THE BIOTECHNOLOGY COMPANY™

Annual Report **2017**

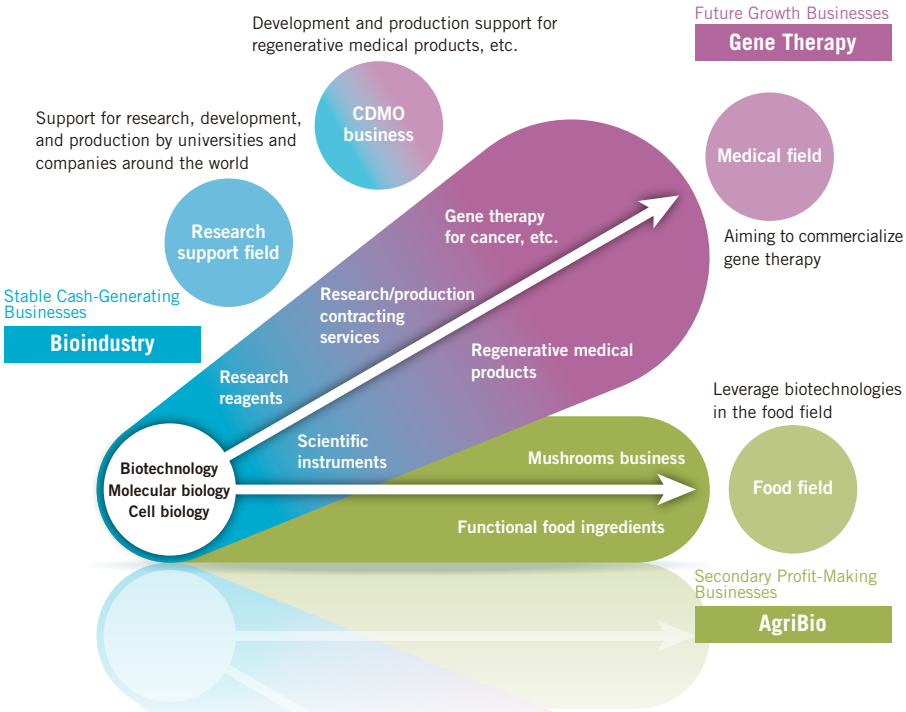
TAKARA BIO INC.

THE BIOTECHNOLOGY

Contributing to the health of humankind through the development

Takara Bio Group's Business Strategy

Takara Bio positions its Bioindustry Business as a stable revenue base providing research reagents, scientific instruments, and various contracted services to universities and companies around the world. The AgriBio Business is being nurtured as our secondary profit-making business, and we are investing R&D funding into our Gene Therapy Business, to encourage broader expansion in an area set to see further growth in the future.



Takara Bio's Businesses

Bioindustry Business

Marketed Japan's first restriction enzymes in 1979. Through both its research support and CDMO fields, Takara Bio currently provides high-quality products and services to bioscience researchers around the world.

Gene Therapy Business

Developing the RetroNectin® Method for highly-efficient gene transduction. To achieve quick commercialization of gene therapies for cancer and other conditions, Takara Bio is engaged in clinical development projects.

AgriBio Business

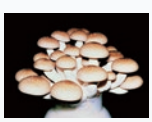
In addition to providing functional foods with proven functionality utilizing biotechnologies, Takara Bio conducts business that leverages our techniques for large-scale mushroom production, including the world's first technique for mass-production of Bunashimeji mushrooms.

1970 1980 1990

History of Takara Bio

HISTORY ■ Bioindustry Business ■ Gene Therapy Business ■ AgriBio Business ■ History

1970 ■ Developed the world's first large-scale production technology for Bunashimeji mushrooms



1973 ■ Licensed Bunashimeji large-scale production technologies to JA ZEN-NOH Nagano

1979 ■ Commenced sales of the first domestically produced restriction enzymes as reagents for genetic engineering research

1985 ■ Began DNA synthesis services

1988 ■ Acquired exclusive distribution rights in Japan for a gene amplification system using PCR technology

1990 ■ Began DNA sequence analysis services

1993 ■ Established Takara Biotechnology (Dalian) Co., Ltd. in China

■ Obtained broad-ranging, PCR-related patent licenses legally binding worldwide

1995 ■ Established Takara Biomedical Europe S.A. (currently Takara Bio Europe S.A.S.)

■ Developed a highly-efficient retroviral transduction method for hematopoietic stem cells (the RetroNectin® Method)

■ Established Bohan Biomedical Inc. (currently Takara Korea Biomedical Inc.)

■ Began genetic testing services

1996 ■ Apoidan-U (now part of the Fucoidan series)

COMPANY™

of revolutionary biotechnologies such as gene therapy

Bioindustry Business Products and Services

Research Reagents and Scientific Instruments

Research/Manufacturing Contracting Services

Clinical Development Projects in Progress

HF10
NY-ESO-1 siTCR gene therapy
CD19 CAR gene therapy

AgriBio Business Products and Services

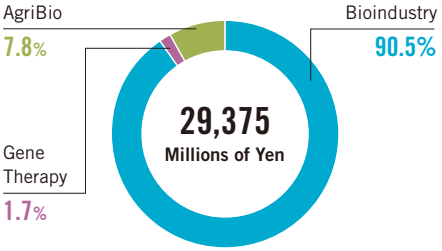
Functional Foods

Mushrooms

Sales and Operating Income (Millions of Yen)

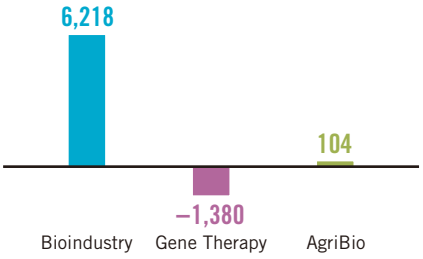
Sales by Business Segment

(FY2017)



Operating Income by Business Segment

(FY2017)

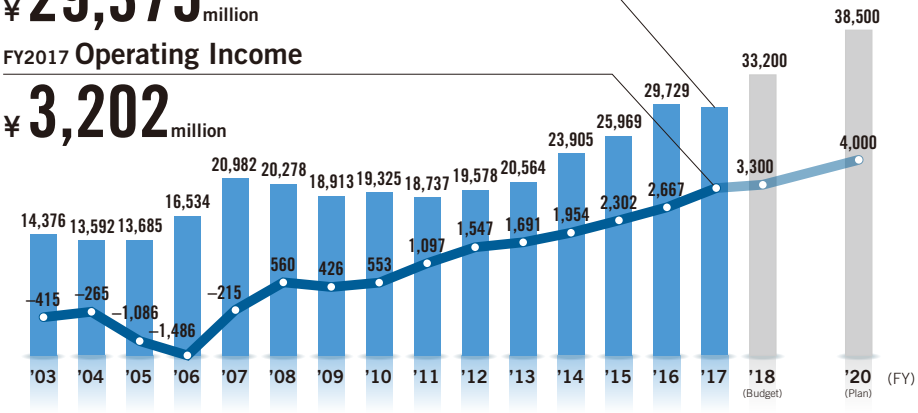


FY2017 Sales

¥29,375 million

FY2017 Operating Income

¥3,202 million



2000

2000 Launched full-scale genetic analysis services

2001 Established Mizuho Norin Co., Ltd.

2002 **Took over Takara Shuzo Co.'s biotechnology business and established Takara Bio Inc. in the city of Otsu, Shiga.**
Established Takara Bio Farming Center Inc.

2004 Established Takara Biomedical Technology (Beijing) Co., Ltd.
Listed on the TSE Mothers Index
Commenced large-scale commercial production of Honshimeji mushrooms

2005 Established Takara Bio USA Holdings Inc.
Acquired U.S.-based Clontech Laboratories, Inc. (now Takara Bio USA, Inc.)

2006 Began next-generation sequence analysis services

2007 Established KINOKO CENTER KIN INC.

2009 Began iPS cell production services

2010

2010 Acquired oncolytic virus HF10 business

2011 Established DSS Takara Bio India Pvt. Ltd.

2013 Began genome editing services

2014 Acquired Cellectis AB (now Takara Bio Europe AB)

Completed construction of the Center for Gene and Cell Processing; Began full-scale CDMO business providing manufacturing and development support services for biopharmaceuticals, etc.

2015

2015 The Center for Gene and Cell Processing obtained accreditation of "foreign cell processor" to conduct specific processed cell manufacturing
Construction completed for new research facility in Kusatsu, Shiga; Headquarters functions relocated

2016 Changed its listing to the First Section of the Tokyo Stock Exchange
Obtained CAP-LAP certification for the contracted genetic analysis business

2017 Acquired Rubicon Genomics, Inc. and WaferGen Bio-systems, Inc.

Working to further expand the overseas research reagent business and domestic CDMO business and steadily promote clinical development of gene therapies.

With an eye to improving corporate value, Takara Bio is investing earnings from its Bioindustry and AgriBio Businesses into achieving growth for the Gene Therapy Business under its corporate philosophy of "contributing to the health of humankind through the development of revolutionary biotechnologies such as gene therapy."

We are further expanding our strong research reagent business outside Japan and increasing earnings inside Japan with a focus on our CDMO business, and steadily advancing clinical development of gene therapies.

Koichi Nakao
President

FY 2017 Business Performance

While net sales dropped due to currency fluctuations, operating income has set new records for eight years in a row

Net sales decreased by 1.2% year-over-year to ¥29,375 million despite increased sales on a local currency basis in our overseas business, reflecting the stronger Japanese yen.

As to profit, cost of sales decreased by 7.3% year-over-year to ¥12,422 million as the cost rate fell due to changes in sales composition for each product and other factors. Consequently, gross profit increased by 3.9% year-over-year to ¥16,952 million. Selling, general and administrative (SG&A) expenses increased by 0.7% year-over-year to ¥13,749 million due to the expenses incurred in relation to the acquisition of shares of United States WaferGen Bio-systems, Inc. (hereinafter, "WaferGen") and Rubicon Genomics, Inc. (hereinafter, "Rubicon"). However, Takara Bio recorded operating income up 20.1% year-over-year to ¥3,202 million. Regarding extraordinary income and losses, an impairment loss of ¥667 million was incurred resulting from assets held for sale and idle assets among others, and income before income taxes and minority interests was decreased 3.4% year-over-year to ¥2,805 million. However, net income attributable to owners of the parent increased by 1.4% year-over-year to ¥1,352 million due to the elimination of income taxes for past fiscal years recognized in the preceding fiscal year.

Growing the Bioindustry Business

U.S.-based Rubicon and WaferGen join the Takara Bio Group

We have been focused on developing products for next-generation sequence analysis, which is seeing increasing use in a wide range of fields spanning basic research to industrial applications. In particular, analysis techniques centered on ultra-low input DNA and RNA are well positioned for further growth in light of increasing opportunities for their use in research involving cancer, stem cells and regenerative medicines. By welcoming Rubicon into the Takara Bio Group, Rubicon's sample preparation technologies for ultra-low input DNA sequencing complement the Group's sample preparation technologies for ultra-low input RNA sequencing analysis. This, combined with preparation systems for WaferGen's next-generation sequencing analysis, allows the Group to provide a broader range of products and services in the area of ultra-low input nucleic acid analysis.

Clinical Development for Gene Therapies

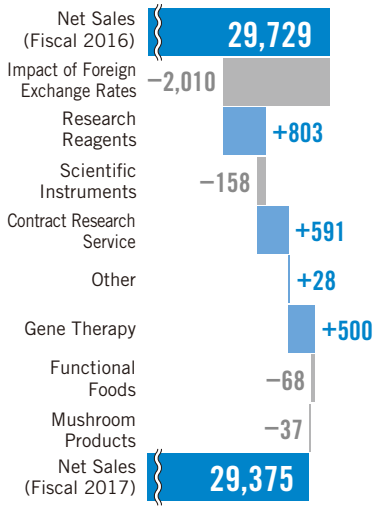
Making steady progress with clinical development in Japan and the U.S.

We are now engaged in the clinical development of gene therapies targeting cancers and other conditions with the goal of quick commercialization. Through "selection and concentration," we clearly distinguish between independent development projects and joint projects, and we are undertaking efficient development.

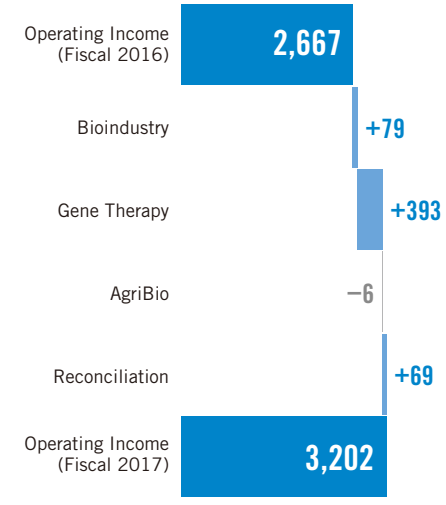
Phase II clinical trials in the U.S. for oncolytic virus HF10, which targets malignant melanoma, have been completed and we are now acquiring data testifying to the efficacy and safety of this therapy. In Japan, Phase II clinical trials for malignant melanoma and Phase I clinical trials for pancreatic cancer are being carried out. Meanwhile, in engineered T cell therapy efforts, we began Phase I / II trials anew in Japan for the NY-ESO-1 siTCR (targeting synovial sarcoma) and CD19 CAR (targeting adult acute lymphocytic leukemia) gene therapies.

Regarding joint projects with other companies, the Takara Bio Group entered into an exclusive license agreement with Otsuka Pharmaceutical Co., Ltd. to develop and sell HF10 in Japan and will actively promote further clinical development.

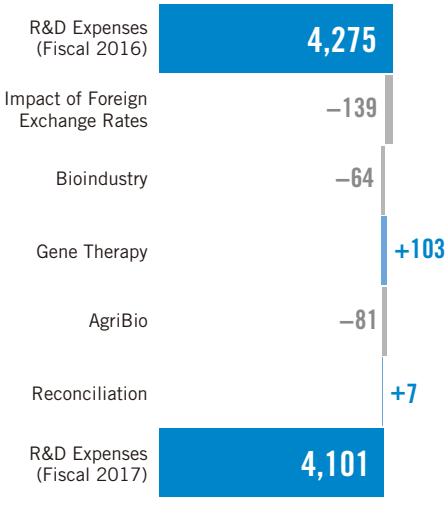
Consolidated Net Sales
(Millions of Yen)



Consolidated Operating Income
(Millions of Yen)



R&D Expenses
(Millions of Yen)



Shareholder Return

Takara Bio Group paid year-end dividends of ¥4 per share

Business performance has been strong, especially in the Bioindustry Business. As we expect to secure a stable financial base going forward, we will continue to make active growth investment. We also changed our dividend policy, effective from fiscal 2017, in order to provide better shareholder return.

Specifically, dividends of surplus that have previously been paid at a target rate of around 10% of projected current net income as calculated without taking into account extraordinary income or loss on consolidated financial statements have been raised to around 20%. Under this basic policy, the dividend for fiscal 2017 was ¥4 per share.

Furthermore, we forecast a ¥4 per share annual dividend for fiscal 2018.

Medium-Term Management Plan Beyond Fiscal 2018

We formulated the Medium-Term Management Plan 2020

Takara Bio's Medium-Term Management Plan 2020 aims to strengthen the Group's three business segments and the business base that supports these efforts, to enhance the Group's standing as a global enterprise and regenerative medical products company, and to achieve prodigious growth. We have set net sales of ¥38.5 billion and operating income of ¥4.0 billion as our targets for fiscal 2020, the final year of the medium-term management plan.

Overall Objective	**To strengthen Takara Bio's three business segments, namely, the Bioindustry, Gene Therapy, and AgriBio businesses, and the business base that supports these efforts, enhance Takara Bio's standing as a global enterprise and regenerative medical product company, and achieve prodigious growth.**
Targets	**Net Sales ¥38.5 billion for FY2020** **Operating Income ¥4.0 billion for FY2020**

The Bioindustry Business aims to achieve prodigious growth by simultaneously expanding business overseas and strengthening domestic business.

Overseas business will leverage the acquisition of WaferGen and Rubicon to maximize synergy among R&D, manufacturing, and sales. In addition, a global SCM (supply chain management) system will be built in order to provide a worldwide logistics and inventory management system. In R&D, efforts will focus on ramping up research across the four research and development bases that span Japan, U.S., Europe, and China in the areas of reagents, contracted services, and equipment. The priority for domestic operations will be expanding CDMO business, which has seen explosive market growth. With an eye to expanding sales primarily in the contracted services, which includes the manufacture of GMP grade vectors, quality testing and others, the Takara Bio Group will reinforce and develop the necessary manufacturing capabilities by developing related technologies and expanding on its facilities and equipment.

Bioindustry Business

Remain number one in CDMO business involving regenerative medical products.

FY2020 Tangible Goals: Overseas sales ratio of 60% or above, and CDMO business (services only) net sales of ¥4.5 billion or above

Contracted Services Related to Regenerative Medical Products

Net sales of over ¥2.0 billion for FY2020

- Contracted Vector Production
  - Expand manufacturing facilities in the Center for Gene and Cell Processing
  - Develop new vectors and production technology
- Contracted Cell Processing
  - Set up clinical human ES cell processing facilities
  - Develop technologies related to genome editing
  - Start operating cell processing room in the Life Innovation Center in Kawasaki, Kanagawa

Contracted Gene Research and Testing

Net sales of over ¥2.5 billion for FY2020

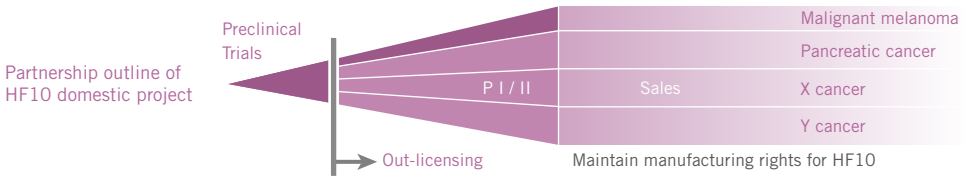
- Genetic Research Contracts
  - Strengthen contracted services related to ultra-low input nucleic acid analysis targeting single cell analysis and liquid biopsy
- Contracted Genetic Testing
  - Expand clinical laboratory testing service using next-generation sequencing analysis conforming to CAP-LAP
  - Strengthen contracts related to the quality testing of regenerative medical products
  - Develop technology for intestinal flora analysis, etc.

The Gene Therapy Business will clearly distinguish between independent development projects and joint projects and, through “selection and concentration,” will aim for quickly obtaining approval for gene therapies. With its independent development projects, the Takara Bio Group aims to launch the HF10 project in the domestic market in fiscal 2019 and take the first step towards making the Takara Bio Group a manufacturer of regenerative medicine products, with the goal of launching multiple products in fiscal 2021. To achieve this, the Takara Bio Group will conduct clinical trials according to plan and construct a system for pharmaceutical affairs and manufacturing business aimed at ensuring successful production following product launch. In the joint project, the Takara Bio Group will make certain to complete an alliance for the HF10 domestic project. The goal is to complete domestic clinical trials for pancreatic cancer, which is scheduled to begin in fiscal 2018. For other projects, new partners will be selected from mostly outside Japan.

Gene Therapy Business

Aim to acquire approval for the first gene therapy product in Japan.

FY2020 Business Goal: Domestic Launch of HF10



Takara Bio’s AgriBio Business aims to establish the functional food and mushroom businesses as profit pillars to support continuously expanding profits. In the functional foods business, the Takara Bio Group will focus its research and development on six types of functional ingredients and will proactively publish its results based on the research data. The Group will also closely coordinate with Takara Healthcare Inc. to build a platform for the stable supply of products suited to the company’s sales plan while helping to grow the Takara Group’s health foods business.

Takara Bio’s mushroom business will focus on executing brand strategies in the markets for three types of mushrooms (Honshimeji, Hatakeshimeji, and Bunashimeji) and will establish a stable revenue base not susceptible to market volatility. As a part of these strategies, the Honshimeji-related business will advertise the strong value of the Honshimeji mushroom “Matsutake for aroma, Shimeji for taste” as the saying goes), and develop a Daikoku Honshimeji brand of products certified as Kyoto Brand Goods, while also focusing on sales of frozen mushrooms.

AgriBio Business

Achieve stable and ongoing profits as our number two profit-making business

FY2020 Tangible Goal: Net sales of ¥**2.7** billion and operating income of ¥**250** million or above

- Focus its research and development on six types of functional ingredients* (*See page 14)
- Build a platform for the stable supply of products to Takara Healthcare Inc.
- Build a brand strategy for mushroom products

Glossary

- **CDMO**
An acronym for Contract Development and Manufacturing Organization. It refers to contracted development and manufacturing support services for biopharmaceuticals and regenerative medical products.
- **GMP**
An acronym for Good Manufacturing Practice. It refers to Standards for Manufacturing Control and Quality Control for Drugs and Quasi-drugs to be observed in the manufacture of pharmaceuticals.
- **Vector**
A molecule used to transduce the target genes into cells, etc. There are plasmid vectors and virus vectors among others.
- **Liquid biopsy**
Technology that performs diagnosis and prediction of treatment effects using blood samples, etc.
- **Intestinal flora**
The cell group that inhabits the intestines.
- **CAP-LAP**
CAP (College of American Pathologists) is a U.S. academic society, with primary operations that include provision of quality management system tools, laboratory accreditation, and education. LAP (Laboratory Accreditation Program) is the world’s largest international clinical testing performance evaluation program carried out annually by CAP. The inspection covers tangible aspects such as the equipment of clinical testing laboratories and intangible aspects of operations.

in JAPAN

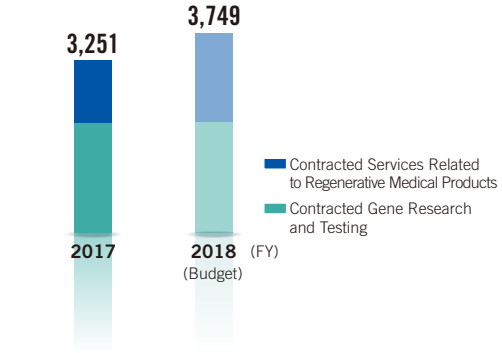
Business Strategy 1

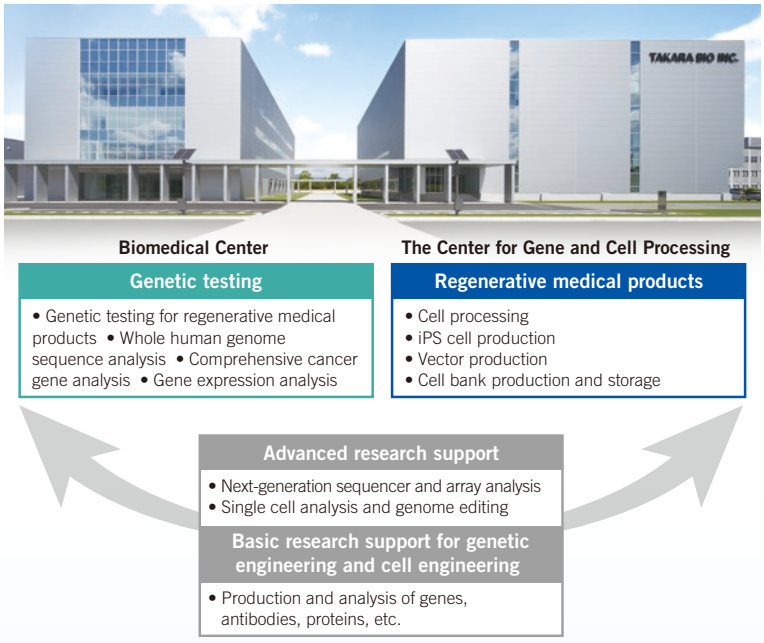
Expanding support for R&D and production support of regenerative medical products

Takara Bio is focused on expanding its CDMO business, which handles development and production support for regenerative medicines. At the core of these efforts is the Center for Gene and Cell Processing in Shiga Prefecture. The facility conducts contracted vector production for gene transduction and contracted cell processing based on GCTP/GMP*. It also produces, conducts quality testing for, and stores RetroNectin®, which is used in gene therapies and other products developed by Takara Bio. April 2017 saw the start of operations at the LIC Annex of the Center for Gene and Cell Processing in Kanagawa, improving our production capacity. Further expansion of CDMO business is in the pipeline.

