



# **1<sup>st</sup> Quarter of Fiscal 2018 Financial Results *Conference Call***

July 30, 2018



- 1. Overview of 1Q FY2018 Financial Results (P.3-11)**
- 2. Upward Revision of Consolidated Forecasts (P.12-15)**
- 3. Shareholder Return (P.16-17)**
- 4. Progress of Strategic Investments & Pipeline (P.18-24)**

## Appendix

- Progress of 1Q FY2018 (Other Aspects) - (P.26)
- Target Milestones for FY2018 - (P.27-28)
- Progress of Pipeline - (P.29-30)
- Revised Full Year Forecasts - (P.31)
- Strategic Investments - (P.32-33)
- Drug Discovery Strategies for Infectious Diseases - (P.34)

# **1. Overview of 1Q FY2018 Financial Results**

## **1Q FY2018 Financial Results**

- 1. Overview of 1Q FY2018 Financial Results**
- 2. Upward Revision of Consolidated Forecasts**
- 3. Shareholder Return**
- 4. Progress of Strategic Investments & Pipeline**

# Financial Results (Consolidated)



(Unit: B yen)

	FY2018			Achieve ment	FY2017	Y on Y	
	Forecasts*		1Q results		1Q results	Change (%)	Change (B yen)
	Full year	1H					
Sales	346.5	164.0	88.5	54.0%	75.0	18.0%	13.5
Operating income	119.0	44.5	27.6	62.1%	16.0	72.9%	11.7
Ordinary income	140.0	54.5	37.9	69.6%	21.1	80.1%	16.9
Profit attributable to owners of parent	111.0	43.1	31.9	74.0%	16.0	99.2%	15.9

- Sales and each profit measure are progressing smoothly toward 1H forecasts
- Each profit measure was higher than the levels achieved in prior 1Q results for:
  - Ordinary income: 8 consecutive years
  - Profit attributable to owners of parent: 3 consecutive years

Exchange rate (average)	FY2018 forecasts	1Q FY2018 results
USD (\$) – JPY (¥)	105.0	109.11
GBP (£) – JPY (¥)	145.0	148.52
EUR (€) – JPY (¥)	130.0	130.04

# Statement of Income



(Unit: B yen)

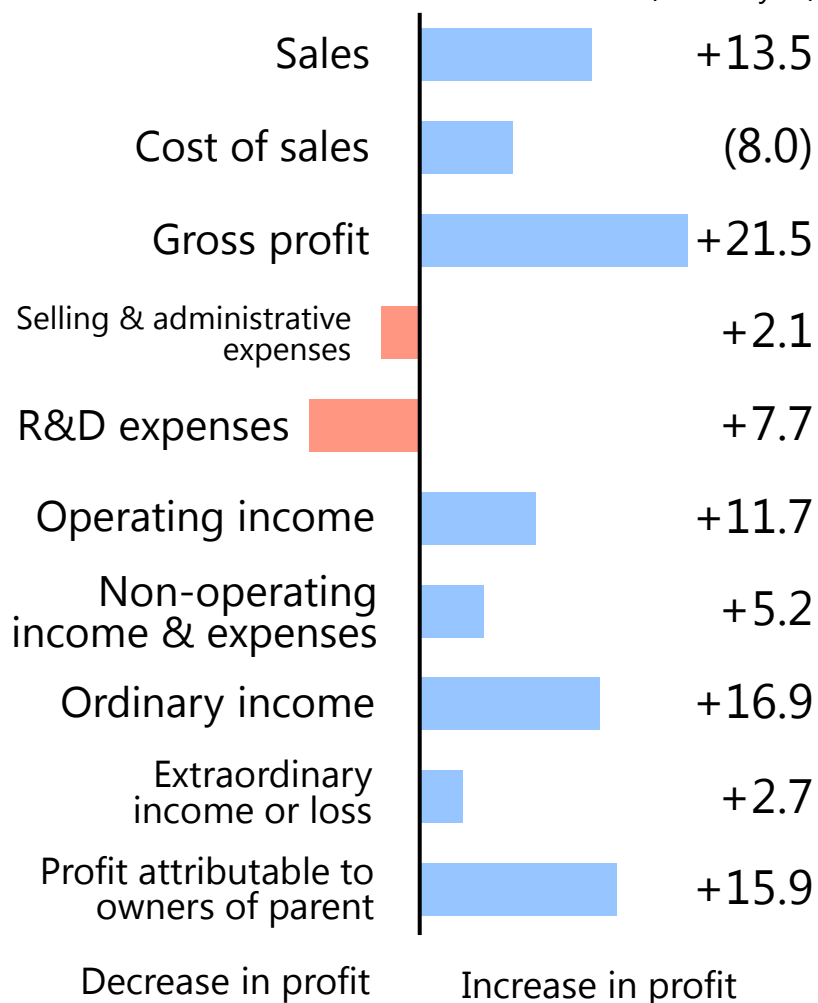
	FY2018			Achievement (%)	FY2017	Y on Y	
	Forecasts*		1Q results		1Q results	Change (%)	Change (B yen)
	Full year	1H					
Sales	346.5	164.0	88.5	54.0	75.0	18.0	13.5
	16.7	16.5	13.5		26.5		
Cost of sales	58.0	27.0	11.9	44.1	19.9	(40.2)	(8.0)
Gross profit	288.5	137.0	76.6	55.9	55.1	39.0	21.5
	48.9	56.4	55.3		52.1		
SG&A expenses	169.5	92.5	49.0	52.9	39.1	25.2	9.8
Selling & administrative expenses	29.6	32.0	27.4	46.2	22.1	9.7	2.1
	19.3	24.4	27.9		22.7		
R&D expenses	67.0	40.0	24.7	61.8	17.0	45.3	7.7
Ordinary R&D expenses**	47.0	25.0	13.7	54.7	17.0	(19.6)	(3.3)
Strategic investment	20.0	15.0	11.0	73.5	-	-	11.0
	34.3	27.1	31.2		21.3		
Operating income	119.0	44.5	27.6	62.1	16.0	72.9	11.7
Non-operating income & expenses	21.0	10.0	10.3	103.0	5.1	102.6	5.2
	40.4	33.2	42.9		28.1		
Ordinary income	140.0	54.5	37.9	69.6	21.1	80.1	16.9
Profit attributable to owners of parent	111.0	43.1	31.9	74.0	16.0	99.2	15.9

