



1st Half of Fiscal 2018 Financial Results

October 30, 2018

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President and CEO



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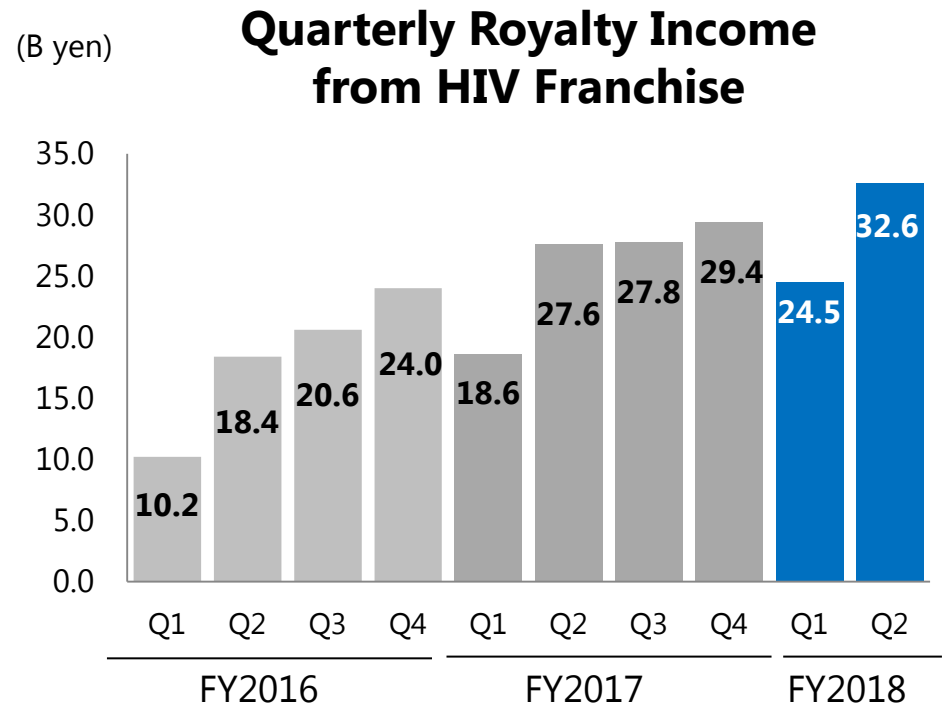
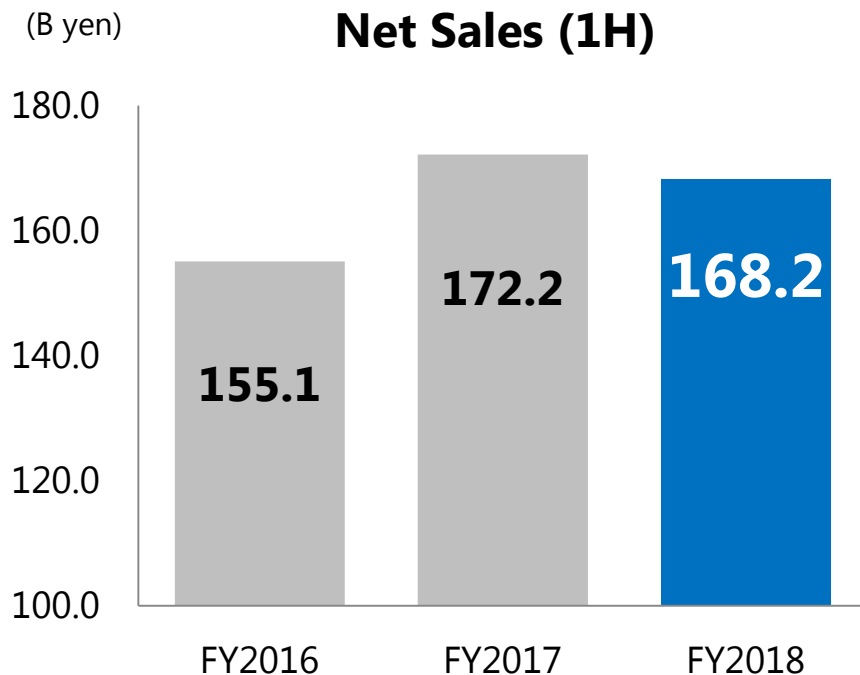
1. 1st Half FY2018 Financial Results

Highlight (1) Top-line Growth vs Forecasts



◆ Net Sales : **168.2 B yen** (-2.3%, +0.1%)
vs. 1H FY2017 vs. 1H Forecasts*

◆ Royalty Income: **57.1 B yen** (+23.5%)
from HIV franchise
vs. 1H FY2017



Highlight (2) All Profit Measures Were Higher than the Levels Achieved in Prior Years



◆ Operating income: **57.3 B yen** ^{vs 1H FY2017} (+2.8%)

Record-high levels
for 4 consecutive years

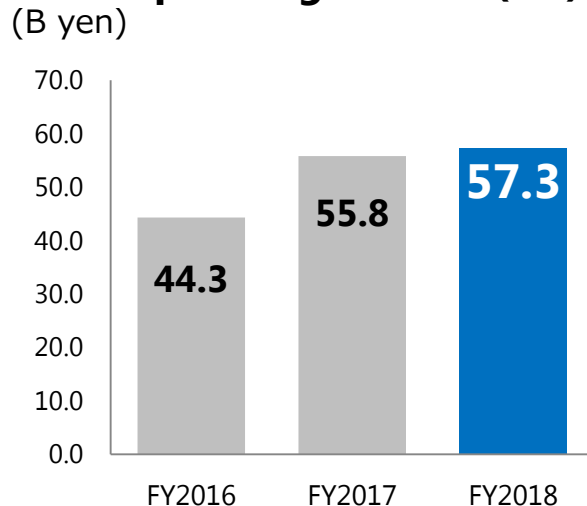
◆ Ordinary income: **70.1 B yen** ^{vs 1H FY2017} (+6.8%)

Record-high levels
for 7 consecutive years

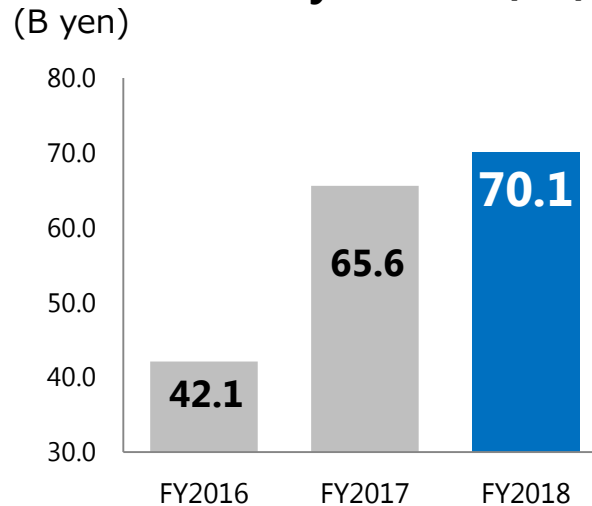
◆ Profit attributable to owners of parent: **57.9 B yen** ^{vs 1H FY2017} (+15.0%)

Record-high levels
for 4 consecutive years

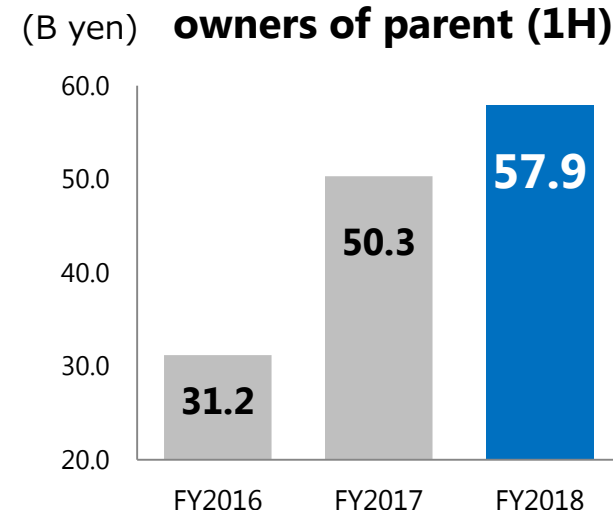
Operating income (1H)



Ordinary income (1H)



Profit attributable to owners of parent (1H)



Financial Results (Consolidated)



(Unit: B yen)

	FY2018			Progress vs 1H forecasts	FY2017	Y on Y	
	Full year forecasts*	1H forecasts**	1H results		1H results	Change (%)	Change (B yen)
Sales	348.0	168.0	168.2	100.1%	172.2	(2.3)	(4.0)
Operating income	120.0	48.0	57.3	119.4%	55.8	2.8	1.5
Ordinary income	144.0	61.0	70.1	114.9%	65.6	6.8	4.5
Profit attributable to owners of parent	114.5	48.6	57.9	119.1%	50.3	15.0	7.6

- Sales and each profit measure have progressed smoothly toward 1H forecasts**
- Operating income was higher than 1H FY2017, although the original 1H FY2018 forecast was lower than 1H FY2017
- Each profit measure was higher than the levels achieved in prior 1H results

Exchange Rate (average)	FY2018 Forecasts	FY2018 1H Results
USD (\$) – JPY (¥)	105.0	110.27
GBP (£) – JPY (¥)	145.0	146.84
EUR (€) – JPY (¥)	130.0	129.80

Statement of Income



(Unit: B yen)

	FY2018			Achievement (%)	FY2017	Y on Y	
	Forecasts		1H results		1H results	Change (%)	Change (B yen)
	Full year*	1H**					
Sales	348.0	168.0	168.2	100.1	172.2	(2.3)	(4.0)
	16.5	15.8	14.7		23.0		
Cost of sales	57.5	26.5	24.7	93.3	39.7	(37.7)	(14.9)
Gross profit	290.5	141.5	143.5	101.4	132.5	8.3	11.0
	49.0	55.7	51.2		44.6		
SG&A expenses	170.5	93.5	86.2	92.2	76.7	12.3	9.4
Selling & administrative expenses	29.3	31.0	28.3		27.1		
	102.0	52.0	47.5	91.4	46.6	1.9	0.9
	19.7	24.7	23.0		17.5		
R&D expenses	68.5	41.5	38.6	93.1	30.1	28.4	8.5
Ordinary R&D expenses***	48.5	26.5	25.6	96.6	30.1	(15.0)	(4.5)
Strategic investment	20.0	15.0	13.1	87.0	-	-	13.1
	34.5	28.6	34.1		32.4		
Operating income	120.0	48.0	57.3	119.4	55.8	2.8	1.5
Non-operating income & expenses	24.0	13.0	12.8	98.3	9.8	29.9	2.9
	41.4	36.3	41.7		38.1		
Ordinary income	144.0	61.0	70.1	114.9	65.6	6.8	4.5
Profit attributable to owners of parent	114.5	48.6	57.9	119.1	50.3	15.0	7.6

