

# Rising Above

# Annual Report

Fiscal year ended December 31, 2011

## CHUGAI PHARMACEUTICAL CO., LTD.

#### Contents

How We Rise Above	2
Financial Highlights	8
Message from the CEO and COO	10
Interview with the CEO	12

### Personalized Healthcare (PHC) at Chugai

atonagai	ALC: NO. OF THE OWNER.
Overview of Personalized Healthcare	18
Personalized Healthcare at Chu <mark>gai</mark>	19
Promoting Personalized Healthcare	21
Our Evolving Pipeline	23

#### **Review of Operations**

Chugai at a Glance	26
Oncology	28
Bone and Joint Diseases	34
Renal Diseases	38
Others	40

#### **Organization and Human Resources**

Research	44
Drug Safety	47
Corporate Social Responsibility	49
Corporate Governance	52
Board of Directors/	
Corporate Auditors	58
Executive Officers	60

#### **Data Section**

Development Pipeline	62
Basic Information	64

#### **Financial Section**

Mes	sage from the CFO	79
11-Y	ear Financial Summary	80
	agement's Discussion Analysis	82
	solidated Financial ements	92
Fina	es to Consolidated ncial Statements	97
Inde	pendent Auditors' Report	116
Orga	anization	117
Netv	vork	118
Sha	reholder Information	120
Corp	oorate Data	121

#### Forward-Looking Statements

This annual report includes forward-looking statements pertaining to the business and prospects of Chugai Pharamaceutical Co., Ltd. ("Chugai" or "the Company"). These statements reflect the Company's current analysis of existing information and trends. Actual results may differ from expectations based on risks and uncertainties that may affect the Company's businesses.

#### Note:

The information regarding pharmaceuticals (including products under development) is not intended for advertising, promotion or medical advice. All trademarks are the property of their respective holders. Titles and names of organizational units are as of April 1, 2012.

# **Rising Above**

Chugai's mission is to add exceptional value through the creation of innovative medical products and services for the benefit of the medical community and human health around the world. Based on that mission, we are moving steadily toward our goal of becoming a top Japanese pharmaceutical company.

We are currently building a strong foundation for future growth in all key aspects of our operations, including research and development, marketing and production. By putting all our efforts into continually generating innovative medical products and creating value for all our stakeholders, we will achieve our goal of becoming a top Japanese pharmaceutical company.

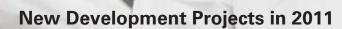
Chugai will continue its challenge to reach greater heights.

## How We Rise Above: We Create Innovation

6

**Approved Projects in 2011** 

74





**Projects in Development Pipeline** (As of February 1, 2012) Chugai focuses on providing products that address unmet medical needs, primarily in the field of oncology. In 2011, we continued to make steady progress in initiatives aimed at continuously creating innovative medical products, and further enhanced our sources of future growth.

#### 2011 Sales by Field

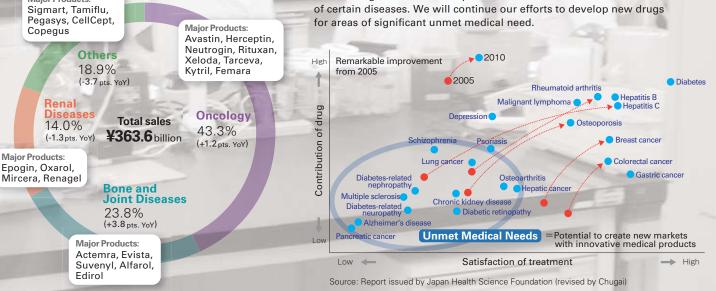
Major Products:

Major Products:

#### **Unmet Medical Needs**

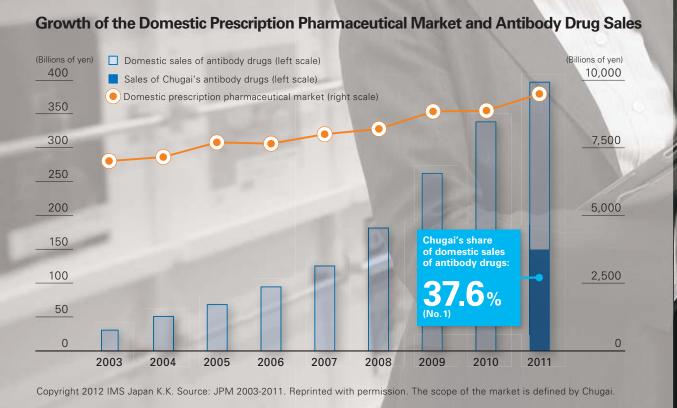
In the fields where Chugai is building its presence, its medicines are contributing to substantial improvement in satisfaction of treatment of certain diseases. We will continue our efforts to develop new drugs for areas of significant unmet medical need.

ANNUAL REPORT 201



## How We Rise Above:

Chugai has established the leading position in Japan in the markets for therapeutic antibodies and anticancer agents, which have expanded rapidly in recent years amid slow growth for the pharmaceutical market overall. Actemra, the first antibody drug manufactured in Japan, continues to grow strongly as a global product, reinforcing Chugai's growth platform.



CHUGAI PHARMACEUTICAL CO., LTE

# 37.6% (No. 1)

Share of Antibody Drug Market in Japan\*

# 18.1% (No. 1)

Share of Oncology Market in Japan\*

#### Sales Growth Rate of Actemra (Developed In-House) (Sales in Japan and Exports)

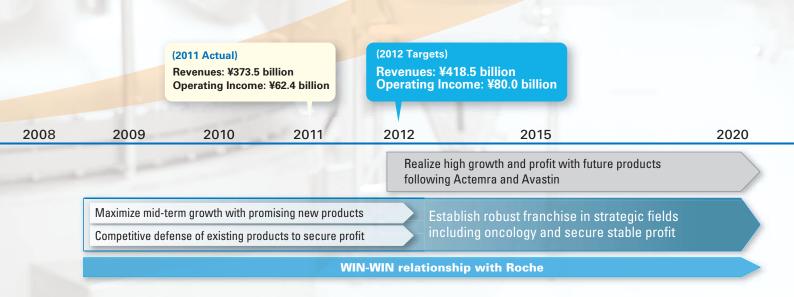
\* Copyright 2012 IMS Japan K.K. Source: JPM 2011. Reprinted with permission. The scope of the market is defined by Chugai.

# We Lead Our Markets

## How We Rise Above: We Strive Toward

Aiming to become a top Japanese pharmaceutical company in the second half of this decade, we are working toward numerical targets while continuing patient-oriented innovation and pursuing initiatives to contribute to medical care. Through these actions, we want to deliver a high level of satisfaction to our stakeholders and win their support and trust.

Medium-to-Long-Term Growth Strategy Based on Innovative Medical Products A top Japanese pharmaceutical company



# Ambitious Goals

# Reach the **Top 3**

Aim to Become One of the Top Three Pharmaceutical Companies in Japan in Each of the Following Categories

- Domestic share
- Consolidated operating income margin
- Consolidated operating income per employee
- Domestic sales per medical representative

## Be No.

Aim to Gain the Top Domestic Market Share in Each of Our Strategic Fields

## Develop

# Globally

## Aim to Increase the Proportion of Sales from Overseas Business

RoActemra/Actemra

• New drugs following the above

### **Financial Highlights**

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

#### For more detailed information, see "11-Year Financial Summary" on pages 80-81.

	(E	Millions of yen xcept as otherwise specif	Percent change	Thousands of U.S. dollars (Except as otherwise specified))	
	2011	2010	2009	2011/2010	2011
Results for the year:					
Revenues	¥373,517	¥379,510	¥428,947	(1.6)%	\$4,788,679
Operating income	62,430	66,238	82,613	(5.7)	800,384
Income before income taxes and minority interests	57,131	65,686	89,416	(13.1)	732,448
Net income	35,235	41,433	56,634	(15.0)	451,731
Research and development expenses.	55,857	54,703	55,315	2.1	716,115
Sales:	¥363,622	¥375,560	¥419,106	(3.2)%	\$4,661,821
Sales (Excluding Tamiflu)	354,913	357,408	342,899	(0.2)	4,550,167
Oncology	157,540	158,159	145,011	(0.4)	2,019,744
Bone and Joint Diseases	86,689	75,307	66,468	15.1	1,111,397
Renal Diseases	50,769	57,373	60,958	(11.5)	650,885
Others (Including Tamiflu)	68,624	84,721	146,670	(19.0)	879,795
Financial position at year-end:					
Total assets	¥533,483	¥508,016	¥540,549	5.0%	\$6,839,526
Interest-bearing debt	154	150	154	2.5	1,977
Total net assets	459,073	449,395	434,687	2.2	5,885,552
		,			
Cash flows:	¥ 69,594	¥ 15,572	¥ 66,461	_	\$ 892,230
Net cash provided by operating activities	<sup>∓</sup> 05,554 (15,135)	(20,192) <sup>₽</sup>	(20,261)	_	(194,038)
Net cash used in investing activities Net cash used in financing activities	(13,133)	(23,055)	(22,252)		(314,756)
Cash and cash equivalents at end of year	94,474	65,144	94,478	_	1,211,204
· · ·	54,474	00,144	0-,+70		1,211,204
Amounts per share (Yen and U.S. dollars):	V 0475	X 7044	V 104 00		<b></b>
Net income – basic	¥ 64.75	¥ 76.14	¥ 104.00	(15.0)%	\$ 0.83
Net income – diluted	64.72	76.12	103.98	(15.0)	0.83
Net assets	839.50	821.87	794.51	2.1	10.76
Cash dividends <sup>2</sup>	40.00	40.00	40.00		0.51
Number of shares outstanding	559,685,889	559,685,889	559,685,889		
Number of employees	6,779	6,709	6,485		
Ratios:					
Operating income to revenues (%)	16.7	17.5	19.3		
Return on equity (%) <sup>3</sup>	7.8	9.4	13.7		
Shareholders' equity to total assets (%)	85.6	88.0	80.0		
Debt-to-equity ratio (%) <sup>4</sup>	0.0	0.0	0.0		
Interest coverage ratio (Times) <sup>5</sup>	20,032.2	8,214.4	4,620.0		
Research and development expenses to revenues (%)	15.0	14.4	12.9		
Payout ratio (%)	61.8	52.5	38.5		

Notes: 1. The U.S. dollar amounts in the consolidated financial statements as of and for the year ended December 31, 2011 have been translated from Japanese yen amounts at the rate of ¥78 to U.S. \$1.00, the approximate exchange rate prevailing on December 31, 2011.

2. Cash dividends per share for 2009 include a special year-end dividend of  $\pm 6.00$  per share.

3. Return on equity = Net income/Shareholders' equity (average of beginning and end of fiscal year) x 100

4. Debt-to-equity ratio = Interest-bearing debt (fiscal year-end)/Shareholders' equity (fiscal year-end) x 100

5. Interest coverage ratio = Net cash provided by operating activities (prior to deductions of interest paid and income taxes paid, and addition of income taxes refunded)/interest paid

#### 2011 in Brief

- Sales excluding Tamiflu were down 0.7 percent year on year, as strong growth of Actemra overseas offset weak sales in Japan due in part to the effects of the Great East Japan Earthquake.
- Operating income declined 5.7 percent and net income was down 15.0 percent, reflecting slight increases in operating and R&D expenses due to new product launches and the advancement of development projects.
- The ratio of shareholders' equity to total assets was 85.6 percent, indicating Chugai's sound financial position.
- Chugai paid cash dividends totaling ¥40 per share (interim and year-end dividends of ¥20 per share each), and the payout ratio was 61.8 percent.



## Message from the CEO and COO



#### Under our new management structure, we will devote all our effort to further expansion to make Chugai a top Japanese pharmaceutical company with global-level capabilities.

Chugai's mission is to add exceptional value through the creation of innovative medical products and services for the benefit of the medical community and human health around the world. Consistent with this mission, we have made it a fundamental management goal to become a top Japanese pharmaceutical company in the second half of this decade by providing a continuous flow of innovative new medicines in Japan and internationally. Our vision of a "top pharmaceutical company" is one in which all employees share an awareness and sense of responsibility as part of a leading enterprise, and work proactively with a global perspective. Through these business activities, a top pharmaceutical company fully satisfies its stakeholders and in turn is rewarded with their active support and trust. To achieve this objective, we will work to increase earnings by developing, launching and expanding the presence of innovative medical products in Japan and internationally.

The year 2012 is the final year of Sunrise 2012, our mid-term business plan, and the tenth year of our strategic alliance with Roche. As such, it will be a pivotal year for Chugai as we move into a new stage of growth. We will reinforce the growth foundation we have established, which includes a rich pipeline, solid research and development fundamentals and a strong product portfolio, to expand our business with speed as a market leader.

On March 28, 2012, Chugai introduced a new management structure to further strengthen management and promote faster decision-making in order to deal with its rapidly changing operating environment. Osamu Nagayama has assumed the post of Representative Director, Chairman and CEO and leads medium-to-long-term strategy for the Company as a whole and makes decisions on key issues. Tatsuro Kosaka has assumed the post of Representative Director, President and COO and makes decisions on business execution. In addition, Motoo Ueno has assumed the post of Representative Director and Deputy Chairman with responsibility for overall corporate governance and compliance, including corporate social responsibility, risk management and audits.

Under its new management structure, Chugai is committed to achieving further advancement by continually developing innovative medical products and working to create value for all stakeholders. We hope our shareholders and investors will continue to support our efforts.

March 2012

Osamu Nagayama Representative Director, Chairman and CEO

Tatsuro Kosaka Representative Director, President and COO

#### Interview with the CEO



Taking maximum advantage of the growth foundation Chugai has built, we will become a top Japanese pharmaceutical company by continuing to tackle challenges with a focus on speed as we advance into a new stage of growth.

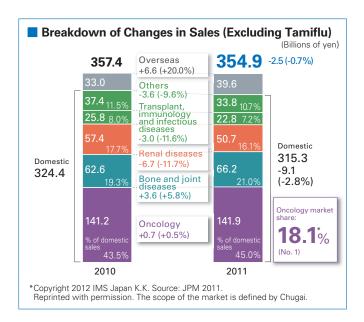
Osamu Nagayama Representative Director Chairman and CEO

## Please summarize Chugai's performance and R&D results in 2011.

## Our initiatives for growth were limited in 2011.

The dominant factor in 2011 was the impact of the Great East Japan Earthquake that struck in March. First, I would like to take this opportunity to express my sincere condolences to everyone who suffered in the disaster, and my hope for the earliest possible recovery for the affected region.

This unprecedented disaster also had major effects on Chugai. Due to damage to some of our production sites, including those of contract manufacturers, we incurred losses and had to adjust shipments of certain products until the end of October. Thanks to the tremendous cooperation of our wholesalers, we managed to avoid any interruption in the supply of medicines to patients. However, explaining the situation on three occasions to as many as 105,000 customers each time, which is triple the number of visits normally handled by our medical representatives (MRs), significantly curtailed MR activities. We were also forced to cancel or scale back planned marketing promotions. The impact on Chugai's performance was substantial, as we had to cancel launch events for two new products, Mircera and Edirol, and did not see the expected accelerated growth of major products Avastin and Actemra. As a result, revenues decreased 1.6 percent compared with the previous year to ¥373.5 billion and net income fell 15.0 percent to ¥35.2 billion.



## We made record progress in research and development.

On the other hand, we continued to make impressive progress in research and development last year. In addition to the two new products I mentioned, we obtained approvals of 12 additional indications, including Xeloda and Herceptin for gastric cancer. So we actually obtained 14 regulatory approvals in total, more than any other year in the Company's history. We expect these new products and additional indications to contribute substantially to revenue growth in 2012 and beyond. Moreover, our pipeline remains well stocked, with six compounds starting clinical trials and many projects steadily advancing to the next stage.

Our technological successes were also impressive. In 2010, we unveiled our groundbreaking recycling antibody, a single-molecule antibody that can bind to the same target antigen multiple times. Building on this technology, in 2011 we announced the sweeping antibody, which improves recycling efficiency to enable the removal of antigens from plasma. Our antibody technologies, a point of pride for Chugai, continue to evolve. Moreover, in January 2012 we established Chugai Pharmabody Research Pte. Ltd. in Singapore to quickly create new antibodies using these technologies. The company aims to generate 20 or more antibody drug candidates over the next five years.

#### Conditions in the pharmaceutical industry are changing rapidly. How do you view the outlook for the industry?

#### Unmet medical needs and biopharmaceuticals will be key growth areas.

The pharmaceutical industry is currently undergoing rapid changes at the global level. The European financial crisis continues to deepen, and we need to be prepared not just for a slowdown in the global economy but for potential cuts to social security expenditures in various countries. From the standpoint of the management of pharmaceutical companies, the impact of the wave of patent expirations for blockbuster products in and around 2010 – the so-called 2010 problem – continues to grow, and although the generic market in Europe and the United States is expanding rapidly, there is a lack of innovative medical products being developed. The products that companies have been manufacturing up to now have little room for improvement, and it is difficult to differentiate new medicines that have effects equivalent to those products. Companies therefore have no choice but to focus on creating first-inclass<sup>1</sup> drugs. Many global players are responding with large-scale mergers and acquisitions to enter areas with unmet medical needs, where growth is expected, and are shifting their resources to biopharmaceuticals. It is estimated that the size of the global biopharmaceutical market, which was about US\$100 billion in 2009, will grow to US\$160 billion in 2016.<sup>2</sup> Meanwhile, emerging markets are expanding rapidly, but the bulk of that growth is in generics, and it is not enough to fully offset the market contraction resulting from the 2010 problem.

2. Source: EvaluatePharma

#### With our extensive knowledge and outstanding technologies, we are ahead of our competitors in future growth markets.

In this environment, we still see ample opportunities and potential for continued strong growth for Chugai, which has been focusing on creating innovative medical products that address unmet medical needs. We have leading positions in future growth markets, with a share of 37.6 percent<sup>3</sup> of Japan's antibody market and 18.1 percent<sup>3</sup> of its oncology market. That gives us a powerful advantage. And looking at the proportion of our products that qualify for the Japanese government's new pricing system aimed at promoting development of drugs that have not yet obtained approval in Japan or are approved for other indications (the Premium for New Drug Creation), it is easy to see that we are creating innovative medical products. (Out of Chugai's 49 products, 15 qualify.)

Leveraging these strengths, we are also taking initiatives in Personalized Healthcare, which will be central to medical care in the future. Our biopharmaceutical

An original drug that is highly novel and useful, has a chemical structure different from that of existing drugs, and significantly changes the therapeutic system.
 Converse Surface Departs

and antibody technologies have given us a head start on our competitors in the field of Personalized Healthcare, and we plan to accelerate our efforts as a leading company in this field. In collaboration with the Roche Group's Diagnostics Division, we will focus on discovery and development based on Personalized Healthcare, and will push ahead with efforts to expand the use of this approach to treatments. (See the feature section on pages 17-24 for further details on Personalized Healthcare.)

3. Copyright 2012 IMS Japan K.K. Source: JPM 2010-2011. Reprinted with permission. The scope of the market is defined by Chugai.

How is Chugai working toward its goal of becoming a top Japanese pharmaceutical company under Sunrise 2012, its mid-term business plan?

#### We will maximize Chugai's strengths and value as we work to become a top Japanese pharmaceutical company.

Our goal for the second half of this decade is to become a top Japanese pharmaceutical company that meets the expectations of all stakeholders. In terms of quantitative targets, our objective is to be among the top three in Japan in four categories: domestic share, consolidated operating income margin, consolidated operating income per employee, and domestic sales per medical representative. We will also aim for the top domestic share in each of our strategic fields and have made the proportion of our sales from overseas business a key indicator.

Our main strategies for accomplishing these targets are continued development and acquisition of innovative new medicines, the maximization of product value, and overseas expansion. For continued development and acquisition of innovative new medicines, we will make maximum use of our strengths in biopharmaceuticals, antibody drugs and molecular target search technology to discover and create innovative medical products. We will also grow our pipeline by introducing promising development candidates from Roche. To maximize product value, we will focus on strengthening product lifecycle management and further expanding our presence in core therapeutic fields such as oncology. For overseas expansion, we will work to accelerate the global market penetration of Actemra, which was developed in-house, and develop and launch innovative medical products to follow Actemra.

#### Although conditions have diverged from our original assumptions, we still aim to achieve ¥80 billion in operating income.

In moving toward our goal of becoming a top Japanese pharmaceutical company, Sunrise 2012 is an important milestone, targeting consolidated revenues of ¥460 billion and consolidated operating income of ¥80 billion in 2012. The actions we have taken up to now – reinforcing our research and development capabilities, launching and promoting growth drivers

#### Definition of "A Top Japanese Pharmaceutical Company" (Chugai's Goal for the Second Half of This Decade)

#### Quantitative Aspects

- 1. One of the Top Three Pharmaceutical Companies in Japan in Each of the Following Categories
  - Domestic share
  - Consolidated operating income margin
  - Consolidated operating income per employee
  - Domestic sales per medical representative
- 2. Top Domestic Market Share in Each of Our Strategic Fields
- 3. Increase in Proportion of Sales from Overseas Business
  - RoActemra/Actemra
  - New drugs following the above

#### **Qualitative Aspects**

- 1. A Company That Satisfies All Its Stakeholders and Receives Their Active Support and Trust
- 2. Works Proactively on a Global Level
  - Continuous creation/development/domestic and overseas launches of products with a competitive advantage in clinical results
  - Contribution to the Roche Group's results through product-appropriate fostering and sales
  - Leadership in pharmaceutical industry activities
  - Activities in which all employees have an awareness, sense of responsibility and pride as part of a top pharmaceutical company

such as Actemra and Avastin, and raising productivity and cutting costs – have steadily contributed to earnings. However, the current situation is markedly different from our initial assumptions when we formulated the plan. This is due to several factors, including the impact of the Great East Japan Earthquake; the delayed and restricted approval of Actemra for rheumatoid arthritis in the United States; the delayed approval of Avastin for breast cancer and delayed development of the same drug for gastric cancer; and the contraction of the chronic hepatitis C market.

Our current performance forecast for 2012 is ¥418.5 billion in revenues and ¥80 billion in operating income.

#### What are Chugai's strategic plans for 2012, the final year of Sunrise 2012?

## We will work to strengthen sales and get back on a growth track.

Originally we had expected new product launches and the expansion of core products to drive substantial growth in 2011, but the effects of the earthquake had a major impact on our performance. However, we have an extensive lineup of products with solid competitive advantages. In 2012, National Health Insurance (NHI) drug price revisions will have some impact, but it is imperative that we return to a growth path by making sure our strong product portfolio is reflected in earnings.

Given these conditions, we plan to put more resources into sales in 2012 and manage operations with an emphasis on speed. Avastin and Actemra are subject to the Japanese government's policy of recalculating drug prices based on expansion of the market. However, we will offset that adjustment with steady sales growth, and will focus on quickly building the market presence of new products Mircera and Edirol. In our sales organization, the Medical Affairs Division, which we established in April 2012, will convey scientific information announced at conferences to medical professionals, provide technical education for MRs and enhance generation of post-marketing evidence.



## Accelerated penetration of core products is expected to drive sales and profit growth.

For 2012, we expect sales excluding Tamiflu of ¥394.1 billion, an increase of 11.0 percent from 2011.

In oncology, we will enhance consulting-based promotion with the goal of establishing our key products as standards of care. By accelerating the penetration of Avastin for non-small cell lung cancer and breast cancer and Xeloda for colorectal cancer, we intend to expand sales in the oncology field by 16.6 percent. In bone and joint diseases, we project that sales will increase 6.2 percent with the steady growth of Actemra and the switch to Edirol from our existing vitamin D<sub>3</sub> derivative. In the renal field, we will focus



on Mircera, a new growth driver, and are aiming for a 23.7 percent increase in sales with the goal of recapturing the top share of the erythropoietin-stimulating agent (ESA) market.

Operating expenses and R&D expenses are expected to rise with our aggressive expansion of sales activities, the advancement of development projects and the start of operations at Chugai Pharmabody Research Pte. Ltd.

Based on these factors, we expect operating income for 2012 to increase 28.2 percent to ¥80 billion, and net income to rise 39.2 percent to ¥49.0 billion.

## Q What is Chugai's policy regarding returns to shareholders?

#### Our goal is to deliver stable dividends to shareholders, with an average consolidated payout ratio over 40 percent.

We recognize that delivering returns to shareholders is an important management responsibility, and paying stable dividends is a fundamental part of that. Our goal is to maintain a payout ratio over 40 percent of consolidated net income on average, taking into account strategic funding needs and the earnings outlook. We use internal reserves to fund research and development in Japan and globally, as well as for capital investments related to new products in order to increase corporate value.

Based on this policy, we kept total cash dividends for 2011 at ¥40 per share, the same as in the previous year, for a consolidated payout ratio of 61.8 percent. The average payout ratio for the last five years is 47.2 percent.

For 2012, we plan to maintain dividends at ¥40 per share, a projected payout ratio of 44.4 percent.

## **Q** What are your thoughts about increasing corporate value?

## We will raise our corporate value in the process of becoming a top Japanese pharmaceutical company.

In October 2012, ten years will have passed since we entered into the strategic alliance with Roche in

2002. I think Chugai's corporate value has changed significantly during that time.

Looking back, I'm proud that the alliance has gone as originally planned in all areas, including research and development, production and marketing. In addition to launching and establishing numerous products licensed from Roche, primarily in oncology, we have taken full advantage of our relationship with Roche to build a strong foundation for future growth. Today, we rank in the top tier of pharmaceutical companies in Japan in the oncology and antibody markets, not just in market share, but also in terms of our pipeline, research and development platform and technologies. Through our initiatives to establish product lifecycle management, increase productivity and make other improvements in our workforce and our manufacturing and research facilities, which expanded as a result of the merger, we have transformed into a leaner organization.

With this solid foundation in place, Chugai entered a new stage of growth from 2011. We will continue to make further innovations in our business operations to become a top Japanese pharmaceutical company while responding to the increasingly rapid changes in our operating environment. We will also accelerate the market penetration of our ample lineup of products and advance the development of compounds from our own research, backed by our outstanding technology platform. Moreover, we intend to use our market position not only to create innovative medical products in oncology, Personalized Healthcare and other areas, but to drive the market by providing strong leadership in ways such as proposing approaches to treatment and delivering useful information to medical professionals.

Working to improve the quality of medical care as we aim to become a top Japanese pharmaceutical company will raise Chugai's corporate value, and I am confident that it is the best way to meet the expectations of our shareholders and other stakeholders.

I hope they look forward to the exciting developments ahead at Chugai.

## **Rising Above** We Are Contributing to New Frontiers in Patient Care

#### **Personalized Healthcare (PHC) at Chugai**

With solid advantages in therapeutic antibodies, oncology and other areas, Chugai is focusing on a Personalized Healthcare strategy to drive its next phase of growth. By promoting the establishment of Personalized Healthcare, which offers benefits to all stakeholders, we will contribute to medical treatment and further enhance our growth platform.

## **Overview of Personalized Healthcare**

Thanks to advances in science and technology, we are gaining a deeper understanding of diseases at the molecular level, and we have come to understand the range of diversity even among patients with the same disease. This has led to the emergence of Personalized Healthcare, a new approach that aims to fit treatments to different groups of patients. In this feature, we begin with an explanation of Personalized Healthcare and how we are developing it at Chugai, followed by a discussion of its benefits.

#### What is Personalized Healthcare?

Personalized Healthcare (PHC) is an approach to understanding the heterogeneity of patients and diseases in order to develop targeted therapies, including diagnostic tests and medicines. These targeted therapies enable physicians to design and implement treatment plans according to each patient's molecular and genetic profile. In the conventional approach, all patients who have a particular disease are given the same treatment. By contrast, with PHC, patients are stratified into subgroups by testing them for the presence of specific molecules or genes called biomarkers<sup>1</sup> before administering a drug. A molecular targeted therapy<sup>2</sup> is then provided only to those patients who have a high likelihood of responding to the treatment. This approach is attracting interest around the world as a way of improving drug efficacy and safety. Areas such as oncology in particular are expected to play a central role in the development of PHC.

#### **Benefits of Personalized Healthcare**

PHC has the potential to optimize risk-benefit ratios, improve cost effectiveness and also lower medical costs by avoiding treatments that have little chance of success. PHC may thus offer significant benefits not only for patients but also for healthcare providers, regulators and insurers. It is expected to be beneficial from the standpoint of national healthcare costs as well.

The advantages for pharmaceutical companies are also considerable. While stratifying patients will reduce the number of patients eligible to receive a targeted medicine, identifying those most likely to respond to treatment will enable clinical development with fewer patients, thus increasing efficiency in drug research and development. In addition to drug prices that reflect the high level of value, PHC is also expected to offer significant advantages in terms of market penetration and competitiveness.

PHC is thus attracting interest as a therapeutic approach that offers benefits to all stakeholders of pharmaceutical companies.

#### **Concept of Personalized Healthcare** Stratified to Homogeneous Groups Heterogeneous Group Method for Efficacy (+) stratificati on to specific properties Risk of AE (+) Biomarkers Efficacy (-) Risk of AE (+) Efficacy (-) Risk of AE (-) Efficacy (+) **Risk of AE (-)** Efficacy (-) Risk of adverse events (AE) (+) High response rate Standard approach Personalized

#### **Benefits of Personalized Healthcare**



also serve as the basis for the development of diagnostic tests.A drug designed to specifically inhibit the action of a molecular target that is implicated in a disease process. Molecular targeted therapies play a central role in Personalized Healthcare.

## Personalized Healthcare at Chugai

#### Chugai's Strengths: Technology, Partnership and Know-How

The Roche Group is a pioneer in Personalized Healthcare, and has made it a central part of its strategy. Chugai, the market leader in Japan for antibody-based drugs and cancer medicines, is also strongly positioned to promote PHC and is proud to be playing a prominent role in helping to establish this approach in Japan.

Among our strengths, three stand out:

The first is our technological excellence in biomarker discovery and molecular targeted therapies. We were among the first companies in Japan to undertake research and development of biopharmaceuticals, and our antibody, protein analysis and other technologies are among the best in the industry.

The second strength is our collaborative relationship with the Roche Group's Diagnostics Division. One key to PHC is our early collaboration in the development of companion diagnostics to detect and measure biomarkers. The Roche Group's Diagnostics Division is the world's leading supplier of *in vitro* diagnostics, and its outstanding technology and extensive experience make it a strong partner for Chugai.

The third strength is our extensive track record and knowledge in PHC. We have accumulated considerable

(Probability) 10 Extended survival in patients with HER2-positive 0.9 Progression-free survival metastatic breast cancer (H0648g trial) 0.8 0.7 0.6 Paclitaxel + Herceptin 0.5 0.4 0.3 p<0.05 0.2 Paclitaxe 0.1 3.0 7.1 0.0 З 0 6 9 12 15 18 Months since start of treatment Source: Roche data on file; Smith et al 2001

#### Herceptin Therapy and HER2 Testing (Breast Cancer)

know-how through the development and commercialization of Herceptin, one of the earliest PHC medicines, in Japan. Our strong oncology R&D coupled with our understanding of disease mechanisms and the needs of healthcare providers also provide a strong foundation for promoting PHC.

#### Herceptin: A Drug That Led to a Paradigm Shift in Cancer Therapy

The success of Herceptin, one of the earliest and best-known targeted medicines, has been a major factor in promoting the PHC approach. Previously, it was thought that the small numbers of eligible patients would severely restrict sales of PHC medicines. However, Herceptin penetrated the market very rapidly, and is now a major global drug with worldwide sales of approximately ¥440 billion<sup>3</sup> (5.3 million Swiss francs) in 2011.

Herceptin targets a protein called HER2. It is administered only to patients whose tumors are found by a special diagnostic test to produce abnormally high levels of HER2.<sup>4</sup> The drug is currently indicated for HER2positive breast and advanced gastric cancer. Herceptin has a dominant share of the breast cancer market, reflecting its high level of efficacy. It is also being used in the adjuvant treatment of early breast cancer therapy, and because the recurrence rate is decreasing, the number of metastatic breast cancer patients is on a downward trend.

The emergence of Herceptin has brought new hope to patients with HER2-positive breast cancer, which previously had a poor prognosis. In Japan, the HER2 testing rate is over 90 percent in breast cancer, indicating that biomarker diagnosis is becoming established in clinical practice. It is fair to say that Herceptin has revolutionized breast cancer treatment. It is also expected to dramatically improve therapeutic outcomes in HER2positive gastric cancer.

3.Based on the JPY/CHF exchange rate as of December 31, 2011. 4.Testing for the expression of the HER2 biomarker using an

immunohistochemical (IHC) test and a genetic test called fluorescence in situ hybridization (FISH).

#### Chugai's Head of Project & Lifecycle Management on PHC-based Drug Discovery

Chugai focuses primarily on developing novel medicines with first-in-class<sup>5</sup> or best-in-class<sup>6</sup> potential. Discovery research based on Personalized Healthcare is key to achieving that goal. The search for biomarkers begins in the early stages of drug discovery, and research is conducted with PHC in mind. Of the 13 compounds from Chugai research currently in our R&D pipeline, four are based on PHC.

Behind our focus on PHC-based drug discovery is the fact that Chugai's accumulated knowledge and technologies fit well with the PHC concept. We have built up our biopharmaceuticals expertise over many years, starting with the development of drugs such as Epogin and Neutrogin in the 1980s, and developed advanced antibody technologies ahead of our competitors. We were also quick to recognize the importance of 3D analysis of target proteins and set up the necessary infrastructure. As a result, our drug development technologies, including technology for identifying molecules with high specificity, are world-class. A focus on PHC is the logical next step for our research.

In discovery of molecular targeted therapies, when we seek the cause of responses in developing a lead compound from candidate compounds, we come to the search for biomarkers. It is not easy to find suitable biomarkers that can be used to identify the right patient subgroups. It is important to study a variety of clinical data, and our collaboration with Roche's Diagnostics Division puts us in a strong position here.

Establishing PHC will require not only the creation of PHC-based medicines but also an exhaustive search for biomarkers, including those that can help guide the appropriate use of drugs that are already on the market. We realize that this is very difficult, but if we are able to develop companion diagnostics for our new products, we can make a tremendous contribution to treatment. In addition, we know that compounds that have insufficient overall efficacy at the research stage can be highly effective when given to the right patient subpopulation, identified by testing for suitable biomarkers. This is why the search for biomarkers is a key part of Chugai's R&D efforts.

PHC is already changing treatment paradigms. If a drug is truly beneficial for patients, it will also be commercially rewarding for the company that makes it. We are strongly committed to contributing to new treatments and working toward the establishment of PHC.

6. A drug that offers clear advantages over other existing drugs.



Chugai's driving role in Personalized Healthcare is a natural progression. We will proceed with strong conviction.

Yutaka Tanaka Senior Vice President Head of Project & Lifecycle Management Unit

An original drug that is highly novel and useful, has a chemical structure different from that of existing drugs, and significantly changes the therapeutic system.

### **Promoting Personalized Healthcare**

## Establishing a System to Accelerate the Penetration of PHC

To promote Personalized Healthcare, the launch of a molecular targeted therapy must be accompanied by that of a companion diagnostic, which must also be established in clinical practice. The simultaneous development and approval of companion diagnostics is therefore critical. In July 2011, the U.S. Food and Drug Administration (FDA) issued draft guidance on diagnostic tests for PHC. The FDA signaled its intention to call for parallel development of companion diagnostics when developing new targeted drug therapies, with certain exceptions.

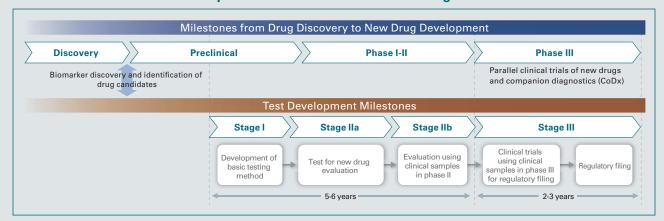
Chugai actively collaborates with the Roche Group's Diagnostics Division from the early stages of research and development with the aim of developing targeted medicines and companion diagnostics in parallel.

In addition to developing suitable companion diagnostics, shaping an environment that facilitates their clinical use will also be vital in expanding PHC. We will make full use of the Roche Group's Diagnostics Division's technology, experience and large installed instrument base and our MRs will work to inform healthcare professionals about PHC and appropriate testing methods.

## Parallel Development of Medical Products and Diagnostics at Chugai

A key to parallel development and approval of drug and companion diagnostic combinations is accurate management of their respective development progress. To obtain approval as a new PHC-based drug, the clinical data necessary for regulatory filing for the companion diagnostic must be obtained in parallel with clinical trials of the drug at minimum, and the filings must be submitted simultaneously.

Chugai therefore initiates biomarker development during the preclinical and early clinical development of a drug. Clinical data and epidemiological research findings are analyzed, while biomarker candidates are selected and optimized and basic testing methods for the markers developed. For example, in the case of GC33 (RG7686), a compound from Chugai research currently in phase I clinical trials in Japan and overseas, we are simultaneously developing an IHC diagnostic jointly with the Roche Group's Diagnostics Division. GC33 is a recombinant humanized antibody designed to target glypican-3, which is highly expressed in hepatocellular carcinoma, a type of liver cancer. In phase I clinical trials, the intensity of the IHC stain indicates that there may be a correlation between the level of glypican-3 expression and the antitumor activity of GC33. Development of the diagnostic is also advancing steadily.



#### Best Practice for Parallel Development of Medical Products and Diagnostics

#### Chugai's Head of R&D Portfolio Management on Development in PHC

In its portfolio management, Chugai emphasizes development strategies built on our competitive advantages, and our PHC strategy is certainly one such solution. Chugai is the leading provider of cancer medicines in Japan, and we also have the largest number of development projects based on PHC. Because we were quick to embrace the PHC concept in our R&D, we have the infrastructure in place for parallel development of new medicines and companion diagnostics. In addition, we have accumulated a wealth of expertise and knowledge on clinical data analysis, epidemiological studies, and the development of biomarkers.

To strengthen our PHC strategy, we launched a unit in January 2012 that will act as a hub for quickly collecting and utilizing a wide variety of data from various settings, including research, clinical trials and medical facilities. This unit will drive further evolution in shaping our collaboration and networking with Roche.

For Chugai, which aims to become a top Japanese pharmaceutical company, the new unit will not only promote PHC, but will help us to develop our own style as an industry leader. We will continue working to establish and expand PHC in Japan. By deploying Chugai's platform and strengths to the fullest, we intend to make PHC, as exemplified by Chugai's approach, the norm. In other words, we want to create a healthcare environment in which the term "Personalized Healthcare" itself will no longer be needed.

#### A Manager from Roche Diagnostics Speaks about Diagnostics Development

The Roche Group is pioneering the development of PHC and is in the forefront of the approach around the world. Within the Roche Group, collaborative projects between the Pharmaceuticals and Diagnostics divisions are increasing at an accelerated pace. In 2011, Roche had 29 pharmaceutical development projects with a diagnostic component, and over 200 collaborative projects in total, including other joint research.

Companion diagnostics are an important element in raising the competitive advantage of medicines. Since our technology contributes directly to raising the quality of care, Roche Diagnostics contributes not just sales but also significant value to the Roche Group overall. Moreover, whereas conventional diagnostics are mainly used to help determine what disease a patient may have and broadly guide medical decision-making, companion diagnostics can predict who is likely to respond to a specific treatment. They thus have a key role in treatment selection and monitoring. We are very much aware that we have different responsibilities than before in terms of product quality and supply.

Roche Diagnostics will strengthen its collaboration and actively support Chugai as it works to become the leader in the development of PHC in Japan.



As a leading healthcare company, we will strive to make Personalized Healthcare the norm.

Hisanori Takanashi Department Manager R&D Portfolio Management Dept. Project & Lifecycle Management Unit We will build a stronger relationship with Chugai and provide active support.

Yoshiaki Tazawa General Manager, Medical Marketing Life Cycle Management In Vitro Diagnostics Roche Diagnostics K.K.



## Our Evolving Pipeline

#### Maximizing Product Value and Expanding Opportunities to Create Innovative Medical Products

Research and development focused on Personalized Healthcare not only leads to PHC-based medicines but maximizes product value and generates new opportunities to create innovative therapeutic options.

One of the best examples of PHC is Herceptin. Herceptin was originally approved for use in HER2positive metastatic breast cancer (see page 19). Next, it was found to be effective in other indications. This led to expanded indications for HER2-positive breast cancer, such as postoperative adjuvant and neoadjuvant therapy, and advanced or recurrent HER2-positive gastric cancer. This has increased the product's value significantly.

Moreover, research focused on HER2 has led to the development of two innovative second- and third-generation HER2-targeted drugs, both licensed from Roche. The first, RG1273 (pertuzumab), binds to the HER2 receptor at a different region than Herceptin does. Combining it with Herceptin is expected to increase efficacy. The

other compound, RG3502 (trastuzumab emtansine, T-DM1), is an antibody-drug conjugate that combines the therapeutic effect of trastuzumab (the active substance of Herceptin) with intracellular delivery of DM1, a highly potent chemotherapy agent, to specifically target HER2-positive tumors. By delivering the chemotherapy agent directly to cancer cells, T-DM1 may offer patients with HER2-positive breast cancer effective treatment while sparing them the burden and side effects of conventional chemotherapy.