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



## • Y on Y comparison

(Unit: B yen)



## Main Variation Factors (Y on Y)

- **Sales**
  - Income from Roche for Xofluza®\*
  - Increase in royalty income for HIV franchise
  - One-time payment from Purdue for the termination of the prior 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
  - Decrease in contract manufacturing
- **SG & A expenses**
  - Selling & administrative expenses
    - › Investment in new products (preparation for launch etc.)
    - › Upfront investment in IT
  - R&D expenses
    - › Ordinary R&D expenses: decreased due to completion of Xofluza® OwH\*\* study in FY2017 (-3.3 B yen)
    - › Strategic investment: net increase (11.0 B yen)
- **Non-operating income & expenses**
  - Increase in ordinary dividend due to sales growth of HIV franchise plus impact of one-time change
- **Extraordinary income or loss**
  - Sale of the Nanjing factory of C&O in China

# Sales by Segment



(Unit: B yen)

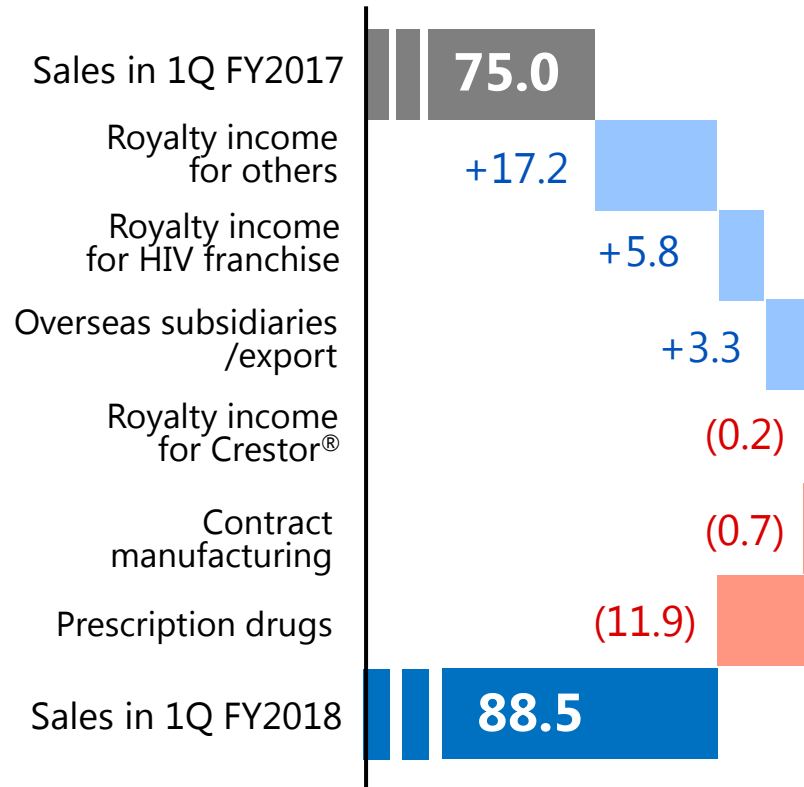
	FY2018			Achieveme nt (%)	FY2017	Y on Y	
	Forecasts*		1Q results		1Q results	Change (%)	Change (B yen)
	Full year	1H					
Prescription drugs	119.3	52.3	25.4	48.6	37.3	(31.9)	(11.9)
Overseas subsidiaries/export	29.8	13.6	9.9	72.4	6.6	49.3	3.3
Shionogi Inc.	10.9	5.0	6.1	120.8	3.5	75.7	2.6
Osphena®	4.1	2.1	0.8	36.7	1.1	(32.7)	(0.4)
C&O	12.4	5.8	2.4	40.4	1.8	31.0	0.6
Contract manufacturing	12.1	5.6	2.8	50.1	3.5	(20.5)	(0.7)
OTC and quasi-drug	7.4	3.4	1.6	46.7	1.6	1.3	0.0
Royalty income	175.5	87.8	48.3	55.0	25.5	89.7	22.9
HIV franchise	124.9	58.7	24.5	41.7	18.6	31.4	5.8
Crestor®	21.1	10.6	5.5	51.9	5.7	(4.3)	(0.2)
Others	29.5	18.5	18.3	99.0	1.1	1,582.1	17.2
Others	2.5	1.3	0.6	45.9	0.6	1.8	0.0
Total	346.5	164.0	88.5	54.0	75.0	18.0	13.5

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



## • Y on Y comparison

(Unit: B yen)



## Main Variation Factors

(Y on Y change: +13.5 B yen, +18.0%)

### • Royalty income

- Income from Roche for Xofluza®\*
- Sales growth of HIV franchise

### • Overseas subsidiaries/export

#### - US business

- One-time payment from Purdue for 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 competitors
- Sales decrease due to NHI price revision



