

# CSR Report 2010

<http://www.astellas.com>

Changing tomorrow



# Business Philosophy

## Raison d'être

Contributing toward improving the health of people around the world through the provision of innovative and reliable pharmaceutical products

- To go beyond all others in exploring and tapping the potential of the life sciences
- To continue tackling new challenges and creating innovative pharmaceutical products
- To deliver quality products along with accurate information and retain solid credibility among customers
- To support healthy living for people around the world
- To continue shining on the global pharmaceutical field

## Beliefs

Our “beliefs” provide the code of conduct we prize at all times. Astellas will always be a group of people who act upon these beliefs.

### High Sense of Ethics

We will always manage our business with the highest sense of ethics.

### Customer Focus

We will always seek to understand customer needs and our focus will always be on achieving customer satisfaction.

### Creativity

We will not be complacent and will always seek to innovate to create new value.

### Competitive Focus

Our eyes will always be directed to the outside world, and we will continue to create better value faster.

## Mission

Sustainable enhancement of enterprise value

- Astellas will seek to enhance its enterprise value in a sustainable manner.
- Astellas will seek to be the company of choice among all its stakeholders, including its customers, shareholders, employees, and the global community. Astellas will strive to gain the trust of all stakeholders and thereby enhance its enterprise value.

## Major global products

### Agent for overactive bladder treatment



**Vesicare®**  
Vesicare® improves symptoms such as urinary frequency, urgency and urge incontinence associated with overactive bladder.

### Treatment for functional symptoms of benign prostatic hyperplasia

(sold under the names Flomax®, OMNIC®, and Omnic Ocas® in Europe and the U.S.)



**Harnal®**  
Harnal® improves symptoms such as decreased urinary pressure, frequent nighttime urination, and constant urge to urinate.

### Candin-type antifungal agent

(sold under the name Mycamine® in Europe and the U.S.)



**Funguard®**  
Funguard® is a candin-type antifungal agent with a new mechanism that inhibits cell wall biosynthesis.

### Immunosuppressant



**Prograf®**  
Prograf® is used to prevent rejection in organ transplants.

### Treatment for atopic dermatitis



**Protopic®**  
Protopic® is the world's first immunoregulatory ointment for the treatment of atopic dermatitis.

## Editorial Policy

Astellas Pharma Inc. and its Japanese and overseas group companies (hereafter, Astellas) have clarified the scope of their social responsibility and set specific targets, and are working proactively to reach those targets so as to create a sustainable society. The CSR Report 2010 is an annual report that showcases the Astellas Group's corporate social responsibility (CSR) initiatives from the perspective of compliance, the environment, employees, society and other major stakeholders for meeting its accountability on these activities. We assume that our readership consists of healthcare practitioners, our shareholders, and employees, the public, and others who are affected by our business activities or have an interest in the Company.

Our priority has been the communication of our specific CSR challenges, initiatives and targets, developed in line with our basic policy on CSR management. We have included figures and tables where appropriate, with the aim of making this report easy to read and understand.

The Group's business activities are only outlined in this report because a summary of their performance results, an overview of the R&D pipeline and other information are made available as Investor Relations Information on our website (<http://www.astellas.com/en/ir>).

## Report Scope

The report covers, as much as possible, the operations of all Astellas consolidated subsidiaries in Japan and overseas. However, depending on the item, the data for some companies was not available.

- **Environment-related initiative**  
All the Company's domestic operating bases and overseas manufacturing plants are included within the scope of this report.
- **Information on our human resources system and welfare programs**  
The report focuses solely on employee-related initiatives in Japan.

## Reporting Term

The report basically covers the period from April 1, 2009 to March 31, 2010. The reports on work-related accidents and performance data for overseas subsidiaries cover the period from January 1 to December 31, 2009.

## Material Organizational Changes During the Reporting Term

In Japan, the Tokyo Research Center was closed.  
Outside Japan, the Grand Island Plant in the United States, which had operated under lease to Astellas, ceased its production operations at the end of March 2009.

## Guideline References

Ministry of the Environment of Japan: Environmental Reporting Guidelines (Fiscal Year 2007 Version)

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This report is also available at our website:

<http://www.astellas.com/en/>

# “Changing Tomorrow”

This slogan represents our strong determination to continue our efforts to create a new era as long as there are people suffering from disease, and to help achieve a brighter future for all patients fighting illness.



*Masafumi Nogimori*

Masafumi Nogimori, *President and CEO*

**“Businesses exist to offer value to the society.”** This phrase expresses our basic stance in continuously practicing CSR-based management. The greatest value that we can offer is to create high value-added pharmaceutical products for patients fighting illness. Five years have passed since Astellas Pharma Inc. was established. At the halfway point of our journey toward VISION 2015, we have made a fresh start toward attaining a new stage of growth. Now we renew our commitment to putting the priority on acting for patients.

## ■ Dedication to CSR-based management

I recall that there was an active debate over who and what businesses are for, when we introduced this CSR system. Pondering why the concept of CSR has attracted global attention, I think that the debate was sparked by environmental issues, a consequence of corporate scandals and the emergence of social issues that government action alone cannot fully resolve. When Astellas was launched, it was difficult to tell to what extent the needs should be met by businesses in relation to employees, society and other stakeholders. I believed that Astellas’ implementation of CSR-based management would require a review of these social issues and a definition of social responsibility that we must fulfill. We set up a CSR Committee to study methods of fulfillment of our social responsibility.

Another point is that I envisioned a form of CSR-based management in which Astellas personnel create a corporate culture of integrity, that builds our credibility with all stakeholders and that allows our employees to work with pride. Japan has a traditional philosophy under which business must bring happiness to society. A good example is the principle of *sampo-yoshi* among merchants from the Omi region of central Japan, which means to bring happiness



to three sides: the buyer, the seller and the public. I thought that this coincided with the concept of contemporary CSR. It is our people who create new products and make profits. No dishonesty can be present in the cycle of reinvesting the earnings we generate in developing more products. These activities must be based on high ethical values. This is why we promote CSR-based management, with its roots in compliance.

### ■ Establishing the Astellas Way

Formulated in 2006, Astellas' VISION 2015 clearly declares that we will aim to continuously increase corporate value by maximizing added value for people who wish to become healthy. To accomplish VISION 2015, we have sought to upgrade our ability to create new drugs and to build a solid business foundation. However, we now face challenging circumstances, chiefly since the U.S. patents on our mainstay Prograf® immunosuppressant and Harnal® treatment for functional symptoms of benign prostatic hyperplasia expired in fiscal 2009.

In this adverse situation, we must resolutely work on reform at an even faster pace, in order to move forward toward the next stage of growth by capitalizing on our strengths. I am convinced that employees will be the decisive factor for success and that reforms cannot be attained without changing the mindset and behavior of every single employee. It is time to establish common values and standards of conduct in our Group and to build a corporate culture unique to us, which we will refer to as the Astellas Way. To this end, we will prepare to change even the existing programs and systems for employees.

Astellas understands that CSR refers to management itself. I have taken every opportunity to assert that businesses must develop not only their economic and social strengths but also their corporate humanity. In the coming five-year period, we will combine this principle with the practice of the Astellas Way, creating environments where our people can work vigorously and develop energetic teamwork. Renewing our shared awareness that all members of the Group adopt an ethos of creating a bright future for patients fighting illness, we will be accelerating our efforts to reform, aspiring to attain our ultimate goal of fully embodying our business philosophy.

### ■ Toward a new five-year period

For fiscal 2010, we are expecting that the operating environment will be more challenging than ever. We have drawn up a new medium-term management plan that specifies a course of action for overcoming the difficult business circumstances and for moving toward a new stage of growth at an increasing pace. The plan has three pillars, specifically a therapeutic field strategy, a regional strategy and an R&D innovation strategy. Meanwhile, OSI Pharmaceuticals, Inc. of the U.S. has become part of the Astellas Group. This move strengthens our business in the field of cancers and will help us achieve a solid growth into a future global category leader.

At the same time, the market economy mechanism is showing signs of weakness. There is mounting concern about global environmental issues and the sustainability of our society. Our new medium-term business plan defines as a priority challenge the adoption of CSR-based management with a view to acting on global warming and contributing to the community in ways that are distinct from economic activities. We also seek to establish the Astellas Way. We will be continually working on these measures to further increase our corporate value.

Fiscal 2010 will be a critical year for future growth. We are determined to awaken hopes among all our stakeholders for the future of Astellas.

We thank you all for your understanding and continuing support.

June 2010

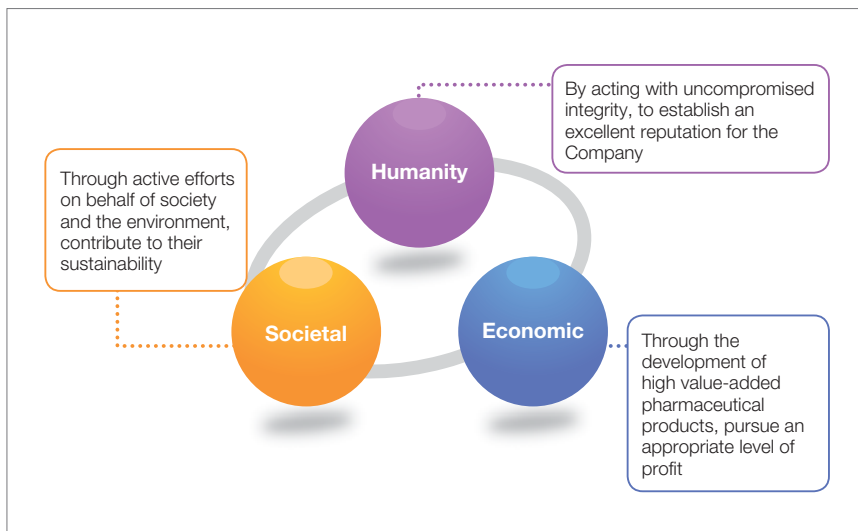
## Management Based on Corporate Social Responsibility

Our mission is to continuously provide truly effective pharmaceutical products to patients fighting illness, and to adequately respond to the requests we receive from the medical community. However, earning the trust of society and raising our enterprise value not only requires adequate product development capabilities and economic performance targets, but is also contingent on the Company’s interaction with society, and the characteristics of its corporate citizenship. A company’s overall rating is based on all of these factors. We have introduced CSR-based management to realize the aspirations expressed in our business philosophy. We will maintain a steady dialogue with the public and practice integrity in our interactions with our stakeholders, while making utmost efforts to fulfill our corporate social responsibilities.

### Basic Stance on CSR-based Management at Astellas

CSR-based management is designed to enable us to practice our business philosophy. Our CSR-based management program is a means through which we strive toward sustained enhancement of enterprise value while remaining acutely aware of our social responsibilities and taking a broad view that considers economics, society, and humanity so that we can exist not just

as a market entity, but also as a valuable member of society. This means not only contributing to society through the provision of truly effective pharmaceutical products, but also considering how to help realize social and environmental sustainability as a good corporate citizen, and take the necessary action.



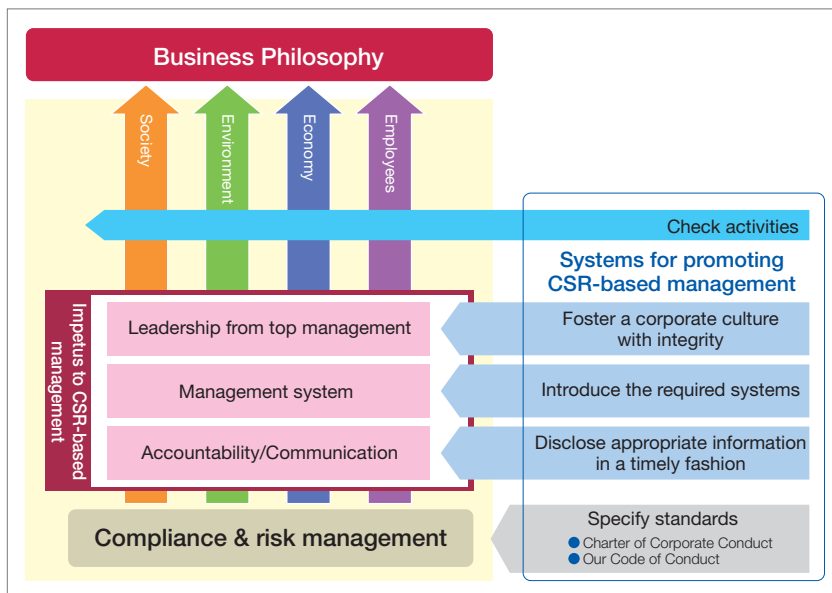
#### Corporate humanity

A concept that considers a company as being an organic entity — a corporation with a personality — and that enhancement of this personality is a proper responsibility for us as members of society. Therefore, it is important to aspire to enhance the company’s personality through honest relationships with stakeholders.

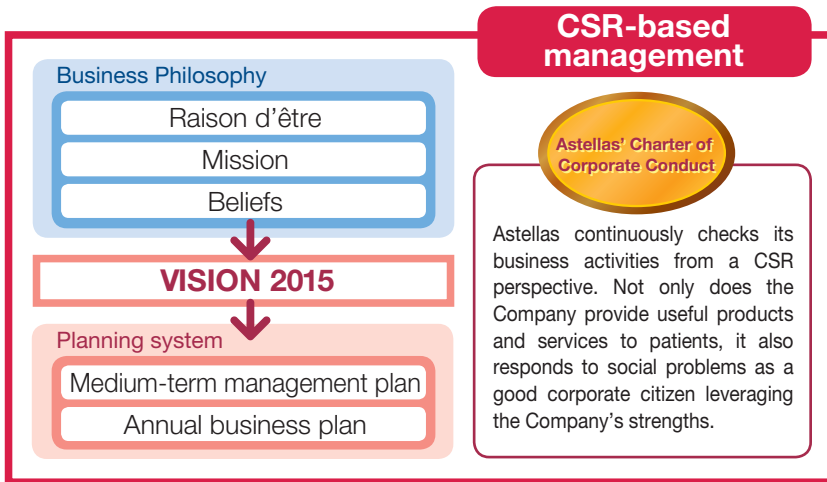
### Three Systems for Promoting CSR-Based Management

We have established a CSR Committee, with the President serving as chairman, to deliberate CSR-related issues pertaining to all aspects of the Company’s operations, to formulate basic policy on CSR, and to set CSR targets.

In order to practice management in a way that fulfills our corporate social responsibility, all the Company’s business activities must be rooted in an awareness of CSR. For this, the driving forces — particularly leadership from the top management — are needed, along with the creation of a management system as the mechanism for implementing CSR management, as well as the timely disclosure of information (accountability and communication).



## Positioning of CSR-based Management



Astellas sees its CSR-based management as an embodiment of its business philosophy or strategy for corporate management and as a mechanism for checking all corporate activities from a CSR perspective. The Charter of Corporate Conduct serves as a yardstick.

## VISION 2015

To turn Astellas' business philosophy, or *raison d'être*, of contributing toward improving health of people around the world through the provision of innovative and reliable ethical pharmaceutical products into a tangible reality, VISION 2015 sets out a vision for the Astellas of 2015 in five different forms. First, we mean the provision of high added value; second, Astellas as a global category leader; third, development of our personnel; fourth, the construction of a corporate culture

of integrity; and fifth, the establishment of the Astellas brand. We will press ahead with three systems for realizing VISION 2015. CSR-based management is one of them. As a baseline for CSR-based management, VISION 2015 envisions a situation in which Astellas fulfills its social responsibility to earn the trust of the public and to build brand recognition in the community, and in which its employees work with pride at being part of Astellas.

### Three systems for realizing "VISION 2015"



### New medium-term management plan

Astellas compiled VISION 2015 in 2006, proclaiming that it would construct a business model of "global category leader (GCL)" and aim to continuously increase corporate value by maximizing added value for all people who wish to become healthy, including patients. To be a GCL means securing leadership with a competitive advantage by offering high value-added products in a multitude of categories of diseases in which patients report poor levels of satisfaction with treatment and where advanced technical expertise is required. To establish this business model, we have been consistently active in bolstering our ability to create new drugs and to build a solid business foundation.

However, we now face difficult circumstances, chiefly following the expiration of our U.S. patents on our mainstay Prograf® immunosuppressant and Harnal® treatment for the functional symptoms of benign prostatic hyperplasia. We have drawn up a new medium-term management plan that specifies a course of action for surmounting challenging business conditions and for moving toward a new stage of growth with increasing speed. The plan has three pillars, specifically the therapeutic field strategy, the regional strategy and the R&D innovation strategy. Apart from these strategies, the plan defines the promotion of CSR-based management as a priority challenge.

#### Therapeutic Field Strategy

The category of cancers has recently been designated as a third category after the fields of urology and transplantation, which were specified earlier in the therapeutic field strategy for becoming a GCL. We aim to quickly build business foundations in this new third area.

#### R&D Innovation Strategy

In an attempt to create innovative new drugs, we are focusing our resources on urological and immunological diseases (transplantation), infectious diseases, oncology (cancers), CNS (central nervous system), diabetes complication and metabolic diseases.

#### Regional Strategy

Astellas is pushing ahead with balanced global expansion based on four centers: Japan, the United States, Europe and Asia.

#### Dividend Policy

Astellas is endeavoring to achieve a sustainable improvement in its corporate value and thereby to increase dividend payments to shareholders.

#### CSR-based Management

Astellas will continue its involvement in social contribution activities geared to local conditions, and will be proactive in its efforts to address global warming. It will also act to forge its own unique corporate culture and to nurture the workforce it needs to support its growth strategy.

## Five Fields and the CSR Policy

Corporate performance is evaluated not only from an economic perspective but also in terms of the company's environmental and social performance. The determination of a company's overall rating using this "triple bottom line" has become a commonly accepted practice. At Astellas, we break this down further by making society and employees into separate categories, and add compliance as an additional factor. We call these the five fields of CSR-based management. Compliance is the very foundation of all our corporate activities, and we are strongly committed to fulfilling our social responsibilities in the other four fields as well.



### ■ Astellas Global CSR Policy

Established October 1, 2006

Through CSR-based management, Astellas is working to be recognized by society for its overall enterprise value, which includes not only profitability, but also our social contributions and the human quality of our approach to business. We facilitate an ongoing dialogue with the public and put a high priority on integrity in our dealings with all our stakeholders as we work to fulfill our social responsibilities to maintain the trust of our stakeholders and inspire pride in our employees. With this as our guiding principle, we are tailoring our CSR-based management to take into account five perspectives: 1) Employees; 2) Society; 3) the Environment; 4) the Economy; and 5) Compliance.

#### ■ Our Employees

Our employees are working to realize our business philosophy, and provide the driving force for the achievement of our corporate vision. We are working to enhance our human resources with the goal of improving employee satisfaction and engagement through high quality talent; career development and training and employee benefit systems which reflect the needs of employees. We are committed to fostering a safe and inclusive work environment that values and respects all employees and encourages them to reach their full potential, both personally and professionally. We also place a strong emphasis on respect for the intrinsic rights of our employees, the unique personalities of each individual, and the ethnic and cultural diversity of our workforce.

#### ■ Society

A Company, as a member of society, must cultivate a positive relationship with the public and help to realize a sustainable society. We are actively working to incorporate an understanding of the various issues facing society – as well as the needs and the diversified values of the general public – into our corporate activities. We will continue contributing to the good of society and help to create a dialogue with various communities. At the same time, we will openly disclose the details of our corporate activities and provide our stakeholders with adequate explanations.

#### ■ The Environment

Finding an effective response to global environmental issues is the highest priority to ensure the continued existence of the human race, and should be given precedence over economic sustainability in the 21st century. We are corporate citizens, but we are also inhabitants of the Earth. We must keep this fact constantly in mind, and put a high priority on the fulfillment of our environmental responsibilities. In addition, as we undertake our corporate activities we must consider the needs of future generations, addressing issues over a long time-frame and from a global perspective.

#### ■ The Economy

A company's reason for existence is to conduct ethical business activity, provide values to all its stakeholders in various ways, and through its operations secure an appropriate level of profit. We are working to establish a business model of "Global Category Leader," in which we target focus illnesses and areas, with the aim of maximizing the value added of our products for people seeking health. We will work to achieve our goal of becoming the global leader in each of our focus categories by utilizing management methods based on economic value added as the indicator of management control. Simultaneously, we will make our best efforts to secure an appropriate level of profit and make adequate dividend payments to our shareholders.

#### ■ Compliance

A company is an organic entity, with its own character or culture. Enhancement of that character is a proper responsibility for us as members of society. We must, therefore, endeavor to refine our corporate culture through honest relationships with our stakeholders. To this end, we have established a series of governance mechanisms to ensure not only that all employees strictly abide by all laws and regulations, but also that they respect internationally accepted rules, as well as differences in culture and customs in their overseas duties. They must also follow the dictates of their conscience and maintain high ethical standards.

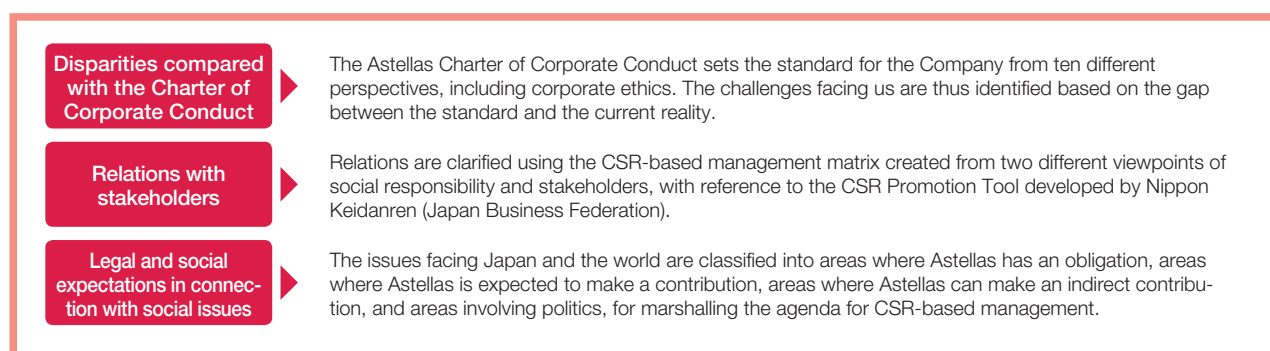


## Overview of CSR-based Management

### The Meaning of Corporate Social Responsibility

What is corporate social responsibility? There is perhaps more than one answer to this question. At Astellas, we believe that CSR-based management requires constant reviews of corporate activities from a CSR perspective to provide products and services that are helpful to customers and of service to society and to capitalize on our own strengths to address the problems facing society. Astellas is also required to explain to stakeholders what social issues or expectations it will address. Given that CSR-based management is designed to enable us to embody

our business philosophy, we have defined Astellas' corporate social responsibility on the basis of the ten provisions of the Astellas Charter of Corporate Conduct, which sets out our business philosophy in the form of specific corporate behavior. The priority level is assessed from three perspectives: disparities compared with the Charter of Corporate Conduct, relations with stakeholders, and legal and social expectations in connection with social issues.



### Corporate Social Responsibility at Astellas

To contribute to the overall sustainability of society, Astellas has drawn up a vision for fiscal 2015 and identified its corporate social responsibilities in five different fields of CSR-based management. We have been addressing issues based on an order of priority. In fiscal 2009, Astellas' corporate social responsibility was revised to include new issues as well as areas where our activities needed to be bolstered. The table below demonstrates the specific issues we are addressing to fulfill our corporate social responsibility in separate fields.

Field	Agenda for fiscal 2006	Issues added and those on which actions are stepped up after revision in fiscal 2009
Employees	Gender equality, response to the falling birthrate, child care and nursing care leave programs, actions for non-regular employees, employment of aged persons, implementation of occupational health and safety activities, elimination of excessive work, mental health improvement, volunteer leave program, increase of the ratio of leave taken	Work-life balance, gender equality, promotion of diversity, employment of disabled persons
Society	Employment of disabled persons, supply chain management, information disclosure and communication, social contribution activities, support for employees' volunteer activities, actions to address social issues	Employment of disabled persons, information disclosure and communication, the United Nations Millennium Development Goals, actions to address social issues, CSR-based purchasing
Environment	Continuous improvement in environmental protection activities, supply chain management, dialogues with stakeholders, construction of a global management framework	Continuous improvement in environmental protection activities, strengthening of the global management framework, measures to combat global warming, biodiversity, environmental impacts of pharmaceutical products
Economy	Accomplishment of VISION 2015, increase in dialogues with shareholders	CSR-based purchasing
Compliance	Strengthening of corporate governance, introduction of management systems, extension and enrichment of helpline functions, participation in the United Nations Global Compact, fostering of a corporate culture of integrity	Strengthening of corporate governance, fostering of a corporate culture of integrity, extension and enrichment of helpline functions, strengthening of the global management framework

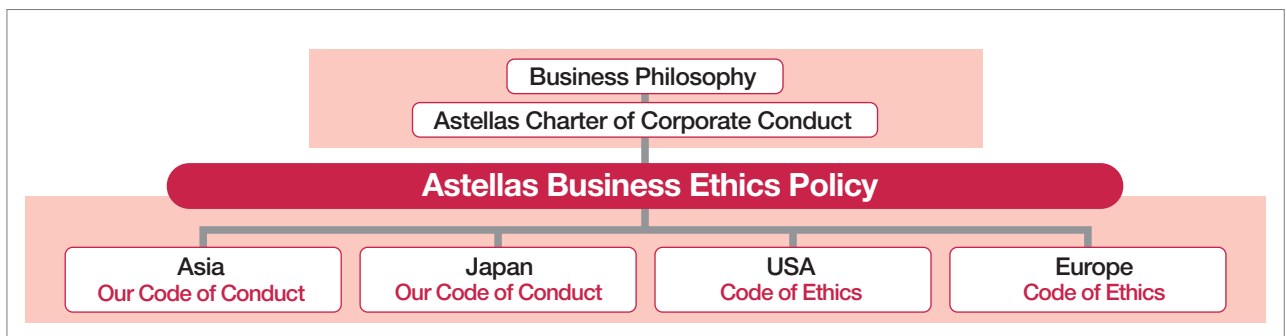
# Integrity in Corporate Management

In Pursuit of Integrity, Astellas puts the highest priority on upholding high ethical standards. Individual integrity creates integrity at the organizational level.

For a company to carry out its business activities on a sustainable basis, it is necessary that it and its individual employees act in accordance with the expectations of society. As individual employees, we endeavor to uphold the highest level of integrity in our interactions with our stakeholders. Given our high standard of ethics, we must naturally choose to act conscientiously, and with

integrity. Accordingly, individual employees are required to maintain high ethical standards when acting on their own initiative. This is what enables the Company to fulfill its social responsibilities. Moreover, it is crucial to create an effective corporate governance system by which to cultivate a corporate culture of integrity, which serves as the basis for our business activities.

## Ethical Structure



## Astellas Charter of Corporate Conduct

Astellas has instituted a Charter of Corporate Conduct to articulate its business philosophy in the accessible form of corporate behavior, as well as its determination to fulfill its corporate social responsibility through corporate activities with integrity. With a strong awareness that their primary task is to reflect the Charter

in tangible corporate activities, Astellas senior management and executives will set good examples, introduce the Charter to all employees and ensure it is followed, and improve internal systems.

### Charter of Corporate Conduct

Established April 1, 2005

The member companies of the Astellas Group shall observe both the spirit as well as the letter of all laws and regulations applying to their activities and conduct themselves in accordance with the following ten principles based on high ethical standards.

- 1 Providing beneficial products  
To fulfill our raison d'être — "Contribute toward improving the health of people around the world through the provision of innovative and reliable pharmaceutical products" — we shall provide products and services which benefit customers and society.
- 2 Maintaining high ethical standards  
We shall ensure that all our relationships with stakeholders are sound and proper, based on high ethical standards.
- 3 Fulfilling disclosure requirements and transparency  
We shall disclose relevant corporate information in a timely and appropriate manner not only to stakeholders but also to all members of society at large, thereby fulfilling our obligations regarding corporate accountability.
- 4 Fair and free competition  
We shall promote appropriate competitive behavior in our business activities.
- 5 Ensuring sustainable benefits  
We shall actively pursue management efficiency to ensure sustainable benefits for stakeholders.
- 6 Promoting employee welfare  
We shall respect the universally recognized human rights of our employees as well as their diversity, individuality, and differences, and provide a safe work environment and fair treatment for all.
- 7 Respect for different cultures  
In the management of our international businesses, we shall not only observe all applicable laws and regulations, but also respect the culture and customs of other nations.
- 8 Promoting environmental conservation  
Recognizing that harmony between the global environment and our business activities is a prerequisite to our corporate existence, we shall proactively take measures to conserve the global environment.
- 8 Engaging in philanthropic activities  
As good corporate citizens, we shall actively engage in charitable and other activities to benefit society.
- 10 Selecting ethical business partners  
We shall not do business with others who break the law or fail to accept standards of responsible social behavior.

