

Consolidated Financial Statements
for the fiscal year ended December 31, 2019

Otsuka Holdings Co., Ltd.

Financial Information

1. Basis of Preparation of Consolidated Financial Statements

The consolidated financial statements of Otsuka Holdings Company Limited (hereinafter referred to as the “Company”) are prepared in accordance with International Financial Reporting Standards (hereinafter referred to as “IFRS”) pursuant to the provision of Article 93 of the Ordinance on Terminology, Forms, and Preparation Methods of Consolidated Financial Statements (Ordinance of the Ministry of Finance No. 28 of 1976; hereinafter referred to as the “Ordinance on Consolidated Financial Statements”).

2. Audit Certification

In accordance with the provision of Article 193-2, Paragraph 1 of the Financial Instruments and Exchange Act, the consolidated financial statements for the fiscal year ended December 31, 2019 were audited by Deloitte Touche Tohmatsu LLC.

3. Special Effort to Ensure the Appropriateness of Consolidated Financial Statements and Others, and Development of a System for Preparing Consolidated Financial Statements Appropriately in Accordance with IFRS

The Company has been making special effort to ensure the appropriateness of consolidated financial statements and others, and developing a system for preparing consolidated financial statements and others appropriately in accordance with IFRS. The details are as follows:

- (1) In order to develop a system that ensures a proper understanding of the contents of accounting standards, etc. or an adequate response to changes in accounting standards, etc. and others, the Company has joined the Financial Accounting Standards Foundation, regularly provides internal training, subscribes to professional journals published by the Japanese Institute of Certified Public Accountants, attends seminars hosted by the Financial Accounting Standards Foundation and auditing firms, etc., and makes other efforts.
- (2) With regard to application of IFRS, the Company keeps up on accounting standards by obtaining press releases and standards published by the International Accounting Standards Board. In addition, the Company has developed the group’s accounting policies and accounting guidelines in accordance with IFRS and practices accounting procedures based on these policies and guidelines to prepare appropriate consolidated financial statements in accordance with IFRS.

1. Consolidated Financial Statements

(1) Consolidated Financial Statements

(i) Consolidated Statements of Financial Position

		(Millions of yen)	
	Note	FY2018 (As of December 31, 2018)	FY2019 (As of December 31, 2019)
Assets			
Current assets			
Cash and cash equivalents	6	285,022	334,040
Trade and other receivables	7	378,520	401,418
Inventories	8	157,128	159,991
Income taxes receivable		9,226	2,807
Other financial assets	9	66,614	48,232
Other current assets	10	36,573	40,321
Subtotal		933,085	986,811
Assets held for sale	11	16	1,539
Total current assets		933,102	988,351
Non-current assets			
Property, plant and equipment	12, 20	393,572	453,380
Goodwill	13	280,989	274,761
Intangible assets	13	487,779	478,540
Investments in associates	15	189,633	197,704
Other financial assets	9	155,153	150,688
Deferred tax assets	16	28,428	22,118
Other non-current assets	10	8,704	15,763
Total non-current assets		1,544,260	1,592,957
Total assets		2,477,363	2,581,309

		(Millions of yen)	
	Note	FY2018 (As of December 31, 2018)	FY2019 (As of December 31, 2019)
Liabilities and equity			
Liabilities			
Current liabilities			
Trade and other payables	17	170,854	166,801
Bonds and borrowings	18	65,912	50,033
Lease liabilities	20	1,894	14,796
Other financial liabilities	19	2,307	2,424
Income taxes payable		7,211	26,516
Contract liabilities	25	10,809	12,407
Other current liabilities	21	168,511	167,910
Total current liabilities		427,502	440,891
Non-current liabilities			
Bonds and borrowings	18	139,973	136,493
Lease liabilities	20	6,159	51,994
Other financial liabilities	19	16,666	18,548
Net defined benefit liabilities	23	18,337	17,301
Provisions	22	619	981
Contract liabilities	25	87,245	80,792
Deferred tax liabilities	16	36,293	26,576
Other non-current liabilities	21	12,300	12,287
Total non-current liabilities		317,594	344,977
Total liabilities		745,097	785,869
Equity			
Equity attributable to owners of the Company			
Share capital	24	81,690	81,690
Capital surplus	24	505,894	505,520
Treasury shares	24	(47,268)	(46,018)
Retained earnings	24	1,229,360	1,304,569
Other components of equity	24	(65,177)	(79,490)
Total equity attributable to owners of the Company		1,704,499	1,766,271
Non-controlling interests		27,766	29,168
Total equity		1,732,266	1,795,440
Total liabilities and equity		2,477,363	2,581,309

(ii) Consolidated Statements of Income

(Millions of yen)

	Note	FY2018 (From January 1, 2018 to December 31, 2018)	FY2019 (From January 1, 2019 to December 31, 2019)
Revenue	5, 25	1,291,981	1,396,240
Cost of sales	26	(441,823)	(451,297)
Gross profit		850,157	944,943
Selling, general and administrative expenses	22, 26	(552,841)	(557,607)
Share of profit of associates	15	16,508	15,621
Research and development expenses	26	(192,931)	(215,789)
Impairment losses	14	(34,742)	(13,476)
Other income	27	24,482	8,694
Other expenses	28	(2,328)	(5,801)
Operating profit		108,304	176,585
Finance income	29	9,178	4,433
Finance costs	29	(7,985)	(7,502)
Profit before taxes		109,497	173,515
Income tax expenses	16	(24,101)	(42,328)
Profit for the year		85,395	131,187
Attributable to:			
Owners of the Company		82,492	127,151
Non-controlling interests		2,903	4,035
Earnings per share:			
Basic earnings per share (Yen)	31	152.24	234.55
Diluted earnings per share (Yen)	31	151.26	231.13

(iii) Consolidated Statements of Comprehensive Income

(Millions of yen)

	Note	FY2018 (From January 1, 2018 to December 31, 2018)	FY2019 (From January 1, 2019 to December 31, 2019)
Profit for the year		85,395	131,187
Other comprehensive income			
Components that will not be reclassified to profit or loss			
Remeasurements of defined benefit plans	30	(2,516)	3,353
Financial assets measured at fair value through other comprehensive income	30	(11,582)	(645)
Share of other comprehensive income of associates	15, 30	(652)	296
Subtotal		(14,751)	3,005
Components that may be reclassified to profit or loss			
Foreign currency translation reserve	30	(26,289)	(10,634)
Cash flow hedges	30	9	(2)
Share of other comprehensive income of associates	15, 30	(7,486)	(4,800)
Subtotal		(33,766)	(15,437)
Total other comprehensive income		(48,518)	(12,432)
Comprehensive income		36,877	118,754
Attributable to:			
Owners of the Company		35,363	115,124
Non-controlling interests		1,513	3,629
Comprehensive income		36,877	118,754

(iv) Consolidated Statements of Changes in Equity

FY2018 (From January 1, 2018 to December 31, 2018)

(Millions of yen)

	Note	Equity attributable to owners of the Company					Other components of equity	
		Share capital	Capital surplus	Treasury shares	Retained earnings	Remeasure-ments of defined benefit plans	Financial assets measured at fair value through other comprehensive income	
Balance as of January 1, 2018		81,690	505,620	(47,267)	1,266,399	—	—	42,915
Changes in accounting policies		—	—	—	(70,242)	—	—	—
Restated balance		81,690	505,620	(47,267)	1,196,157	—	—	42,915
Profit for the year		—	—	—	82,492	—	—	—
Other comprehensive income		—	—	—	—	(2,725)	—	(11,950)
Comprehensive income		—	—	—	82,492	(2,725)	—	(11,950)
Purchase of treasury shares		—	—	(1)	—	—	—	—
Dividends	24	—	—	—	(54,184)	—	—	—
Share-based payment transactions		—	(22)	—	—	—	—	—
Changes in ownership interests in subsidiaries that do not result in loss of control		—	296	—	—	—	—	—
Disposal of subsidiaries		—	—	—	—	—	—	—
Transfer from other components of equity to retained earnings		—	—	—	4,895	2,725	—	(7,621)
Total transactions with owners, etc.		—	274	(1)	(49,289)	2,725	—	(7,621)
Balance as of December 31, 2018		81,690	505,894	(47,268)	1,229,360	—	—	23,344

	Note	Equity attributable to owners of the Company					Other components of equity	
		Foreign currency translation reserve	Cash flow hedges	Total	Total	Non-controlling interests	Total equity	
Balance as of January 1, 2018		(56,072)	(8)	(13,165)	1,793,278	28,671	—	1,821,950
Changes in accounting policies		—	—	—	(70,242)	—	—	(70,242)
Restated balance		(56,072)	(8)	(13,165)	1,723,036	28,671	—	1,751,707
Profit for the year		—	—	—	82,492	2,903	—	85,395
Other comprehensive income		(32,461)	9	(47,128)	(47,128)	(1,389)	—	(48,518)
Comprehensive income		(32,461)	9	(47,128)	35,363	1,513	—	36,877
Purchase of treasury shares		—	—	—	(1)	—	—	(1)
Dividends	24	—	—	—	(54,184)	(1,111)	—	(55,295)
Share-based payment transactions		—	—	—	(22)	—	—	(22)
Changes in ownership interests in subsidiaries that do not result in loss of control		12	—	12	309	(805)	—	(496)
Disposal of subsidiaries		—	—	—	—	(501)	—	(501)
Transfer from other components of equity to retained earnings		—	—	(4,895)	—	—	—	—
Total transactions with owners, etc.		12	—	(4,883)	(53,900)	(2,418)	—	(56,318)
Balance as of December 31, 2018		(88,521)	0	(65,177)	1,704,499	27,766	—	1,732,266

FY2019 (From January 1, 2019 to December 31, 2019)

(Millions of yen)

	Note	Equity attributable to owners of the Company					Other components of equity	
		Share capital	Capital surplus	Treasury shares	Retained earnings	Remeasurements of defined benefit plans	Financial assets measured at fair value through other comprehensive income	
Balance as of January 1, 2019		81,690	505,894	(47,268)	1,229,360	—	—	23,344
Changes in accounting policies		—	—	—	(23)	—	—	—
Restated balance		81,690	505,894	(47,268)	1,229,336	—	—	23,344
Profit for the year		—	—	—	127,151	—	—	—
Other comprehensive income		—	—	—	—	3,414	—	(423)
Comprehensive income		—	—	—	127,151	3,414	—	(423)
Purchase of treasury shares		—	—	(1)	—	—	—	—
Dividends	24	—	—	—	(54,205)	—	—	—
Share-based payment transactions		—	(752)	1,005	—	—	—	—
Exercise of stock options		—	(245)	245	—	—	—	—
Changes in ownership interests in subsidiaries that do not result in loss of control		—	625	—	—	—	—	—
Transfer from other components of equity to retained earnings		—	—	—	2,286	(3,414)	—	1,127
Total transactions with owners, etc.		—	(373)	1,250	(51,919)	(3,414)	—	1,127
Balance as of December 31, 2019		81,690	505,520	(46,018)	1,304,569	—	—	24,047

	Note	Equity attributable to owners of the Company					Other components of equity	
		Foreign currency translation reserve	Cash flow hedges	Total	Total	Non-controlling interests	Total equity	
Balance as of January 1, 2019		(88,521)	0	(65,177)	1,704,499	27,766	—	1,732,266
Changes in accounting policies		—	—	—	(23)	—	—	(23)
Restated balance		(88,521)	0	(65,177)	1,704,475	27,766	—	1,732,242
Profit for the year		—	—	—	127,151	4,035	—	131,187
Other comprehensive income		(15,015)	(2)	(12,026)	(12,026)	(405)	—	(12,432)
Comprehensive income		(15,015)	(2)	(12,026)	115,124	3,629	—	118,754
Purchase of treasury shares		—	—	—	(1)	—	—	(1)
Dividends	24	—	—	—	(54,205)	(1,354)	—	(55,560)
Share-based payment transactions		—	—	—	252	—	—	252
Exercise of stock options		—	—	—	0	—	—	0
Changes in ownership interests in subsidiaries that do not result in loss of control		—	—	—	625	(873)	—	(248)
Transfer from other components of equity to retained earnings		—	—	(2,286)	—	—	—	—
Total transactions with owners, etc.		—	—	(2,286)	(53,328)	(2,227)	—	(55,556)
Balance as of December 31, 2019		(103,537)	(1)	(79,490)	1,766,271	29,168	—	1,795,440

(v) Consolidated Statements of Cash Flows

(Millions of yen)

	Note	FY2018 (From January 1, 2018 to December 31, 2018)	FY2019 (From January 1, 2019 to December 31, 2019)
Cash flows from operating activities			
Profit before taxes		109,497	173,515
Depreciation and amortization expenses		59,275	75,690
Impairment losses and reversals of impairment losses		34,742	10,212
Share of loss (profit) of associates		(16,508)	(15,621)
Finance income		(9,178)	(4,433)
Finance costs		7,985	7,502
Decrease (increase) in inventories		(17,374)	(2,850)
Decrease (increase) in trade and other receivables		(20,468)	(24,440)
Increase (decrease) in trade and other payables		16,311	(11,105)
Others		(6,546)	2,202
Subtotal		157,735	210,671
Interest and dividends received		10,642	10,151
Interest paid		(2,967)	(4,187)
Income taxes paid		(29,589)	(24,000)
Net cash flows from (used in) operating activities		135,821	192,634
Cash flows from investing activities			
Proceeds from sales of property, plant and equipment		469	394
Payments for acquisition of property, plant and equipment		(57,075)	(48,602)
Payments for acquisition of intangible assets		(16,533)	(14,835)
Proceeds from sales and redemption of investments		33,846	44,446
Payments for acquisition of investments		(32,136)	(49,656)
Payments for acquisition of subsidiaries	37	(68,101)	—
Decrease (increase) in time deposits		47,287	18,577
Others		(1,097)	(2,603)
Net cash flows from (used in) investing activities		(93,341)	(52,279)
Cash flows from financing activities			
Proceeds from issuance of bonds	38	—	80,000
Purchase of treasury shares		(1)	(1)
Increase (decrease) in current borrowings	38	4,013	(4,285)
Proceeds from non-current borrowings	38	6,544	5,915
Repayments of non-current borrowings	38	(41,755)	(99,386)
Repayments of lease liabilities	38	(2,202)	(15,701)
Dividends paid		(55,295)	(55,560)
Others	38	(501)	(248)
Net cash flows from (used in) financing activities		(89,198)	(89,267)
Increase (decrease) in cash and cash equivalents		(46,718)	51,087
Cash and cash equivalents at beginning of period		336,613	285,022
Effect of exchange rate changes on cash and cash equivalents		(4,871)	(2,069)
Cash and cash equivalents at end of period		285,022	334,040

Notes to Consolidated Financial Statements

1. Reporting Entity

Otsuka Holdings Company Limited (hereinafter referred to as the “Company”) is a company incorporated in Japan. The addresses of its registered head office and principal business offices are disclosed on the Company’s website (URL <https://www.otsuka.com/en/>). The consolidated financial statements of the Company, which were prepared with the end of the fiscal year on December 31, 2019, comprise the Company and its subsidiaries (hereinafter referred to as the “Group”) and interests in its associates.

The details of businesses and principal business activities of the Group are provided in Note “5. Operating Segments.”

2. Basis of Preparation

(1) Compliance with IFRS

Pursuant to the provision of Article 93 of the Ordinance on Consolidated Financial Statements, the consolidated financial statements of the Company have been prepared in compliance with IFRS since the Company qualifies as a “Specified Company under Designated International Accounting Standards” prescribed in Article 1-2 of the Ordinance.

The Company’s consolidated financial statements for the fiscal year ended December 31, 2019 were approved on March 26, 2020 by Tatsuo Higuchi, President and Representative Director, CEO, and Yuko Makino, Executive Director, CFO.

(2) Basis of measurement

The consolidated financial statements have been prepared on a historical cost basis except for financial instruments, etc. measured at fair value.

(3) Functional currency and presentation currency

The consolidated financial statements are presented in Japanese yen, which is the Company’s functional currency, and figures are rounded down to the nearest million yen.

(4) Changes in accounting policies

The Group has adopted the following standards from the current fiscal year.

IFRS		Description of newly issued standards, interpretations and amendments
IFRS 16	Leases	Amendment concerning accounting treatment for leases

From the current fiscal year, the Group has adopted IFRS 16 “Leases” (issued in January 2016, hereinafter referred to as “IFRS 16”).

On adoption of IFRS 16, right-of-use assets and lease liabilities were recognized at the date of initial application of IFRS 16 (January 1, 2019) for leases previously classified as operating leases applying IAS 17 “Leases” (hereinafter referred to as “IAS 17”). In addition, operating lease payments that were expensed as incurred applying IAS 17 are recorded as depreciation for right-of-use assets and interest costs for lease liabilities in the consolidated statement of income for the current fiscal year, and are reclassified from a reduction in cash flows from operating activities to a reduction in cash flows from financing activities in the consolidated statement of cash flows.

The details of the accounting policy for leases are provided in Note “3. Significant Accounting Policies (10) Leases.”

In accordance with the transition requirement under IFRS 16, the Group has retrospectively adopted IFRS 16 and recognized the cumulative effect of initially applying IFRS 16 as an adjustment to the opening balance of retained earnings for the current fiscal year. In transitioning to IFRS 16, the Group chooses the practical expedient detailed in IFRS 16 paragraph C3 about whether a contract is, or contains a lease and continuously utilizes a result of assessment applying IAS 17 and IFRIC 4 “Determining whether an Arrangement contains a Lease.”

Lease liabilities are measured at the present value of the lease payments that are not paid at the commence date discounted using the lessee’s incremental borrowing rate at the date of initial application. The

weighted average lessee's incremental borrowing rate applied to lease liabilities recognized in the consolidated statement of financial position at the date of initial application is 3.9%. Right-of-use assets are initially measured at the initial measurement of the lease liabilities adjusted by the amount of any prepaid or accrued lease payments.

As a result, compared with the application of the previous accounting standard, as of the beginning of the current fiscal year, right-of-use assets increased by ¥59,324 million as property, plant and equipment in the consolidated statement of financial position, and retained earnings decreased by ¥23 million. The following is the reconciliation of operating lease contracts disclosed applying IAS 17 at the end of the previous fiscal year and lease liabilities recognized in the consolidated statement of financial position at the date of initial application.

(Millions of yen)

	Amount
Operating lease contracts disclosed as of December 31, 2018	42,631
Operating lease contracts discounted using the incremental borrowing rate as of January 1, 2019	33,366
Finance lease contracts disclosed as of December 31, 2018	8,054
Lease contracts accounted for as short-term lease expenses	(213)
Cancellable operating lease contracts	28,339
Others	118
Lease liabilities as of January 1, 2019	69,665

In the application of IFRS 16, the Group applies the following practical expedients detailed in IFRS 16 paragraph C10.

- A single discount rate is applied to a portfolio of leases with reasonably similar characteristics.
- Leases for which the lease term ends within 12 months of the date of initial application are accounted for in the same way as short-term leases.
- Initial direct costs are excluded from the measurement of the right-of-use asset at the date of initial application.
- Hindsight is used, such as in determining the lease term for the contract containing options to extend or terminate the lease.

(5) Changes in presentation

(Consolidated Statements of Financial Position)

The Group has adopted IFRS16 from the current fiscal year. In line with this application, "Lease liabilities," which was included in "Other financial liabilities" in the previous fiscal year, is separately presented from the current fiscal year due to the increased materiality of the amount. To reflect this change in presentation, the consolidated financial statements for the previous fiscal year have been reclassified accordingly.

As a result, ¥1,894 million previously presented as "Other financial liabilities" under "Current liabilities" and ¥6,159 million previously presented as "Other financial liabilities" under "Non-current liabilities" have been reclassified into "Lease liabilities" under "Current liabilities" and "Lease liabilities" under "Non-current liabilities," respectively.

