



Better Health, Brighter Future

FY2018 3rd Quarter DATA BOOK

Takeda Pharmaceutical Company Limited (TSE code 4502)

Contact: Global Finance, IR

TEL: +81-3-3278-2306

<https://www.takeda.com/>

Quarterly Announcements / Presentations

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While Takeda plans to announce an earnings forecast which includes an estimated financial impact of the Shire acquisition once a reasonable financial estimate is determined, the consideration of the asset valuation as well as purchase price allocation, schedule and manner of amortization and depreciation for the business combination accounting will require more time. It is also difficult to estimate the effect on profit and loss since the completion of the acquisition to the end of the consolidated accounting period, nor the acquisition related costs for the full fiscal year with a reasonable level of accuracy at this time. Considering the sizable effect on the business results due to the acquisition, Takeda is not furnishing a new consolidated forecast in a provisional or partial way at this time. It is our objective to disclose a Shire acquisition post-close consolidated business forecast for the fiscal year once a holistic and reasonable earnings forecast can be determined.

Certain Non-IFRS Financial Measures

This Databook includes certain IFRS financial measures not presented in accordance with International Financial Reporting Standards (“**IFRS**”), including Underlying Revenue, Core Earnings, Underlying Core Earnings, Core Net Profit, Underlying Core Net Profit, Underlying Core EPS, Net Debt, EBITDA, Adjusted EBITDA and Operating Free Cash Flow. Takeda’s management evaluates results and makes operating and investment decisions using both IFRS and non-IFRS measures included in this Databook. These non-IFRS measures exclude certain income, cost and cash flow items which are included in, or are calculated differently from, the most closely comparable measures presented in accordance with IFRS. By including these non-IFRS measures, management intends to provide investors with additional information to further analyze Takeda’s performance, core results and underlying trends. Takeda’s non-IFRS measures are not prepared in accordance with IFRS and such non-IFRS measures should be considered a supplement to, and not a substitute for, measures prepared in accordance with IFRS (which we sometimes refer to as “reported” measures). Investors are encouraged to review the reconciliation of non-IFRS financial measures to their most directly comparable IFRS measures.

Further information on certain of Takeda’s Non-IFRS measures is posted on Takeda’s investor relations website at <https://www.takeda.com/investors/reports/quarterly-announcements/quarterly-announcements-2018/>

Medical information

This Databook contains information about products that may not be available in all countries, or may be available under different trademarks, for different indications, in different dosages, or in different strengths. Nothing contained herein should be considered a solicitation, promotion or advertisement for any prescription drugs including the ones under development.

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I. Financial Results

1. Revenue by Region

◆ Consolidated Revenue

(Billion JPY)

	FY15	FY16	FY17	FY17 Q3 YTD	FY18 Q3 YTD	YOY	
Total revenue	1,807.4	1,732.1	1,770.5	1,369.6	1,380.0	10.4	0.8%
Japan	688.1	655.3	580.3	463.2	444.0	-19.2	-4.1%
<% of revenue>	<38.1%>	<37.8%>	<32.8%>	<33.8%>	<32.2%>	<-1.6pt>	
United States	514.4	520.2	598.3	463.0	495.3	32.3	7.0%
<% of revenue>	<28.5%>	<30.0%>	<33.8%>	<33.8%>	<35.9%>	<2.1pt>	
Europe and Canada	309.3	279.7	313.7	233.7	244.9	11.1	4.8%
<% of revenue>	<17.1%>	<16.1%>	<17.7%>	<17.1%>	<17.7%>	<0.7pt>	
Emerging Markets	295.6	276.9	278.1	209.6	195.7	-13.8	-6.6%
<% of revenue>	<16.4%>	<16.0%>	<15.7%>	<15.3%>	<14.2%>	<-1.1pt>	
Russia/CIS	61.8	57.5	68.2	56.0	44.3	-11.7	-20.9%
<% of revenue>	<3.4%>	<3.3%>	<3.9%>	<4.1%>	<3.2%>	<-0.9pt>	
Latin America	68.4	72.5	75.7	56.1	54.5	-1.5	-2.8%
<% of revenue>	<3.8%>	<4.2%>	<4.3%>	<4.1%>	<4.0%>	<-0.1pt>	
Asia	126.0	112.8	104.0	77.3	75.9	-1.5	-1.9%
<% of revenue>	<7.0%>	<6.5%>	<5.9%>	<5.6%>	<5.5%>	<-0.1pt>	
Other	39.4	34.0	30.2	20.2	21.1	0.9	4.3%
<% of revenue>	<2.2%>	<2.0%>	<1.7%>	<1.5%>	<1.5%>	<0.1pt>	
Of which royalty / service income	56.5	60.1	76.7	61.0	46.6	-14.4	-23.6%

*1 Revenue amount is classified into countries or regions based on the customer location.

*2 Other region includes Middle East, Oceania and Africa.

◆ Consolidated Prescription Drugs Revenue

(Billion JPY)

	FY15	FY16	FY17	FY17 Q3 YTD	FY18 Q3 YTD	YOY		Underlying Growth
Total prescription drugs revenue	1,648.7	1,568.9	1,691.5	1,305.9	1,330.4	24.5	1.9%	6.2%
Japan	541.7	504.7	501.4	399.5	394.5	-5.0	-1.3%	4.9%
United States	511.0	516.7	598.3	463.0	495.3	32.3	7.0%	8.5%
Europe and Canada	305.6	276.0	313.7	233.7	244.9	11.1	4.8%	4.9%
Emerging Markets	290.4	271.5	278.1	209.6	195.7	-13.9	-6.6%	5.1%
Russia/CIS	61.8	57.5	68.2	56.0	44.3	-11.7	-20.9%	-13.7%
Russia	43.5	41.9	51.3	42.5	33.9	-8.6	-20.3%	-11.7%
Latin America	68.2	72.5	75.7	56.1	54.5	-1.6	-2.9%	19.6%
Brazil	38.1	39.0	46.2	34.0	34.0	-0.0	-0.1%	26.9%
Asia	121.2	107.8	104.0	77.3	75.9	-1.5	-1.9%	8.2%
China	66.0	57.6	49.6	36.9	34.9	-2.0	-5.4%	19.5%
Other	39.2	33.7	30.2	20.2	21.1	0.9	4.3%	11.9%
Of which royalty / service income	55.8	59.5	76.2	60.6	46.2	-14.4	-23.8%	14.2%
Japan	6.6	18.7	31.3	24.3	16.5	-7.8	-32.2%	68.2%
Overseas	49.3	40.9	44.9	36.3	29.7	-6.6	-18.2%	-3.5%
Ratio of overseas prescription drugs revenue	67.1%	67.8%	70.4%	69.4%	70.3%	0.9pt		

*1 Revenue amount is classified into countries or regions based on the customer location.

*2 Other region includes Middle East, Oceania and Africa.

◆Consolidated Revene (Quarterly)

(Billion JPY)

	FY17				FY18							
	Q1	Q2	Q3	Q4	Q1	YOY	Q2	YOY	Q3	YOY	Q4	YOY
Total revenue	448.2	433.2	488.2	401.0	449.8	0.4%	430.8	-0.6%	499.4	2.3%		
Japan	160.3	134.7	168.2	117.1	144.3	-10.0%	130.0	-3.5%	169.8	0.9%		
<% of revenue>	<35.8%>	<31.1%>	<34.5%>	<29.2%>	<32.1%>		<30.2%>		<34.0%>			
United States	148.6	153.2	161.3	135.3	161.1	8.4%	160.0	4.4%	174.3	8.1%		
<% of revenue>	<33.1%>	<35.4%>	<33.0%>	<33.7%>	<35.8%>		<37.1%>		<34.9%>			
Europe and Canada	73.6	75.4	84.8	80.0	79.1	7.5%	79.5	5.5%	86.3	1.7%		
<% of revenue>	<16.4%>	<17.4%>	<17.4%>	<19.9%>	<17.6%>		<18.5%>		<17.3%>			
Emerging Markets	65.8	69.9	73.9	68.5	65.4	-0.7%	61.3	-12.3%	69.1	-6.5%		
<% of revenue>	<14.7%>	<16.1%>	<15.1%>	<17.1%>	<14.5%>		<14.2%>		<13.8%>			
Russia/CIS	17.0	18.1	20.9	12.3	14.1	-17.1%	13.4	-26.1%	16.8	-19.5%		
<% of revenue>	<3.8%>	<4.2%>	<4.3%>	<3.1%>	<3.1%>		<3.1%>		<3.4%>			
Latin America	17.0	19.1	20.0	19.6	18.5	9.2%	16.2	-15.3%	19.8	-0.8%		
<% of revenue>	<3.8%>	<4.4%>	<4.1%>	<4.9%>	<4.1%>		<3.8%>		<4.0%>			
Asia	25.2	24.0	28.1	26.7	26.9	6.9%	25.0	4.1%	24.0	-14.9%		
<% of revenue>	<5.6%>	<5.5%>	<5.8%>	<6.7%>	<6.0%>		<5.8%>		<4.8%>			
Other	6.6	8.7	4.9	10.0	5.8	-12.1%	6.8	-22.2%	8.5	74.1%		
<% of revenue>	<1.5%>	<2.0%>	<1.0%>	<2.5%>	<1.3%>		<1.6%>		<1.7%>			
Of which royalty income and service income	30.3	12.8	17.9	15.7	13.0	-57.1%	11.9	-7.4%	21.7	21.6%		

*1 Revenue amount is classified into countries or regions based on the customer location. *2 Other region includes Middle East, Oceania and Africa.

◆ Consolidated Prescription Drugs Revenue (Quarterly)

(Billion JPY)

	FY17				FY18							
	Q1	Q2	Q3	Q4	Q1	YOY	Q2	YOY	Q3	YOY	Q4	YOY
Total prescription drugs revenue	427.2	411.2	467.4	385.7	434.5	1.7%	413.6	0.6%	482.3	3.2%		
Japan	139.3	112.7	147.5	101.9	129.0	-7.4%	112.8	0.1%	152.7	3.5%		
United States	148.6	153.2	161.3	135.3	161.1	8.4%	160.0	4.4%	174.3	8.1%		
Europe and Canada	73.6	75.4	84.8	80.0	79.1	7.5%	79.5	5.5%	86.3	1.7%		
Emerging Markets	65.8	69.9	73.9	68.5	65.4	-0.7%	61.3	-12.3%	69.0	-6.6%		
Russia/CIS	17.0	18.1	20.9	12.3	14.1	-17.1%	13.4	-26.1%	16.8	-19.5%		
Russia	12.5	13.8	16.3	8.8	10.5	-16.3%	10.3	-25.5%	13.2	-18.9%		
Latin America	17.0	19.1	20.0	19.6	18.5	9.2%	16.1	-15.5%	19.8	-1.0%		
Brazil	10.0	12.0	12.1	12.2	11.8	18.5%	10.1	-15.6%	12.1	0.0%		
Asia	25.2	24.0	28.1	26.7	26.9	6.9%	25.0	4.1%	24.0	-14.9%		
China	12.3	10.3	14.2	12.7	14.0	13.4%	12.0	16.4%	8.9	-37.4%		
Other	6.6	8.7	4.9	10.0	5.8	-12.0%	6.8	-22.2%	8.5	74.1%		
Of which royalty income and service income	30.2	12.7	17.7	15.6	12.9	-57.3%	11.7	-7.6%	21.5	21.5%		
Japan	18.1	2.5	3.7	7.0	3.2	-82.3%	2.9	16.7%	10.4	180.4%		
Overseas	12.1	10.2	14.0	8.6	9.7	-19.8%	8.9	-13.4%	11.2	-20.4%		
Ratio of overseas prescription drugs revenue	67.4%	72.6%	68.4%	73.6%	70.3%		72.7%		68.3%			

*1 Revenue amount is classified into countries or regions based on the customer location. *2 Other region includes Middle East, Oceania and Africa.