## ■ Our ethical principles

The Astellas Business Ethics Policy is a package of ethical principles that provides a basis for all individuals working at Astellas across the globe in performing their respective duties. It demonstrates important values that we all should share in maintaining the highest standards of ethics. People are the most critical factor in our fairness-based corporate management. We believe that we can embody our business philosophy

when we behave with this moral policy constantly in mind. The five ethical principles of integrity, respect, responsibility, fairness and transparency have been determined by identifying common values from different corporate codes of behavior and behavioral criteria in different countries. These principles are respected by all those who work at Astellas.

### Astellas Business Ethics Policy

~doing the right thing~

Each of us as employees of Astellas will aspire to behave in accordance with the following ethical principles.

#### integrity

We will consistently do what is right.

#### respect

We will value each other as individuals, recognizing our diverse viewpoints and unique contributions.

#### responsibility

We will be accountable for our actions toward each other and the environment, reporting workplace concerns without fear of retribution, and seeking clarification when in doubt.

#### fairness

We will conduct our business in an equitable manner and will make business decisions without bias.

#### transparency

We will conduct our business in an open and truthful manner with appropriate respect for confidentiality.

## ■ Code of conduct

Corporate activities are an aggregation of activities undertaken by individual employees, and Astellas consists of the community formed by these individuals. Accordingly, we have adopted a global code of conduct that specifies the kind of behavior expected of our employees based on our Charter of Corporate Conduct, which has been made broadly available to the Group and to the public. We are endeavoring to establish a corporate

culture in which any employee can take the appropriate and compliant action after studying these codes of conduct, even if they are initially uncertain of how business activities should be carried out. Our Code of Conduct is a set of specific behavioral standards in Japan developed by breaking down the Astellas Business Ethics Policy.

### ■ Our Code of Conduct

Established April 1, 2005

**Our Code of Conduct is composed of the “Basic Code of Conduct” common to all stakeholders, and the stakeholder-specific “Code of Conduct towards Principal Stakeholders.”**

#### I Basic Code of Conduct

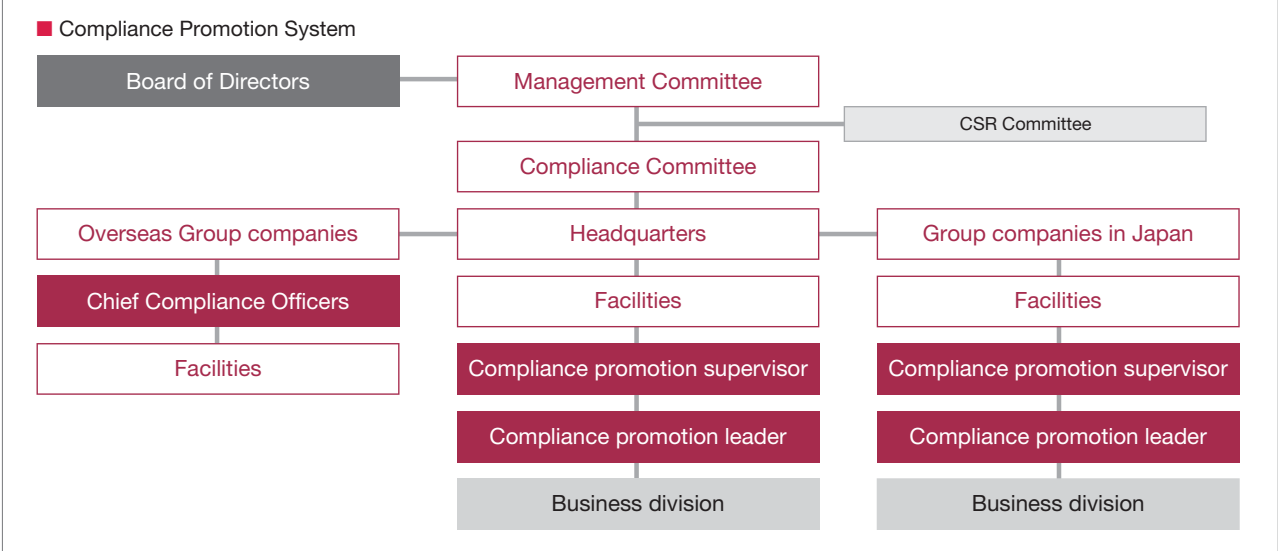
- We will strive to observe laws and regulations, company rules, industry rules, norms of social behavior, etc., and to enhance our sense of ethics constantly.
- We will not simply content ourselves with “corporate logic” and “industry logic,” but will maintain sound social judgment.
- We recognize that sales and profits can be won based on a high sense of ethics, and will act accordingly.  
In the event of a conflict between generating sales or profits and behaving in an ethical manner, we will always opt for ethical behavior.
- We will maintain sound and normal relations with all stakeholders.
- We will respect other people’s human rights, personality and individuality, and not engage in any improper discrimination or harassment.
- We will protect company property, including information assets, in accordance with company rules and similar regulations, and handle it correctly.
- We will appropriately manage and use all personal information, confidential information and information on intellectual property, etc., obtained from stakeholders in accordance with laws and regulations, company rules and similar regulations.

#### II Code of Conduct towards principal stakeholders

Behavioral standards essential for day-to-day operations, with respect to each principal stakeholder

## Compliance Promotion System

Chaired by the Chief Compliance Executive, the Compliance Committee has been established to enhance the compliance promotion system across the Astellas Group, including its overseas operations, and to better respond to individual issues. This Committee makes deliberations and decisions on compliance planning and other matters. Compliance promotion supervisors are in charge of promoting compliance in separate divisions and appoint compliance promotion leaders to take tangible steps to build a corporate culture of integrity.



## Fostering a Spirit of Autonomy

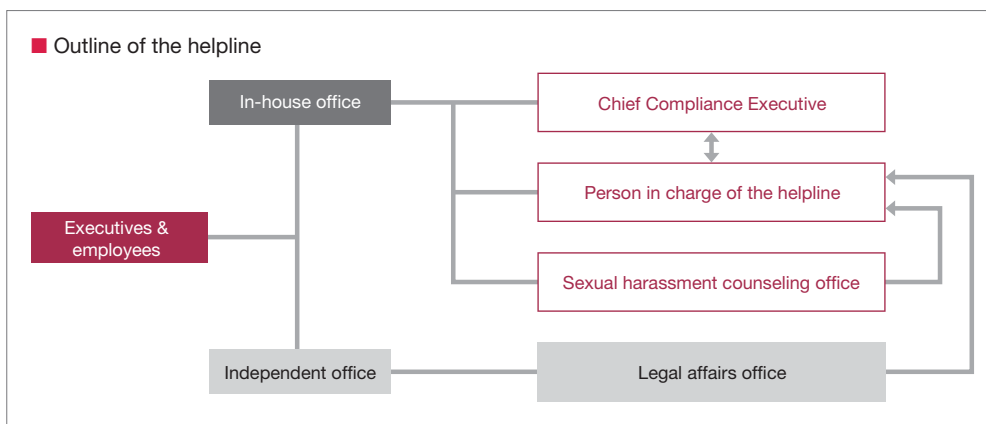
We believe that a corporate culture of compliance will not take root without continuous training. Compliance training is frequently provided to top executives, compliance promotion leaders, newly hired employees and newly appointed managers and others. It does not take the form of a one-way lecture. Our training splits the trainees into small groups and adopts a case method to ensure that every trainee takes part in discussions. Future training sessions will deal with specific problems that are likely to take place in day-to-day operations rather than with textbook-like general matters, to provide more practical training for our personnel. Traditionally, overseas Group companies have independently set up their own codes of conduct on the basis of the Astellas Charter of Corporate Conduct and in consideration

of local legislation, culture and customs. Now, a fixed standard of behavior has been introduced to ensure that their compliance efforts will conform to the common standard. In the future, we are thinking of strengthening ties between the headquarters and Group companies outside Japan in accordance with the Astellas Business Ethics Policy, which has been established as the common standard.

## Compliance Helpline in Japan

We have established a helpline that individual Astellas employees can use at any time for advice, rather than attempting to tackle problems themselves. The helpline can be contacted if an employee witnesses any conduct that may be in violation of the Astellas Charter of Corporate Conduct or Our Code of Conduct, or if an employee is instructed to act in possible violation of these rules. It allows every member of staff to directly contact the Chief Compliance Executive or other relevant staff by e-mail, postal mail, telephone or other means. Complete confidentiality is of course maintained for any staff member contacting the helpline. Disadvantageous treatment, workplace threats and retaliation against helpline users are strictly prohibited.

Sexual harassment is also strictly prohibited under our work regulations, as it can inflict significant harm on the victim. Supervisors and compliance promotion leaders appointed at individual facilities will deal with any case of sexual harassment immediately they have confirmed the case through consultation with the employees involved or a report from their colleagues. We have also set up a counseling office dedicated to sexual harassment in anticipation that such cases may prove difficult to discuss with colleagues in the same workplace or facilities.



## ■ Helpline enquiries

In fiscal 2009, the helpline received a total of 42 inquiries and the sexual harassment counseling office received two inquiries. Many of the incidents reported resulted from insufficient communications in the workplace. The inquiries included notifications and consultations on harassment. Facing a challenge of conducting speedier investigations, we will strive to make these services more reliable for our personnel.

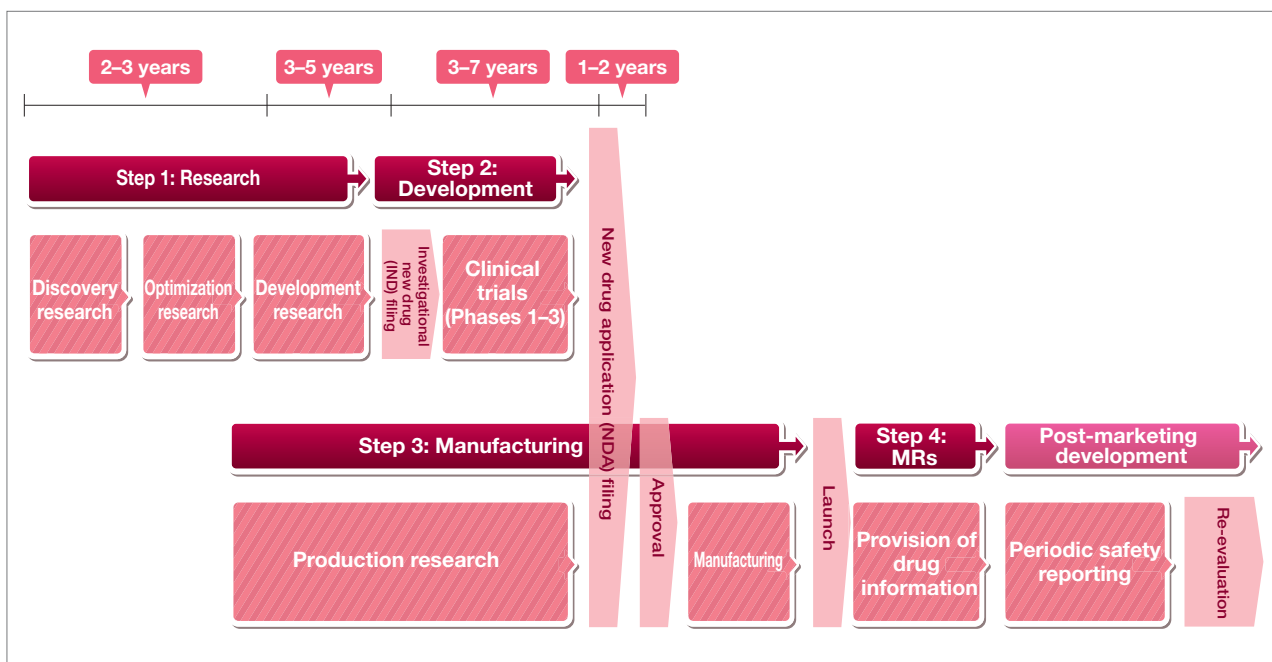
## Challenges in Achieving Compliance and Future Actions

We conduct compliance interviews and surveys to assess the effectiveness of past compliance programs in establishing a compliance culture and to better understand the problems facing different workplaces and staff needs. Our surveys have revealed that the level of understanding varies from division to division and we view this as a problem. We will continue our efforts to improve communications between the compliance promotion section at headquarters and staff working in other operations of the company.

# Product Liability

A great deal of time and procedures are required before pharmaceuticals are ready for patients to use them. The process begins with drug research aimed at identifying pharmaceutical sources. This is followed by steps such as evaluations via animal testing and confirmation of efficacy via clinical research. Each process involves analyses using the latest science and technologies. We are permitted to manufacture and market a pharmaceutical product only when the test data on its efficacy, safety, specifications and manufacturing method are evaluated and deemed effective by the government. Unexpected side-effects and other such factors not identified in the commercialization process could be revealed after a product is released, so we are required to collect safety information on products even after placing them on the market.

The product liability of Astellas begins with collection of correct test data, using appropriate methods, and fair evaluations of those data aimed at ensuring the reliability of all processes. Ensuring the stable quality of our products is also an important responsibility. We need to collect information on adverse effects and quality problems and issue warnings and appropriate information to medical professionals. Moreover, we are tasked with the important duty of reflecting requests from patients and medical professionals in product improvements and development of further new products.



Drug development can be broadly divided into four processes. The first step is research, and involves the discovery of a substance with the potential to become a drug and further investigation until it is considered appropriate for human administration. The next step is development, whereby clinical trials are run to test it in humans. This is followed by the manufacturing of the drug at a factory. Finally, activities by our medical representatives (MRs) include collection and provision of information on appropriate drug usage and further development of the product.

## Initiatives for Ensuring Reliability

Analysis of the safety and efficacy of pharmaceuticals requires a system and methods that comply with laws and guidelines. When manufacturing products, it is mandatory to ensure stable quality by following specified standards and conducting safety management of products after marketing them. Our research, development, manufacturing, and other related departments set out specific procedures for complying with these laws and guidelines. Complying with the procedures and accumulating correct records are essential for ensuring reliability of research and test data. Reliability, however, cannot be achieved unless there is objective confirmation and evaluation of these records' compliance and accuracy.

To ensure reliability, it is also important to collect and evaluate information on the efficacy and safety of our products and provide medical professionals with the information they need to appropriately use the products.

At Astellas, functions for ensuring reliability from research and development to post-marketing stages are centralized at a single department. We have, in other words, established a system to achieve consistent reliability at all stages, including research and development, production, and post-marketing research. We ensure the efficacy, safety, and reliability of our pharmaceutical products by auditing test and research facilities, checking records and other documents, and collaborating closely with regulatory authorities, medical professionals and other relevant parties in sharing information and accurately identifying risks.

# Ethical Considerations in R&D

A range of scientific principles and technologies are applied in the research and development stage. Research using human tissue, clinical trials, and animal testing require ethical considerations as well as reliability.

## ■ Human genetic research

We have established an Ethics Review Board on Human Tissue Research, based primarily on the Ethics Guidelines for Human Genome/Gene Analysis Research issued by the Japanese government. This committee, which is made up of members of the general public and experts in various fields such as ethics, law, and the natural sciences, deliberates on the ethical acceptability of research on human genome and tissue samples.

## ■ Human rights in clinical research

Personal information and the human rights of patients must be protected when conducting clinical trials. Likewise, drug safety and data reliability must be assured. Therefore, we have established an in-house Institutional Board, which includes outside doctors and lawyers. The board checks and monitors the ethical and scientific appropriateness of clinical trial plans.

## ■ Animal testing

Under the current laws and with the current science and technologies, research into pharmaceuticals requires experimentation on animals. Therefore, we have set policies on animal testing that balance scientific and animal welfare perspectives. We have also established the IACUC (Institutional Animal Care and Use Committee), which determines whether to conduct animal testing by strictly evaluating the possibility of substituting with non-animal tests, reduction of the number of animals used, elimination of animal suffering and improvement of breeding environments, as well as accountability in conducting tests on the global basis.

# Efforts to Improve Product Convenience and Encourage Proper Use

It goes without saying that drugs must be effective and have a good safety profile, but many patients also want drugs that are easy to take and easy to handle. Tablets and capsules are, for instance, difficult to take if they are too large, and hard to handle if they are too small. The balance of size and shape therefore needs to be considered. By applying our proprietary technologies, we have developed tablets that quickly dissolve even in a small amount of water. Our efforts also consider size and shape in light of opinions from medical professionals.

Before drugs are prescribed to patients in a clinical setting, the drug name, dosage, administration route and many other points are checked to prevent prescription of wrong drugs and wrong usage. Patients also feel more secure if they can easily confirm the name of the drug and the manufacturer before taking it.

We are working to make drugs easier to handle, so that we can enhance safety and reduce the burden on doctors, nurses, and pharmacists when performing those checks. For example, we make the markings on drug packaging easier to understand and mark product names directly onto tablets.

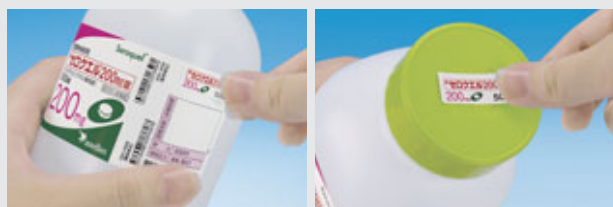
The name of our muscle relaxant, *Succin*, resembled *Saxizon*, an adrenal corticosteroid from another company. This caused an incorrect prescription which resulted in a medical accident. We therefore changed the product name of the muscle relaxant to *Suxamethonium Injection* after studying measures for preventing medical accidents and consulting with relevant organizations.

## ■ Orally disintegrating tablets quickly dissolve in water



The tablet (left photograph) disintegrates after 10–20 seconds (right photograph)

We have introduced a label with a detachable segment indicating the drug name. The segment can be attached to the upper surface of the bottle cap, allowing pharmacists to easily identify the drug by glancing at the top of the bottle cap.



## Providing Information to Medical Professionals

Pharmaceuticals are valuable only to the extent that medical professionals are provided with information on their use, efficacy and safety, and other information required for proper use. Provision of appropriate information on products to medical professionals is therefore an important aspect of product liability at Astellas.

Our medical representatives (MRs) provide medical professionals with technical information, not only about the beneficial aspects of our products, but about the risks as well, so that they may be used properly. MRs also play a role in collecting information on drug efficacy and safety of actual prescriptions; information that cannot be obtained during the R&D phase. They also provide medical institutions with evaluations based

on the results of this effort. Our Drug Information (DI) Center handles inquiries about the safety, effectiveness and efficacy of our products. The DI Center also provides our sales departments with feedback received when handling these inquiries, which is used in ways such as improving our products. In fiscal 2009, the DI Center received a total of 79,598 inquiries about pharmaceuticals.

Our website includes Astellas Medical Net, which provides information for medical professionals in Japan. The site also provides explanations on diseases and other information for general consumers.



## Information on adverse effects

Information concerning adverse effects of pharmaceuticals is reported by medical institutions and companies, collected and sorted out via research by groups such as the Pharmaceuticals and Medical Devices Agency. The information provides a basis for us to revise precautions and other materials included with our products to further assure safe use. In fiscal 2009, we made 59 revisions to our precautions.

Information on adverse effects that immediately needs to be distributed to medical institutions is distributed by the pharmaceutical company as urgent safety information (doctor's letter). In fiscal 2009, no urgent safety information was distributed regarding Astellas products.

## Product recalls

We may voluntarily recall our products being distributed depending on the level of a quality problem or adverse effect. Voluntary recalls are undertaken based on three levels of severity ranging from Class I (use of the product may result in a serious health hazard or death) to Class III (use of the product is unlikely to cause a health hazard). Recalls may also be ordered by a state or prefectural government.

In fiscal 2009, we undertook no voluntary recalls and had no recalls ordered by the government.

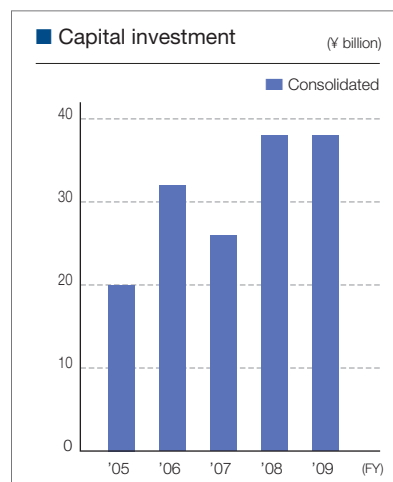
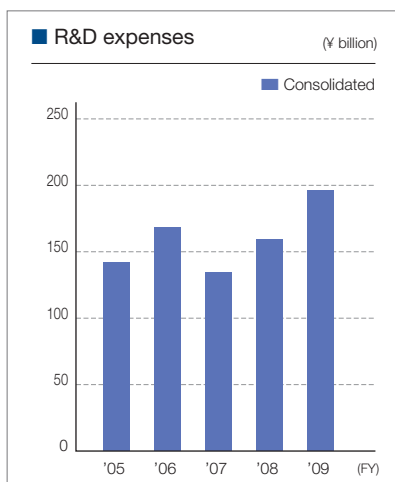
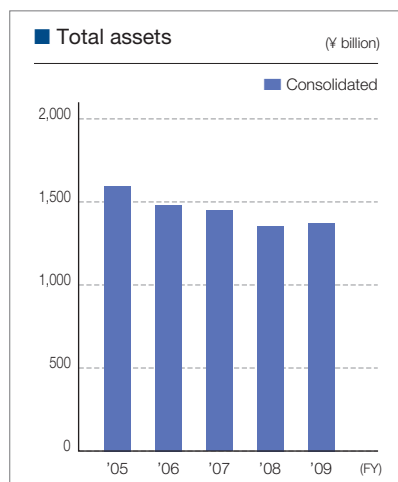
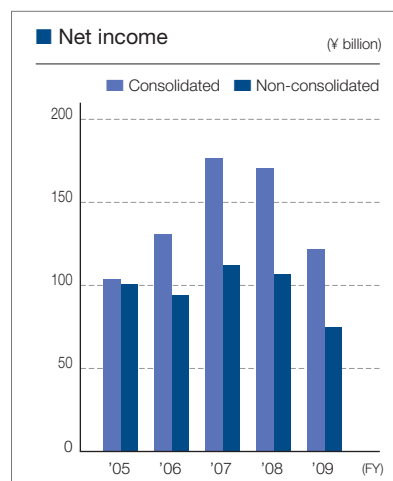
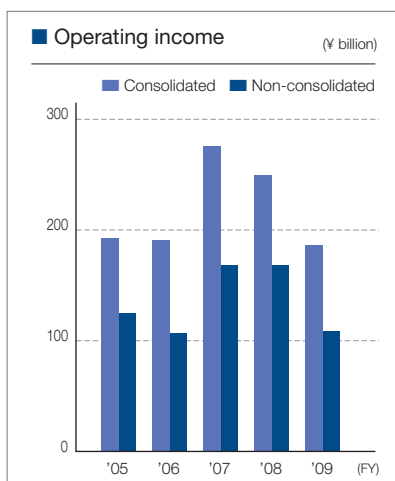
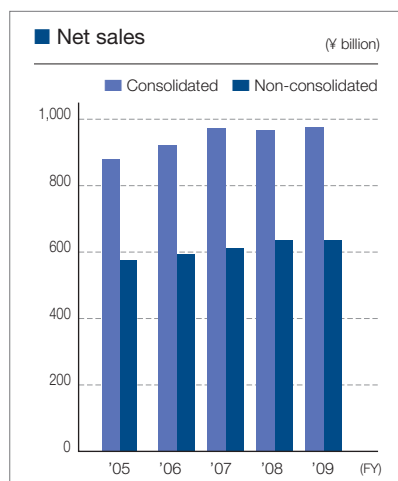


# Major Performance Indicators

## Corporate Profile

**Company Name:** Astellas Pharma Inc.  
**Headquarters:** 2-3-11, Nihonbashi-Honcho, Chuo-Ku,  
 Tokyo 103-8411, Japan  
**Foundation:** 1923  
**Capital:** 103 billion yen (March 31, 2010)

**Representative Director:** Masafumi Nogimori (President and Chief Executive Officer)  
**Employees:** 15,161 (consolidated basis as of March 31, 2010)  
**Business Description:** Manufacturing, marketing and import/export of pharmaceuticals



	FY2005	FY2006	FY2007	FY2008	FY2009
ROE	8.8%	11.3%	16.1%	16.0%	11.7%
DOE	3.3%	3.7%	5.0%	5.4%	5.6%
Dividend per share	¥70	¥80	¥110	¥120	¥125
EPS	¥184	¥244	¥350	¥356	¥262

# Management Organization

## Corporate Governance

Our corporate mission is to provide added value for people seeking to improve their health. We have put into place corporate governance systems as part of our management focus on ensuring business transparency and improving social accountability.

Astellas employs a corporate officer system to achieve a clear separation between the strategic decision-making and operational supervision function of management, performed by the Company’s directors, and the execution of day-to-day operational decisions, carried out by the corporate officers. The

Board of Directors consists of seven members, of whom four are outside directors, bringing a broader perspective to their decision-making and ensuring independence in their operational oversight.

We also have a Board of Auditors, consisting of four statutory auditors of whom two are outside auditors. The Board of Directors has the Nomination Committee and Compensation Committee as advisory councils that decide on issues related to compensation and personnel for members of the Board, corporate auditors, and executive officers.

## Executive Committees

■ Astellas has established the following committees that discuss and decide on key issues.

Committee	Role	Chair
Global Management Committee	Discusses key business and product strategy issues involving R&D, technology, sales, etc.	President
Finance, Accounting, and Administration Committee	Discusses accounting issues such as budgeting and asset elimination/disposal, and business management issues such as basic strategy on domestic Group governance and items for decision at the General Shareholders meeting	Executive Vice-President
Personnel Committee	Discusses executive officer appointments/dismissals, promotions/demotions: divisional head appointments, successor training plans; performance evaluations and work assessments. Also decides on accreditation of highly specialist roles and appointments of Group company presidents.	President
CSR Committee	Discusses CSR activities of the entire Astellas Group	President
Compliance Committee	Discusses key compliance issues as well as compliance policy and planning across the entire Astellas Group	Chief Compliance Executive
Risk Management Committee	Discusses key policies and measures to better manage risk	Risk Management Executive
IR Committee	Discusses IR policy and planning, sets and updates disclosure policy	IR Executive

## Internal Controls on Financial Reporting

Astellas undertakes and assesses its internal controls on financial reporting in compliance with the Standards for Management Assessment and Audit Concerning Internal Control over Financial Reporting and the Standards and Practice Standards for Management Assessment and Audit Concerning Internal Control over Financial Reporting, by the Business Accounting Council.

When performing an assessment, we look at Companywide internal controls that could have a major impact on overall financial reporting. On the basis of these results, we then

select operational processes for assessment. Having analyzed these processes, we identify key points of, and assess operation processes of, internal control procedures for which poor performance could severely impact the reliability of financial reporting.

The President, who is ultimately responsible for internal controls, and the finance officer as the President’s proxy, direct and supervise the processes of improvement and operation of internal controls to ensure their effectiveness.

## Risk Management

Business operations involve numerous risks. Risk management is a method of management that assuredly reduces these risks. Strengthening of risk management is critically important for ensuring a company's sustainable growth.

Astellas has a Risk Management Committee that appropriately

handles operational risks and discusses the management of major disasters, as well as issues on information security, business continuity plans (BCPs), and pandemics. The Committee is also responsible for educating executives and employees and handling evident risks.

### ■ Responding to emergencies

We have created a manual for dealing with emergency situations to illustrate by example how headquarters would respond to possible emergencies in the event of risks from natural disaster (earthquake, typhoon, or flood damage), individual acts, or social circumstances. Each facility is preparing a manual on detailed emergency procedures, with reference to the headquarters manual.

For a major earthquake in Japan, we have defined specific

standards for how employees should respond assuming certain principles of action (ensure personal safety → confirm safety of family → contact company) and have distributed a "disaster card" describing these procedures. We have introduced the Astellas Disaster Message Board, which can be accessed by cell phone or other devices, to facilitate communication with the Company during a disaster.

### ■ Disaster prevention

Prevention of accidents and preparation for natural disasters are among the most important risk management measures. Astellas prioritizes risks to respond to through training and risk assessment that assumes accidents or fires, and has undertaken

seismic reinforcement of our buildings. In Japan, we have also introduced earthquake early-warning systems at our headquarters, plants, research laboratories, and training centers in order to prepare for major earthquakes.