# Changes in Distribution Platform for Symproic® in the US



- Drastic changes in the environment for opioid use in the US
  - In Oct 2017, the President Trump declared 'the opioid epidemic is a national public health emergency' due to the increases of opioid abuse and deaths with overdosing
- Purdue Pharma L.P. took significant steps to transform their business model in the US
- **Terminated the prior alliance for the co-commercialization of Symproic® in the US: Shionogi regained full rights to Symproic®**
  - **One-time payment from Purdue for the termination of the alliance**



**Shionogi Inc. has begun its own sales and distribution of Symproic®, and is seeking a new partner with strong commercial capabilities**

# Sales of Prescription Drugs in Japan



(Unit: B yen)

	FY2018				FY2017	Y on Y	
	Forecasts*		1Q results	Achievement (%)	1Q results	Change (%)	Change (B yen)
	Full year	1H					
Cymbalta®	26.0	12.1	6.1	50.3	5.8	6.1	0.4
Intuniv®	5.0	1.9	1.1	57.3	0.36	209.9	0.8
Xofluza®	13.0	1.3	0.03	2.6	-	-	-
Rapiacta®	1.1	0.06	0.01	22.3	0.05	(76.4)	0.0
Brightpoc® Flu	1.1	0.11	0.01	4.5	0.05	(90.5)	0.0
OxyContin® franchise	9.1	4.2	2.0	47.3	2.4	(15.2)	(0.4)
Symproic®	1.2	0.48	0.31	65.0	0.05	526.3	0.3
<b>Total of strategic products</b>	<b>56.5</b>	<b>20.3</b>	<b>9.6</b>	<b>47.3</b>	<b>8.6</b>	<b>11.0</b>	<b>1.0</b>
Actair®	0.15	0.06	0.04	68.2	0.03	47.4	0.0
Mulpleta®	0.23	0.12	0.05	39.9	0.05	0.6	0.0
Pirespa®	6.0	3.1	1.4	44.7	1.4	(5.1)	0.0
<b>Total of new products</b>	<b>62.8</b>	<b>23.5</b>	<b>11.0</b>	<b>47.0</b>	<b>10.1</b>	<b>8.8</b>	<b>0.9</b>
Crestor®	9.7	5.3	2.6	49.6	12.1	(78.1)	(9.4)
Irbetan® franchise	6.4	3.6	1.9	53.8	3.7	(48.5)	(1.8)
<b>Others</b>	<b>40.4</b>	<b>19.9</b>	<b>9.8</b>	<b>49.2</b>	<b>11.4</b>	<b>(13.8)</b>	<b>(1.6)</b>
<b>Prescription drugs</b>	<b>119.3</b>	<b>52.3</b>	<b>25.4</b>	<b>48.6</b>	<b>37.3</b>	<b>(31.9)</b>	<b>(11.9)</b>

# Growth by Strategic Products



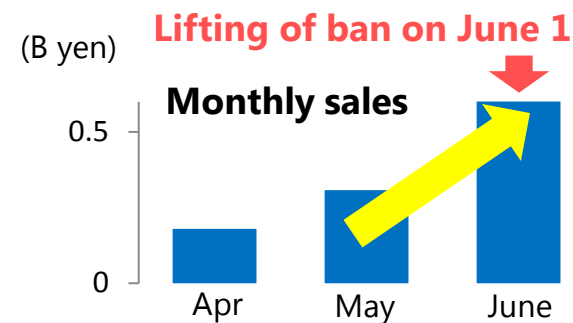
## Cymbalta®

- Smooth prescription increase in CNS field
- ➔ **Y on Y increase by ca. 20%**

## Intuniv®

- Significant increase in sales effort in 1Q prior to the lifting of ban on long-term treatment on June 1, 2018

➔ **Sales of Intuniv® have increased substantially**



## Influenza family (Xofluza®, Rapiacta®, Brightpoc®Flu, Brightpoc® Flu·Neo)

- Launch of Brightpoc® Flu·Neo
  - High sensitivity\* and rapid diagnosis
- Provide timely and accurate information for diagnosis and treatment



➔ **Strengthening the support for Influenza Family prior to the 2018-19 flu season**

## 2. Upward Revision of Consolidated Forecasts

### 1Q FY2018 Financial Results

1. Overview of 1Q FY2018 Financial Results
- 2. Upward Revision of Consolidated Forecasts**
3. Shareholder Return
4. Progress of Strategic Investments & Pipeline

# Major Factors Driving Forecast Changes Since the Beginning of FY2018



- **Acceleration of Xofluza™ HR\* study completion**
  - Prospect for income\*\* from Roche to be received ahead of schedule (2H → 2Q)
  - Increase in R&D expenses (1H)
- **US business**
  - Income from Purdue for 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)**



**Aiming to further increase in income and profit  
with expanding investment for new growth drivers**

**→ Upward revision of forecasts for 1H and full year**

# Upward Revision of Forecasts (Announced on July 23, 2018)



(Unit: B yen)

	FY2018 Forecasts						FY2017	Y on Y	
	Full year			1H			Results	Revised	
	Original*	Revised**	Change (B yen)	Original*	Revised**	Change (B yen)		Change (%)	Change (B yen)
Sales	346.5	348.0	1.5	164.0	168.0	4.0	344.7	1.0	3.3
Operating income	119.0	120.0	1.0	44.5	48.0	3.5	115.2	4.1	4.8
Ordinary income	140.0	144.0	4.0	54.5	61.0	6.5	138.7	3.8	5.3
Profit attributable to owners of parent	111.0	114.5	3.5	43.1	48.6	5.5	108.9	5.2	5.6

