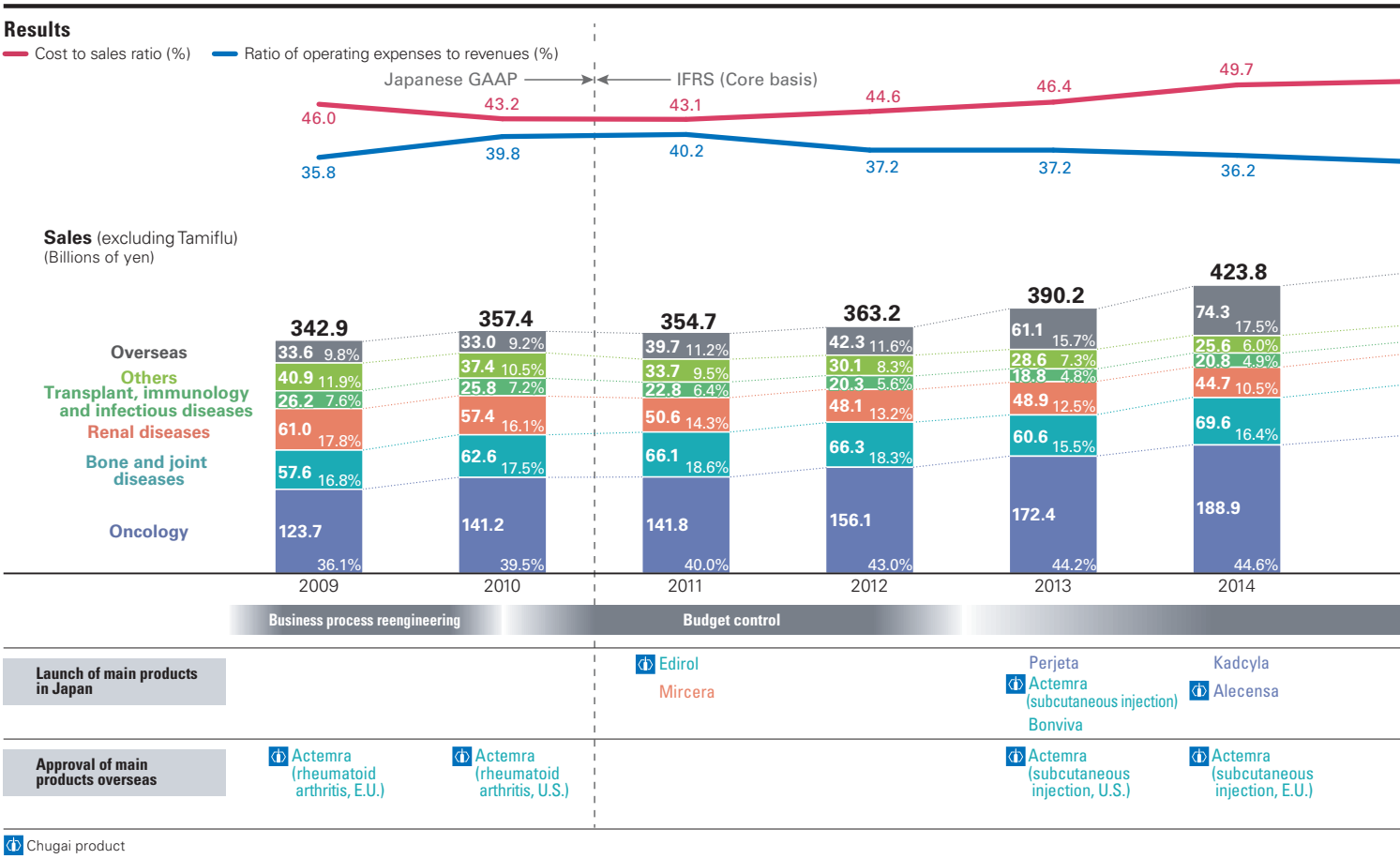
Financial and Pre-Financial Highlights (IFRS)

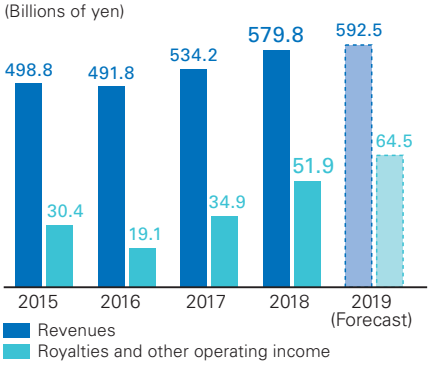
Chugai Pharmaceutical Co., Ltd. and Consolidated Subsidiaries/Years ended December 31

Financial Indicators (Core Basis)



Revenues/ Royalties and Other Operating Income

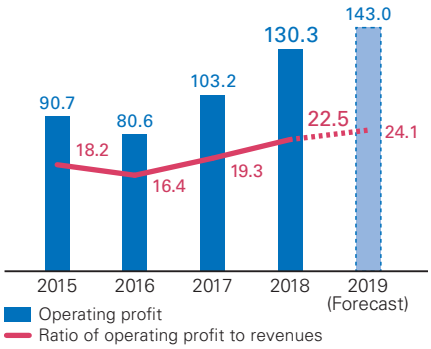
(Billions of yen)



Revenues expanded substantially in 2018 due to exports of Chugai products and non-recurring income from the transfer of long-listed products and others. Royalties and other operating income (ROOI) is composed of recurring income, which has been increasing in conjunction with overseas sales of Actemra and other products, and non-recurring income, which changes from year to year and is the principal factor in the fluctuations in ROOI.