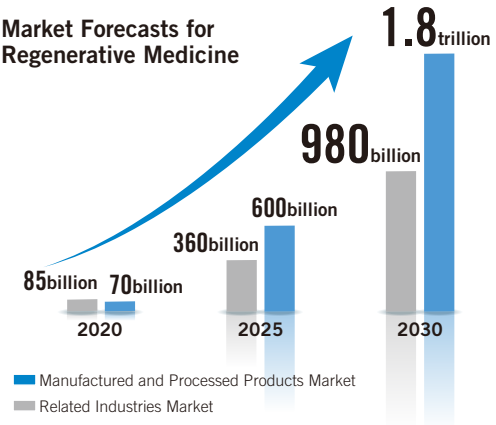
* GCTP (Good Gene, Cellular, and Tissue-based Products Manufacturing Practice): A standard used in manufacturing and quality control for regenerative medical products
* GMP (Good Manufacturing Practice): A standard used in manufacturing and quality control for products including pharmaceuticals

Projected CDMO Business Sales (Millions of Yen)





Market Forecasts for Regenerative Medicine



Source: "FIRM 2017 Regenerative Therapy Marketability Report" published in March, 2017 by the Forum for Innovative Regenerative Medicine

A New Cell Processing Facility Begins Operations at the Life Innovation Center in Kawasaki, Kanagawa

To accommodate growing demand for our CDMO business, the LIC Annex of the Center for Gene and Cell Processing began operations in April 2017 as a cell processing facility. Located inside the Life Innovation Center (LIC), this facility brings the company a nearly 50% increase in production capacity. In addition to providing contracted cell processing services for stem cells, gene-transduced cells, and other cells used in clinical applications, the facility will serve as a cell processing center that provides investigational drugs for gene therapy projects conducted by Takara Bio to clinical testing facilities in the greater Tokyo region.


Life Innovation Center (Kawasaki, Kanagawa)

in R&D

Business Strategy 2

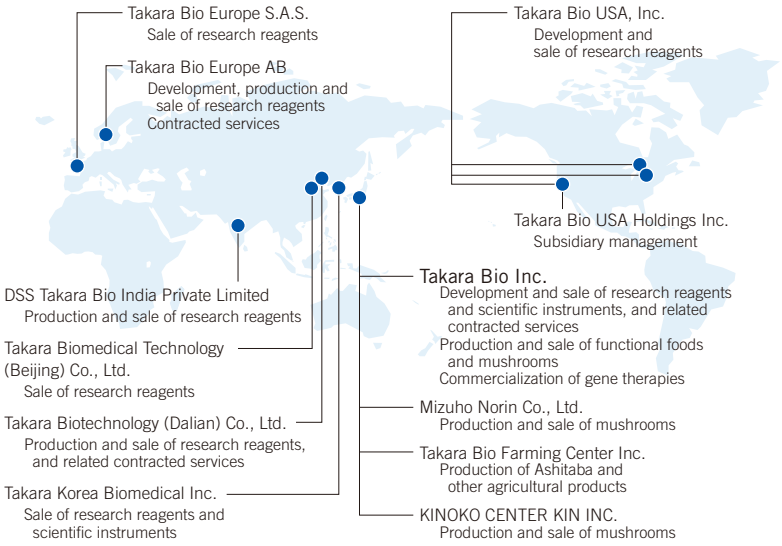
Advancing clinical development for gene therapies using "selection and concentration"

in the WORLD

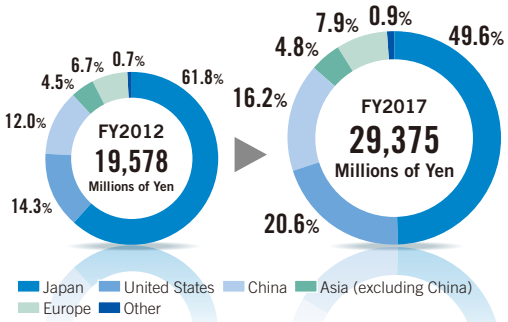
Business Strategy 3

Bringing to the global market research reagents essential for biotechnology research

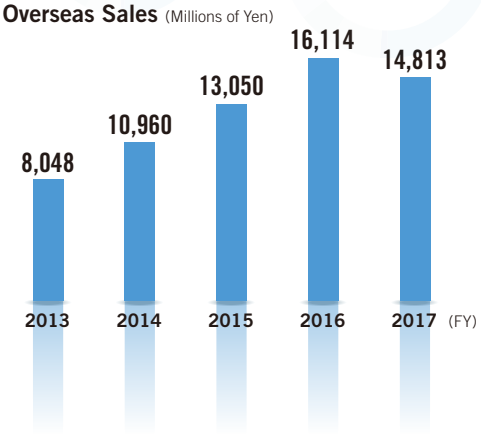
At our four research and development regions, located in Japan, the U.S., Europe, and China, Takara Bio researches and develops new products and services with different development aims that leverage the characteristics of each region. We are also focused on making our production supply system more efficient by strengthening and streamlining production frameworks at production facilities in Japan, China, and India while at the same time rebuilding our logistics framework. Taking advantage of the brand strength of TaKaRa® in Asia, of Clontech® in the United States and Europe, and of Cellartis® for stem cell-related products, we are working to strengthen our marketing structure at each facility in order to expand sales in the global market.



Sales by Geographic Segment



Overseas Sales (Millions of Yen)



In the Gene Therapy Business, Takara Bio is actively making R&D investments in clinical development projects involving gene therapies for cancers and other conditions. These therapies use RetroNectin® Method and the siTCR vector technique, both Takara Bio original technologies.

In order to advance the business, by using "selection and concentration," we aim to quickly bring to market product development projects conducted solely by Takara Bio up to applying for approval. And for projects where we anticipate partnerships with other companies will make development more efficient and enable quicker commercialization, we will proactively engage in joint development and other pursuits.

Independent Development Projects Plan

Independent development projects				Target disease	Present state	Launch target
Oncolytic Virus	HF10		Japan	Malignant melanoma	Phase II trials: In progress	FY2019
Engineered T Cell Therapy	siTCR	NY-ESO-1	Japan	Synovial sarcoma	Phase I / II trials: Applications submitted	FY2021
	CAR	CD19•CAR	Japan	Adult ALL*	Phase I / II trials: In progress	FY2021

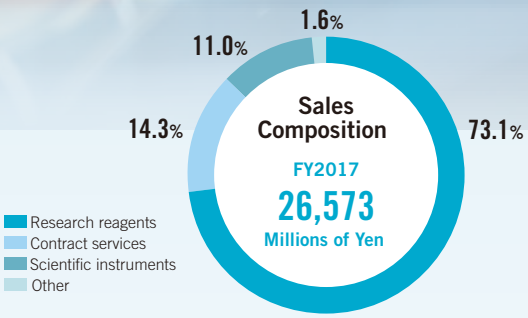
Joint Projects Plan

Joint projects				Target disease	Present state
Oncolytic Virus	HF10		Japan	Pancreas cancer	Phase I trials: Preparations underway
			United States	Malignant melanoma	Phase II trials: In progress Phase III trials: Planning underway
Engineered T Cell Therapy	siTCR	NY-ESO-1	Japan	Esophageal cancer, etc.	Phase I trials: In progress
		MAGE-A4	Japan	Esophageal cancer, etc.	Phase I trials: In progress
	CAR	CD19•CAR	Japan	Childhood ALL*	Planning underway

* ALL: Acute lymphocytic leukemia

Bioindustry Business

Takara Bio develops original research reagents, scientific instruments, and contracted research services that utilize new genetic engineering and advanced cell biology technologies on a consistent basis, supporting a wide range of pursuits in the life sciences field, which includes basic research and drug discovery and development.



Product Line-up

Promoting Strategies for Three Brands

Future Initiatives

- Maximize synergy among R&D, manufacturing, and sales through the acquisition of WaferGen Bio-systems and Rubicon Genomics
- Enhance our product development capabilities by establishing different development focuses that utilize the characteristics of our four research and development bases in Japan, the U.S., Europe, and China
- Step up development of new products and services in the field of stem cell applications including iPS cells, as well as in the field of cellular biology research with next-generation sequencers and genome editing techniques, among other things
- Expand CDMO business, including contracted development and production of virus vectors for gene therapy, contracted cell processing for cell therapy, and contracted genetic analysis using our Center for Gene and Cell Processing and Biomedical Center, as well as our cell processing facility in Tonomachi, Kawasaki, Kanagawa
- Implement strategies for three brands — TaKaRa®, Clontech® and Cellartis® and strengthen selling power by training personnel and building a marketing structure in every one of our sales facilities around the world
- Build a global SCM (supply chain management) framework by strengthening and improving the efficiency of production frameworks at production facilities in Japan, China, and India, and by rebuilding our logistics framework

Research Reagents and Scientific Instruments

Takara Bio provides research reagents and scientific instruments needed for life sciences research at universities and private companies. In 2005, Takara Bio acquired United States-based Clontech Laboratories, Inc. (now Takara Bio USA, Inc.), a company that excels in the field of molecular biology. We then acquired Europe-based Cellectis AB (now Takara Bio Europe AB), owner of technologies to induce differentiation of iPS and other stem cells, as well as products related to stem cells, in 2014. This has given the Takara Bio Group ownership of the TaKaRa®, Clontech®, and Cellartis® brands and a wide-ranging lineup of research reagent products. Through subsidiaries in the U.S., Europe, China, South Korea, and India, we are working to strengthen brand power and increase sales globally for our three brands.

Clontech TaKaRa cellartis

Clontech®

Has a lineup of products that incorporate advanced technologies from fields such as molecular biology and cell biology.

(Main products)
- Products for next-generation sequencers
- Single cell analysis systems
- Gene expression research reagents and fluorescent proteins

TaKaRa®

Offers a broad range of products spanning the entire spectrum of biotechnology research, including genetic engineering. Provides contracted genetic analysis services and contracted services that leverage expertise in the development of regenerative medical products.

(Main products and services)
- Genetic research reagents
- Genetic testing kits
- Contracted genome analysis
- Contracted development and manufacturing of regenerative medical products

Cellartis®

Offers iPS cell products and other products involving stem cell research.

(Main products)
- iPS cell research reagents
- Products related to stem cell culture and differentiation

Contracted Services

Our CDMO (Contract Development and Manufacturing Organization) business provides high added-value contracted services as an R&D partner to our customers. We provide a seamless package of support services combining regenerative medicine development support services at the Center for Gene and Cell Processing and genetic testing support services such as genetic analysis for genome sequence and regenerative medicine at the Biomedical Center.

1. Contract Services for Developing Regenerative Medicine Products

With the Center for Gene and Cell Processing as our central facility, Takara Bio conducts contracted services that include manufacturing and developing virus vectors and cells for gene transduction based on Good Gene, Cellular and Tissue-based Products Manufacturing Practices (GCTP) and Good Manufacturing Practices (GMP). Other contracted services include quality and safety testing and the production and storage of cell banks. Leveraging technologies and expertise developed through the clinical development of gene and cell therapies, we provide comprehensive support for the research, development, and industrial application of products in the regenerative medicine and cell therapy fields.

2. Contracted Gene Analysis Services

In addition to genetic testing support services such as human genome sequence analysis, comprehensive cancer gene analysis, and intestinal flora analysis, our Biomedical Center provides advanced genetic engineering research support services utilizing state-of-the-art technologies and equipment used in techniques such as next-generation sequencing and genome editing. We are also focused on bioinformatics (life information science), providing high added-value services such as next-generation data mining to draw out useful information from vast quantities of acquired data.

TOPICS

U.S.-Based WaferGen Bio-systems and Rubicon Genomics Join the Takara Bio Group as Subsidiaries

The Takara Bio Group has acquired two U.S.-based companies through all-stock acquisitions. Rubicon Genomics, acquired in January 2017, performs ultra-low input DNA analysis while WaferGen Bio-systems, acquired in February 2017, possesses its own single cell analysis systems*1.

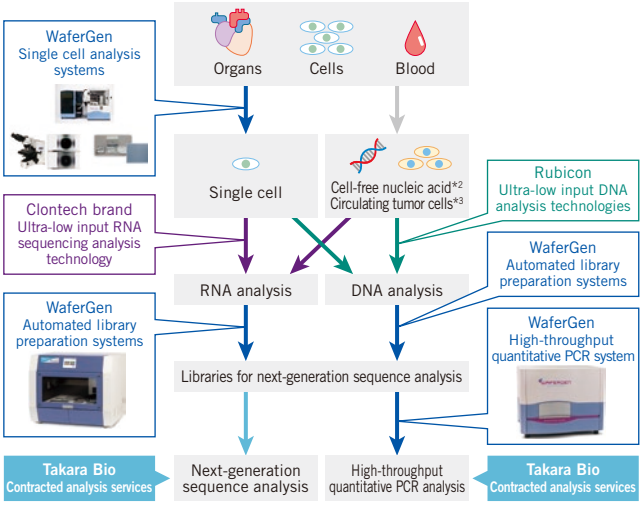
The entry of the two companies into the Takara Bio Group makes it possible to provide a wide range of products and services across basic research through to industrial applications in the ultra-low input nucleic acid analysis field, which is expected to experience market expansion in the future.

*1 Single cell analysis: Refers to a single cell. In the past, analysis was carried out on the tissue level, but technology has improved in the past few years, and analysis can now be conducted at the single cell-level with a high degree of accuracy.

*2 Cell-free nucleic acid: Refers to nucleic acid in blood and urine, etc. Cancer cells release nucleic acid into the blood, etc. through destruction by immune cells or dying themselves. Research into nucleic acid is flourishing in the cancer research field and includes early detection of cancer by analyzing this cell-free nucleic acid.

*3 Circulating tumor cells: Refers to cells contained in peripheral blood. It is said that information on cancer metastasis, etc. can be obtained through an analysis of these cells.

Ultra-Low Input Nucleic Acid (DNA) Analysis Scheme



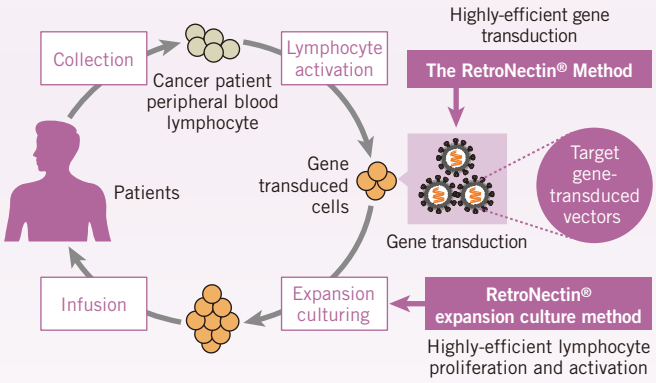
Gene Therapy Business

With the aim of commercialization, Takara Bio advances the clinical development of gene therapies that target diseases such as cancer.

Takara Bio's Proprietary Technology in Gene Therapy

In engineered T cell therapy, one type of gene therapy, a therapeutic gene is transduced into cells taken from a patient or a donor and infused back into the patient. With this therapy, the RetroNectin® method for highly-efficient gene transduction and the RetroNectin® expansion culture method for the efficient expansion culture of lymphocytes, jointly developed between Takara Bio and Indiana University in the United States, are used. These technologies have become the standard in gene therapy and have been licensed to many companies seeking to commercialize gene therapies.

RetroNectin® Method and RetroNectin® expansion culture method



Future Initiatives

As Takara Bio's development projects, we are promoting the following domestic clinical development projects with the aim of applying for approval as quickly as possible.

- HF10 project to treat malignant melanoma
- NY-ESO-1 siTCR gene therapy project for synovial sarcoma
- CD19 CAR gene therapy project targeting adult acute lymphocytic leukemia

For joint projects being conducted with other companies, we have set the following objectives.

- Promote development of domestic clinical trials for HF10 targeting pancreatic cancer
- Select new partners, mostly from outside Japan

Gene Therapy

Through "selection and concentration," we aim to quickly get products to market by selecting development projects where Takara Bio will on its own complete all steps up to applying for approval. Takara Bio also conducts joint development with partners as joint projects.

Oncolytic Virus

HF10

HF10 is an attenuated strain of the herpes simplex virus 1 (HSV-1) that exhibits antitumor activity when inserted into a cancerous region. The administration of HF10 also strengthens immunity to cancer cells, giving it promise as a means to prevent tumors from forming, even in tumor regions where HF10 was not administered. This type of virus is called an oncolytic virus. Oncolytic viruses selectively replicate within tumorous tissue and break it down without doing excessive damage to normal tissue.

As an independent development project, we are currently conducting clinical trials targeting malignant melanoma at the National Cancer Center Hospital and other facilities. Takara Bio aims for commercialization by fiscal 2019. And, in the U.S., we are working with partners to conduct clinical trials for malignant melanoma at such organizations as the Huntsman Cancer Institute. In Japan, we have begun clinical trials targeting pancreatic cancer.

Engineered T Cell Therapy

1. siTCR Gene Therapy

TCR gene therapies involve transducing autologous lymphocytes with TCR genes capable of recognizing cancer antigens, putting the lymphocytes back into the patient, and allowing these lymphocytes to identify and attack cancer cells, thereby eliminating cancer cells. We are developing siTCR gene therapy that involves the use of our proprietary siTCR vector technique The siTCR vector technique is thought to reduce the risk of side effects and improve effectiveness.

As an independent development project, we have begun clinical trials for NY-ESO-1 siTCR gene therapy targeting synovial sarcoma and aim to achieve commercialization in fiscal 2021. Takara Bio is also currently conducting clinical development of siTCR gene therapies as a joint project with Mie University.

2. CAR Gene Therapy

Chimeric Antigen Receptors (CARs) are receptors that are made by artificially combining parts derived from antibodies that specifically recognize certain cancer antigens with parts with cytotoxic functions derived from T-cell receptors. CAR gene therapies involve putting autologous lymphocytes transduced with CAR genes back into the patient, allowing these lymphocytes to identify and attack cancer cells, thereby eliminating them. As an independent development project, Takara Bio has begun clinical trials for CD19 CAR gene therapy targeting adult acute lymphocytic leukemia and aims to commercialize by 2021. We are also working with Jichi Medical University to further conduct clinical research targeting non-Hodgkin lymphoma, a type of malignant lymphoma.

TOPICS

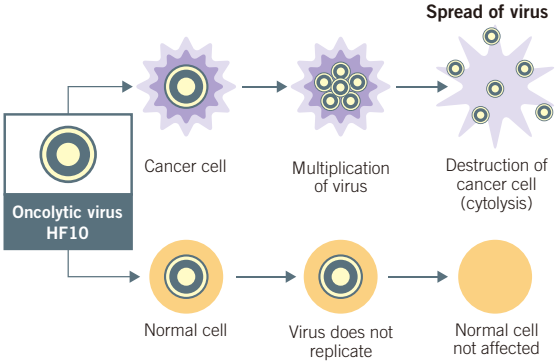
Presentation of Final Results of U.S. HF10 Phase II Clinical Trial at the American Society of Clinical Oncology

We presented the final results of the HF10 Phase II clinical trial targeting malignant melanoma conducted in the U.S. at the meeting of the American Society of Clinical Oncology held in Chicago, Illinois, United States in June, 2017. (Title: Final Results of a Phase II Multicenter Trial of HF10, a Replication-competent HSV-1 Oncolytic Virus, and Ipilimumab*1 Combination Treatment in Patients with Stage IIIB-IV Unresectable or Metastatic Melanoma)

With regards to safety, the adverse events*2 caused by HF10 were, for the most part, moderate to mild (Grade 2 and below), and dose-limiting toxicity*3 was not observed.

Moreover, with regards to efficacy, the combination therapy of Ipilimumab with HF10 was more effective than Ipilimumab monotherapy, suggesting the potential for the combination therapy to be a new treatment for malignant melanoma.

Mechanism of Cancer Treatment with Oncolytic Virus HF10



*1 Ipilimumab: A type of anti-cancer drug known as immune checkpoint inhibitors.

*2 Adverse event grades: Indicate severity of side effects. The grades in order of 1 – 5 are Mild, Moderate, Severe or medically significant but not immediately life-threatening, Life-threatening consequences, Death related to adverse event.

*3 Dose-limiting toxicity: The efficacy of pharmaceuticals increases as the dosage increases, but toxicity rises at the same time. Dose-limiting toxicity refers to toxicity that is the reason why dosage cannot be increased further.


Peucedanum japonicum


Gelidium


Mushroom (*Hypsizigus marmoreus*)


Gagome kombu (kelp)


Dioscorea esculenta (yam)


Ashitaba

AgriBio Business

Takara Bio is developing a mushroom business centered on the development and manufacture of functional foods which utilize biotechnology, and technologies relating to the mass culture of mushrooms.

Product Lineup

Fucoidan Supplement 50

Ashitaba Aojiru

Totonoyell™


Kyotamba Daikoku Honshimeji (Honshimeji)


Otsubu Tanbashimeji (Hatakeshimeji)

Future Initiatives

Functional Food Business

- Conduct research with medical research organizations and conduct in-house research aimed at accumulating evidence-based data on functional food ingredients such as Fucoidan derived from Gagome kombu (kelp), *Angelica keiskei*-derived Chalcone, *Peucedanum japonicum*-derived Isosamidin, agar-derived agaro-oligosaccharide, *Dioscorea esculenta*-derived Yamsgenin, and Terpene from mushrooms
- Develop foods with function claims
- Proactively publish research and development results (advertise research results, etc.)

Mushroom Business

- Streamline Honshimeji and Hatakeshimeji mushroom production at Mizuho Norin Co., Ltd.
- Expand mushroom sales by bolstering sales of frozen mushrooms to highly profitable channels
- Build the brand utilizing “Kyoto Brand Goods” certification

Functional Food Business

Takara Bio clarifies the functionality of food ingredients and develops and manufactures functional foods that make use of these ingredients. Takara Bio is currently promoting research and development specializing in the following six ingredients and focusing its attention towards making widely available the research and development results based on research data.

