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Compassion for Patients.™



# FY2018 Financial Results Presentation

**DAIICHI SANKYO CO., LTD**

**Sunao Manabe  
President and COO**

**April 25, 2019**

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# Agenda

**1** FY2018 Financial Results

2 FY2019 Consolidated Forecast

3 Business Update

4 R&D Update

5 Appendix



# Overview of FY2018 Results

(Bn JPY)

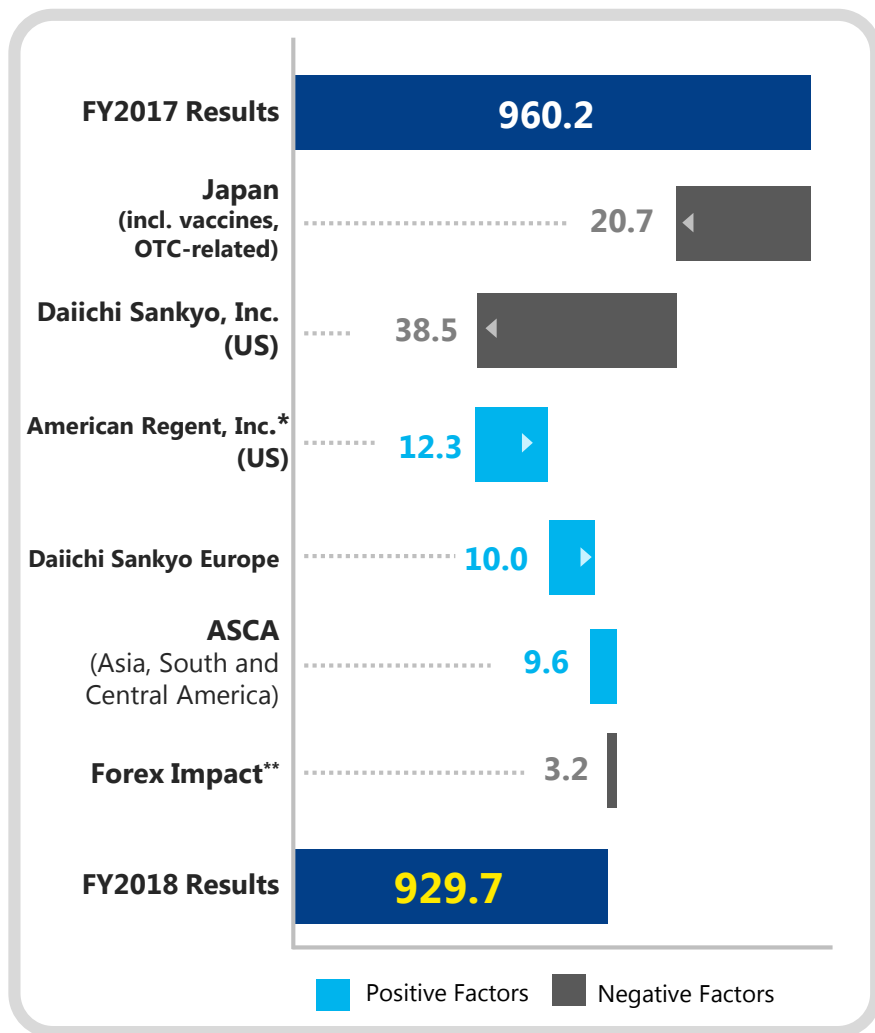
	FY2017 Results	FY2018 Results	YoY
Revenue	960.2	929.7	-3.2% -30.5
Cost of Sales	346.0	364.6	+18.6
SG&A Expenses	301.8	277.7	-24.2
R&D Expenses	236.0	203.7	-32.3
Operating Profit	76.3	83.7	+9.7% +7.4
Profit before Tax	81.0	85.8	+4.8
Profit attributable to owners of the Company	60.3	93.4	+55.0% +33.1

Currency Rate	USD/JPY	110.86	110.91	+0.05
	EUR/JPY	129.70	128.40	-1.30

# Revenue

**Decreased by 30.5 Bn JPY** (Decreased by 27.3 Bn JPY excl. forex impact)

(Bn JPY)



Positive Factors		Negative Factors	
<b>Japan</b>			
Lixiana	+19.6	Olmotec	-29.7
Canalia	+6.5	Nexium	-8.3
Gain on sales of transferring long-listed products	+6.3	Inavir	-7.1
Daiichi Sankyo Espha (GE)	+8.8	Loxonin	-6.0
Olmесartan AG, Rosuvastatin AG etc.		(incl. impact of price revision in Japan)	
		Daiichi Sankyo Healthcare	-6.5
		(incl. impact of change in accounting treatment)	
<b>Daiichi Sankyo, Inc. (US)</b>			
		Welchol	-20.5
		Olmесartan	-10.6
		Effient	-8.2
<b>American Regent, Inc.* (US)</b>			
		Injectafer	+9.9
<b>Daiichi Sankyo Europe</b>			
		Lixiana	+19.2
		Olmесartan	-5.9

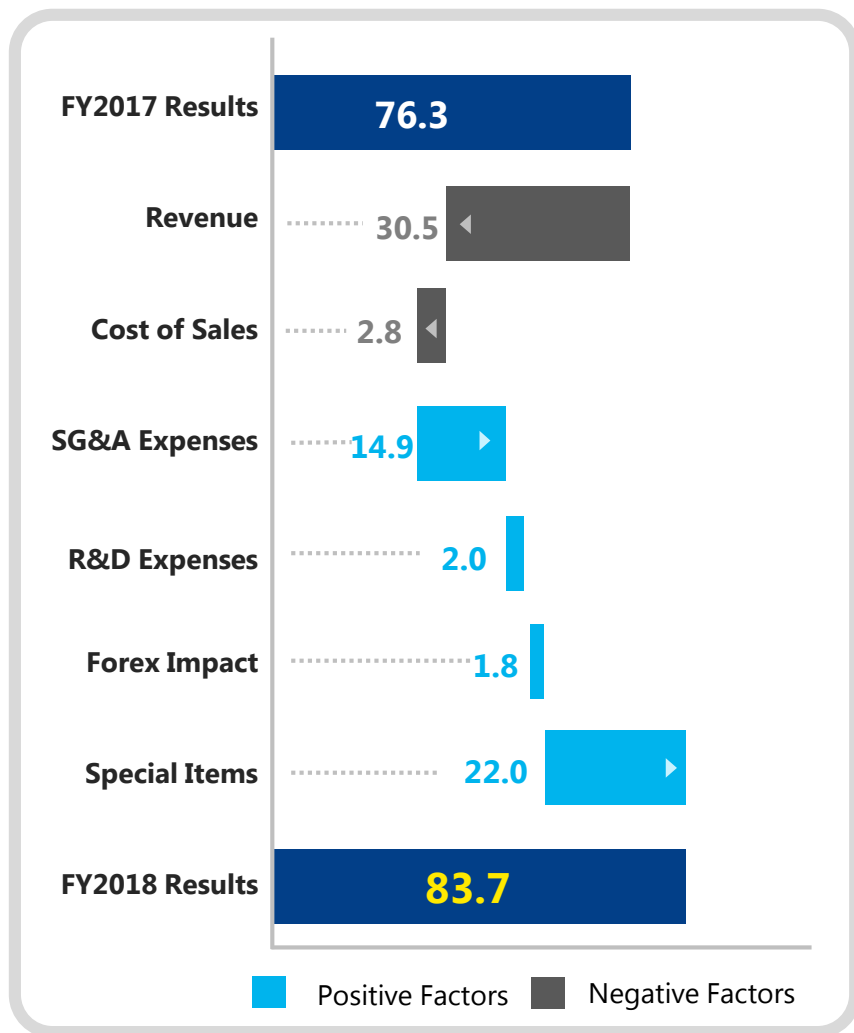
\* Formerly, Luitpold Pharmaceuticals, Inc.

\*\* Forex impact USD: +0.1, EUR: -0.9, ASCA: -2.3

# Operating Profit

## Increased by 7.4 Bn JPY

(Decreased by 13.2 Bn JPY excl. forex impact and special items)



(Bn JPY)

**Revenue** ..... -30.5  
incl. forex impact of -3.2

**Cost of Sales** ..... +2.8 (Cost increased)  
Product mix due to impact of olmesartan LOE

**SG&A Expenses** ..... -14.9 (Cost decreased)  
Effect of cost reductions in US,  
impact of change in accounting treatment etc.