### ■ Business continuity plan (BCP)

When our main facilities are hit by a disaster, we may be forced to suspend business, which could expand the impact of the disaster on society and the economy. Our daily operations could also be hampered by, for instance, a pandemic. Therefore, we have defined BCP guidelines to determine how operations can be maintained, and how to resume suspended operations in as

short a period as possible if Astellas businesses were affected by an accident or disaster. The guidelines define a predetermined priority order for operations that need to be maintained and provide standards illustrating specific procedures for operational substitution or restoration.

#### ■ Basic view on priorities in the event of a major natural disaster

##### 1 Highest priority

■ Ensuring the safety of all employees and their families

##### 2 Next priorities

- Supplying pharmaceuticals and providing reliable information
- Supporting the reconstruction of areas affected by the disaster and the rehabilitation of business partners requiring assistance.
- Securing accumulated management resources

### ■ Information security

Appropriate management of information assets is important for preventing loss of public confidence, suspension of business operations, and loss of Company assets. We have established an Information Security Policy to ensure that Astellas employees understand the importance of protecting the Company's information assets and take responsibility for maintaining systems that allow the confidential use of information. Above all, the risk of abuse of personal information has been greatly increasing in today's advanced information and telecommunications society.

It is therefore becoming increasingly important to ensure appropriate handling of personal information. To that end, we have undertaken measures such as the appointment of personal information protection managers and the establishment of points of contact to handle enquiries. We have also created a personal information protection manual in a readily portable summary format and distributed this to all our employees to remind them of the potential problems associated with personal information.

# Human Resources Management System and Welfare Program

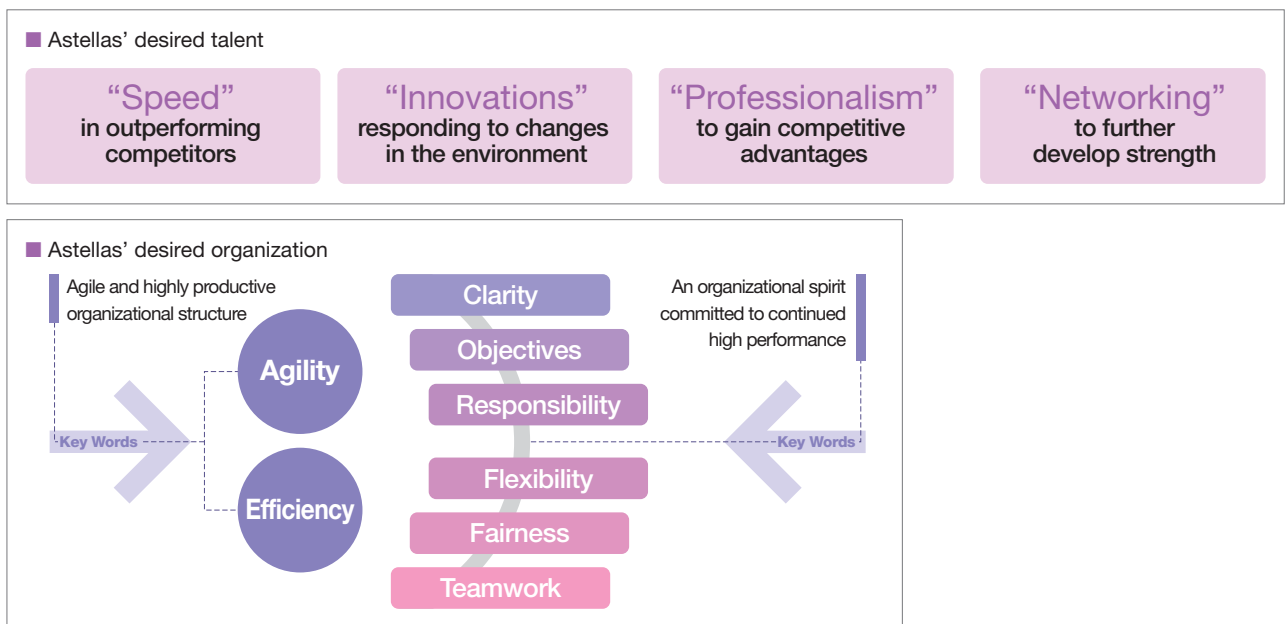
Astellas organizes its CSR activities into five fields (the environment, employees, society, the economy, and compliance) to advance CSR-based management. Separating the field of employees from that of society, and making it a field of its own is the most distinctive part of Astellas' CSR-based management philosophy. These embody the idea that employees, as the driving force of corporate activities, are the important stakeholders of a company, and one of the company's objectives is to provide them with benefits and welfare systems. Astellas CSR management also incorporates our desire to be a company that deeply values its employees.

Based on this stance we strive to enrich our human resources and work to provide an HR management, training, and welfare and benefits system targeted at raising employee satisfaction. Furthermore, by respecting employees' individual rights and characteristics, we provide a safe, discrimination-free workplace.

## Human Resources and the Organization

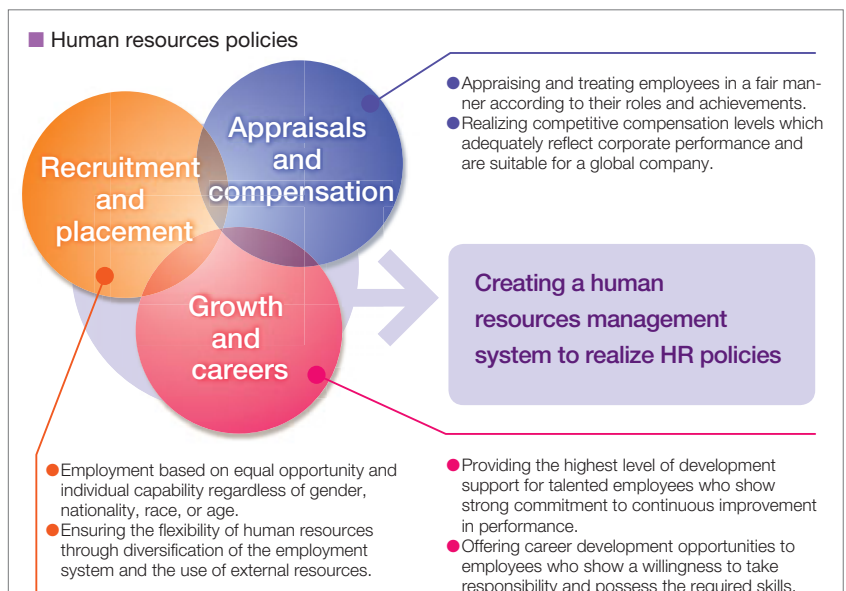
### Human Resources Vision

Through its human resources vision, Astellas has clarified its employees' desired talents and its desired organizational features.



### Human Resources Policies

We believe that the human resource management system at Astellas should be attractive to potential employees who demonstrate excellence in their field, and should also create an environment that enables our talented employees to tackle greater challenges. This requires that both our organization and employees are willing to change themselves and the Company without adhering to precedents and have sufficient courage to change existing systems and structures. Human resource management systems must keep evolving while being interrelated and kept consistent with one another. For this reason, the policies for operating these human resource management systems must be clarified, and appropriate systems put in place.



## Where Our Employees Work

### Number of employees by country/region

	FY2008	FY2009
Japan	7,654	7,979
Europe	2,318	2,375
Americas	3,390	3,775
Asia	1,031	1,151
Total	14,393	15,280

Note: Temporary staff is excluded. "Japan" includes employees dispatched overseas and to other organizations, temporary workers on assignment and part-timers. Not applicable for other categories.

### Employees in Japan

The table below shows the categories of Astellas employees in Japan, which demonstrates the diversification of employment patterns. At group companies in particular, non-regular employees constitute over 30% of the workforce. There are differences in the human resource management systems applied due to the variety of employment patterns, but health, safety, and compliance-related activities, such as providing training opportunities, are implemented universally regardless of employment type.

		FY2008			FY2009		
		Total	Male	Female	Total	Male	Female
Astellas Pharma	Full-time employees	5,473	4,649	824	5,576	4,689	887
	Middle management staff or above	1,934	1,895	39	2,021	1,972	49
	Other full-time employees	3,539	2,754	785	3,555	2,717	838
	Other staff	92	73	19	92	78	14
	Temporary staff	405	40	365	430	46	384
	Total	5,970	4,762	1,208	6,098	4,813	1,285
Group companies	Full-time employees	1,716	1,030	686	1,882	1,116	766
	Middle management staff or above	357	332	25	379	345	34
	Other full-time employees	1,359	698	661	1,503	771	732
	Other staff	373	81	292	429	110	319
	Temporary staff	451	96	355	409	115	294
	Total	2,540	1,207	1,333	2,720	1,341	1,379

Note: Figures include staff seconded to other companies or institutions. Additionally, figures for other staff include workers with fixed-term contracts and part-timers.

### Length of service, average age, and number of employees who left the company (Japan)

		FY2008			FY2009		
		Total	Male	Female	Total	Male	Female
Length of service	Astellas Pharma	15.4	15.8	12.9	15.5	16.0	12.5
	Group companies	22.0	23.5	19.8	20.1	21.5	18.0
	Average	17.0	17.2	16.0	16.6	17.1	15.1
Average age	Astellas Pharma	40.1	41.0	36.4	40.5	41.3	36.2
	Group companies	44.6	46.1	42.3	44.0	45.2	42.1
	Average	41.3	41.9	39.1	41.4	42.0	39.0
Number of employees who left the company	Astellas Pharma	113	77	36	115	91	24
	Group companies	50	25	25	47	28	19
	Total	163	102	61	162	119	43

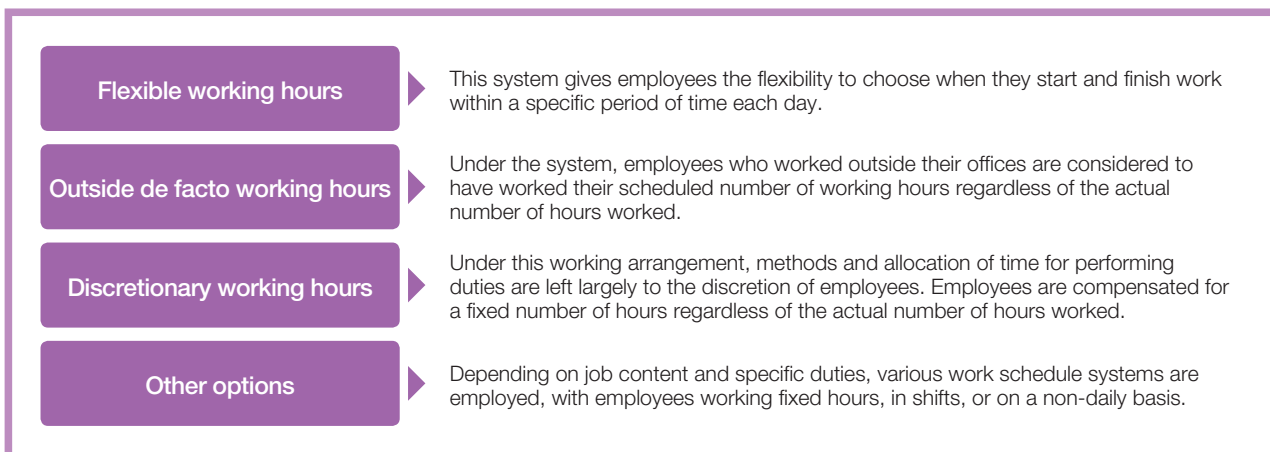
\*Number of retirees is not included in number of employees who left the company.

### Number of full-time employees (Japan)

		FY2008			FY2009		
		Total	Male	Female	Total	Male	Female
Astellas Pharma	New graduates	120	73	47	183	104	79
	Mid-career hires	80	70	10	76	59	17
Group companies	New graduates	0	0	0	25	13	12
	Mid-career hires	119	64	55	192	98	94

## Work Schedule Systems (Japan)

Evaluation of each employee's role and performance is the foundation of the Astellas human resources management system, and we have introduced a work time system that supports a variety of working styles and gives employees discretion to set working hours to suit their professional duties.



### ■ Number of regular employees under each work schedule system

		FY2008			FY2009		
		Total	Male	Female	Total	Male	Female
Astellas Pharma	Flexible working hours	431	113	318	432	123	309
	Discretionary working hours	1,210	908	302	1,214	891	323
	Outside de facto working hours	1,809	1,649	160	1,833	1,632	201
	Other options	161	156	5	151	143	8
Group companies	Flexible working hours	859	449	410	886	463	423
	Other options	503	252	251	620	311	309

# Creating the Ideal Workplace – Initiatives Taken in Japan –

The work-life balance is a virtuous circle of satisfying work and a fulfilling private life. An important mission of the Company is ensuring the work-life balance of its employees, since this leads to sustainable growth. It also helps to fulfill our corporate social responsibility. We have created an environment and a variety of programs that help our employees balance their work and family lives to enable them to work with vigor at various stages in their lives. These efforts work toward the goal of creating ideal working environments where all employees can concentrate on their work with a sense of security.

The development and effective use of human resources is also a part our management strategy. We therefore promote development of human resources who can work globally and contribute to the growth of Astellas. We also promote diversity among employees, which leads to the creation of new sets of values and to business innovation.

We will continue to undertake a range of initiatives by focusing on the themes of the work-life balance and diversity.

## Efforts for Reducing Working Hours

### Action plan

#### 1 Having no employee work longer than the hours stipulated in the government standards for excess monthly hours

- No employee should work overtime in excess of 100 hours/month; the upper limit for sound health management.
- No employee's specified overtime work should reach 60 hours/month for two consecutive months.

#### 2 Ensuring at least 50% of due paid annual leave is taken

### Shortening actual time worked

Since our establishment in 2005, in pursuit of productivity improvement and work-life balance we at Astellas have reviewed the ways in which our employees work. The programs we have introduced include selectable summer holiday periods and shorter, flexible working hours. We strive to decrease scheduled working hours, and in FY2009 we shortened this time from 8 hours/day to 7 hours and 45 minutes. At the same time, we judged that shortening working hours by 1 hour and 45 minutes (105 minutes) on Friday, instead of 15 minutes each day, would allow our employees to more flexibly use their time.

We therefore instituted this 105-minute adjustment and called it Family Friday (FFDay). This system, however, does not suit the sales and manufacturing divisions, so employees at those divisions are allowed to use the system flexibly in accordance with their jobs. We expect that the shorter scheduled working hours will result in less actual time worked, but that the increased time for boosting health, self-development, family enjoyment, and closer relationships with local communities will lead to employees' development and growth.

### Prevention of overwork

To prevent issues with health associated with prolonged work, we have developed action plans for preventing excessive overtime. In fiscal 2009, we conducted the Campaign for Appropriate Working Hours. The measures we took in this Campaign included reducing the number of employees who consistently work long hours, encouraging employees to take paid annual leave, and strengthening our management of working hours.

As a system for managing working hours, we introduced the Overwork Prevention System. Under this system, we monitor the number of hours worked by employees and the number of hours they are working outside the office, including travel time for business trips, as health management time. It is mandatory for employees to consult with our industrial physician when

their working hours exceed our internal standard. We have also established a system under which inquiries are made to immediate managers when late-night or holiday work is required, and adjustments to operations are made as necessary. Looking ahead, we aim to track and analyze the data on overtime for each year.

As a measure for promoting the use of paid leave, we encourage our employees to go about this a planned manner by registering the paid leave they plan to take in each quarter. In fiscal 2009, however, the utilization rate of paid leave was lower than it was in the previous year for both Astellas Pharma Inc. and its Group companies in Japan. We therefore need to take further action in the future.

#### Utilization rate of paid leave

		FY2008	FY2009
Astellas Pharma	Utilization rate	49.0%	42.8%
	Average number of holidays taken	9.6	8.3
Group companies	Utilization rate	71.7%	63.7%
	Average number of holidays taken	13.7	12.3

# Human Resources Management System and Welfare Program

## Increasing Active Roles of Women in the Workforce

Diversity among human resources includes differing ethnic groups, nationalities, genders, and ages. Astellas launched its diverse human resource initiatives by first considering the active roles of women in the workforce. We must change our corporate culture and employee awareness to enable women to more completely utilize their abilities at work. We also have to overcome issues that make it more difficult people from diverse backgrounds to demonstrate their abilities. We believe these initiatives will help Astellas strengthen its overall competitiveness. To this end we have established a diversity promotion office, which works to raise awareness among employees, managers,

and women themselves, and we are reforming our business process and the structures and operations of our human resource management systems.

The number of female employees at Astellas who are at middle management level or above has been increasing; as of FY2009, the number was 83, up 19 from the previous year.

In FY2008 we also introduced a system to bring sales personnel closer to their spouses if they work far away from home. Under this system, sales personnel planning to marry another full-time employee of Astellas, or another employer, are dispatched to work in areas where they can live with their spouse.

■ Number of employees who utilized the system for helping sales personnel live with their spouse when they get married

	FY2008	FY2009
Male	7	8
Female	5	9

## Child-raising Support

Our society is facing a substantially declining birth rate, and we need to support families raising children and promote the creation of an environment with far fewer barriers. Companies, too, are required to take initiatives for a harmonious balance between work and child care. Astellas has introduced a variety of programs to support our employees' child care.

Program		FY2008	FY2009
Maternity care leave	Employees	1	5
Maternity leave	Employees	78	78
Child-care leave	Employees (female)	87	115
	Employees (male)	1	3
	Average days used (female)	374	329
	Average days used (male)	—	23
Shorter working hours for child raising	Employees	53	65
	Average days used	404	522
Special leave	Employees	440	564
Financial assistance for daycare when returning to work after maternity/child-care leave	Employees	—	2
Paid leave for employees returning to work after maternity/child-care leave	Employees	—	16
	Average days taken	—	8.5

Note: The number of users indicates those who used the system in fiscal 2009. This figure excludes cases where the term of leave was not completed by the end of fiscal 2009. In other words, it is limited to cases which ended within fiscal 2009.

Program	Details
Maternity care leave	Units of leave from two weeks to three months can be taken when work is not possible due to pregnancy complications such as morning sickness or the danger of miscarriage or when leave is necessary for preventing these problems, or recovering from injury caused by still birth or miscarriage which took place before the fourth month of pregnancy. This leave may be taken multiple times.
Maternity leave	Leave may be taken by employees who are expecting to give birth within six weeks (14 weeks in the case of multiple births), and within eight weeks following birth.
Child-care leave	Employees are entitled to take leave twice before their children reach three years of age.
Shorter working hours for child raising	Employees with children who have not yet begun the fourth year of elementary school may shorten their working hours (by one or two hours a day). Use of this option together with the flex-time system gives employees more flexibility to select working hours that suit them best.
Special leave	In the event that an employee's child, spouse, or parent suffers injury or illness, the employee is allowed up to five days per year of special leave — separate from the normal annual leave allowance — to allow him/her to care for the indisposed family member. In April 2010, in line with an amendment of the relevant law, up to 10 days of leave became available for employees with two or more children.
Financial assistance for daycare	This program aims to assist our child-raising full-time employees who have working spouses or who are single parents, when they wish to return to work after maternity or child-care leave. It is also available for full-time employees who have children under three years old and have to move to other areas due to transfer. Financial assistance is provided to such employees if their children are not admitted to authorized nurseries and the monthly cost of daycare, such as babysitter fees, exceeds the specified amount (¥80,000/month). The amount of financial assistance equals the excess of the monthly cost over the said specified amount. Assistance is available for up to six months.
Paid leave for supporting employees who return to work after maternity/child-care leave	This program is aimed at reducing the burden on full-time employees returning to work after maternity or child-care leave, and helping them balance their work and child-care needs. Up to 10 days of annual paid leave is granted to these employees as long as the remaining period of paid leave does not exceed 40 days.



## Nursing-care Support

We support our employees with family members who need nursing care, whenever necessary in our employees' life stages, and not limited to child-care periods.

		FY2008	FY2009
Nursing care leave	Employees	1	2
	Average days used	5	121
Shorter working hours for nursing care	Employees	0	0
	Average hours used	0	0

Note: The number of users indicates those who used the system in fiscal 2009. This figure excludes cases where the term of leave was not completed by the end of fiscal 2009. In other words, it is limited to cases which ended within fiscal 2009.

Program	Details
Nursing care leave	Astellas has introduced a nursing leave system where employees can take time off (up to a year) to help take care of family members at home. The leave may be taken in intervals.
Shorter working hours for nursing care	Employees caring for family members in need of nursing care can benefit from reduced working hours for the duration of the nursing care. Working hours may be shortened by 25% of monthly working hours (combined total of working-hour cuts of one hour, two hours, half a day, or a full day). Employees may use this program multiple times. They may also use this option together with flexible working hours.

## Work-at-home Program (Introduced in FY2009)

This program is aimed at helping our employees maintain a balance between work and dealing with major events in their lives (child-care, nursing care of family members, and injuries). Its fundamental objective is establishing win-win relationships between employees and the Company, and maintaining and improving our business performance. Under the program, the Company permits employees to work at home for all or part of their scheduled working hours, in consideration of each applicant's purpose, job content, quality, frequency of utilization of this program and desired period.

### ■ Number of employees who utilized the work-at-home program

Company	FY2009		
	Total	Male	Female
Astellas Pharma	74	45	29
Group companies	2	0	2
Total	76	45	31

## Registration for Reemployment

Regular employees who had to give up their jobs due to responsibilities involving child raising, nursing care for family members or the transfer of a spouse to a new work location, can now register for reemployment under this system. These individuals will be given preference when hiring is necessary.

### ■ Registrations for Reemployment

	FY2008	FY2009
New registrants	22	13
Those reemployed	0	2

## Systems for Supporting Volunteering

We have introduced systems for supporting employees who voluntarily contribute to society (volunteering).

Our volunteer leave system allows for up to five days of leave to be taken each year, to support participation in activities in social welfare, environmental protection, disaster relief, and international cooperation, and for the acquisition of knowledge and technical skills necessary for volunteer activities. The volunteer

leave system can also be used to take leave of absence of up to three years.

The bone marrow donor special leave program reflects our respect of employees' wishes to donate their bone marrow. The system lets employees take special leave to register and donate.

### ■ Number of employees using volunteer leave system

	FY2008	FY2009
Volunteer leave	0	2
Bone marrow donor special leave	3	3

## Employment of the Elderly

Against the backdrop of a low birth rate and the rising average age of the population, in addition to a higher age for initial pension payments, we believe it is important to provide a place of work for employees over the age of 60 who meet our criteria and who have specialist abilities and knowledge. Astellas has introduced an extended employment system that allows all

employees who meet our criteria to continue working on a yearly contract basis. In fiscal 2008, 54 employees made use of the extended employment system. In FY2009, the system was used by 28 employees who newly became eligible for it during the year. Of employees reaching retirement, 32.9% worked beyond retirement age.

### ■ Employment of the elderly

		FY2008	FY2009
Number of retired employees	Astellas Pharma	30	44
	Group companies in Japan	32	41
	Total	62	85
Number of employees who reached the mandatory retirement age in the year and used the extended employment system	Astellas Pharma	13	15
	Group companies in Japan	11	13
	Total	24	28
Rate of extended employment	Astellas Pharma	43.3%	34.1%
	Group companies in Japan	34.4%	31.7%
	Average	38.7%	32.9%

## Employment of Disabled Persons

In fiscal 2009, disabled employees accounted for only 1.79% of our workforce. We will strive to develop duties suitable for such workers while providing them with appropriate working environments, and take specific measures for achieving the entire Astellas Group's target of having disabled persons account for 2.0% of our workforce.

### ■ Percentage of disabled employees

FY2005	FY2006	FY2007	FY2008	FY2009	Target	Legally required level
1.86%	1.81%	1.78%	1.84%	1.79%	2.00%	1.8%

## Health Management

It is crucially important for employees to be able to carry out their duties in a comfortable workplace and in a state of good physical and mental health, not only for the employees themselves, but also for the company. Astellas is committed to taking health improvement measures in collaboration with its employees and labor union, as well as health insurers, in order to help its employees maintain physical and mental fitness.

### Medical checkups

To comply with legal requirements for general health examinations, Astellas provides regular checkups for employees up to the age of 35, and in association with the Company's health insurance union, it provides a more complete series of examinations designed for the middle-aged to verify that those 35 and older are in the best of health. Along with checkups at the time of employment and checkups for employees being assigned overseas, we offer voluntary examinations that are not legally required.

Legally required checkups include special health examinations for employees who handle organic solvents, specific chemical substances, acids, or are exposed to ionized radiation. Astellas also provides checkups that are not legally required, including

special biosafety health examinations for those who handle pathogens or clinical materials and special health examinations for those who handle laboratory animals.

In FY2009, 97.9% of our employees under 40 received regular checkups (some were on leave due to injury/illness or on maternity/child-care leave), and 99.8% of those over 40 received examinations designed for the middle-aged. A total of 43.0% received voluntary examinations and 100% received special health examinations.

We have also strengthened follow-up measures after health examinations. For employees with hypertension and diabetes in particular, we encourage early treatment under the Astellas Follow-up Standards established in FY2009.

### Mental health care

Because mental health problems can be caused by a number of factors, such as occupational stress, we must make an ongoing effort as an organization to alleviate these factors.

We implemented a mental health checkup with self-evaluation at a dedicated website. We also provide counseling by internal psychiatrists and mental health care through the independent Employee Assistance Program (EAP). Moreover, we held a labor-management mental health subcommittee meeting for both employees and management to collaborate in the promotion of various measures.

### No-smoking promotion

At Astellas, we launched initiatives for reducing damage to human health from cigarette smoke and passive smoking. We have run no-smoking campaigns since October 2008, and implemented a total ban on smoking indoors. In April 2010, we further expanded our no-smoking area to our entire premises.

### Health enhancement program

In FY2009, the health insurance union of Astellas began running a health enhancement program. Program participants choose from three courses — walking, stopping smoking, and losing weight. Total participants in the year numbered 1,404.

## Sickness and Injury Leave, and Allowances

### Additional recovery leave

If required for full recuperation, the employee is allowed to take an additional 30 working days of leave for a sickness or injury, in hospital or at home, following the standard one-month recovery leave.

	FY2008	FY2009
Number of users	48	38

In addition to recovery leave, Astellas offers systems for supporting employees in the event of disease, accident, or other unforeseeable circumstances, including medical treatment benefits provided by Kyosaikai (a mutual aid association for regular employees) and income indemnity insurance for employees with long-term disabilities — a group insurance feature.

# Social Activities

Companies, as members of society, must maintain a sound, reciprocal relationship with other members while pursuing the sustainability of society as a whole. By incorporating society's needs and values, and the issues it faces, into our corporate activities, we work to propose ways of creating new added value for society. At the same time, we disclose information about our corporate activities and fulfill our duty of accountability to our stakeholders.

## CSR-based Procurement

To ensure procurement activities based on compliance, we at Astellas have established a basic policy for procurement activities involving suppliers in order to build relationships of mutual trust with suppliers as our business partners. We also undertake measures for CSR procurement (seeking suppliers' cooperation with our CSR activities) globally to build a sound network for business activities.

### Procurement initiatives

To carry out procurement activities in a fair and transparent manner, it is necessary for purchasing staff to comply with our basic policy for procurement activities involving suppliers as a code for self-regulation, and to conduct themselves according to the Purchasing Staff Code of Conduct, which embodies the basic policy. Astellas carries out internal audits and supplier surveys to monitor compliance with the basic policy for procurement

activities, and received responses from 193 companies in fiscal 2009. In the responses from suppliers on compliance with Astellas purchasing staff with the basic policy, "above average" was achieved in more than 94% of cases for all categories. We sincerely acknowledged problems pointed out in the survey and told related parties to act with care.

Basic policy for procurement activities involving suppliers	
<b>1 Comply with the law and corporate ethical standards</b>	Observe all laws and regulations, and act in accordance with prescribed social norms in a highly ethical manner.
<b>2 Maintain partnerships</b>	Respect all suppliers as important partners, maintain integrity in all dealings with them, and work to foster cooperative and reliable relations.
<b>3 Make selections based on economic rationality</b>	Select suppliers fairly and impartially, based on economic rationality, and ensure that these business relationships are transparent and appropriate.
<b>4 Practice fairness and impartiality</b>	Do not treat any particular supplier unfairly.
<b>5 Do not accept inappropriate payments</b>	Do not give or receive inappropriate gifts (money, physical objects, entertainment/wining and dining, and other benefits), exploiting a superior position or your purchasing authority. Such gifts are prohibited.
<b>6 Observe strict confidentiality</b>	Strictly observe the confidentiality of all information received from suppliers.
<b>7 Promote CSR procurement</b>	Conduct procurement activities with a CSR perspective, making sure that all suppliers observe laws and regulations and give consideration to environmental issues.