1. Gagome Kombu (Kelp) "Fucoidan"

Fucoidan is a viscous component found in various species of seaweed, including kombu. It has been found to self-repair damaged areas and act as a barrier against desiccation and bacteria. Takara Bio spent many years researching Gagome kombu (kelp), a particularly sticky type of kombu, and consequently three different types of chemical structures of Fucoidan in Gagome kombu were successfully identified for the first time. Research into Fucoidan functionality continues to move forward.

2. Ashitaba (*Angelica* Herb) "Chalcone"

Indigenous to Japan, Ashitaba grows wild on the Pacific coast, mainly in the Izu Islands. Ashitaba is known for its strong vitality as indicated by the Japanese saying "If Ashitaba leaves are picked today, new leaves will be in place by tomorrow." Ashitaba is rich in vitamins, minerals, and dietary fiber, and other nutrients. In addition to producing Ashitaba on its own farms and contracted farms in Kagoshima Prefecture, Takara Bio is engaged in R&D activities to explore the functions of Chalcone, a polyphenol particular to Ashitaba.

3. Agar-derived "Agaro-oligosaccharide"

Known as the "king of dietary fiber," agar is made from *gelidium, gracilaria,* and other kinds of seaweed (red algae). Takara Bio focuses on agaro-oligosaccharides derived from heating agar in an acidic solution, and has developed a proprietary method for producing agar-derived agaro-oligosaccharide, which features unique functions not found in other oligosaccharides.

4. Herb (*Peucedanum japonicum*) "Isosamidin"

Peucedanum japonicum is a perennial plant in the *Apiaceae* (*Umbelliferae*) family that grows naturally along the coast, mainly from southern Kyushu to Okinawa. It is called "Botanbofu" in Japanese. It is also often called the "herb of long life," which derives from the local folklore saying "If you eat one sprig of Botanbofu, you will live one day longer." Takara Bio continues to research the herb's functionality, with a particular focus on illuminating the intense vitality exhibited by a constituent compound called Isosamidin.

5. Yam (*Dioscorea esculenta*) "Yamsgenin™"

Long known as a healthy food with tonic-like properties, yams are referred to as "Sanyaku" in traditional Chinese medicine. Takara Bio focuses on a component called Yamsgenin™ in the lesser yam (*Dioscorea esculenta* "Togedokoro" in Japanese), which is grown in places like Okinawa. Takara Bio is now conducting research into the functionality of this component.

6. Mushroom "Terpene"

Terpene is the generic name for substances with an isoprene structure, a structure found throughout nature. Takara Bio's research focuses on the functions of mushroom terpenes, which are among the compounds present in Bunashimeji mushrooms (*Hypsizigus marmoreus*).

Mushroom Business

In 1973, Takara Bio established, for the first time in the world, a technique for mass-producing Bunashimeji mushrooms and with its commercialization began the Company's business of mushrooms. We have since developed new high value-added mushrooms and have also established mass production techniques.

Currently, Takara Bio produces Honshimeji mushrooms and Hatakeshimeji mushrooms through Mizuho Norin Co., Ltd. (located in Kyotanba-cho, Kyoto). Takara Bio holds the top share of the market in Japan for Honshimeji mushrooms, known for their good taste which rivals the smell of matsutake — "Matsutake for aroma, Shimeji for taste" as the saying goes. Takara Bio is also concentrating on expanding its sales channels by taking advantage of the strong branding of its Kyotamba Daikoku Honshimeji mushroom which was certified as "Kyoto Brand Goods" in 2015.

TOPICS

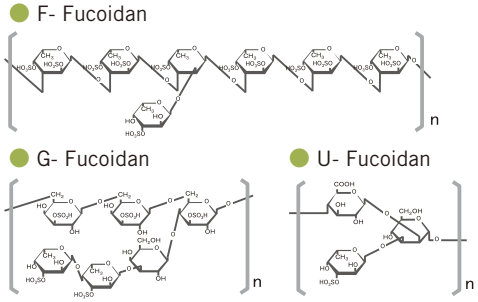
The History Behind Takara Bio's Fucoidan Research

Fucoidan is a high-polymer polysaccharide contained in the viscous component of seaweed known as brown algae, a kind of so-called dietary fiber.

Fucoidan has been found to act as a protective barrier against bacteria and to prevent seaweed from drying out, and it has the ability to self-repair damaged areas. In 1995, Takara Bio became the first company in the world to uncover the chemical structure and functionality of Fucoidan found in Gagome kombu (kelp).

Subsequently, Takara Bio established technology to extract high purity Fucoidan using proprietary manufacturing methods and has been developing safer, more reliable functional foods. Since then, research and development around Fucoidan has continued and Takara Bio continues to steadily produce results, such as making over 30 Fucoidan presentations at prominent academic conferences.

Structure of Gagome Kombu (Kelp) Fucoidan



Fundamental Views on Corporate Governance

Guided by its corporate philosophy of "contributing to the health of humankind through the development of revolutionary biotechnologies such as gene therapy," Takara Bio leverages biotechnology, its fundamental technology, to engage in three businesses: Bioindustry Business, AgriBio Business and Gene Therapy Business. Takara Bio will contribute to society by creating new value through advances in these three business areas and by continuing to grow sustainably.

Takara Bio believes it is important to consolidate retained earnings in order to proactively implement research and development in each field. Takara Bio is presently at the stage where we are making prior investments in R&D. The current three-year Takara Bio's Medium-Term Management Plan FY2020, which will be in its final fiscal year in 2020, is a policy which aims to strengthen Takara Bio's three core business segments and the business base which supports these efforts, in order to enhance Takara Bio's standing as a global enterprise and regenerative medical products company. The management plan also aims to achieve prodigious growth and therefore Takara Bio considers operating income to be the most important factor in determining the current state of business. On the other hand, Takara Bio has placed appropriate shareholder return with awareness of capital efficiency as an important issue for management, and is implementing a basic policy of redistributing profits while taking full consideration of business results and financial conditions.

In this way and based on its corporate philosophy, in order to achieve sustainable growth and enhance corporate value over the medium- to-long term, Takara Bio recognizes that it should endeavor to cooperate with various stakeholders, including shareholders, employees, customers, creditors, and local communities in an appropriate manner and while recognizing that a corporate governance structure which promotes honesty and fairness throughout all its corporate activities at all times is essential, Takara Bio is working towards establishing specific policies one by one.

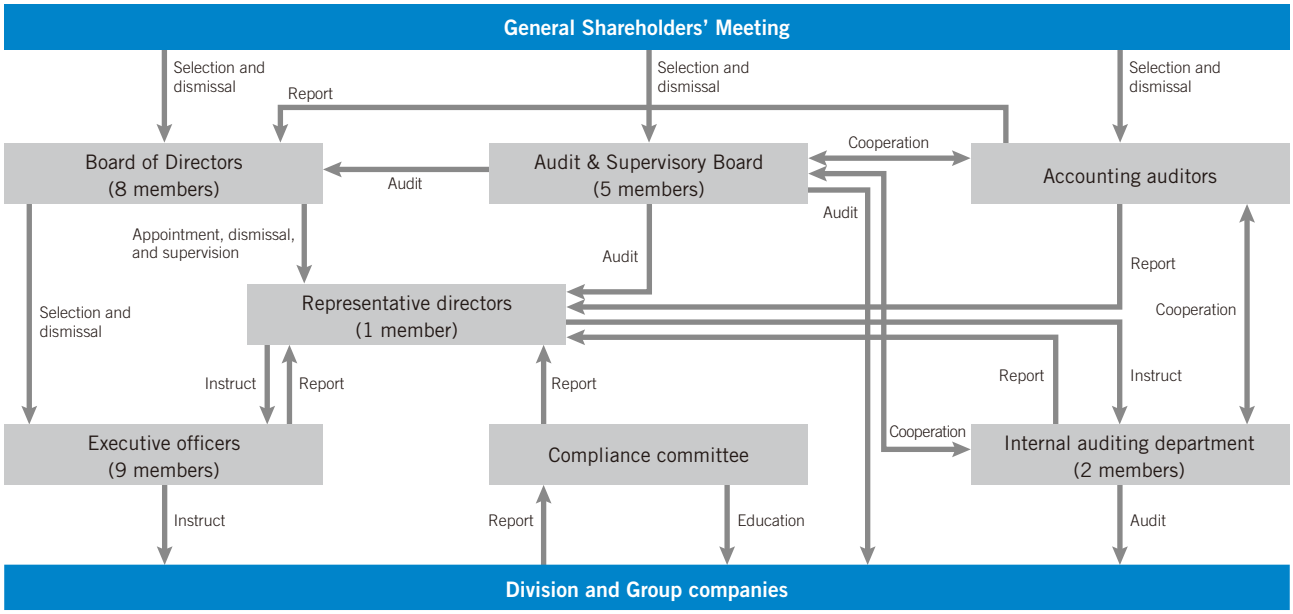
Corporate Governance Structure

The Board of Directors consists of eight members (including two external directors) who meet whenever necessary in addition to the regular monthly Board meetings. The Board makes decisions on important issues concerning the management of Takara Bio, its management policies, and legal matters, as well as overseeing the execution of Board member affairs. Two external directors and three external Audit & Supervisory Board members have been designated as independent directors in accordance with the rules stipulated by the Tokyo Stock Exchange (TSE), and the TSE has been notified of these designations.

Takara Bio has adopted an Audit & Supervisory Board (ASB) system, and three of our five ASB members are external. We have established an internal auditing department comprising two personnel. We endeavor to enhance internal control through a system in which the ASB members conduct audits while coordinating with the internal auditing department.

Our parent company is Takara Holdings Inc., which owns 60.92% of the voting rights as of the end of March 2017. Takara Holdings' policy in managing its group companies is to seek to maximize the corporate value of the whole Takara Group while enabling each and every member corporation of the Takara Group to maintain its uniqueness and independence. Since our biotechnology business requires highly advanced expertise and quick decision making, we are especially unique and independent in the Takara Group. While we report the decisions made at our Board meetings and other issues to the parent company, no prior approval is required in order to execute our decisions.

Diagram of Corporate Governance Structure



Executives As of June 23, 2017

Board of Directors

Hisashi Ohmiya
Chairman, Director

Apr. 1968	Joins Takara Shuzo Co., Ltd.
May 1974	Director, Takara Shuzo Co., Ltd.
Jun. 1982	Managing Director, Takara Shuzo Co., Ltd.
Jun. 1988	Senior Managing Director, Takara Shuzo Co., Ltd.
Jun. 1991	Vice President, Takara Shuzo Co., Ltd.
Jun. 1993	President, Takara Shuzo Co., Ltd.
Apr. 2002	Chairman (incumbent) President, Takara Shuzo Co., Ltd.
Jun. 2012	Chairman, Takara Holdings Inc. (incumbent) Chairman, Takara Shuzo Co., Ltd. (incumbent)

Koichi Nakao
President, Chairman & President of Subsidiaries, Representative Director

Apr. 1985	Joins Takara Shuzo Co., Ltd.
Apr. 2002	Director
Jun. 2003	Managing Director & Executive Officer
Jun. 2004	Senior Managing Director & Executive Officer
Apr. 2006	Senior Managing Director & Executive Officer, COO
Jun. 2007	Vice President & Executive Officer, COO
Jun. 2008	Vice President, COO
May 2009	President (incumbent) President, Takara Bio USA Holdings Inc. (incumbent)
Jun. 2009	Director, Takara Holdings Inc. (incumbent)
Jun. 2015	Chairman & President of Subsidiaries, Representative Director (incumbent)

Shuichiro Matsuzaki
Executive Vice President, Senior Executive Vice President

Apr. 1980	Joins Takara Shuzo Co., Ltd.
Jun. 2005	Director, Takara Holdings Inc.
Jun. 2007	Director, Takara Shuzo Co., Ltd.
Jun. 2008	Managing Director, Takara Shuzo Co., Ltd.
Jun. 2010	Senior Managing Director, Takara Shuzo Co., Ltd.
Jun. 2014	Senior Managing Director
Jun. 2015	Senior Corporate Executive Officer
Jun. 2017	Executive Vice President (incumbent)

Takao Okane
Executive Vice President, Senior Executive Vice President

Apr. 1977	Joins Takara Shuzo Co., Ltd.
Jun. 2003	Managing Director, Japan Synthetic Alcohol Co., Ltd.
Jun. 2005	Executive Officer, Takara Shuzo Co., Ltd.
Jun. 2007	Director, Takara Holdings Inc. Director, Takara Shuzo Co., Ltd.
Jun. 2014	Managing Director
Jun. 2015	Senior Executive Officer
Jun. 2016	Senior Managing Director, Senior Corporate Executive Officer
Jun. 2017	Executive Vice President (incumbent)

Junichi Mineno
Managing Director & Senior Executive Officer

Apr. 1984	Joins Takara Shuzo Co., Ltd.
Apr. 2011	Executive Officer
Jun. 2012	Senior Executive Officer
Jun. 2014	Managing Director (incumbent)
Jun. 2015	Senior Executive Officer (incumbent)

Masanobu Kimura
Director & Senior Executive Officer

May 2013	Joins Takara Bio Co., Ltd.
Jun. 2016	Executive Officer
Jun. 2017	Director (incumbent), Senior Executive Officer (incumbent)

Jawaharlal Bhatt
Director (External Director)

Apr. 1985	Director, Cooper LaserSonics, Inc.
Jun. 1990	President & CEO, Bio NovaTek International, Inc.
May 2000	President & CEO, Jay Bhatt, Inc.
Jun. 2010	Director (incumbent)

Nobuko Kawashima
Director (External Director)

Apr. 1986	Joined The Long-Term Credit Bank of Japan
Sep. 1987	Joined Dentsu Communication Institute Inc.
Sep. 1991	Research fellow at the Centre for Cultural Policy Studies of the University of Warwick
Apr. 1999	Full-time lecturer with the Faculty of Economics at Doshisha University
Apr. 2004	Professor with the Faculty of Economics at Doshisha University (incumbent)
Jun. 2016	Director (incumbent)

Audit & Supervisory Board Members

Akihiko Kita
Standing Audit & Supervisory Board Member

Apr. 1984	Joins Takara Shuzo Co., Ltd.
Apr. 2014	Executive Officer
Jun. 2016	Standing Audit & Supervisory Board Member (incumbent)

Kiyozo Asada
Standing Audit & Supervisory Board Member

Apr. 1987	Joins Takara Shuzo Co., Ltd.
Jun. 2000	Director, Takara Shuzo Co., Ltd.
Apr. 2002	Director
Jun. 2003	Managing Director & Executive Officer
Jun. 2004	Senior Managing Director & Executive Officer
Jun. 2011	Standing Audit & Supervisory Board Member (incumbent)

Kunihiko Kamata
External Audit & Supervisory Board Member

Apr. 1992	Registered as an attorney at law (Osaka Bar Association)
Mar. 1993	Registered as a patent attorney
Apr. 2007	Part-time lecturer at Meijo University (incumbent)
Jan. 2011	Daiichi Law Office, P.C. (incumbent)
Jun. 2016	Audit & Supervisory Board Member (incumbent)

Yasuo Himeiwa
External Audit & Supervisory Board Member

Aug. 1983	Joined the accounting firm of Peat Marwick Mitchell & Co. (currently KPMG)
Aug. 1990	Registered as a Certified Public Accountant of Japan
Aug. 1994	European Director at KPMG Project Japan
Jan. 1996	Century Audit Corporation (currently Ernst & Young ShinNihon LLC)
Feb. 2001	Senior partner at Ernst & Young ShinNihon LLC
Sep. 2003	Partner at KPMG AZSA LLC
Jul. 2009	Director, AZSA LLC Osaka GJP (Global Japanese Practice)
May 2015	KPMG AZSA LLC National Employee Association Chairman
Jun. 2016	Director, Himeiwa Accounting Office (incumbent) Audit & Supervisory Board Member(incumbent)
Jun. 2017	Outside Director (Member of Audit & Supervisory Committee), Sharp Corporation (incumbent)

Masaaki Makikawa
External Audit & Supervisory Board Member

Apr. 1996	Professor with the Department of Robotics, Faculty of Science and Engineering, Ritsumeikan University
Apr. 2003	Head of the Liaison Office, Biwako-Kusatsu Campus, Ritsumeikan University
Apr. 2005	Head of the Research Center for Sport and Health Science, Ritsumeikan University
Apr. 2007	Executive Director of the Institute of Science and Technology, Ritsumeikan University
Apr. 2011	Visiting Professor with the Graduate School of Medicine, Osaka University (incumbent)
Apr. 2012	Dean of the Research Division, Ritsumeikan University
Apr. 2017	Specially Appointed Professor with the Faculty of Science and Engineering, Ritsumeikan University (incumbent)
Jun. 2017	Audit & Supervisory Board Member (incumbent)

Executive Officers

Kazuki Yamamoto
Senior Executive Officer

Yoh Hamaoka
Senior Executive Officer

Hiroyuki Mukai
Senior Executive Officer

Tsuyoshi Miyamura
Senior Executive Officer

Masahide Tamaki
Senior Executive Officer

Masanari Kitagawa
Executive Officer

Masaharu Watabe
Executive Officer

Mutsumi Sano
Executive Officer

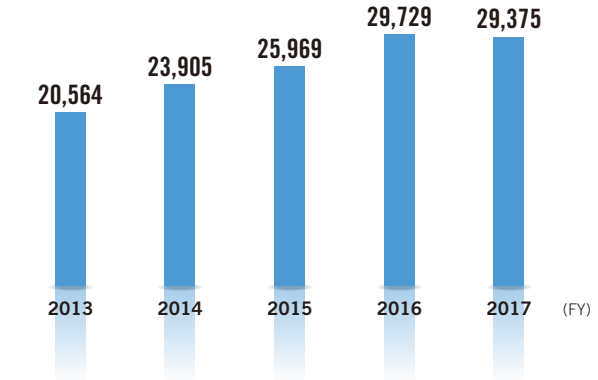
Katsuhiko Kusakabe
Executive Officer

Five-Year Financial Summary

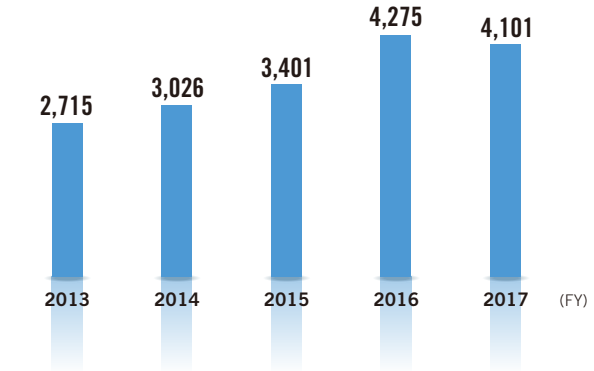
(Millions of Yen) For the Years Ended March 31:	2013	2014	2015	2016	2017
Net sales (sales to customers)	20,564	23,905	25,969	29,729	**29,375**
Cost of sales	9,540	11,331	12,142	13,405	**12,422**
Selling, general and administrative expenses	9,332	10,619	11,524	13,655	**13,749**
Operating income	1,691	1,954	2,302	2,667	**3,202**
Income before income taxes and minority interests	2,268	2,185	2,481	2,905	**2,805**
Income attributable to owners of parent	1,462	1,470	963	1,334	**1,352**
Depreciation	1,104	1,157	1,347	1,687	**1,722**
Capital expenditures	2,397	5,538	4,762	2,090	**1,648**
R&D expenses	2,715	3,026	3,401	4,275	**4,101**
As of March 31:					
Total assets	46,649	62,500	66,425	66,591	**67,143**
Total equity	41,465	57,127	59,642	60,110	**59,985**
Per Share of Common Stock (Yen):					
Basic net income	12.94	12.50	8.01	11.08	**11.24**
Equity	364.65	473.93	494.46	498.34	**497.32**
Ratios (%):					
Return on assets (ROA)	3.1	2.7	1.5	2.0	**2.0**
Return on equity (ROE)	3.7	3.0	1.7	2.2	**2.3**
Equity ratio	88.8	91.3	89.6	90.1	**89.2**

Note: Figures have been rounded down to the nearest million yen.

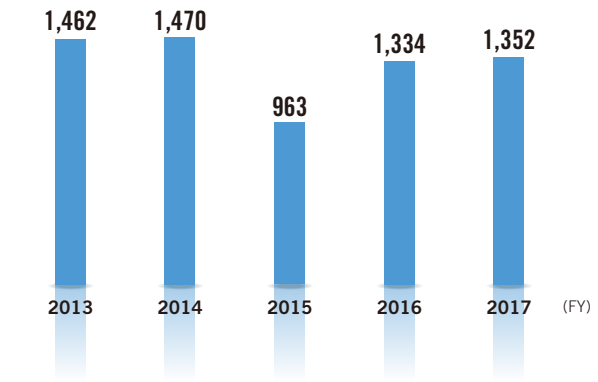
Net Sales (Millions of Yen)



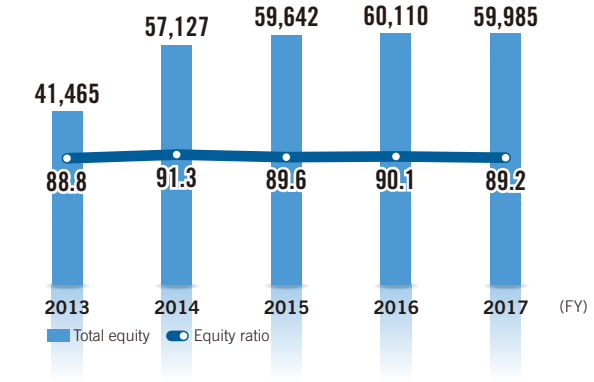
R&D Expenses (Millions of Yen)



Income Attributable to Owners of Parent (Millions of Yen)



Total Equity / Equity Ratio (Millions of Yen / %)



Net Sales

Capitalizing on biotechnologies developed over many years, the Takara Bio Group ("the Group") has focused its management resources on three business segments: Bioindustry, AgriBio, and Gene Therapy. For fiscal 2017, ended March 31, 2017, net sales decreased 1.2% year-over-year to ¥29,375 million despite increased sales on the local currency basis overseas, reflecting the stronger Japanese yen.

Income

Cost of sales in fiscal 2017 decreased by 7.3%, year-over-year, to ¥12,422 million as the cost ratio fell due to changes in the structure of sales for each product and other factors. Consequently, gross profit increased by 3.9%, year-over-year, to ¥16,952 million. Selling, general and administrative (SG&A) expenses increased by 0.7%, year-over-year, to ¥13,749 million due to the expenses incurred in relation to the acquisition of shares of U.S. WaferGen Bio-systems, Inc. and Rubicon Genomics, Inc. However, operating income increased by 20.1%, year-over-year, to ¥3,202 million.

Other income (expenses) decreased by ¥635 million year-over-year mainly due to an increase in impairment loss resulting from idle assets and a decrease in subsidy income.

