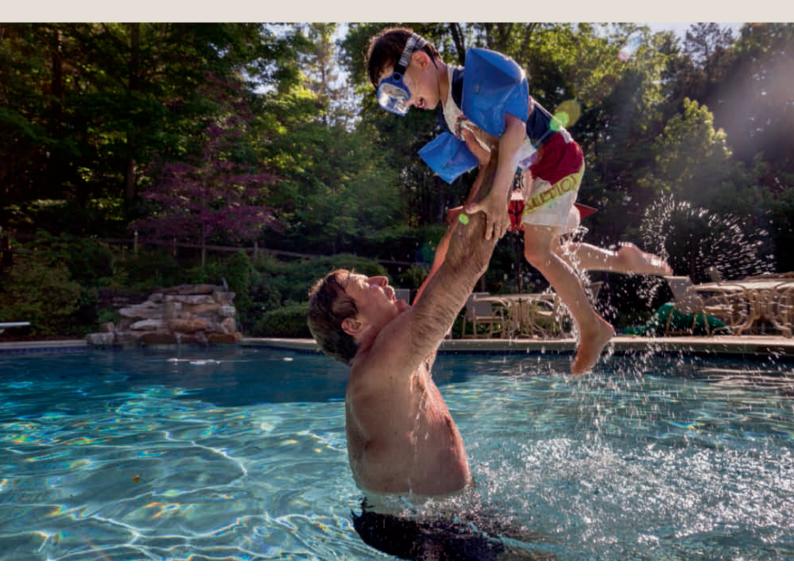
# **U** NOVARTIS

## OUR MISSION

Our mission is to care and cure. We want to discover, develop and successfully market innovative products to prevent and cure diseases, to ease suffering and to enhance the quality of life. We also want to provide a shareholder return that reflects outstanding performance and to adequately reward those who invest their money, their time and their ideas in our company.



Doug Olson plays with his grandson several years after undergoing experimental therapy for chronic lymphocytic leukemia. The therapy is being developed jointly by the University of Pennsylvania and Novartis.

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## CHAIRMAN'S LETTER



Joerg Reinhardt

## Dear shareholder,

In 2014, Novartis initiated a far-reaching transformation process. These operational and structural changes have several objectives: to strengthen sales and profit growth, to drive our ability to innovate and to successfully position Novartis for the long term in the face of increasingly dynamic change in the global healthcare industry.

We undertook important changes to our business portfolio with the aim of being a global leader in our three core areas: pharmaceuticals, eye care, and generic medicines. We plan to divest or spin off operations that lack the potential to be global leaders, including businesses in vaccines and over-the-counter medicines. The planned acquisition of the oncology products of GlaxoSmithKline will strengthen our high-priority oncology business. In January 2015, we sold our Animal Health business and we aim to complete the remaining transactions in 2015.

In parallel, we are expanding research efforts in age-related and chronic diseases, which are growing in importance as the population ages. We are consolidating our internal services into a single organization, strengthening Group-wide collaboration. We also have updated the values and behaviors we expect associates to follow to further emphasize collaboration and high ethical standards.

Taken together, these steps will improve our ability to fulfill our core mission and assume our corporate and social responsibility to the benefit of our diverse stakeholders. Focusing our company enables us to deploy our financial and human resources efficiently to manage increasingly complex challenges in research and development, and to deliver better outcomes for patients through science-based innovation.

With our research pipeline of more than 200 projects in clinical trials and our broad product portfolio of pharmaceuticals, eye care products and generics, we believe we are well-positioned for the long term, and can be a good partner for

Focusing our company enables us to deploy our financial and human resources efficiently to manage increasingly complex challenges in research and development

### OUR STRATEGIC APPROACH

Our mission is to care and cure. Our company culture is guided by high ethical standards and promotes innovation, quality, collaboration, performance, courage and integrity.

As a science-based and patientoriented healthcare company, we strive to be a global leader in growing areas of healthcare. We distinguish ourselves through the research and development of innovative medicines and devices that satisfy unmet medical needs, improve treatment outcomes and increase patient quality of life.

These efforts support access worldwide to high-quality and cost-effective medical care.

For more detail on our strategy, see page 16.

## +6%

Proposed dividend increase per share (CHF) 2014: 2.60 2013: 2.45



Share price at year end (CHF) 2014: 92.35 2013: 71.20

#### TOTAL SHAREHOLDER RETURN (based on CHF amounts)

29% 34% 29% 12% 1% 2% 2010 2011 2012 2013 2014 healthcare systems in mature and emerging markets, offering therapies that improve outcomes in a cost-effective manner. At the same time we are working to advance access to medicine in developing markets and intensify research in the area of neglected diseases so that patients everywhere can live longer and healthier lives.

The restructuring underlines our constant efforts to strengthen Novartis. We also strive to continuously improve our corporate governance and increase transparency with our shareholders and other stakeholders. In this regard, we made further adjustments in 2014 to our compensation system and will change our Articles of Incorporation to align with Swiss rules on executive compensation related to the Minder Initiative. As a result, our shareholders will now be able to cast a binding vote on the total compensation of the Executive Committee and the Board of Directors.

Following last year's good results, we believe we can further strengthen our market position in 2015 and set the course for a successful future. We intend to remain an open partner willing to engage in dialogue and to champion the interests of patients, customers, employees and investors, while striving to create long-term value for all of them.

I thank you for the confidence you have placed in our company and am pleased to be able to propose a dividend increase of 6% to CHF 2.60 at the next Annual General Meeting.

Sincerely,

, Reinherd L

Joerg Reinhardt Chairman of the Board of Directors

## CHIEF EXECUTIVE OFFICER'S LETTER



Joseph Jimenez

## Dear shareholder,

2014 was an important year at Novartis. We delivered strong financial performance while at the same time focusing our portfolio and restructuring our internal operations.

We have strengthened the future growth prospects of our company in 2014

Our strategy fueled our strong performance. Net sales increased 3% in constant currencies (cc) to USD 58.0 billion, after allowing for the divestment of our blood transfusion diagnostics business. This is a notable achievement in light of increased generic competition for some of our products. Core operating income, which excludes certain exceptional items, rose 8% in constant currencies to USD 14.6 billion. Our core margin improved 1.2 percentage points in constant currencies to 25.2%.

Our research and development teams produced impressive innovation. We gained 13 major approvals in key markets in 2014 and advanced our pipeline. For example, *Zykadia* was approved in the US for certain types of lung cancer. Researchers also released clinical trial results for a new heart failure medicine, LCZ696, showing a dramatic effect on mortality. And we licensed Google "smart lens" technology, which we believe could help develop accommodating lenses to correct the gradual loss of vision that comes with age.

A key contributor to our 2014 performance was the strength of our growth products, which include those products introduced since 2009 or with patent protection until 2018 in key markets. Those products accounted for 32% of total sales. Emerging growth markets also contributed significantly, with sales up 11% in constant currencies.

In 2014, we also focused our company's values and behaviors. Our values help guide the choices people make every day, and define our culture. We now highlight six values, simple to understand and apply. Innovation, performance and quality are values embedded in the DNA of our company, and we are renewing emphasis on the values of courage, collaboration and integrity.

## TRANSFORMING OUR COMPANY

Over the next decade, we expect significant changes in healthcare. To prepare Novartis for a new phase of growth, we sharpened our strategy and transformed our company.

Powerful demographic shifts are underway. The world's population is projected to increase by nearly 1 billion people by 2025, half of whom are expected to be over 50. Demand for healthcare will increase, putting greater strain on government and family budgets. New technologies will allow for medical breakthroughs to help an aging population.

To succeed in this new environment, each segment in which we compete must have innovation power to create breakthrough products and global scale to leverage that innovation across markets. The transactions we announced last year, once closed, are expected to help us achieve this goal.

For more detail on our performance, see page 22.

## **3%** Rise in net sales (cc)<sup>1</sup>

8%

Increase in core operating income (cc)<sup>1</sup>

13

Major approvals in key markets

We achieved these results while launching a fundamental transformation to position us for continued success, by focusing our company on three divisions with global scale and innovation power. This has strengthened the future growth prospects of our company. We also created Novartis Business Services to consolidate business support functions across divisions. This is expected to improve collaboration and accelerate productivity efforts.

Our ongoing efforts to improve our performance and secure a strong future for Novartis are reflected in the strong evolution of our share price and in our total shareholder return.

The new year is already off to a good start. We received approval in January in the EU and US for *Cosentyx* to treat psoriasis. We also had a positive opinion from an EU advisory committee for a new indication for our cancer treatment *Jakavi* and in the US an advisory body recommended approval for our biosimilar *Zarxio*.

I'd like to thank our associates for all their hard work and dedication. I would also like to thank you, our shareholders, for your continued support.

Sincerely,

Joseph Jimenez Chief Executive Officer

## KEY PERFORMANCE INDICATORS CONSOLIDATED HIGHLIGHTS

## Financial

KEY FIGURES <sup>1</sup>		_			
(in USD millions, unless indicated otherwise)		_		% Change	
	2014	2013	USD	Constant currencies	Constant currencies excluding diagnostics <sup>2,3</sup>
Net sales	57 996	57 920	0	2	3
Operating income	10 736	10 910	- 2	5	7
Return on net sales (%)	18.5	18.8			
Net income	10 280	9 292	11	17	19
Basic earnings per share <sup>4</sup> (USD)	4.21	3.76	12	18	20
Core operating income	14 616	14 191	3		8
Core return on net sales⁵ (%)	25.2	24.7			
Core net income	12 755	12 351	3		8
Core earnings per share <sup>4</sup> (USD)	5.23	5.01	4		10
Group free cash flow	10 762	9 945	8		

#### SHARE INFORMATION

	2014	2013	% Change	
Share price at year end (CHF)	92.35	71.20	30	
ADR price at year end (USD)	92.66	80.38	15	
Dividend <sup>6</sup> (CHF)	2.60	2.45	6	
Payout ratio <sup>7</sup> (%)	63	74		

#### FURTHER DETAIL

On our performance, see page 20 On our financial report, see page 126

- <sup>1</sup> This Annual Report includes non-IFRS financial measures such as core results, constant currencies, free cash flow and comparisons against 2013 data excluding the results of the blood transfusion diagnostics unit, which was divested on January 9, 2014. Novartis believes that investor understanding of the Group's performance is enhanced by disclosing these non-IFRS measures. Core measures exclude items which can vary significantly from year to year, such as the impact of certain significant exceptional and other items related to disposals and acquisitions, as well as other exceptional items over a USD 25 million threshold. Core measures for 2013 also exclude the results of the blood transfusion diagnostics unit divested on January 9, 2014. Constant currency figures show changes in our results adjusted for fluctuations in the exchange rates between the US dollar and other currencies. Free cash flow is an indicator of the Group's ability to operate without additional borrowing or the use of existing cash. Comparisons against 2013 data excluding the results of the prior year. For more detail on these measures, see page 150.
- <sup>2</sup> Reconciliation tables of non-IFRS measures can be found starting on page 150.
   <sup>3</sup> Excludes the impact of the blood transfusion diagnostics unit divested on January 9, 2014.
- 2014 average number of shares outstanding: 2 426 million (2013: 2 441 million)
- <sup>5</sup> Based on 2013 net sales excluding the divested blood transfusion diagnostics unit of USD 57.4 billion.
- <sup>6</sup> Dividend 2014: proposal to shareholders for approval at the Annual General Meeting on February 27, 2015.
- <sup>7</sup> Payout ratio is calculated by converting into USD the proposed total gross dividend amount in CHF at the CHF-USD exchange rate of December 31, 2014 based on an estimated number of shares outstanding on dividend payment date and dividing it by the USD consolidated net income attributable to shareholders of Novartis AG in the Group's 2014 consolidated financial statements.

## Innovation

KEY FIGURES <sup>1</sup>	2014	2013
Projects entering portfolio <sup>2</sup>	30	31
Ongoing Phase III programs <sup>3</sup>	37	48
US FDA breakthrough therapy designations <sup>4</sup>	2	3
Major submissions (US, EU, JP) <sup>5</sup>	15	16
Major approvals (US, EU, JP) <sup>₅</sup>	13	19
New molecular entity (NME) approvals <sup>6</sup>	5	4

## Social

ACCESS	2014	2013
Total patients reached (millions)	1 229	1 217
Patients reached through access programs (millions)	72.4	103.6
People reached through training, health education & service delivery (millions)	10.2	8.1
Top 20 global burden of disease conditions addressed by products and pipeline <sup>7</sup>	100%	100%
PEOPLE AND ETHICS		
Resignations (including retirements) / separations / hiring (% of associates)	10% / 5% / 13%	8% / 4% / 18%
Women in management: % of management <sup>8</sup> / % of Board of Directors	40% / 18%	38% / 14%
Associate nationalities / Associate nationalities in management <sup>8</sup>	150 / 107	155 / 111
Lost-time injury and illness rate (per 200 000 hours worked) <sup>9</sup>	0.12	0.13

#### Regulatory inspections without major findings **ENVIRONMENTAL SUSTAINABILITY 10**

Misconduct cases reported / substantiated

Greenhouse gas emissions, total Scope 1 and Scope 2 (k tons)	1 557	1 586
Water discharge (million m <sup>3</sup> )	17.5	18.0

FURTHER DETAIL
On innovation,
see page 38

**FURTHER DETAIL** On social, see page 54

1 699 / 930

98.4%

1 501 / 939

98.5%

- <sup>1</sup> Include Pharmaceuticals, Sandoz biosimilars and Alcon ophthalmic pharmaceuticals only
- <sup>2</sup> Include clinical Phase II programs only, post proof of concept. First patient, first visit (FPFV) has occurred. Also include small molecules, biologics; new fixed-dose combinations of existing active pharmaceutical ingredients (APIs), and new target indications, defined as new disease or new line of treatment (e.g. first- vs. second-line). Counted by indication and not compound
- $^{\scriptscriptstyle 3}$  Include projects with FPFV in a Phase III study but not yet filed in US, EU or Japan  $^{\scriptscriptstyle 4}~$  Therapies under development by Novartis designated as breakthrough therapies by the US FDA
- <sup>5</sup> Include small molecules, biologics; new fixed-dose combinations of existing APIs, and new target indications, defined as new disease or new line of treatment (e.g. first- vs. second-line)
- $^{\rm 6}~$  Include new molecular entities such as small molecules, biologics; in the EU, new fixed-dose combinations of existing APIs
- <sup>7</sup> As defined by the US-based Institute for Health Metrics and Evaluation, excluding injuries
- <sup>8</sup> Management defined locally
- <sup>9</sup> Data include Novartis associates and third-party personnel managed by Novartis associates
- $^{\scriptscriptstyle 10}$  For more detail on environmental sustainability, see www.novartis.com/ environmental-care

## 2014 AT A GLANCE

### Who we are

Novartis is a global healthcare company based in Basel, Switzerland, with roots dating back more than 150 years. We provide healthcare solutions that address the evolving needs of patients and societies worldwide. Our portfolio focuses on pharmaceuticals, eye care products and generic medicines. Novartis products are available in more than 180 countries worldwide. Our products reached more than 1 billion people globally in 2014.

About 133 000 people of 150 nationalities work at Novartis around the world.

FURTHER DETAIL Visit www.novartis.com

### Our environment

Aging societies and growing populations are contributing to increased demand for healthcare around the globe and changing how it is delivered. The world's population is expected to grow by nearly 1 billion people by 2025, with the segment of the population over age 50 rising by about 500 million.

At the same time, people are facing fewer infectious diseases, while cancer and other chronic illnesses are on the rise. And medical innovation continues to move forward, driven by better understanding of the underlying mechanisms of disease and new technologies such as cellular therapies.

These factors mean global healthcare spending will likely more than double by 2025, exceeding USD 15 trillion. As rising healthcare costs strain budgets, governments and health insurers are searching for ways to keep spending in check and demanding evidence that new drugs and medical devices deliver significant health improvements.

This raises the bar for innovation. Companies that consistently deliver breakthrough products and make them available on a global scale are most likely to thrive over the long term.

#### **FURTHER DETAIL**

On our environment, see page 14

180+



Patients reached

Countries where Novartis products are available

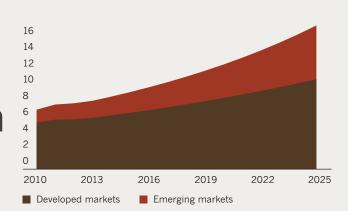


Net sales (USD)



Market capitalization<sup>1</sup> (USD)

#### NOMINAL HEALTHCARE SPEND IN EMERGING AND DEVELOPED MARKETS (in USD trillions)



### Our strategy

We think Novartis is well prepared for a world with a growing, aging population and evolving healthcare needs. We have a clear mission, focused strategy and strong culture, all of which we believe support the creation of long-term value for our company, our shareholders and society.

Our mission is to care and cure. Our vision is to be the world's most respected and successful healthcare company. Our strategy is to deliver better outcomes for patients through science-based innovation. We aim to lead in growing areas of healthcare.

We maintain strong investment in research and development focused on areas of unmet medical need. Our goal is to create products that provide patients with clear health benefits in everyday use.

### Our values

Strong values define our culture and help us execute the Novartis strategy in line with our mission and vision. Our values are innovation, quality, collaboration, performance, courage and integrity. They describe the professional behavior we expect from our employees.

PLANNED TRANSACTIONS FOCUS NOVARTIS ON THREE LEADING DIVISIONS

## Pharmaceuticals

Develops innovative patented medicines

Alcon

Offers the world's widest spectrum of eye care products

## Sandoz

A leader in the growing generic medicines industry

### Transforming our company

#### FROM SIX DIVISIONS TO THREE

In 2014, Novartis announced several transactions that, once completed, will focus our business on three leading divisions with strong innovation power and global scale: pharmaceuticals, eye care and generics. Novartis plans to acquire GlaxoSmithKline's (GSK) oncology products, strengthening our position in cancer treatments. We plan to sell our Vaccines Division, excluding the influenza business, to GSK. Separately, we plan to sell the influenza vaccines business to CSL Limited. Novartis and GSK plan to merge OTC businesses into a joint venture to create one of the world's largest consumer healthcare companies. In January 2015, we sold our Animal Health business to Eli Lilly.

#### **NOVARTIS BUSINESS SERVICES**

We strengthened our organization by creating a centralized business services group to facilitate collaboration across our divisions, and drive efficiency and productivity gains.

We believe these important structural changes create a solid foundation for future growth.

#### **FURTHER DETAIL**

On our strategy, see page 16 On our portfolio, see page 18 On Novartis Business Services, see page 19

### 2014 AT A GLANCE continued

## Performance highlights

#### FINANCIAL

Group net sales in 2014 were USD 58.0 billion, stable in reported terms and up 2% in constant currencies (cc). Allowing for the divestment of the blood transfusion diagnostics unit, sales rose 3% (cc). Sales of growth products<sup>1</sup> rose 18% to USD 18.6 billion, accounting for 32% of net sales. In emerging growth markets,<sup>2</sup> Group net sales rose 11% (cc) to USD 15.3 billion. Growth products and emerging markets helped offset the approximately USD 2.4 billion impact of generic competition.

Group operating income rose 7% in constant currencies, after allowing for the divestment of the blood transfusion diagnostics unit, as strong business performance and productivity gains helped offset generic competition for Diovan and other products that recently lost patent protection. Novartis continued to improve productivity in 2014 and overall savings reached USD 2.9 billion. USD 1.6 billion in savings came from ongoing efforts in procurement across all divisions.

Also after allowing for the blood transfusion diagnostics divestment, Group net income of USD 10.3 billion rose 12% (+19%) cc), and earnings per share rose 14% (+20% cc) to USD 4.21.

<sup>1</sup>Growth products comprise products launched in 2009 or later, or products with exclusivity until at least 2018 in key markets (EU, US, Japan), except Sandoz, which includes only products launched in the last 24 months.

Emerging growth markets comprise all markets except the US, Canada, Western Europe, Japan, Australia and New Zealand.

To help investors track our underlying health, we also present our core results, which exclude the impact of certain exceptional items. Core operating income increased 3% (+8% cc) to USD 14.6 billion. Core operating income margin in constant currencies increased 1.2 percentage points to 25.2% of net sales.

Group core net income of USD 12.8 billion was up 3% (+8% cc) and core EPS was USD 5.23 (+4%, +10% cc).

Free cash flow increased 8% (+12% after allowing for the blood transfusion diagnostics divestment), to USD 10.8 billion.

#### INNOVATION

Research and development efforts yielded 15 major submissions and 13 new product approvals in major markets. Approvals included Zykadia for lung cancer in the US and Cosentyx for psoriasis and psoriatic arthritis in Japan.

Among more than 200 projects under development in our pipeline, we made notable progress in 2014 on potential new treatments for heart failure and cancer.

Trials of LCZ696 for chronic heart failure showed it lowered the chances of death or hospitalization by 20% compared to the standard treatment. Researchers stopped the study six months early due to compelling efficacy.

Two treatments in the Novartis development pipeline received breakthrough therapy designation from the US Food

#### FINANCIAL



Rise in net sales<sup>3</sup>



Increase in operating income<sup>3</sup>



Free cash flow (USD)



Increase in core operating income (cc)

INNOVATION



Projects in clinical development



SOCIAL

72.4 m

Patients reached through access programs

# 100%

Of top 20 conditions causing the global disease burden addressed by our portfolio

<sup>3</sup> In constant currencies and adjusted for divestment of the blood transfusion diagnostics unit

and Drug Administration in 2014: a personalized cell therapy treatment (CTL019) being developed with the University of Pennsylvania in the US to fight certain types of leukemia, as well as *Bexsero*, our meningitis B vaccine. That brings the total number of breakthrough therapies at Novartis to five.

#### SOCIAL

During 2014, we reinforced our culture of ethics. The Board of Directors approved changes in commercial practices and we created a new position of Chief Ethics, Compliance and Policy Officer, reporting to the Chief Executive Officer, to reinforce the Compliance function.

We continued our efforts to improve healthcare access for patients, reaching 72 million people through multiple programs. As part of our Malaria Initiative, in clinical trials, KAE609 showed promise in treating even patients with resistant forms of the malaria parasite. KAE609 is one of our two investigational compounds against malaria.

Sandoz announced a long-term commitment to help prevent the deaths of millions of children worldwide from pneumonia by providing global supplies of amoxicillin dispersible tablets.

#### **FURTHER DETAIL**

On our performance, see page 20

In 2014, two experimental treatments under development at Novartis received breakthrough therapy designation from the US Food and Drug Administration

### Governance and compensation

Novartis strengthened corporate governance in 2014. The Board of Directors created the Research & Development Committee, extended the mandate of the Corporate Governance and Nomination Committee to cover corporate responsibility matters, and disbanded the Chairman's Committee. The Board also further empowered the Executive Committee, accelerating decision-making.

We introduced elements of Swiss rules related to the Minder Initiative, including annual elections of the Chairman, Board members, and Compensation Committee members. We also held a non-binding shareholder vote on executive pay in 2014. In 2015, we will implement all other elements of Swiss rules on executive compensation related to the Minder Initiative, including binding votes on the aggregate compensation of the Board and Executive Committee.

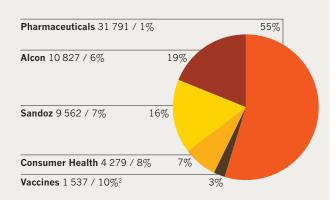
In 2014, we also introduced a new executive compensation system to better align with our business strategy. It places more emphasis on achieving long-term goals and considers Novartis performance compared to competitors. In response to shareholder feedback, we simplified our Compensation Report.

#### **FURTHER DETAIL**

On governance, see page 66 On compensation, see page 96

#### **2014 NET SALES BY DIVISION**

(in USD millions, growth in % cc<sup>1</sup> and divisional share of net sales)



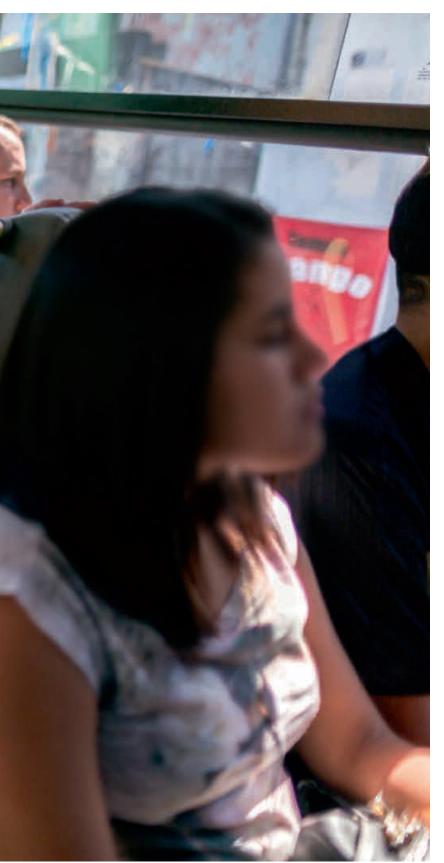
<sup>&</sup>lt;sup>1</sup>In constant currencies

<sup>&</sup>lt;sup>2</sup>Excludes the impact of the blood transfusion diagnostics unit divested on January 9, 2014.

# STRATEGIC OVERVIEW



Cataracts previously impaired Maria Lúcia Martins Moreira's vision. She had to ask passersby in São Paulo, Brazil to read bus signs for her when collecting her grandson. Cataract surgery, performed using Alcon surgical equipment, has since solved her eyesight problems.



Powerful demographic trends are reshaping the healthcare industry. In 2014 Novartis sharpened its strategy and launched a major transformation to prepare for a more competitive future.

# 15tn

Total spending on healthcare worldwide is projected to more than double by 2025 (USD)

# 6→3

Transformation to focus Novartis on three powerhouse divisions

## 1

Clear Novartis strategy

## OUR ENVIRONMENT

Rapid aging in society, growing populations and the steady march of scientific innovation are increasing demand for healthcare around the globe and changing how it is delivered. These trends are likely to have a profound impact on society and on healthcare companies like Novartis, creating both new opportunities and new challenges.

Powerful demographic shifts are driving fundamental changes in society.

Almost a billion more people are expected to inhabit the planet by 2025, with most of the increase in developing countries, according to estimates by the United Nations (UN). The number of people over the age of 50 is projected to increase by about 500 million, as improvements in healthcare and living standards help people live longer. Indeed, the over-50 age group is expected to be the fastest-growing segment of the population and to account for more than 25% of the global population by 2025, according to the UN.

At the same time, aging populations and rising living standards around the globe are contributing to a shift in the types of illnesses people face. Infectious diseases continue to decline while chronic illnesses such as cancer and heart disease are on the rise. Chronic and non-communicable diseases could account for more than 70% of illnesses globally by 2025, up from about 60% in 2010, based on World Health Organization (WHO) projections.

#### THE IMPACT OF INNOVATION

Medical innovation continues to move forward, driven by advances in cell therapy, better understanding of the underlying causes of disease, and increasing use of digital technologies in healthcare. For instance, advances in understanding the genetic and cellular mechanisms behind diseases have sparked work on a new generation of therapies that researchers believe will more effectively target the cause of the illness. These advances are producing new breakthroughs, such as unlocking the body's ability to regenerate itself.

Meanwhile, the proliferation of smartphones and network-connected medical devices is streamlining healthcare delivery and improving medical outcomes for patients. This is empowering consumers, who are increasingly well-informed about medical options and more involved in decisions about their own treatment. Today consumers and healthcare professionals can choose from among more than 100 000 healthcare apps available for mobile devices, according to industry estimates. We believe the use of mobile devices to monitor patient conditions and communicate with health providers will continue to expand at a rapid pace.

These factors are contributing to an increase in demand for healthcare worldwide. We expect healthcare spending to more than double by 2025, to over USD 15 trillion. And we think about half of that growth will be in the developing world as more and more people gain access to modern medical care.

Taken together, these developments are positive for patients and society. They continue to fuel longer, healthier lives for people across the globe.

#### **NEW OPPORTUNITIES, NEW CHALLENGES**

These broad trends present significant opportunities for healthcare companies in general and for Novartis in particular. With our patented medicines and eye care and generics divisions, we have a leading presence in growing segments of healthcare. We believe our focus on science-based innovation will help us respond to increasing demand for healthcare and deliver better outcomes for patients and healthcare systems.

But these demographic and industry trends are also likely to raise new challenges for society and for companies. The continuing rapid rise in healthcare spending by governments, private insurers and individuals is putting strain on government and household budgets. Governments and health insurers are searching for ways to keep spending in check.

One approach now gaining momentum is for governments and insurers to focus more intensely on getting the most value for money spent on healthcare products and services. Increasingly they are demanding evidence that new drugs and medical devices deliver

## By 2025:

World population to increase by

1bn

Number of people over age of 50 to grow by

500 m

Chronic disease share of disease burden to be

70%

Only companies that can consistently deliver true breakthrough medicines and devices – and make them available on a global scale – are likely to thrive and create value over the long term significant health improvements compared to existing treatments, based on the experiences of patients in real-world settings. Those improvements could include prolonging patients' lives, for instance, or significantly improving their quality of life.

Government agencies, such as the National Institute for Health and Care Excellence in the United Kingdom, are increasingly looking at cost-effectiveness when evaluating whether to recommend new treatments for reimbursement. Advances in digital technology are supporting the trend toward measuring and improving cost-effectiveness. The continuing development of sophisticated databases and mobile measurement devices is expected to facilitate evaluations of how well patients respond to specific medicines and treatments. Indeed, an increasing number of non-healthcare companies such as Google, Apple, IBM and Microsoft are entering the healthcare field in search of opportunities.

#### **SEEKING BREAKTHROUGHS**

However, the future is uncertain and these trends may develop at different speeds in different parts of the world, or with varying degrees of intensity. If global economic growth slows significantly and government budgets become further strained, there may be additional pressure in some countries to manage spending on healthcare. While this would likely contribute to continued growth in the use of generic medicines, it also may mean that governments pay closer attention to spending on patented medicines and medical products. In addition to these new trends, we continue to face the familiar challenge of patent expirations, the effects of which must be continually offset by a steady stream of new products.

All of these developments are raising the bar for innovation. In an increasingly demanding and cost-conscious environment, only companies that can consistently deliver true breakthrough medicines and devices – and make them available on a global scale – are likely to thrive and create value over the long term for patients, society and shareholders. That will require significant ongoing investment in research and development.

Faced with increasingly diverse and complex challenges in the years ahead, at Novartis we have refined our strategy and are transforming our business portfolio to make Novartis as fit as possible, with the ability to compete effectively over the next decade and beyond.

We are reinforcing our strength in science in an effort to stay in the lead in innovation. We are exploring creative new ways to augment the benefits patients receive from our products. And we are focusing on growth areas in healthcare – including the developing regions of the world and therapeutic areas such as cancer, where the need for treatment is expanding along with the size of the world's aging population.

Part-time kindergarten teacher Tamara Ivanovna Yachmentseva had a heart attack five years ago. She now participates in a Novartis-sponsored hypertension program at a hospital in Yaroslavl, Russia.



## OUR STRATEGY

We believe Novartis is well prepared for a world with a growing, aging population and continuously evolving healthcare needs. We have a clear mission, focused strategy and strong culture, all of which we expect will support the creation of value over the long term for our company, our shareholders and society.

#### **OUR MISSION**

Our mission is to care and cure. We want to discover, develop and successfully market innovative products to prevent and cure diseases, to ease suffering and to enhance the quality of life.

We also want to provide a shareholder return that reflects outstanding performance and to adequately reward those who invest their money, their time and their ideas in our company.

#### **OUR VISION**

To be the world's most respected and successful healthcare company.

#### **OUR STRATEGY**

To deliver better outcomes for patients through science-based innovation. We aim to lead in growing areas of healthcare.

#### Better patient outcomes

Our customers demand products that yield clear health benefits in everyday use, not just in the controlled setting of clinical trials. We focus our resources on developing medicines and devices that can produce positive real-world outcomes for patients and healthcare providers. The benefits can range from improving the cost-effectiveness of high-quality care to prolonging lives. We also are developing services and technologies to augment the benefits of our core products, such as diagnostic tools, smartphone applications to monitor patient health, and programs to help people lead healthier lifestyles.

#### Science-based innovation

We believe innovation that produces breakthrough medicines and devices will be more important than ever in the healthcare industry in the coming years. We maintain substantial investment in research and development aimed at areas of unmet medical need. Our product pipeline is fed by a distinctive research and

## Our approach for sustainable growth

#### OUR MISSION

To care and cure

#### OUR VISION

To be the most B respected and o successful health-

OUR STRATEGY Better patient

\_\_\_\_\_ Science-based

Lead in growing areas of healthcare

Quality Collaboration Performance

Integrity

**OUR VALUES** 

ALWAYS WITH A FOCUS ON PATIENTS Innovation founded in strong science is at the heart of Novartis clinical approach that focuses on scientific advances before market potential. It is augmented by collaborations with academic researchers and other companies.

#### Lead in growing areas of healthcare

We aim to develop innovative products in growing areas of healthcare. We focus on patented medicines, generic medicines and eye care – segments where we have the innovation power and global scale necessary to compete effectively. At the same time, we are expanding our presence in the emerging markets of Asia, Africa and Latin America, where there is fast-growing demand for access to high-quality medicines and healthcare.

#### **OUR VALUES**

Our values define our culture and help us execute the Novartis strategy in line with our mission and vision. They describe the professional behavior we expect from our employees.

#### Innovation

Innovation founded in strong science is at the heart of Novartis and key for our strategy. We nurture a culture of innovation by encouraging people to experiment and take smart risks. The aim is to foster creative thinking that leads to practical solutions to healthcare and business challenges.

#### Quality

Delivering high quality is critical to ensuring a reliable supply of important medicines and earning the trust of our customers and society. Our focus on quality excellence includes upgraded standards, technology and training for our people.

#### Collaboration

We foster teamwork among our employees to efficiently deliver innovative new products to patients and healthcare providers. This leverages the diversity and creativity of our global staff.

#### Performance

People at Novartis are known for their focus on delivering results and they often make extraordinary efforts to achieve their goals. We aim to reinforce that focus on personal and collective achievement while maintaining high ethical standards.

#### Courage

We want our associates to speak out, challenge conventional thinking and stand up for their ideas. We also want them to have the courage to do the right thing in the face of resistance or moral dilemmas. They need the fortitude to take smart risks, even when the chance of failure is high.

#### Integrity

High performance with integrity is fundamental to the way we operate at Novartis and is critical to maintaining the support of society and governments. Our Code of Conduct sets high ethical standards and comprehensive training ensures our associates know how to apply these standards in their work. We also enforce our rules, investigating allegations of wrongdoing and taking decisive corrective action when needed.

## OUR PORTFOLIO

In 2014, Novartis announced a transformation to focus our business portfolio on three leading divisions that have innovation power and global scale: Pharmaceuticals, Alcon and Sandoz. We also strengthened our organization by creating a business services group to facilitate collaboration across our divisions, and drive efficiency and productivity gains. We believe these important structural changes create a solid foundation for future growth.

#### PORTFOLIO TRANSFORMATION: FROM SIX DIVISIONS TO THREE

In 2014, we announced a series of transactions that, once completed,<sup>1</sup> aim to make Novartis more focused, more profitable and able to grow faster. The transactions were the result of a portfolio review begun in 2013. During that review we concluded that in today's increasingly demanding environment in the healthcare industry, only businesses with innovation power and global scale will thrive over the next decade and beyond. Our Pharmaceuticals, Alcon (eye care) and Sandoz (generics) Divisions have the scale to compete. However, we concluded that our Vaccines, Animal Health and Over-the-Counter (OTC) Divisions, while attractive businesses, lacked the innovation power and commercial scale to compete effectively as independent businesses.

The series of transactions we announced address this and, once concluded, will reduce the number of divisions in our company from six to three. Novartis plans to acquire GlaxoSmithKline's (GSK) oncology products to strengthen our position as the world's number two company in cancer treatments. Novartis plans to sell its Vaccines Division, excluding the influenza business, to GSK - creating the world's largest vaccines business - while it plans to sell its influenza vaccines business to CSL Limited in a separate transaction. Novartis and GSK plan to merge their OTC businesses into a joint venture that would be one of the world's largest consumer healthcare companies. Novartis will own 36.5% of this joint venture. In January 2015, Novartis also sold its Animal Health business to Eli Lilly, creating the world's second-largest company in that sector.

#### **IMMEDIATE BENEFITS**

Once these transactions are completed, Novartis will become a company with three powerhouse divisions:

Pharmaceuticals

One of the world's largest providers of innovative medicines. A strong pipeline, with 135 projects in development. About 43% of sales come from growth products launched since 2009, or with exclusivity in key markets until at least 2018. **Alcon** 

#1 eye care company worldwide, with a strong presence in ophthalmic pharmaceuticals, surgical equipment and vision care products, such as contact lenses.

— Sandoz

#2 generic medicines provider globally. #1 in differentiated generics, including medicines that are difficult to develop and manufacture. A leading biosimilars business, with three products on the market and a strong pipeline in clinical development.