**Forex Impact** ..... -1.8 (Cost decreased)  
Cost of Sales ..... -0.3  
SG&A Expenses ..... -1.3  
R&D Expenses ..... -0.2

**Special Items** ..... -22.0 (Cost decreased)  
\*See next slide for details

# Special Items

(Bn JPY)

	FY2017 Results		FY2018 Results		YoY
<b>Cost of Sales</b>	Gain on sales of fixed assets	-6.1	Impairment loss (Intangible)**	15.1	+16.1
	Impairment loss (Intangible)	5.1			
<b>SG&amp;A Expenses</b>	Restructuring costs in US	2.8	Gain on sales of fixed assets	-3.5	-7.9
	Litigation fee	1.7			
<b>R&amp;D Expenses</b>	Impairment loss (Intangible)*	30.2			-30.2
<b>Total</b>		33.6		11.6	-22.0

\*CL-108 and others

\*\*Zelboraf and Movantik

- : Cost decreased items

Booked in Q4

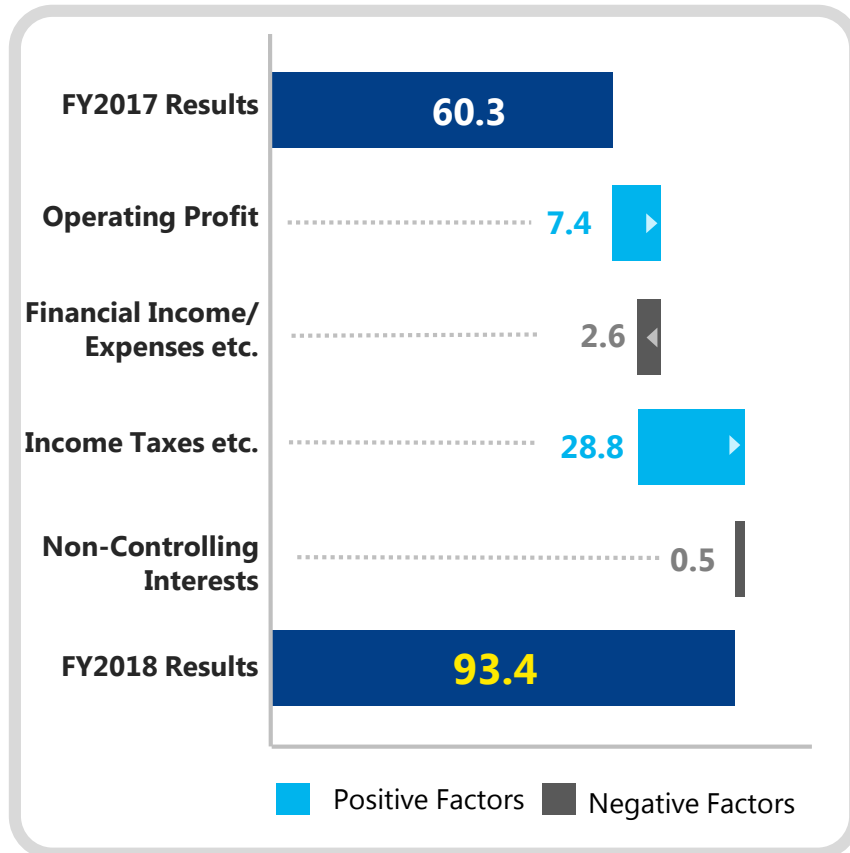
## Special items :

Items having a transitory and material impact on operating profit are defined as "Special items".

Specifically, gains and losses related to: sale of fixed assets, restructuring, impairment, litigation, etc. amounting to 1 billion JPY or more are defined as "Special items".

# Profit Attributable to Owners of the Company

**Increased by 33.1 Bn JPY**



(Bn JPY)

**Financial Income/ Expenses etc.** ..... +2.6 (Cost increased)

Deterioration of forex gains/ losses

**Income Taxes etc.** ..... -28.8 (Cost decreased)

Increase in DTA attributable to future expected taxable income increase due to DS-8201 strategic collaboration

	FY2017	FY2018	YoY
Profit before Tax	81.0	85.8	+4.8
Income Taxes etc.	21.2	-7.6	-28.8
Tax rate	26.2%	-8.8%	-35.0%

**Non-Controlling Interests** ..... +0.5 (Cost increased)



# Revenue: Major Business Units (incl. Forex Impact)

(Bn JPY)

	FY2017 Results	FY2018 Results	YoY	
<b>Japan</b>	<b>540.0</b>	<b>523.3</b>	<b>-16.7</b>	
<b>Daiichi Sankyo Healthcare</b>	<b>72.9</b>	<b>66.4</b>	<b>-6.5</b>	
<b>Daiichi Sankyo, Inc.</b>	<b>74.8</b>	<b>36.3</b>	<b>-38.5</b>	
<b>Olmesartan</b>	<b>21.3</b>	<b>10.7</b>	<b>-10.6</b>	
<b>Welchol</b>	<b>33.9</b>	<b>13.4</b>	<b>-20.5</b>	
<b>Effient</b>	<b>10.7</b>	<b>2.4</b>	<b>-8.2</b>	
<b>Savaysa</b>	<b>2.2</b>	<b>2.3</b>	<b>+0.1</b>	
<b>Movantik</b>	<b>4.7</b>	<b>4.2</b>	<b>-0.5</b>	
<b>American Regent, Inc.</b>	<b>105.4</b>	<b>117.8</b>	<b>+12.4</b>	
<b>Venofer</b>	<b>31.0</b>	<b>28.9</b>	<b>-2.0</b>	
<b>Injectafer</b>	<b>34.3</b>	<b>44.2</b>	<b>+9.9</b>	
<b>GE injectables</b>	<b>37.1</b>	<b>38.5</b>	<b>+1.5</b>	
<b>Daiichi Sankyo Europe</b>	<b>79.4</b>	<b>88.6</b>	<b>+9.1</b>	
<b>Olmesartan</b>	<b>33.5</b>	<b>27.4</b>	<b>-6.1</b>	
<b>Efient</b>	<b>8.0</b>	<b>5.7</b>	<b>-2.3</b>	
<b>Lixiana</b>	<b>27.0</b>	<b>45.8</b>	<b>+18.8</b>	
<b>ASCA (Asia, South and Central America)</b>	<b>80.4</b>	<b>87.7</b>	<b>+7.3</b>	
Currency	USD/JPY	110.86	110.91	+0.05
Rate	EUR/JPY	129.70	128.40	-1.30

# Revenue: Major Products in Japan

(Bn JPY)

		FY2017 Results	FY2018 Results	YoY
<b>Nexium</b>	ulcer treatment	86.5	78.3	-8.3
<b>Lixiana</b>	anticoagulant	45.3	64.9	+19.6
<b>Memary</b>	Alzheimer's disease treatment	48.6	50.2	+1.7
<b>Loxonin</b>	anti-inflammatory analgesic	36.5	30.5	-6.0
<b>Pralia</b>	treatment for osteoporosis/ inhibitor of the progression of bone erosion associated with rheumatoid arthritis	23.2	27.4	+4.2
<b>Tenelia</b>	type 2 diabetes mellitus treatment	26.3	25.3	-1.0
<b>Inavir</b>	anti-influenza treatment	25.3	18.2	-7.1
<b>Olmetec</b>	antihypertensive agent	44.6	14.9	-29.7
<b>Ranmark</b>	treatment for bone complications caused by bone metastases from tumors	15.4	16.4	+1.0
<b>Efient</b>	antiplatelet agent	12.8	13.9	+1.1
<b>Rezaltas</b>	antihypertensive agent	16.8	15.5	-1.3
<b>Urief</b>	treatment for dysuria	11.1	10.3	-0.9
<b>Omnipaque</b>	contrast medium	14.0	12.0	-2.0
<b>Canalia</b>	type 2 diabetes mellitus treatment	2.7	9.2	+6.5
<b>Vimpat</b>	anti-epileptic agent	2.6	6.6	+3.9

① FY2018 Financial Results

② **FY2019 Consolidated Forecast**

③ Business Update

④ R&D Update

⑤ Appendix



# FY2019 Consolidated Forecast

( Bn JPY)

	FY2018 Results	FY2019 Forecast	YoY
Revenue	929.7	940.0	+1.1% +10.3
Cost of Sales	364.6	330.0	-34.6
SG&A Expenses	277.7	285.0	+7.3
R&D Expenses	203.7	225.0	+21.3
Operating Profit	83.7	100.0	+19.5% +16.3
Profit before Tax	85.8	100.0	+14.2
Profit attributable to owners of the Company	93.4	72.0	-22.9% -21.4

Currency Rate	USD/JPY	110.91	110.00
	EUR/JPY	128.40	130.00

# FY2019 Consolidated Forecast

		( Bn JPY)	
	FY2018 Results (excl. special items)	FY2019 Forecast	YoY
Revenue	929.7	940.0	+1.1% +10.3
Cost of Sales	349.5	330.0	-19.5
SG&A Expenses	281.2	285.0	+3.8
R&D Expenses	203.7	225.0	+21.3
Operating Profit	95.3	100.0	+4.9% +4.7

➤ Deferred revenue for DS-8201 strategic collaboration upfront payment +10.0

➤ Gain on sales of Takatsuki Plant transfer -19.0

➤ Gain on sales of Nihonbashi building -10.6  
 ➤ Costs increase for the establishment of the oncology business structure

➤ Increase in R&D investments to DS-8201

Currency Rate	USD/JPY	110.91	110.00
	EUR/JPY	128.40	130.00

\*Regarding the impact of DS-8201 strategic collaboration, only deferred revenue for upfront payment is included in FY2019 forecast