This resulted in income before income taxes and minority interests of ¥2,805 million. Net income attributable to owners of the parent was ¥1,352 million due to the elimination of income taxes for prior periods recorded in the previous fiscal year.

Segment Review

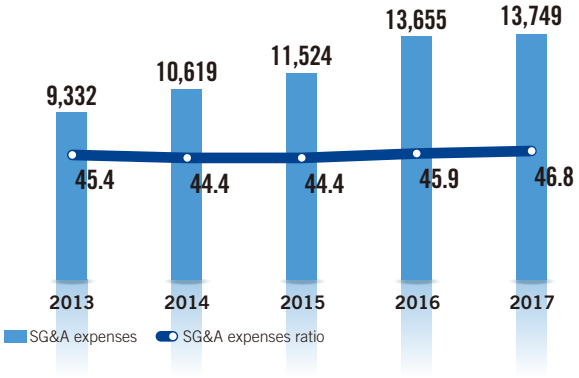
Bioindustry Business

Given the ever-widening activities of biotechnology R&D, the Group has positioned the Bioindustry Business as its core business, which mainly develops products and contract research services supporting such R&D activities.

Analyzing sales by product category, sales of research reagents and scientific instruments, the category's mainstay products, declined year-over-year in part due to the appreciation of the yen. The contracted services business, however, increased in sales year-over-year.

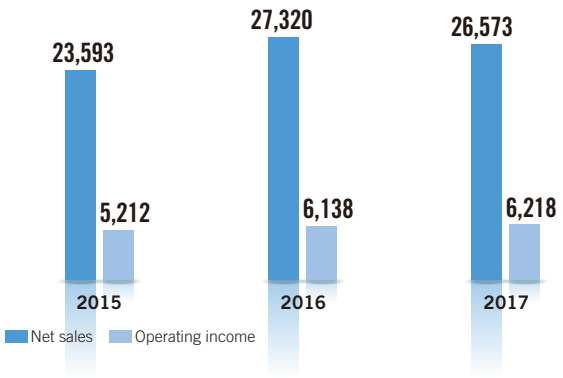
As a result, the business segment recorded a year-over-year decrease of 2.7% in sales to external customers, to ¥26,573 million. However, due to changes in the structure of sales for each product and other factors, gross profit increased 1.4% year-over-year to ¥15,859 million. SG&A expenses increased by 1.4% year-over-year ¥9,641 million, due to expenses incurred in relation to share acquisitions and other factors. However, operating income increased by 1.3% year-over-year to ¥6,218 million.

SG&A Expenses / SG&A Expenses Ratio (Millions of Yen / %)



Bioindustry

Net Sales / Operating Income (Millions of Yen)



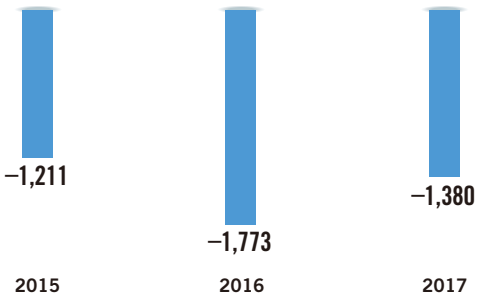
Gene Therapy Business

The business focuses on the early commercialization of gene therapies for cancer. These therapies utilize original Takara Bio technologies such as the RetroNectin® method, a high efficiency gene transduction method; RetroNectin® expansion-culture system, a highly efficient lymphocyte propagation technology; as well as siTCR.

For fiscal 2017, ¥500 million in licensing fees for development and sales related to the oncolytic virus HF10 was generated.

As a result, net sales to external customers for this business were ¥500 million (no sales in the previous fiscal year), and gross profit was also ¥500 million. SG&A expenses increased 6.0% year-over-year to ¥1,880 million primarily due to R&D expenses. However, the Gene Therapy Business recorded an operating loss of ¥1,380 million (operating loss of ¥1,773 million in the previous fiscal year).

Gene Therapy
Operating Loss (Millions of Yen)

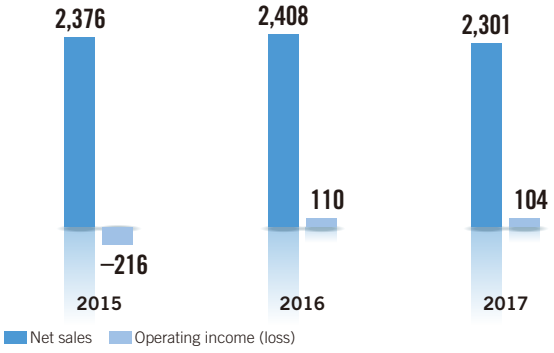


AgriBio Business

In the AgriBio Business, the Group uses the Group's unique leading-edge biotechnology to develop, produce, and market functional food ingredients. Moreover, the segment has established clear scientific evidence for the bioactive properties of these products. The concept that food is the primary source of health guides those efforts. Business development is centered on products related to Gagome kombu (kelp) -derived "Fucoidan," agar-derived agaro-oligosaccharid, Ashitaba (angelica herb) -derived "Chalcone," Botanbofu (Peucedanum japonicum) -derived "Isosamidin," yam-derived "Yamsgenin," and mushroom products.

In fiscal 2017, net sales of functional foods and mushroom related products declined year-over-year. Consequently, net sales to external customers for this business decreased 4.4% year-over-year to ¥2,301 million and gross profit declined 12.9% year-over-year to ¥593 million. SG&A expenses decreased 14.3% year-over-year to ¥488 million owing in part to decreases in R&D expenses and other factors. However, operating income fell below that of the previous fiscal year, declining 5.9% year-over-year to ¥104 million.

AgriBio
Net Sales / Operating Income (Loss) (Millions of Yen)



Financial Condition

Total assets as of the end of the fiscal year ended March 31, 2017 on a consolidated basis were ¥67,143 million, a year-over-year increase of ¥552 million. This owed mainly to a ¥625 million increase in notes and accounts receivable-trade.

Total liabilities as of the fiscal year-end were ¥7,157 million, a year-over-year increase of ¥677 million. This was primarily due to a ¥527 million increase in accounts payable.

Total net assets as of the fiscal year-end were ¥59,985 million, a year-over-year decrease of ¥124 million. This owed mainly to a ¥1,086 million decrease in foreign currency translation adjustment and a decline of ¥172 million in defined retirement benefit plans, despite a ¥1,136 million increase in retained earnings.

Cash Flows

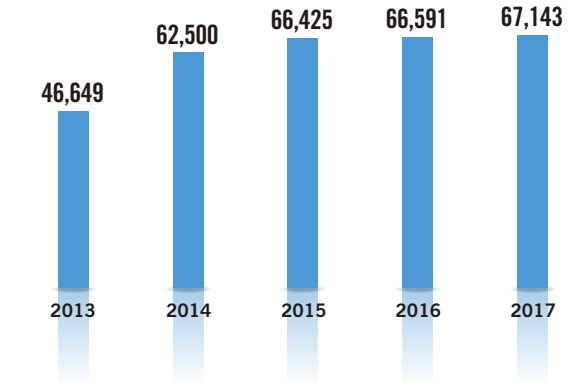
Net cash provided by operating activities was ¥3,584 million, up ¥562 million compared with the previous fiscal year. This was primarily due to a ¥490 million decrease in notes and accounts payable-trade.

Net cash provided by investing activities was ¥13,493 million, a transition from expenditure in the previous fiscal year to revenue and up ¥17,671 million compared with the previous fiscal year. This was primarily due to a ¥17,070 million increase in income from management of funds (the net amount of increase in time deposits, decrease in time deposits, payments to acquire marketable securities, and proceeds from sales of marketable securities).

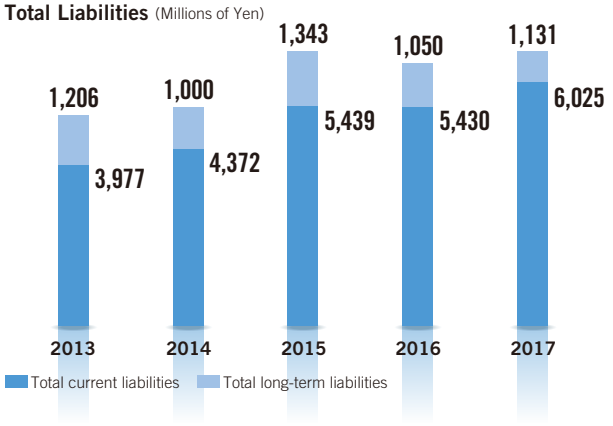
Net cash used in financing activities was ¥280 million, a ¥58 million increase compared with the previous fiscal year. This was primarily because of a ¥36 million increase in cash dividends paid.

As a result, the balance of cash and cash equivalents at the end of the consolidated fiscal year was ¥22,200 million, a year-over-year increase of ¥16,631 million.

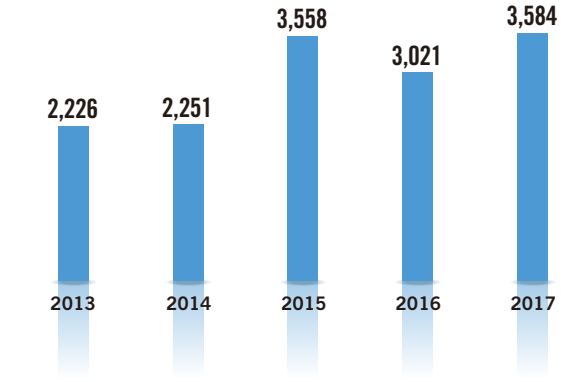
Total Assets (Millions of Yen)



Total Liabilities (Millions of Yen)



Net Cash Provided by Operating Activities (Millions of Yen)



Cash Flows from Business Activities

(Millions of Yen)	2013	2014	2015	2016	2017
Net cash provided by operating activities	¥ 2,266	¥ 2,251	¥ 3,558	¥ 3,021	**¥ 3,584**
Net cash provided by (used in) investing activities	(2,079)	(14,480)	(3,168)	(4,177)	**13,493**
Net cash provided by (used in) financial activities	149	11,281	(231)	(221)	**(280)**

Business Risks

The following are the major potential risks to which the Group may be exposed to in its business and other activities. In addition, from the standpoint of the positive disclosure of information significant to investor decisions, conditions that may not become risks, are also described below. Upon identifying the possibility of such risks, the Group will make the utmost effort to avoid them and will take countermeasures against them. There is, however, no guarantee that we can avoid all risks. Please note that the following descriptions do not cover all of the risk factors concerning the Group.

Unless specifically noted otherwise, all the statements in this section are as of the end of fiscal 2017, ended March 31, 2017, and any other statements with respect to future events are based on the Group's assumptions as of June 29, 2017.

In addition, the explanations of terminology are for investors to use as a reference to understand the information provided in this section. As such, they are the work of Takara Bio based on our judgment and understanding.

1. Research and development

A diverse range of industries are biotechnology-related, including the medical field (cell and gene therapy); the research support field, in which direct targets for the Takara Bio's business include research institutions and universities that are seeking to promote basic research and to develop new drugs; the environment and energy field (bioremediation and biomass research); the bioinformatics field; and the food field (agriculture and functional foods).

Under these circumstances, the Group conducts extensive R&D, which it considers vital to maintaining its competitive edge. In fact, the Group's R&D expenses for fiscal 2017 were ¥4,101 million, or 14.0% of net sales, which is extremely high. At the same time, there is no guarantee that R&D will proceed as planned, and, as clinical development in the Group's Gene Therapy business requires a particularly long period before commercialization, there is no guarantee that R&D will yield adequate results in a timely manner. Therefore, a delay in R&D could affect the Group's business strategy and performance. In addition, there is no guarantee that the R&D currently under way will produce the anticipated results. As a result, the Group could fail to meet its revenue projections.

2. Dependence on manufacturing

Calculated on a sales price base for fiscal 2017, Takara Biotechnology (Dalian), a Chinese subsidiary, accounted for nearly all of the research reagent production, a core Takara Bio Group product that generated 66.2% of the Group's net sales. The consolidation of production bases enables the Group to manufacture highly cost-competitive products, and the diversification of manufacturing centers is also considered to be inexpedient, given the Group's production scale. As a result, changes in earnings trends at the subsidiary or an interruption to its business activities for any reason could adversely affect the Group's business strategy and performance.

3. Long-term prepaid expenses

Due to the nature of the Group's business activities, execution of license agreements relating to patents owned by others is a key strategy. In such license agreements, the Group may make an initial payment and certain milestone payments. These expenditures are booked to assets as long-term prepaid expenses at the time of the expenditure and are treated systematically as expenses in each fiscal year, based on the terms of the agreements. In addition, the Group makes an assessment for the licensed technologies in each settlement period, taking into account use of the technology within the Group and obsolescence due to advances in biotechnology. When the asset component of a technology is in doubt, the Group treats the relevant long-term prepaid expense as a one-off expense.

Consequently, long-term prepaid expenses may increase in the future depending on the conclusion of license agreements and the occurrence of subsequent milestone payments. A high level of expense may also arise depending on the status of use of technologies within the Group and advances in biotechnology. This could affect the Group's performance.

4. Competition

The Group holds a unique position in the industry with a firm, stable revenue base, a solid presence in the Asian market, and an extensive, proprietary technological lineup. Nevertheless, the Group is in competition with a number of other companies in the same industry, not only in Japan, but also overseas.

In the Bioindustry business, the license agreement related to the Polymerase Chain Reaction Method (hereinafter, "PCR Method") is non-exclusive, and a large number of companies hold such licenses. As a result, competition is becoming increasingly severe. In addition, entry into the manufacturing and sale of scientific instruments is relatively easy as it does not require licensing and approval, unlike medical instruments, and Takara Bio has a large number of competitors in this business field as well.

In the Gene Therapy business, a variety of gene transduction methods and effective vectors have been developed, and the applications of gene therapy are expanding from congenital genetic disorders, infectious diseases, and various types of cancer to non-fatal chronic illnesses. Thus, a potentially enormous market has opened up, which has prompted many enterprises to conduct R&D for cell and gene therapies, including large pharmaceutical companies and venture businesses in the United States and Europe.

In the AgriBio business, the functional food industry is booming and many businesses, not just food manufacturers but many pharmaceutical companies as well, are entering this rapidly growing market, and competition has intensified. Under such circumstances, Takara Bio is seeking differentiation through the development of functional food ingredients that the Group has discovered and clarified the scientific basis for itself. However, such a development strategy may not necessarily be successful, and if competitors commercialize similar products and fields of technology first, the product development and performance of the Group could be affected.

5. Parent company of Takara Bio

As of March 31, 2017, Takara Holdings Inc. (listed on the First Section, Tokyo Stock Exchange) is the parent company of Takara Bio, owning 60.92% of the voting rights in the Company. The relationship between Takara Bio and Takara Holdings is as follows.

(1) Position of Takara Bio in the Takara Holdings Group (Takara Holdings and its associated companies)

The extraordinary general meeting of shareholders of Takara Shuzo Co., Ltd. (now Takara Holdings), held on February 15, 2002, approved the proposal to spin off the operations of the company's alcoholic beverage and food business, and the biomedical business with the aim of making the most of the special characteristics of each respective business as well as creating an operating environment for increasing growth potential and competitiveness in both. On this basis, Takara Shuzo and Takara Bio were established on April 1, 2002, through a corporate split, with each company becoming a fully owned subsidiary of Takara Holdings. Since then, Takara Holdings decreased the ownership of voting shares in Takara Bio to 60.92% as of March 31, 2017, through a third-party allotment of new shares by private and public offering.

The Takara Holdings Group consists of Takara Holdings, which is a pure holding company, and 65 affiliated companies (62 subsidiaries and 3 associated companies). Within the Group, Takara Bio is positioned as a subsidiary specializing in the biotechnology business, and it promotes the biotechnology business along with its 11 affiliated companies (subsidiaries).

(2) The food business of the Takara Holdings Group

Takara Healthcare Inc., which specializes in marketing and sales of functional foods of Takara Holdings Group companies, was founded on September 7, 2006, as a 100%-owned subsidiary of Takara Holdings. Following the establishment of Takara Healthcare, Takara Bio appointed Takara Healthcare as its sales agent for our functional foods. The Group's functional foods were sold to customers through Takara Healthcare, but the type of transactions changed to the outsourcing and contracting of manufacturing and research and development in April 2016. The amount of transactions with Takara Healthcare in fiscal 2017 was ¥845 million.

(3) Management of Group companies by Takara Holdings

Takara Holdings has established and operates the Takara Holdings Group Company Management Rules from the standpoint of consolidated business management. However, its objective is to maintain the independence and autonomy of Takara Holdings Group companies while seeking to maximize the corporate value of the entire Takara Holdings Group. The rules are also applicable to Takara Bio, and Takara Bio reports on the decisions made at the meetings of its Board of Directors to Takara Holdings. However, Takara Bio is not required to gain prior approval from Takara Holdings for the resolutions of its Board of Directors, and runs its operations independently.

In addition, Takara Holdings has established a variety of meetings within the Takara Holdings Group, and the ones that relate to Takara Bio are as follows.

Name of meeting	Participants	Role	Frequency of meetings
Group Strategy Meeting	Takara Holdings' directors, President & CEO of Takara Bio, President of Takara Shuzo	Confirmation of matters related to entire Group	In principle, once every two months
Biotechnology Business Report Meeting	Takara Holdings' directors, Takara Bio's directors and officers	Reporting on the status of Takara Bio's activities, etc.	In principle, once a month

These meetings above are for the purpose of reporting between Takara Holdings' Group companies and do not currently obstruct the autonomy and independence of Takara Bio.

In addition, the following officers serve concurrently at Takara Bio and Takara Holdings as of June 29, 2017.

Name	Position at Takara Bio	Position at Takara Holdings
Hisashi Ohmiya	Chairman	Chairman
Koichi Nakao	President & CEO	Director

Mr. Hisashi Ohmiya was appointed as a chairman of the Board of Directors of Takara Bio based on its assessment that his experience and knowledge in the management of the Biomedical Group as a director of Takara Shuzo before the establishment of Takara Bio would be of use to the Company. Moreover, Mr. Koichi Nakao was appointed as director of Takara Holdings from the standpoint of consolidated business management within the holding company structure of Takara Holdings. These decisions were not made with the objective of giving Takara Holdings control over Takara Bio.

However, a change in the Group management strategy of Takara Holdings, although not currently envisaged, could affect the business and performance of Takara Bio.

(4) Transactions with the Takara Holdings Group

1) Real estate lease transactions related to sales sites

Takara Bio was established as a spin-off company of Takara Shuzo (now Takara Holdings) on April 1, 2002. As a result, the majority of Takara Shuzo's former real estate, including plants, sales offices and company housing, was newly transferred to both Takara Shuzo and Takara Bio. Whereas the alcoholic beverage and food business, and the biomedical business had previously been developed on one site, real estate lease transactions have occurred with Takara Shuzo and Takara Bio since these transfers. The real estate lease transactions relating to the lease of sales sites by Takara Bio are as follows. In the event of difficulties in the renewal of these transactions, Takara Bio revenue could be affected and relocation expenses incurred until we are able to secure an alternative site.

Property	Use	Lessor	Amount of transaction (Year ended March 31, 2017, Millions of yen)	Transaction terms, etc.
6F and basement, Takara Meiji Yasuda Building (Chuo-ku, Tokyo)	Takara Bio, Tokyo Branch	Takara Shuzo	13	Area: 140.85m^2 Type of agreement: Lease agreement Basis for computation of rental fees: Market price of land, buildings, etc.

Notes: 1. The above amounts do not include consumption tax, etc.
2. Terms of agreement and method of determining terms of agreement are decided by consultation based on appraisal by real estate appraiser.

2) Transactions related to use of trademark rights

Takara Holdings owns and controls some trademarks used by Takara Bio. Takara Bio has concluded trademark licensing agreements with Takara Holdings with regard to these trademarks and makes a fixed monthly payment per trademark, country and category based on the number of licenses. As of March 31, 2017, Takara Bio had licenses for the use of 83 registered and 1 pending trademarks in Japan and overseas. In the event that Takara Bio is unable to obtain licenses for the use of trademarks from Takara Holdings for any reason, it might affect our business strategies and performance.

Company name (Address)	Details of transaction	Amount of transaction (Year ended March 31, 2017, Millions of yen)	Terms of transaction, etc.
Takara Holdings Inc. (Shimogyo-ku, Kyoto)	License for use of trademarks	8	Type of agreement: License agreement for use of trademarks (concluded March 29, 2004) Basis for computation of license fees: Costs for application and registration of trademark rights, with inclusion of future maintenance and management expenses Monthly license fee per trademark, country and category: ¥8,500 for registered trademarks, ¥1,700 for pending trademarks (neither includes consumption tax)

3) Transactions related to outsourcing of computer-related services

Takara Bio has concluded agreements with Takara Holdings on the contracting of computer-related services and the lease of equipment. In the event of difficulties in the renewal of these transactions for any reason, it might affect our business strategies and performance.

Company name (Address)	Details of transaction	Amount of transaction (Year ended March 31, 2017, Millions of yen)	Terms of transaction, etc.
Takara Holding Inc. (Shimogyo-ku, Kyoto)	Contracting of computer-related services, lease of equipment, etc.	336	Type of agreement: Basic agreement on contracting of computer-related services and lease of equipment Content of services: Support for accounting system operation, support for client server operation, lease of PCs, purchase of supplies, and other

Notes: The above amounts do not include consumption tax, etc.

4) Other

Takara Bio has concluded a manufacturing and research and development outsourcing agreement related to functional foods and a licensing agreement for application and use of intellectual property with Takara Healthcare Inc. In addition, there are also purchases of packaging materials and other goods on an order basis as well as human resource placement agreement transactions with Takara Holdings Group companies (excludes Takara Bio Group companies). In the event of difficulties in the renewal of these transactions for any reason, it might affect our business strategies and performance.

6. Financing

The demand for funds, including R&D expenditure, capital expenditure, loans and investment, working funds, etc., is expected to rise due to the initiation of new businesses and expansion in business size. Thus, fundraising through a paid-in capital increase or other measures may possibly occur in the future. However, if financing does not proceed as planned, it could affect the Group's business strategies and performance.

7. Allocation of funding

In light of the dramatic changes concerning the Takara Bio Group's business environment with regards to the biotechnology industry, the Group's business may be significantly impacted by new technology innovation and new market players. There is therefore no guarantee that the expected results of capital and R&D investment—the intended target of funding received through public stock offerings—will be realized, and the Group's business strategies and performance may be affected.

8. Key operational agreements

An outline of the agreements considered crucial to the Takara Bio Group's operations is described in below. If these agreements end due to the expiry of the agreement term, cancellation, or some other reason or if revisions to the agreements are disadvantageous to the Group, it could affect the business strategy and performance of the Group.

