

# Result Presentation Fiscal 2018 First Quarter

Kyowa Hakko Kirin Co., Ltd.

## Results Summary & Financial Review

**Motohiko Kawaguchi**

Executive Officer, Director of Accounting Department

## R&D Review

**Mitsuo Satoh, Ph.D**

Executive Officer, Vice President Head of R&D Division

## Business Topics

**Wataru Murata**

Executive Officer, Director of Corporate Strategy & Planning Department

## Q&A

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# Results Summary & Financial Review

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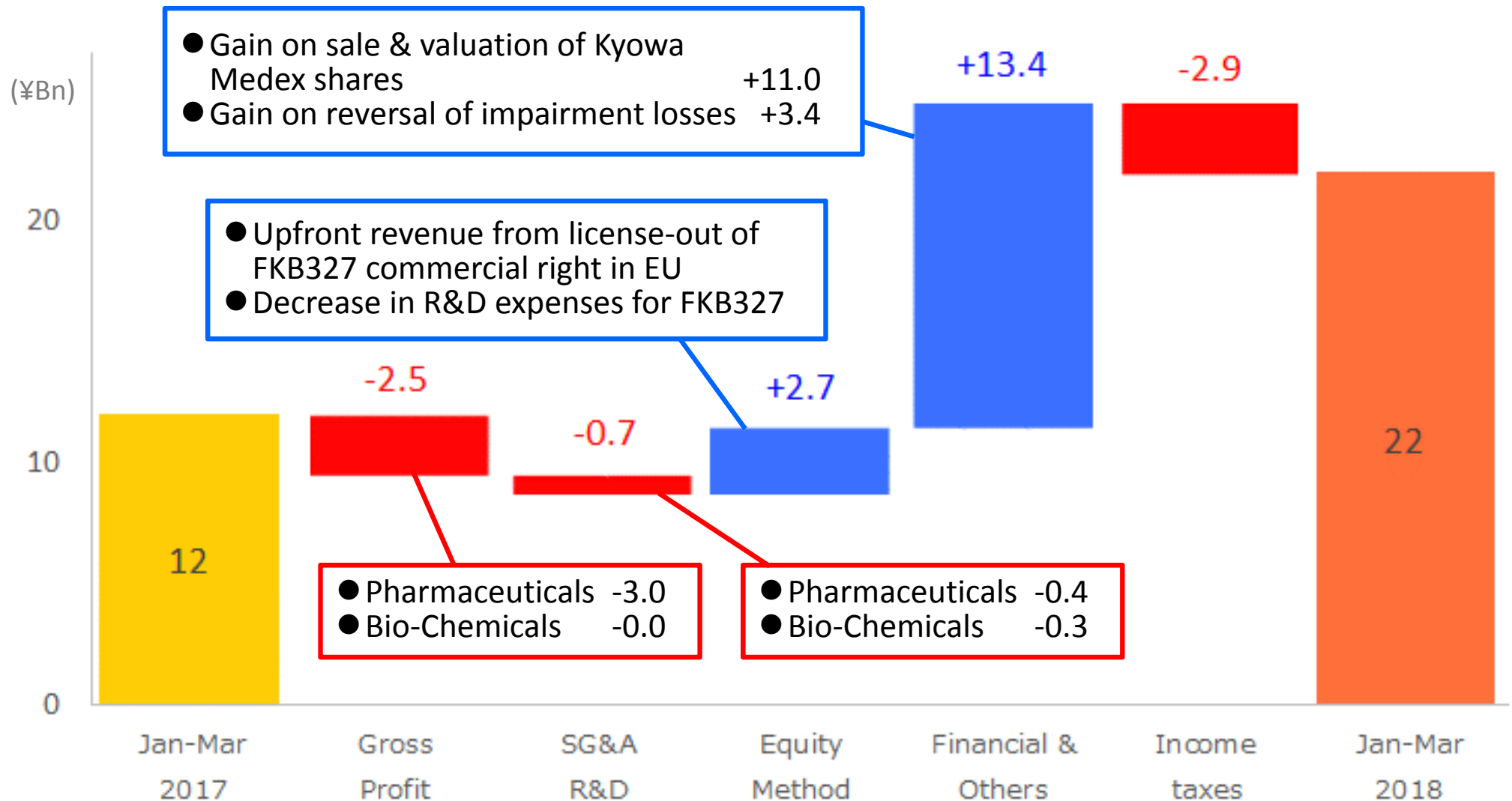
# Summary of Consolidated Results