(Consolidated Statements of Income)

For the purpose of providing more useful and clearer information on future cash flow projection and others, it has been decided that impairment losses on in-process research and development which were included in "Research and development expenses" and other impairment losses which were included in "Selling, general and administrative expenses" in the previous fiscal year are separately presented, in aggregate, as "Impairment losses" from the current fiscal year. To reflect this change in presentation, the consolidated financial statements for the previous fiscal year have been reclassified accordingly.

As a result, ¥23,208 million previously included in "Research and development expenses" and ¥11,533 million previously included in "Selling, general and administrative expenses" have been reclassified into ¥34,742 million of "Impairment losses."

(Consolidated Statements of Cash Flows)

The Group has adopted IFRS16 from the current fiscal year. In line with the application, “Repayments of lease liabilities,” which was included in “Other” under “Cash flows from financing activities” in the previous fiscal year, is separately presented from the current fiscal year due to the increased materiality of the amount. To reflect this change in presentation, the consolidated financial statements for the previous fiscal year have been reclassified accordingly.

As a result, ¥(2,202) million previously presented as “Other” under “Cash flows from financing activities” has been reclassified into “Repayments of lease liabilities” under “Cash flows from financing activities.”

(6) New standards not yet adopted

Among the standards and interpretations newly issued or amended by the date of approval that is described in the Note “2. Basis of Preparation,” there were no new or amended standards and interpretations that have been early adopted by the Group as of December 31, 2019. The impact of the adoption of these standards and interpretations has not been provided because it is expected to be insignificant.

3. Significant Accounting Policies

(1) Basis of consolidation

(i) Subsidiaries

Subsidiaries are entities that are controlled by the Group. The Group controls an investee when the Group has power over the investee, is exposed or has rights to variable returns arising from the Group’s involvement in the investee and has an ability to affect those returns through its power over the investee. The financial statements of subsidiaries are included in the consolidated financial statements from the date that the Group gains control until the date that control is lost.

If any accounting policies applied by a subsidiary differ from those applied by the Group, adjustments are made to the subsidiary’s financial statements where needed. The balances of payables and receivables and internal transactions within the group companies as well as unrealized gains or losses arising from internal transactions are offset in preparing the consolidated financial statements.

When the ownership interest in a subsidiary is partially disposed of, the transaction is accounted for as an equity transaction if the Group retains control over the subsidiary. Any difference between the amount of adjustment to the non-controlling interests and the fair value of the consideration paid or received is recognized directly in equity attributable to owners of the Company.

If the Group loses control over the subsidiary, gains or losses derived from such loss are recognized as profit or loss.

(ii) Associates

Associates are entities over which the Group has significant influence in terms of financial and operating policies but which the Group does not control or jointly control. The Group is presumed to have significant influence over another entity when it holds at least 20% but 50% or less of the voting rights of the entity.

Investments in associates are recognized at cost at the time of acquisition and subsequently accounted for using the equity method. Goodwill recognized on acquisition is included in investments in associates. Because such goodwill is not separately recognized, it is not tested for impairment separately. Instead, the entire amount of the investments in associates is tested for impairment as a single asset whenever objective evidence indicates that the investments in associates may be impaired.

If any accounting policies applied by an associate differ from those applied by the Group, adjustments are made to the associate’s financial statements where needed. When the Group has retained interests after losing significant influence, these interests are measured at fair value and any difference between the fair value and the carrying amount of the investment as of the date on which the equity method was discontinued is recognized as profit or loss.

(2) Business combinations

Business combinations are accounted for using the acquisition method.

Goodwill is measured as the excess of the aggregate of the consideration transferred, the amount of non-controlling interests in the acquiree and the acquisition-date fair value of the acquirer’s previously held equity interest in the acquiree over the net of the acquisition-date amounts of the identifiable assets acquired and the liabilities assumed. In case the identifiable net asset exceeds the aggregate of the consideration and others, such excess is immediately recognized in profit or loss.

The consideration transferred is calculated as the sum of the acquisition-date fair values of the assets transferred by the acquirer, the liabilities incurred by the acquirer to former owners of the acquiree and the equity interests issued by the acquirer. The consideration transferred includes any assets or liabilities resulting from a contingent consideration arrangement. The amount of non-controlling interests in the acquiree is measured for each business combination either at fair value or as the present ownership instruments' proportionate share in the recognized amounts of the acquiree's identifiable net assets. Identifiable assets acquired and liabilities assumed at the acquisition date are measured at their fair values as of the acquisition date, except for limited exceptions based on the requirements of IFRS 3 "Business Combinations."

Transaction costs incurred in relation to business combinations are recognized as expenses when they are incurred.

If the initial accounting for business combinations is incomplete by the end of the fiscal year in which the business combinations occur, the Group reports provisional amounts for the items for which the accounting is incomplete. Those provisional amounts recognized at the acquisition date are retrospectively adjusted to reflect new information obtained during the measurement period about facts and circumstances that existed as of the acquisition date and, if known at the acquisition date, would have affected the measurement of the amounts recognized. Additional assets or liabilities are recognized if new information is known to have resulted in the additional recognition of assets or liabilities. The measurement period does not exceed one year.

(3) Foreign currency translation

(i) Foreign currency transactions

Foreign currency transactions are translated to the respective functional currencies of the group companies at exchange rates on the transaction dates or exchange rates which are close to the actual rate on the transaction dates. Foreign currency monetary assets and liabilities are translated to the functional currency at the closing rate. Foreign currency monetary assets and liabilities that are measured at fair value are translated into the functional currency using the exchange rate at the date of measurement. Translation differences arising from translations or settlements are recognized as profit or loss; provided, however, that translation differences arising from financial assets measured through other comprehensive income as well as from cash flow hedges are recognized as other comprehensive income.

(ii) Foreign operations

The assets and liabilities of foreign operations are translated into Japanese yen at the closing rate. The revenues and expenses of foreign operations are translated into Japanese yen at the average exchange rate for the reporting period. Translation differences arising from translation of financial statements of foreign operations are recognized as other comprehensive income. The foreign currency translation reserve is recognized in profit or loss for periods in which foreign operations are disposed.

(4) Financial instruments

(i) Financial assets

i) Initial recognition and measurement

Trade and other receivables are initially recognized on the date when they are incurred. All other financial assets are initially recognized on the contract date when the Group becomes a party to the contractual provisions of the financial instruments.

At the initial recognition, all financial assets, except for those measured at fair value through profit or loss, are measured at fair value plus directly attributable transaction costs. Transaction costs of financial assets measured through profit or loss are recognized in profit or loss.

At the initial recognition, financial assets are classified as (a) Financial assets measured at amortized cost, (b) Debt instruments measured at fair value through other comprehensive income, (c) Equity instruments measured at fair value through other comprehensive income or (d) Financial assets measured at fair value through profit or loss.

(a) Financial assets measured at amortized cost

Financial assets are classified as financial assets measured at amortized cost if both of the following conditions are met.

- The financial asset is held within a business model whose objective is to hold financial assets in order to collect contractual cash flows.
- The contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

- (b) Debt instruments measured at fair value through other comprehensive income
Financial assets are classified as debt instruments measured at fair value through other comprehensive income if both of the following conditions are met.
 - The financial asset is held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets.
 - The contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.
 - (c) Equity instruments measured at fair value through other comprehensive income
For investments in some equity instruments, the Group has chosen an irrevocable option to present subsequent changes in fair value of investments that are neither 'held for trading' nor 'contingent consideration recognized by an acquirer in a business combination to which IFRS 3 Business Combinations applies,' in other comprehensive income. The Group classifies such investments as equity instruments measured at fair value through other comprehensive income.
 - (d) Financial assets measured at fair value through profit or loss
Financial assets, except for financial assets measured at amortized cost, debt instruments measured at fair value through other comprehensive income, and equity instruments measured at fair value through other comprehensive income stated above, are classified as financial assets measured at fair value through profit or loss.
- ii) Subsequent measurement
After their initial recognition, financial assets are measured according to their classification as follows:
- (a) Financial assets measured at amortized cost
Financial assets measured at amortized cost are measured at amortized cost using the effective interest method. Amortization using the effective interest method and gains or losses arising in the case of derecognition are recognized in profit or loss.
 - (b) Equity instruments measured at fair value through other comprehensive income
Equity instruments measured at fair value through other comprehensive income are measured at fair value. Any changes in fair value are recognized in other comprehensive income. When such financial assets are derecognized, the accumulated other comprehensive income is transferred to retained earnings. Meanwhile, dividends from such financial assets are recognized as profit or loss.
 - (c) Financial assets measured at fair value through profit or loss
Financial assets measured at fair value through profit or loss are measured at fair value, and any changes in fair value are recognized in profit or loss.
- iii) Impairment
With respect to impairment of financial assets measured at amortized cost, the Group recognizes an allowance for expected credit losses on such financial assets.
At the end of each fiscal year, the Group evaluates whether the credit risk on financial instruments has increased significantly since the initial recognition.
If credit risk on a financial instrument has not increased significantly since the initial recognition, the allowance for that instrument is measured at an amount equal to the 12-month expected credit losses.
If credit risk on a financial instrument has increased significantly since the initial recognition, the allowance for such financial instrument is measured at an amount equal to the lifetime expected credit losses.
The Group considers that, as a rule-of-thumb, there has been a significant increase in credit risk when no payments have been made and more than 30 days have passed since the contractual due date. The assessment of whether or not credit risk has increased significantly takes into account all relevant current information that is reasonably available to the Group, as well as historic information.
When the credit risk on a financial asset is considered to be low at the end of a fiscal year, the Group determines that the credit risk on that financial asset has not increased significantly since its initial recognition.
However, with regards to trade receivables, etc., that do not contain a significant financing component, the allowance is always measured at an amount equal to the lifetime expected credit losses, regardless of whether or not there has been a significant increase in credit risk since initial recognition.
Expected credit losses of a financial instrument are measured using a methodology which reflects the following:
- An unbiased and probability-weighted loss that is determined by evaluating a range of possible outcomes;
 - The time value of money; and

- Reasonable and supportable information that is available without undue cost or effort at the reporting date about past events, current conditions and forecasts of future economic conditions. The changes in these measurements are recognized in profit or loss. The amount of expected credit losses (or reversal) required to adjust the loss allowance at the end of the fiscal year to the amount that is required to be recognized is recognized as impairment gains or impairment losses.

iv) Derecognition

The Group derecognizes financial assets only when the contractual rights to the cash flows from the financial assets expire, or when the Group transfers substantially all the risks and rewards of ownership of the financial assets.

(ii) Financial liabilities

i) Initial recognition and measurement

Bonds and borrowings are initially recognized on the date when they are issued or incurred. All other financial liabilities are initially recognized on the contract date when the Group becomes a party to the contractual provisions of the financial instruments.

At the initial recognition, financial liabilities are classified as (a) financial liabilities measured at amortized cost and (b) financial liabilities measured at fair value through profit or loss.

At the initial recognition, financial liabilities measured at amortized cost are measured at fair value net of transaction costs that are directly attributable to the financial liability. Transaction costs of financial liabilities measured at fair value through profit or loss are recognized in profit or loss.

ii) Subsequent measurement

After their initial recognition, financial liabilities are measured according to their classification as follows:

(a) Financial liabilities measured at amortized cost

Financial liabilities measured at amortized cost are measured at amortized cost using the effective interest method. Amortization using the effective interest method and gains or losses arising in the case of derecognition are recognized in profit or loss.

(b) Financial liabilities measured at fair value through profit or loss

Financial liabilities measured at fair value through profit or loss are measured at fair value, and any changes in fair value are recognized in profit or loss.

iii) Derecognition

The Group derecognizes the financial liability when a financial liability is extinguished, that is, the obligations specified in a contract are discharged, cancelled or expired.

(iii) Offsetting of financial assets and financial liabilities

Financial assets and financial liabilities are offset and the net amount is presented only when the Group currently has a legally enforceable right to set off the recognized amount and intends either to settle on a net basis or realize the assets and settle the liabilities simultaneously.

(iv) Derivatives and hedge accounting

Derivatives are initially recognized at fair value. After their initial recognition, derivatives continue to be measured at fair value.

The Group utilizes forward foreign exchange contracts, currency swap agreements, currency option transactions, interest rate swap agreements and other derivatives to hedge foreign currency risk and interest rate risk.

At inception of a hedging relationship, the Group formally designates and documents the hedging relationship and the risk management objective and strategy for undertaking the hedge. The documentation includes identification of the hedging instrument, the hedged item, the nature of the risk being hedged, and the methods of assessing whether the hedging relationship meets the hedge effectiveness requirements. The Group assesses whether the hedging relationship meets the hedge effectiveness requirements, both at inception and on an ongoing basis. Ongoing assessments are performed at each reporting date or upon a significant change in the circumstances affecting the hedge effectiveness requirements, whichever comes first.

The Group applies hedge accounting to cash flow hedges which meet the criteria for hedge accounting and such hedges are accounted for as follows:

The portions of the gain or loss on the hedging instrument that are determined to be effective hedges are recognized in other comprehensive income, while the remaining ineffective portions are recognized in profit or loss. The amounts associated with the hedging instruments recognized in other comprehensive

income are reclassified to profit or loss when the hedged transactions affect profit or loss. However, in cases where the hedged forecast transaction subsequently results in the recognition of a non-financial asset or liability, the amount recognized in other comprehensive income is accounted for as an adjustment to the initial carrying amount of the non-financial asset or liability.

When the hedging relationship ceases to meet the qualifying criteria, or the hedging instrument expires or is sold, terminated or exercised, the application of hedge accounting is discontinued prospectively. When forecast transactions or firm commitments are no longer expected to occur, any related cumulative gains or losses that have been recognized in equity through other comprehensive income are reclassified to profit or loss.

The Group does not undertake any fair value hedges or any hedges of net investment in foreign operations.

(5) Cash and cash equivalents

Cash and cash equivalents consist of cash on hand, demand deposits, and short-term investments with repayment terms of three months or less from the date of acquisition that are readily convertible to cash and subject to an insignificant risk of changes in value.

(6) Inventories

Inventories are measured at the lower of cost or net realizable value. Net realizable value is the estimated selling price in the ordinary course of business less the estimated costs of completion and the estimated costs necessary to make the sale. The cost of inventories is determined mainly by using the weighted-average cost formula. The cost of inventories comprises all costs of purchase, costs of conversion and other costs incurred in bringing the inventories to the present location and condition.

(7) Property, plant and equipment

The cost model is applied in measurement of property, plant and equipment. Property, plant and equipment are carried at cost less any accumulated depreciation and any accumulated impairment losses.

The cost of property, plant and equipment includes cost directly incidental to the acquisition of assets, the initial estimated costs of dismantling and removing the assets and restoration costs.

Depreciation expense for assets except for land and construction in progress is recognized mainly by the straight-line method over the respective estimated useful lives. The estimated useful lives of major asset items are as follows:

- Buildings and structures: 2 to 65 years
- Machinery and vehicles: 2 to 58 years
- Tools, furniture and fixtures: 2 to 20 years

The estimated useful lives, residual values and depreciation methods of assets are reviewed at the end of each fiscal year, and any changes are applied prospectively as a change in an accounting estimate.

(8) Goodwill

Measurement of goodwill at the initial recognition is provided in “(2) Business combinations.” After the initial recognition, the amount is recorded at its cost less any accumulated impairment losses.

Goodwill is allocated to each of the cash-generating units or groups of cash-generating units (hereinafter referred to as the “Cash-Generating Units”) that is expected to benefit from the synergies of the business combination. Cash-Generating Units to which goodwill has been allocated are tested for impairment annually and whenever there is an indication that the unit may be impaired. If the recoverable amount of Cash-Generating Units is less than their carrying amounts, an impairment loss is recognized in profit or loss. With regard to allocation of impairment losses recognized in association with Cash-Generating Units, first the carrying amount of goodwill that has been allocated to the unit is reduced, and then the remaining amount of impairment loss is allocated to other assets of the unit pro rata on the basis of the carrying amount of each asset in the unit. For impairment losses recognized on goodwill, no reversal is made in subsequent periods.

(9) Intangible assets

The cost model is applied in measurement of intangible assets. Intangible assets are carried at cost less any accumulated amortization and any accumulated impairment losses.

Separately acquired intangible assets are measured at cost at the time of the initial recognition.

Intangible assets acquired in business combinations are measured at fair value at the acquisition date.

Internally generated intangible assets, other than development expenses that meet the requirements for capitalization, are recognized as an expense when incurred.

Amortization expense on each intangible asset with a finite useful life is recognized by the straight-line method over its estimated useful life. The estimated useful lives of major intangible assets are as follows:

- Patents: 5 to 15 years
- Trademarks, distribution rights and others: 3 to 16 years
- Software: 2 to 10 years

The estimated useful lives, residual values and amortization methods are reviewed at the end of each fiscal year, and any changes are applied prospectively as a change in an accounting estimate.

Intangible assets with indefinite useful lives consist mainly of brands and trademarks acquired separately or in business combinations, and are included in intangible assets as trademarks, distribution rights and others. Intangible assets with indefinite useful lives are reviewed at the end of each fiscal year to determine whether the indefinite useful life assessment remains appropriate. If it is no longer appropriate, the change in the useful life assessment from indefinite to finite is accounted for as a change in an accounting estimate. In-process research and development acquired separately or in business combinations are included in intangible assets as in-process research and development. Because these assets are intangible assets that are not yet available for use, they are not amortized and are tested for impairment. An asset in “in-process research and development” is transferred to trademarks, distribution rights and others when the asset becomes available for use by obtaining permits and approvals from regulatory authorities in a subsequent period, and begins to be amortized by the straight-line method over the estimated useful life from that time.

(10) Leases

FY2018 (From January 1, 2018 to December 31, 2018)

Lease transactions in which substantially all the risks and rewards incidental to ownership are transferred to the Group are classified as finance leases. All other lease transactions are classified as operating leases.

With regards to finance leases, the Group initially recognizes lease assets and liabilities at the fair value of the leased property or, if lower, the present value of the minimum lease payments, each determined at the inception of the lease.

Leased assets are depreciated using the straight-line method over the shorter of their estimated useful lives or lease terms. Lease payments are apportioned between the finance costs and the repayments of the lease obligations. Finance costs are allocated to each period during the lease term so as to produce a constant periodic rate of interest on the remaining balance of the liability.

Lease payments under operating leases are recognized as expenses using the straight-line method over the lease term.

FY2019 (From January 1, 2019 to December 31, 2019)

For the leases that the Group has contracted as a lessee, right-of-use assets are measured at cost, and lease liabilities are measured at the present value of the lease payments that are not paid.

Right-of-use assets are depreciated using the straight-line method over the shorter of their estimated useful lives or lease terms.

Lease payments are recognized upon apportionment between the finance costs and the repayments of lease liabilities based on the interest method.

The Group does not recognize right-of-use assets and lease liabilities for leases on intangible assets and short-term leases within 12 months. The Group recognizes the lease payments relating to short-term leases on either a straight-line basis over the lease term or another systematic basis.

(11) Impairment of property, plant and equipment and intangible assets

The Group assesses whether there is any indication of impairment at the end of each fiscal year for property, plant and equipment and intangible assets. If any such indication exists, the recoverable amount of the asset is estimated. When it is not possible to estimate the recoverable amount of an individual asset, the Group estimates the recoverable amount of the cash-generating unit to which the asset belongs. A cash-generating unit is the smallest identifiable group of assets that generates cash inflows that are largely independent of the cash inflows from other assets or groups of assets. For the intangible assets with indefinite useful lives, or those not yet available for use, the recoverable amounts are estimated at the end of each fiscal year, regardless of whether there is any indication of impairment.

The recoverable amount of an individual asset or a cash-generating unit is measured at the higher of its fair value less cost of disposal or its value in use. The value in use is calculated by discounting the estimated future cash flows to the present value using a pre-tax discount rate that reflects the time value of money and the risks specific to the asset.