### CSR procurement initiatives

To carry out corporate activities with integrity, it is necessary to promote CSR by involving the entire network, including suppliers, as our important business partners, as well as to act on our own. To this end, Astellas sought suppliers' cooperation in CSR procurement and distributed a questionnaire to them based on the CSR procurement guiding principles below.

In Japan, we delivered the *Astellas CSR Procurement Guidebook* and the Questionnaire Regarding CSR Activities to approximately 400 companies, including our direct suppliers and major suppliers of indirect materials and equipment. We

also conducted similar surveys in North America, Europe, and China by sending questionnaires to a total of about 240 companies (including suppliers of direct and indirect materials). Their survey responses allowed us to confirm that all of our suppliers, including those overseas, are engaging in CSR activities.

CSR procurement guiding principles		
<b>I. Compliance with laws and promotion of CSR</b> <ul style="list-style-type: none"> <li>■ Compliance with relevant laws and rules</li> <li>■ Fair business operations based on ethical standards</li> <li>■ Maintenance of information security</li> <li>■ Encouragement and promotion of CSR activities</li> </ul>	<b>II. Respect for human rights and fair employment practices</b> <ul style="list-style-type: none"> <li>■ Respect for human rights and prohibition of child labor</li> <li>■ Employment consistent with labor-related laws</li> </ul> <b>III. Management of occupational health and safety practices</b> <ul style="list-style-type: none"> <li>■ Maintenance of a safe workplace environment, and the management of occupational health and safety practices</li> </ul>	<b>IV. Responsible environmental and sustainability-related practices</b> <ul style="list-style-type: none"> <li>■ Reduction of the global environmental impact, and contribution to sustainability</li> </ul> <b>V. Social contribution initiatives</b> <ul style="list-style-type: none"> <li>■ Participation in and support for social contribution activities</li> </ul>

# Social Contribution

Astellas' wish for health — for individuals, society and the Earth

If individuals and communities can work together as one, through these joint efforts we can change tomorrow. We are making continuous efforts to promote dialogue with communities.

In "Our Code of Conduct," Astellas declares its commitment to actively implementing social contribution initiatives as a good corporate citizen. In the five fields of CSR-based management, social contribution is positioned as a specific activity within society.

## Basic Philosophy on Social Contribution Activities

**1** Astellas aims to undertake social contribution activities which draw on its unique features as a pharmaceutical company, and pays attention to the sustainability of society as a whole. The Company expects that its activities are being well received by members of the local communities in which it operates, and are raising the motivation of its employees.

**2** As a pharmaceutical company, our approach will be to focus on distinctive activities that can be ongoing. We will not be offering something for everyone. Instead, we will put priority on activities related to our main or peripheral businesses, as well as activities that encourage the cultivation of ties with the local community, respond to requests from society, including the international community, or address humanitarian concerns. We aim to promote activities that reflect the distinctive features of Astellas and its values.

**3** We will proactively undertake social initiatives with a CSR focus after considering requests from the general public.

**4** In conducting social contribution activities, we will first give adequate consideration to any attendant risks, then make a selection and formulate the appropriate means for their implementation. In addition, we will conduct periodic reviews of these activities.

**5** To ensure the transparency of our social contribution activities we will make available information about these activities whenever possible.

**6** Individual employees may take part in social contribution activities on their own initiative. These volunteer activities are considered separate from company-sponsored activities, but Astellas provides support for them.

- Contribute toward improving the health of people around the world through the provision of innovative and reliable pharmaceutical products

- Sustainable enhancement of enterprise value

- Beliefs (high sense of ethics, customer focus, creativity, competitive focus)

Astellas proactively engages in social contribution activities as a good corporate citizen.

Astellas aims to be esteemed not only for its economic contribution but also for its social contributions and its sense of humanity.

Help promote a sustainable society by undertaking corporate activities that constitute a proactive response to social needs, personal values and pertinent social issues.



In Japan, we draw up an action plan every fiscal year based on our basic policy for social contribution activities, with the Company and employees collaborating on various initiatives. We focus on people's health and provide information for a range of parties and support their activities. In doing this, we evaluate the possibility of continuing each of our activities and determine whether there is a need to change direction or take a different approach as we strive to ensure continuous expansion and improvement of our social contribution activities.

In FY2009, to address the global issues detailed in the United Nations Millennium Development Goals (MDGs), we began supporting NGOs and NPOs that take initiatives to enable local people to achieve self-reliance in health and medical care. The birth center and health clinic we constructed and then donated to the village of Pontang Legon in Indonesia via Peoples Hope Japan (PH-Japan) is expected to help reduce the infant mortality rate and improve the health of pregnant and parturient women in the area. Our other measures are listed below. Details of these activities are available on the Astellas website.

### MDGs

The United Nations Millennium Development Goals are eight time-bound objectives addressing global issues including the eradication of extreme poverty and hunger, achievement of universal primary education, and halting the spread of HIV/AIDS. Nations around the world are taking various measures toward the 2015 MDG deadline.

Cooperation with society	Support for NPO/NGO activities	We supported the activities of PH-Japan in Indonesia and Doctors of the World in Angola.
Support for citizen health	Citizens' public lectures	We held the 5th Astellas Good Life Forum.
	Health support line	We are providing helpful information from specialists for those with concerns or questions about their health.
Donations and fund-raising activities	Radio programs on health information	We are using the media to provide accurate knowledge and useful information about health and illness.
	Starlight Partner Activities	We are supporting the independent activities of our patients from the sidelines.
	Flying Star Fund	We make a donation each year consisting of voluntary deposits made by employees and matching donations from the Company. In fiscal 2009, we donated seven wheelchair-compatible vehicles to social welfare facilities.
	Ambulance donations	We have been donating ambulances to local governments since 1970. In fiscal 2009 we donated four ambulances.
Support for scientific research	Disaster relief	We made disaster relief contributions for the Sumatra and Haiti earthquakes.
	Funding for the "Chemical Biology for Drug Discovery" course	Research we support includes development of theoretical bases for drug-discovery science based on genome science.
	Astellas Foundation for Research on Metabolic Disorders Astellas U.S. Foundation Astellas Europe Foundation	We are making contributions to the progress and development of medical science, pharmaceuticals, and other related natural sciences, global environmental protection, and regional development and welfare. We are also supporting the research of young scientists through grants, and contributing to learning through the establishment of an academic society prize.

# Communication with the Larger Community

Astellas believes that providing timely and appropriate information to the larger community and facilitating communication are important functions of CSR-based management. CSR-based management is more than a simple matter of taking initiative in the fulfillment of a company's social responsibilities. It is also crucial to ensure accountability for our activities, and to recognize any discrepancies between solutions to the challenges that society is facing and the initiatives that we are implementing, in order to keep improving our corporate activities. Astellas will continue to faithfully disclose information on the current state of its activities from a CSR perspective, and promote a fruitful dialogue with the greater community.

## ■ Briefing sessions for shareholders and individual investors

Astellas is proactively engaged in IR activities for the timely and appropriate disclosure of information. In December 2009, we held a briefing session for individual shareholders in the Kinki region, at which we explained our specific activities by providing a "Business Overview and Strategies of Astellas" and "CSR Management and the Astellas Brand." A vibrant question-and-answer session followed, with meaningful communication with shareholders. We also hold company information sessions for individual investors in other areas of Japan. We will continue to provide information to ensure even better communication with our shareholders and investors.

## ■ Interaction with the local community

As a "Good Corporate Citizen," Astellas undertakes a variety of activities to build strong ties with the local community. We conduct the following activities, taking into account the distinctive features of each facility and local area.

### ■ Japan

#### Cooperation with an science lab tour program for children organized by the Tsukuba Board of Education

As part of a science lab tour program for children organized by the Tsukuba Board of Education, we offered a tour of the Tsukuba Research Center. We first gave young visitors an easy-to-understand lecture on drugs, and after the tour we invited them to the laboratory where they helped out with protein concentration experiments.



Children learn about medical drugs

Tsukuba Research Center



Experiment after the tour

#### Soccer tournament and penalty kick contests

For children, the Takahagi Facilities and Toyama Plant hosted soccer tournaments and the Yaizu Technology Center and Fuji Plant organized penalty kick contests.



Takahagi Facilities



Yaizu Facilities

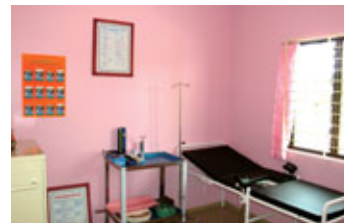
### ■ Overseas

#### Indonesia

Astellas constructed and donated a birth center and health clinic (Poskesdes) in Pontang Legon village, Indonesia in cooperation with PH-Japan, an NGO working on medical assistance programs in developing countries. At Poskesdes, trained midwives are on duty 24 hours a day to provide antenatal and post-maternal healthcare services as well as childbirth assistance.



Poskesdes birth center (overview)



Consultation room

#### United States

Our employees assembled 50 bicycles to contribute to the local community and donated them to children via a local charity organization. Employees also donated various goods to two charity organizations.



Employees assembling a bicycle for donation



## ■ Astellas website

Our Japanese website provides information about diseases and drugs to as many people as possible in order to strengthen trust in Astellas and increase familiarity with our operations and activities. Hoping to attract as many visitors as possible, we have made our website easier to use. We will continually add useful content and other features, putting the highest priority on accessibility.

### Informative illness guide



We provide a variety of useful information about illnesses, aimed at patients, their families, and the general public.

### Medical professionals



We have designed a website targeted at medical professionals.

### Kokoro no jiten (Learning from illness)



This section shows essays submitted in an essay contest titled "What Illness Taught Me." We held the contest as an opportunity to widely communicate our determination to contribute to the health of sick people around the world with new drugs.

### Astellas pharmaceutical guide



Includes information regarding the correct use of Astellas pharmaceuticals.



### Investor relations



### The story of Astellas



The history of Astellas goes back 100 years, which we have spent fighting alongside patients. We introduce our story here, starting with the establishment of our predecessors Fujisawa Pharmaceutical Co., Ltd. and Yamanouchi Pharmaceutical Co., Ltd.

We disclose information about our business performance.

<http://www.astellas.com/jp/>

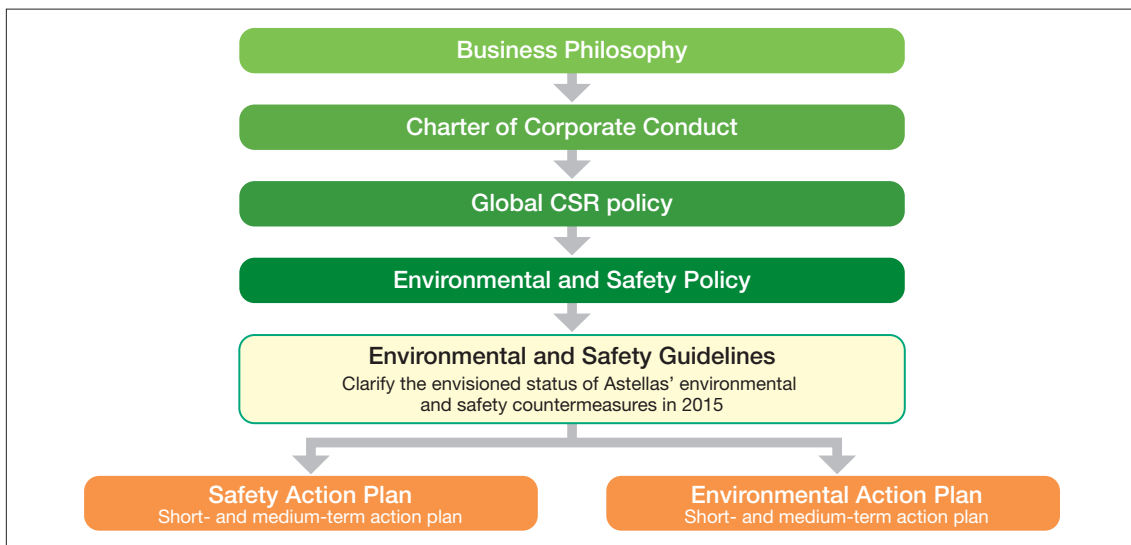


# Environment, and Health & Safety

Global environmental problems have the potential to threaten mankind's existence, and measures for overcoming them are essential for the sustainable growth of a company. Astellas proactively addresses global environmental issues as an important part of its CSR management. Our activities for ensuring the health and safety of our employees are based on measures we have pursued over many years. At the same time, however, in promoting safety management we focus on risks caused by various changes, including changes in employment practice structures. We strive to prevent accidents and minimize damage resulting from accidents.

## Framework for Environment and Safety Activities

Our Environmental and Safety Policy is the basis of our activities for protecting the global environment and ensuring employee safety. Based on this policy, we are making ongoing organizational efforts toward the envisioned outcomes of Astellas' environmental and safety initiatives set out in the Environmental and Safety Guidelines. We address priority issues by setting the medium-term targets in our Safety Action Plan and Environmental Action Plan.



## Environmental and Safety Policy

Our Environmental and Safety Policy is based on the stipulations for environmental and safety issues contained in the Charter of Corporate Conduct.

Established April 1, 2005

Astellas, as a life science corporation that contributes towards improving the health of people all over the world, conducts business activities in harmony with the global environment and with due regard for employees' health and safety. Environmental and safety issues are recognized as key elements of our corporate management and are considered for every aspect of the business.

- 1 We not only strive to comply with applicable laws and regulations relating to environmental protection and occupational safety & health, but also proactively aim to achieve stringent standards, setting ourselves higher targets than those required by regulations.
- 2 We have established environmental and occupational health & safety management systems, which demonstrates our commitment to continual improvement through organized activities.
- 3 We regularly assess the potential environmental impacts and safety risks for all our business operations and make sustained efforts to reduce those potential impacts and risks through our environmental and safety objectives and targets.
- 4 We develop effective products and technologies that harmonize well with environmental and safety considerations.
- 5 We promote the implementation of activities that aim to reduce the potential risks that may give rise to environmental pollution or occupational accidents. These activities also ensure that in the event of an emergency we can act promptly and appropriately in order to minimize damage.
- 6 We provide continual training in environmental and safety education for all employees so that they can keep abreast of environmental and safety issues and embrace their social responsibility.
- 7 We are committed to social and corporate accountability and openly communicate environmental and safety information in a timely and appropriate manner to our stakeholders.



## Environmental and Safety Guidelines

Our Environmental and Safety Guidelines provide unified standards to be upheld in the implementation of specific initiatives to meet the seven goals in our Environmental and Safety Policy above. The Guidelines define in qualitative terms how we want our company to operate by 2015. We revise the Guidelines whenever we think that more challenging targets are needed,

for example in light of changing social needs.

In the environmental and safety audit conducted by our headquarters departments, these Guidelines are used as the standards by which we evaluate performance at the individual business operations at each site.

### Environmental and Safety Guidelines

Established April 1, 2008

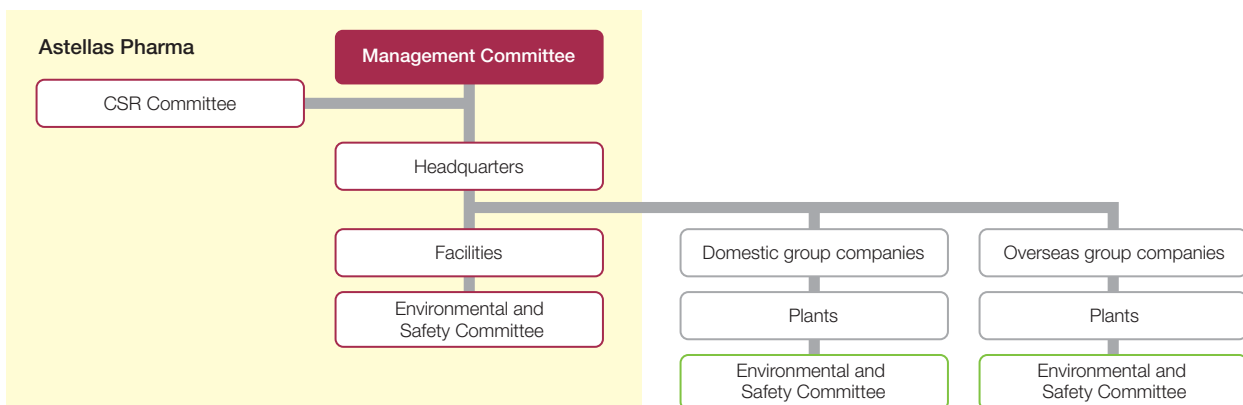
1	Compliance with laws, regulations and internal guidelines	7 clauses
2	Environmental and safety management	7 clauses
3	Risk management, preparedness and response to accidents and emergencies	11 clauses
4	Management of facilities and vehicles	7 clauses
5	Development of products and techniques	4 clauses
6	Education, training and motivation	6 clauses
7	Global warming prevention and resource conservation	8 clauses
8	Chemical substance management	9 clauses
9	Waste management	4 clauses
10	Pollution control for air, water and soil	7 clauses
11	Control of sensory nuisance sources and preparedness and response to complaints	3 clauses
12	Social contribution	7 clauses

## Environmental and Safety Management System

Environment and workplace safety programs are a key focus of CSR management. The CSR Committee deliberates and decides on policy, action plans and measures related to the environment and workplace safety.

The results of these deliberations are communicated to all our business facilities through the Astellas headquarters. Each facility then establishes its own policy and action plan suited to its operations, and works to achieve the targets therein.

### Organization



## The Environmental and Safety Action Plan

With respect to drawing up the action plan, we have outlined what we want the company to be from a long-term viewpoint, and we have set individual fiscal and medium-term goals as checkpoints. We undertake annual reviews, adding new items or setting even higher goals, based on the progress made in the previous fiscal year or changes in social circumstances. The table below outlines progress in the Environmental and Safety Action Plan for fiscal 2009.

Global warming prevention initiatives, which were earmarked for completion in 2010, have been integrated into the action plan scheduled to complete in 2020 (the new Action Plan), and we have decided to launch initiatives in fiscal 2010.

### Progress in the Environmental Action Plan

Item	Fiscal 2009 Action Plan	Fiscal 2009 performance
Global warming prevention	<b>Global</b> <ul style="list-style-type: none"> <li>Reduce CO<sub>2</sub> emissions by 20% or more from fiscal 1996 level by fiscal 2010</li> <li>Reduce CO<sub>2</sub> emissions of Astellas Group domestic operations by 8.6% or more from 1990 level by fiscal 2010 (a 28.8% reduction from fiscal 1996)</li> <li>Reduce CO<sub>2</sub> emissions of the overseas production facilities to below the fiscal 1996 level by fiscal 2010</li> </ul>	CO <sub>2</sub> emissions <ul style="list-style-type: none"> <li>Global: 190,557 tons (compared with fiscal 1996: -14.8%)</li> <li>Domestic: 146,145 tons (compared with fiscal 1996: -2.8%) (compared with fiscal 1996: -24.4%)</li> <li>Overseas: 44,412 tons (compared with fiscal 1996: +46.2%)</li> </ul>
	<b>Domestic</b> <ul style="list-style-type: none"> <li>Reduce CO<sub>2</sub> emissions generated through sales activities by 30% or more from fiscal 2005 level by the end of fiscal 2015</li> </ul>	CO <sub>2</sub> emissions from fuel consumption by sales vehicles: 7,340 tons (compared with fiscal 2005: -15.9%)
Biodiversity initiatives	<b>Global</b> <ul style="list-style-type: none"> <li>Reduce water consumption by 20% or more from fiscal 2005 level by the end of fiscal 2015</li> </ul>	Water usage <ul style="list-style-type: none"> <li>Global: 14,372 thousand m<sup>3</sup> (compared with fiscal 2005: -15.3%)</li> <li>Domestic: 14,090 thousand m<sup>3</sup></li> <li>Overseas: 281 thousand m<sup>3</sup></li> </ul>
Chemical substance management	<b>Domestic</b> <ul style="list-style-type: none"> <li>Reduce atmospheric emissions of formaldehyde by 95% or more from fiscal 1999 level by fiscal 2010</li> <li>Reduce atmospheric emissions of chloroform by 70% or more from fiscal 2003 level by fiscal 2009</li> <li>Reduce atmospheric emissions of VOCs by 25% or more from fiscal 2006 level by fiscal 2015</li> </ul>	Atmospheric emissions <ul style="list-style-type: none"> <li>Formaldehyde: 0.1 ton (compared with fiscal 1999: -97.8%)</li> <li>Chloroform: 1 ton (compared with fiscal 2003: -84.9%)</li> <li>VOCs: 124 tons (compared with fiscal 2006: +14.3%)</li> </ul>
Waste management	<b>Domestic</b> <ul style="list-style-type: none"> <li>Curb the volume of waste materials subject to final disposal to 1% or less of total generation, or 2% or less of total emissions by the end of fiscal 2010</li> </ul>	0.9% of total generation 1.8% of total emissions

### Other initiatives

Item	Fiscal 2009 Performance	Page
Environmental management system	Environmental and safety audits Environmental audits conducted at 17 facilities in Japan and overseas Examinations of paperwork and on-site audits at 12 facilities in Japan Paperwork audits only at 5 facilities overseas	35
	Accidents No accidents relating to the environment	50
	Deviations from emissions standards ● Violations of wastewater standards: 5 instances	
	Complaints ● Noise: 3 instances	
	Soil contamination surveys ● Surveyed soil contamination at the Tokyo Research Center	
Environmental accounting	Environmental accounting and public disclosure ● Environmental preservation costs Equipment investment: ¥250 million      Costs: ¥1,611 million ● Economic benefit: ¥918 million	51
	Environmental efficiency ● Environmental Performance Index: down 51.7% compared with fiscal 2005	52

### Progress in the Safety Action Plan

Item	Action Plan	Progress in Fiscal 2009
Workplace safety and occupational hygiene management	<ul style="list-style-type: none"> <li>Review safety management system at regular intervals for maintenance and improvement</li> <li>Identify all risks at each business site concerning workplace safety, occupational hygiene, security and disaster prevention, and establish objectives and targets with the aim of reducing the likelihood of materialization of risks by the end of fiscal 2009</li> </ul>	<ul style="list-style-type: none"> <li>Continued improvement in risk identification techniques</li> <li>Make risk visually identifiable</li> </ul>
Response to accidents and emergencies	<ul style="list-style-type: none"> <li>Continuously work to effect improvements in the risk management system, including organizations, communication networks, and methods of responding to all conceivable accidents and emergency situations</li> </ul>	<ul style="list-style-type: none"> <li>Introduction of emergency earthquake reporting system</li> </ul>
Severity rate of work-related injuries	<ul style="list-style-type: none"> <li>Continually work to keep the severity rate of work-related injuries at 0.005 or lower</li> </ul>	<ul style="list-style-type: none"> <li>Severity rate of work-related injuries: 0.002</li> </ul>
Chemical substance management	<ul style="list-style-type: none"> <li>Establish a comprehensive and effective system for managing hazardous chemical substances from procurement through disposal by the end of fiscal 2009</li> </ul>	<ul style="list-style-type: none"> <li>Introduction of chemical substance management system</li> </ul>

- Among initiatives to counter global warming, CO<sub>2</sub> emissions due to energy consumption were at nearly the same level as the previous fiscal year.
- Among initiatives to manage chemical substances, we achieved atmospheric emission targets for formaldehyde and chloroform.
- Concerning initiatives for a recycling-based society, we achieved zero emissions for the third consecutive year.
- As in the previous fiscal year, the severity rate of work-related injuries, a health and safety target, has been maintained at a low level below the target value, but we have reinforced risk reduction measures as disaster prevention measures were inadequate in some cases. We have also decided to move forward with sharing disaster information at overseas production facilities.

Issues	Action Plan Revision	Page
<ul style="list-style-type: none"> <li>● Achieving the action plan is difficult, and we have integrated it with the new Action Plan. Comprehensive countermeasures are necessary since an increase in emissions is expected due to plans to expand facilities</li> </ul>	<ul style="list-style-type: none"> <li>■ Reduce emissions of greenhouse gases by 35% or more from fiscal 2005 levels by the end of fiscal 2020</li> <li>● Reduce emissions of greenhouse gases in Japan by 30% or more from fiscal 2005 levels by the end of fiscal 2020</li> <li>● Reduce emissions of greenhouse gases at overseas production facilities by 45% or more from fiscal 2005 levels by the end of fiscal 2020</li> </ul>	39
<ul style="list-style-type: none"> <li>● Promote efficient sales activities</li> </ul>	<ul style="list-style-type: none"> <li>■ Reduce CO<sub>2</sub> emissions generated through sales activities by 30% or more from fiscal 2005 level by the end of fiscal 2015</li> <li>■ Reduce CO<sub>2</sub> emissions caused by our office electricity consumption by 20% or more from 2005 levels by the end of 2015</li> </ul>	
<ul style="list-style-type: none"> <li>● Promote further reduction measures in order to achieve numerical targets</li> </ul>	<ul style="list-style-type: none"> <li>■ Reduce water consumption by 20% or more from fiscal 2005 level by the end of fiscal 2015</li> </ul>	38
<ul style="list-style-type: none"> <li>● With respect to VOCs, new measures oriented at achieving numerical targets are needed</li> <li>● Confirm attainment of numerical targets for chloroform in the coming fiscal year</li> <li>● As we have attained the numerical targets for formaldehyde for two consecutive years, delete from the action plan for the coming fiscal year</li> </ul>	<ul style="list-style-type: none"> <li>■ Maintain reduction in atmospheric emissions of chloroform at 70% or more from fiscal 2003 levels</li> <li>■ Reduce atmospheric emissions of VOCs by 25% or more from fiscal 2006 level by fiscal 2015</li> </ul>	45
<ul style="list-style-type: none"> <li>● Continued achievement of zero emissions</li> </ul>	<ul style="list-style-type: none"> <li>■ Keep waste landfill volume at less than 1% of volume generated or less than 2% of emissions</li> </ul>	47

Note: **Global** means activities by both Japanese and overseas Astellas Group companies, whereas **Domestic** means activities by Japanese Group companies alone.

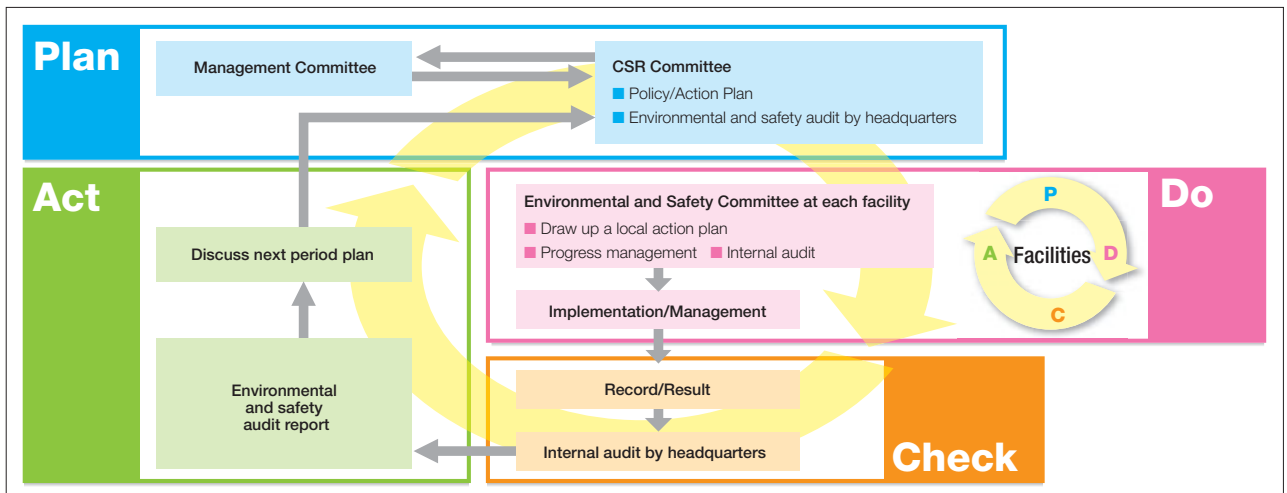
Item	Fiscal 2009 Performance	Page
Reducing environmental load	<ul style="list-style-type: none"> <li>● SOx 5 tons (unchanged from previous year)</li> <li>● NOx 44 tons (up 2.7% from previous year)</li> </ul>	49
	<ul style="list-style-type: none"> <li>● BOD load 20 tons (23.4% down from previous year)</li> <li>● Drainage volume 12,991,000 m<sup>3</sup> (down 6.0% from previous year)</li> </ul>	
	<ul style="list-style-type: none"> <li>● Volume generated 20,882 tons (up 7.3% from previous year)</li> <li>● Emissions 10,876 tons (up 8.3% from previous year)</li> <li>● Landfill volume 207 tons (0.2% down from previous year)</li> </ul>	47
	<ul style="list-style-type: none"> <li>● Released volume of materials for which notification is required by the PRTR Law concerning management of chemical substances (from fiscal 2008): increased by 4.1% to 16 tons</li> </ul>	46

Issues	Action Plan Revision	Page
<ul style="list-style-type: none"> <li>● Reduce risk caused by human error</li> <li>● Strengthen inter-organizational cooperation weakened by the spinning off of certain operations</li> </ul>	<ul style="list-style-type: none"> <li>■ Review safety management system at regular intervals for maintenance and improvement</li> <li>■ Initiatives to reduce risk by establishing autonomous management standards for specific risks identified in risk assessments</li> </ul>	53
<ul style="list-style-type: none"> <li>● Clarify roles for each grade</li> </ul>	<ul style="list-style-type: none"> <li>■ Continuously work to effect improvements in the risk management system, including organizations, communication networks, and methods of responding to all conceivable accidents and emergency situations</li> </ul>	
<ul style="list-style-type: none"> <li>● Thorough disaster prevention measures</li> </ul>	<ul style="list-style-type: none"> <li>■ Create global standards for work-related injuries, and based on these standards, gain a full understanding of work-related injuries</li> <li>■ Continually work to keep the severity rate of work-related injuries at 0.005 or lower</li> </ul>	54
<ul style="list-style-type: none"> <li>● Provide information on rules for appropriate operation of maintenance systems</li> <li>● Periodic internal audits</li> </ul>	<ul style="list-style-type: none"> <li>■ Duly implement a comprehensive and effective system for managing hazardous chemical substances from procurement through disposal</li> </ul>	

# The Environmental and Safety Management System

## Management system flow

To achieve the action plans, company-wide initiatives as well as more specific programs developed by each facility are implemented. After performing company-wide audits to confirm progress at each facility, we identify new issues and implement revisions. Operating the PDCA (Plan-Do-Check-Act) cycle on both a company-wide and individual facility basis leads to a reduction in environmental load and overall risk.