#### Accelerating Growth through Our PHC Strategy

Chugai now has 12 PHC-based drug candidates in its pipeline. Nine additional projects are currently in the process of biomarker discovery. As a result, projects related to PHC now account for approximately 70 percent of our pipeline.

With their novel mechanisms of action, these compounds have the potential to become new treatment options. Two examples in the oncology field are AF802, a highly selective ALK inhibitor from

> Chugai research, and RG3638 (onartuzumab, MetMAb), which targets Met, a hepatocyte growth factor receptor. PHC-based compounds outside of the oncology field are also advancing steadily. RG3637 (lebrikizumab), which specifically inhibits the IL-13 signaling pathway, is being developed as a treatment for asthma, together with a companion diagnostic using periostin as a biomarker. Based on medical needs, market dynamics and our strengths, PHC will clearly become a growth driver for Chugai. We plan to focus further on PHC initiatives to contribute to new medical treatments and accelerate Chugai's growth.

#### **PHC-Based Compounds in Development**

Development Code (* developed in-house)	Expected Indication	Biomarker	
GC33 (RG7686)*	Liver cancer	Glypican-3	
AF802*	Non-small cell lung cancer	ALK transfusion gene	
RG3638 (onartuzumab, MetMAb)	Non-small cell lung cancer	Met	
RG7204 (vemurafenib)	Melanoma	BRAF	
CIF (RG7167)*	Solid tumors	MEK	
CKI27 (RG7304)*	Solid tumors	Raf/MEK	
RG1415 (Tarceva)	Non-small cell lung cancer (first-line)	EGFR	
RG1273 (pertuzumab)	Breast cancer	HER2	
RG3502 (trastuzumab emtansine, T-DM1)	Breast cancer	HER2	
	Indolent non-Hodgkin's lymphoma	6020	
GA101 (RG7159, obinutuzumab)	Aggressive non-Hodgkin's lymphoma	CD20	
RG3637 (lebrikizumab)	Asthma	Periostin	

Note: Biomarker research is in progress for SA237 (rheumatoid arthritis), PA799 (solid tumors), WT4869 (myelodysplastic syndromes, solid tumors), and certain other compounds.

#### From the GC33 Project Leader

GC33 is one of the first projects to come out of Chugai research since we initiated our PHC strategy. We have gone through several cycles of trial and error, but the knowledge we gained from this process will be valuable in promoting PHC. Liver cancer is a disease with few effective therapies, so our mission is to provide an effective new treatment option with this highly promising targeted medicine. We will use all our expertise in the fields of oncology and liver disease to steadily build results and contribute to medical treatment.



#### Chugai will contribute to treatment by creating its own best practices.

Toshihiko Otomo Project Leader, Project Management Dept. Project & Lifecycle Management Unit

#### From the RG3638 (onartuzumab, MetMAb) Project Leader

This compound is an antibody that possesses a unique structure. Remarkable efficacy was also reported in the clinical trials conducted by Roche. It is generating high expectations as a potential new treatment option for non-small cell lung cancer. There are still issues to be addressed, such as improving diagnostic test accuracy in the clinical setting and standardization, but we are confident that this project will play an important role in Chugai's efforts to lead PHC in Japan. Our team will work to realize the considerable value of this medicine for patients and convey to them our enthusiasm and optimism about its potential.



#### "Convey our enthusiasm and optimism" – those are our watchwords.

Noriaki Nakatani Project Leader, Project Management Dept. Project & Lifecycle Management Unit

#### From the AF802 Project Leader

As many lung cancer patients who have the ALK mutation are relatively young, with significant medical needs, interest is increasing in the highly promising efficacy and safety of AF802. Clinical development, including development of a companion diagnostic, is progressing smoothly, and we are optimistic about the chances of bringing this drug to market. This would be very satisfying, especially because it is a product of Chugai's own research. Our aim is to develop AF802 as a medicine that demonstrates clear superiority over previous drugs and offers a new treatment option to the patients who need it.

#### We will develop this compound into a medicine that we can confidently recommend.

Yasushi Yoshimura Project Leader, Project Management Dept. Project & Lifecycle Management Unit



#### From the RG3637 (lebrikizumab) Lifecycle Leader

Chugai has an extensive track record in oncology, but this compound is a potential new treatment for asthma, an inflammatory disease. This presents Chugai with new challenges in areas such as clinical development and, in the future, market rollout. However, we are confident that the drug's advantages – its potential to prevent aggravation of asthma, improve quality of life, and reduce mortality risk – will bring significant hope to patients. Its role in expanding Chugai's portfolio into a new therapeutic area is also important. We look forward to changing the many challenges into success as we contribute to the advancement of PHC.

#### We will fulfill an important mission while overcoming new challenges.

Kenji Kamata Lifecycle Leader, Primary Lifecycle Management Dept. Project & Lifecycle Management Unit



## Rising Above: We Are Expanding by Accelerating Penetration

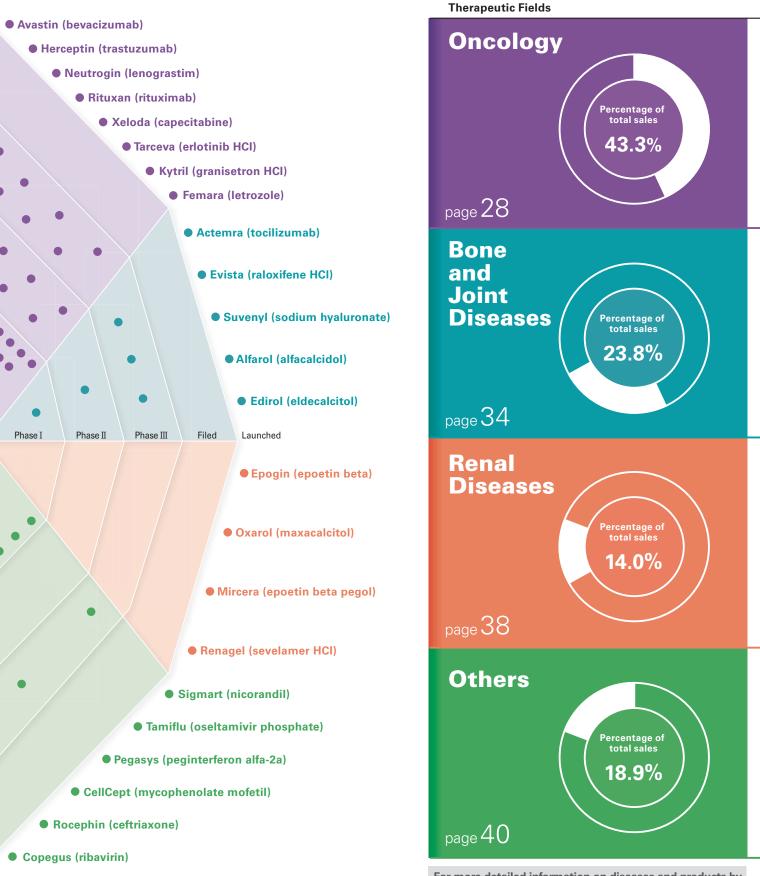
ann

## **Review of Operations**

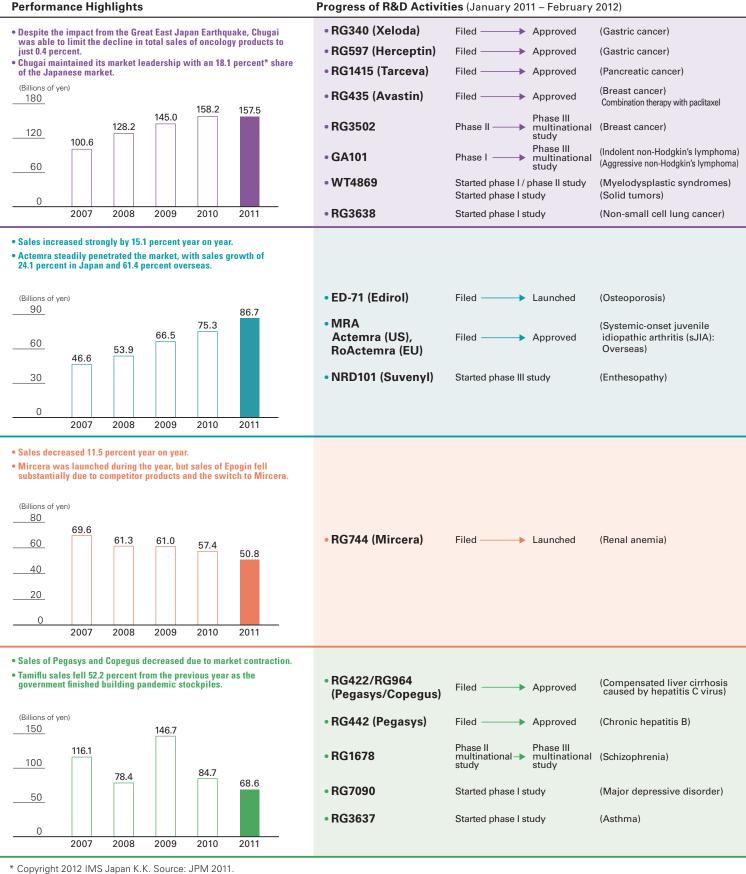
Chugai at a Glance	26
Oncology	28
Bone and Joint Diseases	34
Renal Diseases	38
Others	40

### Chugai at a Glance

#### **Compounds in Development and Major Products**



For more detailed information on diseases and products by therapeutic field, see "Basic Information" on pages 64-77.

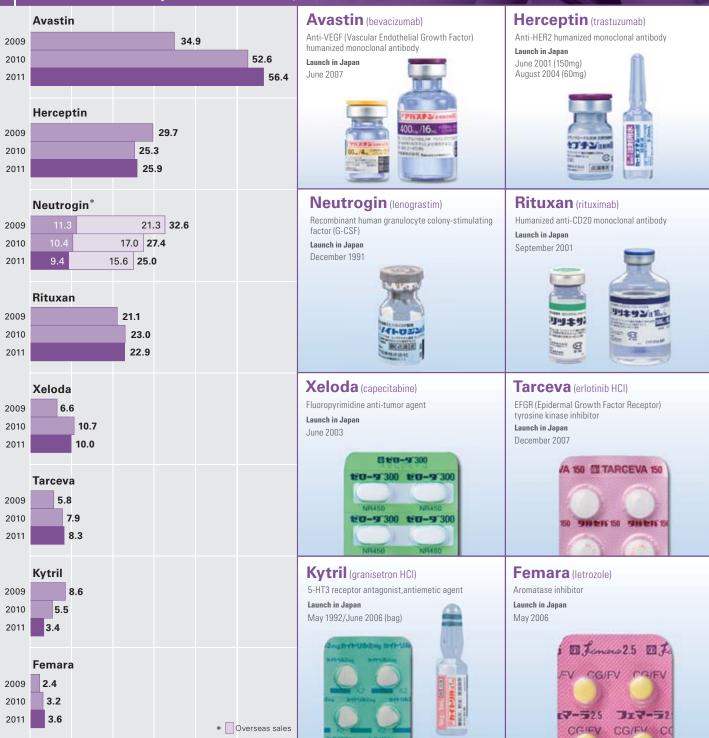


Copyright 2012 IMS Japan K.K. Source: JPM 2011. Reprinted with permission. The scope of the market is defined by Chugai.

## Oncology

Chugai has the largest market share in the oncology segment and the richest oncology pipeline in Japan. In addition to growing our business through strengthening our market position, we are contributing to the establishment of standards of care and nationwide accessibility to cancer treatment as the industry leader in the field of oncology.

#### Domestic Sales of Major Products (Billions of yen)



#### **Review of 2011 Results**

#### Overview

In 2011, total sales in the oncology field decreased ¥0.7 billion, or 0.4 percent, year-on-year to ¥157.5 billion. The Great East Japan Earthquake and its after-effects forced us to restrict our promotional activities and necessitated the cancellation or postponement of national and regional medical conferences and other events. In spite of this, we achieved steady growth in sales of Avastin and other major oncology products, maintaining our leading share<sup>1</sup> of the Japanese oncology market at 18.1 percent.

1. Copyright 2012 IMS Japan K.K. Source: JPM 2010-2011. Reprinted with permission. The scope of the market is defined by Chugai.

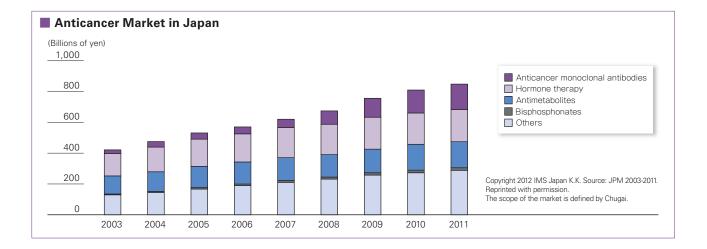
#### New Products and Additional Indications

Sales of the anti-vascular endothelial growth factor (VEGF) humanized monoclonal antibody Avastin increased ¥3.8 billion, or 7.2 percent, to ¥56.4 billion. Growth was driven mainly by continued uptake of Avastin for the first-line treatment of non-small cell lung cancer, particularly at large hospitals and cancer centers. Market penetration of the medicine in the metastatic colorectal cancer (mCRC) segment remained high, despite increased competition in the second- and firstline treatment settings. Avastin is the market leader in the first-line mCRC treatment setting, supported by a substantial body of data, and is already widely used in hospitals. In September 2011, Avastin obtained approval for the additional indication of inoperable or recurrent breast cancer. The rollout for this indication is proceeding as planned.

Sales of Herceptin, an anti-human epidermal growth

factor receptor-2 (HER2) humanized monoclonal antibody, increased ¥0.6 billion, or 2.4 percent, to ¥25.9 billion. Herceptin is recognized for its efficacy in treating breast cancer and is well-established in the treatment of HER2-positive metastatic breast cancer and as postoperative adjuvant therapy for HER2-positive breast cancer. Its use as adjuvant therapy has led to a reduction of tumor recurrence rates to the point where the market for metastatic breast cancer medicines is shrinking. Herceptin is also making inroads in the neoadjuvant (pre-surgery) treatment setting following its approval in this new indication in November 2011. Penetration of Herceptin in the treatment of advanced or recurrent gastric cancer, an indication approved in March 2011, has been faster than expected, with promotion of HER2 testing<sup>2</sup> of gastric tumors playing an important role.

Xeloda is a fluoropyrimidine anti-tumor agent for the treatment of colorectal cancer, recurrent breast cancer, and, following approval in February 2011, advanced or recurrent gastric cancer not amenable to curative resection. Sales in 2011 decreased ¥0.7 billion, or 6.5 percent, to ¥10.0 billion, reflecting slower-than-expected penetration of combination therapy with Xeloda and oxaliplatin (a regimen called XELOX) for colorectal cancer. The XELOX regimen based on oral Xeloda is becoming the standard of care for colorectal cancer worldwide, in part because it lessens the burden for patients and healthcare providers compared with intravenous 5-FU therapy. In addition, Xeloda achieved solid penetration in its indications of recurrent breast cancer and advanced or recurrent gastric cancer, helped particularly by uptake of combined Xeloda and Herceptin for the treatment of HER2-positive disease.



Sales of Tarceva, an epidermal growth factor receptor (EGFR) tyrosine kinase inhibitor, increased ¥0.4 billion, or 5.1 percent, to ¥8.3 billion. Market penetration is increasing steadily, reflecting increased understanding by oncologists of the medicine's safety and efficacy.

#### **Existing Products**

Anticancer agents in Chugai's existing product portfolio posted steady growth in sales. However, maintaining the market position of supportive care products remained a challenge.

Sales of Rituxan, an anti-CD20 monoclonal antibody, decreased ¥0.1 billion, or 0.4 percent, to ¥22.9 billion. This medicine has established a solid position as a standard therapy for non-Hodgkin's lymphoma.

Sales of Femara, an aromatase inhibitor for the treatment of breast cancer in postmenopausal women, increased ¥0.4 billion, or 12.5 percent, to ¥3.6 billion, driven by expanding use in initial adjuvant therapy. Sales were also helped by clinical studies showing that Femara is more effective than tamoxifen in improving survival.

Sales in Japan of Neutrogin (overseas name: Granocyte), a recombinant human granulocyte colonystimulating factor (G-CSF), decreased ¥1.0 billion, or 9.6 percent, to ¥9.4 billion. In Japan, market contraction due to a move toward outpatient chemotherapy intensified competition. In addition, the Great East

> TV lectures on breast and colorectal cancer

Japan Earthquake forced Chugai to significantly scale down a planned 20th anniversary promotional campaign. Outside Japan, competition from follow-on biologics<sup>3</sup> and the impact of the stronger yen led to a decrease in sales of ¥1.4 billion, or 8.2 percent, to ¥15.6 billion.

In a challenging market environment, continued generic erosion resulted in lower sales of Kytril, a 5-HT3 receptor antagonist antiemetic, which decreased ¥2.1 billion, or 38.2 percent, to ¥3.4 billion. In December 2011, Kytril was approved for additional indications of gastrointestinal symptoms associated with radiotherapy.

3. Follow-on versions, produced by other manufacturers, of biopharmaceutical products for which patents have expired; also called follow-on biologicals or biosimilars. Unlike generic versions of synthetic agents, follow-on biologics are not chemically identical to the original drugs.

#### Marketing

Contribute to improving the quality of cancer treatment

Rapid advances in cancer treatment in recent years have increased the importance of information for clinicians. Chugai has a robust marketing system centered on its approximately 550 oncology medical representatives (MRs), who provide accurate, timely information to healthcare professionals, giving top priority to patient safety and appropriate use of Chugai's products. The system we established to train our top oncology MRs in consulting-based promotion backed by expertise is now in its fourth year. Of the nearly 100 top oncology MRs who have completed the program, around 60 are now providing information based on a comprehensive view of cancer treatment. This includes supporting healthcare providers with advice on treatment of individual

> cases and study sessions in hospitals. We are on track to reach our goal of having 120 top oncology MRs in the field in the course of 2012. In addition, we have approximately 40 medical associates (MAs, a role established in 2009) to convey more specialized, advanced information in specific fields. Our professional MRs and MAs work together to offer high-value-added information tailored to the needs of healthcare professionals.

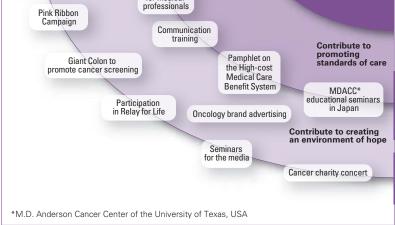
As Japan's top company in the field of oncology, Chugai plays a leading role domestically in cancer treatment. In addition to providing information to patients, we organize or co-sponsor charity events in support of our goal of



Website

for patients

Oncology Branding Activities



<sup>2.</sup> A diagnostic test can determine if a patient's breast or gastric cancer produces abnormally high levels of a protein called HER2, which helps stimulate the growth of these tumors. Herceptin targets HER2 and is administered only to patients whose tumors are identified as being HER2-positive.

realizing cancer treatment that allows patients to confront their disease proactively and with hope.

#### 2012 Strategy and Outlook

As a leader in the field of oncology with a portfolio that includes many standard therapies, Chugai's mission is to expand the application of standards of care, which we believe will directly support our future growth. In 2012, we will focus on establishing our growth drivers as standard therapies. Consulting-based promotion, in which we provide carefully targeted information and propose treatment plans for individual cases, will be key to this effort. We expect this to further increase the penetration of our products.

Avastin will play a major role in this growth, and we are moving to reinforce its market presence. Although competition in the metastatic colorectal cancer segment has intensified, we aim to continue strengthening the position of Avastin based on the substantial data on its safety and efficacy. For lung cancer, we expect to expand sales by recommending use according to treatment guidelines. For breast cancer, we are aiming for rapid market penetration by highlighting not only the effectiveness of Avastin in shrinking tumors but also its added value in areas such as increasing patient motivation for treatment.

Our strategy for Herceptin will focus on accelerating its use in neoadjuvant therapy for breast cancer. In addition, we will work aggressively to promote more widespread use of HER2 testing for gastric cancer.

Marketing of Xeloda will focus on encouraging physicians to switch from FOLFOX therapy<sup>4</sup> by highlighting the efficacy and safety of the XELOX regimen in colorectal cancer. We will also provide detailed information on the management of side effects, which differ from those of FOLFOX therapy. For gastric cancer, we will focus on promoting combination therapy with Herceptin in HER2-positive disease.

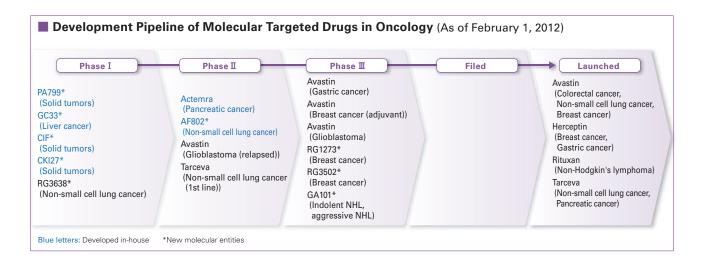
Tarceva is likely to face increased competition following a change in the indication of a competitor product, which is expected to have a significant impact on the market. However, we will continue working to expand sales by broadening awareness of Tarceva's benefits. 4. A combination therapy consisting of fluorouracil, folinic acid and oxaliplatin.

#### **Products under Development**

#### Additional Indications

Line extension projects to maximize the value of key products with additional indications are progressing steadily, and are expected to further expand Chugai's franchise in oncology. A number of projects obtained approval in 2011: Avastin for inoperable or recurrent breast cancer; Herceptin for advanced or recurrent gastric cancer and neoadjuvant therapy in breast cancer; Xeloda for advanced or recurrent gastric cancer; and Tarceva for pancreatic cancer.

Projects currently in development include several clinical trials with Avastin. In addition to a phase III multinational study for adjuvant therapy for breast cancer, we are participating in a phase III multinational study for glioblastoma, an aggressive type of brain tumor with limited treatment options, and are conducting phase II clinical trials in Japan in patients with relapsed glioblastoma. For ovarian cancer, a multinational clinical study is being conducted as an investigator-initiated trial; regulatory approval of this indication was gained in Europe in December 2011. Chugai is preparing to develop Avastin for ovarian cancer in Japan.



Development Code (Product name)	Indication	Phase I	Phase II	Status Phase III	Filed	Approved		Generic Name	Dosage Form	Origin (Collaborator)		
RG340 (Xeloda)	Gastric cancer					0	Feb. 2011	capecitabine	Oral	Roche		
RG597 (Herceptin)	Gastric cancer					•	Mar. 2011	trastuzumab	Injection	Roche		
RG1415 (Tarceva)	Pancreatic cancer					0	Jul. 2011	erlotinib HCl	Oral	Roche / OSI		
	Non-small cell lung cancer (1st line)											
RG435 (Avastin)	Breast cancer					0	Sep. 2011	bevacizumab	Injection	Roche		
	Gastric cancer											
	Breast cancer (adjuvant)				(Multinatio	onal study)	-					
	Glioblastoma				(Multinatio	onal study)	-					
	Glioblastoma (relapsed)						-					
EPOCH (Epogin)	Chemotherapy-induced anemia					*		epoetin beta	Injection	In-house		
RG1273	Breast cancer				(Multinatio	onal study)		pertuzumab	Injection	Roche		
RG3502	Breast cancer			•	(Multinatio	onal study)		trastuzumab emtansine	Injection	Roche		
GA101 (RG7159)	Indolent non-Hodgkin's lymphoma			•	(Multinatio	onal study)		obinutuzumab	Injection	Roche		
	Aggressive non-Hodgkin's lymphoma			•	(Multinatio	onal study)	-					
MRA (Actemra)	Pancreatic cancer			(I / II)				tocilizumab	Injection	In-house		
AF802	Non-small cell lung cancer			(I/II)				_	Oral	In-house		
WT4869	Myelodysplastic syndromes		•	(I/II)				_	Injection	In-house /		
	Solid tumors									Dainippon Sumitomo Pharma		
CIF (RG7167)	Solid tumors							_	Oral	In-house (Roche)		
			(Oversea	s)			-					
CKI27 (RG7304)	Solid tumors							_	Oral	In-house (Roche)		
			(Oversea	s)								
GC33 (RG7686)	Liver cancer							_	Injection	In-house (Roche)		
			(Oversea	s)			-					
PA799	Solid tumors		(Oversea	s)				_	Oral	In-house		
RG3638	Non-small cell lung cancer	•						onartuzumab	Injection	Roche		
			1		1	1	1					

#### Development Pipeline (As of February 1, 2012)

O Designates change in status in 2011 and thereafter.

\* In October 2011, it was concluded that approval of Epogin for this indication was not appropriate. Chugai is currently considering future action.

#### **New Compounds**

Chugai is developing new compounds with a focus on molecular targeted therapies. Our development pipeline currently includes seven projects from Chugai research and five licensed from Roche. All of these projects are based on Chugai's Personalized Healthcare approach. (See the feature section on pages 17-24 for details.)

All of the compounds from Chugai research are in early-stage development. Phase I clinical trials are underway for GC33 (RG7686), an investigational drug Chugai licensed to Roche in January 2011, and which we are co-developing; a phase II multinational study is scheduled to start in 2012. GC33 is a humanized monoclonal antibody that targets glypican-3, a protein that is specifically expressed in liver cancer. An immunohistochemical (IHC) staining method to detect glypican-3 is being developed in parallel.

AF802, a targeted highly selective inhibitor of anaplastic lymphoma kinase (ALK), is currently being investigated in domestic phase I/II clinical trials as a potential treatment for non-small cell lung cancer. Phase I testing has been completed, and the transition to phase II is now under way. International phase I clinical trials are also planned in 2012.

Chugai has licensed the small-molecule targeted therapies CIF (RG7167) and CKI27 (RG7304) to Roche, and joint phase I clinical trials have started. CIF is a MEK inhibitor; CKI27 is a Raf and MEK dual inhibitor.

PA799, a PI3K class I inhibitor that Chugai is developing for the treatment of solid tumors, is advancing steadily through phase I clinical trials overseas. WT4869 is a therapeutic peptide vaccine that targets a protein known as WT1, which is thought to play a key role in leukemia and other cancers. Chugai is codeveloping this compound with Dainippon Sumitomo Pharma Co., Ltd. Domestic phase I/II clinical trials for the treatment of patients with myelodysplastic syndromes started in August 2011, and domestic phase I clinical trials for the treatment of solid tumors started in September 2011.

Among the compounds licensed from Roche are four projects in late-stage development and one that recently entered clinical trials. Chugai is participating in Roche's phase III multinational study investigating RG1273, a monoclonal antibody and HER dimerization inhibitor, in combination with Herceptin for the treatment of HER2-positive breast cancer. The study has been completed, and we plan to file for regulatory approval in Japan in 2012. Roche submitted marketing applications for pertuzumab in the EU and US in late 2011, and the US application has been designated for priority review by the Food and Drug Administration. In addition, since May 2011 Chugai has been participating in Roche's phase III multinational study of RG3502, an anti-HER2 antibody-drug conjugate. This novel compound is designed to selectively kill cancer cells more effectively and safely than the current standard combination of Herceptin plus chemotherapy. RG3502 combines the therapeutic effect of trastuzumab (the active substance of Herceptin) with intracellular delivery of DM1, a highly potent chemotherapy agent, to specifically target HER2-positive tumors. Chugai also started participating in phase III multinational studies of the anti-CD20 monoclonal antibody GA101 (RG7159) for aggressive non-Hodgkin's lymphoma in October 2011 and indolent non-Hodgkin's lymphoma in November 2011. Domestic phase I clinical trials of RG3638, a humanized anti-Met antibody, started in August 2011 for the treatment of non-small cell lung cancer. This compound is expected to offer a new therapeutic option for patients with high Met-expressing advanced non-small cell lung cancer, which has a poor prognosis with currently available treatments.

#### The Increasingly Important "Multidisciplinary Team Approach"

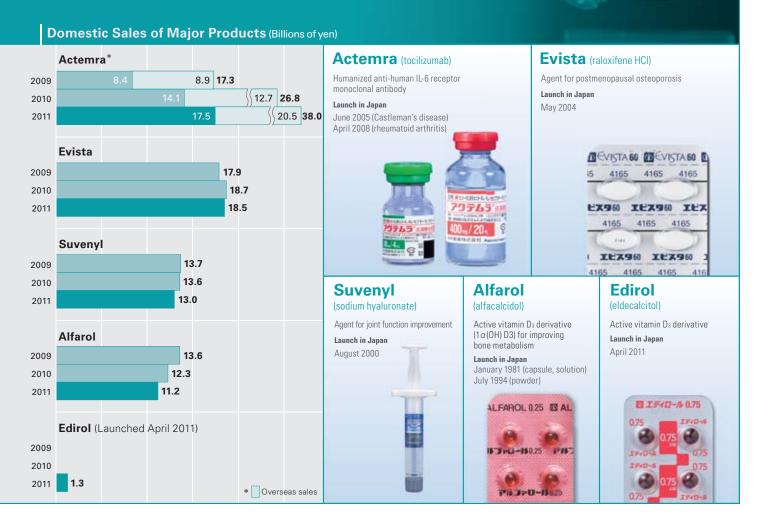
Recent years have seen an increasing trend toward a multidisciplinary team approach in which physicians and other healthcare professionals such as nurses, pharmacists and nutritionists coordinate treatment and care according to the condition of each individual patient. In the conventional approach, a primary physician makes decisions on treatment and issues instructions to other healthcare professionals. However, with the increasing specialization that has accompanied the growing diversification and complexity of healthcare, it has become difficult for one doctor to handle all information and make all decisions. With the proper division of roles and efficient coordination between the physician and other professionals, each can deal with the patient independently. This allows each professional to fully utilize his or her expertise, raising the quality of care and enhancing patient satisfaction. Beginning in 2012, the Japanese Ministry of Health, Labour and Welfare is taking various steps

to promote the multidisciplinary approach, including revising medical fee schedules.

Chugai also recognizes the importance of the multidisciplinary team approach to cancer care in Japan. We hold multidisciplinary care workshops that bring together professionals from numerous facilities at hub hospitals in each region and conduct study sessions at individual hospitals. Participants review case studies in advance so that they can share the results of their discussions with other participants at the workshops. This has also been effective in promoting the use of standardized care. Chugai plans to double the number of workshops in 2012 to around 30. We believe that participating hospitals will play a central role in implementing the multidisciplinary team approach in each region, broadening acceptance by giving it stronger regional roots. We will continue to provide information and guidance to hospitals and other oncology facilities.

## Bone and Joint Diseases

Chugai aims to expand in this field, which is key to future growth, by promoting rapid penetration and building a strong market presence for two products originating from its own research: our main growth driver, Actemra, and our new next-generation osteoporosis treatment, Edirol.



#### **Review of 2011 Results**

#### **Overview**

In 2011, Chugai's total sales in the bone and joint diseases field increased ¥11.4 billion, or 15.1 percent, compared with the previous year to ¥86.7 billion. This growth was driven primarily by the steady market penetration of Actemra, a humanized anti-human IL-6 receptor monoclonal antibody for the treatment of rheumatoid arthritis (RA). Sales of osteoporosis treatments remained stable compared with the previous year as Chugai launched Edirol, the product of many years of research on vitamin D, and maintained the market positions of Alfarol, Evista and other products.

#### **Rheumatoid Arthritis**

Sales of Actemra in Japan increased ¥3.4 billion, or 24.1 percent, to ¥17.5 billion, outpacing market growth despite intensifying competition.

Actemra, which originated from Chugai research, is the first therapeutic antibody created in Japan, with a novel mode of action as the world's first inhibitor of interleukin-6 (IL-6). Its innovative mode of action and efficacy have attracted strong interest from healthcare professionals, and no other biologic medicine was the subject of more academic presentations in the field of RA in 2011. Analyses from all-patient registration surveillance reported by the Japan College of Rheumatology and the American College of Rheumatology and other data have broadened recognition of the medicine's safety.

In marketing, Chugai has established an intensive training system for medical representatives (MRs) promoting Actemra, and has added medical associates (MAs) to convey more advanced scientific information. Backed by a multilayered organization operating through head and branch offices, our MRs and MAs are able to provide information and follow-up tailored to each patient.

As a result, the medicine's profile – effectiveness in preventing joint destruction, high remission rate, and sustained long-term efficacy – is well recognized among rheumatologists, leading to steady market acceptance.

Sales of Actemra outside Japan (sales from exports to Roche for sale in regions other than Japan, Korea and Taiwan) rose ¥7.8 billion, or 61.4 percent, to ¥20.5 billion. The product was approved in the European Union, where it is known as RoActemra, in 2009 and in the United States in 2010. Actemra/RoActemra is now a global medicine sold in more than 70 countries. In the European and US markets, where there is greater competition from established products, Actemra's unique appeal as an IL-6 inhibitor has resulted in steady market penetration similar to that in Japan.

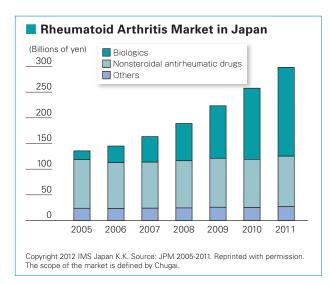
To meet the increasing global demand for Actemra, Genentech will manufacture the active pharmaceutical ingredient (API) of Actemra in the United States under a toll manufacturing agreement with Chugai. The transfer of production technology to Genentech is proceeding smoothly.

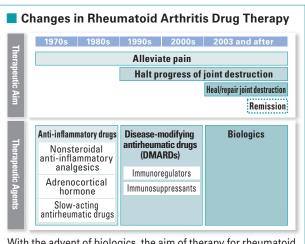
#### **Osteoporosis and Osteoarthritis**

Chugai is the market leader in the osteoporosis segment in Japan. In 2011 we achieved major milestones in our efforts to strengthen this position with approval of the active vitamin D<sub>3</sub> derivative Edirol in January 2011 and its launch in April.

Sales of in-house product Edirol amounted to ¥1.3 billion for the year. While this fell short of our plan due to the cancellation or postponement of major launch conferences and other promotional activities following the Great East Japan Earthquake, increasing recognition of the product was reflected in steadily growing prescriptions, primarily for new patients. Active vitamin D3 derivatives have an important role as a basic treatment for osteoporosis. In addition to promoting calcium absorption like conventional vitamin D<sub>3</sub> products, Edirol is significantly more effective in increasing bone density and inhibiting bone resorption. Thanks to its extensive research into vitamin D, Chugai has established a strong presence in the osteoporosis segment and is focusing on achieving rapid market penetration for Edirol by positioning it as a product with superior clinical data.

Sales of Alfarol decreased ¥1.1 billion, or 8.9 percent, to ¥11.2 billion due to the shift to Edirol and generic erosion. However, the strong reputation of this product after 30 years on the market helped to





With the advent of biologics, the aim of therapy for rheumatoid arthritis has shifted to achieving and maintaining remission.

minimize the decline in sales.

Sales of Evista decreased ¥0.2 billion, or 1.1 percent, to ¥18.5 billion. The market for selective estrogen receptor modulators is showing solid expansion, and following the launch of a competitor product in 2010, Chugai's marketing efforts emphasized the substantial data on the safety and benefit of Evista, resulting in better understanding of the benefits of continued use of this medicine as directed.

In the osteoarthritis segment, sales of Suvenyl decreased ¥0.6 billion, or 4.4 percent, to ¥13.0 billion, reflecting slower market expansion and the launch of a competitor product. The clear benefits of Suvenyl as the only natural, high molecular weight hyaluronate preparation approved in Japan to treat osteoarthritis continue to be well recognized. In addition, the change in dosage form in March 2011 from a glass syringe to a plastic syringe designed to enhance convenience for medical staff has also gained solid acceptance.

#### 2012 Strategy and Outlook

In 2012, we aim to achieve further sales growth of Actemra using evidence of its safety and efficacy and our global marketing platform.

In Japan, we will continue to provide specialized scientific information focused on establishing Actemra as a first-line biologic treatment for RA. Building clinical experience among healthcare providers in the use of Actemra in new patients is especially important in the treatment of this chronic disease. To promote further market penetration, we intend to emphasize the high rates of prolonged remission that can be achieved with Actemra: In domestic clinical trials, 55.3 percent of patients were still in remission after five years. Recent revisions of diagnosis criteria for RA will support further usage of Actemra as well. Rheumatologists are moving from the conventional "wait-and-see" approach to a "treat-to-target" approach in which the patient's response to treatment is assessed after a short period and patients who have not responded are switched to a new therapy. The treatment objective is also shifting to early and sustained remission. Actemra is backed by clinical data showing it to be effective in preventing joint destruction and achieving prolonged remission, and we will position it as a medicine that fits the new

treatment targets.

Outside Japan, Chugai will continue to cooperate closely with Roche and Genentech to further develop Actemra as a global medicine that contributes to the treatment of RA worldwide. By conducting focused activities to provide information, we will anticipate further growth, primarily in the critical markets of the US and EU. In December 2011, Genentech submitted a supplemental biologics license application to the US Food and Drug Administration (FDA) that would lift the limitation of usage in patients with moderately to severely active RA "who have had an inadequate response to one or more tumor necrosis factor (TNF) antagonist therapies." The anticipated action date comes in October 2012.

Chugai aims to reinforce its market position as a leading provider of osteoporosis treatments, focusing on strengthening the position of Edirol, which was launched in 2011.

We are working vigorously to achieve rapid market penetration of Edirol by promoting it as a next-generation replacement for existing vitamin D3 derivatives. Longterm prescriptions are critical in gaining market acceptance of osteoporosis treatments. The restriction on longterm prescriptions of Edirol will end in April 2012, and therefore accelerating penetration starting in April will be vitally important. Moreover, in the December 2011 revision of the osteoarthritis prevention and treatment guidelines, Edirol received a grade A recommendation in the vitamin D<sub>3</sub> derivatives category for the first time. Edirol is highly regarded for its effectiveness in increasing bone mass and preventing bone fractures, and we will focus on providing information and promoting awareness of the new guidelines to establish it as a basic treatment for osteoporosis.

In marketing Evista, we will highlight its long-term safety and efficacy profile as we work to establish it as a leading treatment in patients with early-stage osteoporosis to prevent bone fractures.

As many doctors using Edirol also use Evista, we plan to offer lectures on osteoporosis treatment with combined Edirol and Evista.

In the osteoarthritis segment, we will continue to provide information about the safety and efficacy of Suvenyl, as more doctors recognize the safety of natural, high molecular weight hyaluronate preparations. We

Development Code (Product name)	Indication	Phase I	Phase II	Status Phase III	Filed	Approved		Generic Name	Dosage Form	Origin (Collaborator)
MRA (Actemra)	Systemic-onset juvenile idiopathic arthritis (sJIA)					•	Apr. 2011 (US) Aug. 2011 (EU)	tocilizumab	Injection	In-house (Roche)
	Rheumatoid arthritis (New formulation:									
	Subcutaneous injection)				(Oversea	s)				
ED-71 (Edirol)	Osteoporosis					0	Jan. 2011	eldecalcitol	Oral	In-house (Taisho Pharmaceutical)
NRD101 (Suvenyl)	Enthesopathy			•				sodium hyaluronate	Injection	In-house
RG484	Osteoporosis				(П/Ш)			ibandronate	Injection Roche	
								sodium hydrate Oral		(Taisho Pharmaceutical)
SA237	Rheumatoid arthritis							_	Injection	In-house

#### Development Pipeline (As of February 1, 2012)

O Designates change in status in 2011 and thereafter.

will also emphasize the convenience of the new plastic syringe to maintain market share.

#### **Products under Development**

In the area of RA, development of a new formulation of Actemra for subcutaneous injection is progressing smoothly, and preparation for filing is currently under way. Efficacy evaluations in clinical trials confirmed noninferiority to the intravenous formulation, and no significant difference in safety was found. We believe that making the more convenient subcutaneous formulation available alongside the intravenous formulation will be beneficial for both patients and healthcare providers.

In the osteoporosis segment, Chugai is co-developing the bisphosphonate medicine RG484 (overseas product name: Bonviva/Boniva) with Taisho Pharmaceutical Co., Ltd. A regulatory filing is planned in 2012. Top-line results of phase II/III clinical trials of the injectable formulation were announced in December 2011, and showed non-inferiority to existing bisphosphonates. Phase II clinical trials for the oral formulation are progressing on track. Unlike existing oral bisphosphonates, which are normally taken once a week, oral RG484 can be taken just once a month, and is thus expected to improve patient adherence to treatment.

Phase III clinical trials of Suvenyl for the indication of enthesopathy started in October 2011. Enthesopathy is a painful condition characterized by degeneration in the attachment of tendons and ligaments to bone. Examples of enthesopathy include lateral epicondylitis, patellar tendinitis, achilles tendinopathy and plantar fasciitis.

# Applying Breakthrough Antibody Engineering Technology: Next-Generation Antibody Drug SA237

SA237 is a next-generation antibody drug developed by applying Chugai's proprietary innovative antibody engineering technology, which enables a single antibody molecule to bind to a target antigen multiple times, to Actemra. This antibody engineering technology, which overturns the conventional wisdom about monoclonal antibodies, was created to bring the substantial benefits of Actemra to a broader range of patients.