The corporate assets do not independently generate cash inflows. When there is an indication of impairment of the corporate assets, the recoverable amount of the cash-generating unit to which the corporate assets belong is calculated.

Impairment loss is recognized in profit or loss when the carrying amount of the asset or cash-generating unit exceeds the recoverable amount.

For an impairment loss recognized in prior periods, the Group assesses whether there is any indication of a decrease or disappearance of the impairment loss at the end of each fiscal year. If there is any indication of reversal of impairment loss, the recoverable amounts of assets or cash-generating units are estimated. In cases in which the recoverable amount exceeds the carrying amount of the asset or cash-generating unit, the impairment loss is reversed up to the lower of the recoverable amount or the carrying amount less any depreciation and amortization costs that would have been determined had no impairment loss been recognized.

(12) Assets held for sale

Assets or groups of assets expected to be recovered not by continuous use but by sale are classified as non-current assets or disposal groups held for sale when they are quite likely to be sold within one year, they are available for immediate sale in its present condition, and management of the Group is committed to such sale. In such case, non-current assets are neither depreciated nor amortized, and are measured at carrying amount or fair value less cost of sales, whichever is lower.

(13) Post-employment benefits

The Group's post-employment benefit plans for its employees include defined benefit plans and defined contribution plans.

The Group uses the projected unit credit method to determine the present value of the defined benefit obligations, the related current service cost and the past service cost.

The discount rate is determined based on market yields on high quality corporate bonds at the end of the fiscal year that are consistent with the discount period, which is set for the projected period until the expected date of benefit payment in each fiscal year.

Net defined benefit liabilities or assets are calculated by deducting the fair value of the plan assets from the present value of the defined benefit obligations. If the defined benefit plan has surplus, the defined benefit asset is limited to the asset ceiling that is the present value of any future economic benefits available in the form of reductions in the future contributions to the plan or cash refunds.

Service costs and net interest on the net defined benefit liabilities (assets) are recognized in profit or loss.

The remeasured amount of a defined benefit plan is recognized at once in other comprehensive income when it occurs, and immediately transferred to retained earnings.

Contributions to the defined contribution retirement benefits are recognized as expenses when employees have rendered service.

(14) Provisions

Provisions are recognized when there are present legal or constructive obligations as a result of past events, it is probable that outflows of resources embodying economic benefits will be required to settle the obligations, and reliable estimates can be made of the amount of obligations.

The amount recognized as provisions is the best estimate taking into account the risks and uncertainties of the expenditure required to settle the present obligations on the reporting date. When the time value of money is material, the amount of provision is measured at the present value of the expenditures expected to be required to settle the obligation.

(15) Treasury shares

Treasury shares are measured at acquisition cost and deducted from equity. No gain or loss is recognized associated with the purchase, sale or retirement of treasury shares of the Company. Any difference between the carrying amount and the consideration received from the sale is recognized as capital surplus.

(16) Share-based payments

(i) Equity-settled share-based payment plan

The Group has adopted a restricted stock compensation plan accounted for as an equity-settled share-based payment plan from the current fiscal year. The stock option plan has been terminated due to the lapse of the applicable service period for the plan, and all stock options were exercised for the current fiscal year.

Restricted stock compensation is measured at fair value at the grant date and recognized as expenses over the vesting periods from the grant date with the corresponding amounts as increases in equity. The fair value of restricted stock compensation is measured by reference to fair value of granted shares of the Company.

(ii) Cash-settled share-based payment plan

The Group has adopted equity-linked compensation entitlements as a cash-settled share-based payment plan.

For the cash-settled share-based payments, the fair value of payments is recognized as a liability, and any changes in the fair value of the liability are recognized as profit or loss until the liability is settled.

(17) Revenue

(i) Sales of products

For sales of products, the performance obligation is judged to have been satisfied and revenue is therefore recognized upon delivery of the products because legal title, physical possession, significant risks and rewards of ownership of the products are transferred to customer upon delivery, and the customer obtains control over the products.

Products may be sold with a rebate based upon the achievement of a defined sales volume and amount. In such a case, the transaction price is recognized as the consideration promised in the contract, less estimated rebates and other items. Rebates are measured by the 'most likely amount' method based on historical performance. Revenue is recognized only to the extent that it is highly probable that significant reversal will not occur.

The consideration of sales is received primarily within one year from the time of delivery, and it does not include significant financing component.

(ii) License and royalty income

License income is up-front and milestone payments that the Group receives based on license agreements, etc., which the Group and a third party enter into for development and distribution right of developing and finished products. Under license agreements, etc., if contractual obligations are fulfilled at a specific point in time, up-front payments are recognized as revenue once development and distribution rights are granted. If contractual obligations are fulfilled over a period of time, such payments are recorded as contract liabilities and recognized as revenue over a period (estimated contract term, etc.) in accordance with the method of measuring progress towards complete satisfaction of performance obligations, such as those related to development cooperation, determined by each contract. Income from milestone payments received under license agreements is recognized as revenue from the point when the conditions are met to avoid future reversal of revenues.

Royalty income is the income from license agreements, etc., calculated based on the sales, etc., of counterparties and its revenue is recognized at the later point of either the counterparty's revenue recognition, etc., or satisfaction of performance obligations.

License and royalty income is received primarily within one year from the time when the right to the amount is earned based on the contract, and it does not include material financing component.

(18) Government grants

Grant income is measured at fair value and recognized when there is reasonable assurance that the Group will comply with the conditions attached to the grants and that the grants will be received. Grants for revenue incurred are recorded as revenue in the fiscal year during which the expenses occurred. Grants for the assets are recorded as revenue regularly over the useful life of the asset, and unearned grant income is recorded as liability.

(19) Finance income and finance costs

Finance income principally consists of interest income, dividend income, gain on fair value valuation and foreign exchange gains. Interest income is recognized using the effective interest method when the income arises. Dividend income is recognized when the Group's right to receive the dividend is established.

Finance costs principally consist of interest expenses, loss on fair value valuation and foreign exchange losses.

(20) Income taxes

Income taxes consist of current taxes and deferred taxes. These taxes are recognized in profit or loss, except for those related to business combinations and items recognized directly in equity or other comprehensive income.

Current taxes are measured at the amount of expected tax payment to or expected tax refund from tax authorities. The amount of taxes is computed in accordance with tax rates and tax laws that are in effect or substantially in effect by the end of the fiscal year in countries where the Group conducts business activities and earns taxable profits or losses.

Deferred taxes are recognized for temporary differences between accounting carrying amounts of assets and liabilities at the reporting date and amounts of them for tax purposes, unused tax losses and unused tax credits.

Deferred tax assets and liabilities are not recorded for the following temporary differences:

- Temporary differences arising from goodwill
- Temporary differences arising from initial recognition of assets and liabilities which occur through transactions that affect neither accounting profit nor taxable profit for tax purposes, except for business combinations
- In cases where, for taxable temporary differences associated with investments in subsidiaries and associates, timing of reversal can be controlled and it is highly probable that such temporary differences are not reversed in a foreseeable period
- In cases where, for deductible temporary differences associated with investments in subsidiaries and associates, it is highly probable that such temporary differences are not reversed to the extent foreseeable

Deferred tax liabilities are recognized, in principle, for all taxable temporary differences, while deferred tax assets are recognized for all deductible temporary differences to the extent that it is highly probable that taxable profits will be available against which the deductible temporary differences could be utilized.

The carrying amount of deferred tax assets is reviewed in every period, and reduced by the amount of deferred tax assets for which taxable profit sufficient to use all or part of the deferred tax assets is unlikely to be earned. Unrecognized deferred tax assets are reassessed in every period and recognized to the extent that it is highly probable that deferred tax assets are realizable with future taxable profit.

The Company and certain domestic subsidiaries have adopted the consolidated taxation system from the current fiscal year.

Deferred tax assets and liabilities are calculated in accordance with tax rates and tax laws expected to be applied in the period in which the assets are realized or the liabilities are settled based on tax rates and tax laws that are in effect or substantially in effect at the end of the fiscal year.

Deferred tax assets and liabilities are offset if the Group has a legally enforceable right to offset current tax assets against current tax liabilities, and they are related to income taxes levied by the same taxation authority on the same taxable entity.

(21) Earnings per share

Basic earnings per share are calculated by dividing profit or loss for the year attributable to ordinary equity holders of the Company, by the weighted average number of ordinary shares issued during the period that is adjusted by the number of treasury shares. Diluted earnings per share are calculated reflecting the adjustment of the impact from all diluted shares with dilutive effect.

4. Significant Accounting Estimates and Judgments

In preparing IFRS-compliant consolidated financial statements, the management is required to make judgments, estimates and assumptions that may affect the application of accounting policies and the reported amounts of assets, liabilities, revenue and expenses. Actual results may differ from these estimates.

Such estimates and underlying assumptions are reviewed on an ongoing basis. The effects of the review of accounting estimates are recognized in the accounting period in which the review was conducted and future accounting periods.

Of items for which the management made estimates and judgments, those that have significant effects on the amounts recognized in the consolidated financial statements are as follows:

- Useful lives of property, plant and equipment and intangible assets (items (7) and (9) of Note “3. Significant Accounting Policies,” Notes “12. Property, Plant and Equipment” and “13. Goodwill and Intangible Assets”)
- Impairment of property, plant and equipment, goodwill and intangible assets (items (8) and (11) of Note “3. Significant Accounting Policies” and Note “14. Impairment of Assets”)
- Fair value measurement of the financial instruments (Note “33. Financial Instruments”)
- Recoverability of deferred tax assets (Note “16. Income Taxes”)

- Accounting and measurement of provisions (Note “22. Provisions”)
- Measurements of defined benefit obligations (Note “23. Post-employment Benefits”)
- Revenue recognition (item (17) of Note “3. Significant Accounting Policies” and Note “25. Revenue”)
- Contingent liabilities (Note “40. Contingent Liabilities”)

5. Operating Segments

(1) Overview of reportable segments

The Group’s reportable segments are the constituent units of the Group for which separate financial information is available and which are subject to periodic reviews by the Board of Directors in order to make decisions on allocation of business resources and to evaluate the business performances of the respective segments.

As the Group’s holding company, the Company directs the Group’s strategic planning, monitors Group operations and provides various services to its group companies. Business activities are conducted by the Group’s subsidiaries and associates.

Centering on healthcare business, the Group operates activities inside and outside Japan relating to the following four reportable segments: “Pharmaceuticals,” “Nutraceuticals,” “Consumer products” and “Others” businesses. The Group defines the reportable segments as follows:

“Pharmaceuticals” comprises manufacturing and sales of prescription drugs, intravenous solutions, and others. “Nutraceuticals” comprises manufacturing and sales of functional beverages, etc., over-the-counter drugs and nutritional supplements. “Consumer products” comprises manufacturing and sales of mineral water, soft beverages and food products. “Others” encompasses logistics, warehousing, manufacturing and sales of chemical products, evaluation systems for LED displays and spectroanalysis devices.

(2) Revenue and performances by reportable segment

Revenue and performances by the Group’s reportable segment are as follows.

Segment profit is based on operating profit.

Intersegment revenue and transfers reflect reasonable prices for intersegment transfers based on market value.

FY2018 (From January 1, 2018 to December 31, 2018)

(Millions of yen)

	Reportable segment					Adjustments ¹	Consolidated
	Pharmaceuticals	Nutraceuticals	Consumer products	Others	Total		
Revenue							
Revenue from external customers	817,110	338,585	33,651	102,634	1,291,981	–	1,291,981
Intersegment revenue or transfers	–	372	156	38,614	39,144	(39,144)	–
Total	817,110	338,957	33,807	141,249	1,331,125	(39,144)	1,291,981
Segment profit	84,823	43,041	8,668	9,882	146,415	(38,111)	108,304
Other items							
Depreciation and amortization expenses	38,655	10,448	1,028	6,043	56,176	3,099	59,275
Share of profit of associates	2,883	506	11,351	1,774	16,516	(7)	16,508
Impairment losses	33,884	428	329	85	34,727	15	34,742
Capital expenditures ²	166,872	11,789	1,939	9,546	190,147	3,635	193,782

FY2019 (From January 1, 2019 to December 31, 2019)

(Millions of yen)

	Reportable segment					Adjustments ¹	Consolidated
	Pharmaceuticals	Nutraceuticals	Consumer products	Others	Total		
Revenue							
Revenue from external customers	924,250	333,757	33,553	104,680	1,396,240	–	1,396,240
Intersegment revenue or transfers	–	23	–	39,152	39,176	(39,176)	–
Total	924,250	333,780	33,553	143,833	1,435,417	(39,176)	1,396,240
Segment profit	161,342	39,175	8,852	10,858	220,229	(43,644)	176,585
Other items							
Depreciation and amortization expenses	48,977	13,091	1,311	7,805	71,185	4,504	75,690
Share of profit of associates	3,421	262	10,638	1,302	15,624	(2)	15,621
Impairment losses	8,754	1,034	678	490	10,957	2,518	13,476
Capital expenditures ²	47,834	16,599	2,191	13,717	80,343	6,790	87,133

¹ Details of adjustments are as follows.

(i) Segment profit

Details of adjustments to segment profit are as follows.

(Millions of yen)

	FY2018 (From January 1, 2018 to December 31, 2018)	FY2019 (From January 1, 2019 to December 31, 2019)
Intersegment eliminations	(49)	(3)
Unallocated expenses*	(39,161)	(44,749)
Other income	1,098	1,108
Total	(38,111)	(43,644)

*Unallocated expenses consist mainly of costs of the headquarters functions of the Company and certain subsidiaries.

(ii) Other items

Depreciation and amortization expenses, and impairment losses

Adjustments include depreciation and amortization expenses, and impairment losses of property, plant and equipment and intangible assets as assets associated with headquarters functions of the Company and certain subsidiaries.

(iii) Capital expenditures

Adjustments include capital expenditures relating to assets associated with headquarters and research functions of the Company and certain subsidiaries.

² Capital expenditures represent the amount of increases in property, plant and equipment, goodwill and intangible assets.

(3) Information about products and services

Revenue from external customers by major product and service is as follows.

(Millions of yen)

	FY2018 (From January 1, 2018 to December 31, 2018)	FY2019 (From January 1, 2019 to December 31, 2019)
(Pharmaceuticals)		
<i>ABILIFY MAINTENA</i>	87,978	101,779
<i>REXULTI</i>	69,482	89,822
<i>Samsca</i>	75,927	91,736
Clinical nutrition	111,133	113,375
(Nutraceuticals)		
Functional beverages, etc. ¹	119,411	117,918
Functional foods, etc. ²	87,109	82,597
Supplements ³	103,873	102,733

¹ Functional beverages, etc. consist of *POCARI SWEAT*, *Tiovita Drink*, *ORONAMIN C*, *Fibe-Mini*, *OS-I* and *BODY MAINTÉ*, etc. As a result of reviewing major product groups for functional beverages, etc. in line with the Third Medium-Term Management Plan started in FY2019, revenue of *OS-I* and *BODY MAINTÉ*, etc. has also been included from FY2019. To reflect this change, the amount for FY2018 increased by ¥10,050 million.

² Functional foods, etc. consist of products of the Nutrition & Santé SAS Group, *Calorie Mate* and products of Daiya Foods Inc., etc. As a result of reviewing major product groups for functional foods, etc. as well, revenue of products of Daiya Foods Inc., etc. has also been included from FY2019. To reflect this change, the amount for FY2018 increased by ¥11,545 million.

³ Supplements consist of products of Pharmavite LLC Group, *EQUELLE*, etc. As a result of reviewing major product groups for supplements as well, revenue of *EQUELLE*, etc. has also been included from FY2019. To reflect this change, the amount for FY2018 increased by ¥7,793 million.

(4) Information by geographical area

Revenue from external customers

(Millions of yen)

	FY2018 (From January 1, 2018 to December 31, 2018)	FY2019 (From January 1, 2019 to December 31, 2019)
Japan	645,521	689,734
North America	347,091	399,569
Others	299,367	306,937
Total	1,291,981	1,396,240

¹ Revenue from external customers is classified based on the location of customers.

² Of the amounts for North America, revenue in the United States for FY2018 and FY2019 is ¥332,159 million and ¥388,397 million, respectively.

Non-current assets

(Millions of yen)

	FY2018 (As of December 31, 2018)	FY2019 (As of December 31, 2019)
Japan	381,064	418,951
North America	617,809	621,770
Others	166,818	168,643
Total	1,165,692	1,209,365

¹ Non-current assets are classified based on the location of assets.

² Non-current assets do not include investments in associates, other financial assets, deferred tax assets and net defined benefit assets.

³ Goodwill included in non-current assets is classified based on the location of investees.

⁴ Of the amounts for North America, non-current assets in the United States for FY2018 and FY2019 are ¥581,569 million and ¥574,893 million, respectively.

(5) Information about major customers

Information is not presented because no revenue from transactions with a single external customer amounts to more than 10% of the Group's revenue.

6. Cash and Cash Equivalents

The breakdown of cash and cash equivalents is as follows.

(Millions of yen)

	FY2018 (As of December 31, 2018)	FY2019 (As of December 31, 2019)
Cash and cash equivalents		
Cash and deposits with banks with deposit terms within three months	281,353	305,908
Short-term investments redeemable within three months	3,669	28,132
Total cash and cash equivalents	285,022	334,040

7. Trade and Other Receivables

The breakdown of trade and other receivables is as follows.

(Millions of yen)

	FY2018 (As of December 31, 2018)	FY2019 (As of December 31, 2019)
Trade accounts and notes receivable	368,888	391,948
Accounts receivable - other	11,524	11,414
Allowance for credit losses	(1,892)	(1,945)
Total	378,520	401,418

The amount of assets pledged as collateral for borrowings included in trade and other receivables is ¥255 million in FY2018 and ¥279 million in FY2019.

8. Inventories

The breakdown of inventories is as follows.

(Millions of yen)

	FY2018 (As of December 31, 2018)	FY2019 (As of December 31, 2019)
Merchandise and finished goods	88,733	89,169
Work-in process	28,815	30,472
Raw materials	36,697	37,087
Supplies	2,881	3,262
Total	157,128	159,991
Of which, inventories scheduled to be sold after 12 months	151	188

Cost of inventories that is recognized as expenses is ¥435,283 million in FY2018 and ¥443,266 million in FY2019.

The amount of assets pledged as collateral for borrowings included in inventories is ¥353 million in FY2018 and ¥408 million in FY2019.

The amount of write-downs of inventories recognized as an expense is as follows.

(Millions of yen)

	FY2018 (From January 1, 2018 to December 31, 2018)	FY2019 (From January 1, 2019 to December 31, 2019)
Amount of write-downs	5,660	6,923

9. Other Financial Assets

The breakdown of other financial assets is as follows.

(Millions of yen)

	FY2018 (As of December 31, 2018)	FY2019 (As of December 31, 2019)
Other financial assets		
Financial assets measured at amortized cost		
Time deposits	46,689	28,167
Loans receivable	2,581	69
Bonds	560	557
Others	27,027	28,165
Financial assets measured at fair value through profit or loss		
Derivative assets	1	—
Others	2,397	5,476
Financial assets measured at fair value through other comprehensive income		
Equity instruments	142,509	136,485
Total	221,767	198,921
Other financial assets (current)	66,614	48,232
Other financial assets (non-current)	155,153	150,688

10. Other Assets

The breakdown of other assets is as follows.

(Millions of yen)

	FY2018 (As of December 31, 2018)	FY2019 (As of December 31, 2019)
Other assets		
Prepaid expenses	20,366	23,458
Net defined benefit assets	2,827	5,784
Others	22,084	26,842
Total	45,278	56,085
Total current assets (Other current assets)	36,573	40,321
Total non-current assets (Other non-current assets)	8,704	15,763

11. Assets Held for Sale

The breakdown of assets held for sale and liabilities directly associated with assets held for sale is as follows.