Operating Profit/ Ratio of Operating Profit to Revenues

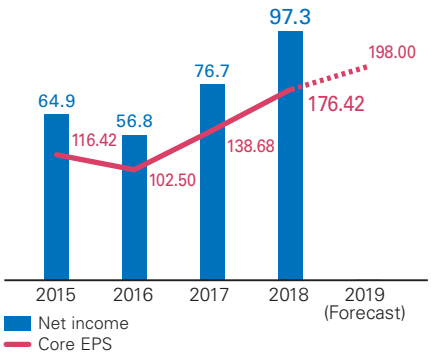
(Billions of yen/%)



The ratio of operating profit to revenues is consistently high due to the low ratio of operating expenses to revenues. In 2018, the increase in ROOI and the lower cost to sales ratio contributed to the increase in the ratio of operating profit to revenues. In 2019, we expect record profit due to factors including ROOI growth from royalty income for Chugai product Hemlibra.

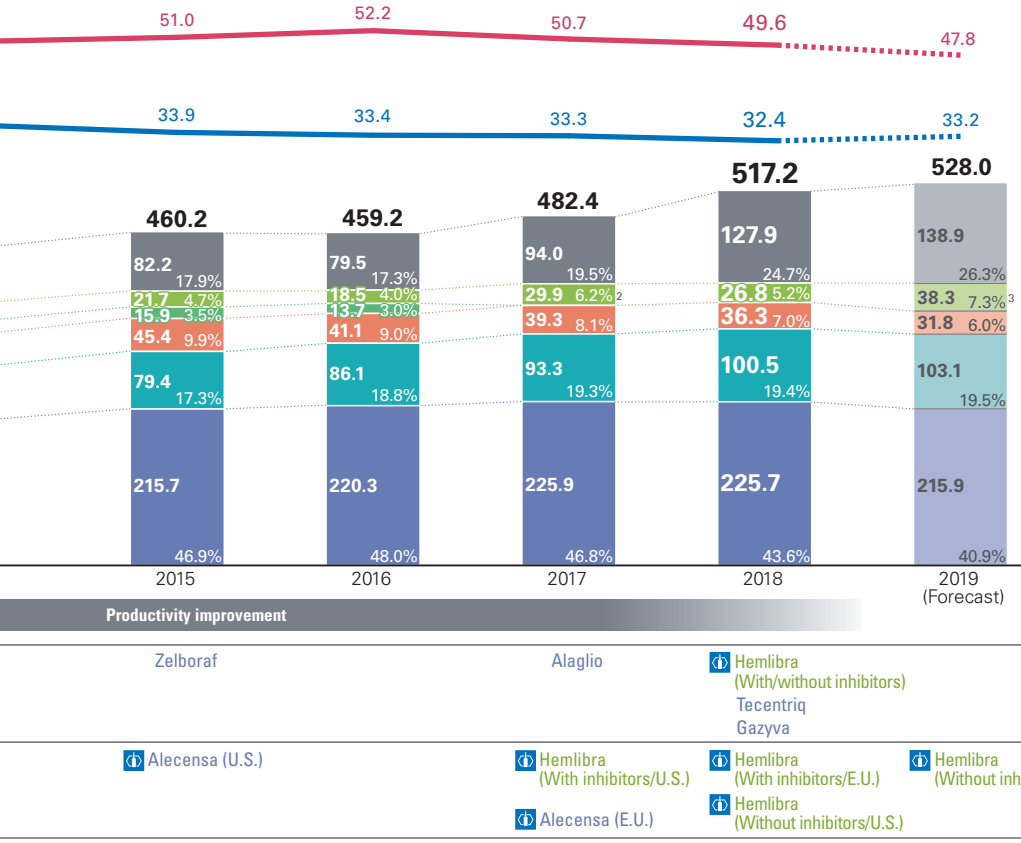
Net Income/Core EPS

(Billions of yen/Yen)



In new mid-term business plan IBI 21, we set a high single-digit[1] Core EPS compound annual growth rate (CAGR) as the quantitative outlook, and are using it as a key performance indicator shared both internally and externally.

1. Based on constant exchange rates for the three-year period



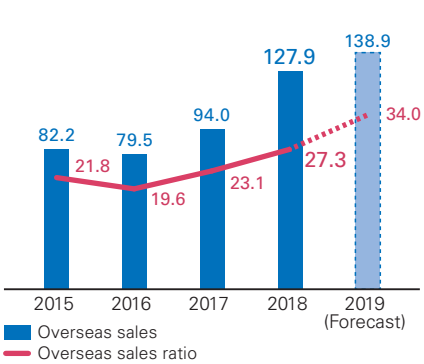
Chugai has substantially improved its cost structure in view of the rising cost to sales ratio resulting from the increase in products in-licensed from Roche under the strategic alliance between the two companies. We have now secured high profitability by continuously achieving a ratio of operating expenses to revenues at a level that compares favorably with the world's leading pharmaceutical companies.

Overseas sales were strong due to an increase in exports of Chugai products Actemra and Alecensa to Roche. In Japan, despite the impact of NHI drug price revisions and generic drugs on some mainstay products, Chugai products such as Alecensa and Actemra continued to drive growth.

2. Sales of the transplant, immunology and infectious diseases area, which were disclosed separately up until 2016, were included and disclosed in sales of the Others area from 2017.
3. From 2019, Tamiflu is included in Others.

