Passion for Innovation. 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)

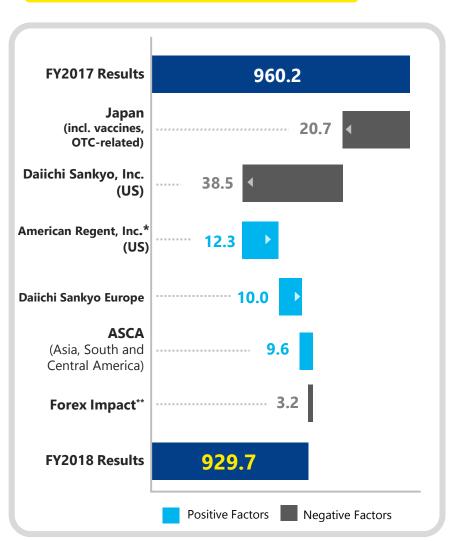
	FY2017 Results	FY2018 Results	YoY
Revenue	960.2	929.7	-30.5
Cost of Sales	346.0	364.6	+18.6
SG&A Expenses	301.8	277.7	-24.2
R&D Expenses	236.0	203.7	-32.3
Operating Profit	76.3	83.7	+9.7% +7.4
Profit before Tax	81.0	85.8	+4.8
Profit attributable to owners of the Company	60.3	93.4	+33.1
Currency USD/JPY	110.86	110.91	+0.05
Rate 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
Japan Lixiana +19.6 Canalia +6.5  Gain on sales of transferring long-listed +6.3 products Daiichi Sankyo Espha (GE) Olmesartan AG,	Olmetec -29.7 Nexium -8.3 Inavir -7.1 Loxonin -6.0 (incl. impact of price revision in Japan) Daiichi Sankyo Healthcare (incl. impact of change
Rosuvastatin AG etc.  Daiichi Sankyo, Inc. (US)	in accounting treatment)  Welchol -20.5  Olmesartan -10.6  Effient -8.2
American Regent, Inc.* (Injectafer +9.9	US)
Daiichi Sankyo Europe Lixiana +19.2	Olmesartan

<sup>\*</sup> Formerly, Luitpold Pharmaceuticals, Inc.

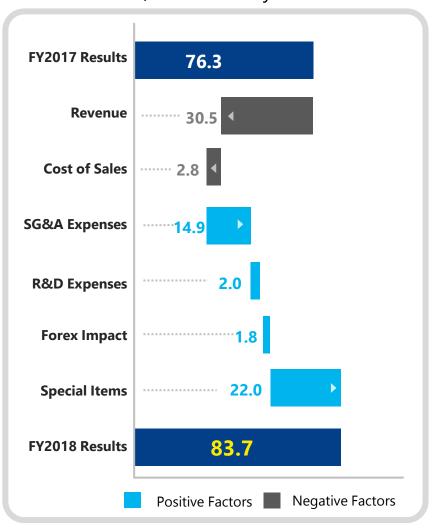
<sup>\*\*</sup> Forex impact USD: +0.1, EUR: -0.9, ASCA: -2.3

## **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
Product mix due to impact of olmesartan LOE
SG&A Expenses14.9 (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
*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) 5.1	Impairment loss (Intangible)** 15.1	+16.1
SG&A Expenses	Restructuring costs in US 2.8 Litigation fee 1.7	Gain on sales of fixed assets -3.5	-7.9
R&D Expenses	Impairment loss (Intangible)* 30.2		-30.2
Total	33.6	11.6	-22.0

\*CL-108 and others

\*\*Zelboraf and Movantik

-: Cost decreased items

Booked in Q4

#### **Special items:**

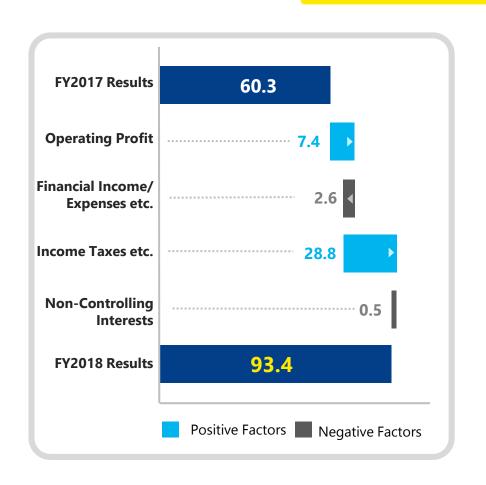
Items having a transitory and material impact on operating profit are defined as "Special items".

