10-Year Financial Summary

Chugai Pharmaceutical Co., Ltd. and Consolidated Subsidiaries/Years ended December 31

International Financial Reporting Standards (IFRS)	2017		2016		2015		2014	
	IFRS	Core[1]	IFRS	Core[1]	IFRS	Core[1]	IFRS	Core[1]
Results								
Revenues[2]	534.2		491.8		498.8		461.1	
Sales	499.3		472.7		468.4		436.9	
Royalties and other operating income	34.9		19.1		30.4		24.2	
Cost of sales	(254.2)	(252.9)	(247.9)	(246.7)	(240.2)	(238.9)	(218.1)	(217.0)
Operating expenses	(181.1)	(178.1)	(167.0)	(164.5)	(171.8)	(169.3)	(167.2)	(166.8)
Marketing and distribution	(72.8)	(72.8)	(69.8)	(69.8)	(74.8)	(74.7)	(71.7)	(71.7)
Research and development	(92.9)	(88.9)	(85.0)	(82.6)	(83.8)	(81.9)	(80.8)	(80.6)
General and administration	(15.3)	(16.3)	(12.2)	(12.1)	(13.2)	(12.8)	(14.6)	(14.6)
Operating profit	98.9	103.2	76.9	80.6	86.8	90.7	75.9	77.3
Profit before taxes	97.0	101.3	74.4	78.1	87.3	91.2	76.2	77.6
Net income	73.5	76.7	54.4	56.8	62.4	64.9	52.1	53.0
Attributable to Chugai shareholders	72.7	75.9	53.6	56.1	61.1	63.7	51.0	51.9
Core EPS (Yen)	—	138.68	—	102.50	—	116.42	—	95.04
Cash dividends per share (Yen)	62		52		58		48	
Core payout ratio	—	44.7%	—	50.7%	—	49.8%	—	50.5%
Financial Position								
Net operating assets	440.2		431.1		380.4		357.7	
Total assets	852.5		806.3		787.4		739.5	
Total liabilities	(159.6)		(159.8)		(160.1)		(141.8)	
Total net assets	692.9		646.5		627.3		597.8	
Investments in property, plant and equipment	34.3		19.4		28.7		16.3	
Depreciation	14.5		14.8		14.0		13.7	
Main Indicators								
Ratio of cost of sales to sales	50.9%	50.7%	52.4%	52.2%	51.3%	51.0%	49.9%	49.7%
Ratio of operating profit to revenues	18.5%	19.3%	15.6%	16.4%	17.4%	18.2%	16.5%	16.8%
Ratio of research and development expenditures to revenues	17.4%	16.6%	17.3%	16.8%	16.8%	16.4%	17.5%	17.5%
Ratio of net income to equity attributable to Chugai shareholders (ROE)[3]	10.9%	—	8.4%	—	10.0%	—	8.7%	—
Ratio of profit before taxes to total assets (ROA)[4]	11.7%	—	9.3%	—	11.4%	—	10.6%	—
Equity per share attributable to Chugai shareholders (BPS) (Yen)	1,265.46	—	1,181.67	—	1,146.17	—	1,092.90	—
Ratio of equity attributable to Chugai shareholders	81.2%	—	80.1%	—	79.5%	—	80.6%	—
Number of employees	7,372		7,245		7,169		7,023	

1. Core basis results are the results after adjusting non-Core items to IFRS basis results. Core basis results are used by Chugai as internal performance indicators, for representing recurring profit trends both internally and externally, and as indices for establishing profit distributions such as returns to shareholders.
2. Revenues do not include consumption tax.
3. Ratio of net income to equity attributable to Chugai shareholders (ROE) = Net income attributable to Chugai shareholders / Capital and reserves attributable to Chugai shareholders (average of beginning and end of fiscal year)
4. Ratio of profit before taxes to total assets (ROA) = Profit before taxes / Total assets (average of beginning and end of fiscal year)

(Billions of yen)

2013 IFRS	2013 Core[1]	2012 IFRS	2012 Core[1]
423.7		386.6	
401.3		375.2	
22.4		11.3	
(187.0)	(186.1)	(168.2)	(167.3)
(157.9)	(157.7)	(143.7)	(143.7)
(71.6)	(71.5)	(67.9)	(67.9)
(74.3)	(74.1)	(66.6)	(66.6)
(12.1)	(12.1)	(9.2)	(9.2)
78.7	79.9	74.7	75.6
76.9	78.1	72.7	73.6
51.9	52.6	46.8	47.4
50.9	51.6	46.1	46.6
—	94.69	—	85.64
45		40	
—	47.5%	—	46.7%
325.2		307.9	
697.2		645.3	
(124.0)		(116.2)	
573.2		529.2	
13.0		14.2	
13.5		13.3	
46.6%	46.4%	44.8%	44.6%
18.6%	18.9%	19.3%	19.6%
17.5%	17.5%	17.2%	17.2%
9.3%	—	9.0%	—
11.5%	—	11.8%	—
1,049.47	—	970.08	—
82.0%	—	81.8%	—
6,872		6,836	

(Billions of yen)

Japanese GAAP	2012	2011	2010	2009	2008
Results					
Revenues[1]	391.2	373.5	379.5	428.9	326.9
Sales	375.2	363.6	375.6	419.1	321.8
Other operating revenues	16.0	9.9	3.9	9.8	5.1
Cost of sales	167.7	157.5	162.4	192.9	127.0
Selling, general and administrative expenses	147.1	153.6	150.9	153.5	148.3
Marketing and distribution expenses	92.0	97.7	96.2	98.2	95.1
Research and development expenditures	55.1	55.9	54.7	55.3	53.2
Operating income	76.4	62.4	66.2	82.6	51.6
Net income (loss)	48.2	35.2	41.4	56.6	39.3
Net income per share (basic) (Yen)	88.58	64.75	76.14	104.00	72.07
Net income per share (diluted) (Yen)	88.54	64.72	76.12	103.98	72.04
Cash dividends per share (Yen)[2]	40	40	40	40	34
Payout ratio	45.2%	61.8%	52.5%	38.5%	47.2%
Financial Position					
Total assets	587.7	533.5	508.0	540.5	478.5
Total net assets[3]	490.1	459.1	449.4	434.7	397.1
Capital investments	14.2	11.9	12.7	14.6	26.6
Depreciation and amortization	15.3	15.9	18.0	19.5	20.1
Main Indicators					
Ratio of cost of sales to revenues	44.7%	43.3%	43.2%	46.0%	39.5%
Ratio of operating income to revenues	19.5%	16.7%	17.4%	19.3%	15.8%
Ratio of research and development expenditures to revenues	14.1%	15.0%	14.4%	12.9%	16.3%
Return on equity[4]	10.2%	7.8%	9.4%	13.7%	10.1%
Return on assets[5]	8.6%	6.8%	7.9%	11.1%	8.4%
Net assets per share (Yen)	896.02	839.50	821.87	794.51	725.18
Shareholders' equity to total assets	83.0%	85.6%	88.0%	80.0%	82.6%
Number of employees	6,836	6,779	6,709	6,485	6,383

1. Revenues do not include consumption tax.
2. Cash dividends per share for 2009 include a special year-end dividend of ¥6 per share.
3. Net assets include minority interests.
4. Return on equity = Net income / Shareholders' equity (average of beginning and end of fiscal year)
5. Return on assets = Net income / Total assets (average of beginning and end of fiscal year)

Management's Discussion and Analysis

Management Policies

Based on its strategic alliance with Roche, Chugai's mission is to dedicate itself to adding exceptional value through the creation of innovative medical products and services for the benefit of the medical community and human health around the world. Our primary management goal is to become a top pharmaceutical company capable of continuously delivering innovative drugs in Japan and internationally as a leading member of the Roche Group. We have been working to fulfill this mission and achieve our goal by leveraging our close relationship with Roche and building systems capable of efficiently and continuously developing and marketing new drugs. We have also innovated by refining our strengths to attain leading-edge drug discovery technology and maintain the top share of the domestic oncology area.

Under our previous mid-term business plan, ACCEL 15, we generated top-class growth in Japan underpinned by several innovative new drugs and expanded our leading share of the domestic oncology market. However, in mid-term business plan IBI 18, Chugai is aiming to transform into a company that continues to make progress globally through its competitive advantages that leverage its strategic alliance with Roche. The quantitative outlook through the final year of the plan is a compound annual growth rate for Core EPS in the low single digits (less than 4 percent) based on average exchange rates for 2015. Chugai aims for a consolidated dividend payout ratio that averages 50 percent of Core EPS to provide a stable allocation of profit to all shareholders.

Overview of Results

Revenues

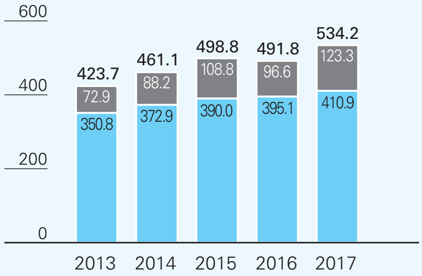
(Billions of yen)

	2015	2016	2017	2016/2017 Change
Revenues	498.8	491.8	534.2	+8.6%
Sales	468.4	472.7	499.3	+5.6%
Royalties and other operating income	30.4	19.1	34.9	+82.7%

- In 2017, in addition to the sales growth of core products in Japan, which more than offset the impact of the NHI drug price revisions, and an increase in exports of Alecensa to Roche, royalties and other operating income also increased. As a result, revenues exceeded the level of the previous year.
- Royalties and other operating income increased year on year due to factors including steady revenue from Actemra, as well as an increase in one-time milestone income.

Revenues

(Billions of yen)



Domestic Sales by Area

(Billions of yen)

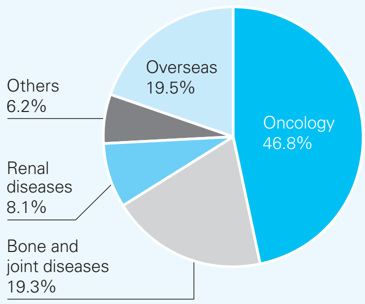
	2015	2016	2017	2016/2017 Change
Domestic sales (excluding Tamiflu)	378.0	379.7	388.4	+2.3%
Oncology	215.7	220.3	225.9	+2.5%
Bone and joint diseases	79.4	86.1	93.3	+8.4%
Renal diseases	45.4	41.1	39.3	-4.4%
Others	37.6	32.2	29.9	-7.1%
Tamiflu sales	8.2	13.5	16.9	+25.2%
Ordinary sales	8.2	12.0	11.9	-0.8%
Sales for government stockpiles	0.0	1.5	5.0	+233.3%

Note: Sales of the transplant, immunology and infectious diseases area, which were disclosed separately up until 2016, were disclosed in Others from 2017. Figures for 2015 and 2016 have been restated accordingly.

- Domestic sales (excluding Tamiflu) increased year on year, led by firm sales of mainstay products in the areas of oncology and bone and joint diseases, although the NHI drug price revisions in the previous year had an impact on sales in the first quarter.
- During 2017, we maintained our number-one share of the domestic oncology market (20.2 percent),* as sales of major products such as Alecensa, which has continued strong growth since its launch in 2014, and Rituxan increased steadily.
- In the bone and joint diseases area, Edirol, which has become a top brand in the domestic market for oral therapeutic agents for osteoporosis, drove solid growth, along with other major products including Actemra and Bonviva.

Percentage of Total Sales (Excluding Tamiflu)

(2017)



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Source: JPM 2017. Reprinted with permission. The scope of the market is defined by Chugai.

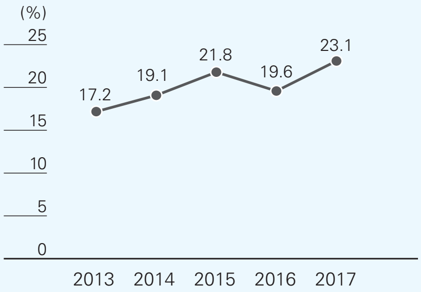
Overseas Sales

(Billions of yen)

	2015	2016	2017	2016/2017 Change
Overseas sales	82.2	79.5	94.0	+18.2%
Actemra (exports to Roche)	62.6	59.1	59.4	+0.5%
Alecensa (exports to Roche)	0.5	3.7	13.9	+275.7%

- Overseas sales increased year on year in 2017. Contributing factors included increased exports of Alecensa to Roche, reflecting strong sales in Europe and the United States. However, sales of Actemra increased only slightly because the increase in sales volume was offset by the negative effect of exchange rates.

Overseas Sales Ratio



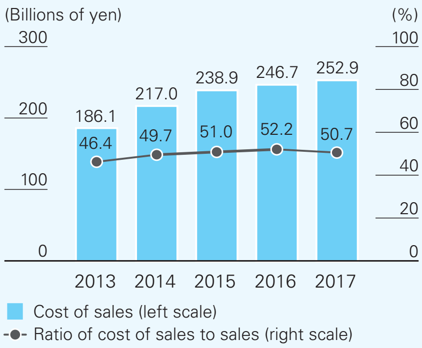
Cost of Sales (Core basis)

(Billions of yen)

	2015	2016	2017	2016/2017 Change
Cost of sales	(238.9)	(246.7)	(252.9)	+2.5%
Ratio of cost of sales to sales	51.0%	52.2%	50.7%	-1.5% pts

- The ratio of cost of sales to sales decreased year on year in 2017, mainly because Chugai products, which have a lower cost-to-sales ratio than products in-licensed from Roche, accounted for a higher percentage of the sales mix.

Cost of Sales/Ratio of Cost of Sales to Sales



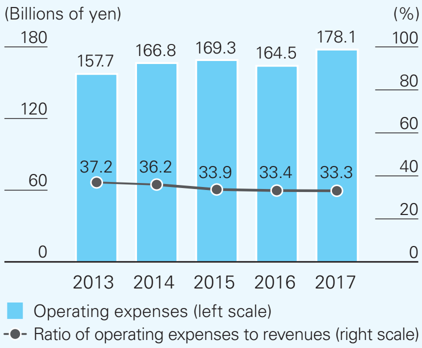
Operating Expenses (Marketing and Distribution Expenses, R&D Expenditures and General and Administration Expenses) (Core Basis)

(Billions of yen)

	2015	2016	2017	2016/2017 Change
Total operating expenses	(169.3)	(164.5)	(178.1)	+8.3%
Marketing and distribution expenses	(74.7)	(69.8)	(72.8)	+4.3%
R&D expenditures	(81.9)	(82.6)	(88.9)	+7.6%
General and administration expenses	(12.8)	(12.1)	(16.3)	+34.7%

- Marketing and distribution expenses increased year on year in 2017 because of an increase in promotional activities and other factors.
- R&D expenditures increased year on year due to factors including increased R&D activities and changes in classification of expenses due to organizational changes.
- General and administration expenses increased year on year due to an increase in expenses including corporate taxes (pro forma standard taxation).

Operating Expenses/ Ratio of Operating Expenses to Revenues



Operating Profit and Net Income (Core Basis)

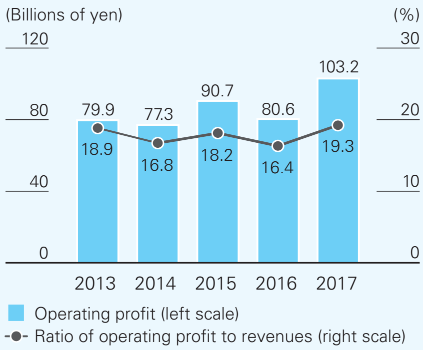
(Billions of yen)

	2015	2016	2017	2016/2017 Change
Operating profit	90.7	80.6	103.2	+28.0%
Ratio of operating profit to revenues	18.2%	16.4%	19.3%	+2.9% pts
Net income	64.9	56.8	76.7	+35.0%
Net income attributable to Chugai shareholders	63.7	56.1	75.9	+35.3%

- Operating profit increased year on year in 2017 because royalties and other operating income increased and cost of sales decreased due to the higher percentage of Chugai products in the sales mix, causing the ratio of operating profit to revenues to increase as well.
- Net income in 2017 increased year on year because the tax rate decreased due to changes in the taxation system.

Note: Chugai filed an Advance Pricing Arrangement covering certain transactions with F. Hoffmann-La Roche Ltd. with Japanese and Swiss tax authorities, but received a notice of agreement in the first quarter of 2017 indicating that the arrangement will decrease taxable income by a certain amount for Chugai and increase it by an equivalent amount for Roche in the fiscal years from 2016 to 2020, and that an additional adjustment will be made in 2021 if necessary. As a result of this agreement, Chugai will transfer a part of the reduction in corporate tax, etc. to Roche in the amount of the estimated tax payable for Roche, in accordance with the license agreement between Chugai and Roche, and recognized a ¥1,706 million adjustment from transfer pricing taxation, including the reduction associated with the estimated amount recorded in the previous year.