## Accreditation of our environmental and safety management system

With the exception of the Norman Plant, we have obtained ISO14001 certification, the international standard for environmental management systems, at all plants in Japan and overseas. With regard to occupational health and safety systems, we have also acquired OHSAS 18001 certification (an international standard for occupational health and safety management) at our Takahagi, Dublin and Kerry plants. Other plants have developed their own occupational health and safety management systems

and are working to continuously improve these systems. At our research laboratories, we have developed an integrated management system for environmental and safety issues, and we are working to continually improve environmental and safety activities. In the future, we plan to improve our organizational systems in our administrative and sales divisions, with the goal of taking our activities to a higher level.

## Environmental and Safety Audits

To ascertain the status of overall environmental and safety activities at Astellas, the officer in charge of CSR acts as chief auditor and heads an audit team, which conducts a company-wide audit of environmental and safety activities. Audits of documentation are conducted annually at our facilities in Japan and overseas while on-site audits are undertaken bearing in mind progress status and any changes at the facilities. Audits assess the degree of compliance with our Environmental and Safety Guidelines, identifying specific issues. The individual facilities

are required to submit reports containing concrete remedial measures for identified issues. A questionnaire on remedial measures is distributed to check the progress of the measures, and the progress is confirmed in the next environmental and safety audit. Individual workplaces and the headquarter departments responsible for environmental and safety issues share views on social needs and workplace issues. This ensures that Astellas policy is consistent, and is one of the main functions of the audit process.

## Fiscal 2009 audit results

### Key audit themes

- Future environmental initiatives: Measures to combat global warming, measures to manage hazardous chemicals
- Research divisions: Developing/implementing a chemicals management system
- Legal compliance: Compliance overview, reconfirming legal interpretations
- Risk management

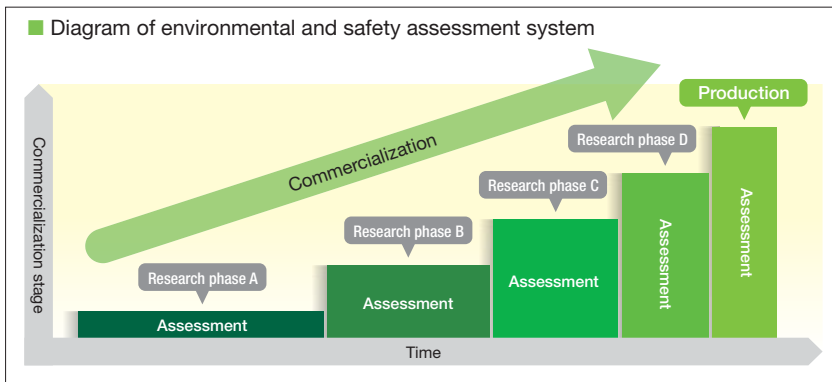
The fiscal 2009 audit identified the following items as issues for the future.

- Appropriate response to changes in legal and social demands
- Position management systems to meet the need for diversity in employment conditions and the organizational structure
- Prevent management systems from turning formulaic and work for continuous improvement
- Continue to train personnel capable of responding appropriately to legal and social demands
- Overhaul organizational structures for responding to disasters and emergencies
- Continue to improve risk management systems
- Plan and implement global warming countermeasures from the long-term viewpoint
- Biodiversity initiatives, environmental assessment of chemical substances

## Environment and Safety Assessment System

Astellas has introduced an environmental and safety assessment system which requires the environmental load and all safety risks to be understood in advance and minimized at all stages, including production, distribution and disposal, during the research and development stages or when building or installing new facilities. The purpose of introducing the assessment system is to establish initiatives such as dealing with laws concerning pharmaceuticals in advance, as well as setting up measures for countering global warming, reducing the use of solvents, curtailing emissions of harmful chemical substances, and assessing the risks of chemical substances used as raw

materials, at the research and development stages. The results of the assessments are important criteria for deciding the pros and cons of taking product development to the next stage, or deciding whether or not to install equipment and purchase land. In fiscal 2009, we conducted assessments of the construction of research facilities and office blocks in Japan and overseas, confirming that measures to reduce the environmental load and safety risks in the manufacturing processes and the design of facilities and equipment had been properly incorporated. We also clarified the issues and measures that should be investigated at the next stage.



## Education and Training

Astellas recognizes the importance of understanding the laws concerning environmental safety and trends in societal attitudes before the fact. That means not waiting to comply with the law, but moving forward with autonomous initiatives to anticipate the demands of society. We need initiatives whereby all employees have a correct understanding of environmental and safety activities, recognizing their own roles and responsibilities, if we wish to bring about improvement. We are working to improve our skill base through a wide variety of training programs, including specialized education for employees engaged in roles requiring specialist knowledge and skills in areas such as environmental conservation or hazardous operations, and the development of employees professionally qualified in environmental, health and safety matters. We also explain our policies and site rules

to construction workers at our plants, raw materials suppliers and waste disposal contractors, and seek collaboration on our environmental and safety programs.



Training for health and safety officers at the Yaizu Plant



Training in response procedures in case of leakage at the Yaizu Plant

## Accident and Emergency Preparedness

Being prepared for emergency situations caused by an accident or natural disaster can help to prevent an environmental catastrophe and minimize damage. We work to understand the overall picture regarding environmental and safety risks in our corporate activities, then define priority risks, develop specific measures and procedures, and educate our employees accordingly. Based on response procedures to emergency situations, we undertake regular training drills, reconfirming and testing the validity of our procedures, communication networks and the division of roles, as well as sharing information about accidents

and disasters that have occurred at other facilities and outside the company. We are working to reduce environmental and safety risks by identifying the potential for disasters of a similar nature occurring at our various facilities.



Fire drill using a smoke tent



Leakage drills at the Takaoka Plant

# Interaction between Astellas and the Environment

The global environment has been recognized as the greatest issue of the 21st century, threatening not only the sustainability of the economy, but the existence of humankind. There are many issues that must be resolved to realize a sustainable society. At Astellas, we believe that to protect the global environment, promoting “corporate activities in harmony with the global environment” is a theme of the highest priority for realizing our business philosophy.

## Japan

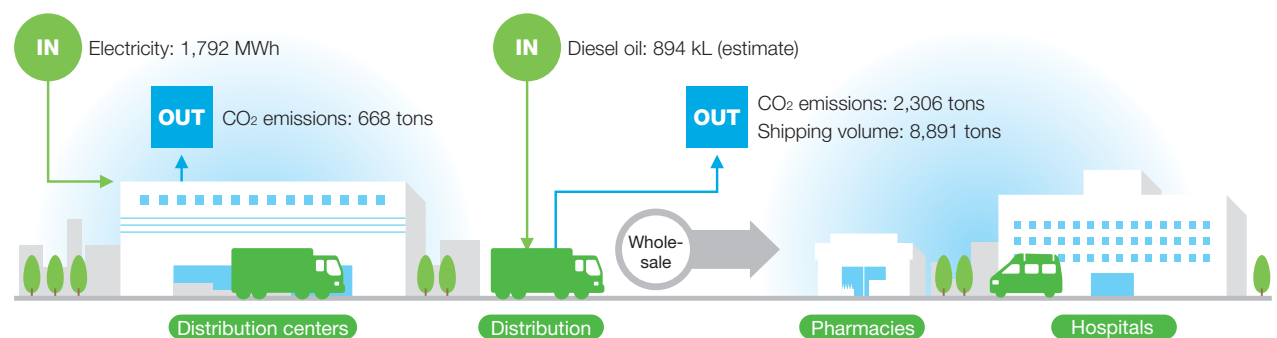
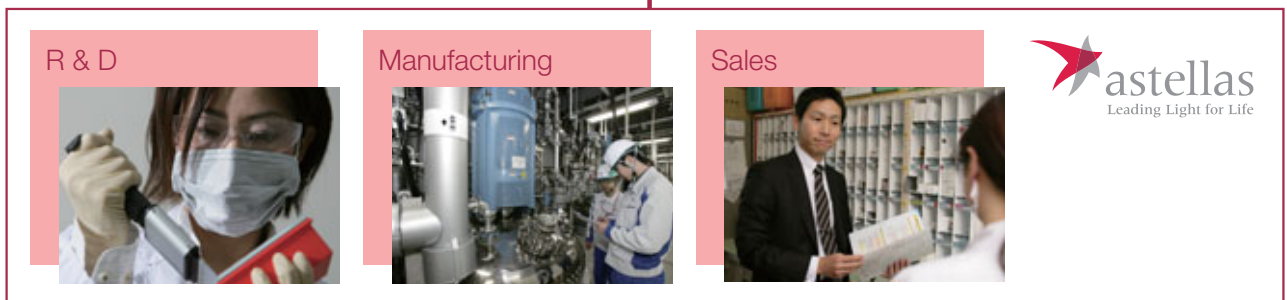
### INPUT

Energy	Electricity	212,244 MWh
	Piped gas	21,928 thousand m <sup>3</sup>
	LPG	2,302 tons
	Fuel oil	4,478 kL
	Kerosene	1,151 kL
	Diesel oil	16 kL
	Gasoline	3,171 kL
	Purchased heat energy	4,083 GJ
Raw materials	Pharmaceutical ingredients	12,630 tons
	Reagent, materials	—
Water	Water	14,090 thousand m <sup>3</sup>
	Tap water	1,009 thousand m <sup>3</sup>
	Industrial water	11,864 thousand m <sup>3</sup>
	Well water	1,218 thousand m <sup>3</sup>
Office supplies	Copier paper	244 tons

### OUTPUT

Greenhouse gases	CO <sub>2</sub> equivalent	161,964 tons
Air pollutants	SO <sub>x</sub>	5 tons
	NO <sub>x</sub>	44 tons
	VOCs	124 tons
Water pollutants	BOD load	20 tons
	Drainage volume	12,991 thousand m <sup>3</sup>
Waste materials	Volume generated	20,882 tons
	Volume recycled	10,876 tons
	Landfill volume	207 tons
Chemical substances*	In the atmosphere	15 tons
	Into rivers, etc.	1 tons

\* Substances specified under the Pollutant Release and Transfer Register Law  
 Note: A dash indicates that these figures were not available at the time of writing.



## Overseas

### INPUT

Energy	Electricity	53,395 MWh
	Piped gas	4,895 thousand m <sup>3</sup>
	Diesel oil	756 kL
	LPG	2 tons
	Purchased heat energy (Steam)	15,092 GJ
Water	Water	281 thousand m <sup>3</sup>

### OUTPUT

Greenhouse gases	CO <sub>2</sub>	42,884 tons
Air pollutants	SO <sub>x</sub>	1 tons
	NO <sub>x</sub>	11 tons
	VOCs	8 tons
Water pollutants	BOD load	10 tons
	Drainage volume	280 thousand m <sup>3</sup>
Waste materials	Volume of waste generated	3,401 tons
	Recycled volume	366 tons

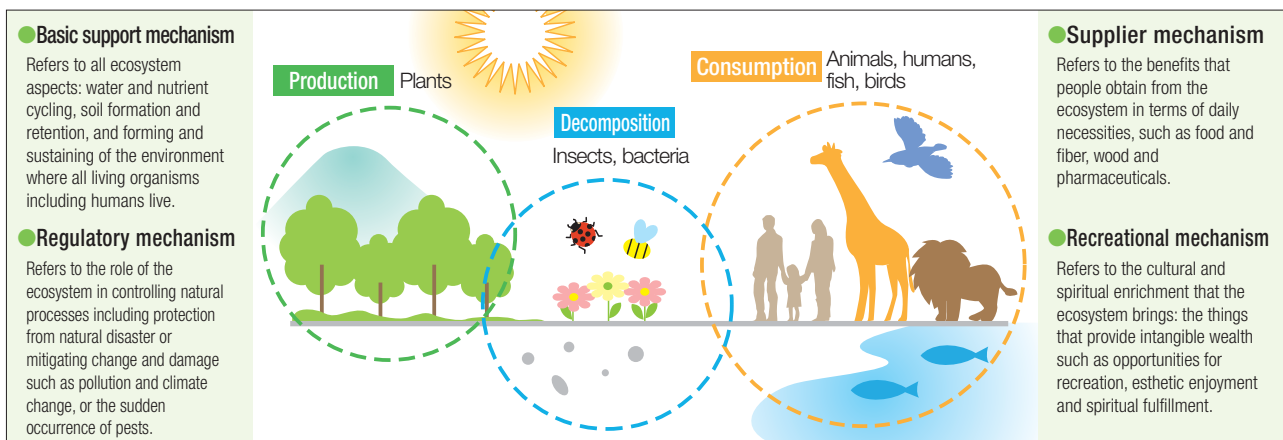
# Biodiversity Initiatives

## Environmental Action Plan Targets

- Reduce water consumption by 20% or more from fiscal 2005 level by the end of fiscal 2015

Astellas has adopted a biodiversity perspective in its Environmental and Safety Guidelines, indicated in a guideline that reads, “We will work towards preserving the water resources by reducing water consumption, reusing water, and reducing the emission of water pollutants as much as possible.” At present, we are undertaking research on the effective use of water resources, which impinges on the ecosystem, and on reducing the impact of chemical substances on the aquatic environment. In the future, we will address business issues from the dual perspectives of biodiversity preservation and sustainable use. We are also considering measures regarding forest protection, which is linked to measures to counter global warming, and the protection of specific species from the perspective of biodiversity in keeping with regional characteristics.

## ■ What biodiversity and the ecosystem do for us

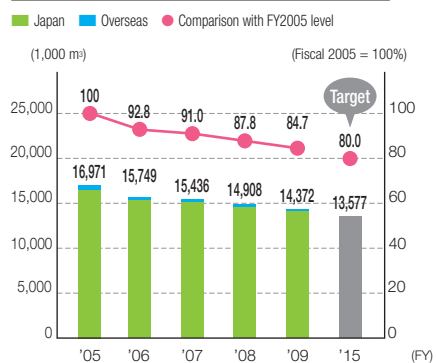


## ■ Effective use of water resources

Since the effective utilization of water resources is one of the indicators of the impact on biodiversity, Astellas is working toward establishing numerical targets for reducing water usage. We are also striving to protect the aquatic environment by reducing the discharge of water pollutants as much as possible.

In fiscal 2009, our water usage was 14,372,000 m<sup>3</sup> (globally), which is a reduction of 3.6% (536,000 m<sup>3</sup>) over the previous fiscal year, and a reduction of 15.3% compared to the base year for the action plan. Further, 98.0% of the total is used in Japan.

### ■ Water consumption



## ■ Impact of pharmaceuticals on water resources

A variety of chemical substances are used in the manufacture of pharmaceuticals. As there is a chance that chemical substances discharged into water resources during the manufacturing process may affect the ecosystem, we are evaluating ways to reduce the emissions into the environment as much as possible in the research and development phases. We are also investigating the impact of pharmaceuticals on the ecosystem by evaluating ease of decomposition (biodegradability) of pharmaceutical substances for drug candidates in the natural environment.

## ■ Use of genetically modified organisms

In recent years, biotechnology has begun to be applied to a variety of fields. It is also applied as a technology for producing effective products in the research and manufacture of pharmaceuticals. However, as there is concern for its impact on the environment, appropriate handling is required to prevent adverse effects on the environment. When we use genetically modified organisms at Astellas, we implement biosafety measures to prevent its spread, such as restricting the locations it is used, containment, and appropriate disposal after use.

# Global Warming Prevention

**Environmental  
Action Plan  
Targets**

- Reduce CO<sub>2</sub> emissions by 20% or more from fiscal 1996 level by fiscal 2010
- Reduce CO<sub>2</sub> emissions from Astellas Group domestic operations by 8.6% or more from fiscal 1990 level by fiscal 2010 (a 28.8% reduction from fiscal 1996)
- Reduce CO<sub>2</sub> emissions of the overseas production facilities to below fiscal 1996 level by fiscal 2010

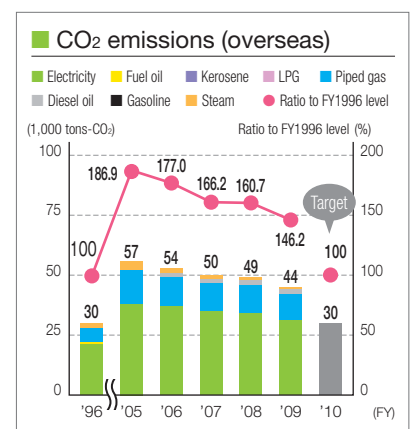
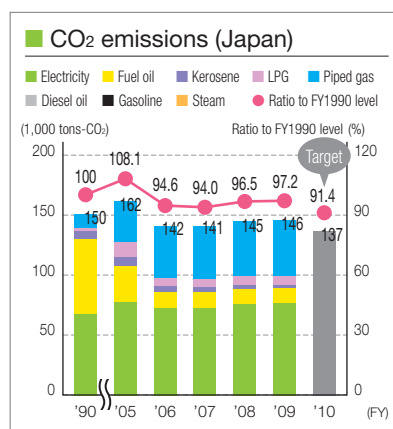
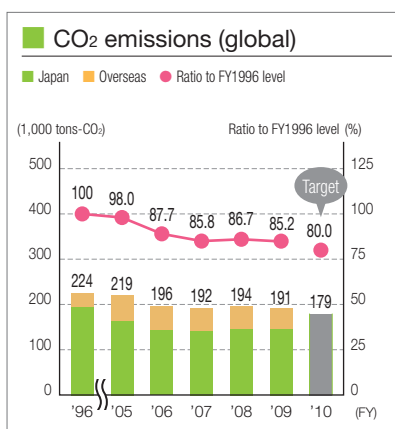
Global warming is an environmental problem that could threaten the very survival of mankind. The issue needs to be addressed through active engagement at all levels, including central governments, local authorities, companies, and individual citizens. We need to work on ongoing programs over the long term.

Scientists around the world have been sounding warnings about global warming. Global temperatures have been rising steadily, and we are now at a stage where we need to focus on measures to mitigate and adapt to, rather than prevent, this warming. In Japan, medium-term targets to be achieved by 2020 and a road map of the countermeasures have been clarified. For example, legal regulations have been strengthened through amendments to the Act on Promotion of Global Warming Countermeasures and the Act on the Rational Use of Energy. In addition, a basic law for prevention of global warming was submitted to the Diet. The levels to be achieved by the middle of the century are shared in global society. Nations responsible for 80% of all the greenhouse gases emitted in the world have set up medium-term goals to be achieved by 2020 and are studying measures from a long-term point of view. At Astellas, we have positioned countermeasures against global warming as our number one priority in management. We believe such measures are essential for continuing business activities.

## ■ Environmental action plan targets to be achieved by FY2010 (former action plan targets)

Since our foundation in 2005, Astellas has been addressing global warming issues in pursuit of our global target, that is, “Reduce CO<sub>2</sub> emissions of Astellas Group arising from energy consumption by 20% or more from FY1996 levels by FY2010.” As we achieved this target in Japan in FY2006, in FY2007 we switched to the second-stage action plan targets and started to work on higher goals. However, our CO<sub>2</sub> emissions due to energy use in FY2009, calculated based on the method we applied for the environmental action plan targets to be achieved by FY2010, totaled 191,000 tons (all business facilities included in the scope of our global action plan targets), down by 1.7% from the previous fiscal year. This means we have achieved a reduction of 14.8% from FY1996 levels (base year for the action plan) and need to cut another 5.2% (12,000 tons) to achieve the target. Considering that we are planning to install equipment

at our production facilities and build a new research building in Japan, and that the energy conservation measures are delayed at the Norman Plant, the second-stage action plan targets we reviewed in FY2006 (started in FY2007) will be hard to achieve. Therefore, we once again reviewed our strategies for addressing global warming issues in FY2009. Our conclusion is that it will be difficult to achieve the second-stage action plan targets by FY2010. Consequently, we have determined to shift our priority to the medium-term targets (new action plan targets; FY2020 = the final year) which we started in FY2008.



Note: We have amended figures for electricity consumption in Japan and diesel oil consumption overseas for past years.

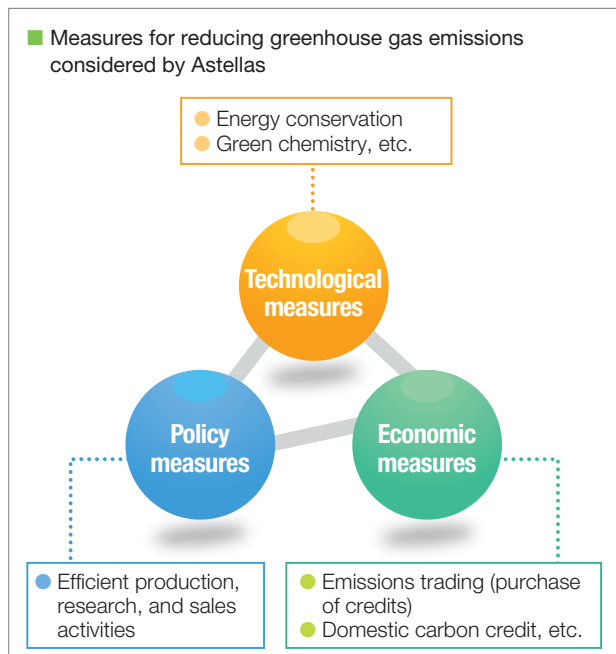


## Global Warming Prevention Committee

A long-term target of “halving global greenhouse gas emissions by 2050” is shared in the international community. In Japan, action plans for creating a low-carbon society have been formulated and amendments to the Act on Promotion of Global Warming Countermeasures and the Act on the Rational Use of Energy are in progress. In this way, measures against global warming are now required to be taken at the management level, as well as in daily activities. At Astellas, we established the Global Warming Prevention Committee since we judged our conventional energy conservation measures would be insufficient for achieving the level required for entire enterprises, as long as such measures continued to be focused on individual business units. The Global Warming Prevention Committee

proposes strategies to be implemented by the entire Astellas Group, in addition to energy conservation measures to be taken by each business facility. The Committee also formulates capital investment plans which apply state-of-the-art technologies and new technologies, such as using renewable energies, to take measures for achieving the medium- and long-term numerical targets of Astellas.

In addition to the technological measures such as introduction of energy-saving equipment, the agenda of the Global Warming Prevention Committee includes policy measures such as efficient production and research systems and economic means such as domestic carbon credit and other emissions trading.



## New Medium-Term Management Plan

As five years have passed since our establishment, Astellas has drawn up a new medium-term management plan which specifies targets to be achieved by FY2014. In this new plan, we position action against global warming as an important management issue. It includes our decision to have the Global Warming Prevention Committee play the key role in formulating

medium- and long-term action plans and investment plans for the entire Astellas Group and to have our Headquarters lead implementation of strategic measures. We have decided to invest approximately ¥1 billion in FY2010 for measures drawn up by the Global Warming Prevention Committee, separately from energy-saving measures of individual business facilities.

### ■ Investment plan for FY2010 (Astellas Group in Japan and overseas)

Introduction of advanced technologies such as heat pumps	¥143 million
Introduction of facilities for wind power generation and photovoltaic power generation	¥171 million
Introduction of energy monitoring systems	¥109 million
Introduction of other equipment and/or facilities	¥594 million

# Environment, and Health & Safety

- Reduce greenhouse gas emissions by 35% or more from fiscal 2005 levels by the end of fiscal 2020
- In Japan, reduce greenhouse gas emissions by 30% or more from fiscal 2005 levels by the end of fiscal 2020
- At overseas production bases, reduce greenhouse gas emissions by 45% or more from fiscal 2005 levels by the end of fiscal 2020
- Reduce CO<sub>2</sub> emissions generated through sales activities by 30% or more from fiscal 2005 levels by the end of fiscal 2015 (Japan)
- Reduce CO<sub>2</sub> emissions generated through office electricity consumption by 20% or more from fiscal 2005 levels by the end of fiscal 2015 (Japan)

## Current Greenhouse Gas Emissions

### New action plan targets

At Astellas, we set a medium-term target as a landmark for the long-term global warming countermeasures being implemented throughout the Astellas Group. The medium-term target specifies that greenhouse gas emissions will be reduced by at least 35% compared with FY2005 levels by the end of FY2020, towards which we started taking measures in FY2008. In addition, we have set numerical targets for CO<sub>2</sub> emissions from our sales vehicles and administrative divisions in Japan.

In our action plan targets for tackling global warming, we include greenhouse gases other than CO<sub>2</sub> generated from

energy consumption to be reduced. We conducted research on our emissions of the six greenhouse gases specified in Japanese laws and ordinances for tackling global warming. The finding was that the amount of those greenhouse gases we emit is small, except for CO<sub>2</sub> from waste oil we use as a combustion improver for our liquid waste incinerator. Therefore, we did not include such gases in our new action plan targets. The new action plan covers branches, sales offices, and training centers in Japan.

### Greenhouse gas emissions in fiscal 2009

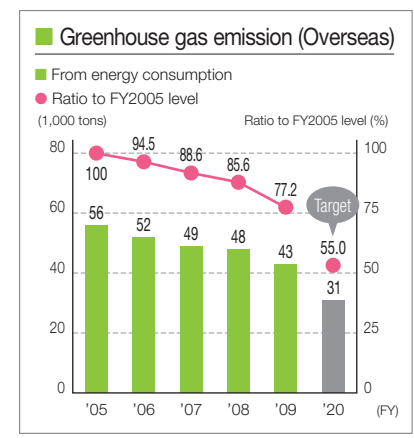
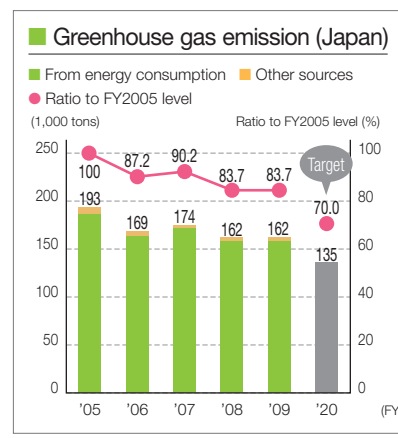
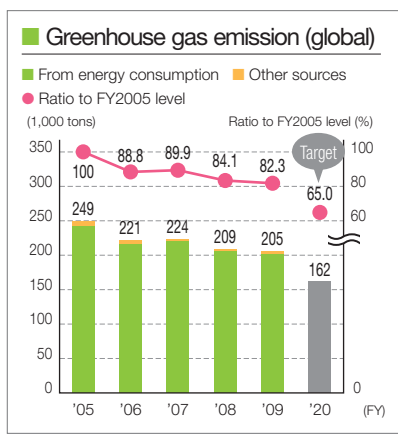
The amount of greenhouse gases we emitted globally in FY2009 was 205,000 tons, down 2.2% (5,000 tons) from the previous fiscal year. Compared with FY2005 levels, the standard for our action plan targets, we achieved a reduction of 17.7%.