	2017Q1 Results	2018Q1 Results	Changes	
Revenue	91.3	84.7	-6.6 (-7%)	<ul style="list-style-type: none"> <li>• Shrink in domestic drug and technology licensing revenue (↓)</li> <li>• Deconsolidation of Kyowa Medex (↓)</li> </ul>
Core Operating Profit (Core OP) <i>[Margin]</i>	16.8 <i>[18.4%]</i>	16.2 <i>[19.2%]</i>	-0.5 (-3%)	<ul style="list-style-type: none"> <li>• Improvement of FKB's profit/loss (equity method) (↑)</li> </ul>
Profit	12.0	22.0	+10.0 (+83%)	<ul style="list-style-type: none"> <li>• Gain on sale &amp; valuation of Kyowa Medex shares (↑)</li> </ul>

( Billion Yen / Rounded )

\*FKB: FUJIFILM KYOWA KIRIN BIOLOGICS Co., Ltd.

## Profit +10.0 billion yen



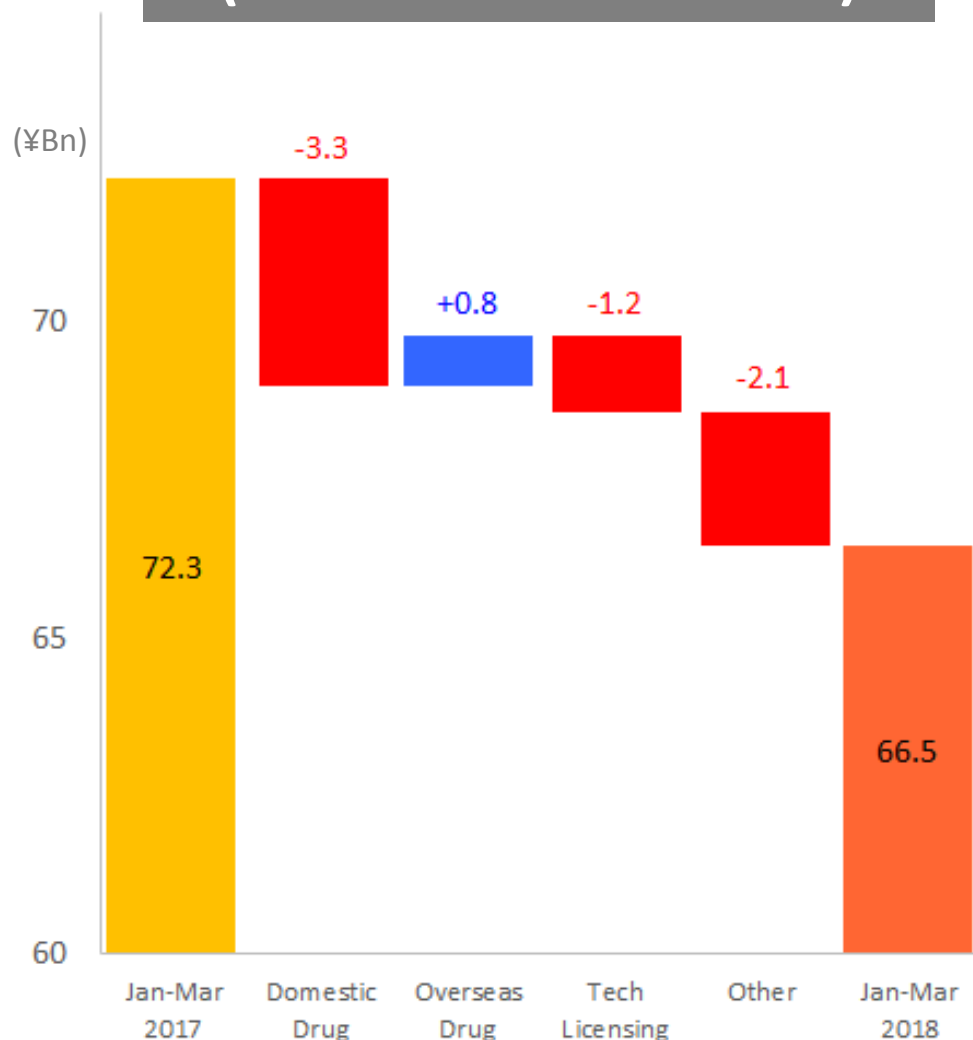
# Summary of Results by Segment

- Pharmaceuticals' Core OP decreased due to the shrink in the domestic drug sales & tech-licensing revenue
- Bio-Chemicals' Core OP fell due to aggressive advertisements for the future mail-order business' expansion

		2017Q1 Results	2018Q1 Results	Changes	2018 Plan	Progression Rate