Operating Profit/ Ratio of Operating Profit to Revenues

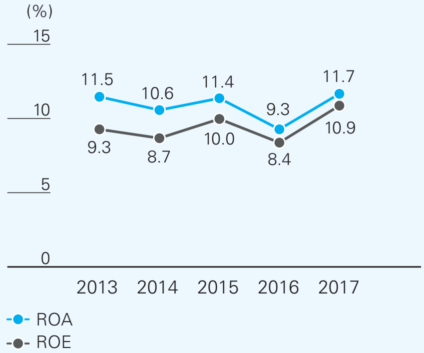


Profitability Indicators (Consolidated)

	2015	2016	2017	2016/2017 Change
Gross profit to revenues (%) (Core)	52.1	49.8	52.7	+2.9% pts
Operating profit to revenues (%) (Core)	18.2	16.4	19.3	+2.9% pts
Ratio of profit before taxes to total assets (ROA[1]) (%) (IFRS)	11.4	9.3	11.7	+2.4% pts
Ratio of net income attributable to Chugai shareholders (ROE[2]) (%) (IFRS)	10.0	8.4	10.9	+2.5% pts

1. ROA = Profit before taxes / Total assets (average of beginning and end of fiscal year)
2. ROE = Net income attributable to Chugai shareholders / Capital and reserves attributable to Chugai shareholders (average of beginning and end of fiscal year)

ROA/ROE



Financial Position

Assets, Liabilities and Net Assets

In conjunction with its decision to apply IFRS from 2013, Chugai has reorganized the consolidated balance sheets and discloses assets and liabilities including net operating assets for use as internal performance indicators (Roche discloses the same indicators). No items have been excluded from the IFRS balance sheet, as the Core basis results concept only applies to the income statement.

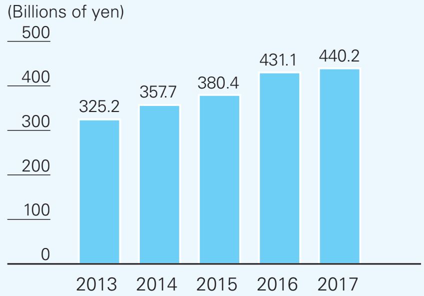
(Billions of yen)

Net Operating Assets (NOA)

	2015	2016	2017	2016/2017 Change
Net working capital	214.6	258.5	250.7	-3.0%
Long-term net operating assets	165.8	172.7	189.5	+9.7%
Net operating assets (NOA)	380.4	431.1	440.2	+2.1%

- Net working capital at December 31, 2017 decreased from a year earlier partly because of the absence of the effect of inventories, which increased in the previous year as Chugai prepared for expansion of global demand.
- Long-term net operating assets increased from a year earlier because of an increase in investments in property, plant and equipment, including the antibody API manufacturing facility UK3 for handling high-mix, low-volume production.
- As a result, net operating assets (NOA) increased from a year earlier due to factors including investments for the future.

Net Operating Assets



Net operating assets are the total of net working capital and long-term net operating assets. Net working capital is composed of accounts receivable, inventories, accounts payable and other payables and receivables. Long-term net operating assets are composed of property, plant and equipment, intangible assets, and other items.

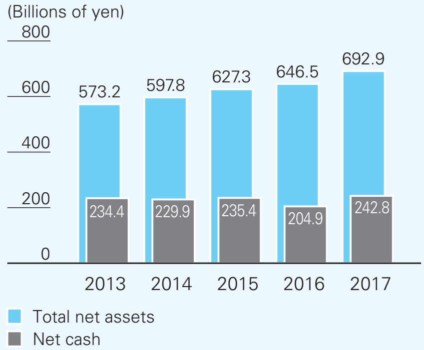
Total Net Assets

(Billions of yen)

	2015	2016	2017	2016/2017 Change
Net operating assets (NOA)	380.4	431.1	440.2	+2.1%
Net cash	235.4	204.9	242.8	+18.5%
Other non-operating assets – net	11.5	10.5	9.9	-5.7%
Total net assets	627.3	646.5	692.9	+7.2%

- Total net assets at December 31, 2017 increased from a year earlier due to factors including construction of the antibody API manufacturing facility UK3 for handling high-mix, low-volume production.
- Despite aggressive investments for future growth, net cash has stayed above ¥200.0 billion for the past five years as Chugai's ability to generate cash has remained high.

Total Net Assets/Net Cash



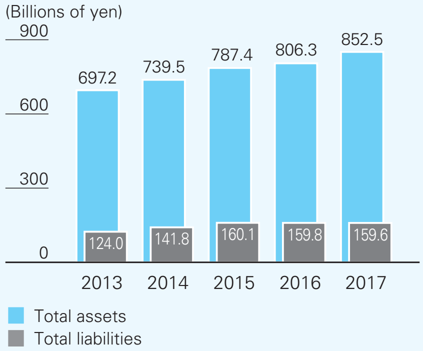
Total Assets and Total Liabilities

(Billions of yen)

	2015	2016	2017	2016/2017 Change
Total assets	787.4	806.3	852.5	+5.7%
Total liabilities	(160.1)	(159.8)	(159.6)	-0.1%

- Looking at the components of total assets, total liabilities and total net assets, total liabilities at December 31, 2017 did not change significantly from a year earlier, and total assets and total net assets increased from a year earlier.

Total Assets/Total Liabilities



Financial Position Indicators

	2015	2016	2017	2016/2017 Change
Ratio of equity attributable to Chugai shareholders (%)	79.5	80.1	81.2	+1.1% pts
Core return on net operating assets (%)	17.1	13.2	17.4	+4.2% pts
Cash conversion cycle (months)	9.4	10.5	9.7	-0.8 months
Net cash turnover period (months)	5.7	5.0	5.5	+0.5 months
Current ratio (%)	426.7	468.0	487.5	+19.5% pts
Debt-to-equity ratio (%)	0.1	0.1	0.0	-0.1% pts

Notes: 1. Ratio of equity attributable to Chugai shareholders = Capital and reserves attributable to Chugai shareholders (fiscal year-end) / Total assets (fiscal year-end)

2. Core return on net operating assets = Core net income / Net operating assets

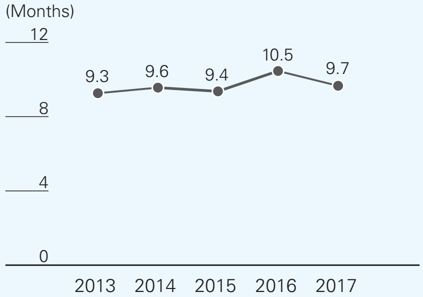
3. Cash conversion cycle = [Trade accounts receivable / Sales + (Inventories – Trade accounts payable) / Cost of sales] x Months passed

4. Net cash turnover period = Net cash / Revenues x Months passed

5. Current ratio = Current assets (fiscal year-end) / Current liabilities (fiscal year-end)

6. Debt-to-equity ratio = Interest-bearing debt (fiscal year-end) / Capital and reserves attributable to Chugai shareholders (fiscal year-end)

Cash Conversion Cycle



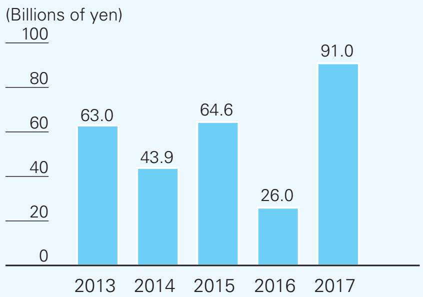
Cash Flows

In conjunction with its decision to apply IFRS from 2013, Chugai has reorganized the consolidated statements of cash flows and uses free cash flows as internal performance indicators (Roche discloses the same indicators). No items have been excluded from cash flows, as the Core basis results concept only applies to the income statement.

(Billions of yen)

	2015	2016	2017	2016/2017 Change
Movement of Free Cash Flows				
Operating profit	86.8	76.9	98.9	+28.6%
Operating profit, net of operating cash adjustment	105.4	98.5	121.0	+22.8%
Operating free cash flow	64.6	26.0	91.0	+250.0%
Free cash flow	37.0	4.3	64.7	+1,405%
Net increase in net cash	5.5	(30.5)	37.9	—
Consolidated Statement of Cash Flows				
Cash flows from operating activities	62.9	38.8	107.6	+177.3%
Cash flows from investing activities	(45.3)	(10.1)	(36.7)	+263.4%
Cash flows from financing activities	(28.5)	(33.4)	(29.6)	-11.4%
Net increase in cash and cash equivalents	(12.3)	(6.3)	43.7	—
Cash and cash equivalents at end of year	101.7	95.4	139.1	+45.8%

Operating Free Cash Flow



Operating free cash flow

- Operating profit, net of operating cash adjustment, totaled ¥121.0 billion after adjustment for items including ¥14.5 billion for depreciation of property, plant and equipment.
- Operating free cash flow, which is calculated by subtracting the increase in net working capital of ¥14.5 billion and expenditures of ¥44.5 billion for the purchase of property, plant and equipment and intangible assets from operating profit, net of operating cash adjustments, amounted to ¥91.0 billion (¥26.0 billion for 2016). Purchases of property, plant and equipment were mainly investments in research and plant equipment.

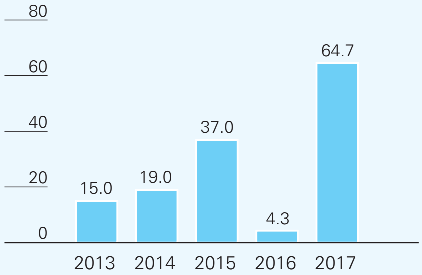
Free cash flow (FCF)

- Free cash flow, which is calculated by subtracting the total of ¥26.2 billion of non-operating cash outflows from financial asset management, settlement for transfer pricing taxation and income taxes paid from operating free cash flow, was ¥64.7 billion (¥4.3 billion for 2016).
- Net cash as of December 31, 2017, after dividends paid and foreign currency translation adjustments, increased ¥37.9 billion compared with the end of the previous fiscal year to ¥242.8 billion.

Note: Chugai formerly stated free cash flow net of dividends paid, but began stating free cash flow before dividends paid from the second quarter of 2016. Chugai changed its presentation of free cash flow to a generally accepted calculation that conforms to the change in the way that Roche defines free cash flow. Free cash flow from 2014 has been restated accordingly. The change has had no effect on operating free cash flow.

Free Cash Flow

(Billions of yen)



Capital Investments

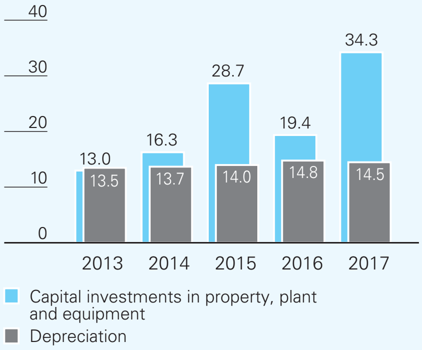
(Billions of yen)

	2015	2016	2017	2016/2017 Change
Investments in property, plant and equipment	28.7	19.4	34.3	+76.8%
Depreciation	14.0	14.8	14.5	-2.0%

- The increase in capital investments in 2017 was largely the result of expenditures to acquire research and plant equipment.
- Chugai plans to make capital investments of ¥79.0 billion during 2018 consisting primarily of new investment in the main facilities below, and expects depreciation to total ¥14.5 billion.

Capital Investments in Property, Plant and Equipment/Depreciation

(Billions of yen)



Major Capital Investments Planned

(Chugai Pharmaceutical Co., Ltd.)

Facilities (Location)	Description	Planned investment (Billions of yen) Total amount	Planned investment (Billions of yen) Investment to date	Fund-raising method	Start of construction	Slated transfer date
—	Purchase of land for business in Totsuka-ku, Yokohama	43.4	4.8	Self-financing	March 2016	December 2018

(Chugai Pharma Manufacturing Co., Ltd.)

Facilities (Location)	Description	Planned investment (Billions of yen) Total amount	Planned investment (Billions of yen) Investment to date	Fund-raising method	Start of construction	Slated completion date
Utsunomiya Plant (Utsunomiya City, Tochigi)	Enhancement of high-mix, low-volume production capability for pre-filled syringe form products (Installation of tray filler)	6.0	5.3	Self-financing	September 2013	October 2018
Ukima Plant (Kita-ku, Tokyo)	Enhancement of high-mix, low-volume production of antibody APIs for initial commercial products (Expansion of production capability with construction of UK3 facility)	37.2	24.3	Self-financing	November 2015	December 2018

Note: Plan concerning enhancement of high-mix, low volume production capability for pre-filled syringe form products (installation of tray filler) was transferred to Chugai Pharma Manufacturing Co., Ltd. in 2015.

Outlook for 2018

Forecast Assumptions

For 2018, Chugai assumes exchange rates of ¥115/CHF, ¥133/EUR, ¥111/USD and ¥84/SGD, and that the scale of seasonal influenza will be about the same as the average since 2012.

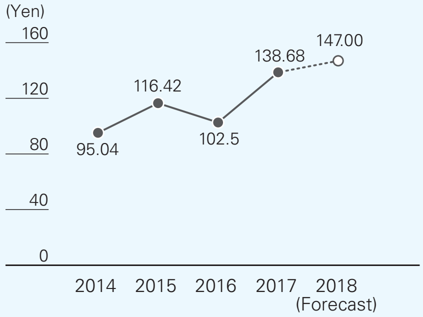
Results Forecast (Core Basis)

(Billions of yen)

	2016	2017	2018 Forecast	2017/2018 Change
Domestic sales (excluding Tamiflu)	379.7	388.4	374.8	-3.5%
Tamiflu sales	13.5	16.9	5.6	-66.9%
Overseas sales	79.5	94.0	118.1	+25.6%
Exports to Roche	62.8	76.4	99.6	+30.4%
Royalties and other operating income	19.1	34.9	43.0	+23.2%
Core operating profit	80.6	103.2	108.0	+4.7%
Core EPS (Yen)	102.50	138.68	147.00	+6.0%

- Domestic sales excluding Tamiflu are forecast to decrease compared with 2017 due to the effect of NHI drug price revisions, including the return of the premium for new drug creation for Herceptin and Rituxan, despite growth in sales of oncology product Alecensa, and growth in the bone and joint diseases area driven by Actemra, Edirol and Bonviva.
- Exports to Roche are expected to increase because of sustained growth in Actemra sales volume and steady growth in exports of Alecensa, which obtained approval for the additional indication of first-line treatment in Europe at the end of 2017. Exports of Hemlibra are forecast to decrease partly because there are few patients with inhibitors, currently the main target patients for this drug, and initial shipments were already made during 2017.
- Royalties and other operating income are forecast to increase substantially because of one-time income in connection with the transfer of long-listed products, in addition to an increase in payments from Roche for co-promotion and royalties for Actemra.
- Regarding cost of sales and operating expenses, although the ratio of cost of sales to sales is forecast to remain virtually unchanged from the previous year, we expect overall operating expenses to increase, mainly due to an increase in R&D expenditures as a result of the progress of development projects.
- Despite the expected negative impact from NHI drug price revisions, we forecast that Core operating profit and Core EPS will increase, mainly as a result of growth in sales of Alecensa, Actemra and other products, as well as income from the transfer of long-listed products.

Core EPS*



* Core EPS = Core net income attributable to Chugai shareholders / Diluted weighted average shares outstanding

Fundamental Profit Distribution Policy and Dividends

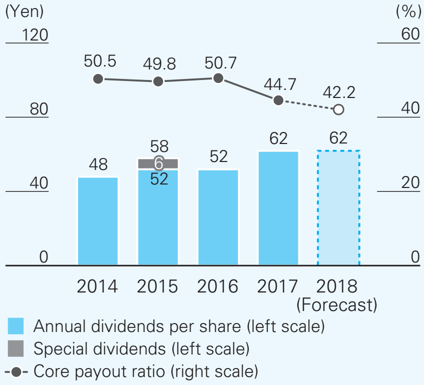
After taking strategic funding needs and the results forecast into account, Chugai aims for a consolidated payout ratio of 50 percent of Core EPS on average to provide for stable allocation of profit to all shareholders. Internal reserves will be used to increase corporate value through investments for further growth in existing strategic areas and to explore future business opportunities.

(Yen)

	2015	2016	2017	2018 Forecast
Basic net income per share (EPS)	112.00	98.12	133.04	—
Core EPS	116.42	102.50	138.68	147.00
Equity per share attributable to Chugai shareholders (BPS)	1,146.17	1,181.67	1,265.46	—
Cash dividends per share	58	52	62	62
Core payout ratio	49.8%	50.7%	44.7%	42.2%

- Cash dividends per share for 2017 totaled ¥62.
- The five-year average Core EPS payout ratio for 2017 was 48.4 percent. (We expect the five-year average Core EPS payout ratio for 2018 to be 47.0 percent.)
- The forecast for cash dividends per share for 2018 includes an interim dividend of ¥31.

Dividends per Share/ Core Payout Ratio



Business Risks

Chugai's corporate performance is subject to material impact from a range of possible future events. Below, we list what we consider the principal sources of risk to the development of our business. We recognize the possibility of these risk events actually occurring, and have prepared policies to forestall such events and take appropriate measures when they do occur.

The categories of risk identified in this section are based on assessments made by Chugai Pharmaceutical as of December 31, 2017.

New Product Research and Development

With the goal of becoming a top pharmaceutical company capable of continuously delivering innovative new drugs, Chugai aggressively pursues research and development in Japan and overseas. Our development pipeline is well stocked, especially in the field of oncology. However, bringing all drug candidates smoothly through to the market from the development stage may not be possible, and we expect to have to abandon development in some cases. When such a situation occurs, there is a possibility of a material impact on Chugai's business performance and financial position, depending on the product under development.

Changes in Product Environments

In recent years, there have been rapid technological advancements in the pharmaceutical industry, and Chugai faces fierce competition from pharmaceutical companies in Japan and overseas. Chugai's business performance and financial position may be materially affected by changes in product environments caused by the sale of competitor products and generics and also by changes in marketing and technology license contracts concluded by Chugai.