Global	205,000 tons (down 2.2% from the previous fiscal year; down 17.7% from FY2005)
Japan	162,000 tons (up 0.1% from the previous fiscal year; down 16.3% from FY2005)
Overseas	43,000 tons (down 9.8% from the previous fiscal year; down 22.8% from FY2005)

### Factors for greenhouse gas emission changes from FY2010 onward

An increase in our greenhouse gas emissions is expected in FY2010 due to facility expansion at our bases for research and technological development. On the other hand, our emission of those gases is expected to decrease from FY2011 onward because by that time we can expect an effect from the capital investment that we decided to make under the Global Warming Prevention Committee. However, as we are also planning to develop and manufacture new products, and increase the total

area for research facilities as well as install equipment from FY2011 onward, we will closely watch these factors which will increase greenhouse gas emissions. We are determined to reduce the amount of emissions from a long-term point of view by combining technological measures such as introduction of energy-saving equipment with policy measures including studies into efficient research and production.



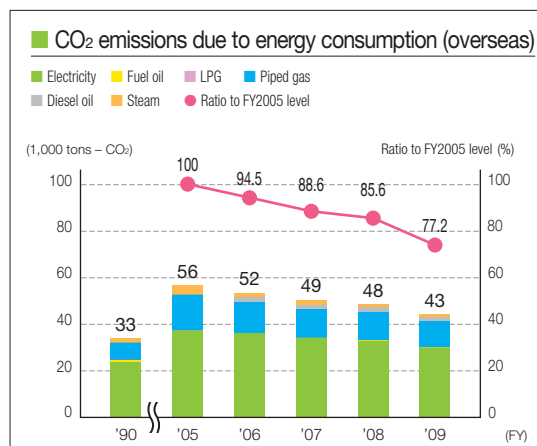
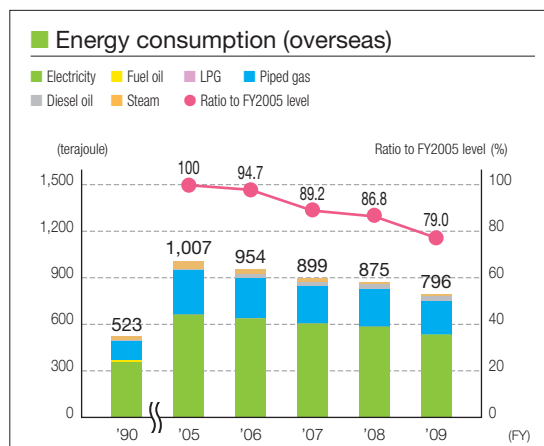
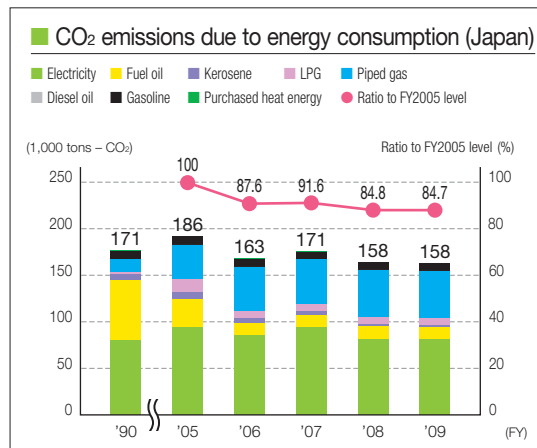
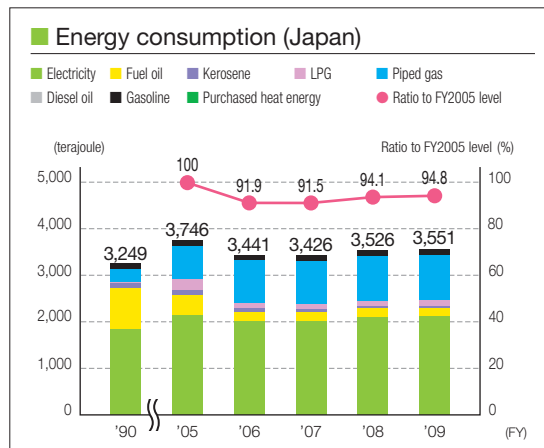
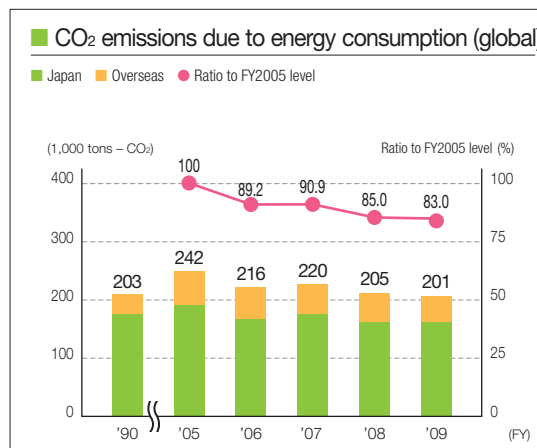
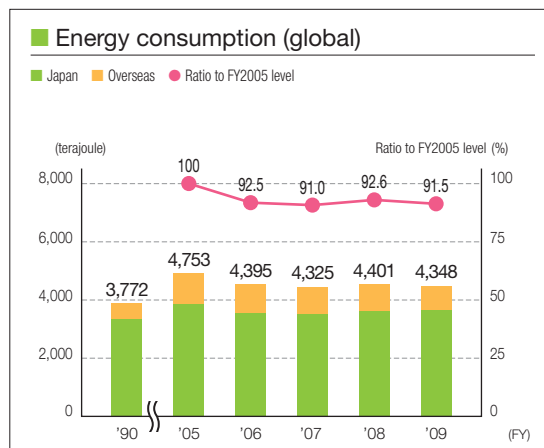
## CO<sub>2</sub> emissions due to energy consumption

Energy consumption by Astellas for FY2009 was 4,348 terajoules worldwide, down 1.2% (53 terajoules) from the previous fiscal year. Of the total consumption, the amount of energy used in Japan was 3,551 terajoules, up 0.7% (25 terajoules) year on year, while that of energy consumed overseas was 796 terajoules, down 9.0% (78 terajoules) year on year. The proportion of energy used in Japan was about 81.7% of our worldwide consumption. Electricity accounted for 59.6% of the energy used in Japan and the figure was 66.9% overseas.

Our CO<sub>2</sub> emissions due to use of energy worldwide was 201,000 tons for FY2009, down 2.4% (5,000 tons) from the previous fiscal year. A factor that contributed to the reduction was the end of production at the Grand Island Plant in March

2009. CO<sub>2</sub> emissions due to use of energy in Japan remained almost flat.

A characteristic of energy use in the pharmaceutical industry is that an extremely large proportion of it is electricity and steam used for air-conditioning at plants and research laboratories.



### Joule

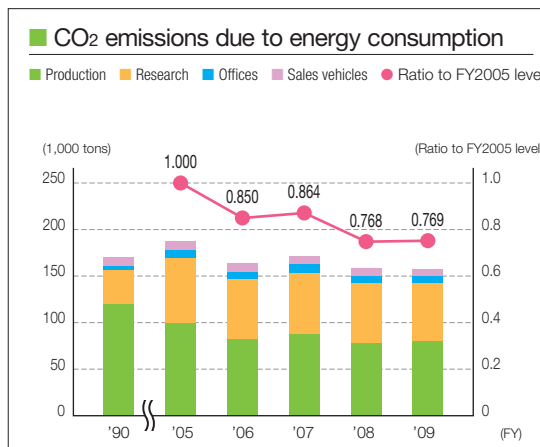
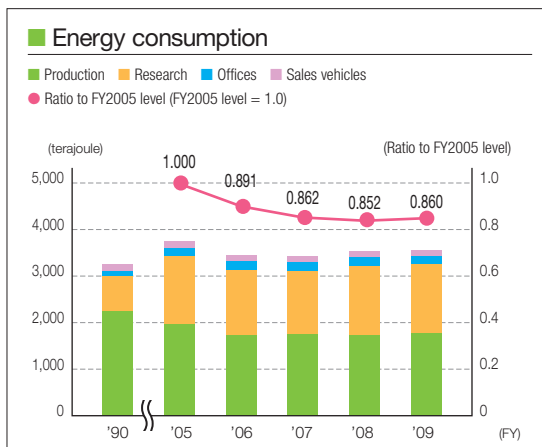
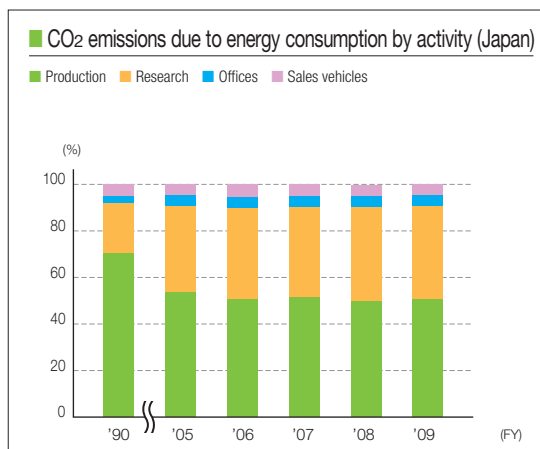
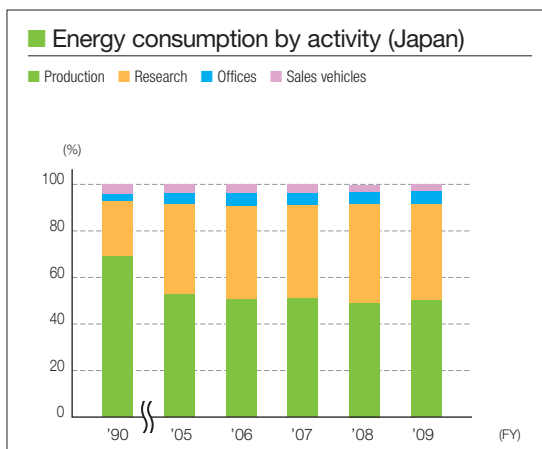
This is a unit of heat energy and is calculated by multiplying each type of energy by a conversion coefficient. The amount of energy used is converted into a calorific value. One terajoule is equivalent to 1 trillion joules.

## CO<sub>2</sub> emissions due to energy consumption by activity (Japan)

In FY2009, our energy use by business activity in Japan was 50.6% for production, 40.1% for research, 4.7% for administration (offices), and 4.7% for sales vehicles. Proportions of CO<sub>2</sub> emissions from these activities were almost the same. The proportion of energy use for production has been decreasing, while that for research has been increasing each year. We attribute the decrease in the proportion of energy use for production to a change in the manufacturing mix to products with lower energy consumption intensity rates and a shift to fuels which emit a smaller amount of CO<sub>2</sub>. The rise in emissions from research is mainly due to a substantial increase in research facility areas and a greater use of equipment as we employ more sophisticated pharmaceutical research processes. The ratio of energy consumption and CO<sub>2</sub> emissions per unit of net sales has been

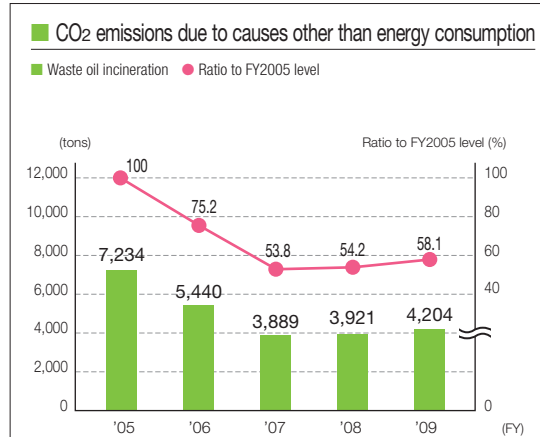
improving each year compared with FY2005. In FY2009, the ratio of energy consumption improved by 14.0%, and that of CO<sub>2</sub> emissions by 23.1%.

We find it necessary to take proactive reduction measures, including introduction of next-generation energy-saving equipment. We will also adopt efficient energy supply systems as we design new buildings and new energy-related facilities that we plan to introduce, in order to reduce our energy consumption.



## Emissions of greenhouse gases due to other causes

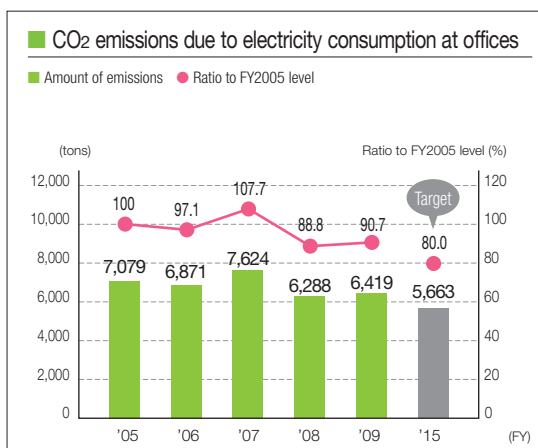
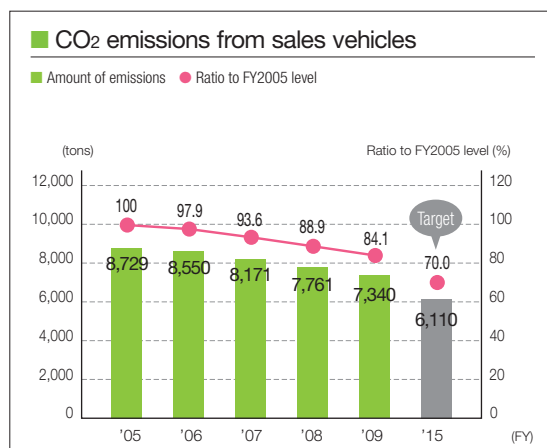
Our new action plan targets also apply to CO<sub>2</sub> emitted from incineration of waste oil in the liquid waste incinerator. In FY2009, the amount of emissions from waste oil incineration was 4,204 tons.



## ■ Administration (offices) and sales activity initiatives

CO<sub>2</sub> emissions from gasoline used in sales vehicles in fiscal 2009 totaled 7,340 tons, which is a 5.4% (421 ton) reduction from the previous year. This is an 15.9% decrease in emissions from the Action Plan's reference year of fiscal 2005, but a further 1,230 ton reduction is necessary to reach our target. As of the end of fiscal 2009, 1,429 (56.4%) of a total of 2,619 sales vehicles were hybrid vehicles, and we plan to upgrade to a total of over 2,000 hybrid vehicles within the next few years. We will continue

working to reach our goal by introducing electric vehicles and examining environmentally-friendly sales activities. In FY2009, we monitored the amount of CO<sub>2</sub> emitted from more than 160 sales offices in Japan. We will apply further energy-saving measures to achieve our goal.



### ■ Introduction of hybrid vehicles

	FY2007	FY2008	FY2009
Number of hybrid vehicles	108	929	1,429
Proportion of hybrid vehicles (%)	4.3	36.7	54.6
Total number of sales vehicles	2,493	2,532	2,619

## ■ CO<sub>2</sub> emissions at the distribution stage

We are trying to gain a complete picture of our CO<sub>2</sub> emissions generated by energy consumption for "internal" distribution (transportation from one plant to another plant or to our distribution center). However, we have not identified the volume of emissions at the distribution stage because we have yet to determine a uniform method of calculation. We will endeavor to determine the volume of emissions included in the scope of our action plan targets.

## Participation in the Trial of Greenhouse Gas Emissions Trading Mechanism

We give priority to our voluntary measures in addressing the issues of global warming, but we are aware that, in the medium- and long-term, it may prove difficult because there will be many uncertainties that could be caused by changes in our manufactured product line-up. We therefore need to consider economic measures, such as emissions trading, right now. In FY2008, we participated in a trial of the Japanese market for

emissions trading that is being promoted by the government, by setting numerical targets for the five years from FY2008 to FY2012 specified in the Kyoto Protocol. In FY2009, we had our performance in FY2008 examined by an independent assessment organization, and submitted a report showing the calculated amount of our greenhouse gas emissions to the Ministry of Health, Labour and Welfare.

# Chemical Substance Management

**Environmental  
Action Plan  
Targets**

- Reduce atmospheric emissions of formaldehyde by 95% or more from fiscal 1999 level by fiscal 2010
- Reduce atmospheric emissions of chloroform by 70% or more from fiscal 2003 level by fiscal 2009
- Reduce atmospheric emissions of VOCs by 25% or more compared to fiscal 2006 level by fiscal 2015

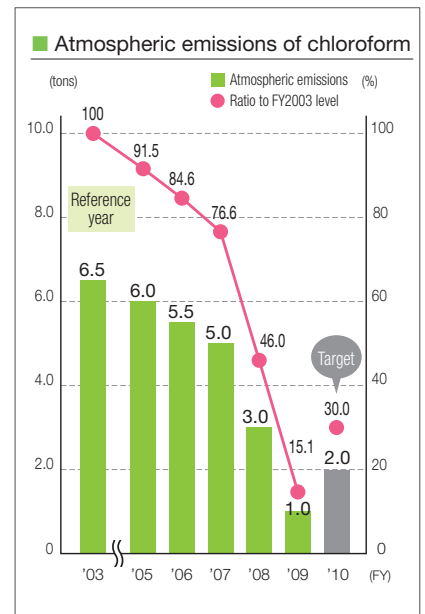
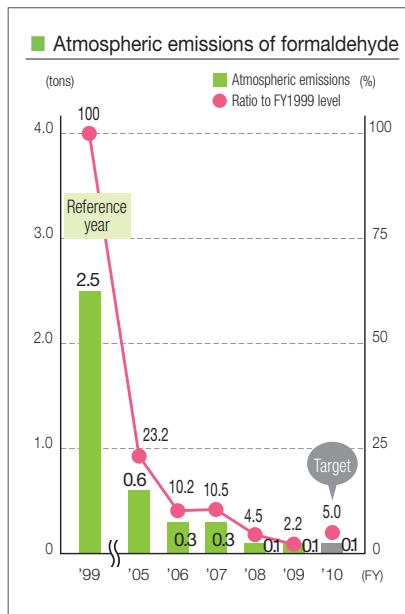
The international community has reached an agreement on minimizing the harmful effects that the production and use of chemical substances have on people's health and the environment by 2020, and initiatives regarding the control of chemical substances are being carried out around the world.

Astellas is implementing measures to limit effects on employees, regional communities, and the global environment by, for example, developing production methods that do not use hazardous chemical substances as a way of preempting environmental pollution, occupational health hazards, and damage to the health of residents in nearby areas.

## Measures to reduce harmful air pollutant emissions

Formaldehyde is mainly used for sterilization during the formulation process when manufacturing injection products. We significantly reduced the amount of formaldehyde used following our revisions to the operational procedure for the injection product manufacturing process. Atmospheric emissions of formaldehyde in FY2009 were 0.1 tons (down 97.8% from the base year), once again attaining the action plan target value.

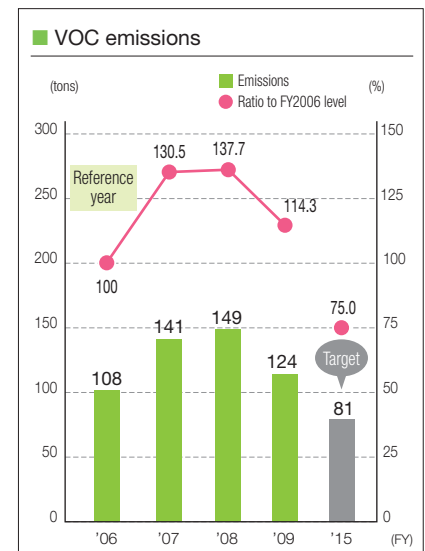
As for chloroform, we installed equipment for removing harmful vapors at the new research facility at of the Tsukuba Research Center (Miyukigaoka). As a result, atmospheric emissions of chloroform in FY2009 came to 1 ton (down 84.9% from the base year), attaining the action plan target value. We will continue working to maintain or even reduce current volumes of harmful pollutants emitted into the atmosphere.



## Measures to reduce VOC emissions

Regarding volatile organic compounds (VOCs)\*, Astellas has no equipment that would fall under the regulations of the Air Pollution Control Act, but we are voluntarily proceeding with initiatives to reduce emissions by, for example, reducing amounts of VOCs used and introducing special equipment. In FY2009, VOC emissions totaled 124 tons, a decrease of 25 tons from the previous year. This is attributable mainly to the reduced use of ethanol at the

Fuji Plant. However, we need to reduce emissions further to achieve the action plan targets. We plan to implement initiatives to achieve our action plan, such as introducing emission-suppressing equipment for specific processes that use large amounts of VOCs.



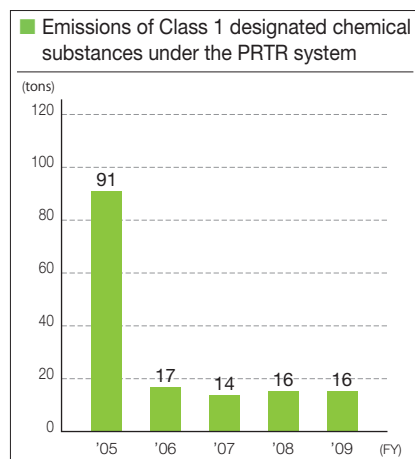
**\*VOCs:**  
VOCs is a generic term for chemicals that evaporate easily into the air. VOCs released into the air become suspended particulate matter, causing air pollution, and VOCs exposed to sunlight in the upper atmosphere turn into photochemical oxidants, which are another source of pollution.

## PRTR (Pollutant Release and Transfer Register) survey

Chemical substances covered by the PRTR Act are those that are recognized as potentially harmful to human health and deemed to exist widely in the environment. The main objective of this law is to require companies to report emission and transfer volumes for such chemical substances, enabling them to voluntarily evaluate and improve the management

of these chemical substances. Transfer and emission statistics for materials requiring notification under the PRTR system in fiscal 2009 are shown in the table below.

In fiscal 2009, emissions of designated chemical substances into the environment totaled 16 tons.



### PRTR

The PRTR is a register of the amounts of potentially harmful chemicals released into the air, land, or water, and the amounts released as waste material, which are independently measured and aggregated by each company. In Japan, the Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof (PRTR Act) came into force in 2001 as the system under which companies submit the PRTR to the central government and disclose the information to the public.

## Fiscal 2009 statistics on material requiring notification under the PRTR system

Substance name	Number of facilities reporting	Volume handled	Volume released			Volume transferred	
			Air	Water	Soil	Waste	Sewerage
Acetonitrile	5	29.171	0.446	0.699	0.000	21.630	0.000
Ethylene glycol	2	90.368	0.005	0.000	0.000	3.000	0.000
Xylene	1	8.618	0.000	0.000	0.000	0.000	0.000
Chloroform	2	37.710	0.939	0.000	0.000	36.771	0.000
Salicylaldehyde	1	28.491	0.000	0.000	0.000	3.456	0.000
1, 4-Dioxane	1	1.200	0.000	0.000	0.000	0.000	0.000
Dichloromethane	3	330.698	13.885	0.000	0.000	2.866	0.000
<i>N, N</i> -dimethylformamide	3	176.326	0.021	0.001	0.000	4.546	0.000
Thiourea	1	12.350	0.000	0.000	0.000	0.000	0.000
Toluene	2	22.427	0.139	0.001	0.000	4.215	0.000
Formaldehyde	1	71.000	0.011	0.000	0.000	51.604	0.000
Manganese and its compounds	1	32.815	0.000	0.013	0.000	32.802	0.000
Dioxins	2	—	0.781	0.018	0.000	0.189	0.000

Notes: \* Amounts in the table are tons/year. For dioxins, the units are mg-TEQ/year.

\* The number of facilities refers to the number of plants and laboratories that handle one ton or more of Class 1 designated chemical substances annually, or half a ton or more of Class 1 designated chemical substances.

## Polychlorinated biphenyl (PCB)

In Japan, public facilities for the treatment of PCB waste are now in place, and five treatment facilities have commenced operation. In response, Astellas has started to treat PCB at some of its facilities. In FY2009, we processed five capacitors. We will continue to undertake systematic treatment as facilities for PCB treatment come on-stream.

### State of PCB-contaminated waste storage

Classification	Category	Number or volume
Stored	Capacitors	234
	Electric current breakers	1
	Fluorescent lamp ballasts	7,381
	PCB-contaminated oil	2 L
	High-voltage transformers	27
	PCB incrustation	2 kg
In use	Fluorescent lamp ballasts	5

### PCB (Polychlorinated Biphenyl)

This is the common name of a group of chemical compounds formed by two benzene rings with 1 to 10 chlorine atoms attached. There are 209 different varieties depending on the number and location of the chlorine atoms. The compound is hard to break down when exposed to heat, which makes it a superior electrical insulator, and it is often used in heating media and capacitors. Waste materials (including PCBs) that have been identified as having harmful effects, and those whose production was suspended are stored by local governments and businesses as stipulated by law.

# Initiatives for a Recycling-Based Society

**Environmental Action Plan Targets** ■ Curb the volume of waste materials subject to final disposal to 1% or less of total generation, or 2% or less of total discharged by the end of fiscal 2010

A number of initiatives have been taken to promote new approaches to the systems of mass-consumption and mass-disposal that our social and economic activities create, and for helping to achieve a recycling-based society. The central government and the Japan Federation of Economic Organizations have set numerical targets for final waste disposal (waste landfill) and engage in activities to achieve those targets. Initiatives for establishing a recycling-based society will continue to be pursued through cooperation among the government, local municipalities, and industry organizations.

At Astellas, we have been striving to reduce waste landfill volumes by setting a target of zero emissions\* and pursuing the recycling of waste (reuse, recycle, thermal recycling).

**\* Zero emissions of waste**  
The goal is to reduce the emission of waste material to effectively zero. In general, this is interpreted as eliminating emissions that are processed through final disposal.

## Waste Management

We have achieved our action plan targets for zero emissions of waste in 2008, two years ahead of schedule. Specific measures include: making organic sludge compost from the residue left over from the wastewater treatment process; recovering valuable materials from inorganic sludge; recycling and reusing organic solvents (material recycling); and using organic solvents

as supplemental fuel (thermal recycling).

In addition to sludge and organic solvents, we recycle a variety of waste materials, including plastics, glass, metal, used paper, and fluorescent lights. Waste mentioned in this CSR Report includes that sold or transferred to other parties for recycling as resources.