① FY2018 Financial Results

② FY2019 Consolidated Forecast

③ **Business Update**

④ R&D Update

⑤ Appendix



**Edoxaban**

**Japan Business**

**Streamlining of Assets**

**Shareholder Returns**

# Edoxaban

Japan Business

Streamlining of Assets

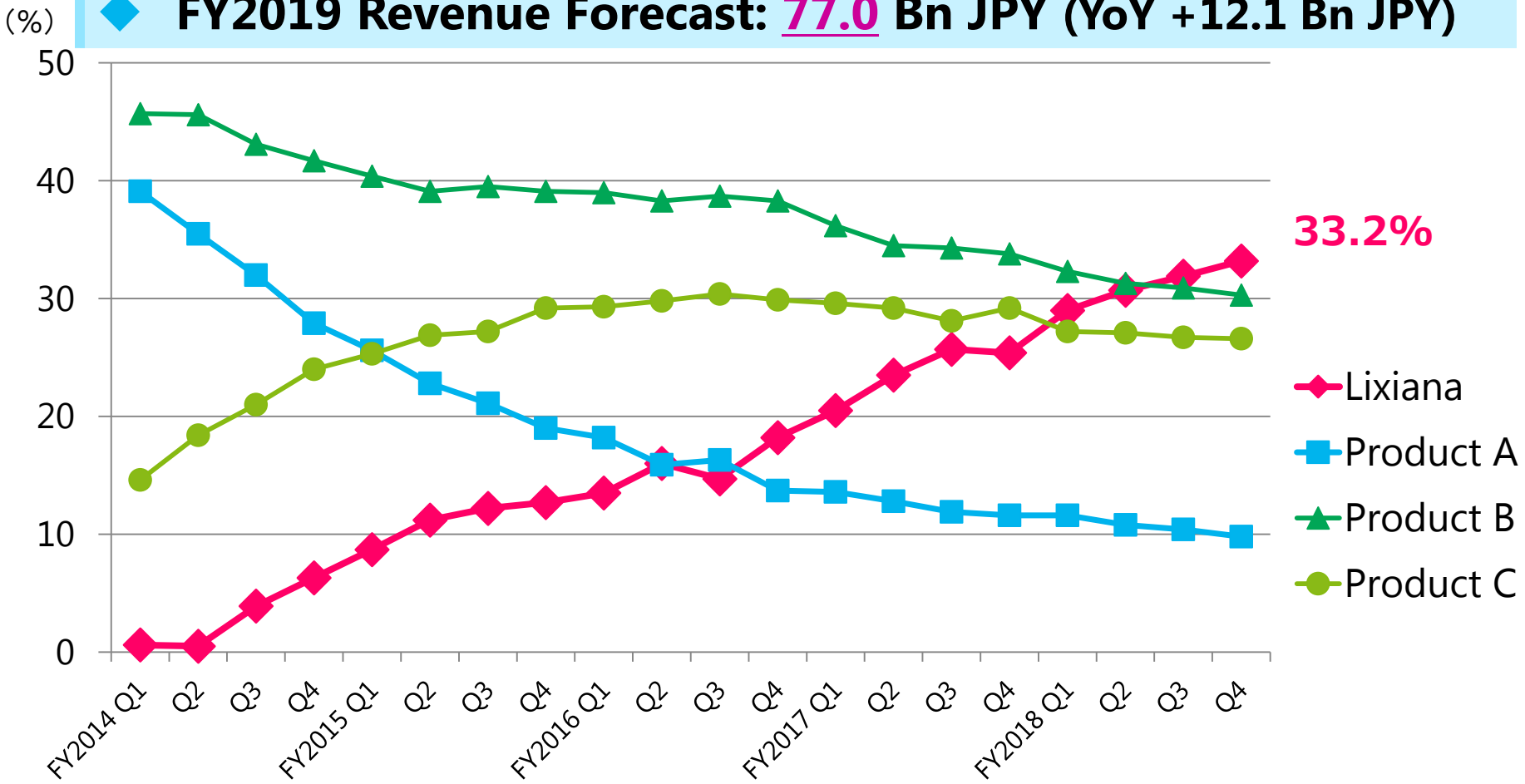
Shareholder Returns



# Lixiana: Growth in Japan



- ◆ FY2018 Q4: No.1 sales share (**33.2%**)
- ◆ FY2018 Revenue Results : **64.9** Bn JPY (YoY +19.6 Bn JPY)
- ◆ FY2019 Revenue Forecast: **77.0** Bn JPY (YoY +12.1 Bn JPY)

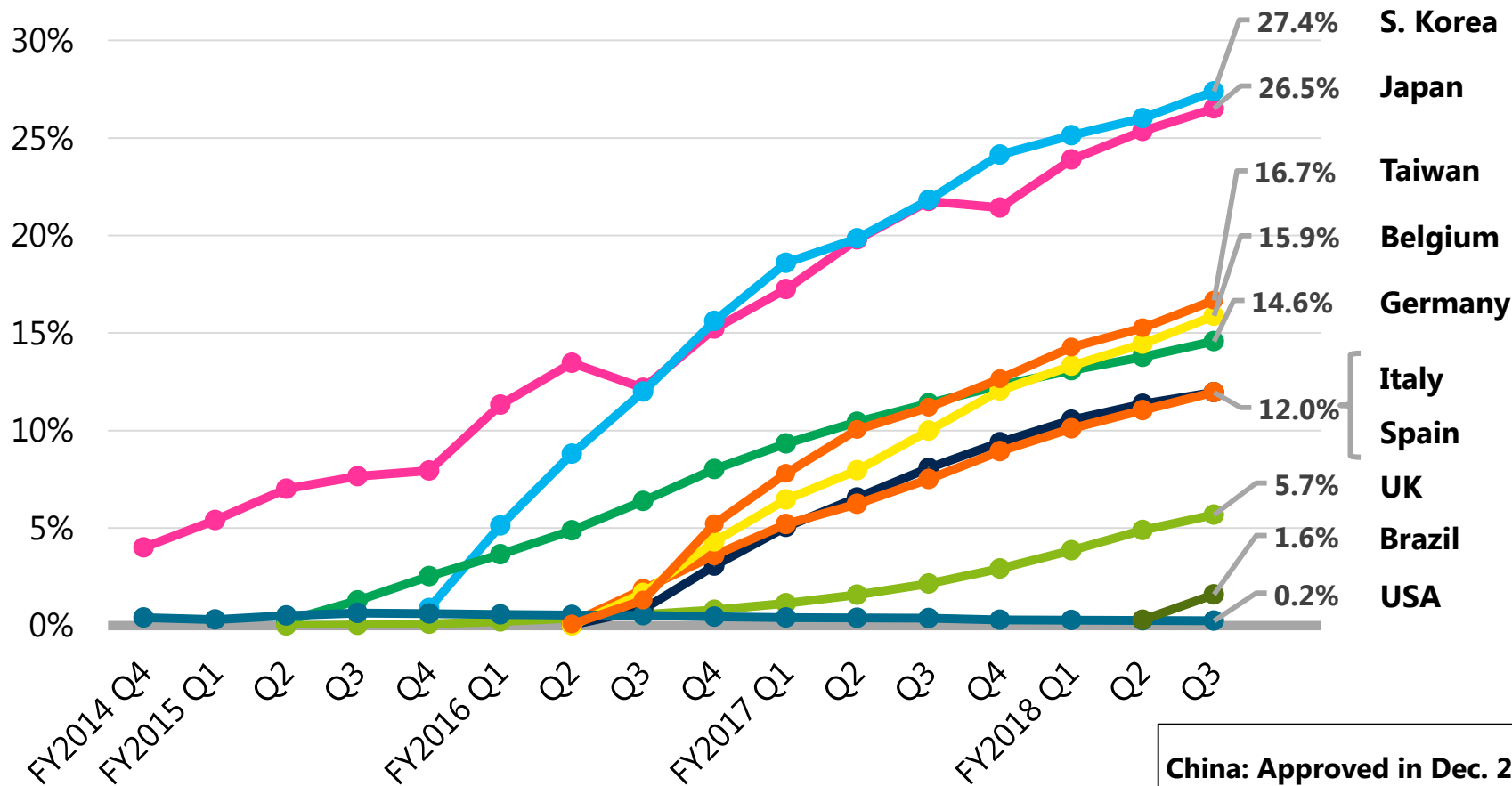


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# Edoxaban: Growth in Each Country/Region









- ◆ Steady growth in each country/region
- ◆ FY2018 Global Revenue Results : **117.7** Bn JPY (YoY +40.6 Bn JPY)
- ◆ FY2019 Global Revenue Forecast: **149.0** Bn JPY (YoY +31.3 Bn JPY)



**China: Approved in Dec. 2018**

# Edoxaban: Life Cycle Management

## ◆ Conducting randomized controlled trials in various clinical settings in AF and VTE to expand the scientific knowledge

Study Name	Clinical Setting (Comparator)	Primary Completion
 ENSURE-AF	Cardioversion (enoxaparin/warfarin)	Presented at ESC 2016
 ENTRUST-AF PCI	PCI (warfarin)	June 2019
 ELIMINATE-AF	Cardiac ablation (warfarin)	Presented at EHRA* 2019
 ENVISAGE-TAVI AF	Transcatheter aortic valve implantation (warfarin)	November 2020
 ELDERCARE-AF	80 years or older who are ineligible for current OAC therapy (placebo)	December 2019
 Hokusai VTE CANCER	VTE associated with cancer (dalteparin)	Presented at ASH 2017

### FY2018 Results

Patient enrollment progressed as planned

➤ Data will be disclosed in FY2019







Late-breaking data presented at EHRA\* in Mar. 2019

➤ Confirmed the efficacy and safety of edoxaban in the treatment of patients undergoing catheter ablation of AF

\*European Heart Rhythm Association

# Edoxaban: Life Cycle Management

## ◆ Conducting non-interventional studies and registries to generate real-world data to expand the scientific knowledge

Study Name	Clinical Setting	FY2018 Results
	Edoxaban Treatment in routine clinical practice in AF	Baseline data presented at ESC in Aug. 2018 ➤ One-year follow-up data will be presented during FY2019
	Edoxaban Treatment in routine clinical practice in VTE	Data presented at EHRA in Mar. 2019 ➤ Confirmed the efficacy and safety of periprocedural edoxaban management in clinical practice
	Edoxaban Management In diagnostic and Therapeutic procedures–AF/VTE	Data presented at EHRA in Mar. 2019 ➤ Confirmed the efficacy and safety of periprocedural edoxaban management in clinical practice
	Prolongation PREFER in AF, European Registry	Baseline data presented at Japanese College of Cardiology (JCC) in Sep. 2018
	All Nippon AF In Elderly Registry (in more than 75 years in Japan)	Baseline data presented at Japanese College of Cardiology (JCC) in Sep. 2018
	Multicenter Prospective Registry in VTE patients associated with cancer	