Side Effects

Pharmaceutical products are approved by regulatory authorities in each country after stringent screening. However, because of the characteristics of these products, it is difficult to completely prevent side effects from their use even if all possible safety measures are taken. In cases where side effects occur, in particular newly discovered serious side effects, there is a risk of a material impact on Chugai's business performance and financial position.

Medical System Reform

Japan's health insurance system is being reformed against a backdrop of rapid demographic change, with a falling birthrate and an increasing number of elderly people. As part of this process, measures are being taken to curb medical expenses. Revisions have been made to the system of reimbursement of medical fees, and debate is continuing in such areas as NHI drug price reform. Overseas, pressure to reduce drug costs is increasing, especially in advanced countries. Future measures to curb drug costs in these countries could materially affect Chugai's business performance and financial position.

Intellectual Property Rights

Chugai recognizes that it applies intellectual property rights in pursuing its business activities, and takes care to distinguish its own proprietary intellectual property rights and licensing arrangements recognized under law. However, the possibility remains of unintentional infringement on third-party intellectual property rights. Major disputes related to intellectual property rights relating to our business could have a material impact on Chugai's business performance and financial position.

Strategic Alliance with Roche

In line with its strategic alliance with Roche, Chugai is the only pharmaceutical partner of Roche in the Japanese market and has granted Roche first refusal rights with respect to its products in global markets outside Japan, excluding South Korea and Taiwan. Consequently, Chugai has in-licensed and out-licensed many products and projects from and to Roche. Changes in Chugai's strategic alliance with Roche for any reason could have a material impact on its business performance and financial position.

International Business Activities

Chugai actively conducts international operations including overseas marketing and research and development, and export and import of bulk drug products. These international business activities expose Chugai to risks associated with legal and regulatory changes, political instability, economic uncertainty, local labor-management relations, changes in and interpretations of systems of taxation, changes in foreign currency markets, differences in commercial practices and other issues. Compliance and other problems arising from these issues could have a material impact on Chugai's business performance and financial position.

Information Technology Security and Information Control

Chugai makes full use of a wide range of information technology systems in its business activities. Consequently, it is subject to the risk of its operations being disrupted due to system malfunctions, computer viruses or other external factors. In addition, an accident or other incident resulting in the leakage of confidential information could have a material impact on Chugai's business performance and financial position.

Impact from Large-Scale Disasters and Other Contingencies

In the event of natural disasters such as earthquakes or typhoons, or accidents such as fires or other contingencies, damage to Chugai's business sites or sales locations, or those of its business partners, could interrupt its operations. In addition, Chugai could incur significant expenses for the repair of damaged buildings and facilities. Such circumstances could therefore have a material impact on Chugai's business performance and financial position.

Litigation

There is a possibility that litigation may be brought against Chugai over side effects of pharmaceuticals, product liability, labor issues, fair trade or other issues associated with its business activities, which could have a material impact on Chugai's business performance and financial position.

Environmental Issues

In addition to complying with laws and regulations related to environmental issues, Chugai has established a set of even higher voluntary standards and has been making efforts to achieve them. In the course of Chugai's business activities, violations of relevant laws or regulations may occur as a result of an accident or other incident. Any related expenses could have a material impact on Chugai's business performance and financial position.

Consolidated Financial Statements

1. Consolidated income statement and consolidated statement of comprehensive income

(1) Consolidated income statement in millions of yen

	Year ended December 31	
	2017	2016
Revenues	**534,199**	**491,780**
Sales (Note 2)	499,308	472,673
Royalties and other operating income (Note 2)	34,891	19,108
Cost of sales	(254,171)	(247,944)
Gross profit	**280,028**	**243,836**
Marketing and distribution	(72,800)	(69,770)
Research and development	(92,947)	(85,011)
General and administration	(15,347)	(12,171)
Operating profit	**98,934**	**76,884**
Financing costs (Note 3)	(110)	(86)
Other financial income (expense) (Note 3)	(87)	1,111
Other expense (Note 4)	(1,706)	(3,460)
Profit before taxes	**97,031**	**74,448**
Income taxes (Note 5)	(23,490)	(20,076)
Net income	**73,541**	**54,372**
Attributable to:		
Chugai shareholders (Note 20)	72,713	53,592
Non-controlling interests (Note 21)	827	780
Earnings per share (Note 25)		
Basic (yen)	133.04	98.12
Diluted (yen)	132.83	97.97

(2) Consolidated statement of comprehensive income in millions of yen

	Year ended December 31	
	2017	2016
Net income recognized in income statement	**73,541**	**54,372**
Other comprehensive income		
Remeasurements of defined benefit plans (Notes 5 and 20)	916	(3,472)
Items that will not be reclassified to the income statement	**916**	**(3,472)**
Available-for-sale investments (Notes 5 and 20)	1,204	(1,735)
Cash flow hedges (Notes 5 and 20)	(3,293)	5,204
Currency translation of foreign operations (Notes 5 and 20)	3,713	(3,296)
Items that may be reclassified subsequently to the income statement	**1,624**	**173**
Other comprehensive income, net of tax (Note 5)	**2,540**	**(3,300)**
Total comprehensive income	**76,081**	**51,073**
Attributable to:		
Chugai shareholders (Note 20)	75,154	50,393
Non-controlling interests (Note 21)	927	680

2. **Consolidated balance sheet** in millions of yen

	December 31, 2017	December 31, 2016
Assets		
Non-current assets:		
Property, plant and equipment (Note 6)	171,569	157,081
Intangible assets (Note 7)	21,078	19,299
Financial non-current assets (Note 8)	11,350	9,706
Deferred tax assets (Note 5)	34,501	27,474
Other non-current assets (Note 9)	14,836	13,965
Total non-current assets	**253,333**	**227,525**
Current assets:		
Inventories (Note 10)	169,056	185,440
Accounts receivable (Note 11)	174,284	167,482
Current income tax assets (Note 5)	717	1
Marketable securities (Note 12)	104,018	110,176
Cash and cash equivalents (Note 13)	139,074	95,368
Other current assets (Note 14)	11,990	20,293
Total current assets	**599,141**	**578,760**
Total assets	**852,473**	**806,285**
Liabilities		
Non-current liabilities:		
Long-term debt (Note 15)	(207)	(510)
Deferred tax liabilities (Note 5)	(9,211)	(9,146)
Defined benefit plan liabilities (Note 23)	(9,292)	(8,790)
Long-term provisions (Note 16)	(2,041)	(2,140)
Other non-current liabilities (Note 17)	(15,923)	(15,543)
Total non-current liabilities	**(36,674)**	**(36,128)**
Current liabilities:		
Short-term debt (Note 15)	(129)	(135)
Current income tax liabilities (Note 5)	(18,541)	(10,533)
Short-term provisions (Note 16)	(79)	(76)
Accounts payable (Note 18)	(63,518)	(72,346)
Other current liabilities (Note 19)	(40,635)	(40,570)
Total current liabilities	**(122,902)**	**(123,660)**
Total liabilities	**(159,576)**	**(159,788)**
Total net assets	**692,897**	**646,497**
Equity:		
Capital and reserves attributable to Chugai shareholders (Note 20)	691,924	645,508
Equity attributable to non-controlling interests (Note 21)	973	989
Total equity	**692,897**	**646,497**

3. **Consolidated statement of cash flows** in millions of yen

	Year ended December 31	
	2017	2016
Cash flows from operating activities		
Cash generated from operations (Note 26)	124,776	102,797
(Increase) decrease in working capital	14,465	(36,159)
Payments made for defined benefit plans	(2,483)	(2,381)
Utilization of provisions (Note 16)	(34)	(77)
Other operating cash flows	(6,447)	(54)
Cash flows from operating activities, before income taxes paid	**130,278**	**64,127**
Income taxes paid	(22,655)	(25,339)
Total cash flows from operating activities	**107,623**	**38,787**
Cash flows from investing activities		
Purchase of property, plant and equipment	(32,881)	(30,084)
Purchase of intangible assets	(11,645)	(6,247)
Disposal of property, plant and equipment	64	(91)
Disposal of intangible assets	452	-
Interest and dividends received (Note 26)	271	301
Purchases of marketable securities	(208,480)	(208,686)
Sales of marketable securities	215,510	232,018
Sales of investment securities	-	2,679
Other investing cash flows	(8)	4
Total cash flows from investing activities	**(36,718)**	**(10,107)**
Cash flows from financing activities		
Interest paid	(5)	(8)
Dividends paid to Chugai shareholders	(30,054)	(31,677)
Dividends paid to non-controlling shareholders	(944)	(1,105)
Exercise of equity compensation plans (Note 24)	922	506
(Increase) decrease in own equity instruments	(20)	(7)
Other financing cash flows	538	(1,124)
Total cash flows from financing activities	**(29,563)**	**(33,415)**
Net effect of currency translation on cash and cash equivalents	2,363	(1,604)
Increase (decrease) in cash and cash equivalents	**43,706**	**(6,338)**
Cash and cash equivalents at January 1	95,368	101,707
Cash and cash equivalents at December 31 (Note 13)	**139,074**	**95,368**

4. **Consolidated statement of changes in equity** in millions of yen

	Attributable to Chugai shareholders						
	Share capital	Capital surplus	Retained earnings	Other reserves	Subtotal	Non-controlling interests	Total equity
Year ended December 31, 2016							
At January 1, 2016	**72,967**	**62,567**	**488,954**	**1,369**	**625,857**	**1,414**	**627,271**
Net income recognized in income statement	-	-	53,592	-	53,592	780	54,372
Available-for-sale investments (Notes 5 and 20)	-	-	-	(1,735)	(1,735)	-	(1,735)
Cash flow hedges (Notes 5 and 20)	-	-	-	5,204	5,204	-	5,204
Currency translation of foreign operations (Notes 5, 20 and 21)	-	-	-	(3,195)	(3,195)	(101)	(3,296)
Remeasurements of defined benefit plans (Notes 5 and 20)	-	-	(3,472)	-	(3,472)	-	(3,472)
Total comprehensive income	**-**	**-**	**50,119**	**273**	**50,393**	**680**	**51,073**
Dividends (Notes 20 and 21)	-	-	(31,675)	-	(31,675)	(1,105)	(32,780)
Equity compensation plans (Note 20)	-	276	-	-	276	-	276
Own equity instruments (Note 20)	-	657	-	-	657	-	657
At December 31, 2016	**72,967**	**63,500**	**507,399**	**1,642**	**645,508**	**989**	**646,497**
Year ended December 31, 2017							
At January 1, 2017	**72,967**	**63,500**	**507,399**	**1,642**	**645,508**	**989**	**646,497**
Net income recognized in income statement	-	-	72,713	-	72,713	827	73,541
Available-for-sale investments (Notes 5 and 20)	-	-	-	1,204	1,204	-	1,204
Cash flow hedges (Notes 5 and 20)	-	-	-	(3,293)	(3,293)	-	(3,293)
Currency translation of foreign operations (Notes 5, 20 and 21)	-	-	-	3,613	3,613	100	3,713
Remeasurements of defined benefit plans (Notes 5 and 20)	-	-	916	-	916	-	916
Total comprehensive income	-	-	**73,630**	**1,524**	**75,154**	**927**	**76,081**
Dividends (Notes 20 and 21)	-	-	(30,055)	-	(30,055)	(944)	(30,998)
Equity compensation plans (Note 20)	3	102	-	-	105	-	105
Own equity instruments (Note 20)	-	1,213	-	-	1,213	-	1,213
At December 31, 2017	**72,970**	**64,815**	**550,974**	**3,166**	**691,924**	**973**	**692,897**

Notes to Consolidated Financial Statements

1. General accounting principles and significant accounting policies

(1) Basis of preparation of the consolidated financial statements
These financial statements are the annual consolidated financial statements of Chugai Pharmaceutical Co., Ltd., ("Chugai") a company registered in Japan, and its subsidiaries ("the Group"). The common stock of Chugai is publicly traded and is listed on the Tokyo Stock Exchange under the stock code "TSE: 4519". The consolidated financial statements were approved by Osamu Nagayama, representative director, Chairman of the Board & CEO, and Yoshio Itaya, Board Director & CFO on March 21, 2018.

Roche Holding Ltd. is a public company registered in Switzerland and the parent company of the Roche Group, which discloses its results in accordance with International Financial Reporting Standards ("IFRS"). The shareholding percentage of Roche Holding Ltd. in Chugai is 59.89% (61.30% of the total number of shares issued excluding treasury stock). The Group became a principal member of the Roche Group after entering into a strategic alliance in October 2002.

The Group meets all of the requirements for a "Specified Company under Designated International Financial Reporting Standards" as stipulated under Article 1-2 of the "Regulations Concerning Terminology, Forms, and Preparation Methods of Consolidated Financial Statements" (Ministry of Finance of Japan Regulation No. 28, 1976). Hence, in accordance with Article 93 of the Regulation, the Consolidated Financial Statements have been prepared in accordance with IFRS.

The consolidated financial statements are presented in Japanese yen, which is Chugai's functional currency and amounts are rounded to the nearest ¥1 million. As a result, the totals shown in the consolidated financial statements do not necessarily agree with the sum of the individual amounts. They have been prepared using the historical cost convention except for items that are required to be accounted for at fair value.

(2) Key accounting judgments, estimates and assumptions
The preparation of the consolidated financial statements requires management to make judgments, estimates and assumptions that affect the reported amounts of revenues, expenses, assets, liabilities and contingent amounts. Actual outcomes could differ from those management estimates. The estimates and underlying assumptions are reviewed on an ongoing basis and are based on historical experience and various other factors. Revisions to estimates are recognized in the period in which the estimate is revised. The following are considered to be the key accounting judgments, estimates and assumptions made and are believed to be appropriate based upon currently available information.

Revenues. Revenues are only recognized when, in management's judgment, the significant risks and rewards of ownership have been transferred and when the Group does not retain continuing managerial involvement or effective control over the goods sold or when the obligation has been fulfilled. The Group is party to out-licensing agreements which involve upfront and milestone payments occurring over several years and which may also involve certain future obligations. Therefore, for some transactions this can result in cash receipts being initially recognized as deferred income and then released to income over subsequent periods on the basis of the performance of the conditions specified in the agreement.

Sales allowances. The Group makes accruals for expected sales rebates, which are estimated based on analyses of existing contractual or legislatively-mandated obligations, historical trends and the Group's experience. As these deductions are based on management estimates, they may be subject to change as better information becomes available. Such changes that arise could impact the accruals recognized in the balance sheet in future periods and consequently the level of sales recognized in the income statement in future periods.

Impairment. Intangible assets not yet available for use are reviewed annually for impairment. Property, plant and equipment and intangible assets in use are assessed for impairment when there is a triggering event that provides evidence that an asset may be impaired. To assess whether any impairment exists estimates of expected future cash flows are used. Actual outcomes could vary significantly from such estimates of discounted future cash flows. Factors such as changes in discount rates, the planned use of buildings, machinery or equipment, closure of facilities, the presence or absence of competition, technical obsolescence and lower than anticipated product sales could lead to shorter useful lives or impairment.

Post-employment benefits. The Group operates defined benefit plans and the fair value of the recognized plan assets and liabilities are based upon statistical and actuarial calculations. The measurement of the net defined benefit obligation is particularly sensitive to changes in the discount rate and expected mortality. The actuarial assumptions used may differ materially from actual results due to changes in market and economic conditions, longer or shorter life spans of participants, and other changes in the factors being assessed. These differences could impact on the assets or liabilities recognized in the balance sheet in future periods.

Legal. The Group provides for anticipated legal settlement costs when there is a probable outflow of resources that can be reasonably estimated. These estimates consider the specific circumstances of each legal case and relevant legal advice, and are inherently judgmental due to the highly complex nature of legal cases. The estimates could change substantially over time as new facts emerge and each legal case progresses. Where no reliable estimate can be made, no provision is recorded and contingent liabilities are disclosed where material.

Environmental. The Group provides for anticipated environmental remediation costs when there is a probable outflow of resources that can be reasonably estimated. Environmental provisions consist primarily of costs to fully clean and refurbish contaminated sites, including landfills, and to treat and contain contamination at certain other sites. These estimates are inherently judgmental due to uncertainties related to the detection of previously unknown contaminated sites, the method and extent of remediation, the percentage of the problematic materials attributable to the Group at the remediation sites, and the financial capabilities of the other potentially responsible parties. The estimates could change substantially over time as new facts emerge and each environmental remediation progresses.

Income taxes. Significant estimates are required to determine the current and deferred tax assets and liabilities. Some of these estimates are based on interpretations of existing tax laws or regulations. Factors that may impact on current and deferred taxes include changes in tax laws, regulations or rates, changing interpretations of existing tax laws or regulations, future levels of research and development spending and changes in pre-tax earnings.

Leases. The treatment of leasing transactions is mainly determined by whether the lease is considered to be an operating or finance lease. In making this assessment, management looks at the substance of the lease, as well as the legal form, and makes a judgment about whether substantially all of the risks and rewards of ownership are transferred. Arrangements which do not take the legal form of a lease but that nevertheless convey the right to use an asset are also covered by such assessments.

(3) Significant accounting policies

Consolidation policy

Subsidiaries are all companies over which the Group has control. Chugai controls an entity when the Group is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. Companies acquired during the year are consolidated from the date on which control is transferred to the Group, and subsidiaries to be divested are included up to the date on which control passes from the Group. Inter-company balances, transactions and resulting unrealized income are eliminated in full. Changes in ownership interests in subsidiaries are accounted for as equity transactions if they occur after control has already been obtained and if they do not result in a loss of control. Associates are companies over which the Group exercises, or has the power to exercise, significant influence, but which it does not control and they are accounted for using the equity method.

