

**Financial results for the second quarter
of fiscal year 2016**

< Supplement >

October 31, 2016

 **SHIONOGI & CO., LTD.**

Contents

- 1 Financial results and forecast
- 2 Sales of main merchandise and finished goods
- 3 Management index
- 4 Capital investments and depreciation cost
- 5 R&D expenses
- 6 Employees
- 7 Consolidated statement of income
- 8 Consolidated balance sheets
- 9 Quarterly trend for FY2015 and FY2016
- 10 Group Companies
- 11 Pipeline (as of October 2016)

1. Financial results and forecast

(Billions of yen)

	FY2016 1H actual	FY2016 2H forecast	FY2016 forecast	FY2015 1H actual	FY2015 2H actual	FY2015 actual	Y on Y change		
							1H	2H	full-year
Net Sales	155.1	178.9	334.0	138.3	171.7	310.0	16.8	7.2	24.0
<i>change %</i>	<i>12.2</i>	<i>4.2</i>	<i>7.8</i>	<i>6.5</i>	<i>19.1</i>	<i>13.1</i>			
Operating Income	44.3	53.2	97.5	33.9	57.5	91.4	10.4	(4.3)	6.1
<i>change %</i>	<i>30.5</i>	<i>(7.4)</i>	<i>6.7</i>	<i>49.4</i>	<i>107.9</i>	<i>81.5</i>			
Ordinary Income	42.1	63.4	105.5	34.8	66.1	100.9	7.3	(2.7)	4.6
<i>change %</i>	<i>21.1</i>	<i>(4.1)</i>	<i>4.6</i>	<i>10.7</i>	<i>42.2</i>	<i>29.5</i>			
Profit attributable to owners of parent	31.2	44.8	76.0	21.4	45.3	66.7	9.8	(0.5)	9.3
<i>change %</i>	<i>45.9</i>	<i>(1.1)</i>	<i>14.0</i>	<i>120.2</i>	<i>31.9</i>	<i>51.4</i>			

Note: Change % shows changes from the same period of the previous fiscal year

2. Sales of main merchandise and finished goods

(Billions of yen)

	FY2016 1H	FY2016 2H	FY2016	FY2015 1H	FY2015 2H	FY2015	Y on Y change		
	actual	forecast	forecast	actual	actual	actual	1H	2H	full-year
Prescription drugs	79.2	81.0	160.2	78.4	83.7	162.1	0.8	(2.7)	(1.9)
<i>change %</i>	0.9	(3.2)	(1.2)	1.9	(0.9)	0.4			
CRESTOR	21.9	21.0	42.9	20.4	23.3	43.7	1.5	(2.3)	(0.8)
CYMBALTA	8.9	10.4	19.3	7.2	8.0	15.2	1.7	2.4	4.1
IRBETAN Franchise	7.8	8.0	15.8	8.3	7.4	15.7	(0.5)	0.6	0.1
Total of 3 key products	38.6	39.3	77.9	35.9	38.7	74.6	2.7	0.6	3.3
OXYCONTIN Franchise	5.0	4.9	9.9	5.2	4.8	10.0	(0.2)	0.1	(0.1)
FINIBAX	1.8	1.8	3.6	2.1	1.7	3.8	(0.3)	0.1	(0.2)
PIRESPA	3.0	3.0	6.0	2.8	3.2	6.0	0.2	(0.2)	0.0
RAPIACTA	0.1	2.2	2.3	(0.0)	2.0	2.0	0.1	0.2	0.3
Total of 7 strategic products	48.5	51.3	99.8	45.9	50.6	96.5	2.6	0.7	3.3
FLOMOX	4.0	5.0	9.0	5.8	5.5	11.3	(1.8)	(0.5)	(2.3)
RINDERON	3.8	3.6	7.4	4.3	3.7	8.0	(0.5)	(0.1)	(0.6)
CLARITIN	1.4	2.3	3.7	1.6	2.8	4.4	(0.2)	(0.5)	(0.7)
FLUMARIN	1.8	1.9	3.7	2.4	1.8	4.2	(0.6)	0.1	(0.5)
Export/Overseas subsidiaries	15.3	9.5	24.8	14.7	15.0	29.7	0.6	(5.5)	(4.9)
<i>change %</i>	3.7	(36.4)	(16.5)	6.7	0.8	3.6			
Shionogi Inc.	9.1	4.5	13.6	8.4	8.2	16.6	0.7	(3.7)	(3.0)
Osphena	2.0	2.8	4.8	2.6	2.2	4.8	(0.6)	0.6	(0.0)
C&O	3.1	2.7	5.8	3.3	3.4	6.7	(0.2)	(0.7)	(0.9)
Contract manufacturing	5.4	7.0	12.4	3.7	4.7	8.4	1.7	2.3	4.0
<i>change %</i>	46.4	46.9	46.6	(46.1)	(45.8)	(45.9)			
OTC and quasi-drugs	3.4	3.6	7.0	2.6	2.3	4.9	0.8	1.3	2.1
<i>change %</i>	33.3	56.6	44.3	4.9	8.8	6.7			
Royalty income	50.6	61.7	112.3	37.5	64.3	101.8	13.1	(2.6)	10.5
<i>change %</i>	35.2	(4.2)	10.3	32.4	98.8	67.8			
CRESTOR	17.3	15.5	32.8	23.7	23.9	47.6	(6.4)	(8.4)	(14.8)
HIV Franchise	28.6	41.6	70.2	11.4	29.1	40.5	17.2	12.5	29.7
Others	1.2	16.0	17.2	1.4	1.6	3.0	(0.2)	14.4	14.2
<i>change %</i>	(14.4)	908.0	474.9	(5.9)	1.3	(2.2)			
Total	155.1	178.9	334.0	138.3	171.7	310.0	16.8	7.2	24.0
<i>change %</i>	12.2	4.2	7.8	6.5	19.1	13.1			