(Millions of yen)

	FY2018 (As of December 31, 2018)	FY2019 (As of December 31, 2019)
Assets held for sale		
Property, plant and equipment		
Buildings and structures	—	116
Machinery and vehicles	16	216
Land	—	632
Construction in progress	—	573
Total	16	1,539

The major assets held for sale in FY2018 are idle assets in the pharmaceutical business and the nutraceutical business which were classified as assets held for sale because of the decision to sell these assets. The sales were completed during FY2019.

The major assets held for sale in FY2019 are idle assets in the consumer products business which were classified as assets held for sale because of the decision to sell these assets. Assets held for sale are measured at the lower of the carrying amount or fair value less costs to sell. The fair value of assets held for sale is expected sales price less cost of disposal and is classified into Level 3 in the hierarchy. The fair value hierarchy is provided in Note “33. Financial Instruments.” For these assets, impairment losses of ¥771 million were recorded in FY2019 and included in “Impairment losses” in the consolidated statement of income. The sales are scheduled to be completed during the following fiscal year.

12. Property, Plant and Equipment

Changes in costs, accumulated depreciation and accumulated impairment losses of property, plant and equipment and the carrying amounts are as follows.

(1) Costs

(Millions of yen)

	Buildings and structures	Machinery and vehicles	Tools, furniture and fixtures	Land	Construction in progress	Total
Balance as of January 1, 2018	397,280	407,345	111,908	90,746	34,098	1,041,379
Purchase	4,708	9,342	6,248	92	37,869	58,261
Business combination	12	553	83	—	—	649
Disposal	(4,482)	(9,779)	(5,913)	(81)	(75)	(20,332)
Transfer	25,956	12,929	1,461	1	(42,774)	(2,425)
Transfer to assets held for sale	—	(102)	—	—	—	(102)
Foreign currency translation differences	(3,845)	(7,951)	(931)	(663)	(796)	(14,189)
Others	419	(18)	(50)	(5)	(151)	193
Balance as of December 31, 2018	420,048	412,318	112,807	90,090	28,170	1,063,435
Adjustment due to the application of IFRS 16	49,833	7,162	275	2,053	—	59,324
Adjusted balance as of January 1, 2019	469,882	419,480	113,083	92,143	28,170	1,122,759
Purchase	15,570	11,784	7,637	764	30,125	65,882
Disposal	(5,739)	(11,391)	(6,537)	(38)	(44)	(23,751)
Transfer	8,274	16,662	2,658	202	(29,069)	(1,271)
Transfer to assets held for sale	(552)	(1,112)	(2)	(698)	(2,922)	(5,289)
Foreign currency translation differences	(1,509)	(1,845)	(164)	(208)	65	(3,661)
Others	610	1,006	(265)	(7)	1,940	3,284
Balance as of December 31, 2019	486,536	434,584	116,409	92,157	28,265	1,157,953

(2) Accumulated depreciation and accumulated impairment losses

(Millions of yen)

	Buildings and structures	Machinery and vehicles	Tools, furniture and fixtures	Land	Construction in progress	Total
Balance as of January 1, 2018	(249,948)	(309,727)	(89,569)	(4,993)	(4,677)	(658,916)
Depreciation expenses	(11,070)	(14,654)	(8,770)	—	—	(34,494)
Impairment losses	(344)	(656)	(471)	(68)	(232)	(1,773)
Disposal	4,135	8,608	5,802	47	—	18,593
Transfer to assets held for sale	—	90	—	—	—	90
Foreign currency translation differences	1,553	4,618	666	1	81	6,921
Others	(328)	(371)	411	5	—	(283)
Balance as of December 31, 2018	(256,002)	(312,093)	(91,930)	(5,007)	(4,827)	(669,862)
Depreciation expenses	(23,812)	(18,351)	(8,873)	(263)	—	(51,300)
Impairment losses	(2,329)	(3,469)	(322)	(2,159)	(518)	(8,799)
Disposal	4,097	10,681	5,965	23	—	20,768
Transfer to assets held for sale	435	897	2	65	2,347	3,749
Foreign currency translation differences	602	1,256	130	10	57	2,057
Others	(942)	(490)	432	(267)	83	(1,185)
Balance as of December 31, 2019	(277,950)	(321,569)	(94,596)	(7,599)	(2,857)	(704,573)

(3) Carrying amounts

(Millions of yen)

	Buildings and structures	Machinery and vehicles	Tools, furniture and fixtures	Land	Construction in progress	Total
Balance as of January 1, 2018	147,331	97,618	22,339	85,752	29,420	382,462
Balance as of December 31, 2018	164,046	100,224	20,876	85,082	23,342	393,572
Balance as of December 31, 2019	208,585	113,014	21,812	84,558	25,408	453,380

¹ In the above table, the amount related to property, plant and equipment under construction is presented as construction in progress.

² The amounts related to each item of property, plant and equipment include the amount of right-of-use assets.

³ Please refer to Notes “27. Other Income” and “28. Other Expenses” for gain on sales of non-current assets, loss on sales of non-current assets and loss on retirement of non-current assets in FY2018 and FY2019. Gain on sales of non-current assets and loss on sales of non-current assets include gain and loss from sales of assets held for sale.

⁴ Please refer to Note “14. Impairment of Assets” for details of impairment losses.

⁵ Please refer to Note “39. Commitments” for commitments related to acquisition of property, plant and equipment.

⁶ There is no significant borrowing cost included in costs of property, plant and equipment.

(4) Assets pledged as collateral

Carrying amounts of assets pledged as collateral for borrowings, etc. that are included in each item of property, plant and equipment are as follows.

(Millions of yen)

	Buildings and structures	Machinery and vehicles	Tools, furniture and fixtures	Land	Total
Balance as of January 1, 2018	790	1,650	4	928	3,373
Balance as of December 31, 2018	481	1,161	6	904	2,553
Balance as of December 31, 2019	478	810	8	727	2,025

(5) Right-of-use assets

For the carrying amount of right-of-use assets included in each item of property, plant and equipment (leased assets under finance leases in FY2018), please refer to Note “20. Leases.”

13. Goodwill and Intangible Assets

Changes in costs, accumulated amortization and accumulated impairment losses of goodwill and intangible assets are as follows.

(1) Costs

(Millions of yen)

	Goodwill	Intangible assets				
		In-process research and development	Trademarks, distribution rights and others	Software	Others	Total
Balance as of January 1, 2018	254,286	274,713	271,069	59,275	35,112	640,170
Purchase	—	5,872	1,424	7,126	86	14,510
Business combination	37,538	76,069	3,531	22	5,138	84,761
Disposal	—	(16,364)	(40,752)	(5,401)	(1,139)	(63,657)
Transfer	—	(2,172)	2,164	508	(202)	299
Foreign currency translation differences	(6,135)	(3,086)	(5,792)	(739)	(2,231)	(11,849)
Others	123	0	—	82	10	92
Balance as of December 31, 2018	285,813	335,032	231,645	60,875	36,776	664,329
Purchase	—	2,244	5,487	7,380	6,017	21,129
Disposal	—	—	(1,962)	(2,629)	(256)	(4,849)
Transfer	—	(8,472)	8,472	76	(11)	65
Foreign currency translation differences	(4,359)	(4,251)	(1,341)	(386)	245	(5,734)
Others	(1,558)	—	0	35	584	620
Balance as of December 31, 2019	279,894	324,552	242,300	65,351	43,356	675,560

(2) Accumulated amortization and accumulated impairment losses

(Millions of yen)

	Goodwill	Intangible assets				
		In-process research and development	Trademarks, distribution rights and others	Software	Others	Total
Balance as of January 1, 2018	(4,823)	(23,140)	(108,679)	(44,982)	(7,505)	(184,307)
Amortization expenses	—	—	(17,405)	(5,941)	(1,434)	(24,781)
Impairment losses	—	(22,651)	(8,800)	(1,022)	(561)	(33,036)
Disposal	—	16,364	40,752	5,283	879	63,278
Foreign currency translation differences	0	(34)	1,923	501	285	2,675
Others	—	—	(21)	(40)	(317)	(379)
Balance as of December 31, 2018	(4,823)	(29,463)	(92,230)	(46,202)	(8,654)	(176,549)
Amortization expenses	—	—	(17,252)	(5,401)	(1,735)	(24,389)
Impairment losses	(953)	(3,630)	(57)	(28)	(2)	(3,719)
Disposal	—	—	521	2,597	216	3,335
Transfer	—	2,645	(2,645)	6	7	14
Foreign currency translation differences	(3)	285	439	270	33	1,028
Others	647	—	3,263	(14)	10	3,260
Balance as of December 31, 2019	(5,133)	(30,163)	(107,960)	(48,771)	(10,124)	(197,019)

(3) Carrying amounts

(Millions of yen)

	Goodwill	Intangible assets				
		In-process research and development	Trademarks, distribution rights and others	Software	Others	Total
Balance as of January 1, 2018	249,463	251,572	162,390	14,293	27,606	455,862
Balance as of December 31, 2018	280,989	305,569	139,415	14,672	28,121	487,779
Balance as of December 31, 2019	274,761	294,389	134,339	16,579	33,231	478,540

¹ Amortization expenses on intangible assets are included in cost of sales, selling, general and administrative expenses and research and development expenses in the consolidated statements of income.

² Please refer to Note “14. Impairment of Assets” for details of impairment losses.

³ Please refer to Note “39. Commitments” for commitments related to acquisition of intangible assets.

⁴ There is no borrowing cost included in costs of intangible assets.

(4) Assets pledged as collateral

Not applicable.

(5) Individually significant intangible assets

Major intangible assets recorded in the consolidated statements of financial position are rights associated to research and development of AVP-786 and rights associated to *NUEDEXTA*, which were recognized in line with the acquisition of Avanir Pharmaceuticals, Inc. executed in 2015. The carrying amounts of the rights associated to research and development of AVP-786 and *NUEDEXTA* are ¥158,508 million and ¥59,602 million, respectively, in FY2018 and ¥156,451 million and ¥50,984 million, respectively, in FY2019. For

these assets of which amortization has already commenced, the remaining amortization period is seven years.

14. Impairment of Assets

(1) Impairment losses

In calculating impairment losses, the Group bases its grouping of assets on the smallest identifiable group of assets that generates largely independent cash inflows.

Impairment losses are recorded as “Impairment losses” in the consolidated statements of income. In addition, reversal of impairment losses is recorded in “Other income.”

The breakdown of impairment losses and reversals of impairment losses by segment is as follows.

(Millions of yen)

	FY2018 (From January 1, 2018 to December 31, 2018)	FY2019 (From January 1, 2019 to December 31, 2019)
Pharmaceuticals	33,884	5,490
Nutraceuticals	428	1,034
Consumer products	329	678
Others	85	490
Corporate	15	2,518
Total	34,742	10,212

Pharmaceuticals

An impairment loss of ¥33,884 million in the pharmaceutical business recognized in FY2018 consists of impairment losses on property, plant and equipment of ¥850 million and on intangible assets of ¥33,034 million.

The impairment loss on property, plant and equipment of ¥850 million is principally a reduction of the carrying amount of machinery and vehicles and tools, furniture and fixtures to the recoverable amount, which is value in use, due to a decrease in the profitability.

The impairment loss on intangible assets of ¥33,034 million is principally ¥8,727 million of impairment loss on trademarks, distribution rights and others for *ONZETRA Xsail*, ¥8,640 million of impairment loss on in-process research and development for centanafadine (development code: EB-1020) which is being developed for the treatment of attention-deficit hyperactivity disorder (ADHD), and ¥12,942 million of impairment loss on in-process research and development for guadecitabine (development code: SGI-110) which is being developed for the treatment of acute myeloid leukemia.

The impairment loss for *ONZETRA Xsail* is a reduction of the full carrying amount due to termination of the license agreement.

The impairment loss for centanafadine (development code: EB-1020) is a reduction of the carrying amount to the recoverable amount of ¥10,389 million, which is value in use, because the initially assumed profitability was no longer expected. For calculation of the value in use, the discount rate (13.5%) based on the pre-tax weighted average cost of capital was used.

The impairment loss for guadecitabine (development code: SGI-110) is a reduction of the carrying amount to the recoverable amount of ¥11,066 million, which is value in use, because the initially assumed profitability was no longer expected. For calculation of the value in use, the discount rate (11.2% to 11.8%) based on the pre-tax weighted average cost of capital was used.

An impairment loss and a reversal of impairment loss in the pharmaceutical business recognized in FY2019 are ¥8,754 million and ¥3,263 million respectively, and an impairment loss of ¥8,754 million consists of impairment losses on property, plant and equipment of ¥4,728 million, on goodwill of ¥306 million, and on intangible assets of ¥3,719 million.

The impairment losses on property, plant and equipment of ¥4,728 million are principally a reduction of the carrying amount of buildings and structures, machinery and vehicles, and tools, furniture and fixtures to the recoverable amount, which is value in use, due to a decrease in the profitability.

The impairment losses on intangible assets of ¥3,719 million are principally a reduction of the carrying amount of in-process research and development, and trademarks, distribution rights and others to the recoverable amount, which is value in use, due to a decrease in the profitability.

(2) Impairment test of goodwill

Goodwill arising in business combinations is allocated to cash-generating units that benefit from the business combination on the acquisition date. The breakdown of the carrying amount of goodwill by segment is as follows.

(Millions of yen)

	FY2018 (As of December 31, 2018)	FY2019 (As of December 31, 2019)
Pharmaceuticals	231,501	226,550
Nutraceuticals	43,739	42,468
Consumer products	473	467
Others	5,274	5,274
Total	280,989	274,761

Of the above, the carrying amount of significant goodwill in FY2019 is Avanir Pharmaceuticals, Inc. (pharmaceuticals) of ¥149,131 million (FY2018: ¥151,091 million), Astex Pharmaceuticals, Inc. (pharmaceuticals) of ¥30,365 million (FY2018: ¥31,307 million), Visterra, Inc. (pharmaceuticals) of ¥25,054 million (FY2018: ¥26,715 million), and Nutrition & Santé SAS (nutraceuticals) of ¥23,680 million (FY2018: ¥25,216 million).

The Group tests goodwill for impairment in each fiscal period, or whenever there is an indication of impairment. The recoverable amount in impairment test is determined based on value in use. Value in use reflects past experience and external information, and is calculated by discounting the estimated amount of cash flows based on the business plan for the next five years approved by the management and the growth rate to the present value using the discount rate (8.4% to 11.0%) based on the pre-tax weighted average cost of capital of the cash-generating unit. The growth rate is determined to be 0% to 1.2% in view of the long-term average growth rate in the industry or country to which the cash-generating unit belongs, and does not exceed the long-term average growth rate of the market. There is the risk that impairment may arise when key assumptions used in the impairment test are changed. However, the value in use adequately exceeds the carrying amount of the cash-generating unit, and it is considered unlikely that the value in use falls below the carrying amount even if key assumptions used in the impairment test change within a reasonably predictable range.

(3) Impairment test of intangible assets with indefinite useful lives

Intangible assets with indefinite useful lives included in trademark rights in FY2019 are principally brands held by the Nutrition & Santé SAS Group (nutraceuticals), and their carrying amount is ¥20,273 million (FY2018: ¥22,526 million).

Each brand is tested for impairment in each fiscal period, or whenever there is an indication of impairment, using the relief-from-royalty method and the excess earnings method. Value in use reflects past experience and external information, and is determined using the business plan for the next five years approved by the management and the discount rate (6.5% to 14.0%) equal to pre-tax weighted average cost of capital to which certain country risk and foreign currency risk are added where necessary. The growth rate is determined to be 0% to 1.5% in view of the long-term average growth rate in the industry or country to which the cash-generating unit belongs, and does not exceed the long-term average growth rate of the market. The value in use adequately exceeds the carrying amount in each case, and it is considered unlikely that the value in use falls below the carrying amount even if key assumptions used in the impairment test change within a reasonably predictable range.

(4) Impairment test of in-process research and development

In-process research and development in FY2019 is principally rights related to research and development of AVP-786, and their carrying amount is ¥156,451 million (FY2018: ¥158,508 million).

As intangible assets not yet available for use, in-process research and development is tested for impairment in each fiscal period, or whenever there is an indication of impairment. The recoverable amount in impairment test is determined based on value in use.

Value in use reflects past experience and external information, and is calculated by discounting the estimated amount of cash flows based on the business plan for the next five years approved by the management and the growth rate to the present value using the discount rate based on the pre-tax weighted average cost of capital of the cash-generating unit (12.4% for AVP-786).

15. Investments in Associates

(1) Significant associates

Not applicable.

(2) Individually insignificant associates

A carrying amount of investments in individually insignificant associates is as follows.

(Millions of yen)

	FY2018 (As of December 31, 2018)	FY2019 (As of December 31, 2019)
Carrying amount of investments in associates	189,633	197,704

Financial information on individually insignificant associates is as follows.

These amounts are after adjustment of the Group's ownership ratio.

(Millions of yen)

	FY2018 (From January 1, 2018 to December 31, 2018)	FY2019 (From January 1, 2019 to December 31, 2019)
Profit for the year	16,508	15,621
Other comprehensive income	(8,138)	(4,503)
Comprehensive income	8,369	11,118

16. Income Taxes

(1) Deferred taxes

Changes in deferred tax assets and deferred tax liabilities are as follows.

(Millions of yen)

	Balance as of January 1, 2018	Changes in accounting policies	Recognized through profit or loss	Recognized in other comprehensive income	Business combination	Others	Balance as of December 31, 2018
Inventories	10,714	—	1,513	—	—	66	12,294
Securities, etc.	(25,863)	—	303	8,307	—	(70)	(17,322)
Intangible assets	(79,441)	—	9,273	—	(22,145)	1,582	(90,731)
Post-employment benefits	1,753	—	657	1,066	—	(57)	3,418
Accrued expenses and other liabilities	16,711	(762)	(1,691)	—	43	(218)	14,082
Contract liabilities	—	31,622	(1,640)	—	—	—	29,981
Unused tax losses	6,716	—	(2,101)	—	1,842	34	6,491
Unused tax credits	37,076	—	(1,433)	—	2,439	(665)	37,417
Others	(5,373)	—	2,721	(3)	361	(1,204)	(3,497)
Total	(37,705)	30,859	7,602	9,370	(17,459)	(532)	(7,865)

The changes in accounting policies are due to the recording of deferred tax assets of ¥30,859 million (in the consolidated statement of financial position at the beginning of FY2018, deferred tax liabilities decreased by ¥17,108 million and deferred tax assets increased by ¥13,751 million, compared with the application of the former accounting standards) as of the beginning of FY2018 as a result of the application of IFRS 15.

(Millions of yen)

	Balance as of January 1, 2019	Recognized through profit or loss	Recognized in other comprehensive income	Others	Balance as of December 31, 2019
Inventories	12,294	8,972	—	74	21,341
Securities, etc.	(17,322)	(137)	(3,491)	12	(20,939)
Intangible assets	(90,731)	542	—	1,289	(88,898)
Post-employment benefits	3,418	282	(1,831)	(48)	1,821
Accrued expenses and other liabilities	14,082	3,703	—	591	18,377
Contract liabilities	29,981	(1,455)	—	—	28,526
Unused tax losses	6,491	(1,801)	—	1,262	5,952
Unused tax credits	37,417	504	—	(482)	37,439
Others	(3,497)	(4,456)	0	(125)	(8,078)
Total	(7,865)	6,155	(5,322)	2,573	(4,458)

In recognizing deferred tax assets, the Group takes into account the possibility that part or all of deductible temporary differences, unused tax losses and unused tax credits can be used against future taxable profit. In assessment of the recoverability of deferred tax assets, reversal of deferred tax liabilities, expected future taxable profit and tax planning are taken into account. Based on the level of taxable profit in the past and estimated future taxable profit in the period during which deferred tax assets are deductible, the Group considers it is probable that deferred taxable assets recognized as of December 31, 2019 will be recovered.