Foreign currency translation

Most foreign subsidiaries of the Group use their local currency as their functional currency. Certain foreign subsidiaries use other currencies (such as the euro) as their functional currency where this is the currency of the primary economic environment in which the entity operates. Local transactions in other currencies are initially reported using the exchange rate at the date of the transaction. Gains and losses from the settlement of such transactions and gains and losses on translation of monetary assets and liabilities denominated in other currencies are included in income, except when they are qualifying cash flow hedges. In such cases the gains and losses are deferred into other comprehensive income.

Upon consolidation, assets and liabilities of foreign subsidiaries using functional currencies other than the Japanese yen are translated into Japanese yen using year-end rates of exchange. The income statement and statement of cash flows are translated at the average rates of exchange for the year. Translation differences due to the changes in exchange rates between the beginning and the end of the year and the difference between net income translated at the average and year-end exchange rates are taken directly to other comprehensive income.

Revenue recognition

Sales represent amounts received and receivable for goods supplied to customers after deducting trade discounts, cash discounts and volume rebates, and exclude consumption taxes and other taxes directly linked to sales.

Revenues from the sale of products are recognized upon transfer to the customer of significant risks and rewards. Trade discounts, cash discounts and volume rebates are recorded on an accrual basis consistent with the recognition of the related sales. Sales returns, charge-backs and other rebates are also deducted from sales and recorded as accrued liabilities or as a deduction from accounts receivable.

Royalties and other operating income are recorded as earned or as the services are performed. Single transactions are split into separately identifiable components to reflect the substance of the transaction, where necessary. Conversely, two or more transactions may be considered together for revenue recognition purposes, where the commercial effect cannot be understood without reference to the series of transactions as a whole.

Cost of sales

Cost of sales includes the corresponding direct production costs and related production overheads of goods sold and services rendered. Royalties, alliance and collaboration expenses, including all collaboration profit-sharing arrangements are also reported as part of cost of sales. Start-up costs between validation and the achievement of normal production capacity are expensed as incurred.

Research and development

Internal research and development activities are expensed as incurred for the following:

- Internal research costs incurred for the purpose of gaining new scientific or technical knowledge and understanding.
- Internal development costs incurred for the application of research findings or other knowledge to plan and develop new products for commercial production. The development projects undertaken by the Group are subject to technical, regulatory and other uncertainties, such that, in the opinion of management, the criteria for capitalization as intangible assets are not met prior to obtaining marketing approval by the regulatory authorities in major markets.
- Post-marketing studies after regulatory approval, such as phase IV costs in the pharmaceuticals business, generally involve safety surveillance and on-going technical support of a drug after it receives marketing approval to be sold. They may be required by regulatory authorities or may be undertaken for safety or commercial reasons. The costs of such post-marketing studies are not capitalized as intangible assets, as in the opinion of management, they do not generate separately identifiable incremental future economic benefits that can be reliably measured.

Acquired in-process research and development resources obtained through in-licensing arrangements, business combinations or separate asset purchases are capitalized as intangible assets. The acquired asset must be controlled by the Group, be separately identifiable and expected to generate future economic benefits, even if uncertainty exists as to whether the research and development will ultimately result in a marketable product. Consequently, upfront and milestone payments to third parties for pharmaceutical products or compounds before regulatory marketing approval are recognized as intangible assets. Assets acquired through such arrangements are measured on the basis set out in the “Intangible assets” policy. Subsequent internal research and development costs incurred post-acquisition are treated in the same way as other internal research and development costs. If research and development are embedded in contracts for strategic alliances, the Group carefully assesses whether upfront or milestone payments constitute funding of research and development work or acquisition of an asset.

Licensing, milestone, and other upfront receipts

Royalty income is recognized on an accrual basis in accordance with the substance of the respective licensing agreements. If the collectability of a royalty amount is not reasonably assured, those royalties are recognized as revenues when the cash is received. The Group receives upfront, milestone and other similar payments from third parties relating to the sale or licensing of products or technology. Revenues associated with performance milestones are recognized based on achievement of the deliverables as defined in the respective agreements. Upfront payments and license fees for which there are subsequent deliverables are initially reported as deferred income and are recognized in income as earned over the period of the development collaboration or the manufacturing obligation.

Employee benefits
Short-term employee benefits include wages, salaries, social security contributions, paid annual leave and sick leave, profit sharing and bonuses, and non-monetary benefits for current employees. The costs are recognized within the operating results when the employee has rendered the associated service. The Group recognizes a liability for profit sharing and bonuses where contractually obliged or where there is a past practice that has created a constructive obligation.

Termination benefits are payable when employment is terminated by the Group before the normal retirement date, or whenever an employee accepts voluntary redundancy in exchange for these benefits. Termination costs are recognized at the earlier of when the Group can no longer withdraw the offer of the benefits or when the Group recognizes any related restructuring costs.

Post-employment benefits
For defined contribution plans, the Group contributions are recognized within the operating results when the employee has rendered the associated service.

For defined benefit plans the liability or asset recognized in the balance sheet is net amount of the present value of the defined benefit obligation and the fair value of the plan assets. All changes in the net defined benefit liability (asset) are recognized as they occur as follows:

Recognized in the income statement:
- Current service costs are charged to the appropriate income statement heading within the operating results.
- Past service costs, including curtailment gains or losses, are recognized immediately in general and administration within the operating results.
- Settlement gains or losses are recognized in general and administration within the operating results.
- Net interest on the net defined benefit liability (asset) is recognized in financing costs.

Recognized in other comprehensive income:
- Actuarial gains and losses arising from experience adjustments (the difference between previous assumptions and what has actually occurred) and changes in actuarial assumptions.
- The return on plan assets, excluding amounts included in net interest on the net defined benefit liability (asset).

Net interest on the net defined benefit liability (asset) comprises interest income on plan assets and interest costs on the defined benefit obligation. The net interest is calculated using the same discount rate that is used in calculating the defined benefit obligation, applied to the net defined benefit liability (asset) at the start of the period, taking account of any changes from contribution or benefit payments.

Pension assets and liabilities in different defined benefit plans are not offset unless the Group has a legally enforceable right to use the surplus in one plan to settle obligations in the other plan.

Equity compensation plans
The fair value of all equity compensation awards, including restricted stocks, granted to directors and certain employees is estimated at the grant date and recorded as an expense over the vesting period. The expense is charged to the appropriate income statement heading within the operating results. For equity-settled plans, an increase in equity is recorded for this expense and any subsequent cash flows from exercises of vested awards are recorded as changes in equity.

Property, plant and equipment
Property, plant and equipment are initially recorded at cost of purchase or construction, and include all costs directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management. These include items such as costs of site preparation, installation and assembly costs and professional fees. The net costs of testing whether the asset is functioning properly, including validation costs, are also included in the initially recorded cost of construction. Property, plant and equipment are depreciated on a straight-line basis, except for land, which is not depreciated. The estimated useful lives of major classes of depreciable assets are as follows:
- Land improvements: 40 years
- Buildings: 10-50 years
- Machinery and equipment: 3-15 years

Where parts of an item of property, plant and equipment have different useful lives, they are accounted for as separate components. The estimated useful lives of the assets are regularly reviewed, and, if necessary, the future depreciation charges are accelerated. Repairs and maintenance costs are expensed as incurred.

Leases
Where the Group is the lessee, finance leases exist when substantially all of the risks and rewards of ownership of leased assets are transferred to the Group. Finance lease assets are capitalized at the start of the lease at fair value, or the present value of the minimum lease payments, if lower. The rental obligation, net of finance charges, is reported within debt. Finance lease assets are depreciated over the shorter of the lease term and its useful life. The interest element of the lease payment is charged against income over the lease term based on the effective interest rate method. Operating leases exist when substantially all of the risks and rewards of ownership are not transferred to the Group. Payments made under operating leases are charged against income on a straight-line basis over the period of the lease.

Intangible assets
Purchased patents, trademarks, licenses and other intangible assets are initially recorded at cost. Assets that have been acquired through a business combination are initially recorded at fair value. Once available for use, intangible assets are amortized on a straight-line basis over their useful lives. The estimated useful life is the lower of the legal duration and the economic useful life. The estimated useful lives of intangible assets are regularly reviewed. Estimated useful lives of major classes of amortizable intangible assets are as follows:
- Product intangibles in use: 5-17 years
- Marketing intangibles in use: 5 years
- Technology intangibles in use: 3-8 years

Impairment of property, plant and equipment and intangible assets
An impairment assessment is carried out at each reporting date when there is evidence that an item of property, plant and equipment or intangible asset in use may be impaired. In addition intangible assets that are not yet available for use are tested for impairment annually. When the recoverable amount of an asset, being the higher of its fair value less costs to sell and its value in use, is less than its carrying value, then the carrying value is reduced to its recoverable amount. This reduction is reported in the income statement as an impairment loss. Value in use is calculated using estimated cash flows. These are discounted using an appropriate long-term interest rate. When an impairment loss arises, the useful life of the asset is reviewed and, if necessary, the future depreciation/amortization charge is accelerated. If the amount of impairment loss subsequently decreases and the decrease can be related objectively to an event occurring after the impairment was recognized, then the previously recognized impairment loss is reversed through the income statement as an impairment reversal.

Inventories
Inventories are stated at the lower of cost and net realizable value. The cost of finished goods and work in process includes raw materials, direct labor and other directly attributable costs and overheads based upon the normal capacity of production facilities. Cost is determined using the weighted average method. Net realizable value is the estimated selling price less cost to completion and selling expenses.

Accounts receivable
Accounts receivable are carried at the original invoice amount less allowances made for doubtful accounts, trade discounts, cash discounts, volume rebates and similar allowances. An allowance for doubtful accounts is recorded where there is objective evidence that the Group will not be able to collect all amounts due. These estimates are based on specific indicators, such as the aging of customer balances, specific credit circumstances and the Group's historical experience, taking also into account economic conditions. Expenses for doubtful trade receivables are recognized within marketing and distribution expenses. Trade discounts, cash discounts, volume rebates and similar allowances are recorded on an accrual basis consistent with the recognition of the related sales, using estimates based on existing contractual obligations, historical trends and the Group's experience.

Cash and cash equivalents
Cash and cash equivalents include cash on hand and time, call and current balances with banks and similar institutions. Such balances are only reported as cash equivalents if they are readily convertible to known amounts of cash, are subject to insignificant risk of changes in their fair value and have a maturity of three months or less from the date of acquisition.

Provisions and contingencies
Provisions are recognized where a legal or constructive obligation has been incurred which will probably lead to an outflow of resources that can be reliably estimated. In particular, restructuring provisions are recognized when the Group has a detailed formal plan that has either commenced implementation or has been announced. Provisions are recorded for the estimated ultimate liability that is expected to arise and are discounted when the time value of money is material. A contingent liability is disclosed where the existence of the obligation will only be confirmed by future events or where the amount of the obligation cannot be measured with reasonable reliability. Contingent assets are not recognized, but are disclosed where an inflow of economic benefits is probable.

Fair values
Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. It is determined by reference to quoted market prices or by the use of established valuation techniques such as option pricing models and the discounted cash flow method if quoted prices in an active market are not available.

Financial instruments
Financial instruments are classified into the following categories:

Available-for-sale. These are non-derivative financial assets that are either designated as such or are not classified in any other financial asset category. Available-for-sale financial assets are initially recorded and subsequently carried at fair value. Changes in fair value are recorded in other comprehensive income, except for impairments, interest and foreign exchange components. When an investment is derecognized the cumulative gains and losses in equity are reclassified to other financial income (expense). Available-for-sale assets are mainly comprised of marketable securities and financial non-current assets.

Fair value – hedging instruments. These are derivative financial instruments that are used to manage the exposures to foreign currency risk. Derivative financial instruments are initially recorded and subsequently carried at fair value. Apart from those derivatives designated as qualifying cash flow hedging instruments, all changes in fair value are recorded as other financial income (expense).

Fair value – designated. These are non-derivative financial instruments that are designated as fair value through profit or loss on initial recognition. Designated fair value instruments are initially recorded and subsequently carried at fair value. Changes in fair value are recorded in the income statement. Designated fair value instruments mainly comprise of financial assets held for trading.

Loans and receivables. These are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. Loans and receivables are initially recorded at fair value and subsequently carried at amortized cost using the effective interest rate method, less any impairment losses. Loans and receivables are mainly comprised of accounts receivable, cash and cash equivalents and a part of financial non-current assets.

Other financial liabilities. These are non-derivative financial liabilities. Other financial liabilities are initially recorded at fair value and subsequently carried at amortized cost using the effective interest rate method. Other financial liabilities are mainly comprised of accounts payable and debt.

Derecognition of financial instruments
A financial asset is derecognized when the contractual cash flows from the asset expire or when the Group transfers the rights to receive the contractual cash flows from the financial assets in a transaction in which substantially all the risks and rewards of ownership of the financial asset are transferred. A financial liability is derecognized when the contractual obligations are discharged, cancelled or expire.

Impairment of financial assets
Financial assets are individually assessed for possible impairment at each reporting date. An impairment charge is recorded where there is objective evidence of impairment, such as where the issuer is in bankruptcy, default or other significant financial difficulty. Available-for-sale equity securities that have a market value of more than 25% below their original cost, or have a market value below their original cost for a sustained six-month period will be considered as impaired.

For financial assets carried at amortized cost, any impairment charge is the difference between the carrying value and the recoverable amount, calculated using estimated future cash flows discounted using the original effective interest rate. For available-for-sale financial assets, any impairment charge is the amount currently carried in other comprehensive income for the difference between the original cost, net of any previous impairment, and the fair value.

An impairment loss is reversed if the reversal can be related objectively to an event occurring after the impairment loss was recognized. For equity securities held as available-for-sale, the reversal is recognized directly in other comprehensive income. For debt securities measured at amortized cost or available-for-sale, the reversal is recognized in other financial income (expense).

Hedge accounting
The Group uses derivatives to manage its exposures to foreign currency risk. The instruments used may include forwards contracts and options. The Group generally limits the use of hedge accounting to certain significant transactions. To qualify for hedge accounting the hedging relationship must meet several strict conditions on documentation, probability of occurrence, hedge effectiveness and reliability of measurement. While many of these transactions can be considered as hedges in economic terms, if the required conditions are not met, then the relationship does not qualify for hedge accounting. In this case the hedging instrument and the hedged item are reported independently as if there were no hedging relationship, which means that any derivatives are reported at fair value, with changes in fair value included in other financial income (expense).

Cash flow hedge. Is a hedge of the exposure to variability in cash flows that is attributable to a particular risk associated with a recognized asset or liability or a highly probable forecast transaction and could affect profit or loss. The hedging instrument is recorded at fair value. The effective portion of the hedge is included in other comprehensive income and any ineffective portion is reported in other financial income (expense). If the hedging relationship is the hedge of the foreign currency risk of a firm commitment or highly probable forecasted transaction that results in the recognition of a non-financial item, the cumulative changes in the fair value of the hedging instrument that have been recorded in other comprehensive income are included in the initial carrying value of the non-financial item at the date of recognition, and if it is the other forecasted transaction, have been recorded the profit or loss as well as the term when hedged item affect profit or loss. For other hedged forecasted cash flow, the cumulative changes in the fair value of the hedging instrument that have been recorded in other comprehensive income are included in other financial income (expense) when the forecasted transaction affects net income.

Fair value hedge. Is a hedge of the exposure to changes in fair value of a recognized asset or liability, or an unrecognized firm commitment, or an identified portion of such an asset, liability or firm commitment, that is attributable to a particular risk and could affect profit or loss. The hedging instrument is recorded at fair value and the hedged item is recorded at its previous carrying value, adjusted for any changes in fair value that are attributable to the hedged risk. Changes in the fair values are reported in other financial income (expense).

Taxation
Income taxes include all taxes based upon the taxable profits of the Group. Other taxes not based on income, such as property and capital taxes, are included in the appropriate heading within the operating results.

Liabilities for income taxes, which could arise on the remittance of retained earnings, principally relating to subsidiaries, are only recognized where it is probable that such earnings will be remitted in the foreseeable future.

Deferred tax assets and liabilities are recognized on temporary differences between the tax bases of assets and liabilities and their carrying values. Deferred tax assets are recognized to the extent that it is probable that future taxable profit will be available against which the unused tax losses can be utilized.

Current and deferred tax assets and liabilities are offset when the income taxes are levied by the same taxation authority and when there is a legally enforceable right to offset them. Deferred taxes are determined based on the currently enacted tax rates applicable in each tax jurisdiction where the Group operates.

Own equity instruments
The Group's holdings in its own equity instruments are recorded as a deduction from equity. The original purchase cost, consideration received for subsequent resale of these equity instruments and other movements are reported as changes in equity. The exercise of stock acquisition rights granted to directors and certain employees will result in the allotment from own equity instruments.

(4) Changes in accounting policies
The accounting policies applied by the Group for the consolidated financial statements for the year ended December 31, 2017 are the same as for the previous fiscal year

There were minor amendments to some existing, which do not materially impact the Group's performance or financial status.

(5) Future new and revised standards

By the date of approval of the consolidated financial statements, the following main new standards have been issued by the International Accounting Standards Board (IASB) and have not yet been implemented by the Group.