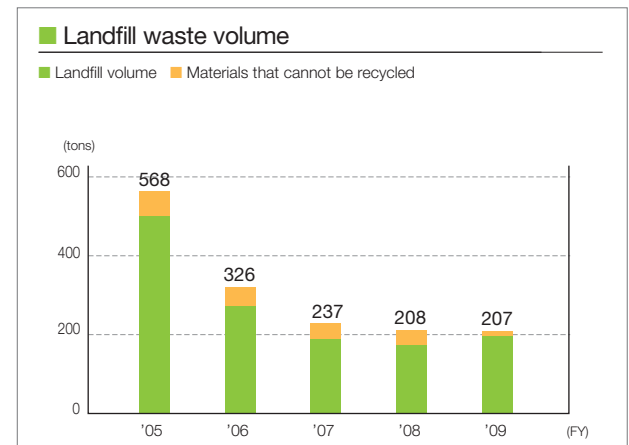
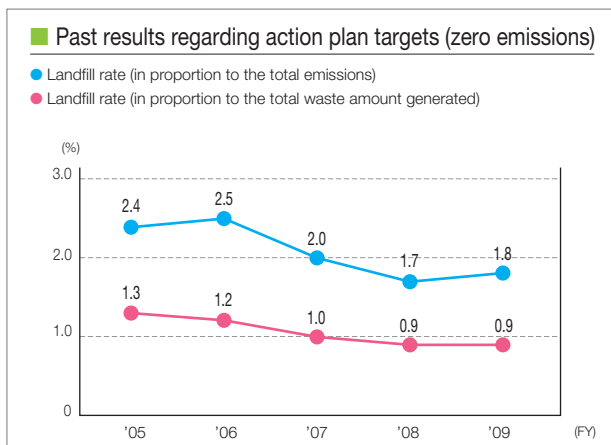
### Waste processing for fiscal 2009

The volume of waste generated in FY2009 was 20,882 tons, an increase of 1,413 tons from the previous year. Emissions totaled 10,876 tons, up 838 tons from the previous year. Landfill volume was 207 tons, down 1 ton from the previous year. The increases in the volume of waste generated and emissions are attributable mainly to the increase in waste oil and waste

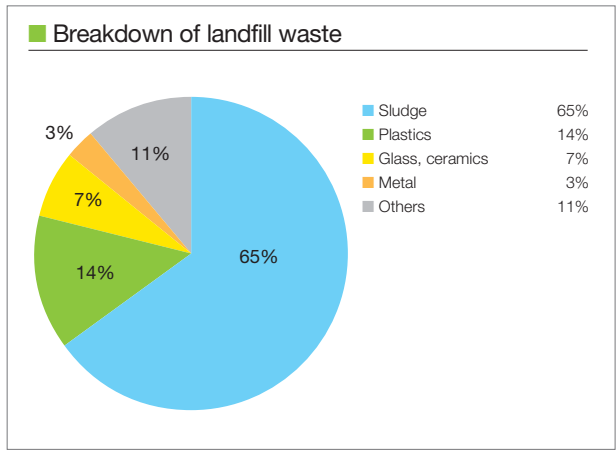
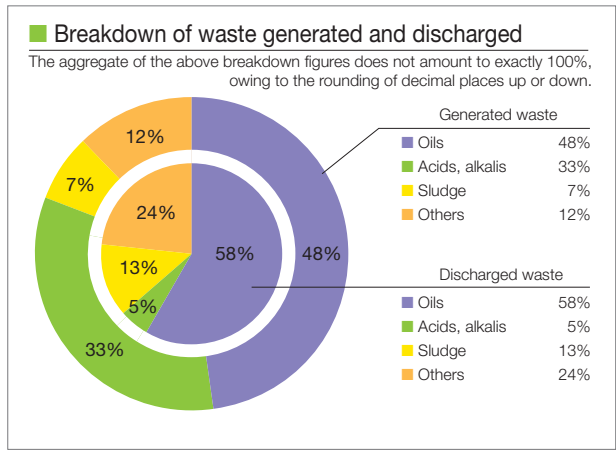
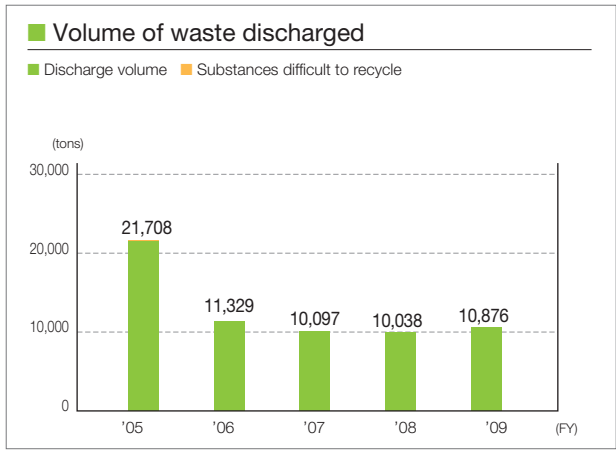
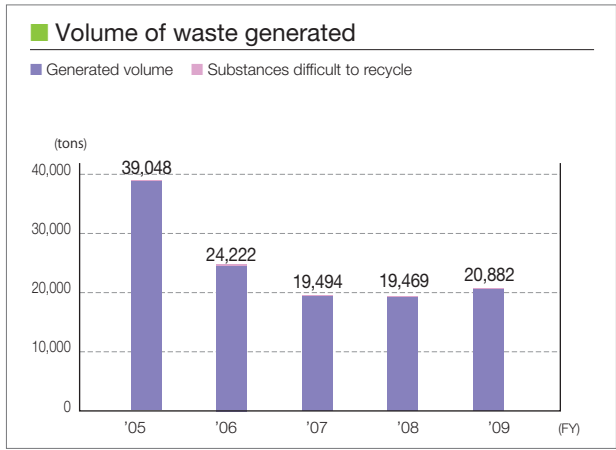
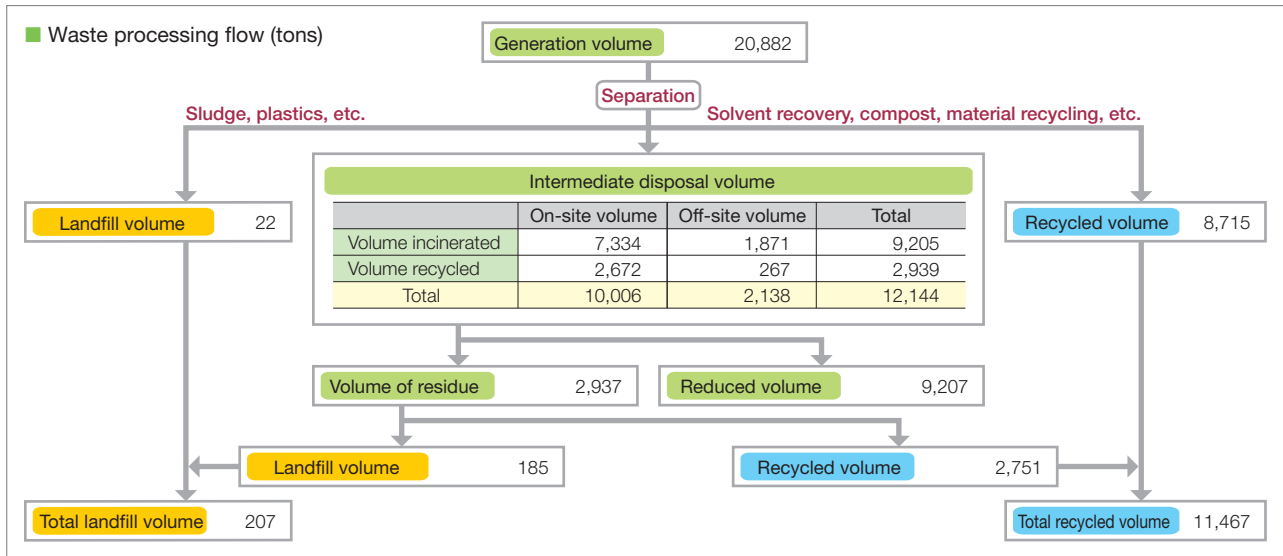
metal. Our performance regarding the action plan targets (zero emissions) was landfill disposal of 0.9% of waste generation volume, and 1.8% of emissions, which means we reached our target. We will leave the action plan targets unchanged, aiming to maintain the current standards.

#### Progress in achieving action plan targets (zero emissions) in FY2009

Facility	Landfill volume as a % of total amount generated	Landfill volume as a % of total emissions	Facility	Landfill volume as a % of total amount generated	Landfill volume as a % of total emissions
Nishine Plant	1.0%	1.1%	Kashima R&D Center	3.2%	3.2%
Takahagi Facilities	0.2%	1.2%	Tsukuba Research Center (Miyukigaoka)	3.6%	3.6%
Fuji Plant	0.5%	0.5%	Tsukuba Research Center (Tokodai)	4.1%	4.1%
Yaizu Facilities	1.5%	1.5%	Tokyo Research Center	1.2%	1.2%
Kiyosu Research Office	0.3%	0.3%	Nihonbashi Facilities	0.6%	0.6%
Toyama Plant	0.6%	0.6%	Hasune Office	0.9%	0.9%
Takaoka Plant	0.8%	4.4%	Overall	0.9%	1.8%







**Packaging recycling initiatives**

Although the majority of ethical pharmaceutical product packaging is disposed of by medical institutions, products prescribed by doctors are disposed of by households. In accordance with the Containers and Packaging Recycling Law, we bear the cost of recycling these waste packaging materials. In fiscal 2009 we

estimated the total amount of bottles, plastic, and paper containers disposed of by households at 533 tons, and the relevant recycling cost amounted to approximately ¥26 million.

# Pollution Prevention, Accidents, and Complaints

Initiatives for preventing the pollution of local environments are as important as measures for addressing global environmental issues. In Japan, management systems for tackling long-standing pollution issues are said to have been weakened, demonstrated by the recent increase in accidents resulting in water pollution in public water areas. The response has been a strengthening of legal regulations concerning the promotion of voluntary measures for pollution prevention and the enhancement of measures for preventing the spread of damage caused by accidents. For major environmental management items regarding atmospheric and water quality, Astellas has voluntarily set stricter targets than the mandatory requirements in regulations or agreements with local governments or residents. The aim is to control pollutant emissions. Additionally, in preparation for accidents and emergency situations, we are working to reduce the risk of pollution by implementing measures for the prevention of environmental pollution, including the installation of backup equipment.

## Water pollutants

We discharge wastewater, after suitable treatment, not only into the sewer system, but also directly into rivers and the sea. The accidental discharge of harmful substances would lead to the pollution of water resources, or cause problems at sewage treatment plants. As this could have a grave impact on regional communities, we consider it one of the most serious environmental risks.

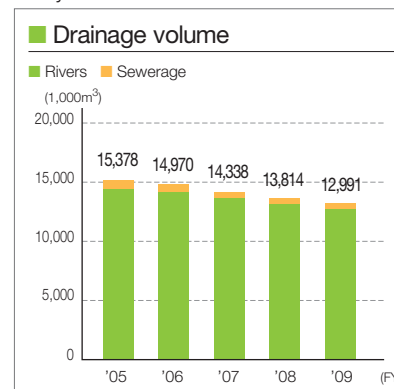
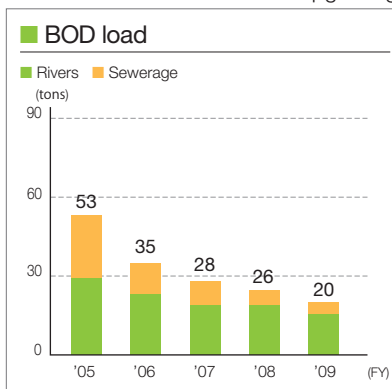
To prevent groundwater contamination, Astellas is working to meet strict

environmental standards in the management of its wastewater treatment facilities. We are closely monitoring operations and taking measurements of the quality of water draining out of our plants to confirm compliance with these standards. We are also upgrading

the skills of our emergency response teams, and installing backup equipment such as emergency cutoff devices and emergency escape tanks.

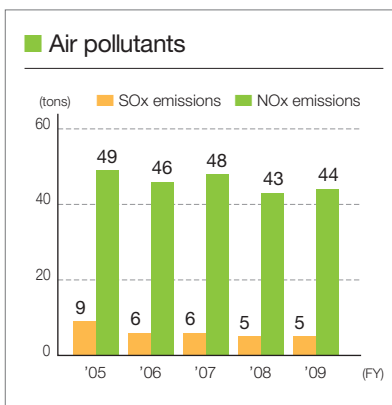
In fiscal 2009, the BOD\*1 load was 20 tons, a 23.4% reduction from the previous year.

**\*1 BOD (Biochemical Oxygen Demand)**  
This index gives the level of water pollution by organic matter, and shows the amount of oxygen (mg/L) consumed when water contaminants are oxidized by microorganisms. The larger the value, the greater the water contamination.



## Air pollutants

In fiscal 2009, SOx\*2 and NOx\*3 emissions totaled 44 tons and 5 tons respectively, virtually unchanged from the previous year. We are investigating alternative fuels to further reduce emissions of air pollutants and also to devise measures that address global warming concerns. In addition, we use incinerators at the Takaoka Plant and Takahagi Plant to burn waste such as solvents from the production process. The amount of dioxins\*4 contained in the exhaust gas of incinerators was far below the regulatory standard in FY2009 again.



**\*2 SOx (Sulfur Oxides)**  
Sulfur oxides are produced when oxygen is combined with sulfur, which is a component of both oil and coal, during combustion. SOx is one of the causes of acid rain.

**\*3 NOx (Nitrogen Oxides)**  
Nitrogen oxides are produced when nitrogen, which is contained in fossil fuels and in the air, combines with oxygen during combustion. NOx is one of the causes of acid rain.

**\*4 Dioxins**  
These are not a single chemical substance, but a general name for a group of chemical compounds. Dioxins can be broadly divided into polychlorinated dibenzo-para-dioxin (75 varieties) and polychlorinated dibenzofuran (135 varieties). Generally, coplanar PCBs (14 varieties) are also now considered dioxins.

**\*5 TEQ (Toxicity Equivalency Quantity)**  
Toxicity equivalency quantity (TEQ) is a value that converts the amount of dioxin into an equivalent amount of the most toxic material. Dioxins are a broad group of compounds, and since toxicity depends on the compound, a method that expresses the amount of dioxin as an equivalent amount of the most toxic substance is formally employed.

Amount of dioxins in the exhaust gas of incinerators (ng-TEQ/m³N)\*5

Facility locations	FY2005	FY2006	FY2007	FY2008	FY2009	
Takahagi	Liquid waste incinerator	0.0014	0.00089	0.000015	0.00045	0.00028
	Standard	10	10	10	10	10
Takaoka	Liquid waste incinerator	0.00072	0.00019	0.000005	0.022	0.018
	Standard	5	5	5	5	5

## ■ Soil contamination surveys

Under the Soil Contamination Countermeasures Act and prefectural ordinances, soil contamination surveys are mandatory where projects for additional facilities or demolition of buildings of a certain scale are undertaken. In FY2009, we conducted a soil contamination survey following closure and demolition of the Tokyo Research Center. In addition to surveys under the Soil Contamination Countermeasures Act and Tokyo municipal ordinances, we undertook surveys on substances we had never used before. As a result, total mercury (elution and inclusion), lead (inclusion), and fluorine (elution) exceeding the standard values were detected from the soil of certain premises, and

trichloroethylene was detected from the groundwater. We will apply appropriate measures through consultations and discussions with the Tokyo metropolitan government and the local municipality of Itabashi-ku. We also undertook a soil contamination survey when we partially renovated facilities at the Tsukuba Research Center (Miyukigaoka). No contamination was found in this survey.

In FY2009, we completed purifications of the premises of Kashima R&D Center, where soil contamination was detected in the survey we conducted in FY2007.

### ■ Results of soil contamination survey at Tokyo Research Center

Item	Substances exceeding the standard values	Maximum concentration	Standard value	Maximum contamination factor (times)
Soil	Total mercury* (elution amount)	0.0034 mg/L	0.0005 mg/L	6.8
	Total mercury (amount included)	180 mg/kg	15 mg/kg	12.0
	Lead (amount included)	180 mg/kg	150 mg/kg	1.2
	Fluorine (elution amount)	1.3 mg/L	0.8 mg/L	1.6
Groundwater	Trichloroethylene	0.14 mg/L	0.03 mg/L	4.7

\*Total mercury: Alkyl mercury not detected

## ■ Compliance with environmental regulations

In FY2009, there were violations of effluent standard (BOD concentration) at Yaizu Facilities and Takaoka Plant. We reported both of these violations to the government and applied preventive measures. At the Tsukuba Research Center (Miyukigaoka), pH levels of stormwater drainage exceeded the values agreed to with the Tsukuba municipal government three times. We reported these to the government, and all were judged to be

temporary incidents.

Over the past five years, standard values were exceeded twice in FY2005, once in FY2007, and once in FY2008, but each time our responses have proved effective.

There have been no lawsuits or fines related to environmental issues over the past five years.

## ■ Environment-related accidents

No environment-related accidents occurred in FY2009.

Over the past five years, there has been one case of an abnormal odor at the Takaoka Plant in FY2006. The foul odor

was caused by gasified acetate compounds dispersed into the atmosphere, but no adverse impact on human health was reported.

## ■ Environment-related complaints

In FY2009, there were two complaints associated with noise caused by construction work at the Yaizu Facilities, and one due to noise from the industrial cooling tower and other equipment at Toyama Plant. We took the appropriate action in each case.

In addition to working to prevent the occurrence of abnormalities such as noise, foul odors, and vibrations, we intend to maintain appropriate levels of communication with local communities even when there is no violation of regulations.

### ■ Environment-related complaints

Item	FY2005	FY2006	FY2007	FY2008	FY2009
Noise	0	2 (Tokyo, Fuji)	1 (Takaoka)	3 (Yaizu, Tokyo)	3 (Yaizu, Toyama)
Foul odors	0	1 (Takaoka)	0	0	0
Vibrations	1 (Kiyosu)	0	0	0	0

Note: Kiyosu = Kiyosu Research Office, Tokyo = Tokyo Research Center, Fuji = Fuji Plant, Takaoka = Takaoka Plant, Yaizu = Yaizu Facilities, Toyama = Toyama Plant  
The number of cases is shown in the table. Single cases that drew several complaints are recorded as one case.

## Environmental Accounting

### Environment-Related Investment and Performance Trends

We calculate the cost of environmental conservation (sums invested and expenses) and the outcomes from such investment for each domestic facility at Astellas, in line with our standards set with reference to the environmental accounting guidelines issued by the Ministry of the Environment.

Environmental conservation costs for FY2009 were as follows: investments totaled ¥250 million and expenses ¥1,611 million, including depreciation cost. The main investment in pollution control included the maintenance of effluent treatment facilities, checks on and laying of underground water pipes, and the installation of VOC recovery equipment. Regarding investments in global environmental conservation, we took steps to save energy, for instance improving the efficiency of air-conditioners and introduction of energy monitoring systems. The economic benefits of our environmental conservation measures totaled ¥918 million, including sale of waste organic solvents and metals as well as the reduced costs for waste disposal.

The table below summarizes trends over the past five years in our investment in environmental conservation and our environmental performance. The costs of environmental degradation were about seven times higher than the previous fiscal year because we booked expenses for purifying the contaminated soil at Kashima R&D Center.

#### Environment-related investment and expenses

(¥ million)

Category	FY2005		FY2006		FY2007		FY2008		FY2009	
	Investment	Expenses	Investment	Expenses	Investment	Expenses	Investment	Expenses	Investment	Expenses
Pollution prevention	193	375	214	453	190	662	211	614	161	461
Global environmental conservation	406	339	197	322	29	397	100	203	80	231
Resource circulation	55	794	119	484	0	416	2	411	1	340
Upstream/downstream costs	0	35	0	14	0	37	0	33	0	73
Administration costs	7	288	17	332	1	270	0	417	0	331
R&D costs	5	80	11	70	4	81	2	28	8	28
Social activity costs	0	12	0	10	0	8	0	7	0	6
Environmental damage costs	0	20	0	22	0	21	0	21	0	141
Total	667	1,945	557	1,708	224	1,892	315	1,734	250	1,611

#### Environmental performance

Category		FY2005	FY2006	FY2007	FY2008	FY2009	
INPUT	Energy*	Electricity MWh	207,118	194,390	194,001	203,303	204,766
		Piped gas thousand m <sup>3</sup>	15,664	20,202	20,558	21,234	21,812
		LPG tons	4,485	2,206	2,248	2,245	2,289
		Fuel oil kL	11,178	4,922	4,975	4,671	4,474
		Kerosene kL	2,679	2,138	1,414	1,279	1,124
		Diesel oil kL	8	7	10	9	16
		Gasoline kL	4	7	6	8	7
		Gasoline for sales vehicles kL	3,762	3,685	3,522	3,345	3,164
	Water resources	Total water usage thousand m <sup>3</sup>	16,479	15,305	15,065	14,564	14,090
		Tap water thousand m <sup>3</sup>	1,121	966	955	964	1,009
Industrial water thousand m <sup>3</sup>		12,882	12,699	12,617	12,333	11,864	
Well water thousand m <sup>3</sup>		2,476	1,639	1,493	1,266	1,218	
Raw materials	Raw materials tons	21,780	13,311	11,261	10,481	12,630	
OUTPUT	Global warming*	CO <sub>2</sub> * 1,000 tons	183	160	167	155	154
	In the atmospheric	SO <sub>x</sub> tons	9	6	6	5	5
		NO <sub>x</sub> tons	49	46	48	43	44
		VOCs tons	—	108	141	149	124
	In water	BOD load tons	53	35	28	26	20
		Drainage water thousand m <sup>3</sup>	15,378	14,970	14,338	13,814	12,991
	Waste materials	Volume generated tons	39,048	24,222	19,494	19,469	20,882
		Volume emitted tons	21,708	11,329	10,097	10,038	10,876
Landfill volume tons		568	326	237	208	207	

\*Actual values based on calculation method applied for the former action plan targets

## Environmental Performance Index\*

An environmental performance index is drawn up to show the overall relationship between the economic added value created by business activities and the environmental load resulting from those activities. We estimate the relationship with an index (added value, sales, etc.) that integrates multiple environmental loads, but there are various methods and theories that apply to this method.

At Astellas, we have designed our environmental performance index based on five factors where our activities are closely linked to environmental load: global warming, chemical substances, waste materials, water quality, and the atmosphere.

By understanding and analyzing the overall environmental load, we can set appropriate environmental action plan targets, which enable us to achieve a balance between our business

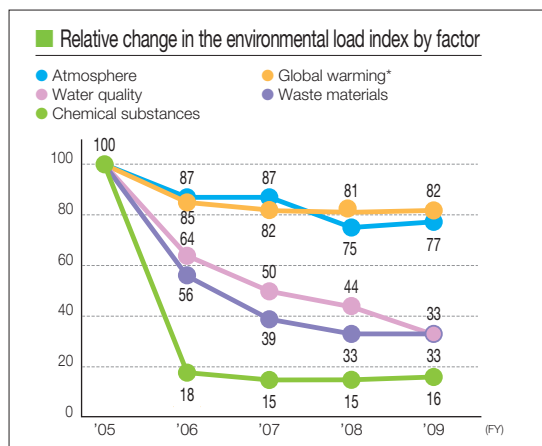
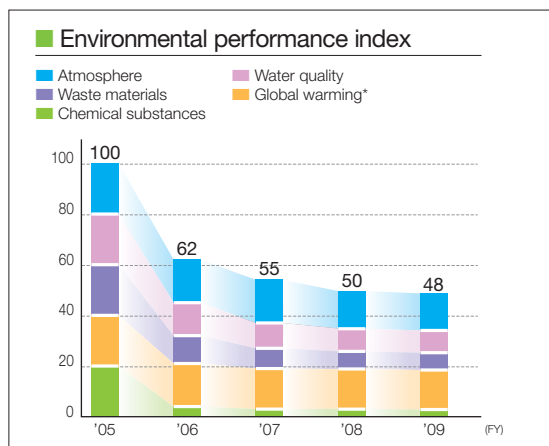
activities and environmental conservation, and to analyze improvements in the total environmental load in relation to our medium- and long-term targets. In FY2009, the environmental performance index was 48, a 51.7% improvement from the base year (FY2005) and a 2.7% improvement from the previous fiscal year. A breakdown by factor shows that our environmental performance indexes for chemical substances, waste materials, and water quality have been kept at one-third or lower than the base year level. However, the indexes for the atmosphere and global warming slightly worsened from the previous fiscal year. Regarding global warming, especially, significant improvement cannot be expected from the installation of new equipment, so we believe we need to take continuous action.

### \*Environmental performance index

On the whole, the coefficients are the economic value generated by a business activity, which includes the added value created, and the impact of those activities on the environment. The environmental performance index integrates individual environmental loads and multiple environmental loads (the environmental impact) into a single numerical value. We calculate the Astellas index taking into account economic value (sales). The index applies only to domestic operations.

## Factors used in determination of the environmental performance index and methods of calculation

Environmental load	The following factors are used in determining the environmental impact of our corporate activities Chemical substances: Atmospheric discharge volume of PRTR Class 1 designated chemical substances Global warming: CO <sub>2</sub> emissions due to energy consumption Waste materials: Landfill volume Water quality: BOD load Atmosphere: Total soot and dust, NOx and SOx emissions
Environmental load intensity	The intensity is calculated by dividing the environmental load of each environmental factor category by the sales of that category for that fiscal year. Environmental load intensity of chemical substances (A) = Discharge volume of PRTR designated chemical substances/Net sales Environmental load intensity of greenhouse gases (B) = CO <sub>2</sub> emissions/Net sales Environmental load intensity of waste products (C) = Landfill volume/Net sales Environmental load intensity of water pollutants (D) = BOD load/Net sales Environmental load intensity for air pollutants (E) = Total NOx and SOx emissions/Net sales
Environmental performance index	A relative value with the total environmental load intensity in the base year (fiscal 2006) at 100. Environmental load intensity of the five environmental factors is set at 20 for each factor (with the total for the five being 100). Calculate the value of the environmental load intensity for the fiscal year divided by that for the base year by multiplying by 20. Environmental performance index = $20 \times (A/A_0 + B/B_0 + C/C_0 + D/D_0 + E/E_0)$ Environmental load intensity for the base fiscal year: A <sub>0</sub> , B <sub>0</sub> , C <sub>0</sub> , D <sub>0</sub> , E <sub>0</sub> Environmental load intensity for the fiscal year being evaluated: A, B, C, D, E



\*Actual values based on calculation method applied for the former action plan targets

## Ensuring a Safe Working Environment

Safety Action Plan	Workplace safety and occupational hygiene management	<ul style="list-style-type: none"> <li>Review safety management system at regular intervals for maintenance and improvement</li> <li>Identify all risks at each business site concerning workplace safety, occupational hygiene, security and disaster prevention, and establish objectives and targets with the aim of reducing the likelihood of materialization of risks by the end of fiscal 2009</li> </ul>
	Response to accidents and emergencies	<ul style="list-style-type: none"> <li>Continuously work to effect improvements in the risk management system, including organizations, communication networks, and methods of responding to all conceivable accidents and emergency situations</li> </ul>
	Severity rate of work-related injuries	<ul style="list-style-type: none"> <li>Continually work to keep the severity rate of work-related injuries at 0.005 or lower</li> </ul>
	Chemical substance management	<ul style="list-style-type: none"> <li>Establish a comprehensive and effective system for managing hazardous chemical substances from procurement through disposal by the end of fiscal 2009</li> </ul>

Ensuring the health and safety of our employees is one of the most crucial aspects of Astellas' CSR-based management. We have established a system for implementing measures for preventing work-related injuries to provide a safe and comfortable working environment for all our employees. In implementing these measures, we operate a workplace safety and occupational hygiene management system that focuses on the risks of work-related injuries, in accordance with which we undertake risk assessment and other initiatives. We also strive to prevent work-related injuries and minimize the damage caused by any accident that might occur.

### Safety Action Plan Initiatives

#### Workplace safety and occupational hygiene management

At those production and research facilities where employees are exposed to potential danger, complacency and inadequate vigilance can lead to serious accidents, even when employees are aware of the importance of safety activities.

Astellas regularly revises day-to-day work procedures and its safety and health management system, conducting identification and assessment of any latent safety and health risks

relating to equipment, work operations, or employee conduct, so as to minimize risk. In FY2009, we introduced initiatives to make further improvements, such as upgrading methods for identifying risks in the research division and the identification of risks in visual terms in the production division.

#### Response to accidents and emergencies

We must prevent occupational accidents and minimize the damage caused by any accident or disaster that might occur. To this end, each of the major facilities at Astellas has created a system and established communication networks to prepare for an emergency response. We conduct fire and earthquake drills and other training exercises so that we are prepared for all

conceivable disasters. We also believe it is important to ensure that managerial level employees can fulfill their duties and responsibilities reliably in the case of accidents and disasters. To achieve this, we provide them with systematic education and training programs that simulate emergency situations.



Joint fire and rescue drill at Toyama Plant



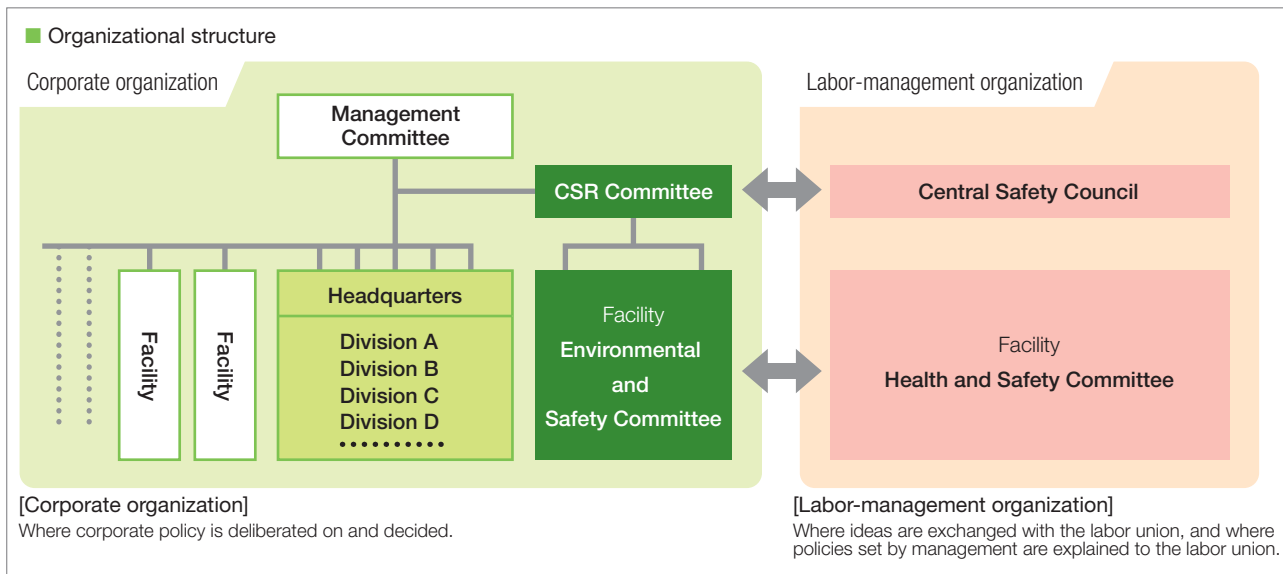
Joint firefighting drill at Takaoka Plant



Learning how to use fire extinguishers correctly at Tsukuba Research Center (Tokodai)



Emergency drill at Fuji Plant



## Work-related injuries

At Astellas, we have set a numerical target for the severity rate of work-related injuries as represented by the number of days of absence from work due to injuries.