Pharmaceuticals	Revenue	72.3	66.5	-5.8 (-8%)	262.0	25%
	Core OP <i>[Margin]</i>	15.1 <i>[20.9%]</i>	14.4 <i>[21.6%]</i>	-0.7 (-5%)	43.0 <i>[16.4%]</i>	34%
Bio-Chemicals	Revenue	20.0	19.0	-1.0 (-5%)	76.0	25%
	Core OP <i>[Margin]</i>	1.5 <i>[7.6%]</i>	1.2 <i>[6.3%]</i>	-0.3 (-22%)	8.0 <i>[10.5%]</i>	15%

( Billion Yen / Rounded )

**-5.8 billion yen  
(incl. forex effect +0.4)**



## ● Domestic Drug -3.3

- NEGATIVE ··· Regpara dropped due to the competing product. Long-listed products including Allelock, Coniel, Asacol, and Depakene decreased due mainly to the penetration of generic drugs.
- POSITIVE ··· Patanol increased due to the high pollen dispersal. New products such as G-Lasta and Lumicef sustained steady growth, and Rituximab-BS, newly launched in January, was smoothly penetrating into the market.

## ● Overseas Drug +0.8 (incl. forex effect +0.6)

- EU ··· Abstral kept growing firmly. Moventig was also steadily penetrating into the market.
- Asia ··· Favorable sales of Gran & Nesp, especially in China & Taiwan.