Overseas Sales/Overseas Sales Ratio

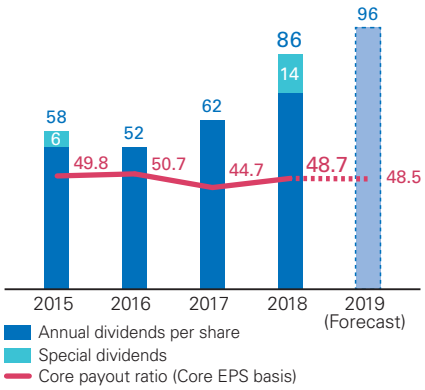
(Billions of yen/%)



Chugai was a growth driver for the Roche Group, with global sales of Actemra (including Japan) exceeding 2.0 billion Swiss francs in 2018 and strong sales of Alecensa in Europe and the United States. An additional indication for Hemlibra is also expected to contribute substantially to overseas revenues in 2019.

Dividends per Share/Core Payout Ratio

(Yen/%)



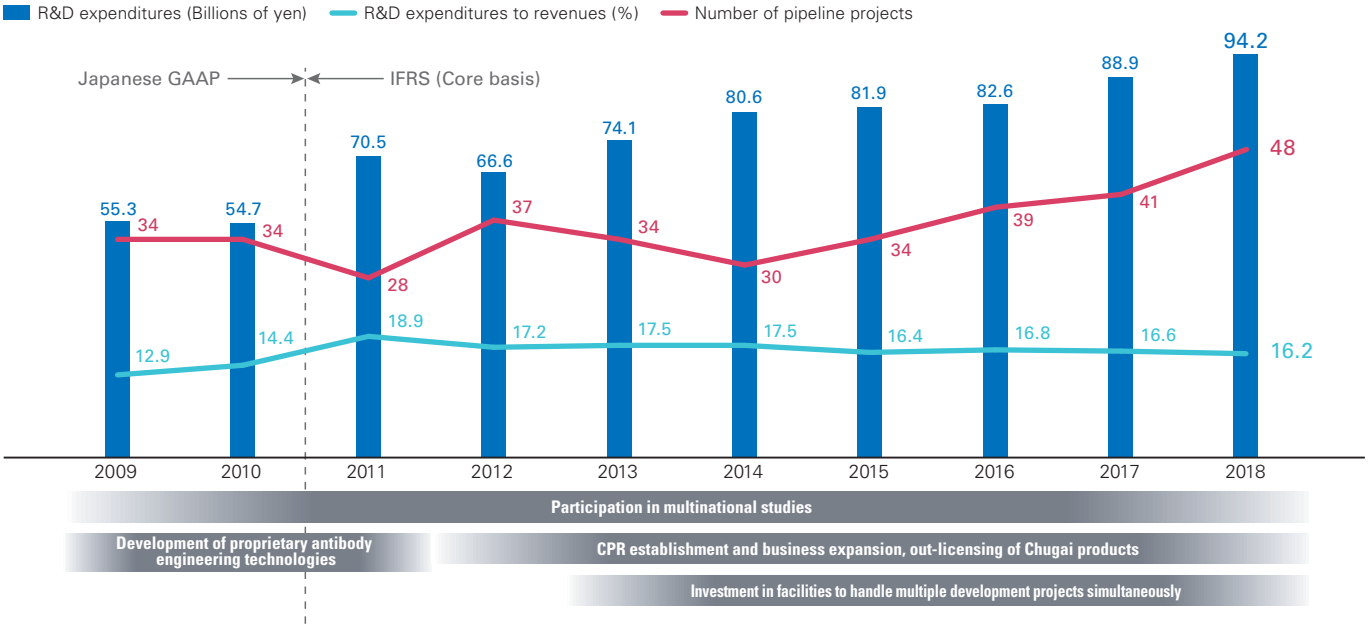
Regarding shareholder returns, we target stable dividends with a Core EPS payout ratio of 50 percent on average, based on an approach of dividing core net income equally between the Company and our shareholders. This policy will continue unchanged under IBI 21, our new mid-term business plan.

About Core Basis Results

Chugai reports its results on a Core basis from 2013 in conjunction with its decision to adopt IFRS. Core basis results are the IFRS basis results adjusted by excluding non-Core items, and are consistent with the concept of Core basis results disclosed by Roche. Core basis results are used by Chugai as internal performance indicators for representing recurring profit trends both internally and externally, and as indices for establishing profit distributions such as returns to shareholders. No items have been excluded from the IFRS balance sheet and cash flows, as the Core basis results concept only applies to the income statement.

Research, Clinical Development, Pharmaceutical Technology and Production

R&D Expenditures/R&D Expenditures to Revenues/Pipeline Projects

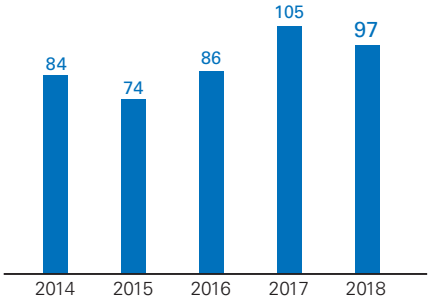


As revenues grow, Chugai increases investment in research and development. In addition to the steady creation of innovative drugs, this leads to research findings that may contribute to the advancement of healthcare and the pharmaceutical industry worldwide. Our policy is to proactively conduct speedy research and development in light of the competitive environment, as well as upfront investment to acquire and enhance future competitiveness, while keeping growth in overall operating expenses within the rate of revenue growth as a general principle.

Under our strategic alliance with Roche, we have been promoting new drug development with higher success rates and greater efficiency by collaborating with Roche in ways such as examining and deciding on which Roche products to in-license based on the results of early-stage clinical trials. In recent years, we have maintained a robust pipeline, with several products from Chugai research having moved into the clinical phase, including in-house products from Chugai Pharmabody Research (CPR),[1] which has expanded its operations to accelerate the creation of innovative therapeutic antibodies.