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/ +2.6 (Cost increased) Expenses etc.

Deterioration of forex gains/ losses

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 -----++0.5 (Cost increased) Interests

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



(Bn JPY)

	FY2017 Results	FY2018 Results	YoY
Japan	540.0	523.3	-16.7
Daiichi Sankyo Healthcare	72.9	66.4	-6.5
Daiichi Sankyo, Inc.	74.8	36.3	-38.5
Olmesartan	21.3	10.7	-10.6
Welchol	33.9	13.4	-20.5
Effient	10.7	2.4	-8.2
Savaysa	2.2	2.3	+0.1
Movantik	4.7	4.2	-0.5
American Regent, Inc.	105.4	117.8	+12.4
Venofer	31.0	28.9	-2.0
Injectafer	34.3	44.2	+9.9
GE injectables	37.1	38.5	+1.5
Daiichi Sankyo Europe	79.4	88.6	+9.1
Olmesartan	33.5	27.4	-6.1
Efient	8.0	5.7	-2.3
Lixiana	27.0	45.8	+18.8
<b>ASCA</b> (Asia, South and Central America)	80.4	87.7	+7.3
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
Nexium	ulcer treatment	86.5	78.3	-8.3
Lixiana	anticoagulant	45.3	64.9	+19.6
Memary	Alzheimer's disease treatment	48.6	50.2	+1.7
Loxonin	anti-inflammatory analgesic	36.5	30.5	-6.0
Pralia	treatment for osteoporosis/ inhibitor of the progression of bone erosion associated with rheumatoid arthritis	23.2	27.4	+4.2
Tenelia	type 2 diabetes mellitus treatment	26.3	25.3	-1.0
Inavir	anti-influenza treatment	25.3	18.2	-7.1
Olmetec	antihypertensive agent	44.6	14.9	-29.7
Ranmark	treatment for bone complications caused by bone metastases from tumors	15.4	16.4	+1.0
Efient	antiplatelet agent	12.8	13.9	+1.1
Rezaltas	antihypertensive agent	16.8	15.5	-1.3
Urief	treatment for dysuria	11.1	10.3	-0.9
Omnipaque	contrast medium	14.0	12.0	-2.0
Canalia	type 2 diabetes mellitus treatment	2.7	9.2	+6.5
Vimpat	anti-epileptic agent	2.6	6.6	+3.9



1 FY2018 Financial Results

**2** FY2019 Consolidated Forecast

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#### **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 Expen	ses	277.7	285.0	+7.3
R&D Expense	es	203.7	225.0	+21.3
Operating Pr	ofit	83.7	100.0	+19.5% + <b>16.3</b>
Profit before	re Tax	85.8	100.0	+14.2
Profit attributa of the Compan		93.4	72.0	-22.9% - <b>21.4</b>
Currency	USD/JPY	110.91	110.00	]
Rate	EUR/JPY	128.40	130.00	

#### **FY2019 Consolidated Forecast**



			( Bn JPY)	> Deferred revenue for
	FY2018 Results (excl. special items)	FY2019 Forecast	YoY	DS-8201 strategic collaboration upfront payment +10.0
Revenue	929.7	940.0	+1.1%	Gain on sales of Takatsuki Plant
Cost of Sales	349.5	330.0	-19.5	transfer -19.0
SG&A Expenses	281.2	285.0	+3.8	➤ Gain on sales of Nihonbashi building -10.6
R&D Expenses	203.7	225.0	+21.3	<ul><li>Costs increase for the establishment of the oncology</li></ul>
Operating Profit	95.3	100.0	+4.9%	business structure  ➤ Increase in R&D
			-	investments to
Currency USD/J	PY 110.91	110.00		DS-8201
Rate EUR/J	PY 128.40	130.00		