## ● Tech Licensing -1.2 (incl. forex effect -0.2)

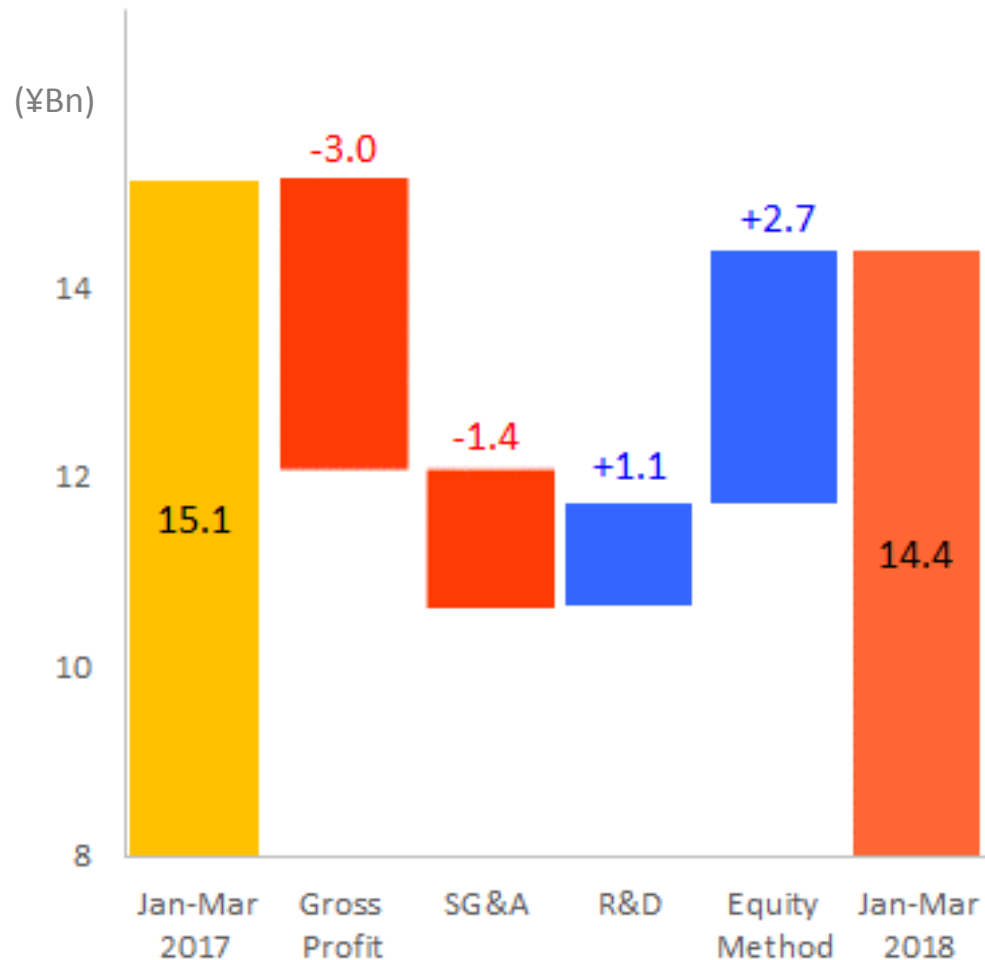
- Mainly due to fall in benralizumab-related revenue.

## ● Others -2.1 (incl. forex effect +0.0)

- Decreased by deconsolidation of Kyowa Medex.



**-0.7 billion yen  
(incl. forex effect -0.2)**



- **Gross Profit -3.0 (incl. forex effect +0.3)**
  - Due to decrease in the sales revenue.

- **SG&A -1.4 (incl. forex effect -0.5)**
  - Mainly due to boost in launch readiness expenses for Crysvita (burosumab).

- **R&D +1.1 (incl. forex effect +0.0)**
  - Due to the shrink in late-stage developments such as KRN23, KW-0761, KHK7580.

- **Income/Loss on Equity Method +2.7**
  - Upfront revenue upon the license-out of FKB327 commercial right in EU.
  - R&D expenses for FKB327 decreased.