◆ Prescription Drugs: Global major products' sales *1

(Billion JPY)

		Gross basis		Net basis					FY18Q3 YTD Underlying Growth	
		FY15	FY16	FY17	FY17 Q3 YTD	FY18 Q3 YTD	YOY	FY18 Forecasts*3		
Entyvio	Japan	-	-	-	-	0.5	0.5	-		-
	U.S.	63.1	99.6	133.6	100.6	136.9	36.4	36.2%		37.0%
	EUCAN	21.9	39.5	60.2	43.6	56.2	12.6	29.0%		28.5%
	EM	1.3	4.0	7.5	5.4	7.4	2.0	37.4%		48.4%
	Total	86.2	143.2	201.4	149.5	201.0	51.5	34.4%	↗ ↗ ↗	35.1%
Velcade	U.S.	131.6	112.9	113.7	88.9	82.0	-6.9	-7.8%		-7.1%
	Other than U.S.	30.4	24.7	23.6	19.0	18.4	-0.7	-3.5%		-2.9%
	Total	162.0	137.6	137.3	107.9	100.3	-7.6	-7.0%	↘	-6.3%
Leuporelin	Japan	53.8	48.6	41.2	33.0	31.7	-1.3	-4.1%		-4.1%
	U.S.	17.3	18.3	19.7	15.1	16.9	1.8	11.9%		12.0%
	EUCAN	35.3	31.1	34.5	25.5	25.3	-0.2	-0.7%		-1.8%
	EM	18.0	16.3	12.7	9.5	10.7	1.2	12.6%		12.8%
	Total	124.4	114.2	108.1	83.2	84.6	1.5	1.8%	➡	1.5%
Azilva	Japan	59.0	66.9	64.0	50.5	55.7	5.2	10.4%		10.4%
	Total	59.0	66.9	64.0	50.5	55.7	5.2	10.4%	↗	10.4%
Pantoprazole	U.S.	13.6	10.1	7.2	6.1	4.1	-2.0	-33.4%		-32.6%
	EUCAN	43.4	30.5	30.6	23.2	21.1	-2.1	-8.9%		-9.9%
	EM	43.7	33.7	28.0	20.3	21.7	1.5	7.3%		10.7%
	Total	100.8	74.2	65.8	49.5	46.9	-2.6	-5.3%	➡	-4.2%
Dexilant	U.S.	64.0	49.7	49.5	40.2	40.3	0.1	0.3%		0.9%
	EUCAN	5.4	5.7	6.4	4.7	5.5	0.8	16.6%		18.2%
	EM	5.7	7.3	9.9	7.2	9.1	1.9	26.5%		35.9%
	Total	75.1	62.6	65.7	52.1	54.9	2.8	5.4%	➡	7.4%
Takecab	Japan	8.4	34.1	48.5	37.5	44.3	6.8	18.2%		18.2%
	Total	8.4	34.1	48.5	37.5	44.4	6.9	18.5%	↗	18.5%
Nesina	Japan	36.9	32.9	26.6	21.5	22.2	0.7	3.4%		3.4%
	U.S.	5.3	5.2	6.0	4.8	4.6	-0.2	-3.7%		-3.1%
	EUCAN	3.5	6.1	9.0	6.5	8.1	1.7	25.9%		24.5%
	EM	3.3	4.9	8.6	5.8	7.5	1.8	30.7%		38.6%
	Total	48.9	49.1	50.2	38.4	42.4	4.0	10.4%	↗	11.5%
Trintellix	U.S.	24.5	31.9	48.4	37.6	44.6	7.1	18.8%		19.5%
	Total	24.5	31.9	48.4	37.6	44.6	7.1	18.8%	↗ ↗	19.5%
Uloric	U.S.	41.8	41.4	45.8	34.2	39.7	5.5	16.0%		17.0%
	EUCAN	0.7	0.7	0.8	0.6	0.6	-0.0	-0.1%		1.4%
	EM	-	0.1	0.3	0.2	0.2	0.0	7.9%		13.1%
	Total	42.5	42.2	46.8	35.0	40.5	5.5	15.7%	↗	16.7%
Ninlaro	Japan	-	-	2.5	1.8	3.2	1.4	79.1%		79.1%
	U.S.	4.0	29.1	39.4	29.8	35.6	5.8	19.4%		20.3%
	EUCAN	-	0.2	4.0	2.7	6.0	3.3	124.8%		125.3%
	EM	0.0	0.1	0.6	0.3	1.6	1.4	-		-
	Total	4.1	29.4	46.4	34.5	46.5	11.9	34.5%	↗ ↗ ↗	36.6%
Colcrys	U.S.	46.5	38.9	40.3	32.1	23.6	-8.5	-26.5%		-25.7%
	Total	46.5	38.9	40.3	32.1	23.6	-8.5	-26.5%	↘ ↘	-25.7%
Adcetris	Japan	3.1	3.3	3.8	2.9	3.7	0.8	27.9%		27.9%
	Europe	17.4	17.5	20.1	15.3	16.2	1.0	6.3%		5.4%
	EM	7.2	9.3	14.3	10.6	12.1	1.6	14.8%		36.2%
	Total	27.6	30.1	38.5	28.9	32.0	3.1	10.9%	➡	17.7%
Lansoprazole	Japan *2	41.3	8.1	4.6	3.6	2.5	-1.1	-31.5%		-18.9%
	U.S.	27.5	20.0	15.2	12.1	5.4	-6.7	-55.6%		-54.9%
	EUCAN	10.5	7.1	7.2	5.5	4.9	-0.6	-11.2%		-12.4%
	EM	10.2	9.2	9.7	7.2	7.0	-0.2	-2.7%		-2.6%
	Total	89.5	44.4	36.8	28.5	19.8	-8.7	-30.5%	↘ ↘	-28.3%
Amitiza	U.S.	37.2	33.7	33.7	26.9	25.8	-1.1	-3.9%		-3.3%
	EUCAN	0.1	0.1	0.1	0.1	0.1	-0.0	-8.4%		-8.1%
	EM	-	0.0	0.0	0.0	0.0	0.0	57.7%		61.7%
	Total	37.3	33.8	33.8	26.9	25.9	-1.1	-3.9%	➡	-3.3%
Iclusig	U.S.	-	2.7	20.4	15.4	19.2	3.8	24.7%		25.8%
	Other than U.S.	-	0.2	2.7	1.9	2.4	0.5	27.4%		28.1%
	Total	-	2.9	23.1	17.3	21.6	4.3	25.0%	↗	26.0%
Alunbrig	U.S.	-	-	2.8	1.5	3.7	2.2	144.5%		145.8%
	EUCAN	-	-	-	-	0.0	0.0	-		-
	Total	-	-	2.8	1.5	3.8	2.3	149.7%	↗ ↗ ↗	151.4%

U.S.: United States, EUCAN: Europe and Canada, EM: Emerging Markets

*1 Sales amount includes royalty income and service income.

*2 Products were transferred to the Joint Venture with Teva in Japan (monotherapy in April 2016 and fixed dose combinations in May 2017).

Supply sales of these products to the JV is currently recognized.

*3 See page 6 for the profit forecast disclaimer.

↗ ± <10% ↗ +10%~20% ↗ ↗ +20%~30% ↗ ↗ ↗ +>30% ↘ -10%~20% ↘ ↘ -20%~30% ↘ ↘ ↘ ->30%

*4 Effective from FY2018, sales of certain products in Japan are now disclosed on a net basis, deducting items such as discounts and rebates, in alignment with the global managerial approach applied to individual product sales. The change in disclosure of individual product sales has been revised retrospectively, with prior year figures reclassified on a net basis to enable year-on-year comparisons. This reclassification has no impact on Takeda's financial statements and does not represent a correction of prior year figures.

Gross basis: discounts and rebates are not deducted (except FY2016 Oncology products in Japan are on net basis)

Net basis: discounts and rebates are deducted

◆ Prescription Drugs: Global major products' sales ^{*1} (Quarterly) (Billion JPY)

		FY17 (Net basis)			
		Q1	Q2	Q3	Q4
Entyvio	Japan	-	-	-	-
	U.S.	31.0	34.8	34.8	33.1
	EUCAN	13.5	14.4	15.7	16.6
	EM	1.4	1.9	2.0	2.2
	Total	45.9	51.1	52.6	51.8
Velcade	U.S.	30.7	29.5	28.7	24.8
	Other than U.S.	5.5	6.3	7.2	4.6
	Total	36.2	35.8	35.8	29.4
Leuprorelin	Japan	11.0	9.7	12.3	8.2
	U.S.	5.2	4.1	5.8	4.6
	EUCAN	8.1	8.6	8.8	8.9
	EM	3.0	3.2	3.3	3.2
	Total	27.3	25.6	30.2	24.9
Azilva	Japan	16.8	14.6	19.0	13.5
	Total	16.8	14.6	19.0	13.5
Pantoprazole	U.S.	1.9	2.2	2.1	1.2
	EUCAN	7.9	7.2	8.1	7.3
	EM	7.0	8.4	4.8	7.8
	Total	16.7	17.8	15.0	16.3
Dexilant	U.S.	12.8	13.3	14.1	9.3
	EUCAN	1.4	1.6	1.8	1.6
	EM	2.1	2.3	2.8	2.7
	Total	16.3	17.1	18.7	13.7
Takecab	Japan	11.3	11.0	15.1	11.0
	Total	11.3	11.0	15.1	11.0
Nesina	Japan	7.3	6.2	8.0	5.1
	U.S.	1.2	1.6	1.9	1.2
	EUCAN	2.0	2.0	2.5	2.6
	EM	1.4	2.1	2.2	2.9
	Total	11.9	11.9	14.6	11.8
Trintellix	U.S.	11.2	12.2	14.1	10.8
	Total	11.2	12.2	14.1	10.8
Uloric	U.S.	11.2	11.3	11.7	11.6
	EUCAN	0.2	0.2	0.2	0.2
	EM	0.1	0.1	0.1	0.1
	Total	11.4	11.6	12.0	11.8
Ninlaro	Japan	0.2	0.6	0.9	0.7
	U.S.	9.0	10.1	10.7	9.6
	EUCAN	0.6	0.9	1.1	1.3
	EM	0.1	0.1	0.1	0.3
	Total	10.0	11.7	12.8	11.9
Colcrys	U.S.	9.6	10.3	12.2	8.2
	Total	9.6	10.3	12.2	8.2
Adcetris	Japan	1.0	0.9	1.0	0.9
	Europe	4.7	5.2	5.4	4.8
	EM	3.6	3.4	3.5	3.7
	Total	9.3	9.7	9.9	9.6
Lansoprazole	Japan *2	1.5	1.0	1.1	1.0
	U.S.	3.8	3.7	4.7	3.1
	EUCAN	1.9	1.8	1.8	1.7
	EM	2.5	2.4	2.4	2.5
	Total	9.7	8.8	9.9	8.3
Amitiza	U.S.	8.6	8.8	9.4	6.9
	EUCAN	0.0	0.0	0.0	0.0
	EM	0.0	0.0	0.0	0.0
	Total	8.6	8.8	9.5	6.9
Iclusig	U.S.	4.7	5.0	5.8	5.0
	Other than U.S.	0.5	0.7	0.7	0.8
	Total	5.2	5.7	6.4	5.8
Alunbrig	U.S.	0.2	0.6	0.7	1.3
	EUCAN	-	-	-	-
	Total	0.2	0.6	0.7	1.3

U.S.: United States, EUCAN: Europe and Canada, EM: Emerging Markets

*1 Sales amount includes royalty income and service income.

*2 Products were transferred to the Joint Venture with Teva in Japan (monotherapy in April 2016 and fixed dose combinations in May 2017). Supply sales of these products to the JV is currently recognized.