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



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#### **Edoxaban**

## **Japan Business**

## **Streamlining of Assets**

#### **Shareholder Returns**



#### **Edoxaban**

Japan Business

Streamlining of Assets

Shareholder Returns

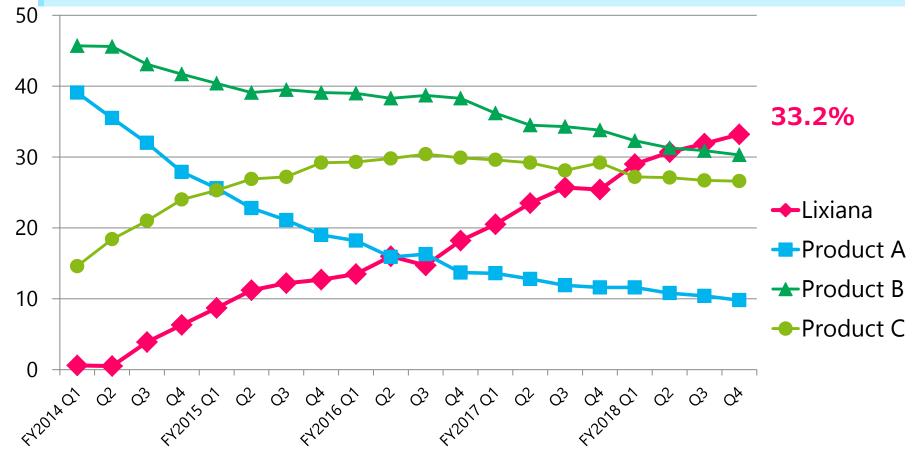
## Lixiana: Growth in Japan

(%)





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



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Calculated based on JPM FY2014 Q1 - FY2018 Q4

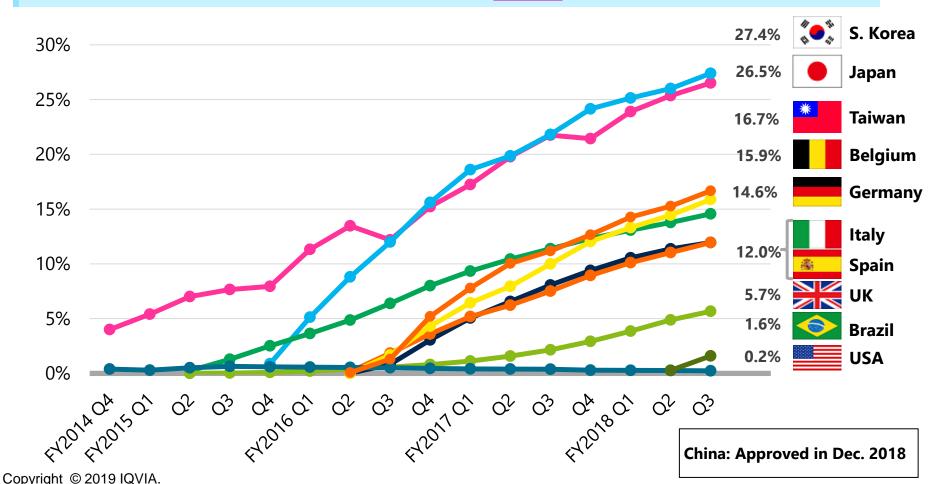
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## **Edoxaban: Growth in Each Country**





- Steady growth in each country
- 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)



## **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-AFPCI	PCI (warfarin)	June 2019
ELIMINATE-AF	Cardiac ablation (warfarin)	Presented at EHRA* 2019
ENVISAGE-TAVI A F	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	VTE associated with cancer (dalteparin)	Presented at ASH 2017



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
ETNA-AF®	Edoxaban Treatment in routine clinical practice in AF	Baseline data presented at ESC in Aug. 2018  One-year follow-up data will be presented
ETNA-VTE® Global	Edoxaban Treatment in routine clinical practice in VTE	during FY2019
EMIT-AF/VTE	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
PREFER in AF Prolongation	Prolongation PREFER in AF, European Registry	clinical practice
ANAFIE	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
Cancer-VTE Registry Venous Thromboembolism Registry in Cancer Patients	Multicenter Prospective Registry in VTE patients associated with cancer	19



#### Edoxaban

## **Japan Business**

Streamlining of Assets

Shareholder Returns

## **Japan Business: New Products Launch**



- Tarlige (mirogabalin): <u>Launched in Apr. 2019</u>
  - MOA: α2δ ligand
  - Indication: peripheral neuropathic pain



- Minnebro (esaxerenone): <u>Launch in May. 2019</u>
  - MOA: mineralocorticoid blocker
  - Indication: hypertension