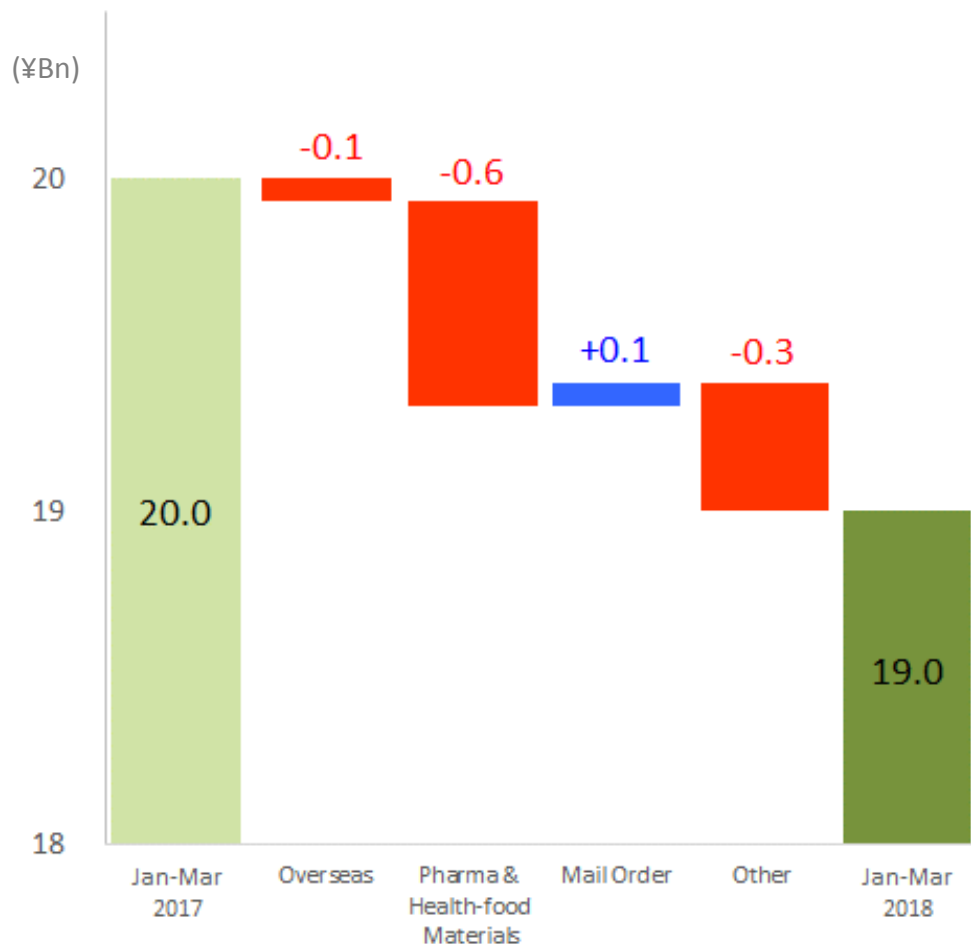
# Pharmaceuticals: Revenue of Major Items

**KYOWA KIRIN**

Item		2017Q1 Results	2018Q1 Results	Changes	Reason	2018 Plan	Progression Rate
NESP	JP	12.5	12.0	-0.5 (-4%)	Timing of shipment	52.4	23%
REGPARA	JP	4.6	3.6	-1.0 (-22%)	Market penetration of the competitor	13.2	27%
ALLELOCK	JP	5.6	4.6	-1.0 (-18%)	Market penetration of GE drugs & high pollen dispersal	11.7	39%
Patanol	JP	7.0	7.7	+0.7 (+11%)	High pollen dispersal	12.1	64%
G-Lasta	JP	3.8	4.3	+0.5 (+13%)	Steady market penetration	20.1	22%
NOURIAST	JP	1.8	1.9	+0.1 (+4%)	Steady market penetration	9.4	20%
Technology licensing	JP	0.8	1.1	+0.3 (+31%)		4.6	24%
Abstral	ex-JP	2.9	3.4	+0.4 (+15%)	Steady market penetration	13.2	25%
Technology licensing	ex-JP	8.0	6.5	-1.5 (-18%)	Decrease in benralizumab-related revenue	17.3	37%

( Billion yen / Rounded )