In FY2009, the severity rate of work-related injuries was 0.002, which is below our target of 0.005. However, there were

some cases where our measures for preventing work-related injuries were insufficient. We will continue to identify and reduce the risks of work-related injuries to maintain the low severity rate.

	FY2005	FY2006	FY2007	FY2008	FY2009
Number of work-related injuries	32	41	31	26	27
Frequency rate of work-related injuries *1	0.44	0.35	0.25	0.31	0.38
Severity rate of work-related injuries *2	0.011	0.003	0.001	0.001	0.002

Note: Work-related injury data is based on the calendar year.

### \*1 Frequency rate of work-related injuries

This rate shows the number of employee deaths or injuries resulting from work-related accidents per million hours of work. The larger the number, the more frequently work-related injuries occur.

### \*2 Severity rate of work-related injuries

This rate shows the number of days absent from work due to work-related injuries per thousand hours worked. The higher the number, the greater the severity of the injury. The indicator of the frequency of work-related injuries is the frequency rate.

## Chemical substance management

To ensure the appropriate management of chemical substances throughout the entire process from purchase to disposal, we introduced and began operating a chemical substance management system in FY2009. We have also devised measures to reduce the risks for workers who handle harmful chemical substances. These include providing information on harmful substances and ensuring that employees are aware of the dangers involved; providing protective equipment; improving work procedures; and taking steps such as closing off facilities.

An accident that occurs during the transportation of chemical substances or waste could have a major impact on the wider community. To prevent this, drivers and other parties involved must take appropriate steps, and information must be provided to authorities such as fire departments. Our guidelines require that emergency contact cards, which contain environmental and safety information as well as contact information, be provided when outsourcing the transportation of chemicals and waste material.

# Methods of Calculating Energy-Use and Emission Data

## 1. Methods of calculating the amount of energy used and greenhouse gas emissions

The table below shows the conversion factors used for calculating our performance with regard to the amount of energy used and greenhouse gas emissions in FY2009. As the conversion factor for electricity use for the new Action Plan, we apply the CO<sub>2</sub> emission intensity of all the power sources (end use electricity; adjusted) of the Federation of Electric Power Companies

(FEPC) of Japan. To tackle global warming, the FEPC “aims for CO<sub>2</sub> emission intensity at around 0.33 tons/thousand kWh in FY2020.” Consequently, the amount of CO<sub>2</sub> emissions due to electricity use reflects the result of FEPC’s initiatives in addition to the emission-reduction efforts made by Astellas.

Type	Former Action Plan		New Action Plan	
	Conversion factor		Conversion factor	
	Calorific value	CO <sub>2</sub> emissions	Calorific value	CO <sub>2</sub> emissions
Electricity	9.83 GJ/MWh	0.378 tons/MWh	9.97 GJ/MWh	0.373* tons/MWh
Fuel oil	39.1 GJ/kL	2.71 tons/kL	39.1 GJ/kL	2.71 tons/kL
Kerosene	36.7 GJ/kL	2.49 tons/kL	36.7 GJ/kL	2.49 tons/kL
LPG	50.2 GJ/ton	3.00 tons/ton	50.8 GJ/ton	3.00 tons/ton
LNG	54.5 GJ/ton	2.70 tons/ton	54.6 GJ/ton	2.70 tons/ton
Piped gas	45.0 GJ/thousand m <sup>3</sup> N	2.15 tons/thousand m <sup>3</sup> N	45.0 GJ/thousand m <sup>3</sup> N	2.24 tons/thousand m <sup>3</sup> N
Diesel oil	38.2 GJ/kL	2.52 tons/kL	37.7 GJ/kL	2.58 tons/kL
Gasoline	34.6 GJ/kL	2.32 tons/kL	34.6 GJ/kL	2.32 tons/kL
Heat	—		—	0.057 tons/GJ

\* To calculate the CO<sub>2</sub> emissions for FY2009, we used the CO<sub>2</sub> emission intensity for FY2008 because the latest CO<sub>2</sub> emission intensity of FEPC was unknown as of the date of issuance of this CSR Report (June).

The conversion factors in the above table are used for our overseas facilities, excluding those in the countries below.

Country	Former Action Plan		New Action Plan	
	CO <sub>2</sub> emission factor		CO <sub>2</sub> emission factor	
	Electricity*	Steam	Electricity*	Steam
US	0.586 tons/MWh	—	0.570 tons/MWh	—
Ireland	0.639 tons/MWh	—	0.582 tons/MWh	—
Netherlands	0.447 tons/MWh	—	0.387 tons/MWh	—
China	0.754 tons/MWh	0.091 tons/GJ	0.787 tons/MWh	0.091 tons/GJ

\* We used the CO<sub>2</sub> emission intensity for FY2005, the base year for the new Action Plan, because the latest CO<sub>2</sub> emission intensities of these countries were unknown as of the date of issuance of this CSR Report (June).

## 2. Estimated amount of energy consumption and CO<sub>2</sub> emissions in past fiscal years

In terms of our branches, sales offices and training centers in Japan that are included in the scope of application of the new Action Plan, the amount of electricity and fuel consumption is unknown for FY1990 and the four years from FY2005 to FY2008. As a result, we utilized the actual amount of consumption in FY2009 to calculate the amount of energy consumption and

CO<sub>2</sub> emissions for these years. In the same way, to calculate our CO<sub>2</sub> emissions at our overseas facilities in FY1990, we utilized the amount of our energy consumption in FY1996, the earliest fiscal year for which we know the actual amount of our energy consumption.



# Environmental Performance at Our Major Facilities

## Japan

### INPUT

#### ■ Nishine Plant

Energy	Electricity	10,240 MWh
	Fuel oil	1,961 kL
	Kerosene	6 kL
	LPG	0.1 tons
	Piped gas	0 thousand m <sup>3</sup>
	Diesel oil	1 kL
	Gasoline	0.4 kL
	Total calorific values	179 TJ
Water	Tap water	0 thousand m <sup>3</sup>
	Industrial water	0 thousand m <sup>3</sup>
	Well water	193 thousand m <sup>3</sup>

#### ■ Takahagi Facilities

Energy	Electricity	16,456 MWh
	Fuel oil	2,200 kL
	Kerosene	0 kL
	LPG	6 tons
	Piped gas	0 thousand m <sup>3</sup>
	Diesel oil	4 kL
	Gasoline	1 kL
	Total calorific values	251 TJ
Water	Tap water	37 thousand m <sup>3</sup>
	Industrial water	2,550 thousand m <sup>3</sup>
	Well water	0 thousand m <sup>3</sup>

#### ■ Fuji Plant

Energy	Electricity	17,399 MWh
	Fuel oil	0 kL
	Kerosene	0 kL
	LPG	5 tons
	Piped gas	2,920 thousand m <sup>3</sup>
	Diesel oil	0 kL
	Gasoline	1 kL
	Total calorific values	305 TJ
Water	Tap water	124 thousand m <sup>3</sup>
	Industrial water	2,517 thousand m <sup>3</sup>
	Well water	0 thousand m <sup>3</sup>

#### ■ Yaizu Facilities

Energy	Electricity	35,454 MWh
	Fuel oil	0 kL
	Kerosene	0 kL
	LPG	0 tons
	Piped gas	5,837 thousand m <sup>3</sup>
	Diesel oil	3 kL
	Gasoline	0.3 kL
	Total calorific values	616 TJ
Water	Tap water	360 thousand m <sup>3</sup>
	Industrial water	0 thousand m <sup>3</sup>
	Well water	499 thousand m <sup>3</sup>

### OUTPUT

Greenhouse gases	CO <sub>2</sub> emissions due to energy consumption	9,151 tons
	Other gases	—
Air pollutants	NO <sub>x</sub>	4 tons
	SO <sub>x</sub>	2 tons
	VOCs	22 tons
Water pollutants	Drainage volume	193 thousand m <sup>3</sup>
	BOD load	0.3 tons
Waste materials	Volume generated	621 tons
	Landfill volume	6 tons

Greenhouse gases	CO <sub>2</sub> emissions due to energy consumption	12,131 tons
	Other gases	278 tons
Air pollutants	NO <sub>x</sub>	8 tons
	SO <sub>x</sub>	3 tons
	VOCs	0.4 tons
Water pollutants	Drainage volume	2,587 thousand m <sup>3</sup>
	BOD load	4 tons
Waste materials	Volume generated	1,108 tons
	Landfill volume	2 tons

Greenhouse gases	CO <sub>2</sub> emissions due to energy consumption	13,047 tons
	Other gases	—
Air pollutants	NO <sub>x</sub>	1 tons
	SO <sub>x</sub>	0 tons
	VOCs	44 tons
Water pollutants	Drainage volume	2,509 thousand m <sup>3</sup>
	BOD load	3 tons
Waste materials	Volume generated	403 tons
	Landfill volume	2 tons

Greenhouse gases	CO <sub>2</sub> emissions due to energy consumption	26,308 tons
	Other gases	—
Air pollutants	NO <sub>x</sub>	11 tons
	SO <sub>x</sub>	0 tons
	VOCs	3 tons
Water pollutants	Drainage volume	745 thousand m <sup>3</sup>
	BOD load	1 tons
Waste materials	Volume generated	518 tons
	Landfill volume	8 tons

Notes: 1. Greenhouse gas volumes released are converted to CO<sub>2</sub> emissions.  
2. The terajoule (TJ) is equal to one trillion joules.

# Japan

## INPUT

### ■ Toyama Plant

Energy	Electricity	23,166 MWh
	Fuel oil	0 kL
	Kerosene	0 kL
	LPG	0 tons
	Piped gas	2,850 thousand m <sup>3</sup>
	Diesel oil	3 kL
	Gasoline	1 kL
	Total calorific values	359 TJ
Water	Tap water	141 thousand m <sup>3</sup>
	Industrial water	2,266 thousand m <sup>3</sup>
	Well water	0 thousand m <sup>3</sup>

### ■ Takaoka Plant

Energy	Electricity	18,172 MWh
	Fuel oil	297 kL
	Kerosene	0.04 kL
	LPG	2,274 tons
	Piped gas	0 thousand m <sup>3</sup>
	Diesel oil	0.3 kL
	Gasoline	1 kL
	Total calorific values	308 TJ
Water	Tap water	72 thousand m <sup>3</sup>
	Industrial water	4,135 thousand m <sup>3</sup>
	Well water	43 thousand m <sup>3</sup>

### ■ Kiyosu Facilities

Energy	Electricity	4,830 MWh
	Fuel oil	0 kL
	Kerosene	0 kL
	LPG	0 tons
	Piped gas	622 thousand m <sup>3</sup>
	Diesel oil	0 kL
	Gasoline	0.2 kL
	Total calorific values	76 TJ
Water	Tap water	15 thousand m <sup>3</sup>
	Industrial water	0 thousand m <sup>3</sup>
	Well water	477 thousand m <sup>3</sup>

## OUTPUT

Greenhouse gases	CO <sub>2</sub> emissions due to energy consumption	15,035 tons
	Other gases	—
Air pollutants	NOx	4 tons
	SOx	0 tons
	VOCs	10 tons
Water pollutants	Drainage volume	2,007 thousand m <sup>3</sup>
	BOD load	3 tons
Waste materials	Volume generated	4,225 tons
	Landfill volume	27 tons

Greenhouse gases	CO <sub>2</sub> emissions due to energy consumption	14,408 tons
	Other gases	3,926 tons
Air pollutants	NOx	7 tons
	SOx	0.002 tons
	VOCs	9 tons
Water pollutants	Drainage volume	3,941 thousand m <sup>3</sup>
	BOD load	4 tons
Waste materials	Volume generated	11,133 tons
	Landfill volume	91 tons

Greenhouse gases	CO <sub>2</sub> emissions due to energy consumption	3,196 tons
	Other gases	—
Air pollutants	NOx	1 tons
	SOx	0 tons
	VOCs	21 tons
Water pollutants	Drainage volume	492 thousand m <sup>3</sup>
	BOD load	1 tons
Waste materials	Volume generated	597 tons
	Landfill volume	2 tons

## ● INPUT

### ■ Tsukuba Research Center (Miyukigaoka)

Energy	Electricity	42,508 MWh
	Fuel oil	0 kL
	Kerosene	20 kL
	LPG	0 tons
	Piped gas	6,338 thousand m <sup>3</sup>
	Diesel oil	0 kL
	Gasoline	0 kL
	Total calorific values	710 TJ
Water	Tap water	124 thousand m <sup>3</sup>
	Industrial water	161 thousand m <sup>3</sup>
	Well water	0 thousand m <sup>3</sup>



## ■ OUTPUT

Greenhouse gases	CO <sub>2</sub> emissions due to energy consumption	30,102 tons
	Other gases	—
Air pollutants	NO <sub>x</sub>	5 tons
	SO <sub>x</sub>	0 tons
	VOCs	9 tons
Water pollutants	Drainage volume	177 thousand m <sup>3</sup>
	BOD load	2 tons
Waste materials	Volume generated	910 tons
	Landfill volume	35 tons

### ■ Tsukuba Research Center (Tokodai)

Energy	Electricity	4,527 MWh
	Fuel oil	0 kL
	Kerosene	1,064 kL
	LPG	4 tons
	Piped gas	0 thousand m <sup>3</sup>
	Diesel oil	1 kL
	Gasoline	1 kL
	Total calorific values	84 TJ
Water	Tap water	41 thousand m <sup>3</sup>
	Industrial water	0 thousand m <sup>3</sup>
	Well water	3 thousand m <sup>3</sup>



Greenhouse gases	CO <sub>2</sub> emissions due to energy consumption	4,356 tons
	Other gases	—
Air pollutants	NO <sub>x</sub>	2 tons
	SO <sub>x</sub>	0 tons
	VOCs	1 tons
Water pollutants	Drainage volume	45 thousand m <sup>3</sup>
	BOD load	0.2 tons
Waste materials	Volume generated	193 tons
	Landfill volume	8 tons

### ■ Kashima R&D Center

Energy	Electricity	21,329 MWh
	Fuel oil	0 kL
	Kerosene	0 kL
	LPG	0 tons
	Piped gas	3,078 thousand m <sup>3</sup>
	Diesel oil	4 kL
	Gasoline	0 kL
	Total calorific values	351 TJ
Water	Tap water	62 thousand m <sup>3</sup>
	Industrial water	221 thousand m <sup>3</sup>
	Well water	0 thousand m <sup>3</sup>



Greenhouse gases	CO <sub>2</sub> emissions due to energy consumption	14,863 tons
	Other gases	—
Air pollutants	NO <sub>x</sub>	2 tons
	SO <sub>x</sub>	0 tons
	VOCs	4 tons
Water pollutants	Drainage volume	252 thousand m <sup>3</sup>
	BOD load	1 tons
Waste materials	Volume generated	276 tons
	Landfill volume	9 tons

■ Volumes released and transferred for which notification is required by the PRTR Act concerning management of chemical substances, by facility (in Japan)

■ Nishine Plant

Substance name	Volume handled	Volume released			Volume transferred	
		Air	Water	Soil	Waste	Sewerage
Dichloromethane	52.866	10.262	0.000	0.000	0.061	0.000

■ Takahagi Facilities

Substance name	Volume handled	Volume released			Volume transferred	
		Air	Water	Soil	Waste	Sewerage
1,4-Dioxane	1.200	0.000	0.000	0.000	0.000	0.000
<i>N, N</i> -dimethylformamide	8.996	0.004	0.000	0.000	0.768	0.000
Acetonitrile	6.589	0.011	0.001	0.000	1.037	0.000
Ethylene glycol	88.018	0.002	0.000	0.000	3.000	0.000
Toluene	20.722	0.096	0.001	0.000	2.553	0.000
Dioxins	—	0.000	0.004	0.000	0.076	0.000

■ Fuji Plant

Substance name	Volume handled	Volume released			Volume transferred	
		Air	Water	Soil	Waste	Sewerage
Dichloromethane	5.818	0.000	0.000	0.000	0.000	0.000

■ Yaizu Facilities

Substance name	Volume handled	Volume released			Volume transferred	
		Air	Water	Soil	Waste	Sewerage
Acetonitrile	4.652	0.232	0.698	0.000	3.722	0.000

■ Toyama Plant

Substance name	Volume handled	Volume released			Volume transferred	
		Air	Water	Soil	Waste	Sewerage
<i>N, N</i> -dimethylformamide	3.500	0.000	0.001	0.000	3.472	0.000
Acetonitrile	12.242	0.040	0.000	0.000	11.346	0.000

■ Takaoka Plant

Substance name	Volume handled	Volume released			Volume transferred	
		Air	Water	Soil	Waste	Sewerage
<i>N, N</i> -dimethylformamide	163.830	0.017	0.000	0.000	0.306	0.000
Ethylene glycol	2.350	0.003	0.000	0.000	0.000	0.000
Salicylaldehyde	28.491	0.000	0.000	0.000	3.456	0.000
Dichloromethane	272.014	3.623	0.000	0.000	2.805	0.000
Thiourea	12.350	0.000	0.000	0.000	0.000	0.000
Formaldehyde	71.000	0.011	0.000	0.000	51.604	0.000
Manganese and its compounds	32.815	0.000	0.013	0.000	32.802	0.000
Dioxins	—	0.781	0.014	0.000	0.113	0.000

■ Tsukuba Research Center (Miyukigaoka)

Substance name	Volume handled	Volume released			Volume transferred	
		Air	Water	Soil	Waste	Sewerage
Acetonitrile	3.462	0.017	0.000	0.000	3.445	0.000
Chloroform	35.067	0.842	0.000	0.000	34.225	0.000

■ Tsukuba Research Center (Tokodai)

Substance name	Volume handled	Volume released			Volume transferred	
		Air	Water	Soil	Waste	Sewerage
Xylene	8.618	0.000	0.000	0.000	0.000	0.000
Chloroform	2.643	0.097	0.000	0.000	2.546	0.000

■ Kashima R&D Center

Substance name	Volume handled	Volume released			Volume transferred	
		Air	Water	Soil	Waste	Sewerage
Acetonitrile	2.226	0.145	0.000	0.000	2.081	0.000
Toluene	1.705	0.043	0.000	0.000	1.662	0.000

Note: Amounts in the table are tons/year. For dioxins, the units are mg-TEQ/year.

## Overseas

### INPUT

#### ■ Norman Plant (U.S.A.)

Energy	Electricity	22,575 MWh
	Piped gas	2,912 thousand m <sup>3</sup>
	Diesel oil	11 kL
	Total calorific values	356 TJ
Water	Tap water	141 thousand m <sup>3</sup>

### OUTPUT

Greenhouse gases	CO <sub>2</sub> emissions due to energy consumption	19,417 tons
Air pollutants	SO <sub>x</sub>	0.1 tons
	NO <sub>x</sub>	6 tons
	VOCs	2 tons
Water pollutants	Drainage volume	141 thousand m <sup>3</sup>
	BOD load	4 tons
Waste materials	Volume generated	96 tons
	Landfill volume	0.2 tons

#### ■ Dublin Plant (Ireland)

Energy	Electricity	6,755 MWh
	Piped gas	762 thousand m <sup>3</sup>
	Diesel oil	2 kL
	Total calorific values	102 TJ
Water	Tap water	53 thousand m <sup>3</sup>

Greenhouse gases	CO <sub>2</sub> emissions due to energy consumption	5,644 tons
Air pollutants	SO <sub>x</sub>	0 tons
	NO <sub>x</sub>	2 tons
	VOCs	5 tons
Water pollutants	Drainage volume	53 thousand m <sup>3</sup>
	BOD load	2 tons
Waste materials	Volume generated	2,246 tons
	Landfill volume	39.2 tons

#### ■ Kerry Plant (Ireland)

Energy	Electricity	7,725 MWh
	Piped gas	—
	Diesel oil	735 kL
	Total calorific values	105 TJ
Water	Tap water	31 thousand m <sup>3</sup>

Greenhouse gases	CO <sub>2</sub> emissions due to energy consumption	6,392 tons
Air pollutants	SO <sub>x</sub>	0.5 tons
	NO <sub>x</sub>	2 tons
	VOCs	—
Water pollutants	Drainage volume	31 thousand m <sup>3</sup>
	BOD load	4 tons
Waste materials	Volume generated	262 tons
	Landfill volume	152 tons

#### ■ Meppel Plant (Netherlands)

Energy	Electricity	12,993 MWh
	Piped gas	923 thousand m <sup>3</sup>
	LPG	2 tons
	Total calorific values	171 TJ
Water	Tap water	29 thousand m <sup>3</sup>

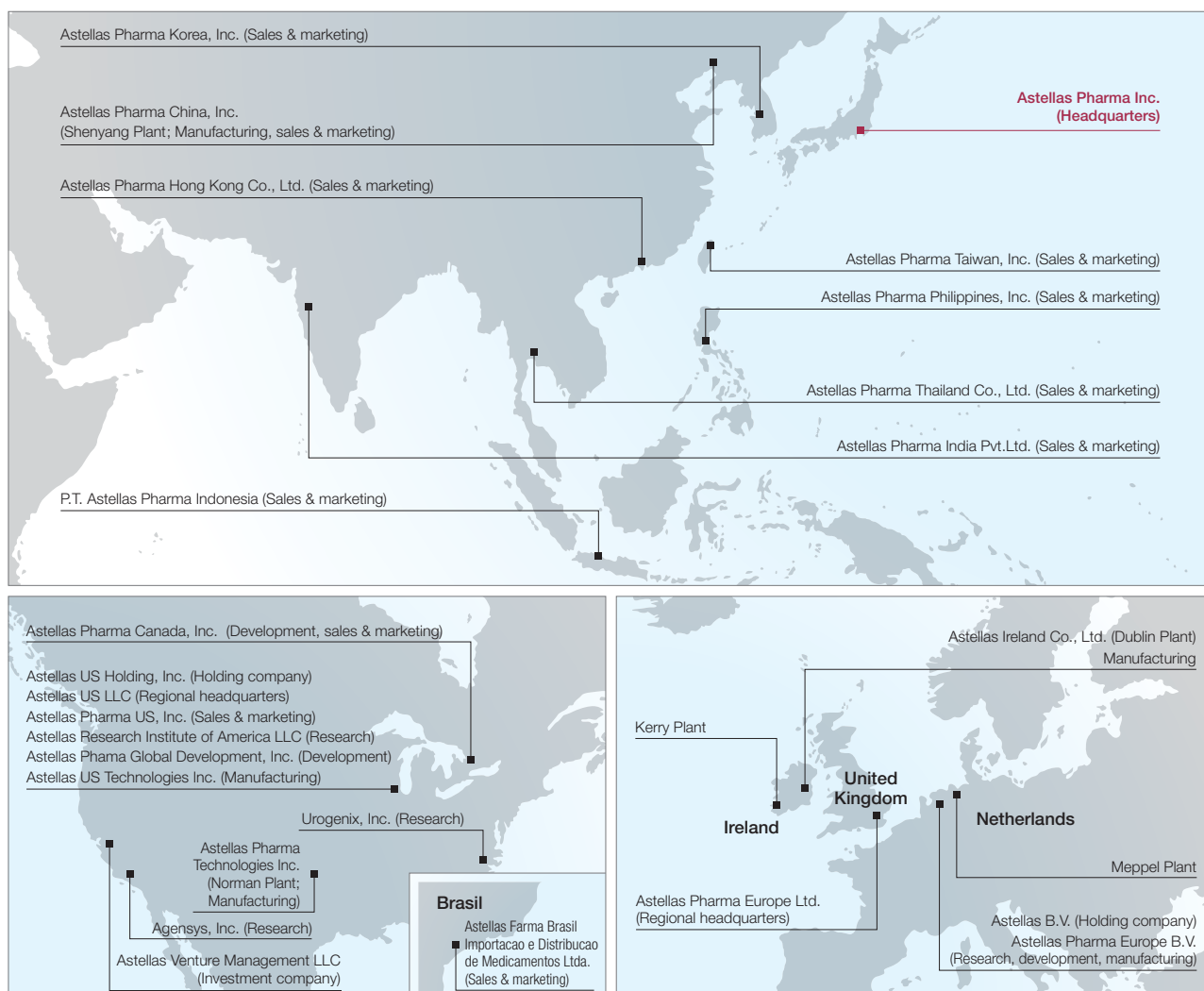
Greenhouse gases	CO <sub>2</sub> emissions due to energy consumption	7,103 tons
Air pollutants	SO <sub>x</sub>	—
	NO <sub>x</sub>	0 tons
	VOCs	1 tons
Water pollutants	Drainage volume	29 thousand m <sup>3</sup>
	BOD load	—
Waste materials	Volume generated	653 tons
	Landfill volume	175 tons

#### ■ Shenyang Plant (China)

Energy	Electricity	1,670 MWh
	Purchased heat energy (steam)	15,092 GJ
	Diesel oil	8 kL
	Total calorific values	32 TJ
Water	Tap water	22 thousand m <sup>3</sup>

Greenhouse gases	CO <sub>2</sub> emissions due to energy consumption	2,704 tons
Air pollutants	SO <sub>x</sub>	—
	NO <sub>x</sub>	—
	VOCs	—
Water pollutants	Drainage volume	21 thousand m <sup>3</sup>
	BOD load	—
Waste materials	Volume generated	145 tons
	Landfill volume	—

# Main Facilities (Astellas Pharma and Main Group Companies)



## ■ Astellas Pharma and domestic group companies

Company name	Facility	Location	Function
Astellas Pharma Inc.*1	Nihonbashi Facilities	Chuo-ku, Tokyo	Headquarters
	Hasune Office	Itabashi-ku, Tokyo	Development
	Tsukuba Research Center (Miyukigaoka)	Tsukuba, Ibaraki	Research
	Tsukuba Research Center (Tokodai)	Tsukuba, Ibaraki	
	Tokyo Research Center	Itabashi-ku, Tokyo	
	Kiyosu Research Office	Kiyosu, Aichi	
	Takahagi Technology Center	Takahagi, Ibaraki	
	Yaizu Technology Center	Yaizu, Shizuoka	
	Kashima R&D Center	Yodogawa-ku, Osaka	Sales & marketing
Branch/sales offices	18 branches, 160 sales offices		
Astellas Tokai Co., Ltd.	Fuji Plant	Fuji, Shizuoka	Manufacturing
	Yaizu Plant	Yaizu, Shizuoka	
	Nishine Plant	Hachimantai, Iwate	
Astellas Toyama Co., Ltd.	Toyama Plant	Toyama, Toyama	
	Takaoka Plant	Takaoka, Toyama	
Astellas Pharma Chemicals Co., Ltd.	Takahagi Plant	Takahagi, Ibaraki	

### Notes

1: The Group companies listed below support the Group's core operations.

●Astellas Business Service Co., Ltd. ●Astellas Learning Institute Co., Ltd. ●Astellas Research Technologies Co., Ltd. ●Astellas Marketing and Sales Support Co., Ltd. ●Lotus Estate Co., Ltd. ●Astellas Analytical Science Laboratories, Inc.

2: The Tokyo Research Center was closed in January 2010.

Note: Assurance was provided on the environmental performance indicators included in the Japanese-language original of **Astellas CSR Report 2010** by the independent assurance provider KPMG AZSA Sustainability Co., Ltd., a subsidiary of KPMG AZSA & Co.

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■ Our CSR Report can be viewed on our website:

<http://www.astellas.com/en/>