

## Consolidated Financial Results for the Year Ended December 31, 2016

[Japanese GAAP]

February 10, 2017

Company name: Carna Biosciences, Inc. Stock Exchange listing: Tokyo Stock Exchange(JASDAQ Growth)  
 Stock code: 4572 URL: <http://www.carnabio.com/english/>  
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 Supplementary materials for financial results: Yes  
 Financial results briefing: Yes (for institutional investors and analysts)

(Rounded down to the nearest million yen)

### 1. Consolidated Financial Results for FY2016 (from January 1, 2016 to December 31, 2016)

(1) Consolidated operating results (Percentages show changes from the same period of the previous fiscal year)

	Net sales		Operating income		Ordinary income		Profit attributable to owners of parent	
	Millions of yen	%	Millions of yen	%	Millions of yen	%	Millions of yen	%
FY2016	811	(48.3)	(423)	–	(440)	–	(289)	–
FY2015	1,569	156.5	472	–	492	–	456	–

Note: Comprehensive income FY2016: (406) million yen (–%) FY2015: 488 million yen (–%)

	Profit per share	Diluted profit per share	Return on equity	Return on assets	Operating income to net sales
	Yen	Yen	%	%	%
FY2016	(31.64)	–	(16.1)	(18.0)	(52.2)
FY2015	52.61	50.05	34.0	27.7	30.1

Reference: Equity in earnings (losses) of associates FY2016: – FY2015: –

### (2) Consolidated financial position

	Total assets	Net assets	Shareholder' equity ratio	Net assets per share
	Millions of yen	Millions of yen	%	Yen
As of Dec. 31, 2016	2,566	1,739	67.6	187.73
As of Dec. 31, 2015	2,337	1,870	79.7	208.78

Reference: Shareholders' equity As of Dec. 31, 2016: 1,734 million yen As of Dec. 31, 2015: 1,862 million yen

### (3) Consolidated cash flows

	Cash flows from operating activities	Cash flows from investing activities	Cash flows from financing activities	Cash and cash equivalents at end of the fiscal year
	Millions of yen	Millions of yen	Millions of yen	Millions of yen
FY2016	(452)	248	754	2,161
FY2015	401	(3)	602	1,624

## 2. Dividends

	Dividend per share					Total cash dividends	Dividend payout ratio (consolidated)	Dividends on equity (consolidated)
	End of 1 <sup>st</sup> quarter	End of 2 <sup>nd</sup> quarter	End of 3 <sup>rd</sup> quarter	Year-end	Total			
	Yen	Yen	Yen	Yen	Yen	Millions of yen	%	%
FY2015	–	0.00	–	0.00	0.00	–	–	–
FY2016	–	0.00	–	0.00	0.00	–	–	–
FY2017 (Forecast)	–	0.00	–	0.00	0.00	–	–	–

## 3. Consolidated Financial Forecast for FY2017 (January 1, 2017 to December 31, 2017)

(Percentages show changes from the same period of the previous fiscal year)

	Net sales		Operating income		Ordinary income		Profit attributable to owners of parent		Profit per share
	Millions of yen	%	Millions of yen	%	Millions of yen	%	Millions of yen	%	Yen
FY2017	1,440	77.4	39	–	35	–	6	–	0.71

**\* Notes**

- (1) Changes in significant subsidiaries during the period (changes in specified subsidiaries resulting in the change in the scope of consolidation): None
- (2) Changes in accounting policies, accounting estimates and restatements
- 1) Changes in accounting policies due to revisions in accounting standards, etc.: Yes
  - 2) Changes in accounting policies other than 1) above: None
  - 3) Changes in accounting estimates: None
  - 4) Restatements: None
- (3) Number of shares outstanding (common stock)
- 1) Number of shares outstanding at the end of the period (including treasury stock)  
As of Dec. 31, 2016: 9,239,900 shares As of Dec. 31, 2015: 8,892,700 shares
  - 2) Number of treasury stock at the end of the period  
As of Dec. 31, 2016: – shares As of Dec. 31, 2015: – shares
  - 3) Average number of shares outstanding during the period  
FY2016: 9,162,414 shares FY2015: 8,675,111 shares

**Reference: Summary of Non-consolidated Financial Results**

**1. Non-consolidated Financial Results for FY 2016 (from January 1, 2016 to December 31, 2016)**

(1) Non-consolidated operating results (Percentages show changes from the same period of the previous fiscal year)

	Net sales		Operating income		Ordinary income		Profit	
	Millions of yen	%	Millions of yen	%	Millions of yen	%	Millions of yen	%
FY2016	729	(50.4)	(401)	–	(414)	–	(262)	–
FY2015	1,469	182.2	455	–	476	–	440	–

	Profit per share	Diluted profit per share
	Yen	Yen
FY2016	(28.70)	–
FY2015	50.81	48.34

(2) Non-consolidated financial position

	Total assets	Net assets	Shareholder' equity ratio	Net assets per share
	Millions of yen	Millions of yen	%	Yen
As of Dec. 31, 2016	2,585	1,763	68.0	190.31
As of Dec. 31, 2015	2,322	1,863	79.9	208.04

Reference: Shareholders' equity As of Dec. 31, 2016: 1,758 million yen As of Dec. 31, 2015: 1,856 million yen

**\* Implementation of audit procedures**

This financial report is exempt from audit procedures under the Financial Instruments and Exchange Act. As of the date of this financial statement, audit procedure for financial statements under the Financial Instruments and Exchange Act had not been completed.

**\* Note to ensure appropriate use of forecasts and other remarks**

The forecasts and other forward-looking statements included in this document are based on the information currently available to the management and certain assumptions considered by the management to be reasonable. Actual operating results may differ materially from these statements for various factors. For details of the assumptions used in the forecast of financial results and a cautionary note concerning appropriate use, please refer to "1. Analysis of Operating Results and Financial Position" on pages 2–8.

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## 1. Analysis of Operating Results and Financial Position

### (1) Analysis of Operating Results

#### 1) Summary of 2016

In 2016, the outlook of the global economy remained unclear due to concerns over Brexit issue and the outcome of the U.S. presidential election while U.S. economy expanded led by strong consumer spending based on improved income situation and the European economy was on a moderate recovery trend. The Japanese economy was on a moderate recovery supported by yen depreciation and improvement in the employment situation. However, the outlook remained unclear due to prolonged weak consumer spending and other reasons.

In the pharmaceutical industry, major pharmaceutical companies are actively in-licensing pipelines from biotech companies to develop next-generation blockbuster drugs while major drugs are being replaced by generic drugs due to patent expiry and “Open Innovation” is becoming mainstream of drug discovery. Such trend led to a successful conclusion of a license agreement for worldwide rights to develop and commercialize drug candidate compounds developed by the Company.

In this environment, the Group has advanced the Drug Discovery Support business focused on drug discovery platform technologies related to kinase inhibitors and the Drug Discovery and Development business to expand the business. As a result, the Company successfully out-licensed its cancer drug candidate compounds targeting CDC7 to Sierra Oncology, Inc. (renamed from ProNAi Therapeutics, Inc. to Sierra Oncology, Inc. in January 2017, hereinafter “Sierra”). The Group has actively conducted research and development of kinase inhibitors focused on its core therapeutic areas including cancer and autoimmune diseases. Furthermore, leveraging its drug discovery platform technologies, the Group enhanced the range of its new kinase products including lipid kinases. In order to increase sales of the Drug Discovery Support business, the Group continued to strengthen proposed-based marketing targeting leading biotech companies and major pharmaceutical companies in North America, while working to secure new contracts for large-scale kinase screening services from pharmaceutical companies both in Japan and overseas.