(1) Technology In-licensing Agreements

Contracting company	Takara Bio Inc. (the Company)
Counterparty	Life Technologies Corporation
Contract	Restated and Amended Patent License Agreement
Conclusion date	September 21, 2006
Term	From September 1, 2006, until all the licensed patents have expired
Summary	F. Hoffman-La Roche Ltd. granted Takara Bio worldwide non-exclusive rights for the Polymerase Chain Reaction (PCR) Method, excluding the diagnostic area. However, F. Hoffman-La Roche granted exclusive rights for the PCR Method that it owned to Applera Corporation ("Applera") through its Applied Biosystems Group based on an agreement between F. Hoffman-La Roche and Applera. As a result, Applera assumed the license agreement that Takara Bio and F. Hoffman-La Roche concluded in 1997. Subsequently, this license agreement was amended and, in addition to rights for the PCR Method, Takara Bio was granted rights relating to the real-time PCR Method and other items in September 2006. Subsequently, Applera transferred its contractual status with Takara Bio to Life Technologies Corporation. As a result, Takara Bio pays Life Technologies Corporation a certain running royalty linked to sales.

Contracting company	Takara Bio Inc. (the Company)
Counterparty	Indiana University Foundation
Contract	License Agreement
Conclusion date	May 26, 1995
Term	From May 26, 1995, until all the licensed patents have expired
Summary	Indiana University Foundation granted Takara Bio worldwide exclusive rights for the implementation of a highly efficient gene transduction method using retroviral vectors. In addition to paying Indiana University Foundation a certain amount as a lump sum on conclusion of the contract, Takara Bio pays Indiana University Foundation a certain running royalty linked to sales. Further, Takara Bio is obliged to pay a certain amount as a milestone payment when it files a New Drug Application (NDA) in order to receive approval for the marketing of a new drug in respective countries. In addition, Takara Bio was obliged to donate a certain amount to Indiana University Foundation for two years. Takara Bio has completed making this donation. In addition, when this contract ends, Takara Bio will transfer the patents acquired by Takara Bio based on this contract with Indiana University Foundation.

Contracting company	Takara Bio Inc. (the Company)
Counterparty	Yukihiro Nishiyama, M's Science Corporation, Nagoya Industrial Science Research Institute
Contract	Memorandum on Changes to Agreements Concerning Equity Transfer, Joint Application, Licensing, Etc.
Conclusion date	November 26, 2010
Term	From November 26, 2010 to the patent expiration date
Summary	In 2010 Takara Bio took over M's Science Corporation's HF10 business and inherited all of the corporation's rights and obligations pertaining to HF 10. This memorandum ensures Takara Bio's partial ownership of patent rights and exclusive use of patents pertaining to HF10. Further, Takara Bio will provide a milestone payment to the Nagoya Industrial Science Research Institute in addition to paying a running royalty tied to sales after the approval of HF10.

Contracting company	Takara Bio Inc. (the Company)
Counterparty	University of Medicine and Dentistry of New Jersey
Contract	Research Collaboration and License Agreement
Conclusion date	October 1, 2005
Term	From October 1, 2005, until all the licensed patents have expired
Summary	University of Medicine and Dentistry of New Jersey (UMDNJ) researches and develops protein expression systems and technology applications for gene therapy, based on technology for RNA cleavage enzyme (ribonucleases). Takara Bio has obtained exclusive worldwide rights to the expertise relating to technology for the MazF ribonuclease that UMDNJ has obtained as well as the results, expertise, and patents obtainable from the above-mentioned research and development. Takara Bio pays UMDNJ a certain amount in accordance with conclusion of the contract and research and development progress. Also, Takara Bio pays UMDNJ a certain running royalty linked to sales.

(2) Technology Out-licensing Agreements

Contracting company	Takara Bio Inc. (the Company)
Counterparty	MolMed S.p.A.
Contract	License Agreement
Conclusion date	December 9, 2001
Term	From December 9, 2001, until all the licensed patents have expired
Summary	Takara Bio granted MolMed non-exclusive rights in the United States and Europe for the implementation of the RetroNectin® Method. In addition to receiving lump sums linked to development milestones, Takara Bio receives fees for providing MolMed with RetroNectin® reagent that complies with the standards of clinical trials in the respective countries.

Contracting company	Takara Bio Inc. (the Company)
Counterparty	Otsuka Pharmaceutical Co., Ltd.
Contract	License Agreement for HF10 Development and Sales
Conclusion date	December 15, 2016
Term	From December 15, 2016 until the end of sales, unless terminated due to a reason stipulated in the contract
Summary	Takara Bio and Otsuka Pharmaceutical Co., Ltd. will implement co-development of gene therapies using oncolytic virus HF10 ("the products") in Japan. Takara Bio gives Otsuka Pharmaceutical exclusive rights to commercialize the products for all indications in Japan. In addition to receiving an initial payment and lump sums according to the progress of development, Takara Bio will receive lump sums according to achievement of sales targets following the launch. Further, Takara Bio will manufacture the products for clinical trials and market sales and provide them to Otsuka Pharmaceutical for a fee.

(3) Sales Agreement

Contracting company	Takara Bio Inc. (the Company)
Counterparty	AB SCIEX
Contract	Distributorship Agreement
Conclusion date	April 15, 2011
Term	From April 1, 2011 to March 31, 2013 Note: If either party has not submitted a written refusal of renewal at least six months before the end of the term, the contract is automatically renewed for a further year, with the same process applying for subsequent years. However, irrespective of the period, Takara Bio can cancel this contract by providing AB SCIEX with six months prior notice in writing. Further, AB SCIEX can cancel this contract by providing Takara Bio with six months prior notice in writing.
Summary	AB SCIEX granted non-exclusive sales rights to sell its mass spectrometry systems in Japan to Takara Bio. Further, Takara Bio is not permitted to sell competing products.

(4) Other

Agreements relating to corporate acquisitions through the acquisition of shares are as follows.

1) Acquisition of WaferGen Bio-systems, Inc.

The Company concluded a merger agreement at the board of directors' meeting held May 13, 2016 pursuant to which its wholly owned subsidiary Takara Bio USA Holdings Inc. ("TBUSH") will acquire the shares of WaferGen Bio-systems, Inc. ("WaferGen") and make it a subsidiary. On the same day, Japan time, TBUSH concluded this agreement with WaferGen. Furthermore, acquisition procedures were concluded per this agreement on February 28, 2017 (local U.S. time).

2) Acquisition of Rubicon Genomics, Inc.

The Company made the decision at the board of directors' meeting held on December 15, 2016 pursuant to which TBUSH will acquire the shares of Rubicon Genomics, Inc. ("Rubicon") and make it a subsidiary. TBUSH acquired the relevant shares on January 17, 2017 (local U.S. time).

9. Securing human resources

The Group is based on R&D, and technological innovation is steadily advancing in the biotechnology industry. Therefore, to maintain its competitive edge, the Group considers it essential to secure outstanding human resources with specialist knowledge and skills for R&D. Nevertheless, the Group cannot rule out the possibility that it may not be able to secure human resources as planned or that its personnel may leave Takara Bio. In this event, the Group's business strategy and performance could be affected.

10. Intellectual property rights

In the biotechnology industry, in which the success of business depends highly on the success of R&D, the Group regards securing intellectual property rights, including patents, as a critical factor, and the Group protects technologies developed in-house with patent rights to prevent competitors from imitating them. The Group will continue to place the highest priority on applications for patents based on R&D activities. However, not all of the applications may be successfully registered, and when a registered patent is made invalid for any reason, or expires, the Group's business strategies and performance may be affected.

In addition, the Group is aware that in the biotechnology industry, an area in which competition over R&D is continually growing, its patented technologies may be made obsolete at any time when a competitor develops superior technologies. When a competitor achieves such R&D, it could affect the Group's business strategy and performance.

Moreover, the Group intends to acquire promising patent rights held by others, or acquire licenses for the patent rights, to enable future expansion of its business. However, these strategies may incur large expenses. In addition, there is a possibility that the Group may not be able to acquire licenses for necessary patent rights held by others, and this could affect its business strategy and performance.

11. Product liability risks

All of the products that the Group handles are exposed to risks of compensation for product liability. If any defect is found in a product during its manufacture or sale, or during the clinical trial process; or if a health impairment is caused by any drug, medical device, regenerative medical products, food, or research reagent, any reagent and cell or gene therapy product used in a clinical trial, or any cell therapy product prepared under a doctor's guidance, then the Group may be subject to product liability claims, and this could affect the promotion of the Group's business strategies and performance.

In addition, it is usual practice to conduct a voluntary recall when any problem arises with these products in view of the possible physical effects and damage to human bodies, and any such recall may require time and entail huge expense.

12. Legal regulations

(1) Bioindustry business and Gene Therapy business

R&D in the Bioindustry business is regulated by relevant legislation, such as the Law Concerning the Prevention of Radiation Hazards due to Radioisotopes, etc., and the Law Concerning the Conservation and Sustainable Use of Biological Diversity through Regulations on the Use of Living Modified Organisms (hereinafter "Cartagena Act"); and the Group is committed to observing these laws and regulations. In addition, in the production, sale, and trade of research reagents, Takara Bio is required to follow relevant legislation, such as the Poisonous and Deleterious Substances Control Law and the Quarantine Act. However, research reagents are not drugs or regenerative medical products as defined by the Act on Securing Quality, Efficacy and Safety of Pharmaceuticals, Medical Devices, Regenerative and Cellular Therapy Products, Gene Therapy

Products, and Cosmetics (hereinafter "Pharmaceuticals and Medical Devices Act"), and therefore are not regulated by that law.

Nevertheless, if these regulations are tightened or new regulations are introduced following expansion of the supporting research industry, it could affect the Group's business strategies and performance.

Moreover, the relevant laws and regulations such as the Pharmaceuticals and Medical Devices Act, the Act on the Safety of Regenerative Medicine, and the Law Concerning the Conservation and Sustainable Use of Biological Diversity through Regulations on the Use of Living Modified Organisms regulate commercialization of the cell and gene therapies that Takara Bio is aiming to accomplish, and the Group intends to comply with such laws and regulations. The relevant laws and regulations are targeted at securing the quality, effectiveness, and safety of drugs, regenerative medical products, quasi-drugs, specific processed cells, cosmetics, and medical devices, and the trading of these products requires approval or permission from the relevant authorities. If the Group is unable to obtain permission to continue conducting research projects as part of its Gene Therapy business, the Group's business strategies and performance could be affected.

(2) AgriBio business

In its functional food business, the Group maintains business facilities; manages tools, containers, and packages; and controls production processes and sales activities in accordance with the provisions of the Food Sanitation Law. The Group observes the Food Sanitation Law and takes extra care to manage food hygiene. Food hygiene matters are an unavoidable issue for a company that handles food, and the Group is committed to strengthening its system for the management of food hygiene in the future. However, if any problem should arise related to this issue, the business strategies and performance of the Group could be affected.

Beginning in October 2006, Takara Bio has been marketing and selling all its functional foods through Takara Healthcare, a 100%-owned subsidiary of Takara Holdings. In selling functional foods and materials in bulk, Takara Bio and Takara Healthcare are making every effort to comply with the sales methods based on the Specified Commercial Transaction Law, the Food Labeling Act, the Act on Standardization and Proper Quality Labeling of Agricultural and Forestry Products, the Pharmaceuticals and Medical Devices Act, the Health Promotion Law, and the Act against Unjustifiable Premiums and Misleading Representation. The Group must also handle labeling and advertising in compliance with all the relevant laws. However, due to the nature of functional foods in general, the Group cannot completely rule out the possibility of violating a provision on mandatory labeling requirements. If any violation occurs, trust in the Group could deteriorate, which may adversely affect the Group's business strategies and performance.

13. Risks of lawsuits, etc.

As of June 29, 2017, there are no major ongoing lawsuits with third parties relating to the Takara Bio's business. However, the Group carries out wide-ranging R&D activities and business expansion. Therefore, there is no guarantee that lawsuits will not arise again in the future. The Group is striving to enhance its internal control and strengthen its compliance system when it carries out its business operations. However, in spite of all these efforts, there still remains a possibility of lawsuits being brought against the Group. The very fact that a lawsuit is brought against the Group and the results of such a lawsuit may seriously affect the Group's business strategies and performance.

Moreover, in order to prevent the Group from being sued concerning intellectual property rights, the Group has been conducting patent investigations through patent offices, etc., and the Group is not aware that any of its products are in conflict with the patent rights of others. However, it is difficult for an R&D-based company such as Takara Bio Group to completely avoid the occurrence of such issues involving the infringement of intellectual property rights. When such

problems with the infringement of intellectual property rights do arise, the Group could be subject to demands for compensation for damages, sales injunctions, and payment of royalties. As a result, the expansion of the relevant business and the Group's business strategy and performance could be affected.

In addition, if the Group's business partners or licensors are involved in disputes, the Group may no longer be able to sell the relevant products or may itself become involved in lawsuits. In such cases, the resolution of the problem could take a long time and may incur huge expenses, and the Group's business strategy and performance could be affected depending on the circumstances.

14. Intangible fixed assets related to Takara Bio USA, Inc. ("TBUSA")

Observing the U.S. Financial Accounting Standards Board (FASB) Codification Topic 350 "Intangibles—Goodwill and Other," Takara Bio did not amortize the trademark rights obtained by TBUSA, a subsidiary of Takara Bio. Looking ahead, Takara Bio intends to determine whether any impairment loss is incurred once every year, as well as whenever an event takes place that suggests the possibility of an impairment loss. As of June 29, 2017, Takara Bio has not incurred any impairment losses. However, if Takara Bio determines that an impairment loss has been incurred, such an event could adversely affect the Group's business performance.

With regard to goodwill recognized by TBUSA, Takara Bio has applied "Practical Solution on Unification of Accounting Policies Applied to Foreign Subsidiaries for Consolidated Financial Statements" (ASBJ Practical Issues Task Force No. 18, March 26, 2015). Consequently, Takara Bio is amortizing this goodwill amount using the straight-line method over a 20-year period.

15. Exchange rate fluctuation

The translation into yen of costs, income, and trade receivables and payables associated with business undertaken by the Group denominated in foreign currencies is exposed to currency exchange rate fluctuation risk. The Group takes such measures as conducting forward foreign-exchange contracts to minimize the negative impact of exchange rate fluctuation, but such risks cannot be completely avoided.

Additionally, sales, expenses, assets, and other such line items on the foreign currency financial statements of overseas consolidated subsidiaries are converted into yen for the purpose of creating consolidated financial statements. Consequently, exchange rate fluctuations may affect the Group's business performance.

16. Overseas business expansion

The Group conducts business operations that include research and development, manufacturing, and sales in regions that include North America, Europe, and Asia (mainly China). Significant changes concerning the economic, political, or social climate in these countries and regions, the occurrence of problems concerning international taxation such as transfer price taxation systems, or the occurrence of natural disasters such as earthquakes may affect the Group's business strategies and performance.

17. Natural disasters

The Group's business activities may be impeded by natural disasters such as storms, earthquakes, lightning strikes, and floods, by fires or other accidents, or by worldwide pandemics of infectious diseases. To minimize damage suffered in such cases, we conduct inspections and training, and create communication systems and business continuity plans. Nevertheless, damage caused to people or things as a result of such incidents may affect the Group's business strategies and performance.

Consolidated Financial Statements

Consolidated Balance Sheet

Takara Bio Inc. and Subsidiaries
March 31, 2017

	Millions of Yen		Thousands of U.S. Dollars (Note 1)
ASSETS	**2017**	**2016**	**2017**
CURRENT ASSETS:			
Cash and cash equivalents (Note 14)	**¥ 22,200**	¥ 5,568	**$ 198,214**
Marketable securities (Notes 3 and 14)	**2,000**	9,721	**17,857**
Time deposits (Note 14)	**5,877**	13,815	**52,473**
Notes and accounts receivable:			
Trade (Note 14)	**7,455**	6,830	**66,562**
Other	**193**	538	**1,723**
Allowance for doubtful accounts (Note 14)	**(30)**	(41)	**(267)**
Inventories (Note 4)	**5,462**	5,100	**48,767**
Deferred tax assets (Note 12)	**252**	202	**2,250**
Prepaid expenses and other current assets	**552**	422	**4,928**
Total current assets	**43,964**	42,158	**392,535**
PROPERTY, PLANT AND EQUIPMENT (Notes 5 and 6):			
Land	**7,297**	7,696	**65,151**
Buildings and structures	**12,699**	13,605	**113,383**
Machinery, equipment and vehicles	**6,866**	7,014	**61,303**
Tools, furniture and fixtures	**6,174**	5,766	**55,125**
Lease assets (Note 13)	**23**	28	**205**
Construction in progress	**34**	22	**303**
Total property, plant and equipment	**33,096**	34,135	**295,500**
Accumulated depreciation	**(13,518)**	(13,600)	**(120,696)**
Net property, plant and equipment	**19,577**	20,534	**174,794**
INVESTMENTS AND OTHER ASSETS:			
Investment securities (Notes 3 and 14)	**2**	2	**17**
Goodwill (Note 5)	**1,213**	1,641	**10,830**
Long-term prepaid expenses	**856**	1,021	**7,642**
Trademarks	**638**	661	**5,696**
Asset for retirement benefits (Note 7)	**40**	73	**357**
Deferred tax assets (Note 12)	**26**	21	**232**
Other assets	**834**	488	**7,446**
Allowance for doubtful accounts	**(11)**	(11)	**(98)**
Total investments and other assets	**3,600**	3,897	**32,142**
TOTAL	**¥ 67,143**	¥ 66,591	**$ 599,491**

See notes to consolidated financial statements.

LIABILITIES AND EQUITY	Millions of Yen 2017	2016	Thousands of U.S. Dollars (Note 1) 2017
CURRENT LIABILITIES:			
Short-term bank loans (Notes 6 and 14)		¥ 16	
Current portion of long-term debt (Notes 6 and 14)	**¥ 48**	48	**$ 428**
Notes and accounts payable (Note 14):			
Trade	**1,944**	1,690	**17,357**
Construction and other	**2,054**	1,526	**18,339**
Accrued income taxes (Notes 12 and 14)	**375**	515	**3,348**
Accrued expenses	**1,112**	1,138	**9,928**
Other current liabilities (Note 15)	**491**	493	**4,383**
Total current liabilities	**6,025**	5,430	**53,794**
LONG-TERM LIABILITIES:			
Long-term debt (Notes 6, 13 and 14)	**82**	130	**732**
Liability for retirement benefits (Note 7)	**622**	488	**5,553**
Deferred tax liabilities (Note 12)	**210**	196	**1,875**
Other long-term liabilities (Note 8)	**215**	234	**1,919**
Total long-term liabilities	**1,131**	1,050	**10,098**
COMMITMENTS AND CONTINGENT LIABILITIES (Notes 13 and 15)			
EQUITY (Note 9):			
Common stock, authorized, 400,000,000 shares; issued, 120,415,600 shares in 2017 and 2016	**14,965**	14,965	**133,616**
Capital surplus	**32,893**	32,893	**293,687**
Retained earnings	**10,432**	9,295	**93,142**
Accumulated other comprehensive income:			
Foreign currency translation adjustments	**2,023**	3,109	**18,062**
Defined retirement benefit plans (Note 7)	**(429)**	(257)	**(3,830)**
Total	**59,884**	60,007	**534,678**
Noncontrolling interests	**100**	102	**892**
Total equity	**59,985**	60,110	**535,580**
TOTAL	**¥ 67,143**	¥ 66,591	**$ 599,491**

See notes to consolidated financial statements.

Consolidated Statement of Income

Takara Bio Inc. and Subsidiaries
Year Ended March 31, 2017

	Millions of Yen		Thousands of U.S. Dollars (Note 1)
	2017	2016	2017
NET SALES	**¥ 29,375**	¥ 29,729	**$ 262,276**
COST OF SALES (Notes 7 and 13)	**12,422**	13,405	**110,910**
Gross profit	**16,952**	16,323	**151,357**
SELLING, GENERAL AND ADMINISTRATIVE EXPENSES (Notes 7, 11 and 13)	**13,749**	13,655	**122,758**
Operating income	**3,202**	2,667	**28,589**
OTHER INCOME (EXPENSES):			
Interest income	**108**	170	**964**
Subsidy income	**226**	419	**2,017**
Foreign exchange (loss) gain	**(44)**	21	**(392)**
Interest expense	**(2)**	(2)	**(17)**
Loss on sales and disposals of property, plant and equipment	**(105)**	(113)	**(937)**
Impairment loss (Note 5)	**(667)**	(281)	**(5,955)**
Other, net	**88**	26	**785**
Other income (expenses), net	**(397)**	238	**(3,544)**
INCOME BEFORE INCOME TAXES	**2,805**	2,905	**25,044**
INCOME TAXES (Note 12):			
Current	**1,492**	1,473	**13,321**
Prior periods		180	
Deferred	**(43)**	(88)	**(383)**
Total income taxes	**1,449**	1,565	**12,937**
NET INCOME	**1,356**	1,340	**12,107**
NET INCOME ATTRIBUTABLE TO NONCONTROLLING INTERESTS	**3**	5	**26**
NET INCOME ATTRIBUTABLE TO OWNERS OF THE PARENT	**¥ 1,352**	¥ 1,334	**$ 12,071**

	Yen		U.S. Dollars (Note 1)
PER SHARE OF COMMON STOCK (Notes 2.s and 17):			
Basic net income	**¥ 11.24**	¥ 11.08	**$ 0.10**
Cash dividends applicable to the year	**4.00**	1.80	**0.03**

See notes to consolidated financial statements.

Consolidated Statement of Comprehensive Income

Takara Bio Inc. and Subsidiaries
Year Ended March 31, 2017

	Millions of Yen		Thousands of U.S. Dollars (Note 1)
	2017	2016	2017
NET INCOME	**¥ 1,356**	¥ 1,340	**$ 12,107**
OTHER COMPREHENSIVE INCOME (LOSS) (Note 16):			
Foreign currency translation adjustments	**(1,091)**	(672)	**(9,741)**
Defined retirement benefit plans	**(172)**	(18)	**(1,535)**
Total other comprehensive income (loss)	**(1,264)**	(691)	**(11,285)**
COMPREHENSIVE INCOME	**¥ 92**	¥ 648	**$ 821**
TOTAL COMPREHENSIVE INCOME ATTRIBUTABLE TO:			
Owners of the parent	**¥ 94**	¥ 646	**$ 839**
Noncontrolling interests	**(2)**	1	**(17)**

See notes to consolidated financial statements.