#### Edoxaban

## Japan Business

## **Streamlining of Assets**

Shareholder Returns

# **Streamlining of Assets**



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

<sup>\*</sup> Booked in other comprehensive income



#### Edoxaban

## Japan Business

# Streamlining of Assets

#### **Shareholder Returns**

#### **Shareholder Returns**



## **Shareholder Returns Policy: FY2016 - FY2022**



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

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



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#### **FY2018 Results**

**Progress of DS-8201** 

**SAKIGAKE Designation of DS-3201** 

DS-1647 (G47 $\Delta$ ) P2 IIS Study Result

**New Phase 3 Study of Mirogabalin** 

**Upcoming Milestones** 

**ASCO IR Events** 



#### **FY2018 Results**

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#### **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						
Post T-DM1		Complet	e P2 DES	TINY-Brea	ast01 stud	dy enrollr	nent						
Breast							Started P3 DESTINY-Breast02 study						
(Global)	vs. T-DM1					Sta	Started P3 DESTINY-Breast03 study					У	
	HER2 low									Starte	ed P3 DEST	INY-Breast(	04 study
Lung (GId	obal)		Sta	rted P	2 stud	y							
	Nivolumab					Sta	rted P	1 stud	у				
IO combo (US/EU)	Pembrolizumab							M	erck				
	Avelumab								M	erck KG	aA/Pfiz	zer	
Partner	CDx development									Ver	ntana (F	Roche G	roup)
ship	Strategic collaboration									AstraZe	eneca		

## **Other Oncology: FY2018 Results**



Fisc	cal year						FY2	018					
N	lonth	4	5	6	7	8	9	10	11	12	1	2	3
U3-1402	Breast cancer			ASCO						SABCS			
Quizartinib	Relapsed/ refractory AML		Orp	EHA han drug	BTD g designa	Us ation	US Japan	NDA <mark>-}}</mark> JP I	NDA				
	Terractory 7 (IVIL						Jápan	<b>₽</b> EU	MAA				
DS-3032	Liposarcoma			ASCO									
D3-3032	AML+quizartinib									Sta	rted P	1 study	,
PLX2853	AML												Started P1 study
Axi-Cel® (Japan)	BCL			Orpha	n drug d	designat	ion	Japan	Sta	rted P	2 study	′	
Pexidartinib (US/EU)	TGCT			ASCO						<b>₽</b> US	NDA		EU MAA
DS-1647(G47Δ) (Japan)	Glioblastoma multiforme										A	Å ACR-JCA	\
DS-1205	NSCLC+gefitinib							Sta	rted P	1 study	/		20

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

## **Specialty Medicine: FY2018 Results**



Fiscal ye	ear						FY2	2018					
Month	1	4	5	6	7	8	9	10	11	12	1	2	3
Edoxaban	AF/VTE									Approved		China	
Mirogabalin	PNP									Japan		Approved	1
	CNP												Started P3 study
Esaxerenone	Hyper- tension									Japan		Approved	d
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**



	FY2018	FY2019	FY2020	FY2021	FY2022
Multiple tumors	P1				
	HER2 positive breas post T-DM1 pivotal	_ <u> </u>	șt01		
Breast	HER2 positive b	reast post T-DM1 vs. phy	s choice P3	Breast02	
(Global)	HER2	positive breast vs	T-DM1 P3	DESTINY-Breast03	
		HER2 low brea	st P3	DESTINY-Breast04	
	HER2 expressing gastri phys choice pivotal P2				
Gastric (Global)		н	ER2 expressing gas	stric 2 <sup>nd</sup> line vs SOC	P3(JP/Asia)
,		HER2 expres	sing gastric P2 (US/	ŒU)	
Colorectal	Colo	orectal P2			
Lung (Global)	Non-smal	l cell lung cancer P	2		
	В	reast/bladder with	nivolumab P1b		
<b>C L</b>			Breast/NSCLC	with pembrolizuma	b P1b
Combo			Solid tumo	or with avelumab P	lb
			Solid	tumor with TKI P1	
New	study		1	ı	33