## Increase in sales and profit over the original forecasts

### ◆ Y on Y change (B yen)

- Sales: 1.8 → 3.3
- Operating income: 3.8 → 4.8
- Ordinary income: 1.3 → 5.3
- Net Profit: 2.1 → 5.6

Exchange rate (average)	FY2018 forecasts	1Q FY2018 results
USD (\$) – JPY (¥)	105.0	109.11
GBP (£) – JPY (¥)	145.0	148.52
EUR (€) – JPY (¥)	130.0	130.04

# Revision of Statement of Income



	FY2018 forecasts								
	Full year			1H			2H		
	Original*	Revised**	Change (B yen)	Original*	Revised**	Change (B yen)	Original*	Revised**	Change (B yen)
<b>Sales</b>	346.5	<b>348.0</b>	<b>1.5</b>	164.0	<b>168.0</b>	<b>4.0</b>	182.5	<b>180.0</b>	<b>(2.5)</b>
	16.7	16.5		16.5	15.8		17.0	17.2	
<b>Cost of sales</b>	58.0	<b>57.5</b>	<b>(0.5)</b>	27.0	<b>26.5</b>	<b>(0.5)</b>	31.0	<b>310.0</b>	<b>0</b>
<b>Gross profit</b>	288.5	<b>290.5</b>	<b>2.0</b>	137.0	<b>141.5</b>	<b>4.5</b>	151.5	<b>149.0</b>	<b>(2.5)</b>
	48.9	49.0		56.4	55.7		42.2	42.8	
<b>SG&amp;A expenses</b>	169.5	<b>170.5</b>	<b>1.0</b>	92.5	<b>93.5</b>	<b>1.0</b>	77.0	<b>77.0</b>	<b>0</b>
	29.6	29.3		32.0	31.0		27.4	27.8	
<b>Selling &amp; administrative expenses</b>	102.5	<b>102.0</b>	<b>(0.5)</b>	52.5	<b>52.0</b>	<b>(0.5)</b>	50.0	<b>50.0</b>	<b>0</b>
	19.3	19.7		24.4	24.7		14.8	15.0	
<b>R&amp;D expenses</b>	67.0	<b>68.5</b>	<b>1.5</b>	40.0	<b>41.5</b>	<b>1.5</b>	27.0	<b>27.0</b>	<b>0</b>
Ordinary R&D expenses***	47.0	<b>48.5</b>	<b>1.5</b>	25.0	<b>26.5</b>	<b>1.5</b>	22.0	<b>22.0</b>	<b>0</b>
Strategic investment	20.0	<b>20.0</b>	<b>0</b>	15.0	<b>15.0</b>	<b>0</b>	5.0	<b>5.0</b>	<b>0</b>
	34.3	34.5		27.1	28.6		40.8	40.0	
<b>Operating income</b>	119.0	<b>120.0</b>	<b>1.0</b>	44.5	<b>48.0</b>	<b>3.5</b>	74.5	<b>72.0</b>	<b>(2.5)</b>
<b>Non-operating income &amp; expenses</b>	21.0	<b>24.0</b>	<b>3.0</b>	10.0	<b>13.0</b>	<b>3.0</b>	11.0	<b>11.0</b>	<b>0</b>
	40.4	41.4		33.2	36.3		46.8	46.1	
<b>Ordinary income</b>	140.0	<b>144.0</b>	<b>4.0</b>	54.5	<b>61.0</b>	<b>6.5</b>	85.5	<b>83.0</b>	<b>(2.5)</b>
<b>Profit attributable to owners of parent</b>	111.0	<b>114.5</b>	<b>3.5</b>	43.1	<b>48.6</b>	<b>5.5</b>	67.9	<b>65.9</b>	<b>(2.0)</b>

## 3. Shareholder Return

### 1Q FY2018 Financial Results

1. Overview of 1Q FY2018 Financial Results
2. Upward Revision of Consolidated Forecasts
3. **Shareholder Return**
4. Progress of Strategic Investments & Pipeline