Note: Change % shows changes from the same period of the previous fiscal year

Sales of each merchandise and finished goods are shown on non-consolidated basis

* Strategic products were changed from eight to seven because Differin sales right was returned in July 2016.

3. Management index

(Management index trend)

		FY2014	FY2015	FY2015 1H	FY2016 1H
Ratio of operating income to net sales	%	18.4	29.5	24.5	28.6
Ratio of ordinary income to net sales	%	28.4	32.5	25.2	27.2
Ratio of net income to net sales	%	16.1	21.5	15.5	20.1
Total asset turnover		0.46	0.50	0.23	0.25
Equity ratio	%	78.7	79.6	80.5	81.4
Return on asset (ROA)	%	13.2	16.2	5.7	6.7
Return on equity (ROE)	%	9.4	13.6	4.4	6.1
Dividend payout ratio	%	39.2	30.3	-	-
Dividends on Equity (DOE)	%	3.7	4.1	-	-
Earnings per share	yen	132.67	204.83	65.69	95.82
Earnings per share (diluted)	yen	132.04	201.70	64.68	94.35

4. Capital investments and depreciation cost

(Billions of yen)

	FY2016 1H actual	FY2016 2H forecast	FY2016 forecast	FY2015 1H actual	FY2015 2H actual	FY2015 actual	Y on Y change		
							1H	2H	full-year
Investment in equipments	5.0	5.5	10.5	4.8	5.1	9.9	0.2	0.4	0.6
Depreciation cost	6.4	7.4	13.8	6.0	6.6	12.6	0.4	0.8	1.2
Amortization of goodwill	1.5	1.7	3.2	1.7	1.6	3.3	(0.2)	0.1	(0.1)

5. R&D expenses

(Billions of yen)

	FY2016 1H actual	FY2016 2H forecast	FY2016 forecast	FY2015 1H actual	FY2015 2H actual	FY2015 actual	Y on Y change		
							1H	2H	full-year
R&D expenses	26.7	33.8	60.5	21.8	28.0	49.8	4.9	5.8	10.7
<i>change %</i>	22.1	21.1	21.5	(5.9)	8.9	1.9			
% to net sales	17.2	18.9	18.1	15.8	16.3	16.1			

Note: Change % shows changes from the same period of the previous fiscal year

6. Employees

	End of FY2014 actual	End of 2015 1H actual	End of FY2015 actual	End of 2016 1H actual	End of FY2016 forecast	Y on Y change		
						1H	2H	full-year
Employees	6,059	6,027	5,896	5,806	5,778	(90)	(28)	(118)