#### **HER2 Positive mBreast Cancer 3rd-line Application Plan**



#### Preparation for BLA submission is progressing steadily

US

BLA submission 1H FY2019

Estimated Review Period: 6M after acceptance of the application

Rast-track status

RTD designation

<u>Japan</u>

NDA submission 2H FY2019

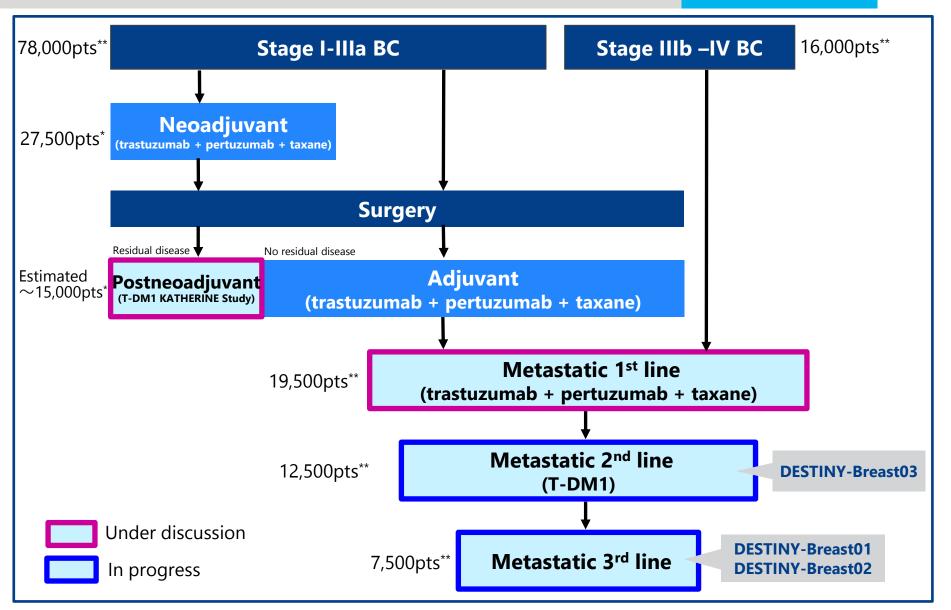
Estimated Review Period: Maximum 12M after application EU

MAA submission
1H FY2020

Estimated Review Period: 12M after application

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

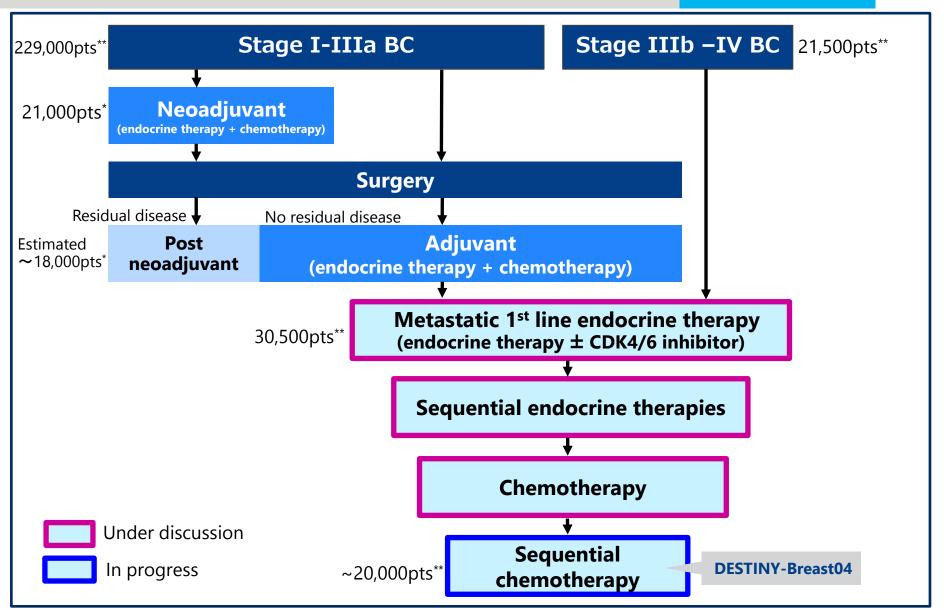




<sup>\*</sup> JP/US/EU5, DS estimation, \*\*JP/US/EU5; Source: CancerMPact®, Kantar Health/ Synix inc. (Strict diversion of confidential information)