*3 Effective from FY2018, sales of certain products in Japan are now disclosed on a net basis, deducting items such as discounts and rebates, in alignment with the global managerial approach applied to individual product sales. The change in disclosure of individual product sales has been revised retrospectively, with prior year figures reclassified on a net basis to enable year-on-year comparisons. This reclassification has no impact on Takeda's financial statements and does not represent a correction of prior year figures.

Net basis: discounts and rebates are deducted

		FY18 (Net basis)					
		Q1	YOY	Q2	YOY	Q3	YOY
Entyvio	Japan	-	-	-	-	0.5	-
	U.S.	41.9	35.5%	45.4	30.4%	49.6	42.5%
	EUCAN	17.2	27.5%	19.1	32.7%	19.9	26.9%
	EM	2.2	50.4%	2.6	36.1%	2.6	29.5%
	Total	61.3	33.6%	67.1	31.3%	72.6	38.2%
Velcade	U.S.	26.2	-14.7%	27.1	-8.2%	28.7	0.1%
	Other than U.S.	5.2	-6.1%	6.4	1.5%	6.8	-5.8%
	Total	31.4	-13.4%	33.5	-6.5%	35.4	-1.1%
Leuprorelin	Japan	10.5	-4.7%	9.6	-1.1%	11.5	-5.9%
	U.S.	6.2	19.3%	4.9	19.6%	5.8	-0.4%
	EUCAN	8.4	4.7%	8.3	-3.2%	8.6	-3.1%
	EM	3.5	14.2%	3.6	14.7%	3.7	9.3%
	Total	28.6	4.7%	26.5	3.5%	29.5	-2.3%
Azilva	Japan	19.4	15.5%	15.8	8.0%	20.5	7.7%
	Total	19.4	15.5%	15.8	8.0%	20.5	7.7%
Pantoprazole	U.S.	2.0	6.8%	1.4	-35.4%	0.7	-67.4%
	EUCAN	7.2	-8.0%	6.5	-10.2%	7.4	-8.6%
	EM	7.0	-0.1%	6.6	-21.7%	8.1	68.9%
	Total	16.2	-3.1%	14.5	-18.7%	16.2	8.1%
Dexilant	U.S.	13.0	1.4%	12.6	-5.0%	14.7	4.3%
	EUCAN	1.7	18.7%	1.8	14.7%	2.0	16.4%
	EM	2.7	30.4%	3.1	37.4%	3.2	14.5%
	Total	17.4	6.6%	17.5	2.4%	20.0	7.0%
Takecab	Japan	14.2	26.4%	12.9	17.1%	17.1	12.9%
	Total	14.3	26.5%	13.0	17.6%	17.1	13.1%
Nesina	Japan	7.8	6.8%	6.5	5.4%	7.9	-1.1%
	U.S.	1.2	-6.9%	1.6	-0.1%	1.8	-4.6%
	EUCAN	2.6	28.7%	2.5	26.1%	3.0	23.4%
	EM	2.6	84.3%	2.1	-2.1%	2.8	28.2%
	Total	14.1	18.2%	12.7	6.8%	15.6	7.0%
Trintellix	U.S.	14.1	25.8%	13.0	6.6%	17.5	23.8%
	Total	14.1	25.8%	13.0	6.6%	17.5	23.8%
Uloric	U.S.	13.8	23.4%	12.1	7.2%	13.7	17.5%
	EUCAN	0.2	4.2%	0.2	1.9%	0.2	-5.5%
	EM	0.1	17.1%	0.1	28.9%	0.1	-19.7%
	Total	14.1	23.1%	12.4	7.2%	14.0	16.8%
Ninlaro	Japan	1.2	-	0.9	42.5%	1.2	27.0%
	U.S.	11.1	23.1%	11.7	15.8%	12.7	19.6%
	EUCAN	1.6	147.5%	1.9	111.9%	2.5	122.4%
	EM	0.1	39.7%	0.9	-	0.6	-
	Total	14.0	39.6%	15.4	31.7%	17.1	33.2%
Colcrys	U.S.	9.2	-4.3%	7.1	-31.2%	7.3	-40.0%
	Total	9.2	-4.3%	7.1	-31.2%	7.3	-40.0%
Adcetris	Japan	1.1	10.8%	1.1	19.8%	1.5	53.1%
	Europe	5.5	17.7%	5.2	-0.1%	5.5	2.5%
	EM	4.3	20.0%	3.9	12.1%	4.0	12.2%
	Total	11.0	17.8%	10.1	4.1%	10.9	11.0%
Lansoprazole	Japan *2	0.9	-42.2%	0.7	-25.6%	0.8	-21.6%
	U.S.	2.0	-46.1%	2.9	-20.2%	0.4	-91.1%
	EUCAN	1.7	-10.5%	1.6	-13.2%	1.6	-9.9%
	EM	2.4	-4.5%	2.4	-0.1%	2.3	-3.3%
	Total	7.0	-27.7%	7.6	-14.0%	5.2	-47.8%
Amitiza	U.S.	7.8	-8.9%	8.4	-4.8%	9.6	1.4%
	EUCAN	0.0	5.7%	0.0	3.0%	0.0	-26.0%
	EM	0.0	-38.8%	0.0	-	0.0	42.3%
	Total	7.9	-8.9%	8.4	-4.7%	9.6	1.3%
Iclusig	U.S.	6.3	34.2%	6.4	29.0%	6.5	13.4%
	Other than U.S.	0.7	43.9%	0.8	6.4%	0.9	37.2%
	Total	7.0	35.1%	7.2	26.2%	7.4	15.9%
Alunbrig	U.S.	1.1	-	1.2	102.3%	1.5	112.2%
	EUCAN	0.0	-	-0.0	-	0.0	-
	Total	1.1	-	1.2	105.1%	1.5	118.8%

U.S.: United States, EUCAN: Europe and Canada, EM: Emerging Markets

*1 Sales amount includes royalty income and service income.

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2. Exchange Rate

Average Exchange Rate	(yen)			
	USD	EUR	RUB	BRL
FY15	121	132	1.9	34.1
FY16	109	120	1.7	32.9
FY17	111	129	1.9	34.5
FY17Q3 (April-December)	112	128	1.9	34.8
FY18Q3 (April-December)	111	130	1.7	29.6
FY18 Assumption (Disclosed on October 31, 2018)	110	130	1.7	28.2

Impact of 1% depreciation of yen yen from Oct 18 to Mar 19 (Disclosed on October 31, 2018)

	(100 million yen)			
	USD	EUR	RUB	BRL
Revenue	+31.6	+10.4	+2.3	+1.7
Core Earnings	+6.3	-1.2	+1.2	+0.4
Operating Profit	+1.3	-3.5	+0.9	+0.3
Net Profit	-0.8	-2.4	+0.6	+0.2

II. Pipeline

1. Development activities

- This table primarily shows the indications for which we will actively pursue approval. We are also conducting additional studies of certain assets to examine their potential for use in further indications and in additional formulations.
- The listings in this table are limited to the US, EU and Japan and China, but we are also actively conducting development activities in other regions, including in Emerging Markets. Country/region is shown in the "Stage" column to denote where a clinical study is ongoing or a filing has been made with our specific intention to pursue approval in any of the US, EU, Japan or China.
- 'Global' refers to US, EU, Japan and China
- Brand name is shown to indicate the brand name for which the specific asset has already been approved for any indication in any of the US, EU, Japan or China and Takeda has commercialization rights for such asset.
- Stage-ups are recognized in the table upon achievement of First Subject In.

■ Oncology

Development code <generic name> BRAND NAME	Drug Class (administration route)	Indications / additional formulations	Stage	
SGN-35 <brentuximab vedotin> ADCETRIS®	CD30 monoclonal antibody-drug conjugate (injection)	Front line Hodgkin Lymphoma	EU	Filed (Nov '17)
		Front line Peripheral T-cell Lymphoma (PTCL)	EU Jpn	P-III P-III
		Relapsed/refractory Hodgkin Lymphoma	CN	P-II
		Relapsed/refractory systemic Anaplastic large-cell lymphoma (sALCL)	CN	P-II
<brigatinib> ALUNBRIG®	ALK inhibitor (oral)	1L ALK-positive Non-Small Cell Lung Cancer	US EU CN	P-III P-III P-I
		2L ALK-positive Non-Small Cell Lung Cancer in patients previously treated with ALK inhibitors	Jpn CN	P-II(a) P-II(a)
		Newly diagnosed Multiple Myeloma	Global	P-III
		Maintenance therapy in patients with newly diagnosed Multiple Myeloma following autologous stem cell transplant	Global	P-III
MLN9708 <ixazomib> NINLARO®	Proteasome inhibitor (oral)	Maintenance therapy in patients with newly diagnosed Multiple Myeloma not treated with stem cell transplant	Global	P-III
		Relapsed/refractory primary amyloidosis	Global	P-III
		Relapsed/refractory Multiple Myeloma (doublet regimen with dexamethasone)	US EU Jpn	P-III P-III P-III
		Relapsed/refractory Multiple Myeloma (triplet regimen with daratumumab and dexamethasone)	Global	P-II
		Front line Philadelphia chromosome-positive Acute Lymphoblastic Leukemia	US	P-III
		Dose ranging study for TKI resistant patients with chronic-phase Chronic Myeloid Leukemia	US	P-II(b)
TAK-924 <pevonedistat>	NEDD 8 activating enzyme inhibitor (injection)	High-Risk Myelodysplastic Syndromes, Chronic Myelomonocytic Leukemia, Low-blast Acute Myelogenous Leukemia	US EU Jpn	P-III P-III P-III
		Prostate cancer	Jpn CN	P-III P-I
		1L Renal cell carcinoma in combination with nivolumab	Jpn	P-III
<cabozantinib>	Multi-targeted kinase inhibitor (oral)	2L Renal cell carcinoma	Jpn	P-II(a)
		2L Hepatocellular carcinoma	Jpn	P-II(a)
		Ovarian Cancer - maintenance	Jpn	P-II
<niraparib>	PARP1/2 inhibitor (oral)	Ovarian Cancer – salvage	Jpn	P-II
		Endometrial cancer	US	P-II(b)
TAK-659 <->	SYK/FLT3 kinase inhibitor (oral)	Diffuse Large B-cell Lymphoma	-	P-II(a)
		Hematologic malignancies	-	P-I
TAK-931 <->	CDC7 inhibitor (oral)	Metastatic colorectal cancer, Esophageal squamous cancer, Squamous Non-Small Cell Lung Cancer	-	P-II(a)
TAK-079 <->	Anti-CD38 monoclonal antibody (injection)	Relapsed/refractory Multiple Myeloma	-	P-I
		Systemic lupus erythematosus	-	P-I
TAK-164 <->	Anti-guanylyl cyclase C antibody drug conjugate (injection)	GI Malignancies	-	P-I

TAK-573 < - >	CD38-targeted IgG4 genetically fused with an attenuated IFN α (injection)	Relapsed/refractory Multiple Myeloma	-	P-I
TAK-788 < - >	EGFR/HER2 exon 20 inhibitor (oral)	Non-Small Cell Lung Cancer	-	P-I
TAK-981 < - >	SUMO inhibitor (injection)	Multiple cancers	-	P-I

Additions since FY2018 Q2: cabozantinib – 1L RCC in combination with nivolumab (Jpn P-III)
niraparib – ovarian cancer maintenance & salvage studies (P-II in Jpn)
pevonedistat – High-Risk Myelodysplastic Syndromes, Chronic Myelomonocytic Leukemia, Low-blast Acute Myelogenous Leukemia (Jpn P-III)

Removals since FY2018 Q2: brigatinib – 2L ALK-positive metastatic Non-Small Cell Lung Cancer in patients previously treated with crizotinib (EU, Approved Nov 2018)
TAK-522/XMT-1522 – HER2 positive solid tumors (P-I) (discontinued)
TAK-659 – removed “solid tumors” indication