1. Established in Singapore in 2012

Publications in Academic Papers and Presentations at Scientific Conferences regarding Chugai Research Findings[2]

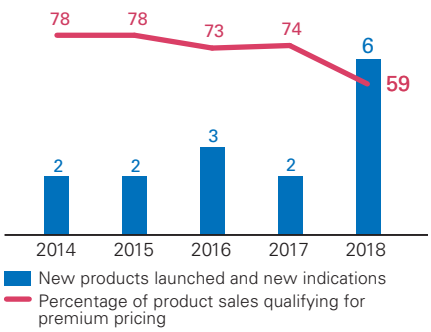


Chugai develops innovative medicines that allow it to differentiate itself from competitors by continuously establishing proprietary drug discovery technologies and applying them to development candidates while promoting research on commercialization for high quality and high added value. We will continue to generate research findings that may contribute to the overall advancement of healthcare, presenting those findings at scientific conferences and publishing them in academic papers.

2. Total of drug discovery and pharmaceutical technology

New Products Launched and New Indications/ Percentage of Product Sales Qualifying for Premium Pricing

(Number/%)

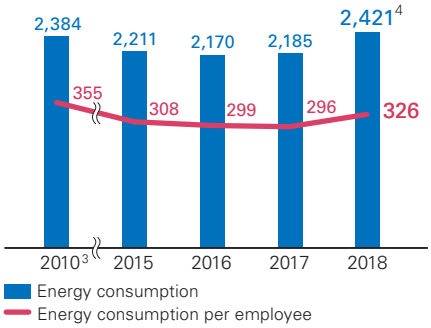


Although the percentage of product sales qualifying for premium pricing decreased substantially in 2018 due to the loss of premium pricing status for new drug creation and launches of generics, the number of new products and additional indications increased significantly. With our stable revenue base from the efficient in-licensing of Roche products for the Japanese market, we will continue to concentrate on the creation of innovative medicines.

Note: Products subject to special market-expansion repricing (2016, 2017: Avastin) are counted as products qualifying for premium pricing because they were assumed to meet the conditions for such pricing in the relevant fiscal years.

Energy Consumption/ Energy Consumption per Employee

(Thousands of GJ/GJ per employee)

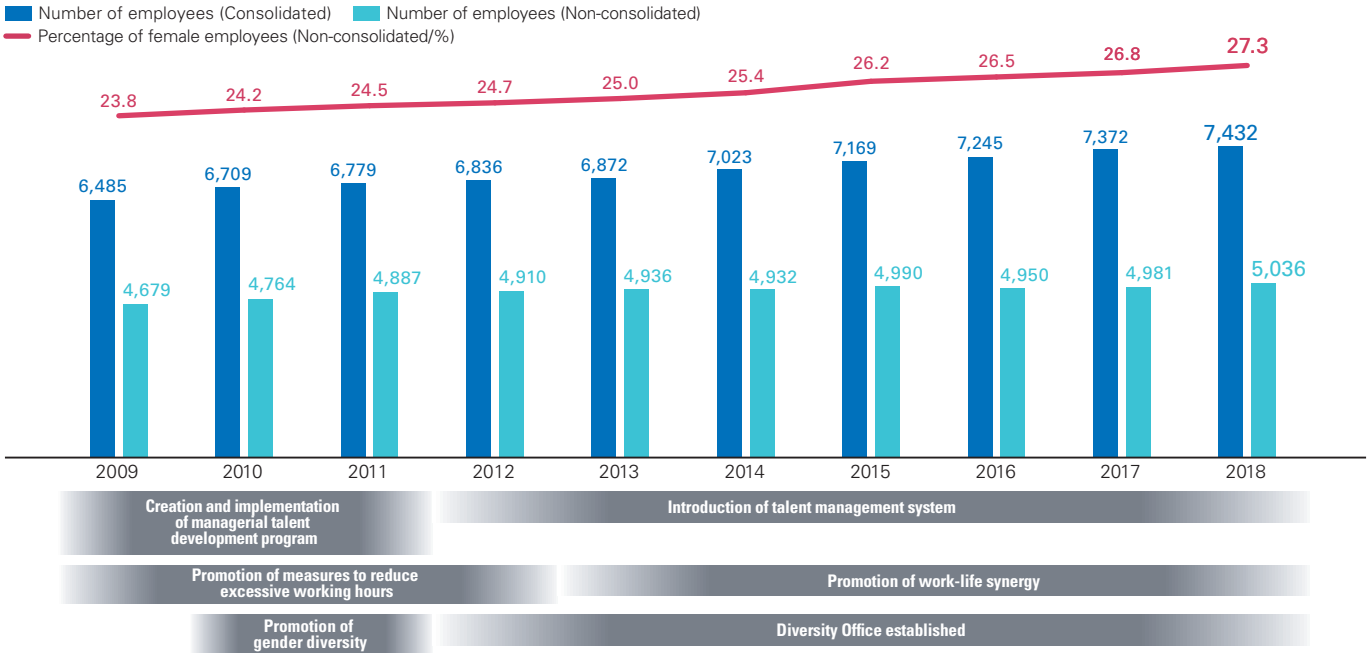


Energy consumption increased 10 percent year-on-year in 2018 due to the start of production at UK3.[5] As Chugai expands its production system for new drugs, it is also working to reduce energy consumption as one of its tasks, based on its Core Values, "We care about the global environment." (See pages 91-93 for details on environmental, health and safety initiatives.)