*Forecasts announced on Jul. 23, 2018 (Revision was announced on Oct. 29, 2018)

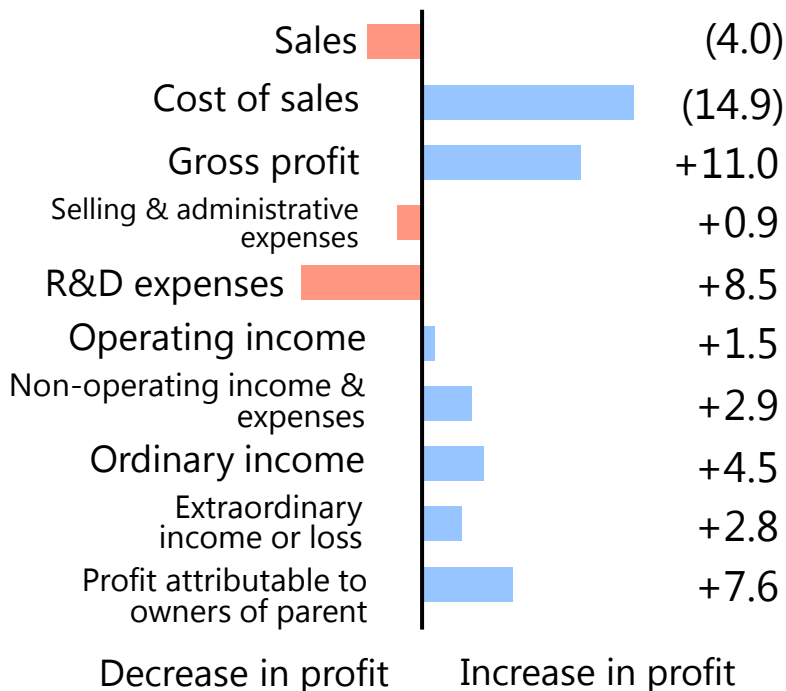
** Forecasts revised on Jul. 23, 2018

*** Ordinary R&D expenses: Total R&D expenses excluding strategic investment

Y on Y Comparison and Main Variation Factors (Statements of Income)

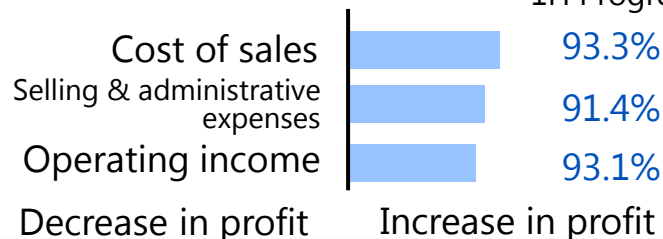


Y on Y comparison (Unit: B yen)



Progress vs 1H Forecasts*

1H Progress



Main Variation Factors (Y on Y)

- **Sales**
 - Increase in royalty income from HIV franchise
 - Income from Roche for Xofluzia®
 - One-time payment from Purdue upon the termination of previous alliance for Symproic®
 - Decrease in sales of prescription drugs in Japan
- **Cost of sales**
 - Japan business: sales decline and changes in the lineup of major products
- **SG & A expenses**
 - **Selling & administrative expenses**
 - › Investment in new products (preparation for launch etc.)
 - › Advance investment in IT
 - **R&D expenses**
 - › Ordinary R&D expenses: decreased due to early completion of Xofluzia® HR study
 - › Strategic investment: net increase (13.1 B yen)
- **Non-operating income & expenses**
 - Increase in ordinary dividend due to sales growth of HIV franchise, including one-time event
- **Extraordinary income or loss**
 - Sale of the Nanjing Factory of C&O in China

Main Variation Factors (vs 1H Forecasts*)

- **Cost of sales**
 - Sales decline and changes in the lineup of major products
- **SG&A expenses**
 - Termination of the contract with Purdue regarding Symproic®
- **R&D expenses**
 - Decrease in strategic investment through effective negotiation

Sales by Segment



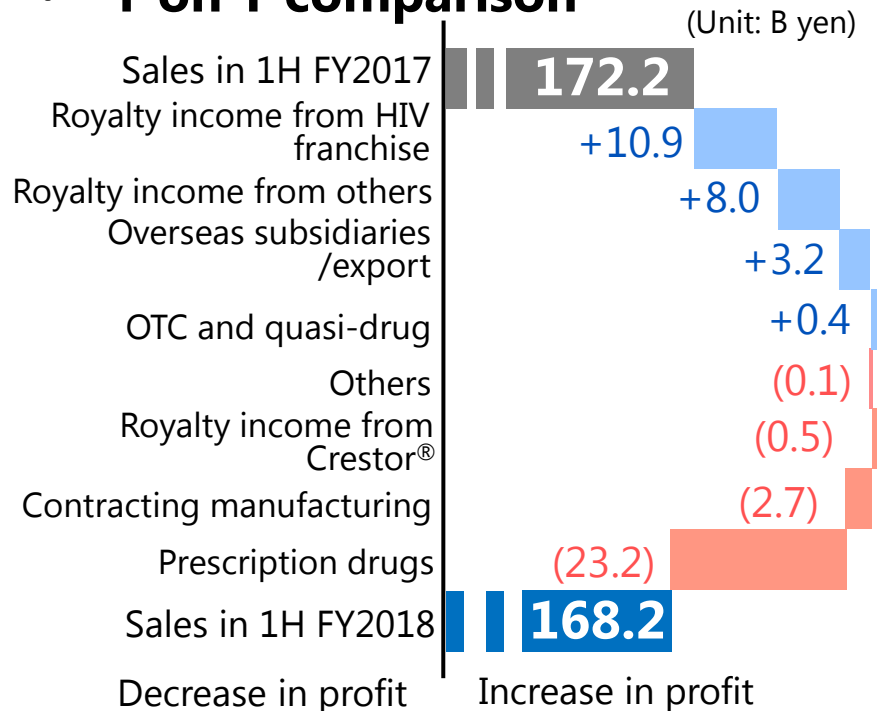
(Unit: B yen)

	FY2018			Achieveme nt (%)	FY2017	Y on Y	
	Forecasts		1H results		1H results	Change (%)	Change (B yen)
	Full year*	1H**					
Prescription drugs	119.3	52.3	50.0	95.5	73.2	(31.7)	(23.2)
Overseas subsidiaries/export	31.3	15.1	15.4	101.8	12.2	26.2	3.2
Shionogi Inc.	12.4	6.5	7.4	112.9	6.0	22.3	1.3
Osphena®	4.1	2.1	1.4	69.3	2.0	(27.8)	(0.6)
C&O	12.4	5.8	5.0	86.7	3.4	49.0	1.6
Contract manufacturing	12.1	5.6	5.7	103.1	8.4	(31.9)	(2.7)
OTC and quasi-drug	7.4	3.4	3.8	111.0	3.4	12.3	0.4
Royalty income	175.5	90.3	92.2	102.1	73.8	24.9	18.4
HIV franchise	124.9	58.7	57.1	97.2	46.2	23.5	10.9
Crestor®	21.1	10.6	10.9	102.8	11.4	(4.1)	(0.5)
Others	29.5	21.0	24.2	115.2	16.2	49.2	8.0
Others	2.5	1.3	1.1	90.6	1.2	(7.0)	(0.1)
Total	348.0	168.0	168.2	100.1	172.2	(2.3)	(4.0)

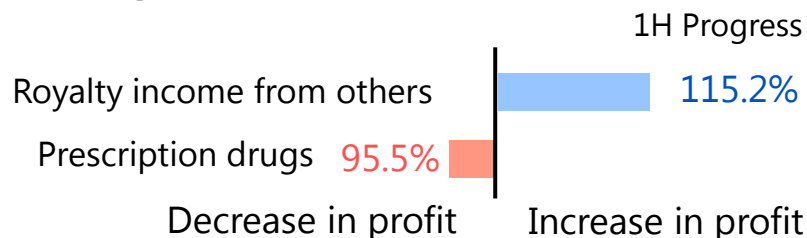
Y on Y Comparison and Main Variation Factors (Sales by Segment)



Y on Y comparison



Progress vs 1H Forecasts*



Main Variation Factors (Y on Y)

- **Royalty income**
 - Sales growth of HIV franchise
 - Income from Roche from Xofluza®
- **Overseas subsidiaries/export**
 - **US business**
 - One-time payment from Purdue upon the termination of the prior alliance for Symproic®
 - Decrease in royalty income from an authorized generic
- **Prescription drugs**
 - Sales growth of strategic products
 - Sales decrease of Crestor® and Irbetan® due to share capture by generic drugs
 - Sales decrease due to NHI price revision

Main Variation Factors (vs 1H forecasts*)

- **Royalty income (Others)**
 - Income from Roche from Xofluza®
- **Prescription drugs in Japan**
 - Xofluza®: The big influenza outbreak in 2017-2018 ended quickly
 - Other prescription drugs: Sales decrease due to share capture by generic drugs

Sales of Prescription Drugs in Japan



(Unit: B yen)

	FY2018			Achieve ment (%)	FY2017	Y on Y	
	Forecasts		1H results		1H results	Change (%)	Change (B yen)
	Full year*	1H**					
Cymbalta®	26.0	12.1	11.9	98.4	11.7	1.9	0.2
Intuniv®	5.0	1.9	2.4	123.0	0.69	246	1.7
Xofluza®	13.0	1.3	0.46	35.8	-	-	0.5
Rapiacta®	1.1	0.06	0.01	11.4	0.07	(91.2)	(0.1)
Brightpoc® Flu	1.1	0.11	0.23	221.3	0.14	73.2	0.1
OxyContin® franchise	9.1	4.2	3.8	90.1	4.6	(16.0)	(0.7)
Symproic®	1.2	0.48	0.72	150.5	0.16	339	0.6
Total of strategic products	56.4	20.3	19.6	96.6	17.3	12.9	2.2
Actair®	0.15	0.06	0.09	144.8	0.06	55.4	0
Mulpleta®	0.23	0.12	0.08	69.2	0.08	1.6	0
Pirespa®	6.0	3.1	2.9	93.7	3.1	(8.0)	(0.2)
Total of new products	62.8	23.5	22.6	96.2	20.6	9.8	2.0
Crestor®	9.7	5.3	5.2	97.0	22.0	(76.5)	(16.8)
Irbetan® franchise	6.4	3.6	3.1	86.1	7.8	(60.4)	(4.7)
Others	40.4	19.9	19.1	96.0	22.9	(16.2)	(3.7)
Prescription drugs	119.3	52.3	50.0	95.5	73.2	(31.7)	(23.2)