**-1.0 billion yen  
(incl. forex effect +0.2)**



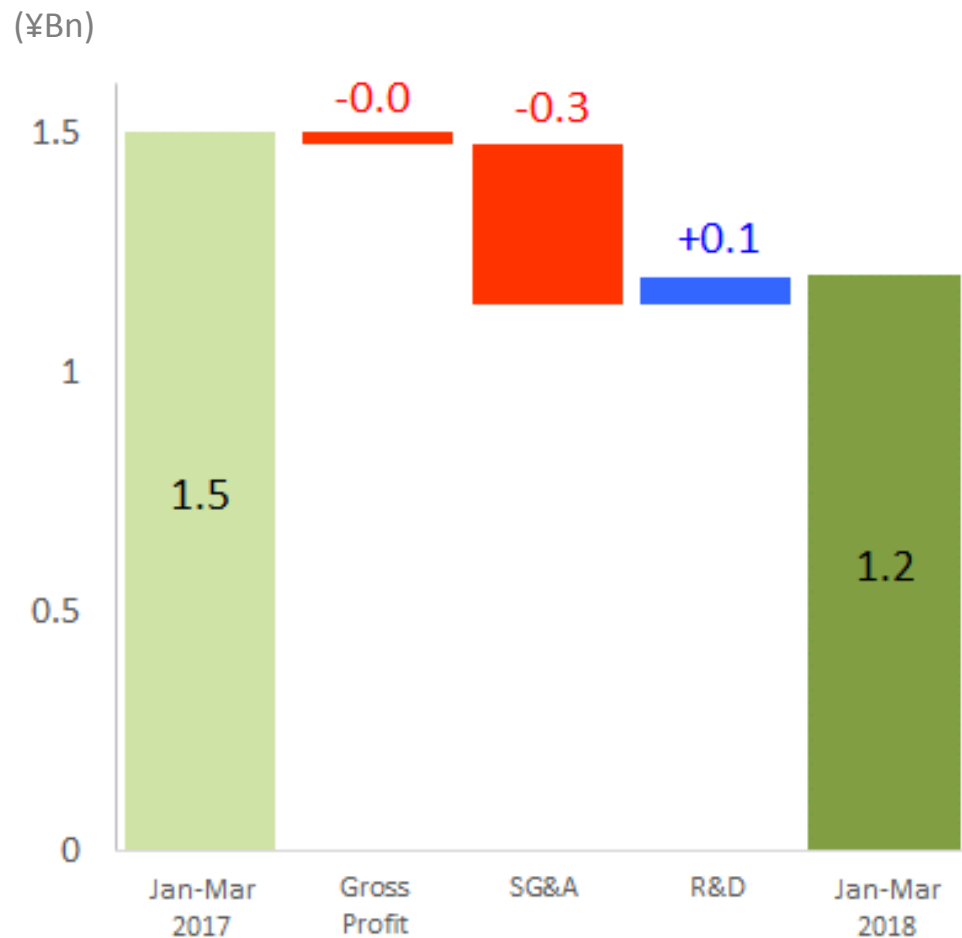
- **Overseas -0.1 (incl. forex effect +0.2)**
  - Americas +0.0 (incl. forex effect -0.1)
  - Europe +0.2 (incl. forex effect +0.3)
  - Asia & others -0.3 (incl. forex effect -0.0):  
Due to fiercer competition in China.

- **Pharma & Health-food Materials -0.6**
  - Dropped by revamping of certain product lineup.

- **Mail Order +0.1**
  - “KHB Arginine EX” is continuously growing.

- **Other -0.3**
  - Decreased due to transfer of the Plant Growth Regulator Business.

**-0.3 billion yen  
(incl. forex effect +0.1)**



- **Gross Profit -0.0 (incl. forex effect +0.0)**
  - Maintained a same level as last year through the improvement of profitability.

- **SG&A -0.3 (incl. forex effect +0.0)**
  - Advertisement increased aiming for the mail order business' growth.

# R&D Review

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# Key development events in 2018

Generic name Code	Indication	Country/ region	Month	Event
Bardoxolone methyl RTA 402	Diabetic kidney disease	Japan	Mar.	Designated under the SAKIGAKE system <sup>1</sup>
Benralizumab <sup>2</sup> KHK4563	Asthma	Europe	Jan.	Approved (BN: Fasenra)
		Japan	Jan.	Approved (BN: Fasenra subcutaneous infusion)
Burosumab KRN23	XLH (pediatric)	Europe	Feb.	Conditionally approved (BN: Crysvisa)
Evocalcet KHK7580	Secondary hyperparathyroidism	Japan	Mar.	Approved (BN: Orkedia tablets)
Granisetron -	Chemotherapy induced nausea and vomiting	Malaysia	Jan.	Approved (BN: Sancuso)

<sup>1</sup>The priority review and designation system by Ministry of Health, Labor and Welfare in Japan

<sup>2</sup>NDA holder is AstraZeneca

BN: brand name

Note: Listed events were completed between January 1, 2018 and March 31, 2018.

- **Approval of burosumab-twza (brand name<sup>1</sup>: Crysvita) for the treatment of pediatric and adult patients with XLH in the U.S.**

<sup>1</sup>The brand name is used in the U.S. and Europe.