As a result, net sales for the fiscal year ended December 31, 2016 (FY2016) decreased 48.3% compared to the previous fiscal year to 811 million yen. By region, sales in Japan decreased 28.4% to 418 million yen and overseas sales decreased 60.1% to 392 million yen. In FY2016, the Group recorded an operating loss of 423 million yen (compared with operating income of 472 million yen in FY2015), an ordinary loss of 440 million yen (compared with ordinary income of 492 million yen in FY2015), and a loss attributable to owners of parent of 289 million yen (compared with profit attributable to owners of parent of 456 million yen in FY2015).

#### <Operating Results by Business Segment>

##### (a) Drug Discovery Support business

By providing kinase proteins, assay development, profiling and screening services, and cell-based assay services, sales of the Drug Discovery Support business decreased 25.3% year-on-year to 712 million yen and operating income decreased 53.5% to 192 million yen.

By region, sales in Japan decreased 28.4% year-on-year to 418 million yen, sales in North America decreased 22.8% year-on-year to 199 million yen, sales in Europe decreased 16.3% year-on-year to 72 million yen, and sales in other regions decreased 10.1% year-on-year to 22 million yen. Sales in Japan decreased mainly due to weak screening service sales to Ono Pharmaceutical Co., Ltd. based on a large-scale contract service agreement. Sales in North America decreased mainly due to weak kinase protein sales as well as sluggish profiling and screening service sales. Operating income decreased year-on-year mainly due to a decrease in sales.

##### (b) Drug Discovery and Development business

As a result of active licensing activities, the Company out-licensed its cancer drug candidate compounds targeting CDC7 kinase (AS-141 including backup compounds) in May 2016 and recorded an initial upfront payment as sales. Further, the Group advanced other internal drug discovery programs and continued to seek for potential out-licensing opportunities with pharmaceutical companies and others. As a result, sales of the Drug Discovery and Development business were 98 million yen (decreased 83.9% year-on-year due to the difference in the amount of the initial upfront payment) and operating loss was 616 million yen (compared with operating income of 60 million yen in FY2015).

#### <Research and Development>

The Group conducts drug discovery research and development of kinase inhibitors, orally available targeted drugs targeting kinase proteins, as well as drug discovery platform technologies to discover kinase inhibitors. Leveraging its accumulated drug discovery platform technologies, the Group also conducts basic research related to kinases to offer kinase-related products and services that satisfy the needs of pharmaceutical companies and academia.

In FY2016, the Group spent 513 million yen on R&D. Major R&D activities in FY2016 are as follows.

## &lt;Drug Discovery and Development business&gt;

The Group focuses its drug discovery efforts on oncology and autoimmune diseases and has one program in the preclinical stage. In oncology area, the Group and the National Cancer Center, a research collaboration partner, are planning to continue preclinical development of TNIK inhibitor program (NCB-0846), which had been conducted mainly by the National Cancer Center until the support from the Japan Agency for Medical Research and Development (AMED) was expired. The Group and the National Cancer Center are jointly developing the backup compound (NCB-0594), aiming to bring it to the preclinical stage. The Group had been conducting preclinical studies of CDC7 kinase inhibitor (AS-141) which was successfully licensed to Sierra. Sierra took over the studies and is continuing preclinical development to initiate clinical studies. The Group is conducting several lead optimization studies to develop a cancer drug targeting leukemic stem cells by the research collaboration with Hiroshima University and an anti-malaria drug by the research collaboration with Kitasato University. In order to maximize the value of its pipeline, the Group will continue to develop other programs in lead generation stage. The Group is also conducting a research on some programs not in the core therapeutic areas after confirming potential of target kinases by target validation study.

The Group is aiming to develop a novel drug by advancing drug discovery programs in the area of kinase inhibitors as well as improving drug discovery platform technologies through in-house research and collaboration. Research and development expenses of this business were 510 million yen in FY2016.

## &lt;Drug Discovery Support business&gt;

The main R&D objectives of the Drug Discovery Support business are to improve the quality of kinase proteins as well as to improve the operation efficiency of profiling and screening services. Receiving positive feedbacks from customers for the quality of its kinase proteins, the Company is conducting research and development to earn higher confidence of its customers. The Company is also working to improve profitability of the products and services by reviewing production processes.

Research and development expenses of this business were 2 million yen in FY2016.

**2) Outlook for Fiscal Year Ending December 31, 2017 (FY2017)**

Sales of the Drug Discovery and Development business are expected to be 440 million yen in FY2017 primarily due to an expected milestone payment from Sierra. The forecast is based on the Sierra's announcement that it expected to initiate phase I clinical trials of AS-141 (Sierra's development code: SRA141) by the end of 2017. AS-141 is a novel cancer drug candidate targeting CDC7 kinase licensed from the Company.

In order to improve the success rate of drug discovery and to accelerate the research, the Company invests its resources intensively in selected programs in its core therapeutic areas. Especially in oncology area, the Company is expanding pharmacology to establish a large variety of evaluation platform using various cancer cells and animal models to evaluate compounds' efficacy against cancer stem cells. As a result of these efforts, the Company and the National Cancer Center have published new research findings in a leading scientific journal, Nature Communications, describing the efficacy of TNIK inhibitors on cancer stem cells. The Company plans to advance the development of TNIK inhibitors including its backup compounds and initiate clinical trials of a first-in-class TNIK inhibitor in collaboration with National Cancer Center. The Company continues the research collaboration with Hiroshima University targeting leukemic stem cells, aiming to discover a novel drug. The company and Janssen Biotech have agreed to terminate the license agreement relating to the drug candidate targeting autoimmune diseases and to return the right for these compounds to the Company in August 2016. The Company plans to continue the development of the program and to pursue new licensing deals with a new partner. Research collaboration with the Kitasato Institute for Life Sciences to discover a novel anti-malaria drug is in lead optimization stage. To explore a new field, the Company plans to expand its drug discovery research targeting non-kinase targets, utilizing the split luciferase technology developed by ProbeX. In FY 2017, Research and development expenses of the Drug Discovery and Development business is expected to increase by 76 million yen or 15.0% from the previous fiscal year to 587 million yen.

The Company plans to increase sales of the Drug Discovery Support business by expanding its market shares in North America and by sales related to lipid kinases called DGKs launched in July 2016. Inquires about DGKs are increasing since active DGK proteins that can be used for assay are provided only by the Company for all ten DGKs. Therefore, the Company is taking measures to win large-scale contracts for profiling and screening services, assay kits, and others. In order to create new demand and win customized contracts, the Company is further committed to providing science-based support and building stronger ties with customers. Furthermore, on top of sales to research groups studying cancer, which account for a large share of sales, the Company seeks to increase sales to research groups studying autoimmune diseases, central nervous system disorders, and other diseases. As a result, in FY2017, sales of the Drug Discovery Support business are expected to increase by 40.3% from the previous fiscal year to 1,000 million yen and operating income is expected to increase by 131.2% from the previous fiscal year to 443 million yen.

Consolidated sales for FY2017 are expected to increase by 77.4% from the previous fiscal year to 1,440 million yen

and consolidated operating income is expected to be 39 million yen compared to operating loss of 423 million yen in FY2016.

## (2) Analysis of Financial Position

### 1) Assets, Liabilities and Net Assets

At the end of FY2016, total assets increased by 228 million yen from the end of previous fiscal year to 2,566 million yen, mainly due to an increase of 536 million yen in cash and deposits, a decrease of 68 million yen in accounts receivable-trade, and a decrease of 274 million yen in investment securities.

Total liabilities increased by 359 million yen to 826 million yen. This is mainly due to an increase of 76 million yen in current portion of long-term loans payable, an increase of 28 million yen in current portion of bonds, a decrease of 33 million yen in income taxes payable, an increase of bonds payable of 172 million yen, and an increase of 207 million yen in long-term loans payable.

Net assets decreased by 131 million yen to 1,739 million yen. This is mainly because of an increase of 283 million yen in capital stock and capital surplus due to issuance of shares resulting from exercise of subscription rights to shares and a decrease in retained earnings owing to loss attributable to owners of parent of 289 million yen.

Shareholders' equity ratio was 67.6% (compared with 79.7% at the end of the previous fiscal year).