Growth of Strategic Products



Cymbalta®

- Sales increased from the previous year (up 1.9% vs 1H FY2017)
 - Prescriptions steadily increased mainly in the pain field
- **15% or more increase from the previous year**

Intuniv®

- Sales increase from the previous year (ca. 3.5-fold vs 1H FY2017)
- Steady sales increase after the ban on long-term treatment was lifted on Jun. 1, 2018

Opioid family*

- OxyContin® franchise:
 - Switching to OxyContin®TR
 - Sales decrease due to share capture by generic drugs (down 16.0% vs 1H FY2017)
- Symproic®:
 - Sales increase from the previous year (ca. 4.4-fold vs 1H FY2017)

Influenza family**

- Enhanced the influenza family prior to the 2018–19 flu season
- **Around 65% of influenza drug market share*** in 1H FY2018**

Sales of new products steadily increased with new sales organization & strategy to maximize the value of each product

Basic Strategy in FY2018 and Major Progress in 1H FY2018



1. Sales: Enhance our sales capability and increase sales of new products

- **Japan: Steadily increased sales of new products, up 9.8% from the previous year**
- **U.S.: Initiated own marketing of Symproic® and Mulpleta®**

2. Investment: To ensure continuous growth

- Drive prioritized projects through selection and concentration
 - Continuously pursue new compounds for in-licensing
- **R&D, mainly of high-priority projects, has progressed**
 - Achieved NDA submission and approval of Xofluza™, and advanced 8 high-priority projects*
 - **Strategic investment to ensure sustainable growth toward beyond 2020: 4 investments in 1H FY2018**
 - Obtained new pipeline assets: S-812217, ADR-001

Accelerate reform to enhance our sales capability

Xofluza™ : Phase III Study (HR* Study)



HR* Study

(CAPSTONE-2)

- High-risk patients aged ≥ 12 years
- 0-48 hours from onset
- 17 countries (Japan/US/EU/Asia/Southern Hemisphere)
- N=2,184

Randomization

Xofluza™ 40 mg or 80 mg,
single dose
(80 mg, body weight ≥ 80 kg)

Placebo

Oseltamivir 75 mg,
twice daily for 5 days

Patients with a confirmed diagnosis of influenza virus infection

N=388

N=386

N=389

Total
N=1163

Common risk factors for influenza-related complications in CAPSTONE-2 (Definition by Centers for Disease Control and Prevention**)

Asthma and chronic lung disease, Adults of 65 years of age and older, ,
Endocrine disorders, Heart disease, Extreme obesity

Influenza virus type/subtype

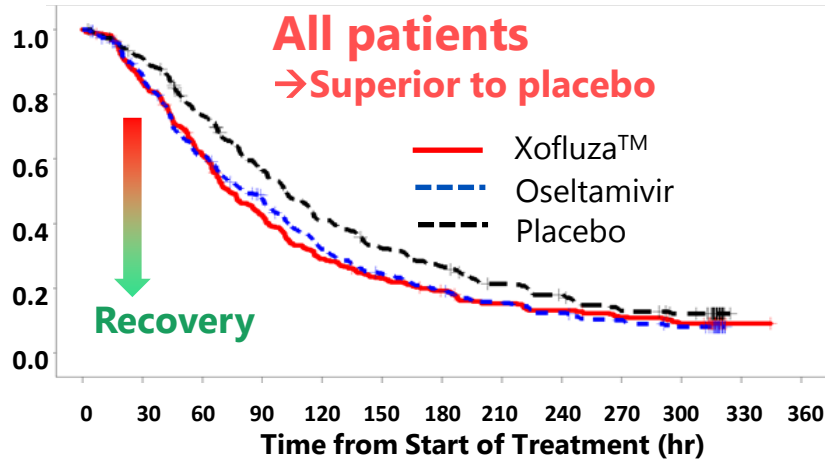
- A/H3N2: 47.9%
- A/H1N1pdm: 6.9%
- B: 41.6%

Xofluza™: Positive HR Study Results

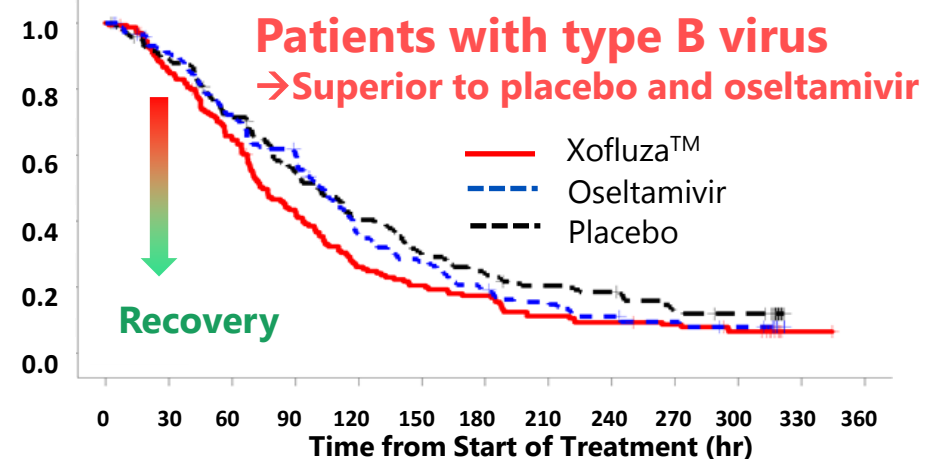


• Proportion of Unimproved Patients

Time to improvement of influenza symptoms (TTIIS)



	Xofluza™	Placebo	Oseltamivir
TTIIS (median value, hr)	73.2*	102.3	81.0
	*p<0.0001 vs placebo		



	Xofluza™	Placebo	Oseltamivir
TTIIS (median value, hr)	74.6*#	100.6	101.6
	*p<0.05 vs placebo #p<0.05 vs oseltamivir		

- Significantly reduced the length of time that the virus continued to be released from the body (vs. Placebo, Oseltamivir)
- Significantly reduced the incidence of influenza-related complications (vs. Placebo)
- Well-tolerated, no new safety signals

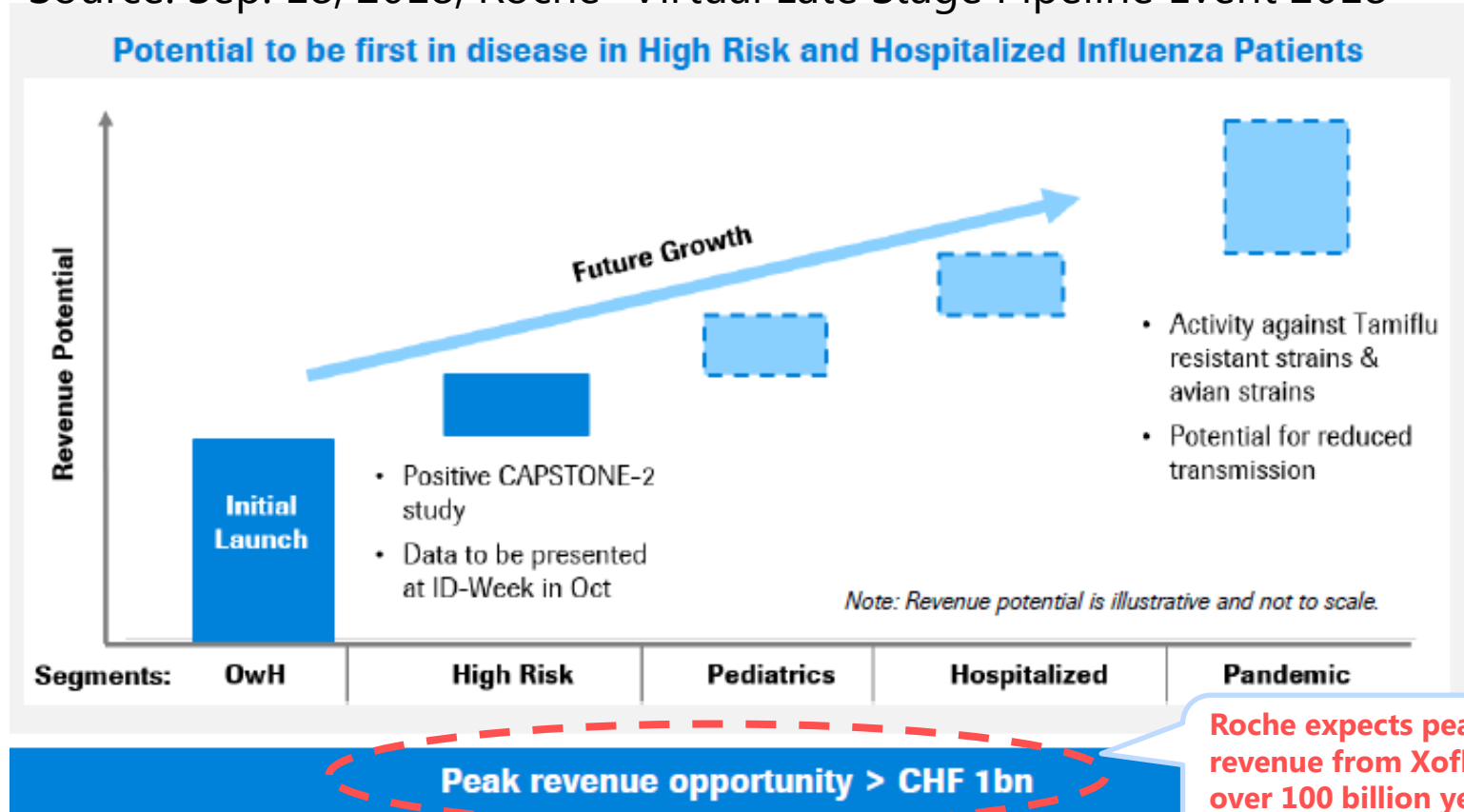
Provide a better therapeutic option for patients at a high risk for influenza-related complications

Xofluza™: Approved in the U.S.