7. Consolidated statement of income

	FY2015 1H actual	FY2016 1H actual	(Millions of yen) Y on Y change
Net sales	138,279	155,101	16,822
Cost of sales	36,451	38,707	2,256
Gross profit	101,828	116,394	14,566
Selling, general and administrative expenses	67,894	72,106	4,212
Operating income	33,933	44,288	10,355
Non-operating income	1,803	1,326	(477)
Interest income	338	377	39
Dividends income	718	729	11
Other	746	219	(527)
Non-operating expenses	945	3,467	2,522
Interest expenses	107	105	(2)
Contribution	407	418	11
Foreign exchange losses	-	2,236	2,236
Other	431	706	275
Ordinary income	34,791	42,147	7,356
Extraordinary income	1,757	-	(1,757)
Gain on sales of investment securities	1,757	-	(1,757)
Extraordinary loss	1,900	-	(1,900)
Settlement package	1,900	-	(1,900)
Income before income taxes	34,648	42,147	7,499
Income taxes-current	10,728	11,194	466
Income taxes-deferred	2,538	(152)	(2,690)
Profit	21,381	31,105	9,724
Loss attributable to non-controlling interests	(4)	(93)	(89)
Profit attributable to owners of parent	21,386	31,198	9,812

Increasing / (decreasing) in
Prescription drugs: 0.7 billion yen
Royalty income.: 13.2 billion yen
Contract manufacturing: 1.7 billion yen

FY2015 1H
Paid to Eli Lilly Japan K.K.

8-1. Consolidated balance sheets (Assets)

	As of Mar. 31 2016	As of Sep. 30 2016	Y on Y change	
<i>(Millions of yen)</i>				
(Assets)				
Current assets				
Cash and deposits	80,230	84,660	4,430	
Notes and accounts receivable-trade	65,207	62,563	(2,644)	
Short-term investment securities	97,200	110,200	13,000	Increased by Marketable securities 12.5 billion yen
Merchandise and finished goods	21,263	23,937	2,674	
Work in process	8,839	7,665	(1,174)	
Raw materials and supplies	12,080	12,092	12	
Other	30,834	23,521	(7,313)	Shionogi Limited Decreased in accounts receivable - other (Dividend from ViiV), etc.
Allowance for doubtful accounts	(45)	(39)	6	
Total current assets	315,611	324,602	8,991	
Non-current assets				
Property, plant and equipment	78,673	78,509	(164)	
Intangible assets				
Goodwill	41,208	35,119	(6,089)	Increased / (decreased) by: Amortization: (1.5) billion yen Exchange rate fluctuations: (4.6) billion yen
Other	30,417	27,749	(2,668)	
Total Intangible assets	71,626	62,868	(8,758)	Increased / (decreased) by: Sales rights Amortization: (1.9) billion yen Exchange rate fluctuations: (1.7) billion yen
Investments and other assets				
Investment securities	146,451	129,070	(17,381)	
Other	27,319	27,497	178	
Allowance for doubtful accounts	(44)	(42)	2	Increased / (decreased) by: Drop in stock market : (5.6) billion yen Exchange rate fluctuatuin: (11.8) billion yen
Total investments and other assets	173,727	156,525	(17,202)	
Total non-current assets	324,027	297,903	(26,124)	
Total assets	639,638	622,505	(17,133)	

8-2. Consolidated balance sheets (Liabilities/Net Assets)

	As of Mar. 31 2016	As of Sep. 30 2016	(Millions of yen) Y on Y change
(Liabilities)			
Current liabilities			
Notes and accounts payable-trade	11,050	13,861	2,811
Income taxes payable	20,294	12,257	(8,037)
Provision for bonuses	10,118	7,808	(2,310)
Provision for sales returns	2,414	1,817	(597)
Other provision	88	-	(88)
Other	28,016	23,731	(4,285)
Total Current liabilities	71,982	59,476	(12,506)
Non-current liabilities			
Bonds payable	20,074	20,064	(10)
Long-term loans payable	10,000	10,000	-
Net defined benefit liability	9,447	9,328	(119)
Other	14,256	13,107	(1,149)
Total non-current liabilities	53,778	52,500	(1,278)
Total liabilities	125,761	111,977	(13,784)
(Net Assets)			
Shareholders' equity			
Capital stock	21,279	21,279	-
Capital surplus	20,227	20,227	-
Retained earnings	503,946	524,070	20,124
Treasury stock	(49,759)	(49,734)	25
Total shareholders' equity	495,693	515,843	20,150
Accumulated other comprehensive income			
Valuation difference on available-for-sale securities	26,748	22,334	(4,414)
Deferred gains or losses on hedges	-	2,311	2,311
Foreign currency translation adjustment	(7,333)	(29,427)	(22,094)
Remeasurements of defined benefit plans	(5,669)	(4,338)	1,331
Total accumulated other comprehensive income	13,745	(9,119)	(22,864)
Subscription rights to shares	352	416	64
Non-controlling interests	4,085	3,387	(698)
Total net assets	513,877	510,528	(3,349)
Total liabilities and net assets	639,638	622,505	(17,133)