### 2) Cash Flows

Cash and cash equivalents (net cash) at the end of FY2016 totaled 2,161 million yen, an increase of 536 million yen from the end of the previous fiscal year. There was a net cash outflow of 452 million yen from operating activities, net cash inflow of 248 million yen from investing activities, and net cash inflow of 754 million yen from financing activities.

(Cash flows from operating activities)

Net cash outflow from operating activities totaled 452 million yen (compared to net cash inflow of 401 million yen in the previous fiscal year). This is mainly the result of loss before income taxes of 288 million yen, depreciation of 21 million yen, gain of sales of investment securities of 177 million yen, and a decrease of 68 million yen in accounts receivable-trade.

(Cash flows from investing activities)

Net cash inflow from investing activities totaled 248 million yen (compared to net cash outflow of 3 million yen in the previous fiscal year), mainly attributable to proceeds from sales of investment securities of 281 million yen.

(Cash flows from financing activities)

Net cash inflow from financing activities totaled 754 million yen (net cash inflow of 602 million yen in the previous fiscal year). This was mainly due to proceeds of 400 million yen from long-term loans payable and 273 million yen from issuance of shares resulting from exercise of subscription rights to shares.

Reference: Cash flow indicators

	FY2012	FY2013	FY2014	FY2015	FY2016
Shareholders' equity ratio (%)	78.9	84.1	67.2	79.7	67.6
Shareholder's equity ratio on a market value basis (%)	148.6	324.7	513.5	1,035.5	765.0
Interest-bearing debt to cash flow ratio (%)	–	–	–	53.2	–
Interest coverage ratio (Times)	–	–	–	17,555.6	–

Shareholders' equity ratio: Shareholders' equity / Total assets

Shareholder's equity ratio on a market value basis: Market capitalization / Total assets

Interest-bearing debt to cash flow ratio: Interest-bearing debt / Operating cash flow

Interest coverage ratio: Operating cash flow / Interest payments

Notes: 1. All indicators are calculated based on consolidated figures.

2. Market capitalization is calculated by multiplying the closing share price at the end of the period by the number of shares outstanding at the end of the period, excluding treasury shares.

3. Operating cash flows are calculated using the figures for operating cash flows in the consolidated statement of cash flows. Interest-bearing debt includes all liabilities on the consolidated balance sheet that incur interest. Interest payments are calculated using the figures for interest expenses in the consolidated statement of income.

4. Interest-bearing debt to cash flow ratio and interest coverage ratios for fiscal years from 2012 to 2014 and for FY2016 are not presented because operating cash flows were negative.

### **(3) Profit Distribution Policy and Dividend for FY2016 and FY2017**

The basic profit distribution policy is to pay a year-end dividend and, based on the results of operations, an interim dividend. However, no dividend has been paid since the Company was established because retained earnings are negative. No dividend payment is planned for FY2016.

The Group has actively made upfront investment in drug discovery research and drug discovery platform technologies. In order to reinforce management base and maximize corporate value, the Group intends to continue aggressive investment in R&D programs. Being aware of the importance of profit distribution to shareholders, the Company will consider dividend payment based on the results of operations and financial condition.

### **(4) Business Risks**

This section explains the potential operational risk factors for the Group. The list also includes the risks not considered significant by the Group. The Group listed such risks since investors may find the information important for their investment decision. The Group plans to take measures to prevent the occurrence of these risks and to address such risks in case they occur. However, investors should take risks described in this section and other risks not included in this section into consideration before making decision to invest in the Company's shares.

Forward-looking statements included in this section are based on the Group's judgments as of the submission date of this document. Actual performance may differ from these statements due to various uncertainties.

#### **1) Risks associated with the Group's business activities**

##### **i) Drug Discovery Support business**

##### **a. Risks from specializing in products and services related to kinase inhibitor research**

The main business of the Drug Discovery Support business is to provide products and services associated with kinase proteins. A potential decline in the number of pharmaceutical companies and biotech companies that research and develop kinase inhibitors may force the Group to adjust management direction and may affect the Group's business performance. In addition, if the outsourcing market for kinase inhibitor research does not expand as expected, the Group's business performance may be affected.

##### **b. Risks related to ProbeX business**

ProbeX, a wholly owned subsidiary of the Company, is mainly engaged in development and provisioning of stable cell lines that applies split luciferase technology associated with GPCR inhibitor research and other fields. If ProbeX is unable to develop and sell stable cell lines and other products as planned, the Group's business performance may be affected.

##### **c. Competition risk**

If competitors enhance the types of kinase proteins they offer, the types of kinase proteins offered solely by the Group may be reduced or be lost. In addition, price competition may intensify if more competitors enter this market. Furthermore, the Group's competitive advantage may be deteriorated if competitors start offering innovative technology ahead of the Group. These competitions may affect the Group's business performance.

##### **d. Risks related to business partners and suppliers**

To maximize synergy effects of collaboration, the Group and its collaboration partners need to complement each others' technology. Therefore, a significant difference in the technical development between the Group and the partners may cause a delay in development of the Group's products and services, which may affect the Group's business performance. In addition, if the Group is unable to operate LabChip® EZ Reader stably, used to provide profiling services, or face difficulties in purchasing its chips due to a potential change in management policy of PerkinElmer, the manufacturer of the screening instrument, the Group's business performance may be affected.

##### **e. Risks from having the research divisions of pharmaceutical companies as the primary customers**

The Group's primary customers are the research divisions of pharmaceutical companies whose drug discovery research is highly confidential and difficult to predict. If the Group is unable to receive orders as expected due to the progress of customers' projects, the Group's business performance may be affected. Pharmaceutical companies in North America and Europe generally have more research programs than Japanese pharmaceutical companies do, which makes European and North American market large. Therefore, significant changes in the activities of individual pharmaceutical companies may affect the Group's business performance.

##### **f. Risks related to the Drug Discovery Support business in overseas**

In North America, CarnaBio USA, a U.S. subsidiary of the Company, is in charge of sales activities. In other regions, the Group's products are distributed mainly through sales agencies or agents. If the overseas sales agents fail to operate efficiently, the Group's business performance may be affected.

g. Risks from relying on products and services of partners

As an agent of alliance partners, the Group provides the products and services of Advanced Cellular Dynamics (ACD), Cell Assay Innovations (CAI), Netherlands Translational Research Center (NTRC), SARomics, and IniXium in designated regions. If the Group is no longer able to sell any of these products or services due to the change in alliance relationships with the Group or other reasons, the Group's business performance may be affected.

ii) Drug Discovery and Development business

a. Risks related to out-licensing candidate compounds of kinase inhibitors

In some cases, candidate compounds of kinase inhibitors developed by the Company may be out-licensed to other companies earlier than the Company initially planned. For example, despite the initial plan to license compounds at the phase IIa clinical trial stage, the licensing agreement may instead be signed at the preclinical or phase I clinical trial stage. In such cases, an initial upfront payment may become smaller than originally expected. In addition, if the Company is unable to conclude a license agreement in the terms and conditions originally expected due to differences in requirements, the earnings of the Group may be affected.

b. Risks related to out-licensing schedule of the Drug Discovery and Development business

Out-licensing negotiations of the Company's kinase inhibitor candidate compounds with pharmaceutical companies and biotech companies may be delayed due to the changes in management policy, R&D, or other policies of the negotiating partners. In addition, negotiating partners may value the drug candidate compounds lower than the Company's expectation, which may affect schedule or the success of the out-licensing agreement.

c. Risks related to engaging both Drug Discovery Support business and Drug Discovery and Development business

The Group is engaged in the Drug Discovery Support business and Drug Discovery and Development business at the same time. The Group allocates the fund generated from the Drug Discovery Support business to the upfront investment in the Drug Discovery and Development business. If sales and earnings from the Drug Discovery Support business fall short of plans, the Group may need to change its business plan for the Drug Discovery and Development business, which may affect the Group's business performance.

d. Risks related to out-licensed drug candidates

After entering a license agreement with a major pharmaceutical company or a biotech company, the licensee company takes over the development of the out-licensed drug candidate. The Company receives milestone payments from the licensee according to the progress of the development. When the drug is launched successfully, the Company receives royalties based on the sales of the drug. If the licensee changes the development schedule or suspends the development, the earnings of the Group may be affected.