■ Gastroenterology

Development code <generic name> BRAND NAME	Drug Class (administration route)	Indications / additional formulations	Stage	
SHP555 ^{*1} <prucalopride> MOTEGRITY®/ RESOLOR®	Selective, 5-HT4 receptor agonist (oral)	Chronic idiopathic constipation	US	Approved (Dec '18)
MLN0002 <vedolizumab> ENTYVIO®	Humanized monoclonal antibody against $\alpha 4\beta 7$ integrin (injection)	Crohn's disease	Jpn CN	Filed (Jul '18) P-III
		Ulcerative colitis	CN	P-III
		Subcutaneous formulation for ulcerative colitis	US EU Jpn	P-III P-III P-III
		Subcutaneous formulation for Crohn's disease)	US EU Jpn	P-III P-III P-III
		Adalimumab head-to-head in patients with ulcerative colitis	Global	P-III
		Graft-versus-Host Disease prophylaxis in patients undergoing allogeneic hematopoietic stem cell transplantation	-	P-II
TAK-438 <vonoprazan> TAKECAB®	Potassium-competitive acid blocker (oral)	Acid-related diseases	CN	Filed (Feb '18)
SHP633 <teduglutide> GATTEX®/ REVESTIVE®	GLP-2 analogue (injection)	Gastro-esophageal Reflux Disease in patients who have a partial response following treatment with a proton pump inhibitor	EU	P-II(b)
		Short bowel syndrome (SBS), pediatric indication	US Jpn	Filed (Sep '18) P-III
		Short bowel syndrome (SBS), adult	Jpn	P-III
Cx601 <darvadstrocel> ALOFISEL®	A suspension of allogeneic expanded adipose-derived stem cells (injection)	Refractory complex perianal fistulas in patients with Crohn's disease	US	P-III
TAK-721/SHP621 ^{*2} <Budesonide>	Glucocorticosteroid (oral)	Eosinophilic Esophagitis (EoE)	US	P-III
TAK-906 < - >	Dopamine D2/D3 receptor antagonist (oral)	Gastroparesis	-	P-II(b)
TAK-671 < - >	Protease inhibitor (injection)	Acute pancreatitis	-	P-I
TAK-018/EB8018 ^{*3} < - >	FimH antagonist (oral)	Crohn's disease	-	P-I
TIMP-GLIA ^{*4} < - >	Tolerizing Immune Modifying nanoParticle (TIMP) (injection)	Celiac Disease	-	P-I
Kuma062 ^{*5} < - >	Glutenase (oral)	Celiac Disease	-	P-I

*1 Partnership with Janssen

*2 Partnership with UCSD and Fortis Advisors

*3 Partnership with Enterome

*4 Partnership with Cour Pharmaceuticals; Cour lead Phase 1 development.

*5 Partnership with PVP Biologics; PVP lead Phase 1 development.

Additions since FY2018 Q2: prucalopride - chronic idiopathic constipation (CIC) (US filed)
teduglutide - Short bowel syndrome (SBS) (US, Japan)
TAK-721 - Eosinophilic Esophagitis (EoE) (US P-III)

Removals since FY2018 Q2: TAK-954 – Enteral feeding intolerance (P-IIb) (discontinued); explore Post-Operative Gastrointestinal Dysfunction
TAK-438 – Non-Erosive Reflux Disease in patients with Gastro-esophageal Reflux Disease (Japan, P-III) (discontinued)

■ Neuroscience

Development code <generic name> BRAND NAME	Drug Class (administration route)	Indications / additional formulations	Stage	
Lu AA21004 <vortioxetine> TRINTELLIX [*]	Multimodal anti-depressant (oral)	Major depressive disorder	Jpn	Filed (Sep '18)
SHP489^{*6} <lisdexamfetamine dimesylate> VYVANSE [®]	Amphetamine-based psychostimulant (oral)	Attention-Deficit/Hyperactivity Disorder (ADHD)	Jpn	Filed (Apr '17)
SHP465 MYDAYIS [®]	Mixed salts of a single-entity amphetamine product (oral)	Attention-Deficit/Hyperactivity Disorder (ADHD) (4-12 year olds)	US	P-III
SHP615 <midazolam> BUCCOLAM [®]	GABA Allosteric Modulator (oral)	Status Epilepticus (Seizures)	Jpn	P-III
TAK-831 <->	D-amino acid oxidase (DAAO) inhibitor (oral)	Friedreich's ataxia	-	P-II(a)
		Negative symptoms and/or cognitive impairment associated with schizophrenia	-	P-II(a)
TAK-935^{*7} <->	CH24H inhibitor (oral)	Rare pediatric epilepsies	-	P-II(a)
WVE-120101^{*8} <->	mHTT SNP1 antisense oligonucleotide (injection)	Huntington's disease	-	P-I/II
WVE-120102^{*8} <->	mHTT SNP2 antisense oligonucleotide (injection)	Huntington's disease	-	P-I/II
TAK-041 <->	GPR139 agonist (oral)	Negative symptoms and/or cognitive impairment associated with schizophrenia	-	P-I
TAK-341/MEDI-1341^{*9}	Alpha-synuclein antibody (injection)	Parkinson's Disease	-	P-I
TAK-418 <->	LSD1 inhibitor (oral)	Kabuki syndrome	-	P-I
TAK-653 <->	AMPA receptor potentiator (oral)	Treatment resistant depression	-	P-I
TAK-925 <->	Orexin 2R agonist (injection)	Narcolepsy	-	P-I
TAK-680/SHP680 <->	Prodrug of d-amphetamine (oral)	Neurological Conditions	-	P-I

^{*6} Co-development with Shionogi in Japan

^{*7} Co-development with Ovid Therapeutics

^{*8} 50:50 co-development and co-commercialization option with Wave Life Sciences

^{*9} Partnership with AstraZeneca; AstraZeneca lead Phase 1 development

Additions since FY2018 Q2: lisdexamfetamine dimesylate - Attention-Deficit/Hyperactivity Disorder (ADHD) (filed, Jpn)

SHP465 – Attention-Deficit/Hyperactivity Disorder (ADHD) Peds (P-III, US)

midazolam – Status epilepticus (P-III, Jpn)

TAK-680/SHP680 – Neurological Conditions (P-I)

Removals since FY2018 Q2: None

■ Rare Diseases

Development code <generic name> BRAND NAME	Drug Class (administration route)	Indications / additional formulations	Stage	
SHP643 <lanadelumab> TAKHZYRO [*]	Plasma kallikrein inhibitor (injection)	Hereditary Angioedema (HAE)	CN	Filed (Dec '18)
SHP672 ^{*10} <antihemophilic factor [recombinant], porcine sequence> OBIZUR [*]	Antihemophilic Factor (recombinant) (injection)	Congenital Hemophilia A with Inhibitors (CHAWI)	US EU	P-III P-III
SHP677 <von Willebrand factor (recombinant)> VONVENDI [*] / VEYVONDI [*]	von Willebrand factor (recombinant) (injection)	Prophylactic Treatment of VWF	Global	P-III
		Pediatric On-Demand	Global	P-III
SHP660 <Antihemophilic Factor (Recombinant), PEGylated> ADYNOVATE [*]	Antihemophilic Factor (recombinant), PEGylated (injection)	Pediatric Hemophilia A	EU	P-III
TAK-755/SHP655 ^{*11} <->	Replacement of the deficient-ADAMTS13 enzyme (injection)	congenital Thrombotic Thrombocytopenic Purpura (cTTP)	US, EU	P-III
TAK-620/SHP620 ^{*12} <maribavir>	Benzimidazole riboside inhibitor (oral)	Cytomegalovirus (CMV)	US, EU	P-III
TAK-607/SHP607 <->	Insulin-like Growth Factor / IGF Binding Protein (injection)	Chronic Lung Disease	-	P-II
TAK-609/SHP609 <->	Recombinant human iduronate-2-sulfatase for intrathecal administration (injection)	Hunter Syndrome CNS	-	P-II
SHP634 <parathyroid hormone> NATPARA [*]	Parathyroid hormone (injection)	Hypoparathyroidism	Jpn	P-I
TAK-611/SHP611 <->	Recombinant human arylsulfatase A (injection)	Metachromatic Leukodystrophy (MLD)	-	P-I
TAK-531/SHP631 ^{*13} <->	Fusion protein of iduronate-2-sulfatase+antibody (injection)	Hunter Syndrome CNS	-	P-I
TAK-754/SHP654 ^{*14} <->	Gene therapy to restore endogenous FVIII expression	FVIII Gene Therapy for Hemophilia A	-	P-I

*10 Partnership with Ipsen

*11 Partnership with KM Biologics

*12 Partnership with GlaxoSmithKline

*13 Partnerships with ArmaGen

*14 Partnership with Asklepios Biopharmaceuticals

Additions since FY2018 Q2: New table for Rare Diseases has been added

■ Plasma-Derived Therapies

Development code <generic name> BRAND NAME	Drug Class (administration route)	Indications / additional formulations	Stage	
SHP616 <C1 esterase inhibitor [human]> CINRYZE*	C1 INH inhibits the complement system (injection)	Acute Antibody Mediated Rejection (AMR)	US	P-III
		Hereditary Angioedema (HAE)	EU	P-III
		Hereditary Angioedema (HAE) (subcutaneous administration)	Jpn	P-III
SHP671*15 <IG Infusion 10% (Human) w/ Recombinant Human Hyaluronidase> HYQVIA* / HYQ*	Immunoglobulin (IgG) + recombinant hyaluronidase replacement therapy (injection)		EU	P-III
		Pediatric indication for Primary immunodeficiency (PID)	US	P-III
		Chronic Inflammatory Demyelinating Polyradiculoneuropathy	EU	P-III

*15 Partnership with Halozyme

Additions since FY2018 Q2: New table for Plasma-Derived Therapies has been added

■ Vaccines

Development code BRAND NAME	Type of vaccine (administration route)	Indications / additional formulations	Stage	
TAK-003	Tetavalent dengue vaccine (injection)	Prevention of dengue fever caused by dengue virus	-	P-III
TAK-214	Norovirus vaccine (injection)	Prevention of acute gastroenteritis (AGE) caused by norovirus	-	P-II(b)
TAK-195	Sabin inactivated polio vaccine (injection)	Prevention of poliomyelitis	-	P-I/II
TAK-021	EV71 vaccine (injection)	Prevention of hand, foot and mouth disease caused by enterovirus 71	-	P-I
TAK-426	Zika vaccine (injection)	Prevention of zika virus infection	-	P-I

■ Ophthalmology

Development code <generic name> BRAND NAME	Drug Class (administration route)	Indications / additional formulations	Stage	
SHP606 <lifitegrast> XIIDRA*	LFA-1/ICAM-1 antagonist (topical)	Dry Eye Disease (DED)	EU	Filed (Dec '18)
TAK-640/SHP640 <povidone iodine/dexamethasone>	Antiseptic and anti-inflammatory effects (topical)	Adenoviral (AVC) and Bacterial Conjunctivitis (BAC)	US	P-III
TAK-759/SHP659*16 <->	ENaC inh (topical)	Dry Eye Disease (DED)	EU	P-III
TAK-639/SHP639 <->	NPR-B receptor agonist (topical)	Dry Eye Disease (DED)	-	P-II
		Glaucoma	-	P-I