Edoxaban

## **Japan Business**

Streamlining of Assets

Shareholder Returns

## ◆ **Tarlige (mirogabalin):** Launched in Apr. 2019

- MOA:  $\alpha 2\delta$  ligand
- Indication: peripheral neuropathic pain



## ◆ **Minnebro (esaxerenone):** Launch in May. 2019

- MOA: mineralocorticoid blocker
- Indication: hypertension



Edoxaban

Japan Business

**Streamlining of Assets**

Shareholder Returns

# Streamlining of Assets

		FY2016 Results	FY2017 Results	FY2018 Results	Total
<b>Reduce cross-shareholding shares</b>	Number of stock brands	<b>14</b> brands	<b>9</b> brands	<b>10</b> brands	<b>33</b> brands
	Sales proceeds	<b>17.3</b> Bn JPY	<b>14.4</b> Bn JPY	<b>14.3</b> Bn JPY	<b>46.0</b> Bn JPY
	Gain on sales*	9.3 Bn JPY	9.8 Bn JPY	10.6 Bn JPY	29.7 Bn JPY
<b>Sale of properties</b>	Sales proceeds	<b>3.2</b> Bn JPY	<b>10.7</b> Bn JPY	<b>11.0</b> Bn JPY	<b>25.0</b> Bn JPY
	Gain on sales	0.8 Bn JPY	7.6 Bn JPY	9.0 Bn JPY	17.5 Bn JPY
<b>Gain on sales of business transfer</b>	Gain on sales	-	-	(transferring long-listed products) <b>6.3</b> Bn JPY	<b>6.3</b> Bn JPY

\* Booked in other comprehensive income

Gain on sales of Takatsuki Plant transfer (19.0 Bn JPY) and Nihonbashi building (10.6 Bn JPY) will be booked in FY2019



Edoxaban

Japan Business

Streamlining of Assets

**Shareholder Returns**

## Shareholder Returns Policy: FY2016 - FY2022



	FY2016 Results	FY2017 Results	FY2018 Results	FY2019 Plan
Dividend	<b>70 JPY</b>	<b>70 JPY</b>	<b>70 JPY</b>	<b>70 JPY</b>
Acquisition of own shares	<b>50.0 Bn JPY</b>	<b>50.0 Bn JPY</b>	-	<b>Flexible</b>
Total return ratio*	<b>180.7%</b>	<b>159.1%</b>	<b>48.5%</b>	-
	<b>114.8%</b>			

\*Total return ratio = ( Dividends + Total acquisition costs of own shares) / Profit attributable to owners of the company

① FY2018 Financial Results

② FY2019 Consolidated Forecast

③ Business Update

④ **R&D Update**

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**FY2018 Results**

**Progress of DS-8201**

**SAKIGAKE Designation of DS-3201**

**DS-1647 (G47Δ) P2 IIS Study Result**

**New Phase 3 Study of Mirogabalin**

**Upcoming Milestones**

**ASCO IR Events**

## **FY2018 Results**

Progress of DS-8201

SAKIGAKE Designation of DS-3201















DS-1647 (G47Δ) P2 IIS Study Result

New Phase 3 Study of Mirogabalin














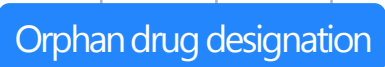







Upcoming Milestones

ASCO IR Events

# DS-8201: FY2018 Results









Fiscal year		FY2018											
Month		4	5	6	7	8	9	10	11	12	1	2	3
Multiple tumors P1				 ASCO			 WCLC	 ESMO			 SABCS		
Breast (Global)	Post T-DM1	Complete P2 DESTINY-Breast01 study enrollment 						Started P3 DESTINY-Breast02 study 					
	vs. T-DM1							Started P3 DESTINY-Breast03 study 					
	HER2 low							Started P3 DESTINY-Breast04 study 					
Lung (Global)		Started P2 study 											
IO combo (US/EU)	Nivolumab	Started P1 study 											
	Pembrolizumab	 Merck											
	Avelumab	 Merck KGaA/Pfizer											
Partner ship	CDx development	 Ventana (Roche Group)											
	Strategic collaboration	AstraZeneca 											

# Other Oncology: FY2018 Results

Fiscal year		FY2018											
Month		4	5	6	7	8	9	10	11	12	1	2	3
U3-1402	Breast cancer			 ASCO						 SABCS			
Quizartinib	Relapsed/ refractory AML			 EHA		 BTD	 US	 US NDA					
				 Orphan drug designation			 Japan	 JP NDA					
								 EU MAA					
DS-3032	Liposarcoma			 ASCO									
	AML+quizartinib									 Started P1 study			
PLX2853	AML												 Started P1 study
Axi-Cel® (Japan)	BCL			 Orphan drug designation			 Japan	 Started P2 study					
Pexidartinib (US/EU)	TGCT			 ASCO						 US NDA			
													 EU MAA
DS-1647(G47Δ) (Japan)	Glioblastoma multiforme												 AACR-JCA
DS-1205	NSCLC+gefitinib							 Started P1 study					

BCL: B-cell lymphoma, NSCLC: non-small-cell lung cancer, TGCT: tenosynovial giant cell tumor

# Specialty Medicine: FY2018 Results

Fiscal year		FY2018												
Month		4	5	6	7	8	9	10	11	12	1	2	3	
Edoxaban	AF/VTE									 Approved				
Mirogabalin	PNP										 Approved			
	CNP													
Esaxerenone	Hyper-tension										 Approved			
Laninamivir (nebulizer)	Influenza				 JP NDA									