**2) Risks associated with R&D activities**

i) Risks related to R&D progress and research collaborations with universities, public research institutes, companies, and other partners

If R&D activities of the Drug Discovery Support business and Drug Discovery and Development business do not progress as planned, the Group's business plan and business performance may be affected. Also, if R&D of collaborators, universities, public research institutes, pharmaceutical companies, and other partners do not progress as planned, or if collaboration contracts are suspended or terminated for some reasons, the Group's business plan and business performance may be affected.

ii) Risks related to advisory contracts with universities and public research institutes

The Group has advisory contracts with research scientists (professors and others) at universities to receive advice on its R&D programs. Because these professors and others concurrently serve as research advisers at the Group, the Group will strictly comply with laws and regulations to prevent conflicts of interest. The Group plans to continue such advisory contracts with professors and others. However, if any of these contracts are cancelled because of a revision to a law or regulation or any other events, the Group will no longer be able to receive advice and other support from these advisers. Such event may negatively affect the Group's activities.

**3) Risks associated with organization**

i) Human resource risks as a small organization

The Group operates with limited number of personnel and relies on the expertise, technologies, and experiences of directors and employees. As a result, departure of directors and employees due to retirement or other reasons may affect the Group's activities. In addition, if the Group is unable to hire personnel as planned, the business may not expand as planned.

ii) Risks related to hiring personnel needed for business expansion



Recruiting qualified personnel is critical to the success of the Group. If the Group is unable to hire personnel as planned, the business may not expand as planned.

#### **4) Foreign currency risk**

The Group generates substantial sales in overseas, which account for 48.4% of consolidated sales in FY2016. The Group provides its products and services and conducts out-licensing activity targeting pharmaceutical companies not only in Japan but also in North America, Europe and other regions. If sales are generated in foreign currencies, such as in U.S. dollars or euros, volatility in foreign exchange rates may affect the Group's business performance.

#### **5) Risks associated with intellectual property**

##### **i) Intellectual property risk in the Drug Discovery and Development business**

The Group may not be able to receive patents for the compounds discovered by the Group as expected if a third party had already filed for patent applications or due to some other reasons. Furthermore, if a third party files a patent infringement suit against the Group, business direction and business performance of the Group may be affected.

##### **ii) Risks related to intellectual property in the Drug Discovery Support business**

If the Group's technical knowledges on kinase become outdated due to technological innovation or other reasons, or if such knowledges are patented by a third party, the technological competitiveness of the Group may be negatively affected and the performance of the Drug Discovery Support business may be affected.

##### **iii) Litigation risk concerning patents**

If a patented technology is included in kinase proteins, assay kits, profiling services, cell-based assay services, and other products and services that the Drug Discovery Support business offers, the patent holder may file a patent infringement suit against the Group. In such cases, sales or provision of the products or the services may be suspended or the Group may be asked to pay a large amount of compensation.

#### **6) Risks associated with technological innovation in the biotechnology industry**

If the Group fails to keep up with rapid technological innovation of the biotechnology industry, the Group's technology and other knowledge may become outdated. In addition, a large amount of R&D investment and time are needed to constantly seek technological advancement, which may affect the Group's business performance.

#### **7) Risks associated with the regulatory environment (laws concerning genetically modified organisms)**

The Act on the Conservation and Sustainable Use of Biological Diversity through Regulations on the Use of Living Modified Organisms was enacted in Japan in February 2004. The act applies to some of the Group's facilities because kinase proteins manufactured by the Company are genetically modified (recombinant) proteins. If the act is amended to tighten the regulations, the Group's business performance may be affected.

#### **8) Other risk factors**

##### **i) Reliance on particular suppliers**

The Group depends heavily on Yashima Pure Chemicals Co., Ltd. and Wakenyaku Co., Ltd for supply of reagents, equipment, and other items used for kinase products and services and R&D programs. The Group has consistently maintained a sound relationship with the companies and plans to continue purchasing from the companies. However, if stable supply from the companies is halted due to a natural disaster or other unexpected events or due to a change in the companies' management policies, the Group's business performance may be affected if the Group cannot secure alternate supplier promptly.

##### **ii) Financing**

Because the Group is aggressively advancing R&D programs in the Drug Discovery and Development business, securing funds for R&D is one of the management issues. In addition to generate operating cash flows, the Group has raised funds through public offering, third party allotment of new shares and stock subscription rights, or through other ways. To strengthen its business infrastructure, the Group will review the needs for raising funds for R&D investment as necessary based on the business plan. However, if the Group is unable to raise funds as planned when needed, the Group may be required to change its business plan.

##### **iii) Potential dilution of per share value due to exercise of subscription rights to shares**

The Company has granted subscription rights to shares to directors, employees, and external contributors who supported the Group's business. The Company may continue to issue subscription rights to shares in order to recruit qualified personnel, to motivate directors and employees to improve business performance, and to raise mid to long-term corporate value. If the existing subscription rights to shares or the subscription rights to shares issued in the future are exercised, the Company's per share value may be diluted. As of December 31, 2016, outstanding subscription

rights to shares represented 545,100 shares of the Company, or 5.9% of the outstanding 9,239,000 shares at that time.

iv) Concentration of business operations

The head office and R&D operations of the Group are located at the Business Support Center for Biomedical Research Activities (BMA) on Port Island in the city of Kobe. Based on the lessons learned from the Great Hanshin-Awaji Earthquake in 1995, BMA, completed in 2004, is equipped with adequate quake resistance, fire prevention system, and emergency power generation system, with 24-hour security. All kinase genes, critical assets of the Group, are stored in two different rooms of BMA to ensure that they are not lost. Furthermore, equipment required for business operations is insured. The Group has an emergency internal communication system to minimize damage. However, if the head office and R&D operations are damaged simultaneously by major earthquakes, typhoons, floods, or by other natural disasters, the Group's financial results and financial condition may be seriously affected due to damage to the R&D equipment or stagnation of the business.

v) Impact of extended power outage on business schedule and products

If the Group is forced to suspend production and storage of kinase proteins and the evaluation equipment of compounds due to an extended power outage in Kobe, where the Group's Drug Discovery Support business office, distribution center, and R&D facilities are located, production of kinase protein may be delayed and the Group's business performance may be affected. There is also a possibility that an extended power outage shuts down the kinase protein storage freezers. As a result, the Group may not be able to ship the proteins to customers and the business may be affected. Furthermore, an extended power outage may halt the operation of compound evaluation equipment (measuring instruments, dispensing units, and other devices), resulting in a delay in delivery of products and services. Such cases may affect the Group's business performance.

vi) Leakage of technologies

The technological information of the Group concerning kinase protein production and assay development may flow out to outsiders due to departure of employees. Such outflow may affect the development and manufacture of products. In addition, if knowledge of the Group flows out to outsiders due to employee's departure to join a competitor, a counterfeit product may be distributed. If the Group is unable to maintain its competitive edge as a result, the Group's financial results and financial condition may be harmed.

vii) Leakage of confidential business information

The Drug Discovery Support business receives compounds from pharmaceutical companies and other customers in order to provide profiling and screening services. To prevent customers' information from leaking, all employees of the Group are required to sign confidentiality agreements that include protection of information received from customers. Furthermore, employees resigning from the Group must sign confidentiality agreements as well. If confidential information is leaked despite these preventive measures, the credibility of the Group may be harmed, which may negatively influence the Group's business.

viii) Latent constraint on business due to engaging in drug discovery research and the Drug Discovery Support business

When the Group enters into a profiling or screening service contract with a customer (a pharmaceutical company or other organization), the customer may have a concern on the Group's ability to protect the confidentiality of the customer's information because the Group is engaged in drug discovery research itself. If such concern leads to severe restrictions of the contract, the profitability of the Group's services may be harmed. Furthermore, the Group may need to consider splitting the Group by business segment. In such cases, the Group's financial results and financial condition may be affected.