# Share Buyback and Cancellation

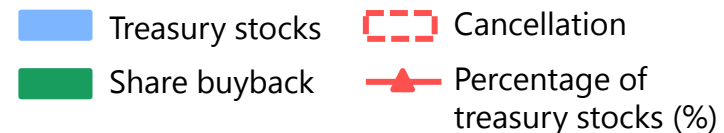


## Share buyback

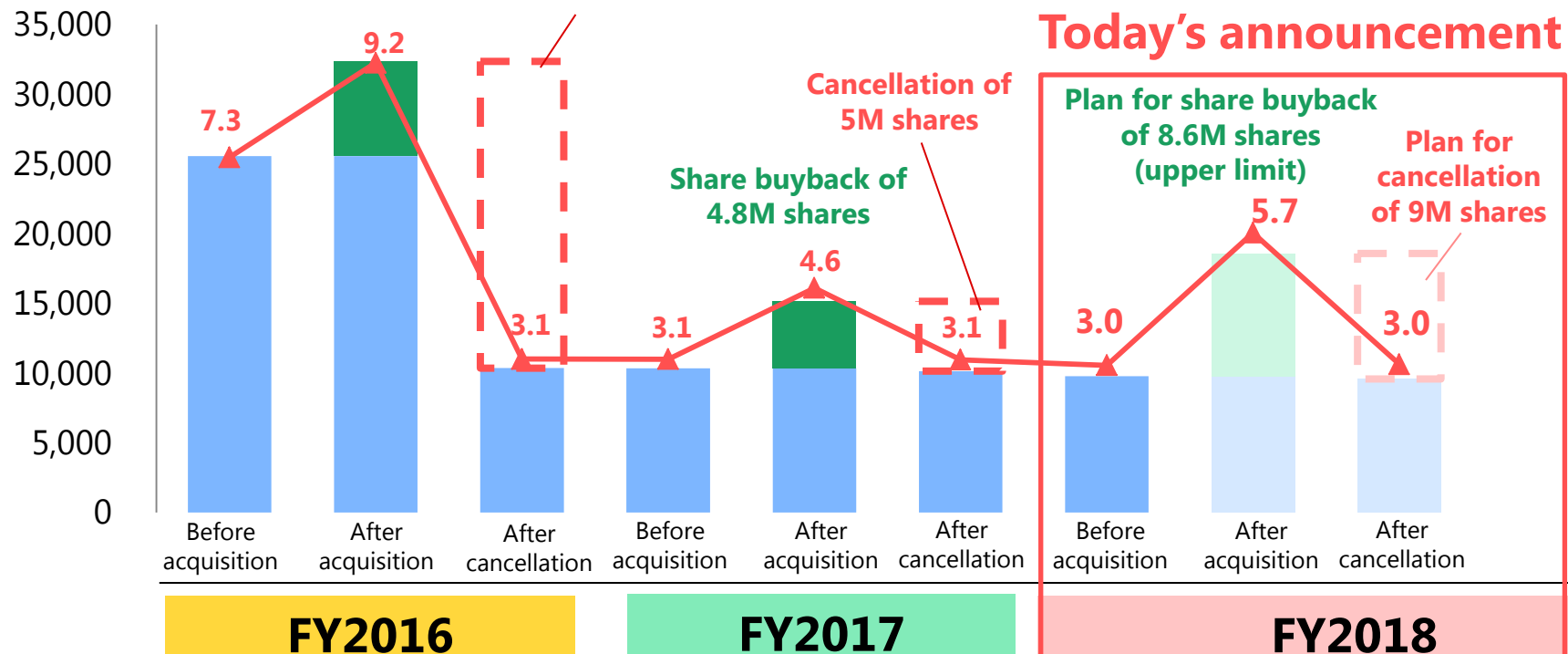
- Share buyback: 8.6M shares (upper limit)
- Total amount of buyback: 50 B yen (upper limit)
- Period: Jul. 31~Dec. 20, 2018

## Cancellation of treasury shares

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



(1,000 shares)



## 4. Progress of Strategic Investments & Pipeline

### 1Q FY2018 Financial Results

1. Overview of 1Q FY2018 Financial Results
2. Upward Revision of Consolidated Forecasts
3. Shareholder Return
4. **Progress of Strategic Investments & Pipeline**

# Steady Progress of Strategic Investment



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



- Global rights for discovery and development of novel therapeutics for non-tuberculous mycobacterial (NTM) diseases and tuberculosis

## ➤ **June 14, 2018: Strategic collaboration with SAGE**

- Antidepressant with novel mechanism of action
  - > Exclusive rights for development & commercialization of SAGE-217 in Japan, Taiwan and South Korea
- Other possible indications: sleep disorder, mood disorder and motor disorder



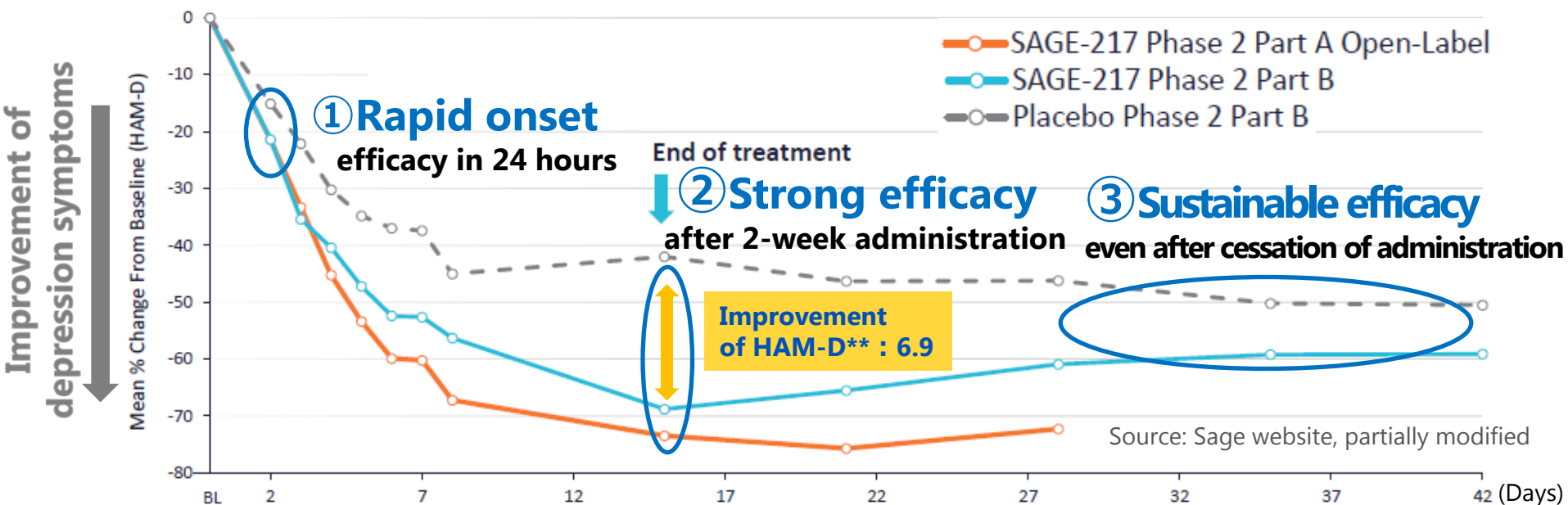
**Strategic investment for sustainable growth  
beyond 2020 (11 B yen in 1Q)**