FY2018 Results

## **Progress of DS-8201**

SAKIGAKE Designation of DS-3201

DS-1647 (G47Δ) P2 IIS Study Result

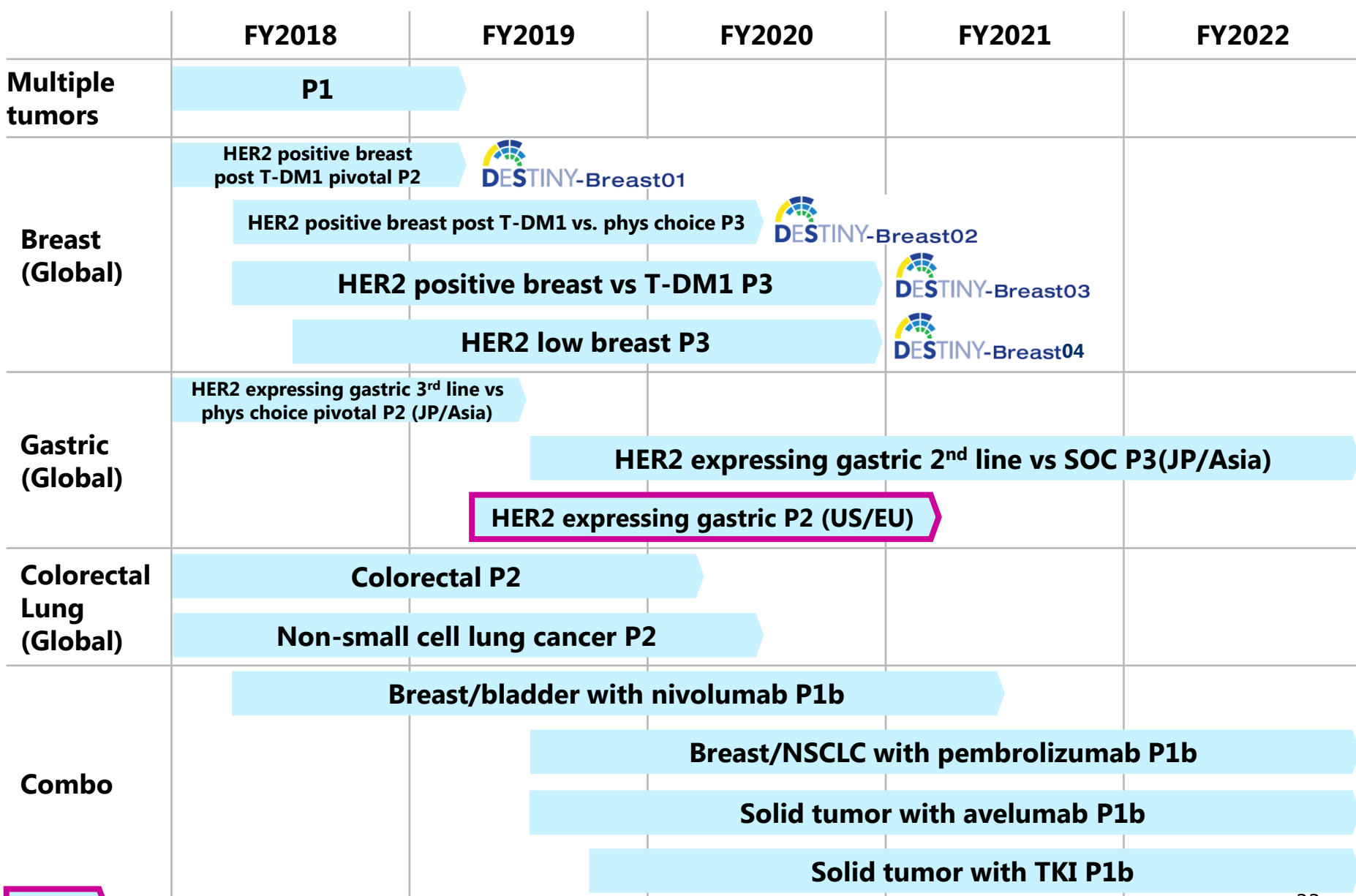
New Phase 3 Study of Mirogabalin

Upcoming Milestones

ASCO IR Events

# DS-8201: Study Plan

As of April 2019



 New study

## Preparation for BLA submission is progressing steadily

### US

BLA submission  
1H FY2019

Estimated Review Period:  
6M after acceptance of  
the application

 Fast-track status

 BTB designation

### Japan

NDA submission  
2H FY2019

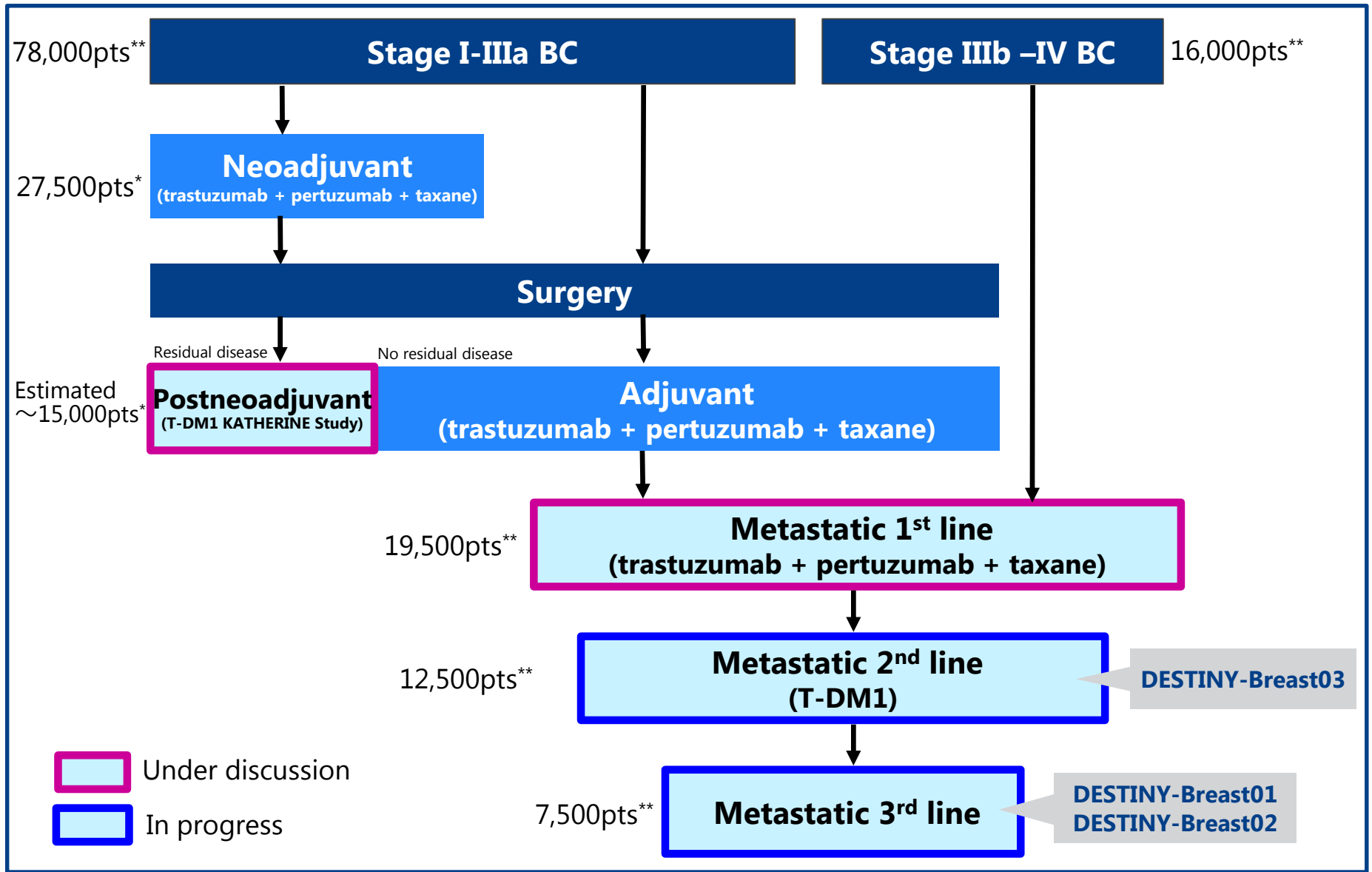
Estimated Review Period:  
Maximum 12M after  
application

### EU

MAA submission  
1H FY2020

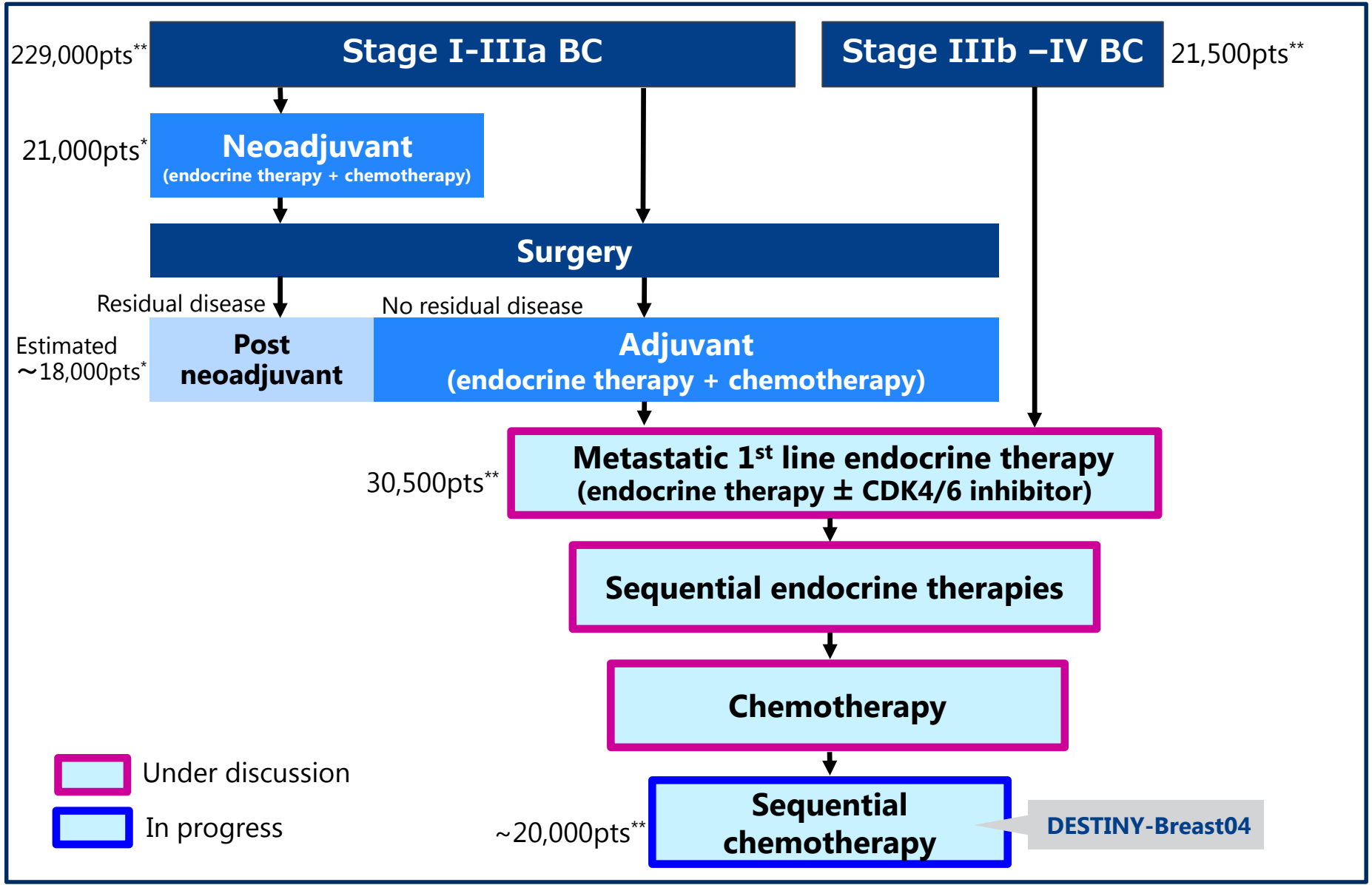
Estimated Review Period:  
12M after application