	IFRS	Mandatory adoption (from the year beginning)	Plan to be implemented by the Group	Description of new and revised standards
IFRS 15	Revenue from Contracts with Customers	January 1, 2018	FY ending Dec. 2018	Revision of accounting relating to revenue recognition
IFRS 9	Financial Instruments	January 1, 2018	FY ending Dec. 2018	Classification, measurement and recognition of financial instruments and revision of hedge accounting
IFRS 16	Leases	January 1, 2019	FY ending Dec. 2019	Revision of accounting relating to recognition of leases

1) Standards that will be effective from January 1, 2018

IFRS 9 Financial Instruments

IFRS 9 sets out standards regarding classification, measurement and recognition of financial instruments, and hedge accounting. The application of this standard will not have a material impact on the Group's performance or financial position.

IFRS 15 Revenue from Contracts with Customers

IFRS 15 sets out standards on accounting for revenue recognition and, with respect to the impact on the Group's performance and financial position, its application will result in a change of accounting for upfront payment the Group receives from an out-licensing contract. With the application of this standard, upfront payment received, which was formerly recognized over time as deferred income, will be recognized as one-time income on out-licensing. In applying this standard, the Group will adopt a method that recognizes the cumulative effect at the date of initial application, which is permitted as a transitional measure.

The main impact of applying this method on the Group's performance and financial position therefore will be that the deferred income of ¥10.6 billion, after tax effect, posted on the consolidated balance sheet for the year ended December 31, 2017 will be presented as the beginning balance of retained earnings at January 1, 2018.

The impact of the change of accounting on the consolidated income statement and consolidated statement of comprehensive income is uncertain since the total amount of upfront payment the Group will receive in 2018 cannot be reasonably estimated at the time of preparing this document.

There will be no impact on the consolidated statement of cash flows with the change of accounting relating to upfront payment received from an out-licensing contract.

2) Standards that will be effective from January 1, 2019 and beyond

The Group is currently assessing the potential impacts of new standards and interpretations that will be effective from January 1, 2019 and beyond.

2. Operating segment information

The Group has a single business of pharmaceuticals and does not have multiple operating segments. The Group's pharmaceuticals business consists of the research and development of new prescription medicines and the subsequent manufacturing, marketing and distribution activities. These functional activities are integrated and managed effectively.

Information on revenues by geographical area in millions of yen

	2017		2016	
	Sales	Royalties and other operating income	Sales	Royalties and other operating income
Japan	405,280	5,635	393,134	1,998
Overseas	94,028	29,256	79,539	17,109
of which Switzerland	76,359	28,957	62,780	15,563
Total	**499,308**	**34,891**	**472,673**	**19,108**

Information on revenues by major customers in millions of yen

	2017	2016
	Revenues	Revenues
F. Hoffmann-La Roche Ltd.	105,262	78,321
Alfresa Corporation	104,952	103,308
Mediceo Corporation	80,390	79,275
Suzuken Co., Ltd.	52,668	50,248

3. Financing costs and other financial income (expense)

Financing costs in millions of yen

	2017	2016
Interest expense	(5)	(8)
Net interest cost of defined benefit plans	(48)	(8)
Net other financing costs	(56)	(69)
Total financing costs	**(110)**	**(86)**

Other financial income (expense) in millions of yen

	2017	2016
Dividend income	183	201
Gains on sale of equity securities	-	1,341
Losses on sale of equity securities	-	-
Write-downs and impairments of equity securities	(97)	(160)
Net income from equity securities	**86**	**1,382**
Interest income	93	81
Gains on sale of debt securities	-	-
Losses on sale of debt securities	-	-
Net interest income and income from debt securities	**93**	**81**
Foreign exchange gains (losses)	140	452
Gains (losses) on foreign currency derivatives	(406)	(804)
Net foreign exchange gains (losses)	**(266)**	**(352)**
Total other financial income (expense)	**(87)**	**1,111**

4. Other expense

Chugai had filed the Advance Pricing Arrangement covering the certain transactions with F. Hoffmann-La Roche Ltd., to Japanese and Swiss tax authorities. In the first quarter of the current fiscal year, Chugai received a notice of agreement from both tax authorities which includes the instruction that the taxable income of Chugai shall be decreased by a certain amount and that of Roche shall be increased by the same amount in each fiscal year from 2016 to 2020, and if necessary, additional adjustments to the accounts shall be made in 2021.
As a result of this agreement, Chugai will transfer a part of the deducted amount of corporate tax etc., to Roche as the estimated tax payable for Roche, in accordance with the license agreement between Chugai and Roche. In addition, it has posted ¥1,706 million of adjustment from transfer pricing taxation, including the deduction associated with the estimated amount recorded in the previous fiscal year.

5. Income taxes

Income tax expenses in millions of yen

	2017	2016
Current income taxes	(29,884)	(22,804)
Deferred taxes	6,394	2,728
Total income tax (expense)	**(23,490)**	**(20,076)**

Reconciliation of the Group's effective tax rate

	2017	2016
Weighted average expected tax rate	30.3%	32.0%
Tax effect of		
- Non-taxable income/non-deductible expenses	0.5%	0.5%
- Effect of changes in applicable tax rates on deferred tax balances	-%	2.1%
- Research and development tax credits	(5.9)%	(5.5)%
- Transfer pricing taxation related	(4.7)%	(3.6)%
- Other differences	4.0%	1.3%
Group's effective tax rate	**24.2%**	**27.0%**

The change of weighted average expected tax rate is mainly due to the following reason: According to the enactment of "The Act for Partial Amendment of the Income Tax Act, etc."(Act No. 15 of 2016) and "The Act for Partial Amendment of the Local Tax Act, etc."(Act No. 13 of 2016) on March 29, 2016, the statutory tax rate of the Company and the domestic subsidiaries for the current fiscal year has decreased.

Tax effects of other comprehensive income in millions of yen

	2017			2016		
	Pre-tax amount	Tax benefit	After-tax amount	Pre-tax amount	Tax benefit	After-tax Amount
Remeasurements of defined benefit plans	1,313	(396)	916	(4,758)	1,285	(3,472)
Available-for-sale investments	1,734	(530)	1,204	(2,518)	783	(1,735)
Cash flow hedges	(4,756)	1,463	(3,293)	7,588	(2,384)	5,204
Currency translation of foreign operations	3,713	-	3,713	(3,296)	-	(3,296)
Other comprehensive income	**2,004**	**537**	**2,540**	**(2,984)**	**(316)**	**(3,300)**

Income tax assets (liabilities) in millions of yen

	December 31, 2017	December 31, 2016
Current income taxes		
- Assets	717	1
- Liabilities	(18,541)	(10,533)
Net current income tax assets (liabilities)	**(17,824)**	**(10,532)**
Deferred taxes		
- Assets	34,501	27,474
- Liabilities	(9,211)	(9,146)
Net deferred tax assets (liabilities)	**25,290**	**18,328**

Current income taxes: movements in recognized net assets (liabilities) in millions of yen

	2017	2016
Net current income tax assets (liabilities) at January 1	(10,532)	(13,084)
Income taxes paid	22,655	25,339
(Charged) credited to the income statement	(29,884)	(22,804)
Currency translation effects and other	(62)	17
Net current income tax assets (liabilities) at December 31	**(17,824)**	**(10,532)**

Deferred taxes: movements in recognized net assets (liabilities) in millions of yen

	Property, plant and equipment	Intangible assets	Provisions	Employee benefits	Other temporary differences	Total
Year ended December 31, 2016						
At January 1, 2016	(19,295)	(1,235)	252	4,136	32,139	15,997
(Charged) credited to the income statement	600	(1,175)	(180)	149	3,332	2,728
(Charged) credited to other comprehensive income	-	-	-	1,285	(1,601)	(316)
Currency translation effects and other	6	(2)	(4)	(2)	(80)	(81)
At December 31, 2016	**(18,689)**	**(2,411)**	**69**	**5,568**	**33,790**	**18,328**
Year ended December 31, 2017						
At January 1, 2017	(18,689)	(2,411)	69	5,568	33,790	18,328
(Charged) credited to the income statement	(306)	(745)	(31)	168	7,308	6,394
(Charged) credited to other comprehensive income	-	-	-	(396)	933	537
Currency translation effects and other	(7)	2	4	6	27	31
At December 31, 2017	**(19,002)**	**(3,155)**	**43**	**5,346**	**42,058**	**25,290**

Other temporary differences mainly relate to prepaid expenses, amortization of deferred assets and accrued expenses.

Deferred tax assets are not recognized for deductible temporary differences of ¥1,601 million (2016: ¥1,377 million). Deferred tax assets are recognized for tax losses carried forward only to the extent that realization of the related tax benefit is probable.

Unrecognized tax losses: expiry in millions of yen

	2017	2016
Less than one year	-	-
Over one year and less than five years	117	-
Over five years	-	480
Tax losses not recognized in deferred tax assets	**117**	**480**

Deferred tax assets for unused tax credits are recognized only to the extent that realization of the related tax benefit is probable.

Unrecognized unused tax credits: expiry in millions of yen

	2017	2016
Less than one year	-	-
Over one year and less than five years	29	-
Over five years	114	144
Unused tax credits not recognized in deferred tax assets	**143**	**144**

Deferred tax liabilities have not been established for the withholding tax and other taxes that would be payable on the unremitted earnings of wholly owned foreign subsidiaries of the Group, where such amounts are currently regarded as permanently reinvested. The temporary differences relating to the unremitted earnings were ¥2,042 million (2016: ¥1,792 million).

6. Property, plant and equipment

Property, plant and equipment: movements in carrying value of assets in millions of yen

	Land	Buildings and land improvements	Machinery and equipment	Construction in progress	Total
At January 1, 2016					
Cost	9,141	115,036	171,457	12,164	307,798
Accumulated depreciation and impairment	(28)	(55,261)	(98,964)	-	(154,253)
Net book value	**9,112**	**59,775**	**72,494**	**12,164**	**153,545**
Year ended December 31, 2016					
At January 1, 2016	9,112	59,775	72,494	12,164	153,545
Additions	-	71	374	18,981	19,425
Disposals	-	(107)	(311)	-	(418)
Transfers	-	3,282	8,402	(11,684)	-
Depreciation charge	-	(4,247)	(10,514)	-	(14,761)
Impairment charge	-	(51)	(10)	-	(61)
Other	-	-	(497)	-	(497)
Currency translation effects	-	(31)	(121)	(1)	(153)
At December 31, 2016	**9,112**	**58,693**	**69,817**	**19,459**	**157,081**
Cost	9,141	117,163	175,949	19,459	321,712
Accumulated depreciation and impairment	(28)	(58,470)	(106,133)	-	(164,631)
Net book value	**9,112**	**58,693**	**69,817**	**19,459**	**157,081**
Year ended December 31, 2017					
At January 1, 2017	9,112	58,693	69,817	19,459	157,081
Additions	-	1	368	33,916	34,285
Disposals	-	(115)	(230)	-	(345)
Transfers	-	3,523	17,761	(21,284)	-
Depreciation charge	-	(4,164)	(10,385)	-	(14,549)
Impairment charge	-	1	(5)	-	(4)
Other	-	-	(5,034)	-	(5,034)
Currency translation effects	-	(2)	112	25	136
At December 31, 2017	**9,112**	**57,937**	**72,404**	**32,116**	**171,569**
Cost	9,141	119,981	186,617	32,116	347,854
Accumulated depreciation and impairment	(28)	(62,044)	(114,212)	-	(176,285)
Net book value	**9,112**	**57,937**	**72,404**	**32,116**	**171,569**

In 2017, no borrowing costs were capitalized as property, plant and equipment (2016: none).

Impairment charge

The carrying value was reduced to the recoverable amount in use as the recoverable amount of certain assets was less than the carrying value.

Classification of impairment of property, plant and equipment in millions of yen

	2017	2016
Cost of sales	4	55
Marketing and distribution	-	-
Research and development	-	6
General and administration	-	-
Total impairment charge	**4**	**61**

Finance leases

The capitalized cost of property, plant and equipment under finance leases was ¥759 million (2016: ¥768 million) and the net book value of these assets was ¥311 million (2016: ¥439 million). The carrying value of the leasing obligation was ¥336 million (2016: ¥476 million), which is reported as part of Debt (see Note 15).

Operating leases
Group companies are party to a number of operating leases, mainly for machinery and equipment, motor vehicles and property rentals. The arrangements do not impose any significant restrictions on the Group. Total operating lease rental expense was ¥7,013 million (2016: ¥6,979 million).

Operating leases: future minimum lease payments under non-cancellable leases in millions of yen

	December 31, 2017	December 31, 2016
Within one year	4,656	4,271
Between one and five years	9,378	4,538
More than five years	46	216
Total minimum payments	**14,081**	**9,025**

Capital commitments
The Group has non-cancellable capital commitments for the purchase or construction of property, plant and equipment totaling ¥13,995 million (2016: ¥27,339 million).

7. Intangible assets

Intangible assets: movements in carrying value of assets in millions of yen

	Product intangibles: in use	Product intangibles: not available for use	Marketing intangibles: in use	Technology intangibles: in use	Total
At January 1, 2016					
Cost	18,027	8,435	1,460	103	28,026
Accumulated amortization and impairment	(12,061)	(2,112)	(307)	(35)	(14,515)
Net book value	**5,966**	**6,324**	**1,153**	**68**	**13,511**
Year ended December 31, 2016					
At January 1, 2016	5,966	6,324	1,153	68	13,511
Additions	687	7,678	1,574	-	9,939
Disposals	-	-	-	-	-
Transfers	-	-	-	-	-
Amortization charge	(1,207)	-	(384)	(17)	(1,608)
Impairment charge	-	(2,380)	-	-	(2,380)
Currency translation effects	(41)	(121)	-	-	(161)
At December 31, 2016	**5,405**	**11,500**	**2,344**	**51**	**19,299**
Cost	18,479	15,992	3,035	103	37,608
Accumulated amortization and impairment	(13,074)	(4,492)	(691)	(52)	(18,309)
Net book value	**5,405**	**11,500**	**2,344**	**51**	**19,299**
Year ended December 31, 2017					
At January 1, 2017	5,405	11,500	2,344	51	19,299
Additions	25	6,581	1,348	-	7,953
Disposals	-	(452)	-	-	(452)
Transfers	1,100	(1,100)	-	-	-
Amortization charge	(1,243)	-	(525)	(17)	(1,785)
Impairment charge	-	(3,992)	(44)	-	(4,035)
Currency translation effects	25	72	-	-	97
At December 31, 2017	**5,312**	**12,609**	**3,123**	**33**	**21,078**
Cost	19,916	21,241	4,382	103	45,641
Accumulated amortization and impairment	(14,604)	(8,631)	(1,259)	(69)	(24,564)
Net book value	**5,312**	**12,609**	**3,123**	**33**	**21,078**

Significant intangible assets
The product intangibles in use and not available for use are mainly acquired through in-licensing agreements of products with related parties. The remaining amortization periods for product intangibles in use are from 1 to 17 years.

Impairment charge
Impairment charge in each year was mainly related to the cessation of R&D projects and the uncertainty regarding expected profits.

Classification of amortization and impairment expenses in millions of yen

	2017		2016	
	Amortization	Impairment	Amortization	Impairment
Cost of sales	1,327	-	1,270	-
Marketing and distribution	133	-	107	-
Research and development	93	4,035	104	2,380
General and administration	232	-	128	-
Total	**1,785**	**4,035**	**1,608**	**2,380**

Internally generated intangible assets
The Group currently has no internally generated intangible assets from development as the criteria for the recognition as an asset are not met.

Intangible assets with indefinite useful lives
The Group currently has no intangible assets with indefinite useful lives.

Product intangibles not available for use
These mostly represent in-process research and development assets acquired either through in-licensing arrangements or separate purchases. Due to the inherent uncertainties in the research and development processes, intangible assets not available for use are particularly at risk of impairment if the project is not expected to result in a commercialized product.

Impairment of intangible assets
Impairment charges arise from changes in the estimates of the future cash flows expected to result from the use of the asset and its eventual disposal. Factors such as the presence or absence of competition, technical obsolescence or lower than anticipated sales for products with capitalized rights could result in shortened useful lives or impairment.

Potential commitments from alliance collaborations
The Group is party to in-licensing and similar arrangements with its alliance partners. These arrangements may require the Group to make certain milestone or other similar payments dependent upon the achievement of agreed objectives or performance targets as defined in the collaboration agreements.

The Group's current estimate of future commitments for such payments is set out in the table below. These figures are undiscounted and are not risk adjusted, meaning that they include all such potential payments that can arise assuming all projects currently in development are successful. The timing is based on the Group's current best estimate.

Potential future collaboration payments at December 31, 2017 in millions of yen

	Third party	Related party	Total
Within one year	3,029	1,900	4,929
Between one and two years	1,569	2,490	4,059
Between two and three years	771	7,158	7,929
Total	**5,369**	**11,548**	**16,917**

8. Financial non-current assets

Financial non-current assets in millions of yen

	December 31, 2017	December 31, 2016
Available-for-sale investments	11,350	9,706
Total financial non-current assets	**11,350**	**9,706**

Financial non-current assets are held for the Group's business purposes to strengthen and maintain the relationship with business partners. The available-for-sale investments are mainly equity securities in Japanese listed companies.