Using the difference in pH of plasma and cells, an antibody that has bound to a target antigen in plasma can enter a cell, where only the antigen is released and degraded. The antibody is then "recycled" back extracellularly, where it can bind to another target antigen. This enables long-term, sustained efficacy, even with smaller-dose subcutaneous administration. Preclinical studies have verified that SA237 can continuously block IL-6 receptors more than four times longer than Actemra. Smaller, less frequent doses are expected to lead to greater convenience for patients. A phase I clinical trial is currently underway in Japan for the indication of rheumatoid arthritis.

# **Renal Diseases**

To fulfill its role as a leader in the field of renal diseases, Chugai will contribute further to treatment and drive market expansion by promoting the rapid establishment of Mircera, an innovative new medicine launched in 2011.



### **Review of 2011 Results**

#### **Overview**

In 2011, sales in the renal diseases field decreased ¥6.6 billion, or 11.5 percent, year-on-year to ¥50.8 billion. Mircera, a long-acting erythropoietin-stimulating agent (ESA) that we expect will become an important growth driver, was launched in July 2011. Sales of Epogin, our established ESA for the treatment of renal anemia, fell sharply due to competitive pressure and also due to patients switching to or starting treatment with Mircera.

In renal anemia associated with chronic kidney disease (CKD), the growth of the dialysis segment in Japan has slowed and competition has intensified since the government introduced a flat-sum reimbursement system for ESAs in 2006 in an effort to limit medical costs. In contrast, the pre-dialysis segment has expanded in recent years. This growth is being driven in part by a national education campaign to promote early diagnosis and treatment of renal anemia in response to an increase in CKD in patients with diabetes.

Despite Chugai's efforts to defend Epogin against competitor products and follow-on biologics based on substantial safety and efficacy data, sales of Epogin declined ¥11.2 billion, or 28.0 percent, to ¥28.8 billion. A significant part of this decline is due to the increasing number of patients switching to or starting treatment with Mircera.

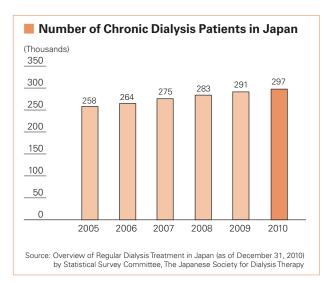
Sales of Mircera amounted to ¥5.9 billion. Like Epogin, Mircera can be used in both the dialysis and pre-dialysis settings. This innovative medication allows maintenance of stable hemoglobin levels with administration once every four weeks, a significant reduction in treatment frequency compared with existing medicines. In addition, the duration of action of Mircera is similar after both intravenous and subcutaneous administration, allowing consistent treatment from the pre-dialysis to the dialysis setting. In the dialysis

<b>Development Pipeline</b> (As of February 1, 2012)									
Development Code (Product name)	Indication	Phase I	Phase II	Status Phase III	Filed	Approved	Generic Name	Dosage Form	Origin (Collaborator)
RG744 (Mircera)	Renal anemia					Apr. 201	1 epoetin beta pegol	Injection	Roche
-									

O Designates change in status in 2011 and thereafter.

segment, the longer dosing interval means that it will take some time for healthcare providers to evaluate the benefits of Mircera, but the number of clinical facilities using it is increasing steadily. In the pre-dialysis segment, market uptake has been somewhat slower, because adoption of Mircera at hospitals and clinics was delayed by the Great East Japan Earthquake. However, the medicine's benefits – a longer dosing interval and the ability to maintain consistent treatment from pre-dialysis to dialysis – are particularly advantageous in the pre-dialysis segment, and recognition by healthcare providers is steadily rising.

Sales of Oxarol, an agent for secondary hyperparathyroidism, grew ¥0.2 billion, or 1.7 percent, to ¥12.2 billion in an expanding market. Growth was driven by substantial clinical evidence that treatment with Oxarol can increase life expectancy, helped by a successful promotional campaign on the 10th anniversary of the medicine's launch. Sales of Renagel, for hyperphosphatemia, decreased ¥1.8 billion, or 36.7 percent, to ¥3.1 billion. The company that manufactures this medicine for Chugai was forced to suspend operations due to the March 11 earthquake. Chugai took immediate action to maintain supplies of Renagel to patients. This included



making arrangements for another company to manufacture the product and organizing emergency imports of alternative products. Despite these steps, sales declined substantially as patients switched to competitor drugs.

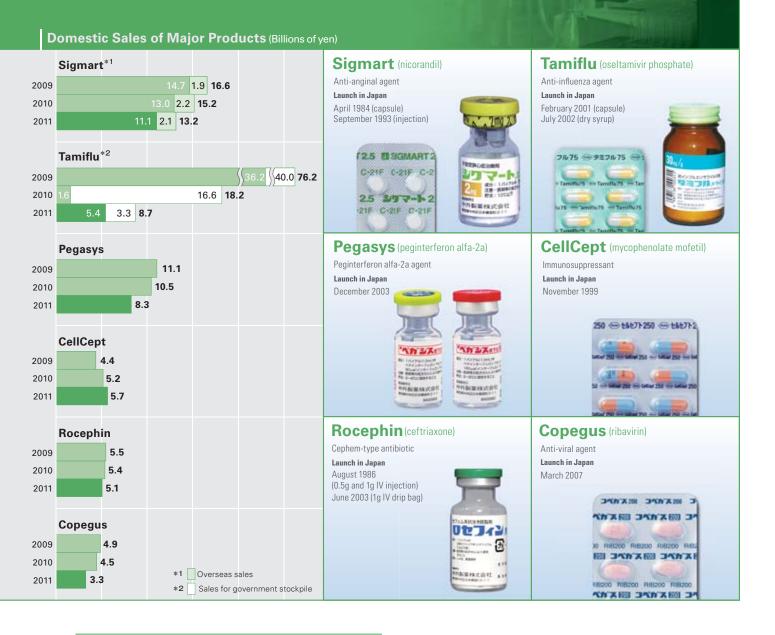
#### **2012 Strategy and Outlook**

In 2012, Chugai plans to further strengthen its leadership in the renal diseases field by expanding sales of Mircera. Promotional efforts will focus on rapidly establishing this key product in the expanding pre-dialysis segment, where most growth is expected. At the same time, we aim to drive market expansion by highlighting the benefits of Mircera (long duration of action, administration once every four weeks) and educating potential renal anemia patients about the importance of early treatment. In the dialysis segment, we expect that competition from competitor products and follow-on biologics will continue to increase. Here, we aim to build our market presence with Mircera by guickly establishing safety and efficacy data in the clinical setting. Marketing activities will continue to focus on proposing optimal treatment approaches for individual patients using our pioneering electronic system for managing each patient's course of treatment, combined with our comprehensive pharmacovigilance system.

We will work to consolidate the market position of Oxarol ahead of the expected launch of competitor products and generics over the next several years. In addition to continuing to highlight the potential of Oxarol to improve life expectancy, we will focus on providing education about the benefits of early treatment of hyperparathyroidism, something that is emphasized in treatment guidelines. Promotional activities for Renagel will emphasize its value based on data showing improved life expectancy. Our aim is to restore awareness of the product's benefits to the level that existed prior to the March 2011 earthquake.

# Others

In the chronic hepatitis C segment, Chugai aims to strengthen its market position and further expand its market share by proactively providing information to healthcare professionals. In addition, Chugai is enhancing its development pipeline in areas of significant unmet medical need, including diseases of the central nervous system and diabetes.



# **Review of 2011 Results**

#### Overview

In 2011, total sales in the Others field, which covers all products other than those for oncology, bone and joint diseases, and renal diseases, decreased ¥15.9 billion, or 18.8 percent, year-on-year to ¥68.6 billion. The decrease was largely due to a contracting market for Pegasys (peg-interferon alfa-2a), a pegylated interferonbased medicine for the treatment of hepatitis B and C, and Copegus (ribavirin), an antiviral agent used in combination with Pegasys to treat chronic hepatitis C, and a decline in sales of the anti-influenza agent Tamiflu.

# **Chronic Hepatitis C**

Chronic hepatitis C results from infection with the hepatitis C virus (HCV). An estimated two million people in Japan are currently infected. Untreated chronic hepatitis C may progress to liver cirrhosis and liver cancer. More than 30,000 people in Japan die from liver cancer each year, and about 80 percent of those cases are thought to be caused by chronic hepatitis C. Emphasis is therefore being placed on the early detection and treatment of hepatitis C. In 2011, the hepatitis C market contracted by approximately 30 percent, as patients deferred treatment in anticipation of the launch of new medicines.

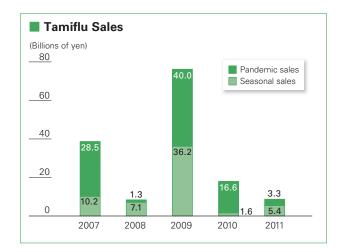
This led to a decline in sales of Pegasys of ¥2.2 billion, or 21.0 percent, to ¥8.3 billion for the year. However, the medicine's market share continued to increase, reflecting the substantial evidence showing its high level of efficacy, suitability for long-term administration in small doses, as recommended in treatment guidelines, and its approval for use as monotherapy. Moreover, the lifting in 2011 of a requirement to conduct a blood test immediately before administration helped the market penetration of Pegasys both as monotherapy and in combination with Copegus.

In 2011, Pegasys was approved for two additional indications: treatment of hepatitis C in patients with compensated liver cirrhosis (in combination with Copegus), in July; and treatment of chronic active hepatitis B (monotherapy), in September. As the proportion of older people in Japan's population increases, the number of patients whose disease is progressing to liver cirrhosis is also rising. Against this background, approval of these additional indications for Pegasys, ahead of competitor products, is highly significant and confirms the continuing importance of Pegasys as a treatment option.

#### Influenza

Sales of Tamiflu decreased ¥9.5 billion, or 52.2 percent, to ¥8.7 billion as there was no major seasonal flu outbreak during the year. Seasonal sales amounted to  $\pm$ 5.4 billion, an increase of  $\pm$ 3.8 billion (237.5 percent), while pandemic sales were  $\pm$ 3.3 billion, a decrease of  $\pm$ 13.3 billion (80.1 percent).

Despite the impact from the launch of several competitor products in 2010, Tamiflu maintained its leading market share, reflecting recognition of the superiority of its unique dry syrup formulation and convenience as the only oral anti-influenza agent.



# 2012 Strategy and Outlook

The market for chronic hepatitis C drugs is expected to expand with the launch of a competitor product. Chugai will continue to focus on promoting the positive clinical data supporting Pegasys and Copegus, and will work to increase sales by rapidly establishing the use of these products in the newly approved indications of hepatitis C in patients with compensated liver cirrhosis (combined Pegasys and Copegus) and chronic active hepatitis B (Pegasys monotherapy). At the same time, we will work to further strengthen the position of our interferon products by providing information to healthcare professionals, including information on diagnostics that can predict a patient's response to treatment.

In the influenza segment, competition is expected to intensify, but Chugai will continue to provide safety information based on the extensive clinical data collected since 2001 to contribute to influenza treatment.

### Development Pipeline (As of February 1, 2012)

Development Code (Product name)	Indication	Phase I	Phase II	Status Phase III	Filed	Approved		Generic Name	Dosage Form	Origin (Collaborator
Transplant, Immun	ology and Infectious Dis	seases								
RG964 (Copegus)	Compensated liver cirrhosis caused by hepatitis C virus					•	Jul. 2011	ribavirin	Oral	Roche
RG442 (Pegasys)	Compensated liver cirrhosis caused by hepatitis C virus					•	Jul. 2011	peginterferon	Injection	Roche
	Chronic hepatitis B					•	Sep. 201	alfa-2a		
Other Diseases										
Other Diseases CSG452	Type 2 diabetes							tofogliflozin hydrate	Oral	In-house
	Type 2 diabetes Schizophrenia			•	(Multinatio	onal study)		tofogliflozin hydrate bitopertin	Oral Oral	In-house Roche
CSG452	- **			•	(Multinatio	onal study)		· · ·		
CSG452 RG1678	Schizophrenia	•	(Oversea		(Multinatic	nal study)		bitopertin	Oral	Roche

O Designates change in status in 2011 and thereafter.

# Products under Development

In 2011, development projects in the central nervous system field and diabetes advanced steadily, and Chugai enhanced its pipeline with the addition of a new compound in the field of inflammatory diseases.

In the central nervous system field, Chugai has three compounds in development, including one new compound. RG7090, an mGluR5 antagonist, entered phase I clinical trials in Japan for the treatment of major depressive disorder in June 2011. This smallmolecule compound with a novel mechanism of action is promising as a first-in-class<sup>1</sup> medicine, and is being investigated together with a companion biomarker as a potential Personalized Healthcare solution. RG1450, a human anti-amyloid-beta peptide monoclonal antibody for the treatment of Alzheimer's disease, is advancing through phase I clinical trials. A phase III multinational study with RG1678, a glycine reuptake inhibitor under development for schizophrenia, started in January 2011, and is progressing as planned. These three projects targeting depression, Alzheimer's disease and schizophrenia, ensure that the central nervous system disease area will remain an important focus of drug development at Chugai.

CSG452, a selective SGLT2 inhibitor in development for the treatment of type 2 diabetes, is advancing through phase III clinical trials. This small-molecule compound is designed to achieve continuous control of blood sugar in an insulin-independent manner through excretion of glucose in the urine.

In the inflammatory diseases field, a new area of development for Chugai, we have added a compound with the potential to become a Personalized Healthcare treatment. RG3637, a humanized anti-IL-13 antibody licensed from Roche, started phase I clinical trials in Japan in August 2011 for the treatment of asthma. In a phase II proof-of-concept trial conducted by Roche, RG3637 demonstrated particular efficacy in patients with elevated levels of serum periostin.<sup>2</sup> RG3637 is being investigated for its potential to improve the daily symptoms of asthma and prevent asthmatic attack in patients with moderate to severe asthma that is uncontrolled with existing treatment options.

 An original drug that is highly novel and useful, has a chemical structure different from that of existing drugs, and significantly changes the therapeutic system.

 An extracellular matrix protein that is induced by IL-13 and is considered to be related with fibrosis of bronchial pathway cells in patients with asthma. Periostin levels can be measured with a blood test.

# Rising Above: We Are Working to Ensure Sustainability



# Organization and Human Resources

Research	44
Drug Safety	47
Corporate Social Responsibility	49
Corporate Governance	52
Board of Directors/ Corporate Auditors	58
Executive Officers	60

# Research

Leveraging its solid technology platform, Chugai is pushing forward on cutting-edge research to continuously generate innovative medical products that address unmet medical needs for the benefit of the medical community and human health around the world.

# Basic Policy and Allocation of Resources

Generating a steady stream of innovative medical products that address unmet medical needs for the benefit of the medical community and human health around the world is Chugai's raison d'etre as well as the basis of its relationship with patients and other stakeholders.

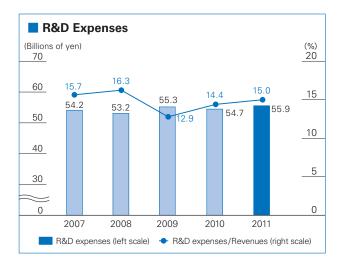
Based on this stance, Chugai conducts research primarily to create new drugs with first-in-class or best-inclass potential, with a focus on the field of oncology. Typically, it takes more than a decade for a drug candidate to advance from the research stage to approved use as a medicine. In conducting research, therefore, Chugai always considers factors such as how healthcare systems will be structured, how the market environment will change, and how treatment methods will evolve in the future.

In allocating research resources, we prioritize projects based on criteria such as a compound's potential for development as a novel, first-in-class medicine; a high level of scientific feasibility for the target product profile; and whether speedy development can be expected. At various decision points during research, we focus first and foremost on patient needs, not on the drug's short-term commercial potential. This reflects our belief that creating medicines that patients and healthcare providers truly need will drive Chugai's medium-to-long-term growth.

#### Strengths of Chugai's Research Organization

Chugai's research activities have produced a number of results in recent years. Three strengths have underpinned these efforts.

The first is our years of accumulated knowledge and the benefits of the merger with Nippon Roche. Before its strategic alliance with Roche, Chugai had been engaged in research and development of biopharmaceuticals for more than 30 years, and had the foremost research platform in Japan for biopharmaceuticals and therapeutic antibodies. Nippon Roche, meanwhile, operated the Kamakura Research Laboratories, which discovered Xeloda, the global standard of care for cancer, and had established a world-class technology platform for the discovery of synthetic agents. The merger of these two companies created a research organization excelling in both biopharmaceuticals and synthetic agents, which expanded options in drug discovery. The resulting technological foundation has led to the development of advanced research technologies. In October 2010, Chugai announced its antibody recycling technology that enables a single antibody molecule to bind to a target antigen multiple times, which was impossible with conventional monoclonal antibodies. Preclinical studies have demonstrated that applying this technology to Actemra increases the duration of IL-6 receptor blockade by more than four times. In 2011, Chugai further evolved this technology to speed up the turnover



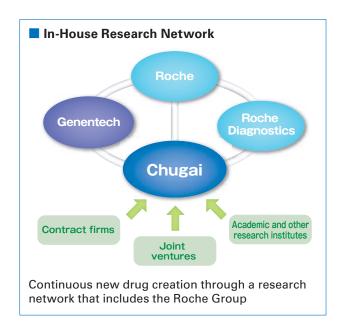
#### Progress in 2011 and Thereafter (January 1, 2011- February 1, 2012)

			Breakdown	
	Number of Projects	New Molecular Entities	Additional Indications	Additional Dosage and Administration/ Formulations
Approved*	14	2	12	—
Filed*	1	1	-	—
Started Phase 🏾	5	5	-	—
Started Phase I	_	_	-	—
Started Phase I	5	5	_	-
Development Suspended	2	2	_	_

\* Includes projects other than those in Chugai's pipeline in which filings have been submitted based on evidence in the public domain for drugs that are not yet approved in Japan or are approved for other indications. (Three projects have obtained approval: Herceptin for neoadjuvant chemotherapy in HER2-positive breast cancer, CellCept for pediatric renal transplants, and Kytril for gastrointestinal symptoms associated with radiotherapy. An application has been filed for one project, Pulmozyme.) of the recycling antibody to break down more antigens, and developed sweeping antibody technology to eliminate target antigens from the bloodstream. These developments not only raise Chugai's competitive advantage, but have the potential to contribute substantially to the creation of new antibody drugs.

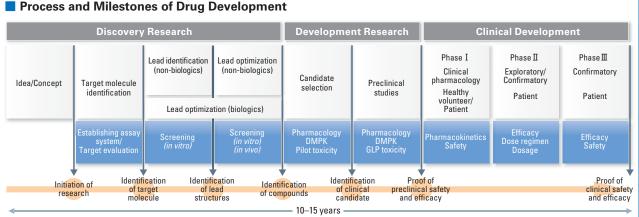
The second strength is access to Roche's global research infrastructure. Roche's world-class drug discovery platform, which includes bioinformatics<sup>1</sup> tools for genomic research, a compound library and chemical evaluation database, and an assay robot that performs high throughput screening,<sup>2</sup> represents a significant advantage for Chugai in terms of cost and efficiency. It has dramatically increased our research productivity, particularly in the lead discovery and optimization stages. While we enjoy the benefits of these assets of the Roche Group, our discovery research is a distinctive feature that has ensured our independence.

The third strength is our research system's environment of open innovation. With the paucity of promising new drug candidates worldwide, the pharmaceutical industry is emphasizing cooperation and partnerships with cutting-edge research institutions outside the industry. Chugai has steadily engaged in joint research, including research at the facilities of partner institutions, while contributing its own technology and know-how. Combined with recognition of our original technologies, this has helped us to build strong external networks. The success of Japan's first antibody drug Actemra, which originated from joint research with Osaka University, demonstrates the value of this approach. Chugai also conducts research using a joint-venture model aimed at reducing development lead time and continuously creating innovative R&D themes.



Research in joint ventures with Forerunner Pharma Research Co., Ltd., a multidisciplinary research institution adjacent to the University of Tokyo Research Center for Advanced Science and Technology; Chugai Pharmabody Research Pte. Ltd. in Singapore, which generates new antibody drugs and specializes in Chugai's proprietary recycling antibody and sweeping antibody technologies; PharmaLogicals Research Pte. Ltd. in Singapore; and C&C Research Laboratories in South Korea, has led to many findings.

- 1. Processing of data to gain understanding of biological processes by searching for information on specific gene functions from a vast database of gene mapping information.
- 2. A technology for selecting active chemical compounds for drug creation targets from a library consisting of a vast number of compound types using automated robots or other means.



# Process and Milestones of Drug Development

# **Progress and Outlook**

In the last several years, many projects from Chugai research, mainly in the field of oncology, have entered clinical development, including AF802, CIF, CKI27, GC33 and PA799. One project entered clinical development in 2006, eight in 2010 and twelve in 2011.

Personalized Healthcare, which tailors treatment based on individual patients' molecular and genetic profiles, will play an increasingly prominent role in the years ahead. In recognition of this trend, Chugai is focusing on the creation of molecular targeted therapies. We are also partnering with the Roche Group's Diagnostics Division to develop diagnostics that screen for specific molecules. (See the feature section on pages 17-24 for more details on Personalized Healthcare.)

Chugai will continue to develop innovative medical products that contribute to healthcare around the world through its own research while fully utilizing the resources available as a member of the Roche Group.

# **Intellectual Property Strategy**

In the pharmaceutical industry, the drug approval success rate is extremely low given the time and expense required for research and development. Moreover, corporate profits are heavily dependent on blockbuster products and the length of their period of exclusivity. These characteristics are unique to the pharmaceutical industry. Therefore, intellectual property (IP) strategy is a vital part of product lifecycle management and a key to maintaining the competitive advantage of a company's technology platform.

Under Chugai's IP policy established in 2007, the IP strategy is integrated with business and R&D strategies and implemented throughout the company. This helps to protect the competitive advantage of our products and secure operational flexibility. We also take care to respect the IP rights of others in our business activities.

Chugai's basic policy emphasizes high-quality patent applications and effective allocation of resources. We concentrate resources on key projects selected according to internal guidelines and aggressively file patent applications outside Japan as well with a view toward global codevelopment with the Roche Group. The Intellectual Property Department and the Research Division share information closely and cooperate to maximize the value of products and technologies. We also protect broadly applicable technologies, such as the innovative antibody technologies that have emerged from our research activities, with IP rights and we have set up the foundation to deploy them effectively. In addition, we are establishing a scheme that enables the use of IP rights to protect findings that emerge from our research network activities with universities, research institutions and other outside parties.

We defend our brands using trademarks and logos that protect our products directly, as well as measures to prevent counterfeiting. To execute IP activities more efficiently, we are also focusing on establishing and maintaining internal environments and systems for IP information, including a system for information sharing with Roche.

# **Drug Safety**

Enhancing safety evaluations and providing extensive safety information are important for promoting appropriate use of pharmaceuticals and acceptance by patients and healthcare providers. Chugai has linked its drug safety operations directly with management as it works to fortify its safety evaluation system and bring it to a world-class level.

# Drug Safety Approach and System

It is the duty of companies that manufacture and sell pharmaceuticals to collect, analyze and study data on drug safety (including the incidence of adverse drug reactions) and efficacy even after the drug is launched in the market. The April 2005 revision of Japan's Pharmaceutical Affairs Law clarifies the responsibilities of drug manufacturers, requiring them to establish three key manufacturing and marketing positions<sup>1</sup> and to carry out Good Vigilance Practice<sup>2</sup> and Good Quality Practice.<sup>3</sup>

One of Chugai's characteristics as a drug manufacturing and sales company is that it handles numerous biopharmaceuticals, molecular targeted therapies and other pharmaceuticals with novel mechanisms of action. Innovative medical products draw attention for their high efficacy, but promoting appropriate use and providing adequate safety information so that they are accepted by patients and healthcare providers are also key issues. In July 2009, therefore, Chugai separated the Drug Safety Unit from the Corporate Regulatory Compliance & Quality Assurance Division and established the Drug Safety Division to directly link drug safety operations to management. The managers in the three key manufacturing and marketing positions will continue to maintain solid coordination while working to build a world-class safety system.

1. General Marketing Authorization Holder (MAH) Manager, Pharmacovigilance Manager, and Quality Assurance Manager

- 2. Standards for pharmacovigilance management
- 3. Standards for quality assurance management of pharmaceuticals and other products

### Measures to Evaluate Safety

#### **Post-Marketing Studies**

The objectives of post-marketing studies are to collect and evaluate information on the safety and efficacy of drugs after their market launch. They must be conducted according to Good Post-Marketing Study Practice<sup>4</sup> guidelines.

At Chugai, the Drug Safety Division is responsible for planning post-marketing studies, managing their progress and analyzing the results in coordination with product lifecycle teams and the Marketing & Sales Division. Medical representatives (MRs) handle tasks such as requests to medical institutions, data collection and follow-up. Like clinical studies, post-marketing studies are conducted according to fixed protocols under binding agreements with medical institutions. We collect the data forms through electronic systems and other means, and analyze the aggregate data. MRs then share this evaluated safety information with the medical institutions when the final report is published.

4. Standards for conducting surveillance and studies after market launch.

# Adverse Drug Reaction Reports and Information Disclosure

In general, adverse drug reactions reported by medical institutions are evaluated from three aspects: 1) the cause-and-effect relationship with the drug administered; 2) whether or not the adverse drug reaction was previously known (for example, whether or not it was listed on the package insert); and 3) the severity of the adverse drug reaction. In the case of serious adverse drug reactions for which a causal relationship cannot be ruled out, we issue individual reports to domestic and overseas regulatory authorities within a specified period. Adverse drug reactions that were previously unknown and are not serious are included in periodic reports.

In addition to reports to regulatory authorities, Chugai compiles information on and typical examples of potential risk factors for the inherent adverse drug reactions of each product. We distribute leaflets containing information on adverse drug reactions to patients and medical institutions and post similar information on our website, while MRs respond to inquiries from medical institutions individually. These activities help to reduce the incidence of serious adverse drug reactions and facilitate their early detection by enabling healthcare providers to monitor high-risk patients.

#### **Global Safety Evaluation System**

Pharmacovigilance has become increasingly important worldwide in recent years. There is a growing consensus that companies should collect and analyze information continuously from the pre-clinical stage and conduct comparative evaluations that consider the risk/benefit profile, rather than the previous approach of focusing on post-marketing studies alone. The European Medicines Agency (EMA), the US Food and Drug Administration (FDA) and other regulatory agencies are also placing greater emphasis on pharmacovigilance in the drug approval process. In light of these trends, Chugai has set up a worldclass safety management system that can accommodate the different review procedures of regulatory agencies in Japan, the United States and Europe. We have also made pharmacovigilance agreements with Roche and other alliance partners. By establishing uniform safety evaluation standards for each product, compiling individually evaluated data in a safety information database, and creating a shared platform, we can accumulate and assess safety information on a global scale. Strengthening such collaborative arrangements will enhance the quality of our pharmacovigilance activities.

### Enhancing Drug Safety

Chugai recognizes that implementing the plan-docheck-act cycle in pharmacovigilance is a key to maintaining and improving world-class drug safety functions. We are shaping our organizational structure to ensure that safety operations are executed in accordance with our risk management plan, including enhancement of our analytical capabilities from an epidemiological perspective. In January 2011, we set up an internal group in charge of epidemiology functions, with the aim of quickly improving the precision of data analysis. In addition, we are actively recruiting medical doctors to strengthen medical evaluation of safety information.

**Quality Assurance** 

Placing top priority on patients, Chugai seeks to provide high-quality products and services that offer outstanding efficacy and safety. Quality assurance functions are critical from this perspective, and Chugai's Quality Assurance Department has been working closely with each manufacturing site to improve product quality.

However, with the increase in our affiliated manufacturing sites in recent years, quality assurance functions have diversified, as reflected in the broader scope of cooperation between our quality assurance and development operations for smoother product development. In addition, the International Conference on Harmonisation of Technical Requirements for Registration of Pharmaceuticals for Human Use (ICH), which covers Japan, the US and the EU, is placing increasingly stringent requirements on quality, including the start of implementation of its international Pharmaceutical Quality System guideline. Making sure that healthcare providers and patients understand the risks is critical for the safe use of pharmaceutical products. Chugai is proactively building a more robust safety evaluation system because we realize that contributing to better care for patients involves not just looking at the benefits, but also reducing the risks of a given treatment.



In view of these trends, Chugai consolidated the quality assurance functions of its development operations into the Quality Assurance Department in October 2011 to promote more rigorous and high-level quality assurance. This new structure supports consistent GMP\* throughout the product lifecycle from development to manufacturing, and strengthens oversight of GMP management.

Chugai's products are provided to people worldwide, and we have affiliated production sites around the world, including Roche's production facilities. We carry out GMP consistently from the development stage and promote it at our global affiliated production sites to ensure that we continue to deliver high-quality medicines to patients around the world.

\* Good Manufacturing Practice: Standards for pharmaceutical production management and quality control

# **Corporate Social Responsibility**

Chugai is committed to creating innovative medical products that address unmet medical needs. At the same time, our conduct reflects our social mission to contribute to diverse stakeholders.

#### **Basic Approach**

To realize its mission, Chugai has established a Mission Statement that includes seven Core Values to be shared as individuals and as a company in order to ensure sound business activities as we work toward our Envisioned Future. The Core Values also form the basis of the Chugai Business Conduct Guidelines (Chugai BCG), a code of behavior for management decision-making and employees. We believe that conducting corporate activities consistent with the Mission Statement and the Chugai BCG is the essence of our corporate social responsibility.

# Framework for Promoting Corporate Social Responsibility

The Corporate Social Responsibility Committee, chaired by the Deputy Chairman and Representative Director, deliberates and makes decisions on issues, policies, targets and action plans concerning social responsibility for all of the Chugai Group's business activities. The Corporate Social Responsibility Department is in charge of implementing the committee's decisions and presiding over daily activities, and works to provide support for corporate social responsibility activities and assess their results.

The manager of each business unit is responsible for spreading and establishing the Chugai BCG, a code of behavior for promoting corporate social responsibility, in his or her workplace. The manager assigns a BCG promotion assistant and they work together to deal with issues such as activities to promote the Chugai

# **Mission Statement**

#### Mission

Chugai's mission is to dedicate itself to adding exceptional value through the creation of innovative medical products and services for the benefit of the medical community and human health around the world.

#### **Core Values**

- The primary focus of all our activities is patients and consumers.
- In all our activities we are committed to the highest ethical and moral standards.
- We value employees who develop profound expertise and broad perspectives and pursue innovation and challenges without fear of failure.
- Wherever we operate around the world we seek to understand and respect people and cultures and to behave as good corporate citizens.
- We promote an open and active corporate culture that respects individuality, ability and teamwork.
- We care about the global environment.
- We aim to achieve a fair return for our shareholders and to disclose information appropriately and in a timely manner.

#### **Envisioned Future**

As a most important member of the Roche group, we aim to become a top Japanese pharmaceutical company by providing a continuous flow of innovative new medicines domestically and internationally.

BCG and to enhance awareness of human rights.

The safety and environmental action plans decided by the Corporate Social Responsibility Committee are shared with the safety managers and the individuals responsible for environmental protection at each facility. They are then reflected in the facility's action plans.



# Main CSR Initiatives

### **Contribution for Patients**

#### **Developing and Providing Innovative Medical Products**

Chugai creates innovative medical products that contribute to medical treatment around the world, with an emphasis on unmet medical needs. We achieved steady results in 2011, launching two new products and obtaining regulatory approvals for 12 projects. To provide a stable, continuous supply of safe, high-quality medicines, we also strengthened supply chain management to optimize all activities from procurement of raw materials to production and distribution.

#### **Raising Patient Awareness**

Chugai undertakes activities to support patients and their families and to raise patient awareness. One event we sponsored in 2011 was the anticancer charity event "Medicine and Humor 2011," aimed at increasing awareness of psychological care for cancer patients. In addition to supplying accurate information about cancer, this program helps to publicize the activities of the Cancer Patient Association. Many Chugai employees also participated as volunteers in Relay for Life, a cancer awareness event, at 22 locations around Japan. At 11 of these locations, a Giant Colon exhibit was used to raise public awareness of the importance of early detection and treatment of colorectal cancer.

Chugai also works energetically to provide useful information to patients by operating informational websites on cancer, liver cirrhosis and other diseases. In January 2011, we launched a disease awareness website for rheumatoid arthritis (RA). The site includes explanations about RA symptoms and the importance of early treatment, information on public seminars and events, and links to search engines for medical institutions.

#### **Academic Support Activities**

To contribute to the advancement of research and medical treatment in the field of oncology in Japan, we established the Chugai Academy for Advanced Oncology in 2009. In July 2011, the academy held its largest event, International Forum 2011, based on the theme "Clinical Development Strategies for Personalized Oncology Medicines." The event was attended by leading oncology specialists from around the world, and participants engaged in vigorous discussions. The academy will continue programs such as international forums and academic support with the goal of bringing cancer treatment in Japan to a worldclass level.

### **Contribution for Society**

#### **Establishment of Endowed Course on Medical Care**

Starting in September 2011, Chugai established an endowed course at Waseda University that included a total of 15 lectures based on the theme of medical treatment (especially for cancer). The course was designed to encourage students to take an interest in medical care and medicine and to consider healthcare issues independently. Lectures by physicians, securities analysts and Chugai employees (researchers and MRs) with hands-on experience helped to raise the students' awareness of healthcare.

#### Support for the Disaster Area

Following the Great East Japan Earthquake that struck on March 11, 2011, Chugai MRs worked to provide support for medical care and ensure stable supplies of pharmaceuticals. In addition, Chugai took proactive measures to assist the disaster-stricken region and disaster victims. Immediately after the disaster, we donated approximately 60,000 treatment courses of stockpiled Tamiflu in light of the urgent demand for medical supplies. Chugai also donated ¥100 million from the company and ¥25.9 million from officers and employees through the Japanese Red Cross Society. Moreover, Chugai donated approximately ¥4.3 million from the total funds raised<sup>1</sup> in the Children's Walk, a charity event held globally by the Roche Group, to aid children who lost their parents in the disaster. (For details on business continuity measures following the disaster, refer to the column on page 56.)

1. Chugai contributed matching funds equivalent to the amount raised by employees.

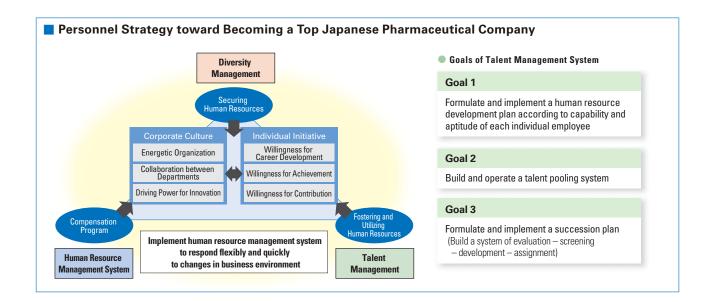
# **Contribution for Employees**

### Personnel Strategy Aimed at Becoming a "Top Japanese Pharmaceutical Company"

Based on its belief that human resources are the most important key to becoming a top Japanese pharmaceutical company, Chugai is taking the following three initiatives starting in January 2012.

First, we will build a talent management system to promote human resource development according to the capabilities and aptitude of individual employees. The purpose of this is to strengthen human resources across the company and improve their motivation while systematically and continuously producing the next generation of leaders and core staff.

We will also promote diversity management as a key management priority to enable full utilization of diverse human resources. In January 2012, we



established a Diversity Office in the Human Resources Management Department and assigned dedicated staff. The Diversity Office will lead initiatives starting with gender diversity to establish and foster awareness of a corporate culture in which everyone can play an important role regardless of gender. It will also create environments and systems to promote the use of non-Japanese employees and seniors.

In addition, Chugai will improve the human resource management system as the foundation for promoting these strategies. Based on its previous policy of valuing job accountability and performance, Chugai will streamline its human resource management system to a simpler framework that enables earlier promotion of employees. By implementing flexible human resource management focused on enhancing individual independence and autonomy, we will promote human resource and career development, which will help our diverse employees to succeed.

# Protection of the Environment Countering Global Warming

In 2010, Chugai revised its target for reduction of CO<sub>2</sub> emissions (GJ per employee), i.e., a 10 percent reduction from the 2009 level in 2014,<sup>2</sup> and is working to achieve this new medium-term target.

In 2011, while a new formulation facility at the Fujieda plant went into full-scale operation, all business sites established and implemented action plans to conserve electricity in response to power shortages associated with the Great East Japan Earthquake. These efforts, in addition to the closing of the Kamakura plant, resulted in a 15 percent decrease in electricity usage from 2010, and a 12 percent decrease in total energy consumption compared with the base year of 2009.



### Introducing Chugai's Corporate Social Responsibility Report CSR '11

Chugai's Corporate Social Responsibility Report CSR '11 presents the Company's corporate policies, including its Mission Statement and corporate governance policy, and provides stakeholders with an update on CSR initiatives and environmental protection activities undertaken in 2011.

The full report is on our website: http://www.chugai-pharm.co.jp/english/csr/index.html

The Roche Group's target for reduction of energy consumption per employee, including vehicle gasoline consumption and business trip flights (1.8GJ/1,000km per employee) (GJ: gigajoule, or 10<sup>9</sup> joules)

# **Corporate Governance**

Chugai is committed to increasing corporate value continuously and responding appropriately and fairly to the requests of shareholders and other stakeholders. To fulfill this commitment, we have positioned the enhancement of corporate governance as an important management task and are building a system with prompt decision-making, clarification of executive responsibilities and management transparency as the key points.

# Management Decision-Making, Execution and Oversight of Business Operations

To expedite business operations and clarify executive responsibilities, Chugai has adopted an executive officer system to keep decision-making on management issues of primary importance separate from business execution. The Board of Directors is in charge of the former, while executive officers are entrusted by the board with the authority to conduct the latter. The Executive Committee makes decisions concerning business execution. In execution of business, starting in March 2012, the chief executive officer (CEO) has ultimate responsibility for decisions on company-wide management strategies and other important matters, and the chief operating officer (COO) is responsible for decisions on business execution.

#### **Board of Directors**

The Board of Directors makes decisions on management issues of primary importance and receives quarterly reports on the state of business execution as well as reports on key decisions made by the Executive Committee. It is also responsible for oversight of the execution of business operations. The board consists of 12 directors, including seven outside directors. Four of the outside directors are from the Roche Group. In 2011, the Board of Directors convened eight times.

#### **Executive Committee**

The Executive Committee makes important executive decisions. It consists of key executive officers, including the CEO and COO, and the full-time corporate auditors.

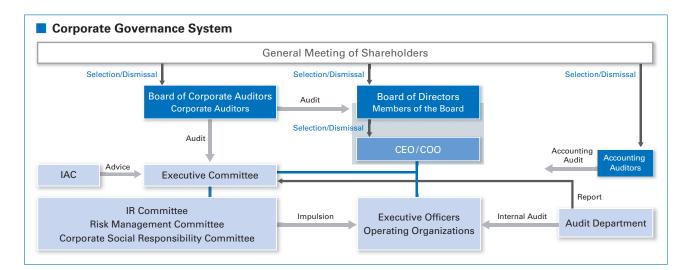
In addition, the IR Committee, Risk Management Committee and Corporate Social Responsibility Committee have been established under the Executive Committee.

#### Introduction of Outside Perspectives

To reflect diverse stakeholder viewpoints in business decisions, Chugai has taken measures to obtain outside perspectives, such as nominating outside directors and establishing an advisory board made up of domestic and overseas specialists.

#### International Advisory Council (IAC)

Chugai has established the International Advisory Council (IAC), an advisory board composed of industry leaders and other professionals from around the world. The IAC provides valuable advice on how to deal with changes in the global business environment and appropriate business conduct.



#### **IAC Chairman**

Abraham E. Cohen (US)
 Chairman of the Board of Directors of Chugai USA, Inc.
 Chairman of the Board of Directors of Chugai Pharma USA, LLC

#### **IAC Advisors**

- Virginia Bottomley (UK) Former Health Secretary
- Andrew von Eschenbach (US) Former Commissioner of the Food and Drug Administration
- Victor Halberstadt (Netherlands) Professor, Leiden University
- Andre Hoffmann (Switzerland) Vice Chairman, ROCHE HOLDING LTD
- Robert A. Ingram (US) Former Vice Chairman of Pharmaceuticals, GlaxoSmithKline plc
- Arnold J. Levine (US)
   Professor at the Institute for Advanced Study, Princeton University
   Discoverer of the p53 cancer suppressor protein
- Henry L. Nordhoff (US) Former Chairman of the Board, Gen-Probe, Inc.
- Abraham D. Sofaer (US) George P. Shultz Distinguished Scholar and Senior Fellow at the Hoover Institution, Stanford University Former advisor to the U.S. Department of State
- Goro Watanabe (Japan) Senior Advisor, Mori Building Co., Ltd.

#### **Outside Directors**

Chugai has appointed outside directors to reflect the views of a broader range of stakeholders in management decision-making. Outside directors provide timely and proactive advice concerning Chugai's management and business operations both in and outside board meetings. Outside directors from Roche provide appropriate advice and oversight with regard to management and business from a global perspective. Other outside directors contribute to management decision-making through advice and oversight based on their abundant experience and knowledge as top management or medical specialists. Chugai has designated Mitsuo Ohashi and Yasuo Ikeda as independent directors.

Because the residences of the outside directors are spread around the world, it is difficult in some cases to have the attendance of all outside directors at board meetings. The rate of attendance by outside directors at the eight board meetings in 2011 was approximately 73.2 percent on average, the highest being 100 percent and the lowest 42.8 percent.