*16 Partnership with Halozyme

Additions since FY2018 Q2: New table for Ophthalmology has been added

2. Recent progress in stage [Progress in stage disclosed since release of FY2017 results (May 14th, 2018)]

Development code <generic name>	Indications / additional formulations	Country/Region	Progress in stage
MLN0002 <vedolizumab>	Ulcerative colitis	Jpn	Approved (Jul '18)
SGN-35 <brentuximab vedotin>	Front line Hodgkin Lymphoma	Jpn	Approved (Sep '18)
Lu AA21004 <vortioxetine>	Data added to labeling that demonstrated superiority over escitalopram in improving SSRI-induced sexual dysfunction in patients with Major Depressive Disorder	US	Approved (Oct '18)
MLN0002 <vedolizumab>	Crohn's disease	Jpn	Filed (Jul '18)
Lu AA21004 <vortioxetine>	Major depressive disorder	Jpn	Filed (Sep '18)
<ponatinib>	Front line Philadelphia chromosome-positive Acute Lymphoblastic Leukemia	US	P-III
MLN0002 <vedolizumab>	Graft-versus-Host Disease prophylaxis in patients undergoing allogeneic hematopoietic stem cell transplantation	-	P-II(a)
<cabozantinib>	2L hepatocellular carcinoma	Jpn	P-II(a)
MLN9708 <ixazomib>	Relapsed/refractory Multiple Myeloma (triplet regimen with daratumumab and dexamethasone)	Global	P-II
WVE-120101 <->	Huntington's disease	-	P-I/II
WVE-120102 <->	Huntington's disease	-	P-I/II
Kuma062 <->	Celiac Disease	-	P-I
TAK-164 <->	GI Malignancies	-	P-I
TAK-671 <->	Acute pancreatitis	-	P-I
TAK-981 <->	Multiple cancers	-	P-I
TAK-018 / EB8018 <->	Crohn's disease	-	P-I
<brigatinib>	2L ALK-positive metastatic Non-Small Cell Lung Cancer in patients previously treated with crizotinib	EU	Approved (Nov '18)
<cabozantinib>	1L Renal cell carcinoma in combination with nivolumab	Jpn	P-III
TAK-906 <->	Gastroparesis	US	P-II(b)
<niraparib>	Ovarian Cancer – maintenance	Jpn	P-II
<niraparib>	Ovarian Cancer – salvage	Jpn	P-II
<brigatinib>	2L ALK-positive Non-Small Cell Lung Cancer in patients previously treated with ALK inhibitors	CN	P-II

Progress in stage disclosed since the announcement of FY2018 Q2 results (October 31, 2018) are listed under the bold dividing line

3. Discontinued projects [Update disclosed since release of FY2017 results (May 14th, 2018)]

Development code <generic name>	Indications (Stage)	Reason
MLN0002 <vedolizumab>	Graft-versus-Host Disease steroid refractory (P-II(a))	Co-morbidities in steroid-refractory acute Graft-versus-Host Disease patients impair ability to demonstrate efficacy to justify continued development.
SPI 0211 <lubiprostone>	New formulation (US, P-III)	The P-III study to evaluate the bioequivalence of sprinkle and capsule formulations of lubiprostone compared to placebo in adult subjects with chronic idiopathic constipation (CIC) did not achieve bioequivalence.
TAK-522 / XMT-1522 <->	HER2 positive solid tumors (P-I)	The decision to terminate the further development of XMT-1522 was made due to the competitive environment for HER2-targeted therapies.
TAK-438 <vonoprazan>	Non-Erosive Reflux Disease in patients with Gastro-esophageal Reflux Disease (P-III)	Data from the P-III study did not justify pursuing a regulatory submission in this indication. There were no new safety findings
TAK-954 <->	Enteral feeding intolerance (P-IIb)	The EFI study was terminated because of patient recruitment challenges due to evolving practices in patient management. The program is pursuing the new indication post-operative gastrointestinal dysfunction (POGD); anticipate dosing first-patient by or before Q1 FY19.

Discontinuations disclosed since the announcement of FY2018 Q2 results (October 31, 2018) are listed under the bold dividing line

4. Exploring Alternative Value Creation [Update disclosed since release of FY2017 results (May 14th, 2018)]

Development code <generic name>	Indications (Stage)	Reason
TAK-385 <relugolix>	Uterine fibroids (Japan Approved) Endometriosis (Japan P-II(b))	Out-licensed to ASKA Pharmaceutical Co., Ltd., which has a strong presence in the gynecology therapeutic area in Japan, to maximize product value and to deliver relugolix to as many patients as possible.
SHP647 <->	Inflammatory bowel disease	As announced on October 27, 2018, Takeda has proposed a remedy to the European Commission of a potential divestment of SHP647 and certain associated rights.

Externalized assets in which Takeda retains a financial interest

Partner	Nature of Partnership	
ASKA Pharmaceutical Co., Ltd	Takeda granted exclusive commercialization rights for uterine fibroids and exclusive development and commercialization rights for endometriosis for Japan to maximize the product value of relugolix (TAK-385).	
Biological E. Limited	Takeda agreed to transfer existing measles and acellular pertussis vaccine bulk production technology to develop low-cost combination vaccines for India, China and low- and middle-income countries.	
Cardurion Pharmaceuticals	Takeda provided a 12-person cardiovascular research team from its Shonan (Japan) site, including fully equipped laboratory space, development resources and licenses to a portfolio of preclinical-stage cardiovascular drug programs.	
Cerevance	Takeda provided a 25-person neuroscience research team from its Cambridge (UK) site, fully equipped laboratory space, and licenses to a portfolio of undisclosed preclinical and clinical stage drug programs.	
Izana Biosciences	Takeda granted Izana Biosciences an exclusive, worldwide license to develop, manufacture and commercialize namilumab in all indications. As part of the license agreement, Takeda has taken a strategic equity stake in Izana.	
Mirum Pharmaceuticals	Takeda granted exclusive global rights to develop and market maralixibat and volixibat, oral inhibitors of the apical sodium-dependent bile acid transporter (ASBT). Maralixibat is being developed in Phase II for Alagille syndrome (ALGS) and progressive familial intrahepatic cholestasis (PFIC), both debilitating liver diseases that tend to strike pediatric patients.	
Myovant Sciences	Takeda granted Myovant an exclusive, worldwide license (excluding Japan and certain other Asian countries) to relugolix (TAK-385) and an exclusive, worldwide license to MVT-602 (TAK-448).	
Rhythm	Exclusive, worldwide rights from Takeda to develop and commercialize T-3525770 (now RM-853). RM-853 is a potent, orally available ghrelin o-acyltransferase (GOAT) inhibitor currently in preclinical development for Prader-Willi Syndrome.	
Schoia Pharma	Takeda granted Schoia Pharma exclusive rights for the research, development, manufacture, marketing, etc. of eight of Takeda's R&D projects, including TAK-272, TAK-792 and TAK-094.	
Samsung Bioepis	Strategic collaboration agreement to jointly fund and co-develop multiple novel biologic therapies in unmet disease areas. The program's first therapeutic candidate is TAK-671, which is intended to treat severe acute pancreatitis.	
Stargazer [‡]	Takeda out licensed own asset to Stargazer Pharmaceuticals.	
Entrepreneurial Venture Programs (EVPs)	Aikomi	Developing a new digital therapy for persons with dementia.
	ChromaJean	Established unique chromatography algorithm/software platform.
	Chordia Therapeutics	Takeda provided a 6-person oncology research team from its Shonan (Japan) site, fully equipped laboratory space, development resources and licenses to a portfolio of preclinical-stage oncology drug programs including CDC like kinase inhibitors.
	Fimecs	A drug discovery biotech creating a new class of drugs based on protein degradation.
	GenAhead Bio	Through providing two technologies; nucleic acid delivery on specific cell types as well as efficient genome editing, fee for service and/or collaboration in cell/gene therapies are delivered.
	GEXVal	Drug discovery for orphan disease (e.g. PAH etc.) using Takeda's late research & early clinical assets.
	Reborna Biosciences	Developing small molecules that modulate RNA degeneration associated with genetic disease.
	Seedsupply	Provides HTS FFS using novel binder selection technology and Takeda's compound library. Provides target identification FFS using novel binder selection technology and own protein library.
	ARTham [‡]	Focus on clinical and preclinical development of high quality assets identified via drug repurposing approach.

[‡] Executed since April 1, 2018

5. Main Research & Development collaborations

Oncology

Partner	Country	Subject
Adimab [‡]	US	The discovery, development and commercialization of three mAbs and three CD3 Bi-Specific antibodies for oncology indications.
Centre d'Immunologie de Marseille-Luminy	France	The collaboration will bring together expertise and knowledge in innate biology with Takeda's BacTrap capabilities to identify novel targets and pathways in myeloid cells.
Crescendo Biologics	UK	The discovery, development and commercialization of Humabody [®] -based therapeutics for cancer indications.
Exelixis, Inc.	US	Exclusive licensing agreement to commercialize and develop novel cancer therapy cabozantinib and all potential future cabozantinib indications in Japan, including advanced renal cell carcinoma and hepatocellular carcinoma.
GammaDelta Therapeutics	UK	Novel T cell platform, based on the unique properties of gamma delta (γδ) T cells derived from human tissues, to discover and develop new immunotherapies in oncology.
Haemalogix [‡]	Australia	A research collaboration and licensing agreement for the development of new therapeutics to novel antigens in multiple myeloma.
Heidelberg Pharma	Germany	ADC Research Collaboration on 2 Targets and Licensing Agreement (α-amanitin payload and proprietary linker).
ImmunoGen, Inc.	US	Use ImmunoGen's Inc. ADC technology to develop and commercialize targeted anticancer therapeutics (TAK-164).
Maverick Therapeutics	US	T-cell engagement platform created specifically to improve the utility of T-cell redirection therapy for the treatment of cancer.
Memorial Sloan Kettering Cancer Center [‡]	US	Discover and develop novel CAR-T cell products for the potential treatment of hematological malignancies and solid tumors.
Molecular Templates	US	Initial collaboration applied MTEM's engineered toxin bodies (ETB) technology platform to potential therapeutic targets. The second collaboration is for the joint development of CD38-targeted engineered toxin bodies (ETBs) for the treatment of patients with diseases such as multiple myeloma. [‡]
Nektar Therapeutics	US	Research collaboration to explore combination cancer therapy with five Takeda oncology compounds and Nektar's lead immuno-oncology candidate, the CD122-biased agonist NKTR-214.
Noile-Immune Biotech	Japan	The development of next generation chimeric antigen receptor T cell therapy (CAR-T), developed by Professor Koji Tamada at Yamaguchi University.
Seattle Genetics	US	Joint development of ADCETRIS, an Antibody-Drug Conjugate technology which targets CD30 for the treatment of HL. Approved in 67 countries with ongoing clinical trials for additional indications.
Shattuck Labs	US	Explore and develop checkpoint fusion proteins utilizing Shattuck's unique Agonist Redirected Checkpoint (ARC) [™] platform which enables combination immunotherapy with a single product.
Tesaro	US	Exclusive licensing agreement to develop and commercialize novel cancer therapy niraparib for the treatment of all tumor types in Japan, and all tumor types excluding prostate cancer in South Korea, Taiwan, Russia and Australia.
Teva	Israel	Worldwide License to TEV-48573 (TAK-573) (CD38-Attenukine) and multi-target discovery collaboration accessing Teva's attenukine platform.