We believe these transactions will lead to an increase in our core operating margin. We also believe they could accelerate sales growth because of the addition of GSK's oncology products, our ability to focus investment on just three divisions, and greater attention from senior management on our most competitive businesses. Once these transactions are completed, Novartis will become a company with three powerhouse divisions

# 7 500

Associates transferred to the newly created Novartis Business Services

## Planned transactions focus Novartis on three leading divisions

#### PHARMACEUTICALS

Develops innovative, patent-protected medicines and is at the forefront of development and commercialization in oncology, primary care and specialty medicines.

#### ALCON

Provides products that enhance quality of life by helping people see better. It offers the world's widest spectrum of eye care products.

#### SANDOZ

A leader in the growing generics industry, offering more than 1 000 different types of high-quality, affordable medicines across a broad range of therapeutic areas.

#### SUPPORTING OUR DIVISIONS Novartis Business Services

In July, we created Novartis Business Services (NBS) to consolidate business support services across Novartis divisions. NBS will help drive efficiency, increase standardization, and simplify processes to deliver services at a better price. NBS aims to harmonize six service domains and related services, including human resources services, real estate management and facility services, procurement, information technology, and financial reporting and accounting operations, among others. NBS currently includes approximately 7 500 associates. It is expected to play a key role in accelerating our productivity gains. Productivity is strategic for Novartis: It supports our continued investment in research and development, and underpins strong financial results.

#### Novartis Institutes for BioMedical Research

The Novartis Institutes for BioMedical Research (NIBR), with more than 6 000 scientists and physicians worldwide, is the innovation engine of Novartis. It focuses on discovering new drugs that can change the practice of medicine.

FURTHER DETAIL On NIBR and innovation, see page 40

# PERFORMANCE



Special Olympian Ryan Groves from Michigan in the US, has tuberous sclerosis and suffers from kidney tumors and mild autism. He takes *Afinitor*, a Novartis drug that helps reduce tumors. This was not the drug's original intended use and it shows how research can lead to unexpected, beneficial discoveries.



We continued to successfully implement the Novartis strategy in 2014, delivering solid performance across financial, innovation and social measures, and across all Novartis divisions.

3% Increase in net sales<sup>1</sup>

# 13

Major regulatory approvals

## 1bn+

Patients reached with Novartis products

<sup>1</sup> In constant currencies adjusted for the divestment of the blood transfusion diagnostics unit

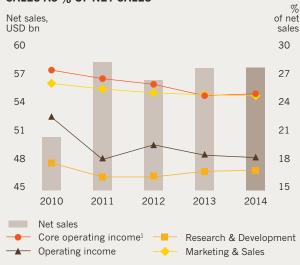
## PERFORMANCE SUMMARY

Novartis increased sales and profitability in 2014 in constant currencies, despite recent patent expirations on important products and ongoing economic weakness in some key markets. Our research and development teams gained approval for new treatments in disease areas ranging from lung cancer to psoriasis, and continued to advance experimental medicines for the future. We also made strides in the areas of quality, people management, and access to healthcare.

#### **KEY FIGURES**<sup>1</sup>

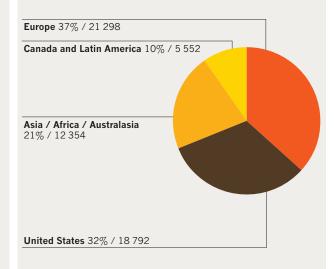
(in USD millions, unless indicated otherwise)		_			
				% Change	
	2014	2013	USD	Constant currencies	Constant currencies excluding diagnostics <sup>2,3</sup>
Net sales	57 996	57 920	0	2	3
Operating income	10 736	10 910	-2	5	7
Return on net sales (%)	18.5	18.8			
Net income	10 280	9 292	11	17	19
Basic earnings per share <sup>4</sup> (USD)	4.21	3.76	12	18	20
Core operating income	14 616	14 191	3		8
Core return on net sales⁵ (%)	25.2	24.7			
Core net income	12 755	12 351	3		8
Core earnings per share <sup>4</sup> (USD)	5.23	5.01	4		10
Group free cash flow	10 762	9 945	8		

#### NET SALES. OPERATING INCOME. CORE OPERATING INCOME<sup>1</sup>, RESEARCH & DEVELOPMENT, MARKETING & SALES AS % OF NET SALES



#### 2014 NET SALES BY GEOGRAPHICAL REGION

(% of net sales and in USD millions)



<sup>1</sup>This Annual Report includes non-IFRS financial measures such as core results, constant currencies, free cash flow and comparisons against 2013 data excluding the results of the blood transfusion diagnostics unit, which was divested on January 9, 2014. Novartis believes that investor understanding of the Group's performance is enhanced by disclosing these non-IFRS measures. Core measures exclude items which can vary significantly from year to year, such as the impact of certain significant exceptional and other items related to disposals and acquisitions, as well as other exceptional items over a USD 25 million threshold. Core measures for 2013 also exclude the results of the blood transfusion diagnostics unit divested on January 9, 2014. Constant currency figures show changes in our results adjusted for fluctuations in the exchange rates between the US dollar and other currencies. Free

cash flow is an indicator of the Group's ability to operate without additional borrowing or the use of existing cash. Comparisons against 2013 data excluding the results of the blood transfusion diagnostics unit assist with the comparability of our 2014 performance against the prior year. For more detail on these measures, see page 150.

<sup>2</sup> Reconciliation tables of non-IFRS measures can be found starting on page 150. <sup>3</sup>Excludes the impact of the blood transfusion diagnostics unit divested on January 9, 2014.

<sup>4</sup>2014 average number of shares outstanding: 2 426 million (2013: 2 441 million) <sup>5</sup>Based on 2013 net sales excluding the divested blood transfusion diagnostics unit of USD 574 billion



11% Increase in sales in emerging growth markets (cc)<sup>1,2</sup>

#### FINANCIAL PERFORMANCE

Novartis delivered solid financial performance in 2014, driven by our continued success with growth products and expansion in emerging growth markets, which helped offset the effects of generic competition of approximately USD 2.4 billion. As a result, we achieved Group net sales of USD 58.0 billion, the same level as 2013 in reported terms, and up 2% in constant currencies (cc). Group operating income amounted to USD 10.7 billion (-2%, +5% cc). Operating income margin was 18.5% of net sales. Group net income rose 11% (+17% cc) to USD 10.3 billion. Earnings per share (EPS) rose 12% (+18% cc) to USD 4.21. Free cash flow in 2014 increased by 8% to USD 10.8 billion, mainly due to higher cash flows from operating activities.

To help illustrate performance on a more comparable basis, we also provide comparisons against 2013 data excluding the results of the blood transfusion diagnostics unit, which was divested on January 9, 2014. Excluding the divested unit, Group net sales were up 3% (cc), operating income advanced 7% (cc), net income rose 19% (cc) and EPS was up 20% (cc).

In addition, to help investors track the underlying health of our business, we present our core results, which exclude the exceptional impact of significant disposals and acquisitions, as well as other significant exceptional items. Our core results also exclude sales and income from the divested blood transfusion diagnostics unit. Our core operating income in 2014 increased 3% (+8% cc) to USD 14.6 billion. Core operating income margin increased 0.5 percentage points to 25.2% of net sales, as our efforts to enhance productivity helped to offset 0.7 percentage points of negative impact from changing currency exchange rates. Core net income was USD 12.8 billion, up 3% (+8% cc), and core earnings per share rose 4% (+10% cc) to USD 5.23.

#### Growth

Across divisions, our portfolio of growth products and presence in emerging growth markets continued to fuel performance in 2014.<sup>2</sup>

Sales of growth products increased 18% to USD 18.6 billion, or 32% of net sales. In the Pharmaceuticals Division, growth products accounted for 43% of net sales, up from 37% in 2013 – demonstrating how we are rejuvenating our portfolio and mitigating the impact of patent expirations on key products.

Top-performing Pharmaceuticals products in 2014 included *Gilenya* (USD 2.5 billion, +30% cc), our oral therapy for multiple sclerosis; *Afinitor* (USD 1.6 billion, +22% cc), a treatment for several types of cancer including breast and kidney; and *Tasigna* (USD 1.5 billion, +24% cc), a treatment for chronic myeloid leukemia.

At Alcon, surgical equipment was a key growth driver, following the launch in late 2013 of the *Centurion* Vision System and continued growth of the *LenSx* femtosecond laser for cataract surgery. Disposable products for cataract and vitreoretinal surgery also showed strong growth.

In the Sandoz Division, biosimilars – which are follow-on versions of complex biologic drugs – made a strong contribution to growth, with sales rising 23% (cc) to USD 514 million globally.

In addition, efforts to expand our presence in emerging growth markets such as Asia, Africa and Latin America continued to show good results. Net sales in those markets rose 11% (cc) to USD 15.3 billion, led by China, up 15% (cc), and by Brazil, up 18% (cc).

In constant currencies and adjusted for the divestment of the blood transfusion diagnostics unit

<sup>&</sup>lt;sup>2</sup>Growth products are products launched in 2009 or later or products with exclusivity until at least 2018 in key markets (EU, US, Japan), except Sandoz (launched in the last 24 months). Emerging growth markets are all markets except the US, Canada, Western Europe, Japan, Australia and New Zealand.

## PERFORMANCE SUMMARY

#### Productivity

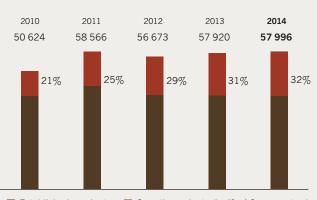
Novartis made solid progress in 2014 in generating synergies across divisions to improve productivity. Overall savings reached approximately USD 2.9 billion, exceeding our target. In 2014, we also created Novartis Business Services (NBS), a shared services organization designed to enhance profitability by harmonizing and simplifying the provision of services to the divisions. NBS is expected to play a key role in accelerating our productivity gains.

The most significant savings of USD 1.6 billion came from ongoing efforts in procurement to manage spending on goods and services across all our divisions. That represents 7% of the annual spending of USD 22 billion managed by the procurement organization.

An area where we made significant progress in 2014 was travel, where we reduced spending by about 23% across the company. We primarily achieved this by increasing the use of virtual meetings among Novartis colleagues, in lieu of travel. We aim to continue increasing the use of videoconferences and other technology for internal meetings to make these savings sustainable. We also made strides in managing capital spending for equipment at manufacturing sites worldwide. In 2014, we began adopting standard technical requirements for machinery across our divisions. For instance, we now have uniform specifications for tablet presses, a common type of equipment previously purchased individually by each manufacturing site. This standardization enabled us to negotiate better prices from our supplier and will help reduce future costs related to such things as commissioning new equipment and maintenance.

Additionally, our multi-year plan begun in 2010 to optimize our global manufacturing network is on track. In 2014, we announced several further steps, including the closure of our pharmaceuticals manufacturing site in Suffern, New York, in the US and the planned sale of our pharmaceuticals manufacturing site in Taboão da Serra, Brazil – bringing the total number of production sites that have been or are being restructured or divested to 24. These changes are helping us balance capacity, reducing it where no longer needed and adding new capacity for the products and technologies of the future. **1.6bn** Procurement savings (USD)

#### INCREASING CONTRIBUTION OF GROWTH PRODUCTS<sup>1</sup> (Group net sales in USD millions, % of Group net sales)



Established products Growth products (in % of Group net sales)

<sup>1</sup>Since 2010, to demonstrate the rejuvenation of our portfolio, we have separately reported the net sales and growth rate of our newer products. During the years 2010 through 2012, these included products launched in 2007 or later (except for Sandoz products, which were included only if launched within the preceding one to two years). Beginning in 2013, we moved to a slightly different definition of "growth products," which included products launched years, launched within the preceding five years, or products with exclusivity in key markets (EU, US, Japan) for at least the next four years (except for Sandoz products, which were included only if launched within the preceding two years).

Researchers stopped the LCZ696 heart failure study six months early due to compelling efficacy We continued to find synergies to increase sales through our Customers First program, which delivered USD 1.6 billion in revenues in 2014, generating 2.8% of Group net sales. This program aims to serve our customers more effectively by ensuring they have access to a full range of Novartis products from all divisions.

#### **INNOVATION PERFORMANCE**

In 2014, our research and development efforts yielded 13 approvals in key markets, as well as 15 regulatory filings. For example, in March, *Xolair* was approved in the EU for chronic spontaneous urticaria and in the US for chronic idiopathic urticaria, a severe skin condition characterized by hives. In April, *Zykadia* was approved in the US for the treatment of ALK+ non-small cell lung cancer. In December, we received approval in Japan for *Cosentyx* (formerly AIN457) for the treatment of psoriasis and psoriatic arthritis. *Cosentyx* also received positive recommendations from advisory bodies in the EU and US for psoriasis.

We also reached major milestones with promising pipeline products, including LCZ696 in chronic heart failure and CTL019 in certain forms of leukemia. CTL019, a personalized cell therapy for cancer being developed with the University of Pennsylvania in the US, received breakthrough therapy designation from the US Food and Drug Administration (FDA), marking the fifth such designation for therapies under development by Novartis (including *Bexsero, Zykadia*, RLX030 and BYM338).

#### Oncology

A number of cancer drugs moved forward in late-stage development in 2014. For instance, LEE011, a CDK 4/6 inhibitor, showed promising results in breast cancer patients and is entering full development across multiple indications. And BKM120, a pan-PI3K inhibitor being developed in multiple tumor types, began Phase III trials for breast cancer, with results expected in 2015. Preliminary results from two pilot clinical trials of CTL019 that were published in The New England Journal of Medicine showed that 27 of 30 patients with acute lymphoblastic leukemia experienced complete remission. While more work remains, these results suggest that CTL019 could become a potentially transformative treatment.

#### Cardiovascular

Novartis had notable success during the year with trials of LCZ696, an investigational treatment for chronic heart failure. Data from a study of 8 400 cardiovascular patients showed that LCZ696 lowered the chances of death or hospitalization by 20% compared to the standard treatment for heart failure. Researchers stopped the study six months early due to compelling efficacy. LCZ696 works by relaxing the blood vessels and stimulating the kidneys to excrete sodium and water, relieving strain on the heart.

#### Immunology and dermatology

In 2014, we published positive results of Phase III studies of *Cosentyx* for two additional indications: psoriatic arthritis and ankylosing spondylitis, a chronic inflammation of the joints in the spine.

*Cosentyx* inhibits interleukin-17A, a protein involved in the inflammatory process. Global regulatory filings are planned in 2015 for *Cosentyx* for psoriatic arthritis and ankylosing spondylitis.

#### Eye care

We licensed Google "smart lens" technology in July. Alcon is working with Google to develop products such as contact lenses to monitor glucose levels in patients' tear fluid, as well as lenses that use tiny sensors to help wearers focus at any range. Alcon also added new components to the *Cataract Refractive Suite* used by surgeons to plan cataract surgery – including *Verion*, a precision diagnostic tool, and the *WaveTec ORA* System, which provides precise

## PERFORMANCE SUMMARY

measurements during surgery. Alcon also is working on a new lens that could improve patient outcomes by freeing some cataract patients from needing glasses after surgery. In ophthalmic pharmaceuticals, we licensed OAP030 (*Fovista*) from Ophthotech during 2014. We are studying it in combination with another drug to treat age-related macular degeneration.

#### Biosimilars

Sandoz filed a marketing application in the US for a proposed biosimilar, one of six in Phase III clinical trials or undergoing registration. The drug, which stimulates white blood cell production in some cancer patients undergoing chemotherapy, is called *Zarzio* (filgrastim) in Europe and is a proposed biosimilar to Neupogen<sup>®</sup> from Amgen.

#### QUALITY

During the year, Novartis advanced efforts to ensure that quality is at the core of the company's operations.

A number of measures are being implemented as part of a long-term transformation process. At their heart is a review of quality standards across the manufacturing network to ensure they are up-to-date and consistent for all divisions, and reflect the feedback given during regulatory inspections. An enhanced governance system tracks progress and ensures standards are consistently applied.

These steps reflect senior management's determination to achieve sustained improvement in performance, in line with the company's philosophy of quality beyond compliance. Measures to strengthen the quality management system are among the objectives of our Chief Executive Officer and other senior leaders. Monthly cross-divisional meetings are designed to review progress and share experiences, helping to anticipate issues and tackle them before quality is compromised.

In addition, we are reinforcing the culture of quality at all levels of our organization, starting with divisional leaders and cascading down to every associate at more than 100 manufacturing plants. During designated "quality days" at plants, interactive workshops, and shop floor discussions and presentations drive home the importance of quality. Sessions focus on the needs of patients, for whom quality and continuity of supply are crucial concerns.

The impact of this focus on quality, and the substantial associated investment, are reflected in the results of recent inspections by regulatory authorities. During the year, we had 247 inspections at our facilities worldwide, 243 of which were deemed good or acceptable.

In July 2014, the FDA lifted a warning letter that highlighted compliance issues at three Sandoz manufacturing sites – in Boucherville, Quebec in Canada and in Broomfield, Colorado and Wilson, North Carolina in the US. A warning letter relating to production of the Alcon *LenSx* laser system also was lifted in May 2014. In December, the FDA concluded an inspection at a Sandoz facility in Unterach, Austria, with a good outcome. The FDA found that all items identified in a May 2013 warning letter had been corrected.

While these achievements are an important measure of success, more work remains before Novartis can achieve its goal of making the quality of its products and processes a consistent source of competitive advantage.

#### PEOPLE

The ability to attract, grow and keep talented people is vital for Novartis to execute our strategy and keep developing innovative products that produce better results for patients. In the context of an increasingly challenging healthcare environment and rapid change at Novartis, we are reinforcing our culture, boosting our associates' skills and building a diverse workforce with talented leaders.

Novartis hired 18 252 people during 2014, or about 13% of the workforce. Voluntary turnover, which includes retirements and resignations, was about average for the industry.

# 98.4%

Regulatory inspections without major findings in 2014 We took steps in 2014 to reinforce our company culture and encourage employees to behave in ways that support our strategic goals

#### Reinforcing our culture

We took steps in 2014 to reinforce our company culture and encourage employees to behave in ways that support our strategic goals. In November, we introduced revised Novartis Values and Behaviors that explain how we expect associates to act at work. They emphasize six key attributes: innovation, quality, collaboration, performance, courage and integrity. These values were selected by the Novartis Executive Committee – with input from 300 associates worldwide – and will form an integral part of the framework we use to recruit people, develop them, and assess and reward their performance.

#### Preparing our people for change

We continued to strengthen skills for coping with accelerated change in our industry and our company. Divisions are employing several tools to support associates at all levels of the organization. For instance, during 2014, the Pharmaceuticals Division organized more than 40 change leadership forums with leadership teams around the world. Across the company, new online courses provided change management tools and interactive sessions to 1 000 associates and leaders in 2014. We aim to expand the application in 2015, with a target of training at least 10 000 people.

## Talent management and leadership development

In 2014, we took further measures to ensure our associates have the capabilities and experience they need to prepare for more senior roles. For example, we established cross-divisional regional talent boards to help identify and develop talented individuals, and inform succession planning for key roles. Our Global Organization and Talent Review process currently evaluates the skills and career paths of about 18 000 associates each year. We filled 81% of our most senior positions with internal candidates, reflecting our strong leadership pipeline, while 19% were filled with external hires who bring new perspectives and skills to Novartis.

#### ASSOCIATES<sup>1</sup> BY REGION AND ORGANIZATION AS OF DECEMBER 31

-		Europe		Asia/Africa/ Australasia	ι	Jnited States		Canada and atin America		Total
	2014	2013	2014	2013	2014	2013	2014	2013	2014	2013
Pharmaceuticals	25 760	28 1 7 2	18973	20 572	10 250	11 756	4 096	4 762	59 079	65 262
Alcon	7 241	7 682	6 604	6 597	8 489	9 327	1 566	1 888	23 900	25 494
Sandoz	17 327	17 523	4 705	4812	1 929	1 944	2 462	2 626	26 423	26 905
Vaccines	4 274	4212	927	985	1 161	1 670	129	130	6 491	6 997
Consumer Health	3 891	3 854	2 455	2 450	1 687	1 893	987	1016	9 020	9 2 1 3
Business services <sup>2</sup>	3 909	352	1 670	74	1 603	334	326	6	7 508	766
Corporate	665	820	126	71	181	147	20	21	992	1 059
Total	63 067	62 615	35 460	35 561	25 300	27 071	9 586	10 449	133 413	135 696

<sup>1</sup> Full-time equivalent positions at year end

<sup>2</sup>2014 includes the newly established Novartis Business Services (NBS)

## PERFORMANCE SUMMARY

Special initiatives target the development of highly skilled individuals in the expanding markets of Asia, Latin America and Africa where competition for talent is fierce. The LEAD program, for instance, provides fast-track development for high-potential senior managers crucial to our success in those regions. Of the people who completed the course since 2011, 60% have since been promoted, while fewer than 20% have left Novartis – a turnover rate substantially below the average for these regions.

Our approach to developing top talent gained recognition in 2014 from consultancy Aon Hewitt, which identified Novartis as one of the top 10 companies globally for leaders and as number one among healthcare companies.

A diverse workforce supports innovation, which is central to the Novartis strategy. To encourage diversity, Novartis continued to focus on the promotion of women, who made up 40% of Group company management in 2014.

Novartis divisions operate initiatives to support women in their move into management roles. In the Pharmaceuticals Division, for instance, the Executive Female Leadership Program offers residential workshops, coaching and mentoring, as well as the opportunity to work on strategic projects alongside senior leaders. More than 85% of alumni have moved into new roles within Novartis, including 25% who have been promoted to senior positions.

During 2014, Novartis Pharmaceuticals Corporation, our US affiliate, was recognized by DiversityInc magazine as the number one company in the US for diversity.

#### SOCIAL PERFORMANCE Ethics

In 2014, we took several steps to strengthen our approach to integrity and compliance.

In August, the Board of Directors approved changes to reinforce ethics in commercial practices across the company, including the discontinuation of some traditional promotional practices, the review of compensation schemes for the salesforce, and the strengthening of an integrity culture.

We created a new position of Chief Ethics, Compliance and Policy Officer, reporting to the CEO. This elevated the Compliance function to the highest levels in the company and aims to further ingrain ethics into our culture.

In 2014, 122 689 associates completed the annual Code of Conduct e-training and certification, which all Novartis Group company associates are required to complete each year. To improve the learning experience and impact of our courses, we customized the content based on actual problems reported to the Business Practices Office (BPO). We also launched compliance training for all new hires to the organization.

We take allegations of inappropriate behavior seriously, actively investigate them, and take appropriate disciplinary action. Associates can report suspected misconduct to the BPO – an independent team that reports to the Head of Corporate Security. In 2014, the BPO investigated 1 699 reported cases, with 930 substantiated, and 485 dismissals and resignations related to misconduct. The majority of cases investigated by the BPO involve fraud, such as fraudulent expense reporting.

When concerns about behavior in the broader pharmaceutical industry arose in China, we made proactive changes in our Chinese business. They range from how we



Associates completed Code of Conduct e-training and certification 2 New antimalarial compounds in clinical development manage meetings with Chinese healthcare organizations and funding for them, to improved financial controls and a review of incentives for our salesforce. In response to issues with investigator-initiated trials (IITs) in Japan, we made several changes during 2014, including replacing the Japanese senior management team and requiring additional compliance training for all associates there. We also issued new guidelines for all IITs that we run worldwide.

#### Expanding access to healthcare

In a world where one-third of people lack regular access to essential medicines, we made good progress last year in helping to improve healthcare access for patients.

The Novartis Malaria Initiative continued expanding its work to fight malaria on several fronts. In July, The New England Journal of Medicine published clinical trial results for KAE609, one of our two investigational compounds against malaria. The study demonstrated that KAE609 rapidly cleared the parasite in patients with one of the two main types of malaria, including in patients with infections resistant to current treatments.

Sandoz announced a long-term commitment to help treat millions of children worldwide suffering from pneumonia. As part of the United Nations' new Every Newborn Action Plan, Sandoz will provide long-term global supplies of amoxicillin dispersible tablets. In 2014, Sandoz delivered medicines to UNICEF to treat 500 000 children.

The Novartis Foundation announced a collaboration with Netherlands Leprosy Relief and national leprosy programs in pilot sites in Asia, Africa and Latin America to implement their new leprosy strategy, which aims to stop the spread of leprosy by identifying people who have come in contact with newly diagnosed patients and treating them preventatively.

In response to the Ebola outbreak in West Africa, Novartis donated USD 1.5 million to support aid organizations in countries affected. At the same time, we are actively searching our compound library and evaluating any molecules that may be effective as a potential future Ebola treatment.



Fernando Sánchez and dance partner Filomena Zamit from Andalusia, Spain see flamenco dancing as part of a healthier lifestyle to combat diabetes.

## DIVISION PERFORMANCE Pharmaceuticals

The Pharmaceuticals Division reinforced its leadership in innovation in 2014, with major approvals including Cosentyx in psoriasis and Zykadia in ALK+ non-small cell lung cancer, along with submissions for LCZ696 in heart failure. Growth products, which demonstrate the rejuvenation of our portfolio, contributed 43% of division net sales in 2014.

The Pharmaceuticals Division develops innovative medicines that help people live longer with a better quality of life. Within Pharmaceuticals, we are focused in three areas: Oncology, Primary Care and Specialty. The planned acquisition of GlaxoSmithKline's oncology products is expected to reinforce our already strong position in cancer treatments.

#### PERFORMANCE

Pharmaceuticals delivered net sales of USD 31.8 billion (-1%, +1% in constant currencies, or cc) as strong sales of growth products countered the impact of greater generic competition for *Diovan* and other products, particularly in the US and Japan. Generic competition reduced sales by seven percentage points.

Growth products generated USD 13.7 billion of division net sales, growing 17% (cc) compared to last year. These products – which include *Gilenya*, *Afinitor*, *Tasigna*, *Galvus*, *Lucentis*, *Xolair*, *Jakavi* and our portfolio of products for the treatment of chronic obstructive pulmonary disease (COPD) – contributed 43% of division net sales, compared to 37% in 2013. Sales in emerging growth markets increased 11% (cc) to USD 8.1 billion.

Operating income was USD 8.5 billion (-10%, -5% cc), with the decline mainly due to restructuring and other exceptional charges.

Core operating income, which excludes certain exceptional items, was USD 9.5 billion (0%, +4% cc). Core operating income margin improved by 0.3 percentage points to 29.9% of net sales, despite the negative effect of 0.8 percentage points of changing currency exchange rates.

Highlights in 2014 included the submission of regulatory applications in the EU and US for LCZ696 in chronic heart failure, an area of high unmet medical need. We also submitted for approval NVA237 and QVA149 in the US for chronic obstructive pulmonary disease (COPD). *Cosentyx* (formerly AIN457) received regulatory approval in Japan for psoriasis and psoriatic arthritis, as well as positive recommendations in the EU and US for psoriasis. Other products that received regulatory approval in 2014 included *Xolair* for chronic spontaneous urticaria (also known as chronic

# 13.7 bn

Sales of growth products, such as *Gilenya, Afinitor, Tasigna* and *Galvus* (USD)

#### **KEY FIGURES**

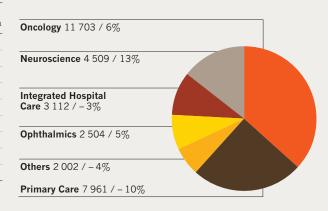
(in USD millions, unless indicated otherwise)

			% Char	ige
	2014	2013	USD	$CC^1$
Net sales	31 791	32 214	- 1	1
Operating income	8 471	9 376	-10	- 5
Return on net sales (%)	26.6	29.1		
Core operating income <sup>1</sup>	9 514	9 523	0	4
Core return on net sales (%)	29.9	29.6		
Core Research & Development <sup>1</sup>	6 997	7 161	2	2
As a % of net sales	22.0	22.2		
Free cash flow 1	7 918	8 332	- 5	
Net operating assets	15 125	15 424	- 2	

<sup>1</sup>Constant currencies (cc), core results and free cash flow are non-IFRS measures. An explanation of non-IFRS measures and reconciliation tables can be found starting on page 150.

#### PHARMACEUTICALS 2014 NET SALES BY FRANCHISES

(in USD millions and growth in  $\%~{\rm cc^{\scriptscriptstyle 1}}$ 



# 17.3 m

People worldwide die from cardiovascular diseases each year

# 11.7 bn

Total Oncology sales, driven by sales of *Afinitor, Tasigna* and *Jakavi* (USD) idiopathic urticaria) in the EU and US, and *Zykadia* for ALK+ non-small cell lung cancer in the US.

#### Oncology

Oncology sales rose 4% (+6% cc) to USD 11.7 billion, despite increased generic competition for *Zometa* (USD 264 million, –55% cc). By brand, growth was driven mainly by *Afinitor*, up 22% (cc) to USD 1.6 billion; *Tasigna*, up 24% (cc) to USD 1.5 billion; and *Jakavi*, up 72% (cc) to USD 279 million.

#### **Primary Care**

Sales in Primary Care, which includes mainly cardiovascular, metabolic and respiratory products, amounted to USD 8.0 billion in 2014, down 12% (–10% cc). Excluding older, established medicines such as *Diovan* (USD 2.3 billion, –32% cc), sales rose 13% (+16% cc) to USD 2.8 billion. The recently launched COPD portfolio, for example, which includes *Onbrez Breezhaler/Arcapta Neohaler, Seebri Breezhaler,* and *Ultibro Breezhaler,* grew 93% (cc) to USD 484 million. Other key products include the Galvus Group, up 6% (cc) to USD 1.2 billion; and *Xolair*, up 30% (cc) to USD 777 million.

#### Specialty Care

Sales in Specialty Care, which includes our Neuroscience, Integrated Hospital Care and Ophthalmics products, amounted to USD 10.1 billion. *Gilenya*, our oral multiple sclerosis therapy, grew 30% (cc) to USD 2.5 billion, with strong volume growth through new patient initiations in the US and elsewhere. Sales of *Lucentis*, for ocular conditions, rose 5% (cc) to USD 2.4 billion, driven by increased use in new indications beyond wet age-related macular degeneration.

#### **FURTHER DETAIL**

See Condensed Financial Report at www.novartis.com/investors

#### 2014 news highlights

In February, Novartis acquired CoStim Pharmaceuticals Inc., expanding its cancer immunotherapy research and development program.

**In May,** Novartis acquired non-US rights from Ophthotech for OAP030 (*Fovista*) for wet AMD.

**In July,** personalized cell therapy CTL019 for leukemia received FDA breakthrough therapy designation.

**Photo:** Esmé Savoie takes part in a patient study run by the Boston Children's Hospital and Novartis.



## Alcon

Alcon, the global leader in eye care, saw further growth in 2014, thanks to the continued rollout of innovative products across a broad range of eye diseases and conditions.

Globally, more than 285 million people live with vision impairment and blindness. More than 90% of vision problems can be prevented, treated or cured, provided patients have access to treatment.

Alcon provides innovative products that enhance quality of life by helping people worldwide see better. Alcon's Surgical, Ophthalmic Pharmaceuticals, and Vision Care businesses offer the world's widest spectrum of eye care products.

#### PERFORMANCE

Alcon net sales in 2014 grew 3% (+6% in constant currencies, or cc) to USD 10.8 billion. Growth was driven by key product launches, such as *Centurion* and *LenSx* for cataract surgery, *Azarga* and *Simbrinza* for the treatment of glaucoma, *Ilevro* to treat ocular inflammation, as well as *AirOptix* Colors and the continued rollout of *Dailies Total1* contact lenses.

Regionally, sales were driven by strong performance in emerging growth markets, led by Asia (+13% cc), particularly in China (+23% cc), and Russia (+27% cc).

Latin America delivered robust growth (+17% cc), driven by the Surgical and Ophthalmic Pharmaceuticals franchises.

North America (+4% cc) accelerated its growth in the Surgical franchise, offset by softness in the Ophthalmic Pharmaceuticals franchise. Sales in Europe, the Middle East and Africa (+3% cc) were driven by moderate performance in the Surgical and Ophthalmic Pharmaceuticals franchises. Japan sales (+3% cc) grew moderately in the Surgical franchise, offsetting weaker growth in Ophthalmic Pharmaceuticals and Vision Care.

Operating income increased 30% (+43% cc) to USD 1.6 billion, driven by operational performance, as well as the ending in 2013 of charges related to the acquisition of Alcon.

Core operating income, which excludes certain items, rose +3% (+8% cc) to USD 3.8 billion. Core operating income margin increased 0.6 percentage points in constant currencies, however that was fully offset by a 0.6 percentage point negative currency effect, resulting in a stable core margin of 35.2% of sales.

## 285 m

People live with vision impairment and blindness

# 90%

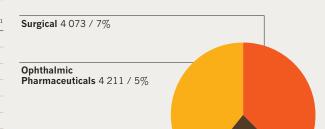
Of vision problems or blindness can be prevented, treated or cured – provided people have access to treatment

#### **KEY FIGURES**

(in USD millions, unless indicated otherwise)

			% Char	nge
	2014	2013	USD	CC 1
Net sales	10 827	10 496	3	6
Operating income	1 597	1 232	30	43
Return on net sales (%)	14.8	11.7		
Core operating income <sup>1</sup>	3811	3 694	3	8
Core return on net sales (%)	35.2	35.2		
Core Research & Development <sup>1</sup>	903	939	4	3
As a % of net sales	8.3	8.9		
Free cash flow 1	3 086	2 755	12	
Net operating assets	39 785	41 102	- 3	

<sup>1</sup>Constant currencies (cc), core results and free cash flow are non-IFRS measures An explanation of non-IFRS measures and reconciliation tables can be found starting on page 150.



**ALCON 2014 NET SALES BY FRANCHISES** 

(in USD millions and growth in % cc<sup>1</sup>)

Vision Care 2 543 / 4%



Alcon is the global leader in eye care

2.5 bn Vision Care sales in 2014 (USD)

#### Surgical

Surgical franchise sales rose 5% (+7% cc) to USD 4.1 billion. The increase was driven by strong equipment sales, led by the *Centurion* Vision System for phacoemulsification cataract surgery, the continued growth of the *LenSx* femtosecond laser for refractive cataract surgery, strong sales of vitreoretinal and cataract disposable surgical equipment, as well as the launch of the *Verion* image-guided system.

Alcon experienced a more modest increase in intraocular lens (IOL) sales, driven by strong competition in the US, Japan and EU.

#### **Ophthalmic Pharmaceuticals**

Ophthalmic Pharmaceuticals sales grew 3% (+5% cc) to USD 4.2 billion despite a weak allergy season in the US. Sales were led by glaucoma products such as *DuoTrav*, *Azarga* and the newly-launched *Simbrinza*. *Systane* eye drops to treat the symptoms of dry eye saw double-digit growth.

Within the Infection/Inflammation segment, sales growth (+7% cc) was driven by *llevro* and *Durezol. Jetrea*, a first-in-class treatment for symptomatic vitreomacular adhesion/traction, continued to gain regulatory approvals, notably in Latin America and Asia.

#### Vision Care

Vision Care sales increased 2% (+4% cc) to USD 2.5 billion. Contact lens sales rose 6% (+7% cc), driven by key launches of *AirOptix* Colors, *Dailies AquaComfort Plus* (*DACP*) Toric, and *DACP* Multifocal, as well as the continued rollout of *Dailies Total1* worldwide.

At the same time, contact lens care solutions declined (-7% cc), driven by market shifts to daily disposable lenses, as well as competitive pressure in the US.

#### FURTHER DETAIL

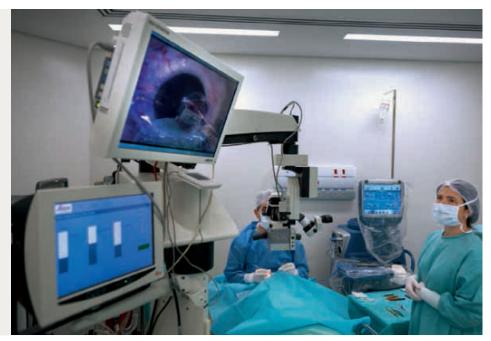
See Condensed Financial Report at www.novartis.com/investors

#### **2014 news highlights**

**In July,** Alcon agreed to license "smart lens" technology from Google[x], marrying Google expertise in miniaturized electronics with Alcon expertise in developing and commercializing contact and intraocular lenses.

In October, Alcon completed the acquisition of WaveTec Vision, developer of the first intraoperative guidance system for enhanced cataract outcomes, complementing the Alcon Verion imageguided preoperative diagnostic system.

**Photo:** Maria Lúcia Martins Moreira undergoes cataract removal surgery at an eye clinic in São Paulo, Brazil that uses Alcon surgery equipment.



## Sandoz

Sandoz continued to reinforce its position as the world's secondlargest provider of generic medicines by expanding in emerging markets and building a portfolio of differentiated generics,\* including biosimilars.

Sandoz plays an important role in the Novartis strategy of offering a range of products to patients and healthcare providers around the world. Sandoz products – which are focused in Retail Generics, Biopharmaceuticals & Oncology Injectables, and Anti-Infectives – help make affordable, high-quality medicines available to more people.