Consolidated Statement of Changes in Equity

Takara Bio Inc. and Subsidiaries
Year Ended March 31, 2017

	Thousands	Millions of Yen							
					Accumulated Other Comprehensive Income				
	Number of Shares of Common Stock Outstanding	Common Stock	Capital Surplus	Retained Earnings	Foreign Currency Translation Adjustments	Defined Retirement Benefit Plans	Total	Noncontrolling Interests	Total Equity
BALANCE, APRIL 1, 2015	120,415	¥14,965	¥32,893	¥ 8,142	¥3,777	¥(238)	¥59,541	¥101	¥59,642
Net income attributable to owners of the parent				1,334			1,334		1,334
Cash dividends, ¥1.5 per share				(180)			(180)		(180)
Net change in the year					(668)	(18)	(687)	1	(686)
BALANCE, MARCH 31, 2016	120,415	14,965	32,893	9,295	3,109	(257)	60,007	102	60,110
Net income attributable to owners of the parent				**1,352**			**1,352**		**1,352**
Cash dividends, ¥1.8 per share				**(216)**			**(216)**		**(216)**
Net change in the year					**(1,086)**	**(172)**	**(1,258)**	**(2)**	**(1,260)**
BALANCE, MARCH 31, 2017	**120,415**	**¥14,965**	**¥32,893**	**¥10,432**	**¥2,023**	**¥(429)**	**¥59,884**	**¥100**	**¥59,985**

	Thousands of U.S. Dollars (Note 1)							
				Accumulated Other Comprehensive Income				
	Common Stock	Capital Surplus	Retained Earnings	Foreign Currency Translation Adjustments	Defined Retirement Benefit Plans	Total	Noncontrolling Interests	Total Equity
BALANCE, MARCH 31, 2016	$133,616	$293,687	$82,991	$27,758	$(2,294)	$535,776	$910	$536,696
Net income attributable to owners of the parent			**12,071**			**12,071**		**12,071**
Cash dividends, $0.01 per share			**(1,928)**			**(1,928)**		**(1,928)**
Net change in the year				**(9,696)**	**(1,535)**	**(11,232)**	**(17)**	**(11,250)**
BALANCE, MARCH 31, 2017	**$133,616**	**$293,687**	**$93,142**	**$18,062**	**$(3,830)**	**$534,678**	**$892**	**$535,580**

See notes to consolidated financial statements.

Consolidated Statement of Cash Flows

Takara Bio Inc. and Subsidiaries
Year Ended March 31, 2017

	Millions of Yen		Thousands of U.S. Dollars (Note 1)
	2017	2016	2017
OPERATING ACTIVITIES:			
Income before income taxes	**¥ 2,805**	¥ 2,905	**$ 25,044**
Adjustments for:			
Income taxes paid	**(1,592)**	(1,460)	**(14,214)**
Depreciation and amortization	**1,884**	1,868	**16,821**
Loss on sales and disposals of property, plant and equipment	**105**	113	**937**
Impairment loss	**667**	281	**5,955**
Changes in assets and liabilities:			
Increase in trade notes and accounts receivable	**(720)**	(165)	**(6,428)**
Increase in inventories	**(594)**	(600)	**(5,303)**
Increase (decrease) in trade notes and accounts payable	**288**	(202)	**2,571**
Increase in liability for retirement benefits	**135**	13	**1,205**
Other, net	**604**	265	**5,392**
Total adjustments	**778**	115	**6,946**
Net cash provided by operating activities	**3,584**	3,021	**32,000**
INVESTING ACTIVITIES:			
Increase in time deposits	**(5,776)**	(14,473)	**(51,571)**
Decrease in time deposits	**13,392**	14,672	**119,571**
Payments to acquire marketable securities	**(7,026)**	(5,453)	**(62,732)**
Proceeds from sales of marketable securities	**14,679**	3,453	**131,062**
Purchases of property, plant and equipment	**(1,443)**	(2,263)	**(12,883)**
Increase in long-term prepaid expenses	**(74)**	(111)	**(660)**
Other, net	**(257)**	(0)	**(2,294)**
Net cash provided by (used in) investing activities	**13,493**	(4,177)	**120,473**
FINANCING ACTIVITIES:			
(Decrease) increase in short-term bank loans, net	**(14)**	7	**(125)**
Repayments of long-term debt	**(48)**	(48)	**(428)**
Cash dividends paid	**(216)**	(180)	**(1,928)**
Net cash used in financing activities	**(280)**	(221)	**(2,500)**
FOREIGN CURRENCY TRANSLATION ADJUSTMENTS ON CASH AND CASH EQUIVALENTS	**(166)**	(125)	**(1,482)**
NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS	**16,631**	(1,502)	**148,491**
CASH AND CASH EQUIVALENTS, BEGINNING OF YEAR	**5,568**	7,071	**49,714**
CASH AND CASH EQUIVALENTS, END OF YEAR	**¥ 22,200**	¥ 5,568	**$ 198,214**

See notes to consolidated financial statements.

1 BASIS OF PRESENTATION OF THE CONSOLIDATED FINANCIAL STATEMENTS

The accompanying consolidated financial statements have been prepared in accordance with the provisions set forth in the Japanese Financial Instruments and Exchange Act and its related accounting regulations, and in accordance with accounting principles generally accepted in Japan ("Japanese GAAP"), which are different in certain respects as to the application and disclosure requirements of International Financial Reporting Standards.

In preparing these consolidated financial statements, certain reclassifications and rearrangements have been made to the consolidated financial statements issued domestically in order to present them in a form which is more familiar to readers outside Japan. In addition, certain reclassifications have been made in the 2016 consolidated financial statements to conform them to the classifications used in 2017.

The consolidated financial statements are stated in Japanese yen, the currency of the country in which Takara Bio Inc. (the "Company") is incorporated and operates. Japanese yen figures of less than a million yen are rounded down to the nearest million yen, except for per share data. The translations of Japanese yen amounts into U.S. dollar amounts are included solely for the convenience of readers outside Japan and have been made at the rate of ¥112 to $1, the approximate rate of exchange at March 31, 2017. U.S. dollar figures of less than a thousand dollars are rounded down to the nearest thousand dollars, except for per share data. Such translations should not be construed as representations that the Japanese yen amounts could be converted into U.S. dollars at that or any other rate.

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

a. Consolidation — The consolidated financial statements as of March 31, 2017, include the accounts of the Company and all 11 (11 in 2016) subsidiaries (collectively, the "Group").

Under the control and influence concepts, those companies in which the Company, directly or indirectly, is able to exercise control over operations are fully consolidated.

All significant intercompany balances and transactions have been eliminated in consolidation. All material unrealized profit included in assets resulting from transactions within the Group is also eliminated.

b. Unification of Accounting Policies Applied to Foreign Subsidiaries for the Consolidated Financial Statements — Under Accounting Standards Board of Japan ("ASBJ") Practical Issues Task Force ("PITF") No. 18, "Practical Solution on Unification of Accounting Policies Applied to Foreign Subsidiaries for the Consolidated Financial Statements," the accounting policies and procedures applied to a parent company and its subsidiaries for similar transactions and events under similar circumstances should in principle be unified for the preparation of the consolidated financial statements. However, financial statements prepared by foreign subsidiaries in accordance with either International Financial Reporting Standards or accounting principles generally accepted in the United States of America (Financial Accounting Standards Board Accounting Standards Codification —"FASB ASC") tentatively may be used for the consolidation process, except for the following items that should be adjusted in the consolidation process so that net income is accounted for in accordance with Japanese GAAP, unless they are not material: (a) amortization of goodwill; (b) scheduled amortization of actuarial gain or loss of pensions that has been recorded in equity through other comprehensive income; (c) expensing capitalized development costs of R&D; and (d) cancellation of the fair value model of accounting for property, plant and equipment and investment properties and incorporation of the cost model of accounting.

c. Business Combinations — Business combinations are accounted for using the purchase method. Acquisition-related costs, such as advisory fees or professional fees, are accounted for as expenses in the periods in which the costs are incurred. If the initial accounting for a business combination is incomplete by the end of the reporting period in which the business combination occurs, an acquirer shall report in its financial statements provisional amounts for the items for which the accounting is incomplete. During the measurement period, which shall not exceed one year from the acquisition, the acquirer shall retrospectively adjust the provisional amounts recognized at the acquisition date to reflect new information obtained about facts and circumstances that existed as of the acquisition date and that would have affected the measurement of the amounts recognized as of that date. Such adjustments shall be recognized as if the accounting for the business combination had been completed at the acquisition date. A parent's ownership interest in a subsidiary might change if the parent purchases or sells ownership interests in its subsidiary. The carrying amount of noncontrolling interest is adjusted to reflect the change in the parent's ownership interest in its subsidiary while the parent retains its controlling interest in its subsidiary. Any difference between the fair value of the consideration received or paid and the amount by which the noncontrolling interest is adjusted is accounted for as capital surplus as long as the parent retains control over its subsidiary.

d. Cash Equivalents — Cash equivalents are short-term investments that are readily convertible into cash and exposed to insignificant risk of changes in value. Cash equivalents include time deposits, all of which mature or become due within three months of the date of acquisition.

e. Marketable and Investment Securities — The Group's marketable and investment securities consist of held-to-maturity debt securities and available-for-sale securities. Marketable and investment securities

are classified and accounted for, depending on management's intent, as follows held-to-maturity debt securities are reported at amortized cost, and marketable available-for-sale securities are reported at fair value, with unrealized gains and losses, net of applicable taxes, reported in a separate component of equity. The cost of securities sold is determined by the moving-average method. Nonmarketable available-for-sale securities are stated at cost, determined by the moving-average method.

For other-than-temporary declines in fair value, marketable and investment securities are reduced to net realizable value by a charge to income.

f. Inventories — Inventories are stated principally at the lower of cost, determined by the weighted-average method, or net selling value.

g. Property, Plant and Equipment — Property, plant and equipment are stated at cost. Depreciation of property, plant and equipment of the Company and its subsidiaries is computed principally by the straight-line method. The range of useful lives is principally from 6 to 60 years for buildings and structures, from 2 to 10 years for machinery, equipment and vehicles, and from 2 to 20 years for tools, furniture and fixtures.

Pursuant to an amendment to the Corporate Tax Act, some domestic subsidiaries adopted ASBJ PITF No. 32, "Practical Solution on a change in depreciation method due to Tax Reform 2016," and changed the depreciation method for building improvements and structures acquired on or after April 1, 2016, from the declining-balance method to the straight-line method. There was no impact from this accounting change.

h. Goodwill — The excess of the cost of an acquisition over the fair value of the net assets of an acquired subsidiary at the date of acquisition is recorded as goodwill and amortized on a straight-line basis over a certain period, not exceeding 20 years.

Takara Bio USA, Inc., the Company's consolidated subsidiary, records goodwill according to FASB ASC 350, "Intangibles – Goodwill and Other." Under ASC 350, goodwill is tested for impairment at least annually locally, however, the goodwill is amortized on a straight-line basis over a period of 20 years in the Group's consolidated financial statements in accordance with ASBJ PITF No. 18, "Practical Solution on Unification of Accounting Policies Applied to Foreign Subsidiaries for the Consolidated Financial Statements," which was subsequently revised in February 2010 and March 2015 to reflect revisions of the relevant Japanese GAAP or accounting standards in other jurisdictions issued by ASBJ as described in Note 2.b.

i. Long-Lived Assets — The Group reviews its long-lived assets for impairment whenever events or changes in circumstance indicate the carrying amount of an asset or asset group may not be recoverable. An impairment loss is recognized if the carrying amount of an asset or asset group exceeds the sum of the undiscounted future cash flows expected to result from the continued use and eventual disposition of the asset or asset group. The impairment loss would be measured as the amount by which the carrying amount of the asset exceeds its recoverable amount, which is the higher of the discounted cash flows from the continued use and eventual disposition of the asset or the net selling price at disposition.

j. Retirement and Pension Plans — The employees' retirement benefits programs of the Company and certain subsidiaries consist of an unfunded lump-sum severance payment plan, a defined benefit pension plan and a defined contribution pension plan as described in Note 7.

The Group accounted for the liability for retirement benefits based on the projected benefit obligations and plan assets at the consolidated balance sheet date.

k. Allowance for Doubtful Accounts — The allowance for doubtful accounts is stated in amounts considered to be appropriate based on the Group's past credit loss experience and an evaluation of potential losses in the receivables outstanding.

l. Asset Retirement Obligations — An asset retirement obligation is recorded for a legal obligation imposed either by law or contract that results from the acquisition, construction, development and normal operation of a tangible fixed asset and is associated with the retirement of such tangible fixed asset. The asset retirement obligation is recognized as the sum of the discounted cash flows required for the future asset retirement and is recorded in the period in which the obligation is incurred if a reasonable estimate can be made. If a reasonable estimate of the asset retirement obligation cannot be made in the period the asset retirement obligation is incurred, the liability should be recognized when a reasonable estimate of the asset retirement obligation can be made. Upon initial recognition of a liability for an asset retirement obligation, an asset retirement cost is capitalized by increasing the carrying amount of the related fixed asset by the amount of the liability. The asset retirement cost is subsequently allocated to expense through depreciation over the remaining useful life of the asset. Over time, the liability is accreted to its present value each period. Any subsequent revisions to the timing or the amount of the original estimate of undiscounted cash flows are reflected as an adjustment to the carrying amount of the liability and the capitalized amount of the related asset retirement cost.

m. Research and Development Costs — Research and development costs are charged to income as incurred.

n. Leases — Finance lease transactions are capitalized by recognizing lease assets and lease obligations in the balance sheet.

o. Income Taxes — The provision for income taxes is computed based on the pretax income included in the consolidated statement of income. The asset and liability approach is used to recognize deferred tax assets and liabilities for the expected future tax consequences of temporary differences between the carrying amounts and the tax bases of assets and liabilities. Deferred taxes are measured by applying currently enacted income tax rates to the temporary differences.

The Company applied ASBJ Guidance No. 26, "Guidance on Recoverability of Deferred Tax Assets," effective April 1, 2016. There was no impact from this for the year ended March 31, 2017.

p. Foreign Currency Transactions — All short-term and long-term

monetary receivables and payables denominated in foreign currencies are translated into Japanese yen at the exchange rates at the consolidated balance sheet date. The foreign exchange gains and losses from translation are recognized in the consolidated statement of income to the extent that they are not hedged by forward exchange contracts.

q. Foreign Currency Financial Statements — The balance sheet accounts of the consolidated foreign subsidiaries are translated into Japanese yen at the current exchange rate as of the balance sheet date except for equity, which is translated at the historical rate. Differences arising from such translation are shown as "Foreign currency translation adjustments" under accumulated other comprehensive income in a separate component of equity. Revenue and expense accounts of consolidated foreign subsidiaries are translated into Japanese yen at the average exchange rate.

r. Derivative and Hedging Activities — The Group uses derivative financial instruments to manage its exposures to fluctuations in foreign currency exchange rates. Foreign exchange forward contracts, nondeliverable forwards and currency options are utilized by the Group to reduce foreign currency exchange rate risks. The Group does not enter into derivatives for trading or speculative purposes.

Derivative financial instruments are classified and accounted for as follows: (1) all derivatives are recognized as either assets or liabilities and measured at fair value, and gains or losses on derivative transactions are recognized in the consolidated statement of income; and (2) for derivatives used for hedging purposes, if such derivatives qualify for hedge accounting because of high correlation and effectiveness between the hedging instruments and the hedged items, gains or losses on derivatives are deferred until maturity of the hedged transactions.

Foreign currency forward contracts are utilized to hedge foreign currency exposures in collection of purchases and payments of royalties. Payables denominated in foreign currencies are translated at the contracted rates if the forward contracts qualify for hedge accounting.

s. Per Share Information — Basic net income per share is computed by dividing net income attributable to common shareholders by the weighted-average number of common shares outstanding for the period, retroactively adjusted for stock splits.

Cash dividends per share presented in the accompanying consolidated statement of income are dividends applicable to the respective fiscal years, including dividends to be paid after the end of the year.

t. Accounting Changes and Error Corrections — Under ASBJ Statement No. 24, "Accounting Standard for Accounting Changes and Error Corrections," and ASBJ Guidance No. 24, "Guidance on Accounting Standard for Accounting Changes and Error Corrections," accounting treatments are required as follows: (1) Changes in Accounting Policies – When a new accounting policy is applied following revision of an accounting standard, the new policy is applied retrospectively unless the revised accounting standard includes specific transitional provisions, in which case the entity shall comply with the specific transitional provisions. (2) Changes in Presentation – When the presentation of financial statements is changed, prior-period financial statements are reclassified in accordance with the new presentation. (3) Changes in Accounting Estimates – A change in an accounting estimate is accounted for in the period of the change if the change affects that period only, and is accounted for prospectively if the change affects both the period of the change and future periods. (4) Corrections of Prior-Period Errors – When an error in prior-period financial statements is discovered, those statements are restated.

3 MARKETABLE AND INVESTMENT SECURITIES

Marketable and investment securities as of March 31, 2017 and 2016, consisted of the following:

	Millions of Yen		Thousands of U.S. Dollars
	2017	**2016**	**2017**
Current:			
Trust beneficiary rights	**¥ 2,000**	¥ 2,000	**$ 17,857**
Certificates of deposit		723	
Other securities		6,998	
Noncurrent:			
Nonmarketable equity securities	**¥ 2**	¥ 2	**$ 17**

The cost and aggregate fair values of marketable and investment securities at March 31, 2017 and 2016, were as follows:

	Millions of Yen				Thousands of U.S. Dollars			
	Cost	Unrealized Gains	Unrealized Losses	Fair Value	Cost	Unrealized Gains	Unrealized Losses	Fair Value
March 31, 2017								
Securities classified as:								
Held-to-maturity	**¥ 2,000**			**¥ 2,000**	**$ 17,857**			**$ 17,857**
March 31, 2016								
Securities classified as:								
Available-for-sale:								
Debt securities and other	¥ 723			¥ 723				
Held-to-maturity	8,998	¥ 1		8,999				

4 INVENTORIES

Inventories at March 31, 2017 and 2016, consisted of the following:

	Millions of Yen		Thousands of U.S. Dollars
	2017	**2016**	**2017**
Finished products and merchandise	**¥ 4,032**	¥ 3,822	**$ 36,000**
Work in process	**459**	331	**4,098**
Raw materials and supplies	**970**	946	**8,660**
Total	**¥ 5,462**	¥ 5,100	**$ 48,767**

5 LONG-LIVED ASSETS

Impairment Loss

The impairment losses of long-lived assets for the years ended March 31, 2017 and 2016, were as follows:

March 31, 2017		Millions of Yen					
		Asset Type and Impairment Loss					
Utilization	Location	Building and Structures	Machinery, Equipment and Vehicles	Tools, Furniture and Fixtures	Land	Goodwill	Total
Property to be sold (Production facilities)	Otsu City, Shiga Pref.	**¥ 131**	**¥ 5**	**¥ 9**	**¥ 1**		**¥ 148**
Property to be sold (Bachelors' dormitory)	Otsu City, Shiga Pref.	**16**		**0**	**34**		**51**
Idle property	Yokkaichi city, Mie Pref.				**286**		**286**
Goodwill						**¥ 181**	**181**
Total		**¥ 148**	**¥ 5**	**¥ 9**	**¥ 322**	**¥ 181**	**¥ 667**

March 31, 2016		Millions of Yen				
		Asset Type and Impairment Loss				
Utilization	Location	Building and Structures	Machinery, Equipment and Vehicles	Tools, Furniture and Fixtures	Dismantling Cost	Total
Idle property	Otsu City, Shiga Pref.	¥ 209	¥ 0	¥ 8	¥ 63	¥ 281
Total		¥ 209	¥ 0	¥ 8	¥ 63	¥ 281

March 31, 2017		Thousands of U.S. Dollars					
		Asset Type and Impairment Loss					
Utilization	Location	Building and Structures	Machinery, Equipment and Vehicles	Tools, Furniture and Fixtures	Land	Goodwill	Total
Property to be sold (Production facilities)	Otsu City, Shiga Pref.	**$ 1,169**	**$ 44**	**$ 80**	**$ 8**		**$ 1,321**
Property to be sold (Bachelors' dormitory)	Otsu City, Shiga Pref.	**142**		**0**	**303**		**455**
Idle property	Yokkaichi city, Mie Pref.				**2,553**		**2,553**
Goodwill						**$ 1,616**	**1,616**
Total		**$ 1,321**	**$ 44**	**$ 80**	**$ 2,875**	**$ 1,616**	**$ 5,955**

① Reason for recognizing impairment loss

The Company recognized an impairment loss on property to be sold with net recoverable value was less than its carrying value as of March 31, 2017 due to the resolution of the Board of Directors of the Company on December 15, 2016. The Company recognized an impairment loss on idle assets that were not likely to be used in the future as of March 31, 2017 and 2016. As for the goodwill, the performance of Takara Bio Europe AB ("TBEAB"), a subsidiary of the Company, has been below the plan formulated at the time of acquisition in recent years. Based on the decline profitability of TBEAB, the Company recognized an impairment loss for on amount of March 31, 2017.

In the fiscal year ended March 31, 2016, the Company moved its headquarters from Otsu City to Kusatsu City, Shiga Prefecture. The Company recognized an impairment loss on unutilized assets of the former headquarters at Otsu City.

② Method of calculating recoverable amount

In the fiscal year ended March 31, 2017, as for the property to be sold, the recoverable values were measured at the net selling price, which was based on the expected selling price. As for the idle property, the recoverable values were measured at the net selling price, which was based on the appraisal value of real estate or reasonable estimation of the value of the assets. As for the goodwill, the recoverable amount was measured based on the value in use, and the discount rate used was 10.0%.

In the fiscal year ended March 31, 2016, recoverable amounts were measured based on value in use, which was considered zero because future cash flows were not expected.

6 SHORT-TERM BANK LOANS AND LONG-TERM DEBT

The interest rates for the Group's short-term bank loans ranged from 0% to 9.50% at March 31, 2016.
Long-term debt at March 31, 2017 and 2016, consisted of the following:

	Millions of Yen		Thousands of U.S. Dollars
	2017	2016	2017
Loans principally from banks and the local government, due serially to 2022 with interest rates ranging from 0% to 1.75% in 2017 and 0% to 1.75% in 2016:			
Collateralized	**¥ 102**	¥ 122	**$ 910**
Unsecured	**27**	55	**241**
Obligation under finance leases	**0**	1	**0**
Total	**130**	179	**1,160**
Less current portion	**48**	48	**428**
Long-term debt, less current portion	**¥ 82**	¥ 130	**$ 732**

Annual maturities of long-term debt as of March 31, 2017, for the next five years and thereafter were as follows:

Years Ending March 31	Millions of Yen	Thousands of U.S. Dollars
2018	¥ 48	$ 428
2019	20	178
2020	20	178
2021	20	178
2022	21	187
2023 and thereafter		
Total	¥ 130	$ 1,160

At March 31, 2017, buildings and structures of ¥304 million ($2,714 thousand); and land of ¥250 million ($2,232 thousand) were pledged as collateral for long-term debt (including current portion of long-term debt) of ¥102 million ($910 thousand).

7 RETIREMENT AND PENSION PLANS

The Company and certain foreign subsidiaries have severance payment plans for employees.

The Company and the subsidiaries have lump-sum payment plans and defined benefit corporate pension plans. The Company implemented a defined contribution pension plan in October 2012, by which the former severance lump-sum payment plan was partially terminated, and applied ASBJ Guidance No. 1, "Accounting Standard for Transfer between Retirement Benefit Plans." As a result of this transfer, the Company has lump-sum payment plans, defined benefit corporate pension plans and defined contribution pension plans. Under the lump-sum payment plans, employees terminating their employment are entitled to certain lump-sum severance payments based on their rate of pay at the time of termination, length of service and certain other factors. Under the defined benefit corporate pension plans, employees terminating their employment are entitled to certain lump-sum severance payments or pension payments based on their rate of pay at the time of termination, length of service and certain other factors. In most circumstances, if the termination is involuntary, caused by retirement at the mandatory retirement age or caused by death, employees are entitled to greater payments than in the case of voluntary termination.