9. Other non-current assets

Other non-current assets in millions of yen

	December 31, 2017	December 31, 2016
Long-term prepaid expenses	10,064	9,481
Other assets	4,772	4,483
Total other non-current assets	**14,836**	**13,965**

Long-term prepaid expenses are mainly payments to related parties for start-up and validation costs at plants used for outsourcing to the related parties.

10. Inventories

Inventories in millions of yen

	December 31, 2017	December 31, 2016
Raw materials and supplies	55,239	72,459
Work in process	30	21
Intermediates	42,963	46,404
Finished goods	72,904	69,449
Less: Provision for slow-moving and obsolete inventory	(2,080)	(2,894)
Total inventories	**169,056**	**185,440**

Inventories expensed through cost of sales totaled ¥241,487 million (2016: ¥236,048 million). Expenses relating to inventory write-down totaled ¥630 million (2016: ¥2,239 million).

11. Accounts receivable

Accounts receivable in millions of yen

	December 31, 2017	December 31, 2016
Trade receivables – third party	128,884	123,391
Trade receivables – related party	19,593	17,314
Notes receivables	18	20
Other receivables – third party	5,320	5,343
Other receivables – related party	20,475	21,420
Allowances for doubtful accounts	(6)	(5)
Total accounts receivable	**174,284**	**167,482**

12. Marketable securities

Marketable securities in millions of yen

	December 31, 2017	December 31, 2016
Available-for-sale financial assets		
Money market instruments and time accounts over three months	99,018	105,177
Debt securities	5,000	4,999
Total marketable securities	**104,018**	**110,176**

Marketable securities are held for fund management purposes. The money market instruments are mainly certificates of deposit, cash in trust and commercial papers. Debt securities are mainly corporate bonds.

13. Cash and cash equivalents

Cash and cash equivalents in millions of yen

	December 31, 2017	December 31, 2016
Cash - cash in hand and in current or call accounts	136,219	91,580
Cash equivalents - time accounts with a maturity of three months or less	2,855	3,788
Total cash and cash equivalents	**139,074**	**95,368**

14. Other current assets

Other current assets in millions of yen

	December 31, 2017	December 31, 2016
Derivative financial instruments	2,107	10,733
Total financial current assets	**2,107**	**10,733**
Prepaid expenses	9,883	8,662
Other	-	898
Total non-financial current assets	**9,883**	**9,560**
Total other current assets	**11,990**	**20,293**

15. Debt

Debt: movements in carrying value of recognized liabilities in millions of yen

	2017	2016
At January 1	645	735
Increase in debt	1	47
Decrease in debt	(310)	(137)
At December 31	**336**	**645**
Finance lease obligations	336	476
Other debt	-	169
Total debt	**336**	**645**
Long-term debt	207	510
Short-term debt	129	135
Total debt	**336**	**645**

16. Provisions and contingent liabilities

Provisions: movements in recognized liabilities in millions of yen

	Environmental provisions	Other provisions	Total
Year ended December 31, 2016			
At January 1, 2016	421	1,733	2,154
Additional provisions created	12	364	376
Unused amounts reversed	-	(24)	(24)
Utilized	(77)	(209)	(286)
Other	-	(4)	(4)
At December 31, 2016	**356**	**1,859**	**2,216**
Long-term provisions	356	1,783	2,140
Short-term provisions	-	76	76
At December 31, 2016	**356**	**1,859**	**2,216**
Year ended December 31, 2017			
At January 1, 2017	356	1,859	2,216
Additional provisions created	22	23	45
Unused amounts reversed	(33)	(77)	(110)
Utilized	(34)	-	(34)
Other	-	3	3
At December 31, 2017	**311**	**1,808**	**2,120**
Long-term provisions	283	1,758	2,041
Short-term provisions	29	51	79
At December 31, 2017	**311**	**1,808**	**2,120**
Expected outflow of resources			
Within one year	29	51	79
Between one to two years	-	77	77
Between two to three years	-	31	31
More than three years	283	1,650	1,933
At December 31, 2017	**311**	**1,808**	**2,120**

Environmental provisions

Provisions for environmental matters include various separate environmental issues. By their nature the amounts and timings of any outflows are difficult to predict. Significant provisions are discounted where the time value of money is material.

Other provisions

Other provisions arise mainly from asset retirement obligations and removal costs with respect to property, plant and equipment. The timings of cash outflows are by their nature uncertain. Significant provisions are discounted where the time value of money is material.

Contingent liabilities

The operations and earnings of the Group continue, from time to time and in varying degrees, to be affected by political, legislative, fiscal and regulatory developments, including those relating to environmental protection. The industries in which the Group operates are also subject to other risks of various kinds. The nature and frequency of these developments and events, not all of which are covered by insurance, as well as their effect on future operations and earnings, are not predictable.

The Group has entered into strategic alliances with various companies in order to gain access to potential new products or to utilize other companies to help develop the Group's own potential new products. Potential future payments may become due to certain collaboration partners achieving certain milestones as defined in the collaboration agreements. The Group's best estimates for future commitment payments are given in Note 7.

17. Other non-current liabilities

Other non-current liabilities in millions of yen

	December 31, 2017	December 31, 2016
Deferred income	14,127	14,352
Other long-term liabilities	1,796	1,191
Total other non-current liabilities	**15,923**	**15,543**

18. Accounts payable

Accounts payable in millions of yen

	December 31, 2017	December 31, 2016
Trade payables – third party	9,761	9,564
Trade payables – related party	28,673	32,965
Other taxes payable	4,438	4,343
Accounts payable - purchase of property, plant and equipment	5,642	4,250
Other payables – third party	2,967	6,819
Other payables – related party	12,037	14,405
Total accounts payable	**63,518**	**72,346**

19. Other current liabilities

Other current liabilities in millions of yen

	December 31, 2017	December 31, 2016
Deferred income	1,598	1,387
Accrued bonus and related items	12,480	10,312
Derivative financial instruments	1,652	6,347
Other accrued liabilities	24,905	22,523
Total other current liabilities	**40,635**	**40,570**

20. Equity attributable to Chugai shareholders

Changes in equity attributable to Chugai shareholders in millions of yen

	Share capital	Capital surplus	Retained earnings	Other reserves: Fair value reserve	Other reserves: Hedging reserve	Other reserves: Translation reserve	Total
Year ended December 31, 2016							
At January 1, 2016	72,967	62,567	488,954	6,599	(1,630)	(3,600)	625,857
Net income attributable to Chugai Shareholders	-	-	53,592	-	-	-	53,592
Available-for-sale investments							
- Fair value gains (losses) taken to equity	-	-	-	(1,337)	-	-	(1,337)
- Transferred to income statement on sale or impairment	-	-	-	(1,181)	-	-	(1,181)
- Income taxes	-	-	-	783	-	-	783
Cash flow hedges							
- Effective portion of fair value gains (losses) taken to equity	-	-	-	-	(3,619)	-	(3,619)
- Transferred to income statement	-	-	-	-	(635)	-	(635)
- Transferred to initial carrying amount of hedged items	-	-	-	-	11,841	-	11,841
- Income taxes	-	-	-	-	(2,384)	-	(2,384)
Currency translation of foreign operations							
- Exchange differences	-	-	-	-	-	(3,296)	(3,296)
- Non-controlling interests	-	-	-	-	-	101	101
Defined benefit plans							
- Remeasurement gains (losses)	-	-	(4,758)	-	-	-	(4,758)
- Income taxes	-	-	1,285	-	-	-	1,285
Other comprehensive income, net of tax	**-**	**-**	**(3,472)**	**(1,735)**	**5,204**	**(3,195)**	**(3,199)**
Total comprehensive income	**-**	**-**	**50,119**	**(1,735)**	**5,204**	**(3,195)**	**50,393**
Dividends	-	-	(31,675)	-	-	-	(31,675)
Equity compensation plans	-	276	-	-	-	-	276
Own equity instruments	-	657	-	-	-	-	657
At December 31, 2016	**72,967**	**63,500**	**507,399**	**4,864**	**3,574**	**(6,796)**	**645,508**

Changes in equity attributable to Chugai shareholders in millions of yen

	Share capital	Capital surplus	Retained earnings	Other reserves: Fair value reserve	Other reserves: Hedging reserve	Other reserves: Translation reserve	Total
Year ended December 31, 2017							
At January 1, 2017	72,967	63,500	507,399	4,864	3,574	(6,796)	645,508
Net income attributable to Chugai Shareholders	-	-	72,713	-	-	-	72,713
Available-for-sale investments							
- Fair value gains (losses) taken to equity	-	-	-	1,639	-	-	1,639
- Transferred to income statement on sale or impairment	-	-	-	95	-	-	95
- Income taxes	-	-	-	(530)	-	-	(530)
Cash flow hedges							
- Effective portion of fair value gains (losses) taken to equity	-	-	-	-	(1,415)	-	(1,415)
- Transferred to income statement	-	-	-	-	(114)	-	(114)
- Transferred to initial carrying amount of hedged items	-	-	-	-	(3,228)	-	(3,228)
- Income taxes	-	-	-	-	1,463	-	1,463
Currency translation of foreign operations							
- Exchange differences	-	-	-	-	-	3,713	3,713
- Non-controlling interests	-	-	-	-	-	(100)	(100)
Defined benefit plans							
- Remeasurement gains (losses)	-	-	1,313	-	-	-	1,313
- Income taxes	-	-	(396)	-	-	-	(396)
Other comprehensive income, net of tax	**-**	**-**	**916**	**1,204**	**(3,293)**	**3,613**	**2,440**
Total comprehensive income	**-**	**-**	**73,630**	**1,204**	**(3,293)**	**3,613**	**75,154**
Dividends	-	-	(30,055)	-	-	-	(30,055)
Equity compensation plans	3	102		-	-	-	105
Own equity instruments	-	1,213		-	-	-	1,213
At December 31, 2017	**72,970**	**64,815**	**550,974**	**6,068**	**281**	**(3,183)**	**691,924**

Share capital (Number of shares)

	December 31, 2017	December 31, 2016
Authorized shares	799,805,050	799,805,050
Issued shares (Non-par value common stock)	559,685,889	559,685,889

Dividends

Date of resolution	Type of shares	Total dividends (millions of yen)	Dividend per share (yen)	Record date	Effective date
March 24, 2016 (Resolution of the Annual General Meeting of shareholders)	Common stock	17,473	32	December 31, 2015	March 25, 2016
July 21, 2016 (Board resolution)	Common stock	14,202	26	June 30, 2016	September 1, 2016
March 23, 2017 (Resolution of the Annual General Meeting of shareholders)	Common stock	14,203	26	December 31, 2016	March 24, 2017
July 27, 2017 (Board resolution)	Common stock	15,852	29	June 30, 2017	September 1, 2017
March 22, 2018 (Resolution of the Annual General Meeting of shareholders)	Common stock	18,044	33	December 31, 2017	March 23, 2018

Own equity instruments

	Number of shares	
	2017	2016
At January 1	13,417,953	13,641,743
Issue of common stocks	-	-
Exercises of equity compensation plans	(389,600)	(225,800)
Purchase/Disposal of own equity instruments	4,594	2,010
Retirement of own equity instruments	(123,000)	-
At December 31	**12,909,947**	**13,417,953**
Book value (millions of yen)	**30,233**	**31,413**

Other reserves

Fair value reserve: The fair value reserve represents the cumulative net change in the fair value of available-for-sale financial assets until the asset is sold, impaired or otherwise disposed of.

Hedging reserve: The hedging reserve represents the effective portion of the cumulative net change in the fair value of cash flow hedging instruments related to hedged transactions that have not yet occurred.

Translation reserve: The translation reserve represents the cumulative currency translation differences relating to the consolidation of foreign subsidiaries of the Group that use functional currencies other than the Japanese yen.

21. Non-controlling interests

Changes in equity attributable to non-controlling interests in millions of yen

	2017	2016
At January 1	989	1,414
Net income attributable to non-controlling interests	827	780
Currency translation of foreign operations	100	(101)
Other comprehensive income, net of tax	**100**	**(101)**
Total comprehensive income	**927**	**680**
Dividends to non-controlling shareholders	(944)	(1,105)
At December 31	**973**	**989**

Non-controlling interests are attributable to the minority shareholders of Chugai sanofi-aventis S.N.C.

22. Employee benefits

Employee benefits expense in millions of yen

	2017	2016
Wages and salaries	70,595	66,976
Social security costs	9,046	8,358
Defined contribution plans	1,029	1,099
Operating expenses for defined benefit plans	4,231	4,145
Equity compensation plans	415	433
Other employee benefits	4,143	3,939
Employee benefits expense included in operating results	**89,459**	**84,951**
Net interest cost of defined benefit plans	48	8
Total employee benefits expense	**89,507**	**84,959**

Other employee benefits consist mainly of welfare costs.

23. Post-employment benefits plans

Post-employment benefit plans are classified as “defined contribution plans” if the Group pays fixed contributions into third-party financial institutions and will have no further legal or constructive obligation to pay further contributions. All other plans are classified as “defined benefit plans”, even if Chugai’s potential obligation is relatively minor or has a relatively remote possibility of arising.

Employees are covered by defined contribution and defined benefit plans sponsored by Group companies, most of which are classified as defined benefit plans.

A resolution was passed in the 98th Annual General Meeting of shareholders held in March 2009 to abolish the retirement benefits system for directors. In addition, a resolution was passed in the 95th Annual General Meeting of shareholders held in March 2006 to abolish the retirement benefits system for outside directors and audit & supervisory board members (including outside audit & supervisory board members).

Defined contribution plans
Defined contribution plans are funded through payments by the Group to funds administered by third parties. The Group’s expenses for these plans were ¥1,029 million (2016: ¥1,099 million).

Defined benefit plans
The Group has defined benefit plans mainly comprising a corporate pension fund and a lump-sum retirement benefit plan. Under the corporate pension fund, employees can receive a lump-sum payment based on the number of accumulated points received during their years of service. Employees with over a certain period of service can receive part of or all of the payment as certain annuity or life annuity. Under the lump-sum retirement benefit plan, employees

can receive a lump-sum payment based on the number of accumulated points received during their years of service. A retirement benefit trust has been established for the lump-sum retirement benefit plan. Certain employees may be entitled to additional special retirement benefits apart from the defined benefit plans based on the conditions under which termination occurs.

The corporate pension fund and retirement benefit plan trust are independent of the Group and are funded only by payments from the Group.

A pension asset management strategy is developed to optimize expected returns and to manage risks through adopting investment strategies from a long-term perspective. For this purpose, the Group focusses on long-term objectives which are not influenced by fluctuations in short-term yields, and maintains a well-diversified portfolio. The funding status is closely monitored at the corporate level and valuations at the balance sheet date are carried out annually.

The defined benefit obligation is calculated using the projected unit credit method. If potential assets arise since defined benefit plans are over-funded, the recognition of pension assets is limited to the present value of any economic benefits available from refunds from the plans or reductions in future contributions to the plan.

Defined benefit plans: income statement in millions of yen

	2017	2016
Current service cost	4,231	3,983
Past service cost	-	139
Settlement loss	-	23
Total operating expenses	**4,231**	**4,145**
Net interest cost of defined benefit plans	48	8
Total expense recognized in income statement	**4,279**	**4,154**

Defined benefit plans: funding status in millions of yen

	December 31, 2017	December 31, 2016
Fair value of plan assets	78,516	76,551
Defined benefit obligation	(87,809)	(85,341)
Over (under) funding	**(9,292)**	**(8,790)**
Defined benefit plan assets	-	-
Defined benefit plan liabilities	(9,292)	(8,790)
Net recognized asset (liability)	**(9,292)**	**(8,790)**

Defined benefit plans: fair value of plan assets in millions of yen

	2017	2016
At January 1	76,551	76,543
Interest income on plan assets	538	815
Remeasurements on plan assets	2,336	155
Currency translation effects	10	(10)
Employer contributions	2,243	2,209
Benefits paid – funded plans	(3,162)	(3,162)
At December 31	**78,516**	**76,551**
Composition of plan assets		
- Equity securities	13,426	11,267
- Debt securities	47,112	46,046
- Cash and cash equivalents	7,685	8,866
- Other investments	10,293	10,373
Total plan assets	**78,516**	**76,551**

Equity securities and debt securities have quoted market prices (Level 1 of fair value hierarchy).

Defined benefit plans: present value of defined benefit obligation in millions of yen

	2017	2016
At January 1	85,341	78,901
Current service cost	4,231	3,983
Past service cost	-	139
Settlement loss	-	(67)
Interest cost	586	824
Remeasurements – demographic assumption	513	(1)
Remeasurements – financial assumptions	76	4,694
Remeasurements – experience adjustments	434	220
Currency translation effects	30	(18)
Benefits paid – funded plans	(3,403)	(3,334)
At December 31	**87,809**	**85,341**
Duration in years	15.2	15.6

Actuarial assumptions

Actuarial assumptions are unbiased and mutually compatible estimates of variables that determine the ultimate cost of providing post-employment benefits. They are set on an annual basis by the responsible departments of the Group based on advice from actuaries. Actuarial assumptions consist of demographic assumptions on matters such as mortality and employee turnover, and financial assumptions on matters such as interest rates.

Demographic assumptions: Demographic assumptions relate to mortality and employee turnover rates. Mortality rates are based on the standard mortality rate stated in the Ordinance for Enforcement of the Defined-Benefit Corporate Pension Act. Rates of employee turnover are based on historical behavior within the Group companies.

Financial assumptions: Discount rates are determined mainly with reference to interest rates on high-quality corporate bonds and reflect the period over which the obligations are to be settled.