(2) Unrecognized deferred tax assets

Deductible temporary differences, unused tax losses and unused tax credits for which no deferred tax asset is recognized are as follows.

(Millions of yen)

	FY2018 (As of December 31, 2018)	FY2019 (As of December 31, 2019)
Deductible temporary differences	273,706	313,508
Unused tax losses	47,976	47,475
Unused tax credits	28	234
Total	321,712	361,218

Deferred tax assets on the above items are not recognized because it is not highly probable that future taxable income necessary for the Group to utilize the benefits arises. Deductible temporary differences do not expire under current tax law. Expiration of unused tax losses of the Company and some of its subsidiaries is as follows.

(Millions of yen)

	FY2018 (As of December 31, 2018)	FY2019 (As of December 31, 2019)
1st year	2,217	2,945
2nd year	4,493	3,598
3rd year	4,140	2,867
4th year	4,017	2,447
5th year and onward	33,107	35,617
Total	47,976	47,475

(3) Taxable temporary differences for which deferred tax liabilities were not recognized

Unrecognized deferred tax liabilities are as follows. In cases where the Company can control the timing of reversal of temporary differences and it is highly probable that such temporary differences are not reversed in a foreseeable period, deferred tax liabilities associated with such temporary differences are not recognized.

(Millions of yen)

	FY2018 (As of December 31, 2018)	FY2019 (As of December 31, 2019)
Temporary differences related to investments in subsidiaries and associates for which deferred tax liabilities were not recognized because the Company decided not to pay a dividend in the foreseeable future	910,114	996,448

(4) Income tax expenses

The effective tax rates for FY2018 and FY2019 in Japan were 30.8% and 30.6%, respectively. The tax amount in other tax jurisdictions is calculated using a general tax rate in each jurisdiction. The breakdown of current tax expenses and deferred tax expenses is as follows.

(Millions of yen)

	FY2018 (From January 1, 2018 to December 31, 2018)	FY2019 (From January 1, 2019 to December 31, 2019)
Current tax expenses:		
Current income taxes	31,029	50,068
Income taxes for prior periods	674	(1,584)
Total current tax expenses	31,704	48,484
Deferred tax expenses:		
Origination and reversal of temporary differences, etc.	(7,185)	(9,218)
Changes in unrecognized deferred tax assets	(417)	3,063
Total deferred tax expenses	(7,602)	(6,155)
Total income tax expenses	24,101	42,328

The reconciliation of the effective statutory tax rate and the actual tax rate for each fiscal year is as follows. The actual tax rate represents the ratio of income tax expenses to profit before taxes.

	FY2018 (From January 1, 2018 to December 31, 2018)	FY2019 (From January 1, 2019 to December 31, 2019)
Effective statutory tax rate	30.8%	30.6%
Special deduction for research and development expenses	(8.9)%	(8.8)%
Entertainment expenses not deductible from the taxable income	1.2%	0.7%
Pharma fees not deductible from the taxable income	0.5%	0.4%
Share of profit of associates	(3.8)%	(2.2)%
Changes in unrecognized deferred tax assets	(0.4)%	1.8%
Difference from tax rate applied to subsidiaries	3.4%	1.7%
Others	(0.8)%	0.2%
Actual tax rate	22.0%	24.4%

17. Trade and Other Payables

The breakdown of trade and other payables is as follows.

(Millions of yen)

	FY2018 (As of December 31, 2018)	FY2019 (As of December 31, 2019)
Notes and accounts payable - trade	83,596	86,311
Accounts payable - other	86,150	79,484
Others	1,107	1,006
Total	170,854	166,801

18. Bonds and Borrowings

The breakdown of bonds and borrowings is as follows.

(Millions of yen)

	FY2018 (As of December 31, 2018)	FY2019 (As of December 31, 2019)	Average interest rate ¹	Year of maturity
(Secured)				
Current borrowings	535	357	14.3%	—
Current portion of non-current borrowings	532	423	1.8%	—
Non-current borrowings (excluding current portion)	954	523	2.4%	2021 to 2026
(Unsecured)				
Current borrowings	23,831	19,153	3.7%	—
Current portion of non-current borrowings	41,012	30,099	0.9%	—
Non-current borrowings (excluding current portion)	139,018	56,201	1.1%	2021 to 2036
Bonds ³	—	79,768	—	2024 to 2029
Total	205,885	186,527	—	—
Bonds and borrowings (current)	65,912	50,033	—	—
Bonds and borrowings (non-current)	139,973	136,493	—	—

¹ Average interest rate represents the weighted average interest rate to the balance of borrowings, etc. at end of the year.

² For the breakdown of non-current borrowings by repayment date and their fair values, please refer to Note “33. Financial Instruments.”

³ The summary of terms and conditions of bonds issued is as follows:

Company name	Name	Date of issuance	FY2018 (As of December 31, 2018) (Millions of yen)	FY2019 (As of December 31, 2019) (Millions of yen)	Interest rate (%)	Collateral	Maturity
Otsuka Holdings Co., Ltd.	1st unsecured bonds	March 7, 2019	— [—]	19,950 [—]	0.120	None	March 7, 2024
Otsuka Holdings Co., Ltd.	2nd unsecured bonds	March 7, 2019	— [—]	29,914 [—]	0.260	None	March 6, 2026
Otsuka Holdings Co., Ltd.	3rd unsecured bonds	March 7, 2019	— [—]	29,904 [—]	0.375	None	March 7, 2029
Total			— [—]	79,768 [—]	—	—	—

The figures in brackets indicate the amounts that will be redeemed within one year.

19. Other Financial Liabilities

The breakdown of other financial liabilities is as follows.

(Millions of yen)

	FY2018 (As of December 31, 2018)	FY2019 (As of December 31, 2019)
Other financial liabilities		
Financial liabilities measured at amortized cost		
Others	2,365	2,607
Financial liabilities measured at fair value through profit or loss		
Derivative liabilities	81	86
Contingent consideration	16,526	18,279
Total	18,973	20,973
Other financial liabilities (current)	2,307	2,424
Other financial liabilities (non-current)	16,666	18,548

20. Leases

FY2018 (As of December 31, 2018)

The comparative information presented for FY2018 is based on IAS 17.

(1) Finance lease

The breakdown of finance lease obligations is as follows.

(Millions of yen)

	FY2018 (As of December 31, 2018)	
	Minimum lease payments	Present value of minimum lease payments
Due within one year	2,082	1,894
Due after one year through five years	4,193	3,869
Due after five years	2,910	2,290
Total	9,186	8,054
Deduction—future finance costs	(1,132)	
Present value of minimum lease payments	8,054	

The Group has a policy to conduct a lease transaction only when the Group judged that the lease transaction has more merits, comprehensively taking into account aversion of obsolescence risk, a reduction in related expenses and other factors.

The weighted average interest rate on finance lease obligations was 4.89% for FY2018.

Some contracts include renewal options. There are no contingent rent payable, escalation clauses (clauses specifying a raise in the lease contract amount) or restriction imposed by any lease contracts (such as restriction on dividends, additional borrowings and additional leases).

The maturity analysis of lease liabilities of the Group (contractual undiscounted cash flows) is as follows:
(Millions of yen)

	FY2018 (As of December 31, 2018)
Due within one year	2,082
Due after one year through two years	1,742
Due after two years through three years	1,124
Due after three years through four years	809
Due after four years through five years	515
Due after five years	2,910
Contractual cash flows	9,186
Balance of lease liabilities at the end of the year recognized in the consolidated statement of financial position	8,054
Current liabilities	1,894
Non-current liabilities	6,159

(2) Operating leases

The breakdown of the Group's future minimum lease payments payable under non-cancellable operating leases by due date is as follows.

	(Millions of yen) FY2018 (As of December 31, 2018)
Due within one year	5,469
Due after one year through five years	17,210
Due after five years	19,951
Total	42,631

The breakdown of lease payments and sublease payments under operating lease contracts recognized as expenses is as follows.

	(Millions of yen) FY2018 (From January 1, 2018 to December 31, 2018)
Minimum lease payments	17,692
Contingent rent	149
Sublease payments received	(5)
Total	17,835

The Group leases buildings, vehicles and other assets as a lessee.

Renewal options and escalation clauses are attached to some lease contracts. In addition, there are no restrictions (restrictions on additional borrowings and additional leases) imposed by the lease contracts.

FY2019 (As of December 31, 2019)

“Property, plant and equipment” consists of property, plant and equipment owned by the Company and right-of-use assets that do not meet the definition of investment property. Right-of-use assets are included in “Property, plant and equipment” in the consolidated statement of financial position.

(Millions of yen)

	FY2019 (As of December 31, 2019)
Property, plant and equipment owned by the Company	390,410
Right-of-use assets	62,969
Total	453,380

Please refer to Note “12. Property, Plant and Equipment” for changes in costs, accumulated depreciation and accumulated impairment losses of property, plant and equipment and the carrying amounts.

(1) Right-of-use assets

Information on leases that the Group has contracted as a lessee is as follows:

(Millions of yen)

Carrying amount	Buildings and structures	Machinery and vehicles	Tools, furniture and fixtures	Land	Total
Balance as of December 31, 2018	3,146	1,111	3,558	–	7,816
Adjustment due to the application of IFRS 16	49,833	7,162	275	2,053	59,324
Balance as of January 1, 2019	52,979	8,273	3,834	2,053	67,141
Purchase	11,518	2,486	2,222	204	16,431
Depreciation expenses	(12,215)	(2,881)	(1,604)	(263)	(16,964)
Others	(2,225)	(550)	(545)	(316)	(3,638)
Balance as of December 31, 2019	50,056	7,328	3,906	1,677	62,969

The balance as of December 31, 2018 is the carrying amount of leased assets under finance leases based on IAS 17.

Buildings and structures

Buildings and structures principally consist of leases of plants, office buildings and warehouses.

Estimated useful life is 2 to 50 years.

Machinery and vehicles

Machinery and vehicles principally consist of leases of automobiles.

Estimated useful life is 2 to 15 years.

Tools, furniture and fixtures

Tools, furniture and fixtures principally consist of leases of vending machines and IT equipment.

Estimated useful life is 2 to 10 years.

Land

Land principally consist of leases of land for factories.

Estimated useful life is 2 to 50 years

(2) Lease liabilities

The maturity analysis of lease liabilities of the Group (contractual undiscounted cash flows) is as follows:

(Millions of yen)

	FY2019 (As of December 31, 2019)
Due within one year	16,551
Due after one year through two years	12,785
Due after two years through three years	9,146
Due after three years through four years	7,368
Due after four years through five years	6,020
Due after five years	25,880
Contractual cash flows	77,753
Balance of lease liabilities at the end of the year recognized in the consolidated statement of financial position	66,790
Current liabilities	14,796
Non-current liabilities	51,994

(3) Amount recognized in profit or loss

(Millions of yen)

	FY2019 (From January 1, 2019 to December 31, 2019)
Interest expense on lease liabilities	1,509
Expense relating to short-term leases	5,430

(4) Amount recognized in the statement of cash flows

(Millions of yen)

	FY2019 (From January 1, 2019 to December 31, 2019)
Total cash outflow for leases	22,642

21. Other Liabilities

The breakdown of other liabilities is as follows.

(Millions of yen)

	FY2018 (As of December 31, 2018)	FY2019 (As of December 31, 2019)
Other liabilities		
Accrued expenses	132,491	123,386
Deposits received	9,682	10,015
Employees' bonuses	17,048	18,366
Others	21,590	28,430
Total	180,812	180,197
Total current liabilities (Other current liabilities)	168,511	167,910
Total non-current liabilities (Other non-current liabilities)	12,300	12,287

22. Provisions

The breakdown of provisions is as follows.

(Millions of yen)

	FY2018 (As of December 31, 2018)	FY2019 (As of December 31, 2019)
Provision for asset retirement obligations	619	981
Total	619	981
Non-current liabilities	619	981

The breakdown and changes of provisions are as follows.

FY2018 (From January 1, 2018 to December 31, 2018)

(Millions of yen)

	Provision for asset retirement obligations	Provision for loss on litigation	Total
Balance as of January 1, 2018	612	3,136	3,749
Increase during the year	0	—	0
Reversal of discounts due to passage of time	6	—	6
Decrease during the year (utilization)	—	(3,136)	(3,136)
Decrease during the year (reversal)	—	—	—
Balance as of December 31, 2018	619	—	619

FY2019 (From January 1, 2019 to December 31, 2019)

(Millions of yen)

	Provision for asset retirement obligations	Total
Balance as of January 1, 2019	619	619
Increase during the year	341	341
Reversal of discounts due to passage of time	15	15
Decrease during the year (utilization)	(0)	(0)
Decrease during the year (reversal)	–	–
Foreign currency translation differences and others	6	6
Balance as of December 31, 2019	981	981

The details of provisions are as follows.

Provision for asset retirement obligations

The Group records provision for asset retirement obligations at the estimated amount of costs for removal of harmful substances related to non-current assets and the estimated amount of restoration costs for rented offices and others for which the Group has obligations to restore the site to its original condition at the end of the lease contract.

The Group expects that the timing at which economic resources flow out is principally after one year passed from the end of each fiscal year.

23. Post-employment Benefits

The Group has adopted defined benefit plans and defined contribution plans as post-employment benefit plans.

Major domestic subsidiaries have a contributory funded, defined benefit corporate pension plan and lump-sum retirement payments plan as defined benefit plans, and defined contribution pension plans as defined contribution plans.

Certain foreign subsidiaries have contributory funded or unfunded defined benefit plans, defined contribution plans, or a combination of them.

Among defined benefit plans, the major plan is the defined benefit plan in Japan, which accounts for approximately 90% of total defined benefit obligations. In the current fiscal year, some domestic subsidiaries have abolished early retirement plans.

There is no post-employment benefit other than pensions and lump-sum payments.

For the accounting policy for defined benefit plans, please refer to Note “3. Significant Accounting Policies (13) Post-employment benefits.”

(1) Defined benefit plans

For benefits under defined benefit plans of the Company and major domestic subsidiaries, the amount of retirement benefit payments is calculated based on service years, salaries during the service period, position and other factors. When the period of validity of a retiring employee equals to or more than a certain period, benefits are paid as lump-sum payment or pension at the option of the employee. Upon retirement, etc. of employees, additional retirement benefits that do not qualify as benefits under defined benefit plans may be paid.

Defined benefit corporate pension plans are managed by Otsuka Pharmaceuticals corporate pension fund. Directors of this pension fund and the pension plan management institution are required by laws and regulations to behave in a way that gives utmost priority to the interest of plan participants and former participants and assume the responsibility for managing plan assets under the prescribed policy.

Although defined benefit retirement benefit plans are exposed to general investment risk, interest rate risk and others, it is considered that the exposure to these risks is not significant.

Amounts recognized in the consolidated statements of financial position are as follows.

(Millions of yen)

	FY2018 (As of December 31, 2018)	FY2019 (As of December 31, 2019)
Present value of defined benefit obligations	257,785	269,248
Fair value of plan assets	(243,986)	(258,531)
Funding position	13,799	10,717
Effect of asset ceiling	1,710	800
Net amount of defined benefit obligations and plan assets	15,510	11,517
Amounts in the consolidated statements of financial position		
Net defined benefit liabilities	18,337	17,301
Net defined benefit assets (other non-current assets)	(2,827)	(5,784)
Net defined benefit liabilities/assets recognized in the consolidated statements of financial position	15,510	11,517

Changes in the present value of the defined benefit obligations are as follows.

(Millions of yen)

	FY2018 (From January 1, 2018 to December 31, 2018)	FY2019 (From January 1, 2019 to December 31, 2019)
Balance of defined benefit obligations at the beginning of the year	260,566	257,785
Current service cost	9,737	9,456
Interest cost	2,603	2,546
Remeasurement		
Difference between the assumption and actual amount of retirement benefit obligations	(1,755)	4,478
Actuarial gains and losses arising from changes in demographic assumptions	(1,936)	(1)
Actuarial gains and losses arising from changes in financial assumptions	450	7,690
Retirement benefits paid	(10,736)	(11,868)
Curtailement/settlement	(277)	(508)
Foreign currency translation differences	(854)	(272)
Others	(10)	(58)
Balance of defined benefit obligations at the end of the year	257,785	269,248

Changes in fair value of the plan assets are as follows.

(Millions of yen)

	FY2018 (From January 1, 2018 to December 31, 2018)	FY2019 (From January 1, 2019 to December 31, 2019)
Balance of fair value of plan assets at the beginning of the year	257,786	243,986
Interest income on plan assets	2,324	2,163
Remeasurement		
Return on plan assets (excluding interest income)	(12,557)	16,448
Contributions by the employer	7,071	7,076
Retirement benefits paid	(9,966)	(10,952)
Curtailment/settlement	(320)	–
Foreign currency translation differences	(436)	(194)
Others	84	4
Balance of fair value of plan assets at the end of the year	243,986	258,531

The Group plans to pay contributions of ¥6,750 million in FY2020.

Management policy for plan assets

The fund management policy for major plans of the Group aims to secure stable returns over the medium to long term to ensure the payment of defined benefit obligations now and in the future. Specifically, assets are managed by setting the target rate of return and the asset mix by investment asset within a range of acceptable risk defined annually and maintaining this mix.

The Group conducts review of the asset mix where necessary, taking into account financial conditions of defined benefit pension plans and the investment environment.

When management of each asset is implemented, the Group seeks efficiency on the investment aspect through continuous monitoring with attention to risk diversification associated to asset managers.

The fair value of the plan assets is as follows.

(Millions of yen)

	FY2018 (As of December 31, 2018)		FY2019 (As of December 31, 2019)	
	Assets with market prices in active markets	Assets without market prices in active markets	Assets with market prices in active markets	Assets without market prices in active markets
Cash and cash equivalents	21,930	–	28,846	–
Shares	15,935	68,849	11,645	62,145
Bonds	213	92,628	187	96,919
Others	1,150	43,278	8,128	50,658
Total	39,230	204,756	48,807	209,723

The Company's investment policy for the defined benefit plans takes into consideration various factors such as the allowable limit of deductible expenses under tax laws, the funding status of plan assets and actuarial calculations.

Changes in the effect of the asset ceiling are as follows.

(Millions of yen)

	FY2018 (From January 1, 2018 to December 31, 2018)	FY2019 (From January 1, 2019 to December 31, 2019)
Balance of effect of asset ceiling at the beginning of the year	7,413	1,710
Interest income	54	12
Remeasurement		
Effect of limiting a net defined benefit asset to the asset ceiling	(5,757)	(922)
Balance of effect of asset ceiling at the end of the year	1,710	800

Any economic resource is not available because future contributions are not reduced or refunded. Consequently, an unrecognized surplus has arisen in some pension plans of the Group.

Principal actuarial assumptions at the end of the reporting period are as follows.

	FY2018 (As of December 31, 2018)	FY2019 (As of December 31, 2019)
Discount rate	0.6-0.9%	0.5-0.6%

The following table represents the sensitivity analysis for significant actuarial assumptions.

The sensitivity analysis shows impact of a 0.5% increase or decrease in assumptions used in actuarial calculation on the present value of defined benefit obligations.

This analysis is based on the assumption that other variables are constant. The analysis for FY2019 was made using the same fundamentals as those for FY2018.

(Millions of yen)

	FY2018 (From January 1, 2018 to December 31, 2018)	FY2019 (From January 1, 2019 to December 31, 2019)
0.5% increase in the discount rate	(16,731)	(17,885)
0.5% decrease in the discount rate	15,586	16,619

The weighted average duration of the defined benefit obligations as of December 31, 2018 and 2019 is 14.7 years and 15.6 years, respectively.

(2) Defined contribution plans

Amounts recognized as expenses in association with defined contribution plans are ¥6,560 million for FY2018 and ¥6,905 million for FY2019. The above figures include amounts recognized as expenses in association with public plans.