Some subsidiaries apply the simplified method to calculate liabilities for retirement benefits and retirement benefit costs.

Year Ended March 31, 2017

(1) The changes in defined benefit obligation for the year ended March 31, 2017, were as follows:

	Millions of Yen	Thousands of U.S. Dollars
Balance at beginning of year	¥ 1,008	$ 9,000
Current service cost	78	696
Interest cost	8	71
Actuarial losses	181	1,616
Benefits paid	(55)	(491)
Others	(4)	(35)
Balance at end of year	¥ 1,216	$ 10,857

(2) The changes in plan assets for the year ended March 31, 2017, were as follows:

	Millions of Yen	Thousands of U.S. Dollars
Balance at beginning of year	¥ 593	$ 5,294
Expected return on plan assets	10	89
Actuarial losses	(28)	(250)
Contributions from the employer	92	821
Benefits paid	(29)	(258)
Others	(3)	(26)
Balance at end of year	¥ 635	$ 5,669

(3) Reconciliation between the liability recorded in the consolidated balance sheet and the balances of defined benefit obligation and plan assets for the year ended March 31, 2017, was as follows:

	Millions of Yen	Thousands of U.S. Dollars
Funded defined benefit obligation	¥ 595	$ 5,312
Plan assets	(635)	(5,669)
Total	(39)	(348)
Unfunded defined benefit obligation	622	5,553
Net liability arising from defined benefit obligation	¥ 582	$ 5,196
Liability for retirement benefits	¥ 622	$ 5,553
Asset for retirement benefits	(40)	(357)
Net liability arising from defined benefit obligation	¥ 582	$ 5,196

(4) The components of net periodic benefit costs for the year ended March 31, 2017, were as follows:

	Millions of Yen	Thousands of U.S. Dollars
Service cost	¥ 78	$ 696
Interest cost	8	71
Expected return on plan assets	(10)	(89)
Recognized actuarial losses	63	562
Amortization of prior service cost	(26)	(232)
Net periodic benefit costs	¥ 113	$ 1,008

(5) Amounts recognized in other comprehensive income (before income tax effect) in respect of defined retirement benefit plans for the year ended March 31, 2017, were as follows:

	Millions of Yen	Thousands of U.S. Dollars
Prior service cost	¥ (26)	$ (232)
Actuarial losses	(145)	(1,294)
Total	¥ (172)	$ (1,535)

(6) Amounts recognized in accumulated other comprehensive income (before income tax effect) in respect of defined retirement benefit plans as of March 31, 2017, were as follows:

	Millions of Yen	Thousands of U.S. Dollars
Unrecognized prior service cost	**¥ 107**	**$ 955**
Unrecognized actuarial losses	**(537)**	**(4,794)**
Total	**¥ (429)**	**$ (3,830)**

(7) Plan assets

a. Components of plan assets

Plan assets as of March 31, 2017, consisted of the following:

Debt investments	**54%**
General account of insurance company	**28**
Equity investments	**14**
Cash and cash equivalents	**1**
Others	**3**
Total	**100%**

b. Method of determining the expected rate of return on plan assets

The expected rate of return on plan assets is determined considering the long-term rates of return which are expected currently and in the future from the various components of the plan assets.

(8) Assumptions used for the year ended March 31, 2017, were set forth as follows:

Discount rate:	
Defined benefit	**0.377%**
Lump sum pension distribution	**0.382%**
Expected rate of return on plan assets	**2.000%**
Average rate of increase in salary	**4.200%**

(9) Contributions paid to the defined contribution pension plan were ¥106 million ($946 thousand) for the year ended March 31, 2017.

Year Ended March 31, 2016

(1) The changes in defined benefit obligation for the year ended March 31, 2016, were as follows:

	Millions of Yen
Balance at beginning of year	¥ 958
Current service cost	81
Interest cost	8
Actuarial gains	(13)
Benefits paid	(20)
Others	(5)
Balance at end of year	¥ 1,008

(2) The changes in plan assets for the year ended March 31, 2016, were as follows:

	Millions of Yen
Balance at beginning of year	¥ 554
Expected return on plan assets	9
Actuarial losses	(51)
Contributions from the employer	93
Benefits paid	(9)
Others	(3)
Balance at end of year	¥ 593

(3) Reconciliation between the liability recorded in the consolidated balance sheet and the balances of defined benefit obligation and plan assets for the year ended March 31, 2016, was as follows:

	Millions of Yen
Funded defined benefit obligation	¥ 521
Plan assets	(593)
Total	(72)
Unfunded defined benefit obligation	487
Net liability arising from defined benefit obligation	¥ 415

Liability for retirement benefits	¥ 488
Asset for retirement benefits	(73)
Net liability arising from defined benefit obligation	¥ 415

(4) The components of net periodic benefit costs for the year ended March 31, 2016, were as follows:

	Millions of Yen
Service cost	¥ 81
Interest cost	8
Expected return on plan assets	(9)
Recognized actuarial losses	46
Amortization of prior service cost	(26)
Net periodic benefit costs	¥ 98

(5) Amounts recognized in other comprehensive income (before income tax effect) in respect of defined retirement benefit plans for the year ended March 31, 2016, were as follows:

	Millions of Yen
Prior service cost	¥ (26)
Actuarial gains	7
Total	¥ (18)

(6) Amounts recognized in accumulated other comprehensive income (before income tax effect) in respect of defined retirement benefit plans as of March 31, 2016, were as follows:

	Millions of Yen
Unrecognized prior service cost	¥ 133
Unrecognized actuarial losses	(391)
Total	¥ (257)

(7) Plan assets

a. Components of plan assets

Plan assets as of March 31, 2016, consisted of the following:

Debt investments	55%
General account of insurance company	28
Equity investments	13
Cash and cash equivalents	1
Others	3
Total	100%

b. Method of determining the expected rate of return on plan assets

The expected rate of return on plan assets is determined considering the long-term rates of return which are expected currently and in the future from the various components of the plan assets.

(8) Assumptions used for the year ended March 31, 2016, were set forth as follows:

Discount rate:	
Defined benefit	**0.9%**
Lump sum pension distribution	**1.0%**
Expected rate of return on plan assets	**2.0%**
Average rate of increase in salary	**4.1%**

(9) Contributions paid to the defined contribution pension plan were ¥103 million for the year ended March 31, 2016.

8 ASSET RETIREMENT OBLIGATIONS

The changes in asset retirement obligations for the years ended March 31, 2017 and 2016, were as follows:

	Millions of Yen		Thousands of U.S. Dollars
	2017	2016	2017
Balance at beginning of year	**¥ 35**	¥ 35	**$ 312**
Additional provisions associated with the acquisition of property, plant and equipment	**50**		**446**
Reconciliation associated with passage of time	**0**	0	**0**
Reversal	**(9)**		**(80)**
Balance at end of year	**¥ 75**	¥ 35	**$ 669**

9 EQUITY

Japanese companies are subject to the Companies Act of Japan (the "Companies Act"). The significant provisions in the Companies Act that affect financial and accounting matters are summarized below:

(a) Dividends

Under the Companies Act, companies can pay dividends at any time during the fiscal year in addition to the year-end dividend upon resolution at the shareholders' meeting. For companies that meet certain criteria including (1) having a Board of Directors, (2) having independent auditors, (3) having an Audit & Supervisory Board, and (4) the term of service of the directors being prescribed as one year rather than the normal two-year term by its articles of incorporation, the Board of Directors may declare dividends (except for dividends-in-kind) at any time during the fiscal year if the company has prescribed so in its articles of incorporation. However, the Company does not meet all the above criteria.

The Companies Act permits companies to distribute dividends-in-kind (non-cash assets) to shareholders subject to a certain limitation and additional requirements.

Semiannual interim dividends may also be paid once a year upon resolution by the Board of Directors if the articles of incorporation of the company so stipulate. The Companies Act provides certain limitations on the amounts available for dividends or the purchase of treasury stock. The limitation is defined as the amount available for distribution to the shareholders, but the amount of net assets after dividends must be maintained at no less than ¥3 million.

(b) Increases/Decreases and Transfer of Common Stock, Reserve and Surplus

The Companies Act requires that an amount equal to 10% of dividends must be appropriated as a legal reserve (a component of retained earnings) or as additional paid-in capital (a component of capital surplus), depending on the equity account charged upon the payment of such dividends, until the aggregate amount of legal reserve and additional paid-in capital equals 25% of the common stock. Under the Companies Act, the total amount of additional paid-in capital and legal reserve may be reversed without limitation. The Companies Act also provides that common stock, legal reserve, additional paid-in capital, other capital surplus and retained earnings can be transferred among the accounts within equity under certain conditions upon resolution of the shareholders.

(c) Treasury Stock and Treasury Stock Acquisition Rights

The Companies Act also provides for companies to purchase treasury stock and dispose of such treasury stock by resolution of the Board of Directors. The amount of treasury stock purchased cannot exceed the amount available for distribution to the shareholders, which is determined by a specific formula. Under the Companies Act, stock acquisition rights are presented as a separate component of equity. The Companies Act also provides that companies can purchase both treasury stock acquisition rights and treasury stock. Such treasury stock acquisition rights are presented as a separate component of equity or deducted directly from stock acquisition rights.

10 RELATED PARTY DISCLOSURES

The Company is majority-owned by Takara Holdings Inc., which is listed on the first section of the Tokyo Stock Exchange.

11 RESEARCH AND DEVELOPMENT COSTS

Research and development costs charged to income were ¥4,101 million ($36,616 thousand) and ¥4,275 million for the years ended March 31, 2017 and 2016, respectively.

12 INCOME TAXES

The Company and its domestic subsidiaries are subject to Japanese national and local income taxes, which, in the aggregate, resulted in normal effective statutory tax rates of approximately 31% and 33% for the years ended March 31, 2017 and 2016, respectively. Foreign subsidiaries are subject to income taxes of the countries where they operate.

The tax effects of significant temporary differences and tax loss carryforwards, which resulted in deferred tax assets and liabilities at March 31, 2017 and 2016, are as follows:

	Millions of Yen		Thousands of U.S. Dollars
	2017	2016	2017
Deferred tax assets:			
Inventories	**¥ 222**	¥ 195	**$ 1,982**
Unrealized profit on sales of inventories	**208**	175	**1,857**
Accrued bonuses	**130**	58	**1,160**
Retirement benefits	**45**	47	**401**
Reconciliation related to retirement benefits	**128**	77	**1,142**
Depreciation	**43**	43	**383**
Impairment loss	**334**	192	**2,982**
Tax loss carryforwards	**354**	463	**3,160**
Expenses incurred upon acquisition	**289**		**2,580**
Other	**242**	310	**2,160**
Less valuation allowance	**(1,421)**	(1,008)	**(12,687)**
Deferred tax assets	**¥ 577**	¥ 557	**$ 5,151**
Deferred tax liabilities:			
Goodwill	**¥ 238**	¥ 248	**$ 2,125**
Undistributed profit of foreign subsidiaries	**194**	194	**1,732**
Other	**75**	87	**669**
Deferred tax liabilities	**¥ 509**	¥ 530	**$ 4,544**
Net deferred tax assets	**¥ 68**	¥ 26	**$ 607**

A reconciliation between the normal effective statutory tax rates and the actual effective tax rates reflected in the accompanying consolidated statement of income for the years ended March 31, 2017 and 2016, is as follows:

	2017	2016
Normal effective statutory tax rate in Japan	**31.0%**	33.0%
Expenses not deductible for income tax purposes	**0.5**	0.6
Valuation allowance	**12.2**	7.1
Per capita rate of local tax	**0.4**	0.3
Tax rate difference of subsidiaries	**(1.2)**	(4.1)
Elimination of unrealized profit on sales of inventories	**1.4**	1.1
Tax credit	**(2.2)**	(1.0)
Goodwill depreciation	**1.8**	2.1
Goodwill impairment loss	**2.0**	
Foreign withholding tax	**5.0**	6.2
Income taxes for prior periods		6.2
Reconciliation of transfer pricing	**0.5**	1.5
Other, net	**0.3**	0.9
Actual effective tax rate	**51.7%**	53.9%

At March 31, 2017, the Company and certain subsidiaries have tax loss carryforwards aggregating approximately ¥1,181 million ($10,544 thousand) which are available to be offset against taxable income of the Company and such subsidiaries in future years. A portion of these tax loss carryforwards, if not utilized, will expire as follows:

Years Ending March 31	Millions of Yen	Thousands of U.S. Dollars
2018	¥ 131	**$ 1,169**
2019	106	**946**
2020	86	**767**
2021		
2022	55	**491**
2023	217	**1,937**
2024	40	**357**
2025 and thereafter	135	**1,205**
Total	¥ 772	**$ 6,892**

13 LEASES

The Group leases certain machinery, computer equipment and other assets.

Total rental expense for the years ended March 31, 2017 and 2016, was ¥421 million ($3,758 thousand) and ¥431 million, respectively.

The minimum rental commitments under noncancelable operating leases at March 31, 2017, were as follows:

	Millions of Yen	Thousands of U.S. Dollars
Due within one year	¥ 208	$ 1,857
Due after one year	355	3,169
Total	¥ 564	$ 5,035

14 FINANCIAL INSTRUMENTS AND RELATED DISCLOSURES

(1) Group policy for financial instruments

Cash surpluses, if any, are invested in low-risk financial assets. Derivatives are used, not for speculative purposes, but to hedge foreign currency exchange rate risk associated with certain assets and liabilities denominated in foreign currencies.

(2) Nature and extent of risks arising from financial instruments

Receivables such as trade notes and trade accounts are exposed to customer credit risk. Although receivables in foreign currencies are exposed to the market risk of fluctuation in foreign currency exchange rates, the position, net of payables in foreign currencies, is hedged by using forward foreign currency contracts.

Marketable and investment securities, mainly held-to-maturity securities, are exposed to the issuer's credit risk.

Payment terms of payables, such as trade notes and trade accounts, are generally within three months. Although payables in foreign currencies are exposed to the market risk of fluctuation in foreign currency exchange rates, those risks are netted against the balance of receivables denominated in the same foreign currency and are hedged by foreign currency contracts as noted above.

Maturities of bank loans are less than 5 years after the balance sheet date.

Derivatives mainly include forward foreign currency contracts, nondeliverable forwards and currency options which are used to hedge foreign exchange risk associated with certain assets and liabilities denominated in foreign currencies. Please see Note 15 for more details about derivatives.

(3) Risk management for financial instruments

Credit risk management

Credit risk is the risk of economic loss arising from a counterparty's failure to repay or service debt according to the contractual terms. The Group manages its credit risk from receivables on the basis of internal guidelines, which include monitoring of payment terms and balances of major customers by each business administration department to identify the default risk of customers at an early stage. With respect to held-to-maturity financial investments, the Group manages exposure to credit risk by limiting investments to high credit rated bonds in accordance with its internal guidelines.

Market risk management
(foreign exchange risk and interest rate risk)

Foreign currency trade receivables and payables are exposed to market risk resulting from fluctuations in foreign currency exchange rates. Such foreign exchange risk is hedged principally by forward foreign currency contracts.

Since interest rates for loans are fixed, there is no market risk from changes in interest rates.

Derivative transactions are performed and managed with the approval of the prescribed authority based on the internal guidelines.

Liquidity risk management

Liquidity risk comprises the risk that the Group cannot meet its contractual obligations in full on their maturity dates. The Group manages its liquidity risk by holding adequate volumes of liquid assets, along with adequate financial planning by the corporate treasury department.

(4) Fair values of financial instruments

Fair values of financial instruments are based on quoted prices in active markets. If a quoted price is not available, another rational valuation technique is used instead.

(a) Fair value of financial instruments

	Millions of Yen		
March 31, 2017	Carrying Amount	Fair Value	Unrealized Gain (Loss)
Cash and cash equivalents	**¥ 22,200**	**¥ 22,200**	
Time deposits	**5,877**	**5,877**	
Notes and accounts receivable - trade	**7,455**	**7,455**	
Allowance for doubtful accounts	**(30)**	**(30)**	
Marketable securities	**2,000**	**2,000**	
Total	**¥ 37,503**	**¥ 37,503**	
Notes and accounts payable - trade	**¥ 1,944**	**¥ 1,944**	
Current portion of long-term debt	**48**	**48**	**¥ (0)**
Notes and accounts payable - Construction and other	**2,054**	**2,054**	
Accrued income taxes	**375**	**375**	
Long-term debt	**82**	**85**	**(2)**
Total	**¥ 4,505**	**¥ 4,507**	**¥ (2)**
Derivatives (*)	**¥ (3)**	**¥ (3)**	

	Millions of Yen		
March 31, 2016	Carrying Amount	Fair Value	Unrealized Gain (Loss)
Cash and cash equivalents	¥ 5,568	¥ 5,568	
Time deposits	13,815	13,815	
Notes and accounts receivable - trade	6,830	6,830	
Allowance for doubtful accounts	(41)	(41)	
Marketable securities	9,721	9,723	¥ 1
Total	¥ 35,894	¥ 35,895	¥ 1
Short-term bank loans	¥ 16	¥ 16	
Notes and accounts payable - trade	1,690	1,690	
Current portion of long-term debt	48	48	¥ (0)
Notes and accounts payable - Construction and other	1,526	1,526	
Accrued income taxes	515	515	
Long-term debt	130	133	(3)
Total	¥ 3,929	¥ 3,932	¥ (3)
Derivatives (*)	¥ (4)	¥ (4)	

	Thousands of U.S. Dollars		
March 31, 2017	Carrying Amount	Fair Value	Unrealized Gain (Loss)
Cash and cash equivalents	**$ 198,214**	**$ 198,214**	
Time deposits	**52,473**	**52,473**	
Notes and accounts receivable - trade	**66,562**	**66,562**	
Allowance for doubtful accounts	**(267)**	**(267)**	
Marketable securities	**17,857**	**17,857**	
Total	**$ 334,848**	**$ 334,848**	
Notes and accounts payable - trade	**$ 17,357**	**$ 17,357**	
Current portion of long-term debt	**428**	**428**	**$ (0)**
Notes and accounts payable - Construction and other	**18,339**	**18,339**	
Accrued income taxes	**3,348**	**3,348**	
Long-term debt	**732**	**758**	**(17)**
Total	**$ 40,223**	**$ 40,241**	**$ (17)**
Derivatives (*)	**$ (26)**	**$ (26)**	

Note: *Assets and liabilities arising from derivative transactions are shown at net value with amounts in parentheses representing the net liability position.

Cash and cash equivalents, time deposits, and notes and accounts receivables - trade
The carrying values of cash and cash equivalents, time deposits, and notes and accounts receivable - trade approximate fair value because of their short maturities.

Marketable and investment securities
The fair values of marketable and investment securities are measured at the quoted price obtained from the financial institution for certain debt instruments. The carrying values of certificates of deposit approximate fair value because of their short maturities. Fair value information for marketable and investment securities by classification is included in Note 3.

Notes and accounts payable (trade and construction and other) and accrued income taxes
The carrying values of notes and accounts payable and accrued income taxes approximate fair value because of their short maturities.

Short-term bank loans, current portion of long-term debt and long-term debt
The fair values of short-term bank loans, current portion of long-term debt and long-term debt are determined by discounting the cash flows related to the debt at the Group's assumed corporate borrowing rate.

Derivatives
Fair value information for derivatives is included in Note 15.

(b) Carrying amount of financial instruments whose fair value cannot be reliably determined

	Millions of Yen		Thousands of U.S. Dollars
	2017	2016	2017
Nonmarketable equity securities	**¥ 2**	¥ 2	**$ 17**
Total	**¥ 2**	¥ 2	**$ 17**

Since nonmarketable equity securities do not have a quoted market price in an active market and their fair value cannot be reliably determined, they are excluded from disclosure of fair value.

(5) Maturity analysis for financial assets and securities with contractual maturities

	Millions of Yen			
March 31, 2017	Due in 1 Year or Less	Due after 1 Year through 5 Years	Due after 5 Years through 10 Years	Due after 10 Years
Cash and cash equivalents	**¥ 22,200**			
Time deposits	**5,877**			
Notes and accounts receivable - trade	**7,455**			
Marketable securities	**2,000**			
Total	**¥ 37,534**			

	Thousands of U.S. Dollars			
March 31, 2017	Due in 1 Year or Less	Due after 1 Year through 5 Years	Due after 5 Years through 10 Years	Due after 10 Years
Cash and cash equivalents	**$ 198,214**			
Time deposits	**52,473**			
Notes and accounts receivable - trade	**66,562**			
Marketable securities	**17,857**			
Total	**$ 335,125**			

Please see Note 6 for annual maturities of long-term debt.

15 DERIVATIVES

The Group enters into foreign currency forward contracts, nondeliverable forwards and currency options to hedge foreign currency exchange rate risk associated with certain assets and liabilities denominated in foreign currencies.

All derivative transactions are entered into to hedge foreign currency exposures incorporated within the Group's business. Accordingly, market risk in these derivatives is basically offset by opposite movements in the value of hedged assets and liabilities.

Because the counterparties to these derivatives are limited to major international financial institutions, the Group does not anticipate any losses arising from credit risk.

Derivative transactions entered into by the Group have been made in accordance with internal policies of the Finance Department, which regulate the authorization, purposes, credit limit amount, evaluation of the counterparties and reporting procedures.

Foreign currency forward contracts that qualify for hedge accounting are excluded from the disclosure of market value information.

Derivative Transactions to Which Hedge Accounting Is Not Applied

		Millions of Yen			
At March 31, 2017		Contract Amount	Contract Amount Due after One Year	Fair Value	Unrealized Gain (Loss)
Foreign currency forward contracts:					
Buying	USD	**¥ 422**		**¥ (3)**	**¥ (3)**
	GBP	**22**		**0**	**0**
	AUD	**0**		**(0)**	**(0)**
Selling	EUR	**48**		**0**	**0**
Nondeliverable forward:					
Selling	KRW	**2**		**(0)**	**(0)**
Currency option: (*)					
Selling and buying	KRW	**28**		**(1)**	**(1)**

		Millions of Yen			
At March 31, 2016		Contract Amount	Contract Amount Due after One Year	Fair Value	Unrealized Gain (Loss)
Foreign currency forward contracts:					
Buying	USD	¥ 239		¥ (2)	¥ (2)
Selling	EUR	107		(0)	(0)
	CNY	51		(0)	(0)
Nondeliverable forward:					
Selling	KRW	47		(1)	(1)

		Thousands of U.S. Dollars			
At March 31, 2017		Contract Amount	Contract Amount Due after One Year	Fair Value	Unrealized Gain (Loss)
Foreign currency forward contracts:					
Buying	USD	**$ 3,767**		**$ (26)**	**$ (26)**
	GBP	**196**		**0**	**0**
	AUD	**0**		**(0)**	**(0)**
Selling	EUR	**428**		**0**	**0**
Nondeliverable forward:					
Selling	KRW	**17**		**(0)**	**(0)**
Currency option: (*)					
Selling and buying	KRW	**250**		**(8)**	**(8)**

Note: *The currency option contracts are zero-cost option contracts. With respect to the zero-cost option contracts, the call option and put option are shown in aggregate as they are set in one contract.