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

### HR\* Study

#### (CAPSTONE-2)

- High-risk patients aged  $\geq 12$  years
- 0-48 hours from onset
- Japan/US/EU/  
Asia/Southern Hemisphere
- N=2,184

Randomization

Xofluza™ 40 mg or 80 mg, single dose  
(80 mg, body weight  $\geq 80$  kg)

Placebo

Oseltamivir 75 mg, twice daily for 5 days

#### Primary endpoint:

- Time to improvement of influenza symptoms

#### Key secondary endpoints:

- Anti-viral effects (viral titers\*\*, duration of viral shedding\*\*\*)
- Incidence of influenza-related complications

## Achieved Primary Objective

**Xofluza™ is the first medicine ever to demonstrate superior efficacy in high-risk patients in time to improvement of influenza symptoms compared with placebo in a clinical study**

- **Primary endpoint: Superior efficacy in time to improvement of influenza symptoms compared with placebo**
- **Key secondary endpoints:**
  - **Superior anti-viral effects compared with placebo and with oseltamivir**
    - > Viral titers\*
    - > Duration of viral shedding\*\*
  - **Reduced the incidence of influenza-related complications compared with placebo**
- **Safety**
  - Well-tolerated
  - No new safety signals

**Details to be presented at upcoming medical meetings**

**Valuable results to show the great efficacy and safety profile of Xofluza™ following the OwH\*\*\* study**

# Progress in 1Q FY2018\* (Pipeline)



Global

**Xofluza™**

- US NDA submission (PDUFA date 2018/12/24)
- HR study top-line results
- Taiwan NDA submission

In Japan

**S-005151**

- Start of PhI study (Acute ischemic stroke)

**S-600918**

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

**OxyContin®TR**

- Start of PhIII study (Chronic pain)

**Xofluza®**

- NDA submission (granule product)

**Brightpoc® Flu·Neo**

- Approval, Launch

**SR-0379**

- Start of PhII study (Cutaneous ulcer)

Out-licensed

Infectious diseases

Pain/CNS

Frontier

**DTG+3TC**

- PhIII study top-line results (GEMINI)

**Juluca® (DTG/RPV)**

- Approval, Launch



# Appendix

- Progress in 1Q FY2018 (Other Aspects) -
- Target Milestones for FY2018 -
- Progress of Pipeline -
- Revised Full Year Forecasts -
- Strategic Investment -
- Drug Discovery Strategies for Infectious Diseases -

# Progress in 1Q FY2018\* (Other Aspects)



- **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<sup>®</sup>"
- Entered into a capital alliance between Shionogi Healthcare and Rohto

- **July**

- Terminated the prior alliance with Purdue for the co-commercialization of Symproic<sup>®</sup> in the US (Shionogi has regained full rights to Symproic<sup>®</sup>)

# 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)				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	Global: ongoing → US	US
Xofluza™, granule (Influenza virus infection)			Achieved (Apr. 2018)	Japan: ongoing → 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		
OxyContin®TR (Treatment of moderate to severe chronic pain)			Japan: initiated	Achieved	
S-120083 (Inflammatory pain)		US: completed			
S-588410 (Bladder cancer)		Japan, EU: completed			
S-600918 (Refractory/unexpected chronic cough, Neuropathic pain)		Japan: initiated	Achieved (Refractory/unexpected chronic cough)		
S-770108 (Idiopathic pulmonary fibrosis)	Japan: completed				
S-637880 (Neuropathic pain)	Japan: completed				
S-005151 (Acute ischemic stroke)	Japan: initiated				
S-004992 (Tuberculosis)	Asia (China) : initiated	Achieved			

**S** **O** **N** **G**  
for you!

Progress from May 10 to July 30, 2018 <sup>\*In preparation for Phase 1</sup> 29

# Pipeline -Out-licensed (as of July 2018)



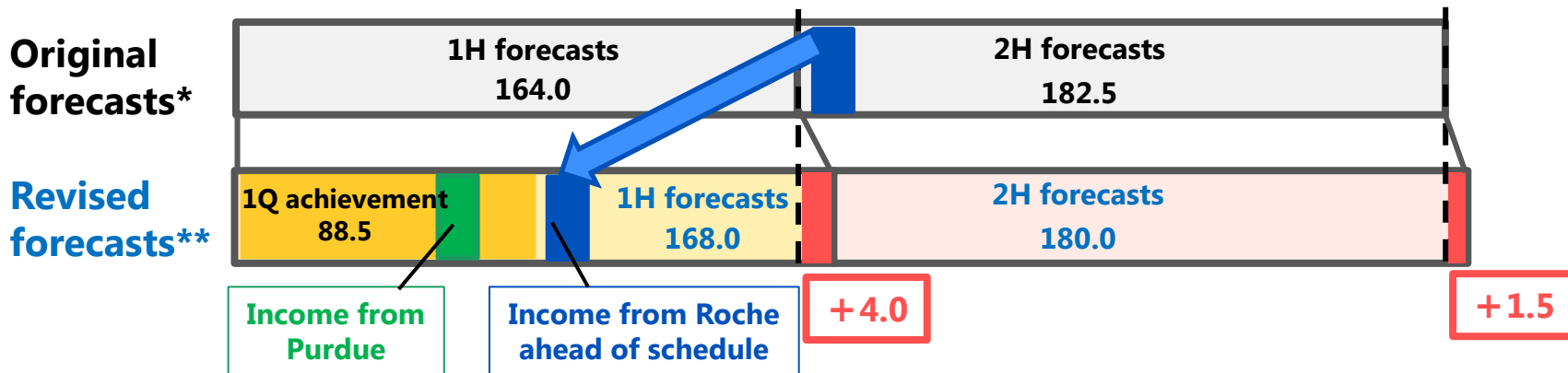
Preclinical	Phase I	Phase II	Phase III	Filed
	<b>GSK3342830</b> Multidrug-resistant Gram-negative bacterial infections		<b>DTG+3TC</b> Treatment for HIV infection GEMINI study (untreated) TANGO study (maintenance)	<b>Osphena®</b> Vaginal dryness associated with postmenopausal VVA
			<b>CAB LAP</b> Prevention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