	December 31, 2017	December 31, 2016
Discount rates (%)	0.70	0.71

Defined benefit plans: sensitivity of defined benefit obligation to actuarial assumption in millions of yen

The impact resulting from changes of actuarial assumption on the defined benefit obligation is shown in the table below. It is based on the assumption that variables other than the stated assumption used for the calculation are held constant.

	2017
Discount rates	
- 0.25% increase	(3,301)
- 0.25% decrease	3,516
Life expectancy	
- 1 year increase	1,553

Future cash flows

Based on the most recent actuarial valuations, the Group expects that employer contributions for defined benefit plans in 2018 will be approximately ¥2,306 million.

24. Equity compensation plans

The Group operates equity-settled equity compensation plans for directors and certain employees. IFRS 2 "Share-based Payment" requires that the value be estimated by fair value at grant date and recorded as an expense over the vesting period. Effective from the current fiscal year, for the purpose of further promoting shared value with shareholders and providing an incentive to sustainably increase the Group's corporate value, strengthening linkage between their compensation and mid- to long-term business performance, a restricted stock compensation plan (the "Compensation Plan") was introduced in place of the existing stock option compensation plans.

Expenses for equity compensation plans in millions of yen

	2017	2016
Cost of sales	3	3
Marketing and distribution	42	48
Research and development	70	71
General and administration	300	311
Total	**415**	**433**
Equity-settled plans		
- Chugai common stock options	212	311
- Chugai stock options as stock-based compensation	34	122
- Tenure-based restricted stock	134	-
- Performance-based restricted stock	35	-

Cash inflow from equity compensation plans in millions of yen

	2017	2016
Equity-settled plans		
- Exercises of Chugai common stock options	922	506
- Exercises of Chugai stock options as stock-based compensation	0	-

(1) Stock options

Chugai common stock options

The Group has issued stock acquisition rights to directors and certain employees as common stock options since 2003. Each right entitles the holder to purchase 100 Chugai shares at a specified exercise price. The rights are non-tradable and have an exercise period of around ten years after receiving the rights under the condition of approximately two years of continuous service of the holder after the grant date.

Chugai common stock options – movement in number of rights outstanding

	2017		2016	
	Number of rights	Weighted average exercise price (yen)	Number of rights	Weighted average exercise price (yen)
Outstanding at January 1	15,966	278,016	15,698	252,938
Granted	-	-	2,764	374,600
Forfeited	(40)	381,125	(40)	387,650
Exercised	(3,803)	242,506	(2,258)	224,268
Expired	(396)	302,978	(198)	228,833
Outstanding at December 31	**11,727**	**288,337**	**15,966**	**278,016**
- of which exercisable	9,013	262,362	10,428	219,730

Chugai common stock options – terms of rights outstanding at December 31, 2017

Year of grant	Rights outstanding: Number outstanding	Rights outstanding: Weighted average years remaining contractual life	Rights outstanding: Weighted average exercise price (yen)	Rights exercisable: Number exercisable	Rights exercisable: Weighted average exercise price (yen)
2009	260	1.23	169,600	260	169,600
2010	647	2.31	188,100	647	188,100
2011	550	3.40	139,700	550	139,700
2012	1,739	4.31	152,800	1,739	152,800
2013	1,364	5.32	250,000	1,364	250,000
2014	2,018	6.31	267,400	2,018	267,400
2015	2,435	7.31	400,700	2,435	400,700
2016	2,714	8.31	374,600	-	-
Total	**11,727**	**6.10**	**288,337**	**9,013**	**262,362**

Chugai stock options as stock-based compensation

The Group has issued stock acquisition rights to directors as stock options as stock-based compensation since 2009 in lieu of the retirement benefit system for directors which was abolished. Each right entitles the holder to purchase 100 Chugai shares at an exercise price of ¥100. The rights are non-tradable and have an exercise period of 30 years after receiving the rights, which may be vested upon the holder's retirement as a director of Chugai.

Chugai stock options as stock-based compensation – movement in number of rights outstanding

	2017		2016	
	Number of rights	Weighted average exercise price (yen)	Number of rights	Weighted average exercise price (yen)
Outstanding at January 1	4,078	100	3,724	100
Granted	-	-	354	100
Forfeited	-	-	-	-
Exercised	(93)	100	-	-
Expired	-	-	-	-
Outstanding at December 31	**3,985**	**100**	**4,078**	**100**
- of which exercisable	-	-	-	-

Chugai stock options as stock-based compensation – terms of rights outstanding at December 31, 2017

Year of grant	Rights outstanding: Number outstanding	Rights outstanding: Weighted average years remaining contractual life	Rights outstanding: Weighted average exercise price (yen)	Rights exercisable: Number exercisable	Rights exercisable: Weighted average exercise price (yen)
2009	519	21.31	100	-	-
2010	579	22.31	100	-	-
2011	672	23.40	100	-	-
2012	723	24.31	100	-	-
2013	457	25.32	100	-	-
2014	422	26.31	100	-	-
2015	287	27.31	100	-	-
2016	326	28.31	100	-	-
Total	**3,985**	**24.35**	**100**	**-**	**-**

Exercise of stock acquisition rights

	2017		2016	
	Number of rights	Weighted average share price (yen)	Number of rights	Weighted average share price (yen)
Chugai common stock options	3,803	4,512	2,258	3,546
Chugai stock options as stock-based compensation	93	3,950	-	-

(2) Restricted stock compensation plan

Under the Compensation Plan, the restricted stocks to be provided consist of "tenure-based restricted stock" for Executive Directors (excluding non-executive Directors, the "Eligible Directors") as well as certain Vice Presidents and other employees (collectively, the "Eligible Directors and Officers"), which require continuous service for a certain period as Eligible Directors and Officers, of Chugai, and "performance-based restricted stock" for the Eligible Directors which require the attainment of Chugai's mid- to long-term business performance target in addition to the aforementioned continuous service. The Eligible Directors and Officers, shall make in–kind contribution of all monetary compensation claims or monetary claims to be provided by Chugai according to the Compensation Plan, and shall, in return, receive shares of common stock of Chugai that shall be issued by Chugai. For the issuance of shares of common stock of Chugai under the Compensation Plan, Chugai and each Eligible Directors and Officers, shall make an agreement on allotment of restricted stocks, which provide that (1) The Eligible Directors and Officers, shall not transfer, create a security interest on, or otherwise dispose of the allotted shares during a certain restriction period, and (2) Chugai shall take back all or part of the allotted shares without cost in case where certain events happen.

	Tenure-based restricted stock	Performance-based restricted stock
The number of allotted shares	74,900 shares	48,100 shares
Fair value at the grant date	3,820 yen	2,910 yen
Evaluation method	Market price	Monte carlo simulation
Allottees	Directors of Chugai Employees of Chugai Directors of Chugai's subsidiaries Employees of Chugai's subsidiaries	Directors of Chugai
Settlement method	Equity settlement	
Transfer restriction period	3 years	
Conditions for releasing transfer restriction	On the condition that the Eligible Directors and Officers maintain their positions continuously during the transfer restriction period, Chugai shall release the transfer restriction for all of the allotted shares at the expiration of the transfer restriction period.	On the condition that the Eligible Directors maintain their positions continuously during the transfer restriction period, Chugai shall release the transfer restriction for the number of allotted shares, which is calculated by multiplying the number of shares that the Eligible Directors obtain at the expiration of the transfer restriction period by the release rate that is determined by the growth rate on the three-year Total Shareholders Return (TSR) for a peer group as a performance goal decided by the Board of Directors in advance (the "Evaluation Period"). The release rate is applied against the number of shares that is provided at the beginning of the restriction period by multiplying the maximum coefficient of 150%, ranging from 0% to 150% separately set by Chugai's Board, and is set from 0% to 100%.

The TSR calculation formula is as follows:

TSR=(Increase in the stock price during the Evaluation Period (B-A) + Dividends during the Evaluation Period) ÷ Initial stock price (A)

A: Initial stock price (Average closing price for the three months prior to the start of the Evaluation Period)

B: Final stock price (Average closing price for the three months prior to the end of the Evaluation Period)

25. Earnings per share

Basic earnings per share

	2017	2016
Net income attributable to Chugai shareholders (millions of yen)	**72,713**	**53,592**
Weighted average number of common stock	559,685,889	559,685,889
Weighted average number of treasury stock	(13,147,406)	(13,506,255)
Weighted average number of shares in issue	**546,538,483**	**546,179,634**
Basic earnings per share (yen)	**133.04**	**98.12**

Diluted earnings per share

	2017	2016
Net income attributable to Chugai shareholders (millions of yen)	**72,713**	**53,592**
Weighted average number of shares in issue	546,538,483	546,179,634
Adjustment for assumed exercise of equity compensation plans, where dilutive	886,414	821,617
Weighted average number of shares in issue used to calculate diluted earnings per share	**547,424,897**	**547,001,251**
Diluted earnings per share (yen)	**132.83**	**97.97**

There were no rights in equity compensation plans, which are anti-dilutive, and therefore excluded from the calculation of diluted earnings per share (2016: 5,538 rights).

26. Statement of cash flows

Cash flows from operating activities

Cash flows from operating activities arise from the Group's primary activities including research and development, manufacturing and sales in the Pharmaceuticals business. These are calculated by the indirect method by adjusting the Group's operating profit for any operating income and expenses that are not cash flows (for example depreciation, amortization and impairment) in order to derive the cash generated from operations. Operating cash flows also include income taxes paid on all activities.

Cash generated from operations in millions of yen

	2017	2016
Net income	73,541	54,372
Financing costs	110	86
Other financial income (expense)	87	(1,111)
Other expense	1,706	3,460
Income taxes	23,490	20,076
Operating profit	**98,934**	**76,884**
Depreciation of property, plant and equipment	14,549	14,761
Amortization of intangible assets	1,785	1,608
Impairment of property, plant and equipment	4	61
Impairment of intangible assets	4,035	2,380
Operating expense for defined benefit plans	4,231	4,122
Operating expense for equity-settled equity compensation plans	415	433
Net (income) expense for provisions	(11)	12
Inventories write-down	630	2,239
Other adjustments	205	298
Cash generated from operations	**124,776**	**102,797**

Cash flows from investing activities
Cash flows from investing activities are principally those arising from the Group's investments in property, plant and equipment and intangible assets. Cash flows connected with the Group's portfolio of marketable securities and other investments are also included, as are any interest and dividend payments received in respect of these securities and investments.

Interest and dividends received in millions of yen

	2017	2016
Interest received	88	100
Dividends received	183	201
Total	**271**	**301**

Cash flows from financing activities
Cash flows from financing activities are primarily dividend payments to Chugai shareholders.

Significant non-cash transactions
There were no significant non-cash transactions (2016: none).

27. Risk management

(1) Financial risk management
The Group is exposed to various financial risks arising from its underlying operations and corporate finance activities. The Group's financial risk exposures are predominantly related to changes in foreign exchange rates, interest rates and equity prices as well as the creditworthiness and the solvency of the Group's counterparties.

Financial risk management within the Group is governed by policies approved by the board of directors of Chugai. These policies cover credit risk, liquidity risk and market risk. The policies provide guidance on risk limits, type of authorized financial instruments and monitoring procedures. Policy implementation and day-to-day risk management are carried out by the relevant functions and regular reporting on these risks is performed by the relevant finance & accounting and controlling functions within Chugai.

1) Credit risk
Accounts receivable are exposed to customer credit risk. The main accounts receivable are trade receivables. The management of trade receivables is focused on the assessment of country risk, setting of credit limits, ongoing credit evaluation and account monitoring procedures. As part of the credit risk management, sales administration departments regularly monitor the financial position of major customers by checking payment term and balances of trade receivables for each customer according to the accounting manuals to ensure early identification and mitigation of overdue balances and potential bad debts associated with the deterioration of customers' financial position.

The objective of the management of trade receivables is to sustain the growth and profitability of the Group by optimizing asset utilization while maintaining risks at an acceptable level. The Group obtains credit insurance and similar enhancements when appropriate to protect the collection of trade receivables. No collateral was held for trade receivables (2016: none).

Of the Group's accounts receivable, trade receivables from third parties are mainly to Japanese customers, of which major customers account for 71 % as of December 31, 2017.

Trade receivables: major customers in millions of yen

	December 31, 2017	December 31, 2016
Alfresa Corporation	31,492	30,979
Mediceo Corporation	24,656	23,767
Suzuken Co., Ltd.	22,192	20,115
Toho Pharmaceutical Co., Ltd.	13,592	12,688
Total	**91,932**	**87,549**

Aging of accounts receivable that are not impaired in millions of yen

	December 31, 2017	December 31, 2016
Neither overdue nor impaired	174,215	167,276
Overdue less than 1 month	64	199
Overdue 1-3 months	4	6
Overdue 4-6 months	1	1
Overdue 7-12 months	–	-
Overdue more than 1 year	–	-
Total	**174,284**	**167,482**

Derivative transactions and money market instruments are restricted to financial institutions with high credit ratings in an effort to mitigate the counterparty risks.

The maximum exposure to credit risk resulting from financial activities, without taking into account any collateral held or other credit enhancements, is equal to the carrying value of the Group's financial assets.

Impairment losses by asset class

The Group's impairment loss on available-for-sale investments was ¥97 million (2016: ¥160 million).

2) Liquidity risk

Liquidity risk arises through a surplus of financial obligations over available financial assets due at any point in time. The Group's approach to liquidity risk is to maintain sufficient readily available reserves in order to meet its liquidity requirements at any point in time. The Group manages liquidity risks based on a cash management plan prepared and updated as appropriate by finance and accounting departments based on the reporting from each department.

Chugai is rated as highly creditable by more than one major credit rating agency. The ratings will permit efficient access to the international capital markets in the event of major financing requirements. Chugai has unused committed credit lines with various financial institutions totaling ¥40,000 million (2016: ¥40,000 million).

Contractual maturities of financial liabilities in millions of yen

	Total	0-3 months	4-6 months	7-12 months	Over 1 year
At December 31, 2017					
Accounts payable	63,518	61,447	2,029	43	-
Other current liabilities					
- Derivative financial instruments*	1,652	625	324	478	225
Total financial liabilities	**65,170**	**62,072**	**2,353**	**521**	**225**
At December 31, 2016					
Accounts payable	72,346	68,238	4,105	1	2
Other current liabilities					
- Derivative financial instruments*	6,347	2,007	1,190	2,188	963
Total financial liabilities	**78,693**	**70,245**	**5,295**	**2,189**	**965**

*Derivative financial instruments are held for risk management purposes and will not be canceled before the maturity date.

3) Market risk

Market risk arises from changing market prices, mainly due to foreign exchange rates and interest rates, of the Group's financial assets or financial liabilities which affect the Group's net income and equity.

Foreign exchange risk: Accounts receivable and accounts payable denominated in foreign currencies are exposed to foreign exchange risk. The objective of the Group's foreign exchange risk management activities is to preserve the economic value of its current and future assets and to minimize the volatility of the Group's financial result. The Group enters into derivative transactions such as foreign exchange forward contracts and currency options to reduce the risk of foreign currency exchange fluctuations related to assets and liabilities denominated in foreign currencies. Some of these transactions qualify as cash flow hedges at the point that the forecast transaction is expected.

When making use of derivatives for hedging foreign exchange risk on assets and liabilities denominated in foreign currencies, Chugai conducts such operations in accordance with its internal regulations and monthly reports are prepared on the balance of such transactions, valuation gains and losses, and other related matters at fair value. Consolidated subsidiaries do not utilize derivative transactions.

Sensitivity analysis: Chugai has financial instruments denominated in currencies other than its functional currency. The table below shows the impact to profit before taxes resulting from a 1% decrease of the Swiss franc, euro and US dollar against the Japanese yen, which is Chugai's functional currency. The effective portion of derivative financial instruments for which hedge accounting is applied is excluded from the calculation. All calculations are based on the assumption that exchange rates for other currencies are constant and there are no changes in other variables such as interest rates.

Foreign currency sensitivity analysis

	2017	2016
Average exchange rate (yen per each currency)		
CHF	113.90	110.46
EUR	126.39	120.42
USD	112.17	108.83
Profit before taxes (millions of yen)		
CHF	(256)	(237)
EUR	9	12
USD	(187)	(140)

(Note) Positive numbers are the amount of positive impact on profit before taxes resulting from a 1% decrease of each currency against the Japanese yen. The amounts above do not reflect the impact on Chugai's cash flows or forecast result.

The impact resulting from a 1% decrease of each currency against the Japanese yen on the financial instruments denominated in foreign currency is shown in the tables below.