Derivative Transactions to Which Hedge Accounting is Applied

		Millions of Yen			
At March 31, 2017		Hedged Item	Contract Amount	Contract Amount Due after One Year	Fair Value
Foreign currency forward contracts:					
Buying	EUR	**Payables**	**¥ 3**		**¥ (0)**
	USD	**Payables**	**38**		**(0)**

		Millions of Yen			
At March 31, 2016		Hedged Item	Contract Amount	Contract Amount Due after One Year	Fair Value
Foreign currency forward contracts:					
Buying	EUR	Payables	¥ 3		¥ (0)
	USD	Payables	43		(0)

		Thousands of U.S. Dollars			
At March 31, 2017		Hedged Item	Contract Amount	Contract Amount Due after One Year	Fair Value
Foreign currency forward contracts:					
Buying	EUR	**Payables**	**$ 26**		**$ (0)**
	USD	**Payables**	**339**		**(0)**

The fair value of derivative transactions is measured at the quoted price obtained from the financial institution.

16 OTHER COMPREHENSIVE INCOME (LOSS)

The components of other comprehensive income (loss) for the years ended March 31, 2017 and 2016, were as follows:

	Millions of Yen		Thousands of U.S. Dollars
	2017	2016	2017
Foreign currency translation adjustments:			
Adjustments arising during the year	**¥ (1,091)**	¥ (672)	**$ (9,741)**
Total	**¥ (1,091)**	¥ (672)	**$ (9,741)**
Defined retirement benefits plans:			
Adjustments arising during the year	**¥ (209)**	¥ (38)	**$ (1,866)**
Reclassification adjustments to profit	**36**	19	**321**
Amount before income tax effect	**(172)**	(18)	**(1,535)**
Total	**¥ (172)**	¥ (18)	**$ (1,535)**
Total other comprehensive income	**¥ (1,264)**	¥ (691)	**$ (11,285)**

17 NET INCOME PER SHARE

Reconciliation of the differences between basic net income per share ("EPS") for the years ended March 31, 2017 and 2016, is as follows:

	Millions of Yen	Thousands of Shares	Yen	U.S. Dollars
For the year ended March 31, 2017:	Net Income Attributable to Owners of the Parent	Weighted-Average Shares	EPS	
Basic EPS				
Net income available to common shareholders	**¥ 1,352**	**120,415**	**¥ 11.24**	**$ 0.10**
For the year ended March 31, 2016:				
Basic EPS				
Net income available to common shareholders	¥ 1,334	120,415	¥ 11.08	

Diluted net income per share is not disclosed because no dilutive securities are outstanding for the years ended March 31, 2017 and 2016.

18 SUBSEQUENT EVENTS

Significant Subsequent Events

(Company Acquisition by Acquisition of Shares)

On May 13, 2016, the Board of Directors of the Company resolved that Takara Bio USA Holdings Inc. ("TBUSH"), a wholly owned subsidiary of the Company, would acquire all shares of WaferGen Bio-systems, Inc. ("WaferGen"), and TBUSH entered into a merger agreement with WaferGen on the same day. Based on the agreement, TBUSH completed the acquisition on February 28, 2017 (US Pacific Standard Time). The fiscal year-end of TBUSH is December 31.

1. Reason for the share acquisition

The Group supplies research reagents, scientific instruments, and contracted services to biotechnology researchers. Specifically, the Group focuses on development of reagent kits for next generation sequencers and reagent kits using SMART technology which efficiently amplifies genes from micro amounts of RNA samples under the brand name of Clontech®. Currently, the Group is developing reaction reagents optimized for automatic analysis devices targeted for use in the clinical field.

WaferGen provides devices and reagent kits for single-cell analysis, and their unique massively-parallel qPCR device for small amount samples, to biotechnology companies, pharmaceutical companies and clinical laboratories.

The Group expects synergies and increased sales of equipment and single-cell reagent kits from the combination of WaferGen technology including single-cell analysis and molecular biotechnology of the Group.

2. Outline of the business combination

(1) Name of to be acquired company
WaferGen Bio-systems, Inc.

(2) Name of counterparty to acquire shares
Affiliates of Sabby Management, LLC and other shareholders.

(3) Business description
Manufacturing and sales of research reagents and equipment

(4) Consolidated financial position as of December 31, 2016 and consolidated operating results for the year then ended

	Thousands of U.S. Dollars
Common stock and preferred stock	**$ 123,716**
Net assets	**49**
Total assets	**10,980**
Revenue	**10,733**
Operating loss	**(16,304)**

(5) Date of business combination
February 28, 2017 (US Pacific Standard Time)

(6) Legal form of business combination
Acquisition of shares

(7) Name of the acquired company after the combination
WaferGen Bio-systems, Inc.
WaferGen merged with Takara Bio USA, Inc., a wholly owned subsidiary of TBUSH, on May 31, 2017 (US Pacific Standard Time).

(8) Ratio of voting rights acquired
100%

(9) Basis for determining the acquiring company
It is based on the fact that TBUSH acquired 100% of voting rights by means of share acquisition in consideration for cash.

3. Number and acquisition price of the shares to be acquired, and the ownership ratio after the acquisition

(1) Number of shares held before the acquisition
- shares (Number of voting rights: -)

(2) Number of shares acquired
Common stock: 3,798,112 shares
(Number of voting rights: 3,798,112)

(3) Number of shares to be held after the acquisition
Common stock: 3,798,112 shares
(Number of voting rights: 3,798,112,
Ownership ratio: 100%)

4. Fundraising method

The transaction was funded by the Group's funds on hand.

5. Acquisition cost of the acquired company and related details of each class of consideration for acquisition

		Thousands of U.S. Dollars
Consideration for acquisition	Cash	**$ 35,908**
Acquisition cost		**$ 35,908**

6. Major acquisition-related costs

	Thousands of U.S. Dollars
Advisory fees and commissions	**$ 3,855**

7. Amount of goodwill, reason of goodwill, and method/period of amortization

Currently under review.

8. Details of assets acquired and liabilities assumed on the date of the business combination

Currently under review.

On December 15, 2016, the Board of Directors of the Company resolved that TBUSH would acquire all shares of Rubicon Genomics, Inc. ("Rubicon"). TBUSH completed the acquisition procedure on January 17, 2017 (US Pacific Standard Time).

1. Reason for the share acquisition

The Group is concentrating on developing next generation sequencing reagent kits that are used in a wide range of fields from basic research to industrial applications. As Rubicon joins the Group, the Group complements its sample preparation technology for ultra-trace DNA sequence analysis and sample preparation technology for ultra-trace RNA sequence analysis; therefore the Group will be able to provide a wide range of products and services in the field of ultra-trace nucleic acid analysis.

Additionally, the Group will be able to provide products and services to a wide range of fields from basic research to industrial application by adding WaferGen's pre-processing system for next generation sequence analysis.

2. Outline of the business combination

(1) Name of to be acquired company
Rubicon Genomics, Inc.

(2) Counterparties to acquire shares
Management of the acquired company and other shareholders.

(3) Business description
Manufacturing and sales of research reagents

(4) Consolidated financial position as of December 31, 2016 and consolidated operating results for the year then ended

	Thousands of U.S. Dollars
Common stock	**$ 13,249**
Net assets	**1,397**
Total assets	**4,940**
Revenue	**12,554**
Operating income	**2,127**

(5) Date of business combination
January 17, 2017 (US Pacific Standard Time)

(6) Legal form of business combination
Acquisition of shares

(7) Name of the acquired company after the combination
Rubicon Genomics, Inc.
Rubicon merged with Takara Bio USA, Inc., a wholly owned subsidiary of TBUSH, on March 31, 2017 (US Pacific Standard Time).

(8) Ratio of voting rights acquired
100%

(9) Basis for determining the acquiring company
It is based on the fact that TBUSH acquired 100% of voting rights by means of share acquisition in consideration for cash.

3. Number and acquisition price of the shares to be acquired, and the ownership ratio after the acquisition

(1) Number of shares held before the acquisition
- shares (Number of voting rights: -)

(2) Number of shares acquired
Common stock: 23,006,790 shares
(Number of voting rights: 23,006,790)

(3) Number of shares to be held after the acquisition
Common stock: 23,006,790 shares
(Number of voting rights: 23,006,790,
Ownership ratio: 100%)

4. Fundraising method

The transaction was funded by the Group's funds on hand.

5. Acquisition cost of the acquired company and related details of each class of consideration for acquisition

		Thousands of U.S. Dollars
Consideration for acquisition	Cash	**$ 74,426**
Acquisition cost		**$ 74,426**

6. Major acquisition-related costs

	Thousands of U.S. Dollars
Advisory fees and commissions	**$ 2,934**

7. Amount of goodwill, reason of goodwill, and method/period of amortization

Currently under review

8. Details of assets acquired and liabilities assumed on the date of the business combination

Currently under review

(Appropriations of Retained Earnings)

The following appropriation of retained earnings at March 31, 2017, was approved at the Company's shareholders' meeting held on June 23, 2017:

	Millions of Yen	Thousands of U.S. Dollars
Year-end cash dividends, ¥4.00 ($0.03) per share	**¥ 481**	**$ 4,294**

19 SEGMENT INFORMATION

Under ASBJ Statement No. 17, "Accounting Standard for Segment Information Disclosures," and ASBJ Guidance No. 20, "Guidance on Accounting Standard for Segment Information Disclosures," an entity is required to report financial and descriptive information about its reportable segments. Reportable segments are operating segments or aggregations of operating segments that meet specified criteria. Operating segments are components of an entity about which separate financial information is available and such information is evaluated regularly by the chief operating decisionmaker in deciding how to allocate resources and in assessing performance. Generally, segment information is required to be reported on the same basis as is used internally for evaluating operating segment performance and deciding how to allocate resources to operating segments.

(1) Description of reportable segments

The Group's reportable segments are those for which separate financial information is available, and regular evaluation by the Company's management is being performed in order to decide how resources are allocated among the Group. As such, the Group's reportable segments consist of Bioindustry, Gene Therapy and AgriBio segments.

The Bioindustry segment consists of the businesses for research reagents (for genetic engineering research, protein engineering research, cell biology research and glycobiology research), research instruments and services.

The Gene Therapy segment consists of the businesses for gene therapy-related products and services.

The AgriBio segment consists of the businesses for mushrooms, technical training of mushroom cultivation, ashitaba (a unique celery-like vegetable of the Angelica family), Agar, health food and cosmetics.

(2) Methods of measurement for the amounts of sales, profit (loss), assets and other items for each reportable segment

The accounting policies of each reportable segment are consistent with those disclosed in Note 2, "Summary of Significant Accounting Policies."

Segment income in the segment information below is based on operating income. Amounts of inter-segment transactions are based on the prevailing market prices.

(3) Information about sales, profit (loss), assets and other items

Millions of Yen

	2017					
	Bioindustry	Gene Therapy	AgriBio	Total	Reconciliations	Consolidated
Sales:						
Sales to external customers	**¥ 26,573**	**¥ 500**	**¥ 2,301**	**¥ 29,375**		**¥ 29,375**
Intersegment sales or transfers			**5**	**5**	**¥ (5)**	
Total	**¥ 26,573**	**¥ 500**	**¥ 2,307**	**¥ 29,380**	**¥ (5)**	**¥ 29,375**
Segment profit (loss)	**¥ 6,218**	**¥ (1,380)**	**¥ 104**	**¥ 4,942**	**¥ (1,739)**	**¥ 3,202**
Segment assets	**51,017**	**3,663**	**2,625**	**57,306**	**9,837**	**67,143**
Other:						
Depreciation	**1,165**	**331**	**101**	**1,598**	**123**	**1,722**
Amortization of goodwill	**162**			**162**		**162**
Increase in property, plant and equipment and intangible assets	**1,036**	**562**	**18**	**1,616**	**32**	**1,648**

Millions of Yen

	2016					
	Bioindustry	Gene Therapy	AgriBio	Total	Reconciliations	Consolidated
Sales:						
Sales to external customers	¥ 27,320		¥ 2,408	¥ 29,729		¥ 29,729
Intersegment sales or transfers			7	7	¥ (7)	
Total	¥ 27,320		¥ 2,416	¥ 29,736	¥ (7)	¥ 29,729
Segment profit (loss)	¥ 6,138	¥ (1,773)	¥ 110	¥ 4,475	¥ (1,808)	¥ 2,667
Segment assets	37,304	3,266	2,910	43,481	23,109	66,591
Other:						
Depreciation	1,177	304	102	1,584	103	1,687
Amortization of goodwill	181			181		181
Increase in property, plant and equipment and intangible assets	1,580	199	96	1,876	214	2,090

Thousands of U.S. Dollars

	2017					
	Bioindustry	Gene Therapy	AgriBio	Total	Reconciliations	Consolidated
Sales:						
Sales to external customers	**$ 237,258**	**$ 4,464**	**$ 20,544**	**$ 262,276**		**$ 262,276**
Intersegment sales or transfers			**44**	**44**	**$ (44)**	
Total	**$ 237,258**	**$ 4,464**	**$ 20,598**	**$ 262,321**	**$ (44)**	**$ 262,276**
Segment profit (loss)	**$ 55,517**	**$ (12,321)**	**$ 928**	**$ 44,125**	**$ (15,526)**	**$ 28,589**
Segment assets	**455,508**	**32,705**	**23,437**	**511,660**	**87,830**	**599,491**
Other:						
Depreciation	**10,401**	**2,955**	**901**	**14,267**	**1,098**	**15,375**
Amortization of goodwill	**1,446**			**1,446**		**1,446**
Increase in property, plant and equipment and intangible assets	**9,250**	**5,017**	**160**	**14,428**	**285**	**14,714**

Note: 1. Reconciliations of segment profit include unallocated operating expenses of ¥1,739 million ($15,526 thousand) and ¥1,808 million for the years ended March 31, 2017 and 2016, respectively, consisting principally of fundamental research and development expenses and administrative expenses incurred by the administrative and accounting departments of the Company.

(4) Information about products and services is as follows:

	Millions of Yen				Thousands of U.S. Dollars			
	2017							
	Bioindustry	Gene Therapy	AgriBio	Total	Bioindustry	Gene Therapy	AgriBio	Total
Sales to external customers	**¥ 26,573**	**¥ 500**	**¥ 2,301**	**¥ 29,375**	**$ 237,258**	**$ 4,464**	**$ 20,544**	**$ 262,276**

	Millions of Yen			
	2016			
	Bioindustry	Gene Therapy	AgriBio	Total
Sales to external customers	¥ 27,320		¥ 2,408	¥ 29,729

(5) Information about geographical areas is as follows:

(a) Sales

Millions of Yen						
2017						
Japan	USA	China	Asia (except for China)	Europe	Other	Total
¥ 14,561	**¥ 6,063**	**¥ 4,754**	**¥ 1,406**	**¥ 2,336**	**¥ 253**	**¥ 29,375**

Millions of Yen						
2016						
Japan	USA	China	Asia (except for China)	Europe	Other	Total
¥ 13,615	¥ 5,985	¥ 5,809	¥ 1,565	¥ 2,334	¥ 418	¥ 29,729

Thousands of U.S. Dollars						
2017						
Japan	USA	China	Asia (except for China)	Europe	Other	Total
$ 130,008	**$ 54,133**	**$ 42,446**	**$ 12,553**	**$ 20,857**	**$ 2,258**	**$ 262,276**

(b) Property, plant and equipment

Millions of Yen					
2017					
Japan	USA	China	Asia (except for China)	Europe	Total
¥ 16,947	**¥ 264**	**¥ 2,118**	**¥ 217**	**¥ 30**	**¥ 19,577**

Millions of Yen					
2016					
Japan	USA	China	Asia (except for China)	Europe	Total
¥ 17,496	¥ 287	¥ 2,468	¥ 248	¥ 34	¥ 20,534

Thousands of U.S. Dollars					
2017					
Japan	USA	China	Asia (except for China)	Europe	Total
$ 151,312	**$ 2,357**	**$ 18,910**	**$ 1,937**	**$ 267**	**$ 174,794**

(6) Information about impairment losses

	Millions of Yen				
	2017				
	Bioindustry	Gene Therapy	AgriBio	Reconciliations	Consolidated
Impairment loss	**¥ 384**			**¥ 283**	**¥ 667**

	Millions of Yen				
	2016				
	Bioindustry	Gene Therapy	AgriBio	Reconciliations	Consolidated
Impairment loss				¥ 281	¥ 281

	Thousands of U.S. Dollars				
	2017				
	Bioindustry	Gene Therapy	AgriBio	Reconciliations	Consolidated
Impairment loss	**$ 3,428**			**$ 2,526**	**$ 5,955**

Note: The amount of "Reconciliations" is impairment loss of corporate assets which does not belong to the reportable segments.

(7) Information about amortization of goodwill and goodwill at March 31, 2017 and 2016, is as follows.

Millions of Yen

	2016					
	Bioindustry	Gene Therapy	AgriBio	Total	Reconciliations	Consolidated
Amortization of goodwill	**¥ 162**			**¥ 162**		**¥ 162**
Goodwill at March 31, 2017	**1,213**			**1,213**		**1,213**

Millions of Yen

	2015					
	Bioindustry	Gene Therapy	AgriBio	Total	Reconciliations	Consolidated
Amortization of goodwill	¥ 181			¥ 181		¥ 181
Goodwill at March 31, 2016	1,641			1,641		1,641

Thousands of U.S. Dollars

	2016					
	Bioindustry	Gene Therapy	AgriBio	Total	Reconciliations	Consolidated
Amortization of goodwill	**$ 1,446**			**$ 1,446**		**$ 1,446**
Goodwill at March 31, 2017	**10,830**			**10,830**		**10,830**

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INDEPENDENT AUDITOR'S REPORT

To the Board of Directors and Shareholders of Takara Bio Inc.:

We have audited the accompanying consolidated balance sheet of Takara Bio Inc. and its subsidiaries as of March 31, 2017, and the related consolidated statements of income, comprehensive income, changes in equity, and cash flows for the year then ended, and a summary of significant accounting policies and other explanatory information, all expressed in Japanese yen.

Management's Responsibility for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with accounting principles generally accepted in Japan, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatements, whether due to fraud or error.

Auditor's Responsibility

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

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

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

Opinion

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of Takara Bio Inc. and its subsidiaries as of March 31, 2017, and the consolidated results of their operations and their cash flows for the year then ended in accordance with accounting principles generally accepted in Japan.

Emphasis of Matters

As discussed in Note 18 to the consolidated financial statements, Takara Bio USA Holdings Inc., a wholly owned subsidiary of Takara Bio Inc., acquired all shares of Rubicon Genomics, Inc. on January 17, 2017, and acquired all shares of WaferGen Bio-systems, Inc. on February 28, 2017. Our opinion is not modified in respect of these matters.

Convenience Translation

Our audit also comprehended the translation of Japanese yen amounts into U.S. dollar amounts and, in our opinion, such translation has been made in accordance with the basis stated in Note 1 to the consolidated financial statements. Such U.S. dollar amounts are presented solely for the convenience of readers outside Japan.

Deloitte Touche Tohmatsu LLC

June 6, 2017

Member of
Deloitte Touche Tohmatsu Limited

Investor Information As of March 31, 2017

Corporate Data

Trade Name
Takara Bio Inc.

Head Office
Nojihigashi 7-4-38, Kusatsu, Shiga 525-0058, Japan
Telephone: +81-77-565-6920

Established
April 1, 2002

Issued Capital
¥14,965,828,496

Number of Employees of Takara Bio Group
1,344

URL
www.takara-bio.com

Main Offices

Headquarters
Nojihigashi 7-4-38, Kusatsu, Shiga 525-0058, Japan

Kusatsu Office
Nojihigashi 7-2-62, Kusatsu, Shiga 525-0058, Japan

Eastern Japan Sales
Nihonbashi 2-15-10, Chuo-ku, Tokyo 103-8232, Japan

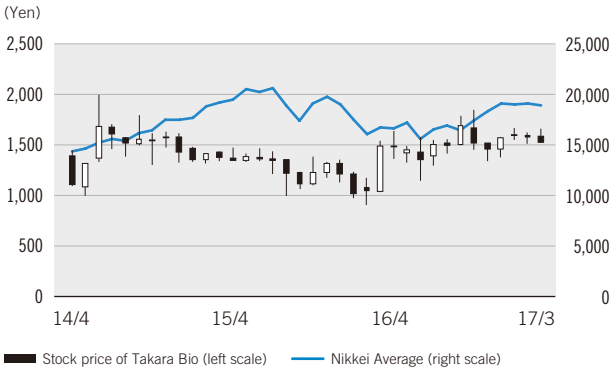
Consolidated Subsidiaries	Location	Issued Capital and Subscription	Line of Business
Takara Biotechnology (Dalian) Co., Ltd.	Dalian, People's Republic of China	¥2,350 million	Development and production of research reagents, and related contracted services
Takara Korea Biomedical Inc.	Seoul, Korea	₩3,860 million	Sale of research reagents and scientific instruments
Takara Biomedical Technology (Beijing) Co., Ltd.	Beijing, People's Republic of China	¥1,330 million	Sale of research reagents
DSS Takara Bio India Pvt. Ltd.	New Delhi, India	Rs.110 million	Production and sale of research reagents
Takara Bio USA Holdings Inc.	Mountain View, U.S.A.	$70,857 thousand	Subsidiary management
Takara Bio USA, Inc.	Mountain View, U.S.A.	$83 thousand	Development and sale of research reagents
Takara Bio Europe S.A.S.	Saint-Germain-en-Laye, France	EUR891 thousand	Sale of research reagents
Takara Bio Europe AB	Gothenburg, Sweden	2,222 thousand kronas	Development, production, sale of research reagents, and related contracted services
Mizuho Norin Co., Ltd.	Kyotamba-cho, Funai-gun, Kyoto, Japan	¥10 million	Production and sale of mushrooms
Takara Bio Farming Center Inc.	Yakushima-cho, Kumage-gun, Kagoshima, Japan	¥3 million	Production of Ashitaba and other agricultural products
KINOKO CENTER KIN INC.	Okinawa, Japan	¥5 million	Production and sale of mushrooms

Investor Information

CommosShares

Issued and Outstanding	400,000,000 shares
Number of Shareholders	120,415,600 shares
Major Shareholder	48,227
Stock Listing	Takara Holdings Inc. (60.92% equity owned)
	First Section of Tokyo Stock Exchange
Fiscal year	(securities code number: 4974)
Annual Meeting of Shareholders	From April 1 to March 31 of the following year
Record Date	Every June
	The vote March 31
	Dividends March 31
	Interim dividends September 30
	Other record date will be posted in advance
Share Unit Number	if necessary
	100 shares

Stock Price Range



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