3. Benchmark year for mid-term environmental goals
4. Includes 40,000 GJ of overseas consumption
5. A new high-mix low-volume biological API manufacturing facility within the Ukima Plant (Kita-ku, Tokyo)

Human Resource Management

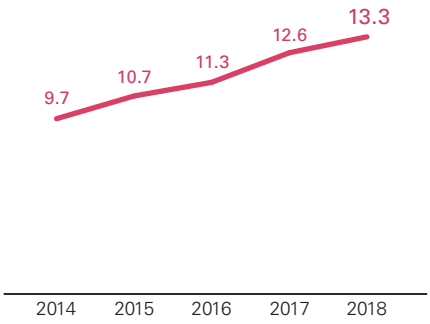
Employees/Ratio of Female Employees



Chugai is working to enhance its management of human resources based on the belief that its people are the source of its contribution to patients in terms of providing greater value. We have implemented a talent management system to develop and retain leaders and core personnel, and also promote diversity and inclusion and work-life synergy so our diverse human resources can generate new value. The ratio of female employees is rising, and women have been steadily making inroads not only in our personnel systems but also in our initiatives.

Ratio of Female Managers

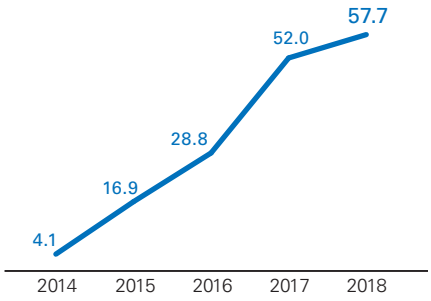
(Non-consolidated/%)



To promote the success of women in the workplace, we set a target ratio of female managers of 13 percent or higher by 2018, and focused on programs such as management candidate training to support the career development and professional growth of women. As a result, the percentage reached 13.3 percent as of December 31, 2018. However, this is still below global levels, so we plan to further accelerate our initiatives to develop female leaders.

Percentage of Male Employees Taking Childcare Leave[6]

(Non-consolidated/%)

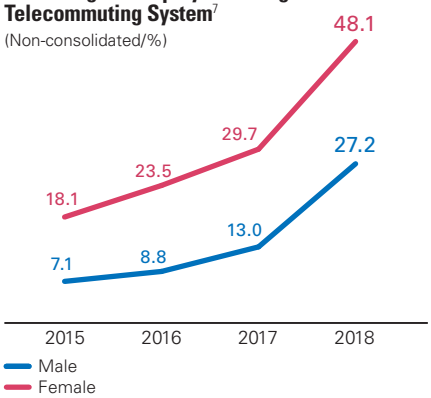


Chugai implements various measures to promote work-life synergy and work arrangements that fit employee lifestyles, and to improve productivity. The number of male employees taking childcare leave is increasing. In addition to sending e-mails about taking childcare leave to men with newborn children and their supervisors, we have created a handbook for supervisors that contains examples of employees taking leave and guidance on key management points.

6. Number of male employees taking childcare leave as a percentage of all male employees with newborn children

Percentage of Employees Using the Telecommuting System[7]

(Non-consolidated/%)



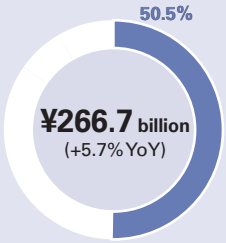
Since introducing the telecommuting system in 2012 for employees caring for young children and other family members, and for late-night teleconferencing with people overseas, we expanded the conditions for use of the system in 2015 to include productivity improvement, temporary injury and regular outpatient treatment. The number of users is on the rise. We will continue our efforts to raise awareness about the use of this system and continue to promote additional initiatives to achieve more flexible work styles.

7. Percentage of eligible employees

Review by Disease Area

Oncology

Sales and Percentage of Total Sales



Opportunities and Risks

Opportunities

- Cancer is the largest area of unmet medical need[1] (the leading cause of death in Japan).
- Personalized healthcare is expected to advance further due to factors including insurance coverage for cancer genomic profiling.
- Phase Three of the Basic Plan to Promote Cancer Control Programs is promoting delivery systems for cancer genomic medicine.

Risks

- Intensifying global competition for cancer immunotherapies including anti-PD-1/PD-L1 immune checkpoint inhibitors
- Return of premium for new drug creation for mainstay products
- Entry of large pharmaceutical companies into biosimilar[2] markets

Review of 2018 Performance

In Japan, market penetration by new product Tecentriq was steady and sales of Alecensa, a product from Chugai research, were firm. However, sales decreased 0.1 percent year on year to ¥225.7 billion due to factors including the effect of NHI drug price revisions and lower sales of mainstay products Herceptin and Rituxan.

Overall sales, including overseas sales, increased 5.7 percent to ¥266.7 billion supported by dramatic growth in Alecensa exports to Roche, which rose 107.9 percent to ¥28.9 billion, and other factors.

Bone and Joint Diseases/ Autoimmune Diseases

Sales and Percentage of Total Sales[3]

Opportunities and Risks

Opportunities

- The emergence of biologics has dramatically improved the effectiveness of rheumatoid arthritis (RA) treatment, and the treatment goal is shifting to remission (a symptom-free state).
- The number of osteoporosis patients is increasing yearly as populations age.
- There are many potential osteoporosis patients because the treatment rate and adherence to treatment remain low.

Risks

- Intensifying global competition in the RA market
- Slower growth due to the maturing of Actemra in the medium to long term
- The emergence of biosimilars that compete with biologics

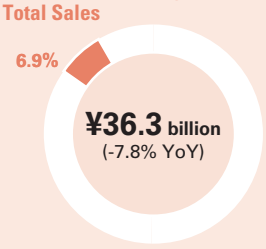
Review of 2018 Performance

In Japan, sales increased 7.7 percent year on year to ¥100.5 billion. The increase was driven by the solid performance of mainstay products Actemra, a product from Chugai research for treatment of RA and other diseases; Edirol, another product from Chugai research and the top brand in oral osteoporosis drugs; and Bonviva, which treats osteoporosis by inhibiting bone resorption.