#### PERFORMANCE

Sandoz had net sales of USD 9.6 billion in 2014, up 4% (+7% in constant currencies, or cc) from the prior year, driven by a 15 percentage points increase in volume, more than offsetting 8 percentage points of price erosion. Performance was driven by strong retail generics and biosimilars sales growth in Asia (excluding Japan) (+15% cc), the US (+14% cc), and Latin America (+10% cc). Sales growth in Western Europe (excluding Germany) was solid at 4% (cc).

Sandoz continued to strengthen its global leadership position in differentiated generics, including medicines that are difficult to develop and manufacture. Differentiated generics accounted for 45% of Sandoz sales. Operating income increased 6% (+14% cc) to USD 1.1 billion. Core operating income, which excludes certain exceptional items, was USD 1.6 billion (+2%, +7% cc), impacted by high price erosion. Core operating income margin decreased by 0.4 percentage points to 16.4% of net sales, mainly due to a negative impact of 0.5 percentage points due to changing currency exchange rates.

#### **Retail Generics**

In Retail Generics, Sandoz develops, manufactures and markets active ingredients and finished dosage forms of pharmaceuticals. It includes the specialty areas of Dermatology, Respiratory and Ophthalmics. Retail Generics sales worldwide rose 4% (+6% cc) to USD 7.9 billion. US sales grew 10% (cc) , dampened by customer consolidation. Sales in Western Europe (excluding Germany) rose 3% (cc), driven by strong growth in Italy, Nordics and the United Kingdom. German sales were down 1% (cc) due to weak market demand. Emerging growth markets grew strongly, driven by Asia (excluding Japan), up 14% (cc); Central and Eastern Europe, up 4% (cc); and Latin America, up 8% (cc).

# 514 m

Sales of biosimilars, which rose 23% (cc) as Sandoz continues to grow its leading global position (USD)

45%

Of Sandoz sales are differentiated generics

\*Sandoz differentiated products are comprised of biosimilars and generic injectables, ophthalmics, dermatologics, and respiratory, as well as difficult-to-make oral solids (such as tacrolimus).

#### **KEY FIGURES**

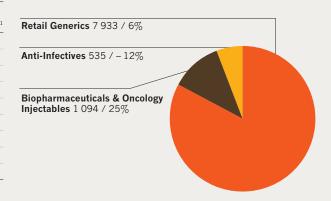
(in USD millions, unless indicated otherwise)

				% Chan	ge
		2014	2013	USD	$CC^1$
	Net sales	9 562	9 159	4	7
	Operating income	1 088	1 028	6	14
	Return on net sales (%)	11.4	11.2		
	Core operating income <sup>1</sup>	1 571	1 541	2	7
	Core return on net sales (%)	16.4	16.8		
	Core Research & Development <sup>1</sup>	823	785	- 5	- 5
	As a % of net sales	8.6	8.6		
	Free cash flow 1	1 021	1 055	- 3	
	Net operating assets	15 322	16 869	- 9	
- 1					

<sup>1</sup>Constant currencies (cc), core results and free cash flow are non-IFRS measures. An explanation of non-IFRS measures and reconciliation tables can be found starting on page 150.

#### SANDOZ 2014 NET SALES BY FRANCHISES

(in USD millions and growth in  $\%~{\rm cc^{\scriptscriptstyle 1}}$ 



## 1.1 bn

Sandoz operating income following strong growth in Asia and US (USD)

#### **Biopharmaceuticals & Oncology Injectables**

In Biopharmaceuticals, Sandoz develops, manufactures and markets protein- and other biotechnology-based products, which are known as biosimilars, or follow-on biologics. Sandoz also provides biotechnology manufacturing services to other companies. Sales of Biopharmaceuticals & Oncology Injectables rose 23% (+25% cc) to USD 1.1 billion. In 2014, Sandoz continued to strengthen its global leadership position in biosimilars. In May, Sandoz was the first to apply for approval of a biosimilar in the US under the new biosimilar pathway created in the Biologics Price Competition and Innovation Act of 2009, with filgrastim, which is used to decrease the incidence of infection among cancer patients receiving chemotherapy. In January 2015, a US Food and Drug Administration advisory body recommended approval. Sandoz leads the industry with six biosimilars in Phase III clinical trials or registration.

Three Sandoz biosimilar products occupy the number one position in market share in their respective categories – *Omnitrope*, a human growth hormone; *Binocrit* for anemia; and filgrastim under the brand name *Zarzio*. Biosimilars sales in 2014 amounted to USD 514 million, up 23% (cc) from the previous year, mainly due to continued strong growth across all our brands and regions.

Sandoz also develops, manufactures and markets cytotoxic products for traditional cancer chemotherapy. The Oncology Injectables business now includes a portfolio of more than 25 products. Oncology Injectables sales in 2014 amounted to USD 477 million, up 29% (cc) from the previous year, mainly due to recent launches in the US.

#### Anti-Infectives

In Anti-Infectives, Sandoz manufactures active pharmaceutical ingredients and intermediates – mainly antibiotics – for sale under the Sandoz name and by third-party customers. Anti-Infectives sales in 2014 amounted to USD 535 million, down 12% (cc) from the previous year, as production capacities were temporarily constrained due to quality upgrades.

FURTHER DETAIL See Condensed Financial Report at www.novartis.com/investors

#### 2014 news highlights

**In June,** Sandoz joined forces with the United Nations to combat infections that are a leading cause of child mortality worldwide.

**In July,** Sandoz announced FDA acceptance of a biosimilar application for filgrastim, a version of Amgen's Neupogen®, to fight infections in cancer patients.

**Photo:** An exercise class at the YaroslavI Veterans Hospital in Russia, part of a Novartis-sponsored program to improve the diagnosis, screening and treatment of hypertension.



### Vaccines

Vaccines saw solid demand across its portfolio of products in 2014. Divestment of the blood transfusion diagnostics unit was completed in January 2014 for USD 1.7 billion.

In 2014, Novartis reached definitive agreements to divest the non-influenza portion of the Vaccines Division to GlaxoSmithKline plc, UK, and the influenza vaccines business to CSL Limited, Australia.

#### PERFORMANCE

Vaccines net sales amounted to USD 1.5 billion in 2014, down 23% (-21% in constant currencies, or cc) from USD 2.0 billion in 2013. However, 2013 included the net sales of the divested blood transfusion diagnostics unit. Excluding the diagnostics unit, Vaccines net sales increased 8% (+10% cc) from USD 1.4 billion a year ago. Demand was solid across the product portfolio, particularly in the Meningitis franchise, with the recent launch of *Bexsero*.

Operating loss was USD 552 million in 2014, compared to a loss of USD 238 million a year earlier, driven by a USD 1.1 billion impairment charge for the influenza vaccines business, which was mostly offset by the USD 876 million exceptional gain from the divestment of the blood transfusion diagnostics unit.

Core operating loss, which excludes certain exceptional items, was USD 290 million, compared to a loss of USD 302 million in 2013.

#### Influenza

Influenza vaccines sales were USD 476 million, down 10% (-8% cc). Novartis was the first to market with vaccines for the 2014–2015 influenza season and shipped 43 million doses of *Flucelvax* and *Fluvirin* in the US.

#### Meningitis

Meningitis vaccine sales increased 37% to USD 454 million (+41% cc), benefiting from the strong performance of *Menveo*, *Menjugate* and *Bexsero*. *Bexsero* was awarded breakthrough therapy designation by the US Food and Drug Administration and regulatory approval is pending. In the United Kingdom, an advisory body recommended including *Bexsero* in the national immunization schedule.

#### **Travel and Pediatrics**

Sales of travel and pediatric vaccines grew 9% (+11% cc) to USD 607 million, driven by tickborne encephalitis and *lxiaro* vaccine sales.

VACCINES 2014 NET SALES BY FRANCHISES

(in USD millions and growth in % cc<sup>1</sup>)

Influenza 476 / - 8%

Meningitis 454 / 41%

Travel and Pediatrics 607 / 11%

#### **FURTHER DETAIL**

See Condensed Financial Report at www.novartis.com/investors

## 41 %

Increase in sales of meningitis vaccines (cc)

#### **KEY FIGURES**

(in USD millions, unless indicated otherwise)

			% Cha	ange
	2014	2013	USD	CC1
Net sales <sup>2</sup>	1 537	1 987	- 23	-21
Operating loss <sup>2</sup>	- 552	- 238	-132	-130
Return on net sales (%)	- 35.9	- 12.0		
Core operating loss <sup>1,3</sup>	- 290	- 302	4	5
Core return on net sales <sup>3,4</sup> (%)	- 18.9	-21.2		
Core Research & Development <sup>1,3</sup>	537	423	-27	- 27
As a % of net sales <sup>4</sup>	34.9	29.7		
Free cash flow <sup>1</sup>	- 544	98	nm	
Net operating assets	2 995	4 703	-36	

<sup>1</sup>Constant currencies (cc), core results and free cash flow are non-IFRS measures. An explanation of non-IFRS measures and reconciliation tables can be found starting on page 150.

<sup>2</sup> 2013 includes USD 565 million of net sales and USD 239 million operating income, respectively, from the divested blood transfusion diagnostics unit.

<sup>3</sup>Excludes the impact of the blood transfusion diagnostics unit divested on January 9, 2014.

<sup>4</sup>Based on 2013 net sales excluding the divested blood transfusion diagnostics unit of USD 1 422 million.

nm = not meaningful



### Consumer Health

Novartis Consumer Health comprises the Over-the-Counter (OTC) and Animal Health Divisions. Both made strong progress in 2014 with advances in key global brands and successful re-launches.

4.3 bn

Net sales in 2014, driven by strong growth of strategic brands (USD) As part of the Novartis portfolio transformation, the Animal Health Division was sold to Eli Lilly on January 1, 2015 and Novartis plans to merge its OTC business into a joint venture with GlaxoSmithKline's consumer healthcare business, retaining a 36.5% interest in the combined entity. The OTC Division develops and sells a wide range of affordable and reliable consumer medications for self-care and numerous common ailments, while Animal Health's products prolong and improve animals' lives.

#### PERFORMANCE

Consumer Health saw sales increase 5% (+8% in constant currencies, or cc) to USD 4.3 billion in 2014.

Within OTC, *Voltaren*, the seventh-largest global OTC brand, was a key growth driver. Animal Health performance benefited from the 2013 North American re-launch of *Sentinel*, a product for prevention and control of parasites in dogs.

Operating income reached USD 470 million compared to USD 178 million in the prior year, driven by higher gross margin from incremental sales and lower remediation and restructuring expenses for the manufacturing plant in Lincoln, Nebraska, US. Core operating income increased 52% (+72% cc) to USD 452 million. Core operating income margin increased by 3.3 percentage points to 10.6% of net sales.

#### отс

OTC sales reached USD 3.1 billion, up 9% (cc) over the previous year, driven by strong growth of all strategic brands, including *Voltaren* (+22% cc). North America achieved double-digit growth, due largely to increased sales of *Voltaren* in Canada and the US re-launch of *Theraflu* shipments in July. Emerging growth markets also performed strongly with double-digit growth (cc) led by China and Brazil, and with robust growth in Russia.

#### Animal Health

Animal Health achieved sales of USD 1.2 billion (+5% cc), boosted by the 2013 North American re-launch of *Sentinel*. Excluding *Sentinel*, Animal Health sales advanced in key markets. Sales of *Deramaxx* and *Onsior*, both non-steroidal antiinflammatory drugs, continued to grow strongly.

#### **FURTHER DETAIL**

See Condensed Financial Report on www.novartis.com/investors

#### **KEY FIGURES**

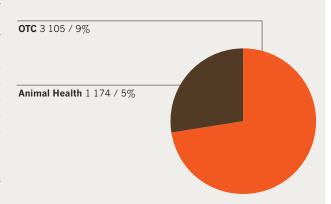
(in USD millions, unless indicated otherwise)

			% Cha	nge
	2014	2013	USD	CC1
Net sales	4 279	4 064	5	8
Operating income	470	178	164	196
Return on net sales (%)	11.0	4.4		
Core operating income <sup>1</sup>	452	298	52	72
Core return on net sales (%)	10.6	7.3		
Core Research & Development <sup>1</sup>	312	305	- 2	-2
As a % of net sales	7.3	7.5		
Free cash flow 1	288	208	38	
Net operating assets	1 762	1 677	5	

<sup>1</sup>Constant currencies (cc), core results and free cash flow are non-IFRS measures An explanation of non-IFRS measures and reconciliation tables can be found starting on page 150.

#### CONSUMER HEALTH 2014 NET SALES

(in USD millions and growth in % cc<sup>1</sup>)



# INNOVATION



Scientist Eric M. Njunju prepares samples at the Tropical Disease Research Center (TDRC) at Ndola Central Hospital, Zambia. Investigators from the TDRC have participated in Novartis/World Health Organization studies into malaria.



Innovation is fundamental to implementing our strategy. We make substantial investments in research and development to create new products that address the evolving needs of patients, healthcare professionals and society.

# 9.9 bn

Group research and development spending in 2014, amounting to 17.1% of net sales (USD)

# 200+

Research and development projects underway at Novartis

## INNOVATION OVERVIEW

Scientific research drives innovation at Novartis. Our researchers work to push the boundaries of science, broaden our understanding of diseases and develop novel products with significant benefits for patients. We are focusing on faulty molecular pathways and therapeutic areas where we see the greatest unmet medical need and believe the scientific tools to address these needs are within reach.

Novartis invested USD 9.9 billion on research and development for new drugs and medical devices in 2014, or 17.1% of net sales. More than 200 research and development projects are underway.

Research and development teams work together to bring new and better medicines to patients in the shortest possible time. This effort involves a discovery phase, during which a potential new medicine is identified. A proof of concept is established through small clinical studies in patients, after which the medicine is studied in larger numbers of patients in a clinical development phase.

#### DISCOVERY

The Novartis Institutes for BioMedical Research (NIBR) is the innovation engine of Novartis. More than 6 000 scientists and physicians prioritize work based on areas of greatest patient need and scientific understanding of disease.

The fundamental organizing principle for our drug discovery efforts is the analysis of molecular signaling pathways that are the communication highways inside cells. A breakdown or imbalance at any point along a pathway can result in disease. NIBR scientists work to discover new chemical compounds and biologics that will correct these breakdowns or imbalances.

Using our knowledge of pathways as a guide for drug discovery has helped fill our pipeline with promising new medicines to treat a wide range of diseases. For example, understanding the pathways that govern cell growth and division has been instrumental in developing cancer drugs such as *Tasigna, Afinitor* and *Zykadia*. Likewise, insights into the role of a protein called interleukin-17A helped to shape the development of *Cosentyx* (formerly AIN457). It was approved in December by the Japanese Ministry of Health, Labour and Welfare for the treatment of both psoriasis and psoriatic arthritis (PsA), a form of arthritic joint disease associated with psoriasis, in adults. *Cosentyx* is also in development to treat ankylosing spondylitis, a chronic inflammation of the joints in the spine.

All drugs enter the clinic via proof-ofconcept trials. These are small-scale studies that are designed to get an early read on a drug's safety and effectiveness, and to help find and advance the most promising drug candidates. Wherever possible, especially when molecular pathways are shared, several diseases are explored in parallel. If the proof-of-concept study is successful, a medicine typically moves into full clinical development.

#### **CLINICAL DEVELOPMENT**

The development process varies by division because of the different types of products involved. For drug development in the Pharmaceuticals Division, in Ophthalmic Pharmaceuticals at Alcon and at Sandoz for biosimilars, Novartis scientists work with practicing physicians to build a development plan. We consult government health authorities to best define the clinical utility of a medicine. We then work with physicians to recruit patients and study their response to the drug in a carefully controlled fashion, creating convincing evidence of the safety and therapeutic effects of a new medicine.

This process is lengthy and sometimes requires treating thousands of patients. For instance, the PARADIGM-HF study of LCZ696 in chronic heart failure completed last year took five years and involved more than 8 400 patients.

Development at Sandoz for generics usually takes a different path. Sandoz typically conducts small clinical studies to show that the generic version is equivalent to the original branded medicine. At Alcon, researchers develop new devices and surgical instruments in collaboration with eye surgeons and research institutes. They also work with research institutes to develop new materials for contact lenses. The fundamental organizing principle for our drug discovery efforts is the analysis of molecular signaling pathways that are the communication highways inside cells 25 Biological pathways

associated with cancer progression that Novartis is studying

6000

Scientists and physicians working in research at NIBR

#### **CANCER TREATMENTS**

Cancer was the second leading cause of death worldwide in 2013, according to the World Health Organization. Although new therapies introduced in recent years have succeeded in prolonging the lives of some cancer patients, the disease remains a grave public health threat.

Scientists continue to deepen their understanding of the mechanisms that cause cancer. Insights into the pathways that govern cancer cell growth and division, as well as how cancer interacts with the immune system and other parts of the body, have led to new ways to fight the disease.

#### **Targeted therapies**

Novartis has over many years developed strong capabilities in targeted therapies, which block the growth of cancer cells by interfering with specific pathways. Novartis is currently exploring more than 25 biological pathways associated with cancer progression.

Among the most recent successes linked to this approach is the approval of *Zykadia* (ceritinib), an ALK (anaplastic lymphoma kinase) inhibitor – previously known as LDK378 – for patients with non-small cell lung cancer who have not responded to other treatments. A recent study found patients who had not already been exposed to an ALK inhibitor lived an average of more than 18 months without their cancer progressing when taking *Zykadia*. The approval of *Zykadia* less than three and a half years after the first patient entered a clinical trial shows what is possible with a highly-targeted approach to drug development.

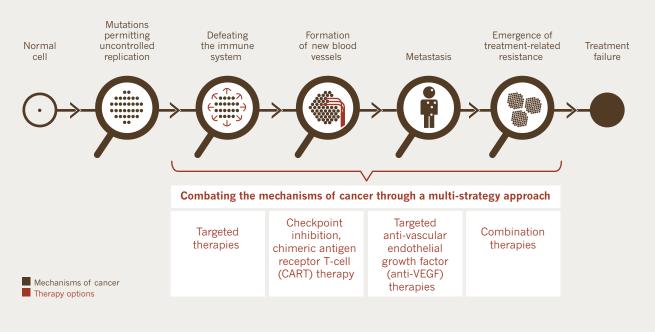
With US collaborator Incyte Corporation, we also are continuing research and development efforts for Jakavi (ruxolitinib), a JAK (Janus kinase) inhibitor approved for patients with myelofibrosis, a rare and debilitating blood cancer. In follow-up data from the pivotal myelofibrosis studies, Jakavi treatment reduced the risk of death and resulted in sustained reductions in spleen size, a hallmark of the disease, while also improving quality of life. A Phase III study for Jakavi in the rare blood cancer polycythemia vera, a condition in which the body makes too many red blood cells, found it controlled the ratio of red blood cell volume to total blood volume better than the best available therapy. Based on these data, regulatory applications for Jakavi in patients with polycythemia vera have been submitted to health authorities worldwide.

#### Cell therapy and immunotherapy

Cell therapy is emerging as a revolutionary approach to tackling cancer and Novartis is a leader in this field. In collaboration with the University of Pennsylvania in the US, Novartis is pioneering chimeric antigen receptor T-cell (CART) technology. This cell therapy reprograms patients' white blood cells to recognize cancer cells and destroy them.

#### CANCER DEVELOPMENT AND TREATMENT OPTIONS

With better understanding of how cancer develops, researchers are creating new treatment options for patients, such as targeted therapies and immunotherapy.



# INNOVATION OVERVIEW

Novartis believes the CART program could lead to therapies for several cancers. Currently the leading candidate is CTL019 for treatment of acute lymphoblastic leukemia. The US Food and Drug Administration (FDA) granted it breakthrough therapy status last July.

Another area of focus is next-generation checkpoint inhibitors – antibodies that zero in on the immune-blocking signals tumors use to hide from the body's immune system. Last February we acquired CoStim, a biotechnology company developing these antibodies.

Data suggest that combining targeted therapies with immunotherapies may lead to better outcomes for patients. Our large portfolio of targeted therapies presents multiple opportunities to develop such combination therapies, both in-house and with other companies.

In October, Novartis signed a clinical collaboration with Bristol-Myers Squibb to test three of our targeted lung cancer therapies – *Zykadia*, EGF816 and INC280 – in combination with one of its immune-oncology drugs.

#### CARDIOVASCULAR THERAPIES

Cardiovascular diseases are the leading cause of death worldwide, responsible for an estimated 17.3 million deaths per year. These are diseases that are linked to aging and lifestyle factors such as diet, exercise and smoking. Although surgical interventions and pharmaceutical innovations have reduced the rate of heart attacks, strokes and cardiovascular deaths, there has been little progress in the past two decades in the fight against heart failure, which remains the biggest single cause of hospital admissions in adults who are older than 65.

Heart failure occurs when a patient's heart is not able to pump enough blood to meet the demands of the body. Symptoms include shortness of breath, fatigue, and swollen feet and legs.

Novartis has two promising heart failure medicines under development.

LCZ696, an investigational drug for chronic heart failure, lowered the risk of death by 20% and the rate of subsequent hospitalization by 23% for patients with reduced-ejection fraction – where the heart contracts with insufficient force, reducing the flow of blood. The finding came in March in a study of LCZ696 involving more than 8 400 patients in 47 countries – the largest ever in heart failure. The study ended early after results showed the drug was significantly better than the existing standard treatment, enalapril. Based on those findings, regulatory applications have been submitted in both the EU and US for LCZ696 as a treatment for patients with heart failure with reduced ejection fraction. We also started a large clinical trial with LCZ696 in patients with another type of heart failure.

RLX030 (serelaxin) is a novel treatment for acute heart failure, the first therapy to target this large group of patients in more than a decade. Phase II and III studies suggested RLX030 helped patients with acute heart failure live longer. A new trial involving 6 300 patients is underway to test this hypothesis. This second Phase III study follows a request from regulators for more evidence of the therapy's efficacy.

#### **RESPIRATORY CARE**

Respiratory diseases are a leading cause of death, disability and reduced quality of life for hundreds of millions of people around the world. Novartis is researching solutions for patients with conditions such as chronic obstructive pulmonary disease (COPD) and asthma, both major and growing public health issues.

COPD encompasses several chronic lung diseases that restrict lung airflow. According to the World Health Organization, some 210 million people have COPD and by 2020, it will become the third leading cause of death worldwide. There is a need for new treatment options for COPD because many patients continue to suffer debilitating symptoms, despite receiving existing medicines.

We have a number of compounds in development and several treatment options to help COPD patients better manage their day-to-day symptoms and to reduce exacerbations.

One such option is *Ultibro Breezhaler* (QVA149), a medicine with two active substances. The results of a major clinical trial presented in September showed *Ultibro Breezhaler* reduced COPD exacerbations by 31% compared to the current standard treatment for patients

# 20%

The reduction of risk of cardiovascular death for patients in a trial of LCZ696

## 8400

Number of patients in the PARADIGM-HF trial for LCZ696, the largest-ever trial of a heart failure treatment

#### PHARMACEUTICALS DIVISION — MAJOR CLINICAL TRIAL RESULTS IN 2014

This table summarizes the results of major clinical trials conducted during the year and includes successful and unsuccessful outcomes.

Product/ compound	Indication	Trial (phase)	Outcome
Afinitor	Advanced pancreatic neuroendocrine tumor (pNET)	RADIANT-3 (Phase III)	Afinitor plus best supportive care (BSC) led to a median overall survival of 44 months, which is unprecedented in controlled clinical trials for advanced progressive pNET, compared to 37.7 months with placebo plus BSC. The 6-month difference was clinically relevant but not statistically significant (of note, 85% of patients crossed over from the placebo arm to the <i>Afinitor</i> arm).
Afinitor	HER2 positive advanced breast cancer	BOLERO-1 (Phase III)	Afinitor in combination with standard trastuzumab/paclitaxel therapy did not demonstrate a progression-free survival (PFS) benefit in the full study population of patients with untreated HER2+ (any HR status) advanced breast cancer. In the HR negative subpopulation, the second primary objective, the difference in median PFS was also not statistically significant. However, the addition of <i>Alinitor</i> was associated with a clinically relevant 27-month PFS benefit compared with the control arm. Results support continued research of the PI3K/AKT/mTOR pathway in this patient population.
Cosentyx (secuki- numab, formerly known as AIN457)	Moderate-to- severe psoriasis	ERASURE, FIXTURE, FEATURE, JUNCTURE (Phase III)	<i>Cosentyx</i> 150 mg and 300 mg doses demonstrated efficacy superior to placebo in four Phase III studies, which enrolled more than 2 400 moderate-to-severe plaque psoriasis patients. More than 70% of patients treated with the 300 mg dose achieved Psoriasis Area and Severity Index (PASI) 90 or PASI 100 at 16 weeks, and this response was maintained in the majority of patients up to week 52. <i>Cosentyx</i> at the 300 mg dose also showed superior efficacy to Enbrel® (etanercept) with PASI 90 of 72.4% vs. 31.3% at week 16. Efficacy for the prefilled syringe and the autoinjector forms of <i>Cosentyx</i> were comparable. The overall safety profile of <i>Cosentyx</i> was favorable.
Cosentyx	Moderate-to- severe psoriasis	CLEAR (Phase IIIb)	Cosentyx 300 mg demonstrated superiority to Stelara® (ustekinumab) on PASI 90 at week 16 for moderate-to-severe plaque psoriasis patients, and demonstrated superior efficacy (PASI 75) to Stelara® at 4 weeks. Safety results were consistent with previously reported Phase III clinical trials for Cosentyx and showed minimal differences compared to ustekinumab.
Cosentyx	Psoriatic arthritis (PsA)	FUTURE I, FUTURE 2 (Phase III)	In placebo-controlled Phase III studies in psoriatic arthritis, <i>Cosentyx</i> met primary and key secondary endpoints, including improving peripheral joint disease, preventing joint damage, and delivering almost clear (PASI 90) skin. No new safety issues were identified.
Cosentyx	Ankylosing spondylitis (AS)	MEASURE I, MEASURE 2 (Phase III)	In placebo-controlled Phase III studies in ankylosing spondylitis, <i>Cosentyx</i> 150 mg met primary and key secondary endpoints, including improvements in signs and symptoms of the disease (ASAS 20/40), and associated improvements in physical function and quality of life. No new safety issues were identified.
secuki- numab (AIN457)	Rheumatoid arthritis (RA)	F2309 (Phase III)	This trial studied two subcutaneous doses of secukinumab (75 mg and 150 mg) vs. placebo and abatacept in RA patients with an inadequate response to anti-TNF alpha biologics. The 150 mg dose demonstrated superior efficacy to placebo on the primary endpoint (ACR 20 at 6 months), but was numerically lower than abatacept. No new safety issues were identified.
CTL019	Relapsed/refractory adult and pediatric acute lymphoblastic leukemia	ENSIGN (ped) COMMODORE (adult) (Phase I)	As reported in The New England Journal of Medicine, 27 out of 30, or 90% of patients achieved complete remission.
Gilenya	Primary progressive multiple sclerosis	INFORMS (Phase III)	The study did not meet the primary endpoint. The trial did not show a significant difference between fingolimod and placebo on a combination of disability measures. The safety results were consistent with the well-characterized safety profile of fingolimod in relapsing MS (RMS).
Jakavi	Polycythemia vera (PV) resistant to or intolerant of hydroxyurea	RESPONSE (Phase III)	Patients on <i>Jakavi</i> achieved improvement in disease control: 77% achieved hematocrit control or spleen reduction vs. 20% of patients on best available therapy (BAT). Nearly half of ruxolitinib-treated patients had 50% or higher reduction in debilitating PV symptoms, compared to 5% on BAT.
LBH589	Relapsed or relapsed and refractory multiple myeloma	PANORAMA-1 (Phase III)	Adding LBH589 to bortezomib and dexamethasone reduced the risk of disease progression by 37% compared with bortezomib plus dexamethasone alone. Patients in the LBH589 arm achieved a statistically significant and clinically relevant 4-month improvement in median progression-free survival compared to patients in the placebo arm. The addition of LBH589 also led to a clinically meaningful increase in complete or near complete response rate and duration of response.
LCZ696	Chronic heart failure with reduced ejection fraction (HF-REF)	PARADIGM-HF (Phase III)	Reduced the risk of death from cardiovascular causes by 20%, reduced heart failure hospitalizations by 21%, and reduced the risk of all-cause mortality by 16% vs. ACE-inhibitor enalapril in patients with heart failure with reduced ejection fraction. Overall, there was a 20% risk reduction on the primary endpoint, a composite measure of cardiovascular death or heart failure hospitalization.
Signifor LAR	Acromegaly	PAOLA (Phase III)	Signifor showed superior efficacy in acromegaly patients not controlled on first-generation somatostatin analogues. Patients achieved greater biochemical control as measured by growth hormone and insulin-like growth factor-1 levels when compared to continued treatment with the first-generation somatostatin analogue therapies.
Xolair	Chronic Spontaneous Urticaria (CSU)	ASTERIA I, ASTERIA II, GLACIAL (Phase III)	Met all primary and pre-specified endpoints, including rapid itch relief. Significantly improved itches and hives and, in many cases, completely cleared symptoms.
<i>Zykadia</i> (ceritinib; LDK378)	Advanced anaplastic lymphoma kinase positive (ALK+) non- small cell lung cancer (NSCLC)	ASCEND-1 (Phase I)	In a pivotal study, an overall response rate of 61.8% and a median progression-free survival of 9 months were achieved in all patients regardless of prior ALK therapy. Patients who entered the study with brain metastases also responded to treatment with <i>Zykadia</i> , suggesting that <i>Zykadia</i> demonstrated activity against brain metastases. Patients who took <i>Zykadia</i> as their first ALK inhibitor had a median of more than 18 months without their cancer progressing.

# INNOVATION OVERVIEW

with moderate-to-severe COPD. Already approved for use in Europe and Japan, we filed for approval in the US in December.

Asthma affects some 235 million people around the world. While it is a public health problem in all countries, most asthma-related deaths occur in low-income countries. Two Phase II trials are currently underway into two novel therapies for asthma. These include QGE031 for the treatment of allergic diseases, and QAW039 for asthma and atopic dermatitis.

We also are investigating new treatments for other serious respiratory diseases including cystic fibrosis, pulmonary fibrosis, and pulmonary vascular disease.

#### IMMUNOLOGY AND DERMATOLOGY

Disorders of the immune system are common and most frequently affect joints and connective tissue, skin and most body organs. They are important because their effects can be significant and may have a serious impact on patients' quality of life and, in some cases, significantly shorten life expectancy.

Novartis has more than 20 compounds in various stages of development for a range of disorders in dermatology and rheumatology.

*Cosentyx* (formerly AIN457) was approved in Japan for the treatment of both psoriasis and psoriatic arthritis (PsA). *Cosentyx* also received positive recommendations from advisory bodies in the EU and US for moderate-to-severe psoriasis.

In October, we presented data from Phase III studies in psoriasis that showed *Cosentyx* cleared psoriasis skin regardless of the severity of the patient's disease at the start of treatment. *Cosentyx* is a human monoclonal antibody that targets a protein called interleukin IL-17a. It stimulates inflammation and is central to the development of psoriasis and inflammatory arthritic diseases, including psoriatic arthritis and ankylosing spondylitis.

Results of the Phase III study of *Cosentyx* in psoriatic arthritis and ankylosing spondylitis were positive. Results of two Phase III studies in ankylosing spondylitis showed more than 60% of patients achieved significant improvement in symptoms. Two Phase III trials in patients with psoriatic arthritis showed that *Cosentyx* improved signs and symptoms, helped prevent progression of joint structural damage, and maintained clear skin. We plan to file global regulatory approvals for both these indications in 2015. In a trial, Cosentyx (formerly AIN457) consistently cleared psoriasis skin regardless of the severity of the patient's disease at the start of treatment

## 20

Number of compounds in various stages of development for a range of disorders in dermatology and rheumatology



Ricardo Dolmetsch, Head of Neuroscience at the Novartis Institutes for BioMedical Research, looks on as a colleague, Sravya Kommineni, conducts stem cell research. The WHO estimates one in four people will be affected by mental or neurological disorders In 2014, we filed for approval in the EU, Switzerland and Australia, and the US for LDE225 (sonidegib) – a compound for advanced basal cell carcinoma. This is the most common form of skin cancer and accounts for more than 80% of non-melanoma skin cancers. The filing followed positive Phase III trials that showed patients with locally advanced or metastatic basal cell carcinoma taking the drug had marked and sustained tumor shrinkage.

We also are developing a new compound for the most common form of eczema, atopic dermatitis. This disease occurs in 10–20% of children and can be severe and persistent in some cases where limited effective treatment options exist. A positive proof-of-concept trial of QAW039 in 2014 showed efficacy in adult patients with moderate-to-severe atopic dermatitis. Nearly half the patients in the study had skin lesions improve by at least 50%.

Novel targets for many other diseases are being evaluated in earlier-stage programs, including in transplantation and allergic disease.

#### NEUROSCIENCE

Brain disorders pose a heavy burden on individuals, families and communities. Neurological disorders – including forms of dementia and mental disorders such as depression, schizophrenia and bipolar disorder – are the leading cause of disability globally, both in the developed and developing worlds. The World Health Organization estimates that one in four people in the world will be affected by mental or neurological disorders at some point in their lives.

Work at NIBR is focused on identifying new therapies for neurodegenerative diseases like Alzheimer's disease, as well as psychiatric diseases such as autism and schizophrenia that have received much attention in the past decades, but for which there have been few new therapies. We are harnessing advances in human genetics, new imaging technologies and other novel approaches to gain a better understanding of brain disorders and to develop and test new therapies.

One new approach that we have developed is the use of induced pluripotent stem cells to

generate preclinical models of human brain diseases in the lab. This "brain-in-a-dish" approach enables scientists to generate neurons from the skin cells of patients with neuropsychiatric diseases. These cells provide an unprecedented opportunity to investigate the molecular pathways that cause neurological disease, and enable researchers at NIBR to study the response of a patient's actual brain cells to potential treatments.

#### Multiple sclerosis

We continue to research ways of treating progressive forms of multiple sclerosis (MS) for which there are no approved therapies. Reports suggest that increased production of the protein IL-17 has been shown to be associated with clinical disease activity in patients with MS. We are exploring a potential new treatment option, CJM112, for MS that targets IL-17.

BAF312 (siponimod) is a new oral therapy under investigation for secondary progressive MS, which begins with a relapsing form of the disease that is followed by some apparent easing of symptoms and later becomes progressive. BAF312 is an S1P inhibitor that works by preventing white blood cells from leaving lymph nodes and reaching the central nervous system. It is currently in Phase III trials.

#### Alzheimer's disease

Currently, treatments for Alzheimer's disease manage the symptoms but do not fundamentally change the course of the disease. In July, Novartis initiated a pioneering study in collaboration with the Banner Alzheimer's Institute to assess two treatments that could prevent development of the disease.

This study is planned to assess the ability of two Novartis treatments, CAD106 and a BACE inhibitor, to limit the build-up of protein aggregates that are linked to the emergence of Alzheimer's disease.

The study is intended to involve people who are at increased risk of developing Alzheimer's disease because of their genetic makeup. It is expected to assess if administering either treatment before the onset of the disease can prevent the decline of cognitive function.

## INNOVATION OVERVIEW

#### Muscle wasting

BYM338 (bimagrumab) is being developed for sporadic inclusion body myositis (sIBM). sIBM is a rare and potentially life-threatening musclewasting condition. Patients who have the disease can gradually lose the ability to walk, experience falls and injuries, lose hand function and have swallowing difficulties. There are no effective treatments for sIBM.

Bimagrumab is also in development for hip fracture recovery, among other indications. Hip fractures are serious fall injuries that often result in long-term functional impairment, loss of independence and increased risk of death. Treatment typically includes surgery and hospitalization, and is frequently followed by extensive rehabilitation. Treatment with a muscle anabolic drug during the recovery phase may boost the recovery of muscle mass and strength, and drive overall improvement of physical function.

#### **INFECTIOUS DISEASES**

Communicable diseases continue to be a major cause of illness and death around the world. There is an urgent need for new drugs to combat diseases that can be devastating in developing countries, as well as to combat the growing threat of drug resistance.

A particular area of focus for Novartis is malaria, which each year kills more than 600 000 people, most of them African children. Novartis has been at the forefront of the fight against malaria for more than a decade. With two new compounds in Phase II clinical testing and one drug target in preclinical development, we believe we are building one of the strongest malaria pipelines in the industry and helping tackle the growing problem of drug resistance.

KAE609 (cipargamin) is the first drug candidate with a novel mechanism of action to reach Phase II clinical development in more than 20 years. Trials indicate it has the potential to treat malaria and block transmission. We are also exploring its potential as a single-dose combination therapy. A second antimalarial agent, KAF156, has the ability to treat and prevent malaria by targeting both blood and liver infections, attacking the parasite at both stages of its reproductive cycle. With antimalarial drug resistance on the rise in Southeast Asia, both KAE609 and KAF156 could provide alternatives to existing therapies.

Work is also underway on P14K, a novel drug target for the development of antimalarial drugs. Compounds that inhibit this target have the potential to prevent and treat malaria, and block transmission. Research is ongoing.