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

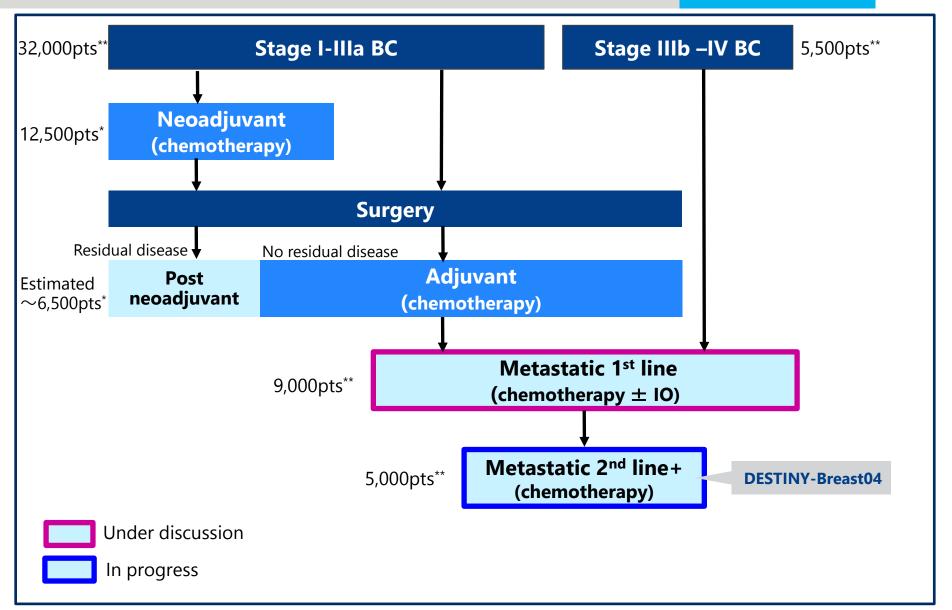




<sup>\*</sup> JP/US/EU5, DS estimation, \*\*JP/US/EU5; Source: CancerMPact®, Kantar Health/ Synix inc. (Strict diversion of confidential information)

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

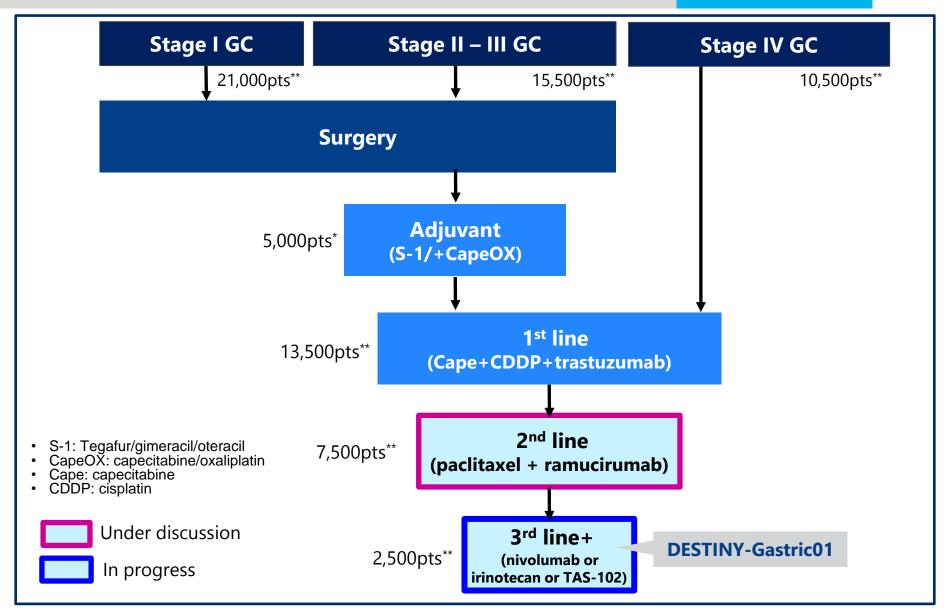




<sup>\*</sup> JP/US/EU5, DS estimation, \*\*JP/US/EU5; Source: CancerMPact®, Kantar Health/ Synix inc. (Strict diversion of confidential information)

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





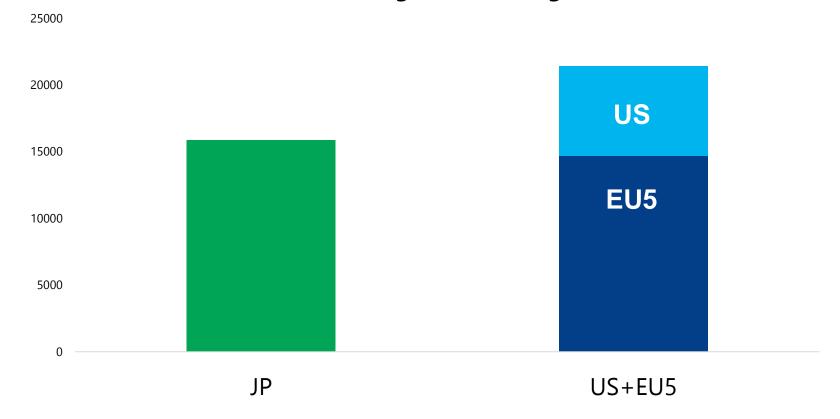
<sup>\*</sup> JP/US/EU5, DS estimation, \*\*JP/US/EU5; Source: CancerMPact®, Kantar Health/ Synix inc. (Strict diversion of confidential information)