# HER2 Positive BC Treatment Flow and Ongoing DS-8201 Studies



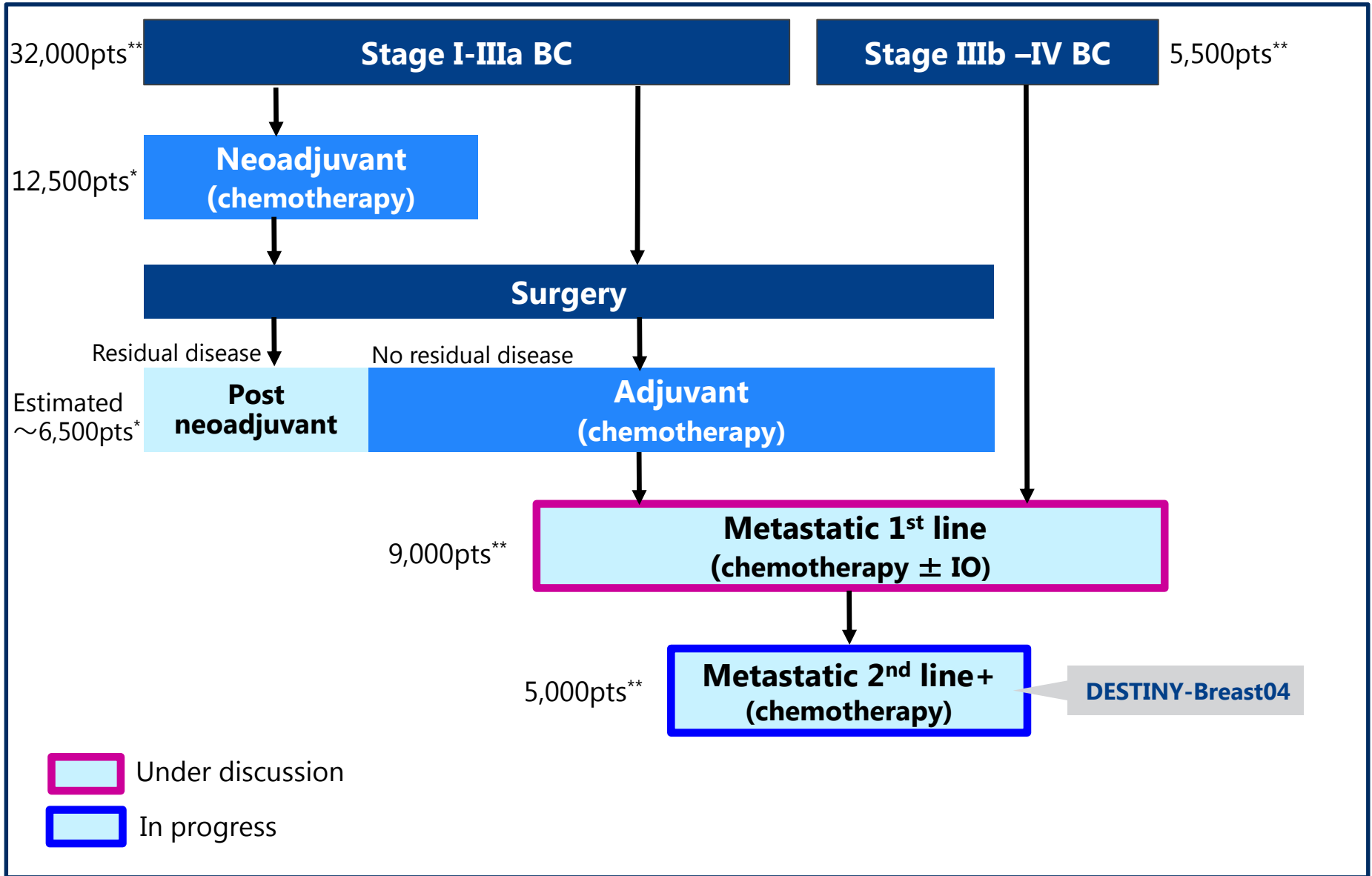
\* JP/US/EU5, DS estimation, \*\*JP/US/EU5; Source: CancerMPact®, Kantar Health/ Synix inc. (Strict diversion of confidential information)

# HER2 Low(HR+) BC Treatment Flow and Ongoing DS-8201 Study



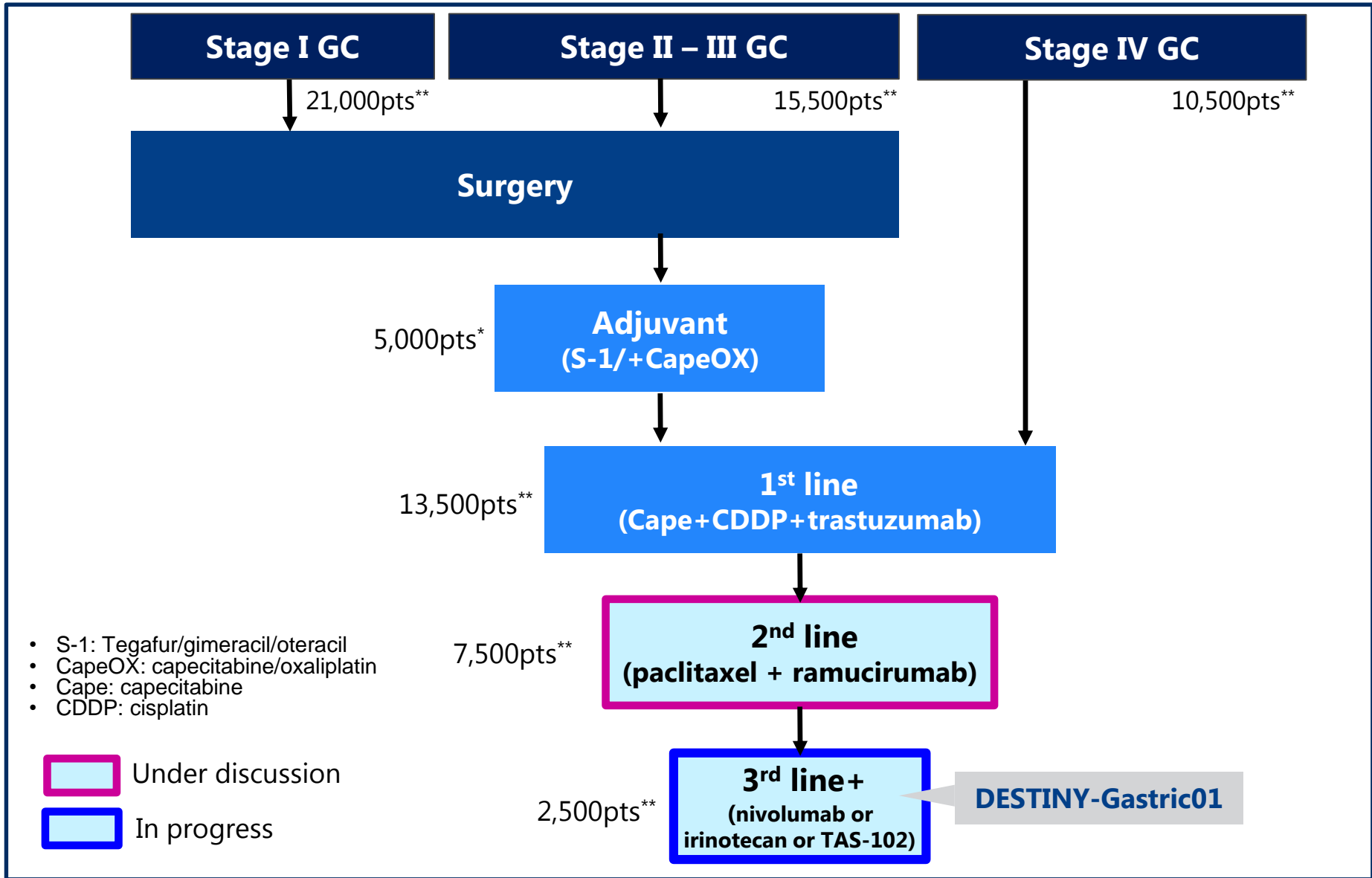
\* JP/US/EU5, DS estimation, \*\*JP/US/EU5; Source: CancerMPact®, Kantar Health/ Synix inc. (Strict diversion of confidential information)

# HER2 Low(HR-) BC Treatment Flow and Ongoing DS-8201 Study



\* JP/US/EU5, DS estimation, \*\*JP/US/EU5; Source: CancerMPact®, Kantar Health/ Synix inc. (Strict diversion of confidential information)

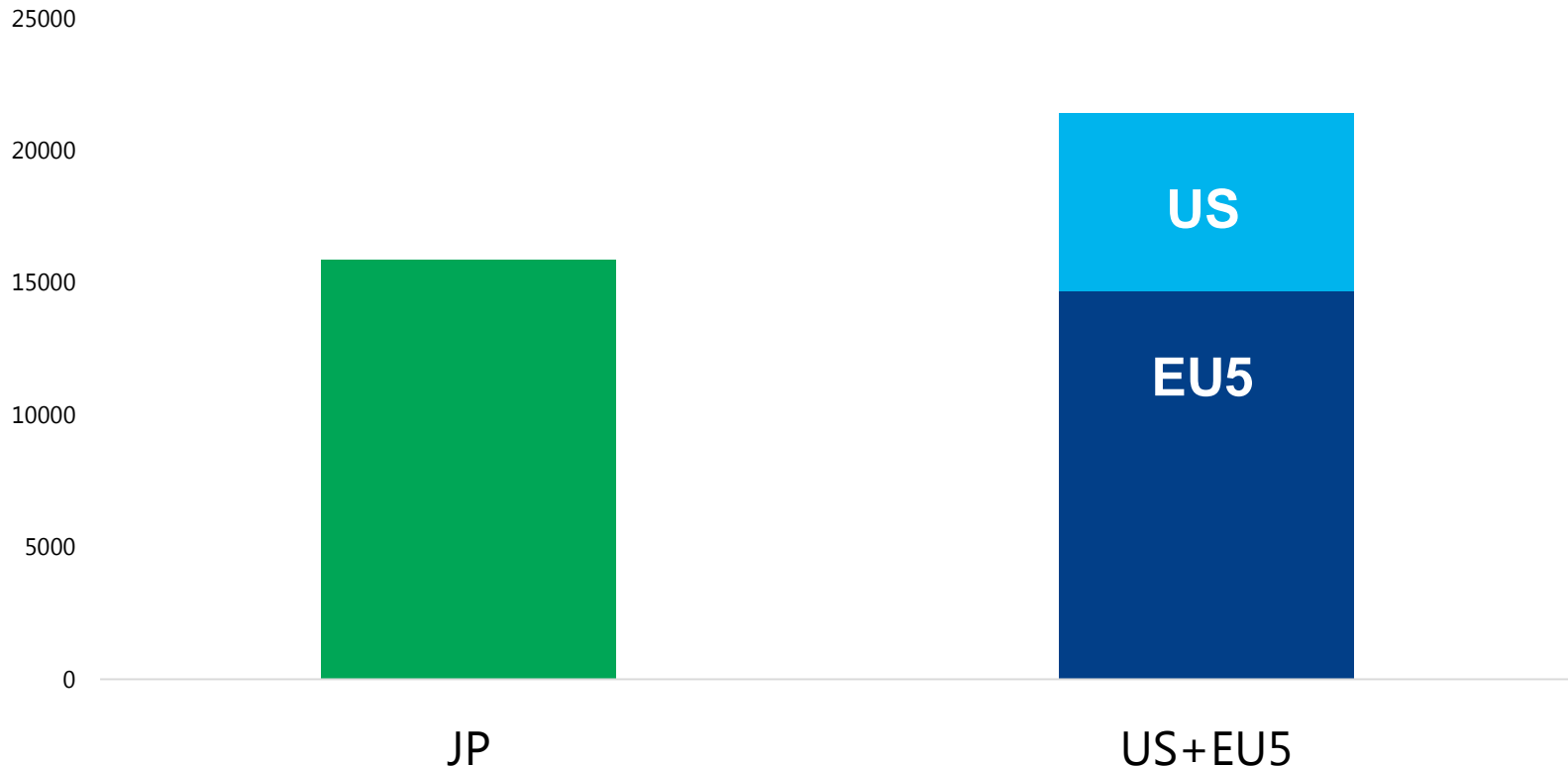
# HER2 Expressing GC Treatment Flow and Ongoing DS-8201 Study