Name	Outside Position	Reason for Election
Mitsuo Ohashi	Senior Advisor, SHOWA DENKO K.K.	Recommended or appointed as the Company expects that he would provide advice and monitoring by leveraging his abundant experience and knowledge of corporate management and other fields. Designated as independent director based on the Company's judgment that he meets all the conditions for independence stipulated by the Tokyo Stock Exchange and that there is no risk of conflict with the interests of shareholders in general.
Yasuo Ikeda	Professor of Department of Life Science and Medical Bioscience of Graduate School of Advanced Science and Engineering of Faculty of Science and Engineering of Waseda University	Recommended or appointed based on the Company's judgment that he would provide appropriate advice and monitoring with respect to the Company's management and business by leveraging his abundant experience and knowledge as a doctor and university professor and can properly execute the duties of an outside director. Designated as independent director based on the Company's judgment that he meets all the conditions for independence stipulated by the Tokyo Stock Exchange and that there is no risk of conflict with the interests of shareholders in general.
Abraham E. Cohen	Chairman of the Board of Directors of Chugai USA, Inc.; Chairman of the Board of Directors of Chugai Pharma USA, LLC	Recommended or appointed as the Company expects that he would provide advice and monitoring by leveraging his abundant experience and knowledge of management in the global pharmaceutical business.
William M. Burns	Board Member of ROCHE HOLDING LTD	
Pascal Soriot	COO of Roche Pharmaceuticals and Member of the Corporate Executive Committee	Board and managerial members of the Roche Group, to which the Company belongs. Recommended or appointed based on the
Jean-Jacques Garaud	Head of Roche Pharma Research & Early Development (pRED) and Member of the Enlarged Roche Corporate Executive Committee	Company's judgment that they can provide appropriate advice and monitoring with respect to the Company's management and business from a global perspective and can properly execute the duties of outside directors.
Sophie Kornowski-Bonnet	Head of Roche Partnering and Member of the Enlarged Roche Corporate Executive Committee	

# Auditing System

#### Audits by Corporate Auditors

Chugai has a Board of Corporate Auditors, and audits of management decision-making and business execution are conducted independently from business operations by four corporate auditors, including two outside corporate auditors. Corporate auditors express their opinions from the standpoint of appropriate corporate governance in a variety of real-time occasions including meetings of the Board of Directors, the Executive Committee (full-time auditors only) and the Board of Corporate Auditors.

#### Reasons for Election of Outside Directors

### Audit Department

The Audit Department, staffed by approximately 16 members including certified internal auditors, conducts internal audits of operational conditions including the compliance status of various organizations within the Company. It makes reports and recommendations to the Executive Committee. In addition, it conducts internal control assessments based on the Financial Instruments and Exchange Act (informally known as J-SOX) to maintain sound operations.

#### **Accounting Auditors**

From 2011, Chugai has changed its accounting auditors from Ernst & Young ShinNihon LLC to KPMG AZSA LLC, which conducts accounting audits and internal control audits in accordance with the Corporation Law and the Financial Instruments and Exchange Act.

#### **Cooperative Auditing**

Corporate auditors, the Audit Department and the accounting auditors cooperate closely by regularly exchanging information to improve the effectiveness of their respective audits. Corporate auditors and the accounting auditors confirm each other's audit plans and exchange opinions on matters including quarterly and year-end audit reports. Corporate auditors also attend accounting audit reviews. The Corporate Auditors' Support Section ensures the independence of corporate auditors and enhances auditing functions.

#### **Officer Remuneration**

Chugai's fundamental policy for remuneration of directors and corporate auditors is to facilitate maximization of the Chugai Group's corporate value. Remuneration levels and the remuneration system are designed to link compensation of officers with the Company's performance and promote shared values with shareholders.

Remuneration of directors consists of three components: regular compensation, which is fixed; bonuses paid according to performance; and stock options granted as a long-term incentive. These components are paid by resolution of the Board of Directors based on the Company's criteria within the limits on remuneration approved by the general meeting of shareholders. The Remuneration Committee, composed of outside directors and people with experience as outside directors, sets policies and details concerning remuneration of executive directors to ensure the objectivity and transparency of the compensation setting process.

Remuneration of outside directors and corporate auditors (including outside corporate auditors), which consists solely of fixed regular compensation, is paid by resolution of the Board of Directors for outside directors and through consultation with the Board of Corporate Auditors for corporate auditors. The amounts are set within the limits approved by the general meeting of shareholders.

A resolution was passed in the 98th annual general meeting of shareholders held in March 2009 to abolish the retirement benefits system for directors. A resolution

Amount of Remuneration, etc	Amount of Remuneration, etc., Paid to Directors and Corporate Auditors (Millions of yen)										
	Amountof	Total Compensation by Type									
	Amount of Remuneration, etc.	Regular Compensation			Stock Options as Stock-based Compensation						
Directors (5) (excluding outside directors)	643	295	186	58	103						
Outside Directors (4)	54	54	—	—	—						
Total (9)	698	53	36	58	103						
Corporate Auditors (3) (excluding outside corporate auditors)	62	62			_						
Outside Corporate Auditors (2)	21	21	—	—	—						
Total (5)	84		84	—	—						

1. The table includes one corporate auditor who retired during the fiscal year under review

the fiscal year under review. 2. The amount of remuneration, etc. paid to all directors was no more than ¥750 million per year as per the resolution passed in the 96th annual general meeting of shareholders held in March 2007.

The maximum amounts of compensation paid to directors in the form of stock acquisition rights allocated as stock options, separately from the amount of remuneration, are ¥150 million per year for stock options as stock-based compensation and ¥125 million per year for common stock options as per the resolution passed in the 98th annual general meeting of shareholders held in March 2009.

general meeting of shareholders held in March 2009. 3. The amount of remuneration for all corporate auditors was no more than ¥100 million per year as per the resolution passed in the 95th annual general meeting of shareholders held in March 2006.

 The amount of bouses shown in the table is the amount of the provision for bouses to directors for the fiscal year under review.

5. The amounts of common stock options and stock options as stock-based compensation shown in the table are the amounts that were posted as expenses during the fiscal year under review.

6. A resolution was passed in the 98th annual general meeting of shareholders held in March 2009 to abolish the retirement benefits system for directors who perform duties, and to make a final lump-sum payment equivalent to the retirement benefits that accrued up until the abolishment of the system to those directors whose terms extended past the conclusion of the 98th annual general meeting of shareholders. This payment will be made when the directors in question retire. A resolution was passed in the 95th annual general m

A resolution was passed in the 95th annual general meeting of shareholders held in March 2006 to abolish the retirement benefits system for directors and corporate auditors who do not perform duties, and to make a final lump-sum payment equivalent to the retirement benefits that accrued up until the abolishment of the system to those directors and corporate auditors whose terms extended past the conclusion of the 95th annual general meeting of shareholders. This payment will be made when the directors and corporate auditors in question retire.

when the directors and corporate auditors in question retire. In the fiscal year under review, the amount of remuneration, etc. received from the Roche Group by three directors, namely, William M. Burns, Erich Hunziker and Pascal Soriot, totaled ¥953 million (converted into yen at the averages of exchange rates in the fiscal year under review). was passed in the 95th annual general meeting of shareholders held in March 2006 to abolish the retirement benefits system for outside directors and corporate auditors (including outside corporate auditors).

### **Relationship with Roche**

Roche, the parent company of Chugai, owns 59.9 percent of Chugai's outstanding shares, but the basic agreement establishing the alliance between the two companies restricts the extent to which Roche may increase its shareholding in Chugai for the 10-year period following the date of the merger of Chugai and Nippon Roche (October 1, 2002).<sup>1</sup> Roche and Chugai have agreed to cooperate in maintaining the listing of Chugai's common stock on the First Section of the Tokyo Stock Exchange after this 10-year period.<sup>2</sup>

Chugai makes all decisions based on the principle of self-governance and considers its management independence to be ensured by the fact that the directors from Roche constitute less than half of the members of its Board of Directors.

In addition to our capital ties, we maintain a wide ranging partnership with Roche that includes many joint development projects and co-promotion activities in Europe. However, in our business dealings with Roche, we conduct fair transactions using third-party prices in order to protect the interests of minority shareholders.

We will continue to manage our business with autonomy and independence as a publicly listed company.

1. The restrictions do not apply to increases in Roche's shareholding that result from share repurchases by Chugai.

2. The Tokyo Stock Exchange requires delisting if the ratio of tradable shares to listed shares is less than 5 percent.

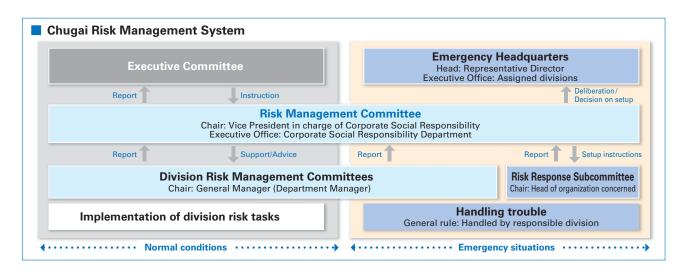
#### **Restrictions on Roche's Shareholding**

Period	Maximum Shareholding Percentage
Oct. 1, 2002 - Sept. 30, 2007	50.1%
Oct. 1, 2007 – Sept. 30, 2012	59.9%
Oct. 1, 2012 and thereafter	Cooperate in maintaining Chugai's listing

#### Maintenance and Management of Internal Controls

Chugai seeks to fulfill its mission by conducting transparent, fair and ethical corporate activities. In maintaining its internal control system, Chugai established the Chugai Business Conduct Guidelines (Chugai BCG) as standards for management decision-making and employee behavior. The Corporate Social Responsibility Committee created under the Executive Committee, together with the Corporate Social Responsibility Department, ensure that the guidelines are implemented throughout the Company.

In addition, Chugai has prepared for the system of internal controls over financial reporting under the Financial Instruments and Exchange Act. We have formulated a basic policy for the establishment, management and assessment of internal controls over financial reporting, formulated a system of controls that ensures reliable financial reporting and implemented control design effectiveness assessments. We select business processes to be assessed based on the results of the assessments of company-wide internal controls, and evaluate the design and operation of internal controls after identifying and analyzing financial reporting risks.



# **Risk Management**

Chugai has established Risk Management Regulations to prevent risks that could affect the Company's business activities as well as to ensure prompt and appropriate handling of problems that arise. We have also established a Risk Management Committee under the Executive Committee, and Division Risk Management Committees. The Risk Management Committee draws up a comprehensive list of risks facing all divisions based on information provided by each Division Risk Management Committee, identifies companywide risks that may significantly affect management and submits a progress report to the Executive Committee concerning preventive measures for such risks. (See pages 90-91 for details.)

#### Compliance

Chugai has put in place Compliance Regulations as the fundamental rules of its compliance system. These regulations are promoted by the Risk Management & Compliance Department and the Compliance Committee, established under the Risk Management Committee. In 2011, the Risk Management & Compliance Department conducted monitoring surveys on compliance status each quarter and reported the results to the Risk Management Committee. We also worked to ensure thorough legal compliance through managers and specialists in charge of promoting the Chugai BCG in each organization. The Corporate Social Responsibility Committee and the Corporate Social Responsibility Department, in cooperation with the BCG Committee members assigned to each department, hold regular business ethics training for all employees, and conducted such training twice in 2011.

Also, a BCG Hotline was established to receive employee inquiries and reports concerning compliance with laws, internal Company rules and the Chugai BCG. An external hotline is also available to employees.

### Efforts for Business Continuity Following the Great East Japan Earthquake

Chugai incurred damage from the earthquake that struck eastern Japan on March 11, 2011, including structural damage to the Sendai Branch, the Koriyama Office, the Utsunomiya plant and other facilities and equipment. Immediately after the earthquake, an emergency headquarters headed by the CEO was set up to determine the safety of employees and damage to facilities, provide supplies to the affected area, ensure business continuity, and assist in the recovery and reconstruction of the disaster-stricken region. Fortunately, the headquarters was able to confirm the safety of all Chugai Group employees. In addition, measures were taken for the early restoration of the damaged Utsunomiya plant and a task force was set up to ensure stable supplies of Chugai products. To minimize the effect of the damage to the Utsunomiya plant and the facilities of contract manufacturers, we shifted production to other plants in the Chugai Group or to other companies and conducted emergency imports to maintain stable supplies of medicines. All facilities at

the Utsunomiya plant were back on line by August 2011, and shipments of all products from contract manufacturers resumed by the middle of October.

To assist the disaster-stricken region, Chugai donated approximately 60,000 courses of Tamiflu and made a cash donation of ¥100 million. Additional funds totaling approximately ¥25.9 million collected from Chugai officers and Chugai Group employees were donated through the Japanese Red Cross Society. (See page 50 for further details about Chugai's support for the disaster area.)

We are currently using the experience of the recent disaster to strengthen earthquake response

measures in preparation for potential future major earthquakes in Japan.

Earthquake damage at the Utsunomiya plant



# **Disclosure Policy**

### Overview

Chugai pursues interactive corporate communication activities in an attempt to deepen mutual understanding and further enhance trust with its stakeholders, such as shareholders, investors, consumers, patients and healthcare service providers. In order to achieve this objective, Chugai ensures that information related to its business activities is made available in a transparent, fair, and consistent manner to all stakeholders.

Chugai's policy for disclosing information to shareholders and investors is to make timely, consistent and fair disclosure of information in accordance with the Financial Instruments and Exchange Act and relevant rules of the stock exchange on which shares of Chugai are listed in order to receive fair valuation in the capital markets. In addition, measures to allow easy access to disclosed information have been established to ensure transparency.

The Corporate Communications Department is in charge of the internal framework for information disclosure. The IR Committee, chaired by the executive officer in charge of investor relations, formulates information disclosure policies and supervises disclosure activities.

Note: For further details on policies for disclosure to shareholders and investors, securities analysts and other capital market participants, please refer to Chugai's website

(http://www.chugai-pharm.co.jp/hc/ss/english/ir/policy/disclosure.html)

#### Communication with Shareholders and Investors

#### **General Meeting of Shareholders**

Unlike many Japanese companies, which have fiscal years ending in March, Chugai's fiscal year ends in December. As a result, we are able to avoid holding our

general meeting of shareholders on a day when many other companies' meetings are held. Convocation notices for the general meeting are sent out promptly, at least 20 days prior to the date of the general meeting of shareholders each year.

The 101st annual general meeting of shareholders was held on March 28, 2012. After the presentation of the business report through narration and materials, shareholders deliberated on agenda items such as appropriation of retained earnings, amendments to the Company's articles of incorporation and election of directors and corporate auditors. All agenda items were approved and passed by a majority.

#### **IR** Activities

Chugai holds information meetings and conference calls for analysts and investors coinciding with the announcement of results for each quarter. In addition to these regular IR events, Chugai co-hosted a Personalized Healthcare (PHC) seminar with Roche Diagnostics K.K. in October 2011 to explain our approach to PHC.

For overseas investors, Chugai's senior management holds roadshows, and visited investors in Europe, the United States and Asia during 2011. Additionally, Chugai conducts information meetings for individual investors at branches of securities companies throughout Japan.

The Chugai website contains news releases, financial results, presentation materials and other information in Japanese and English, as well as webcasts of major IR events.

#### **External Recognition**

Chugai is listed on the FTSE4Good Index Series, a representative global index for socially responsible investment (SRI). The FTSE4Good Index Series is maintained by the FTSE Group in the UK, which offers a variety of stock and other investment indices. This index tracks the stocks of about 2,400 listed companies in 23 countries worldwide that meet international criteria related to the environment and society. Chugai has been selected for this global SRI index in recognition of its corporate social responsibility initiatives relating to the environment, society and human rights.



# Board of Directors/Corporate Auditors (As of March 28, 2012)

#### **Representative Directors**



Osamu Nagayama



Motoo Ueno



Tatsuro Kosaka

#### Directors



Tatsumi Yamazaki



Yoshio Itaya



Mitsuo Ohashi Senior Advisor, SHOWA DENKO K.K.



Yasuo Ikeda Professor of Department of Life Science and Medical Bioscience of Graduate School of Advanced Science and Engineering of Faculty of Science and Engineering of Waseda University



Abraham E. Cohen Chairman of the Board of Directors of Chugai USA, Inc.; Chairman of the Board of Directors of Chugai Pharma USA, LLC



William M. Burns Board Member of ROCHE HOLDING LTD

#### **Corporate Auditors**



Pascal Soriot COO of Roche Pharmaceuticals and Member of the Roche Corporate Executive Committee



Jean-Jacques Garaud Head of Roche Pharma Research & Early Development (pRED) and Member of the Enlarged Roche Corporate Executive Committee



Sophie Kornowski-Bonnet Head of Roche Partnering and Member of the Enlarged Roche Corporate Executive Committee



YasuhiroTsuji (full-time)



Kotaro Miwa (full-time)



Hisashi Hara Chairman, Attorney at Law, The Law Office of Nagashima Ohno & Tsunematsu



Michio Ishizuka Ishizuka Certified Public Accountant Office

# Board of Directors (As of March 28, 2012)

#### Osamu Nagayama

- 1978 Entered the Company
- 1985 Deputy General Manager of Development and Planning Div. and Director
- 1987 Director & Senior Vice President
- 1989 Representative Director & Deputy President1992 Representative Director, President & CEO
- 2012 Representative Director, Chairman & CEO (to present)

#### Motoo Ueno

- 1984 Entered the Company
- 1991 General Manager of London Representative Office
- 1993 Director
- 1994 Director and General Manager of Medical Information Div.
- 1995 Director and General Manager of Clinical Research & Development Division
- 1996 Director and Deputy General Manager of Research and Development Division
- 1997 Director & Senior Vice President
- 1998 Senior Vice President
- 2000 Director & Senior Vice President
- 2002 Director & Deputy President
- 2003 Director & Deputy President
- 2004 Representative Director & Deputy President
- 2006 Representative Director & President, Chugai Pharma Manufacturing Co., Ltd.
- 2012 Representative Director & Deputy Chairman (to present)
- Tatsuro Kosaka

#### 1976 Entered the Company

- 1995 Deputy President of Chugai Pharma Europe Ltd. (UK)
- 2000 General Manager of Business Strategy Planning Office
- 2002 Vice President & General Manager of Corporate
- Planning Dept. 2004 Senior Vice President & General Manager of Corporate Planning Dept.
- 2005 Senior Vice President & Deputy Managing Director of Sales & Marketing Group
- Senior Vice President & Head of Strategic Marketing Unit 2008 Senior Vice President & Head of Lifecycle Management
- & Marketing Unit 2010 Director & Executive Vice President and Head of Lifecycle Management & Marketing Unit
- 2011 Director & Executive Vice President
- 2012 Representative Director, President & COO (to present)

#### Tatsumi Yamazaki

- 1980 Entered the Company
- 1993 Head of Laboratory of Molecular Science
- 1996 Department Manager of Research Planning & Coordination Dept.
- 1997 Department Manager of Research Administration Dept.1998 Vice President
- 2002 Senior Vice President & General Manager of Research Div.
- 2003 Senior Vice President & Managing Director of Research & Development Div.
- 2004 Director & Executive Vice President
- 2011 Director & Deputy President (to present)

#### Yoshio Itaya

- 1977 Entered The Sumitomo Bank, Ltd. (SB)
- 1994 General Manager of Fukui Branch of SB
- 1999 General Manager Planning Dept. of Americas Div. of SB
- 2001 General Manager of Planning Dept. of Americas Div. of Sumitomo Mitsui Banking Corporation
- 2003 Entered the Company Senior Specialist of Finance & Accounting Div.
- 2006 Vice President and General Manager of Finance & Accounting Div.
- 2007 Vice President and General Manager of Corporate Planning Dept.
- 2010 Senior Vice President and General Manager of Finance Supervisory Div. and Finance & Accounting Dept.
- 2012 Director, Executive Vice President & CFO (to present)

#### Mitsuo Ohashi

- 1959 Entered The Mitsui Bank Limited.
- 1961 Entered Showa Denko K.K. (SDK)
- 1989 Director and Chief Manager, Corporate Planning Department, SDK
- 1993 Managing Director, SDK
- 1995 Senior Managing Director, SDK
- 1997 Representative Director and President (CEO), SDK
   2005 Representative Director and Chairman of the Board of Directors, SDK
   Director of the Company (to present)
- 2010 Senior Advisor, SDK (to present)
- UTU Sellior Advisor, SDK (to present)

#### Yasuo Ikeda

- 1979 Director of Keio University Hospital Blood Center1991 Professor of Internal Medicine of Keio University School
- of Medicine
- 2001 Director of Keio University Center for Integrated Medical Research
- 2005 Dean of Keio University School of Medicine
- 2009 Professor Emeritus of Keio University (to present) Professor of Department of Life Science and Medical Bioscience of Graduate School of Advanced Science and Engineering of Faculty of Science and Engineering of Waseda University (to present)
- 2010 Director of the Company (to present)

#### Abraham E. Cohen

- 1957 Entered Merck Sharp & Dohme International Division
- 1977 President of Merck Sharp & Dohme International Division
- 1992 Member of the Board of Directors of Akzo Novel N.V.
- Director of Teva Pharmaceutical Industries, Ltd. (to present)
- 1994 Chairman of the Board of Directors of Neurobiological Technologies, Inc.
- 1995 Director of Chugai Biopharmaceuticals, Inc.1998 Chairman of the Board of Directors of Chugai Pharma
- USA, Inc.
- 2001 Director of the Company (to present) 2002 Chairman of the Board of Directors of Chugai USA, Inc. (to present)
- Director of Chugai Pharma USA, LLC 2005 Chairman of the Board of Directors of Chugai Pharma USA, LLC (to present)
- 2009 Director of BioTime, Inc. (to present)

#### William M. Burns

- 1969 Entered Beecham Pharmaceuticals
- 1986 Director of Sales & Marketing, Roche UK
- 1988 Head of Pharmaceuticals Division, Roche UK
- 1991 Global Head of Strategic Marketing & Business Development, F. Hoffmann-La Roche Ltd, Basel
- 1998 Head of Pharma Europe/International
- 2000 Member of Corporate Executive Committee of the Roche Group
- 2001 Head of Pharmaceuticals Division
- 2002 Board Member of the Company (to present)
- 2004 Board Member of Genentech, USA
- 2005 Chief Executive Officer Division Roche Pharmaceuticals2010 Board Member of ROCHE HOLDING LTD (to present)

#### **Pascal Soriot**

- 1986 Roussel Uclaf, Financial Controller, Asia Pacific Region
- 1987 Roussel New Zealand, District Sales Manager
   1989 Roussel Australia, Sales and Marketing Manager
   Roussel Australia, General Manager
- 1994 Roussel Uclaf Pharmaceuticals, Division Global Marketing Director
- 1996 Hoechst Marion Roussel Australia, General Manager1997 Hoechst Marion Roussel Tokyo, Regional Vice President
- Asia Pacific 2000 Aventis Bridgewater (US), Senior VP, Head of Global Marketing & Medical Affairs
- 2002 Aventis USA (Sanofi Aventis USA from 2004), Chief Operating Officer
- 2006 Roche, Head of Strategic Marketing

Corporate Executive Committee

Jean-Jacques Garaud

1990 Rhone-Poulenc Rorer, France

Systems

Officer

1991

2002 Novartis Pharma, USA

Medical Affairs

2005 Novartis Pharma, Switzerland

2007 Roche Basel, Switzerland

1985 Marion Merrel Dow, UK and Canada

1992 Schering-Plough Research Institute, USA

2001 Schering-Plough Research Institute, USA

Clinical Research Physician

Director of the Company (to present)

2007 Head of Commercial Operations and Member of the Enlarged Corporate Executive Committee 2009 Genentech, Inc. (US) CEO and Member of the Roche

2010 Roche Pharmaceuticals Division, COO and Member of

the Roche Corporate Executive Committee (to present)

Group Medical Director, Clinical Development in areas of Anti-infectives, AIDS and Allergy/Immunology

Senior Director for Anti-Infectives, Clinical Research

Research and Clinical Operations/Research Information

Head of Clinical Research and Development, Global

Global Head of Pharma Development and Chief Medical

(pRED) and Member of the Enlarged Roche Corporate

2010 Head of Roche Pharma Research & Early Development

Global Head of Exploratory Development

Executive Committee (to present)

Sophie Kornowski-Bonnet

Marketing Research Analyst

1994 Sanofi Winthrop - Paris, France

& Co. Inc. USA 2002 Merck Sharp & Dohme Paris, France

2007 Roche Pharma, France

General Manager

1996 Merck Sharp & Dohme Paris, France

Director, Rheumatology Division

Director, Cardiovascular Division

2006 Merck Sharp & Dohme Paris, France

Scientific Manager

Director of the Company (to present)

1985 Abbott Diagnostic Division - Paris - France

Neuroscience Sales Representative

Director, Neuroscience Business Unit

1997 Merck Sharp & Dohme Israel Managing Director

Sanofi Winthrop – New York USA

1989 Abbott Pharmaceutical Products - Chicago, USA

1990 Abbott Pharmaceutical Products - New York, USA

Director, Strategic Marketing, Diagnostic Imaging

Director, Marketing Research and Strategic Planning

2000 Vice-President Arthritis and Analgesia Franchise, Merck

2012 Head of Roche Partnering and Member of the Enlarged

Roche Corporate Executive Committee (to present) Director of the Company (to present)

59

ANNUAL REPORT 2011

Executive Vice President of Worldwide Clinical

# Executive Officers (As of April 1, 2012)



#### **Executive Committee Members**

Osamu Nagayama Chairman CEO

Motoo Ueno Deputy Chairman Corporate Social Responsibility, Audit

Tatsuro Kosaka President COO

Tatsumi Yamazaki Deputy President Yoshio Itaya Executive Vice President CFO, General Manager of Finance Supervisory Div., General Manager of Finance & Accounting Dept. and General Manager of IT Supervisory Div.

(back) Yasuhiro Tsuji, Fumihiko Kamoshida, Masaaki Tohaya, Naotaka Nakamura, Yutaka Tanaka, Shin-ya Unno, Shunji Yokoyama, Kotaro Miwa

Naotaka Nakamura Executive Vice President

Yutaka Tanaka Senior Vice President Head of Project & Lifecycle Management Unit MasaakiTohaya Senior Vice President General Manager of Marketing & Sales Div.

Shin-ya Unno Senior Vice President General Manager of Corporate Planning Supervisory Div. and General Manager of Corporate Planning Dept.

Fumihiko Kamoshida Senior Vice President General Manager of Legal Dept.

Shunji Yokoyama Vice President Head of Regulatory & Quality Management Unit and General Manager of Drug Safety Div.

#### **Executive Officers** (Non-Executive Committee Members)

#### Toshihiko Komori

Vice President Deputy Head of Project & Lifecycle Management Unit (R&D Portfolio, Business Assessment, Regulatory Affairs, Intellectual Property, Overseas Development)

Hisafumi Okabe Vice President General Manager of Research Div.

Hitoshi Kuboniwa Vice President General Manager of Pharmaceutical Technology Div.

# Minoru Machida

Vice President Deputy General Manager of Pharmaceutical Technology Div.

Yasushi Ito

Vice President General Manager of Clinical Development Div.

#### AkioTanaka

Vice President Deputy General Manager of Marketing & Sales Div. (Bone Disease Area)

#### Keiji Kono

Vice President Deputy General Manager of Marketing & Sales Div. (Marketing & Sales Planning, Marketing & Sales Coordination, Marketing & Sales Human Resource, Overseas Business)

### Toshitaka Uto

Vice President Head of Primary Unit

#### Susumu Kato Vice President

Supervisory Branch Manager of Tokyo Branch 1

# Mitsuru Kikuchi

Vice President General Manager of External Affairs Dept. Mamoru Togashi

#### Vice President

General Manager of Human Resources Supervisory Div. and General Manager of Human Resources Management Dept.

Kunitoshi Watanabe Vice President General Manager of General Affairs Dept.

#### ToshihikoTsuchiya Vice President

General Manager of Secretarial Dept.

# **Data Section**

1

1)

**Development Pipeline** 

**Basic Information** 

62 64

# Development Pipeline (As of February 1, 2012)

Indication	Phase I	Phase II	<b>Status</b> Phase III	Filed	Approved	
Gastric cancer					0	Feb. 2011
Gastric cancer					•	Mar. 2011
Pancreatic cancer					•	Jul. 2011
Non-small cell lung cancer (1st line)						
Breast cancer					0	Sep. 2011
Gastric cancer						
Breast cancer (adjuvant)				(Multinational	study)	
Glioblastoma				(Multinational	study)	
Glioblastoma (relapsed)						
Chemotherapy-induced anemia					(Note 1)	
Breast cancer				(Multinational	study)	
Breast cancer			0	(Multinational	study)	
Indolent non-Hodgkin's lymphoma			•	(Multinational	study)	
Aggressive non-Hodgkin's lymphoma			•	(Multinational	study)	
Pancreatic cancer			(I/II)			
Non-small cell lung cancer			(I/II)			
Myelodysplastic syndromes		0	(I/II)			
Solid tumors						
Solid tumors						
		(Overseas)				
Solid tumors						
		(Overseas)				
Liver cancer						
		(Overseas)			-+	
Solid tumors		(Overseas)				
	Gastric cancer         Gastric cancer         Non-small cell lung cancer (1st line)         Breast cancer         Gastric cancer         Breast cancer         Gastric cancer         Breast cancer         Gastric cancer         Breast cancer (adjuvant)         Glioblastoma         Glioblastoma         Glioblastoma         Glioblastoma         Breast cancer         Breast cancer         Breast cancer         Breast cancer         Indolent non-Hodgkin's lymphoma         Aggressive non-Hodgkin's lymphoma         Pancreatic cancer         Non-small cell lung cancer         Myelodysplastic syndromes         Solid tumors         Solid tumors         Solid tumors         Liver cancer	Gastric cancer       Gastric cancer         Pancreatic cancer       Mon-small cell lung cancer (1st line)         Breast cancer       Gastric cancer         Gastric cancer       Gastric cancer         Breast cancer (adjuvant)       Glioblastoma         Glioblastoma (relapsed)       Glioblastoma         Breast cancer       Monesmall         Indolent non-Hodgkin's lymphoma       Monesmall         Aggressive non-Hodgkin's lymphoma       Monesmall cell lung cancer         Non-small cell lung cancer       Myelodysplastic syndromes         Solid tumors       Solid tumors         Solid tumors       Monesmall         Solid tumors       Monesmall         Solid tumors       Monesmall	Gastric cancer       Image: Cancer         Pancreatic cancer       Image: Cancer         Non-small cell lung cancer (1st line)       Image: Cancer         Breast cancer       Image: Cancer         Breast cancer       Image: Cancer         Breast cancer       Image: Cancer         Breast cancer (adjuvant)       Image: Cancer         Glioblastoma       Image: Cancer         Glioblastoma (relapsed)       Image: Cancer         Breast cancer       Image: Cancer         Breast cancer       Image: Cancer         Breast cancer       Image: Cancer         Breast cancer       Image: Cancer         Indolent non-Hodgkin's lymphoma       Image: Cancer         Aggressive non-Hodgkin's lymphoma       Image: Cancer         Non-small cell lung cancer       Image: Cancer         Myelodysplastic syndromes       Image: Cancer         Solid tumors       Image: Cancer         Image: Cancer       Image: Cancer         Solid tumors       Image: Cancer         Image: Cancer       Image: Cancer	Indication     Phase I     Phase II     Phase II       Gastric cancer	Indication     Phase II     Phase III     Phase III     Filed       Gastric cancer     Image: Solution of the solution of	Indication     Phase II     Phase III     Phase III     Filed     Approved       Gastric cancer

# **Bone and Joint Diseases**

MRA*	Systemic-onset juvenile idiopathic arthritis (sJIA)				•	Apr. 2011 (US) - Aug. 2011 (EU)
	Rheumatoid arthritis (new formulation: subcutaneous injection)	 		(Overseas)		- Aug. 2011 (EO)
ED-71	Osteoporosis				0	Jan. 2011
NRD101	Enthesopathy (Lateral epicondylitis, Patellar tendinitis, Achilles tendinopathy, Plantar fasciitis)		•			
RG484	Osteoporosis	 		(II/III)		-
SA237	Rheumatoid arthritis					
Renal Diseases						
						4 0044

RG744	Renal anemia			Apr. 2011

#### Transplant, Immunology and Infectious Diseases

RG964*	Compensated liver cirrhosis caused by hepatitis C virus			0	Jul. 2011
RG442*	Compensated liver cirrhosis caused by hepatitis C virus			0	Jul. 2011
	Chronic hepatitis B			•	Sep. 2011

Other Diseases						
CSG452	Type 2 diabetes					
RG1678	Schizophrenia		•	(Multinational	study)	
RG1450	Alzheimer's disease					
RG7090	Major depressive disorder	(Overseas)				
RG3637	Asthma					

OOO Designates change in status in 2011 and thereafter

Notes: 1. In October 2011, it was concluded that approval of Epogin for this indication was not appropriate. Chugai is currently considering future action. 2. Chugai plans to start a phase I clinical trial in Japan in 2012 of RG7204 (vemurafenib) for BRAF mutation-positive metastatic melanoma.

62 CHUGAI PHARMACEUTICAL CO., LTD.

Generic Name / Product Name	Origin (Collaborator)	Mode of Action
capecitabine / Xeloda (Overseas name: Xeloda)	Roche	Antimetabolite, 5-FU derivative (Oral)
trastuzumab / Herceptin (Overseas name: Hercep	ptin) Roche	Anti-HER2 humanized monoclonal antibody (Injection)
erlotinib HCI / Tarceva (Overseas name: Tarceva)	Roche / OSI	EGFR tyrosine kinase inhibitor (Oral)
bevacizumab / Avastin (Overseas name: Avastin)	Roche	Anti-VEGF (Vascular Endothelial Growth Factor) humanized monoclonal antibody (Injection)
epoetin beta / Epogin	In-house	Recombinant human erythropoietin (Injection)
pertuzumab / Product name undetermined	Roche	Humanized HER dimerization inhibitory monoclonal antibody (Injection)
trastuzumab emtansine / Product name undetermined	Roche	HER2 antibody-drug conjugate (T-DM1) (Injection)
obinutuzumab / Product name undetermined	Roche	Humanized anti-CD20 monoclonal antibody (Injection)
tocilizumab / Actemra	In-house	Humanized anti-human IL-6 receptor monoclonal antibody (Injection)
	In-house	ALK inhibitor (Oral)
_	In-house / Dainippon Sumitomo Pharma	WT1 peptide cancer vaccine (Injection)
_	In-house (Roche)	MEK inhibitor (Oral)
-	In-house (Roche)	Raf and MEK dual inhibitor (Oral)
	In-house (Roche)	Humanized anti-Glypican-3 monoclonal antibody (Injection)
-	In-house	PI3K class I inhibitor (Oral)
onartuzumab / Product name undetermined	Roche	Humanized anti-Met antibody (Injection)
	In-house (Roche)	Humanized anti-human IL-6 receptor monoclonal antibody (Injection)
tocilizumab / Actemra	III House (Hoene)	
tocilizumab / Actemra (Overseas name: Actemra (US), RoActemra (EU))		
		Active vitamin D <sub>3</sub> derivative (Oral)
(Overseas name: Actemra (US), RoActemra (EU))		Active vitamin D₃ derivative (Oral) Sodium hyaluronate (Injection)
(Overseas name: Actemra (US), RoActemra (EU)) eldecalcitol / Edirol	In-house (Taisho Pharmaceutical)	
(Overseas name: Actemra (US), RoActemra (EU)) eldecalcitol / Edirol sodium hyaluronate / Suvenyl	In-house (Taisho Pharmaceutical)	Sodium hyaluronate (Injection)
(Overseas name: Actemra (US), RoActemra (EU)) eldecalcitol / Edirol sodium hyaluronate / Suvenyl ibandronate sodium hydrate / Product name undetermin	In-house (Taisho Pharmaceutical)	Sodium hyaluronate (Injection) Bisphosphonate (Injection)
(Overseas name: Actemra (US), RoActemra (EU)) eldecalcitol / Edirol sodium hyaluronate / Suvenyl ibandronate sodium hydrate / Product name undetermin (Overseas name: Boniva (US), Bonviva (EU)) —	In-house (Taisho Pharmaceutical) In-house ed Roche (Taisho Pharmaceutical) In-house	Sodium hyaluronate (Injection) Bisphosphonate (Injection) Bisphosphonate (Oral) Humanized anti-human IL-6 receptor monoclonal antibody (Injection)
(Overseas name: Actemra (US), RoActemra (EU)) eldecalcitol / Edirol sodium hyaluronate / Suvenyl ibandronate sodium hydrate / Product name undetermin	In-house (Taisho Pharmaceutical) In-house ed Roche (Taisho Pharmaceutical)	Sodium hyaluronate (Injection) Bisphosphonate (Injection) Bisphosphonate (Oral)
(Overseas name: Actemra (US), RoActemra (EU)) eldecalcitol / Edirol sodium hyaluronate / Suvenyl ibandronate sodium hydrate / Product name undetermin (Overseas name: Boniva (US), Bonviva (EU)) epoetin beta pegol (Overseas name: Mircera)	In-house (Taisho Pharmaceutical) In-house ed Roche (Taisho Pharmaceutical) In-house Roche	Sodium hyaluronate (Injection) Bisphosphonate (Injection) Bisphosphonate (Oral) Humanized anti-human IL-6 receptor monoclonal antibody (Injection) Continuous erythropoietin receptor activator (Injection)
(Overseas name: Actemra (US), RoActemra (EU)) eldecalcitol / Edirol sodium hyaluronate / Suvenyl ibandronate sodium hydrate / Product name undetermin (Overseas name: Boniva (US), Bonviva (EU))  epoetin beta pegol (Overseas name: Mircera) ribavirin / Copegus (Overseas name: Copegus)	In-house (Taisho Pharmaceutical) In-house ed Roche (Taisho Pharmaceutical) In-house Roche Roche	Sodium hyaluronate (Injection) Bisphosphonate (Injection) Bisphosphonate (Oral) Humanized anti-human IL-6 receptor monoclonal antibody (Injection) Continuous erythropoietin receptor activator (Injection) Anti-viral agent, in combination with Pegasys (Oral)
(Overseas name: Actemra (US), RoActemra (EU)) eldecalcitol / Edirol sodium hyaluronate / Suvenyl ibandronate sodium hydrate / Product name undetermin (Overseas name: Boniva (US), Bonviva (EU)) epoetin beta pegol (Overseas name: Mircera)	In-house (Taisho Pharmaceutical) In-house ed Roche (Taisho Pharmaceutical) In-house Roche	Sodium hyaluronate (Injection) Bisphosphonate (Injection) Bisphosphonate (Oral) Humanized anti-human IL-6 receptor monoclonal antibody (Injection) Continuous erythropoietin receptor activator (Injection)
(Overseas name: Actemra (US), RoActemra (EU)) eldecalcitol / Edirol sodium hyaluronate / Suvenyl ibandronate sodium hydrate / Product name undetermin (Overseas name: Boniva (US), Bonviva (EU)) — epoetin beta pegol (Overseas name: Mircera) ribavirin / Copegus (Overseas name: Copegus) peginterferon alfa-2a / Pegasys	In-house (Taisho Pharmaceutical) In-house ed Roche (Taisho Pharmaceutical) In-house Roche Roche Roche	Sodium hyaluronate (Injection) Bisphosphonate (Injection) Bisphosphonate (Oral) Humanized anti-human IL-6 receptor monoclonal antibody (Injection) Continuous erythropoietin receptor activator (Injection) Anti-viral agent, in combination with Pegasys (Oral)
(Overseas name: Actemra (US), RoActemra (EU)) eldecalcitol / Edirol sodium hyaluronate / Suvenyl ibandronate sodium hydrate / Product name undetermin (Overseas name: Boniva (US), Bonviva (EU)) — epoetin beta pegol (Overseas name: Mircera) ribavirin / Copegus (Overseas name: Copegus) peginterferon alfa-2a / Pegasys (Overseas name: Pegasys)	In-house (Taisho Pharmaceutical) In-house ed Roche (Taisho Pharmaceutical) In-house Roche Roche Roche	Sodium hyaluronate (Injection)         Bisphosphonate (Injection)         Bisphosphonate (Oral)         Humanized anti-human IL-6 receptor monoclonal antibody (Injection)         Continuous erythropoietin receptor activator (Injection)         Anti-viral agent, in combination with Pegasys (Oral)         Peginterferon alfa-2a agent (recombinant) (Injection)
(Overseas name: Actemra (US), RoActemra (EU)) eldecalcitol / Edirol sodium hyaluronate / Suvenyl ibandronate sodium hydrate / Product name undetermin (Overseas name: Boniva (US), Bonviva (EU)) — epoetin beta pegol (Overseas name: Mircera) ribavirin / Copegus (Overseas name: Copegus) peginterferon alfa-2a / Pegasys (Overseas name: Pegasys) tofogliflozin hydrate / Product name undetermine	In-house (Taisho Pharmaceutical) In-house ed Roche (Taisho Pharmaceutical) In-house Roche Roche Roche d In-house	Sodium hyaluronate (Injection)         Bisphosphonate (Injection)         Bisphosphonate (Oral)         Humanized anti-human IL-6 receptor monoclonal antibody (Injection)         Continuous erythropoietin receptor activator (Injection)         Anti-viral agent, in combination with Pegasys (Oral)         Peginterferon alfa-2a agent (recombinant) (Injection)         SGLT2 inhibitor (Oral)
(Overseas name: Actemra (US), RoActemra (EU)) eldecalcitol / Edirol sodium hyaluronate / Suvenyl ibandronate sodium hydrate / Product name undetermin (Overseas name: Boniva (US), Bonviva (EU)) — epoetin beta pegol (Overseas name: Mircera) ribavirin / Copegus (Overseas name: Copegus) peginterferon alfa-2a / Pegasys (Overseas name: Pegasys) tofogliflozin hydrate / Product name undetermine bitopertin / Product name undetermined	In-house (Taisho Pharmaceutical) In-house ed Roche (Taisho Pharmaceutical) In-house Roche Roche Roche d In-house Roche	Sodium hyaluronate (Injection)         Bisphosphonate (Injection)         Bisphosphonate (Oral)         Humanized anti-human IL-6 receptor monoclonal antibody (Injection)         Continuous erythropoietin receptor activator (Injection)         Anti-viral agent, in combination with Pegasys (Oral)         Peginterferon alfa-2a agent (recombinant) (Injection)         SGLT2 inhibitor (Oral)         Glycine reuptake inhibitor (Oral)

# **Basic Information**

# **Basic Information on the Pharmaceutical Industry**

#### **Overview of Domestic Pharmaceutical Market and NHI Drug Price Revisions**

#### **Trends in National Medical Expenses**

Without medical system reforms, Japan's national medical expenses will increase at an annual rate of approximately three percent to four percent going forward. In the year ended March 2010, national medical expenses totaled ¥36,006.7 billion, a ¥1,198.3 billion increase from the previous year. The rapid aging of Japan's society presents the serious challenge of efficiently managing the marked increase in medical expenses for the elderly.