Growing resistance to antibiotics is another area of focus. Scientists at NIBR are working to discover novel antibiotics to treat multi-drugresistant gram-negative bacteria. Gram-negative bacteria have two membranes, the outer of which is impermeable, and are also equipped with molecules whose function is to keep substances out of the cell. Many antibiotics need to make it past both membranes to have an effect. NIBR's infectious disease research team is pursuing a variety of genetic and biochemical approaches in our search for new antimicrobials.

#### **EYE CARE**

Novartis, through its eye care division Alcon and its Ophthalmic Pharmaceuticals franchise, partners with eye care professionals worldwide to develop new products in three main areas. They are pharmaceutical therapies to treat chronic diseases such as age-related macular degeneration (AMD) and glaucoma, as well as other ophthalmic conditions such as dry eye, ocular inflammation, ocular allergy and ocular infections; surgical devices and platforms to help treat patients with cataracts, retinal conditions such as a detached retina, as well as refractive errors such as nearsightedness, farsightedness and astigmatism; and vision care products including contact lenses and lens care solutions. Innovations result from our substantial commitment to research and development, from our work with research institutes, and from collaborations with surgeons and technology companies such as Google.

# 600 000

People die from malaria each year. We have a strong pipeline of antimalarials

Alcon is devising new ways to improve eye care globally. An example is our collaboration with Google[x] on "smart lens" technology Only a few businesses, including Sandoz, have mastered the challenging process of developing biosimilars

Sandoz biosimilars are in Phase III trials or undergoing registration

#### **Ophthalmic Pharmaceuticals**

In December, Alcon initiated Phase III trials for RTH258, a new generation anti-vascular endothelial growth factor (anti-VEGF) agent that may help tackle wet AMD, a disease where blood vessels grow into the eye, damaging the retina and progressively blocking the center of the field of vision. If approved, RTH258 will broaden our medical retina portfolio, which already includes Lucentis (ranibizumab). In May, Novartis acquired the non-US rights to OAP030, otherwise known as Fovista, an anti-platelet-derived growth factor (anti-PDGF) agent from Ophthotech. OAP030, in combination with an anti-VEGF agent, may help improve the treatment of wet AMD. In July, Alcon received EU approval for Simbrinza suspension, a combination therapy that significantly lowers intraocular pressure in patients with the chronic, sight-threatening disease glaucoma. Simbrinza suspension is currently the only combination therapy that is formulated without a beta blocker, and so provides a new therapeutic option for glaucoma patients suffering from certain respiratory or cardiac conditions who should avoid beta blockers.

#### Surgical

Alcon is the world leader in developing ophthalmic surgical devices and platforms to treat cataracts, a clouding of the natural lens of the eye. In cataract surgery, the clouded lens is removed and replaced with an artificial intraocular lens (IOL). In October, Alcon acquired WaveTec, the makers of the ORA System with VerifEye technology, adding a new component to its *Cataract* Refractive Suite, used by surgeons to plan and perform cataract surgical procedures with increased precision. The ORA System provides intra-operative guidance for use during cataract surgery and has been shown to significantly improve refractive outcomes among cataract patients with astigmatism. In November, the FDA's Ophthalmic Devices Advisory Committee recommended approval for the AcrySof IQ ReSTOR Multifocal Toric IOL. If approved by the FDA, this lens will offer a new treatment option to cataract patients in the US who wish to correct their astigmatism and achieve satisfactory vision without the need for glasses after surgery.

#### Vision Care

In July, Alcon entered into an agreement with Google[x] to license its "smart lens" technology to address ocular conditions. Alcon and Google are working to develop a smart contact lens to help diabetic patients monitor their glucose levels via tear fluid in the eye. Work is also underway on contact lenses and IOLs for patients living with presbyopia who can no longer read without spectacles. The "smart lens" has the potential to provide accommodative vision correction to help restore the eye's natural autofocus on near objects.

#### BIOSIMILARS

Our generics division, Sandoz, is developing biosimilars – protein drugs that have essentially the same active ingredient as existing biological drugs that have lost patent protection. Biosimilars are approved by regulators once stringent analytical and clinical tests show they have highly similar safety and efficacy when compared with the original drug.

Seven of the top 10 pharmaceuticals by sales in 2013 were biological agents, but only a few businesses – including Sandoz – have mastered the challenging process of developing biosimilars.

In 2014, we became the first company to file a marketing application for a biosimilar in the US under the new biosimilar pathway created in the Biologics Price Competition and Innovation Act of 2009. The drug, called *Zarzio* (filgrastim) in Europe, is a proposed biosimilar to Neupogen® from Amgen. It stimulates white blood cell production in some cancer patients undergoing chemotherapy.

Sandoz has six biosimilars that are in Phase III clinical trials or are undergoing registration, including adalimumab (for patients with autoimmune diseases and based on Humira® from AbbVie), and pegfilgrastim (based on Neulasta® from Amgen). Other biosimilars include rituximab, a version of Roche's Rituxan®/MabThera®, for rheumatoid arthritis and follicular lymphoma. It is in Phase III trials.

## PIPELINE

Novartis is consistently rated as having one of the industry's most respected development pipelines, with more than 200 projects in clinical development, including 135 in the Pharmaceuticals Division, as of Dec. 31, 2014.

Many of these projects, which include new molecular entities as well as additional indications and different formulations for marketed products, are for potentially best-in-class or first-in-class medicines that could significantly advance treatment standards for patients worldwide. This table provides an overview of selected projects in confirmatory development.

We use the traditional pipeline model as a platform (e.g. Phase I-III). However, we have tailored the process to be simpler, more flexible and efficient. Our development paradigm consists of two parts: Exploratory Development and Confirmatory Development.

#### EXPLORATORY DEVELOPMENT

This consists of clinical proof-of-concept studies, which are small clinical trials that combine elements of traditional Phase I/II testing. These customized trials are designed to give early insights into issues such as safety, efficacy and toxicity for a drug in a given indication. Once a positive proof of concept has been established, the drug moves to the Confirmatory Development stage.

#### CONFIRMATORY DEVELOPMENT

These are projects for which a positive proof of concept has been established. They have elements of traditional Phase II/III testing and include trials aimed at confirming the safety and efficacy of the drug in the given indication leading up to submission of a dossier to health authorities for approval. Like traditional Phase III testing, this stage can also include trials that compare the drug to the current standard of care for the disease, in order to evaluate the drug's overall risk/benefit profile. The pipeline table provides an overview of selected projects in Confirmatory Development. See the glossary on pages 50 and 52 for further explanation of the terms used.

#### MAJOR DEVELOPMENT PROJECTS

Project/product	Division	Common name	Mechanism of action
ONCOLOGY			
BYL719	Pharmaceuticals	alpelisib	PI3K <sup>3</sup> inhibitor
LJM716	Pharmaceuticals	-	HER3 inhibitor
EGF816	Pharmaceuticals	-	Epidermal growth factor receptor
BGJ398	Pharmaceuticals	-	Pan-FGF receptor kinase inhibitor
INC280	Pharmaceuticals	capmatinib	cMET inhibitor
Tasigna	Pharmaceuticals	nilotinib	BCR-ABL inhibitor
LGX818	Pharmaceuticals	encorafenib	RAF inhibitor
Afinitor/Votubia (RAD001)	Pharmaceuticals	everolimus	mTOR <sup>₄</sup> inhibitor
LCI699	Pharmaceuticals	osilodrostat	Aldosterone synthase inhibitor
BKM120	Pharmaceuticals	buparlisib	PI3K <sup>3</sup> inhibitor
LEE011	Pharmaceuticals	ribociclib	CDK4/6 <sup>6</sup> inhibitor
MEK1627	Pharmaceuticals	binimetinib	MEK <sup>8</sup> inhibitor
MEK162 <sup>7</sup> + LGX818	Pharmaceuticals	binimetinib, encorafenib	MEK <sup>8</sup> inhibitor + RAF inhibitor
PKC412	Pharmaceuticals	midostaurin	Signal transduction inhibitor
Signifor LAR (SOM230)	Pharmaceuticals	pasireotide	Somatostatin analogue
Zykadia (LDK378)	Pharmaceuticals	ceritinib	ALK <sup>10</sup> inhibitor
Jakavi	Pharmaceuticals	ruxolitinib	Janus kinase inhibitor
LBH589	Pharmaceuticals	panobinostat	Pan-deacetylase inhibitor (pan-DACi)
<i>Exjade</i> film-coated tablet (FCT)	Pharmaceuticals	deferasirox	Iron chelator

CARDIOVASCULAR AI	CARDIOVASCULAR AND METABOLISM						
BGS649	Pharmaceuticals	-	Aromatase inhibitor				
LIK066	Pharmaceuticals	-	SGLT 1/2 inhibitor				
ACZ885	Pharmaceuticals	canakinumab	Anti-interleukin-1ß monoclonal antibody				
LCQ908	Pharmaceuticals	pradigastat	Diacylglycerol acyl transferase-1 inhibitor				
RLX030	Pharmaceuticals	serelaxin	Recombinant form of human relaxin-2 hormone				
Tekturna	Pharmaceuticals	aliskiren	Direct renin inhibitor				
LCZ696	Pharmaceuticals	valsartan, sacubitril (as sodium salt complex)	Angiotensin receptor, neprilysin inhibitor				

RESPIRATORY			
BCT197	Pharmaceuticals	-	Anti-inflammatory agent
QAW039	Pharmaceuticals	fevipiprant	CRTH2 antagonist
QAX576	Pharmaceuticals	-	Anti-interleukin-13 monoclonal antibody
QGE031	Pharmaceuticals	-	High-affinity anti-IgE monoclonal antibody
Seebri (NVA237)	Pharmaceuticals	glycopyrronium bromide	Long-acting muscarinic antagonist
Ultibro (QVA149)	Pharmaceuticals	indacaterol, glycopyrronium bromide	Long-acting beta <sub>2</sub> adrenergic agonist and long-acting muscarinic antagonist

<sup>1</sup> Filings that have received approval in one of the markets (US or EU) but are awaiting approval in the other market are included in the table.

<sup>2</sup> Refers to lead indication only

<sup>3</sup> Phosphoinositide 3-kinase inhibitor
 <sup>4</sup> Mammalian target of rapamycin

<sup>5</sup> Diffuse large B-cell lymphoma

			PHASE I	PHASE II	PHASE III	Submission
Potential indication/disease area	Route of administration	Planned filing dates <sup>1,2</sup>				
			-			
Solid tumors	Oral	≥2019		~		
Solid tumors	Intravenous	≥2019				
Solid tumors	Oral	≥2019				
Solid tumors	Oral	≥2019				
Non-small cell lung cancer	Oral	2018				
Chronic myeloid leukemia treatment-free remission	Oral	2016				
Solid tumors	Oral	≥2019				
Non-functioning GI and lung neuroendocrine tumors, tuberous sclerosis complex seizures, DLBCL <sup>5</sup>	Oral	2015				
Cushing's disease	Oral	2017				
Metastatic breast cancer, hormone receptor-positive, aromatase inhibitor resistant, mTQR <sup>4</sup> inhibitor naive [lead indication]; metastatic breast cancer, hormone receptor-positive, aromatase inhibitor and mTQR <sup>4</sup> inhibitor resistant solid tumors	Oral	2015				
HR+, HER2 negative advanced breast cancer (postmenopausal women)[lead indication]; HR+, HER2 negative advanced breast cancer (premenopausal women); solid tumors	Oral	2016				
NRAS mutant melanoma [lead indication], LGSOC, <sup>9</sup> solid tumors	Oral	2016				
RAF mutant melanoma	Oral	2016				
Acute myeloid leukemia [lead indication], aggressive systemic mastocytosis	Oral	2015				
Cushing's disease	Long-acting release, Intramuscular injection	2016				
ALK <sup>10+</sup> advanced non-small cell lung cancer (post chemo- therapy and post crizotinib)[lead indication], ALK <sup>10+</sup> advanced non-small cell lung cancer (chemotherapy naive, crizotinib naive)	Oral	US approved EU registration				
Polycythemia vera	Oral	EU registration				
Relapsed or relapsed-and-refractory multiple myeloma	Oral	US registration EU registration				
Iron overload	Oral FCT	US registration				

Obese hypogonadotropic hypogonadism	Oral	≥2019		 
Type 2 diabetes	Oral	≥2019		
Secondary prevention of cardiovascular events	Subcutaneous injection	2017		
Familial chylomicronemia syndrome	Oral	2015		
Acute heart failure	Intravenous infusion	2016		
Reduction of cardiovascular death/hospitalizations in chronic heart failure	Oral	2016		
Chronic heart failure with reduced ejection fraction [lead indication], chronic heart failure with preserved ejection fraction	Oral	US registration EU registration		

Oral	≥2019				
Oral	≥2019				
Subcutaneous injection	≥2019				
Subcutaneous injection	≥2019				
Inhalation	EU approved US registration <sup>11</sup>				
Inhalation	EU approved US registration <sup>11</sup>				
	Oral Subcutaneous injection Subcutaneous injection Inhalation	Oral     ≥2019       Subcutaneous injection     ≥2019       Subcutaneous injection     ≥2019       Inhalation     EU approved US registration <sup>11</sup>	Oral     ≥2019       Subcutaneous injection     ≥2019       Subcutaneous injection     ≥2019       Inhalation     EU approved US registration <sup>11</sup>	Oral     ≥2019       Subcutaneous injection     ≥2019       Subcutaneous injection     ≥2019       Inhalation     EU approved US registration <sup>11</sup>	Oral     ≥2019       Subcutaneous injection     ≥2019       Subcutaneous injection     ≥2019       Inhalation     EU approved US registration <sup>11</sup>

<sup>6</sup> Cyclin-dependent kinase 4/6
 <sup>7</sup> Conditional on completion of the previously announced transactions with GSK, we expect to return our rights in MEK162 to Array BioPharma Inc.
 <sup>8</sup> Combination of mitogen-activated protein kinase and extracellular signal-regulated kinase
 <sup>9</sup> Low-grade serous ovarian cancer
 <sup>10</sup> Anaplastic lymphoma kinase
 <sup>11</sup> Submission pending acceptance by FDA



#### GLOSSARY

Project/product Project refers to the Novartis reference code (combination of three letters and three numbers) used for projects in development. Product refers to the brand name for a marketed product.

Common name Official international nonproprietary name or generic name for an individual molecular entity as designated by the World Health Organization

Mechanism of action Specific biochemical interaction with a molecular target such as a receptor or enzyme, through which a drug substance produces its pharmacological effect

Potential indication/indications Disease or condition for which a compound or marketed product is in development and is being studied as a potential therapy

Route of administration Path by which a medicinal preparation is administered into the body, such as oral, subcutaneous or intravenous

Phase I First clinical trials of a new compound, generally performed in a small number of healthy human volunteers, to assess the clinical safety and tolerability, as well as metabolic and pharmacologic properties of the compound

Phase II Clinical studies with patients who have the target disease, with the aim of continuing the Phase I safety assessment in a larger group, assessing the efficacy of the drug in the patient population, and determining the appropriate doses for further evaluation

#### MAJOR DEVELOPMENT PROJECTS

Project/product	Division	Common name	Mechanism of action
IMMUNOLOGY AND	DERMATOLOGY		
QAW039	Pharmaceuticals	fevipiprant	CRTH2 antagonist
ACZ885	Pharmaceuticals	canakinumab	Anti-interleukin-1ß monoclonal antibody
Cosentyx (AIN457)	Pharmaceuticals	secukinumab	Anti-interleukin-17 monoclonal antibody
LDE225	Pharmaceuticals	sonidegib	Smoothened receptor/ hedgehog signaling inhibitor
NEUROSCIENCE			
CJM112	Pharmaceuticals	-	Anti-interleukin-17

CJM112	Pharmaceuticals	-	Anti-interleukin-17 monoclonal antibody
CAD106	Pharmaceuticals	-	Beta-amyloid-protein therapy
BAF312	Pharmaceuticals	siponimod	Sphingosine-1-phosphate receptor modulator
Gilenya	Pharmaceuticals	fingolimod	Sphingosine-1-phosphate receptor modulator
BYM338	Pharmaceuticals	bimagrumab	Inhibitor of activin receptor type II

#### CELL AND GENE THERAPY

CTL019	Pharmaceuticals	tisagenlecleucel-T	CD19-targeted chimeric antigen receptor T-cell immunotherapy
FCR001	Pharmaceuticals	-	Inducing stable donor chimerism and immunological tolerance
HSC835	Pharmaceuticals	-	Stem cell regeneration

#### INFECTIOUS DISEASES

INFECTIOUS DISEASES	5		
H7N9 <sup>12</sup>	Vaccines	H7N9 vaccine	Pandemic influenza
Acellular pertussis combination	Vaccines	Tdap vaccine	Pediatric
C. difficile <sup>13</sup>	Vaccines	C. difficile vaccine	Hospital infections
Human immunodeficiency virus (HIV) <sup>14</sup>	Vaccines	HIV vaccine	HIV
S. aureus	Vaccines	S. aureus vaccine	Hospital infections
KAF156	Pharmaceuticals	-	
KAE609	Pharmaceuticals	cipargamin	PfATP4 inhibitor
Group B streptococcus	Vaccines	Group B streptococcus vaccine	Maternal
H5N1 influenza cell culture vaccine <sup>12</sup>	Vaccines	Pandemic influenza vaccine	Pandemic
MenABCWY	Vaccines	Meningococcal A, B, C, W and Y vaccine	Meningitis
P. aeruginosa <sup>13</sup>	Vaccines	P. aeruginosa vaccine	Hospital infections
Cell culture QIV	Vaccines	Seasonal influenza vaccine	Seasonal influenza
aQIV pediatric	Vaccines	Seasonal influenza vaccine	Seasonal influenza
Fluad US	Vaccines	Seasonal influenza vaccine	Seasonal influenza
Flucelvax age 4+ US	Vaccines	Seasonal influenza vaccine	Seasonal influenza
Bexsero US	Vaccines	Meningococcal B vaccine	Meningitis

<sup>1</sup> Filings that have received approval in one of the markets (US or EU) but are awaiting approval in the other market are included in the table. Refers to lead indication only 2

<sup>11</sup> Submission pending acceptance by FDA
 <sup>12</sup> Collaboration with United States Department of Health and Human Services

<sup>13</sup> Collaboration with Valneva
 <sup>14</sup> Collaboration with United States National Institutes of Health

Potential indication/description       Provide description       Provide				PHASE I	PHASE II	PHASE III	Submission
Herestitury periodic fevers     Subjectioneeus     2016       Prostitia figial indication; amyloaning spondylits, periodic antihonis     Usi registration EU Singestration     Imagestration       Advenued basel cell carcinoma     Oral     USi registration       Minimum disorders     Bub citareau     2019       Mathemark Status     Bub citareau     2019       Mathemark Status     Bub citareau     2019       Stoondary progression multiple sclerosa     Oral     2019       Chronic inflammatacy deryelinding polyradiculoneuropathy hip factors     Oral     2017       Spondic inclusion carls     Intravenous     2016       Mathemark Langelint     Intravenous     2016       Reveal transplant     Intravenous     2019       Stematic relation code lymphobetic levidema     Intravenous     2016       Reveal transplant     Intravenous     2016       Prevention of future large-levidymbetic levidema     Intravenous     2016       Prevention of future large-levidymbetic levidema     Intravenous     2019       Prevention of future large-levidymbetic levidema     Intravenous     2010       Prevention of future large-levidymbetic levidema     Intravenous     2010       Prevention of future large-levidymbetic levidema     Intravenous     2011       Prevention of future large-levidymbetic levidema     In	Potential indication/disease area	Route of administration					
Herestitury periodic fevers     Subjectioneeus     2016       Prostitia figial indication; amyloaning spondylits, periodic antihonis     Usi registration EU Singestration     Imagestration       Advenued basel cell carcinoma     Oral     USi registration       Minimum disorders     Bub citareau     2019       Mathemark Status     Bub citareau     2019       Mathemark Status     Bub citareau     2019       Stoondary progression multiple sclerosa     Oral     2019       Chronic inflammatacy deryelinding polyradiculoneuropathy hip factors     Oral     2017       Spondic inclusion carls     Intravenous     2016       Mathemark Langelint     Intravenous     2016       Reveal transplant     Intravenous     2019       Stematic relation code lymphobetic levidema     Intravenous     2016       Reveal transplant     Intravenous     2016       Prevention of future large-levidymbetic levidema     Intravenous     2016       Prevention of future large-levidymbetic levidema     Intravenous     2019       Prevention of future large-levidymbetic levidema     Intravenous     2010       Prevention of future large-levidymbetic levidema     Intravenous     2010       Prevention of future large-levidymbetic levidema     Intravenous     2011       Prevention of future large-levidymbetic levidema     In							
Interface         Interface         Image of the second sec	Atopic dermatitis	Oral	≥2019				
protectic anthmitis         impactor         EUrospitzation           Advanced basal cell cercinoma         Oral         Unservice and the end of	Hereditary periodic fevers		2016				
Immune disorders       Saboutaneous       2019         Abheiner's disease       Intranusculur       2019         Becondary progressive multiple sclerosis       Oral       2019         Chronic inflammatory demyelinating polyradiculoneuropathy       Oral       2017         Spondic inclusion body myosits [load indication],       Intravenous       2016         Inge diadication, diffue large colds bymphoblastic leakernia       Intravenous       2016         Benal transplant       Intravenous       2019         Benal transplant       Intravenous       2016         Prevention of ITNB influenza       Intravenous       2019         Prevention of Italiana diptiburia and pertussis       Intravenous       2019         Prevention of Italiana       2017       Intravenous         Prevention of Italiana       2016       Intravenous         Prevention of Italiana, diptiburia and pertussis       Intravenous       2019         Prevention of Italiana, diptiburia and pertussis       Intravenous       2019         Prevention of Italiana, diptiburia and pertussis       Intravuscular       2015         Prevention of Saureus disease       Intravuscular       2015         Prevention of Saureus disease       Intravuscular       2017         Prevention of Saureus disease <td>Psoriasis [lead indication], ankylosing spondylitis, psoriatic arthritis</td> <td></td> <td>US registration EU registration</td> <td></td> <td></td> <td></td> <td></td>	Psoriasis [lead indication], ankylosing spondylitis, psoriatic arthritis		US registration EU registration				
Akthemer's disease       injection       22019       Impediance         Secondary progressive multiple solerosis       Oral       22019       Impediance       Impediance         Chronic inflammatory derryelinsting polyradiculoneuropathy       Oral       2017       Impediance       Impediance         Secondary progressive multiple solerosis       Oral       2017       Impediance       Impediance       Impediance         Secondary progressive multiple solerosis       Oral       2017       Impediance	Advanced basal cell carcinoma	Oral	US registration EU registration				
Akthemer's disease       injection       22019       Impediance         Secondary progressive multiple solerosis       Oral       22019       Impediance       Impediance         Chronic inflammatory derryelinsting polyradiculoneuropathy       Oral       2017       Impediance       Impediance         Secondary progressive multiple solerosis       Oral       2017       Impediance       Impediance       Impediance         Secondary progressive multiple solerosis       Oral       2017       Impediance							
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Sporadic inclusion body myositis [lead indication],       Intravenous infusion       2016       Intravenous         Adult and gediatric acute lymphobiatic leakemia       Intravenous       2016       Intravenous         Renal transplant       Infusion       2019       Intravenous         Stem cell transplantation       Infusion       2019       Intravenous         Prevention of H7N9 influenza       Intravuscular       2015       Intravuscular         Prevention of H7N9 influenza       Intravuscular       2015       Intravuscular         Prevention of Lifficie disease       Intravuscular       2015       Intravuscular         Prevention of Saureus disease       Intravuscular       22015       Intravuscular         Nalaria       Oral       22015       Intravuscular       Intravuscular         Prevention of H3N1 influenza       Intravuscular       22015       Intravuscular       Intravuscular         Prevention of Gauge B streptococcus       Intravuscular       22015       Intravuscular       Intravuscular         Prevention of H3N1 influenza       Intravuscular       22015       Intravuscular       Intravuscular         Prevention of Gauge B streptococcus       Intravuscular       22015       Intravuscular       Intravuscular         Prevention of H3N1 influenza </td <td>Secondary progressive multiple sclerosis</td> <td>Oral</td> <td>≥2019</td> <td></td> <td></td> <td></td> <td></td>	Secondary progressive multiple sclerosis	Oral	≥2019				
hip fracture, sarcopenia       Adult and pediatric acute lymphoblastic leakernia [lead indication]; diffuse large beall lymphoma       Intravenous       2015         Renal transplant       Infusion       >2019         Stem cell transplantation       Infusion       >2019         Prevention of H7N9 influenza       Intramuscular       >2015         Prevention of tetanus, diphtheria and pertussis       Intramuscular       >2015         Prevention of C. difficile disease       Intramuscular       >2015         Prevention of C. difficile disease       Intramuscular       >2015         Prevention of S. aureus disease       Intramuscular       >2015         Malaria       Oral       >2017         Malaria       Oral       2017         Prevention of H5N1 influenza       Intramuscular       >2015         Prevention of S. aureus disease       Intramuscular       2015         Prevention of Broup B streptococcus       Intramuscular       2015         Prevention of H5N1 influenza       Intramuscular       2015         Prevention of P. aurginosa disease       Intramuscular       2015         Prevention of P. aurginosa disease       Intramuscular       2015         Prevention of Seasonal influenza       Intramuscular       2015       Imageeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeee	Chronic inflammatory demyelinating polyradiculoneuropathy	Oral	2017				
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Prevention of P. aeruginosa disease     Intramuscular     ≥2015       Prevention of seasonal influenza     Intramuscular     2014 <sup>11</sup> Prevention of seasonal influenza     Intramuscular     2014 <sup>11</sup>	Prevention of H5N1 influenza	Intramuscular	≥2015				
Prevention of seasonal influenza       Intramuscular       ≥2015         Prevention of seasonal influenza       Intramuscular       ≥2015         Prevention of seasonal influenza       Intramuscular       2014 <sup>11</sup> Prevention of seasonal influenza       Intramuscular       2014 <sup>11</sup> Prevention of seasonal influenza       Intramuscular       2014 <sup>11</sup>	Prevention of meningococcal A, B, C, W and Y disease	Intramuscular	≥2015				
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Prevention of seasonal influenza Intramuscular 2014 <sup>11</sup>							
Prevention of meningococcal B disease Intramuscular 2014							
	Prevention of meningococcal B disease	Intramuscular	2014				



Phase III Large-scale clinical studies with several hundred to several thousand patients, which are conducted to establish the safety and efficacy of the drug-specific indications for regulatory approval. Phase III trials also may be used to compare a new drug against a current standard of care to evaluate the overall benefit-risk relationship of the new medicine.

Advanced development Medical device project for which a positive proof of concept has been established and studies are being conducted to establish the safety, efficacy or performance to address regulatory requirements for obtaining marketing authorization

Submission An application for marketing approval has already been filed with one or both of the following regulatory agencies: FDA (United States), EMA (European Union). Novartis has not yet received marketing authorization from both regulatory agencies.<sup>1</sup> The application contains comprehensive data and information gathered during human clinical trials and animal studies conducted through the various phases of drug development.

<sup>1</sup>Filings that have received approval in one of the markets (either US or EU ) but are awaiting approval in the other market are included in the table.

#### MAJOR DEVELOPMENT PROJECTS

Project/product	Division	Common name	Mechanism of action
OPHTHALMOLOGY			
RTH258	Alcon	-	Anti-VEGF <sup>15</sup> single-chain antibody fragment
Lucentis	Pharmaceuticals	ranibizumab	Anti-VEGF <sup>15</sup> monoclonal antibody fragment
OAP030 (Fovista)	Pharmaceuticals	-	Aptamer anti-PDGF <sup>17</sup>
AcrySof IQ ReSTOR Toric 3.0D diopter range expansion IOL	Alcon	-	Multifocal, aspheric and cylinder correcting intraocular lens
EXE844b	Alcon	finafloxacin	Anti-infective
EXZ829	Alcon	olopatadine hydrochloride	Antihistamine and mast cell stabilization
AOSept Plus/ Clear Care Plus with HydraGlyde	Alcon	-	Disinfection and cleaning
AcrySof IQ ReSTOR Toric 2.5D IOL	Alcon	-	Multifocal, aspheric and cylinder correcting intraocular lens
AcrySof IQ ReSTOR 2.5D IOL	Alcon	-	Multifocal aspheric intraocular lens
AcrySof IQ ReSTOR Toric 3.0D IOL	Alcon	-	Multifocal, aspheric and cylinder correcting intraocular lens
BIOSIMILARS			
GP2013	Sandoz	rituximab	Anti-CD20 antibody

GP2013	Sandoz	rituximab	Anti-CD20 antibody
GP2015	Sandoz	etanercept	TNF-α inhibitor
GP2017	Sandoz	adalimumab	TNF-α inhibitor
HX575	Sandoz	epoetin alfa	Erythropoiesis-stimulating agent
HX575 s.c.	Sandoz	epoetin alfa	Erythropoiesis-stimulating agent
LA-EP2006	Sandoz	pegfilgrastim	Pegylated granulocyte colony-stimulating factor
EP2006	Sandoz	filgrastim	Granulocyte colony-stimulating factor

<sup>1</sup> Filings that have received approval in one of the markets (US or EU) but are awaiting approval in the other market are included in the table.

2 Refers to lead indication only

<sup>15</sup> Vascular endothelial growth factor

<sup>16</sup> Choroidal neovascularization and macular edema secondary to conditions other than age-related macular degeneration, diabetic macular edema, retinal vein occlusion and pathologic myopia <sup>17</sup> Anti-platelet-derived growth factor

			PHASE I	PHASE II	PHASE III	Submission
Potential indication/disease area	Route of administration	Planned filing dates <sup>1,2</sup>				
Wet age-related macular degeneration	Intravitreal injection	≥2017				
Choroidal neovascularization and macular edema, <sup>16</sup> retinopathy of prematurity (ROP)	Intravitreal injection	2016				
Wet age-related macular degeneration	Solution	2016				
Cataractous lens replacement with or without presbyopia, and with astigmatism	Surgical	2016 US and Japan	Advanced development			
Otitis media-tympanostomy tube surgery	Topical	2016 US				
Allergic conjunctivitis	Topical	Submitted US				
Contact lens care	Lens care	Submitted US 2016 Japan	Ad	vanced developm	ent	US
Cataractous lens replacement with or without presbyopia, and with astigmatism	Surgical	Submitted Japan 2015 US	Advanced development		Japan	
Cataractous lens replacement with or without presbyopia	Surgical	Submitted US				
Cataractous lens replacement with or without presbyopia, and with astigmatism	Surgical	Submitted US				

Non-Hodgkin lymphoma, chronic lymphocytic leukemia, rheumatoid arthritis, granulomatosis with polyangiitis (also known as Wegener's granulomatosis), and microscopic polyangiitis and others (same as originator)	Intravenous			
Arthritidies (rheumatoid arthritis, ankylosing spondylitis, psoriatic arthritis), plaque psoriasis and others (same as originator)	Subcutaneous			
Arthritidies (rheumatoid arthritis, ankylosing spondylitis, psoriatic arthritis), plaque psoriasis and others (same as originator)	Subcutaneous			
Chronic kidney disease, chemotherapy-induced anemia and others (same as originator)	Subcutaneous and intravenous	US		
Chronic kidney disease	Subcutaneous	EU (extension nephrology, appproved as <i>Binocrit</i> since 2007)		
Chemotherapy-induced neutropenia and others (same as originator)	Subcutaneous			
Chemotherapy-induced neutropenia, mobilization of peripheral blood progenitor cells and others (same as originator)	Subcutaneous and intravenous			US

# CORPORATE RESPONSIBILITY



Voluntary community healthcare worker Dismus Mwalukwanda runs a malaria workshop in Chongwe, Zambia. He services more than 500 households, testing for malaria and administering Novartis antimalarial *Coartem*.



We apply our expertise in science and innovation to society's biggest health challenges. Responsibility is a core part of our business strategy and underscores our mission of caring and curing.

# 1bn+

Patients reached with Novartis products

# 100%

Of top 20 conditions causing the global disease burden addressed by our portfolio

# 122 689

Associates trained on our Code of Conduct

## CORPORATE RESPONSIBILITY

We focus our corporate responsibility work in two key areas: expanding access to healthcare and doing business responsibly. We work to develop innovative products for underserved patients, pioneer new social business approaches in low- and middle-income communities, drive environmental sustainability and meet high ethical standards.

#### MANAGING CORPORATE RESPONSIBILITY

We take very seriously our commitment to improve access to healthcare and to do business responsibly. Our efforts were recognized in 2014: Novartis was one of the Global 100 Most Sustainable Corporations by Corporate Knights; ranked fourth in the Access to Medicine Index; was included in the Dow Jones Sustainability World, FTSE4Good and UN Global Compact 100 indices; and achieved Silver Class status in the Sustainability Yearbook published by RobecoSAM. In 2014, we made changes to our corporate responsibility (CR) governance, management and reporting to ensure more oversight of our CR work.

#### Strengthening CR management

The Board of Directors created the Governance, Nomination and Corporate Responsibilities Committee to oversee our company's strategy and governance on CR-related issues that may affect Novartis business and reputation.

To better lead and support our companywide efforts and coordinate our ongoing activities, we appointed Juergen Brokatzky-Geiger – former Global Head of Human Resources – as Global Head of Corporate Responsibility, reporting directly to the CEO. He leads the Corporate Responsibility Board, made up of senior managers who drive our efforts.

#### Setting CR priorities

We completed a materiality analysis to measure the importance of specific CR issues to the company and key outside stakeholders. We interviewed nearly 100 individuals, representing patient organizations, NGOs, health institutions, customers, academics and others, to better understand the issues that matter to them, and determine their expectations and requirements.

Overall, three priority topics stood out: access to healthcare, governance and ethical business practices, and research and development. We assigned sponsors to each of these topics to develop action plans based on the feedback we received and regularly report on progress. To better lead our CR efforts, we appointed a new Global Head of Corporate Responsibility, reporting directly to the CEO



Technician Osbert Namafente examines malaria-bearing mosquitos at the Tropical Disease Research Center (TDRC) at Ndola Central Hospital, Zambia. Novartis is committed to working toward malaria elimination by developing nextgeneration antimalarials. www.malaria.novartis.com 72.4 m

Patients reached through access programs in 2014 We use the findings to guide our CR strategy, track issues of concern, inform and prioritize our programs, and establish metrics against which to measure our performance.

#### Consolidating our reporting

In June 2014, we issued a Corporate Responsibility Performance Report, which consolidated information previously published in our separate Global Reporting Initiative (GRI); Health, Safety and Environment; and United Nations Global Compact reports. We have structured our report content in accordance with the GRI G4 guidelines one year in advance of required implementation.

By issuing a single report, we aim to meet the needs and expectations of CR professional audiences by offering easy access to key data. The report also enhances our transparency in several key areas, including human resources, supply chain and ethics.

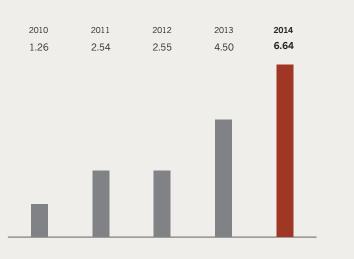
#### **EXPANDING ACCESS TO HEALTHCARE**

The number of people in need continues to exceed the capacity of corporate philanthropy. That's why our strategy includes shared value business models that complement philanthropic and zero-profit initiatives, unique fundraising activities, and investment in training and education to strengthen healthcare systems.

To advance our goal of making healthcare more accessible to more people – and build on our strong history of expanding access – we established a dedicated Access to Medicine Committee in 2014. Chaired by the CEO, the committee reviews opportunities to expand access to Novartis medicines and treatments to more patients, especially in underserved communities.

In 2014, our access programs continued to help more people secure the healthcare they need, regardless of where they live.

## PEOPLE REACHED THROUGH SOCIAL BUSINESS INITIATIVES (in millions)



#### FURTHER DETAIL

Corporate responsibility: www.novartis.com/corporate-responsibility

Detailed targets and results for 2014, and targets for 2015: www.novartis.com/cr-targets

CR materiality: www.novartis.com/cr-materiality

CR Performance Report: www.novartis.com/cr-performance

2014 figures requiring estimates will be restated in the CR Performance Report. Figures from previous years are also restated here.

#### For more detail on social business initiatives, see page 60.

## CORPORATE RESPONSIBILITY

#### **Fighting malaria**

Year after year, our associates have asked how they can get more directly involved in the Novartis Malaria Initiative. Last April, we kicked off an internal campaign to support fundraising for Power of One<sup>®</sup>, a global digital fundraising campaign run by charity Malaria No More. The goal was to fund 100 000 malaria treatments for children in Africa.

Employees from around the world found creative ways to raise donations and spread the word about malaria to their colleagues, friends and families. Overall, Novartis associates helped raise funds for more than 218 000 treatments. Novartis matched them, resulting in a total donation of 436 000 antimalarial treatments for children in Zambia.