# Revised Full Year Forecasts



- Sales (346.5 → 348.0)**

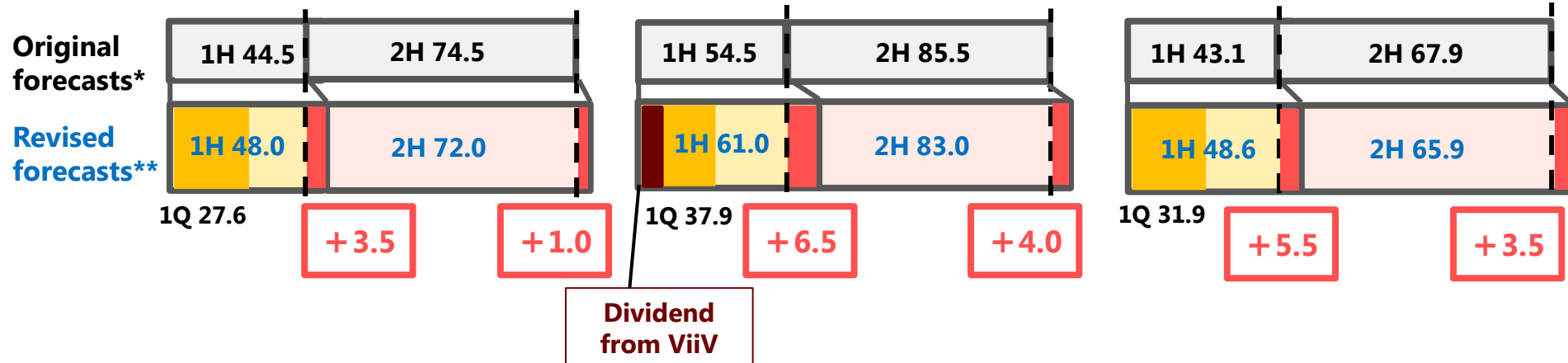
(Unit: B yen)



- Operating income (119.0 → 120.0)**

- Ordinary income (140.0 → 144.0)**

- Profit attributable to owners of parent (111.0 → 114.5)**



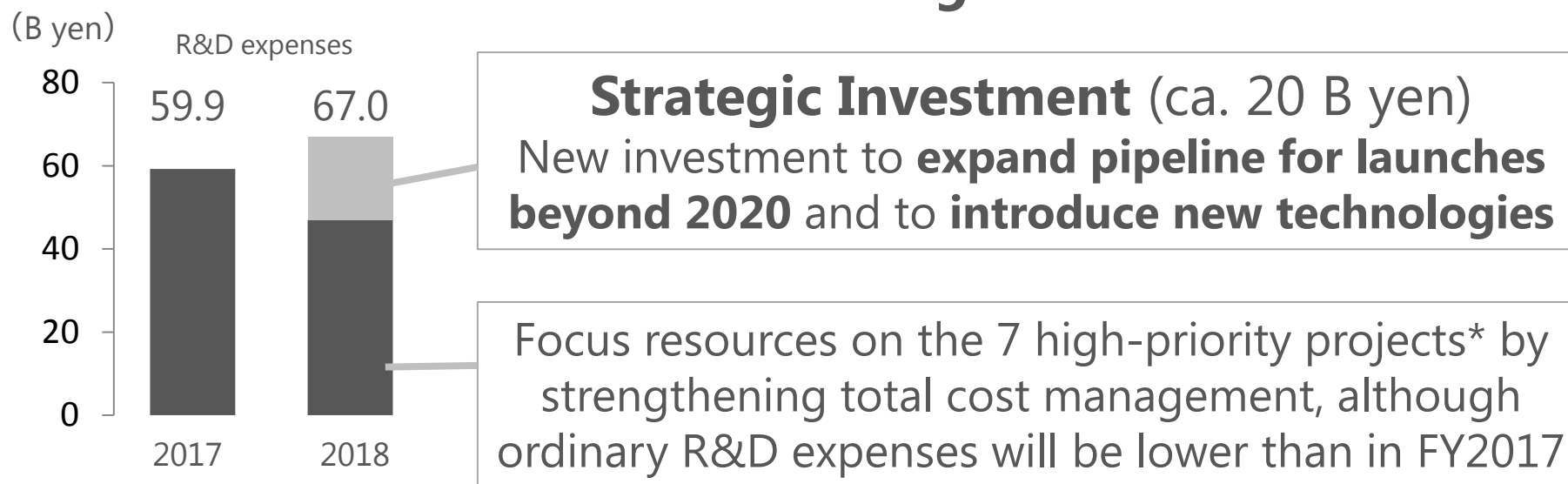
# Strategic Investment for Sustainable Growth