# National Health Insurance (NHI) Drug Price Revision

The Ministry of Health, Labour and Welfare (MHLW) generally reviews drug reimbursement prices every two years and sets standard prices (reimbursement prices) so that the prices of pharmaceuticals prescribed under the health insurance system approximate their actual market price. The MHLW does this by investigating the prices and volumes of all prescription drug transactions during a given period. In the year ending March 2013, drug reimbursement prices declined by 1.26 percent overall on a medical cost basis, or 6.00 percent on a reimbursement price basis.

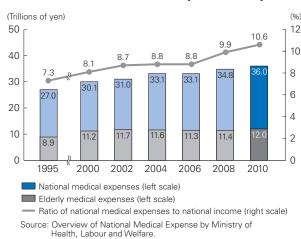
#### Impact of NHI Drug Price Revision

NHI Drug Price Reduction Rate (%)	2008	2010	2012
Industry Average	5.2	6.5	6.25
Chugai	7.2	6.8	6.00

Source: Chugai data

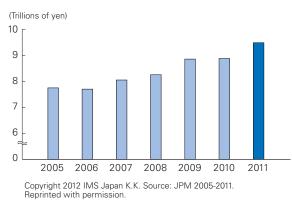
# Premium to Promote the Development of New Drugs and Eliminate Off-Label Use

In December 2009, the Central Social Insurance Medical Council, which advises the MHLW, approved the FY2010 Framework for Drug Pricing Reimbursement System Reforms. With this approval, a new pricing scheme was implemented on a trial basis as part of the NHI drug price revisions for the year ended March 2011 to promote the creation of innovative medical products and solve the drug lag<sup>1</sup> problem. In this scheme, at the time of the NHI drug price revisions a premium equal to the weighted-average percentage price difference of all listed drugs minus 2 percent, multiplied by 0.8, is added to the price of drugs for which no generics<sup>2</sup> are available (provided that they have been in the NHI price list for no more than 15 years), and which satisfy certain conditions.<sup>3</sup> Companies receiving the premium pricing are requested to develop drugs selected by a panel of the MHLW that have not yet obtained approval in Japan



#### Trends in National and Elderly Medical Expenses

#### Prescription Drug Market



Note: National income is based on the actual results of the System of National Accounts (announced in December 2010 by the Cabinet office).

or are approved for other indications (off-label use). In the year ending March 2013, 367 compounds and 702 products received premium pricing.

- 1. The inability of Japanese patients to access global standard or state-ofthe-art treatments because the drugs are not developed in Japan.
- Generic drugs, which are approved after the expiry of the patents for original drugs with the same active ingredients and efficacy.
- The percentage price difference between the current market price and the reimbursement price of the original drug must not exceed the weighted-average percentage price difference of all listed drugs.

#### **Changes to Promote Use of Generics**

The MHLW has instituted changes to prescription rules in line with an Action Program announced in October 2007 to promote the safe use of generics. Previously, physicians ticked the "Can be substituted" box on the prescription form if they determined that a generic was acceptable. However, since April 2008 they need to tick a box only if they do not agree to substitution with a generic. The Japanese government aims to trim medical expenditure by raising the generic share of prescription drug volume from approximately 23.0 percent as of March 2011 to 30 percent or more by the year ending March 2013.

#### Solving the Drug Lag Problem

In January 2005, the MHLW established the Study Group on Unapproved and Off-label Drugs of High Medical Need as one means of helping solve the drug lag problem. The study group is charged with investigating the clinical necessity and the appropriateness of usage of drugs already approved in Europe and the United States but not yet approved in Japan. The aim of these investigations is to promote the development of those drugs in Japan.

The MHLW has also reinforced several functions of the Pharmaceutical and Medical Devices Agency, an independent administrative institution responsible for reviewing drugs and medical devices for approval. Measures include increasing the number of staff involved in the reviewing process, introducing a project management system under which a dedicated staff is appointed to oversee the progress, providing guidelines on multinational clinical studies, clarifying reviewing criteria and offering an improved consultancy function. The goal is to shorten the period from new drug development through approval by two-and-a-half years (development by one-and-a-half years and the review process by one year) by the year ending March 2012.

#### Current Situation of Requests Made by the MHLW Study Group on Unapproved and Off-label Drugs of High Medical Need (As of February 1, 2012)

Date for request	Product	Indication	Development status
May 21, 2010	Xeloda	Advanced or recurrent gastric cancer	Approved in Feb. 2011
	Tarceva	Advanced or recurrent pancreatic cancer	Approved in Jul. 2011
	Avastin	Advanced or recurrent breast cancer	Approved in Sep. 2011
	pulmozyme	Improvement of pulmonary function in patients with cystic fibrosis	Filed in Jul. 2011
Dec. 13, 2010	Herceptin	Q3W dosage HER2+ metastatic breast cancer	Approved in Nov. 2011
		HER2 + neoadjuvant breast cancer	
	CellCept	Child renal transplant	Approved in Sep. 2011
	Avastin	Ovarian cancer	Planning
	Kytril	Gastrointestinal symptoms associated with radiotherapy	Approved in Dec. 2011
	Bactramin	Prevention & treatment of pneumocystis pneumonia	Preparing for filing

# Oncology

#### **Overview of Diseases and Treatment Methods**

#### Leading Cause of Death in Japan

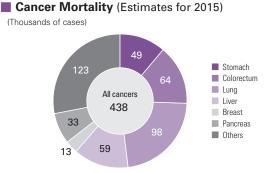
Cancer has been the single most common cause of death in Japan since 1981. In 2010, 353,499 people died of cancer, accounting for 29.5 percent of all deaths in that year and the highest figure recorded since government surveys began in 1899.

# Establishment of the Basic Act for Anticancer Measures and Changes in the Healthcare Environment

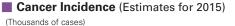
In June 2006, the Diet enacted the Basic Act for Anticancer Measures, which stipulates the obligation of national and local governments to promote measures to fight cancer. The basic principle of the law is to develop optimal cancer treatment systems in every region of the country so that patients can receive optimal treatment in accordance with their wishes ("the availability of optimal treatment" for cancer patients). The law includes provisions for (1) improvement of cancer prevention and treatment technologies, (2) development of oncologists and "hub" institutions that specialize in cancer, and (3) enhanced provision of information to patients.

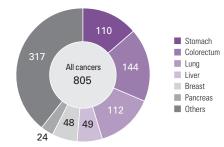
# The Changing Cancer Treatment Environment from the Patient's Perspective

Measures introduced as part of the patient-centered cancer treatment policy are bringing about major changes in the Japanese cancer treatment environment. The Basic Act for Anticancer Measures requires the national government to formulate a basic plan and policies to

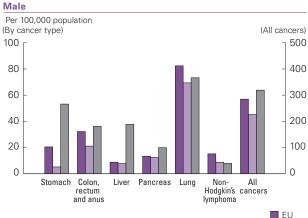


Source: Cancer White Paper-Incidence/Death/Prognosis-2004 (Shinohara Shuppan Shinsha)

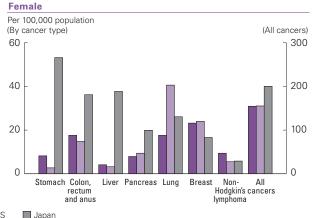




International Comparison of Cancer Mortality Rates (2005)







fight cancer after listening to the opinions of patients, their families and experts. As a result of these patientcentered policies, great progress is being made in the training of oncologists and medical staff such as nurses, pharmacists and nutritionists who work with oncologists. Major advances have also been seen in efforts such as establishing networks among local medical institutions by designating interregional hub cancer centers. Japan's first medical oncologists were certified in 2006, and as of September 2011 there were 584 such specialists. Moreover, there is a growing multidisciplinary approach involving oncologists and other healthcare professionals such as nurses, pharmacists and nutritionists. The drug lag problem - the inability of Japanese patients to gain access to global standard or state-of-the-art treatments - is also being addressed, and the adoption of a patient-centered approach to treatment is significantly changing oncology in Japan.

#### **Changes in Treatment Methods**

Cancer treatment is increasingly being based on a multidisciplinary approach that combines surgery, radiation therapy and anticancer agents. In particular, the field of anticancer agents is evolving, and highly innovative medications such as molecular targeted drugs have been introduced. This has brought about a dramatic improvement in treatment outcomes in colorectal, lung and breast cancer, malignant lymphoma and other forms of cancer.

As the adverse reaction profiles of these drugs differ from those of conventional anticancer agents, it is now recognized that there is a need for cancer drug therapy specialists with a thorough knowledge of drug mechanisms of action, pharmacokinetics and the effects of co-administration with other drugs. Furthermore, in recent years, there has been a rapid increase in the number of cancer patients receiving drug treatment on an outpatient basis, which allows them to maintain their normal lifestyles. To ensure the medical safety of chemotherapy for these patients, a multidisciplinary approach involving close collaboration between oncologists and medical staff has become essential.

### Overview of Products and Development Projects Neutrogin

Neutrogin is a recombinant human granulocyte colony-

stimulating factor (G-CSF) developed by Chugai. G-CSF is a hematopoietic factor that specifically stimulates the differentiation and growth of cells of the granulocytic series (especially neutrophils) in bone marrow. Neutrogin has the effect of reducing the period when the neutrophil count is low and promoting recovery in various types of neutropenia. Neutrogin is used to treat neutropenia that occurs as a side effect of anticancer agents, mobilize peripheral blood progenitor cells, promote neutrophilia after hematopoietic cell transplantation and treat neutropenia associated with myelodysplastic syndrome, aplastic anemia, HIV infection and immunosuppressive therapy following kidney transplantation. Overseas, Neutrogin is sold under the name Granocyte.

#### Herceptin

Herceptin is a targeted monoclonal antibody that works across all stages of human epidermal growth factor receptor type 2 (HER2)-positive breast cancer. The product specifically activates the immune system and suppresses the HER2 protein that contributes to tumor cell growth. In Japan, this product is indicated for the treatment of patients with HER2-positive metastatic breast cancer and now also for postoperative adjuvant therapy of patients with early HER2-positive breast cancer.

In March 2011, Herceptin obtained approval for the additional indication of HER2-positive advanced or recurrent gastric cancer. In November 2011, Herceptin also obtained approval for the additional indication of neoadjuvant chemotherapy in HER2-positive early breast cancer. As a result, Herceptin has gained approval for all stages of breast cancer that overexpresses HER2.

# Rituxan

Rituxan is a targeted monoclonal antibody for the treatment of CD20-positive, B-cell non-Hodgkin's lymphoma. It works by binding to a specific protein (the CD20 antigen) found on the surface of normal and malignant B cells, activating the immune system to eliminate the marked cells. These are then replaced by healthy B cells from the bone marrow. The efficacy of Rituxan has been confirmed in many overseas and domestic clinical trials, and it is now the standard therapy for non-Hodgkin's lymphoma. As a result, it has gained

wide recognition internationally. In Japan, Rituxan is marketed jointly by Chugai and Zenyaku Kogyo Co., Ltd. Outside Japan and North America, Rituxan is sold under the brand name MabThera by the Roche Group.

#### Avastin

The anti-VEGF (vascular endothelial growth factor) humanized monoclonal antibody Avastin is the first antiangiogenesis agent in the world to obtain approval. Avastin inhibits angiogenesis – the growth of the network of blood vessels that supply nutrients and oxygen to cancerous tissues.

Chugai plans to investigate the efficacy of combinations of Avastin and its other anticancer agents. We expect Avastin to play a key role in improving our presence in oncology in Japan. In Japan, Avastin was launched in June 2007 for the treatment of advanced or recurrent colorectal cancer. Chugai obtained approval for the additional indications of advanced or recurrent non-squamous non-small cell lung cancer in November 2009, and inoperable or recurrent breast cancer in combination with paclitaxel in September 2011.

### Kytril

Kytril is a selective inhibitor of the 5-HT3 (serotonin) receptors found in afferent vagal nerve endings distributed mainly along the gastrointestinal tract. It is widely prescribed as an antiemetic agent to alleviate nausea and vomiting caused by adverse reactions due to anticancer agents.

### Xeloda

Xeloda was developed at the Kamakura Research Laboratories of the former Nippon Roche to improve the efficacy and safety of Furtulon. After Xeloda is absorbed by the body, it is gradually metabolized by certain enzymes present in high concentrations in the liver and tumors and is eventually converted into 5-FU within tumors. It is an innovative drug with high target specificity.

Xeloda is the standard treatment for metastatic breast cancer and colorectal cancer in more than 100 countries around the world. In Japan, Xeloda is currently used to treat advanced or recurrent breast cancer and as a postoperative adjuvant chemotherapy for colon cancer. In addition, a combination of Xeloda and oxaliplatin (a regimen called XELOX) has obtained approval for treating patients with advanced or recurrent colorectal cancer. In February 2011, Xeloda obtained approval for advanced or recurrent gastric cancer.

#### Tarceva

Tarceva is a targeted, small-molecule drug that inhibits the activation of human epidermal growth factor receptor (EGFR) by blocking the enzyme tyrosine kinase. EGFR plays a key role in the growth, progression and metastasis of cancer. The product is marketed by Roche, Genentech and OSI Pharmaceuticals in Europe and the United States, where it has obtained approval for the second-line treatment of advanced non-small cell lung cancer and the first-line treatment of metastatic pancreatic cancer. In Japan, Tarceva is used for the second-line or later treatment of non-small cell lung cancer. In July 2011, it obtained approval for the additional indication of pancreatic cancer not amenable to curative resection.

### Femara

Chugai commenced joint marketing of Femara, an aromatase inhibitor, with Novartis Pharma K.K., Femara's manufacturer and distributor, in May 2006. Femara has already obtained approval in over 100 countries around the world as a breast cancer treatment for postmenopausal women and it is a standard of care in endocrine therapy. Although it is the third agent to come into the domestic market as a third-generation aromatase inhibitor, we will aim to differentiate Femara from competitor products using the strong evidence in its favor: (1) Femara is the first aromatase inhibitor shown in large-scale clinical trials to be useful as an extended adjuvant therapy (adjuvant therapy after the standard five years of endocrine therapy to prevent recurrence after surgery for breast cancer); (2) largescale clinical trials overseas have confirmed that Femara reduces the risk of cancer recurrence as an initial adjuvant therapy commencing immediately after surgery; and (3) large-scale clinical trials have confirmed that Femara is more effective than tamoxifen in treating advanced and recurrent breast cancer.

### **RG1273**

RG1273 (pertuzumab) is a monoclonal antibody licensed from Roche. This is the first in a new class of targeted agents known as HER dimerization inhibitors. Chugai is participating in Roche's phase III multinational study for the indication of HER2-positive breast cancer.

#### GA101 (RG7159)

GA101 (obinutuzumab) is a humanized monoclonal antibody licensed from Roche. In October and November 2011, Chugai participated in Roche's phase III multinational study of GA101 as a potential treatment for aggressive non-Hodgkin's lymphoma and indolent non-Hodgkin's lymphoma.

### RG3502

RG3502 (trastuzumab emtansine, T-DM1) is an antibody-drug conjugate combining the anti-HER2 monoclonal antibody trastuzumab (active ingredient of Herceptin) with the chemotherapy agent DM1. A phase III multinational study for the treatment of HER2positive breast cancer started in May 2011.

#### AF802

AF802 is a targeted molecular therapy from Chugai research that is being developed for the treatment of non-small cell lung cancer. It inhibits the activity of EML4-ALK, a recombinant kinase expressed in about 5 percent of non-small cell lung cancers. Phase I/II clinical trials started in Japan in September 2010.

#### **CIF (RG7167)**

CIF is a targeted small-molecule agent from Chugai research. Chugai has licensed CIF to Roche overseas, and the two companies are co-developing it for the treatment of solid tumors. Phase I clinical trials are currently under way in Japan and overseas.

# CKI27 (RG7304)

CKI27 is a Raf and MEK dual inhibitor from Chugai research. Chugai has licensed CKI27 to Roche overseas, and the two companies are co-developing it for the treatment of solid tumors. Phase I clinical trials are currently under way in Japan and overseas.

#### GC33 (RG7686)

GC33, a humanized antibody from Chugai research, targets glypican-3 proteins, which are specifically expressed in liver cancer. The project involves joint research between Chugai and Tokyo University, as well as clinical proteomics work by PharmaLogicals Research, a joint venture in which Chugai participates. GC33 was licensed out to Roche in January 2011, and Phase I clinical trials are currently under way in Japan and overseas.

#### PA799

PA799, a PI3K class I inhibitor, is an oral agent from Chugai research that is being developed for the treatment of solid tumors. Overseas phase I clinical trials started in August 2010.

#### WT4869

A product of joint research with Dainippon Sumitomo Pharma Co., Ltd. based on the results of clinical research by Dr. Haruo Sugiyama, Professor of Osaka University Graduate School of Medicine. WT4869 is a cancer peptide vaccine that targets the WT1 protein, a product of Wilms' tumor gene 1. Phase I/II clinical trials are under way in Japan for myelodysplastic syndromes. In addition, phase I clinical trials for solid tumors started in September 2011. WT4869 induces WT1-specific cytotoxic T-lymphocytes (CTLs), which attack tumor cells that express the WT1 protein. It is thus expected to demonstrate therapeutic efficacy against leukemia and other types of cancer that express WT1.

#### **RG3638**

RG3638 (onartuzumab), a humanized anti-Met antibody licensed from Roche, targets Met, a hepatocyte growth factor (HGF) receptor. In August 2011, phase I clinical trials started in Japan for non-small cell lung cancer. This compound can be used in combination with erlotinib hydrochloride (Tarceva), and is expected to show efficacy in patients with high Met expression, which is associated with poor outcomes using existing therapies.

# **Bone and Joint Diseases**

#### **Rheumatoid Arthritis, Osteoarthritis**

Rheumatoid arthritis (RA) is a systemic disease characterized by inflammation of joints leading to dysfunction, pain and deformity. A lack of appropriate treatment tends to result in deterioration of a patient's condition over time. It is estimated that there are about 600,000 to 700,000 patients in Japan suffering from RA, of whom some 350,000 are currently receiving drug treatment. The number of patients is increasing as the average age of the population rises. Systemic-onset juvenile idiopathic arthritis (sJIA), the form of RA suffered by children below 16 years of age, is associated with growth disorders. It is considered even more difficult to treat than adult forms of the disease, as few suitable drugs are available.

The most common joint disease is osteoarthritis. Degeneration of the cartilage in the joints and surrounding areas causes joint pain, stiffness and loss of function. The disease is more common in older people and is thought to occur in 80 percent or more of people 60 years of age or older.

#### **Treatment Methods and Market Conditions**

RA has been conventionally treated with antirheumatic drugs, anti-inflammatory analgesics and steroids, but biologics (anti-tumor necrosis factor (TNF) agents) targeting cytokines, proteins involved in the process of inflammation, have recently entered the market and expanded the range of treatment choices. Research in recent years implies that the administration of biologics at the early onset stage is effective in inhibiting bone and joint damage. The global market for these agents exceeded US\$10 billion in 2010, and the Japanese market also continues to grow.

sJIA is a serious and potentially fatal disease. While it is rare, with only a few hundred patients in Japan, no effective treatment is available. Current therapy relies on steroid drugs, which can cause growth impairment and other adverse reactions. Accordingly, the approval and launch of Actemra in April 2008 provided a significant step forward in therapy.

The main drug therapies for osteoarthritis include

non-steroidal anti-inflammatory analgesics, steroids and hyaluronic acid preparations. However, the level of satisfaction with these therapies is not high, and more useful drugs are needed.

#### **Regulatory Trends**

In October 2005, the MHLW released the Report of the Rheumatism and Allergy Countermeasure Committee. The report calls for the following measures to prevent rheumatism from becoming severe: (1) promotion of early diagnosis and the development of highly effective treatment methods; (2) establishment of medical service systems to provide appropriate care; and (3) improvement of the patient environment, including consultation opportunities and access to information.

The 2001-2010 period was designated as the Bone and Joint Decade, and academic societies and other players have been aggressively promoting research, diagnosis and treatment of osteoarthritis. In 2010, it was decided to extend these activities for ten more years through 2020.

# Overview of Products and Development Projects Suvenyl

Suvenyl, a drug that improves joint function through injection into the joint cavity, is a high molecular weight hyaluronate sodium drug that alleviates knee joint pains caused by knee osteoarthritis and RA. Because its physical and chemical properties are close to that of natural hyaluronic acid, the superior performance of Suvenyl over low molecular weight hyaluronic acid has been recognized.

#### **Actemra**

Actemra, the first antibody drug created in Japan, blocks the activity of interleukin-6 (IL-6), a type of cytokine. It was first launched in Japan in 2006 as a treatment for Castleman's disease. In April 2008, we obtained domestic approval for the additional indications of RA, polyarticular-course juvenile idiopathic arthritis (pJIA) and sJIA. The high expectations placed by physicians in this new drug are shared by patients for whom conventional RA treatments, including existing biologics, have failed to be effective.

Actemra is marketed globally through Roche. In the European Union, where it is known as RoActemra, sales of the drug have started for the treatment of RA. In the United States, Actemra obtained approval in January 2010 for the treatment of adult patients with moderately to severely active RA who have had an inadequate response to one or more TNF antagonist therapies, and a supplemental biologics license application was submitted in December 2011 for an additional indication as a first-line treatment. Actemra obtained approval for the additional indication of treatment of sJIA in the United States in April 2011 and the European Union in August 2011. In Asia, where it has local sales branches, Chugai filed for regulatory approval in South Korea in April 2011, and obtained approval in Taiwan in July 2011.

The requirement for post-marketing all-patient registration surveillance as a condition of Actemra's approval in Japan was lifted in August 2010 for RA and pJIA, and is expected to be lifted in 2012 for Castleman's disease. All-patient registration surveillance for sJIA is ongoing, and patient registration continues.

# SA237

SA237, a compound from Chugai research, is a next-generation antibody drug that has shown success in blocking IL-6 receptors for an extended period of time. It is being developed as a treatment for RA. A novel antibody technology established by Chugai enables a single antibody molecule to block the target antigen multiple times. Chugai created SA237 by applying this technology to Actemra, a humanized antihuman IL-6 receptor monoclonal antibody. Preclinical studies have verified that SA237 can continuously block IL-6 receptors more than four times longer than Actemra. This sustained efficacy is expected to lead to greater convenience for patients by allowing them to take smaller, less frequent doses. A phase I clinical trial started in December 2010.

#### Osteoporosis

Osteoporosis is considered to be a serious disease, as fractures caused by the disease, especially compression fractures of the spine and femoral neck, can decrease quality of life, leave patients bedridden and increase mortality risks. It is estimated that over 12 million people suffer from osteoporosis throughout Japan, with one in every two women aged 65 or over said to suffer from the disease. However, the treatment rate stands at around only 30 percent of the estimated number of sufferers due to a lack of readily noticeable symptoms. Consequently, the appearance of a new drug acts to expand the osteoporosis treatment market by exposing more patients.

# **Treatment Methods**

In the past, drug treatment of osteoporosis mainly involved active vitamin D<sub>3</sub> derivatives, bisphosphonates and calcitonin preparations. Since 2005, however, there has been an increase in the use of Evista, a selective estrogen receptor modulator (SERM).

#### **Regulatory Trends**

National guidelines for osteoporosis treatment underwent major revision in October 2006 with the aim of improving quality of life of the elderly and containing medical costs. Among the main points of the new guidelines are: (1) emphasis on the prevention of fractures; (2) a new focus on "bone quality" as an indicator of bone strength; and (3) establishment of criteria for the initiation of drug treatment that are separate from the criteria for diagnosis. Over the following five years, notable advances have been made in basic and clinical research into osteoporosis, evaluation of fracture risk and criteria for the initiation of drug treatment have been reviewed, and osteoporosis caused by lifestylerelated diseases has been addressed. In addition, Edirol and other medicines are covered by insurance. New guidelines were issued in December 2012 with revised content to accommodate these current conditions, which adds preventative and diagnostic items from the standpoint of the importance of early treatment to broaden the overall scope of osteoporosis treatment.

# Overview of Products and Development Projects Evista

Evista, a new category of osteoporosis treatment called SERM, has an estrogen-like effect on bones while reducing the occurrence of gynecological adverse reactions that are associated with existing estrogen drugs. In Japan, Evista has been jointly marketed by Chugai and Eli Lilly Japan K.K. since May 2004.

The results of large-scale overseas clinical trials conducted by Eli Lilly have established Evista as an evidence-based medicine. The drug reduces vertebral fractures and has low risk of causing breast cancer. Guidelines implemented in October 2006 designated Evista as a grade-A recommended agent.

# Alfarol

Alfarol, an active vitamin D<sub>3</sub> derivative, is positioned as the base drug for osteoporosis treatment. Alfarol inhibits the decline of bone mass by adjusting calcium and bone metabolism, and therefore is effective in preventing vertebral fractures. The latest treatment guidelines also indicate the drug's effect on prevention of falls, focusing attention on this feature that other osteoporosis treatments do not have.

# **Edirol**

Edirol (eldecalcitol) is a vitamin D<sub>3</sub> preparation born out of Chugai's many years of research in vitamin D. Chugai started sales of Edirol in April 2011 as the successor drug to Alfarol. In May 2008, we entered into a co-development and co-marketing agreement with Taisho Pharmaceutical Co., Ltd. Clinical trials have confirmed that Edirol has a similar safety profile to the existing D<sub>3</sub> derivatives but a statistically significant greater effect in preventing fractures. Edirol received a grade A recommendation in the treatment guidelines for vitamin D<sub>3</sub> preparations for the first time in December 2011.

# **RG484**

# (overseas product name: Bonviva/Boniva)

RG484 (ibandronate sodium hydrate) is a bisphosphonate licensed from Roche that requires less frequent administration than existing medicines of the same class. It is available overseas in two dosage forms: a tablet that needs to be taken only once a month, and an injection that is given once every three months. These more convenient treatment schedules are expected to enable patients to take a more active role in their treatment, thus improving adherence. In order to expedite development and maximize sales of RG484, Chugai entered into a co-development and comarketing agreement with Taisho Pharmaceutical in September 2006. In December 2011, it was announced that efficacy for osteoporosis was demonstrated in phase II/III clinical trials for the injectable formulation. Based on the results of these trials, Chugai is making preparations for a regulatory filing for the injectable formulation in 2012. In addition, phase II clinical trials for the oral formulation are currently under way.

# **Renal Diseases**

# **Renal Anemia**

# **Chronic Kidney Disease**

Chronic kidney disease (CKD) is defined as the continuation for three months or more of "manifestations showing the existence of renal disease, such as positive proteinuria" or "presence of kidney damage (a glomerular filtration rate of less than 60ml/min)." Recently, reports containing ample evidence of the major risk posed by chronic kidney disease in end-stage renal failure and cardiovascular disease have prompted efforts to address this disease around the world. In Japan, too, measures are fully under way to deal with the problem. For example, the Japanese Society of Nephrology issued a CKD Clinical Practice Guidebook in 2007 and CKD Clinical Practice Guidelines in 2009. The MHLW has started strategic research through The Kidney Foundation, Japan with the objective of achieving a 15 percent reduction in five years of the number of dialysis patients compared with current forecasts.

#### **Chronic Renal Failure and Renal Anemia**

Chronic renal failure is a disease in which renal function is significantly reduced due to a variety of causes, including diabetes-related renal disease, chronic glomerulonephritis, nephrosclerosis and polycystic kidney disease. In recent years, the rise in the number of diabetes patients has led to a corresponding increase in chronic renal failure in patients with underlying diabetes-related renal disease; this has become the primary reason for dialysis use.

For dialysis patients and end-stage renal failure patients, the treatment of serious complications of advanced renal dysfunction, such as renal anemia, secondary hyperparathyroidism, and abnormal calcium and phosphorus metabolism, is a major issue. Of these complications, renal anemia is one of the most frequent, occurring not only in dialysis patients but also in pre-dialysis patients. Renal anemia, in turn, is thought to be responsible for a wide range of further complications suffered by renal failure patients, including deterioration in heart, brain and hemostatic functions. The importance of treating renal anemia and secondary hyperparathyroidism was indicated in Guidelines for the Management of Secondary Hyperparathyroidism in Chronic Dialysis Patients (2006) and the Guideline for Renal Anemia in Chronic Kidney Disease (2008) issued by the Japan Society for Dialysis Therapy and in the CKD Clinical Practice Guidelines (2009) issued by the Japanese Society of Nephrology.

#### Erythropoietin

Erythropoietin (EPO) is a hemopoietic factor produced mainly in the kidneys. It speeds up erythrocyte production by acting on normoblastic progenitor cells found in bone marrow. EPO preparations are effective in treating renal anemia caused primarily by the decline in erythropoietin production due to chronic renal failure. In addition, by correcting and controlling anemia, the drug is also thought to help improve the secondary complications listed above. Large-scale studies have shown that correction of anemia with EPO preparations helps reduce the length of hospital stays and improves both quality of life and life expectancy. It is estimated that EPO preparations are currently used by approximately 80 percent of dialysis patients and the majority of pre-dialysis renal failure patients with serum creatinine levels of 2mg/dL or more. Chugai's Epogin is thus an essential drug for the treatment of renal anemia.

# A Flat-sum Reimbursement System for Erythropoietin Preparations

The number of patients receiving dialysis treatment in Japan has increased by about two to three percent annually, reaching approximately 297,000 people as of December 2010, partly due to increased use of dialysis in patients with diabetes-related renal disease. Expenses for EPO preparations, essential for dialysis treatment, accounted for 8.8 percent of all dialysis-related expenses in 2005.

Consequently, the government decided in its 2006 revisions of medical fees that the administration of erythropoietin in dialysis treatment would be comprehensively incorporated as a flat-sum reimbursement within the medical fee points\* for "artificial kidney" (dialysis treatment). The government changed the previous mechanism under which the number of fee points awarded depended on the amount of erythropoietin used. The new mechanism provides an integrated fee structure by adding the average amount of erythropoietin used per dialysis session to the medical fee points for one session.

# Overview of Products and Development Projects Epogin

Epogin is a human erythropoietin formulation that uses epoetin beta, produced through Chugai's unique gene recombinant technology, as its main active ingredient. Erythropoietin is effective in improving renal anemia primarily caused by the decline in erythropoietin production due to chronic renal failure. It also contributes to the improvement of a wide range of complications arising from anemia. Since its launch in 1990, Epogin has been widely used in the clinical setting for its approved indications of renal anemia under dialysis and before dialysis, and anemia of prematurity. In June 2010, Epogin Subcutaneous Injection Syringe 24000 obtained approval for autologous blood transfusion of

<sup>\*</sup> Formerly, the average amount of erythropoietin used per patient was approximately 4,500 international units per week, on the basis of three dialysis sessions per week. The new system adds points equivalent to 1,500 international units to the artificial kidney medical fee points and provides an integrated fee structure. The integrated fee points were set for review in 2008, 2010 and 2012.

800ml or more for a patient's scheduled surgery with a blood collection period of more than one week.

### Mircera

Mircera is a new anemia treatment with a very long serum half-life, enabling stable and sustained control of haemoglobin. It stimulates erythropoiesis by a different interaction with the erythropoietin receptor on progenitor cells in the bone marrow. Mircera obtained approval in April 2011 for the treatment of renal anemia, and was launched in July 2011. Outside Japan, Mircera obtained approval in the European Union in 2007, and is currently sold in more than 100 countries.

The serum half-life of Mircera is virtually the same for subcutaneous administration or intravenous injection, and the drug demonstrates effectiveness in relieving the symptoms of anemia when administered at four-week intervals during the maintenance period. Consequently, it may reduce the cost of hospital visits for patients with pre-dialysis chronic renal failure and is expected to contribute to better treatment adherence. Furthermore, as a dialysis-related treatment, Mircera is expected to reduce medical costs such as drug administration costs and medical waste by dramatically reducing administration frequency. The product thus has the potential to expand the range of options for the treatment of renal anemia.

#### Renagel

Renagel is used to treat hyperphosphatemia. Because depressed renal functions impair the ability of dialysis patients to eliminate phosphorous excretions, phosphorous intake is controlled by phosphorouseliminating dialysis and strictly controlled diets. However, these methods are not 100 percent effective in correcting oversupplies of phosphorus, so a phosphate binder is required to eliminate the excess phosphorus. Renagel differs from conventional calcium carbonates used to treat this condition, and there is almost no possibility of hypercalcemia occurring with Renagel use, as it is a new type of treatment, free of aluminum and calcium. Therefore, synergies with Chugai's other products can be expected. For instance, it becomes easier to use vitamin D<sub>3</sub> derivatives, in particular Oxarol, an agent for the treatment of secondary hyperparathyroidism.

#### Oxarol

Synthesized by Chugai, Oxarol is the first intravenous active vitamin D<sub>3</sub> derivative agent in Japan. It treats secondary hyperparathyroidism, a result of prolonged dialysis, by acting directly on the parathyroid gland to control parathyroid hormone synthesis and secretion, and by acting to improve osteitis fibrosa and excess remodeling. Oxarol is proving to be effective in cases where previous oral vitamin D<sub>3</sub> derivatives were insufficient.

# Others

# **Chronic Hepatitis C**

Chronic hepatitis C is a liver disease caused by persistent infection by the hepatitis C virus (HCV). In Japan, this disease has been designated a "21st century national health issue," as there are over two million HCV carriers. Early detection and treatment of HCV is particularly important because approximately 70 percent of those infected develop chronic hepatitis, which gradually progresses to liver cirrhosis and then liver cancer.

### **Treatment Methods and Market Conditions**

There are two methods of treating chronic hepatitis C: antiviral therapy to eradicate HCV from the body, and liver-support therapy to improve liver function and prevent the hepatitis from worsening.

Interferon therapy is the main antiviral treatment. However, its limited efficacy has led to an increase in the use of liver-support therapy in Japan, where about 80 percent of chronic hepatitis C patients do not receive interferon treatment. Since 2001, the introduction of interferon-ribavirin combination therapy and of peginterferon<sup>1</sup> has increased the treatment options available for patients with hepatitis C.

1. Interferon conjugated with polyethylene glycol, which makes the medication longer-acting.

# **Regulatory Trends**

The Japanese government is aiming to double the number of hepatitis patients treated with interferon in the seven years from April 2008. It has been cooperating with local governments to implement a comprehensive seven-year program for hepatitis treatment. In order to diagnose potential patients who are unaware of their infection due to a lack of symptoms, public healthcare centers have been offering free testing since 2008 to people aged 20 or older. Also, regional hospitals in each prefecture are designated as hub centers for hepatitis C treatment in order to provide patients with a framework for treatment and consultation. Additionally, to ease the financial burden on hepatitis patients, the government is subsidizing medical fees by setting the upper limit of co-payments depending on the patient's income level.

Furthermore, in January 2010, a new law went into effect to promote comprehensive measures against hepatitis. This law establishes a new Hepatitis Countermeasures Promotion Council in the MHLW to formulate basic policies for promoting measures against hepatitis, including prevention and medical treatment. The law also includes necessary provisions for the national and local governments to ease the financial burden on hepatitis patients to ensure that they can get appropriate treatment when necessary. In April 2010, the hepatitis B and C medical expense subsidy program was expanded.

# Overview of Products and Development Projects Pegasys/Copegus

Pegasys is a pegylated interferon-based drug that enables sustained therapeutic concentrations to be achieved with once-weekly<sup>2</sup> administration, with fewer adverse reactions than standard interferon preparations. The guidelines for chronic hepatitis C treatment published by the MHLW recommend Pegasys as monotherapy for patients with a low viral load or those who cannot use ribavirin.

Copegus is a chronic hepatitis C treatment that synergistically strengthens the antiviral effect when used in combination with interferon. Chugai obtained approval for Copegus in January 2007 and launched it in March in combination with Pegasys for the treatment of patients with chronic hepatitis C serogroup 1 infection<sup>3</sup> and high viral load, or those who have either not responded to, or have relapsed following, interferon monotherapy. Chugai is the only pharmaceutical company in Japan that can offer peginterferon for both monotherapy and combination therapy. The Company plans to use this advantage to maximize the value of the two products by seeking to expand its market share in the treatment of chronic hepatitis C and further expanding the range of indications. Pegasys is establishing its position as monotherapy for patients who are unable to use ribavirin.

In July 2011, Chugai received approval of the combination therapy of Pegasys and Copegus for the additional indication of compensated liver cirrhosis caused by hepatitis C. Pegasys also obtained approval in September 2011 for the additional indication of chronic active hepatitis B.

 Conventional interferon must be injected three or more times per week.
 Genotypes I (1a) and II (1b), with which approximately 70 percent of HCV patients in Japan are infected.

# Influenza

Influenza is an acute infectious disease characterized by the rapid onset of high fever (38 degrees centigrade or more) and severe systemic symptoms. It is highly infectious, and epidemics can develop quickly. In some cases, secondary infections can lead to very serious illness. Influenza is classified into types A, B and C based on differences in the antigenicity of the underlying virus. Types A and B can infect humans and cause major outbreaks.

# Overview of Product Tamiflu

Tamiflu is the only oral anti-influenza agent that is effective against both type A and type B infections. It inhibits viral replication by binding to and blocking the action of neuraminidase, an enzyme essential for the multiplication of the influenza virus. Launched in capsule form in February 2001 and dry syrup form in July 2002, dosages are available for patients one year of age and older.

Since March 2007, restrictions on the use of Tamiflu in teenage patients with seasonal influenza have been in force in Japan. The measure was introduced as a safety precaution following several reports of abnormal behavior in influenza patients who had taken Tamiflu. The interim report of an epidemiological survey published by a working group of the MHLW suggested that there are no findings to date that point to a causal association between Tamiflu and the abnormal behavior of patients taking the drug. The MHLW concluded that further investigations were needed and is continuing the restriction on the use of Tamiflu.

# **Angina Pectoris**

Hardening of the coronary artery or coronary spasms can cause constriction of the artery and lead to ischemia, a condition in which the heart does not receive sufficient blood flow. Clinical symptoms of angina pectoris include chest pain and pressure that accompany temporary ischemia. Nitric acid is used to treat angina pectoris, enlarging the coronary artery and increasing blood flow to the ischemia-affected areas. In addition, beta blocker agents are used for exertional angina pectoris treatment, and calcium blockers are used for coronary spasm related angina pectoris.

# Overview of Product Sigmart

Anti-anginal agent Sigmart is a drug that overcomes the flaws of nitric acid compounds such as nitroglycerin and is effective in treating various types of angina pectoris. In October 2007, additional approval was obtained for an injectable formulation for acute heart failure.

# **Castleman's Disease**

Castleman's disease is a lymphoproliferative disease characterized by symptoms such as systemic lymphadenopathy, fever and general fatigue, as well as various abnormal laboratory test values including anemia, hypergammaglobulinemia and hypoalbuminemia. It has been confirmed that these manifestations result from the excessive production of interleukin-6 (IL-6), one of the proteins that causes inflammation. Castleman's disease is very rare, affecting approximately 1,500 people in Japan.

# Overview of Product Actemra

Actemra, a humanized anti-human IL-6 receptor monoclonal antibody produced using genetic recombination technology, is the first antibody drug created in Japan. With a mechanism of action that inhibits the receptor for IL-6, a type of cytokine, the drug improves Castleman's disease symptoms. An estimated 160 patients in Japan are eligible for Actemra treatment because they cannot be treated by surgery due to the presence of multiple enlarged lymph nodes and show resistance to traditional therapies.