Overall sales, including overseas sales such as exports of Actemra, which is approved in more than 110 countries and is distributed through Roche, increased 17.4 percent to ¥181.0 billion.

Renal Diseases

Sales and Percentage of Total Sales



Opportunities and Risks

Opportunities

- Screening rates are increasing among potential patients and people who have not been screened due to enhanced measures to address chronic kidney disease (CKD) by the Ministry of Health, Labour and Welfare.
- Early intervention in potential patients is improving the treatment rate of renal anemia.
- Renal anemia is divided into the dialysis stage and the pre-dialysis stage, and the number of patients treated in the pre-dialysis stage is trending upward every year.

Risks

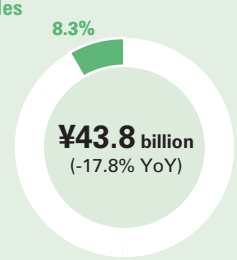
- Intensifying competition in the renal anemia market due to a reduction in fee points for dialysis as part of medical fee revisions

Review of 2018 Performance

In Japan, sales decreased 7.8 percent year on year to ¥36.3 billion. Sales of Oxarol, an agent for secondary hyperparathyroidism, and Mircera, a long-acting erythropoiesis stimulating agent, decreased in part because of the effect of NHI price revisions.

Other Diseases

Sales and Percentage of Total Sales



Opportunities and Risks

Opportunities

- The burden on people with hemophilia A and caregivers due to the development of inhibitors and frequent administration is an issue.
- Neurology is an area of very high unmet medical need, with many pathologies and syndromes.
- Medical fee points have been increased to promote more kidney transplants, and treatment needs for kidney transplants in Japan are rising.
- In addition to skin deterioration, itching associated with atopic dermatitis reduces patients' quality of life by disrupting sleep.

Risks

- Intensifying global competition due to the limited number of known molecular targets
- Possibility of few target patients despite high unmet medical need

Review of 2018 Performance

In Japan, market penetration was steady for Hemlibra, a treatment for hemophilia A launched in 2018, and CellCept, an immunosuppressant, maintained its share of the transplant segment and increased its share for lupus nephritis. However, sales decreased 10.4 percent year on year to ¥26.8 billion due to the transfer of long-listed products to Taiyo Pharma Co., Ltd. Sales of anti-influenza agent Tamiflu for ordinary use decreased 15.1 percent year on year to ¥10.1 billion, and sales for government stockpiles, etc. decreased 90.0 percent to ¥500 million.

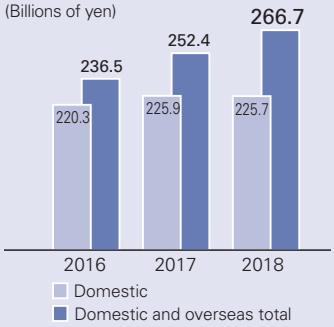
Overall sales in the other diseases category decreased 17.8 percent year on year to ¥43.8 billion.

1. Medical need that is not adequately met due to a lack of effective treatments
2. Successor products to biopharmaceuticals whose patent term has expired, made by manufacturers other than the manufacturer that developed the antecedent biopharmaceutical
3. Bone and joint diseases only

Sales

Domestic market share in oncology: No. 1[4]

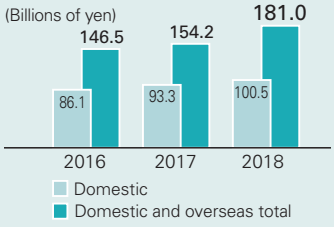
(Billions of yen)



Domestic market share in osteoporosis: No. 2[4]

Domestic market share in RA: No. 2[4]

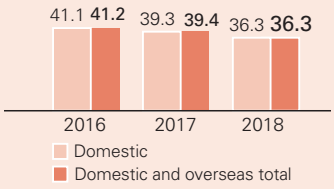
(Billions of yen)



Note: Graph shows sales for bone and joint diseases only.

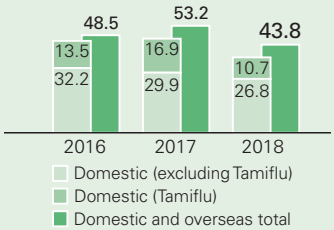
Domestic market share in renal diseases: No. 2[4]

(Billions of yen)



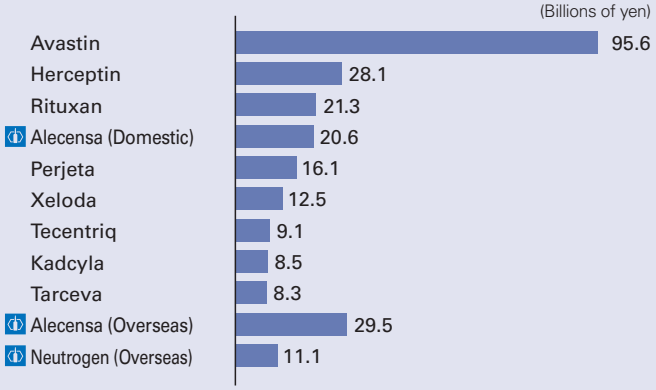
Other Diseases

(Billions of yen)

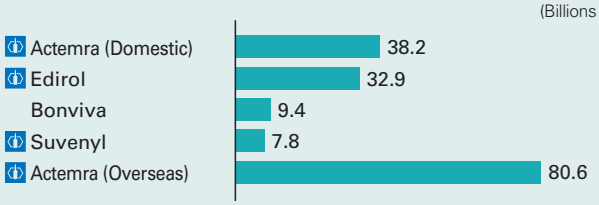


Sales of Major Products

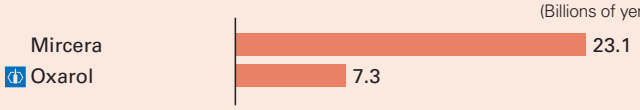
(Billions of yen)