## 2. Status of the Corporate Group

The Group consists of the Company, a subsidiary in Japan and a subsidiary in the United States. The Group is engaged in the Drug Discovery Support business and Drug Discovery and Development business targeting kinase proteins and the Drug Discovery Support business associated with stable cell lines applying split luciferase technology.

## 3. Management Policy

### (1) Corporate Philosophy

The Group's mission is to contribute to drug discovery that help protect lives and health of people. The Group strives to maximize corporate value by contributing to drug discovery based on the trusting relationship with stakeholders.

**(2) Target Management Indicators**

The Group considers sales growth and gross profit margin are the important management indicators for the Drug Discovery Support business, a core business that is expected to generate stable earnings to achieve sustainable growth.

For the Drug Discovery and Development business, monitoring the business performance using short-term management indicators is inappropriate since securing stable earnings from out-licensed drug candidate compounds requires time. The Company plans to announce a business plan, business results, and corporate value of this business segment when it is ready to disclose outlook for regulatory approval and commercialization of out-licensed drug candidates, using management indicators such as ROE (Return on Equity) to focus on the efficient use of shareholders' equity.

**(3) Mid- to Long-term Management Strategy**

The Group aims to out-license new drug candidate compounds at early stages of clinical development and initiate clinical trials as early as possible and to increase operating income of the Drug Discovery Support business by expanding sales and improving productivity.

In the Drug Discovery and Development business, two out-licenses achieved in FY2015 and FY2016 contributed to increased interests from pharmaceutical companies in the Group's drug discovery pipeline. The Group continues to seek for potential out-licensing opportunities to maximize the value. The Group aims to enhance its drug discovery pipeline for next generation, advancing research programs to the next phase as early as possible and developing new core technology to discover novel drugs. Furthermore, the Group plans to establish an infrastructure to conduct clinical trials by in-house initiative.

In the Drug Discovery Support business, the Group aims at annual sales of 1 billion yen by increasing sales in North America and Europe and winning more orders for proprietary protein products and large-scale screening services. In order to achieve this target, the Group plans to enhance sales organization and distribution network, thereby deepening relationships with existing customers and gaining new customers. In addition, the Group plans to increase sales by developing new differentiated products and services that satisfy customer needs.

Based on these activities, the Group strives to increase corporate value by initiating clinical trials as early as possible and out-licensing drug candidate compounds to pharmaceutical companies while allocating the revenue generated from the Drug Discovery Support business to R&D activity of the Drug Discovery and Development business.

**(4) Issues to be Addressed**

## 1) Issues to be addressed

Securing surplus sustainably

In FY2015, the Group recorded its first ordinary income since its establishment, achieving the highest-priority goal. The management is aware that establishing a business foundation to generate ordinary income sustainably is an important management issue. In order to address the issue, the Drug Discovery Support business plans to increase profits by expanding sales while the Drug Discovery and Development business works to minimize a fluctuating factor by advancing R&D activities and out-licensing multiple programs.

## 2) Issues to be addressed by each business segment

## i) Drug discovery and development

(Drug Discovery and Development business)

As of the end of December 2016, TNIK inhibitor program (NCB-0846) was in the preclinical stage. Preclinical studies require efficacy evaluations of compounds and safety and toxicity evaluation of drugs. Furthermore, before start manufacturing active pharmaceutical ingredients, salts and crystalline forms and production processes must be examined. The Group is performing such evaluation and studies as quickly as possible, collaborating with external organizations, and aims to start clinical trials as soon as possible. In addition, the Group is working to establish next-generation research targets by enhancing drug discovery platform technologies.

Furthermore, in order to maximize the value of its drug discovery pipeline, the Group plans to build a development organization that is capable of conducting clinical trials in-house to generate clinical-stage drug candidates, thereby increasing the corporate value.

(Drug Discovery Support business)

The Group provides products and services produced from its drug discovery platform technologies related to kinase proteins to pharmaceutical companies and other customers in global markets. In order to increase market share and the number of customers, the Group needs to expand and improve the lineup of products and services to reflect customer needs. While focusing on the science-based marketing to identify precise customer needs, the Group plans

to enhance its capability for customized services and develop new kinase related products and evaluation platform by utilizing its accumulated expertise on kinase protein production, evaluation methods for activation of kinases, and other know-hows.

ProbeX, a subsidiary of the Company, is developing stable cell lines that facilitate the real time visualization of protein-protein interactions and working on customized services by applying split luciferase technology. ProbeX aims for the profitability at an early stage and is reinforcing its platform technologies.

ii) Business development

Leveraging the track record of successful out-licensing in FY2015 and FY2016, the Company continues to seek for potential out-licensing opportunities of its drug candidate compounds. Furthermore, the Group will enhance new products and services based on its unique drug discovery platform technologies more aggressively and build stronger ties with universities and other academic institutions.

iii) Development, manufacture and distribution of products and services

The Group plans to improve the quality of its standard catalog products and services and enhance its capability for customized products and services to satisfy diversified customer needs. At the same time, the Group plans to improve production process to reinforce profitability.

iv) Sales structure

Although the Drug Discovery Support business has a high market share in Japan, its shares in the U.S. and Europe, two major markets, are relatively low. The Group considers that expanding its shares in the U.S. and Europe is an important management issue. In an effort to reinforce the relationship with existing customers and reaching a larger customer base, the Group is enhancing proposal-based marketing to stimulate potential demand and strengthening science-based marketing to support customers, while reviewing the organization structure. In addition, since major customers of the Group are researcher in oncology area, the Group is approaching researchers for autoimmune diseases, neurodegenerative disease, and other diseases to expand sales. The Group is focusing especially on promoting its proprietary products and services with higher profit margins and on winning large-scale screening service contracts to secure stable revenue.

**(5) Other Important Management Matters**

Not applicable.

**4. Basic Approach to the Selection of Accounting Standards**

The Group has been preparing consolidated financial statements in accordance with Japan GAAP and continues to do so for the time being to allow historical and peer comparisons.

With regard to the application of IFRS (International Financial Reporting Standards), the Company plans to take suitable actions considering global accounting circumstances.

**5. Consolidated Financial Statements****(1) Consolidated Balance Sheet**

	(Thousands of yen)	
	FY2015	FY2016
	(As of Dec. 31, 2015)	(As of Dec. 31, 2016)
<b>Assets</b>		
Current assets		
Cash and deposits	1,624,941	2,161,186
Accounts receivable–trade	191,740	122,924
Merchandise and finished goods	91,445	86,920
Work in process	7,459	4,573
Raw materials and supplies	26,415	30,399
Other	53,788	86,686
Total current assets	1,995,790	2,492,690
Non-current assets		
Property, plant and equipment		
Buildings and structures, net	12,871	10,959
Machinery, equipment and vehicles, net	68	55
Tools, furniture and fixtures, net	24,311	24,121
Total property, plant and equipment	37,251	35,136
Intangible assets	1,451	787
Total investments and other assets	303,115	37,681
Total non-current assets	341,819	73,605
Total assets	2,337,609	2,566,295