#### **Diabetes**

The number of patients suffering from diabetes is increasing worldwide. In Japan, the 2009 National Health and Nutrition Survey issued by the MHLW put the total number of "persons strongly suspected of having diabetes" and "persons for which having diabetes cannot be denied" at approximately 22.65 million. Patients with type 2 diabetes have higher than normal blood sugar levels due to difficulty in controlling blood sugar caused by a diminished insulin secretory function or lower insulin sensitivity. Treatment using various kinds of oral diabetic drugs becomes necessary as the disease progresses, and further deterioration necessitates insulin replacement therapy.

# Overview of Development Projects CSG452

A compound from Chugai research, CSG452 (tofogliflozin hydrate) is an oral hypoglycemic agent that is expected to be effective in the treatment of type 2 diabetes. CSG452 uses an insulin-independent mechanism to achieve blood glucose control through direct glucose excretion in the urine. Compared with existing diabetes treatments, CSG452 reduces the risk of hypoglycemia, a serious side effect. Moreover, it is not accompanied by gastrointestinal side effects or weight gain and may have a weight loss effect. Phase III clinical trials started in November 2010.

# Schizophrenia

It is estimated that about one percent of the population suffers from schizophrenia, a disease characterized by persistent disturbances of thought, communication, perceptions, emotions and behavior. Patients become detached from reality and may experience delusions, hallucinations or uncontrollable thoughts.

# Overview of Development Projects RG1678

RG1678 (bitopertin), a small-molecule compound licensed from Roche, is expected to be effective in treating schizophrenia. Chugai joined Roche's phase III multinational study in January 2011.

# **Alzheimer's Disease**

Alzheimer's disease (AD) is the most common form of dementia. Pathologically, it is a progressive neurodegenerative disease that causes neuron death in the brain and brain atrophy. It leads to a general and progressive loss of memory and other cognitive functions, which can interfere with daily life. While existing AD treatments have some effect in slowing disease progression by several months, they are unable to stop the neuron death, and thus do not treat the underlying cause. Consequently, the level of satisfaction with these treatments is low, and there is strong demand for a more effective drug.

# Overview of Development Projects RG1450

RG1450 (gantenerumab) is a human anti-amyloidbetapeptide monoclonal antibody licensed from Roche. Phase I clinical trials investigating RG1450 as a potential treatment for AD are currently under way.

# Depression

Depression is a condition associated with brain dysfunction. It is classified by type, including exogenous, psychogenic, endogenous, reactive or situational, depending on the cause. Severe depression is called major depressive disorder. For treatment of depression, if the cause of the depressive state is clear, removal of the cause may be considered. However, if the cause is undetermined, or the depressive state is severe, drug therapy with an antidepressant is carried out. The number of patients in Japan with mood disorders including depression was estimated at 1.04 million in 2008, and has been trending upward year by year.

# Overview of Development Projects RG7090

RG7090 is an oral mGluR5 antagonist licensed from Roche. Phase I clinical trials for the treatment of major depressive disorder started in June 2011.

# Asthma

Asthma is a disease in which the sensitive airways become inflamed and narrow, hindering the passage of air and causing attacks of breathing difficulty. It is accompanied by symptoms such as coughing, mucus production, wheezing and shortness of breath. In Japan, asthma affects an estimated 4 million people, and about 10 percent of patients have symptoms that are not adequately controlled with existing treatments.

# Overview of Development Projects RG3637

Licensed from Roche, RG3637 (lebrikizumab) is a humanized anti-IL-13 antibody under development for the treatment of asthma. It is expected to improve asthma symptoms and enable prevention of asthma attacks in patients with moderate to severe asthma who are unable to adequately control their symptoms with existing treatments. This agent has demonstrated particular efficacy in patients with high serum periostin<sup>4</sup> levels. Phase I clinical trials started in August 2011.

 An extracellular matrix protein induced by IL-13, periostin is thought to be involved in fibrosis of the airways of asthma patients.

# **Financial Section**

Message from the CFO	79	6
11-Year Financial Summary	80	
Management's Discussion and Analysis	82	
Consolidated Financial Statements	92	
Notes to Consolidated Financial Statements	97	
Independent Auditors' Report	116	/
	14	

# Message from the CFO



The Great East Japan Earthquake had a substantial impact on Chugai's performance in 2011. Facilities at our Utsunomiya plant and at some of our contract manufacturers were damaged, and in addition to recording a loss of ¥4.7 billion, we had to adjust shipments of certain products until the end of October, severely limiting the usual activities of our MRs. We were also forced to cancel or curtail scheduled launch events and other promotions, which was another major factor that hindered our plans to accelerate growth. As a result, sales in Japan, excluding Tamiflu, decreased 2.8 percent compared with the previous year. Although this decrease was partly offset by growth in overseas sales due to the market penetration of Actemra, revenues for the year fell 1.6 percent. Operating income decreased 5.7 percent, primarily due to the lower revenues.

On the other hand, Chugai generated healthy cash flow, with free cash flow of ¥54.5 billion, and secured sufficient working capital to meet current capital requirements, with cash and cash equivalents totaling ¥94.5 billion at the end of the year. We also maintain a sound and stable financial position, with a ratio of shareholders' equity to total assets of 85.6 percent and a current ratio of 609.4 percent.

In 2012, the final year of our mid-term business plan Sunrise 2012, we will promote aggressive sales activities for rapid market penetration of new products and products with additional indications, while investing in our future growth. In this way, we will further strengthen our foundation for growth, moving us closer to our goal of becoming a top Japanese pharmaceutical company.

# **11-Year Financial Summary**

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

		2011/12	2010/12	2009/12	2008/12
Revenues		373,517	379,510	428,947	326,938
Sales		363,622	375,560	419,106	321,836
Other operating reve	enues	9,895	3,950	9,841	5,102
Cost of sales		157,507	162,418	192,851	127,029
	(Percentage of revenues)	42.2%	42.8%	45.0%	38.9%
Selling, general and ad	ministrative expenses	97,723	96,151	98,168	95,121
	(Percentage of revenues)	26.2%	25.3%	22.9%	29.1%
Research and developr	nent expenses	55,857	54,703	55,315	53,225
	(Percentage of revenues)	15.0%	14.4%	12.9%	16.3%
Operating income		62,430	66,238	82,613	51,563
	(Percentage of revenues)	16.7%	17.5%	19.3%	15.8%
Net income (loss)		35,235	41,433	56,634	39,265
	(Percentage of revenues)	9.4%	10.9%	13.2%	12.0%
Total assets		533,483	508,016	540,549	478,518
Property, plant and equ	lipment, net	82,936	87,954	93,663	98,346
Interest-bearing debt		154	150	154	305
Total net assets <sup>2</sup>		459,073	449,395	434,687	397,067
Return on equity <sup>3</sup>		7.8%	9.4%	13.7%	10.1%
Return on assets <sup>4</sup>		6.8%	7.9%	11.1%	8.4%
Net income per share	(basic) (Yen)	64.75	76.14	104.00	72.07
Net income per share	(diluted) (Yen)	64.72	76.12	103.98	72.04
Net assets per share (`	(en)	839.50	821.87	794.51	725.18
Cash dividends per sha	are⁵ (Yen)	40.00	40.00	40.00	34.00
Payout ratio		61.8%	52.5%	38.5%	47.2%
Shareholders' equity to	o total assets	85.6%	88.0%	80.0%	82.6%
Capital investments		11,927	12,662	14,630	26,570
Depreciation and amor	tization	15,900	17,983	19,506	20,080
Number of employees		6,779	6,709	6,485	6,383

1. In June 2003, the Company changed its fiscal year-end from March 31 to December 31. As a result of this change, the nine months ended December 31, 2003 are presented as a transitional period.

Net assets include minority interests from 2006 in accordance with a revision to regulations for consolidated financial statements in Japan.

3. Return on equity = Net income/Shareholders' equity (average of beginning and end of fiscal year)  $\times$  100

4. Return on assets = Net income/Total assets (average of beginning and end of fiscal year) x 100

5. Cash dividends per share for 2009 include a special year-end dividend of ¥6.00 per share. Cash dividends per share for 2005 include a special yearend dividend of ¥10.00 per share.

Note: The accompanying notes to the consolidated financial statements are an integral part of this summary.

2007/12	2006/12	2005/12	2004/12	2003/12 <sup>1</sup>	2003/3	2002/3
344,808	326,109	327,155	294,671	232,748	237,391	211,705
332,943	_		_			_
11,865	_		_			_
137,293	133,086	119,423	111,108	83,541	79,385	64,962
39.8%	40.8%	36.5%	37.7%	35.9%	33.4%	30.79
86,569	80,067	78,505	83,900	62,963	79,178	72,189
25.1%	24.6%	24.0%	28.5%	27.1%	33.4%	34.19
54,243	54,609	50,058	48,166	43,525	48,511	47,845
15.7%	16.7%	15.3%	16.3%	18.7%	20.4%	22.60
66,703	58,347	79,169	51,497	42,719	30,317	26,709
19.3%	17.9%	24.2%	17.5%	18.4%	12.8%	12.69
40,061	38,418	53,632	34,117	28,446	(20,135)	14,598
11.6%	11.8%	16.4%	11.6%	12.2%	—	6.9
458,942	462,124	456,442	411,449	405,197	425,301	349,226
92,495	85,150	79,460	90,051	91,970	93,969	81,445
775	1,300	2,549	6,167	10,761	12,108	70,093
385,798	391,604	368,306	320,847	296,717	277,254	200,779
10.4%	10.1%	15.6%	11.0%	9.9%	_	7.5
17.4%	8.4%	12.4%	8.4%	6.9%	_	4.2
73.23	69.35	97.00	62.27	51.73	(51.75)	57.93
73.16	69.26	96.33	61.34	50.94	_	49.09
703.80	703.08	665.29	583.61	542.96	503.41	796.97
30.00	30.00	34.00	18.00	13.00	16.00	16.00
41.0%	43.3%	35.1%	28.9%	25.1%	_	27.6
83.5%	84.3%	80.7%	78.0%	73.2%	65.2%	57.5
19,609	16,344	16,129	9,865	11,819	17,815	14,292
14,914	13,815	16,981	14,383	10,514	14,905	12,939
6,257	5,905	5,280	5,313	5,619	5,743	4,912

# **Management's Discussion and Analysis**

# **Operating Environment**

In 2011, the operating environment of the pharmaceutical industry became increasingly challenging due to the promotion of generics and other ongoing government policies to reduce medical costs, in addition to factors including the increasingly stringent approval process for new pharmaceuticals worldwide. Under these conditions, growth rates are generally slowing in the pharmaceutical markets of developed countries including Japan, the United States and Europe. Furthermore, the Great East Japan Earthquake that struck on March 11, 2011 had a significant impact on production and business activities.

On the other hand, pharmaceutical markets that address unmet medical needs are expected to continue growing strongly, with annual growth of biopharmaceuticals and oncology drugs forecast at over 10 percent.

# Management Policies

Based on a strategic alliance with Roche, a leading global pharmaceutical company, Chugai's mission is to dedicate itself to adding exceptional value through the creation of innovative medical products and services for the benefit of the medical community and human health around the world. Chugai's primary management goal is to become a top Japanese pharmaceutical company capable of continuously delivering innovative drugs. We have been working to fulfill our mission and achieve our goals by concentrating on building a highly unique R&D platform that employs advanced technologies based on our specialized organization for the prescription drug business. Concurrently, we have been cooperating with Roche to enhance our clinical development pipeline and our product lineup in order to build a foundation for top-class competitiveness in Japan.

Chugai has positioned consolidated revenues and consolidated operating income as key management indicators, and has formulated Sunrise 2012, a mid-term business plan ending 2012. The plan originally included a consolidated revenue target of ¥460 billion. However, we have revised this target to ¥418.5 billion for 2012 as factors including the impact from the Great East Japan Earthquake have caused actual conditions to differ significantly from the assumptions used when the plan was announced. As for consolidated operating income, factors with a direct positive impact will include the Japanese government's new drug pricing scheme to promote the development of innovative new drugs and drugs that have not yet obtained approval in Japan or are approved for other indications, as well as the renegotiation of our agreement with Roche to share the impact of National Health Insurance (NHI) drug price cuts. In addition, our measures to enhance our growth platform will steadily lead to higher revenues. Consequently, we expect to reach our original operating income target of ¥80.0 billion.

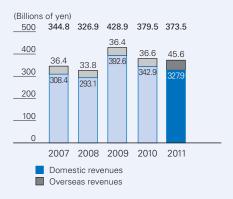
# Results

#### Revenues

### Overview of Revenues

In 2011, revenues decreased 1.6 percent compared with the previous fiscal year to \$373.5 billion. Due to the damage to the Utsunomiya plant and

#### Revenues



some contract manufacturers from the Great East Japan Earthquake, shipping adjustments were made until the end of October 2011, which limited sales activities in general for a prolonged period. The effects of the earthquake also hindered sales promotions for new products Edirol, an active vitamin D<sub>3</sub> derivative launched in April 2011, and Mircera, a long-acting erythropoiesis stimulating agent (ESA) launched in July 2011. Excluding sales of Tamiflu, which are seasonal, and other operating revenues, product sales decreased 0.7 percent to ¥354.9 billion.

#### Domestic Sales by Field

Domestic sales excluding Tamiflu decreased 2.8 percent compared with the previous fiscal year to ¥315.3 billion. Sales in the oncology field increased only 0.5 percent to ¥141.9 billion, but Chugai maintained the number-one share (18.1 percent)\* of the domestic oncology market. This performance is the result of the steady growth in sales of products including Avastin, an anti-vascular endothelial growth factor (VEGF) humanized monoclonal antibody, and Herceptin, an anti-HER2 humanized monoclonal antibody. These increases offset lower sales of Kytril, a 5-HT3 receptor antagonist that has been affected by the large number of competing generics. Avastin had posted double-digit growth in sales since the drug's launch in 2007, but the pace of growth weakened in 2011 as Avastin has fully penetrated the market for colorectal cancer treatment and because Chugai was unable to carry out sufficient promotional activities due to the effects of the Great East Japan Earthquake.

In the bone and joint diseases field, sales continued on an upward trend with a 5.8 percent increase compared with the previous fiscal year to ¥66.2 billion as Actemra, a humanized anti-human IL-6 receptor monoclonal anti-body, continued to steadily penetrate the market.

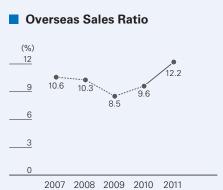
In the renal diseases field, sales decreased 11.7 percent compared with the previous fiscal year to ¥50.7 billion. Sales of the recombinant human erythropoietin Epogin decreased sharply due to competition from rival products and the shift to use of Mircera, a long-acting ESA launched in July 2011. Market uptake of Mircera did not proceed as initially planned because Chugai was unable to conduct sufficient promotional activities due to the effects of the Great East Japan Earthquake.

In the transplant, immunology and infectious diseases field, sales (excluding Tamiflu) decreased 11.6 percent compared with the previous fiscal year to ¥22.8 billion. The decrease resulted from lower sales of peginterferon alfa-2a Pegasys and anti-viral agent Copegus due to contraction of the market for chronic hepatitis C treatments.

Sales of anti-influenza agent Tamiflu decreased 52.2 percent compared with the previous fiscal year to ¥8.7 billion as there was no major influenza outbreak during the 2010/2011 season and the government completed purchases for pandemic stockpiles. Seasonal sales totaled ¥5.4 billion, and sales to the government for pandemic stockpiles totaled ¥3.3 billion.

\* Copyright 2011 IMS Japan K.K. Source: JPM 2011.

Reprinted with permission. The scope of the market is defined by Chugai.



#### **Overseas Sales and Other Operating Revenues**

Overseas sales increased 20.0 percent compared with the previous fiscal year to ¥39.6 billion. Sales of recombinant human granulocyte-colony stimulating factor (G-CSF) Neutrogin decreased due to the impact of followon biologics and the appreciation of the yen. However, exports of Actemra to Roche (for sale in regions other than Japan, Korea and Taiwan) increased 61.4 percent; this product is now sold in more than 70 countries.

Other operating revenues increased 153.8 percent compared with the previous fiscal year to ¥9.9 billion, reflecting one-time revenues from the licensing of GC33, increases in royalties on overseas sales of Actemra and profit sharing in European countries where Chugai is co-promoting Actemra with Roche.

#### **Cost of Sales and Gross Profit**

Cost of sales decreased 3.0 percent compared with the previous fiscal year to ¥157.5 billion due to the decrease in product sales. The cost-to-sales ratio increased 0.1 percentage point to 43.3 percent.

As a result of the above, gross profit decreased 0.5 percent compared with the previous fiscal year to  $\pm$ 216.0 billion.

### Selling, General and Administrative Expenses and Operating Income

Selling, general and administrative (SG&A) expenses increased 1.6 percent to ¥97.7 billion, reflecting promotion of new products and other factors. R&D expenses increased 2.2 percent to ¥55.9 billion due to an increase in late-stage development activities.

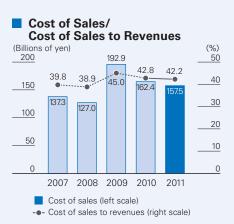
As a result, operating income decreased 5.7 percent compared with the previous fiscal year to ¥62.4 billion, and the ratio of operating income to revenues decreased 0.8 percentage points to 16.7 percent.

# Other Income (Expenses) and Income before Income Taxes and Minority Interests

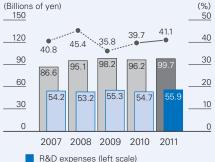
Other expenses totaled ¥5.3 billion, compared with ¥0.6 billion for the previous fiscal year. Chugai uses forward foreign exchange contracts to cover substantial foreign currency transactions, centered on imports from Roche. In 2011, loss on derivatives associated with these forward foreign exchange contracts was ¥0.0 billion, compared with ¥2.8 billion in the previous fiscal year. Chugai recorded a loss on disaster of ¥4.7 billion in connection with the Great East Japan Earthquake and a loss of ¥1.0 billion on prior-year adjustments related to application of the Accounting Standard for Asset Retirement Obligations. The loss on disaster consisted of ¥1.2 billion for scrapping, demolition and repair of buildings and equipment, and ¥3.5 billion primarily due to loss on inventories and fixed expenses during production shutdowns. Consequently, income before income taxes and minority interests decreased 13.1 percent to ¥57.1 billion.

#### **Net Income**

Income taxes totaled  $\pm 20.9$  billion and minority interests totaled  $\pm 1.0$  billion. As a result, net income decreased 15.0 percent compared with the previous fiscal year to  $\pm 35.2$  billion.



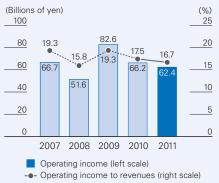
#### SG&A and R&D Expenses/ SG&A and R&D Expenses to Revenues



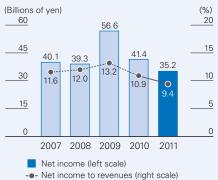
SG&A expenses (left scale)

--- SG&A and R&D expenses to revenues (right scale)

#### Operating Income/ Operating Income to Revenues



#### Net Income/ Net Income to Revenues



#### **Profitability Indicators (Consolidated Basis)**

	2011	2010	2009	2008	2007
Gross profit ratio (%)	57.8	57.2	55.0	61.1	60.2
Operating income to revenues (%)	16.7	17.5	19.3	15.8	19.3
Return on assets (%)	6.8	7.9	11.1	8.4	17.4
Return on equity (%)	7.8	9.4	13.7	10.1	10.4

Notes: 1. Return on assets = Net income/Total assets (average of beginning and end of fiscal year) x 100 2. Return on equity = Net income/Shareholders' equity (average of beginning and end of fiscal year) x 100

# **Financial Position**

# Assets, Liabilities and Net Assets

#### Assets

As of December 31, 2011, total assets were ¥533.5 billion, an increase of ¥25.5 billion, or 5.0 percent, compared with the end of the previous fiscal year. The primary reason for the increase was an increase in cash and deposits.

Current assets increased ¥32.9 billion, or 8.5 percent, compared with the end of the previous fiscal year to ¥419.4 billion. Cash and deposits increased ¥31.0 billion, or 40.7 percent, to ¥107.2 billion mainly because of a decrease in tax payments. Trade notes and trade accounts receivable decreased ¥2.5 billion, or 2.2 percent, to ¥110.9 billion. Trade receivables turnover increased to 3.37 times from 3.35 times for the previous fiscal year.

Inventories increased ¥0.1 billion, or 0.1 percent, compared with the end of the previous fiscal year to ¥105.0 billion as the impact of the launch of new products such as Mircera was offset by a decrease in stockpiles with the completion of the production site transfer from the Kamakura plant.

Property, plant and equipment, net decreased ¥5.1 billion, or 5.8 percent, compared with the end of the previous fiscal year to ¥82.9 billion. Depreciation exceeded the increase in assets from capital investments.

#### Liabilities

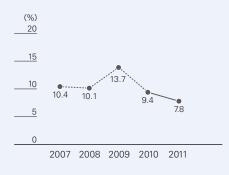
Total liabilities as of December 31, 2011 increased  $\pm$ 15.8 billion, or 27.0 percent, compared with the end of the previous fiscal year to  $\pm$ 74.4 billion. This increase was primarily the result of an increase in current liabilities of  $\pm$ 14.2 billion, or 26.0 percent, to  $\pm$ 68.8 billion due to increases in income taxes payable and in accrued liabilities.

Trade notes and trade accounts payable decreased ¥2.1 billion, or 10.8 percent, compared with the end of the previous fiscal year to ¥17.4 billion. This decrease was primarily the result of reduced purchases of Tamiflu and products involved in the production site transfer associated with the closure of the Kamakura plant. Trade payables turnover increased to 21.53 times from 19.47 times.

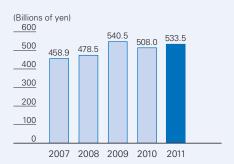
Income taxes payable increased ¥10.5 billion, or 283.8 percent, compared with the end of the previous fiscal year to ¥14.2 billion. The reason for this large increase was a substantial decrease in income taxes payable at the end of the previous fiscal year because of the year-on-year decrease in income for 2010.



#### Return on Equity



### Total Assets



# **Net Assets**

As of December 31, 2011, net assets totaled ¥459.1 billion, an increase of ¥9.7 billion, or 2.2 percent, compared with the end of the previous fiscal year. This increase was primarily the result of an increase of ¥11.9 billion in retained earnings. Net unrealized holding gain on securities totaled ¥0.8 billion, about the same level as a year earlier. Translation adjustments reduced net assets by ¥13.0 billion.

The ratio of shareholders' equity to total assets decreased 2.4 percentage points from the end of the previous fiscal year to 85.6 percent. Net working capital (current assets minus current liabilities) totaled ¥350.6 billion, and the current ratio was 609.4 percent, as the Company maintained a sound financial position.

#### **Stability Indicators (Consolidated Basis)**

	2011	2010	2009	2008	2007
Current ratio (%)	609.4	708.2	409.3	438.5	472.5
Fixed assets ratio (%)	25.0	27.2	29.9	34.0	33.7
Interest coverage ratio (times)	20,032.2	8,214.4	4,620.0	517.5	461.9
Debt-to-equity ratio (%)	0.0	0.0	0.0	0.1	0.2
Shareholders' equity to total assets (%)	85.6	88.0	80.0	82.6	83.5
Market value equity ratio (%)	129.4	159.6	175.2	196.2	189.9

Notes: 1. Current ratio = Current assets (fiscal year-end)/Current liabilities (fiscal year-end) x 100

2. Fixed assets ratio = Fixed assets (fiscal year-end)/Shareholders' equity (fiscal year-end) x 100
 3. Interest coverage ratio = Net cash provided by operating activities (prior to deductions of interest paid and income taxes paid, and addition of income taxes refunded)/Interest paid

4. Debt-to-equity ratio = Interest-bearing debt (fiscal year-end)/Shareholders' equity (fiscal year-end) x 100

5. Market value equity ratio = Total market capitalization/Total assets (fiscal year-end) x 100

# **Efficiency Indicators (Consolidated Basis)**

	2011	2010	2009	2008	2007
Total assets turnover (times)	0.72	0.72	0.84	0.70	0.75
Trade receivables turnover (times)	3.37	3.35	3.53	3.01	3.22
Inventories turnover (times)	3.56	3.62	4.63	4.15	6.25
Trade payables turnover (times)	21.53	19.47	12.50	11.37	19.90

Notes: 1. Total assets turnover = Revenues/Total assets (yearly average)

2. Trade receivables turnover = Revenues/(Trade notes receivable + Trade accounts receivable)

3. Inventories turnover = Revenues/Inventories

4. Trade payables turnover = Revenues/(Trade notes payable + Trade accounts payable)

# **Cash Flows**

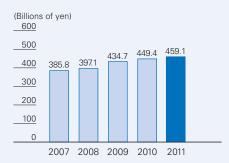
## **Cash and Cash Equivalents**

Cash and cash equivalents as of December 31, 2011 totaled ¥94.5 billion, an increase of ¥29.3 billion from a year earlier.

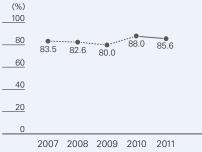
#### **Cash Flows from Operating Activities**

Net cash provided by operating activities totaled ¥69.6 billion, up ¥54.0 billion from ¥15.6 billion in the previous fiscal year. Income before income taxes and minority interests of ¥57.1 billion was a primary source of cash. Depreciation and amortization totaled ¥15.9 billion. Partially offsetting these items were a ¥1.5 billion increase in working capital and income taxes paid

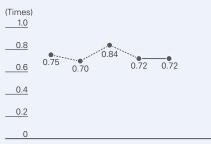
#### Net Assets



#### Shareholders' Equity to Total Assets



# Total Assets Turnover



2007 2008 2009 2010 2011





<sup>---</sup> Trade payables turnover (right scale)

of ¥11.8 billion. In items related to disaster losses, Chugai recorded a loss on disaster of ¥4.7 billion, received insurance proceeds of ¥3.0 billion, and made payments for loss on disaster totaling ¥3.4 billion.

# **Cash Flows from Investing Activities**

Net cash used in investing activities totaled ¥15.1 billion, down ¥5.1 billion from ¥20.2 billion used in the previous fiscal year. Net proceeds from withdrawals of time deposits and sales of marketable and investment securities used cash totaling ¥3.9 billion. Purchases of fixed assets less proceeds from sales of fixed assets used net cash totaling ¥11.2 billion. Purchases of fixed assets included capital investments to rebuild administration and welfare buildings at the Utsunomiya plant that were damaged by the Great East Japan Earthquake, remodel a biopharmaceutical facility at the Ukima plant, and enhance research facilities and equipment at the Fuji-Gotemba Research Laboratories and the solid agent facility at the Fujieda plant.

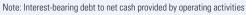
#### **Free Cash Flow**

Free cash flow was positive ¥54.5 billion, a year-on-year change of ¥59.1 billion compared to negative free cash flow of ¥4.6 billion for the previous fiscal year.

# **Cash Flows from Financing Activities**

Net cash used in financing activities totaled ¥24.6 billion, up ¥1.5 billion from the previous fiscal year. The primary factor was cash dividends paid totaling ¥23.4 billion.

Cash Flows (Consolidated Basis) (Millions of yen)							
	2011	2010	2009	2008	2007		
Net cash provided by operating activities	69,594	15,572	66,461	39,277	60,365		
Net cash used in investing activities	(15,135)	(20,192)	(20,261)	(14,122)	(7,510)		
Net cash used in financing activities	(24,551)	(23,055)	(22,252)	(18,361)	(47,173)		
Effect of exchange rate changes on cash and cash equivalents	(578)	(1,660)	(128)	(9,865)	(292)		
Net increase (decrease) in cash and cash equivalents	29,330	(29,335)	23,820	(3,071)	5,390		
Cash and cash equivalents at beginning of year	65,144	94,478	70,652	73,723	68,333		
Increase in cash and cash equivalents resulting from merger with unconsolidated subsidiaries	_	_	6	_	_		
Cash and cash equivalents at end of year	94,474	65,144	94,478	70,652	73,723		
Net cash provided by operating activities to revenues (%)	18.6	4.1	15.5	12.0	17.5		
Capital investments to net cash provided by operating activities (%)	17.1	81.3	21.9	67.6	32.5		
Interest-bearing debt to net cash provided by operating activities (years)	0.0	0.0	0.0	0.0	0.0		

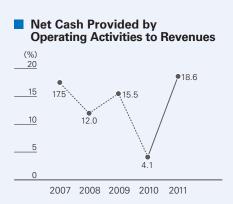


= Interest-bearing debt/Net cash provided by operating activities (prior to interest and income tax deductions)



0 2007 2008 2009 2010 2011

2.0





# **Capital Investments**

Capital investments decreased 6.3 percent compared with the previous fiscal year to ¥11.9 billion because investment has peaked in the solid agent facility at the Fujieda plant and injection products building No. 3 at the Utsunomiya plant. This offset expenditures for the reconstruction of administrative, welfare and other buildings at the Utsunomiya plant that were damaged by the Great East Japan Earthquake. In addition, depreciation and amortization decreased 11.7 percent to ¥15.9 billion.

In 2012, Chugai projects capital investments of about  $\pm$ 18.0 billion and depreciation of about  $\pm$ 16.0 billion.

### Per Share Data

Net income per share for 2011 decreased ¥11.39 compared with the previous fiscal year to ¥64.75. Net income per share on a fully diluted basis was ¥64.72. Net assets per share increased ¥17.63 compared with the previous fiscal year to ¥839.50.

# Per Share Data (Consolidated Basis)

	2011	2010	2009	2008	2007
Net income per share (basic)	64.75	76.14	104.00	72.07	73.23
Net income per share (diluted)	64.72	76.12	103.98	72.04	73.16
Net assets per share	839.50	821.87	794.51	725.18	703.80
Cash dividends per share	40.00	40.00	40.00	34.00	30.00
Payout ratio (%)	61.8	52.5	38.5	47.2	41.0

Note: Cash dividends per share for 2009 include a special year-end dividend of ¥6.00 per share.

# Outlook for 2012

#### **Forecast Assumptions**

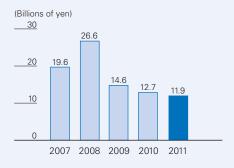
For 2012, Chugai assumes exchange rates of ¥85/CHF, ¥109/EUR, and ¥82/USD, and that the scale of seasonal influenza will be about the same as the average for the past 10 years, excluding the influenza A/H1N1 pandemic in the 2009/2010 season.

#### **Results Forecast**

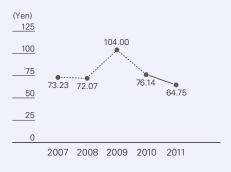
Chugai expects revenues to increase 12.0 percent year-on-year to ¥418.5 billion.

Despite the expected impact of NHI drug price revisions, Chugai forecasts that domestic sales, excluding Tamiflu, will increase 12.2 percent compared with the previous fiscal year to ¥353.9 billion, driven by continued year-on-year growth in sales of Avastin and other oncology drugs, as well as the continued growth of Actemra and expanding sales of Edirol and Mircera. Chugai expects sales of Tamiflu increase 10.3 percent to ¥9.6 billion, including ¥0.3 billion for government stockpiles. Overseas sales are forecast to increase 1.5 percent to ¥40.2 billion as a result of factors including an increase in exports due to further growth in overseas sales of Actemra. In addition, other operating revenues are forecast to increase 49.5 percent to

#### Capital Investments

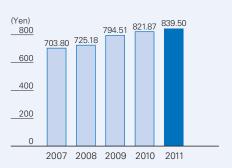


#### Net Income per Share



### Net Assets per Share

(Yen)



¥14.8 billion due to licensing income and other one-time revenues, and an increase in co-promotion income and royalties from Roche related to Actemra.

R&D expenses and SG&A expenses are expected to increase, reflecting increased activities to promote the proper use of new products and products with extended indications, and progress in development themes, as well as the start of operations at Chugai Pharmabody Research Pte. Ltd. However, Chugai expects operating income to increase 28.2 percent compared with the previous fiscal year to ¥80.0 billion, the target in the midterm business plan Sunrise 2012. In addition to the effect of this increase in operating income, in view of the impact of losses related to the Great East Japan Earthquake in 2011, Chugai forecasts that net income for 2012 will increase 39.2 percent to ¥49.0 billion.

# **Fundamental Profit Distribution Policy and Dividends**

Chugai aims to provide shareholders with stable dividends. The Company's goal is to maintain the consolidated payout ratio at 40.0 percent or more on average, taking into account strategic funding needs and earnings prospects.

Based on the above policy, cash dividends for 2011 totaled ¥40.00 per share, consisting of an interim dividend of ¥20.00 per share and a year-end dividend of ¥20.00 per share. Thus, cash dividends per share for 2011 were the same as for the previous fiscal year, and the consolidated payout ratio was 61.8 percent.

Chugai projects total cash dividends of ¥40.00 per share for 2012, including an interim dividend of ¥20.00 per share, and a consolidated payout ratio of 44.4 percent.

### Cash Dividends per Share/ Payout Ratio



Payout ratio (right scale)

# **Business Risks**

Chugai's corporate performance is subject to major impact from a range of possible future events. Below, we list what we consider the principal sources of risk to the development of our business. We recognize the possibility of these risk events actually occurring, and have prepared policies to forestall such events and take appropriate measures when they do occur. The categories of risk identified in this section are based on assessments made by the Company as of December 31, 2011.

#### **New Product Development**

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

#### **Changes in Product Environments**

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

#### **Side Effects**

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

#### **Reform of Japan's Medical System**

Japan's health insurance system is being reformed against a backdrop of rapid demographic change, with a falling birthrate and an increasing number of elderly people. As part of this process, measures are being taken to curb medical expenses. Revisions have been made to the system of reimbursement of medical fees, and debate is continuing in such areas as NHI drug price reform. The Company's business performance could be significantly affected by future developments in medical system reform, including NHI drug price reform.

#### **Intellectual Property Rights**

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

# **Strategic Alliance with Roche**

In line with its strategic alliance with Roche, Chugai is the only pharmaceutical partner of Roche in the Japanese market and has licensed many products and projects from Roche. Changes in Chugai's strategic alliance with Roche for any reason could have a major impact on the Company's business performance and financial position.

### **International Business Activities**

With the goal of continuously delivering new drugs in Japan and overseas, Chugai actively conducts international operations including overseas marketing and research and development, and export and import of bulk drug products. These international business activities expose Chugai to risks associated with legal and regulatory changes, political instability, economic uncertainty, local labor-management relations, changes in and interpretations of systems of taxation, changes in foreign currency markets, differences in commercial practices and other issues that could have a major impact on the Company's business performance and financial position.

#### Impact from Large-Scale Disasters and Other Contingencies

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

# Consolidated Financial Statements Consolidated Balance Sheets

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

	Million	Millions of yen			
Assets	2011	2010	2011		
Current assets:					
Cash and deposits (Notes 12 and 19)	¥ 107,163	¥ 76,213	\$ 1,373,885		
Marketable securities including short-term investments	· ·	·			
(Notes 12 and 13)		59,700	781,987		
Receivables (Notes 12 and 20):			· · · ·		
Trade notes	11	17	141		
Trade accounts	110,902	113,374	1,421,821		
Other		7,902	108,897		
Reserve for doubtful accounts	(3)	(6)	(38)		
Inventories (Note 5)		104,885	1,345,949		
Deferred tax assets (Note 9)		19,927	291,577		
Other		4,526	53,089		
Total current assets		386,538	5,377,308		
Property, plant and equipment, at cost:					
Land	10,177	9,894	130,474		
Buildings and structures	120,014	125,874	1,538,641		
Machinery and equipment	126,438	127,512	1,621,000		
Construction in progress	2,717	2,010	34,833		
Other	61	45	783		
	259,407	265,335	3,325,731		
Accumulated depreciation	(176,471)	(177,381)	(2,262,449)		
Property, plant and equipment, net	82,936	87,954	1,063,282		
Investments and other assets:					
Investment securities (Notes 12 and 13)		7,527	81,667		
Investments in unconsolidated subsidiaries and affiliates		61	782		
Long-term loans	7	19	90		
Lease deposits		4,229	55,423		
Deferred tax assets (Note 9)	1	14,939	179,923		
Other	6,322	6,749	81,051		
Total investments and other assets	31,117	33,524	398,936		
Total assets	¥ 533,483	¥ 508,016	\$ 6,839,526		

	Million	s of yen	Thousands of U.S. dollars (Note 4)	
Liabilities and net assets	2011	2010	2011	
Current liabilities:				
Payables (Notes 12 and 20):				
Trade notes	¥ 1	¥ 1	\$ 13	
Trade accounts	17,350	19,489	222,436	
Construction	7,442	5,301	95,410	
Other	445	632	5,705	
Income taxes payable (Note 9)	14,156	3,679	181,487	
Accrued liabilities	26,316	23,492	337,385	
Other	3,112	1,986	39,897	
Total current liabilities	68,822	54,580	882,333	
Long-term liabilities:				
Reserve for employees' retirement benefits (Note 10)	2,599	2,596	33,321	
Reserve for directors and corporate auditors' retirement benefits	729	729	9,346	
Other	2,260	716	28,974	
Total long-term liabilities	5,588	4,041	71,641	
Contingent liabilities (Note 16)				
Net assets (Notes 7,18 and 21):				
Shareholders' equity:				
Common stock, without par value:				
Authorized: 799,805,050 shares				
Issued:				
December 31, 2011 and 2010 – 559,685,889 shares	72,967	72,967	935,474	
Capital surplus	92,815	92,815	1,189,936	
Retained earnings	339,477	327,642	4,352,270	
Treasury stock, at cost:				
December 31, 2011 – 15,494,118 shares	(36,261)	—	(464,885)	
December 31, 2010 – 15,491,466 shares	_	(36,256)		
Total shareholders' equity	468,998	457,168	6,012,795	
Accumulated other comprehensive income:				
Net unrealized holding gain on securities	842	1,341	10,795	
Foreign currency translation adjustments	(12,992)	(11,252)	(166,564)	
Total accumulated other comprehensive income	(12,150)	(9,911)	(155,769)	
Stock subscription rights	1,016	775	13,026	
Minority interests in consolidated subsidiaries	1,209	1,363	15,500	
Total net assets	459,073	449,395	5,885,552	
Total liabilities and net assets	¥533,483	¥508,016	\$6,839,526	

# **Consolidated Statements of Income**

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

		Thousands of U.S. dollars (Note 4		
	2011	2010	2009	2011
Revenues (Note 20):				
Sales	¥363,622	¥375,560	¥419,106	\$4,661,821
Other operating revenues	9,895	3,950	9,841	126,858
	373,517	379,510	428,947	4,788,679
Cost of sales (Note 20)	157,507	162,418	192,851	2,019,321
Gross profit	216,010	217,092	236,096	2,769,358
Selling, general and administrative expenses	97,723	96,151	98,168	1,252,859
Research and development expenses (Note 20)	55,857	54,703	55,315	716,115
Operating income	62,430	66,238	82,613	800,384
Other income (expenses):				
Interest and dividend income	501	450	753	6,423
Interest expense	(4)	(4)	(20)	(51)
Other (Note 8)	(5,796)	(998)	6,070	(74,308)
	(5,299)	(552)	6,803	(67,936)
Income before income taxes and minority interests	57,131	65,686	89,416	732,448
Income taxes (Note 9)	(20,856)	(23,096)	(31,183)	(267,385)
Income before minority interests	36,275	42,590	58,233	465,063
Minority interests	(1,040)	(1,157)	(1,599)	(13,332)
	¥ 35,235	¥ 41,433	¥ 56,634	\$ 451,731

		U.S. dollars (Note 4)		
	2011	2010	2009	2011
Basic net income per share	¥64.75	¥76.14	¥104.00	\$0.83
Diluted net income per share	64.72	76.12	103.98	0.83
Cash dividends per share	40.00	40.00	40.00	0.51

See accompanying notes to consolidated financial statements.