The Malaria Initiative is our largest access program, as measured by the number of patients reached. We believe that no one should die of malaria, which is a preventable and treatable disease. To support efforts to contain the disease, in 1999 when Novartis launched *Coartem*, the first artemisinin-based combination therapy (ACT), the company and its partners committed not to enforce the patent. Since then, we have supplied 700 million *Coartem* treatments without profit. The World Health Organization (WHO) estimates that international efforts against the disease reduced malaria mortality by 54% from 2000 through 2013, and reduced incidence of malaria by 34%.

Several trends have contributed to this achievement, including more systematic use of diagnostic testing in endemic countries, enabling more effective targeting of malaria patients. In addition, because we did not enforce the patent on *Coartem*, we enabled generic manufacturers to obtain WHO prequalification and become eligible to participate in donorfunded programs, ultimately enhancing patient access. As a result, in 2014 we began to see a drop in demand for *Coartem*. Last year we delivered treatments for 70 million patients in endemic countries, compared to treatments for 100 million patients in 2013.

Despite significant progress, the fight against malaria is not over and Novartis

### 700 m Malaria treatments delivered without profit since 2001



A young malaria patient at Chongwe District Hospital, Zambia. The country benefited from the Malaria No More's Power of One<sup>®</sup> campaign, sponsored by Novartis. www.malaria.novartis.com

### Access to healthcare key performance indicators 2014

#### **RESEARCH AND DEVELOPMENT**

	FTEs <sup>1</sup>	Value USD (millions) <sup>2</sup>
Novartis Institute for Tropical Diseases	108	17.0
Novartis Vaccines Institute for Global Health	43	10.0
Novartis Institutes for BioMedical Research neglected disease programs	15	3.0
Pharmaceuticals Development on malaria, tuberculosis and neglected diseases	35	11.8
Total	201	41.8

#### PATIENT ASSISTANCE

	Patients	
	reached	Value USD
	(thousands)	(millions) <sup>3</sup>
Novartis Patient Assistance Foundation, Inc.	61.3	546.9
Glivec patient assistance	60.7	1 215.2
Tasigna patient assistance	6.4	184.4
Exjade patient assistance	8.1	31.6
Alcon medical missions <sup>4</sup>	438.6	41.4
Alcon US patient assistance	9.3	13.1
Malaria / Coartem	70 027.9	137.4
Leprosy (WHO)	308.3	5.6
Pediatric pneumonia / amoxicillin dispersible tablets	500.0	0.5
Fascioliasis / Egaten ⁵	233.0	0.1
Emergency relief (medicine donations)		1.9
Total	71 653.6	2 178.1

#### HEALTH SYSTEMS STRENGTHENING

Grand total	746	10 207.2	72 442.0	2 238.0
Total	545	10 207.2	788.4	18.1
Social Business: Healthy Family in India, Kenya, Vietnam and Indonesia <sup>8</sup>	529	6 646.0	788.4	
Novartis research capacity-building programs	6	1.0		5.0
Novartis Foundation <sup>7</sup>	10	3 560.2		13.1
	FTEs <sup>1</sup>	People reached (thousands) <sup>6</sup>	Patients reached (thousands)	Value USD (millions) <sup>2</sup>

#### Grand total

<sup>1</sup> Full-time equivalent positions and contractors

<sup>2</sup> Operating costs

<sup>3</sup> Wholesale acquisition cost (WAC) plus logistics costs for some programs

<sup>4</sup> Retail value for surgical products

<sup>5</sup> Manufacturing costs

<sup>6</sup> Via training and service delivery

<sup>7</sup> Previously known as the Novartis Foundation for Sustainable Development

<sup>8</sup> People reached via training

For more information, updates and details on calculation methodology for access to healthcare programs, see www.novartis.com/access.

## CORPORATE RESPONSIBILITY

continues to lead research and development of next-generation medicines. A new drug candidate called KAE609 is one of two new classes of antimalarial compounds that Novartis has discovered in the past four years. Both classes of drugs treat malaria in different ways than current therapies, which helps combat emerging drug resistance. In July, The New England Journal of Medicine published clinical study results for KAE609 – which is the first antimalarial treatment with a novel mechanism of action to reach Phase II clinical development in more than 20 years. The next round of trials is currently being planned.

The Novartis Foundation also announced a new partnership with the University of California, San Francisco; the University of Namibia; and the National Vector-borne Disease Control Program at the Ministry of Health and Social Services of Namibia. This partnership will drive research, including training and technical assistance on targeted elimination of the malaria parasite in the Zambezi region in northeastern Namibia.

#### Commitment to the developing world

Novartis works on innovative ways to improve access to healthcare for people in developing countries, with a particular focus on Africa. In Kenya, social business Familia Nawiri modified its portfolio to include low-cost, essential drugs, with the goal of driving enough sales to create a self-sustaining business model. More than 160 000 people attended Familia Nawiri health education meetings in 2014 – and health camps helped diagnose and treat more than 3 200 patients.

The Novartis Foundation supported the WHO and the Swiss Tropical and Public Health Institute in developing e-learning tools to increase maternal and child health training for health workers in 25 countries. The Novartis Foundation and the Millennium Villages Project also expanded their novel use of mobile phones for training sessions and healthcare consultations to cover the Amansie West District in Ghana, home to approximately 135 000 people. The experience and success of this phase will help determine if we are able to expand teleconsultation services on a national level to support health workers across Ghana.

# 6.6 m

People reached with health education through social business initiatives



Community healthcare worker Dismus Mwalukwanda takes a patient to a malaria clinic in rural Zambia. As he lives 14 kilometers (8 miles) from the nearest clinic, Dismus travels everywhere by bicycle. www.malaria.novartis.com

## 35000+

Patients with restored sight through Alcon medical missions Additionally, the Novartis Institutes for Bio-Medical Research (NIBR) is working with the University Teaching Hospital in Lusaka, Zambia to determine rheumatic heart disease prevalence and monitor treatment. NIBR teams are also working with the University of Chicago, Lagos University and Ibadan University to better understand the genetics of an aggressive form of breast cancer in Nigerian women.

We also support scientific education and research to help strengthen African healthcare systems by offering African scientists the opportunity to train in Novartis labs in Switzerland and the United States, and by establishing training and research centers across the continent.

### Sandoz working to combat childhood pneumonia

In June, Sandoz announced a long-term commitment to help prevent the deaths of millions of children worldwide from pneumonia. As part of the United Nations' Every Newborn Action Plan, Sandoz will provide amoxicillin dispersible tablets, which is the WHO recommended first-line treatment for pneumonia in children under 5, to developing countries. In 2014, Sandoz delivered medicines to UNICEF to treat 500 000 children.

#### Alcon driving eye care for underprivileged patients

Alcon maintains numerous partnerships with nonprofit organizations to raise awareness and educate about eye health, train local physicians to perform state-of-the-art surgery, and bring much-needed eye care treatments and services to places where it doesn't yet exist. Since 1964, Alcon's Medical Missions program has supported eye care professionals around the world in their work to bring eye care to those in need. In 2014, Alcon supported 576 medical missions, reaching 438 674 patients with eye conditions, and restoring sight for more than 35 000 patients through surgery. Through the US Patient Assistance program, Alcon helped 9 310 patients get the sight-saving medications they needed in 2014.





## CORPORATE RESPONSIBILITY

#### DOING BUSINESS RESPONSIBLY

#### Building a culture of integrity

We are committed to creating a culture of integrity at Novartis and demonstrating ethical leadership – because as a global leader in healthcare, we have a responsibility to serve as a role model in how we conduct our business. That means striving to go beyond the basic standards, regulations and legal stipulations to exceed expectations wherever we can.

This year, we have taken concrete steps to increase transparency and strengthen our ethical business practices. We named Eric Cornut, formerly Chief Commercial Officer, Novartis Pharmaceuticals, as Chief Ethics, Compliance and Policy Officer reporting to the CEO. This change elevated the Compliance function to the highest levels in the company and aims to further ingrain ethics into our culture. Mr. Cornut's experience in our commercial organization – as well as prior positions at regional and country levels – ensure that he can help teams continue to embed a culture of high performance with integrity. We know there are potential pockets of bad behavior in a global business with more than 130 000 associates, but we work to take swift action when this occurs. Our goal is to prevent issues from recurring, drive personal accountability for behaviors, and generate learnings that can be applied across the organization. We have further strengthened our compliance system by adding country and global compliance risk assessments for marketing and sales. We work to identify and mitigate risk exposure proactively so it can be reviewed and discussed at a management level.

In 2013, for example, we uncovered several issues regarding conflict of interest and reliability of data with a number of investigatorinitiated trials (IITs) in Japan. As soon as these issues came to light, we commissioned an independent panel of experts to investigate.

Early in 2014, we released the panel's findings, which included concerning information about possible breaches of patient confidentiality and cases when documents were We have taken concrete steps to increase transparency and strengthen our ethical business practices

#### ETHICS AND PEOPLE KEY PERFORMANCE INDICATORS

	2014	2013
Full-time equivalent positions	133 413	135 696
Resignations (including retirements) / separations / hiring (% of associates)	10% / 5% / 13%	8% / 4% / 18%
Women in management: $\%$ of management <sup>1</sup> / $\%$ of Board of Directors	40% / 18%	38% / 14%
Number of associate nationalities / Number of associate nationalities in management <sup>1</sup>	150 / 107	155 / 111
Lost-time injury and illness rate (per 200 000 hours worked) <sup>2</sup>	0.12	0.13
Total recordable case rate (per 200 000 hours worked) <sup>3</sup>	0.41	0.44
Novartis associates trained and certified on Code of Conduct <sup>4</sup>	122 689	113 092
Misconduct cases reported / substantiated	1 699 / 930	1 501 / 939
Dismissals and resignations related to misconduct	485	459
Regulatory inspections without major findings	98.4%	98.5%
Suppliers posing an elevated risk under Responsible Procurement <sup>5</sup>	480	368
Suppliers with active follow-up <sup>5,6</sup>	125	144
Suppliers audited <sup>5</sup>	79	44

<sup>1</sup> Management defined locally

<sup>2</sup> Data include Novartis associates and third-party personnel managed by Novartis associates

<sup>5</sup> Includes new suppliers and new products, services or sites from existing suppliers; figures include data on Labor Rights, HSE and Animal Welfare

<sup>6</sup> Follow-up includes more information requested, audits or on-site assessments

<sup>&</sup>lt;sup>3</sup> Includes all work-related injury and illness, whether leading to lost time or not

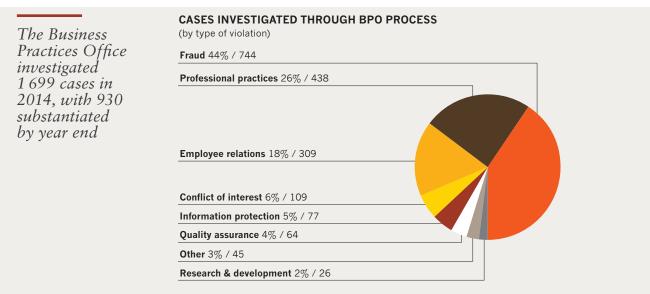
<sup>&</sup>lt;sup>4</sup> Active Novartis associates with email addresses, trained via e-learning

Our goal is to maintain consistent standards of business practices across Novartis, ultimately enabling us to provide the best possible care for patients destroyed. In response, we announced wideranging changes at our Japanese business. Among the measures were the appointment of new senior executives at Novartis Japan, an independent review of all our IIT programs in the country, and additional training for all Novartis Japan associates to ensure compliance with our Code of Conduct. We also issued new guidelines relating to all IITs that we run worldwide.

Also during 2014, we introduced a series of changes in Chin a to enhance compliance with our Code of Conduct and strengthen our culture of performance with integrity. The changes apply across our business, including the organization of external meetings, financial controls, and funding to healthcare organizations. Our goal is to maintain consistent standards of business practices across Novartis, ultimately enabling us to provide the best possible care for patients in China and globally. We do not tolerate unethical behavior by our associates anywhere, and we will take all necessary steps to ensure compliance with our Code of Conduct and all applicable laws.

#### Safety

The overall trend on safety at Novartis was positive, although there remains room for improvement. There were fewer incidents of occupational injury and illness in 2014 than 2013, with the number of injuries requiring associates to take time off work declining by 7.5%. Countering this overall positive trend, however, two Novartis employees and two contractors died tragically in work-related incidents during the year, compared to a single fatality in 2013. In response, Novartis has accelerated a program aiming to further reduce the potential of serious injury. The program, begun in early 2014, examines every process or situation that could lead to life-threatening injury and proposes measures to remedy or avoid the risk. By the end of 2014, all manufacturing and research sites had undertaken risk assessments and begun prevention activities, which will continue during 2015 as the program progresses.



One case can fall under several categories, so the total is greater than 100% and category figures total more than the stated number of cases.

## CORPORATE RESPONSIBILITY

#### Offsetting greenhouse gas emissions

While our main focus is to lower greenhouse gas (GHG) emissions by using renewable energy, purchasing energy from renewable sources, and improving the energy efficiency of our operations, we also use voluntary carbon-offset options such as the United Nations Clean Development Mechanism. These help us compensate for exceeding emission limits through offsetting, particularly in developing countries or emerging markets. We also believe that carefully selected carbon-offset projects help foster long-term economic growth for local populations in developing economies, while supporting Novartis in meeting our emission reduction target.

We have three well-established carbonoffset forestry projects in Argentina, Mali and China. These are large-scale efforts. About 3 million trees were planted on our land in Argentina between 2007 and 2010. Additionally, an area of 4 100 hectares in southwestern Sichuan, China is being planted with 9 million trees, with 1 719 hectares planted in 2014. Rather than planting only non-native pine trees, which grow fast and absorb large amounts of carbon, we have designed our projects to generate benefits for local communities and improve local biodiversity. For example, since 2007, 5 000 local farmers in Mali have planted jatropha bushes. The harvest from these plantations is pressed into jatropha oil for soap manufacturing and fuel.

A fourth forestry project kicked off in the Altillanura region of Colombia – a rapidly developing area, with petroleum and agricultural activities displacing traditional pastures. After purchasing 3 593 hectares of farmland and starting preparatory work, in 2014 we began planting the first 366 hectares with local tree species such as acacia, balsa, rubber and other native hardwoods. Carbon offsets achieved in 2014 from our forestry projects totaled 90.0 kilotons of  $CO_2e$ , or 5% of our 2008 baseline emissions.

## 3593 ha

Land Novartis purchased in Colombia for new carbon offset forestry project

#### ENVIRONMENTAL SUSTAINABILITY KEY PERFORMANCE INDICATORS

	2014	2013
Energy use (million gigajoules), on site and purchased	19.3	19.8
Water discharge (million m <sup>3</sup> )	17.5	18.0
Contact water use, excluding cooling water (million m <sup>3</sup> )	17.1	17.1
Emissions:		
Greenhouse gas (GHG) emissions, total Scope 1, including vehicles, and Scope 2 (1 000 t)	1 557	1 586
GHG emissions, Scope 1, combustion and processes on-site (1 000 t)	469	475
GHG emissions, Scope 1, vehicles (1 000 t)	159	168
GHG emissions, Scope 2, purchased energy (1 000 t)	929	943
Halogenated volatile organic compounds (t)	92	103
Non-halogenated volatile organic compounds (t)	697	849
Operational waste:		
Hazardous waste not recycled (1 000 t)	66	74
Non-hazardous waste not recycled (1 000 t)	37	41

For more detail on environmental sustainability, see www.novartis.com/environmental-care

### Independent Assurance Report on the Novartis 2014 Corporate Responsibility Reporting

#### TO THE BOARD OF DIRECTORS OF NOVARTIS AG, BASEL

### INDEPENDENT ASSURANCE REPORT ON THE NOVARTIS CORPORATE RESPONSIBILITY REPORTING

We have been engaged to perform assurance procedures to provide limited assurance on the following aspects of the 2014 Corporate Responsibility (CR) reporting of Novartis AG and its consolidated subsidiaries (Novartis Group).

#### SCOPE AND SUBJECT MATTER

Our limited assurance engagement focused on the following data and information disclosed in the consolidated CR reporting of Novartis Group for the year ended December 31, 2014:

- The CR key performance indicators on page 55, the "people reached through social business initiatives" information on page 57, the "access to healthcare key performance indicators 2014" on page 59, the "ethics and people key performance indicators" on page 62, the "cases investigated through BPO process" information on page 63, and the "environmental sustainability key performance indicators" on page 64 (CR indicators)
- Reporting processes with respect to the CR indicators, as well as the related control environment in relation to data aggregation of CR indicators

#### CRITERIA

The management reporting processes with respect to the CR reporting and CR indicators were assessed against:

- Guideline on Corporate Responsibility Management at Novartis and the Code of Conduct
- Procedures, by which the data for the CR indicators reporting is gathered, collected and aggregated internally

The accuracy and completeness of CR indicators are subject to inherent limitations given their nature and methods for determining, calculating and estimating such data. Our Assurance Report should therefore be read in connection with Novartis Group guidelines, definitions and procedures on the CR reporting.

#### **RESPONSIBILITIES AND METHODOLOGY**

The Board of Directors of Novartis AG is responsible for both the subject matter and the criteria as well as for selection, preparation and presentation of the selected information in accordance with the criteria. Our responsibility is to form an independent opinion, based on our limited assurance procedures, on whether anything has come to our attention to indicate that the CR indicators are not stated, in all material respects, in accordance with the reporting criteria. We planned and performed our procedures in accordance with the International Standard on Assurance Engagements (ISAE 3 000) "assurance engagements other than audits or reviews of historical financial information". This standard requires that we comply with ethical requirements including independence requirements, and plan and perform the assurance engagement to obtain limited assurance on the identified CR indicators.

For the subject matter for which we provide limited assurance, the nature, timing and extent of procedures for gathering sufficient appropriate evidence are deliberately limited relative to a reasonable assurance engagement.

#### SUMMARY OF WORK PERFORMED

Our limited assurance procedures included the following:

- Reviewing application of the Novartis Group internal CR reporting guidelines
- Interviewing associates responsible for internal reporting and data collection at Group, divisional and local level
- Performing tests on a sample basis of evidence supporting selected CR data concerning completeness, accuracy, adequacy and consistency
- Inspecting relevant documentation on a sample basis
- Reviewing and assessing the management processes for CR reporting and consolidation

We have not carried out any work on data other than outlined in the scope and subject matter section as defined above. We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our assurance conclusions.

#### LIMITED ASSURANCE CONCLUSION

Based on our work described in this report, nothing has come to our attention that causes us to believe that the data and information outlined in the scope and subject matter section as defined above have not been prepared, in all material aspects, in accordance with Novartis Group internal policies and procedures.

PricewaterhouseCoopers AG

Bruno Rossi

Basel, January 26, 2015



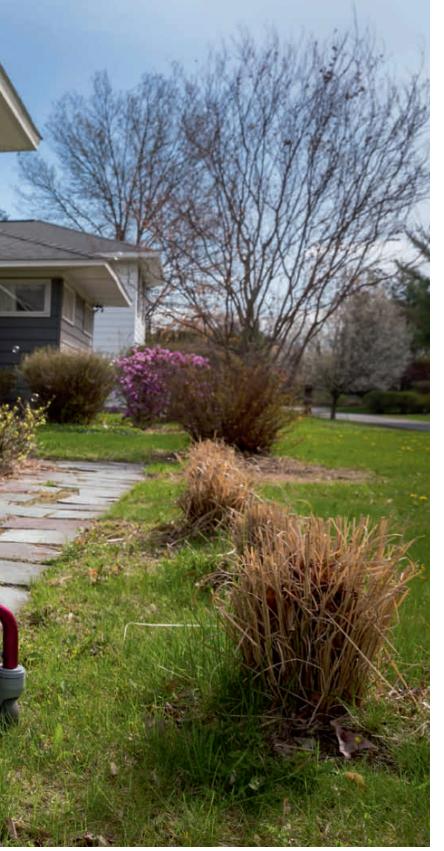
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**Raphael Rutishauser** 

# CORPORATE GOVERNANCE



Hillary Savoie with daughter Esmé at their home in Troy, New York in the US. Esmé suffers from PCDH19 female limited epilepsy, a rare genetic disorder. She is a participant in research into neurological disorders by the Boston Children's Hospital and Novartis.



Novartis strives to create sustainable value. Our corporate governance framework is designed to support this goal. While it complies with all applicable laws and implements the best corporate governance standards, it is tailormade for Novartis.

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### DEAR SHAREHOLDER,

This letter is intended to share with you some key aspects of our governance approach, important developments in 2014 and what we plan for 2015.

#### **OUR MANDATE FROM YOU, OUR SHAREHOLDERS**

The role of our Board is to represent the interests of you, our shareholders. We are accountable to you for striving to create sustainable value. This is our mandate as enshrined in article 2 of Novartis AG's Articles of Incorporation. We achieve this by setting a clear strategy for Novartis and through effective governance focused on target setting, risk management, and performance optimization to provide accountability and control.

This requires an effective Board with the right composition, structure, processes and a clear understanding of its role. The Novartis Board meets these requirements.

Our Board includes members with diverse educations, experiences, nationalities and interpersonal skills. This diversity will be further strengthened by Nancy C. Andrews joining our Board. Nancy holds a medical degree from Harvard Medical School and a Ph.D. in Biology from the Massachusetts Institute of Technology. I am therefore delighted that she has agreed to stand for election at the upcoming AGM.

We emphasize training, performance evaluation, and ongoing improvement of our Board and its members, as well as succession planning. To get an outside view on where we could improve further, in 2014 we initiated a performance and effectiveness evaluation of our Board by an independent expert company. All Board members are independent and we have established appropriate processes to ensure our Board functions effectively. These processes promote efficient and balanced decision-making, and guarantee a seamless information transfer – enabling our Board to effectively discharge its duties.

Our Board is primarily responsible for setting the strategic direction of Novartis and appointing Executive Committee members. We closely communicate with the Executive Committee, making sure our strategy is properly implemented and our ethical standards are applied. We assert independent judgment and work to build a strong relationship with the Executive Committee based on mutual respect and trust.

### OUR BOARD'S DECISION TO CHANGE THE PORTFOLIO OF NOVARTIS

Perhaps the most important task of our Board is to set the strategic direction of Novartis, re-evaluate it each year, and make necessary changes. The guiding line here is the mandate from our shareholders to strive to create sustainable value. Active portfolio management is part of this role.

To fulfill this task our Board holds a dedicated two-day strategy meeting each August. At our 2013 meeting, we reviewed the Company's portfolio, examining a comprehensive proposal with recommended actions from the Executive Committee. These recommendations – supported by our Board – considered the best structure for creating shareholder value by leading in every segment in which we operate. Our Board subsequently decided in April 2014 to transform our portfolio to focus on our leading businesses – Pharmaceuticals, Alcon and Sandoz – which each have strong innovation power and global scale, while bringing our Over-the-Counter business into a joint venture, with Novartis holding a substantial minority stake.

Our strategy for these leading businesses has, in substance, not changed. It is to deliver better outcomes for patients through science-based innovation. We aim to lead in growing areas of healthcare. To further support the implementation of our strategy, we have strengthened our Board's role in innovation by creating a Research & Development Committee. This new Board committee oversees our research and development strategy, and evaluates the effectiveness and competitiveness of our research and development organization. It reflects our Board's commitment to support and promote innovation at Novartis.

For details on our strategy, please see page 12.

#### THE ROLE OF THE CHAIRMAN

As independent, non-executive Chairman, I provide direction to our Board and make sure we effectively collaborate with our CEO and Executive Committee.

The Chairman's role is to ensure that our Board and its committees work effectively. That includes setting the agenda, style and tone of Board discussions; promoting constructive debate and effective decision-making; and ensuring that our performance is regularly evaluated and that our members are properly trained.

In addition, the Chairman's role includes supporting and mentoring our CEO, while not interfering with the operational management of Novartis, and supporting effective communication with shareholders, so that we understand your views. WE HAVE ADAPTED OUR GOVERNANCE FRAMEWORK

We continuously strive to improve in representing the interests of all stakeholders. In 2013, we undertook an extensive review of our corporate governance framework, benchmarking it against international best practices, and identified improvement opportunities that we implemented in 2014: In addition to creating the Research & Development Committee, we extended the mandate of the Corporate Governance and Nomination Committee to cover corporate responsibility matters, and disbanded the Chairman's Committee - while further empowering the Executive Committee and accelerating decision-making. Moreover, we introduced, among others, the following elements of the rules implementing the Minder Initiative: the annual election during the Annual General Meeting (AGM) of the Chairman of the Board, and Board and Compensation Committee members; the possibility for shareholders to provide their voting instructions to the Independent Proxy electronically; and the ban of the corporate and custody proxies. We also held a non-binding say-on-pay vote at our AGM in 2014.

In 2015, we will implement all other elements of the rules implementing the Minder Initiative by amending our Articles of Incorporation and asking our shareholders to approve them during the 2015 AGM on February 27, 2015. Key aspects of these amendments will include determining (i) the maximum number of allowable external mandates for members of our Board and Executive Committee, (ii) the principles concerning the tasks and responsibilities of our Compensation Committee, (iii) the details concerning the procedure for the new yearly binding shareholder votes on the aggregate compensation of our Board and Executive Committee, and (iv) the principles of our compensation policy.

### KEY ACTIVITIES OF OUR BOARD AND ITS COMMITTEES IN 2014

In addition to the standard, recurring topics that we address at Board and committee levels (as set-out later in this report), in 2014 we focused on a number of special key topics, including deciding on and preparing for the transformation of our portfolio to focus on our leading businesses, establishing Novartis Business Services, strengthening our oversight over research and development, reviewing a number of important business development deals and investments, discussing certain key personnel decisions, preparing for the introduction of the rules implementing the Minder Initiative, optimizing our compensation system and enterprise risk management, strengthening our compliance regime, and revising our company values and behaviors to make them more focused and further emphasizing collaboration and high ethical standards.

#### THE IMPORTANCE OF SHAREHOLDER ENGAGEMENT

Shareholder engagement is critical to the long-term success of our company. It should be conducted in an atmosphere of trust and respect that promotes a collaborative dialogue between Novartis and our shareholders – with views and positions expressed openly to enhance mutual understanding. As part of these efforts, we have established regular meetings of our governance specialists with their respective peers from shareholder groups. I have personally met with many of our shareholders and intend to continue this dialogue.

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Joerg Reinhardt Chairman of the Board of Directors

## SUMMARY OF OUR CORPORATE GOVERNANCE APPROACH

#### **GOVERNANCE BODIES**

#### GENERAL MEETING OF SHAREHOLDERS

Approves annual report and financial statements, decides appropriation of available earnings and dividend, approves compensation of Board and Executive Committee, elects Board members, Chairman, members of Compensation Committee, Independent Proxy and external auditors, adopts articles of association



#### LEADERSHIP STRUCTURE

Independent, non-executive Chairman and separate CEO

#### **BOARD GOVERNANCE**

#### STRUCTURE

All Board members are independent.

The Board has assigned responsibilities to five committees: — Audit and Compliance Committee

- Compensation Committee
- Governance, Nomination and Corporate Responsibilities Committee
- Research & Development Committee
- Risk Committee

#### COMPOSITION

Board members have diverse educations, experience, nationalities and interpersonal skills. Their biographies (beginning on page 84) describe their specific qualifications.

#### PROCESSES

The Board's processes have a decisive influence on its effectiveness. The Board has implemented best practices for all such processes. Important elements include Board meeting agendas (to address all important topics), information submitted to the Board (to ensure the Board receives sufficient information from management to perform its supervisory duty and to make decisions that are reserved for it), and boardroom behavior (to promote an efficient and balanced decision-making process).

#### **BOARD AND EXECUTIVE COMPENSATION**

Information on Board and executive compensation is outlined in our Compensation Report, beginning on page 96.

#### FULL IMPLEMENTATION OF MINDER INITIATIVE

In 2015, all elements of the rules implementing the Minder Initiative will be fully introduced with the amendment of the Articles of Incorporation of Novartis AG (Aol). The key content of the Aol will be set-out in the 2015 Corporate Governance Report, including information on the maximum number of board mandates of Board and Executive Committee members and on the rules for the vote on pay at the general meeting of shareholders.

### OUR SHARES AND OUR SHAREHOLDERS

### **OUR SHARES**

### SHARE CAPITAL OF NOVARTIS AG

As of December 31, 2014, the share capital of Novartis AG is CHF 1 353 096 500 fully paid-in and divided into 2 706 193 000 registered shares, each with a nominal value of CHF 0.50. Novartis has neither authorized nor conditional capital. There are no preferential voting shares; all shares have equal voting rights. No participation certificates, non-voting equity securities (Genusscheine) or profit-sharing certificates have been issued.

Novartis shares are listed and traded on the SIX Swiss Exchange (Valor No. 001200526, ISIN CH0012005267, symbol: NOVN), as well as on the New York Stock Exchange (NYSE) in the form of American Depositary Receipts (ADRs) representing Novartis American Depositary Shares (ADSs) (Valor No. 567514, ISIN US66987V1098, symbol: NVS).

The holder of an ADR has the rights enumerated in the Deposit Agreement (such as the right to give voting instructions and to receive a dividend). The ADS depositary of Novartis – JPMorgan Chase Bank, New York – holding the Novartis shares underlying the ADRs, is registered as a shareholder in the share register of Novartis. An ADR is not a Novartis share and an ADR holder is not a Novartis shareholder. ADR holders exercise their voting rights by instructing the depositary to exercise their voting rights. Each ADR represents one Novartis share.

### **CHANGES IN SHARE CAPITAL**

During the last three years, the following changes took place to the share capital of Novartis AG:

In 2012, Novartis reduced its share capital by CHF 19.7 million (from CHF 1 372 811 500 to CHF 1 353 096 500) by cancelling 39.43 million shares repurchased on the second trading line during 2011. In 2013 and in 2014, the share capital of Novartis did not change.

### **CAPITAL CHANGES**

		Number of shares				
Year	As of Jan 1	Changes in shares	As of Dec 31	Changes in CHF		
2012	2 745 623 000	- 39 430 000	2 706 193 000	- 19 715 000		
2013	2 706 193 000		2 706 193 000			
2014	2 706 193 000		2 706 193 000			

A table with additional information on changes in the Novartis share capital can be found in Note 6 to the Financial Statements of Novartis AG.

### **CONVERTIBLE OR EXCHANGEABLE SECURITIES**

Novartis has not issued convertible or exchangeable bonds, warrants, options or other securities granting rights to Novartis shares, other than options (and similar instruments such as Stock Appreciation Rights) granted under or in connection with equity-based participation plans of associates.

### SHARE REPURCHASE PROGRAMS

At the Annual General Meeting (AGM) in February 2008, shareholders authorized the Board to repurchase shares up to a maximum amount of CHF 10 billion via a second trading line on the SIX Swiss Exchange. In 2008, a total of 6 million shares were repurchased at an average price of CHF 49.42 per share and cancelled. The share repurchases were suspended in April 2008 in favor of debt repayment. In December 2010, the Board announced the reactivation of the share repurchases to minimize dilution to existing Novartis shareholders in connection with the proposed merger of Alcon, Inc. into Novartis. In 2011, 39 430 000 shares were repurchased at an average price of CHF 52.81 per share and cancelled. In 2012, no shares were repurchased. On November 22, 2013, Novartis announced it would buy back shares via the second trading line of up to USD 5 billion spread over two years as part of the sixth program. In 2013, 2 160 000 shares were repurchased at an average price of CHF 70.58 per share. In 2014, 27 040 000 shares were repurchased at an average price of CHF 81.18 per share on the second trading line.

### SHARE DEVELOPMENTS Share developments in 2014

- Swiss-listed Novartis shares rise 30% to CHF 92.35
- American Depositary Receipts (ADRs) rise 15% to USD 92.66

Novartis shares finished at CHF 92.35, an increase of 30% from the 2013 year-end closing price of CHF 71.20. The Novartis American Depositary Receipts (ADRs) increased by 15% to USD 92.66 from USD 80.38 in 2013. The Swiss Market Index (SMI) in comparison rose at 9.5% in 2014, whereas the world pharmaceutical index (MSCI) grew by 10.6% in the year. Total shareholder return in 2014 was 34% in CHF and 20% in USD. Over a longer-term period, Novartis has consistently delivered a solid performance, providing a 10.7% compounded annual total shareholder return between January 1, 1996, and December 31, 2014, exceeding the 9.2% compounded returns of its large pharmaceutical peers (see page 101; "Benchmark Companies") or the returns of 9.5% of the world pharmaceutical index (MSCI).

The market capitalization of Novartis based on the number of shares outstanding (excluding treasury shares) amounted to USD 224 billion as of December 31, 2014, compared to USD 194 billion as of December 31, 2013.

### Continuously rising dividend since 1996

The Board proposes a 6% increase in the dividend payment for 2014 to CHF 2.60 per share (2013: CHF 2.45) for approval at the AGM on February 27, 2015. This represents the 18th consecutive increase in the dividend paid per share since the creation of Novartis in December 1996. If the 2014 dividend proposal is approved by shareholders, dividends to be paid out will amount to approximately USD 6.4 billion (2013: USD 6.8 billion), resulting in an expected payout ratio of 63% of net income attributable to Novartis shareholders (2013: 74%). Based on the 2014 year-end share price of CHF 92.35, the dividend yield will be 2.8% (2013: 3.4%). The dividend payment date has been set for March 5, 2015.

### Direct Share Purchase Plan

Novartis offers a Direct Share Purchase Plan to investors residing in Switzerland. It provides an easy and inexpensive way for investors to directly purchase Novartis registered shares and for them to be held at no cost in a deposit account with SIX SAG AG. Due to legal restrictions, investors residing outside Switzerland may not participate in the plan. At the end of 2014, a total of 7 740 shareholders were enrolled in this plan.

### **NOVARTIS 2014 SHARE PRICE MOVEMENT**

(Based on USD amounts)



### **NOVARTIS 1996–2014 TOTAL SHAREHOLDER RETURN** (Based on USD amounts)



Source: Datastream, data are converted into US Dollars and re-based to 100 at January 1, 1996. Currency fluctuations have an influence on the representation of the relative performance of Novartis versus indices and peers.

### **KEY NOVARTIS SHARE DATA**

	2014	2013
Issued shares	2 706 193 000	2 706 193 000
Treasury shares 1	307 566 743	280 108 692
Outstanding shares at December 31	2 398 626 257	2 426 084 308
Average number of shares outstanding	2 425 782 324	2 440 849 805

<sup>1</sup>Approximately 153 million treasury shares (2013: 149 million) are held in entities that restrict their availability for use.

### **PER-SHARE INFORMATION<sup>1</sup>**

	2014	2013
Basic earnings per share (USD)	4.21	3.76
Diluted earnings per share (USD)	4.13	3.70
Operating cash flow (USD)	5.73	5.40
Year-end equity for Novartis AG shareholders (USD)	29.50	30.64
Dividend (CHF) <sup>2</sup>	2.60	2.45

<sup>1</sup>Calculated on the average number of shares outstanding, except year-end equity. <sup>2</sup>2014: Proposal to shareholders for approval at the Annual General Meeting on February 27, 2015.

### **KEY RATIOS – DECEMBER 31**

	2014	2013
Price/earnings ratio <sup>1</sup>	22.2	21.3
Enterprise value/EBITDA	14	13
Dividend yield (%) <sup>1</sup>	2.8	3.4

 ${}^{\scriptscriptstyle 1}\textsc{Based}$  on the Novartis share price at December 31 of each year.

### **KEY DATA ON ADRs ISSUED IN THE US**

	2014	2013
Year-end ADR price (USD)	92.66	80.38
High <sup>1</sup>	96.65	80.39
Low <sup>1</sup>	78.20	63.70
Number of ADRs outstanding <sup>2</sup>	307 623 364	317 193 803

<sup>1</sup>Based on the daily closing prices.

<sup>2</sup>The depositary, JPMorgan Chase Bank, holds one Novartis AG share for every American Depositary Receipt (ADR) issued.

SHARE PRICE (CHF)

	2014	2013
Year-end share price	92.35	71.20
High <sup>1</sup>	93.80	73.65
Low <sup>1</sup>	70.65	58.70
Year-end market capitalization (USD billions) <sup>2</sup>	223.7	194.2
Year-end market capitalization (CHF billions) <sup>2</sup>	221.5	172.7

<sup>1</sup> Based on the daily closing prices.

<sup>2</sup>Market capitalization calculated based on the number of shares outstanding (excluding treasury shares).

OUR SHAREHOLDERS

#### SIGNIFICANT SHAREHOLDERS

According to the share register, as of December 31, 2014, the following registered shareholders (including nominees and the ADS depositary) held more than 2% of the total share capital of Novartis AG with the right to vote these shares:<sup>1</sup>

- Shareholders: Novartis Foundation for Employee Participation, with its registered office in Basel, Switzerland, holding 3.2%; and Emasan AG, with its registered office in Basel, Switzerland, holding 3.3%
- Nominees: JPMorgan Chase Bank, New York, holding 9.1%; Nortrust Nominees, London, holding 3.2%; and The Bank of New York Mellon, New York, holding 4.6% through its nominees, Mellon Bank, Everett, 2.6% and The Bank of New York Mellon, Brussels 2.0%
- ADS depositary: JPMorgan Chase Bank, New York, holding 11.4%.