\* JP/US/EU5, DS estimation, \*\*JP/US/EU5; Source: CancerMPact®, Kantar Health/ Synix inc. (Strict diversion of confidential information)

## West (US+EU5) GC patients are larger than Japan

Patient number in stage IV 2<sup>nd</sup> line gastric cancer

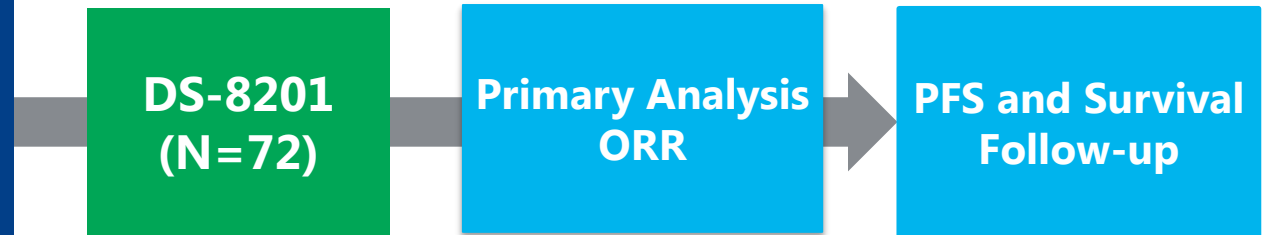




# HER2 Expressing GC US/EU P2 Study Design

- ◆ Historical data of comparable drug suggests East and West gastric cancer patients may have different efficacy
- ◆ Planned to start the study from Q2 FY2019

- HER2 positive gastric and gastroesophageal junction cancer
- Re-confirm HER2 status
- Post trastuzumab



<b>Study patients</b>	HER2 positive gastric and gastroesophageal junction cancer
<b>Primary endpoint</b>	ORR
<b>Secondary endpoint</b>	PFS, OS
<b>CTG/JAPIC</b>	TBD

FY2018 Results

Progress of DS-8201

**SAKIGAKE Designation of DS-3201**

DS-1647 (G47Δ) P2 IIS Study Result

New Phase 3 Study of Mirogabalin

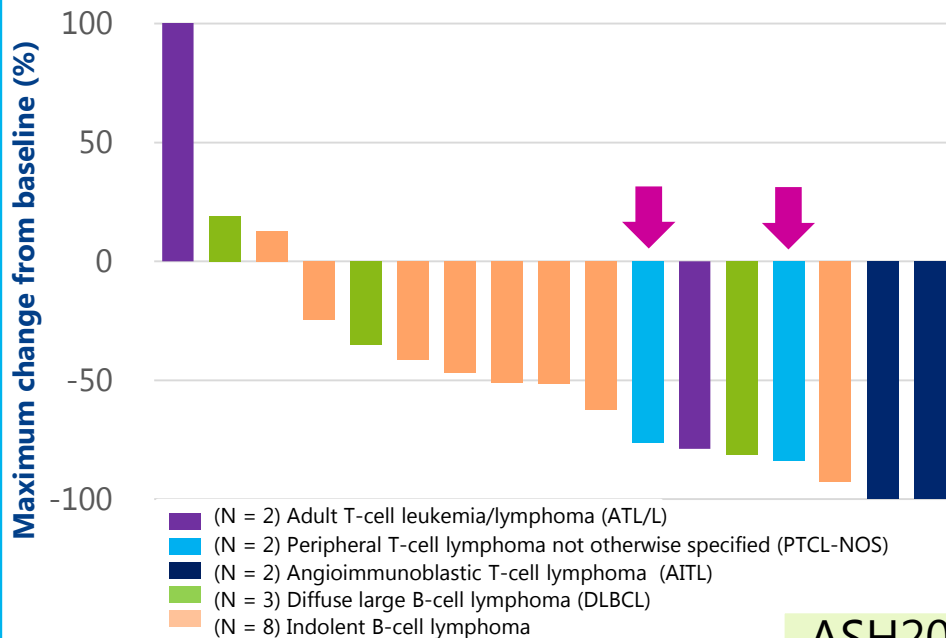
Upcoming Milestones

ASCO IR Events

# SAKIGAKE Designation: DS-3201 PTCL

- ◆ Potential first-in-class **EZH1/2 dual inhibitor**
- ◆ Received SAKIGAKE Designation for **relapsed/refractory peripheral T-cell lymphoma (PTCL)** treatment based on the preliminary result of Phase 1 Non-Hodgkin lymphomas trial including PTCLs

## Preliminary results in relapsed or refractory Non-Hodgkin Lymphoma



ASH2017

## PTCL

- ◆ Non-Hodgkin lymphoma arising from T cells
- ◆ Tend to be aggressive and associated with poor prognosis, particularly for relapsed disease
- ◆ **High unmet medical needs** (very few treatment options)

FY2018 Results

Progress of DS-8201

SAKIGAKE Designation of DS-3201

**DS-1647 (G47Δ) P2 IIS Study Result**

New Phase 3 Study of Mirogabalin

Upcoming Milestones

ASCO IR Events

# DS-1647 (G47Δ) Oncolytic Virus

## G47Δ: Innovative cancer therapy with most advanced oncolytic virus

- ◆ Third-generation oncolytic virus: herpes simplex virus type 1 (HSV-1) was modified to grow exclusively in cancer cells by genetic recombination
- ◆ Developing this treatment for various solid cancers, including Glioblastoma, in collaboration with Professor Tomoki Todo of the Institute of Medical Sciences of the University of Tokyo

### Synopsis of Phase 2 IIS Trial (glioblastoma multiforme)

Objective	Evaluating the efficacy and safety of G47Δ in patients with glioblastoma with residual or recurrent tumors after radiation alone or radiation plus temozolomide
Design	Open-label study (no control group)
Primary endpoint	1 year survival rate
Secondary endpoints	Overall survival; Progression-free survival; Tumor response; Safety
Case	Target 30 cases (interim analysis in 13 cases)
Dosage and administration	Stereotactic brain surgery for intratumoral administration, up to 6 doses

# Interim Analysis Results of Phase 2 Clinical Trials (IIS)

- ◆ Interim analysis lead to **stop study early after confirming efficacy**
- ◆ Professor Todo presented the results at AACR-JCA
- ◆ Planning to submit **NDA in Japan in 1H FY2019 (SAKIGAKE Designation)**

## Efficacy

Primary endpoint

- ◆ **1 year survival rate: 92.3%**  
(12/13 cases survived)

Secondary endpoint

- ◆ PFS: 8.6 months
- ◆ Tumor response :  
SD for all 4 patients at the end of follow-up

## Safety

**Good safety profile** is suggested

- ◆ Side effect leading prolonged hospitalization: 2/16 (12.5%)
- ◆ AEs leading to discontinue treatment: 1/16 (6.3%)

## **Glioblastoma**

- ◆ Gliomas represent about a quarter of brain tumors
- ◆ Glioblastoma is the most common and most aggressive type of glioma
- ◆ The 5-yr survival rate with standard therapy is about 10% and healing is extremely difficult
- ◆ About 1,000 patients per year in Japan

FY2018 Results

Progress of DS-8201

SAKIGAKE Designation of DS-3201


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**New Phase 3 Study of Mirogabalin**

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## Started P3 study for indication expansion

<b>Neuropathic Pain</b> 	Classifi- cation	Diseases	Status
	Peripheral	<ul style="list-style-type: none"> <li>• Diabetic peripheral neuropathic pain</li> <li>• Postherpetic neuralgia, etc.</li> </ul>	Approved
<b>Central</b>	<ul style="list-style-type: none"> <li>• <b>Neuropathic pain after spinal cord injury</b></li> <li>• Pain related to Parkinson's disease</li> <li>• Post stroke pain, etc.</li> </ul>	<b>P3 started</b>	

Double blind phase (14W) N=274



Open-label extension phase (52W) N=180



<b>Target</b>	<b>Central neuropathic pain (neuropathic pain after spinal cord injury, etc.)</b>
<b>Primary endpoint</b>	Change in the weekly average daily pain score from baseline to Week 14
<b>CTG/JAPIC</b>	NCT03901352/JapicCTI-194653



FY2018 Results

Progress of DS-8201

SAKIGAKE Designation of DS-3201

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**Upcoming Milestones**

**ASCO IR Events**

# Upcoming Milestones: ASCO

## ASCO abstract release: 5/15, 5pm (ET)

**U3-1402**



EGFRm NSCLC P1 Study

ASCO: oral presentation on May 31, 2019

**DS-1062**



NSCLC P1 Study

ASCO: poster presentation on June 2, 2019

**DS-1001**



Glioma

ASCO: oral presentation on June 3, 2019

## On-site conference

<b>Date</b>	June 2 (Sunday) 5:00-8:00 pm CDT (planned)
<b>Speaker</b>	Sunao Manabe, COO Antoine Yver, Oncology R&D Head
<b>Contents</b>	About presentation in ASCO * This content will be distributed on-demand at a later date