# **Consolidated Statement of Comprehensive Income**

		Thousands of U.S. dollars (Note 4)		
	2011	2010	2009	2011
Income before minority interests	¥36,275	_		\$465,063
Other comprehensive income (Note 17)				
Unrealized gains (losses) on securities	(499)	_	_	(6,397)
Foreign currency translation adjustments	(1,809)	_	_	(23,192)
Total other comprehensive income	(2,308)	—	—	(29,589)
Comprehensive income (Note 17)	¥33,967	_	_	\$435,474
Comprehensive income attributable to:				
Owners of the parent	32,996	—	—	423,025
Minority interests	971	_	_	12,449

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

# **Consolidated Statements of Changes in Net Assets**

Chugai Pharmaceutical Co., Ltd. and Consolidated Subsidiaries / Years ended December 31, 2011, 2010 and 2009

	Thousands						Millions of yer	ı				
			Share	holders' equity (	Note 7)		Accumul	ated other com income	prehensive			
	Number of shares issued (Note 18)	Common stock	Capital surplus	Retained earnings	Treasury stock, at cost	Total shareholders' equity	Net unrealized holding gain on securities	Foreign currency translation adjustments	Total accumulated other comprehensive income	Stock subscription rights	Minority interests in consolidated subsidiaries	Total net assets
Balance at December 31, 2008	559,686	¥72,967	¥92,815	¥271,009	¥(35,168)	¥401,623	¥1,355	¥ (7,889)	¥ (6,534)	¥ 326	¥1,652	¥397,067
Effect of changes in accounting policies of foreign subsidiaries.				(26)		(26)					(11)	(37)
Purchases of treasury stock				(10)	(1,161)	(1,161)						(1,161)
Disposal of treasury stock				(19)	55	36						36
Net income				56,634		56,634						56,634
Cash dividends paid Net changes in items other than				(19,613)		(19,613)						(19,613)
shareholders' equity							281	1,122	1,403	211	147	1,761
Balance at December 31, 2009	559,686	72,967	92,815	307,985	(36,274)	437,493	1,636	(6,767)	(5,131)	537	1,788	434,687
Purchases of treasury stock					(10)	(10)						(10)
Disposal of treasury stock				(8)	28	20						20
Net income				41,433		41,433						41,433
Cash dividends paid Net changes in items other				(21,768)		(21,768)						(21,768)
than shareholders' equity							(295)	(4,485)	(4,780)	238	(425)	(4,967)
Balance at December 31, 2010.	559,686	72,967	92,815	327,642	(36,256)	457,168	1,341	(11,252)	(9,911)	775	1,363	449,395
Purchases of treasury stock					(5)	(5)						(5)
Net income				35,235		35,235						35,235
Cash dividends paid				(23,400)		(23,400)						(23,400)
Net changes in items other												
than shareholders' equity							(499)	(1,740)	(2,239)	241	(154)	(2,152)
Balance at December 31, 2011	559,686	¥72,967	¥92,815	¥339,477	¥(36,261)	¥468,998	¥ 842	¥(12,992)	¥(12,150)	¥1,016	¥1,209	¥459,073

		Thousands of U.S. dollars (Note 4)									
		Shareholders' equity (Note 7)				Accumulated other comprehensive income					
	Common stock	Capital surplus	Retained earnings	Treasury stock, at cost	Total shareholders' equity	Net unrealized holding gain on securities	Foreign currency translation adjustments	Total accumulated other comprehensive income	Stock subscription rights	Minority interests in consolidated subsidiaries	Total net assets
Balance at December 31, 2010	\$935,474	\$1,189,936	\$4,200,538	\$(464,821)	\$5,861,127	\$17,192	\$(144,256)	\$(127,064)	\$ 9,936	\$17,474	\$5,761,473
Purchases of treasury stock				(64)	(64)						(64)
Net income			451,731		451,731						451,731
Cash dividends paid			(299,999)		(299,999)						(299,999)
Net changes in items other than shareholders' equity						(6,397)	(22,308)	(28,705)	3,090	(1,974)	(27,589)
Balance at December 31, 2011	\$935,474	\$1,189,936	\$4,352,270	\$(464,885)	\$6,012,795	\$10,795	\$(166,564)	\$(155,769)	\$13,026	\$15,500	\$5,885,552

# **Consolidated Statements of Cash Flows**

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

		Millions of yen		Thousands of U.S. dollars (Note 4)	
-	2011	2010	2009	2011	
		2010			
Cash flows from operating activities	¥ 57.131	V GE GOG	¥ 89,416	¢ 700 440	
Income before income taxes and minority interests	ŧ 57,131	¥ 65,686	<b>≠</b> 09,410	\$ 732,448	
Adjustments to reconcile income before income taxes					
and minority interests to net cash provided					
by operating activities:	15 000	17.000	10 500	000.040	
Depreciation and amortization	15,900	17,983	19,506	203,846	
Loss on impairment of fixed assets	145	41	27	1,859	
Increase (decrease) in reserve for employees'	0.45	(407)	000	0.444	
retirement benefits	245	(107)	600	3,141	
Interest and dividend income	(501)	(450)	(753)	(6,423)	
Interest expense	4	4	20	51	
Loss on disposal of fixed assets	659	210	212	8,449	
(Gain) loss on sales of fixed assets	8	(18)	(264)	103	
(Gain) loss on sales and revaluation of	0.17	(0.1)	10	0.700	
investment securities	217	(91)	13	2,782	
Loss on disaster	4,723			60,551	
(Increase) decrease in receivables – trade notes					
and trade accounts	2,357	7,896	(12,966)	30,218	
(Increase) decrease in inventories	(1,877)	(12,716)	(13,484)	(24,064)	
Increase (decrease) in payables – trade notes					
and trade accounts	(1,949)	(14,676)	5,345	(24,987)	
Increase (decrease) in accrued consumption taxes	1,926	(3,803)	4,447	24,692	
Others	2,340	(5,947)	(2,294)	30,000	
Subtotal	81,328	54,012	89,825	1,042,666	
Interest and dividends received	500	432	736	6,410	
Interest paid	(4)	(7)	(20)	(51)	
Proceeds from insurance income	2,966	—	—	38,026	
Payments for loss on disaster	(3,384)	—	—	(43,385)	
Income taxes paid	(11,812)	(38,865)	(24,080)	(151,436)	
Net cash provided by operating activities	69,594	15,572	66,461	892,230	
Cash flows from investing activities					
Purchases of time deposits	(22,393)	(23,363)	(23,399)	(287,090)	
Proceeds from withdrawal of time deposits	19,769	22,512	11,235	253,449	
Purchases of marketable securities	(119,989)	(125,384)	(118,151)	(1,538,321)	
Proceeds from sales of marketable securities	118,700	117,900	126,400	1,521,795	
Purchases of investment securities	(6)	(5)	(631)	(77)	
Proceeds from sales of investment securities	_	1,613		_	
Purchases of fixed assets	(11,239)	(13,565)	(16,068)	(144,090)	
Proceeds from sales of fixed assets	12	89	330	154	
Other	11	11	23	142	
Net cash used in investing activities	(15,135)	(20,192)	(20,261)	(194,038)	
Cash flows from financing activities	( - , ,	( - <b>/</b> - <b>/</b>	( - <i>y</i> - <i>y</i>	( - , ,	
Net (increase) decrease in treasury stock	(4)	(9)	(1,125)	(51)	
Cash dividends paid	(23,397)	(21,759)	(19,620)	(299,962)	
Cash dividends paid to minority interests	(1,125)	(1,277)	(1,503)	(14,423)	
Other	(1)(25)	(10)	(4)	(320)	
Net cash used in financing activities	(24,551)	(23,055)	(22,252)	(314,756)	
Effect of exchange rate changes on cash	127,0017	(20,000)	(22,202)	(014,700)	
and cash equivalents	(578)	(1,660)	(128)	(7,411)	
Net increase (decrease) in cash and cash equivalents	29,330		23,820	376,025	
		(29,335)			
Cash and cash equivalents at beginning of year	65,144	94,478	70,652	835,179	
Increase in cash and cash equivalents resulting			C		
from merger with unconsolidated subsidiaries	V 04 474	V 65 144	<u> </u>	¢ 1 011 004	
Cash and cash equivalents at end of year (Note 19)	¥ 94,474	¥ 65,144	¥ 94,478	\$ 1,211,204	

# **Notes to Consolidated Financial Statements**

Chugai Pharmaceutical Co., Ltd. and Consolidated Subsidiaries / December 31, 2011

#### Basis of Presentation of Financial Statements

The accompanying consolidated financial statements of Chugai Pharmaceutical Co., Ltd. (the "Company") and its consolidated subsidiaries (collectively, the "Group") are prepared on the basis of accounting principles generally accepted in Japan, which are different in certain respects as to the application and disclosure requirements of International Financial Reporting Standards (IFRS), and have been compiled from the consolidated financial statements prepared by the Company as required by the Financial Instruments and Exchange Law of Japan.

1

2

The Company and its domestic consolidated subsidiaries maintain their books of account in accordance with accounting principles generally accepted in Japan, and its foreign consolidated subsidiaries maintain their books of account in conformity with those of their countries of domicile. Effective the year ended December 31, 2009, the Company adopted "Practical Solution on Unification of Accounting Policies Applied to Foreign Subsidiaries for Consolidated Financial Statements" (PITF No. 18, issued by the Accounting Standards Board of Japan (ASBJ) on May 17, 2006). In accordance with PITF No. 18, the accompanying consolidated financial statements have been prepared by using the accounts of foreign consolidated subsidiaries prepared in accordance with either IFRS or accounting principles generally accepted in the United States.

Certain modifications of, and reclassifications in, the presentation of the accompanying consolidated financial statements have been made to facilitate understanding by readers outside Japan.

#### Significant Accounting Policies

# (a) Basis of consolidation and accounting for investments in unconsolidated subsidiaries and affiliates

The accompanying consolidated financial statements include the accounts of the Company and significant companies which it controls directly or indirectly. All significant intercompany accounts and transactions have been eliminated in consolidation. The number of consolidated subsidiaries was 16 as of December 31, 2011, and 15 as of December 31, 2010 and 2009.

During the fiscal year ended December 31, 2011, the Company established one new subsidiary, Chugai Pharma Science (Beijing) Co., Ltd.

The closing date of all subsidiaries is the same as the Company's closing date.

Investments in subsidiaries and affiliates which are neither consolidated nor accounted for by the equity method are carried at cost and subject to write-down if there has been a permanent decline in the value of such investments.

#### (b) Foreign currency translation

Receivables and payables denominated in foreign currencies are translated into Japanese yen at the rates of exchange in effect at the balance sheet date, and differences arising from the translation are included in the consolidated statements of income.

The revenue and expense accounts of the foreign consolidated subsidiaries are translated into Japanese yen at the average exchange rate in effect for the year. Their balance sheet accounts, except for the components of net assets excluding minority interests in consolidated subsidiaries, are translated into Japanese yen at the rates of exchange in effect at the balance sheet date. The components of net assets excluding minority interests in consolidated subsidiaries are translated at their historical rates. Translation differences are presented as foreign currency translation adjustments and minority interests in consolidated subsidiaries in net assets.

#### (c) Cash and cash equivalents

Cash and cash equivalents in the consolidated statement of cash flows consist principally of cash in banks and highly liquid investments with maturities of three months or less when purchased which can easily be converted to cash and are subject to little risk of change in value.

#### (d) Inventories

Inventories are stated at the lower of cost, determined principally by the average cost method, or net realizable value.

#### (e) Depreciation and amortization

Depreciation of property, plant and equipment is calculated primarily by the declining-balance method at rates based on the estimated useful lives of the respective assets.

Amortization of intangible assets is calculated primarily by the straight-line method over the estimated useful lives of the respective assets. Amortization of software for internal use is calculated based on the usable period (5 years).

#### (f) Leases

Leased assets under finance leases are capitalized in the balance sheet except for leases for which ownership of the leased asset is not transferred to the lessee that commenced prior to January 1, 2009. Depreciation of leased assets is calculated primarily by the straight-line method over the lease period assuming no residual value.

#### (g) Securities

Securities other than equity securities issued by subsidiaries and affiliates are classified into three categories: trading, held-tomaturity and other securities. Trading securities are carried at fair value and held-to-maturity securities are carried at amortized cost. Marketable securities classified as other securities are carried at fair value with any changes in unrealized holding gain or loss, net of the applicable income taxes, included directly in net assets. Non-marketable securities classified as other securities are carried at cost. If the value of marketable securities classified as other securities are written down to their respective fair value thus establishing a new cost basis, and the amount of each writedown is charged to income as an impairment loss unless the fair value is deemed to be recoverable.

#### (h) Retirement benefits

The reserve for employees' retirement benefits for defined benefit schemes is based on the projected benefit obligation and the estimated fair value of pension plan assets as of the balance sheet date, as adjusted for unrecognized actuarial gain or loss and unrecognized prior service cost.

The retirement benefit obligation is primarily attributed to each period by the straight-line method over the estimated years of service of the eligible employees. Certain domestic consolidated subsidiaries adopt a simplified method in their calculation of the retirement benefit obligations.

Prior service cost is being amortized as incurred by the declining-balance method over a period (10 years) which is shorter than the average remaining years of service of the active participants in the plans.

Actuarial gain or loss is principally amortized from the year following the year in which the gain or loss is recognized by the declining-balance method over a period (10 years) which is shorter than the average remaining years of service of the active participants in the plans.

Directors and corporate auditors are not covered by the retirement benefit plans referred to above. However, the liability for their retirement benefits is calculated based on management's estimate of the amounts which would be payable if these directors and corporate auditors resigned their offices as of the balance sheet date. Amounts payable to directors and corporate auditors upon retirement are subject to the approval of the shareholders. Accompanying the abolishment of retirement benefit programs for directors and corporate auditors in 2009, the reserve for directors and corporate auditors' retirement

#### Accounting Changes

3

 (a) Effective the year ended December 31, 2011, "Accounting Standard for Presentation of Comprehensive Income" (ASBJ Statement No. 25, issued on June 30, 2010) and "Revised Accounting Standard for Consolidated Financial Statements" (ASBJ Statement No. 22, revised on June 30, 2010) have been adopted.

As a result, the Company has presented a consolidated statement of comprehensive income in the consolidated financial statements for the fiscal year ended December 31, 2011.

Information on comprehensive income for the fiscal year ended December 31, 2010 is described in Note 17.

(b) Effective the year ended December 31, 2011, "Accounting Standard for Asset Retirement Obligations" (ASBJ Statement No. 18, issued on March 31, 2008) and "Guidance on Accounting Standard for Asset Retirement Obligations" (ASBJ Guidance No. 21, issued on March 31, 2008) have been adopted.

As a result, operating income decreased by ¥90 million (\$1,154 thousand), and income before income taxes and minority interests decreased by ¥1,092 million (\$14,000 thousand) for the fiscal year ended December 31, 2011 compared with the amounts which would have been recorded under the previous method.

benefits represents the amount payable to those directors and corporate auditors corresponding to services provided until the date the program was terminated.

#### (i) Research and development expenses

Research and development expenses are charged to income when incurred.

#### (j) Income taxes

Deferred tax assets and liabilities are determined based on the differences between financial reporting and the tax bases of assets and liabilities and are measured using the statutory tax rates which will be in effect when the differences are expected to be realized. Refer to Note 9.

#### (k) Derivative financial instruments

The Company enters into derivative transactions in order to manage certain risk arising from adverse fluctuation in foreign currency exchange rates. Derivatives are carried at fair value with any changes in unrealized gain or loss charged or credited to income.

#### (I) Distribution of retained earnings

Under the Japanese Corporate Law and regulations (the "Corporate Law"), the distribution of retained earnings with respect to a given financial period is made by resolution of the shareholders at a general meeting held subsequent to the close of such financial period. The accounts for that period do not, therefore, reflect such distributions. Refer to Note 18.

- (c) Effective the year ended December 31, 2011, the following accounting standards have been adopted. All of these accounting standards, partial amendments to existing accounting standards, and guidance were issued by the ASBJ on December 26, 2008.
  - "Accounting Standard for Business Combinations" (ASBJ Statement No. 21)
  - "Accounting Standard for Consolidated Financial Statements" (ASBJ Statement No. 22)
  - "Partial Amendments to the Accounting Standard for Research and Development Costs" (ASBJ Statement No. 23)
  - "Revised Accounting Standard for Business Divestitures" (ASBJ Statement No. 7)
  - "Revised Accounting Standard for Equity Method of Accounting for Investments" (ASBJ Statement No. 16)
  - "Revised Guidance on Accounting Standard for Business Combinations and Accounting Standard for Business Divestitures" (ASBJ Guidance No. 10)

As a result, the method of accounting for the assets and liabilities of consolidated subsidiaries was changed from the partial fair market value method to the full-fair market value method from the fiscal year ended December 31, 2011. There was no effect from this accounting change on the consolidated financial statements for the fiscal year ended December 31, 2011.

# 4 U.S. Dollar Amounts

The U.S. dollar amounts in the accompanying consolidated financial statements as of and for the fiscal year ended December 31, 2011 have been translated from Japanese yen amounts at \$78 = U.S.\$1.00, the approximate exchange rate prevailing on December 31, 2011. This translation is presented

for convenience only and should not be construed as a representation that Japanese yen amounts have been, could have been, or could in the future be, converted into U.S. dollars at that or any other rate.

### 5 Inventories

Inventories at December 31, 2011 and 2010 consisted of the following:

	Millions	Thousands of U.S. dollars	
December 31,	2011	2010	2011
Finished goods and merchandise	¥ 58,983	¥ 55,291	\$ 756,192
Work in process and semi-finished goods	28,281	34,177	362,577
Raw materials and supplies	17,720	15,417	227,180
	¥104,984	¥104,885	\$1,345,949

### Short-Term Bank Loans and Long-Term Debt

The Company had no short-term bank loans and long-term debt as of December 31, 2011 and 2010.

The Company has entered into loan commitment agreements amounting to ¥40,000 million (\$512,821 thousand)

with ten banks. There were no loan payables outstanding at December 31, 2011 and 2010 under these loan commitment agreements.

# Net Assets

6

7

Under the Corporate Law, the entire amount paid for new shares is required to be designated as common stock. However, a company may, by a resolution of its Board of Directors, designate an amount not exceeding half of the price of the new shares as additional paid-in capital, which is included in capital surplus.

The Corporate Law 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 total aggregate amount of legal reserve and additional paid-in capital equals 25% of the common stock.

The maximum amount that a company can distribute as dividends is calculated based on its unconsolidated financial statements in accordance with the Corporate Law.

#### 8 Other Income (Expenses)

The components of "Other" in "Other income (expenses)" for the years ended December 31, 2011, 2010 and 2009 were as follows:

		Millions of yen		Thousands of U.S. dollars
Year ended December 31,	2011	2010	2009	2011
Gain (loss) on foreign exchange	¥ 566	¥ 877	¥ (1,027)	\$ 7,256
Gain (loss) on derivatives	(34)	(2,762)	7,328	(436)
Gain (loss) on sales of investment securities	_	93	_	_
Loss on revaluation of investment securities	(217)	(2)	(13)	(2,782)
Loss on disposal of fixed assets	(659)	(210)	(212)	(8,449)
Gain on sales of fixed assets	0	18	264	0
Loss on sales of fixed assets	(8)	(O)	(1)	(103)
Loss on impairment of fixed assets	(145)	(41)	(27)	(1,859)
Restructuring cost, charge and reversal	(69)	480	(1,228)	(885)
Loss on disaster (*)	(4,723)	_	_	(60,551)
Loss on adjustment for changes of				
Accounting Standard for Asset Retirement Obligations	(1,002)	—	_	(12,846)
Life insurance dividend income	341	—	—	4,372
Provision for environmental measures	(280)	_		(3,590)
Subsidies received for construction of a plant	—	50	_	—
Other	434	499	986	5,565
	¥(5,796)	¥ (998)	¥ 6,070	\$(74,308)

(\*) The Company and its domestic subsidiaries incurred certain damage as a result of the Great East Japan Earthquake in March 2011, mainly at the Utsunomiya plant. The expenses incurred mainly included inventory loss, write-off of damaged property, plant and equipment, restoration and demolition costs for damaged assets, and fixed cost during shutdown. The above amount represents the gross costs incurred net of insurance proceeds received.

#### Income Taxes

9

Income taxes in Japan applicable to the Company and its domestic consolidated subsidiaries consist of corporation tax, inhabitants' taxes and enterprise tax. Income taxes of foreign consolidated subsidiaries are based generally on the tax rates applicable in their countries of incorporation. The approximate aggregate statutory tax rate for the Company was 40.4% for the fiscal years ended December 31, 2011, 2010 and 2009.

Following the enactment on December 2, 2011 of "Act for Partial Revision of the Income Tax Act, etc. for the Purpose of Creating Taxation System Responding to Changes in Economic and Social Structures" (Act No. 114 of 2011) and "Act on Special Measures for Securing Financial Resources Necessary to Implement Measures for Reconstruction following the Great East Japan Earthquake" (Act No. 117 of 2011), the corporate tax rate will be reduced and a special recovery tax will be imposed effective from the fiscal year beginning on and after April 1, 2012.

In accordance with this reform, the effective statutory tax rates, which are used to measure deferred tax assets and deferred tax liabilities, will be reduced to 38.0% from 40.4% for temporary differences that are expected to be eliminated during the fiscal year beginning on January 1, 2013 through the fiscal year beginning on January 1, 2015, and to 35.6% for temporary differences that are expected to be eliminated in and after the fiscal year beginning on January 1, 2016.

The changes in effective statutory tax rates resulted in a ¥1,414 million (\$18,128 thousand) decrease in deferred tax assets (after deducting deferred tax liabilities) as of December 31, 2011 and a ¥1,474 million (\$18,897 thousand) and a ¥60 million (\$769 thousand) increase, respectively, in income taxes - deferred (debit) for the fiscal year ended December 31, 2011 and net unrealized holding gain on securities as of December 31, 2011.

Income taxes for the fiscal years ended December 31, 2011, 2010 and 2009 consisted of the following:

		Thousands of U.S. dollars		
Year ended December 31,	2011	2010	2009	2011
Income taxes:				
Current	¥22,212	¥22,130	¥32,989	\$284,769
Deferred	(1,356)	966	(1,806)	(17,384)
	¥20,856	¥23,096	¥31,183	\$267,385

The significant components of deferred tax assets and liabilities at December 31, 2011 and 2010 were as follows:

	Millions	Thousands of U.S. dollars	
December 31,	2011	2010	2011
Deferred tax assets:			
Prepaid expenses	¥ 9,173	¥ 8,567	\$ 117,603
Depreciation	4,759	6,202	61,013
Reserve for employees' retirement benefits	4,678	5,132	59,974
Supplies	4,154	2,493	53,256
Amortization of deferred charges	3,852	4,636	49,385
Reserve for bonuses to employees	2,089	1,783	26,782
Net operating loss carryforwards	1,939	_	24,859
Valuation loss on securities	1,274	1,231	16,333
Enterprise tax payable	1,219	445	15,628
Unrealized profit on inventories	1,171	956	15,013
Reserve for sales rebates	803	983	10,295
Asset retirement obligations	536	—	6,872
Reserve for directors and corporate auditors' retirement benefits	260	294	3,333
Impairment loss on fixed assets	170	157	2,179
Other	4,469	5,626	57,296
Gross deferred tax assets	40,546	38,505	519,821
Valuation allowance	(2,748)	(2,149)	(35,231)
Amount offset by deferred tax liabilities	(1,021)	(1,490)	(13,090)
Deferred tax assets, net	¥36,777	¥34,866	\$471,500
Deferred tax liabilities:			
Unrealized gain on securities	¥ 455	¥ 905	\$ 5,833
Deferred gain on sales of properties for tax purposes	422	540	5,410
Other	249	45	3,193
Total deferred tax liabilities	1,126	1,490	14,436
Amount offset by deferred tax assets	(1,021)	(1,490)	(13,090)
Deferred tax liabilities, net	¥ 105	¥ —	\$ 1,346

A reconciliation of the statutory and effective tax rates for the fiscal years ended December 31, 2011, 2010 and 2009 is summarized as follows:

Year ended December 31,	2011	2010	2009
Statutory tax rate	40.4%	40.4%	40.4%
Permanently non-deductible expenses for tax purposes such as			
entertainment expenses	2.8	2.6	1.9
Permanently non-taxable income such as dividend income	(0.0)	(0.0)	(0.0)
Per capita inhabitants' taxes	0.2	0.2	0.1
Different tax rates applied to foreign subsidiaries	(1.0)	(1.1)	(1.8)
Tax credit for research and development expenses	(8.8)	(6.9)	(5.9)
Change in valuation allowance	1.1	0.1	0.1
Effect of revised corporate tax rate	2.6	_	_
Other	(0.8)	(0.1)	0.1
Effective tax rate	36.5%	35.2%	34.9%

### 10 Retirement Benefits

#### (a) Overview of retirement benefits

The Company has various retirement benefit plans such as defined contribution pension plans and certain types of defined benefit pension plans comprising a corporate pension fund and lump-sum retirement benefit plans. The Company's domestic consolidated subsidiaries participate in lump-sum retirement benefit plans. The Company's foreign consolidated subsidiaries participate in defined benefit or defined contribution pension plans.

Certain employees may be entitled to additional special retirement benefits (which have not been provided for) based

on the conditions under which termination occurs.

The Company has a retirement benefit trust to fund the lump-sum retirement benefit plan.

#### (b) Retirement benefit obligation

The following table sets forth the funded and accrued status of the plans, and the amounts recognized in the accompanying consolidated balance sheets as of December 31, 2011 and 2010 for the Company's and the consolidated subsidiaries' defined benefit plans:

	Millions	Thousands of U.S. dollars	
December 31,	2011	2010	2011
Retirement benefit obligation Plan assets at fair value	¥(67,041) 62,448	¥(66,208) 62,602	\$(859,500) 800,615
Funded status Unrecognized prior service cost Unrecognized actuarial loss	(4,593) (1,572) 3,566	(3,606) (1,465) 2,730	(58,885) (20,154) 45,718
Net amount Prepaid pension expense	(2,599)	(2,341) 255	(33,321)
Reserve for employees' retirement benefits	¥ (2,599)	¥ (2,596)	\$ (33,321)

#### (c) Retirement benefit expenses

		Thousands of U.S. dollars		
Year ended December 31,	2011	2010	2009	2011
Service cost (*)	¥ 2,686	¥ 2,684	¥ 2,572	\$ 34,435
Interest cost	1,473	1,454	1,402	18,885
Expected return on pension plan assets	(1,432)	(1,312)	(1,271)	(18,359)
Amortization of actuarial loss	578	895	1,142	7,410
Amortization of prior service cost	(349)	(380)	(479)	(4,474)
Contribution payments to a defined contribution				
pension plan	844	832	803	10,821
Additional retirement benefits paid	26	—	55	333
Total	¥ 3,826	¥ 4,173	¥ 4,224	\$ 49,051

(\*) Retirement benefit expenses of consolidated subsidiaries which adopted a simplified method are included in this amount.

### (d) The assumptions utilized in accounting for the retirement benefit plans are summarized as follows:

Year ended December 31,	2011	2010	2009
(1) Discount rates	Principally 2.25%	Principally 2.25%	Principally 2.25%
(2) Expected rates of return on plan assets	1.3% – 2.5%	0.6% - 2.5%	0.8% - 2.5%

#### 11 Leases

The Company holds certain machinery, equipment and software under finance leases which do not transfer ownership of the leased assets to the lessee. Finance lease transactions commencing on or before December 31, 2008 that do not transfer ownership are accounted for as operating leases. If these leases had been capitalized, the acquisition costs, accumulated depreciation/amortization and net book value of such leased assets at December 31, 2011 and 2010 would have been as follows:

	Millions of yen			Thousands of U.S. dollars			
December 31, 2011	Machinery and equipment	Other	Total	Machinery and equipment	Other	Total	
Acquisition costs	¥820	¥3	¥823	\$10,513	\$38	\$10,551	
Accumulated depreciation/amortization	614	3	617	7,872	38	7,910	
Net book value	¥206	¥0	¥206	\$ 2,641	\$ 0	\$ 2,641	

	Mi	llions of yer	<u>ו</u>
	Machinery and		
December 31, 2010	equipment	Other	Total
Acquisition costs	¥1,068	¥3	¥1,071
Accumulated depreciation/amortization	662	2	664
Net book value	¥ 406	¥1	¥ 407

Lease payments relating to finance leases accounted for as operating leases as noted above totaled ¥209 million (\$2,679 thousand), ¥303 million and ¥386 million for the fiscal years ended December 31, 2011, 2010 and 2009, respectively, which are equal to the depreciation/amortization expense of the

leased assets computed by the straight-line method over the respective lease terms. Future minimum lease payments subsequent to December 31, 2011 and 2010 for finance leases accounted for as operating leases are summarized as follows:

	Millions	Thousands of U.S. dollars	
Year ending December 31,	2011	2010	2011
Due within one year Due after one year	¥137 69	¥204 203	\$1,756 885
	¥206	¥407	\$2,641

Future minimum lease payments subsequent to December 31, 2011 and 2010 for non-cancelable operating leases are summarized as follows:

	Millions	Thousands of U.S. dollars	
Year ending December 31,	2011	2010	2011
Due within one year	¥ 3,015	¥2,325	\$ 38,654
Due after one year	11,729	3,315	150,372
	¥14,744	¥5,640	\$189,026

# 12 Financial Instruments

#### (a) Policies for financial instruments

The Group manages temporary cash surpluses mainly through low risk and highly liquid financial assets. The Group makes use of derivatives to reduce risk, as explained below, and does not enter into derivatives for speculative or trading purposes.

#### (b) Types of financial instruments and related risk

In the course of its business activities, the Group is exposed to credit risk associated with trade notes and accounts receivable. In addition, the Group is exposed to foreign currency exchange risk arising from operating receivables denominated in foreign currencies.

Through its holdings of marketable securities and investment securities, the Group is exposed to market price risk. These securities are composed mainly of bonds held for the investment of cash surpluses and the stocks of other companies with which the Group has business relationships.

The Group is exposed to foreign currency exchange risk arising from trade notes and accounts payable denominated in foreign currencies.

The Company enters into forward foreign exchange contracts to reduce the risk of foreign currency exchange movements that arise from the receivables and payables denominated in foreign currencies.

#### (c) Policies and processes for risk management

#### (1) Credit risk management

In accordance with the internal policies prepared by the Company, regarding receivables, the management administration sections of operating units monitor the conditions of their main customers periodically, and monitor due dates and outstanding balances by individual customers. In addition, the Group is making efforts to identify and mitigate risks of bad debts from customers who are having financial difficulties.

When making use of derivatives, the Company arranges such transactions with highly creditworthy financial institutions to minimize counterparty risk.

#### (2) Market risk management

To manage foreign currency exchange risk arising from receivables and payables denominated in foreign currencies, the Company hedges such risk mainly by entering into forward foreign exchange contracts. For marketable securities and investment securities, the Company reviews the market value of such securities periodically and monitors the financial position of the issuers (counterparts). Also, for securities other than those classified as held-to-maturity, the Company reviews its portfolio of such securities on a continuing basis, taking into account market conditions and relationships with transactions partners. When making use of derivatives, the Company conducts such operations in accordance with its internal policies, and monthly reports are prepared including the balances of such transactions, valuation gains and losses, and other related information. Furthermore, consolidated subsidiaries do not utilize derivative transactions.

#### (3) Liquidity risk management

The Company manages liquidity risk by monitoring its cash flow forecasts on a timely basis prepared and updated by the finance and accounting departments based on reports from each operational division.

#### (d) Supplemental information on fair values

The fair value of financial instruments is based on their quoted market price, if available. When there is no quoted market price available, fair value is reasonably estimated. Since various assumptions and factors are reflected in estimating the fair value, different assumptions and factors could result in a different fair value. The notional amounts of derivatives in Note 14 are not necessarily indicative of the actual market risk involved in derivative transactions.

#### (e) Fair value of financial instruments

The carrying value, the fair value and the difference in those values for significant financial instruments on the consolidated balance sheet as of December 31, 2011 and 2010 are shown in the following table. The following table does not include financial instruments for which obtaining a fair value is deemed to be extremely difficult (Refer to Note (2) below).

		Millions of yer	ı	Thousands of U.S. dollars			
December 31, 2011	Carrying value	Fair value	Difference	Carrying value	Fair value	Difference	
Cash and deposits	¥107,163	¥ 107,163	¥—	\$1,373,885	\$1,373,885	\$-	
Receivables – trade notes and trade accounts	110,913	110,913	-	1,421,962	1,421,962	_	
Marketable securities and investment securities	67,114	67,114	_	860,436	860,436	_	
Total	¥285,190	¥285,190	¥—	\$3,656,283	\$3,656,283	\$—	
Payables – trade notes and trade accounts	¥ 17,351	¥ 17,351	¥—	\$ 222,449	\$ 222,449	\$—	
Total	¥ 17,351	¥ 17,351	¥—	\$ 222,449	\$ 222,449	\$—	
Derivatives (*)	¥ 18	¥ 18	¥—	\$ 231	\$ 231	\$—	
Total	¥ 18	¥ 18	¥—	\$ 231	\$ 231	\$—	

	Millions of yen				
December 31, 2010	Carrying value	Fair value	Difference		
Cash and deposits	¥ 76,213	¥ 76,213	¥—		
Receivables – trade notes and trade accounts	113,391	113,391	_		
Marketable securities and investment securities	66,975	66,975	_		
Total	¥256,579	¥256,579	¥—		
Payables – trade notes and trade accounts	¥ 19,490	¥ 19,490	¥—		
Total	¥ 19,490	¥ 19,490	¥—		
Derivatives (*)	¥ 52	¥ 52	¥—		
Total	¥ 52	¥ 52	¥—		

(\*) The value of assets and liabilities arising from derivative transactions is shown on a net basis.

Notes:

(1) Methods for computing the estimated fair value of financial instruments and other matters related to assets, liabilities, and derivatives are as follows:

[Assets]

Cash and deposits, receivables – trade notes and trade accounts: Since these items are settled in a short period of time, their carrying value approximates fair value.

Marketable securities and investment securities: Stocks are valued at the quoted market price. Bonds are valued at the quoted market price or at the price provided by the counterpart. For information on securities classified by holding purpose,

please refer to Note 13 of the notes to the consolidated financial statements.

[Liabilities]

Payables – trade notes and trade accounts: Since these items are settled in a short period of time, their carrying value approximates fair value. [Derivatives]

Estimates of the fair value of derivatives are based on the prices provided by the counterpart.

(2) Financial instruments for which it is extremely difficult to determine the fair value are as follows:

	Millions	Millions of yen		
December 31,	2011	2010	2011	
Unlisted securities	¥312	¥313	\$4,000	

Since quoted market prices are not available for these financial instruments and estimating their fair value is deemed to be extremely difficult, they are not included within "Marketable securities and investment securities" in the previous table.

101	TI . I		1.1	1		1.	· · · · · · · · · · · · · · · · · · ·
(3	The redemption	schedule for moneta	rv claims and	I securities with	maturity o	dates is sumr	marized as follows:
101	ino rodomption		ny olamito and		induction of the second	aatoo io oainii	11011200 00 10110110

		Million	s of yen			Thousands o	f U.S. dollars	
December 31, 2011	Due in one year or less		Due after five years through ten years	Due after ten years	Due in one year or less		Due after five years through ten years	Due after ten years
Cash and deposits	¥ 107,163	¥ —	¥ —	¥ —	\$1,373,885	\$ —	\$ —	\$ —
Receivables – trade notes and								
trade accounts	110,913	-	-	_	1,421,962	_	-	_
Marketable securities and								
investment securities								
Other securities with maturity dates:								
Corporate bonds	5,000	1,500	-	_	64,102	19,231	-	_
Other bonds	5,000	_	_	_	64,102	_	-	_
Other	51,000	_	_	_	653,846	_	_	_
Total	¥279,076	¥1,500	¥ —	¥ —	\$3,577,897	\$19,231	\$ —	\$ —

	Millions of yen							
December 31, 2010	Due in one year or less		Due after five years through ten years	Due after ten years				
Cash and cash deposits	¥ 76,213	¥ —	¥ —	¥ —				
Receivables – trade notes and								
trade accounts	113,391	_	_	_				
Marketable securities and								
investment securities								
Other securities with maturity dates:								
Corporate bonds	1,000	1,499	_	_				
Other bonds	4,695	_	_	—				
Other	54,005	_	_	_				
Total	¥249,304	¥1,499	¥ —	¥ —				

# 13 Securities

Securities consisted of marketable securities and non-marketable securities classified as other securities. The acquisition cost, carrying value and unrealized gain (loss) on marketable securities at December 31, 2011 and 2010 are summarized by type of security as follows:

#### (a) Other securities with determinable market value

		Millions of yer	1	Thousands of U.S. dollars		
December 31, 2011	Acquisition cost	Carrying value	Unrealized gain (loss)	Acquisition cost	Carrying value	Unrealized gain (loss)
Securities whose carrying value exceeds their acquisition cost:						
Stocks	¥ 1,732	¥ 3,279	¥1,547	\$ 22,205	\$ 42,038	\$19,833
Bonds	5,499	5,501	2	70,500	70,526	26
Other	31,000	31,000	0	397,436	397,436	0
Subtotal	38,231	39,780	1,549	490,141	510,000	19,859
Securities whose carrying value						
does not exceed their acquisition cost:						
Stocks	1,589	1,348	(241)	20,372	17,282	(3,090)
Bonds	5,997	5,986	(11)	76,885	76,744	(141)
Other	20,000	20,000	(0)	256,410	256,410	(0)
Subtotal	27,586	27,334	(252)	353,667	350,436	(3,231)
Total	¥65,817	¥67,114	¥1,297	\$843,808	\$860,436	\$16,628

		Millions of yer	1
December 31, 2010	Acquisition cost	Carrying value	Unrealized gain (loss)
Securities whose carrying value exceeds their acquisition cost:			
Stocks	¥ 2,337	¥ 4,737	¥2,400
Bonds	2,000	2,001	1
Other	39,000	39,004	4
Subtotal	43,337	45,742	2,405
Securities whose carrying value			
does not exceed their acquisition cost:			
Stocks	1,195	1,039	(156)
Bonds	5,197	5,194	(3)
Other	15,000	15,000	(0)
Subtotal	21,392	21,233	(159)
Total	¥64,729	¥66,975	¥2,246

#### (b) Sales of securities classified as other securities

Sales proceeds from, and aggregate gain and loss on, sales of securities classified as other securities for the years ended December 31, 2011, 2010 and 2009 are summarized as follows:

	Millions of yen			Thousands of U.S. dollars
Year ended December 31,	2011	2010	2009	2011
Sales proceeds	¥—	¥613	¥ —	\$ —
Aggregate gain	—	95	_	-
Aggregate loss	—	(3)	—	-

### 14 Derivatives

#### (a) Derivative transaction for which hedge accounting has not been applied

Summarized below are the notional amounts and the estimated fair value of the derivative instruments outstanding at the balance sheet date.

#### (1) Currency-related transactions

	Millions of yen		Thousands of U.S. dollars			
December 31, 2011	Notional amounts	Estimated fair value	Unrealized gain (loss)	Notional amounts	Estimated fair value	Unrealized gain (loss)
Currency swap: Swiss francs	¥2,493	¥(11)	¥(11)	\$ 31,962	\$(141)	\$(141)
U.S. dollars	¥5,365	¥29	¥ 29	\$ 68,782	\$ 372	\$ 372
Total	¥ 7,858	¥ 18	¥ 18	\$100,744	\$ 231	\$ 231

	Millions of yen		l
	Notional	Estimated	Unrealized
December 31, 2010	amounts	fair value	gain (loss)
Currency swap:			
Swiss francs	¥1,822	¥52	¥52
Total	¥1,822	¥52	¥52

(2) Interest rate-related transactions

There were no open derivatives positions of interest rate-related transactions at December 31, 2011 and 2010.

#### (b) Derivative transaction for which hedge accounting has been applied

There were no open derivatives positions for which hedge accounting has been applied at December 31, 2011 and 2010.

#### 15 Segment Information

The Group is engaged principally in the manufacture and sales of pharmaceutical products in Japan and overseas.

Effective the year ended December 31, 2011, "Accounting Standard for Disclosures about Segments of an Enterprise and Related Information" (ASBJ Statement No. 17, issued on March 27, 2009) and "Guidance on the Accounting Standard for Disclosures about Segments of an Enterprise and Related Information" (ASBJ Guidance No. 20, issued on March 21, 2008) have been adopted.

Related segment information for the fiscal year ended December 31, 2011 is described in (a) below, while segment information for the fiscal years ended December 31, 2010 and 2009 is described in (b), (c) and (d).

#### (a) Related information for the fiscal year ended December 31, 2011

December 31, 2011	Millions of yen	Thousands of U.S. dollars
Revenues from external customers:		
Avastin (Sales)	¥ 56,367	\$ 722,654
Actemra (Sales)	38,041	487,705
Other	279,109	3,578,320
Total	¥373,517	\$4,788,679

#### (2) Information by geographical area

December 31, 2011	Millions of yen	Thousands of U.S. dollars
Revenues:		
Japan	¥ 327,874	\$4,203,513
Europe	42,579	545,885
Other	3,064	39,281
Total	¥373,517	\$4,788,679

Note: Revenues are classified by country or region where customers are located.

#### Property, plant and equipment

As the carrying value of the property, plant and equipment of the Group that are located in Japan accounts for more than 90% of the Group's total consolidated property, plant and equipment, disclosure of geographical segment information has been omitted.

#### (3) Information on principal customers

Customer name	Revenue (Year ended December 31, 2011)		Relevant company segment
	Millions of yen	Thousands of U.S. dollars	
Alfresa Corporation	¥ 87,818	\$ 1,125,872	Pharmaceuticals
Mediceo Corporation	73,920	947,692	Pharmaceuticals
Suzuken Co., Ltd	44,970	576,538	Pharmaceuticals
Toho Pharmaceutical Co., Ltd	37,917	486,115	Pharmaceuticals

#### (b) Business segments for the fiscal years ended December 31, 2010 and 2009

As the Group operated solely in the pharmaceutical business segment, the disclosure of business segment information has been omitted.

#### (c) Geographical segments for the fiscal years ended December 31, 2010 and 2009

As revenues and total assets of the foreign consolidated subsidiaries constituted less than 10% of the consolidated totals, the disclosure of geographical segment information has been omitted.

#### (d) Overseas revenues for the fiscal years ended December 31, 2010 and 2009

As overseas revenues were ¥36,567 million and ¥36,390 million for the fiscal years ended December 31, 2010 and 2009, respectively, and less than 10% of total consolidated revenues for these years, the disclosure of overseas revenues information has been omitted.