According to disclosure notifications filed with Novartis AG and the SIX Swiss Exchange, each of the following shareholders held between 3% and 5% of the share capital of Novartis AG as of December 31, 2014:

- Capital Group Companies, Inc., Los Angeles, USA
- BlackRock, Inc., New York, USA

<sup>1</sup> Excluding 5.7% of the share capital held by Novartis AG and its subsidiaries (excluding foundations) as treasury shares.

Disclosure notifications pertaining to shareholdings in Novartis AG that were filed with Novartis AG and the SIX Swiss Exchange are published on the latter's electronic publication platform, and can be accessed via the database search page:

http://www.six-exchange-regulation.com/obligations/ disclosure/major\_shareholders\_en.html.

Novartis has not entered into any agreement with any shareholder regarding the voting or holding of Novartis shares.

### **CROSS SHAREHOLDINGS**

Novartis has no cross shareholdings in excess of 5% of capital or voting rights with any other company.

### DISTRIBUTION OF NOVARTIS SHARES

The information in the following tables relates only to registered shareholders and does not include holders of unregistered shares. Also, the information provided in the tables below cannot be assumed to be representative of the entire Novartis investor base because nominees and JPMorgan Chase Bank, as ADS depositary, are registered as shareholders for a large number of beneficial owners.

As of December 31, 2014, Novartis had approximately 150 000 registered shareholders.

### NUMBER OF SHARES HELD

As of December 31, 2014	Number of registered shareholders	% of registered share capital
1–100	20 105	0.05
101–1 000	89 754	1.44
1 001–10 000	36 011	3.75
10 001–100 000	3 325	3.24
100 001-1 000 000	446	4.98
1 000 001–5 000 000	71	5.66
5 000 001 or more <sup>1</sup>	33	51.06
Total registered shareholders/shares	149 745	70.18
Unregistered shares		29.82
Total		100.00

<sup>1</sup>Including significant registered shareholders as listed above

### **REGISTERED SHAREHOLDERS BY TYPE**

As of December 31, 2014	Shareholders in %	Shares in %
Individual shareholders	96.04	11.54
Legal entities	3.88	39.41
Nominees, fiduciaries and ADS depositary	0.08	49.05
Total	100.00	100.00

### **REGISTERED SHAREHOLDERS BY COUNTRY**

As of December 31, 2014	Shareholders in %	Shares in %
,	/-	
France	2.65	0.98
Germany	5.10	3.85
Switzerland <sup>1</sup>	88.80	40.86
United Kingdom	0.48	3.37
United States	0.28	46.70
Other countries	2.69	4.24
Total	100.00	100.00

 $^1\,\rm Excluding$  5.7% of the share capital held by Novartis AG, together with Novartis affiliates, as treasury shares

### SHAREHOLDER RIGHTS

Shareholders have the right to receive dividends, to vote and to execute such other rights as granted under Swiss law and Novartis AG's Articles of Incorporation.

### Right to vote ("one share, one vote")

Each share registered with the right to vote entitles the holder to one vote at General Meetings. Shares can only be voted if they are registered with voting rights with the Novartis share register by the third business day before the General Meeting.

ADR holders may vote by instructing JPMorgan Chase Bank, the ADS depositary, to exercise the voting rights attached to the registered shares underlying the ADRs. JPMorgan Chase Bank exercises the voting rights for registered shares underlying ADRs for which no voting instructions have been given by providing a discretionary proxy to an uninstructed independent designee. Such designee has to be a shareholder of Novartis.

### Powers of General Meetings

The following powers are vested exclusively in the General Meeting:

- Adoption and amendment of the Articles of Incorporation
- Election and removal of the Chairman of the Board,
   Board and Compensation Committee members, the
   Independent Proxy and the external auditors
- Approval of the operational and financial review of Novartis AG and of the consolidated financial statements
- Approval of the statutory financial statements of Novartis AG and decision on the appropriation of available earnings shown on the balance sheet, including with regard to dividends
- Approval of the aggregate amounts of compensation of the Board and Executive Committee (as from 2015)

- Grant of discharge to Board and Executive Committee members
- Decision of other matters that are reserved by law or by the Articles of Incorporation to the General Meeting of Shareholders

### **Resolutions and elections at General Meetings**

The General Meeting passes resolutions and elections with the absolute majority of the votes represented at the meeting. However, under the Articles of Incorporation (www.novartis.com/corporate-governance), the approval of two-thirds of the votes represented at the meeting is required for:

- An alteration of the purpose of Novartis AG
- The creation of shares with increased voting powers
- An implementation of restrictions on the transfer of registered shares and the removal of such restrictions
- $-\!\!\!$  An authorized or conditional increase of the share capital
- An increase of the share capital out of equity, by contribution in kind, for the purpose of an acquisition of
- property, or the grant of special rights
- A restriction or suspension of rights or options to subscribe
- A change of location of the registered office of Novartis AG
- The dissolution of Novartis AG

In addition, the law provides for a qualified majority for other resolutions, such as a merger or spin-off.

### Other shareholder rights

Shareholders representing at least 10% of the share capital may request that an extraordinary General Meeting of Shareholders be convened. Additionally, those representing shares with an aggregate nominal value of at least CHF 1 million may request that an item be included in a General Meeting agenda. Such requests must be made in writing at least 45 days before the meeting, specify the agenda item to be included, and contain the proposal on which the shareholder requests a vote.

Shareholders can vote their shares by themselves or appoint another shareholder or the Independent Proxy to vote on their behalf. All shareholders (who are not yet registered on the Sherpany Platform; see below) receive a General Meeting invitation letter with a proxy appointment form for the appointment of the Independent Proxy. On this form shareholders can instruct the Independent Proxy to vote on alternative or additional motions related to the agenda items either (i) according to the motions of the Board for such alternative or additional motions, or (ii) against such alternative or additional motions, or (iii) to abstain from voting.

Novartis offers to shareholders the possibility to use an online platform (the "Sherpany Platform") and thus to receive notices of future General Meetings exclusively by e-mail and to electronically give their instructions to the Independent Proxy, grant powers of attorney to other shareholders or to order their admission card online. The General Meeting registration form allows shareholders that are not yet registered on the Sherpany Platform to order the detailed documents related to opening a Sherpany account. In addition, they may do so by contacting the Novartis Share Registry. Shareholders can deactivate their online account at any time and again receive invitations in paper form.

The right to vote and other rights associated with a registered share may only be exercised by a shareholder, or a usufructuary (a person not the owner of the share who is entitled to exercise the shareholder rights) or nominee who is registered in the Novartis share register.

### SHAREHOLDER REGISTRATION

Only shareholders, usufructuaries or nominees registered in the Novartis share register with voting rights may exercise their voting rights. To be registered with voting rights, a shareholder must declare that he or she acquired the shares in his or her own name and for his or her own account. According to the Articles of Incorporation, the Board may register nominees with the right to vote. For restrictions on registration of nominees, please see below.

The Articles of Incorporation provide that no shareholder shall be registered with the right to vote for more than 2% of the registered share capital. The Board may, upon request, grant an exemption from this restriction. Considerations include whether the shareholder supports the Novartis goal of creating sustainable value and has a long-term investment horizon. In 2014, no exemptions were requested. Exemptions are in force for the registered Significant Shareholders listed under – Our Shareholders – Shareholdings – Significant Shareholders, and for Norges Bank (Central Bank of Norway), Oslo, which as of December 31, 2014 held less than 2% of the share capital of Novartis AG.

The same registration and voting restrictions indirectly apply to holders of ADRs.

Given that shareholder representation at General Meetings traditionally has been low in Switzerland, Novartis considers registration restrictions necessary to prevent a minority shareholder from dominating a General Meeting.

The Articles of Incorporation provide that no nominee shall be registered with the right to vote for more than 0.5% of the

registered share capital. The Board of Directors may, upon request, grant an exemption from this restriction if the nominee discloses the names, addresses and the number of shares of the persons for whose account it holds 0.5% or more of the registered share capital. Exemptions are in force for the nominees listed under – Our Shareholders – Shareholdings – Significant Shareholders.

The same restrictions indirectly apply to holders of ADRs.

Registration restrictions in the Articles of Incorporation may only be removed through a resolution of the General Meeting of Shareholders, with approval of at least two-thirds of the votes represented at the meeting.

Shareholders, ADR holders or nominees who are linked to each other or who act in concert to circumvent registration restrictions are treated as one person or nominee for the purposes of the restrictions on registration.

### NO RESTRICTION ON TRADING OF SHARES

No restrictions are imposed on the transferability of Novartis shares. The registration of shareholders in the Novartis share register or in the ADR register kept by JPMorgan Chase Bank does not affect the tradability of Novartis shares or ADRs. Registered Novartis shareholders or ADR holders may, therefore, purchase or sell their Novartis shares or ADRs at any time, including before a General Meeting regardless of the record date. The record date serves only to determine the right to vote at a General Meeting.

### CHANGE-OF-CONTROL PROVISIONS No opting up, no opting out

According to the Swiss Stock Exchange Act, anyone who – directly, indirectly or acting in concert with third parties – acquires equity securities exceeding 33 1/3% of the voting rights of a company (whether or not such rights are exercisable) is required to make an offer to acquire all listed equity securities of that company. A company may raise this threshold to 49% of the voting rights ("opting up") or may, under certain circumstances, waive the threshold ("opting out"). Novartis has not adopted any such measures.

### Change-of-control clauses

In accordance with good corporate governance and the rules implementing the Minder Initiative, there are no change-ofcontrol clauses benefiting Board members, Executive Committee members or other members of management, and employment contracts with Executive Committee members do not contain notice periods or contract periods exceeding 12 months, commissions for the acquisition or transfer of enterprises or severance payments.

## OUR BOARD OF DIRECTORS

### COMPOSITION OF THE BOARD OF DIRECTORS AND ITS COMMITTEES (AS PER DECEMBER 31, 2014)

		BOARD OF DIRECTORS		
Chairman: J. R Vice Chairmen	einhardt : U. Lehner, E. Vanni	D. Azar V. Briner S. Datar A. Fudge P. Landolt	A. von Planta C. Sawyers W. Winters	
Audit and Compliance Committee	Risk Committee	Compensation Committee	Governance, Nomination and Corporate Respons- ibilities Committee	Research & Development Committee

### **ELECTION AND TERM OF OFFICE**

All Board members are elected individually.

The Chairman and members of the Board and Compensation Committee are re-elected annually and individually by shareholders at the General Meeting.

The average tenure of Board members is six years. A Board member must retire after reaching the age limit of 70. Under

special circumstances, shareholders may grant an exemption from this rule and re-elect a Board member for additional terms of office. There is no mandatory term limit for Board members, so as not to lose the value of the insight and knowledge of the Company's operations and practices that long-serving Board members have developed.

Name	Nationality	Year of birth	First election at AGM	Last election at AGM	End of current Term
Joerg Reinhardt, Ph.D.	D	1956	2013	2014	2015
Ulrich Lehner, Ph.D.	D	1946	2002	2014	2015
Enrico Vanni, Ph.D.	СН	1951	2011	2014	2015
Dimitri Azar, M.D., MBA	US	1959	2012	2014	2015
Verena A. Briner, M.D.	СН	1951	2013	2014	2015
Srikant Datar, Ph.D.	US	1953	2003	2014	2015
Ann Fudge	US	1951	2008	2014	2015
Pierre Landolt, Ph.D.	СН	1947	1996	2014	2015
Andreas von Planta, Ph.D.	СН	1955	2006	2014	2015
Charles L. Sawyers, M.D.	US	1959	2013	2014	2015
William T. Winters	UK/US	1961	2013	2014	2015

### **BOARD PROFILE**

### **COMPOSITION OF THE BOARD**

The composition of the Board must align with our status as a listed company, business portfolio, geographic reach and culture. The Board has to be diverse in all aspects of diversity and it must be big enough to staff the five Board committees without an excessive overlap of personnel, and, to enable the individual Board members to have enough time to fulfill their tasks adequately.

Knowledge and experience in the following fields must be represented on the Board: leadership and management, healthcare, life sciences and medicine, research and development, engineering and technology, manufacturing and marketing, banking, finance and accounting, legal and public affairs, and risk management.

### INDIVIDUAL BOARD MEMBER PROFILE

Individual Board members should have the following personal qualities:

- Interact with other Board members to build an effective and complementary Board
- Build trusting relationships
- Apply independence of thought
- Be challenging but supportive in the boardroom
- Influence without creating conflict by applying a constructive, non-confrontational style
- Offer advice based on sound judgment while also being good listeners

- Be able and willing to commit adequate time to Board and committee responsibilities
- Be open to personal feedback and seek to become more effective
- Do not have existing board memberships or hold other positions that could lead to a conflict of interest
- Understand and respect the boundaries of their role, leaving the operational management of the Company to the CEO and his Executive Committee

The biographies of the Board members (pages 84 – 86) set out the particular qualifications that led the Board to conclude that a Board member is qualified to serve on the Board, creating a Board that today is diverse in terms of background, qualifications, interests and skills.

### **BOARD DIVERSITY**

The diversity of a board of directors is a critical success factor for its effectiveness. Thus, when the Governance, Nomination and Corporate Responsibilities Committee identifies new Board member candidates to propose to the shareholders for election, the maintenance and improvement of the diversity of the Board is an important criterion. The Board's aspiration is to have a diverse Board in all its aspects. This includes geographic origin, background, gender, race, faith, education, experience, viewpoint, interests and technical and interpersonal skills.

### **ROLE OF THE BOARD AND ITS COMMITTEES**

The Board is responsible for the overall direction and supervision of management and holds the ultimate decision-making authority for Novartis AG, except for those decisions reserved to shareholders.

The Board has delegated certain responsibilities to five committees, as set out below. The responsibilities described below with the terms "overseeing" or "reviewing" are subject to final approval by the Board. These committees enable the Board to work in an efficient and effective manner, ensuring a thorough review and discussion of issues, while giving the Board more time to deal with non-technical matters. Moreover, through committees, it is possible to make sure that only Board members who are independent oversee audit and compliance, governance and compensation as only independent Board members are delegated in the respective committees.

Responsibilities	Membership comprises	Number of meetings held in 2014/ approximate average duratio (hrs) of each meeting Attendance	n Link
The Board of Directors		8/7:30	
The primary responsibilities of the Board of Directors include: — Setting the strategic direction of the Group;	Joerg Reinhardt <sup>1</sup>	8	Articles of Incorporation of Novartis AG
- Determining the organizational structure and governance of the Group;	Ulrich Lehner	6	
<ul> <li>Appointing, overseeing and dismissing key executives and planning their succession:</li> </ul>	Enrico Vanni	8	Regulations of the Board
<ul> <li>Determining and overseeing the financial planning, accounting,</li> </ul>	Dimitri Azar	8	of Directors, its Committees and the Executive Committee
reporting and controlling;	Verena A. Briner	8	of Novartis AG
<ul> <li>Approving the annual financial statements and the corresponding financial results releases; and</li> </ul>	Srikant Datar	8	(Board Regulations)
Approving major transactions and investments.	Ann Fudge	8	http://www.novartis.com/
	Pierre Landolt	8	corporate-governance
	Andreas von Planta	8	
	Charles L. Sawyers	8	
	William T. Winters	8	
The Audit and Compliance Committee The primary responsibilities of this committee include:	Srikant Datar <sup>1,2</sup>	7/3:00 7	Charter of the Audit and
<ul> <li>Overseeing the internal auditors;</li> <li>Supervising the external auditors and selecting and nominating</li> </ul>	Dimitri Azar	7	Compliance Committee
the external auditors for election by the meeting of shareholders;	Ulrich Lehner <sup>2</sup>	6	http://www.novartis.com/
<ul> <li>Overseeing the accounting policies, financial controls and</li> </ul>	Enrico Vanni	7	corporate-governance
<ul> <li>compliance with accounting and internal control standards;</li> <li>Approving quarterly financial statements and financial results releases;</li> <li>Overseeing internal control and compliance processes and procedures;</li> </ul>	Andreas von Planta	7	
and — Overseeing compliance with laws and external and internal regulations. The Audit and Compliance Committee has the authority to retain external consultants and other advisors.			
The Risk Committee		4/2:00	
The primary responsibilities of this committee include:	Andreas von Planta	4	Charter of the Risk Committee
<ul> <li>Ensuring that Novartis has implemented an appropriate and effective risk management system and process;</li> </ul>	Verena Briner	4	http://www.novartis.com/
<ul> <li>Ensuring that all necessary steps are taken to foster a culture</li> </ul>	Srikant Datar	4	corporate-governance
of risk-adjusted decision making without constraining reasonable	Ann Fudge	4	. 0
risk-taking and innovation; — Approving guidelines and reviewing policies and processes; and			
<ul> <li>Reviewing with management, internal auditors and external auditors the identification, prioritization and management of the risks, the accountabilities and roles of the functions involved with risk management, the risk portfolio and the related actions implemented by</li> </ul>			
management. The Risk Committee has the authority to retain external consultants and other advisors.			

<sup>1</sup>Chairman

<sup>2</sup>Audit Committee Financial Expert as defined by the US Securities and Exchange Commission (SEC)

Responsibilities	Membership comprises	Number of meetings held in 2014/ approximate average durat (hrs) of each meeting Attendance	
		c /2 .00	
The Compensation Committee		6/3:00	
The primary responsibilities of this committee include:	Enrico Vanni 1	6	Charter of the
<ul> <li>Designing, reviewing and recommending to the Board compensation policies and programs;</li> </ul>	Srikant Datar	6	Compensation Committee
<ul> <li>Advising the Board on the compensation of the Board members</li> </ul>	Ann Fudge	6	http://www.novartis.com/
and the Chief Executive Officer, and	Ulrich Lehner	5	corporate-governance
<ul> <li>Deciding on the compensation of the members of the Executive Committee.</li> </ul>			_

The Compensation Committee has the authority to retain external consultants and other advisors.

#### The Governance, Nomination and **Corporate Responsibilities Committee**

The primary responsibilities of this committee include:

- Designing, reviewing and recommending to the Board corporate governance principles;
- Reviewing on a regular basis the Articles of Incorporation with a view to reinforcing shareholder rights; Reviewing on a regular basis the composition and size of the Board
- and its committees;
- Reviewing annually the independence status of each Board member; Reviewing directorships and agreements of Board members for
- conflicts of interest and dealing with conflicts of interest;
- Identifying candidates for election as Board member; Assessing existing Board members and recommending to the Board whether they should stand for re-election;
- Preparing and reviewing the succession plan for the CEO;
- Developing and reviewing an orientation program for new Board members and an ongoing education plan for existing Board members; and
- Overseeing the Company's strategy and governance on corporate responsibility.
- The Governance, Nomination and Corporate Responsibilities Committee has the authority to retain external consultants and other advisors.

### The Research & Development Committee

<sup>1</sup>Chairman

The primary responsibilities of this committee include:

- Monitoring research and development and bringing recommendations to the Board;
- Assisting the Board in the oversight, evaluation and decision making related to research and development;
- Informing the Board on a periodic basis on the research and development strategy, the effectiveness and competitiveness of the research and development function, on emerging scientific trends and activities, critical to the success of research and development and on the pipeline;
- Advising the Board on scientific, technological and research and development matters;
- Providing counsel and know how to management in the area of research and development; and
- Reviewing such other matters in relation to Novartis' research and development as the committee may, in its own discretion, deem desirable in connection with its responsibilities.

The Research & Development Committee has the authority to retain external consultants and other advisors.

	3/8:00	
Joerg Reinhardt <sup>1</sup>	3	Charter of the Research &
Dimitri Azar	3	Development Committee
Charles L. Sawyers	3	http://www.novartis.com/
Enrico Vanni	3	corporate-governance
-		

4/2:00

Pierre Landolt 1	4	Charter of the Governance,
Ann Fudge	4	Nomination and Corporate Responsibilities Committee
Ulrich Lehner	4	
Andreas von Planta	4	http://www.novartis.com/

### THE FUNCTIONING OF THE BOARD

The Board takes decisions as a whole, supported by its five committees. Each committee has a written charter outlining its duties and responsibilities and is led by a Board-elected chairman.

The Board and its committees meet regularly throughout the year. The chairmen set their meeting agendas. Any Board member may request a Board or committee meeting, and the inclusion of an agenda item. Before meetings, Board members receive materials to help them prepare the discussions and decision making.

### THE CHAIRMAN

Joerg Reinhardt has been acting as independent, non-executive Chairman since August 1, 2013. He has both industry and Novartis experience, and meets the Company's independence criteria. As independent Chairman, Joerg Reinhardt can lead the Board to represent the interests of shareholders, being accountable to them, and creating sustainable value through an effective governance of Novartis. The independent Chairmanship also ensures an appropriate balance of power between the Board and the Executive Committee.

In his role as independent, non-executive Chairman Joerg Reinhardt:

- Provides leadership to the Board
- Supports and advises the CEO
- Supported by the Governance, Nomination and Corporate Responsibilities Committee, ensures effective succession plans on the Board, and also ensures such plans on Executive Committee levels
- Ensures that the Board and its committees work effectively
- Sets the agenda, style and tone of Board discussions, promoting constructive dialogue and effective decision-making
- Supported by the Governance, Nomination and Corporate Responsibilities Committee, ensures that all Board committees are properly established, composed and operated
- Ensures that the performance of the Board is evaluated on an annual basis
- Ensures introduction programs for new Board members and continuing education for all Board members
- Ensures effective communication with the Company's shareholders
- Promotes effective relationships and communications between Board and Executive Committee members

### **BOARD MEETINGS**

The Board of Directors has meetings with the members of the Executive Committee as well as private meetings without members of the Executive Committee.

In 2014, there were 8 Board meetings. Because all Board members are independent, no separate meetings of the independent Board members were held in 2014.

Board meeting agendas in 2014 included the following topics: Annual Report and media release, General Meeting agenda, Group targets, the CEO's personal objectives (January meeting), pipeline update, mergers and acquisitions and business development and licensing review (April meeting), strategy (separate, dedicated two-day meeting in August), financial and business reviews (at each meeting), and major projects, investments and transactions (when required).

Topics addressed during private meetings included Board self-evaluation and performance assessment of senior management (January meeting), as well as succession planning (August meeting).

### HONORARY CHAIRMEN

Dr. Alex Krauer and Dr. Daniel Vasella have been appointed Honorary Chairmen in recognition of their significant achievements on behalf of Novartis. They are not provided with Board documents and do not attend Board meetings.

### INDEPENDENCE OF BOARD MEMBERS

The independence of Board members is a key corporate governance issue. An independent Board member is one who is independent of management and has no business or relationship that could materially interfere with the exercise of objective, unfettered and independent judgment. Only with a majority of Board members being independent can the Board fulfill its obligation to represent the interests of shareholders, being accountable to them, and creating sustainable value through an effective governance of Novartis. Accordingly, Novartis established independence criteria based on international best-practice standards and outlined on the Novartis website: www.novartis.com/investors/governance-documents.shtml.

- The Novartis independence criteria require that the majority of Board members and any member of the Audit and Compliance Committee; the Compensation Committee; and the Governance, Nomination and Corporate Responsibilities Committee must meet Novartis' independence criteria. These include, inter alia, (i) a Board member not having received compensation of more than USD 120 000 per year from Novartis, except for Board compensation, (ii) a Board member not having been within the last three years an employee of Novartis, (iii) a family member not having been within the last three years an executive officer of Novartis, (iv) a Board member or family member not being employed by the external auditor of Novartis, (v) a Board member or family member not being a board member, employee or 10% shareholder of an enterprise that has made payments to, or received payments from, Novartis, in excess of the greater of USD 1 million or 2% of that enterprise's gross revenues. For members of the Audit and Compliance Committee and the Compensation Committee even stricter rules apply.

- In addition, Board members are bound by the Novartis Conflict of Interest Policy, which prevents a Board member's potential personal interests from influencing the decision-making of the Board.
- The Governance, Nomination and Corporate Responsibilities Committee annually submits to the Board a proposal concerning the determination of the independence of each Board member. For this assessment, the committee considers all relevant facts and circumstances of which it is aware – not only the explicit formal independence criteria. This includes an assessment of whether a Board member is truly independent, in character and judgment, from any member of the senior management and from any of his/her current or former colleagues.
- In its meeting of December 11, 2014, the Board determined that all of its members are independent.

### RELATIONSHIP OF NON-EXECUTIVE BOARD MEMBERS WITH NOVARTIS

No Board member is or was a member of the management of Novartis AG or of any other Novartis Group company in the last three financial years up to December 31, 2014.

There are no significant business relationships of any Board member with Novartis AG or with any other Novartis Group company.

### PERFORMANCE AND EFFECTIVENESS EVALUATION OF THE BOARD

### PROCESS

The Board conducts an annual review to evaluate its performance, and that of individual committees and members. As part of this process, each Board member completes a questionnaire on the performance and effectiveness of the Board and his/her committees, which lays the groundwork for a deep, qualitative review led by the Chairman. The Chairman has individual discussions with each Board member, followed by discussions with the entire Board and each committee. Any identified point for improvement is recorded and actions are agreed upon.

Periodically, this process is conducted by an independent consultant. In 2014, an independent performance and effectiveness evaluation of the Board and its committees including an individual Board member assessment was conducted by the independent expert company Russell Reynolds Associates. Participants in the evaluation were all members of the Board and a selected group of members of the Executive Committee of Novartis. The evaluation included a questionnaire on the performance and the effectiveness of the Board, followed by an interview with each individual conducted by Russell Reynolds Associates. While the members of the Executive Committee of Novartis received the same questionnaire as Board members, they did not participate in the individual Board member assessment.

### **CONTENT AND RESULTS**

The performance review examined the performance and effectiveness, and strengths and weaknesses of individual Board members, and of the full Board and each Board committee.

The review covered topics including composition of the Board; purpose, scope and responsibilities; processes and governance of the Board and its committees; meetings and pre-reading material; team effectiveness; leadership and culture.

The review also evaluated the ability and willingness of each Board member to commit adequate time and effort to his/her responsibilities as provided for in the Charter of the Governance, Nomination and Corporate Responsibilities Committee.

The results of the 2014 performance and effectiveness evaluation were discussed at the January 2015 meeting of the Board. It was concluded that the Board and its committees operate effectively, with high commitment by the Board members. Progress in a number of areas, including a cultural change within the Board, was noted. Room for improvement was seen in areas including diversity and succession planning for Board members.

### INFORMATION AND CONTROL SYSTEMS OF THE BOARD VIS-À-VIS MANAGEMENT

### INFORMATION ON THE MANAGEMENT

The Board ensures that it receives sufficient information from the Executive Committee to perform its supervisory duty and to make decisions that are reserved for it.

The Board obtains the information required to perform its duties through several means:

- The CEO informs the Board regularly about current developments
- Executive Committee meeting minutes are made available to the Board
- Meetings or teleconferences are held as required between Board members and the CEO
- The Board regularly meets with all Executive Committee members
- The Board receives detailed, quarterly updates from each Division Head
- By invitation, other members of management attend Board meetings to report on areas of the business for which they are responsible
- Board members are entitled to request information from Executive Committee members or any other Novartis associate, and they may visit any Novartis site

### **BOARD COMMITTEES**

Board committees regularly meet with management and, at times, outside consultants to review the business, better understand applicable laws and policies affecting the Group, and support the Board and management in meeting the requirements and expectations of stakeholders and shareholders.

In particular, the Chief Financial Officer, the Group General Counsel, and representatives of the external auditors are invited to Audit and Compliance Committee meetings. Additionally, the heads of Internal Audit, Financial Reporting and Accounting, Compliance and Quality, as well as the business practices officers, report on a regular basis to the Audit and Compliance Committee. This committee reviews financial reporting processes on behalf of the Board. For each quarterly and annual release of financial information, the Disclosure Review Committee is responsible for ensuring the accuracy and completeness of disclosures. The Disclosure Review Committee, which is a management committee, is chaired by the CFO and includes the CEO, the Group General Counsel, division heads, the heads of finance of the divisions, and the heads of the following corporate functions: Treasury, Tax, Financial Reporting and Accounting, Internal Audit and Investor Relations. The Audit and Compliance Committee reviews decisions made by the Disclosure Review Committee before the quarterly and annual releases are published.

The Risk Committee oversees the risk management system and processes, and also reviews the risk portfolio of the Group to ensure appropriate and professional risk management. For this purpose, the Corporate Risk Management function and the risk owners of the divisions report on a regular basis to the Risk Committee. The Group General Counsel, the Global Head of Internal Audit, and the Global Head of Corporate Responsibility are also invited to these meetings.

### NOVARTIS MANAGEMENT INFORMATION SYSTEM

Novartis produces comprehensive, consolidated (unaudited) financial statements on a monthly basis for the total Group and its divisions. These are typically available within 10 days of the end of the month and include the following:

- Consolidated income statement of the month, quarterto-date and year-to-date in accordance with International Financial Reporting Standards (IFRS), as well as adjustments to arrive at core results as defined by Novartis.
   The IFRS and core figures are compared to the prior-year period and targets in both USD and on a constant currency basis
- Consolidated balance sheet as of the month end in accordance with IFRS in USD
- Consolidated cash flow on a monthly, quarter-to-date and year-to-date basis in accordance with IFRS in USD
- Supplementary data on a monthly, quarterly and year-to-date basis such as free cash flow, gross and net liquidity, headcount, personnel costs, working capital, and earnings per share on a USD basis where applicable

The above information is made available to Board members on a monthly basis. An analysis of the key deviations from prior year or target is also provided.

The Board also receives twice a year an outlook of the fullyear results in accordance with IFRS and core, along with related commentary prior to the release of the quarterly results.

On an annual basis, in the fourth quarter of the year, the Board receives and approves the operating and financial targets for the following year.

In the middle of the year, the Board also reviews and approves the strategic plan for the next five years which includes a projected consolidated income statement in USD prepared in accordance with IFRS and core (as defined by Novartis).

The Board does not have direct access to the Company's financial and management reporting systems but can at any time request more detailed financial information on any aspect that is presented to it.

### **INTERNAL AUDIT**

The Internal Audit function carries out operational and system audits in accordance with an audit plan approved by the Audit and Compliance Committee. The function helps organizational units accomplish objectives by providing an independent approach to the evaluation, improvement and effectiveness of their internal control framework. It prepares reports on the audits it has performed and reports actual or suspected irregularities to the Audit and Compliance Committee and the CEO. The Audit and Compliance Committee regularly reviews the scope of Internal Audit, audit plans and internal audit results.

### **RISK MANAGEMENT**

The Corporate Risk Management function is overseen by the Board's independent Risk Committee. The Compensation Committee works closely with the Risk Committee to ensure that the compensation system does not lead to excessive risk-taking by management (for details see our Compensation Report).

Organizational and process measures have been established to identify and mitigate risks at an early stage. Organizationally, the individual divisions are responsible for risk and risk mitigation, with specialized corporate functions – such as Group Finance, Group Quality Assurance, Corporate Health, Safety and Environment, Business Continuity Management, and Integrity & Compliance – providing support and controlling the effectiveness of risk management by the divisions in these respective areas.

### BOARD OF DIRECTORS



From left to right: William T. Winters, Pierre Landolt, Ann Fudge, Enrico Vanni, Dimitri Azar, Joerg Reinhardt, Charles L. Sawyers, Verena A. Briner, Andreas von Planta, Ulrich Lehner, Srikant Datar

**Function at Novartis AG** Joerg Reinhardt, Ph.D., has been Chairman of the Board of Directors of Novartis AG since August 2013. He also serves as Chairman of the Research & Development Committee.

**Other activities** Mr. Reinhardt previously served as chairman of the board of management and the executive committee of Bayer Health-Care, Germany. Prior to that, he served as Chief Operating Officer of Novartis from 2008 to 2010, and as Head of the Vaccines and Diagnostics Division of Novartis from 2006 to 2008. He also served as Chairman of the Board of the Genomics Institute of the Novartis Research Foundation in the United States from 2000 to 2010, as a member of the supervisory board of MorphoSys AG in Germany from 2001 to 2004, and as a member of the board of directors of Lonza Group AG in Switzerland from 2012 to 2013.

**Professional background** Mr. Reinhardt graduated with a Ph.D. in pharmaceutical sciences from Saarland University in Germany. He joined Sandoz Pharma Ltd. in 1982 and held various positions including Head of Development. Following the merger that created Novartis in 1996, Mr. Reinhardt became Head of Preclinical Development and Project Management at Novartis, and assumed the position of Head of Pharmaceutical Development in 1999.

**Key knowledge/experience** *Leadership, global and industry experience* – former chairman of global healthcare company; former Chief Operating Officer of Novartis and former Chairman of Novartis research institution; former board member of leading biotechnology company; former board member of global supplier for pharmaceutical, healthcare and life sciences industries.

### Ulrich Lehner, Ph.D.

Vice Chairman of the Board of Directors German, age 68

Function at Novartis AG Ulrich Lehner, Ph.D., has been a member of the Board of Directors since 2002. He qualifies as an independent Non-Executive Director. He serves as Vice Chairman of the Board of Directors, and is a member of the Audit and Compliance Committee; the Compensation Committee; and the Governance, Nomination and Corporate Responsibilities Committee. The Board of Directors has appointed him as Audit Committee Financial Expert.

**Other activities** Mr. Lehner is a member of the shareholders' committee of Henkel AG & Co. KGaA, is chairman of the supervisory boards of Deutsche Telekom AG and ThyssenKrupp AG, and is a member of the supervisory boards of E.ON AG and Porsche Automobil Holding SE, all in Germany. He is also a member of the advisory board of Krombacher Brauerei, Germany.

**Professional background** Mr. Lehner graduated from the Darmstadt University of Technology, Germany, with degrees in economical and mechanical engineering in 1972, and with a doctorate degree in 1975. From 1975 to 1981, he was an auditor with KPMG Deutsche Treuhand-Gesellschaft AG in Düsseldorf. In 1981, he joined Henkel KGaA. After heading the controlling department of Fried. Krupp GmbH in Germany from 1983 to 1986, Mr. Lehner returned to Henkel as finance director. From 1991 to 1994, he headed Henkel Asia-Pacific Ltd. in Hong Kong, and from 1995 to 2000, he served as executive vice president, finance and logistics, of Henkel KGaA. From 2000 to 2008, Mr. Lehner served as chairman of the management board of Henkel KGaA.

**Key knowledge/experience** *Leadership and global experience* – chairman of supervisory board of a global telecommunications and a technology company; former chairman of management board of global consumer goods company. *Industry experience* – member of committees of global companies in the energy, automotive, consumer goods, telecommunications and manufacturing technology areas.

Enrico Vanni, Ph.D. Vice Chairman of the Board of Directors Swiss, age 63

**Function at Novartis AG** Enrico Vanni, Ph.D., has been a member of the Board of Directors since 2011. He qualifies as an independent Non-Executive Director. He serves as Vice Chairman of the Board of Directors and as Chairman of the Compensation Committee. He is also a member of the Audit and Compliance Committee and the Research & Development Committee.

**Other activities** Since his retirement as director of McKinsey & Company in 2007, Mr. Vanni has been an independent consultant. He is currently a member of several boards of directors in industries from healthcare to private banking, including Advanced Oncotherapy plc in England, and several non-listed companies including Lombard Odier SA, Banque Privée BCP (Suisse) SA, Eclosion2, Jan-Autos Holding SA, and Denzler & Partners SA, all based in Switzerland.

Professional background Mr. Vanni holds an engineering degree in chemistry from the Federal Polytechnic School of Lausanne, Switzerland; a Ph.D. in chemistry from the University of Lausanne; and a Master of Business Administration from INSEAD in Fontainebleau, France. He began his career as a research engineer at International Business Machines Corp. in California, United States, and joined McKinsey & Company in Zurich in 1980. He managed the Geneva office for McKinsey from 1988 to 2004, and consulted for companies in the pharmaceutical, consumer and finance sectors. He led McKinsey's European pharmaceutical practice and served as a member of the firm's partner review committee prior to his retirement in 2007. As an independent consultant, Mr. Vanni has continued to support leaders of pharmaceutical and biotechnology companies on core strategic challenges facing the healthcare industry.

**Key knowledge/experience** *Global and industry experience* – senior consultant of global pharmaceutical/biotech and consumer goods companies, and financial institutions. *Science experience* – research engineer at technology company and manager of projects in global pharmaceutical R&D. *Leadership experience* – office management of global consultant company and leadership of its European pharmaceutical practice.

#### Dimitri Azar, M.D.

Member of the Board of Directors American, age 55

**Function at Novartis AG** Dimitri Azar, M.D., has been a member of the Board of Directors since 2012. He qualifies as an independent Non-Executive Director and is a member of the Audit and Compliance Committee, as well as the Research & Development Committee.

**Other activities** Dr. Azar is dean of the College of Medicine and professor of ophthalmology, bioengineering and pharmacology at the University of Illinois at Chicago in the United States, where he formerly was head of the Department of Ophthalmology and Visual Sciences. He is a member of the American Ophthalmological Society and the Chicago Medical Society, and is on the board of trustees of the Chicago Ophthalmological Society and the Association of Research in Vision and Ophthalmology.