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**



## Acquire knowledges about the novel modality “Symbiotics<sup>©</sup>” an approach to the problem of AMR

### Symbiotics<sup>©</sup>

Symbiotic<sup>®</sup> 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

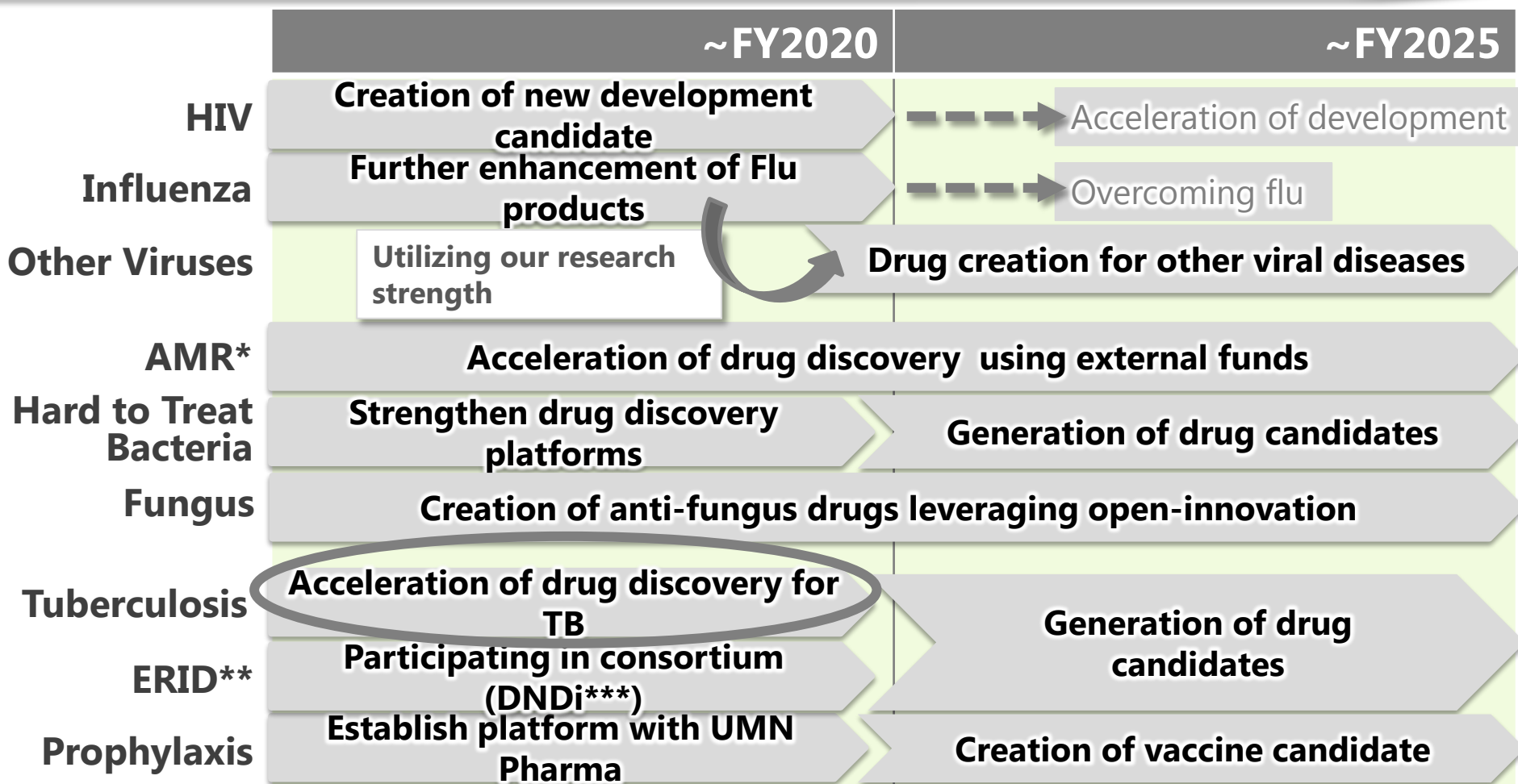
3) Modification of antibiotic-  
resistant genes by inserted  
plasmid

⇒ **Inactivation of antibiotic-  
resistant genes**

Source: Nemesis website, partially modified

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

# Drug Discovery Strategies for Infectious Diseases



Short term) Focusing on HIV, influenza and preparing for the future  
 Medium to long term) Expand/shift scope to include other viruses, tuberculosis

# 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.
- Materials and information provided during this presentation may contain so-called “forward-looking statements”. These statements are based on current expectations, forecasts and assumptions that are subject to risks and uncertainties which could cause actual outcomes and results to differ materially from these statements.
- Risks and uncertainties include general industry and market conditions, and general domestic and international economic conditions such as interest rate and currency exchange fluctuations. Risks and uncertainties particularly apply with respect to product-related forward-looking statements. Product risks and uncertainties include, but are not limited to, technological advances and patents attained by competitors; challenges inherent in new product development, including completion of clinical trials; claims and concerns about product safety and efficacy; regulatory agency’s examination period, obtaining regulatory approvals; domestic and foreign healthcare reforms; trend toward managed care and healthcare cost containment; and governmental laws and regulations affecting domestic and foreign operations.
- 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.
- Shionogi disclaims any intention or obligation to update or revise any forward-looking statements whether as a result of new information, future events or otherwise.
- This material is presented to inform stakeholders of the views of Shionogi's management but should not be relied on solely in making investment and other decisions.
- You should rely on your own independent examination of us before investing in any securities issued by our company. Shionogi shall accept no responsibility or liability for damage or loss caused by any error, inaccuracy, misunderstanding or changes of target figures or any other use of this material.
- This English presentation was translated from the original Japanese version. In the event of any inconsistency between the statements in the two versions, the statements in the Japanese version shall prevail.