- Approved on Oct. 24, 2018 (two months ahead of schedule) and to be launched in Nov. 2018*
- Indication: **For the treatment of acute, uncomplicated influenza in patients 12 years of age and older**

Source: Sep. 18, 2018, Roche "Virtual Late Stage Pipeline Event 2018"



Roche expects peak revenue from Xofluza™ over 100 billion yen (their highest rank).

Mulpleta®: Approved and Launched in the U.S.



- Approved on Jul. 31, 2018 and launched on Aug. 30, 2018 (1 month ahead of schedule)
 - Indication: **for the treatment of thrombocytopenia in adult patients with chronic liver disease who are scheduled to undergo a procedure**
- Aim for strong market through a support program for patients access, **Mulpleta Assist**

Market size (U.S.)

>125,000
procedures/year

Annual number of invasive procedures for adult patients with chronic liver disease and platelet number <50,000/ μ l* in the U.S.

Medical need

Avoid disadvantages of platelet transfusion

- **Infection, allergic reaction**
- **Burden on healthcare workers and patients**

Drug that satisfies unmet medical need



- Favorable safety and efficacy
- No need for transfusion
- No need to change dose depends on platelet count
- No interaction with food

Establish specialized sales base in the U.S. market

Progress of Strategic Investment



See appendices for more details

➤ **May 31, 2018 In-licensing & research collaboration with Hsiri**

– **Novel therapeutics for mycobacterial infection**

- > Exclusive global rights for discovery and development
- > Effective on both tuberculosis and non-tuberculous mycobacterial diseases (non-clinical data)



➤ **Jun. 14, 2018 In-licensing from SAGE**

– **S-812217, antidepressant with novel mechanism of action**

- > Exclusive rights for development & commercialization in Japan, Taiwan and South Korea
- > Favorable Phase II study data, break-through therapy designation in the U.S.
- > Plan to start Phase I study in Japan from 2H FY2018



➤ **Jun. 18, 2018 Investment in Nemesis**

– Gain knowledge about **a novel modality to solve the problem of AMR** (non-clinical data)



➤ **Sep. 13, 2018 In-licensing from Rohto**

– **ADR-001, regenerative medicine for liver cirrhosis**

- > Exclusive rights for development & commercialization in Japan
- > Expectations for improvement of fibrosis and stable supply (Phase I/II study is ongoing)





Changes of Environment Surrounding OTC Drugs

- Super-aging society
- Pressure on national finances due to increasing healthcare costs
- Need to extend healthy life expectancy through healthcare by each individual

→ **Expanded need for self-care***

- Jun. 25, 2018 **Strategic collaboration with Rohto**
 - Initiate collaboration to **build on the strengths of each company**
 - Create new business opportunities for the self-care of the future
- Sep. 20, 2018 **Acquire health food business from Takara**
 - **Acquire infrastructure of mail-order business**
 - **Supporting the pre-frail**** to promote long-term health of elderly people for the coming super-aging society



Grow and expand presence in developing self-care area



2. FY2018 Financial Forecasts

Major Factors Driving Forecast Changes Since the Beginning of FY2018



Announced on Jul. 23, 2018

- **Acceleration of Xofluza™ HR* study completion**
 - Potential for income from Roche to be received ahead of schedule(2H → 2Q)
 - Increase in R&D expenses (1H)
- **US business**
 - Income from Purdue upon the termination of the prior alliance for the co-commercialization of Symproic® in US
 - Decrease in royalty income from an authorized generic
- **HIV franchise: Increase in dividend from ViiV, including one-time event (1Q)**

Revised on Oct. 29, 2018

- **Xofluza™ was approved in the U.S. on Oct. 24, 2018, ahead of schedule**
 - Income from Roche and export to the U.S. are planned in 2H
- **Increase in selling expenses to strengthen domestic and overseas sales**
 - Japan: Additional investment to promote new products
 - Overseas: Additional investment to promote Symproic®
- **Increase in ordinary R&D expenses: Additional investment in high-priority pipeline compounds**



Second upward revision of full year forecasts due to strengthening sales of new products and expanding investment in next growth-drivers

Upward Revision of Forecasts (Announced on Oct 29, 2018)



(Unit: B yen)

	FY2018 Forecasts				FY2017	Y on Y	
	Original (May 9)	Revised (Jul 23)	Revised (Oct 29)	Change* (B yen)	Results	Change (%)	Change (B yen)
Sales	346.5	348.0	354.0	6.0	344.7	2.7	9.3
Operating income	119.0	120.0	124.5	4.5	115.2	8.1	9.3
Ordinary income	140.0	144.0	148.5	4.5	138.7	7.1	9.8
Profit attributable to owners of parent	111.0	114.5	118.5	4.0	108.9	8.8	9.6

Increase in sales and profit over the forecasts revised in 1Q FY2018

◆ Y on Y change (B yen)

- Sales: 3.3 → **9.3**
- Ordinary income: 5.3 → **9.8**
- Operating income: 4.8 → **9.3**
- Net Profit: 5.6 → **9.6**

Exchange rate (average)	FY2018 forecasts	1H FY2018 results
USD (\$) – JPY (¥)	105.0	110.27
GBP (£) – JPY (¥)	145.0	146.84
EUR (€) – JPY (¥)	130.0	129.80

Revision of Statement of Income



(Unit: B yen)

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	Original (May 9)	Revised (Jul 23)	Revised (Oct 29)	Change*	Results	Change (%)	Change (B yen)
Sales	346.5	348.0	354.0	6.0	344.7	2.7	9.3
	16.7	16.5	16.1		21.4		
Cost of sales	58.0	57.5	57.0	(0.5)	73.9	(22.9)	(16.9)
Gross profit	288.5	290.5	297.0	6.5	270.8	9.7	26.2
	48.9	49.0	48.7		45.1		
SG&A expenses	169.5	170.5	172.5	2.0	155.5	10.9	17.0
Selling & administrative expenses	102.5	102.0	104.0	2.0	95.6	8.8	8.4
	19.3	19.7	19.4		17.4		
R&D expenses	67.0	68.5	68.5	0	59.9	14.3	8.6
Ordinary R&D expenses**	47.0	48.5	50.4	1.9	59.9	(15.9)	(9.5)
Strategic investment	20.0	20.0	18.1	(1.9)	-	-	18.1
	34.3	34.5	35.2		33.4		
Operating income	119.0	120.0	124.5	4.5	115.2	8.1	9.3
Non-operating income & expenses	21.0	24.0	24.0	0	23.5	2.2	0.5
	40.4	41.4	41.9		40.2		
Ordinary income	140.0	144.0	148.5	4.5	138.7	7.1	9.8
Profit attributable to owners of parent	111.0	114.5	118.5	4.0	108.9	8.8	9.6

Revision of Sales by Segment



(Unit: B yen)

	FY2018 Forecasts				FY2017	Y on Y	
	Original (May 9)	Revised (Jul 23)	Revised (Oct 29)	Change*	Results	Change (%)	Change (B yen)
Prescription drugs	119.3	119.3	119.3	0	139.2	(14.3)	(19.9)
Overseas subsidiaries/export	29.8	31.3	31.3	0	23.6	32.5	7.7
Shionogi Inc.	10.9	12.4	12.4	0	10.6	17.0	1.8
Osphena [®]	4.1	4.1	4.1	0	3.7	12.0	0.4
C&O	12.4	12.4	12.4	0	6.9	80.1	5.5
Contracting manufacturing	12.1	12.1	12.9	0.8	16.9	(23.8)	(4.0)
OTC and quasi-drug	7.4	7.4	7.4	0	7.2	1.7	0.1
Royalty income	175.5	175.5	180.6	5.2	155.0	16.5	25.6
HIV franchise	124.9	124.9	124.9	0	103.5	20.7	21.4
Crestor [®]	21.1	21.1	21.1	0	22.6	(6.6)	(1.5)
Others	29.5	29.5	34.6	5.2	29.0	19.5	5.7
Others	2.5	2.5	2.5	0	2.6	(4.5)	(0.1)
Total	346.5	348.0	354.0	6.0	344.7	2.7	9.3

3. 2nd Half FY2018 Business Plan

Efforts in 2H FY2018

– in Mid- to Long-term Plan



(1) Japan Business

Rebuilding foundation to achieve greater strength in Japan (P.27-30)

- New approach to expand sales of new products, such as Cymbalta[®], Intuniv[®], and Xofluza[®]

(2) Overseas Business

Strengthen presence in the U.S. (P.31)

- Improve efficiency by combining partnering and our own promotion
- Intensive investment of resources in the hospital/specialty market

(3) R&D

Promote development of the next growth drivers (P.32-35)

- Intensive investment of capital in high-priority projects
- Expanding range of treatment options in the HIV franchise that supports earnings base

(1) Japan Business Sales Forecasts for Prescription Drugs in Japan



(Unit: B yen)

	FY2018 Forecasts						FY2017	Y on Y	
	Full year			2H			Results	Change (%)	Change (B yen)
	Revised (Jul 23)	Revised (Oct 29)	Change*	Revised (Jul 23)	Revised (Oct 29)	Change*			
Cymbalta®	26.0	26.0	0	13.8	14.0	0.2	23.5	10.5	2.5
Intuniv®	5.0	6.1	1.1	3.1	3.8	0.7	1.9	223.1	4.2
Xofluza®	13.0	13.0	0	11.7	12.5	0.8	2.4	439.1	10.6
Rapiacta®	1.1	1.1	0	1.1	1.1	0	3.3	(66.4)	(2.2)
Brightpoc® Flu	1.1	1.3	0.2	1.0	1.0	0.1	1.1	11.8	0.1
OxyContin®	9.1	8.7	(0.4)	4.8	4.8	0	8.7	0	0
franchise									
Symproic®	1.2	1.6	0.4	0.69	0.85	0.2	0.60	162.5	1.0
Total of strategic products	56.4	57.7	1.3	36.2	38.2	2.0	41.6	38.9	16.2
Actair®	0.15	0.18	0	0.09	0.10	0	0.12	48.3	0.1
Mulpleta®	0.23	0.19	(0)	0.11	0.11	(0)	0.16	19.1	0
Pirespa®	6.0	5.9	(0.1)	2.9	3.0	0.1	6.5	(9.2)	(0.6)
Total of new products	62.8	64.0	1.2	39.3	41.4	2.1	48.3	32.5	15.7
Crestor®	9.7	9.7	0	4.3	4.5	0.2	29.3	(67.0)	(19.6)
Irbetan®	6.4	6.0	(0.4)	2.8	2.9	0.1	14.6	(58.8)	(8.6)
franchise									
Others	40.4	39.6	(0.8)	20.5	20.5	0	47.0	(15.8)	(7.4)
Total	119.3	119.3	0	67.0	69.3	2.3	139.2	(14.3)	(19.9)
Y on Y	(19.9)	(19.9)	-	0.9	3.3	-	-	-	-