**Professional background** Dr. Azar began his career at the American University Medical Center, Beirut, Lebanon, and completed his fellowship and residency training at the Massachusetts Eye and Ear Infirmary at Harvard Medical School in the United States. His research on matrix-metalloproteinases in corneal wound healing and angiogenesis has been funded by the US National Institutes of Health since 1993. Dr. Azar practiced at the Wilmer Ophthalmologic Institute at the Johns Hopkins Hospital School of Medicine, and returned to the Massachusetts Eye and Ear Infirmary as director of cornea and external disease. He became professor of ophthalmology with tenure at Harvard Medical School in 2003. Dr. Azar holds an Executive Master of Business Administration from the University of Chicago Booth School of Business.

**Key knowledge/experience** Leadership, healthcare and education experience – dean and professor at leading US university medical school. Biomedical science experience – federally funded clinician-scientist and research fellowship recipient.

#### Verena A. Briner, M.D.

Member of the Board of Directors Swiss, age 63

**Function at Novartis AG** Verena A. Briner, M.D., has been a member of the Board of Directors since 2013. She qualifies as an independent Non-Executive Director and is a member of the Risk Committee.

**Other activities** Dr. Briner is professor of internal medicine at the University of Basel, and visiting professor at the University of Lucerne, both in Switzerland. She is chief medical officer and head of the Department of Medicine at the Lucerne Cantonal Hospital in Switzerland. Additionally, she is a member of several medical and ethical institutions and commissions, including the board of the Foundation for the Development of Internal Medicine in Europe, the senate of the Swiss Academy of Medical Sciences, and the journal of the inter-cantonal convention on high-specialized medicine (IVHSM), Switzerland. She also is a member of the board of trustees of Patientensicherheit Schweiz.

**Professional background** Dr. Briner graduated with an M.D. from the University of Basel in 1978, and has a specialized degree in internal medicine and nephrology from the Swiss Medical Association. She has received several prestigious scholarships and scientific grants, including the President's Grant of the Swiss Society of General Internal Medicine in 2011. Additionally, she is a fellow of the Royal College of Physicians, UK, and an honorary fellow of the American College of Physicians, the European Federation of Internal Medicine, the Polish Association of Internal Medicine, and the Swiss Society of General Internal Medicine.

**Key knowledge/experience** *Leadership* and healthcare experience – chief medical officer and department head at leading Swiss hospital; former president of Swiss medical society; member of various medical and ethical institutions and commissions. *Education experience* – professor and visiting professor at leading Swiss universities.

#### Srikant Datar, Ph.D.

Member of the Board of Directors American, age 61

**Function at Novartis AG** Srikant Datar, Ph.D., has been a member of the Board of Directors since 2003. He qualifies as an independent Non-Executive Director. He is Chairman of the Audit and Compliance Committee, and a member of the Risk Committee and the Compensation Committee. The Board of Directors has appointed him as Audit Committee Financial Expert.

**Other activities** Mr. Datar is Arthur Lowes Dickinson Professor at the Graduate School of Business Administration at Harvard University. He is also a member of the boards of directors of ICF International Inc., Stryker Corp. and T-Mobile US, all in the United States.

**Professional background** Mr. Datar graduated with distinction in mathematics and economics from the University of Bombay, India, in 1973. He is a chartered accountant, and holds two master's degrees and a doctorate from Stanford University. Mr. Datar has worked as an accountant and planner in industry, and as a professor at Carnegie Mellon University, Stanford University and Harvard University, all in the United States. His research interests are in the areas of cost management, measurement of productivity, new product development, time-based competition, incentives and performance evaluation. He is the author of many scientific publications and has received several academic awards and honors. Mr. Datar has advised and worked with numerous companies in research, development and training.

**Key knowledge/experience** *Leadership and education experience* – former senior associate dean and current professor at leading US university. *Global and industry experience* – board member of global professional services firm, leading global medical technology company, and major US telecommunications company.

#### Ann Fudge

Member of the Board of Directors American, age 63

**Function at Novartis AG** Ann Fudge has been a member of the Board of Directors since 2008. She qualifies as an independent Non-Executive Director. She is a member of the Risk Committee; the Compensation Committee; and the Governance, Nomination and Corporate Responsibilities Committee.

**Other activities** Ms. Fudge serves on the boards of directors of General Electric Co. in the United States and Unilever NV, London and Rotterdam. She is a trustee of the New York-based Rockefeller Foundation, and is chair of the US Programs Advisory Panel of the Bill & Melinda Gates Foundation. Ms. Fudge is further a member of the Harvard University Corporation Committee on Finance. She is also on the board of the Council on Foreign Relations.

**Professional background** Ms. Fudge received her bachelor's degree from Simmons College and her Masters of Business Administration from Harvard University Graduate School of Business in the United States. She is former chairman and CEO of Young & Rubicam Brands, New York. Before that, she served as president of the Beverages, Desserts and Post divisions of Kraft Foods Inc. in the United States.

**Key knowledge/experience** *Leadership and marketing experience* – former chairman and CEO of global marketing communications company; former president of leading consumer products business unit. *Global and industry experience* – board member of global industrial/financial company and global consumer goods company.

#### Pierre Landolt, Ph.D.

Member of the Board of Directors Swiss, age 67

**Function at Novartis AG** Pierre Landolt, Ph.D., has been a member of the Board of Directors since 1996. He qualifies as an independent Non-Executive Director and is Chairman of the Governance, Nomination and Corporate Responsibilities Committee.

**Other activities** Mr. Landolt is currently chairman of the Sandoz Family Foundation and oversees the development of the foundation in several investment fields. He is also chairman of the Swiss private bank Landolt & Cie SA. In Switzerland, he is chairman of Emasan AG and Vaucher Manufacture Fleurier SA, and vice chairman of Parmigiani Fleurier SA. He is a member of the board of EcoCarbone SAS, France, and Amazentis SA, Switzerland. He is also vice chairman of the Montreux Jazz Festival Foundation. In Brazil, Mr. Landolt serves as president of AxialPar Ltda. and Moco Agropecuaria Ltda., the Instituto Fazenda Tamanduá and the Instituto Estrela de Fomento ao Microcrédito.

**Professional background** Mr. Landolt graduated with a bachelor's degree in law from the University of Paris–Assas. From 1974 to 1976, he worked for Sandoz Brazil. In 1977, he acquired an agricultural estate in the semi-arid Northeast Region of Brazil, and within several years converted it into a model farm in organic and biodynamic production. Since 1997, Mr. Landolt has been associate and president of AxialPar Ltda., Brazil, an investment company focused on sustainable development. In 2000, he co-founded EcoCarbone SAS, a company active in the design and development of carbon-sequestration processes. In 2007, he co-founded Amazentis SA, a startup company active in the convergence space of medication and nutrition. In 2011, Mr. Landolt received the title of Docteur des Sciences Économiques Honoris Causa from the University of Lausanne in Switzerland.

**Key knowledge/experience** Banking and industry experience in international and emerging markets – chairman of private bank; chairman and vice chairman of luxury goods companies; board member of agribusiness company. *Leadership and global experience* – chairman of large family investment holding. Andreas von Planta, Ph.D. Member of the Board of Directors

Swiss, age 59

Function at Novartis AG Andreas von Planta, Ph.D., has been a member of the Board of Directors since 2006. He qualifies as an independent Non-Executive Director. He is Chairman of the Risk Committee and a member of the Audit and Compliance Committee, as well as the Governance, Nomination and Corporate Responsibilities Committee.

**Other activities** Mr. von Planta is chairman of the Schweizerische National-Versicherungs-Gesellschaft AG and a board member of Helvetia Holding AG, both in Switzerland. He also is a board member of various Swiss subsidiaries of foreign companies and other non-listed Swiss companies. Additionally, he is chairman of the regulatory board of the SIX Swiss Exchange AG, and former chairman of the Geneva Association of Business Law.

**Professional background** Mr. von Planta holds lic. iur. and Ph.D. degrees from the University of Basel, Switzerland, and an LL.M. from Columbia University School of Law in the United States. He passed his bar examinations in Basel in 1982. Since 1983, he has lived in Geneva and worked for the law firm Lenz & Staehelin, where he became a partner in 1988. His areas of specialization include corporate law, corporate governance, corporate finance, company reorganizations, and mergers and acquisitions.

**Key knowledge/experience** *Leadership and global experience* – chairman of insurance company. *Industry experience* – partner of leading Swiss law firm.

### Charles L. Sawyers, M.D.

Member of the Board of Directors American, age 55

**Function at Novartis AG** Charles L. Sawyers, M.D., has been a member of the Board of Directors since 2013. He qualifies as an independent Non-Executive Director, and is a member of the Research & Development Committee.

Other activities In the United States, Dr. Sawyers is chairman of the Human Oncology and Pathogenesis Program at Memorial Sloan-Kettering Cancer Center, professor of medicine and of cell and developmental biology at the Weill Cornell Graduate School of Medical Sciences, and an investigator at the Howard Hughes Medical Institute. He serves on US President Barack Obama's National Cancer Advisory Board and is former president of the American Association of Cancer Research, as well as the American Society for Clinical Investigation. He also is a member of the US National Academy of Sciences and Institute of Medicine.

**Professional background** Dr. Sawyers received his M.D. from the Johns Hopkins School of Medicine in the United States, and worked at the Jonsson Comprehensive Cancer Center at the University of California, Los Angeles, for nearly 18 years before joining Memorial Sloan-Kettering in 2006. An internationally acclaimed cancer researcher, he co-developed the Novartis cancer drug Gleevec/Glivec, and has received numerous honors and awards, including the Lasker-DeBakey Clinical Medical Research Award in 2009. Dr. Sawyers is a member of the Scientific Advisory Board of Agios Pharmaceuticals, Inc. in the United States.

**Key knowledge/experience** *Leadership, healthcare and science experience* – program chair at leading cancer treatment and research institution; member of US cancer advisory board; former president of scientific organization and medical honor society. *Education experience* – professor at leading US university.

William T. Winters Member of the Board of Directors British/American, age 53

**Function at Novartis AG** William T. Winters has been a member of the Board of Directors since 2013. He qualifies as an independent Non-Executive Director.

**Other activities** Mr. Winters is chairman and CEO of Renshaw Bay, an alternative asset management and advisory company based in London. He is a former member of the UK Independent Commission on Banking, and served as co-CEO of JPMorgan's investment banking business from 2003 to 2010.

**Professional background** Mr. Winters received his bachelor's degree from Colgate University and his Masters of Business Administration from the Wharton School at the University of Pennsylvania in the United States. He joined JPMorgan in 1983 and held management roles across several market areas and in corporate finance. Mr. Winters serves on the boards of Colgate University and the International Rescue Committee, both in the United States, and of Pension Insurance Corporation, the Young Vic Theatre and The Print Room, all in London. He was awarded the title of Commander of the Order of the British Empire (CBE) in 2013.

**Key knowledge/experience** *Leadership and global experience* – chairman and CEO of alternative asset management and advisory company; former co-CEO of investment banking at global financial services firm. *Education experience* – board member of leading US university.

### HONORARY CHAIRMEN

Alex Krauer, Ph.D

Daniel Vasella, M.D.

### CORPORATE SECRETARY

Charlotte Pamer-Wieser, Ph.D.

### OUR MANAGEMENT

### COMPOSITION OF THE EXECUTIVE COMMITTEE

			h Jimenez ocutive Officer			
	Steven Baert Human Resources	Harry Kirsch Chief Financial Officer	N	<b>Iré Wyss</b> ovartis ss Services	Felix R. Ehrat General Counsel	
<b>David Epstein</b> Pharmaceuticals	Mark C. Fishman Biomedical Research		rd Francis andoz	Andrin Oswald Vaccines	Brian McNamara OTC	<b>George Gunn</b> Animal Health

### **COMPOSITION OF THE EXECUTIVE COMMITTEE**

The Executive Committee is headed by the CEO. Its members are appointed by the Board.

The organizational structure and responsibilities of the Executive Committee are described in the Board Regulations (www.novartis.com/corporate-governance).

There are no contracts between Novartis and third parties whereby Novartis would delegate any business management tasks to such third parties.

### ROLE AND FUNCTIONING OF THE EXECUTIVE COMMITTEE

The Board has delegated to the Executive Committee the overall responsibility for and oversight over the operational management of Novartis. This includes:

- Developing policies and strategic plans for Board approval, and implementing those approved
- Submitting to the Board and its committees proposed changes in management positions of material significance; investments; financial measures; acquisitions or divestments; contracts of material significance; and targets
- Preparing and submitting quarterly and annual reports to the Board and its committees
- Informing the Board of all matters of fundamental significance to the businesses

- Recruiting, appointing and promoting senior management
- Ensuring the efficient operation of the Group and achievement of optimal results
- Promoting an active internal and external communications policy
- Dealing with any other matters delegated by the Board

The Executive Committee is supported by three sub-committees: The Deal Committee (attended by the CEO, CFO, Group General Counsel, Head Research, and Head of M&A and Licensing) reviews important acquisitions and divestments of companies and businesses and business development deals and makes recommendations to the Executive Committee. The Disclosure Committee (attended by the CEO, CFO, Group General Counsel, Global Head of Investor Relations, and Group Head of Communications) determines whether an event constitutes information that is material to the Group, determines the appropriate disclosure and update of such information and reviews media releases concerning such information. The Disclosure Review Committee supports the CEO and CFO to meet their US Sarbanes-Oxley Act legal requirements (for details please see the description under "Board Committees" starting on page 81).

### THE CEO

In addition to other Board-assigned duties, the CEO leads the Executive Committee, building and maintaining an effective executive team. With the Executive Committee, the CEO:

- Is responsible for the operational management of Novartis
- Develops strategy proposals to recommend to the Board and ensures that agreed strategies are implemented
- Plans human resourcing to ensure that Novartis has the capabilities and means to achieve its plans
- Develops an organizational structure and establishes processes and systems to ensure the efficient organization of resources
- Ensures that financial results, business strategies and, when appropriate, targets and milestones are communicated to the investment community – and generally develops and promotes an effective communication with shareholders and other stakeholders

- Ensures that business performance is consistent with business principles, as well as legal and ethical standards
- Ensures that robust management succession and management development plans are in place and presented to the Board
- Develops processes and structures to ensure that capital investment proposals are reviewed thoroughly, that associated risks are identified, and that appropriate steps are taken to manage these risks
- Develops and maintains an effective framework of internal controls over risk in relation to all business activities including the Company's trading activities
  - Ensures that the flow of information to the Board is accurate, timely and clear

### EXECUTIVE COMMITTEE



From left to right: David Epstein, Steven Baert, Andrin Oswald, Jeff George, André Wyss, George Gunn, Joseph Jimenez, Felix R. Ehrat, Brian McNamara, Harry Kirsch, Mark C. Fishman, Richard Francis

#### Joseph Jimenez

Chief Executive Officer (CEO) of Novartis American, age 55

Joseph Jimenez has been Chief Executive Officer (CEO) of Novartis since 2010. Mr. Jimenez is responsible for leading the company's diversified healthcare portfolio of leading businesses in innovative pharmaceuticals, eye care, generics, vaccines and OTC.

Previously, Mr. Jimenez served as Division Head, Novartis Pharmaceuticals. He led the transformation of the pharmaceuticals portfolio to balance mass market and specialty products, and significantly increased the percentage of sales from newly launched products.

Mr. Jimenez joined Novartis in 2007 as Division Head, Novartis Consumer Health. Previously, he served as president and CEO of the North America business for the H.J. Heinz Company and as president and CEO of Heinz in Europe from 2002 to 2006. Prior to joining Novartis, he was a nonexecutive director of AstraZeneca PLC, United Kingdom, from 2002 to 2007. He also was an adviser for the private equity organization Blackstone Group in the United States.

Mr. Jimenez is a member of the board of directors of Colgate-Palmolive Company, New York. He graduated in 1982 with a bachelor's degree from Stanford University and in 1984 with a Master of Business Administration from the University of California, Berkeley, both in the United States.

#### Steven Baert

Head of Human Resources of Novartis Belgian, age 40

Steven Baert has been Head of Human Resources of Novartis since February 26, 2014. He is a member of the Executive Committee of Novartis.

Mr. Baert joined Novartis in 2006 as Head of Human Resources Global Functions in Switzerland. He has held several senior HR roles, including Head of Human Resources for Emerging Growth Markets and Global Head, Human Resources, Oncology. Mr. Baert also served as Head of Human Resources, US and Canada, for Novartis Pharmaceuticals Corporation.

Prior to joining Novartis, Mr. Baert held positions in human resources for Bristol-Myers Squibb and Unilever.

Mr. Baert holds a Master of Business Administration from the Vlerick Business School and a Master in Law from the Katholieke Universiteit Leuven. He has a Bachelor in Law from the Katholieke Universiteit Brussels.

#### Felix R. Ehrat, Ph.D.

Group General Counsel of Novartis Swiss, age 57

Felix R. Ehrat, Ph.D., has been Group General Counsel since October 2011. He is a member of the Executive Committee of Novartis.

Mr. Ehrat is a leading practitioner of corporate, banking, and mergers and acquisitions law, as well as an expert in corporate governance and arbitration. He started his career as an associate with Baer & Karrer Ltd. in Zurich in 1987, became partner in 1992, and advanced to senior partner (2003 to 2011) and executive chairman of the board (2007 to 2011) of the firm. Mr. Ehrat is chairman of Globalance Bank AG in Switzerland, and a board member of Geberit AG, economiesuisse (SwissBusiness Federation), SwissHoldings (Federation of Industrial and Service Groups in Switzerland), and avenir suisse (think tank for economic and social issues). Previously, he was, among other things, chairman and board member of several listed and non-listed companies.

Mr. Ehrat was admitted to the Zurich bar in 1985 and received his doctorate of law from the University of Zurich in 1990. In 1986, he completed an L.L.M. at McGeorge School of Law in the United States. Some of his past memberships include the International Bar Association, where he was co-chair of the Committee on Corporate and M&A Law from 2007 to 2008, and Association Internationale des Jeunes Avocats (AIJA), where he was president from 1998 to 1999.

David Epstein

Division Head, Novartis Pharmaceuticals American, age 53

David Epstein has been Division Head, Novartis Pharmaceuticals, since 2010. He is a member of the Executive Committee of Novartis.

Since taking this role Mr. Epstein has set a course for Novartis Pharmaceuticals to develop into the world's best pharmaceutical business. He previously served as Head of Novartis Oncology, building the Oncology business from start-up to number two in the world through six new drug approvals and more than 10 indication expansions.

Before joining Novartis, Mr. Epstein was an associate in the strategy practice of the consulting firm Booz Allen Hamilton in the United States. He joined Sandoz, a Novartis predecessor company, in 1989 and held various leadership positions of increasing responsibility including Chief Operating Officer of Novartis Pharmaceuticals Corporation in the United States and Global Head of Novartis Specialty Medicines.

Mr. Epstein received a bachelor's degree in pharmacy, with honors, from the Ernest Mario School of Pharmacy at Rutgers, The State University of New Jersey, in 1984. He received a Master of Business Administration in finance and marketing from New York's Columbia University Graduate School of Business in 1987.

### Mark C. Fishman, M.D.

President of the Novartis Institutes for BioMedical Research (NIBR) American, age 63

Mark C. Fishman, M.D., has been President of the Novartis Institutes for BioMedical Research (NIBR) since 2002. He is a member of the Executive Committee of Novartis.

Before joining Novartis in 2002, Dr. Fishman was chief of cardiology and director of the Cardiovascular Research Center at Massachusetts General Hospital, and was professor of medicine at Harvard Medical School, both in the United States. Dr. Fishman completed his internal medicine residency, chief residency and cardiology training at Massachusetts General Hospital.

Dr. Fishman graduated with a bachelor's degree from Yale College in 1972 and with an M.D. from Harvard Medical School in 1976. He has been honored with many awards and distinguished lectureships, and serves on the council of the Institute of Medicine of the National Academies in the United States. Additionally, he is a fellow of the American Academy of Arts and Sciences, also in the United States.

#### **Richard Francis**

Division Head, Sandoz British, age 46

Richard Francis has been Division Head of Sandoz since May 1, 2014. He is a member of the Executive Committee of Novartis.

Mr. Francis joined Novartis from Biogen Idec, where he held global and country leadership positions during his 13-year career with the company. Most recently, Mr. Francis was the senior vice president of the company's US commercial organization. From 1998 to 2001, Mr. Francis was at Sanofi in the United Kingdom, where he held various marketing roles across the company's urology, analgesics and cardio-vascular products. He also has held sales and marketing positions at Lorex Synthelabo and Wyeth.

Mr. Francis holds a B.A. in economics from the Manchester Metropolitan University, England.

### Jeff George

Division Head, Alcon American, age 41

Jeff George has been Division Head of Alcon since May 1, 2014. He is a member of the Executive Committee of Novartis.

For more than five years prior to joining Alcon, Mr. George led Sandoz, the generics division of Novartis and the world's second-largest generics company with more than 26 000 associates across 164 countries. Prior to Sandoz, Mr. George was Head of Emerging Markets for the Middle East, Africa, Southeast Asia and CIS for Novartis Pharmaceuticals.

Mr. George joined Novartis in January 2007 as Head of Commercial Operations for Western and Eastern Europe for Novartis Vaccines. Before joining Novartis, Mr. George was senior director of strategic planning and business development at Gap Inc., in San Francisco. Between 2001 and 2004, he worked at McKinsey & Company, also in San Francisco, where he was an engagement manager.

Mr. George received a Master of Business Administration from Harvard University in 2001. He graduated in 1999 with a master's degree from The Johns Hopkins University's School of Advanced International Studies, where he studied international economics and emerging markets political economy. In 1996, he received his bachelor's degree, magna cum laude, in international relations from Carleton College in Minnesota, United States.

#### George Gunn, MRCVS

Division Head, Novartis Animal Health British, age 64

George Gunn has been Division Head, Novartis Animal Health, since March 2011. He is a member of the Executive Committee of Novartis.

Before joining Novartis, Mr. Gunn was president of Pharmacia Animal Health, based in the United States. Previously, he spent more than 15 years in positions of increasing responsibility at healthcare companies. He worked as a veterinary surgeon for nine years before joining the industry.

Mr. Gunn joined Novartis in 2003 as Head of Novartis Animal Health, North America. In January 2004, he assumed his position as Head of the Animal Health Business Unit. In addition to this role, he was Division Head, Novartis Consumer Health, from 2008 to 2011 and he served as Head of Corporate Responsibility from 2011 to 2014.

Mr. Gunn graduated with a bachelor of veterinary medicine and surgery degree from the Royal (Dick) School of Veterinary Studies in the United Kingdom in 1973. He graduated with a diploma in veterinary state medicine from the same school in 1978. In 2008, he received an honorary doctorate in veterinary medicine and surgery from the University of Edinburgh.

#### Harry Kirsch

Chief Financial Officer (CFO) of Novartis German, age 49

Harry Kirsch has been Chief Financial Officer (CFO) of Novartis since May 1, 2013. He is a member of the Executive Committee of Novartis.

Mr. Kirsch joined Novartis in 2003 and, prior to his current position, served as CFO of the company's Pharmaceuticals Division. Under his leadership, the division's core operating income margin increased, in constant currencies, every quarter of 2011 and 2012 despite patent expiration. At Novartis, he also served as CFO of Pharma Europe, and as Head of Business Planning & Analysis and Financial Operations for the Pharmaceuticals Division. Mr. Kirsch joined Novartis from Procter & Gamble (P&G) in the United States, where he was CFO of P&G's global pharmaceuticals business. Prior to that, he held finance positions in different categories of P&G's consumer goods business, technical operations, and Global Business Services organization.

Mr. Kirsch studied industrial engineering and economics at the University of Karlsruhe in Germany ("Diplom-Wirtschaftsingenieur").

**Brian McNamara** Division Head, Novartis OTC American, age 48

Brian McNamara has been Division Head, Novartis OTC, since February 2012. He is a member of the Executive Committee of Novartis.

Prior to this role, Mr. McNamara served as President, Americas Region, for Novartis OTC. Since joining Novartis OTC in 2004 as Senior Vice President and General Manager of Novartis OTC North America, he has worked on a number of strategic initiatives. He also served as President of Novartis OTC Europe from 2007 until 2010.

Mr. McNamara began his career at the Procter & Gamble Company, Cincinnati, United States, where he gained extensive experience in consumer and brand marketing, product supply, and customer leadership. He previously was on the board of directors and executive committee of the Consumer Healthcare Products Association in the United States, and was a board member of the Association of the European Self-Medication Industry, where he served as chairman of the Economic Affairs Committee.

Mr. McNamara received a Master of Business Administration in finance from the University of Cincinnati and a bachelor's degree in electrical engineering from Union College, both in the United States.

#### Andrin Oswald, M.D.

Division Head, Novartis Vaccines Swiss, age 43

Andrin Oswald, M.D., has been Division Head, Novartis Vaccines, since 2008. He is a member of the Executive Committee of Novartis. In September 2013, Dr. Oswald also became Chairman of the Board of the Novartis Foundation for Sustainable Development.

Previously, Dr. Oswald was CEO of Speedel Holding AG and Global Head of Pharmaceutical Development Franchises in the Novartis Pharmaceuticals Division, both in Switzerland. Dr. Oswald joined Novartis in 2005 as Assistant to the Chairman and CEO. Before his appointment as Head of Development Franchises, he served as Head of the Country Pharmaceuticals Organization (CPO) and Country President for Novartis in South Korea.

Dr. Oswald joined Novartis from McKinsey & Company, Switzerland, where he was an associate principal. He is a board member of the Global Health Investment Corporation (GHIC) and an Investment Committee member of the Global Health Investment Fund (GHIF). Between 2002 and 2003, he also served as a delegate of the International Committee of the Red Cross (ICRC) to Nepal. Dr. Oswald holds a doctorate in medicine from the University of Geneva.

#### André Wyss

Global Head, Novartis Business Services and Country President for Switzerland Swiss, age  $\ensuremath{47}$ 

André Wyss has been Global Head of Novartis Business Services (NBS) since May 1, 2014. On July 1, 2014, he also was appointed Country President for Switzerland. He is a member of the Executive Committee of Novartis.

Mr. Wyss previously served as US Country Head and President of Novartis Pharmaceuticals Corporation. Prior to that, he served as Head of the Pharmaceuticals Division Region Asia-Pacific, Middle East and African Countries (AMAC). Before leading AMAC, he served as Group Emerging Markets Head, and as Country President and Head of Pharmaceuticals, Greece.

Mr. Wyss received a graduate degree in economics from the School of Economics and Business Administration (HWV) in Switzerland in 1995.

#### SECRETARY

### Bruno Heynen

## OUR INDEPENDENT EXTERNAL AUDITORS

### DURATION OF THE MANDATE AND TERMS OF OFFICE OF THE AUDITORS

Based on a recommendation by the Audit and Compliance Committee, the Board nominates an independent auditor for election at the Annual General Meeting. Pricewaterhouse-Coopers ("PwC") assumed its existing auditing mandate for Novartis in 1996. Bruno Rossi, auditor in charge, began serving in his role in 2013, and Stephen Johnson, global relationship partner, began serving in his role in 2014. The Audit and Compliance Committee ensures that these partners are rotated at least every five years.

### INFORMATION TO THE BOARD AND THE AUDIT AND COMPLIANCE COMMITTEE

PwC is responsible for providing an opinion on whether the consolidated financial statements comply with International Financial Reporting Standards (IFRS) and Swiss law and whether the separate parent company financial statements of Novartis AG comply with Swiss law. Additionally, PwC is responsible for opining on the effectiveness of internal control over financial reporting and on the Compensation Report.

The Audit and Compliance Committee, acting on behalf of the Board, is responsible for overseeing the activities of PwC. During 2014, the Audit and Compliance Committee held seven meetings. PwC was invited to attend during the discussion of agenda items that dealt with accounting, financial reporting or auditing matters, and any other matters relevant to their audit.

On an annual basis, PwC provides the Audit and Compliance Committee with written disclosures required by the US Public Company Accounting Oversight Board (PCAOB), and the Audit and Compliance Committee and PwC discuss PwC's independence from Novartis and its management.

The Audit and Compliance Committee recommended to the Board of Directors to approve the audited financial statements for the year ended December 31, 2014. The Board of Directors proposed the acceptance of the financial statements for approval by the Annual General Meeting.

The Audit and Compliance Committee regularly evaluates the performance of PwC and once a year determines whether PwC should be proposed to the Annual General Meeting for election. Also once a year, the auditor in charge and the global relationship partner report to the Board on PwC's activities during the current year and on the audit plan for the coming year. They also answer any questions or concerns Board members might have on the performance of PwC, or on the work it has conducted or is planning to conduct.

To assess the performance of PwC, the Audit and Compliance Committee holds private meetings with the CEO, the CFO and the Global Head of Internal Audit and, if necessary, obtains an independent external assessment. Criteria applied for the performance assessment of PwC include an evaluation of its technical and operational competence; its independence and objectivity; the sufficiency of the resources it has employed; its focus on areas of significant risk to Novartis; its willingness to probe and challenge; its ability to provide effective, practical recommendations; and the openness and effectiveness of its communications and coordination with the Audit and Compliance Committee, the Internal Audit function, and management.

### PRE-APPROVAL OF AUDIT AND NON-AUDIT SERVICES

The Audit and Compliance Committee's pre-approval is required for all services provided by PwC. These services may include audit services, audit-related services, tax services and other services.

Pre-approval specifies the particular services or categories of services, and is subject to a specific budget. PwC reports quarterly to the Audit and Compliance Committee regarding the extent of services provided in accordance with this pre-approval and the fees for the services performed to date. The Audit and Compliance Committee may also pre-approve additional services on a case-by-case basis. Tax and Other Services are individually approved prior to commencement of the work.

### AUDIT AND ADDITIONAL FEES

PwC charged the following fees for professional services rendered for the 12-month periods ended December 31, 2014 and December 31, 2013:

	2014 USD million	2013 USD million
Audit Services	29.7	28.6
Audit-Related Services	2.0	2.0
Tax Services	0.2	0.1
Other Services	0.1	0.3
Total	32.0	31.0

Audit Services include work performed to issue opinions on the parent company financial statements and the Group consolidated financial statements, to issue opinions relating to the effectiveness of the Group's internal control over financial reporting, and to issue reports on local statutory financial statements. Also included are audit services that generally can only be provided by the statutory auditor, such as the audit of the compensation report, audits of non-recurring transactions, audit of the adoption of new accounting policies, audits of information systems and the related control environment, reviews of quarterly financial results, consents and comfort letters. Audit-Related Services include those other assurance services provided by the independent auditor but not restricted to those that can only be provided by the statutory auditor. They include services such as audits of pension and other employee benefit plans, contract audits of third-party arrangements, corporate responsibility assurance, compliance with corporate integrity agreements and other audit-related services. Tax Services represent tax compliance, assistance with historical tax matters and other tax-related services.

Other Services include training in the finance area, benchmarking studies, and license fees for use of accounting and other reporting guidance databases.

### OUR CORPORATE GOVERNANCE FRAMEWORK

### LAWS AND REGULATIONS

Novartis is subject to the laws of Switzerland, in particular Swiss company and securities laws, and to the securities laws of the United States as applicable to foreign private issuers of securities.

In addition, Novartis is subject to the rules of the SIX Swiss Exchange, including the Directive on Information Relating to Corporate Governance.

Novartis is also subject to the rules of the New York Stock Exchange (NYSE) as applicable to foreign private issuers of securities. The NYSE requires Novartis to describe any material ways in which its corporate governance differs from those of domestic US companies listed on the exchange. These differences are:

- Shareholders of Novartis do not receive written reports from Board committees.
- External auditors are appointed by the shareholders at the Annual General Meeting, as opposed to being appointed by the Audit and Compliance Committee.
- While the shareholders cannot vote on all equity-compensation plans, they are entitled to hold a consultative vote on the compensation system of Novartis. The vote takes place before every significant change to the compensation system, but at least at every third Annual General Meeting. As from 2015 there will be yearly binding shareholder votes on the compensation of the Board and of the Executive Committee.
- The Board has set up a separate Risk Committee that is responsible for business risk oversight, as opposed to delegating this responsibility to the Audit and Compliance Committee.

- The full Board is responsible for overseeing the performance evaluation of the Board and Executive Committee.
- The full Board is responsible for setting objectives relevant to the compensation of the CEO and for evaluating the performance of the CEO.

### SWISS CODE OF BEST PRACTICE FOR CORPORATE GOVERNANCE

Novartis applies the Swiss Code of Best Practice for Corporate Governance.

### **NOVARTIS CORPORATE GOVERNANCE STANDARDS**

Novartis has incorporated the corporate governance standards described above into the Articles of Incorporation and the Regulations of the Board of Directors, its Committees and the Executive Committee (www.novartis.com/corporate-governance).

The Governance, Nomination and Corporate Responsibilities Committee regularly reviews these standards and principles, taking into account best practices, and recommends improvements to the corporate governance framework for consideration by the full Board.

Additional corporate governance information can be found on the Novartis website:

http://www.novartis.com/corporate-governance.

Printed copies of the Novartis Articles of Incorporation, Regulations of the Board and Charters of Board Committees can be obtained by writing to: Novartis AG, Attn: Corporate Secretary, Lichtstrasse 35, CH-4056 Basel, Switzerland.

## FURTHER INFORMATION

### THE GROUP STRUCTURE OF NOVARTIS

NOVARTIS AG AND GROUP COMPANIES

Under Swiss company law, Novartis AG is organized as a corporation that has issued shares of common stock to investors. The registered office of Novartis AG is Lichtstrasse 35, CH-4056 Basel, Switzerland.

Business operations are conducted through Novartis Group companies. Novartis AG, a holding company, owns or controls directly or indirectly all entities worldwide belonging to the Novartis Group. Except as described below, the shares of these companies are not publicly traded. The principal Novartis subsidiaries and associated companies are listed in Note 32 to the Group's consolidated financial statements.

### DIVISIONS

The businesses of Novartis are divided on a worldwide basis into six operating divisions: Pharmaceuticals, Alcon (eye care), Vaccines, Sandoz (generics), Over-the-Counter (OTC) and Animal Health. In addition there are Novartis Business Services (shared services organization, delivering services to the divisions), Novartis Institutes for BioMedical Research (Novartis' global pharmaceutical research organization), and Corporate activities. Subject to closings during 2015, Vaccines will be divested, and OTC will be brought into a joint venture with GlaxoSmithKline's business in this area with Novartis holding a 36.5% minority stake in this joint venture. Animal Health was divested on January 1, 2015.

### MAJORITY HOLDINGS IN PUBLICLY TRADED GROUP COMPANIES

The Novartis Group owns 75% of Novartis India Limited, with its registered office in Mumbai, India, and listed on the Bombay Stock Exchange (ISIN INE234A01025, ID: NOVARTIS). The total market value of the 25% free float of Novartis India Limited was USD 82.8 million at December 31, 2014, using the quoted market share price at year-end. Applying this share price to all the shares of the company, the market capitalization of the whole company was USD 331.2 million and that of the shares owned by Novartis was USD 248.4 million.

### SIGNIFICANT MINORITY SHAREHOLDING OWNED BY THE NOVARTIS GROUP

The Novartis Group owns 33.3% of the bearer shares of Roche Holding AG, with its registered office in Basel, Switzerland, and listed on the SIX Swiss Exchange (Valor No. 1203211, ISIN CH0012032113, symbol: RO). The market value of the Group's interest in Roche Holding AG, as of December 31, 2014, was USD 14.4 billion. The total market value of Roche Holding AG was USD 234.9 billion. Novartis does not exercise control over Roche Holding AG, which is independently governed, managed and operated.

### **POLITICAL CONTRIBUTIONS**

Novartis makes political contributions to support political dialogue on public policy issues of relevance to Novartis, such as healthcare innovation or access to medicine.

Political contributions made by Novartis are not intended to give rise to any obligations of the party receiving it. Moreover, rules and procedures are in place to make sure that political contributions are never made with the expectation of a direct or immediate return for Novartis, and that they are fully compliant with applicable laws, regulations and industry codes.

Novartis only makes political contributions in countries where such contributions by corporations are legal and generally considered appropriate.

In 2014, Novartis made political contributions totaling approximately USD 766 000, thereof approximately 500 000 in Switzerland, 240 000 in the US, and 26'000 in Canada. In addition, in the US, a Political Action Committee (PAC) established by Novartis used funds received from Novartis employees (but not from the Company) to make political contributions totaling approximately USD 300'000.

In Switzerland, Novartis supports political parties that have a political agenda and hold positions that support the strategic interests of Novartis, its shareholders and other stakeholders.

### **RELATIONS WITH SHAREHOLDERS**

The CEO, with the CFO and the Investor Relations team, supported by the Chairman, is responsible for ensuring effective communication with shareholders to keep them informed of the company's strategy, business operations and governance. Through communication, the Board also learns about and addresses shareholders' expectations and concerns.

Novartis communicates with its shareholders through the Annual General Meeting, meetings with groups of shareholders and individual shareholders, and written and electronic communication.

At the Annual General Meeting, the Chairman, the CEO and other Executive Committee members, and representatives of the external auditors are present and can answer shareholders' questions. Other meetings with shareholders may be attended by the Chairman, CEO, CFO, Executive Committee members, and other members of senior management.