Note: Listed events were completed between April 1, 2018 and May 8, 2018.

- **Discontinued development for mogamulizumab in combination with PF-05082566 for the treatment of solid tumors based on a collaboration agreement on immuno-oncology combination therapies with Pfizer**
- **Discontinued development for mogamulizumab in combination with durvalumab or tremelimumab for the treatment of solid tumors based on a collaboration agreement on immuno-oncology combination therapies with AstraZeneca**

Note: Listed events were completed between April 1, 2018 and May 8, 2018.



# Business Topics

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# Progress in products under the alliances with partners

Product	Indication	Country/ region	Month	Event
Dovobet Gel	<ul style="list-style-type: none"> <li>• Psoriasis</li> </ul>	Japan	Feb.	Approved
Rituximab BS Intravenous Infusion [KHK]	<ul style="list-style-type: none"> <li>• CD20 positive, B-cell non Hodgkin's lymphoma</li> <li>• CD20 positive, B-cell lymphoma under immunosuppressed condition</li> <li>• Wegener's Granulomatosis, microscopic polyangiitis</li> </ul>	Japan	Jan.	Launched

Note: Listed events were completed between January 1, 2018 and March 31, 2018.

## **FKB327 (Biosimilar to Humira <adalimumab>)**

- Submitted an application for marketing authorization to the European Medicines Agency in the EU, and it was accepted on May 18, 2017
- Concluded an exclusive sales agreement with Mylan for Europe
  - Mylan has excellent sales capabilities in Europe, and it is the optimum partner for maximizing the value of FKB327
  - Based on the agreement, FKB will receive an upfront payment, as well as a milestone payment upon the start of sales and sales royalties
- Currently negotiating an exclusive sales agreement with Mylan for the other territories
- Responses are being made to the EU authorities in partnership with Mylan, and marketing authorization is expected to be received in the second half of 2018

## **FKB238 (Biosimilar to Avastin <bevacizumab>)**

- **Concluded an agreement with AstraZeneca and established a joint venture (Centus Biotherapeutics) funded equally by both parties in 2015**
- **The above joint venture is currently conducting a phase 3 international joint clinical trial**

### Summary of the biosimilar business at Fujifilm Kyowa Kirin Biologics

- **Planning to start sales of FKB327 by Mylan in Europe from around 2019, and it is expected that capital recovery will begin before long**
- **Development of FKB238 by the joint venture with AstraZeneca is proceeding according to plan, and it is expected that capital recovery will begin in a few years**
- **In addition to FKB238, forming a sales alliance with a global pharmaceutical company for FKB327 as well is expected to improve profitability of this biosimilar business**

# Appendix

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## Average FOREX Rate

[ Yen ]

Currency	2017Q1 Results	2018Q1 Results	Changes	2018 Plan
USD/JPY	115	110	-5	110
EUR/JPY	122	134	+12	130
GBP/JPY	143	152	+9	150

## 2018Q1 FOREX Effect (YoY)

[ Million Yen]

Segment	Currency	Revenue	Core OP
Pharmaceuticals	USD	-190	-70
	EUR	+20	+10
	GBP	+510	-130
Bio-Chemicals	USD	-180	-150
	EUR	+330	+150