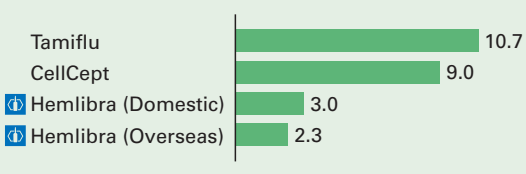
(Billions of yen)



(Billions of yen)



(Billions of yen)



Development Pipeline
(Including additional indications)

- AF802 (Alecensa)
- RG435 (Avastin)
- RG3502 (Kadcyla)
- RG7446 (Tecentriq)
- RG7440
- RG7596
- GC33
- CKI27
- ERY974
- RG7421
- RG6268
- RG6264
- RG7802
- RG7828
- ED-71 (Edirol)
- NRD101 (Suvenyl)
- MRA (Actemra)
- RG7845
- EOS789
- ACE910 (Hemlibra)
- RG1450
- RG7412
- RG6206
- RG7916
- CIM331
- SKY59
- PCO371
- RG7716
- GYM329
- RG7935
- SA237
- AMY109
- RG7906

Products from Chugai research

Development Pipeline (As of January 31, 2019)

Development Code (*Additional Indication)	Indication	Status: Phase Ⅰ / Phase Ⅱ / Phase Ⅲ / Filed / Approved	Approved/Filing Date [Planned Year of Filing]
Oncology			
RG7446	◆Non-small cell lung cancer (NSCLC) [2nd line]	Approved	Jan. 2018
	◆NSCLC [1st line]	Approved	Dec. 2018
	◆Small cell lung cancer	Filed	Dec. 2018
	◆Breast cancer	Filed	Dec. 2018
	◆NSCLC (adjuvant)	Phase Ⅲ (Multinational Study)	[2020]
	◆Urothelial carcinoma	Phase Ⅲ (Multinational Study)	[2021 or later]
	◆Muscle invasive urothelial carcinoma (adjuvant)	Phase Ⅲ (Multinational Study)	[2020]
	◆Renal cell carcinoma	Phase Ⅲ (Multinational Study)	[2020]
	◆Renal cell carcinoma (adjuvant)	Phase Ⅲ (Multinational Study)	[2021 or later]
	◆Early breast cancer	Phase Ⅲ (Multinational Study)	[2021 or later]
	◆Ovarian cancer	Phase Ⅲ (Multinational Study)	[2020]
	◆Prostate cancer	Phase Ⅲ (Multinational Study)	[2021 or later]
	◆Hepatocellular carcinoma	Phase Ⅲ (Multinational Study)	[2021 or later]
	◆Head and neck carcinoma (adjuvant)	Phase Ⅲ (Multinational Study)	[2021 or later]
GA101 (RG7159)	Follicular lymphoma	Approved	Jul. 2018
RG1273*	◆Breast cancer (adjuvant)	Approved	Oct. 2018
RG6268	◆Solid tumors [*NTRK* fusion-positive]	Filed	Dec. 2018
	◆NSCLC	Phase Ⅱ (Multinational Study)	[2019]
RG435*	Renal cell carcinoma	Phase Ⅲ (Multinational Study)	[2020]
	Hepatocellular carcinoma	Phase Ⅲ (Multinational Study)	[2021 or later]
RG3502*	◆Breast cancer (adjuvant)	Phase Ⅲ (Multinational Study)	[2020]
RG7440	◆Prostate cancer	Phase Ⅲ (Multinational Study)	[2021 or later]
	◆Breast cancer	Phase Ⅲ (Multinational Study)	[2020]
RG7596	Diffuse large B-cell lymphoma (DLBCL)	Phase Ⅲ (Multinational Study)	[2021 or later]
RG6264	◆Breast cancer (Fixed-dose combination, subcutaneous injection)	Phase Ⅲ (Multinational Study)	[2021 or later]
AF802 (RG7853)*	◆NSCLC (adjuvant)	Phase Ⅲ (Multinational Study)	[2021 or later]
GC33	◆Hepatocellular carcinoma	Phase Ⅰ (Multinational Study)[1]	
CKI27	◆Solid tumors	Phase Ⅰ	
ERY974	◆Solid tumors	Phase Ⅰ	
RG7421	Solid tumors	Phase Ⅰ	
RG7802	◆Solid tumors	Phase Ⅰ	
RG7828	Hematologic tumors	Phase Ⅰ	
Bone and Joint Diseases			
ED-71	Osteoporosis	Filed (China)	Feb. 2018
NRD101	Knee osteoarthritis/Shoulder periarthritis	Phase Ⅲ (China)	[2019]
Renal Diseases			
EOS789	Hyperphosphatemia	Phase Ⅰ	
Autoimmune Diseases			
MRA* (RG1569)	Systemic sclerosis	Phase Ⅲ (Multinational Study)	[2019]
RG7845	Rheumatoid arthritis	Phase Ⅰ	
Neurology			
RG1450	◆Alzheimer's disease	Phase Ⅲ (Multinational Study)	[2021 or later]
RG7412	◆Alzheimer's disease	Phase Ⅲ (Multinational Study)	[2021 or later]
SA237 (RG6168)	Neuromyelitis optica spectrum disorder (NMOSD)	Phase Ⅲ (Multinational Study)[1]	[2019]
RG6206	Duchenne muscular dystrophy (DMD)	Phase Ⅱ/Ⅲ (Multinational Study)	[2020]
RG7916	Spinal muscular atrophy (SMA)	Phase Ⅱ/Ⅲ (Multinational Study)	[2020]
RG7935	◆Parkinson's disease	Phase Ⅰ	
GYM329 (RG6237)	Neuromuscular disease	Phase Ⅰ	
RG7906	Psychiatric disorders	Phase Ⅰ	
Other Diseases			
ACE910 (RG6013)	Hemophilia A (Inhibitor)	Approved	(E.U.) Feb. 2018, (Japan) Mar. 2018, (Taiwan) Dec. 2018
	Hemophilia A (Non-inhibitor)	Approved	(U.S.) Oct. 2018, (Japan) Dec. 2018
		Filed	(Taiwan) Jan. 2019
		Filed	(E.U.) Apr. 2018
RG7716	Diabetic macular edema	Phase Ⅲ (Multinational Study)	[2021 or later]
	Wet age-related macular degeneration	Phase Ⅰ	
CIM331	Pruritus in dialysis patients[2]	Phase Ⅱ	[2021 or later]
SKY59 (RG6107)	Paroxysmal nocturnal hemoglobinuria (PNH)	Phase Ⅰ/Ⅱ (Multinational Study)	
PCO371	Hypoparathyroidism	Phase Ⅰ	
AMY109	◆Endometriosis	Phase Ⅰ	