## **Gastric Cancer Patients in West**



# 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

  Primary Analysis ORR
  Primary Analysis ORR
  Follow-up

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

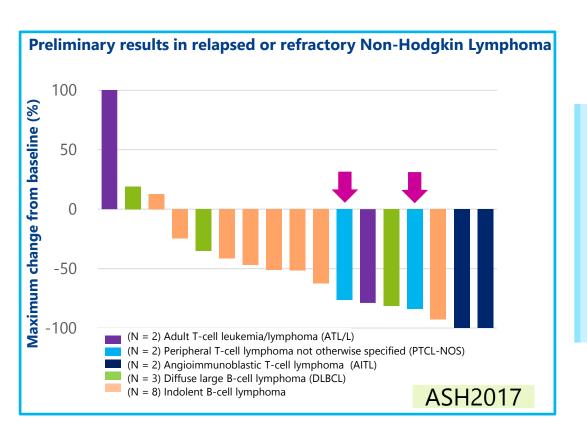
**Upcoming Milestones** 

**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



#### **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 (G47<sub>\Delta</sub>) 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

#### **Synosis of Phase 2 IIS Trial (glioblastoma multiforme)**

Obje	ective
------	--------

Evaluating the efficacy and safety of  $G47\Delta$  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

DS-1647 (G47Δ) P2 IIS Study Result

## **New Phase 3 Study of Mirogabalin**

**Upcoming Milestones** 

**ASCO IR Events** 

# Mirogabalin: Life Cycle Management



# Started P3 study for indication expansion

Neuropathic Pain	Classifi- cation	Diseases	Status
	Peripheral	<ul><li>Diabetic peripheral neuropathic pain</li><li>Postherpetic neuralgia, etc.</li></ul>	Approved
À	Central	<ul> <li>Neuropathic pain after spinal cord injury</li> <li>Pain related to Parkinson's disease</li> <li>Post stroke pain, etc.</li> </ul>	P3 started

Double blind phase (14W) N=274

Mirogabalin

**Placebo** 



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

Mirogabalin

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



#### 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**

# **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** 

## **ASCO IR Events**





Date	June 2 (Sunday) 5:00-8:00 pm CDT (planned)

Speaker

Sunao Manabe, COO

Antoine Yver, Oncology R&D Head

About presentation in ASCO

\* This content will be distributed on-demand at a later date

# **Conference call**



Date June 3 (Monday) 9:00-10:00 pm .	JST
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Speaker

Sunao Manabe, COO

Antoine Yver, Oncology R&D Head

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** 



1 FY2018 Financial Results

2 FY2019 Consolidated Forecast

**3** Business Update

4 R&D Update

6 Appendix



## **FY2019 R&D Milestones**

As of April 2019



Duoiset	Indications and Studies	FY2018	FY2019			
Project		Q4	Q1	Q2	Q3	Q4
	P2 pivotal: BC (HER2 positive post T-DM1)		US submission		JP Submission	
DS-8201	P2: GC (US/EU)			Study start		
D3-8201	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/ <u>EU</u> )	<b>EU Submitted</b>		US approval		
DS-1647	IIS: glioblastoma multiforme (JP)	TLR	Subm	ission		
DS-1205	P1: NSCLC with osimertinib (Asia)		Study started			
Mine male alim	P3: PNP (JP)	Approved	<u>Launched</u>			
Mirogabalin	P3: central neuropathic pain (JP/Asia)	Study started				
Esaxerenone	P3: hypertension (JP)	Approved	<u>Launch</u>			
Laninamivir	P3: influenza (nebulizer formulation) (JP)			<u>Approval</u>		

Blue: achieved

TGCT: tenosynovial giant cell tumor, TLR: top line results Underlined in red: new or updated from FY2018 Q3