[‡] Executed since April 1, 2018

Gastroenterology

Partner	Country	Subject
Ambys Medicines	US	The application of novel modalities, including cell and gene therapy and gain-of-function drug therapy, to meet the urgent need for treatments that restore liver function and prevent the progression to liver failure across multiple liver diseases.
Arcturus	US	Collaboration to develop RNA-based therapeutics for the treatment of non-alcoholic steatohepatitis (NASH) and other gastrointestinal (GI) related disorders using Arcturus's wholly-owned LUNAR [™] lipid-mediated delivery systems and UNA Oligomer chemistry.
Beacon Discovery	US	G-protein coupled receptor drug discovery and development program to identify drug candidates for a range of gastrointestinal disorders.
Cour Pharmaceutical Development Company	US	Immune modulating therapies for the potential treatment of celiac disease and other gastrointestinal diseases, utilizing Cour's Tolerizing Immune Modifying nanoParticle (TIMP) platform to co-develop TIMP-Gliadin
Emulate Bio	US	Drug discovery in inflammatory bowel disease using organ-on-chip micro engineered cell models.
enGene	Canada	Discover, develop and commercialize novel therapies for specialty gastrointestinal (GI) diseases using enGene's "Gene Pill" gene delivery platform.
Enterome	France	Research and develop microbiome targets thought to play crucial roles in gastrointestinal disorders, including inflammatory bowel diseases (e.g. ulcerative colitis) and motility disorders (e.g. irritable bowel syndrome). Global license and co-development of EB8018/TAK-018 in Crohn's disease.
Finch Therapeutics	US	Global agreement to develop FIN-524, a live biotherapeutic product composed of cultured bacterial strains linked to favorable clinical outcomes in studies of microbiota transplantations in inflammatory bowel disease.
Hemoshear Therapeutics	US	Novel target and therapeutic development for liver diseases, including nonalcoholic steatohepatitis (NASH) using Hemoshear's proprietary REVEAL-Tx drug discovery platform.
Janssen	Belgium	Exclusive license, with the right to develop and market prucalopride as a treatment for chronic constipation in the US. Motegrity approved in US Dec 2018.

Karolinska Institutet & Structural Genomics Consortium	Sweden	Proprietary collaboration to discover and validate new potential intervention points for the treatment of inflammatory bowel disease.
NuBiyota	Canada	Development of Microbial Ecosystem Therapeutic products for gastroenterology indications.
PvP Biologics	US	Global agreement to develop Kuma062, a novel enzyme designed to break down the immune-reactive parts of gluten in the stomach.
Theravance Biopharma	US	Global agreement for TAK-954, a selective 5-HT4 receptor agonist for motility disorders.
UCSD/Fortis Advisors	US	Development of oral budesonide formulation (TAK-721) for treatment of Eosinophilic Esophagitis, using technology licensed from UCSD.

Neuroscience

Partner	Country	Subject
Affilogic	France	Research collaboration to explore Affilogic's proprietary Nanofitins [®] platform in therapies targeting the central nervous system.
AstraZeneca	UK	Joint development and commercialization of MEDI1341 (TAK-341), an alpha-synuclein antibody currently in development as a potential treatment for Parkinson's disease.
Denali Therapeutics	US	A strategic option and collaboration agreement to develop and commercialize up to three specified therapeutic product candidates for neurodegenerative diseases, incorporating Denali's ATV platform for increased exposure of biotherapeutic products in the brain.
Lundbeck	Denmark	Collaboration to develop and commercialize vortioxetine.
Mindstrong Health	US	Explore development of digital biomarkers for selected mental health conditions, in particular schizophrenia and treatment-resistant depression.
Ovid Therapeutics	US	Development of TAK-935, an oral CH24H inhibitor for rare pediatric epilepsies. Takeda and Ovid Therapeutics will share in the development and commercialization costs of TAK-935 on a 50/50 basis and, if successful, share in the profits on a 50/50 basis.
Shionogi	Japan	Co-development and co-commercialization agreement for geographic expansion of ADHD (Vyvanse & Intuniv) to Japan
Teva	Israel	Collaboration to develop and commercialize Rasagiline.
Verily	Japan	Research collaboration that will use Verily's investigational Study Watch to measure motor symptoms of patients with Parkinson's disease.
Wave Life Sciences	US	Research, development and commercial collaboration and multi-program option agreement to develop antisense oligonucleotides for a range of neurological diseases.

Rare Diseases

Partner	Country	Subject
AB Biosciences	US	Research collaboration to potentially develop assets for rare disease with pan-receptor interacting molecules targeted for specific immunological conditions with a focus on autoimmune modulated inflammatory diseases
ArmaGen	US	Worldwide licensing and collaboration agreement to develop AGT-182 (TAK-531/SHP631), an investigational enzyme replacement therapy (ERT) for potential treatment of both the central nervous system (CNS) and somatic (body-related) manifestations of Hunter syndrome
Asklepios Biopharmaceuticals	US	Multiple research and development collaborations using FVIII Gene Therapy for the treatment of Hemophilia A and B.
BioMarin	US	In-license of enabling technology for the exogenous replacement of iduronate-2-sulfatase with Idursulfase-IT in patients via direct delivery to the CNS for the long-term treatment of Hunter Syndrome in patients with cognitive impairment in order to slow progression of cognitive impairment (TAK-609/SHP609).
IPSEN	France	Development of Obizur for the treatment of Acquired Hemophilia A (AHA) including for patients with Congenital Hemophilia A with inhibitors (CHAWI) indication in elective or emergency surgery.
KM Biologics	Japan	Development collaboration of TAK-755 to overcome the ADAMTS13 deficiency, induce clinical remission thus reducing cTTP and aTTP related morbidity and mortality
Max Planck Institute	Germany	Exclusive worldwide license under certain intellectual property to develop and commercialize the licensed products in the field
NanoMedSyn	France	Pre-clinical research collaboration to evaluate a potential enzyme replacement therapy using NanoMedSyn's proprietary synthetic derivatives named AMFA
Novimmune	Switzerland	Exclusive worldwide rights to develop and commercialize an innovative, bi-specific antibody in pre-clinical development for the treatment of hemophilia A
Rani Therapeutics	US	Research collaboration to evaluate a micro tablet pill technology for oral delivery of FVIII therapy in hemophilia
Xenetic Biosciences	US	Exclusive R & D license agreement for PolyXen (PSA) delivery technology for hemophilia factors VII, VIII, IX, X.

Plasma Derived Therapies

Partner	Country	Subject
Halozyne	US	In-license of Halozyne's proprietary ENHANZE™ platform technology to increase dispersion and absorption of HyQvia. Ongoing development work for a US pediatric indication to treat primary and secondary immunodeficiencies and a Phase 3 indication in Chronic Inflammatory Demyelinating Polyradiculoneuropathy (CIDP).
Kamada	Israel	In-license agreement to develop and commercialize Alpha-1 proteinase inhibitor (Glassia) ; Exclusive supply and distribution of Glassia in the US, Canada, Australia and New Zealand; Development of protocol for post market commitment trial ongoing.

Vaccines

Partner	Country	Subject
U.S. Government - The Biomedical Advanced Research and Development Authority (BARDA)	US	Partnership to develop TAK-426, a Zika vaccine candidate, to support the Zika response in the US and affected regions around the world.
Bill & Melinda Gates Foundation	US	Partnership to develop TAK-195, a Sabin-strain Inactivated Polio vaccine (sIPV) candidate, to support polio eradication in developing countries.
Zydus Cadila	India	Partnership to develop TAK-507, a Chikungunya vaccine candidate, to tackle an emerging and neglected infectious disease in the world.

Other / Multiple Therapeutic Area

Partner	Country	Subject
AMED	Japan	Development of a novel drug for hypertrophic cardiomyopathy using iPS cells-derived cardiomyocytes with disease-causing mutations induced by gene-editing technology (CICLE: Cyclic Innovation for Clinical Empowerment by AEMD).
Arix Bioscience	UK	Value creation through venture and biotech partnerships with focus on oncology and gastroenterology.
Arcellx	US	Investment to develop format for T cell-mediated anti-tumor therapy.
ArmaGen	US	Investment in ArmaGen whose proprietary technology platform takes advantage of the body's natural system to non-invasively deliver therapeutics to the brain.
Atlas Ventures	US	Fund XI Limited Partner to drive venture investments.
BioMotiv	US	Strategic investment in therapeutic accelerator to identify and develop pioneering medical innovations specifically in the therapeutic areas of immunology & inflammation and cardio-metabolic diseases.
BiomX	Israel	Investment in BiomX who discovered and validated proprietary bacterial targets, and develop rationally designed phage therapies that seek and destroy harmful bacteria in microbiome-related diseases such as inflammatory bowel disease (IBD) and cancer.
BioSurfaces, Inc.	US	Research program designed to develop innovative medical devices to treat patients with GI diseases using BioSurfaces' proprietary nanomaterial technology.
Bridge Medicines	US	Building upon Tri-I TDI, Bridge Medicines will give financial, operational and managerial support to move projects seamlessly from a validating, proof-of-concept study to an in-human clinical trial.
Center for iPS Cell Research Application, Kyoto University	Japan	Clinical applications of iPS cells in Takeda strategic areas including applications in neurosciences, oncology and GI as well as discovery efforts in additional areas of compelling iPSC translational science.
Cortexyme	US	Investment in Cortexyme who is developing therapeutics based on data supporting a new theory of the cause of Alzheimer's and other degenerative disorders.
Dementia Discovery Fund (DDF)	UK	New global investment fund to support discovery and development of novel dementia treatments.
Emendo	Israel	Investment in Emendo who is at the forefront of cutting-edge genetic medicine, developing genome editing technology that can repair and eliminate genetic mutations in living cells that cause serious diseases or disorders.
Encyle Therapeutics	Canada	Investment in company developing macrocyclic peptide derivatives for orally bioavailable inhibitors of GI targets
Endosome Therapeutics	US	Seed investment in newCo exploring new therapeutic approaches for pain, including visceral GI pain
Fujifilm	Japan	Collaboration to develop regenerative medicine therapies using cardiomyocytes derived from iPSC for the treatment of heart failure.
FutuRx	Israel	Investment in Israel seed stage venture fund/biotech accelerator to access innovation in Israel; de-risked through pre-formed syndication.
GlaxoSmithKline	UK	In-license agreement between GSK and University of Michigan for marabivir in the treatment of human cytomegalovirus.
Harrington Discovery Institute at University Hospitals in Cleveland, Ohio	US	Collaboration for the advancement of medicines for rare diseases.
HITGen	China	HitGen will apply its advanced technology platform, based on DNA-encoded library design, synthesis and screening, to discover novel leads which will be licensed exclusively to Takeda.

HiFiBio	US	Functional therapeutics high-throughput antibody discovery platform that enables identification of antibodies for rare events for discovery of therapeutic antibodies for GI & Oncology therapeutic areas.
Hookipa Biotech	Austria	Value creation through venture and biotech partnership investments.
Isogenica	UK	Access to a sdAb platform to generate a toolbox of VHH to various immune cells and targets for pathway validation and pipeline development across Oncology and GI portfolio.
National Cancer Center of Japan	Japan	A partnership to develop basic research to clinical development by promoting exchanges among researchers, physicians, and others engaged in anti-cancer drug discovery and cancer biology research.
Numerate	US	Joint-discovery programs aimed at identifying clinical candidates for use in Takeda's core therapeutic areas: oncology, gastroenterology, and central nervous system disorders, which is using its AI-driven platform, from hit finding and expansion through lead design/optimization and ADME toxicity modeling.
OrphoMed	US	Investment in OrphoMed, a clinical-stage biotechnology company with a proprietary dimer therapeutics platform. The company is focused on developing best-in class treatments for patients with gastrointestinal disorders.
Obsidian Therapeutics	US	Investment in Obsidian, who is developing next-generation cell and gene therapies with pharmacologic operating systems.
Palleon	US	Investment in Palleon, developing therapeutics to alleviate glyco-immune checkpoints in oncology.
Parion	US	Exclusive worldwide license granted for the development and commercialization of TAK-759/SHP659 for Dry Eye Disease (DED).
Presage	US	Investment in Presage, who uses CIVO [®] , a platform that enables assessment of multiple early stage agents simultaneously and directly in the context in which they were meant to be used—the human patient.
Portal Instruments	US	The development and commercialization of Portal's needle-free drug delivery device for potential use with Takeda's investigational or approved biologic medicines.
Recursion Pharmaceuticals	US	Provide pre-clinical candidates for Takeda's TAK-celerator™ development pipeline.
Ribon Therapeutics	US	Investment in Ribon Therapeutics, who is pioneering the discovery and development of monoPARP (mono ADP-ribose polymerase) inhibitors to block cancer cells' fundamental ability to survive under stress.
Schrödinger	US	Multi-target research collaboration combining Schrödinger's in silico platform-driven drug discovery capabilities with Takeda's deep therapeutic area knowledge and expertise in structural biology.
Seattle Collaboration	US	SPRINT (Seattle Partnership for Research on Innovative Therapies): accelerate the translation of Fred Hutchinson Cancer Research Center's and University of Washington's cutting-edge discoveries into treatments for human disease (focusing on Oncology, GI and Neuroscience).
Stanford University	US	Collaboration with Stanford University to form the Stanford Alliance for Innovative Medicines (Stanford AIM) to more effectively develop innovative treatments and therapies.
Stride Bio	US	Investment in StrideBio, who develops engineered viral vectors for gene therapy for the treatment of rare diseases. StrideBio's technology engine utilizes structure-inspired design to engineer AAV vectors which can escape pre-existing neutralizing antibodies (NAbs).
Tri-Institutional Therapeutics Discovery Institute (Tri-I TDI)	US	Collaboration of academic institutions and industry to more effectively develop innovative treatments and therapies.
Ultragenyx	US	Collaboration to develop and commercialize therapies for rare genetic diseases.
Univercells	Belgium	Univercells is a technology company delivering novel biomanufacturing platforms, aiming at making biologics available & affordable to all.
VelosBio	US	Investment in VelosBio, a preclinical stage company developing antibody drug conjugates (ADCs).
VHsquared	UK	VHsquared is a clinical stage company developing transformational therapies – Vorabodies™ – for inflammatory bowel disease. (Note: A Vorabody is an oral domain antibody).
Whiz Partners‡	Japan	Joint investment fund aimed at promoting a drug discovery ecosystem in Japan.