Decreased due to accounts payable- other, etc.

Due to the strong yen

9-1. Quarterly trend for FY2015 and FY2016 (Sales of main merchandise and finished goods)

Fiscal year ended March 31, 2016

(Billions of yen)

FY2015	FY2015 1Q actual	Y on Y change %	FY2015 2Q actual	Y on Y change %	FY2015 3Q actual	Y on Y change %	FY2015 4Q actual	Y on Y change %
Prescription drugs	39.7	2.6	38.7	1.2	45.0	2.7	38.7	(4.7)
CRESTOR	10.6	(1.8)	9.8	(4.4)	13.2	18.8	10.1	(11.5)
CYMBALTA	3.5	36.2	3.7	27.5	4.3	44.0	3.7	49.6
IRBETAN Franchise	4.1	9.4	4.2	11.6	3.7	(4.0)	3.6	(2.2)
Total of 3 key products	18.2	6.3	17.7	4.7	21.2	18.1	17.5	(0.9)
OXYCONTIN Franchise	2.6	(4.2)	2.6	(0.5)	2.8	(2.7)	2.0	(1.4)
FINIBAX	1.0	11.7	1.1	6.6	0.9	(17.5)	0.8	(18.1)
DIFFERIN	0.9	(2.6)	0.7	(24.0)	0.7	(33.3)	0.7	(32.0)
PIRESPA	1.6	24.1	1.2	(11.2)	1.9	35.1	1.4	(0.4)
RAPIACTA	(0.0)	-	(0.0)	-	0.5	(58.3)	1.6	4.3
Total of 8 strategic products	24.2	5.7	23.3	2.1	28.0	9.7	23.9	(2.6)
FLOMOX	2.8	(9.4)	2.9	9.9	3.1	(17.3)	2.4	(19.3)
RINDERON	2.2	4.3	2.1	0.5	2.1	1.4	1.7	(4.2)
CLARITIN	0.8	(11.1)	0.8	15.9	1.0	13.3	1.7	(2.2)
FLUMARIN	1.1	4.3	1.2	(5.3)	1.0	(14.1)	0.8	(15.9)
Export/Overseas subsidiaries	7.2	19.3	7.6	(2.9)	8.0	6.5	7.0	(5.0)
Shionogi Inc.	4.4	53.8	4.0	(11.6)	4.8	5.1	3.4	(13.8)
Osphena	1.3	66.4	1.3	41.8	1.2	(16.8)	1.0	(27.7)
C&O	1.6	(11.9)	1.8	18.2	1.3	(24.1)	2.0	7.0
Contract manufacturing	1.5	(57.6)	2.2	(33.7)	1.6	(45.4)	3.1	(46.0)
OTC and quasi-drugs	1.2	12.4	1.3	(1.4)	1.2	5.2	1.1	13.3
Royalty income	13.5	6.9	23.9	53.0	30.9	120.0	33.5	82.6
CRESTOR	11.2	(4.5)	12.4	(1.6)	12.0	12.0	11.9	(3.0)
HIV Franchise	1.4	-	10.0	-	13.7	945.2	15.5	241.5
Others	0.7	(1.1)	0.7	(10.5)	0.9	1.9	0.7	0.7
Total	63.9	1.8	74.4	10.9	87.6	24.4	84.0	14.0