	(Thousands of yen)	
	FY2015	FY2016
	(As of Dec. 31, 2015)	(As of Dec. 31, 2016)
<b>Liabilities</b>		
Current liabilities		
Accounts payable–trade	15,466	3,495
Current portion of bonds	—	28,000
Current portion of long-term loans payable	65,344	142,260
Accounts payable–other	69,531	76,907
Income taxes payable	38,767	4,959
Other	46,882	15,805
Total current liabilities	235,992	271,428
Non-current liabilities		
Bonds payable	—	172,000
Long-term loans payable	148,273	355,459
Asset retirement obligations	25,168	25,669
Other	57,673	2,416
Total non-current liabilities	231,115	555,545
Total liabilities	467,107	826,974
<b>Net assets</b>		
Shareholders' equity		
Capital stock	2,900,784	3,042,759
Deposit for subscriptions to shares	5,946	—
Capital surplus	1,718,888	1,860,826
Retained earnings	(2,879,693)	(3,169,633)
Total shareholders' equity	1,745,925	1,733,952
Accumulated other comprehensive income		
Valuation difference on available-for-sale securities	114,484	57
Deferred gains or losses on hedges	(1,696)	—
Foreign currency translation adjustment	3,848	459
Total accumulated other comprehensive income	116,637	516
Subscription rights to shares	7,940	4,853
Total net assets	1,870,502	1,739,321
Total liabilities and net assets	2,337,609	2,566,295

**(2) Consolidated Statements of Income and Comprehensive Income****Consolidated Statement of Income**

	(Thousands of yen)	
	FY2015 (Jan. 1 – Dec. 31, 2015)	FY2016 (Jan. 1 – Dec. 31, 2016)
Net sales	1,569,205	811,598
Cost of sales	269,594	254,425
Gross profit	1,299,611	557,172
Selling, general and administrative expenses	826,829	981,149
Operating income (loss)	472,781	(423,977)
Non-operating income		
Interest income	188	115
Subsidy income	29,240	8,692
Other	1,760	1,577
Total non-operating income	31,190	10,385
Non-operating expenses		
Interest expenses	2,287	5,660
Share issuance cost	2,452	1,467
Bond issuance cost	—	2,617
Issuance cost of subscription rights to shares	1,674	—
Foreign exchange losses	4,576	15,967
Other	747	1,353
Total non-operating expenses	11,739	27,066
Ordinary income (loss)	492,233	(440,657)
Extraordinary income		
Gain on sales of investment securities	—	177,543
Gain on reversal of subscription rights to shares	2,282	—
Total extraordinary income	2,282	177,543
Extraordinary losses		
Impairment loss	8,425	25,811
Total extraordinary losses	8,425	25,811
Profit (loss) before income taxes	486,090	(288,926)
Income taxes-current	30,235	1,349
Income taxes-deferred	(533)	(335)
Total income taxes	29,701	1,014
Profit (loss)	456,388	(289,940)
Profit (loss) attributable to owners of parent	456,388	(289,940)

**Consolidated Statement of Comprehensive Income**

	(Thousands of yen)	
	FY2015 (Jan. 1 – Dec. 31, 2015)	FY2016 (Jan. 1 – Dec. 31, 2016)
Profit (Loss)	456,388	(289,940)
Other comprehensive income		
Valuation difference on available-for-sale securities	34,530	(114,427)
Deferred gains or losses on hedges	(1,696)	1,696
Foreign currency translation adjustment	(915)	(3,389)
Total other comprehensive income	31,918	(116,120)
Comprehensive income	488,307	(406,060)
Comprehensive income attributable to		
Comprehensive income attributable to owners of parent	488,307	(406,060)



**(3) Consolidated Statement of Changes in Equity**

FY2015 (Jan. 1 – Dec. 31, 2015)

(Thousands of yen)

	Shareholders' equity				
	Capital stock	Deposit for subscriptions to shares	Capital surplus	Retained earnings	Total shareholders' equity
Balance at beginning of current period	2,627,070	–	1,445,230	(3,336,081)	736,219
Changes of items during period					
Issuance of new shares–exercise of subscription rights to shares	273,713	5,946	273,657		553,317
Profit (loss) attributable to owners of parent				456,388	456,388
Net changes of items other than shareholders' equity					
Total changes of items during period	273,713	5,946	273,657	456,388	1,009,705
Balance at end of current period	2,900,784	5,946	1,718,888	(2,879,693)	1,745,925

	Accumulated other comprehensive income				Subscription rights to shares	Total net assets
	Valuation difference on available-for-sale securities	Deferred gains or losses on hedges	Foreign currency translation adjustment	Total accumulated other comprehensive income		
Balance at beginning of current period	79,954	–	4,764	84,718	9,289	830,227
Changes of items during period						
Issuance of new shares–exercise of subscription rights to shares						553,317
Profit (loss) attributable to owners of parent						456,388
Net changes of items other than shareholders' equity	34,530	(1,696)	(915)	31,918	(1,349)	30,569
Total changes of items during period	34,530	(1,696)	(915)	31,918	(1,349)	1,040,275
Balance at end of current period	114,484	(1,696)	3,848	116,637	7,940	1,870,502

FY2016 (Jan. 1 – Dec. 31, 2016)

(Thousands of yen)

	Shareholders' equity				
	Capital stock	Deposit for subscriptions to shares	Capital surplus	Retained earnings	Total shareholders' equity
Balance at beginning of current period	2,900,784	5,946	1,718,888	(2,879,693)	1,745,925
Changes of items during period					
Issuance of new shares—exercise of subscription rights to shares	141,975	(5,946)	141,937		277,966
Profit (loss) attributable to owners of parent				(289,940)	(289,940)
Net changes of items other than shareholders' equity					
Total changes of items during period	141,975	(5,946)	141,937	(289,940)	(11,973)
Balance at end of current period	3,042,759	—	1,860,826	(3,169,633)	1,733,952

	Accumulated other comprehensive income				Subscription rights to shares	Total net assets
	Valuation difference on available-for-sale securities	Deferred gains or losses on hedges	Foreign currency translation adjustment	Total accumulated other comprehensive income		
Balance at beginning of current period	114,484	(1,696)	3,848	116,637	7,940	1,870,502
Changes of items during period						
Issuance of new shares—exercise of subscription rights to shares						277,966
Profit (loss) attributable to owners of parent						(289,940)
Net changes of items other than shareholders' equity	(114,427)	1,696	(3,389)	(116,120)	(3,087)	(119,207)
Total changes of items during period	(114,427)	1,696	(3,389)	(116,120)	(3,087)	(131,180)
Balance at end of current period	57	—	459	516	4,853	1,739,321

**(4) Consolidated Statement of Cash Flows**

(Thousands of yen)

	FY2015 (Jan. 1 – Dec. 31, 2015)	FY2016 (Jan. 1 – Dec. 31, 2016)
Cash flows from operating activities		
Profit (loss) before income taxes	486,090	(288,926)
Depreciation	19,219	21,801
Impairment loss	8,425	25,811
Interest income	(188)	(115)
Interest expenses	2,287	5,660
Foreign exchange losses (gains)	263	12,248
Subsidy income	(29,240)	(8,692)
Share issuance cost	2,452	1,467
Bond issuance cost	—	2,617
Issuance cost of subscription rights to shares	1,674	—
Loss (gain) on sales and valuation of investment securities	—	(177,543)
Gain on reversal of subscription rights to shares	(2,282)	—
Decrease (increase) in notes and accounts receivable–trade	(96,028)	68,459
Decrease (increase) in inventories	(6,095)	4,059
Increase (decrease) in notes and accounts payable–trade	11,179	(11,904)
Increase (decrease) in accounts payable–other	(46,871)	(6,668)
Other, net	46,394	(59,525)
Subtotal	397,279	(411,251)
Interest income received	155	183
Interest expenses paid	(2,344)	(5,809)
Proceeds from subsidy income	8,692	6,631
Income taxes (paid) refund	(2,137)	(43,390)
Other	—	669
Net cash provided by (used in) operating activities	401,645	(452,967)
Cash flows from investing activities		
Purchase of property, plant and equipment	(2,768)	(31,070)
Purchase of intangible assets	(232)	—
Proceeds from sales of investment securities	—	281,876
Other, net	—	(2,802)
Net cash provided by (used in) investing activities	(3,000)	248,004
Cash flows from financing activities		
Proceeds from long-term loans payable	100,000	400,000
Repayments of long-term loans payable	(47,259)	(115,898)
Proceeds from issuance of bonds	—	197,382
Proceeds from issuance of subscription rights to shares	6,265	—
Proceeds from issuance of shares resulting from exercise of subscription rights to shares	543,932	273,412
Net cash provided by (used in) financing activities	602,938	754,897
Effect of exchange rate change on cash and cash equivalents	(3,385)	(13,689)
Net increase (decrease) in cash and cash equivalents	98,198	536,244
Cash and cash equivalents at beginning of period	626,742	1,624,941
Cash and cash equivalents at end of period	1,624,941	2,161,186

**(5) Notes to Consolidated Financial Statements****(Going Concern Assumption)**

Not applicable.