# Burosumab : Collaboration with Ultragenyx (summary)

	KHK group	Ultragenyx
U.S.A Canada	<ul style="list-style-type: none"> <li>● Books sales</li> <li>● Splits profits in half with Ultragenyx for first 5 years</li> <li>● After 5 years, pays mid to high 20% range sales royalty to Ultragenyx</li> </ul>	<ul style="list-style-type: none"> <li>● Splits profits in half with KHK for first 5 years</li> <li>● After 5 years, receives mid to high 20% range sales royalty from KKI</li> </ul>
Europe	<ul style="list-style-type: none"> <li>● Books sales</li> <li>● Pay up to 10% sales royalty to Ultragenyx</li> </ul>	<ul style="list-style-type: none"> <li>● Receives up to 10% sales royalty from KKI</li> </ul>
Latin America	<ul style="list-style-type: none"> <li>● Receives low single-digit sales royalty from Ultragenyx</li> </ul>	<ul style="list-style-type: none"> <li>● Books sales</li> <li>● Pays low single-digit sales royalty to KHK</li> </ul>
Turkey	<ul style="list-style-type: none"> <li>● Receives up to 20% sales royalty from Ultragenyx</li> <li>● Retains an option to take over commercialization rights after a certain period</li> </ul>	<ul style="list-style-type: none"> <li>● Books sales</li> <li>● Pays up to 20% sales royalty to KKI</li> </ul>
Asia (incl. Japan) ROW	<ul style="list-style-type: none"> <li>● Books sales</li> </ul>	

\* KHK supplies commercial product in all regions.



# Development schedule of major pipeline

As of March 31  
+ : Estimated time of regulatory decisions

Generic name Code	Indication	Country/ region	2018	2019	2020~
Bardoxolone methyl RTA 402	Diabetic kidney disease	Japan	Phase 3		
Benralizumab <sup>1</sup> KHK4563	COPD	U.S., Europe		Submission	
		Japan		Submission	
Brodalumab KHK4827	Psoriasis	Asia	Submission / +		
	Axial spondyloarthritis	Japan, Korea, Taiwan	Phase 3		Submission
Burosumab <sup>2</sup> KRN23	XLH	Europe	Approved (Pediatric)	+ (Adult)	
		U.S.	+ <sup>3</sup>		
		Japan	Submission	+	
Entinostat KHK2375	Breast cancer	Japan	Phase 2		
Istradefylline KW-6002	Parkinson's disease	U.S.	Submission	+	
Mogamulizumab KW-0761	CTCL	U.S., Europe	+ <sup>4</sup>		
Romiplostim AMG531	Aplastic anemia	Japan, Korea	Submission	+	
	ITP	China		Submission	+

<sup>1</sup>NDA holder is AstraZeneca

<sup>2</sup>Jointly developed with Ultragenyx

PDUFA: <sup>3</sup>April 17 and <sup>4</sup>June 4, 2018.

# Development schedule of major pipeline (cont.)

As of March 31

Code	Indication	Country/ region	2018	2019	2020~
ASKP1240 <sup>5</sup>	Recurrence of FSGS in de novo kidney transplant	U.S.		Phase 2	
KHK4083	Ulcerative colitis	U.S., Europe		Phase 2	
	Atopic dermatitis	U.S., Europe, Japan		Phase 2	
KW-6356	Parkinson's disease	Japan		Phase 2	

<sup>5</sup>Jointly developed with Astellas Pharma Inc

Development code	Reference bio medical product		Country/region	Development stage		
	Generic name	Brand name		Phase 2	Phase 3	Application
FKB327	Adalimumab	HUMIRA	U.S., others			
FKB238	Bevacizumab	Avastin	U.S., Europe, others			
Not disclosed	Not disclosed	Not disclosed	Not disclosed (Target product determined)			

1

Biosimilar pharmaceutical products are developed by *FUJIFILM KYOWA KIRIN BIOLOGICS Co., Ltd.*

ClinialTrials.gov identifier: <sup>1</sup>NCT02810457

<sup>1</sup> Development is currently conducted by Centus Biotherapeutics Limited.

BS	Biosimilar
COPD	Chronic Obstructive Pulmonary Disease
CTCL	Cutaneous T-Cell Lymphoma
FSGS	Focal Segmental Glomerulosclerosis
HTLV-1	Human T-cell Leukemia Virus Type 1
ITP	Idiopathic (immune) Thrombocytopenic Purpura
XLH	X-linked Hypophosphatemia

# **KYOWA KIRIN**

The Kyowa Hakko Kirin Group companies strive to contribute to the health and well-being of people around the world by creating new value through the pursuit of advances in life sciences and technologies.

**Kyowa Hakko Kirin Co Ltd**  
**Corporate Communications Dept, IR Group**  
**Tel: +81-3-5205-7206**