○○○○○ Designates change in status in 2018 and thereafter ◆ PHC-based drug discovery

1. Multinational study managed by Chugai Pharmaceutical 2. Development of atopic dermatitis was out-licensed to Galderma S.A. (Overseas)/Maruho Co., Ltd. (Japan)

Generic Name/Product Name	Origin (Collaborator)	Mode of Action
atezolizumab/Tecentriq	Roche	Engineered anti-PDL1 monoclonal antibody (Injection)
obinutuzumab/Gazyva (Overseas name: Gazyva/Gazyvaro (E.U.))	Roche (Nippon Shinyaku)	GIycoengineered type II anti-CD20 monoclonal antibody (Injection)
pertuzumab/Perjeta	Roche	HER2 dimerization inhibitory humanized monoclonal antibody (Injection)
entrectinib/Product name undetermined	Roche/ Nerviano Medical Sciences	ROS1/TRK inhibitor (Oral)
bevacizumab/Avastin	Roche	Anti-VEGF (Vascular Endothelial Growth Factor) humanized monoclonal antibody (Injection)
trastuzumab emtansine/Kadcyla	Roche	Anti-HER2 antibody-tubulin polymerization inhibitor conjugate (Injection)
ipatasertib/Product name undetermined	Roche/Array BioPharma	AKT inhibitor (Oral)
polatuzumab vedotin/Product name undetermined	Roche	Anti-CD79b antibody-drug conjugate (Injection)
trastuzumab/pertuzumab, Herceptin/Perjeta	Roche	Anti-HER2 humanized monoclonal antibody/HER2 dimerization inhibitory humanized monoclonal antibody (Injection)
alectinib/Alecensa	In-house (Roche)	ALK inhibitor (Oral)
codrituzumab/Product name undetermined	In-house	Anti-Glypican-3 humanized monoclonal antibody (Injection)
Generic and product names undetermined	In-house	Raf and MEK dual inhibitor (Oral)
Generic and product names undetermined	In-house	Anti-Glypican-3/CD3 bispecific antibody (Injection)
cobimetinib/Product name undetermined (Overseas name: Cotellic)	Roche/Exelixis	MEK inhibitor (Oral)
cibisatamab/Product name undetermined	Roche	Anti-CEA/CD3 bispecific antibody (Injection)
mosunetuzumab/Product name undetermined	Roche	Anti-CD20/CD3 bispecific antibody (Injection)
eldecalcitol/Edirol	In-house	Activated vitamin D_3 agent (Oral)
purified sodium hyaluronate/Suvenyl	In-house	Sodium hyaluronate (Injection)
Generic and product names undetermined	In-house	— (Oral)
tocilizumab/Actemra (Overseas name: Actemra/RoActemra (E.U.))	In-house (Roche)	Humanized anti-human IL-6 receptor monoclonal antibody (Injection)
fenebrutinib/Product name undetermined	Roche	BTK inhibitor (Oral)
gantenerumab/Product name undetermined	Roche/MorphoSys	Anti-amyloid-beta human monoclonal antibody (Injection)
crenezumab/Product name undetermined	Roche/AC Immune	Anti-amyloid-beta humanized monoclonal antibody (Injection)
satralizumab/Product name undetermined	In-house (Roche)	Anti-IL-6 receptor recycling antibody (Injection)
Generic and product names undetermined	Roche/Bristol-Myers Squibb	Anti-myostatin adnectin (Injection)
risdiplam/Product name undetermined	Roche/PTC Therapeutics	SMN2 splicing modifier (Oral)
prasinezumab/Product name undetermined	Roche/Prothena	Anti-α-synuclein monoclonal antibody (Injection)
Generic and product names undetermined	In-house (Roche)	— (Injection)
Generic and product names undetermined	Roche	— (Oral)
emicizumab/Hemlibra	In-house (Roche)	Anti-factor IXa/X bispecific antibody (Injection)
faricimab/Product name undetermined	Roche	Anti-VEGF/Ang2 bispecific antibody (Injection)
nemolizumab/Product name undetermined	In-house	Anti-IL-31 receptor A humanized monoclonal antibody (Injection)
Generic and product names undetermined	In-house (Roche)	Anti-C5 recycling antibody (Injection)
Generic and product names undetermined	In-house	PTH1 receptor agonist (Oral)
Generic and product names undetermined	In-house	— (Injection)

Note: In principle, completion of first dose is regarded as the start of clinical studies in each phase.