‡ Executed since April 1, 2018;

List is not inclusive of all Takeda R&D collaborations

Completed Partnerships

Partner	Country	Subject
Gencia LLC	US	Mitochondrial Associated Glucocorticoid Receptors (MAGR) agonists for potential use primarily in hematological and inflammatory diseases.
Mersana	US	The decision to terminate the further development of TAK-522/XMT-1522 was made due to the competitive environment for HER2-targeted therapies.
Prana Biotechnology Ltd.	Australia	Collaboration with Takeda to study ability of Prana's pbt434, to slow or prevent neurodegeneration of gastrointestinal system.
TiGenix	Belgium	Takeda acquired TiGenix
Keio University, Niigata University, Kyoto University	Japan	The search for and functional analysis of disease-related RNA-binding proteins, that may lead to treatments in the areas such as neuroscience and oncology.
Astellas, Daiichi Sankyo	Japan	Fundamental biomarker data on healthy adult volunteers in order to optimize and accelerate the development of innovative medicines.

■ Clinical study protocol summaries

Clinical study protocol summaries are disclosed on the English-language web-site (<https://takedaclinicaltrials.com/>) and clinical study protocol information in the Japanese-language is disclosed on the Japanese-language web-site (<https://www.takeda.com/jp/what-we-do/research-and-development/takeda-clinical-trial-transparency/>).

We anticipate that this disclosure will assure transparency of information on Takeda's clinical trials for the benefit of healthcare professionals, their patients and other stakeholders, which we believe will contribute to the appropriate use of Takeda's products worldwide.

Appendix

◆ Prescription Drugs: US major products' sales (in US\$) ^{*1}

(Million US\$)

	Net basis					YOY	
	FY15	FY16	FY17	FY17 Q3 YTD	FY18 Q3 YTD		
Entyvio	524	913	1,202	901	1,235	334	37.0%
Velcade	1,059	1,000	995	776	717	-59	-7.5%
Trintellix	203	294	435	337	402	66	19.5%
Dexilant	530	457	445	360	363	3	0.9%
Uloric	347	380	411	306	358	52	17.0%
Ninlaro	34	267	354	267	321	54	20.3%
Amitiza	308	310	303	241	233	-8	-3.3%
Colcrys	386	358	362	288	214	-74	-25.7%
Iclusig	-	22	171	130	157	27	20.5%
Prevacid (lansoprazole)	222	179	132	104	46	-58	-55.9%
Alunbrig	-	-	25	13	33	20	145.8%

*1 Product sales (royalty income and service income are excluded).

Net basis: discounts and rebates are deducted

◆ Prescription Drugs: US major products' sales (in US\$) *¹ (Quarterly)

(Million US\$)

	FY17 (Net basis)				FY18 (Net basis)							
	Q1	Q2	Q3	Q4	Q1	YOY	Q2	YOY	Q3	YOY	Q4	YOY
Entyvio	278	314	309	301	387	39.3%	410	30.6%	438	41.5%		
Velcade	268	259	249	219	235	-12.1%	235	-9.1%	247	-1.0%		
Trintellix	101	110	126	98	130	29.4%	117	6.7%	154	22.9%		
Dexilant	115	120	126	85	120	4.2%	114	-5.0%	130	3.5%		
Uloric	101	102	104	105	128	27.1%	109	7.3%	121	16.7%		
Ninlaro	81	91	95	87	103	26.8%	106	16.2%	112	18.7%		
Amitiza	77	80	84	63	72	-6.2%	76	-4.7%	84	0.6%		
Colcrys	87	93	109	74	85	-1.6%	64	-31.0%	65	-40.5%		
Iclusig	40	42	49	41	55	37.8%	51	22.5%	51	4.5%		
Prevacid (lansoprazole)	33	31	40	28	18	-46.0%	25	-20.1%	3	-91.7%		
Alunbrig	2	5	6	12	10	-	10	102.4%	13	110.7%		

*1 Product sales (royalty income and service income are excluded).

Net basis: discounts and rebates are deducted

◆ Prescription Drugs: Japan major products' sales

(Billion JPY)

	Launched	Therapeutic Class	Gross basis		Net basis				
			FY15	FY16	FY17	FY17 Q3 YTD	FY18 Q3 YTD	YOY	
Azilva ^{*1}	(12. 5)	Hypertension	59.0	66.9	64.0	50.5	55.7	5.2	10.4%
Takecab ^{*1}	(15. 2)	Acid-related Diseases	8.4	34.1	48.5	37.5	44.3	6.8	18.2%
Leuplin (leuprorelin)	(92. 9)	Prostate cancer, breast cancer and endometriosis	53.8	48.6	41.2	33.0	31.7	-1.3	-4.1%
Enbrel	(05. 3)	Rheumatoid arthritis	40.8	40.4	37.1	29.5	27.9	-1.6	-5.4%
Lotriga	(13. 1)	Hyperlipidemia	22.3	27.5	28.5	22.4	24.3	1.9	8.3%
Nesina ^{*1}	(10. 6)	Diabetes	36.9	32.9	26.6	21.5	22.2	0.7	3.4%
Vectibix	(10. 6)	Colorectal cancer	18.4	18.8	18.9	15.0	16.2	1.2	8.2%
Reminyl	(11. 3)	Alzheimer-type dementia	16.0	17.4	16.1	12.8	13.0	0.1	1.0%
Rozerem	(10. 7)	Insomnia	7.4	8.1	8.0	6.3	7.4	1.1	18.0%
Benet	(02. 5)	Osteoporosis	9.7	8.3	6.8	5.5	4.8	-0.7	-12.4%
Adcetris	(14. 4)	Malignant Lymphoma	3.1	3.3	3.8	2.9	3.7	0.8	27.9%
Ninlaro	(17. 5)	Multiple Myeloma	-	-	2.5	1.8	3.2	1.4	79.1%
Azilect	(18. 6)	Parkinson's disease	-	-	-	-	0.5	0.5	-
Entyvio	(18. 11)	Ulcerative colitis	-	-	-	-	0.5	0.5	-

*1 The figures include the amounts of fixed dose combinations and blister packs.

*2 Effective from FY2018, sales of certain products in Japan are now disclosed on a net basis, deducting items such as discounts and rebates, in alignment with the global managerial approach applied to individual product sales. The change in disclosure of individual product sales has been revised retrospectively, with prior year figures reclassified on a net basis to enable year-on-year comparisons. This reclassification has no impact on Takeda's financial statements and does not represent a correction of prior year figures.

Gross basis: discounts and rebates are not deducted (except FY2016 Oncology products in Japan are on net basis)

Net basis: discounts and rebates are deducted

◆ Prescription Drugs: Japan major products' sales (Quarterly)

(Billion JPY)

Launched	Therapeutic Class	FY17 (Net basis)				FY18 (Net basis)							
		Q1	Q2	Q3	Q4	Q1	YOY	Q2	YOY	Q3	YOY	Q4	YOY
Azilva *	(12. 5)	Hypertension	16.8	14.6	19.0	13.5	19.4	15.5%	15.8	8.0%	20.5	7.7%	
Takecab *	(15. 2)	Acid-related Diseases	11.3	11.0	15.1	11.0	14.2	26.4%	12.9	17.1%	17.1	12.9%	
Leuplin (leuprorelin)	(92. 9)	Prostate cancer, breast cancer and endometriosis	11.0	9.7	12.3	8.2	10.5	-4.7%	9.6	-1.1%	11.5	-5.9%	
Enbrel	(05. 3)	Rheumatoid arthritis	9.9	9.1	10.5	7.6	9.9	-0.0%	8.2	-10.1%	9.8	-6.3%	
Lotriga	(13. 1)	Hyperlipidemia	7.2	6.7	8.5	6.1	8.1	13.2%	7.1	6.1%	9.0	5.9%	
Nesina *	(10. 6)	Diabetes	7.3	6.2	8.0	5.1	7.8	6.8%	6.5	5.4%	7.9	-1.1%	
Vectibix	(10. 6)	Colorectal cancer	5.0	4.7	5.3	4.0	5.4	8.0%	5.1	9.0%	5.7	7.6%	
Reminyl	(11. 3)	Alzheimer-type dementia	4.3	3.9	4.7	3.3	4.5	4.7%	3.9	0.5%	4.6	-2.1%	
Rozerem	(10. 7)	Insomnia	2.1	1.9	2.3	1.7	2.5	19.4%	2.2	17.9%	2.7	16.9%	
Benet	(02. 5)	Osteoporosis	1.9	1.6	1.9	1.3	1.7	-10.2%	1.5	-11.3%	1.6	-15.5%	
Adcetris	(14. 4)	Malignant Lymphoma	1.0	0.9	1.0	0.9	1.1	10.8%	1.1	19.8%	1.5	53.1%	
Ninlaro	(17. 5)	Multiple Myeloma	0.2	0.6	0.9	0.7	1.2	-	0.9	42.5%	1.2	27.0%	
Azilect	(18. 6)	Parkinson's disease	-	-	-	-	0.3	-	0.1	-	0.2	-	
Entyvio	(18. 11)	Ulcerative colitis	-	-	-	-	-	-	-	-	0.5	-	

*1 The figures include the amounts of fixed dose combinations and blister packs.

*2 Effective from FY2018, sales of certain products in Japan are now disclosed on a net basis, deducting items such as discounts and rebates, in alignment with the global managerial approach applied to individual product sales. The change in disclosure of individual product sales has been revised retrospectively, with prior year figures reclassified on a net basis to enable year-on-year comparisons. This reclassification has no impact on Takeda's financial statements and does not represent a correction of Net basis: discounts and rebates are deducted

◆ Consumer Healthcare: Japan major products' sales

(Billion JPY)

	Gross basis		Net basis				
	FY15	FY16	FY17	FY17 Q3 YTD	FY18 Q3 YTD	YOY	
Alinamin tablet	25.2	24.1	23.5	19.0	17.1	-1.9	-9.9%
Alinamin drink	14.9	16.1	11.5	9.4	9.2	-0.2	-2.3%
Benza	9.8	10.0	7.1	6.2	6.0	-0.3	-4.1%
Borriginol	4.5	4.5	4.4	3.4	3.4	0.0	0.6%
Mytear	4.2	3.9	3.7	2.3	2.7	0.3	14.6%
Midori-no-Shukan	1.1	2.7	3.2	2.4	2.1	-0.3	-12.0%

*1 This table shows sales amount of Takeda Consumer Healthcare Company Limited (TCHC) in Japan. TCHC succeeded the business of Takeda's Japan Consumer Healthcare Business Unit (JCHBU), and started its business on April 1, 2017 as the new company.