24. Equity and Other Equity Items

(1) Share capital and capital surplus

Changes in the number of authorized shares, total number of issued shares, and the balance of share capital, etc. are as follows.

	Number of authorized shares (Ordinary shares with no par value)	Total number of issued shares (Ordinary shares with no par value)	Share capital (Millions of yen)	Capital surplus (Millions of yen)
Balance as of January 1, 2018	1,600,000,000 shares	557,835,617 shares	81,690	505,620
Changes during the year	—	—	—	274
Balance as of December 31, 2018	1,600,000,000 shares	557,835,617 shares	81,690	505,894
Changes during the year	—	—	—	(373)
Balance as of December 31, 2019	1,600,000,000 shares	557,835,617 shares	81,690	505,520

(2) Treasury shares

Changes in the number and balance of treasury shares are as follows.

	Number of shares (Shares)	Amount (Millions of yen)
Balance as of January 1, 2018	15,986,878	47,267
Increase due to request for buyback of shares less than one share unit	339	1
Balance as of December 31, 2018	15,987,217	47,268
Increase due to request for buyback of shares less than one share unit	290	1
Decrease due to disposal as restricted stock compensation	(340,120)	(1,005)
Decrease due to exercise of stock options	(83,200)	(245)
Balance as of December 31, 2019	15,564,187	46,018

¹ The Company has adopted the stock option plan, issues share acquisition rights pursuant to the Companies Act, and appropriates treasury shares to the grant of shares in line with exercise of the rights. The stock option plan has been terminated due to the elapse of the applicable service period for the plan, and all stock options were exercised in the current fiscal year. The contractual terms and conditions, amount and others of the plan are provided in Note “32. Share-based Payments.”

² The Company has adopted the restricted stock compensation plan and appropriates treasury shares to the grant of shares under the plan. The contractual terms and conditions, amount and others of the plan are provided in Note “32. Share-based Payments.”

(3) Capital surplus

Under the Companies Act of Japan (hereinafter the “Companies Act”), at least 50% of the contribution for share issue shall be credited to share capital, and the remainder shall be credited to additional paid-in capital included in capital surplus. In addition, under the Companies Act, additional paid-in capital can be transferred to share capital upon approval at the shareholders meeting.

(4) Retained earnings

The Companies Act provides that 10% of dividends shall be appropriated as additional paid-in capital or as a legal reserve until the aggregate amount of the additional paid-in capital and the legal reserve equals 25% of share capital. The legal reserve may be used to eliminate or reduce a deficit, or may also be reversed upon approval at the shareholders meeting.

(5) Details and purpose of other components of equity

(i) Remeasurements of defined benefit plans

Remeasurements of defined benefit plans represent actuarial difference on defined benefit obligation, return on plan assets (excluding the amount included in interest income), and changes in effect of asset ceiling (excluding the amount included in interest income).

Actuarial difference represents adjustment based on past experience on defined benefit obligation (difference between actuarial assumptions at the beginning of the year and actual results) and effect of changes in actuarial assumptions.

These items are recognized in other comprehensive income when occurred and immediately transferred from other components of equity to retained earnings.

(ii) Financial assets measured at fair value through other comprehensive income

Financial assets measured at fair value through other comprehensive income represent the valuation difference in fair value of financial assets measured at fair value through other comprehensive income.

(iii) Foreign currency translation reserve

Foreign currency translation reserve represents the translation difference incurred when consolidating financial statements of foreign operations prepared using foreign currencies.

(iv) Cash flow hedges

The Group uses derivatives to hedge the risk of fluctuation in future cash flows. Cash flow hedges represent the effective portion of changes in fair value of derivative transactions designated as cash flow hedges.

(6) Dividends

Dividends paid are as follows.

FY2018 (From January 1, 2018 to December 31, 2018)

Resolution	Total amount of dividends (Millions of yen)	Dividends per share (Yen)	Record date	Effective date
Meeting of the Board of Directors held on February 14, 2018	27,092	50.00	December 31, 2017	March 30, 2018
Meeting of the Board of Directors held on August 8, 2018	27,092	50.00	June 30, 2018	September 3, 2018

FY2019 (From January 1, 2019 to December 31, 2019)

Resolution	Total amount of dividends (Millions of yen)	Dividends per share (Yen)	Record date	Effective date
Meeting of the Board of Directors held on February 13, 2019	27,092	50.00	December 31, 2018	March 29, 2019
Meeting of the Board of Directors held on August 8, 2019	27,113	50.00	June 30, 2019	September 2, 2019

Dividends whose effective date falls in the following fiscal year are as follows.

FY2018 (From January 1, 2018 to December 31, 2018)

Resolution	Total amount of dividends (Millions of yen)	Dividends per share (Yen)	Record date	Effective date
Meeting of the Board of Directors held on February 13, 2019	27,092	50.00	December 31, 2018	March 29, 2019

FY2019 (From January 1, 2019 to December 31, 2019)

Resolution	Total amount of dividends (Millions of yen)	Dividends per share (Yen)	Record date	Effective date
Meeting of the Board of Directors held on February 14, 2020	27,113	50.0	December 31, 2019	March 30, 2020

(7) Put options granted to non-controlling interests

The put options written on shares of foreign subsidiaries granted by the foreign subsidiaries to owners of non-controlling interests are recognized at the present value of exercise price of options as financial liabilities and the same amount is deducted from capital surplus at initial recognition, while any subsequent change is recorded in finance income and finance costs.

The remaining balance, valuation techniques and hierarchy of recognized financial liabilities as at the end of each fiscal year are provided in Note “33. Financial Instruments (8) Fair value of financial instruments.”

25. Revenue

(1) Disaggregation of revenue

The Group disaggregates revenue by type of goods or services and by geographical area. The relationship between disaggregated revenue and reportable segments is as follows.

FY2018 (From January 1, 2018 to December 31, 2018)

(Millions of yen)

	Reportable segment				
	Pharma- ceuticals	Nutra- ceuticals	Consumer products	Others	Total
By type of goods or services					
Sales of products	738,434	338,555	33,009	84,347	1,194,347
License and royalty income	23,646	22	—	—	23,669
Others	55,028	6	641	18,286	73,963
Total	817,110	338,585	33,651	102,634	1,291,981
By geographical area *					
Japan	407,789	146,630	24,502	66,598	645,521
North America	236,201	98,995	8,699	3,195	347,091
Others	173,118	92,958	449	32,840	299,367
Total	817,110	338,585	33,651	102,634	1,291,981

* Revenue is classified based on the location of customers.

FY2019 (From January 1, 2019 to December 31, 2019)

(Millions of yen)

	Reportable segment				
	Pharma- ceuticals	Nutra- ceuticals	Consumer products	Others	Total
By type of goods or services					
Sales of products	840,853	333,717	32,950	82,900	1,290,422
License and royalty income	23,632	34	—	384	24,051
Others	59,763	5	602	21,395	81,767
Total	924,250	333,757	33,553	104,680	1,396,240
By geographical area *					
Japan	450,213	146,674	24,337	68,509	689,734
North America	289,335	97,836	8,753	3,644	399,569
Others	184,701	89,246	462	32,526	306,937
Total	924,250	333,757	33,553	104,680	1,396,240

* Revenue is classified based on the location of customers.

(2) Contract balance

The breakdown of receivables and contract liabilities from contracts with customers is as follows.

(Millions of yen)

	January 1, 2018	FY2018 (As of December 31, 2018)	FY2019 (As of December 31, 2019)
Receivables from contracts with customers	355,589	366,996	390,003
Notes and accounts receivable - trade	357,448	368,888	391,948
Allowance for credit losses	(1,859)	(1,892)	(1,945)
Contract liabilities (current liabilities)	11,170	10,809	12,407
Contract liabilities (non-current liabilities)	92,711	87,245	80,792

Of the opening balance of contract liabilities, the amount of revenue recognized is ¥11,042 million in FY2018 and ¥10,822 million in FY2019. In addition, the balance of contract liabilities increased by ¥5,205 million in FY2018 and ¥5,905 million in FY2019 due to receipt of up-front payments and achievement of milestones for license agreements for development and distribution rights and others of products under developments, and other factors.

The amount of revenue recognized from performance obligations satisfied (or partially satisfied) in the past period was ¥13,567 million for FY2018 and ¥12,827 million for FY2019, of which major revenue was license and royalty income.

(3) Timing of satisfaction of performance obligations

Contract liabilities mainly arise in certain license agreements entered into between the Group and a third party for development and distribution rights and others of products under development. In addition, contract liabilities include advances received from customers in relation to sale of products.

The total amount of transaction price allocated to remaining performance obligations and timing when revenue is expected to be recognized are as follows.

(Millions of yen)

	FY2018 (From January 1, 2018 to December 31, 2018)	FY2019 (From January 1, 2019 to December 31, 2019)
Due within one year	10,809	12,407
Due after one year through two years	10,643	12,198
Due after two years through three years	10,507	10,512
Due after three years through four years	10,507	10,328
Due after five years	55,586	47,754
Total	98,054	93,200

26. Breakdown of Expenses by Nature

The major breakdown of expenses included in cost of sales, selling, general and administrative expenses, and research and development expenses by nature is as follows.

(Millions of yen)

	FY2018 (From January 1, 2018 to December 31, 2018)	FY2019 (From January 1, 2019 to December 31, 2019)
Personnel expenses	(302,203)	(299,755)
Sales promotion expenses	(102,041)	(119,065)
Depreciation and amortization expenses	(59,275)	(74,258)

27. Other Income

The breakdown of other income is as follows.

(Millions of yen)

	FY2018 (From January 1, 2018 to December 31, 2018)	FY2019 (From January 1, 2019 to December 31, 2019)
Grant income	178	371
Rent received	255	217
Gain on sales of non-current assets ¹	168	115
Change in fair value of contingent considerations ²	1,899	120
Gain on fair value valuation ³	17,971	–
Reversal of impairment losses	–	3,263
Others	4,008	4,605
Total other income	24,482	8,694

¹ The amount includes gain on sales of assets held for sale.

² The fair value changes of the contingent considerations attributable to time value is recognized in “Finance costs,” and the one attributable to changes of non-time-value is recognized in either “Other income” or “Other expenses.” The fair value changes of the contingent considerations recorded in “Other income” relates to the acquisitions of Neurovance, Inc. and ReCor Medical Inc.

³ Gain on fair value valuation in FY2018 is in regard to the Group’s shareholding of ReCor Medical Inc., that the Group had held directly before the date on which control of that company was obtained and the joint development and commercializing agreement with that company. It includes recognition of ¥8,442 million remeasurement gain from its shareholding as a result of remeasurement of fair value on the date on which control of that company was obtained and ¥9,529 million remeasurement gain from the joint development and commercializing agreement.

28. Other Expenses

The breakdown of other expenses is as follows.

(Millions of yen)

	FY2018 (From January 1, 2018 to December 31, 2018)	FY2019 (From January 1, 2019 to December 31, 2019)
Loss on sales of non-current assets	(171)	(92)
Loss on retirement of non-current assets	(471)	(1,906)
Others	(1,685)	(3,801)
Total other expenses	(2,328)	(5,801)

29. Finance Income and Finance Costs

The breakdown of finance income and finance costs is as follows.

(Millions of yen)

	FY2018 (From January 1, 2018 to December 31, 2018)	FY2019 (From January 1, 2019 to December 31, 2019)
Finance income		
Interest income		
Financial assets measured at amortized cost	1,948	2,424
Dividend income		
Financial assets measured at fair value through other comprehensive income	1,745	1,788
Gain on fair value valuation		
Financial assets and liabilities measured at fair value through profit or loss	5,245	1
Others	239	218
Total finance income	9,178	4,433
Finance costs		
Interest expenses		
Financial liabilities measured at amortized cost	(2,769)	(2,701)
Lease liabilities	(190)	(1,509)
Loss on fair value valuation		
Financial assets and liabilities measured at fair value through profit or loss	(239)	(1,848)
Foreign exchange losses	(4,060)	(564)
Others	(726)	(879)
Total finance costs	(7,985)	(7,502)

30. Other Comprehensive Income

Reclassification adjustments and income taxes for each separate component of other comprehensive income are as follows.

(Millions of yen)

	FY2018 (From January 1, 2018 to December 31, 2018)	FY2019 (From January 1, 2019 to December 31, 2019)
Components that will not be reclassified to profit or loss		
Remeasurements of defined benefit plans		
Amount arising during the year	(3,582)	5,185
Before income taxes	(3,582)	5,185
Income taxes	1,066	(1,831)
Remeasurements of defined benefit plans	(2,516)	3,353
Financial assets measured at fair value through other comprehensive income		
Amount arising during the year	(18,789)	2,989
Before income taxes	(18,789)	2,989
Income taxes	7,206	(3,635)
Financial assets measured at fair value through other comprehensive income	(11,582)	(645)
Share of other comprehensive income of associates		
Amount arising during the year	(652)	296
Share of other comprehensive income of associates	(652)	296
Subtotal	(14,751)	3,005
Components that may be reclassified to profit or loss		
Foreign currency translation reserve		
Amount arising during the year	(26,289)	(10,955)
Reclassification adjustments	—	321
Before income taxes	(26,289)	(10,634)
Foreign currency translation reserve	(26,289)	(10,634)
Cash flow hedges		
Amount arising during the year	2	(2)
Reclassification adjustments	9	(0)
Before income taxes	12	(2)
Income taxes	(3)	0
Cash flow hedges	9	(2)
Share of other comprehensive income of associates		
Amount arising during the year	(7,794)	(4,800)
Reclassification adjustments	308	—
Share of other comprehensive income of associates	(7,486)	(4,800)
Subtotal	(33,766)	(15,437)
Total other comprehensive income	(48,518)	(12,432)

31. Earnings per Share

(1) Basis of calculating basic earnings per share

	FY2018 (From January 1, 2018 to December 31, 2018)	FY2019 (From January 1, 2019 to December 31, 2019)
Profit for the year attributable to owners of the Company (Millions of yen)	82,492	127,151
Profit for the year not attributable to ordinary equity holders of the Company (Millions of yen)	—	—
Profit for the year used for calculation of basic earnings per share (Millions of yen)	82,492	127,151
Weighted average number of ordinary shares (Thousands of shares)	541,848	542,104
Basic earnings per share (Yen)	152.24	234.55

(2) Basis of calculating diluted earnings per share

	FY2018 (From January 1, 2018 to December 31, 2018)	FY2019 (From January 1, 2019 to December 31, 2019)
Profit for the year used for calculation of basic earnings per share (Millions of yen)	82,492	127,151
Adjustments of profit for the year (Millions of yen)	(517)	(1,843)
Profit for the year used for calculation of diluted earnings per share (Millions of yen)	81,974	125,308
Weighted average number of ordinary shares (Thousands of shares)	541,848	542,104
Increase in ordinary shares		
Share acquisition rights (Thousands of shares)	86	37
Weighted average number of diluted ordinary shares (Thousands of shares)	541,934	542,142
Diluted earnings per share (Yen)	151.26	231.13

32. Share-based Payments

The Group has introduced a restricted stock compensation plan for Directors of the Company (excluding Outside Directors) and certain Directors of its subsidiaries from FY2019 aiming at granting incentives so as to achieve the medium-term management plan, to sustainably improve the medium- to long-term performance and corporate value of the Company, and to further share more of that value with shareholders. The stock option plan, which was introduced as a medium-term incentive plan covering three-year period from the fiscal year ended December 31, 2016 to the fiscal year ended December 31, 2018 has been terminated due to the elapse of the applicable period for the plan.

In addition, the Group has adopted equity-linked compensation entitlements as a cash-settled share-based payment plan for officers and employees of certain consolidated subsidiaries. The Group grants the entitlements to officers and employees who have the rank as of the time of grant and makes the payment in cash, taking into account the level of achievement of performance targets and the share price at the end of the period for each cycle: from cycle of one-year period to cycle of three-year period.

(1) Restricted stock compensation plan

The details of restricted stock compensation plan are as follows:

	FY2019 (From January 1, 2019 to December 31, 2019)
Date of grant	May 20, 2019
Number of shares granted	340,120 shares
Fair value at date of grant	¥4,196
Settlement method	Equity-settled
Transfer restriction period	From May 20, 2019 to June 1, 2026

¹ Persons granted are Directors of the Company (excluding Outside Directors) and certain Directors of its subsidiaries (hereinafter referred to as “Eligible Directors”).

² The Company has entered into, with each Eligible Director, a restricted stock allocation agreement, which contains the provisions that Eligible Directors shall not transfer, attach security interest, and make other dispositions of the Company’s ordinary shares allotted (hereinafter referred to as the “Allotted Shares”), and that the Company acquires the Allotted Shares at no cost upon the occurrence of specified events, and other provisions.

³ The Company shall remove the transfer restriction on the Allotted Shares on the condition that (1) the Eligible Director continued to hold a position as Director of the Company (Director of its subsidiary, if the Eligible Director is a Director of its subsidiary) during the transfer restriction period and (2) targets set by the Company in advance in light of consolidated revenue, operating profit and other metrics were achieved. If it is determined that a person eligible for allotment retires due to the expiration of the term of office or any other reasonable cause, the time of release from the transfer restriction and the number of shares to be released from the transfer restriction will be reasonably adjusted as necessary.

⁴ The method of measuring fair value is calculated based on the closing price of shares of the Company on the First Section of the Tokyo Stock Exchange on the business day prior to the date of a resolution of the Board of Directors.

(2) Stock options

(i) Contractual terms of stock options

Contractual terms of stock options are as follows.

	2016 Stock Option No. 5
Persons granted	Directors of the Company (excluding Outside Directors) and Directors of subsidiaries who do not concurrently serve as Directors of the Company
Number of stock options*	851,400 shares
Settlement method	Equity-settled
Date of grant	May 31, 2016
Target service period	From January 1, 2016 to December 31, 2018
Period during which share acquisition rights may be exercised	From March 1, 2019 to February 28, 2021
Vesting conditions	An eligible person is required to continue to have the rank of Director of the Company or its subsidiaries that he or she had on the right allotment date, at the time of exercising the right; provided, however, that this shall not apply if holders of share acquisition rights retired from or left the position of Director of the Company or its subsidiaries due to the expiration of the term of office or at the request of the Company, and the Company's Board of Directors gives approval.

* The number of stock options is converted to the number of shares.

(ii) Changes in the number of stock options and exercise price

Changes in the number of stock options and exercise price are as follows.

	2016 Stock Option No. 5	
	Number of stock options (Shares)	Weighted average exercise price (Yen)
Unexercised balance at January 1, 2018	851,400	1
Granted	—	—
Exercised	—	—
Canceled	—	—
Unexercised balance at December 31, 2018	851,400	1
Exercisable balance at December 31, 2018	—	—
Granted	—	—
Exercised	(83,200)	1
Canceled	(768,200)	—
Unexercised balance at December 31, 2019	—	—
Exercisable balance at December 31, 2019	—	—

¹ The number of stock options is converted to the number of shares.

² 851,400 shares subject to share acquisition rights granted represent the maximum number of exercisable rights, and the number of share acquisition rights that ultimately become exercisable varies depending on the level of achievement of the medium-term management plan and others. Therefore, 83,200 shares subject to share acquisition rights that ultimately become exercisable were determined by multiplying the base number of share acquisition rights, which is determined for the position of each eligible person in consideration of the content of duties performed, responsibilities, fixed remuneration, etc., by a certain percentage according to the level of achievement of the medium-term management plan, and all of them were exercised in FY2019.

³ The weighted average share price of stock options exercised at the time of exercising the right during FY2019 was ¥3,647.

(3) Share-based payment expenses

The breakdown of share-based payment expenses is as follows.