Fiscal year ending March 31, 2017

FY2016	FY2016 1Q actual	Y on Y change %	FY2016 2Q actual	Y on Y change %
Prescription drugs	39.9	0.5	39.2	1.4
CRESTOR	11.4	7.5	10.5	7.6
CYMBALTA	4.4	27.0	4.5	20.7
IRBETAN Franchise	4.2	3.1	3.6	(15.4)
Total of 3 key products	20.0	10.2	18.6	4.9
OXYCONTIN Franchise	2.6	(0.1)	2.4	(5.0)
FINIBAX	0.9	(5.6)	0.8	(26.4)
PIRESPA	1.6	3.9	1.4	15.7
RAPIACTA	0.1	-	(0.0)	-
Total of 7 strategic products	25.3	8.5	23.2	2.7
FLOMOX	2.2	(22.9)	1.8	(37.2)
RINDERON	2.0	(8.3)	1.9	(12.2)
CLARITIN	0.8	5.9	0.6	(25.8)
FLUMARIN	0.9	(16.3)	0.9	(30.4)
Export/Overseas subsidiaries	6.5	(8.1)	8.7	14.7
Shionogi Inc.	3.6	(17.4)	5.5	35.5
Osphena	1.2	(5.4)	0.8	(38.6)
C&O	1.5	(4.8)	1.6	(9.8)
Contract manufacturing	2.6	71.9	2.8	28.7
OTC and quasi-drugs	1.7	37.0	1.7	29.7
Royalty income	21.8	60.8	28.9	20.7
CRESTOR	10.5	(6.2)	6.8	(45.4)
HIV Franchise	10.2	637.5	18.4	84.6
Others	0.6	(15.7)	0.6	(13.0)
Total	73.2	14.6	81.9	10.1

Note: Sales of each product are shown on non-consolidated basis

* Strategic products were changed from eight to seven because Differin sales right was returned in July 2016.

9-2. Quarterly trend for FY2015 and FY2016 (Consolidated statements of income)

Fiscal year ended March 31, 2016

(Billions of yen)

FY2015	FY2015 1Q actual	Y on Y change %	FY2015 2Q actual	Y on Y change %	FY2015 3Q actual	Y on Y change %	FY2015 4Q actual	Y on Y change %
Net sales	63.9	1.8	74.4	10.9	87.6	24.4	84.0	14.0
Cost of sales	28.3 18.0	(9.0)	24.7 18.4	0.5	21.4 18.7	(9.2)	23.3 19.6	(16.4)
Gross profit	45.8	6.8	56.0	14.8	68.9	38.4	64.5	28.2
SG & A expenses	52.1 33.3	(4.5)	46.5 34.6	1.4	42.7 37.4	2.6	45.8 38.5	7.0
Selling & general expenses	22.7	(1.9)	23.4	3.2	23.9	(0.5)	24.0	5.7
R & D expenses	10.6	(9.5)	11.2	(2.1)	13.5	8.6	14.5	9.1
Operating income	19.6 12.5	55.7	28.8 21.4	45.9	36.0 31.5	136.2	30.9 25.9	81.5
Non-operating income & expenses	2.1		(1.2)		0.2		8.4	
Ordinary income	22.9 14.6	7.1	27.1 20.2	13.5	36.2 31.8	56.4	40.8 34.3	31.2
Extraordinary income & loss	-		(0.1)		(1.1)		(2.1)	
Income before income taxes	14.6		20.0		30.6		32.2	
Income taxes and profit attributable to non-controlling interests	4.9		8.3		10.3		7.2	
Profit attributable to owners of parent	15.1 9.7	(6.4)	15.8 11.7	-	23.1 20.3	22.5	29.8 25.0	40.6

Fiscal year ending March 31, 2017

FY2016	FY2016 1Q actual	Y on Y change %	FY2016 2Q actual	Y on Y change %
Net sales	73.2	14.6	81.9	10.1
Cost of sales	27.1 19.8	9.8	23.1 18.9	2.7
Gross profit	53.3	16.4	63.0	12.6
SG & A expenses	48.3 35.3	6.1	44.9 36.8	6.3
Selling & general expenses	22.7	0.2	22.8	(2.8)
R & D expenses	12.6	18.7	14.0	25.3
Operating income	24.7 18.0	43.9	32.0 26.3	22.7
Non-operating income & expenses	(1.4)		(0.8)	
Ordinary income	22.8 16.7	14.3	31.1 25.5	26.1
Extraordinary income & loss	-		-	
Income before income taxes	16.7		25.5	
Income taxes and profit attributable to non-controlling interests	4.1		6.8	
Profit attributable to owners of parent	17.1 12.5	29.8	22.8 18.7	59.1