*2 Effective from FY2018, sales of certain products in Japan are now disclosed on a net basis, deducting items such as discounts and rebates, in alignment with the global managerial approach applied to individual product sales. The change in disclosure of individual product sales has been revised retrospectively, with prior year figures reclassified on a net basis to enable year-on-year comparisons. Regarding the products shown on this page, the sales figures of FY2017 and FY2018Q1 disclosed at the FY2018Q1 earnings announcement have been reclassified again, due to the change in deduction method implemented in FY2018Q2. This reclassification has no impact on Takeda's financial statements and does not represent a correction of prior year figures.

Gross basis: discounts and rebates are not deducted

Net basis: discounts and rebates are deducted

◆ Consumer Healthcare: Japan major products' sales (Quarterly)

(Billion JPY)

	FY17 (Net basis)				FY18 (Net basis)							
	Q1	Q2	Q3	Q4	Q1	YOY	Q2	YOY	Q3	YOY	Q4	YOY
Alinamin tablet	6.9	5.7	6.4	4.5	5.7	-17.5%	5.4	-5.6%	6.1	-5.4%		
Alinamin drink	3.1	3.1	3.2	2.1	3.1	2.3%	3.1	-2.0%	3.0	-7.0%		
Benza	1.0	3.1	2.1	0.9	1.0	-3.8%	3.2	3.3%	1.8	-15.3%		
Borriginol	1.0	1.0	1.3	1.0	1.0	0.5%	1.0	1.5%	1.3	0.0%		
Mytear	0.8	0.8	0.8	1.4	0.9	16.2%	0.9	14.4%	0.9	13.4%		
Midori-no-Shukan	0.8	0.8	0.8	0.8	0.7	-6.9%	0.7	-10.7%	0.7	-17.8%		

*1 This table shows sales amount of Takeda Consumer Healthcare Company Limited (TCHC) in Japan.

TCHC succeeded the business of Takeda's Japan Consumer Healthcare Business Unit (JCHBU), and started its business on April 1, 2017 as the new company.

*2 Effective from FY2018, sales of certain products in Japan are now disclosed on a net basis, deducting items such as discounts and rebates, in alignment with the global managerial approach applied to individual product sales. The change in disclosure of individual product sales has been revised retrospectively, with prior year figures reclassified on a net basis to enable year-on-year comparisons. Regarding the products shown on this page, the sales figures of FY2017 and FY2018Q1 disclosed at the FY2018Q1 earnings announcement have been reclassified again, due to the change in deduction method implemented in FY2018Q2. This reclassification has no impact on Takeda's financial statements and does not represent a correction of prior year figures.

Net basis: discounts and rebates are deducted

FY2018 YTD Reconciliation

FY2017 YTD Reconciliation

							1,369.6
				1.1			-383.9
				1.1			985.7
							-456.3
							-236.7
				1.1			292.7
							Core Earnings
86.3							-
101.4							-
-15.0							-
-163.9							-
46.8							-
-30.7				1.1			292.7
	2.0	-16.0				3.3	-11.8
			39.1				5.7
-30.7	2.0	-16.0	39.1	1.1		3.3	286.6
13.5	-0.0	4.9	-12.0	-0.4		-25.1	-69.4
							0.2
-17.3	2.0	-11.1	27.1	0.8		-25.1	217.5
							Core Net Profit
							279
							Core EPS
							780,671,614

-28.7	-18.6	-3.3	-13.4	-10.4	-45.8	1,295.0
2.5	1.8	3.0	3.2	4.2	12.1	-369.3
-26.2	-16.9	-0.4	-10.2	-6.2	-33.7	925.8
7.5		0.9	8.9		9.9	-438.9
8.8		0.1	0.8		0.9	-227.0
-9.9	-16.9	0.7	-0.5	-6.2	-23.0	259.8
Underlying Core Earnings						-
						-
						-
						-
						-
-9.9	-16.9	0.7	-0.5	-6.2	-23.0	259.8
6.0		-0.1	-0.1		-0.1	-5.9
-0.0						5.7
-3.9	-16.9	0.6	-0.6	-6.2	-23.1	259.6
1.2	5.2	0.6	0.2	1.9	7.9	-60.3
-0.6						-0.4
-3.4	-11.7	1.2	-0.4	-4.3	-15.2	198.9
Underlying Core Net Profit						255
Underlying Core EPS						781,309,162

* Average number of outstanding shares (excluding treasury shares) for the reporting period is used for EPS and Core EPS calculations. Number of shares outstanding (excluding treasury shares) as of the end of the comparative period (i.e. the end of March 2018) is used for Underlying Core EPS calculation.

Takeda Pharmaceutical Company Limited

Underlying Core Reconciliation - FY2018 Q3 & FY2017 Q3



FY2018 Q3 Reconciliation

(Bn yen)

	Reported	YoY %	Reported to Core Adjustments								Core	YoY %	Core to Underlying Core Adj.						Underlying Core	YoY %	
			Account line adj. between CE and OP	Non-recurring items						FX			*1 Impact of LLPs sold to Teva JV	*2 Impact of Multilab divestiture	*3 Impact of Techpool divestiture	Others	Divestitures				
				Contingent consideration fair value adj.	Gains on sales of securities	Teva JV purchase accounting adj.	Other purchase accounting adj.	Shire acquisition related costs	US tax reform									Others			
Revenue	499.4	+2.3%									499.4	+2.3%	-8.8							490.6	+6.0%
COGS	-138.5	-2.7%									-138.5	-2.4%	1.7							-136.8	+1.9%
Gross profit	360.9	+4.3%									360.9	+4.2%	-7.1							353.8	+7.7%
SG&A	-153.9	-3.3%							3.1		-150.8	-5.2%	2.5							-148.3	-2.2%
R&D	-77.5	-5.0%									-77.5	-5.0%	3.9							-73.6	-5.4%
Core Earnings									3.1		132.6	+25.6%	-0.8							131.8	+33.1%
											Core Earnings								Underlying Core Earnings		
Amortization and impairment losses on intangible assets	-31.1		31.1								-									-	
Amortization	-24.2		24.2								-									-	
Impairment	-6.9		6.9								-									-	
Other operating income	29.3		-29.3								-									-	
Other operating expenses	-15.3		4.4						11.0		-									-	
Operating profit	112.5	+27.9%	6.1						14.0		132.6	+25.6%	-0.8							131.8	+33.1%
Financial income/expenses	-16.9			0.3					9.3		-7.2		1.2							-6.0	
Equity income/loss	-48.0					50.3					2.3		0.1							2.4	
Profit before tax	47.6	-13.3%	6.1	0.3		50.3			23.4		127.7	+22.4%	0.4							128.1	+28.7%
Tax expense	-9.7		0.5	-0.0		-15.4			-5.3		-29.9		1.5							-28.4	
Non-controlling interests	-0.1										-0.1		-0.4			0.4		0.4		-0.1	
Net Profit	37.8	-44.5%	6.6	0.3		34.9			18.1		97.7	+28.6%	1.5			0.4		0.4		99.6	+36.8%
											Core Net Profit								Underlying Core Net Profit		
EPS	48										125									127	
											Core EPS								Underlying Core EPS		
Number of shares	784,477,033										784,477,033									781,309,162	

FY2017 Q3 Reconciliation

Revenue	488.2
COGS	-142.3
Gross profit	345.9
SG&A	-159.1
R&D	-81.6
Core Earnings	
Amortization and impairment losses on intangible assets	-29.5
Amortization	-35.2
Impairment	5.7
Other operating income	27.0
Other operating expenses	-14.8
Operating profit	87.9
Financial income/expenses	0.8
Equity income/loss	-33.8
Profit before tax	54.9
Tax expense	13.1
Non-controlling interests	0.1
Net Profit	68.1
EPS	87
Number of shares	781,122,699

											488.2										
						0.4					-141.9										
						0.4					346.2										
											-159.1										
											-81.6										
											105.6										
						0.4					Core Earnings										
											-										
											-										
											-										
											-										
											-										
											-										
						0.4					105.6										
						0.6	-6.2				-4.3										
											3.0										
						36.8					0.5										
						17.3	0.6	-6.2	36.8	0.4	104.3										
						-4.7	0.0	1.9	-11.3	-0.1	-28.4										
											0.1										
						12.6	0.6	-4.3	25.6	0.3	-1.7										
											76.0										
											Core Net Profit										
											97										
											Core EPS										
											781,122,699										

-14.1	-1.8	-0.9	-4.8	-3.8	-11.3	462.8
2.3	1.7	0.9	1.2	1.6	5.4	-134.3
-11.8	-0.1	-0.0	-3.5	-2.2	-5.9	328.5
4.0		0.3	3.0		3.3	-151.7
3.5		0.0	0.2		0.3	-77.8
-4.3	-0.1	0.3	-0.3	-2.2	-2.3	99.0
						Underlying Core Earnings
						-
						-
						-
						-
						-
-4.3	-0.1	0.3	-0.3	-2.2	-2.3	99.0
1.8		-0.0	-0.0		-0.0	-2.5
0.0						3.0
-2.4	-0.1	0.3	-0.3	-2.2	-2.4	99.5
0.7	0.0	0.3	0.2	0.6	1.2	-26.5
-0.3			0.4	-0.3	0.0	-0.2
-2.0	-0.1	0.6	0.3	-1.9	-1.1	72.8
						Underlying Core Net Profit
						93
						Underlying Core EPS
						781,309,162

*1 The impact associated with the sales of 7 long-listed products in Japan to Teva JV in May 2017 is adjusted (FY2017).

*2 Given the sales of Takeda's subsidiary in Brazil, Multilab (in July 2018), Multilab's profit/loss is adjusted in FY2017.

*3 Given the sales of Takeda's subsidiary in China, Techpool (in August 2018), Techpool's profit/loss is adjusted in FY2017.

** Average number of outstanding shares (excluding treasury shares) for the reporting period is used for EPS and Core EPS calculations. Number of shares outstanding (excluding treasury shares) as of the end of the comparative period (i.e. the end of March 2018) is used for Underlying Core EPS calculation.

Takeda Pharmaceutical Company Limited



Reconciliation from net profit to EBITDA / Adjusted EBITDA

(Bn yen)	Full year ended March 31			9 months ended December 31	
	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2017</u>	<u>2018</u>
Net profit for the year	83.5	115.5	186.7	240.7	164.4
Income tax expenses	37.1	27.8	30.5	47.2	44.0
Depreciation and amortization	182.2	171.4	182.1	142.7	116.3
Interest expense, net	3.0	5.5	6.8	5.0	9.4
EBITDA	305.8	320.2	406.1	435.6	334.1
Impairment losses	15.2	51.4	13.5	-14.9	8.0
Other operating expense (income), net, excluding depreciation and amortization	17.0	-78.3	-61.1	-118.0	-31.6
Finance expense (income), net, excluding interest income and expense, net	7.3	5.4	-14.4	-4.0	22.7
Share of loss on investments accounted for under the equity method	—	1.5	32.2	33.3	44.0
Other adjustments:					
Loss on deconsolidation	6.3	—	—	—	—
Transaction costs related to the acquisition of ARIAD	—	3.2	—	—	—
Impact on profit related to fair value step up of inventory in ARIAD acquisition	—	—	1.4	1.1	—
Acquisition costs related to Shire	—	—	—	—	11.0
Adjusted EBITDA	351.6	303.4	377.7	333.2	388.1

Takeda Pharmaceutical Company Limited



Takeda Pharmaceutical Company Limited