(Millions of yen)

	FY2018 (From January 1, 2018 to December 31, 2018)	FY2019 (From January 1, 2019 to December 31, 2019)
Equity-settled	(22)	252
Cash-settled	1,126	1,487
Total	1,103	1,740

The carrying amount of liabilities arising from share-based payment transactions is ¥1,250 million for FY2018 and ¥1,600 million for FY2019.

33. Financial Instruments

(1) Capital management

The Group's basic policy for capital management is to improve capital efficiency and ensure financial soundness in order to achieve sustainable growth and enhance corporate value over the medium to long term.

The Group conducts monitoring of financial indicators as a procedure for capital management. The Group monitors return on equity attributable to owners of the Company for capital efficiency and ratio of equity attributable to owners of the Company to total assets for financial soundness in a timely manner.

The Group is not subject to any material capital restrictions.

(2) Classification of financial instruments

The breakdown of financial assets and financial liabilities by category is as follows.

(Millions of yen)

	FY2018 (As of December 31, 2018)	FY2019 (As of December 31, 2019)
<Financial assets>		
Financial assets measured at amortized cost		
Cash and cash equivalents	285,022	334,040
Trade and other receivables	378,520	401,418
Other financial assets	76,859	56,958
Financial assets measured at fair value through profit or loss		
Other financial assets	2,398	5,476
Financial assets measured at fair value through other comprehensive income		
Other financial assets	142,509	136,485
Total financial assets	885,311	934,379
<Financial liabilities>		
Financial liabilities measured at amortized cost		
Trade and other payables	170,854	166,801
Bonds and borrowings	205,885	186,527
Other financial liabilities	2,365	2,607
Financial liabilities measured at fair value through profit or loss		
Other financial liabilities	16,608	18,365
Total financial liabilities	395,713	374,302

(3) Financial risk management

The Group is exposed to financial risks (market risk, credit risk and liquidity risk) in the course of operating activities and conducts risk management in accordance with certain policy to mitigate these financial risks. The Group uses derivative transactions to avoid foreign currency risks or interest rate risks and, in accordance with its policy, does not carry out any speculative transactions.

(4) Market risk management

The Group's activities are mainly exposed to risks of changes in economic circumstances and financial market circumstances. Specifically, the risks of changes in financial market circumstances include 1) Foreign currency risk, 2) Interest rate risk, and 3) Risk of fluctuations in equity instrument prices.

1) Foreign currency risks

(i) Foreign currency risk management

The Group engages in business globally, and fluctuations in exchange rates of the US dollar and euro, principally, affect its operating results.

With regard to settlement of receivables and payables arising from ongoing operating activities, the Group's policy is to balance foreign exchange receipts and payments as much as possible with three major currencies, namely, the US dollar, euro and yen. More specifically, operating subsidiaries that continuously engage in export and import transactions reduce the frequency of exchanging foreign currencies by holding foreign currencies received as export proceeds without exchanging them for the local currency, and using them directly in payment for imports, in order to mitigate foreign currency risks.

(ii) Foreign exchange sensitivity analysis

The Group is principally exposed to foreign currency risks of US dollar and Euro. The following table shows the sensitivity analysis in the case where the yen's value increases by 1% against the US dollar and the Euro in each reporting period. In making these calculations, the Group has assumed no changes in currencies other than those used. The impact from the translation of functional currency-denominated financial instruments, and assets, liabilities, profit and expense of foreign operations into yen is not included. This is based on the assumption that other variable factors (such as balances and interest rate) are constant.

(Millions of yen)

	FY2018 (From January 1, 2018 to December 31, 2018)	FY2019 (From January 1, 2019 to December 31, 2019)
USD		
Impact on profit before taxes	(377)	(657)
Impact on other comprehensive income (before the application of tax effects)	(169)	(58)
EUR		
Impact on profit before taxes	(187)	(255)
Impact on other comprehensive income (before the application of tax effects)	(1)	(3)

The above figures in parentheses represent negative effects on profit or loss and equity of the Group in the case where the yen's value increases by 1% against each currency. The above amounts show effects of currency translation on the Group's consolidated financial statements, and do not have direct positive or negative effects on its cash flows and business management.

(iii) Forward exchange contracts and others

With regard to management of derivative transactions, including forward exchange contracts, the Group has established management rules for derivative transactions and limits derivative transactions to those made for the purpose of hedging risks.

The Group may enter into forward exchange contracts and other agreements to fix future cash flows related to lending and borrowing of funds within the Group in association with receivables and payables denominated in foreign currencies or to determine the amount of dividends within the Group. In this case, the Group also manages these contracts appropriately in accordance with the internal rules.

The breakdown of forward exchange contracts and others is presented in "(8) Fair value of financial instruments (ii) Fair value of derivatives."

2) Interest rate risk

(i) Interest rate risk management

The Group is exposed to various interest rate risks in its business activities, and fluctuations in interest rates associated with borrowings especially affect its operating results. However, the effect of interest rate fluctuations on borrowing costs is offset by income arising from assets that are affected by the interest rate fluctuations.

The Group monitors fluctuations in interest rates arising from these assets and liabilities, and manages interest rate risks through refinancing and other means when interest rates drastically fluctuate.

(ii) Interest rate sensitivity analysis

The impact of a 1% increase in interest rates for each reporting period on profit before taxes of the Group is as follows.

In this analysis, calculation is made by multiplying balances of financial instruments with variable interest rates held by the Group as of the end of each reporting period by 1%, assuming that all other variables are constant.

(Millions of yen)

	FY2018 (From January 1, 2018 to December 31, 2018)	FY2019 (From January 1, 2019 to December 31, 2019)
Impact on profit before taxes	(177)	(143)

3) Risk of fluctuations in equity instrument prices

(i) Management of risk of fluctuations in equity instrument prices

The Group is exposed to risk of fluctuations in share prices arising from equity instruments (shares). The Group has no equity instruments held for short-term trading and owns equity instruments to smoothly execute business strategies. The Group does not sell these investments actively. With regard to equity instruments, the Group regularly assesses and monitors fair value and financial conditions of issuers.

(ii) Price sensitivity analysis

For equity instruments (shares) held by the Group, the following table shows impact of a 10% decrease in the share price on other comprehensive income (before the application of tax effects) of the Group, assuming that all other variables are constant.

(Millions of yen)

	FY2018 (From January 1, 2018 to December 31, 2018)	FY2019 (From January 1, 2019 to December 31, 2019)
Impact on other comprehensive income (before the application of tax effects)	(8,896)	(10,070)

(iii) Financial assets measured at fair value through other comprehensive income

The fair value of financial assets measured at fair value through other comprehensive income and dividend income are as follows.

(Millions of yen)

	FY2018 (From January 1, 2018 to December 31, 2018)		FY2019 (From January 1, 2019 to December 31, 2019)	
	Fair value	Dividend income	Fair value	Dividend income
Listed	88,961	1,237	100,704	1,265
Unlisted	53,547	508	35,780	523
Total	142,509	1,745	136,485	1,788

Of the above, fair values of major financial assets are as follows. The Group classifies investments held for the purpose of participating in the management of the investees, encouraging an alliance of enterprises or reinforcing sales foundations into financial assets measured at fair value through other comprehensive income.

FY2018 (As of December 31, 2018)

(Millions of yen)

Name	Amount
Listed	
DAIICHI SANKYO COMPANY, LIMITED	12,470
EIKEN CHEMICAL CO., LTD.	9,628
The Awa Bank, Ltd.	8,087
BML, INC.	5,644
Dong-A ST., Co., Ltd.	5,415
Others	47,716
Unlisted	
Pharmaceuticals	29,482
Electrical equipment	20,419
Food	1,363
Others	2,282
Total	142,509

Names of major unlisted shares are Nichia Corporation (electrical equipment), Proteus Digital Health, Inc. (pharmaceuticals) and SomaLogic, Inc. (pharmaceuticals).

FY2019 (As of December 31, 2019)

(Millions of yen)

Name	Amount
Listed	
DAIICHI SANKYO COMPANY, LIMITED	25,672
EIKEN CHEMICAL CO., LTD.	8,104
The Awa Bank, Ltd.	6,877
BML, INC.	6,290
Dong-A ST., Co., Ltd.	5,868
Others	47,892
Unlisted	
Electrical equipment	19,607
Pharmaceuticals	14,784
Food	556
Others	832
Total	136,485

Names of major unlisted shares are Nichia Corporation (electrical equipment), SomaLogic, Inc. (pharmaceuticals) and Pact Pharma, Inc. (pharmaceuticals).

(iv) Derecognition

The Group sells (derecognizes) financial assets measured at fair value through other comprehensive income for the purpose of reviewing the portfolio regularly, managing risk assets, and others.

Fair value at time of sale and cumulative gains or losses (pre-tax) are as follows.

(Millions of yen)

FY2018 (From January 1, 2018 to December 31, 2018)		FY2019 (From January 1, 2019 to December 31, 2019)	
Fair value at time of sale	Cumulative gains or losses	Fair value at time of sale	Cumulative gains or losses
11,302	9,128	1,242	92

The above item was transferred from other comprehensive income to retained earnings at the time of sale.

The amounts (net of tax) transferred in FY2018 and FY2019 are ¥7,621 million of cumulative gains and ¥1,127 million of cumulative losses, respectively.

In FY2018 and FY2019, dividend income from financial assets measured at fair value through other comprehensive income that were sold (derecognized) are ¥3 million and ¥7 million, respectively.

(5) Offsetting of financial assets and financial liabilities

As of December 31, 2018 and December 31, 2019, there were no significant financial instruments that were offset in the consolidated statements of financial position. Among financial assets and financial liabilities that were recognized for the same counterparty, there were also no significant financial instruments that were under enforceable master netting arrangements or similar contracts but were not offset as they did not meet certain or all criteria of offsetting of financial assets and financial liabilities.

(6) Credit risk management

Credit risks are risks that result in financial losses incurred by the Group when a customer goes into default for contractual obligations. The Group has the sales department and the accounting and finance department monitor the status of business partners in terms of trade receivables, etc., regularly and manage due dates and balances for each business partner while working to early identify and mitigate any concerns about collections due to deterioration in each business partner's financial position and other factors. When full or partial collection of trade receivables, etc., is considered impossible, or extremely difficult, it is deemed to be a default.

With respect to shares in securities and investment securities, the financial situation of issuers is assessed regularly in accordance with the management rules of each group company. With respect to public and corporate bonds, credit risk is insignificant because the Group invests solely in highly rated bonds.

The Group recognizes that there is extremely insignificant credit risk in the use of derivatives since it only deals with financial institutions with high credit ratings to mitigate credit risk.

The Group does not have any credit risk overly concentrated in a specific counterparty or a group to which the counterparty belongs.

1) Allowance for credit losses

When financial assets are impaired, the Group does not reduce the impairment directly from the carrying amount and accounts for the impairment in the allowance for credit losses account. Changes in allowance for credit losses are as follows.

FY2018 (From January 1, 2018 to December 31, 2018)

(Millions of yen)

	Lifetime expected credit losses		Total
	Financial assets of which credit risk has increased significantly since the initial recognition	Financial assets that are always measured at an amount equal to lifetime expected credit losses	
Balance as of January 1, 2018	84	1,859	1,943
Increase during the year	70	290	361
Decrease during the year (utilization)	—	(381)	(381)
Decrease during the year (reversal)	(10)	(68)	(79)
Others	(29)	194	164
Balance as of December 31, 2018	114	1,892	2,007

FY2019 (From January 1, 2019 to December 31, 2019)

(Millions of yen)

	Lifetime expected credit losses		Total
	Financial assets of which credit risk has increased significantly since the initial recognition	Financial assets that are always measured at an amount equal to lifetime expected credit losses	
Balance as of January 1, 2019	114	1,892	2,007
Increase during the year	10	270	280
Decrease during the year (utilization)	—	(234)	(234)
Decrease during the year (reversal)	(38)	(142)	(181)
Others	14	158	172
Balance as of December 31, 2019	100	1,945	2,045

2) Exposure to credit risk of financial assets

The carrying amounts after impairment presented in the consolidated statements of financial position represent the Group's maximum exposure to credit risk of financial assets.

(7) Liquidity risk management

The Group manages liquidity risk by having the accounting and finance department prepares and updates a cash flow management plan, maintaining a constant level of liquidity. A temporary shortage of cash due to the payment of dividends, bonuses and other items is covered by a loan from a bank or other financial institution.

The balance of financial liabilities other than liability on guarantee (including derivative financial instruments) by maturity is as follows. The details of the lease liabilities are provided in Note "20. Leases."

(Millions of yen)

FY2018 (As of December 31, 2018)	Carrying amount	Contractual cash flows	Due within one year	Due after one year through two years	Due after two years through three years	Due after three years through four years	Due after four years through five years	Due after five years
Non-derivative financial liabilities								
Trade payables	83,596	83,596	83,596	—	—	—	—	—
Borrowings	205,885	210,935	68,548	51,080	39,977	38,684	5,370	7,273
Contingent consideration	16,526	18,204	—	—	12,321	—	2,997	2,886
Others	89,623	89,623	89,484	—	—	—	—	139
Total	395,632	402,359	241,628	51,080	52,298	38,684	8,367	10,299
Derivative financial liabilities								
Forward exchange contracts and others	31	31	31	—	—	—	—	—
Interest rate swaps	42	42	42	—	—	—	—	—
Currency swaps	7	7	7	—	—	—	—	—
Total	81	81	81	—	—	—	—	—

(Millions of yen)

FY2019 (As of December 31, 2019)	Carrying amount	Contractual cash flows	Due within one year	Due after one year through two years	Due after two years through three years	Due after three years through four years	Due after four years through five years	Due after five years
Non-derivative financial liabilities								
Trade payables	86,311	86,311	86,311	—	—	—	—	—
Borrowings	106,758	108,654	50,911	28,452	13,143	6,090	1,454	8,601
Bonds payable	79,768	81,683	214	214	214	214	20,202	60,623
Contingent consideration	18,279	18,953	—	12,161	—	2,958	—	3,834
Others	83,098	83,098	82,913	—	—	—	—	184
Total	374,216	378,701	220,350	40,828	13,357	9,263	21,657	73,244
Derivative financial liabilities								
Forward exchange contracts and others	1	1	1	—	—	—	—	—
Interest rate swaps	74	74	—	—	—	—	—	74
Currency swaps	10	10	—	—	—	—	—	10
Total	86	86	1	—	—	—	—	84

(8) Fair value of financial instruments

The details of fair values of financial instruments are provided in Note "3. Significant Accounting Policies

(4) Financial instruments."

Fair value hierarchy

The fair value hierarchy classifies fair values as follows.

Level 1: Fair value measured based on quoted prices in active markets

Level 2: Fair value calculated directly or indirectly using observable price, other than Level 1 prices

Level 3: Fair value calculated using valuation techniques including unobservable inputs

Transfers between fair value hierarchy levels are recognized on the date the event or condition prompting the transfer occurred.

(i) Financial instruments measured at amortized cost

(Millions of yen)

FY2018 (As of December 31, 2018)	Carrying amount	Fair value			
		Level 1	Level 2	Level 3	Total
<Financial assets>					
Securities	560	581	—	—	581
Total	560	581	—	—	581
<Financial liabilities>					
Borrowings	205,885	—	205,092	—	205,092
Total	205,885	—	205,092	—	205,092

(Millions of yen)

FY2019 (As of December 31, 2019)	Carrying amount	Fair value			
		Level 1	Level 2	Level 3	Total
<Financial assets>					
Securities	557	538	—	—	538
Total	557	538	—	—	538
<Financial liabilities>					
Borrowings	106,758	—	105,255	—	105,255
Bonds	79,768	—	80,207	—	80,207
Total	186,527	—	185,462	—	185,462

The calculation method for above fair values is as follows.

Securities

The fair value of securities is determined based on the quoted price at the securities exchange.

Borrowings

The fair value of borrowings with floating interest rates reflects market interest rates in the short term, and the carrying amount approximates to that fair value. The fair value of borrowings with fixed interest rates is determined by the method in which future cash flows are discounted, using an interest rate which approximates to when funds are borrowed under the same terms and conditions with the same remaining borrowing period.

Bonds

The fair value of bonds is determined based on the observable price in the market.

(ii) Fair value of derivatives

(Millions of yen)

FY2018 (As of December 31, 2018)	Cash flow hedges	Derivatives not designated as hedges	Total
Forward exchange contracts and others	1	(31)	(30)
Interest rate swaps	—	(42)	(42)
Currency swaps	—	(7)	(7)
Total	1	(81)	(79)

(Millions of yen)

FY2019 (As of December 31, 2019)	Cash flow hedges	Derivatives not designated as hedges	Total
Forward exchange contracts and others	(1)	—	(1)
Interest rate swaps	—	(74)	(74)
Currency swaps	—	(10)	(10)
Total	(1)	(84)	(86)

The calculation method for above fair values is as follows.

Forward exchange contracts and others

The fair value of forward exchange contracts and others is calculated based on the market price of forward exchange contracts and others entered into on similar terms and conditions.

Interest rate swaps

Interest rate swaps are used for the purpose of reducing interest borne on borrowings, and their fair value is calculated based on the value presented by creditor financial institutions.

Currency swaps

Currency swaps are used for the purpose of reducing foreign currency risks on currencies of borrowings, and their fair value is calculated based on the value presented by creditor financial institutions.

(iii) Financial instruments measured at fair value

(Millions of yen)

FY2018 (As of December 31, 2018)	Level 1	Level 2	Level 3	Total
<Financial assets>				
Financial assets measured at fair value through other comprehensive income				
Equity instruments	88,961	—	53,547	142,509
Financial assets measured at fair value through profit or loss				
Equity instruments	1,520	—	876	2,397
Derivatives	—	1	—	1
Total	90,482	1	54,424	144,907
<Financial liabilities>				
Financial liabilities measured at fair value through profit or loss				
Derivatives	—	81	—	81
Contingent consideration	—	—	16,526	16,526
Total	—	81	16,526	16,608

(Millions of yen)

FY2019 (As of December 31, 2019)	Level 1	Level 2	Level 3	Total
<Financial assets>				
Financial assets measured at fair value through other comprehensive income				
Equity instruments	100,704	—	35,780	136,485
Financial assets measured at fair value through profit or loss				
Equity instruments	4,244	—	1,232	5,476
Total	104,948	—	37,013	141,962
<Financial liabilities>				
Financial liabilities measured at fair value through profit or loss				
Derivatives	—	86	—	86
Contingent consideration	—	—	18,279	18,279
Total	—	86	18,279	18,365

In FY2018 and FY2019, there was no significant transfer between Level 1 and 2. There was a transfer from Level 3 to Level 1 due to listing of shares held. Please refer to “(v) Reconciliation of financial instruments classified as Level 3 from the opening balances to the closing balances” for the transfer.

(iv) Valuation techniques and inputs for financial instruments classified as Level 2 and Level 3

(a) Valuation techniques and inputs

Equity instruments

The fair values of equity instruments are measured using a valuation technique appropriate to characteristics of the instrument, such as the comparable company analysis method and the option pricing method.

In the measurement, input information, including stock price index of comparable companies, the discount rate according to risk of the instrument, and price of conversion of preference shares held by the Group into ordinary shares, is taken into account.

Derivatives

The information is provided in Note “33. Financial Instruments (8) Fair value of financial instruments

(ii) Fair value of derivatives.”

Contingent consideration

Contingent considerations classified as Level 3 are liabilities recognized as a result of recognizing a part of the considerations as contingent considerations in the acquisition of shares in Neurovance, Inc. and shares in ReCor Medical Inc. in the past. Valuation techniques and inputs of fair value are provided in Note “36. Business Combinations.”

(b) Valuation processes

Fair values of Level 3 financial instruments are measured based on internal regulations.

The Group has adopted appropriate valuation techniques and inputs that reflect the risks, characteristics and nature of the financial instruments subject to valuation.

