> Intravenous Infusion	Ovarian cancer *3	Phase III	Japan	In-house (Co-development with Bristol- Myers Squibb Company)
(ONO-4538) /BMS-936558	Solid tumor (Cervical cancer, Endometrial cancer, Soft tissue sarcoma)	Phase II	Japan	In-house (Co-development with Bristol- Myers Squibb Company)
	Primary central nervous system lymphoma / Testicular malignant lymphoma	Phase II	Japan	In-house (Co-development with Bristol- Myers Squibb Company)
	Virus- positive/negative solid tumor	Phase I/II	Japan South Korea Taiwan	In-house (Co-development with Bristol- Myers Squibb Company)
	Biliary tract cancer	Phase I	Japan	In-house (Co-development with Bristol- Myers Squibb Company)
Anti-TIGIT Antibody (ONO-4686 / BMS-986207)	Solid tumor *4	Phase I/II	Japan	In-license (Co-development with Bristol- Myers Squibb Company)
Urelumab (ONO-4481 / BMS-663513)	Solid tumor	Phase I	Japan	In-license (Co-development with Bristol- Myers Squibb Company)
Anti-LAG3 Antibody (ONO-4482 / BMS-986016)	Solid tumor	Phase I	Japan	In-license (Co-development with Bristol- Myers Squibb Company)

Changes from Second Quarter Flash Report for the Fiscal Year ending March 2017 announced on November 7, 2016 \*3: Phase III of Opdivo® Intravenous Infusion was initiated for the treatment of ovarian cancer. \*4: Phase I/II of Anti-TIGIT Antibody (ONO-4686 / BMS-986207) was initiated for the treatment of solid tumor.

**Note**: "In-house" compounds include a compound generated from collaborative research. In the case of clinical development of the anticancer compound in the same indication, the most advanced clinical phase is described.

#### ii . Developments Status in Europe and the United States

**Approved** 

<b>Product Name / Development Code</b>	<b>Development Indications</b>	Area	In-house / In-license
		USA	In-house
	Head and neck cancer *5		(Co-development with Bristol-
Opdivo® Intravenous Infusion			Myers Squibb Company)
(ONO-4538) / BMS-936558			In-house
	Hodgkin's lymphoma *6	Europe	(Co-development with Bristol-
			Myers Squibb Company)

Changes from Second Quarter Flash Report for the Fiscal Year ending March 2017 announced on November 7, 2016 \*5: Approval for the partial change in approved items of the manufacturing and marketing approval for Opdivo® Intravenous Infusion was obtained in USA for the treatment of patients with recurrent or metastatic squamous cell carcinoma of the head and

neck (SCCHN) with disease progression on or after platinum-based therapy.

\*6: Approval for the partial change in approved items of the manufacturing and marketing approval for Opdivo® Intravenous Infusion was obtained in Europe for the treatment of adult patients with relapsed or refractory classical Hodgkin lymphoma (cHL) after autologous stem cell transplant (ASCT) and treatment with brentuximab vedotin.

Note: "In-house" compounds include a compound generated from collaborative research.

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

#### **Filed**

<b>Product Name / Development Code</b>	<b>Development Indications</b>	Area	In-house / In-license
Opdivo <sup>®</sup> Intravenous Infusion (ONO-4538) / BMS-936558	Head and neck cancer	Europe	In-house
			(Co-development with Bristol-
			Myers Squibb Company)
	Urothelial carcinoma	USA Europe	In-house
			(Co-development with Bristol-
			Myers Squibb Company)

**Note**: "In-house" compounds include a compound generated from collaborative research.

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

#### Ongoing clinical studies

Product Name / Development Code	Development Indications	Clinical Stage	Area	In-house / In-license
	Glioblastoma	Phase III	USA Europe	In-house (Co-development with Bristol- Myers Squibb Company)
	Small cell lung cancer	Phase III	USA Europe	In-house (Co-development with Bristol- Myers Squibb Company)
Opdivo <sup>®</sup> Intravenous Infusion	Hepatocellular carcinoma	Phase III	USA Europe	In-house (Co-development with Bristol- Myers Squibb Company)
(ONO-4538) / BMS-936558	Esophageal cancer	Phase III	USA Europe	In-house (Co-development with Bristol- Myers Squibb Company)
	Multiple myeloma	Phase III	USA Europe	In-house (Co-development with Bristol- Myers Squibb Company)
Esophagogastric junction cancer and Esophagogastric	junction cancer and Esophageal	Phase III	USA Europe	In-house (Co-development with Bristol- Myers Squibb Company)

### Ongoing clinical studies

Product Name / Development Code	Development Indications	Clinical Stage	Area	In-house / In-license
	Gastric cancer	Phase III	USA Europe	In-house (Co-development with Bristol- Myers Squibb Company)
	Malignant pleural mesothelioma	Phase III	USA Europe	In-house (Co-development with Bristol- Myers Squibb Company)
	Diffuse large B cell lymphoma	Phase II	USA Europe	In-house (Co-development with Bristol- Myers Squibb Company)
	Follicular lymphoma	Phase II	USA Europe	In-house (Co-development with Bristol- Myers Squibb Company)
	Primary central nervous system lymphoma / Testicular malignant lymphoma	Phase II	USA Europe	In-house (Co-development with Bristol- Myers Squibb Company)
	Colon cancer	Phase I/II	USA Europe	In-house (Co-development with Bristol- Myers Squibb Company)
Opdivo <sup>®</sup> Intravenous Infusion (ONO-4538) / BMS-936558	Solid tumors (triple negative breast cancer, gastric cancer, pancreatic cancer, small cell lung cancer, urothelial cancer, ovarian cancer)	Phase I/II	USA Europe	In-house (Co-development with Bristol- Myers Squibb Company)
	Virus-positive/negative solid tumor	Phase I/II	USA Europe	In-house (Co-development with Bristol- Myers Squibb Company)
	Hematologic cancer (T-cell lymphoma, multiple myeloma, chronic leukemia, etc.)	Phase I	USA Europe	In-house (Co-development with Bristol- Myers Squibb Company)
	Chronic myeloid leukemia	Phase I	USA Europe	In-house (Co-development with Bristol- Myers Squibb Company)
	Hepatitis C	Phase I	USA Europe	In-house (Co-development with Bristol- Myers Squibb Company)
	Sepsis *7	Phase I	USA	In-house (Co-development with Bristol- Myers Squibb Company)

Changes from Second Quarter Flash Report for the Fiscal Year ending March 2017 announced on November 7, 2016 \*7: Phase I of Opdivo® Intravenous Infusion was initiated for the treatment of Sepsis.

Note: "In-house" compounds include a compound generated from collaborative research.

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