(1) Japan Business: Building Sales Growth by Our Own Earning Power



(Unit: B yen)

Prescription Drugs in Japan	2H FY2017 Results	2H FY2018 Forecasts (Revised on Oct 29)	Y on Y comparison
New products (including strategic products)	27.7	41.4	+13.7
Crestor®, Irbetan® franchise	14.1	7.4	(6.7)
Others	24.2	20.5	(3.7)
Total	66.0	69.3	+ 3.3



**Increase sales in 2H FY2018 compared to year prior
through growth in sales of strategic products**

(1) Japan Business: Building Sales Growth by Our Own Earning Power



Sales of prescription drugs in Japan (Y on Y comparison)

**The impact of share capture
by generic competitors
hit a plateau in 1H FY2018**

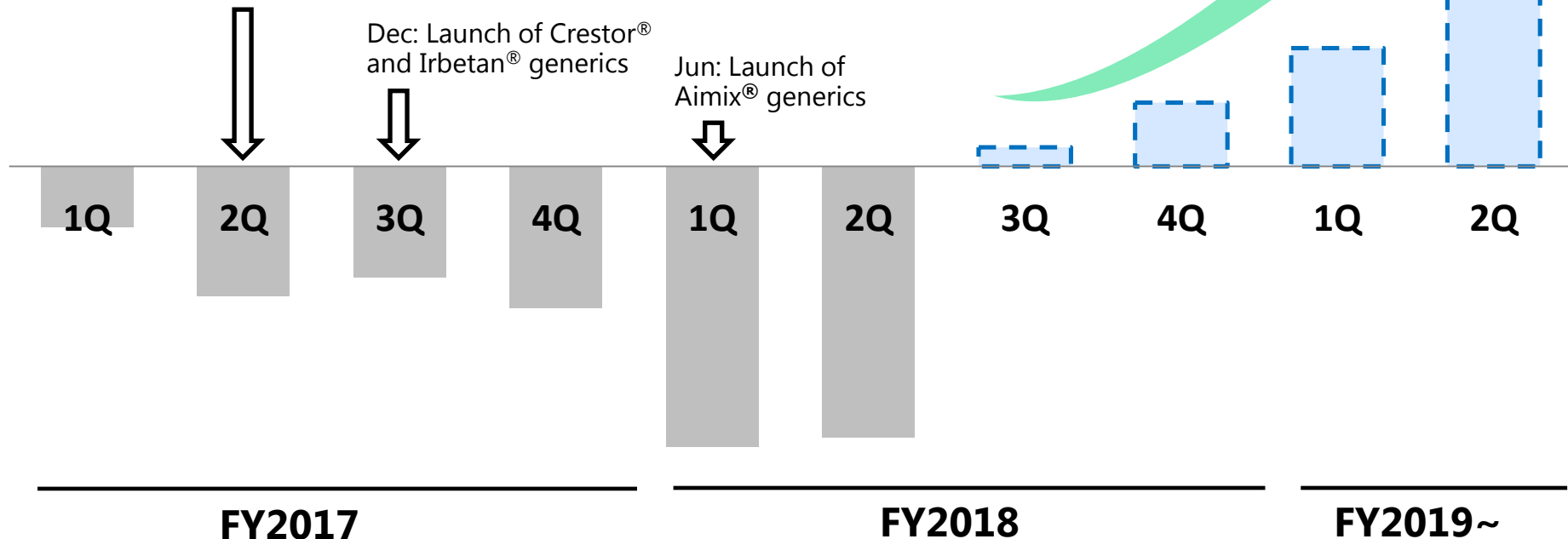


**Sales-growth phase by
our own earning power**

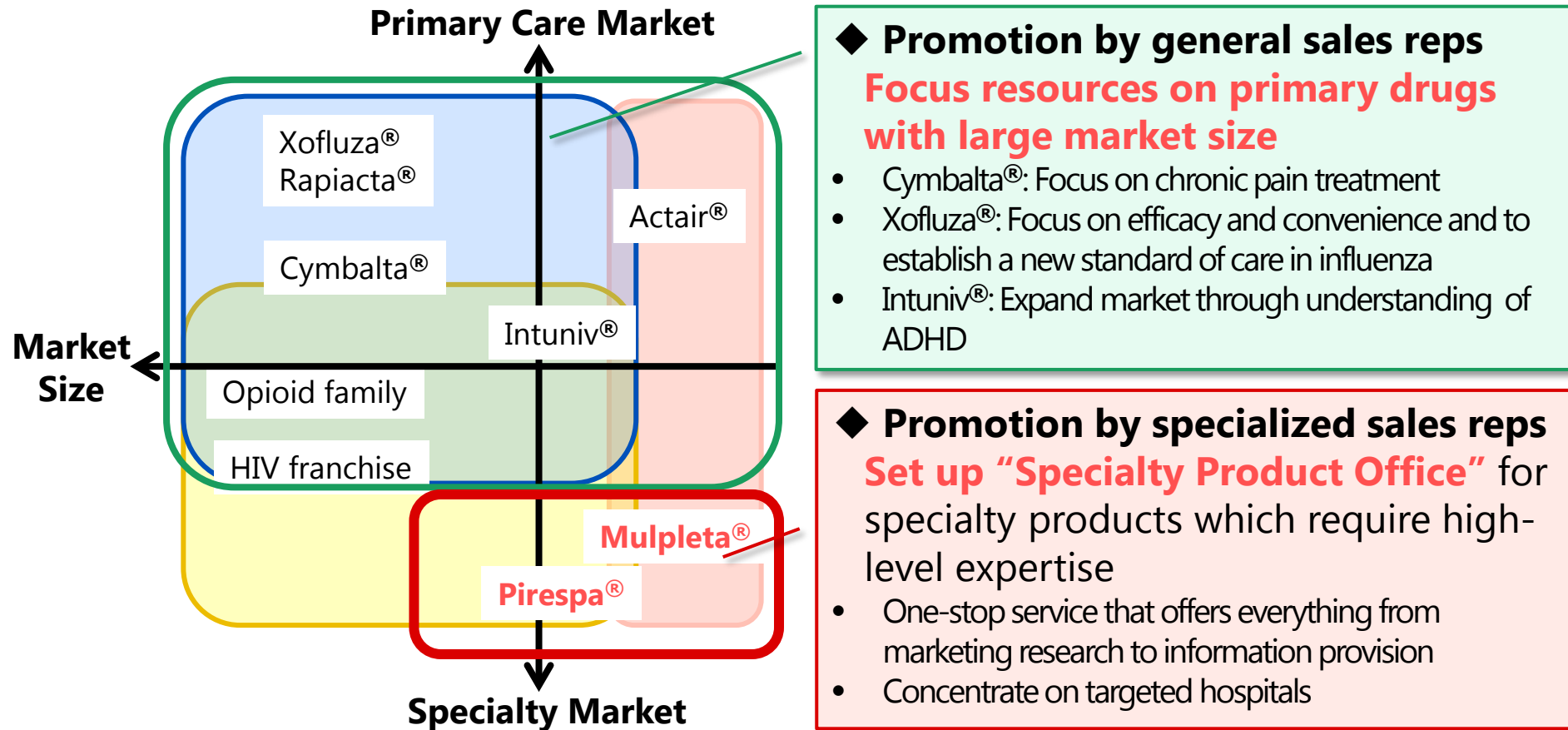
Sep: Launch of Crestor®
authorized generic

Dec: Launch of Crestor®
and Irbetan® generics

Jun: Launch of
Aimix® generics



(1) Japan Business: Rebuild and Strengthen Sales Division



**Pursue suitable resource allocation and deploy expertise
based on each market's characteristics**

(2) Overseas Business _to Strengthen the U.S. Business



Infectious disease

- **Cefiderocol: NDA submission in the U.S. in CY2018**
 - Continued accumulation of CR* study data for NDA submission in the U.S.
 - Steady Progress of Phase III studies (CR*, HAP/VAP/HCAP**)

Pain/CNS

- **Symproic® : Smooth transition to our own promotion**
 - Minimize disruption and focus on improved strategies
 - Selection of a new business partner is ongoing

Frontier

- **Mulpleta® : Use focused resources to achieve market uptake**
 - Support program "Mulpleta Assist"
- **Osphena® : Continue to support our collaborator, Duchesnay**
 - Building information base and supporting pursuit of U.S. dryness indication

**Growth of top-line, total cost management, and further collaboration with business partners
→ Achieve break-even in FY2018**

(3) R&D- Progress of Next Growth Drivers



		Pipeline	Target in 2H FY2018
Infectious disease		Novel HIV drug	Non-clinical studies are progressing to support initiation of Phase I study in FY2019
		S-004992 (Tuberculosis)	Non-clinical studies are progressing to support initiation of Phase I study (China)
Pain/CNS	In house	S-600918 (Refractory/unexplained chronic cough, Neuropathic pain)	Top-line results of proof of concept (Phase II) study (Refractory/unexplained chronic cough, Japan)
		S-637880 (Neuropathic pain)	Completion of Phase I study and micro-dose study (Japan)
	Collabo-ration	S-812217 (Depression)	Initiation of Phase I study in Oct 2018 (Japan)
Others	In house	Adjuvant	Non-clinical studies are progressing to support initiation of Phase I study in FY2019
		S-770108 (Idiopathic pulmonary fibrosis)	Completion of Phase I study (Japan)
	Collabo-ration	Peptide	Optimization of HIT peptides to initiate new drug discovery projects