**(Basis for Preparing Consolidated Financial Statements)**

## 1. Scope of consolidation

All subsidiaries are included in the consolidation.

Number of consolidated subsidiaries: 2

Names of consolidated subsidiaries:

CarnaBio USA, Inc.

ProbeX, Inc.

## 2. Fiscal year of consolidated subsidiaries

Fiscal years of each consolidated subsidiary are the same as the consolidated fiscal year.

## 3. Accounting standards

## (1) Valuation standards and methods for principal assets

## 1) Marketable securities

Available-for-sale securities

Securities with market quotations

Market value method based on the market price of the fiscal year end (Valuation difference is booked directly into net assets. Cost of securities sold is determined by the moving-average method.)

Securities without market quotations

Cost method based on the moving-average method

## 2) Inventories

Finished goods and work in process

Specific-identification cost method (Method in which book values are lowered based on declines in profitability.)

Raw materials

First-in first-out method (Method in which book values are lowered based on declines in profitability.)

Supplies

First-in first-out method (Method in which book values are lowered based on declines in profitability.)

## (2) Depreciation and amortization of principal assets

## 1) Property, plant and equipment

Declining-balance method (For property, plant and equipment acquired on and after April 1, 2016, straight-line method is applied.)

Useful lives of principle assets are as follows:

Buildings and structures                      3–38 years

Machinery, equipment and vehicles        2–11 years

Tools, furniture and fixtures:                2–15 years

## 2) Intangible assets

Straight-line method

Software for internal use is amortized over an expected useful life of three to five years.

## (3) Accounting for significant deferred assets

1) Share issuance cost is accounted for as the full amount at the time of the expenditure.

2) Bond issuance cost is accounted for as the full amount at the time of the expenditure.

## (4) Recognition of significant allowances

Allowance for doubtful accounts

To prepare for credit losses on accounts receivable, allowances are provided based on the historical write-off rate for ordinary receivables, and the estimated amount of irrecoverable debt based on recoverability of the individual cases for specified receivables such as doubtful accounts.

## (5) Standard for translation of significant foreign currency-denominated assets and liabilities applied for the preparation of financial statements of consolidated companies

Foreign currency-denominated receivables and payables are translated into yen at the spot exchange rate in effect on the consolidated balance sheet date. Foreign exchange gain or loss is accounted for as profit or loss. Assets and liabilities of overseas subsidiaries are translated into yen at the spot exchange rate on the consolidated balance sheet date, and income and expenses at the average foreign exchange rate for the fiscal year. Foreign exchange gain or loss is included in the foreign currency translation adjustments in net assets.

## (6) Significant hedge accounting methods

## 1) Hedge accounting method

The Company primarily applies the deferred hedge accounting method. Certain foreign currency forward contracts are subject to appropriated treatment if they satisfy the requirements of appropriated treatment.

## 2) Hedging instruments and hedged items

Hedging instruments: Forward exchange contracts and foreign currency deposits

Hedged items: Accounts receivables and forecasted transactions denominated in foreign currencies

## 3) Hedging policy

Forward exchange contracts and foreign currency deposits are used to reduce exposure to foreign exchange volatility associated with significant accounts receivables and forecasted transactions denominated in foreign currencies.

## 4) Evaluation method for the effectiveness of hedges

The evaluation of hedge effectiveness is omitted since the terms of hedged items are substantially same as those of hedging instruments.

## (7) Scope of cash and cash equivalents on consolidated statement of cash flows

Cash and cash equivalents in the consolidated statement of cash flows consist of cash in hands, deposits that can be withdrawn on demand, and short-term investments, generally with original maturities of three months or less, that are readily convertible to known amounts of cash and are near maturity and that they present insignificant risk of change in value.

## (8) Other important items for preparing consolidated financial statements

Accounting for consumption taxes

National and local consumption taxes are accounted based on the tax-exclusion method.

**(Change in Accounting Policies)**

## Application of the Accounting Standards for Business Combinations

The Company has applied the “Accounting Standard for Business Combinations” (Accounting Standards Board of Japan (ASBJ) Statement No. 21, September 13, 2013), “Accounting Standard for Consolidated Financial Statements” (ASBJ Statement No. 22, September 13, 2013), “Accounting Standard for Business Divestitures” (ASBJ Statement No. 7, September 13, 2013), etc. from the current fiscal year. Accordingly, difference arising from changes in the Company’s ownership interests in subsidiaries in cases where control is retained is recognized in capital surplus, and the acquisition costs in connection with business combinations are recognized as expenses in the fiscal year in which they arise. Regarding business combinations that take place on or after the beginning of the current fiscal year, the Company has revised the method to reflect reviewed allocation of the acquisition costs arising from determination of the provisional accounting treatment on the consolidated financial statements to which the date of the business combination belongs.

In addition, the presentation of net profit and other items has been revised. For consistency with these changes, the consolidated financial statements for the previous fiscal year have been revised.

The Company has adopted these accounting standards, etc. from the beginning of the current fiscal year, in accordance with the transitional accounting treatments set forth in Article 58-2 (4) of the Accounting Standard for Business Combinations, Article 44-5 (4) of the Accounting Standard for Consolidated Financial Statements, and Article 57-4 (4) of the Accounting Standard for Business Divestitures.

Starting from the current fiscal year, “cash flows related to purchases or sales of shares of subsidiaries not resulting in change in scope of consolidation” is presented as “cash flows from financing activities”, and “cash flows related to cost of purchasing shares of subsidiaries resulting in change in scope of consolidation” and “cost of purchasing or selling shares of subsidiaries not resulting in change in scope of consolidation” are presented as “cash flows from operating activities”.

There is no impact on the consolidated financial statements and per share for the current fiscal year.

#### Change in depreciation method

Following the revision of the Corporation Tax Act, the Company has adopted the “Practical Solution on a Change in Depreciation Method due to Tax Reform 2016” (ASBJ Practical Issues Task Force (PITF) No. 32, June 17, 2016) from the current fiscal year, and changed the method for the depreciation of facilities attached to buildings and structures acquired on or after April 1, 2016, from the declining-balance method to the straight-line method.

There is no impact on the consolidated financial statements in the current fiscal year.

#### **(Reclassifications)**

##### Consolidated Balance Sheet

“Investment securities” under “Investments and other assets” presented as a separate line item in the previous fiscal year is included in “Investments and other assets” in the current fiscal year given the reduced materiality in the context of financial statements. The consolidated financial statements for the previous fiscal year are restated to conform to the presentation of the current fiscal year.

As a result, “Investment securities” (286,382 thousand yen) and “Other” (16,733 thousand yen) presented in the consolidated financial statements of the previous fiscal year are reclassified and included in “Investments and other assets (303,155 thousand yen).”

“Deferred tax liabilities” under “Non-current liabilities” presented as a separate line item in the previous fiscal year is included in “Other” in the current fiscal year since the amount given the reduced materiality in the context of financial statements. The consolidated financial statements for the previous fiscal year are restated to conform to the presentation of the current fiscal year.

As a result, “Deferred tax liabilities” (57,148 thousand yen) and “Other” (525 thousand yen) under “Non-current liabilities” presented in the consolidated financial statements of the previous fiscal year are reclassified and included in “Other” (57,673 thousand yen).