	2017			2016		
	Exposure (m CHF)	Exposure (m YEN)	Impact (m YEN)	Exposure (m CHF)	Exposure (m YEN)	Impact (m YEN)
CHF						
Accounts receivable	227	26,165	(262)	210	23,877	(239)
Accounts payable	(279)	(32,224)	322	(403)	(45,868)	459
Financial non-current assets	-	-	-	-	-	-
Cash and cash equivalents	40	4,629	(46)	55	6,268	(63)
Notional amounts of derivative financial instruments						
- Effective portion of hedge	230	27,007	(270)	330	39,423	(394)
- Other than above	-	-	-	-	-	-
Total	**218**	**25,576**	**(256)**	**192**	**23,700**	**(237)**

	Exposure (m EUR)	Exposure (m YEN)	Impact (m YEN)	Exposure (m EUR)	Exposure (m YEN)	Impact (m YEN)
EUR						
Accounts receivable	10	1,385	(14)	6	788	(8)
Accounts payable	(17)	(2,250)	23	(17)	(2,023)	20
Financial non-current assets	-	-	-	-	-	-
Cash and cash equivalents	-	-	-	-	-	-
Notional amounts of derivative financial instruments						
- Effective portion of hedge	-	-	-	-	-	-
- Other than above	-	-	-	-	-	-
Total	**(6)**	**(865)**	**9**	**(10)**	**(1,235)**	**12**

	Exposure (m USD)	Exposure (m YEN)	Impact (m YEN)	Exposure (m USD)	Exposure (m YEN)	Impact (m YEN)
USD						
Accounts receivable	32	3,636	(36)	56	6,586	(66)
Accounts payable	(98)	(11,043)	110	(36)	(4,206)	42
Financial non-current assets	-	-	-	-	-	-
Cash and cash equivalents	-	-	-	-	-	-
Notional amounts of derivative financial instruments						
- Effective portion of hedge	240	26,139	(261)	100	11,581	(116)
- Other than above	-	-	-	-	-	-
Total	**174**	**18,732**	**(187)**	**120**	**13,961**	**(140)**

Interest rate risk: The amounts of debt and loans were insignificant and therefore the Group is not exposed to material interest rate risk.

(2) Financial instruments fair value

Carrying value and fair value of financial instruments

The Group's financial instruments are mainly comprised of financial non-current assets, accounts receivable, marketable securities, cash and cash equivalents, derivative financial instruments included in other current assets, accounts payable, derivative financial instruments included in other current liabilities and debt. The carrying values of these financial instruments are equal to or reasonably approximate fair values.

Fair value hierarchy

The table below analyses financial instruments carried at fair value, by valuation method. The different levels have been defined as follows:

- Level 1 – quoted prices (unadjusted) in active markets for identical assets and liabilities.
- Level 2 – observable inputs other than quoted prices in active markets for identical assets and liabilities.
- Level 3 – fair value determined using valuation method which includes unobservable inputs.

Fair value hierarchy of financial instruments in millions of yen

	Level 1	Level 2	Level 3	Total
At December 31, 2017				
Marketable securities:				
- Money market instruments and time accounts over 3 months	-	99,018	-	99,018
- Debt securities	5,000	-	-	5,000
Other current assets				
- Derivative financial instruments	-	2,107	-	2,107
Financial non-current assets				
- Available-for-sale investments	9,734	-	1,616	11,350
Financial assets recognized at fair value	**14,735**	**101,125**	**1,616**	**117,476**
Other current liabilities				
- Derivative financial instruments	-	(1,652)	-	(1,652)
Financial liabilities recognized at fair value	**-**	**(1,652)**	**-**	**(1,652)**
At December 31, 2016				
Marketable securities:				
- Money market instruments and time accounts over 3 months	-	105,177	-	105,177
- Debt securities	4,999	-	-	4,999
Other current assets				
- Derivative financial instruments	-	10,733	-	10,733
Financial non-current assets				
- Available-for-sale investments	8,154	-	1,552	9,706
Financial assets recognized at fair value	**13,153**	**115,910**	**1,552**	**130,615**
Other current liabilities				
- Derivative financial instruments	-	(6,347)	-	(6,347)
Financial liabilities recognized at fair value	**-**	**(6,347)**	**-**	**(6,347)**

Level 1 financial assets consist of corporate bonds and quoted shares. Level 2 financial assets consist primarily of certificates of deposit, cash in trust, commercial paper and derivative financial instruments.

Fair values Level 2 financial assets are determined as follows:

・Marketable securities and derivative financial instruments are based on valuation models that use observable market data for interest rates, yield curves, foreign exchange rates and implied volatilities for similar instruments at the measurement date.

The Group recognizes transfers between levels of the fair value hierarchy as of the end of the reporting period during which the transfer has occurred. There were no significant transfers between Level 1 and Level 2 and vice versa.

Level 3 financial assets consist of unquoted shares. Valuation is based on latest financial data.

Reconciliation of financial instruments classified into level 3 in millions of yen

	Fair value through other comprehensive income	Fair value through income statement	Total
At January 1, 2016	1,453	-	1,453
Gains or losses	97	-	97
Purchases	-	-	-
Disposals	-	-	-
Transfers	-	-	-
Currency translation effects	1	-	1
At December 31, 2016	**1,552**	**-**	**1,552**
At January 1, 2017	1,552	-	1,552
Gains or losses	64	-	64
Purchases	-	-	-
Disposals	-	-	-
Transfers	-	-	-
Currency translation effects	(1)	-	(1)
At December 31, 2017	**1,616**	**-**	**1,616**

(3) Derivative financial instruments

Derivative financial instruments in millions of yen

Assets	December 31, 2017	December 31, 2016
Forward exchange contracts	2,107	10,733
Total derivative financial instruments	**2,107**	**10,733**

Liabilities	December 31, 2017	December 31, 2016
Forward exchange contracts	(1,652)	(6,347)
Total derivative financial instruments	**(1,652)**	**(6,347)**

Hedge accounting

The Group has the following cash flow hedges which are designated in a qualifying hedge relationship.

Cash flow hedges

The Group is exposed to foreign exchange risk from transactions for inventories and other materials in foreign currencies with foreign related parties. The Group has entered into foreign exchange forward contracts and currency options to hedge a part of foreign exchange risk. Such instruments are recorded as fair value assets of ¥456 million (2016: fair value liabilities of ¥5,162 million). There was no ineffective portion.

The present value of expected cash flows from qualifying cash flow hedges is shown in the table below.

Present value of expected cash flows of qualifying cash flow hedges in millions of yen

	Total	0-6 months	7-12 months	Over 1 Year
Year ended December 31, 2017				
Cash inflows	242,308	107,794	96,290	38,224
Cash outflows	(241,852)	(107,570)	(96,042)	(38,239)
Total cash inflow (outflow)	**456**	**223**	**248**	**(15)**
Year ended December 31, 2016				
Cash inflows	175,272	43,872	94,775	36,625
Cash outflows	(170,110)	(42,697)	(91,670)	(35,742)
Total cash inflow (outflow)	**5,162**	**1,174**	**3,105**	**883**

(4) Capital management

The Group defines the capital that it manages as the Group's total capitalization, being the sum of debt plus equity including non-controlling interests. The Group's objectives when managing capital are:

- To safeguard the Group's ability to continue as a going concern, so that it can continue to provide benefits for patients and returns to investors.
- To provide an adequate return to investors based on the level of risk undertaken.
- To have available the necessary financial resources to allow the Group to invest in areas that may deliver future benefits for patients and returns to investors.
- To maintain sufficient financial resources to mitigate against risks and unforeseen events.

Capitalization is monitored and reported to the Chief Financial Officer as part of the Group's regular internal management reporting.

The Group is not subject to regulatory capital adequacy requirements.

Capital in millions of yen

	December 31, 2017	December 31, 2016
Capital and reserves attributable to Chugai shareholders	691,924	645,508
Equity attributable to non-controlling interests	973	989
Total equity	692,897	646,497
Total debt	336	645
Capitalization	**693,233**	**647,142**

28. Related parties

(1) Controlling shareholder

Effective October 1, 2002, Roche and Chugai completed an alliance to create a leading research-driven Japanese pharmaceutical company, which was formed by the merger of Chugai and Roche's Japanese pharmaceuticals subsidiary, Nippon Roche. Through the merger, Chugai became a member of the Roche Group as the surviving company.

Chugai has entered into certain agreements with Roche, which are discussed below:

Basic Alliance Agreement: As part of the Basic Alliance Agreement signed in December 2001, Roche and Chugai entered into certain arrangements covering the future operation and governance of Chugai. Amongst other matters these cover the following areas:

- The structuring of the alliance.
- Roche's rights as a shareholder.
- Roche's rights to nominate members of Chugai's Board of Directors.
- Certain limitations to Roche's ability to buy or sell Chugai's common stock.

Chugai issues additional shares of common stock in connection with its convertible debt and equity compensation plans, and may issue additional shares for other purposes, which affects Roche's percentage ownership interest. The Basic Alliance Agreement provides, amongst other matters, that Chugai will guarantee Roche's right to maintain its shareholding percentage in Chugai at not less than 50.1%.

Licensing Agreements: Under the Japan Umbrella Rights Agreement signed in December 2001, Chugai has exclusive rights to market Roche's pharmaceutical products in Japan. Chugai also has right of first refusal on the development and marketing in Japan of all development compounds advanced by Roche.

The Rest of the World Umbrella Rights Agreement (excluding Japan and South Korea) signed in May 2002 was revised and the Amended and Restated Rest of the World Umbrella Rights Agreement (excluding Japan, South Korea and Taiwan) was signed in August 2014. Under this Agreement, Roche has the right of first refusal on the development and marketing of Chugai's development compounds in markets outside Japan, excluding South Korea and Taiwan.

Further to these agreements, Roche and Chugai have signed a series of separate agreements for certain specific products. Depending on the specific circumstances and the terms of the agreement, this may result in payments on an arm's length basis between Roche and Chugai, for any or all of the following matters:

- Upfront payments, if a right of first refusal to license a product is exercised.
- Milestone payments, dependent upon the achievement of agreed performance targets.
- Royalties on future product sales.

These specific product agreements may also cover the manufacture and supply etc. of the respective products to meet the other party's clinical and/or commercial requirements on an arm's length basis.

Research Collaboration Agreements: Roche and Chugai have entered into research collaboration agreements in the areas of small-molecule synthetic drug research and biotechnology-based drug discovery.

Dividends: The dividends distributed to Roche by Chugai in respect to its holdings of Chugai shares totaled ¥18,437 million (2016: ¥19,443 million).

(2) Material transactions and balances with related parties

Transactions with F. Hoffmann-La Roche in millions of yen

	2017	2016
Sales	76,359	62,780
Purchases of inventory and other materials	124,792	120,923

Balances with F. Hoffmann-La Roche in millions of yen

	December 31, 2017	December 31, 2016
Trade accounts receivable	19,593	17,314
Trade accounts payable	(24,805)	(32,965)

(3) Remuneration of key management personnel

Remuneration of members of the board and audit & supervisory board members in millions of yen

	2017	2016
Board of Directors		
- Regular remuneration	333	364
- Bonuses	234	191
- Tenure-based restricted stock compensation plan	92	-
- Performance-based restricted stock compensation plan	35	-
- Chugai common stock options	83	123
- Chugai stock options as stock-based compensation	34	122
Total	**811**	**801**
Audit & supervisory board members		
- Regular remuneration	85	85
Total	**85**	**85**

Effective from the current fiscal year, for the purpose of further promoting shared value with shareholders and providing an incentive to sustainably increase the Group's corporate value, strengthening linkage between their compensation and mid- to long-term business performance, a restricted stock compensation plan was introduced in place of the existing stock option compensation plans.

29. Subsidiaries

Subsidiaries	Country of incorporation	Equity interest %	
		2017	2016
Consolidated subsidiaries			
Chugai Research Institute for Medical Science, Inc.	Japan	100 %	100 %
Chugai Clinical Research Center Co., Ltd.	Japan	100 %	100 %
Chugai Business Support Co., Ltd.	Japan	100 %	100 %
Medical Culture, Inc.	Japan	100 %	100 %
Chugai Distribution Co., Ltd.	Japan	100 %	100 %
Chugai Pharma Manufacturing Co., Ltd.	Japan	100 %	100 %
Forerunner Pharma Research Co., Ltd.	Japan	100 %	100 %
Chugai Pharma USA, Inc.	United States	100 %	100 %
Chugai Pharma Europe Ltd.	United Kingdom	100 %	100 %
Chugai Pharma U.K. Ltd.	United Kingdom	100 %	100 %
Chugai Pharma Development Ltd.	United Kingdom	–	100 %
Chugai Pharma France S.A.S.	France	100 %	100 %
Chugai sanofi-aventis S.N.C.	France	55 %	55 %
Chugai Pharma Taiwan Ltd.	Taiwan	100 %	100 %
Chugai Pharma (Shanghai) Consulting Co., Ltd.	China	–	100 %
Chugai Pharma Science (Beijing) Co., Ltd.	China	100 %	100 %
Chugai Pharma China Co., Ltd.	China	100 %	100 %
Chugai Pharma Technology Taizhou Co., Ltd.	China	100 %	100 %
Chugai Pharmabody Research Pte. Ltd.	Singapore	100 %	100 %

(Note) Chugai Pharma (Shanghai) Consulting Co., Ltd. and Chugai Pharma Development Ltd. were completely dissolved in August and November 2017, respectively.

30. Subsequent events

(Transfer of Marketing Authorizations Including Marketing and Manufacturing Rights)
With regard to the transfer of the 13 long-term listed products manufactured and marketed in Japan by Chugai, from Chugai and F. Hoffmann-La Roche Ltd. to TAIYO Pharma Co., Ltd., the transfer of assets excluding inventories has been executed upon the fulfillment of the relevant closing conditions of the asset transfer agreement on January 5, 2018.

(1) Purpose of the transfer
Chugai aims to contribute to patients and the medical community through the creation of innovative medical products and services based on its business philosophy, "Innovation all for the patients." The decision to transfer these long-term listed products was taken to reinforce Chugai's focus on creating innovation, supporting the goal of ensuring sustainable growth by optimizing investment in business segments and products with potential to enhance Chugai's competitive advantage.

(2) Name of the transferee
TAIYO Pharma Co., Ltd.

(3) Details of the assets subject to transfer
Marketing authorizations, including marketing and manufacturing rights, of the following 13 products (All formulations of products under the following brand names are subject to transfer.)

	Brand Name	Therapeutic Category
1	BACTRAMIN	Synthetic Antibacterial Agent / Agent for the treatment of Pneumocystis Pneumonia
2	DIGOSIN	Digitalis Glycoside
3	EUGLUCON	Oral Hypoglycemic Agent
4	FURTULON	Anti-Tumor Agent
5	GLYCEOL	Drug for the treatment of Intracranial Hypertension and Intracranial Edema / Ocular Hypotensive Agent
6	KYTRIL	5-HT3 receptor antagonist for the treatment of Nausea and Vomiting
7	MADOPAR	Agent for the treatment of Parkinson's disease
8	PROCARBAZINE HYDROCHLORIDE	Anti-Tumor Agent
9	PYDOXAL	Active Form of Vitamin B6
10	RESPLEN	Antitussive and Mucolytic Agent
11	RIVOTRIL	Anti-epileptic Agent
12	ROCEPHIN	Cephalosporin Antibiotic
13	TIGASON	Agent for the treatment of Hyperkeratosis

(4) Transfer timetable
Date of transfer agreement: November 14, 2017
Date of execution of transfer: January 5, 2018

(5) Transfer price
¥21,280 million (including the amount received by Roche) plus the value of inventories
The value of the inventories will be determined upon the transfer of the marketing authorizations, including marketing and manufacturing rights, of each product.
The agreement prevents Chugai from disclosing the amount it has received.

Additional information

This Additional information is provided for the information of readers and does not form part of the consolidated financial statements.

1. Significant legal cases

At December 31, 2017, the Group is involved in the following significant legal cases for which the outcome cannot be determined at this time, but for which the Group assesses that the possibility of any settlement to be remote:

(1) Arbitration in United Kingdom regarding Actemra
In May 2017 Medical Research Council and LifeArc (formerly Medical Research Council Technology) ('Claimants') requested arbitration against Chugai Pharmaceutical Co., Ltd. with an arbitrator being appointed on 9 August 2017. Sums are sought from Chugai for alleged breach of obligations under a collaboration agreement dated 15 August 1990 in connection with the development of the humanized anti-human IL-6 receptor monoclonal antibody, Actemra. It is claimed that Chugai is obliged to pay royalties to the Claimants pursuant to the collaboration agreement.

(2) Patent infringement lawsuit regarding emicizumab in Japan
Baxalta (Baxalta Incorporated and Baxalta GmbH) filed a lawsuit against Chugai at the Tokyo District Court on 6 May 2016 requesting an injunction against the manufacture, usage, transfer, exportation and offer of any transfer regarding emicizumab alleging emicizumab is infringing its Japanese patent (patent number 4313531).

(3) Patent infringement lawsuit regarding emicizumab in the United States
Baxalta (Baxalta Incorporated and Baxalta GmbH) filed a lawsuit against Chugai and Genentech Inc., at the United States District Court for the District of Delaware on 4 May 2017 requesting relief including an injunction against manufacturing, using, offering to sell, or selling of emicizumab within the United States, or importing emicizumab into the United States.

Independent Auditor's Report

Independent Auditor's Report

To the Board of Directors of Chugai Pharmaceutical Co., Ltd.:

We have audited the accompanying consolidated financial statements of Chugai Pharamaceutical Co., Ltd. and its consolidated subsidiaries, which comprise the consolidated balance sheet as at December 31, 2017, and the consolidated income statement, statement of comprehensive income, statement of changes in equity and statement of cash flows for the year then ended, and notes, comprising a summary of significant accounting policies and other explanatory information.

Management's Responsibility for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with International Financial Reporting Standards, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in Japan. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on our judgement, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, we consider internal control relevant to the entity's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances, while the objective of the financial statement audit is not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of Chugai Pharmaceutical Co., Ltd. and its consolidated subsidiaries as at December 31, 2017, and their financial performance and cash flows for the year then ended in accordance with International Financial Reporting Standards.

KPMG AZSA LLC

March 21, 2018
Tokyo, Japan