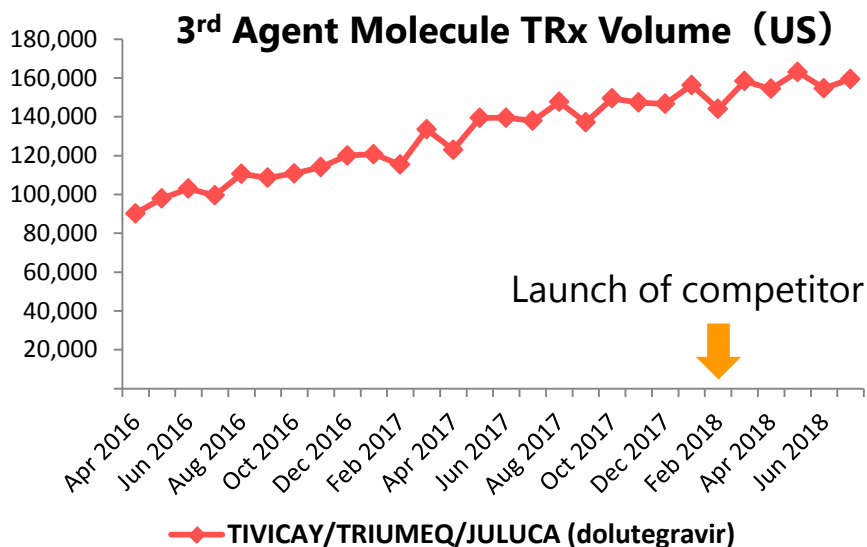
Consistent progress of 8 high-priority projects

(3) R&D- Progress of HIV Franchise



Stable Prescriptions

Prescription trend in the US (TRx Volume) from Apr. 2016 to Aug. 2018



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Progress of two-drug regimen

DTG/3TC MAA/NDA submission in EU/US

- PDUFA action date is anticipated in 6 months in the US with a priority review voucher

DTG/3TC Phase III studies (GEMINI-1,2)

- Non-inferiority to three-drug regimen, and met the primary endpoint
- No emergence of resistance
- Less frequent drug-related adverse events compared with three-drug regimen

CAB+RPV Phase III study (ATLAS)

- Non-inferiority to three-drug regimen, and met the primary endpoint

Stable revenue base for our future growth with royalty income from ViiV

(3) R&D HIV Platform Based on DTG/CAB Franchise



Tivicay[®], Triumeq[®] Launch: 2013~

- **Key drug for 3-drug regimen**

Juluca[®] (DTG/RPV) Launch: 2017~

- **First 2-drug regimen for maintenance therapy**
- Nov. 2017-Jun. 2018: Approved in US, EU, CAN, AUS

DTG/3TC Launch: 2019~

- **First 2-drug regimen for naïve patients**
- Sep. 2018: MAA submission in EU, Oct. 2018: NDA submission in US (naïve patients)
 - PDUFA action date is anticipated in 6 months (priority review voucher)

CAB+RPV Launch: 2019~

- **First long acting injection** (monthly or bimonthly)
- 2H 2018~1H 2019: NDA/MAA submission in US and EU (monthly injection)

CAB prophylaxis Launch: 2021~

- **First long-acting injectable for prophylaxis** (bimonthly)

Provide various options for all patients' needs

Convenience

**Medication
Adherence**

**Reduce daily
awareness of
HIV**

Privacy



Improvement of QOL

Interview of 27 patients enrolled in LATTE-2

Deanna Kerrigan et al, PLOS ONE, 2018

Most patients prefer long-acting injection to daily oral dosing

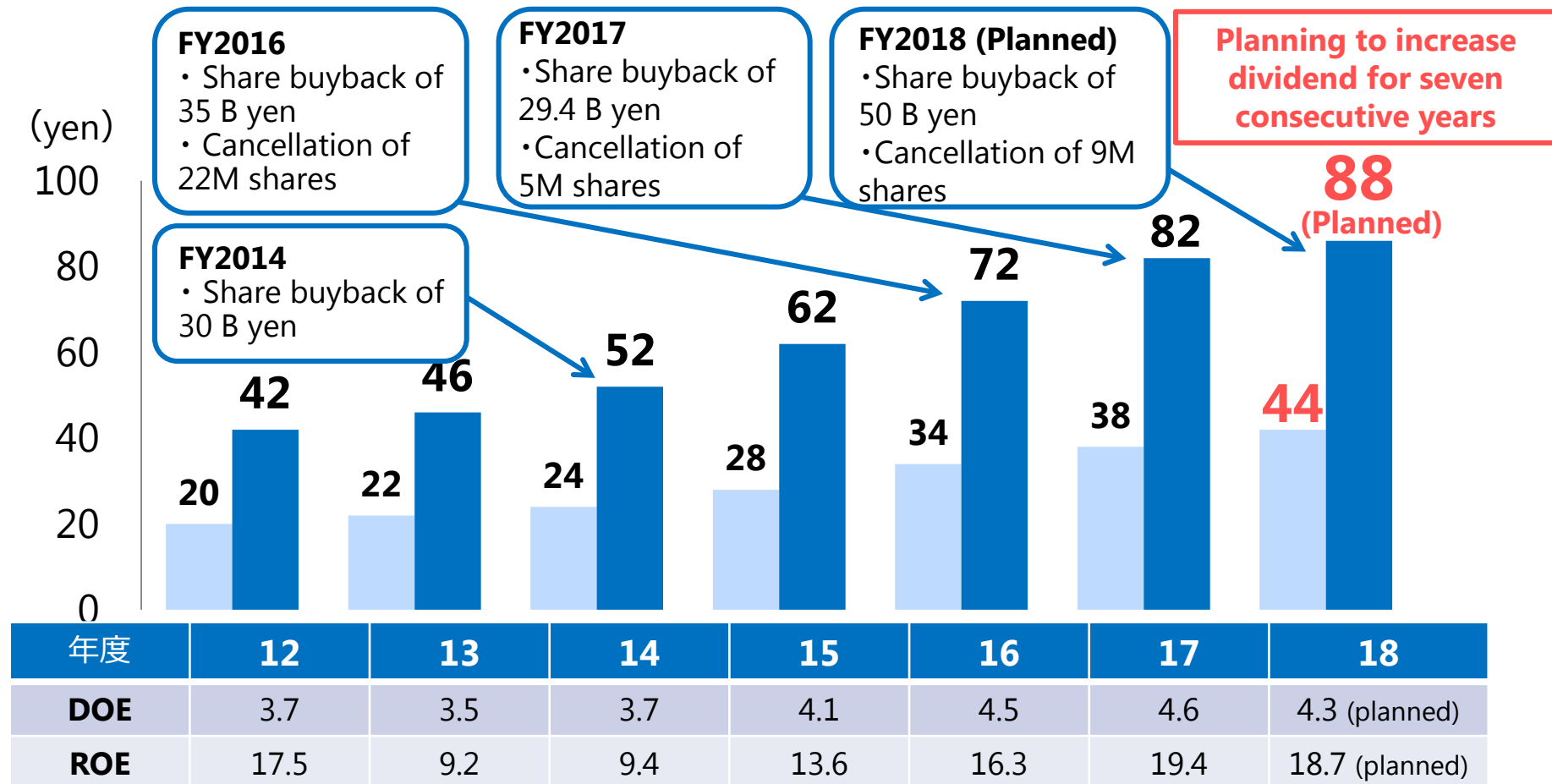
- No need to take a tablet daily
- No need to keep tablets at home
⇒ Avoid unintentional disclosure
- No reminder of HIV status on a daily basis
⇒ Live life like an uninfected person
- No concerns for baggage inspection at an airport

4. Shareholder Return

Shareholder Return Policy



Maximizing corporate value by balancing three key factors
: return to shareholders, investment for further growth, and strategic investment



Appendix

- **Progress of 1st Half FY2018**
- **Target Milestones for FY2018**
- **Progress of Pipeline**
- **Launch Plan**
- **Strategic Investment**
- **Share Buyback and Cancellation**
- **Maximizing Corporate Value Through Group Businesses**

Progress in 1H FY2018* (Pipeline)



Global

Xofluza™

- HR study top-line results
- Taiwan NDA submission
- US Approval

Mulpleta®

- US Approval, Launch

In Japan

S-005151

- Start of PhI study (Acute ischemic stroke)

S-600918

- Start of PhII study (Refractory/unexplained chronic cough)

OxyContin®TR

- Start of PhIII study (Chronic pain)

Intuniv®

- NDA submission (adult)

Brightpoc® Flu·Neo

- Approval, Launch

SR-0379

- Start of PhII study (Cutaneous ulcer)

Xofluza®

- Start PhIII study (prophylaxis)

Xofluza®

- Approval (granule product)

Out-licensed

Infectious diseases

Pain/CNS

Frontier

DTG/3TC

- PhIII study top-line results (GEMINI)
- EU/US MAA/NDA submission

CAB+RPV

- PhIII study top-line results(ATLAS)

Juluca® (DTG/RPV)

- Approval, Launch

Progress in 1H FY2018* (Others)



- **May**

- Collaboration with Aichi Prefecture for “Prevention of Drug Abuse”
- Collaboration with Iwate Prefecture in “Support for Children’s Bright Future”
- Started Shionogi’s internal use of PDPS**, a drug discovery platform developed by PeptiDream
- Entered into a collaborative licensing, research and development program with Hsiri to discover and develop drugs for mycobacterial diseases

- **June**

- Collaboration with SAGE to develop and commercialize S-812217
- Investment in the clinical development of Nemesis “Symbiotics[©]”
- Entered into a capital alliance between Shionogi Healthcare and Rohto

- **July**

- Terminated the prior alliance with Purdue for the co-commercialization of Symproic[®] in the US (Shionogi has regained full rights to Symproic[®])

- **September**

- Shionogi and Rohto Pharmaceutical Co.,Ltd. Enter into License Agreement regarding “Cellular and Tissue-based Products” Candidate ADR-001
- Agreement regarding acquisition of equity in Takara Healthcare and an absorption-type merger by Shionogi Healthcare, and succession of Takara Bio’s functional food business

- **October**

- Establishment of Shionogi Pharma Co., Ltd.
- Establishment of “Department of Biostatistics and Data Science” jointly with Osaka University

* Progress from May 10 to Oct. 29, 2018

** PDPS (Peptide Discovery Platform System) : Technology to obtain the peptide with high activity and high selectivity

Target Milestones for FY2018 : Approvals and NDA Submission



Product (indication)	Phase I	Phase II	Phase III	NDA submission	Approval
Mulpleta® (Thrombocytopenia associated with chronic liver disease)			Achieved (Aug.)	US (2017.12) EU (2018.1)	US
Rizmoic® (Opioid-induced constipation)				EU (2017.3)	EU
Lisdexamfetamine (ADHD [pediatric])				Japan (2017.4)	Japan
Xofluza™ (Influenza virus infection)		Achieved (Oct.)	Global: ongoing	US (2018.4)	US
Xofluza™, granule (Influenza virus infection)		Achieved (Sep.)	Japan: ongoing	Japan	Japan
Cefiderocol (Multidrug-resistant Gram-negative bacterial infections)			Global: ongoing	US	
Intuniv® (ADHD [adult])			Japan: Extension study, ongoing	Japan	