## Conference call

<b>Date</b>	June 3 (Monday) 9:00-10:00 pm JST
<b>Speaker</b>	Sunao Manabe, COO Antoine Yver, Oncology R&D Head
<b>Contents</b>	About presentation in ASCO * This content will be distributed on-demand at a later date

# Upcoming Milestones

**DS-8201**



HER2 positive mBC 3rd-line  
BLA submission in 1H FY2019 (US)  
**NDA submission in 2H FY2019 (Japan)**

DESTINY-BREAST01 (Pivotal P2 study)  
**SABCS: December 2019 (planned)**

**Quizartinib**



Relapsed/refractory AML  
**ODAC May 14, 2019**  
FDA PDUFA **August 25, 2019 (3M delay)**

**Pexidartinib**



Tenosynovial giant cell tumor  
**ODAC May 14, 2019**  
FDA PDUFA August 3, 2019

**DS-1647  
(G47Δ)**



Glioblastoma multiforme  
**NDA submission in 1H FY2019 (Japan)**

ODAC: Oncology Drug Advisory Committee

Underlined in red: new or updated from FY2018 Q3

① FY2018 Financial Results

② FY2019 Consolidated Forecast

③ Business Update

④ R&D Update

⑤ **Appendix**



# FY2019 R&D Milestones

As of April 2019



Project	Indications and Studies	FY2018	FY2019			
		Q4	Q1	Q2	Q3	Q4
DS-8201	P2 pivotal: BC (HER2 positive post T-DM1)		US submission		JP Submission	
	P2: GC (US/EU)			Study start		
	P1b: BC/NSCLC (with pembrolizumab)		→		Study start	
	P1b: solid tumor (with avelumab)		→		Study start	
Quizartinib	P3: relapsed/refractory AML			US approval		
Pexidartinib	P3: TGCT (US/EU)	EU Submitted		US approval		
DS-1647	IIS: glioblastoma multiforme (JP)	TLR	Submission			
DS-1205	P1: NSCLC with osimertinib (Asia)		Study started			
Mirogabalin	P3: PNP (JP)	Approved	Launched			
	P3: central neuropathic pain (JP/Asia)	Study started				
Esaxerenone	P3: hypertension (JP)	Approved	Launch			
Laninamivir	P3: influenza (nebulizer formulation) (JP)			Approval		

AML: acute myeloid leukemia, EGFRm: EGFR mutation, NSCLC: non-small cell lung cancer, PNP: peripheral neuropathic pain,

TGCT: tenosynovial giant cell tumor, TLR: top line results

Underlined in red: new or updated from FY2018 Q3

Blue: achieved

# Major R&D Pipeline (Oncology)

As of April 2019



	Generic name/Project number (drug efficacy/mechanism of action)	Target Indication	Region	Stage			
				Phase 1	Phase 2	Phase 3	NDA/BLA
ADC Franchise	DS-8201 (anti-HER2 ADC)	BC (HER2 positive post T-DM1)	JP/US/EU/Asia	[Progress bar to Phase 2] ★ [Medal]			
		BC (HER2 positive vs T-DM1)	JP/US/EU/Asia	[Progress bar to Phase 3]			
		BC (HER2 low)	JP/US/EU/Asia	[Progress bar to Phase 3]			
		GC (HER2 expressing post trastuzumab)	JP/Asia	[Progress bar to Phase 2] ★ [Medal]			
		CRC	JP/US/EU	[Progress bar to Phase 2]			
		NSCLC	JP/US/EU	[Progress bar to Phase 2]			
		BC and bladder cancer (with nivolumab)	US/EU	[Progress bar to Phase 1]			
	U3-1402 (anti-HER3 ADC)	BC	JP/US	[Progress bar to Phase 1]			
		NSCLC	US	[Progress bar to Phase 1]			
	DS-1062 (anti-TROP2 ADC)	NSCLC	JP/US	[Progress bar to Phase 1]			
AML/HEM Franchise	Quizartinib/AC220 (FLT3 inhibitor)	AML (relapsed/refractory)	JP/US/EU/Asia	[Progress bar to Phase 3] [Medal]			
		AML (1st line)	JP/US/EU/Asia	[Progress bar to Phase 2]			
	DS-3032 (MDM2 inhibitor)	Solid tumor	JP/US	[Progress bar to Phase 1]			
		AML	JP/US	[Progress bar to Phase 1]			
	DS-3201 (EZH1/2 inhibitor)	PTCL	JP	[Progress bar to Phase 1] [Medal]			
		ATL/L	JP	[Progress bar to Phase 1]			
		AML, ALL	US	[Progress bar to Phase 1]			
	PLX2853 (BRD4 inhibitor)	AML, solid cancer	US	[Progress bar to Phase 1]			
	DS-1001 (IDH1m inhibitor)	Glioma	JP	[Progress bar to Phase 1]			
	Axi-Cel® (anti-CD19 CAR-T cells)	BCL	JP	[Progress bar to Phase 2] ★			
Breakthrough Science	Pexidartinib (CSF-1/KIT/FLT3 inhibitor)	TGCT	US/EU	[Progress bar to Phase 3] [Medal]			
	DS-1647 (G47Δ virus)	Glioblastoma multiforme	JP	[Progress bar to Phase 2] ★ [Medal]			
	DS-1205 (AXL inhibitor)	NSCLC [with osimertinib (Asia) gefitinib (JP)]	JP/Asia	[Progress bar to Phase 1]			

ALL: acute lymphoblastic leukemia, AML: acute myeloid leukemia, ATL/L: adult T-cell leukemia/lymphoma, BCL: B-cell lymphoma, NSCLC: non-small cell lung cancer, PTCL: peripheral T-cell lymphoma, TGCT: tenosynovial giant cell tumor

★: Projects in the field of oncology which are planned for registration application based on the results of P2 studies, [Medal] designated as breakthrough therapy (FDA)/SAKIGAKE (JP)

# Major R&D Pipeline (SM/Vaccination)

As of April 2019



	Generic Name/Project Code Number (Drug Efficacy/Mechanism of Action)	Target Indications	Region	Stage			
				Phase 1	Phase 2	Phase 3	NDA
Specialty Medicine (SM)	Edoxaban / DU-176b (Fxa-inhibitor)	Very elderly patients AF	JP				
	Prasugrel / CS-747 (anti-platelet agent)	Ischemic stroke	JP				
	Esaxerenone / CS-3150 (MR-antagonist)	Diabetic nephropathy	JP				
	DS-1040 (TAFIa inhibitor)	Acute ischemic stroke, acute pulmonary embolism	JP/US/EU				
	DS-2330 (hyperphosphatemia treatment)	Hyperphosphatemia in chronic kidney disease	-				
	Mirogabalin (α2δ ligand)	Central neuropathic pain	JP/Asia				
	Laninamivir / CS-8958 (neuraminidase inhibitor)	Influenza	JP				
	DS-5141 (ENA-oligonucleotide)	DMD	JP				
	DS-1211 (TNAP inhibitor)	Inhibition of ectopic calcification	US				
Vaccination	VN-0107/MEDI3250 (live attenuated influenza vaccine)	Prophylaxis of seasonal influenza	JP				
	VN-0105 (DPT-IPV/Hib)	Prevention of pertussis, diphtheria, tetanus, poliomyelitis and Hib)	JP				
	VN-0102/JVC-001 (Measles-mumps-rubella vaccine)	For measles, mumps, and rubella Prophylaxis	JP				

AF: atrial fibrillation, DMD: Duchenne muscular dystrophy  
 designated as breakthrough therapy (FDA)/SAKIGAKE (JP)





# Status of Accelerated Development Support Program

Project (indication)	Japan	US	Europe
DS-8201 (BC 3 <sup>rd</sup> line)		Fast track Breakthrough therapy	
DS-8201 (GC 2 <sup>nd</sup> line)	SAKIGAKE		
Quizartinib (AML)	Orphan drug	Fast track Breakthrough therapy Orphan drug	Orphan drug
DS-3201 (PTCL)	SAKIGAKE		
Axi-Cel <sup>®</sup> (BCL)	Orphan drug		
Pexidartinib (TGCT)		Breakthrough therapy Orphan drug Priority review	Orphan drug
DS-1647(G47Δ) Glioblastoma multiforme	SAKIGAKE		
DS-5141 (DMD)	SAKIGAKE		

# Listing of abbreviations

Abbreviations	English	Implications
BTD	Breakthrough therapy designation	Designation of innovative therapeutics
CR	Complete response	Complete response (complete resolution of cancer)
DCR	Disease control rate	Disease control rate (percentage of patients with controlled disease status)
DLT	Dose limiting toxicity	Dose-limiting toxicities (toxicities that may explain the inability to escalate doses)
DOR	Duration of response	Duration of response (duration of response)
EGFR	Epidermal growth factor receptor	Epidermal growth factor receptor
MTD	Maximum tolerated dose	Maximum tolerated dose (dose with intolerable toxicity)
ORR	Overall response rate Objective response rate	Overall response rate (expressed as the proportion of patients who responded to treatment and the sum of CR and PR)
OS	Overall survival	Overall survival (time from start of treatment to death)
PD	Progress disease	Disease progression (worsening disease despite treatment)
PFS	Progression-free survival	Progression-free survival (without cancer progression)
PR	Partial response	Partial response (a reduction in the size of the cancer by 30% or more that lasts for 4 weeks)
SD	Stable disease	The size of the cancer is almost unchanged before and after treatment

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