10. Group companies

< Consolidated affiliated companies >

No	Company name	Location	Common stock	Business status	Establish	Closing date	Ownership (%)
1	Shionogi Pharma Chemicals Co., Ltd.	Tokushima, Japan	JPY 200 million	Mfg. of pharmaceutical raw materials	August 24, 1976	March 31	100
2	Shionogi Analysis Center Co., Ltd.	Osaka, Japan	JPY 200 million	Contract testing and analysis on medicine	December 21, 2007	March 31	100
3	Shionogi General Service Co., Ltd.	Osaka, Japan	JPY 10 million	Real estate rental, Insurance agency and contract general services	November 2, 1992	March 31	100
4	Shionogi Healthcare Co., Ltd.	Osaka, Japan	JPY 10 million	Mfg., and sale of OTC and quasi-drugs	January 15, 2016	March 31	100
5	Shionogi Techno Advance Research Co., Ltd.	Osaka, Japan	JPY 9 million	Contract support services for experimental research	September 8, 2010	March 31	100
6	Aburahi AgroResearch Co., Ltd.	Shiga, Japan	JPY 10 million	Contract Laboratories for agro chemicals	February 26, 2004	March 31	* 100
7	Saishin Igaku Co., Ltd.	Osaka, Japan	JPY 90 million	Publication of medical information	December 21, 1998	March 31	100
8	Shionogi Inc.	New Jersey, U.S.A.	USD 12	Mfg., sale and development of pharmaceuticals	August 25, 2008	March 31	100
9	SG Holding, Inc.	New Jersey, U.S.A.	USD 140	Holding company	September 10, 2001	March 31	* 100
10	Shionogi Ltd.	London, U.K.	GBP 700 thousand	Mfg., sale and development of pharmaceuticals	February 10, 2012	March 31	100
11	C&O Pharmaceutical Technology (Holdings) Limited	Shenzhen, China	HKD 165,840 thousand	Mfg., sale and development of pharmaceuticals	July 28, 2003	December 31	71
12	Taiwan Shionogi & Co., Ltd.	Taipei, Taiwan, R.O.C.	TWD 92 million	Mfg. and sale of pharmaceuticals	December 26, 1963	March 31	100
13	Beijing Shionogi Pharmaceutical Technology Limited	Beijing, China	JPY 30 million	Support services for sales	March 29, 2013	December 31	100
14	Shionogi Singapore Pte. Ltd.	Singapore	SGD 9 million	Development of pharmaceuticals	December 30, 2013	March 31	100

* Incl. Indirect ownership

Note: Twenty-two consolidated affiliated companies are not shown on this table as the scale of their business is very small.