## Major R&D Pipeline (Oncology)

#### As of April 2019



	Generic name/Project number  Target Indication		Danie II	Stage			
	(drug efficacy/mechanism of action)	l arget indication	Region	Phase 1	Phase 2	Phase 3	NDA/BLA
×		BC (HER2 positive post T-DM1)	JP/US/EU/Asia		<b>☆</b> 🙊		
		BC (HER2 positive vs T-DM1)	JP/US/EU/Asia				
ě	DS-8201 (anti-HER2 ADC)	BC (HER2 low)	JP/US/EU/Asia				
ADC Franchise	,	GC (HER2 expressing post trastuzumab)	JP/Asia				
Frai		CRC	JP/US/EU				
ADC		NSCLC	JP/US/EU				
		BC and bladder cancer (with nivolumab)	US/EU				
	112 4 402 ( 11502 4 5 6)	ВС	JP/US				
	U3-1402 (anti-HER3 ADC)	NSCLC	US				
	DS-1062 (anti-TROP2 ADC)	NSCLC	JP/US				
A	Quizartinib/AC220 (FLT3 inhibitor)	AML (relapsed/refractory)	JP/US/EU/Asia				<b>₽</b>
0		AML (1st line)	JP/US/EU/Asia				
	DC 2022 (MDM2 inhibits )	Solid tumor	JP/US				
ise	DS-3032 (MDM2 inhibitor)	AML	JP/US				
nc		PTCL	JP				
Fra	DS-3201 (EZH1/2 inhibitor)	ATL/L	JP				
AML/HEM Franchise		AML、ALL	US				
🛓	PLX2853 (BRD4 inhibitor)	AML, solid cancer	US				
Α	DS-1001 (IDH1m inhibitor)	Glioma	JP				
	Axi-Cel® (anti-CD19 CAR-T cells)	BCL	JP				
The same of the sa	Pexidartinib (CSF-1/KIT/FLT3 inhibitor)	TGCT	US/EU				- A
through	DS-1647 (G47∆ virus)	Glioblastoma multiforme	JP		<b>→</b> 🔅		
Break	DS-1205 (AXL inhibitor) NSCLC [with osimertinib (Asia) gefitinib (		JP/Asia				

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

## Major R&D Pipeline (SM/Vaccination)

As of April 2019



	Generic Name/Project Code Number	Target Indications		Stage			
	(Drug Efficacy/Mechanism of Action)	rarget mulcations	Region	Phase 1	Phase 2	Phase 3	NDA
ā	Edoxaban / DU-176b (Fxa-inhibitor)	Very elderly patients AF	JP				
<u>ئ</u>	Prasugrel / CS-747 (anti-platelet agent)	Ischemic stroke	JP				
	Esaxerenone / CS-3150 (MR-antagonist)	Diabetic nephropathy	JP				
(SM)	DS-1040 (TAFIa inhibitor)	Acute ischemic stroke, acute pulmonary embolism	JP/US/EU				
Specialty Medicine (S	DS-2330 (hyperphosphatemia treatment)	Hyperphosphatemia in chronic kidney disease	ı				
Med	Mirogabalin (α2δ ligand)	Central neuropathic pain	JP/Asia				
alty	Laninamivir / CS-8958 (neuraminidase inhibitor)	Influenza	JP				
peci	DS-5141 (ENA-oligonucleotide)	DMD	JP				
S	DS-1211 (TNAP inhibitor)	Inhibition of ectopic calcification	US				
NIE PA	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				
Vaccination	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)

# **Out-licensing Projects**



	Pre-clinical	Phase 1	Phase 2
Oncology		■ PLX7486   (Solid tumor / FMS/TRK inhibitor) ■ PLX8394   (Solid tumor / BRAF inhibitor) ■ PLX9486   (Solid tumor (gastrointestinal stromal tumor) / KIT inhibitor)	
Specialty Medicine	■ DS-1515 (Inflammatory disease / PI3Kδ inhibitor) ■ DS-1039 (Cystic fibrosis / new MOA (CFTR independent fluid secretion)) ■ ASB29609 (Circadian rhythm sleep-wake disorders / 5-HT5A receptor agonist)	<ul> <li>■ DS-2969         (Clostridium difficile infection / GyrB inhibitor)</li> <li>■ DS-1093         (inflammatory bowel disease (IBD) / HIF-PH inhibitor)</li> <li>■ DS-7080         (AMD / angiogenesis inhibitor)</li> <li>■ DS-1501: US/EU (other than JP)         (Osteoporosis / anti Siglec-15 antibody)</li> </ul>	■ Laninamivir (CS-8958/anti-influenza / out-licensing with Vaxart Inc)

## **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® (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**



Abbrevi ations	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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