(v) Reconciliation of financial instruments classified as Level 3 from the opening balances to the closing balances

FY2018 (From January 1, 2018 to December 31, 2018)	Fair value measurement as of the end of the year (Millions of yen)	
	Financial assets	Financial liabilities
Balance at the beginning of the year	64,553	12,570
Gains (losses)		
Recorded in profit or loss ¹	3,489	(1,830)
Recorded in other comprehensive income ²	(15,169)	(163)
Purchase and issuance	12,189	—
Increase through business combinations	—	7,931
Sales and settlements	(7,884)	(1,980)
Transfer into Level 1 due to listing	(452)	—
Others	(2,302)	—
Balance at the end of the year	54,424	16,526
Unrealized gains or losses included in profit or loss for assets and liabilities held at the end of the year	(148)	(1,749)

FY2019 (From January 1, 2019 to December 31, 2019)	Fair value measurement as of the end of the year (Millions of yen)	
	Financial assets	Financial liabilities
Balance at the beginning of the year	54,424	16,526
Gains (losses)		
Recorded in profit or loss ¹	(83)	1,853
Recorded in other comprehensive income ²	(11,799)	(101)
Purchase and issuance	5,697	—
Sales and settlements	(31)	—
Transfer into Level 1 due to listing	(1,221)	—
Transfer into Level 3 due to delisting	5	—
Others	(9,979)	—
Balance at the end of the year	37,013	18,279
Unrealized gains or losses included in profit or loss for assets and liabilities held at the end of the year	(83)	1,853

¹ Gains or losses included in profit or loss relate to financial assets and financial liabilities measured at fair value through profit or loss as of the reporting date. These gains or losses are included in “Other income,” “Finance income” and “Finance costs” in the consolidated statements of income.

² Gains or losses included in other comprehensive income mainly relate to financial assets measured at fair value through other comprehensive income as of the reporting date. These gains or losses are included in “Financial assets measured at fair value through other comprehensive income” and “Foreign currency translation reserve” in the consolidated statements of comprehensive income.

(9) Transfer of financial assets

The Group discounts certain notes receivable for banks before the due date of the note and endorses certain notes to suppliers, etc. Even if notes are discounted for banks or endorsed to suppliers, etc., the Group is required to purchase the notes back from the bank for which the discount was made or the supplier, etc. when the note was not honored. Therefore, discounted notes and endorsed notes continue to be recognized as notes receivable until the due date of the note and included and presented in trade and other receivables. Amounts received due to the endorsement or discount are presented as other financial liabilities. Other financial liabilities (discounted notes, etc.) related to discounted notes and endorsed notes, etc. as of December 31, 2018 and December 31, 2019 are as follows.

(Millions of yen)

	FY2018 (As of December 31, 2018)	FY2019 (As of December 31, 2019)
Other financial liabilities (discounted notes, etc.)	246	442

(10) Hedge accounting

The Group utilizes derivatives (forward exchange contracts and others) to hedge foreign currency risk associated to forecast transactions denominated in foreign currencies.

The effect of hedge accounting on consolidated statements of financial position is as follows.

1) Hedging instrument

FY2018 (As of December 31, 2018)

(Millions of yen)

Types of hedges	Risk classification	Hedging instrument	Notional amount of hedging instrument	Carrying amount of hedging instrument		Line item in the statement of financial position in which the hedging instrument is recorded	Change in fair value using calculation of the ineffective portion of hedge
				Assets	Liabilities		
Cash flow hedges	Foreign currency risks	Forward exchange contracts and others	242	1	—	Other financial assets (current)	12

FY2019 (As of December 31, 2019)

(Millions of yen)

Types of hedges	Risk classification	Hedging instrument	Notional amount of hedging instrument	Carrying amount of hedging instrument		Line item in the statement of financial position in which the hedging instrument is recorded	Change in fair value using calculation of the ineffective portion of hedge
				Assets	Liabilities		
Cash flow hedges	Foreign currency risks	Forward exchange contracts and others	178	—	1	Other financial liabilities (current)	(2)

2) Hedged items

FY2018 (As of December 31, 2018)

(Millions of yen)

Types of hedges	Risk classification	Change in fair value using calculation of the ineffective portion of hedge	Reserve of cash flow hedges
Cash flow hedges	Foreign currency risks	(12)	0

FY2019 (As of December 31, 2019)

(Millions of yen)

Types of hedges	Risk classification	Change in fair value using calculation of the ineffective portion of hedge	Reserve of cash flow hedges
Cash flow hedges	Foreign currency risks	2	(1)

- 3) Amounts that affected the consolidated statements of comprehensive income in association with cash flow hedges

FY2018 (As of December 31, 2018)

(Millions of yen)

Types of hedges	Risk classification	Gains or losses on hedges recognized in other comprehensive income*	Ineffective portion recognized in profit or loss	Line item in profit or loss (which includes the ineffective portion of hedge)	Amount transferred from reserve of cash flow hedges to profit or loss*	Line item in profit or loss affected by the transfer
Cash flow hedges	Foreign currency risks	12	—	—	9	Cost of sales

FY2019 (As of December 31, 2019)

(Millions of yen)

Types of hedges	Risk classification	Gains or losses on hedges recognized in other comprehensive income*	Ineffective portion recognized in profit or loss	Line item in profit or loss (which includes the ineffective portion of hedge)	Amount transferred from reserve of cash flow hedges to profit or loss*	Line item in profit or loss affected by the transfer
Cash flow hedges	Foreign currency risks	(2)	—	—	(0)	Cost of sales

* The figure represents an amount before tax effect adjustments.

34. Subsidiaries and Associates

Significant subsidiaries and associates of the Company are presented in “I. Overview of the Company 4. Overview of Affiliated Entities” (in Japanese only).

35. Related Parties

(1) Related party transactions and outstanding balances

Transactions between the Company or its consolidated subsidiaries and the Company's related parties that are consolidated subsidiaries are eliminated in the consolidation and not disclosed in notes.

There are no significant transaction volume and balances of payables and receivables between the Group and other related parties.

(2) Remuneration for key management personnel

Remuneration for key management personnel of the Group is as follows.

(Millions of yen)

	FY2018 (From January 1, 2018 to December 31, 2018)	FY2019 (From January 1, 2019 to December 31, 2019)
Fixed remuneration and bonuses	1,607	1,662
Post-employment benefits	71	66
Share-based payment	(22)	140
Total remuneration for key management personnel	1,656	1,870

36. Business Combinations

(1) Significant business combinations

FY2018 (From January 1, 2018 to December 31, 2018)

(Acquisition of ReCor Medical Inc.)

The Company exercised an acquisition option to acquire the remaining shares of ReCor Medical Inc., which had previously been the Company's associate company, on June 29, 2018 (Japan time) and made ReCor Medical Inc. its wholly owned subsidiary (hereinafter referred to as "the Acquisition"). ReCor Medical Inc. manufactures and develops medical devices in the United States.

(i) Overview of business combination

(a) Name of company acquired and nature of business

Name of company acquired: ReCor Medical Inc.

Nature of business: Manufacture and development of medical devices (ultrasound renal denervation devices)

(b) Primary reasons for business combination

The Group has had a minority interest in ReCor Medical Inc. since 2014 and obtained the exclusive development and sales rights of ultrasound renal denervation therapeutic devices in Asia. Since then, the two parties have developed a good working relationship through jointly developing the device (conducting the REQUIRE test) in Japan and South Korea.

ReCor Medical Inc.'s clinical trial (RADIANCE-HTN SOLO trial) showed a positive result, and in June, it obtained permission to implement the next clinical trial (RADIANCE II) from the Food and Drug Administration (FDA) in the U.S. After that, the Group exercised the acquisition option.

(c) Acquisition date

June 29, 2018

(d) Acquisition background and percentage of voting equity interests acquired

Before the acquisition, the Group held 22% of the voting equity interests. As a result of exercising its acquisition option, the Group acquired all the remaining shares and converted existing convertible loans that Otsuka Medical Devices Co., Ltd., held. ReCor Medical Inc. has become a 100%-owned subsidiary of the Group.

(ii) Fair values of consideration transferred, assets acquired and liabilities assumed as of the acquisition date

(Millions of yen)

	Amount
Fair value of consideration transferred	50,854
Cash	16,293
Contingent consideration	7,931
Fair value of existing shareholding	9,066
Others ¹	17,563

(Millions of yen)

	Amount
Fair value of assets acquired and liabilities assumed	
Current assets	671
Non-current assets	56,577
Current liabilities	(384)
Non-current liabilities	(15,646)
Fair value of assets acquired and liabilities assumed	41,219
Goodwill	9,635
Total	50,854

- ¹ The amount of “Others” under the fair value of consideration transferred includes the fair values of the acquisition option, of existing convertible loans and of contractual rights on the basis of the joint development and commercializing agreement between the Group and ReCor Medical Inc. (hereinafter referred to as “the co-development and commercializing agreement”). The fair value of the co-development and commercializing agreement is based on estimated future cash flows arising from the contract.
- ² The Group remeasured its existing shareholding, acquisition option, convertible loans and the co-development and commercializing agreement at the fair value at the date of acquisition. The Group recognizes ¥8,442 million remeasurement gain from its shareholding, ¥833 million remeasurement gain of the acquisition option, ¥3,067 million remeasurement gain from convertible loans and ¥9,529 million remeasurement gain from the co-development and commercializing agreement. The remeasurement gains from the shareholding and the co-development and commercializing agreement are included in “Other income,” and the remeasurement gains from acquisition option and convertible loans are included in “Finance income” in the consolidated statement of income.
- ³ Acquisition-related costs are ¥66 million and included in “Selling, general and administrative expenses” in the consolidated statement of income.
- ⁴ For acquired trade and other receivables, there is no contractual cash flow that is not expected to be collected.
- ⁵ Major components of goodwill are synergies with existing businesses expected to be generated from the acquisition and excess earnings power. With regard to goodwill, there is no amount expected to be deductible for tax purposes.
- ⁶ Of non-current assets, a major component allocated to intangible assets is in-process research and development of ¥56,452 million.
- ⁷ Of non-current liabilities, deferred tax liabilities recognized in the business combination is ¥15,645 million.

(iii) Effect on operating results of the Group

The amounts of revenue and profit or loss of ReCor Medical Inc. since the acquisition date that are included in the Group’s consolidated statement of income are insignificant. Furthermore, the information about revenue and profit and loss on the assumption that the acquisition date had been January 1, 2018 (so-called “pro-forma” information) is not disclosed because the effect is insignificant.

(Acquisition of Visterra, Inc.)

On July 11, 2018, Otsuka Pharmaceutical Co., Ltd. (“Otsuka”), a consolidated subsidiary of the Company, entered into an agreement to acquire all shares of Visterra, Inc. (“Visterra”), which is engaged in research and development of pharmaceutical products in the United States, through an acquisition company set up by Otsuka America, Inc. (“Otsuka America”), a consolidated subsidiary of the Company. This acquisition was completed on August 31, 2018.

(i) Overview of business combination

(a) Name of company acquired and nature of business

Name of company acquired: Visterra, Inc.

Nature of business: Research and development of pharmaceutical products

(b) Primary reasons for business combination

Visterra has unique antibody platform technologies (Hierotope® platform) that enable computer estimations of three-dimensional structures of a portion of a protein deemed essential for its function, simulations of the structure in combination with numerous partial structures of antibodies, detection of optimal antibody structures, and design of antibody drugs. These technologies may make it possible to develop antibody drugs to many biological materials that were previously considered difficult to address. Visterra has already created several clinical development products from the antibody technologies, and it also has multiple programs that will move to clinical development soon. Among them, a clinical trial was launched for “VIS649,” which is aimed at treatment of IgA nephropathy, as an effective therapeutic approach to this disease for which there is currently no approved medication.

Otsuka will promote further drug development by newly acquiring the base for antibody drug discovery, in addition to the existing base for small-molecule drug discovery, through this acquisition.

(c) Acquisition date

August 31, 2018

(d) Acquisition background and percentage of voting equity interests acquired

The acquisition company set up by Otsuka America acquired 100% of the outstanding voting shares in Visterra in exchange for cash.

(ii) Fair values of consideration transferred, assets acquired and liabilities assumed as of the acquisition date

(Millions of yen)

	Amount
Fair value of consideration transferred	47,813
Cash	47,813
Fair value of assets acquired and liabilities assumed	
Current assets	1,260
Non-current assets	22,667
Current liabilities	(1,683)
Non-current liabilities	(1,161)
Fair value of assets acquired and liabilities assumed	21,083
Goodwill	26,730
Total	47,813

¹ Acquisition-related costs are ¥475 million and included in “Selling, general and administrative expenses” in the consolidated statement of income.

² The total amount of trade and other receivables is ¥1,030 million, none of which is expected to be uncollectible.

³ Major components of goodwill are synergies with existing businesses expected to be generated from the acquisition and excess earnings power. With regard to goodwill, there is no amount expected to be deductible for tax purposes.

⁴ Of non-current assets, a major component allocated to intangible assets is in-process research and development of ¥17,658 million and other intangible assets of ¥4,775 million.

⁵ Of non-current liabilities, deferred tax liabilities recognized in the business combination is ¥1,059 million.

(iii) Effect on operating results of the Group

The amounts of revenue and profit or loss of Visterra since the acquisition date that are included in the Group’s consolidated statement of income are insignificant. Furthermore, the information about revenue and profit and loss on the assumption that the acquisition date had been January 1, 2018 (so-called “pro-forma” information) is not disclosed because the effect is insignificant.

FY2019 (From January 1, 2019 to December 31, 2019)

In FY2019, there were no significant business combinations.

(2) Contingent consideration

Contingent considerations arose from the business combination of Neurovance, Inc. and ReCor Medical Inc. The contingent considerations from the acquisition of Neurovance, Inc. consist of the milestones to be paid based on the progress of the development of centanafadine, which is a compound under development as a treatment of ADHD, obtained when the Group acquired Neurovance, Inc. in March 2017, and the ones to be paid based on the revenue after the launch of centanafadine. The maximum potential amounts of the milestones will be USD 125 million and USD 750 million, respectively.

The contingent considerations from the acquisition of ReCor Medical Inc. are the milestones to be paid based on the progress of the development of the ultrasound renal denervation device obtained by the Group at its acquisition in June 2018. The maximum potential amount of the milestones will be USD 125 million.

The fair value of the contingent considerations is estimated based on the probability-weighted present value of the potential amount to be paid to the counterparty.

The level of contingent considerations in the fair value hierarchy is classified as Level 3.

The fair value changes of the contingent considerations attributable to time value is recognized in “Finance costs,” and the one attributable to changes of non-time-value is recognized in either “Other income” or “Other expenses.”

The details of the fair value hierarchy are provided in Note “33. Financial Instruments.”

Changes in fair value of the contingent considerations are as follows.

(Millions of yen)

	Amount
Balance as of January 1, 2018	10,509
Business combination	7,931
Changes in fair value	(1,749)
Foreign currency translation adjustment	(163)
Balance as of December 31, 2018	16,526
Changes in fair value	1,853
Foreign currency translation adjustment	(101)
Balance as of December 31, 2019	18,279

37. Cash Flow Information

FY2018 (From January 1, 2018 to December 31, 2018)

Payments for acquisition of subsidiaries

As provided in Note “36. Business Combinations,” the Group acquired the shares in ReCor Medical Inc., Visterra, Inc. and one other company. The following represents amounts of assets, liabilities and purchase consideration transferred as at the acquisition date.

(Millions of yen)

	FY2018 (From January 1, 2018 to December 31, 2018)
Current assets	2,212
Non-current assets	79,840
Goodwill	40,167
Current liabilities	(2,230)
Non-current liabilities	(16,808)
Total consideration transferred for acquisition of subsidiaries	103,181
Less: Amount of contingent considerations included in the consideration transferred	(7,931)
Less: Amount of non-cash transactions included in the consideration transferred	(26,629)
Less: Cash and cash equivalents that were held by the acquired companies at the time of the acquisition	(837)
Foreign currency translation and others	316
Cash and cash equivalents spent to gain the control	68,101

FY2019 (From January 1, 2019 to December 31, 2019)

Not applicable.

38. Reconciliation of Liabilities Arising from Financing Activities

Reconciliation of liabilities classified as cash flows from financing activities is as follows.

FY2018 (From January 1, 2018 to December 31, 2018)

(Millions of yen)

	Balance as of January 1, 2018	Cash flow	Changes due to non-cash transactions					Balance as of December 31, 2018
			Business combination and others	Leases	Transfer	Changes in fair value	Exchange rate fluctuations	
Current liabilities								
Bonds and borrowings	64,472	(37,506)	(556)	–	41,545	–	(2,043)	65,912
Lease liabilities	2,017	(1,937)	12	105	1,697	–	(1)	1,894
Other financial liabilities	–	–	–	–	1,980	–	–	1,980
Total	66,489	(39,443)	(544)	105	45,222	–	(2,044)	69,787
Non-current liabilities								
Bonds and borrowings	176,961	6,308	(88)	–	(41,545)	–	(1,663)	139,973
Lease liabilities	6,294	(265)	9	1,837	(1,697)	–	(18)	6,159
Other financial liabilities	2,061	–	–	–	(1,980)	(81)	–	–
Total	185,316	6,043	(79)	1,837	(45,222)	(81)	(1,682)	146,132

FY2019 (From January 1, 2019 to December 31, 2019)

(Millions of yen)

	Balance as of December 31, 2018	Adjustment due to the application of IFRS 16	Balance as of January 1, 2019	Cash flow	Changes due to non-cash transactions			Balance as of December 31, 2019
					Leases	Transfer	Exchange rate fluctuations	
Current liabilities								
Bonds and borrowings	65,912	—	65,912	(45,906)	—	30,523	(495)	50,033
Lease liabilities	1,894	12,607	14,502	(14,540)	2,190	12,719	(74)	14,796
Other financial liabilities	1,980	—	1,980	—	—	—	—	1,980
Total	69,787	12,607	82,394	(60,446)	2,190	43,242	(570)	66,810
Non-current liabilities								
Bonds and borrowings	139,973	—	139,973	27,918	—	(30,523)	(875)	136,493
Lease liabilities	6,159	49,003	55,163	(1,161)	10,900	(12,719)	(188)	51,994
Total	146,132	49,003	195,136	26,757	10,900	(43,242)	(1,064)	188,487

39. Commitments

Commitments related to expenditures after the reporting date are as follows.

(Millions of yen)

	FY2018 (As of December 31, 2018)	FY2019 (As of December 31, 2019)
Acquisition of property, plant and equipment	1,641	1,177
Acquisition of intangible assets	326,180	301,088

Commitments related to the acquisition of intangible assets

The Group has entered into license agreements, etc. for development and distribution rights and others of products under development or finished products with third parties. The Group may pay a certain amount of money when milestones related to development or sales targets specified in these agreements are achieved. The above represents the maximum amount to be paid if all the milestones are achieved and may be different from the amount actually paid. Risk adjustment and discount have not been made for the amount.

40. Contingent Liabilities

Amount of liability on guarantee

The Group has provided guarantee for borrowings of associates from financial institutions as follows.

(Millions of yen)

	FY2018 (As of December 31, 2018)	FY2019 (As of December 31, 2019)
Outstanding guarantees	120	111

41. Subsequent Events

Not applicable.

(2) Others

(i) Quarterly information for FY2019

(Cumulative period)	First quarter	Second quarter	Third quarter	Full year
Revenue (Millions of yen)	313,956	671,131	1,028,758	1,396,240
Profit before taxes (Millions of yen)	31,233	93,421	151,574	173,515
Profit attributable to owners of the Company (Millions of yen)	19,152	67,763	111,519	127,151
Basic earnings per share (Yen)	35.34	125.03	205.73	234.55

(Accounting period)	First quarter	Second quarter	Third quarter	Fourth quarter
Basic earnings per share (Yen)	35.34	89.68	80.69	28.82

(ii) Litigation, etc.
Not applicable.

(iii) Events after the reporting date
Not applicable.