## 16 Contingent Liabilities

The Company was contingently liable as guarantor of loan obligations for its employees of ¥271 million (\$3,474 thousand) and ¥352 million at December 31, 2011 and 2010, respectively.

## 17 Supplementary Information for the Consolidated Statement of Comprehensive Income

Comprehensive income and other comprehensive income for the fiscal year ended December 31, 2010 were as follows:

Year ended December 31, 2010	Millions of yen
Comprehensive income attributable to:	
Owners of the parent	¥36,652
Minority interests	852
Total	¥37,505
Other comprehensive income	
Unrealized gains (losses) on securities	¥ (295)
Foreign currency translation adjustments	(4,789)
Total	¥(5,084)

### 18 Supplementary Information for the Consolidated Statements of Changes in Net Assets

#### (a) Type and number of outstanding shares

		Number	of shares	
Year ended December 31, 2011 Type of shares	Balance at beginning of year	Increase in shares during the year	Decrease in shares during the year	Balance at end of year
Issued stock:				
Common stock	559,685,889	_	_	559,685,889
Total	559,685,889	_	_	559,685,889
Treasury stock:				
Common stock (*1, *2)	15,491,466	2,834	182	15,494,118
Total	15,491,466	2,834	182	15,494,118

(\*1) Treasury stock increased by 2,834 shares due to the repurchase of fractional shares of less than one unit.

(\*<sup>2</sup>) Treasury stock decreased by 182 shares due to the sale of fractional shares of less than one unit.

		Number	of shares	
Year ended December 31, 2010 Type of shares	Balance at beginning of year	Increase in shares during the year	Decrease in shares during the year	Balance at end of year
Issued stock:				
Common stock	559,685,889	_	_	559,685,889
Total	559,685,889	—		559,685,889
Treasury stock:				
Common stock (* <sup>1, *2</sup> )	15,497,079	6,118	11,731	15,491,466
Total	15,497,079	6,118	11,731	15,491,466

(\*1) Treasury stock increased by 6,118 shares due to the repurchase of fractional shares of less than one unit.

(\*2) Treasury stock decreased by 11,731 shares due to the exercise of stock options resulting in a decrease of 11,500 shares and the sale of 231 fractional shares of less than one unit.

		Number	of shares	
Year ended December 31, 2009 Type of shares	Balance at beginning of year	Increase in shares during the year	Decrease in shares during the year	Balance at end of year
Issued stock:				
Common stock	559,685,889	—	_	559,685,889
Total	559,685,889	—		559,685,889
Treasury stock:				
Common stock (*1, *2)	14,872,196	648,466	23,583	15,497,079
Total	14,872,196	648,466	23,583	15,497,079

(\*1) Treasury stock increased by 648,466 shares due to the repurchase of 640,800 shares of common stock and the repurchase of 7,666 fractional shares of less than one unit.

(\*2) Treasury stock decreased by 23,583 due to the exercise of stock options resulting in a decrease of 23,100 shares and the sale of 483 fractional shares of less than one unit.

#### (b) Stock subscription rights

December 31, 2011		Millions of yen	Thousands of U.S. dollars
Company	Description	Balance at end of year	Balance at end of year
The Company	Share subscription rights as stock options	¥1,016	\$13,026
	Total	¥1,016	\$13,026

December 31, 2010		Millions of yen
Company	Description	Balance at end of year
The Company	Share subscription rights as stock options	¥775
	Total	¥775

### (c) Dividends

#### (1) Dividends paid to shareholders

Year ended December 31, 2011

Date of approval	Resolution approved by	Type of shares	Amount (Millions of yen)	Amount (Thousands of U.S. dollars)	Amount per share (Yen)	Amount per share (U.S. dollars)	Shareholders' cut-off date	Effective date
March 24, 2011	Annual general meeting of shareholders	Common stock	¥12,516	\$160,461	¥23	\$0.29	December 31, 2010	March 25, 2011
July 21, 2011	Board of directors	Common stock	¥10,884	\$139,538	¥20	\$0.26	June 30, 2011	September 1, 2011
Year ended Decem	ber 31, 2010							
Date of approval	Resolution approved by	Type of shares	Amount (Millions of yen)		Amount per share (Yen)		Shareholders' cut-off date	Effective date
March 25, 2010	Annual general meeting of shareholders	Common stock	¥12,516		¥23		December 31, 2009	March 26, 2010
July 22, 2010	Board of directors	Common stock	¥9,252		¥17		June 30, 2010	September 1, 2010
Year ended Decem	ber 31, 2009							
Date of approval	Resolution approved by	Type of shares	Amount (Millions of yen)		Amount per share (Yen)		Shareholders' cut-off date	Effective date
March 25, 2009	Annual general meeting of shareholders	Common stock	¥10,351		¥19		December 31, 2008	March 26, 2009
July 23, 2009	Board of directors	Common stock	¥9,262		¥17		June 30, 2009	September 8, 2009

(2) Dividends with a shareholders' cut-off date during the current fiscal year but an effective date subsequent to the current fiscal year end. Year ended December 31, 2011

Date of approval	Resolution approved by	Type of shares	Amount (Millions of yen)	Amount (Thousands of U.S. dollars)	Paid from	Amount per share (Yen)	Amount per share (U.S. dollars)	Shareholders' cut-off date	Effective date
March 28, 2012	Annual general meeting of shareholders	Common stock	¥10,884	\$139,538	Retained earnings	¥20	\$0.26	December 31, 2011	March 29, 2012

## 19 Supplementary Cash Flow Information

Cash and cash equivalents at December 31, 2011, 2010 and 2009 in the consolidated statements of cash flows classified by account on the consolidated balance sheets were as follows:

		Millions of yen		Thousands of U.S. dollars
December 31,	2011	2010	2009	2011
Cash and deposits	¥107,163	¥ 76,213	¥106,978	\$1,373,885
Time deposits over three months	(12,689)	(11,069)	(12,500)	(162,681)
Cash and cash equivalents	¥ 94,474	¥ 65,144	¥ 94,478	\$1,211,204

## 20 Related Party Transactions

The Company is substantively a 61.6%-owned (Percentage of Voting rights) consolidated subsidiary of Roche Holding Ltd. ("Roche Holding"). The Company principally purchases raw materials from F. Hoffmann-La Roche Ltd. ("Roche"), a

consolidated subsidiary of Roche Holding.

Significant balances at December 31, 2011 and 2010 and transactions for the fiscal years ended December 31, 2011, 2010 and 2009 with related parties are summarized as follows:

	Millions	of yen	Thousands of U.S. dollars
December 31,	2011	2010	2011
Balances:			
Roche:			
Payables – Trade accounts	¥9,914	¥11,874	\$127,103
Receivables – Trade accounts	6,001	3,161	76,936
Receivables – Other (Sharing of co-development costs)	5,311	4,923	68,090

		Thousands of U.S. dollars		
Year ended December 31,	2011	2010	2009	2011
Transactions:				
Roche (*):				
Purchases of raw materials	¥75,742	¥87,840	¥120,159	\$971,051
Sales of products	25,678	15,538	11,227	329,205
Sharing of co-development costs	5,334	5,932	9,545	68,385
Directors of the Company:				
Excise of stock options				
Osamu Nagayama	—	_	12	_
Motoo Ueno	_	_	12	-

(\*) Business transactions are determined on an arm's-length basis at the same price as general transactions based on considering market value. Sharing of co-development costs is determined based on the license contracts concluded with Roche.

## 21 Stock Option Plans

At December 31, 2011, 2010 and 2009, the Company had the following stock option plans approved by its shareholders in accordance with the Corporate Law:

	2011 plan (stock-based	0011	2010 plan (stock-based	0010 m la m	2009 plan (stock-based	2000 mlan
December 31, 2011	compensation plan)	2011 plan	compensation plan)	2010 plan	compensation plan)	2009 plan
Date of grant	June 14, 2011	June 14, 2011	May 11, 2010	May 11, 2010	May 11, 2009	April 9, 2009
Grantees	5 directors	5 directors and	5 directors	5 directors and	6 directors	6 directors and
		102 employees of		96 employees of		101 employees of
		the Company and		the Company and		the Company and 2 directors and
		2 employees of a		4 employees of a		
		subsidiary		subsidiary		5 employees of a subsidiary
Type of stock	Common stock	Common stock	Common stock	Common stock	Common stock	Common stock
Number of shares granted	88,800	325,000	71,600	324,000	78,500	330,000
Exercise price (yen)	¥1	¥1,397	¥1	¥1,881	¥1	¥1,696
Exercise price (U.S. dollars)	\$0.01	\$17.91	\$0.01	\$24.12	\$0.01	\$21.74
Exercisable period	June 14, 2011 –	May 29, 2013 –	May 11, 2010 –	April 25, 2012 –	May 11, 2009 –	April 11, 2011 –
	May 27, 2041	May 27, 2021	April 23, 2040	April 23, 2020	April 24, 2039	March 25, 2019
December 31, 2011	2007 plan	2006 plan	2005 plan	2004 plan	2003 plan	
Date of grant	April 9, 2007	April 3, 2006	April 1, 2005	April 5, 2004	August 5, 2003	
Grantees	6 directors and	6 directors and	6 directors and	6 directors and	5 directors and	
	110 employees of	111 employees of	24 employees of	19 employees of	23 employees of	
	the Company and	the Company	the Company	the Company and	the Company and	
	3 directors and			1 director of a	1 director of a	
	4 employees of a			subsidiary	subsidiary	
	subsidiary			_	_	
Type of stock	Common stock	Common stock	Common stock	Common stock	Common stock	
Number of shares granted	355,000	344,000	252,000	232,000	231,000	
Exercise price (yen)	¥3,039	¥2,245	¥1,649	¥1,675	¥1,454	
Exercise price (U.S. dollars)	\$38.96	\$28.78	\$21.14	\$21.47	\$18.64	
Exercisable period	April 1, 2009 –	April 1, 2008 –	April 1, 2007 –	April 1, 2006 –	July 1, 2005 –	
	March 23, 2017	March 23, 2016	March 23, 2015	March 25, 2014	June 25, 2013	

Non-vested (number of shares)         Outstanding at the beginning of the year       —       —       71,600       324,000       67,000       328         Granted during the year       88,800       325,000       —       —       —       —         Forfeited during the year       —       —       —       —       —       —       —         Vested during the year       —       …       328       Outstanding at the end of the year       88,800       325,000       71,600       324,000       67,000       Vested (number of shares)       Outstanding at the beginning of the year       …       …       …       …       …       …       …       …       …       …       …       …       …       …       …       …       …<	December 31, 2011	2011 plan (stock-based compensation plan)	2011 plan	2010 plan (stock-based compensation plan)	2010 plan	2009 plan (stock-based compensation plan)	2009 plan
Granted during the year       88,800       325,000       -       -       -       -         Forfeited during the year       -       -       -       -       -       -       328         Outstanding at the end of the year       88,800       325,000       71,600       324,000       67,000         Vested (number of shares)       -       -       -       -       -       -       328         Outstanding at the beginning of the year       -       -       -       -       -       -       328         Outstanding at the end of the year       -       -       -       -       -       -       -       328         Vested during the year       -       -       -       -       -       -       328         Vested during the year       -       -       -       -       -       -       328         Weighted-average market price (Ven)       -       -       -       -       -       -       328         Vested during the year       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -		··· [····					
Granted during the year       88,800       325,000       -	Outstanding at the beginning of the year	_	_	71.600	324,000	67,000	328,000
Vested during the year	Granted during the year	88,800	325,000	_			_
Outstanding at the end of the year         88,800         325,000         71,600         324,000         67,000           Vested (number of shares)         Outstanding at the beginning of the year         —         —         —         —         —         328           Outstanding at the beginning of the year         —         —         —         —         —         328           Exercised during the year         —         —         —         —         —         —         328           Forfeited during the year         —         —         —         —         —         —         328           Weighted-average market price (Ven)         —         —         —         —         —         —         328           December 31, 2011         2007 plan         2006 plan         2005 plan         2004 plan         2003 plan           Non-vested (number of shares)         —         —         —         —         —         —           Outstanding at the beginning of the year         —         —         —         —         —         —         —         —           Vested (number of shares)         —         —         —         —         —         —         —         —         —	Forfeited during the year	_		_	_	_	_
Vested (number of shares)	Vested during the year	_	_	_	_	_	328,000
Outstanding at the beginning of the year	Outstanding at the end of the year	88,800	325,000	71,600	324,000	67,000	_
Vested during the year	Vested (number of shares)						
Exercised during the year	Outstanding at the beginning of the year	_	_	_	_	_	_
Exercised during the year	Vested during the year	_	_	_	_	_	328,000
Outstanding at the end of the year	Exercised during the year	_	_	_	_	_	_
Weighted-average market price (yen)	Forfeited during the year	_	_	_	_	_	_
Weighted-average market price (U.S. dollars)	Outstanding at the end of the year	_	_	_	_	_	328,000
December 31, 20112007 plan2006 plan2005 plan2004 plan2003 planNon-vested (number of shares)Outstanding at the beginning of the year	Weighted-average market price (yen)	_	_	_	_	_	_
Non-vested (number of shares)         Outstanding at the beginning of the year	Weighted-average market price (U.S. dollars)	)	—	_	_	—	_
Outstanding at the beginning of the yearGranted during the yearForfeited during the yearVested during the yearOutstanding at the end of the yearVested (number of shares)Outstanding at the beginning of the year	December 31, 2011	2007 plan	2006 plan	2005 plan	2004 plan	2003 plan	
Granted during the year	Non-vested (number of shares)						
Forfeited during the yearVested during the yearOutstanding at the end of the yearVested (number of shares)Outstanding at the beginning of the yearOutstanding at the beginning of the yearVested during the yearExercised during the year	Outstanding at the beginning of the year	_	_	_	_	_	
Vested during the yearOutstanding at the end of the yearVested (number of shares)Outstanding at the beginning of the year345,000333,000245,200206,900106,400Vested during the yearExercised during the year	Granted during the year	_	_	_	_	_	
Outstanding at the end of the yearVested (number of shares)Outstanding at the beginning of the year345,000333,000245,200206,900106,400Vested during the yearExercised during the yearForfeited during the yearOutstanding at the end of the year345,000333,000245,200206,900106,400Weighted-average market price (yen)	Forfeited during the year	_	_	_	_	_	
Vested (number of shares)         Outstanding at the beginning of the year       345,000       333,000       245,200       206,900       106,400         Vested during the year	Vested during the year	_	_	_	_	_	
Outstanding at the beginning of the year       345,000       333,000       245,200       206,900       106,400         Vested during the year	Outstanding at the end of the year	_	_	_	_	_	
Vested during the yearExercised during the yearForfeited during the yearOutstanding at the end of the year345,000333,000245,200206,900106,400Weighted-average market price (yen)	Vested (number of shares)						
Exercised during the yearForfeited during the yearOutstanding at the end of the year345,000333,000245,200206,900106,400Weighted-average market price (yen)	Outstanding at the leader is a of the user	045 000		245 200	206 000	106 400	
Forfeited during the yearOutstanding at the end of the year345,000333,000245,200206,900106,400Weighted-average market price (yen)	Outstanding at the beginning of the year	345,000	333,000	245,200	200,300	100,400	
Outstanding at the end of the year         345,000         333,000         245,200         206,900         106,400           Weighted-average market price (yen)		345,000	333,000	245,200	200,300		
Weighted-average market price (yen)	Vested during the year	345,000 	333,000	245,200 — —			
	Vested during the year Exercised during the year	345,000 — — —	333,000 — — —	245,200 — — —	200,900 — —		
Weighted-average market price (U.S. dollars)	Vested during the year Exercised during the year Forfeited during the year						
	Vested during the year Exercised during the year Forfeited during the year Outstanding at the end of the year Weighted-average market price (yen)	345,000					

December 31, 2010	2010 plan (stock-based compensation plan)	2010 plan	2009 plan (stock-based compensation plan)	2009 plan	2007 plan
Date of grant	May 11, 2010	May 11, 2010	May 11, 2009	April 9, 2009	April 9, 2007
Grantees	5 directors	5 directors and	6 directors	6 directors and	6 directors and
		96 employees of		101 employees of	110 employees of
		the Company and		the Company and	the Company and
		4 employees of a		2 directors and	3 directors and
		subsidiary		5 employees of a	4 employees of a
				subsidiary	subsidiary
Type of stock	Common stock	Common stock	Common stock	Common stock	Common stock
Number of shares granted	71,600	324,000	78,500	330,000	355,000
Exercise price (yen)	¥1	¥1,881	¥1	¥1,696	¥3,039
Exercisable period	May 11, 2010 –	April 25, 2012 –	May 11, 2009 –	April 11, 2011 –	April 1, 2009 –
	April 23, 2040	April 23, 2020	April 24, 2039	March 25, 2019	March 23, 2017
December 31, 2010	2006 plan	2005 plan	2004 plan	2003 plan	
Date of grant	April 3, 2006	April 1, 2005	April 5, 2004	August 5, 2003	
Grantees	6 directors and	6 directors and	6 directors and	5 directors and	
	111 employees of	24 employees of	19 employees of	23 employees of	
	the Company	the Company	the Company and	the Company and	
			1 director of a	1 director of a	
			subsidiary	subsidiary	
Type of stock	Common stock	Common stock	Common stock	Common stock	
Number of shares granted	344,000	252,000	232,000	231,000	
Exercise price (yen)	¥2,245	¥1,649	¥1,675	¥1,454	
Exercisable period	April 1, 2008 –	April 1, 2007 –	April 1, 2006 –	July 1, 2005 –	
	March 23, 2016	March 23, 2015	March 25, 2014	June 25, 2013	

December 31, 2010	2010 plan (stock-based compensation plan)	2010 plan	2009 plan (stock-based compensation plan)	2009 plan	2007 plan
Non-vested (number of shares)					
Outstanding at the beginning of the year	_	_	78,500	330,000	_
Granted during the year	71,600	324,000	_	_	_
Forfeited during the year	_	_	_	2,000	_
Vested during the year	_	_	11,500	_	_
Outstanding at the end of the year	71,600	324,000	67,000	328,000	_
Vested (number of shares)					
Outstanding at the beginning of the year	_	_	_	_	350,000
Vested during the year	_	_	11,500	_	_
Exercised during the year	_	_	11,500	_	_
Forfeited during the year	_	_	_	_	5,000
Outstanding at the end of the year	_	_	_	_	345,000
Weighted-average market price (yen)	_	_	¥1,790	_	_

December 31, 2010	2006 plan	2005 plan	2004 plan	2003 plan
Non-vested (number of shares)				
Outstanding at the beginning of the year	_	_	_	_
Granted during the year	_	_	_	_
Forfeited during the year	_	_	_	_
Vested during the year	—	_	_	_
Outstanding at the end of the year	_	_	_	_
Vested (number of shares)				
Outstanding at the beginning of the year	338,000	249,200	210,900	106,400
Vested during the year	_	_	_	_
Exercised during the year	—	_	_	_
Forfeited during the year	5,000	4,000	4,000	_
Outstanding at the end of the year	333,000	245,200	206,900	106,400
Weighted-average market price (yen)	_	_	_	_

December 31, 2009	2009 plan (stock-based compensation plan)	2009 plan	2007 plan	2006 plan	2005 plan
Date of grant	May 11, 2009	April 9, 2009	April 9, 2007	April 3, 2006	April 1, 2005
Grantees	6 directors	6 directors and	6 directors and	6 directors and	6 directors and
		101 employees of	110 employees of	111 employees of	24 employees of
		the Company and	the Company and	the Company	the Company
		2 directors and	3 directors and		
		5 employees of a	4 employees of a		
		subsidiary	subsidiary		
Type of stock	Common stock	Common stock	Common stock	Common stock	Common stock
Number of shares granted	78,500	330,000	355,000	344,000	252,000
Exercise price (yen)	¥1	¥1,696	¥3,039	¥2,245	¥1,649
Exercisable period	May 11, 2009 –	April 11, 2011 –	April 1, 2009 –	April 1, 2008 –	April 1, 2007 –
	April 24, 2039	March 25, 2019	March 23, 2017	March 23, 2016	March 23, 2015
December 31, 2009	2004 plan	2003 plan			
Date of grant	April 5, 2004	August 5, 2003			
Grantees	6 directors and	5 directors and			
	19 employees of	23 employees of			
	the Company and	the Company and			
	1 director of a	1 director of a			
	subsidiary	subsidiary			
Type of stock	Common stock	Common stock			
Number of shares granted	232,000	231,000			
Exercise price (yen)	¥1,675	¥1,454			
Exercisable period	April 1, 2006 –	July 1, 2005 –			
	March 25, 2014	June 25, 2013			

	2009 plan (stock-based				
December 31, 2009	compensation plan)	2009 plan	2007 plan	2006 plan	2005 plan
Non-vested (number of shares)					
Outstanding at the beginning of the year	_	—	355,000	_	_
Granted during the year	78,500	330,000	_	_	_
Forfeited during the year	_	_	4,000	_	_
Vested during the year	—	—	351,000	—	—
Outstanding at the end of the year	78,500	330,000	_	—	—
Vested (number of shares)					
Outstanding at the beginning of the year	_	—	_	344,000	252,000
Vested during the year	_	_	351,000	_	_
Exercised during the year	_	_	_	_	2,800
Forfeited during the year	—	—	1,000	6,000	—
Outstanding at the end of the year	_	_	350,000	338,000	249,200
Weighted-average market price (yen)	_	_	_	_	¥1,724

December 31, 2009	2004 plan	2003 plan
Non-vested (number of shares)		
Outstanding at the beginning of the year	_	—
Granted during the year	_	—
Forfeited during the year	_	_
Vested during the year	_	—
Outstanding at the end of the year	_	—
Vested (number of shares)		
Outstanding at the beginning of the year	218,000	127,600
Vested during the year	_	_
Exercised during the year	7,100	13,200
Forfeited during the year	_	8,000
Outstanding at the end of the year	210,900	106,400
Weighted-average market price (yen)	¥1,739	¥1,733

The fair value of options granted is estimated by using the binominal model with the following weighted average assumptions.

Year ended December 31, 2011	2011 plan (stock-based compensation plan)	2011 plan
Expected volatility (*1)	32%	33%
Expected holding period (*2)	3 years	10 years
Expected dividend per share (*3)	40 yen	40 yen
Risk-free rate (*4)	0.24%	1.12%

(\*1) The volatility of the share price for the expected life of the option is estimated by taking into account the volatility of the characteristics of the company's stock, while drawing upon the actual share price in the past.

(\*2) Since there is insufficient data to make a reasonable estimation, the expected holding period of the options of the 2011 plan is based on the assumption that the options are exercised at the end of the exercisable period, and the expected holding period of the options of the 2011 plan (stock-based compensation plan) is based on the age at the time of retirement according to the past record.

(\*3) This is based the Company's dividend paid for the last fiscal year.

(\*4) Risk-free interest rate is the yield on government bonds for the period that corresponds to the remaining holding period of the option.

Because it is difficult to reasonably estimate the number of options that will expire in the future, the number of vested options is calculated based on historical data for the options that have not yet been vested, and the number of options that have actually forfeited for the options that have already been vested.

## 22 Amounts Per Share

Basic net income per share is computed based on the net income available for distribution to shareholders of common stock and the weighted-average number of shares of common stock outstanding during each year. Diluted net income per share is computed based on the net income available for distribution to the shareholders and the weighted-average number of shares of common stock outstanding during each year after giving effect to the dilutive potential of shares of common stock to be issued upon the exercise of stock subscription rights and stock options. The potential dilutive impact of 187,361 shares, 124,760 shares and 107,488 shares of common stock has been included in the computation of the weighted-average number of shares for the years ended December 31, 2011, 2010 and 2009, respectively.

## **Independent Auditors' Report**

#### **Independent Auditors' Report**

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

We have audited the accompanying consolidated balance sheet of Chugai Pharmaceutical Co., Ltd. and its consolidated subsidiaries as of December 31, 2011, and the related consolidated statements of income, comprehensive income, changes in net assets and cash flows for the year then ended, expressed in Japanese yen. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to independently express an opinion on these consolidated financial statements based on our audit. The consolidated balance sheet of Chugai Pharmaceutical Co., Ltd. and its consolidated subsidiaries as of December 31, 2010 and the related consolidated statements of income, changes in net assets and cash flows for each of the two years in the period ended December 31, 2010 were audited by other auditors whose report dated March 24, 2011, expressed an unqualified opinion on those statements.

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 financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Chugai Pharmaceutical Co., Ltd. and its consolidated subsidiaries as of December 31, 2011, and the results of their operations and their cash flows for the year then ended, in conformity with accounting principles generally accepted in Japan.

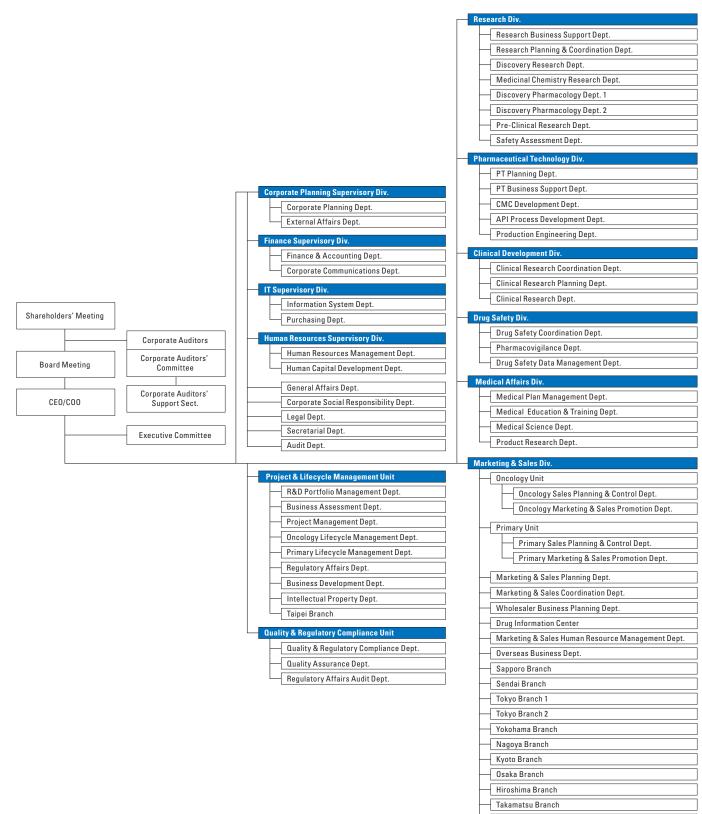
Without qualifying our opinion, we draw attention to Note 17 to the consolidated financial statements, in which the comprehensive income for the year ended December 31, 2010 is disclosed.

The U.S. dollar amounts in the accompanying consolidated financial statements with respect to the year ended December 31, 2011 are presented solely for convenience. Our audit also included the translation of yen amounts into U.S. dollar amounts and, in our opinion, such translation has been made on the basis described in Note 4 to the consolidated financial statements.

KPMG AZSA LLC

Tokyo, Japan March 28, 2012

# Organization (As of April 1, 2012)



Fukuoka Branch

# Network (As of March 28, 2012)

#### Chugai Pharmaceutical

#### **Head Office**

1-1 Nihonbashi-Muromachi 2-chome, Chuo-ku, Tokyo 103-8324 Japan Tel +81-(0) 3-3281-6611 URL: http://www.chugai-pharm.co.jp/english

#### **Research Laboratories**

Fuji Gotemba Research Laboratories 1-135 Komakado, Gotemba City, Shizuoka Pref. 412-8513 Japan Tel +81-(0)550-87-3411

Kamakura Research Laboratories 200 Kajiwara, Kamakura City, Kanagawa Pref. 247-8530 Japan Tel +81-(0)467-47-2260

#### Ukima Research Laboratories

5-5-1 Ukima, Kita-ku, Tokyo 115-8543 Japan Tel +81-(0)3-3968-6111

#### Plants

#### Ukima Plant

5-5-1 Ukima, Kita-ku, Tokyo 115-8543 Japan Tel +81-(0)3-3968-6111

#### Fujieda Plant

2500 Takayanagi, Fujieda City, Shizuoka Pref. 426-0041 Japan Tel +81-(0)54-635-2311

#### Utsunomiya Plant

16-3 Kiyohara-Kogyodanchi, Utsunomiya City, Tochigi Pref. 321-3231 Japan Tel +81-(0)28-667-7611

#### Branches

#### Domestic

Sapporo Branch Nihon Seimei Sapporo Bldg., 4-1-1 Kita-sanjo-Nishi, Chuo-ku, Sapporo City, Hokkaido 060-0003 Japan Tel +81-(0)11-271-5311

#### Sendai Branch

Honcho Plaza Bldg., 1-12-7 Honcho, Aoba-ku, Sendai City, Miyagi Pref. 980-0014 Japan Tel +81-(0)22-225-8551

#### Tokyo Branch 1

Shinjuku NS Bldg., 2-4-1 Nishi-Shinjuku, Shinjuku-ku, Tokyo 163-0807 Japan Tel +81-(0)3-3346-0211

#### Tokyo Branch 2

Omiya Center Bldg., 1-9-6 Sakuragicho, Omiya-ku, Saitama City, Saitama Pref. 330-0854 Japan Tel +81-(0)48-642-4771

#### Yokohama Branch

Yokohama East Square, 1-4 Kinkoucho, Kanagawa-ku, Yokohama City, Kanagawa Pref. 221-0056 Japan Tel +81-(0)45-450-7670

#### Nagoya Branch

Chugai Tokyo Kaijo Bldg., 3-20-17 Marunouchi, Naka-ku, Nagoya City, Aichi Pref. 460-0002 Japan Tel +81-(0)52-961-8511

#### Kyoto Branch

Karasuma Chuo Bldg., 659 Tearaimizu-cho, Nishikikoji-agaru, Karasuma-dori, Nakagyo-ku, Kyoto City, Kyoto 604-8152 Japan Tel +81-(0)75-212-6090

#### Osaka Branch

Uemura Nissei Bldg., 3-3-31 Miyahara, Yodogawa-ku, Osaka City, Osaka 532-0003 Japan Tel +81-(0)6-6350-6355

#### Hiroshima Branch

Nissei Hiroshima Bldg., 7-32 Nakamachi, Naka-ku, Hiroshima City, Hiroshima Pref. 730-0037 Japan Tel +81-(0)82-543-6100

#### Takamatsu Branch COI Bldg., 2-2-7 Kotobuki-cho, Takamatsu City, Kagawa Pref. 760-0023 Japan Tel +81-(0)87-811-6988

Fukuoka Branch Echo Bldg., 2-13-34 Hakataeki-higashi, Hakata-ku, Fukuoka City, Fukuoka Pref. 812-0013 Japan Tel +81-(0)92-451-8181

#### Overseas

Chugai Pharmaceutical Co., Ltd. Taipei Branch 8FI-2, No.73, ZhouZi Street, Neihu District, Taipei 11493 Taiwan Tel +886-(0)2-2659-8030

#### **Domestic Subsidiaries**

Chugai Clinical Research Center Co., Ltd. 1-1 Nihonbashi-Muromachi 2-chome, Chuo-ku, Tokyo 103-8324 Japan (within the Chugai Pharmaceutical Head Office) Tel+81-(0)3-3273-1173

## Chugai Research Institute

for Medical Science, Inc. 1-135 Komakado, Gotemba City, Shizuoka Pref. 412-8513 Japan (within the Fuji Gotemba Research Laboratory) Tel +81-(0)550-87-5425

#### Chugai Business Support Co., Ltd.

5-5-1 Ukima, Kita-ku, Tokyo 115-8543 Japan (within the Ukima Representative Office) Tel +81-(0)3-3968-8760

#### Medical Culture Inc.

Muromachi CS Bldg., 4-6-5 Nihonbashi-Muromachi, Chuo-ku, Tokyo 103-0022 Japan Tel +81-(0)3-5202-8270

#### Chugai Distribution Co., Ltd.

1-20, Okuwa, Kazo City, Saitama Pref. 347-0010 Japan (within the Kazo Distribution Center) Tel +81-(0)480-76-0381

## **Chugai Pharma Manufacturing Co., Ltd.** 5-5-1 Ukima, Kita-ku, Tokyo

5-5-1 Okima, Nita-ku, Tokyo 115-8543 Japan (within the Ukima Representative Office) Tel +81-(0)3-3968-6200

#### Forerunner Pharma Research Co., Ltd. 4-2-16 Komaba, Meguro-ku, Tokyo 153-0041 Japan Tel +81-(0)3-5465-0871

#### Overseas Subsidiaries, Affiliates and R&D Partners

Chugai Pharma Europe Ltd. Mulliner House, Flanders Road, Turnham Green, London W4 1NN U.K. Tel +44-(0)20-8987-5600

Chugai Pharma U.K. Ltd. Mulliner House, Flanders Road, Turnham Green, London W4 1NN U.K. Tel +44-(0)20-8987-5680

#### Chugai Pharma Marketing Ltd.

Mulliner House, Flanders Road, Turnham Green, London W4 1NN U.K. Tel +44-(0)20-8987-5656

#### Germany Branch

Lyoner Strasse 15, Atricom 7 OG 60528 Frankfurt am Main, Germany Tel +49-(0)69-663000-0

#### Chugai Pharma France S.A.S.

Tour Franklin, La Défense 8, 100/101 Quartier Boieldieu 92042 Paris La Défense Cedex, France Tel +33-(0)1-56-37-05-20

#### CHUGAI sanofi-aventis S.N.C.

20 Avenue Raymond Aron 92165 Antony Cedex, France Tel +33-(0)1-41-24-75-52

Chugai U.S.A., Inc. 300 Connell Drive, Suite 3100 Berkeley Heights, NJ 07922 U.S.A. Tel +1-908-516-1350 New York Office 444 Madison Avenue New York, NY 10022 U.S.A. Tel +1-212-486-7780

Chugai Pharma U.S.A., LLC 300 Connell Drive, Suite 3100 Berkeley Heights, NJ 07922 U.S.A. Tel +1-908-516-1350

Chugai Pharma (Shanghai) Consulting Co., Ltd. Unit 2901, Central Plaza, No.381 Central Huaihai Road, Shanghai 200020 China Tel +86-(0)21-6319-0388

#### Beijing Branch

2102 Beijing Fortune Bldg. No.5, Dong San Huan Bei Lu, Chao Yang District, Beijing 100004 China Tel +86-(0)10-6590-8066

## **Guangzhou Branch** Unit 2508B, Yian Plaza,

No.33 Jian She 6th Road, Guangzhou 510060 China Tel +86-(0)20-8363-3468

#### Chugai Pharma Science (Beijing) Co., Ltd.

2103 Beijing Fortune Bldg. No.5, Dong San Huan Bei Lu, Chao Yang District, Beijing 100004 China Tel +86-(0)10-6590-9556

Chugai Pharma Taiwan Ltd.

3FI., No.73, ZhouZi Street, Neihu District, Taipei 11493 Taiwan Tel +886-(0)2-2658-8800

PharmaLogicals Research Pte. Ltd. No.11 Biopolis Way #05-08/09 Helios, Singapore 138667 Tel +65-(0)6776-6556

Chugai Pharmabody Research Pte. Ltd. No.11 Biopolis Way #05-08/09 Helios, Singapore 138667 Tel +65-(0)6776-6556

#### C&C Research Laboratories

146-141 Annyeong-dong, Hwaseong-si, Gyeonggi-do 445-380 Korea Tel +82-(0)31-230-6542

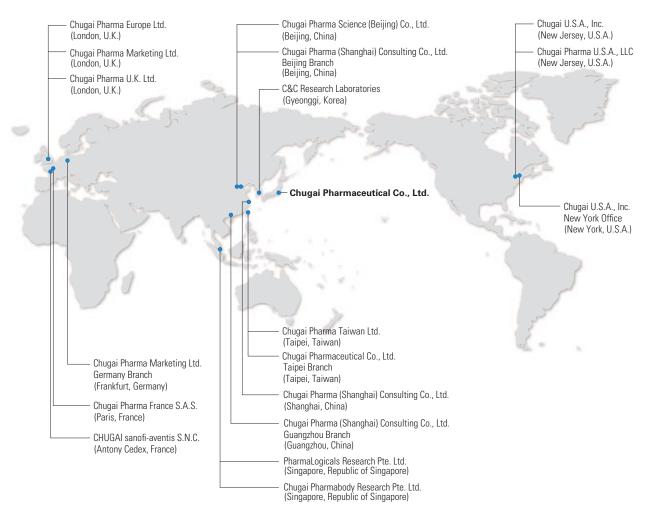
#### **Discovery Research Center**

DRC Natural Sciences Campus, Sungkyunkwan University, Cheoncheon-dong, Jangan-gu, Suwon-si, Gyeonggi-do 440-746 Korea Tel +82-(0)31-8014-6603

#### **Clinical Research Center**

903 E&C Venture Dream Tower 3Cha, 197-33 Guro-Dong, Guro-Gu, Seoul 152-719 Korea Tel +82-(0)2-858-6226

## **Chugai's Global Network**



# Shareholder Information (As of December 31, 2011)

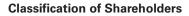
## Major Shareholders\*

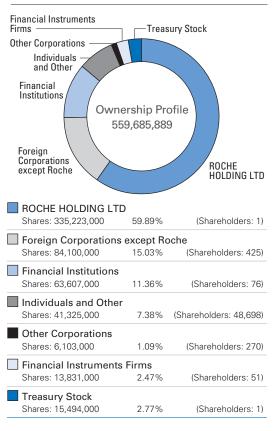
5	Number of Shares Held (Thousands)	Percentage of Voting Rights (%)
ROCHE HOLDING LTD	335,223	61.62
The Master Trust Bank of Japan, Ltd. (Trust account)	13,637	2.50
Japan Trustee Services Bank, Ltd. (Trust account)	12,214	2.24
JP Morgan Chase Bank 385147	5,321	0.97
Northern Trust Co. (AVFC) Sub A/C American Clients	4,026	0.74
Tokio Marine & Nichido Fire Insurance Co., Ltd.	4,016	0.73
State Street Bank and Trust Company 505225	3,854	0.70
SSBT OD05 OMNIBUS ACCOUNT - TREATY CLIENTS	3,734	0.68
Chugai Pharmaceutical Employee Shareholders' Association	3,697	0.67
Mellon Bank, N.A. as Agent for its Client Mellon Omnibus US Pension	3,565	0.65

\* 15,494,000 shares of treasury stock held by the Company are not included in the above breakdown of major shareholders.

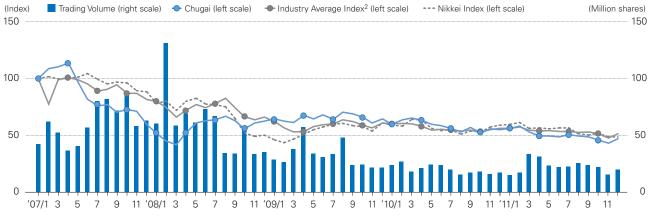
#### **Stock Price Information**

	Sto	Stock Price	
	Low	High	
From January 1, 2011 to December 31, 2011			
First Quarter	¥1,250	¥1,628	
Second Quarter	1,291	1,469	
Third Quarter	1,236	1,424	
Fourth Quarter	1,128	1,324	





#### Share Performance<sup>1</sup>

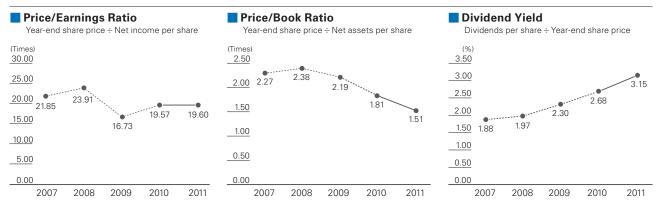


1. Share price on January 4, 2007 (¥2,705) = 100

2. Industry average index is calculated as below (because of mergers):

From October 2007: A total of eight companies (Takeda, Daiichi Sankyo, Astellas, Shionogi, Eisai, Mitsubishi Tanabe, Dainippon Sumitomo, Chugai)

## **Share Price Indicators**



## Corporate Data (As of December 31, 2011)

#### **Company Name**

Chugai Pharmaceutical Co., Ltd.

#### Year of Foundation

1925

#### Year of Establishment 1943

1340

## Address

1-1, Nihonbashi-Muromachi 2-chome, Chuo-ku, Tokyo 103-8324, Japan

## Stated Capital

¥72,966,826,000

Number of Employees 6,779 (Consolidated)

## Number of Shares Issued of Common Stock 559,685,889

Number of Shareholders 49,522

Stock Listing Tokyo Stock Exchange, First Section

#### Fiscal Year-End

December 31

#### General Meeting of Shareholders March

Transfer Agent Mitsubishi UFJ Trust and Banking Corporation

#### **Public Notices**

Public notices are to be made electronically on the Chugai website (http://www.chugai-pharm.co.jp/english/ir). In case electronic communications are unavailable, public notices will be made in the newspaper *Nihon Keizai Shimbun*.

#### For further information, please contact:

#### **Investor Relations**

Tel: +81-(0) 3-3273-0554 Fax: +81-(0) 3-3281-6607 E-mail: ir@chugai-pharm.co.jp Chugai Pharmaceutical Co., Ltd. provides information on its website:

URL: http://www.chugai-pharm.co.jp/english



Roche A member of the Roche group

1-1, Nihonbashi-Muromachi 2-chome, Chuo-ku Tokyo 103-8324, Japan