Target Milestones for FY2018 : Phase I ~ III



Product (indication)	Phase I	Phase II	Phase III	NDA submission	Approval
Xofluza® (Influenza virus infection [prophylaxis])			Japan: initiated	Achieved (2Q)	
OxyContin®TR (Treatment of moderate to severe chronic pain)			Japan: initiated	Achieved (1Q)	
S-120083 (Inflammatory pain)		US: completed			
S-588410 (Bladder cancer)		Japan, EU: completed			
S-600918 (Refractory/unexpected chronic cough, Neuropathic pain)		Japan: initiated		Achieved (1Q) (Refractory/unexplained chronic cough)	
S-770108 (Idiopathic pulmonary fibrosis)	Japan: completed				
S-637880 (Neuropathic pain)	Japan: completed				
S-005151 (Acute ischemic stroke)	Japan: initiated			Achieved (1Q)	
S-004992 (Tuberculosis)	Asia (China) : initiated				

Pipeline (as of Oct. 29, 2018)



Preclinical	Phase I	Phase II	Phase III	Filed
Influenza virus infection HIV virus infection Bacterial infection Bacterial infection Mycobacterium disease Fungus infection Fungus infection Peptide Vaccine for prevention ADHD Opioid Peptide Alzheimer's disease Post-stroke spasticity Obesity NASH Cancer metastasis Adjuvant Peptide	Global S-004992* Tuberculosis S-117957 Insomnia S-237648 Obesity In Japan S-812217* Depression S-600918 Neuropathic pain S-637880 Neuropathic pain S-010887 Neuropathic pain S-005151 Acute ischemic stroke S-770108 Idiopathic pulmonary fibrosis	Cefiderocol Multidrug-resistant Gram-negative bacterial infections S-120083 Inflammatory pain S-707106 Type2 diabetes S-488210 Head and neck squamous cell carcinoma epertinib Malignant tumor S-588410 Bladder cancer Cefiderocol Multidrug-resistant Gram-negative bacterial infections S-600918 Refractory/unexpected chronic cough S-237648 Obesity S-525606 Allergic rhinitis caused by Japanese cedar allergen S-588410 Bladder cancer SR-0379 Cutaneous ulcer ADR-001** Decompensated liver cirrhosis	Cefiderocol Multidrug-resistant Gram-negative bacterial infections Cefiderocol Multidrug-resistant Gram-negative bacterial infections Xofluza™ Influenza virus infection (prophylaxis) Cymbalta® Depression (pediatric) Oxycodone Moderate to severe chronic pain S-588410 Esophageal cancer	Xofluza™ (Taiwan) Influenza virus infection Rizmoic® (EU) Opioid-induced constipation Mulpleta® (EU) Thrombocytopenia Oxycodone Moderate to severe chronic pain Lisdexamfetamine ADHD (pediatric) Intuniv® ADHD (adult) • Infectious diseases • Pain/CNS • Other

Pipeline -Out-licensed (as of Oct. 29, 2018)



Preclinical	Phase I	Phase II	Phase III	Filed
	<div> GSK3342830 Multidrug-resistant Gram-negative bacterial infections </div>		<div> DTG/3TC Treatment for HIV infection TANGO study (maintenance) </div> <div> CAB LAP Prevention for HIV infection </div> <div> CAB+RPV LAP Treatment for HIV infection </div> <div> Xofluza™ Severe influenza virus infection </div>	<div> DTG/3TC (EU/US) Treatment for HIV infection </div> <div> Osphena® Vaginal dryness associated with postmenopausal VVA </div> <div> <ul style="list-style-type: none"> • Infectious diseases • Pain/CNS • Others </div>

Target Milestones for Launch of Products

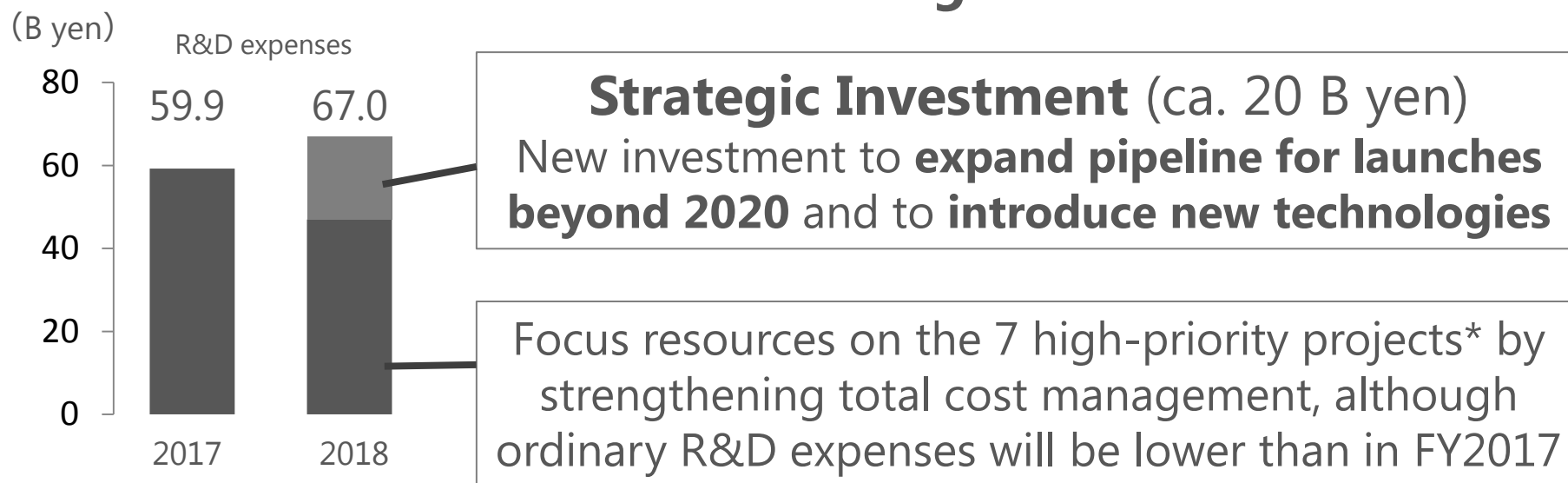


FY2017 (Achieved)	FY2018	FY2019
In Japan		
Symproic® Intuniv® ADHD (pediatric) Oxycodone Tamper resistant formulation Actair® Pediatric allergic rhinitis caused by house-dust mite allergen Xofluza® (adult, pediatric)		Intuniv® ADHD (adult) Lisdexamfetamine ADHD (pediatric) Xofluza® (granule)
Global		
Symproic® (US)	Mulpleta® (US) Launched Rizmoic® (EU)	Cefiderocol (US) Mulpleta® (EU) Baloxavir marboxil (Taiwan)
Out-licensed		
Juluca® (DTG/RPV)(US)	Juluca® (DTG/RPV) (EU) Launched Osphena® (US) Vaginal dryness associated with postmenopausal VVA Xofluza™ (US, OwH*)	DTG/3TC (US, EU) CAB+RPV (US)

Development of Xofluza™ is in its final stage

Favorable opportunity to invest in other growth drivers

New investment to expand pipeline for sustainable growth



Strategic investment (ca. 20 B yen) in R&D is planned for sustainable growth

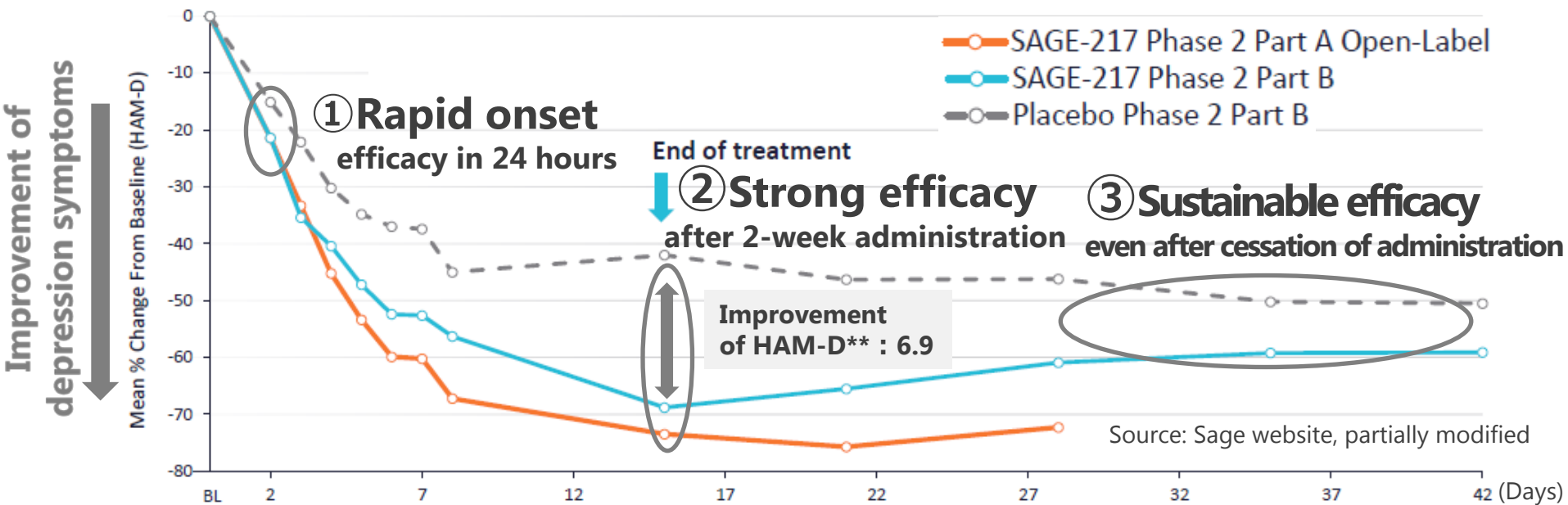


- **Novel mechanism of action**, efficacy on both tuberculosis and non-tuberculosis mycobacterial disease, potential to fulfill unmet medical needs
- Start R&D for the treatment of NTM Disease