11. Pipeline (as of October 2016)

Areas	Code No. (Generic name) 【Product name】	Category (Administration)	Indication	Stage	Origin	Development
Infectious disease	S-649266 (cefiderocol)	Cephem antibiotic (injection)	Multidrug-resistant Gram-negative bacterial infections	Global: Phase II & III	In-house	In-house
	S-033188	Anti-influenza virus infection (oral)	Influenza virus infection	Global: Phase III US: Phase I	In-house	Shionogi/Roche (Switzerland)
	S-033188	Anti-influenza virus infection (oral)	Influenza virus infection (pediatric)	Japan: Phase III	In-house	Shionogi/Roche (Switzerland)
Pain/CNS	S-877503 (guanfacine hydrochloride)	Alpha-2A-adrenergic receptor agonist (oral)	ADHD (pediatric)	Japan: NDA submission (Jan. 2016)	Shire (Ireland)	Shionogi/Shire
	LY248686 (duloxetine hydrochloride) 【Cymbalta®】	SNRI (serotonin & noradrenaline reuptake inhibitor) (oral)	Pain associated with osteoarthritis	Japan: NDA submission (Feb. 2016)	Eli Lilly (USA)	Shionogi/Eli Lilly Japan K.K.
	S-297995 (naldemedine tosilate)	Peripheral opioid receptor antagonist (oral)	Opioid-induced constipation	US, Japan: NDA submission (Mar. 2016)	In-house	In-house
	S-877489 (lisdexamfetamine)	DA and NE reuptake inhibitor/releaser of DA, NE (oral)	ADHD (pediatric)	Japan: Phase III	Shire (Ireland)	Shionogi/Shire
	S-877503 (guanfacine hydrochloride)	Alpha-2A-adrenergic receptor agonist (oral)	ADHD (adult)	Japan: Phase III	Shire (Ireland)	Shionogi/Shire
	S-120083	Analgesic agent for inflammatory pain (oral)	Inflammatory pain	Japan: Phase I US: Phase I	Shionogi/Purdue Pharma L.P. (USA)	Shionogi/Purdue Pharma L.P.
	S-010887	Analgesic agent for neuropathic pain (oral)	Neuropathic pain	Japan: Phase I	In-house	In-house
	S-117957	Agent for insomnia (oral)	Insomnia	USA: Phase I	Shionogi/Purdue Pharma L.P. (USA)	Shionogi/Purdue Pharma L.P.
	S-600918	Analgesic agent for neuropathic pain (oral)	Neuropathic pain	Japan: Phase I	In-house	In-house
Metabolic disorder	S-237648	Neuropeptide Y Y5 receptor antagonist (oral)	Obesity	Japan: Phase II USA: Phase I	In-house	In-house
	S-707106	Insulin sensitizer (oral)	Type 2 diabetes	USA: Phase IIa	In-house	In-house
Frontier	S-888711 (lusutrombopag) 【Japan: Mulpleta®】	Thrombopoietin (TPO) receptor agonist (oral)	Thrombocytopenia associated with chronic liver disease	Japan: Approval (Sep. 2015) Global: Phase III	In-house	In-house
	Ospemifene 【USA: Osphena®】 【Europe: Senshio®】	Selective estrogen receptor modulator (oral)	Vaginal dryness associated with postmenopausal VVA	USA: Phase III	QuatRx (USA)	In-house
	S-524101 【Actair®】	Sublingual tablet of house-dust mite allergen extracts for immunotherapy (sublingual)	Pediatric patients with perennial allergic rhinitis caused by HDM	Japan: Phase III	Stallergenes (France)	In-house
	S-588410	Cancer peptide vaccine (injection)	Esophageal cancer	Japan: Phase III	OncoTherapy Science, Inc. (Japan)	In-house
	S-555739	Prostaglandin D2 receptor antagonist (oral)	Allergic rhinitis	Japan: Phase III USA: Phase IIa Europe: POM (Proof of Mechanism)	In-house	In-house
	S-588410	Cancer peptide vaccine (injection)	Bladder cancer	Japan, Europe: Phase II	OncoTherapy Science, Inc. (Japan)	In-house
	S-525606	Sublingual tablet of Japanese cedar allergen extracts for immunotherapy (sublingual)	Allergic rhinitis caused by Japanese cedar allergen	Japan: Phase II	Stallergenes (France)	In-house
	S-488210	Cancer peptide vaccine (injection)	Head and neck squamous cell carcinoma	Europe: Phase I/II	OncoTherapy Science, Inc. (Japan)	In-house
S-222611	HER2/EGFR dual inhibitor (oral)	Malignant tumor	Europe: Phase I/II	In-house	In-house	

<Out-Licensing Activity>

Code No. (Generic name)	Category (Administration)	Indication	Stage	Origin	Development
S/GSK1265744 LAP* (cabotegravir)	Integrase inhibitor (injection)	For the treatment and prevention for HIV infection	USA: Phase II	Shionogi-ViiV Healthcare LLC	ViiV Healthcare Ltd. (UK)
S-0373	Non-peptide mimetic of TRH (oral)	Spinocerebellar ataxia	Japan: Phase III	In-house	Kissei Pharmaceutical Co., Ltd. (Japan)
Janssen/Shionogi BACE inhibitor	BACE inhibitor (oral)	Alzheimer's disease	Global: Phase II/III	In-house	Janssen Pharmaceuticals, Inc. (USA)

*: Long acting parenteral formulation

<Drugs to acquire new indication requested by the Ministry of Health, Labour and Welfare>

Generic name 【Product name】	Category (Administration)	Indication	Stage	Origin	Development
Oxycodone hydrochloride hydrate 【OxyContin®】	Natural opium alkaloids (oral)	For the treatment of moderate to severe chronic pain	Japan: Phase III	Napp Pharmaceuticals Limited (UK)	In-house

Since August 2016

Change of phase	S-033188: Influenza virus infection: Japan: Phase II → Global: Phase III
Compound added to the list	S-033188: Influenza virus infection (pediatric): Japan: Phase III