#### **(Segment and Other Information)**

##### [Segment Information]

##### 1. General information about reportable segments

The reportable segments of the Group are components of business activities for which discrete financial information is available and whose operating results are regularly reviewed by the Board of Directors to make decisions about resource allocation and to assess performance.

The Group is engaged in the Drug Discovery Support business and the Drug Discovery and Development business based on the drug discovery platform technologies. These two businesses are two reportable segments of the Group.

Main activities of the Drug Discovery Support business include sale of kinase proteins, assay development, and profiling and screening services. The Drug Discovery and Development business conducts research and development of kinase inhibitor drugs.

##### 2. Calculation methods for net sales, profit or loss, assets, liabilities, and other items for each reportable segment

The accounting treatment methods for reportable segments are generally the same as those listed in the section “Basis for Preparing Consolidated Financial Statements.”

Segment profit (loss) for reportable segments are operating income figures in the consolidated statement of income.

3. Information about net sales, profit or loss, assets, liabilities, and other items for each reportable segment  
FY2015 (Jan. 1 – Dec. 31, 2015)

(Thousands of yen)

	Reportable segment			Adjustments (Note 1)	Amounts recorded in the consolidated financial statements (Note 2)
	Drug Discovery Support	Drug Discovery and Development	Total		
Net sales					
External sales	954,355	614,850	1,569,205	—	1,569,205
Intersegment sales or transfers	—	—	—	—	—
Total	954,355	614,850	1,569,205	—	1,569,205
Segment profit	412,610	60,171	472,781	—	472,781
Segment assets	453,436	48,390	501,827	1,835,782	2,337,609
Other items					
Depreciation	12,915	6,304	19,219	—	19,219
Increase in property, plant and equipment and intangible assets	1,294	10,355	11,650	—	11,650

Notes: 1. The adjustment of 1,835,782 thousand yen to segment assets relates to the corporate assets and does not belong to any of the reportable segments. Corporate assets mainly consist of the Company's surplus funds (cash and deposits) and investment securities.

2. Segment profits are consistent with operating income shown on the consolidated statement of income.

FY2016 (Jan. 1 – Dec. 31, 2016)

(Thousands of yen)

	Reportable segment			Adjustments (Note 1)	Amounts recorded in the consolidated financial statements (Note 2)
	Drug Discovery Support	Drug Discovery and Development	Total		
Net sales					
External sales	712,670	98,928	811,598	—	811,598
Intersegment sales or transfers	—	—	—	—	—
Total	712,670	98,928	811,598	—	811,598
Segment profit (loss)	192,059	(616,036)	(423,977)	—	(423,977)
Segment assets	315,996	53,322	369,318	2,196,977	2,566,295
Other items					
Amortization of goodwill	8,924	12,876	21,801	—	21,801
Increase in property, plant and equipment and intangible assets	7,893	36,978	44,872	—	44,872

Notes: 1. The adjustment of 2,196,977 thousand yen to segment assets relates to the corporate assets and does not belong to any of the reportable segments. Corporate assets mainly consist of the Company's surplus funds (cash and deposits) and investment securities.

2. Segment profits (losses) are consistent with operating loss shown on the consolidated statement of income.

## [Related information]

FY2015 (Jan. 1 – Dec. 31, 2015)

## 1. Information by product or service

(Thousands of yen)

	Drug Discovery Support				Drug Discovery and Development	Total
	Kinase proteins	Assay development	Profiling and screening services	Other		
External sales	324,627	29,092	457,693	142,942	614,850	1,569,205

## 2. Information by region

## (1) Net sales

(Thousands of yen)

Japan	North America	Europe	Other	Total
584,683	873,838	86,151	24,531	1,569,205

Note: Net sales are classified by country or region based on the location of customers.

## (2) Property, plant and equipment

This information is omitted since property, plant and equipment located in Japan consists more than 90% of consolidated property, plant and equipment.

## 3. Information by major customers

(Thousands of yen)

Name	Net sales	Related segments
Janssen Biotech, Inc.	614,850	Drug Discovery and Development
Ono Pharmaceutical Co., Ltd.	317,478	Drug Discovery Support

FY2016 (Jan. 1 – Dec. 31, 2016)

## 1. Information by product or service

(Thousands of yen)

	Drug Discovery Support				Drug Discovery and Development	Total
	Kinase proteins	Assay development	Profiling and screening services	Other		
External sales	248,710	49,237	276,662	138,059	98,928	811,598

## 2. Information by region

## (1) Net sales

(Thousands of yen)

Japan	North America	Europe	Other	Total
418,673	298,775	72,095	22,054	811,598

Note: Net sales are classified by country or region based on the location of customers.

## (2) Property, plant and equipment

This information is omitted since property, plant and equipment located in Japan consists more than 90% of consolidated property, plant and equipment.

## 3. Information by major customers

(Thousands of yen)

Name	Net sales	Related segments
Ono Pharmaceutical Co., Ltd.	194,677	Drug Discovery Support
ProNAi Therapeutics, Inc*	98,928	Drug Discovery and Development

\*ProNAi Therapeutics, Inc. changed the company name to Sierra Oncology, Inc. in January 2017.

## [Information related to impairment loss of non-current assets for each reportable segment]

FY2015 (Jan. 1 – Dec. 31, 2015)

(Thousands of yen)

	Reportable segment			Other	Elimination or corporate	Total
	Drug Discovery Support	Drug Discovery and Development	Total			
Impairment loss	–	8,425	8,425	–	–	8,425



FY2016 (Jan. 1 – Dec. 31, 2016)

(Thousands of yen)

	Reportable segment			Other	Elimination or corporate	Total
	Drug Discovery Support	Drug Discovery and Development	Total			
Impairment loss	–	25,811	25,811	–	–	25,811

[Information related to goodwill amortization and the unamortized balance for each reportable segment]

Not applicable.

[Information related to gain on bargain purchase for each reportable segment]

Not applicable.

**(Per Share Information)**

(Yen)

Item	FY2015 (Jan. 1 – Dec. 31, 2015)	FY2016 (Jan. 1 – Dec. 31, 2016)
Net assets per share	208.78	187.73
Profit (loss) per share	52.61	(31.64)
Diluted profit per share	50.05	–

Notes: 1. Despite the existence of dilutive shares, diluted net income per share for FY2016 is not presented because net loss was posted for the period.

2. Net income (loss) per share and diluted net income per share are calculated as follows:

(Thousands of yen)

Item	FY2015 (Jan. 1 – Dec. 31, 2015)	FY2016 (Jan. 1 – Dec. 31, 2016)
(1) Profit (loss) per share		
Profit (loss) attributable to owners of parent	456,388	(289,940)
Profit (loss) not attributable to owner of common stock	–	–
Profit (loss) attributable to owners of common stock of parent	456,388	(289,940)
Average number of common stock outstanding during the period (Shares)	8,675,111	9,162,414
(2) Diluted profit per share		
Increase in number of common stock (Shares)	443,219	–
[of which subscription rights to shares (Shares)]	[443,219]	[–]
Summary of dilutive shares not included in the calculation of diluted net income per share since there was no dilutive effect	–	–

3. Net assets per share is calculated as follows.

(Thousands of yen)

Item	FY2015 (As of Dec. 31, 2015)	FY2016 (As of Dec. 31, 2016)
Total net assets	1,870,502	1,739,321
Deduction from total net assets	13,886	4,853
[of which deposit for subscriptions to shares]	[5,946]	[–]
[of which subscription rights to shares]	[7,940]	(4,853)
Net assets attributable to owners of common stock at end of period	1,856,616	1,734,468
Number of common stock used in calculation of net assets per share (Shares)	8,892,700	9,239,000

**(Material Subsequent Events)**

Not applicable.

*This financial report is solely a translation of “Kessan Tanshin” (in Japanese, including attachments), which has been prepared in accordance with accounting principles and practices generally accepted in Japan, for the convenience of readers who prefer an English translation.*