Mycobacterial Disease		
	Tuberculosis (TB)	NTM Disease* ⁵
Patient number, Market potential	10.4 M new patients/year* ¹ , ¥43.7 B market worldwide* ²	Estimated 90K patients (JP); 180K patients (US) ; 9K patients (EU5)
Challenges for Mycobacterial Disease Treatment	<ul style="list-style-type: none"> • One of the world's top 3 infectious diseases • Multidrug-resistant TB and extensively drug-resistant TB • Long-term treatment • The most common presenting illness among HIV patients 	<ul style="list-style-type: none"> • No drugs developed for NTM disease, low effectiveness of current treatment • Long-term treatment (>1 year) • Increased prevalence in developed countries
Action by Shionogi	S-004992, Hsiri molecules, Collaboration with TB ALLIANCE* ³ , GHIT* ⁴	Hsiri molecules

Enhance presence of Shionogi in infectious disease field including TB through development of S-004992 and Hsiri molecules for mycobacterial disease

- A potential paradigm shift in the treatment of depression through **a novel mechanism*** affecting inhibitory neurons
- FDA designated **Break-Through Therapy** in US
- **Positive placebo-controlled Phase 2 Results** demonstrate potential in depressive disorders (figure)
- Plan to start of a clinical study in Japan in CY2018



- Novel antidepressant following Cymbalta®
- Launching new development products in CNS field contributing to sales beyond 2020

Acquire knowledges about the novel modality “Symbiotics[©]” an approach to the problem of AMR

Symbiotics[©]

Symbiotic[®] seeks, finds and inactivates antibiotic resistance genes and restores antibiotic sensitivity

1) Insert plasmid* designed specifically to inactivate antibiotic-resistant genes into phage**

* DNA molecule, ** Virus that infects to bacteria

2) Deliver plasmid into antibiotic-resistant bacteria

3) Modification of antibiotic-resistant genes by inserted plasmid

⇒ **Inactivation of antibiotic-resistant genes**

Source: Nemesis website, partially modified

Expanding therapeutic options to AMR as a leading company in the infectious disease field

Rohto: Regenerative Medicine Products for Liver Cirrhosis



Regenerative Medicine Product Candidate: ADR-001

- **“Cellular-based products” prepared from mesenchymal stromal cells (MSC) derived from allogeneic adipose tissue** by Rohto’s original technology
 - Rohto is conducting Phase I/II study in patients with decompensated liver cirrhosis
-
- **Expected to reduce fibrosis** through the effect of cytokines secreted from stromal cells
 - Prospect for **stable supply**
 - Prospect for supply at an affordable price compared to treatment with iPS cells or ES cells



Improve QOL of patients with decompensated liver cirrhosis, for which there is no effective treatment



SHIONOGI

×

NEVER SAY NEVER

ロート製薬

Expand our therapeutic modalities looking ahead to Beyond 2020 by reinforcing our drug discovery platform in the regenerative medicine area

Share Buyback and Cancellation



Share buyback

- Share buyback: 8.6M shares (upper limit)
- Total amount of buyback: 50 B yen (upper limit)
- Period: Jul. 31~Dec. 20, 2018

Cancellation of treasury shares

- Total shares to be cancelled: 9M shares
- Date for cancellation: Jan. 31, 2019

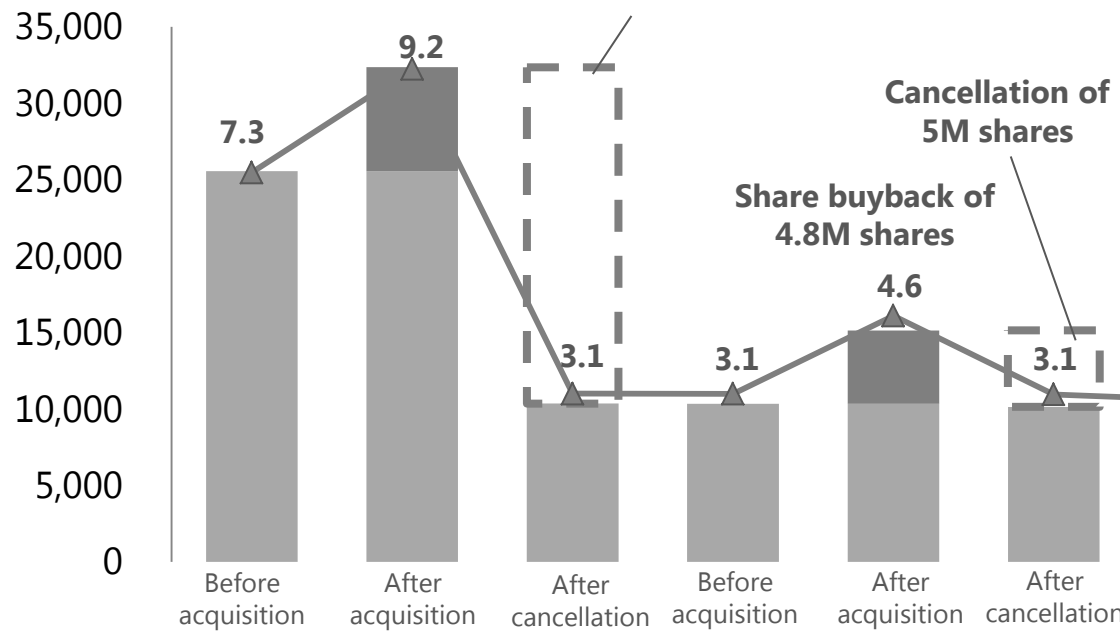
Treasury stocks
 Cancellation

Share buyback
 Percentage of treasury stocks (%)

(1,000 shares)

Share buyback of
ca. 6.8M shares

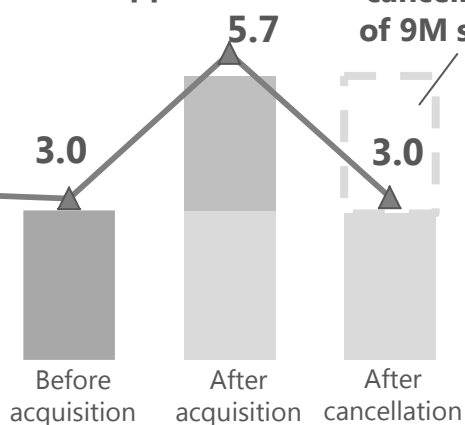
Cancellation
of 22M shares



Today's announcement

Plan for share buyback
of 8.6M shares
(upper limit)

Plan for
cancellation
of 9M shares



FY2016

FY2017

FY2018

Maximizing Corporate Value Through Group Businesses



- Improvement of business operations
- Respond to requests from society (e.g. employment extension, equal pay for equal work)

Close communication between senior management of group companies

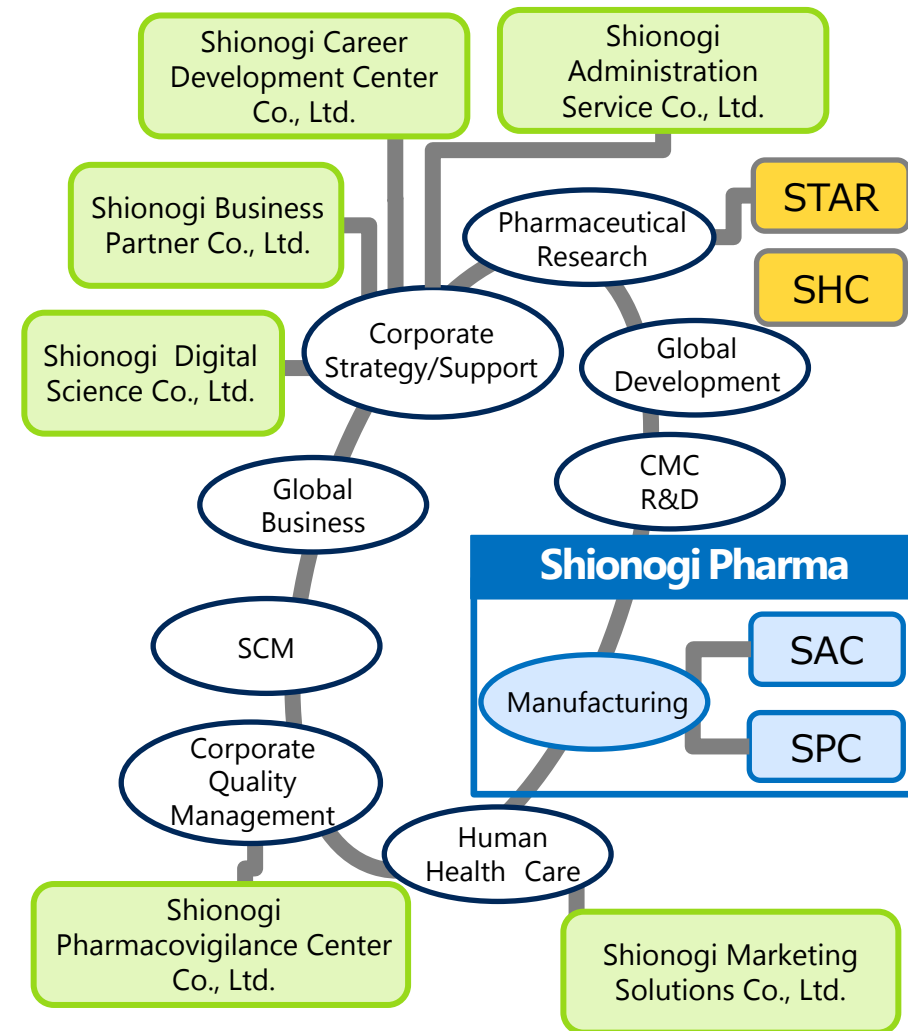
Refine infrastructure to enhance productivity and build expertise

For further growth

Press release on Oct 1, 2018

Construction of a new manufacturing subsidiary
"Shionogi Pharma Co., Ltd."
(Start business on Apr 1, 2019)

 シオノギファーマ株式会社



Forward-Looking Statements

- Forecast or target figures in this material are neither official forecasts of earnings and dividends nor guarantee of target, achievement and forecasts, but present the midterm strategies, goals and visions. Official earnings guidance should be referred to in the disclosure of the annual financial report (*kessan tanshin*) in accordance with the rules set by Tokyo Stock Exchange.
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- For products that are approved, there are manufacturing and marketing risks and uncertainties, which include, but are not limited to, inability to build production capacity to meet demand, inavailability of raw materials, and failure to gain market acceptance.
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