Topics discussed with shareholders may include strategy, business performance and corporate governance.

### INFORMATION FOR OUR STAKEHOLDERS INTRODUCTION

Novartis is committed to open and transparent communication with shareholders, financial analysts, customers, suppliers and other stakeholders. Novartis aims to disseminate material developments in its businesses in a broad and timely manner that complies with the rules of the SIX Swiss Exchange and NYSE.

### COMMUNICATIONS

Novartis publishes an Annual Report each year that provides information on the Group's results and operations. In addition to the Annual Report, Novartis prepares an annual report on Form 20-F that is filed with the US Securities and Exchange Commission (SEC). Novartis discloses quarterly financial results in accordance with IFRS and issues press releases from time to time regarding business developments.

Novartis furnishes press releases relating to financial results and material events to the SEC via Form 6-K. An archive containing recent Annual Reports, annual reports on Form 20-F, and quarterly results releases – as well as related materials such as slide presentations and conference call webcasts – is on the Novartis website at http://www.novartis.com/investors.

Novartis publishes a consolidated Corporate Responsibility Performance Report, which details progress and demonstrates the company's commitment to be a leader in corporate responsibility. The Corporate Responsibility Performance Report reflects the best-in-class reporting standard, the Global Reporting Initiative's (GRI) G4 guidelines, and fulfills the Company's reporting requirement as a signatory to the UN Global Compact.

Information contained in reports and releases issued by Novartis are only correct and accurate at the time of release. Novartis does not update past releases to reflect subsequent events and advises against relying on them for current information.

### INVESTOR RELATIONS PROGRAM

An Investor Relations team manages the Group's interaction with the international financial community. Several events are held each year to provide institutional investors and analysts with various opportunities to learn more about Novartis.

Investor Relations is based at the Group's headquarters in Basel. Part of the team is located in the US to coordinate interaction with US investors. Information is available on the Novartis website: www.novartis.com/investors. Investors are also welcome to subscribe to a free e-mail service on this site.

Торіс	Information
Share Capital	Articles of Incorporation of Novartis AG http://www.novartis.com/corporate-governance Novartis key share data http://www.novartis.com/key-share-data
Shareholder Rights	Articles of Incorporation of Novartis AG http://www.novartis.com/corporate-governance Investor Relations information http://www.novartis.com/investors
Board Regulations	Board Regulations http://www.novartis.com/corporate-governance
Executive Committee	Executive Committee http://www.novartis.com/executive-committee
Novartis Code for Senior Financial Officers	Novartis Code of Ethical Conduct for CEO and Senior Financial Officers http://www.novartis.com/corporate-governance
Additional Information	Novartis Investor Relations http://www.novartis.com/investors

### WEBSITE INFORMATION

## **COMPENSATION REPORT**



Acute lymphoblastic leukemia (ALL) patient Emily Whitehead was the first child to undergo chimeric antigen receptor T-cell (CART) therapy, being developed by the University of Pennsylvania and Novartis. Treated in 2012, she remains clear of the disease.



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### Dear Shareholder

As Chairman of the Compensation Committee of the Board of Directors, I am pleased to share with you the 2014 Compensation Report of Novartis AG.

At Novartis, our mission is to care and cure. We make innovative products to treat diseases, ease suffering and enhance patients' quality of life. The company also wants to provide superior returns to its shareholders and to be an employer of choice. The Novartis Executive Committee compensation system was introduced in 2014 to provide better alignment with business strategy, shareholder interests and corporate governance best practice. The system has an emphasis on long-term performance and equity-based compensation. The Compensation Committee is confident that this system allows Novartis to attract and retain the caliber of talent needed to reach its vision to be the most respected and successful healthcare company. The Committee received strong support for this system from shareholders during the consultation process.

### 2014 Company and Executive Committee Performance

2014 was a very successful year. Novartis completed a major portfolio review and focused the company on leading businesses with innovation power and global scale in pharmaceuticals, eye care and generics. Overall, the company exceeded its financial targets for the year, while being just slightly below its sales target. The Group significantly exceeded its profitability and cash flow targets. Novartis Business Services (NBS) was launched and is designed to enhance profitability by harmonizing high-quality services at lower costs across the Group and divisions. Novartis also had an outstanding year in innovation, advancing major products to address unmet medical needs. The company achieved a total shareholder return of 34% in CHF and 20% in USD, and is one of the worlds' top 20 companies in market capitalization.

### 2014 CEO compensation

Following the introduction of the new compensation system, for 2014 the CEO was awarded total compensation of CHF 12 648 490. This amount included an Annual Incentive of CHF 4 018 084 (representing 130% of target) based on his, and the company's performance, as mentioned above. 50% of the Annual Incentive was delivered in cash, and 50% was delivered in restricted share units, which will have a three year vesting period. It also included long-term incentive grants of CHF 6 181 504, which will be subject to performance conditions for the 2014-2016 cycle.

### **Compensation Systems**

Novartis strives to continually adapt to a changing environment and to be best in class with regard to our compensation systems and practices. Since the 2014 AGM, Novartis has continued to interact with shareholders to jointly discuss any relevant changes. The Board and the management are confident that the Executive Committee compensation system rewards performance in a balanced and sustainable way without encouraging excessive risk taking. The company will make limited changes in 2015 to the performance measures and payout matrix for the Annual Incentive, including the updated Novartis Values and Behaviors. These changes are explained on page 115 of this report.

The Board Compensation system and fee structure will remain in place for 2015, although from the 2015 AGM the Chairman of the Board will voluntarily no longer receive company contributions to any pension.

### 2015 AGM

This year the Committee continued to prepare for the implementation of the new Swiss law related to the Minder Initiative, requiring Swiss listed companies to hold separate binding votes on Board and Executive Committee compensation at the 2015 AGM. As a result, shareholders will be asked to approve the following:

- Total maximum amount of Board compensation from the 2015 AGM to the 2016 AGM
- Total maximum amount of Executive Committee compensation for the 2016 financial year

Shareholders will also be asked to endorse this Compensation Report in an advisory vote.

In response to your feedback, you will find a simplified Compensation Report, including a comprehensive management summary.

On behalf of Novartis and the Compensation Committee, I would like to thank you for your continued support and feedback, which I consider extremely valuable in driving improvements in our compensation systems and practices. I invite you to send your comments to me at the following email address: investor.relations@novartis.com.

Respectfully,

Maur

Enrico Vanni, Ph.D. Chairman of the Compensation Committee

### COMPENSATION REPORT AT A GLANCE Executive Committee Compensation

### 2014 EXECUTIVE COMMITTEE COMPENSATION SYSTEM (page 103-107)

### The following components are included:

	Fixed compensation	n and hanafita	Variable compensation			
	Annual base compensation	Pension and other benefits	Annual Incentive (AI)	Long-Term Performance Plan (LTPP)	Long-Term Relative Performance Plan (LTRPP)	
Purpose	Reflects the associates' responsibilities, job character- istics, experience and skill set	Establishes a level of security for associates and their dependents tailored to local market practice and regulations	Rewards performance against key short-term targets and values & behaviors	Rewards long-term shareholder value creation and long-term innovation	Rewards relative total shareholder return	
Performance period	n/a	n/a	1 year (2014)	3 years (2014–2016)	3 years (2014–2016)	
Performance measures	n/a	n/a	Based on a payout matrix made up of: — Individual balanced scorecard, including financial targets and individual objectives — Assessed Novartis Values and Behaviors	<ul> <li>3 year forward looking targets</li> <li>75% Novartis Group Cash Value Added (NCVA)</li> <li>25% divisional Long-Term innovation milestones</li> </ul>	3 year relative Total Shareholder Return (TSR) versus our peer group of 12 healthcare companies <sup>1</sup>	
Delivery	Cash	Country specific	50% cash 50% deferred equity <sup>2</sup> (3 year holding of restricted shares/ restricted share units)	Equity (includes dividend equivalents)	Equity (includes dividend equivalents)	
	Eli Lilly & Compa	ny, GlaxoSmithKline,	Johnson & Johnson, Merck &	Imgen, AstraZeneca, Bristol-Mye Co., Pfizer, Roche and Sanofi. nnual Incentive in shares instead		Total Variable Compensation
CEO variable opportunity as % of base salary	n/a	n/a	Target: 150% (range 0%-200% of target)	Target: 200% (range 0%–200% of target)	Target: 100% (range 0%–200% of target)	Target: 450% (range 0%–200% of target)
Executive Committee variable opportunity as % of base salary (excluding CEO)	n/a	n/a	Target: 90%–120% (range 0%–200% of target)	Target: 140%–190% (range 0%–200% of target)	Target: 30%–90% (range 0%–200% of target)	Target: 260%–400% (range 0%–200% of target)
2014 EXECUTIN	E COMMITTE	E COMPENSA	<b>FION</b> (page 108–113)			Total Componention
2014 CEO compensation paid or granted (grants under long-term plans are reported	CHF 2 060 500	CHF 388 402	CHF 4 018 084	CHF 4 121 003	CHF 2 060 501	CHF 12 648 490
at target)						
at target) 2014 Executive Committee compensation paid or granted (excluding CEO / grants under long-term plans are reported at target)	CHF 8 917 856	CHF 13 874 257 1	CHF 14 110 638	CHF 14 883 817	CHF 4 753 376	CHF 56 539 944

Total

CHF 69 188 434 2

<sup>1</sup> It includes compensation for loss of entitlements with one member's previous employer in 2014, and the compensation of the members who stepped down from the Executive Committee part-way through the financial year for the period from the date they stepped down to December 31 of the same year.

<sup>2</sup> In compliance with the Minder Ordinance, it includes an amount of mandatory employer social security contributions of CHF 76 534. This amount provides a right to the maximum future insured government benefit for the members. This is out of a mandatory total of CHF 2 980 528 paid by Novartis to both Swiss and US governmental social security systems.

## COMPENSATION REPORT AT A GLANCE

### 2015 EXECUTIVE COMMITTEE COMPENSATION SYSTEM (page 115)

#### Compensation opportunity

As for all associates, members of the Executive Committee may have received a merit increase, based on their 2014 performance, and adjustment to benchmark for newer members. The CEO base salary for 2015 will remain unchanged at CHF 2 060 500. His total target variable compensation opportunity remains unchanged at 450% of base salary under all other elements of the compensation system.

#### Performance measures

Annual Incentive The Annual Incentive continues to be based on a payout matrix made up of a balanced scorecard and assessed Novartis Values and Behaviors. Changes have been made to the measures under the balanced scorecard, the Novartis Values and Behaviors and the payout matrix (see page 115). Long-Term Incentives

No changes have been made to the performance measures under either the Long-Term Performance Plan or the Long-Term Relative Performance Plan.

### **Board** Compensation

### 2014 BOARD COMPENSATION SYSTEM (page 116)

Delivery: 50% cash, 50% shares	(CHF)	Annual fee
	Chairman of the Board	3 800 000
	Board membership	300 000
	Vice Chairman	50 000
	Chairman of Audit and Compliance Committee	120 000
	Chairman of the following Committees: — Compensation Committee — Governance, Nomination and Corporate Responsibilities Committee — Risk Committee — Research and Development Committee <sup>2</sup>	60 000
	Membership of Audit and Compliance Committee	60 000
	Membership of the following Committees: — Compensation Committee — Governance, Nomination and Corporate Responsibilities Committee — Risk Committee — Research and Development Committee	30 000
	<sup>1</sup> Dr. Reinhardt also received company occupational pension contributions of CHF 144 81 cease to be paid as of the 2015 AGM and payment for loss of other entitlements with his EUR 748 000.	s previous employer of

<sup>2</sup>The Chairman receives no additional Committee fees for chairing the Research and Development Committee.

#### 2014 BOARD COMPENSATION (page 117-118)

rdt 2 058 334	1 741 666	157 844	3 957 844
<b>nbers</b> 1 775 002	2 695 835	336 383	4 807 220
			8 765 064 <sup>2</sup>
	mbers 1 775 002	mbers 1 775 002 2 695 835 cludes an amount of CHF 27 771 for estimated mandato primental social security systems. This amount is out of	

Novartis to governmental social security systems. This amount is out of estimated mandatory total employer contributions of CHF 359 890, and provides a right to the maximum future insured government pension benefit for the Board member. No occupational pension contributions to be provided to the Chairman from the 2015 AGM onwards.

<sup>2</sup> Please see page 118 for a reconciliation between the amount reported in this table, and the amount of endorsed by shareholders at the 2014 AGM to be used to compensate the Board members for the period from the 2014 AGM to the 2015 AGM. Novartis has respected and paid within the maximum amount endorsed by shareholders.

### Compensation Governance

### **GOVERNANCE AND RISK MANAGEMENT** (page 119-120)

OVERNANCE AND RISK MANAGEMENT (page 119-120)				
ecision making authorities with regard o compensation, within the parameters et by the shareholder's meeting	Decision on	Authority		
	Compensation of Chairman and other Board members	Board of Directors		
	Compensation of the Chief Executive Officer	Board of Directors		
	Compensation of the Executive Committee members (excluding the CEO)	Compensation Committee		

### **Executive Committee Compensation Risk Management Principles**

Rigorous performance management process

Balanced mix of short-term and long-term

Matrix approach to performance evaluation

individual balanced scorecard and assessed

under the Annual Incentive, including an

variable compensation elements

Novartis Values and Behaviors

De to set

- Performance-vesting long-term incentives only, with three-year overlapping cycles
  - All variable compensation is capped at 200%
- of target — Contractual notice period of 12 months
- Post-contractual non-compete limited to
- a maximum of 12 months (annual base compensation and annual incentive of the prior year only)
- No severance payments or change of control clauses
- Clawback principles apply to all elements of variable compensation
- Share ownership requirements; no hedging or pledging of Novartis share ownership position (this element applies to Board members and Executive Committee members)

### EXECUTIVE COMMITTEE COMPENSATION PHILOSOPHY & PRINCIPLES

### **NOVARTIS COMPENSATION PHILOSOPHY**

The compensation philosophy aims to ensure that the Executive Committee is rewarded according to their success in implementing the company strategy and their contribution to company performance. The Executive Committee compensation system is designed in line with the following key elements:

Pay for performance	Variable compensation is tied directly to the achievement of strategic Company targets
Shareholder alignment	A significant part of our incentives are equity-based. Also, one Long-Term Incentive rewards on the basis of relative Total Shareholder Return
Balanced rewards to create sustainable value	Mix of targets based on financial metrics, innovation, individual objectives, values and behaviors, and performance versus competitors
Business ethics	The Novartis Values and Behaviors are an integral part of our compensation system
Competitive compensation	Compensation competitive to relevant benchmarks ensures we are able to attract and retain the most talented global Executive Committee members

### ALIGNMENT WITH COMPANY STRATEGY

Novartis' strategy is to deliver better outcomes for patients through science-based innovation. We aim to lead in growing areas of healthcare. In order to align the compensation system with this strategy, the Board of Directors determines specific, measurable and time-bound performance metrics, including financial metrics such as sales, profit and cash flow, as well as non-financial metrics, which indicate the success of its implementation. The Board then sets short-term and long-term targets for each of these performance metrics and compensates the Executive Committee according to the extent to which the targets are achieved. In line with the company focus on science-based innovation, the Board sets a number of specific targets for each division to fulfill within specific timeframes. In line with the company's aim to lead in growing areas of healthcare, Novartis has now planned to focus its portfolio to have three market-leading divisions in innovative pharmaceuticals, eye care and generics. Finally, in order to ensure that Novartis is a high-performing organization over the long term, the Board also sets targets in areas such as quality, talent, integrity and reputation, which are reinforced by the Novartis Values and Behaviors.

### EXECUTIVE COMMITTEE COMPENSATION BENCHMARKING

To attract and retain key talent, it is important for us to offer competitive compensation levels. Executives meeting their objectives are generally awarded target compensation at a level comparable to the median level of similar roles within the benchmark companies (see below). In the event of under- or over-performance, the actual compensation may be lower or higher than the benchmark median.

Whilst benchmarking information regarding executive pay is considered by the Compensation Committee, any decisions on compensation are ultimately based on the specific business needs of Novartis and the performance of the individual.

The Compensation Committee reviews the compensation of the CEO and of the members of the Executive Committee annually in comparison to the relevant compensation level of similar positions at peer companies. For this purpose, the Committee uses benchmark data from publicly available sources, as well as reputable market data providers. All data is reviewed and evaluated by the Compensation Committee's independent advisor, who also provides independent research and advice regarding the compensation of the CEO and other members of the Executive Committee.

For the CEO and the members of the Executive Committee, the company benchmarks against global competitors in the healthcare industry with similar business models, size and needs for talent and skills. This peer group may change over time in line with the evolution of the competitive environment in the healthcare industry.

### **BENCHMARK COMPANIES**

Abbott	AbbVie	Amgen
AstraZeneca	Bristol-Myers Squibb	Eli Lilly & Company
GlaxoSmithKline	Johnson & Johnson	Merck & Co.
Pfizer	Roche	Sanofi

Within this peer group, Novartis is among the largest in key dimensions including market capitalization, sales and operating income.

# 2014 EXECUTIVE COMMITTEE COMPENSATION SYSTEM

The 2014 Executive Committee compensation system consists of the following components:

Fixed compensa	tion and benefits			
Annual Base	Pension	Annual Incentive	Long-Term	Long-Term Relative
Compensation	and other benefits	(AI)	Performance Plan (LTPP)	Performance Plan (LTRPP)

### FIXED COMPENSATION AND BENEFITS ANNUAL BASE COMPENSATION

The level of base compensation reflects each associate's key areas of responsibilities, job characteristics, experience and skill sets. It is paid in cash, typically monthly.

Base compensation is reviewed annually, and any increase reflects both merit based on performance, as well as market movements.

### PENSION AND OTHER BENEFITS

The primary purpose of pension and insurance plans is to establish a level of security for associates and their dependents with respect to age, health, disability and death. The level and scope of pension and insurance benefits provided is countryspecific, influenced by local market practice and regulations.

Company policy is to change from defined-benefit pension plans to defined-contribution pension plans. All major plans have now been aligned with this policy as far as reasonably practicable. See also Note 25 to the Novartis Financial Statements.

Novartis may provide other benefits in a specific country according to local market practice and regulations, such as a company car, tax and financial planning services. Executive Committee members who have been transferred on an international assignment also receive benefits (such as tax equalization) in line with the company's international assignment policies.

### VARIABLE COMPENSATION ANNUAL INCENTIVE

For the Annual Incentive of the CEO and Executive Committee members, a target incentive is defined as a percentage of base compensation at the beginning of each performance year. The target incentive is 150% of base compensation for the CEO, and ranges from 90% to 120% for other Executive Committee members, and is paid half in cash and half in shares deferred for three years. The formula for the target Annual Incentive is outlined below:

### ANNUAL INCENTIVE FORMULA

Annual Base Compensation	х	Target Incentive %	=	Target Annual Incentive Value
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### Performance measures

The Annual Incentive is based on a payout matrix comprising of two elements, a balanced scorecard and the Novartis Values and Behaviors, which are described in more detail below.

### **Balanced Scorecard**

The first element used to determine the payout of the Annual Incentive is a balanced scorecard, within which, Group or divisional Financial and Innovation targets are weighted 60% and Individual objectives are weighted 40%. For more details on the target setting and performance management process, please refer to page 120.

### Group or divisional Financial and Innovation targets

Within the Group or divisional Financial and Innovation targets, each measure such as sales or net income is weighted individually. The CEO and function heads share the same Group Financial and Innovation targets. In place of the Group targets, division heads have division targets which include division sales, division operating income, division free cash flow as a percentage of sales, division market share of peers and division innovation targets. The Board sets the Group and divisional financial and innovation targets at the start of each performance year in constant currencies and evaluates achievement against those targets at the end of that year. The newly established Research and Development Committee, which became operational in 2014, assists the Board in reviewing innovation targets and achievements.

### Individual Objectives

The individual objectives differ for each Executive Committee member depending on their responsibility, and may include additional financial and non-financial targets. Additional financial targets examples are implementation of growth, productivity and development initiatives. Non-financial targets may include leadership and people management, workforce diversity, quality, social initiatives such as access to medicines, and ethical business practices.

By way of illustration, the balanced scorecard measures used for the CEO in 2014 are set out below:

### 2014 BALANCED SCORECARD MEASURES USED FOR THE CEO

Performance measures	Weight	Breakdown of performance measures
Group Financial and Innovation Targets	60%	Group net sales Group net income Group free cash flow as % of sales Corporate net result Weighted average of division innovation
CEO Individual Objectives	40%	Specific additional financial targets e.g. EPS Innovation and growth targets Portfolio review Organization, quality and customer satisfaction Cross-divisional synergies
Overall total	100%	

### Values and Behaviors

The second element used to determine the payout of the Annual Incentive ensures that the associate's performance is achieved in line with the highest standards of business conduct, as outlined in the Novartis Values and Behaviors. Novartis requires Executive Committee members to be action-oriented and full of energy to face challenging situations, to assign the highest priority to customer satisfaction and to commit to honesty in every facet of behavior, demonstrating strong ethical and legal conduct. Novartis leaders are expected to live up to these behaviors on a daily basis, and to align and energize other associates to do the same. The Values and Behaviors are an essential element in the annual assessment of Executive Committee members and have been updated for the 2015 Annual Incentive onwards (see page 115).

### Performance evaluation and payout determination

Following a thorough review of the two elements that compose the Annual Incentive, including performance against the balanced scorecard objectives and an assessment against the Novartis Values and Behaviors, a rating will be assigned from 1 to 3 for each element.

The following payout matrix shows how the Annual Incentive performance factor is derived using a combination of performance against the balanced scorecard and demonstration of the Novartis Values and Behaviors. The Compensation Committee determines the final payout factor taking into account the ranges shown. Payouts are capped at 200% of target.

### 2014 ANNUAL INCENTIVE PAYOUT MATRIX

				% Payout	
	Exceeded Expectations	3	70-100%	130-160%	170-200%
Performance vs. Balanced Scorecard	Fully met Expectations	2	50-80%	90-120%	130-160%
	Partially met Expectations	1	0%	0-70%	60-90%
			1	2	3
			Partially met Ex- pectations	Fully met Ex- pectations	Exeeded Ex- pectations
	Novartis Values and Behaviors				Behaviors

Assessment

The payout matrix will be updated for the 2015 Annual Incentive onwards to equally recognize performance against the objectives in the balanced scorecard, and the assessment against the Novartis Values and Behaviors (see page 115).

### Form of the award

The Annual Incentive is paid 50% in cash in March of the year following the performance period, and 50% in Novartis shares (or Restricted Share Units (RSUs)) that are deferred and restricted for three years. Each restricted share is entitled to voting rights and payment of dividends during the vesting period. Each RSU is equivalent in value to one Novartis share and is converted into one share at the vesting date. RSUs under this plan do not carry any dividend, dividend equivalent or voting rights.

If a participant leaves Novartis due to voluntary resignation or misconduct, unvested shares (and RSUs) are forfeited. The Board and Compensation Committee retain accountability for ensuring that rules are applied correctly, and for determining whether a different treatment should apply in exceptional circumstances. This is necessary to ensure that the treatment of any award in the event of cessation of employment is appropriate.

Executives may choose to receive some or the entire cash portion of their Annual Incentive in Novartis shares or American Depositary Receipts (ADRs (US only)) that shall not be subject to conditions. In the United States, awards may also be delivered in cash under the US deferred compensation plan.

### Delivery of equity at vesting

Following the vesting period, settlement is made in unrestricted Novartis shares or ADRs.

### LONG-TERM INCENTIVES

Novartis operates two Long-Term Incentives (the Long-Term Performance Plan, and the Long-Term Relative Performance Plan) for the Executive Committee, which function in an identical way except for the performance conditions applied.

### **Grant of Long-Term Incentives**

At the beginning of every performance period, Executive Committee members are granted a target number of Performance Share Units (PSUs) under each of the long-term incentives according to the following formula:

STEP 1	Annual Base Compensation	x	Target Incentive %	=	Grant Value
STEP 2	Grant Value	/	Share Price	=	Target Number of PSUs

### Vesting of Long-Term Incentives

At the end of the three-year performance period, the Compensation Committee adjusts the number of PSUs realized based on actual performance against target.

### LONG-TERM INCENTIVE PAYOUT FORMULA

Target number x Perfomance of PSUs Factor	=	Realized PSUs + dividend equivalents
--	---	--

Each realized PSU is converted into one Novartis share at the vesting date. PSUs do not carry voting rights, but do carry dividend equivalents that are reinvested in additional PSUs and paid at vesting to the extent that performance conditions have been met. In the United States, awards may also be delivered in cash under the US deferred compensation plan.

If a participant leaves Novartis due to voluntary resignation or termination by the company for misconduct, none of the awards vest. Where a member is terminated by the company for reasons other than for performance or conduct, the award vests on a pro rata basis for time spent with the company during the performance period. In such a case, the award will vest on the regular vesting date (no acceleration), will be subject to performance should an evaluation be possible, and will also be subject to other conditions such as observing the conditions of a non-compete agreement. Executives leaving Novartis due to approved retirement, including approved early retirement, death or disability, will receive full vesting of their award on the normal vesting date (acceleration will only apply in the case of death). The award will be subject to performance, should an evaluation be possible, and it will also be subject to other conditions such as observing the conditions of a non-compete agreement. Further details can be found in Note 26 of the Financial Statements (page 207).

The Board and Compensation Committee retain accountability for ensuring that rules are applied correctly, and for determining whether different treatment should apply in exceptional circumstances. This is necessary to ensure that the treatment of any award in the event of cessation of employment is appropriate.

### Long-Term Performance Plan (LTPP)

This is the first of the two long-term incentive plans.

### Overview

The LTPP, as described below, was granted for the first time to the CEO and Executive Committee members in 2014. The target incentive is 200% of base compensation for the CEO, and ranges from 140% to 190% for other Executive Committee members. Additional executives in key positions, with a significant impact on the long-term success of Novartis, will be invited to participate in the LTPP, as of 2015.

In previous Compensation Reports, there was a different plan which was also called LTPP. In this Compensation Report, that plan has been renamed Old Long-Term Performance Plan (OLTPP), and is described on page 114.

### Performance measures

Awards under the LTPP are based on rolling three-year performance objectives, which are established at the time of grant and split as follows:

	75% Financial	25% Innovation	
Measure	Novartis Cash Value Added (NCVA)	Up to 10 key Innovation Milestones	
CEO & Function Heads	100% 0	Weighted Average of Division Performance	
Division Heads	- 100% Group -	100% Division	

### Financial measure (Novartis Cash Value Added) – 75% of LTPP

The Novartis Cash Value Added (NCVA) is a metric that is based on what the company assesses to be its cash flow return less a capital charge on gross operating assets. A summary of the calculation is below:

### CALCULATION FORMULA FOR NOVARTIS CASH VALUE ADDED (NCVA)

### **Operating income**

- + Amortization, impairments and adjusting for gains/losses from non-operating financial assets
- Taxes
- Capital charge (based on WACC<sup>1</sup>) on gross operational assets
- = NCVA<sup>2</sup>

<sup>1</sup>WACC = Weighted average cost of capital

 $^2$  NCVA = (Cash flow return on investment (CFROI) % – WACC<sup>1</sup>) x gross operational assets Note: NCVA is calculated in constant currencies

NCVA replaced Novartis Value Added (NVA), used in the calculation of the payout of the Old Long-Term Performance Plan (OLTPP), as the primary internal financial measure used for this LTPP. The company has built a framework that links its strategy with CFROI (Cash flow return on investment) and NCVA and shows how all levels of the organization can impact CFROI/ NCVA and drive value creation. In future, the Committee will continue to evaluate this performance metric to ensure that it aligns with the company strategy, particularly given the changes to the business model following the portfolio review.

The three-year targets are determined considering expected growth rates in sales, operating income and return from invested capital, under foreseen economic circumstances.

At the end of the performance cycle, the NCVA performance factor is calculated. The NCVA performance factor is based on

a 1:3 payout curve, where a 1% deviation in realization versus target leads to a 3% change in payout (for example, a realization of 105% leads to a payout factor of 115%). If performance over the three-year vesting period falls below 67% of target, no payout is made for this portion of LTPP. If performance over the three-year vesting period is above 133% of target, payout for this portion of LTPP is capped at 200% of target.

The calculated performance realization is adjusted for unplanned major events during the cycle (e.g. significant merger and acquisition transactions).

### Innovation measure – 25% of LTPP

Innovation is a key element of the Novartis strategy. Divisional innovation targets are set at the beginning of the performance cycle, comprised of up to ten target milestones that represent the most important research and development project milestones for each division. These milestones are chosen because of the expected future impact to Novartis in terms of potential revenue, or due to their qualitative potential impact to science, medicine and the treatment or care of patients. The CEO and function heads receive the weighted average of divisional innovation payouts.

The Research and Development Committee, established during 2014, gave input to the Board during the innovation target-setting process for targets under the LTPP for the first time. It also assists the Board and Compensation Committee in evaluating performance against the innovation targets at the end of the cycle.

A payout matrix has been established for this metric that allows 0–150% payout for the achievement of the target milestones. If all target milestones are achieved, a payout of 150%-200% may be awarded for extraordinary additional achievement.

### Long-Term Relative Performance Plan (LTRPP) Overview

This is the second of the two long-term incentive plans.

The LTRPP was granted for the first time to the CEO and Executive Committee members in 2014. The target incentive is 100% of base compensation for the CEO, and ranges from 30% to 90% for other Executive Committee members.

#### Performance measure

LTRPP is based on the achievement of long-term relative Group Total Shareholder Return (TSR) versus the peer group of 12 companies in the healthcare industry over rolling three-year performance periods. TSR is calculated in USD as share price growth plus dividends over the three-year performance period. The calculation will be based on Bloomberg standard published TSR data, which is publicly available.

The peer group for the 2014–2016 performance cycle is the same as for determining the compensation of Executive Committee members and is comprised of Abbott, AbbVie, Amgen, AstraZeneca, Bristol-Myers Squibb, Eli Lilly & Company, GlaxoSmithKline, Johnson & Johnson, Merck & Co., Pfizer, Roche and Sanofi.

At the end of the performance period, all companies are ranked in order of highest to lowest TSR, and the position in the peer group determines the payout range as follows:

#### **PAYOUT MATRIX**

Position in peer group	Payout range
Positions 1–3	160%-200%
Positions 4–6	100%-140%
Positions 7–10	20%-80%
Positions 11–13	0%

The Compensation Committee determines the payout within the ranges shown, and takes into consideration factors such as absolute TSR, overall economic conditions, currency fluctuations and other unforeseeable situations.

### TARGET DISCLOSURE

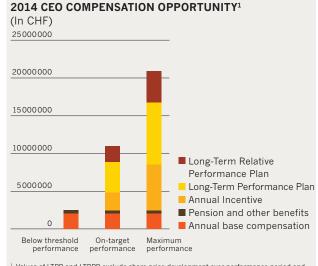
Novartis strives for transparency in relation to pay for performance. Internal financial, innovation and individual targets under the Annual Incentive plan and the LTPP are considered confidential at the time of setting. This is because communicating such targets would allow substantial insight into Novartis' forward-looking strategies and therefore would place the company at a competitive disadvantage. In order to ensure transparency whilst avoiding competitive risk, they will be disclosed to shareholders together with the achievements against such targets under both plans at the end of each performance cycle.

#### MALUS AND CLAWBACK

Any incentive compensation paid to members of the Executive Committee is subject to "malus" and "clawback" rules. This means that the Board of Directors for the CEO, or the Compensation Committee for the other members of the Executive Committee, may decide not to pay any unpaid or unvested incentive compensation (malus), or seek to recover incentive compensation that has been paid in the past (clawback), where the payout has been proven to conflict with internal management standards including company policies and accounting policies or a violation of law. This principle applies to both the Annual Incentive and to the Long-Term Incentives.

#### **2014 CEO TARGET COMPENSATION**

In January 2014, at target, the CEO's compensation was made up of 18% annual base compensation, 2% benefits, 27% Annual Incentive and 53% Long-Term Incentive. The Long-Term Incentive was split according to a ratio of 2:1 LTPP to LTRPP.



<sup>1</sup> Values of LTPP and LTRPP exclude share price development over performance period and exclude dividend equivalent rights.

### 2014 EXECUTIVE COMMITTEE COMPENSATION

### **2014 CEO COMPENSATION**

The 2014 compensation of the CEO is outlined in detail within this section:

Base salary: The CEO's base salary remained CHF 2 060 500 for 2014.

Benefits: The CEO received pension benefits of 165 584 and other benefits of 222 818 during 2014.

**Annual Incentive:** Overall, the company exceeded its financial targets for the year set by the Board in constant currencies. The Group was marginally behind its sales target, despite continued success of growth products and expansion into emerging growth markets. Group net income was ahead of target mainly due to the cost control measures taken, which translated into strong operating income performance. Corporate net result was ahead of target mainly due to proceeds from Novartis Venture Fund divestments and lower taxes. Strong performance in Group free cash flow as a percentage of sales was mainly due to higher cash flows from operating activities, hedging gains and proceeds from Novartis Venture Fund divestments. Finally, the Group finished ahead of innovation targets set for 2014, with 13 major approvals in key markets and important pipeline advancements (e.g. LCZ696, Zykadia).

### **CEO 2014 BALANCED SCORECARD**

	Performance metrics	Individual Weight	Target	Realization (versus target in constant currencies)
	Group net sales	20%	USD 59 592 m	Slightly below
	Corporate net result <sup>1</sup>	20%	USD -2 898 m	Significantly exceeded
Group Financial	Group net income	30%	USD 10 240 m	Exceeded
and Innovation Targets	Group free cash flow as % of sales	20%	17%	Significantly exceeded
	Innovation	10%	Weighted average of division Innovation payouts	Exceeded
	Total	100%		Overall exceeded targets
	Specific financial targets		(cc), and ahead of target (cc) after a impairment charge of USD 1.1 billio the influenza vaccines business as	6 ahead of prior year in constant currencies adjusting for an exceptional pre-tax on related to the pending divestment of a result of the portfolio transformation. ead of prior year (in cc) and core EPS
	Innovation and growth		to invest in its pipeline, with the No producing 13 new "Proof of Concep many key Pharmaceuticals Division trial read-out for LCZ696 in chronic surgical suite and Sandoz progresse	vation and growth. The company continue vartis Institutes of BioMedical Research ts" (above target). In total, Novartis secure: approvals, including an important positiv theart failure. Alcon launched its cataract ed its biosimilars pipeline. Growth product: and total emerging growth markets have r (cc).
Individual Objectives	Portfolio review		portfolio review, and is in the proces and subject to regulatory approval, divisions: Pharmaceuticals, Alcon a leading to the divestment of the Ani	the company. Novartis completed its is of closing the transactions. Going forward the company will focus on three leading nd Sandoz. The closure of the transactions imal Health Division (January 1, 2015) and lanuary 9, 2014) unit took place succesfully
Organization, quality and customer satisfaction	quality and customer		There were 247 health authority ins acceptable, with two deemed unsai company accelerated the process of	ce paid off across the Novartis network: spections in 2014, 243 were good or tisfactory and two pending. In addition, th of upgrading its compliance and integrity development. However, the company was nee and reputation challenges.
	Cross-divisional		Novartis created Novartis Business the business. The launch has progr	Services to better capture synergies acros

<sup>1</sup>Corporate net result includes corporate cost, income from associated companies, net financial income and income taxes

Details of the performance management process for the CEO are included in page 120. Following a thorough performance evaluation, including assessed Values and Behaviors, the Compensation Committee determined that the CEO's Annual Incentive performance factor would be 130%. The value of his Annual Incentive award was determined as follows:

2014 CEO ANNUAL INCENTIVE									
	Annual base salary (CHF 000)	x	Target incentive %	x	Performance Factor	=	Final award (CHF 000)		
Annual Incentive	2 061	х	150%	- x	130%	=	4 018 <sup>1</sup>		

<sup>1</sup>50% of the Annual Incentive was paid in cash and 50% was paid as 23 706 restricted share units, which will have a three-year vesting period.

The table below shows how the 2014 long-term incentive grants of the CEO were determined. These grants were awarded under the LTPP and LTRPP and will vest to the extent that performance conditions have been met for the 2014-2016 cycle. An overview of these plans is outlined on pages 105-107.

2014 CEO LONG TERM INCENTIVE GRANTS									
	Annual base salary (CHF 000)	x	Target incentive %	=	Grant value (CHF 000)	Number of RSUs <sup>1</sup> (Share price = 73.75)			
LTPP	2 061	х	200%	=	4 122	55 878			
LTRPP	2 061	х	100%	=	2 061	27 939			

<sup>1</sup>Achievement will be reported in the 2016 Compensation Report.

### EXECUTIVE COMMITTEE COMPENSATION TABLES (AUDITED)

### COMPENSATION OF MEMBERS OF THE EXECUTIVE COMMITTEE FOR 2014

The following table discloses the compensation paid or granted to the CEO and other members of the Executive Committee for performance in 2014.

### ALIGNMENT OF REPORTING AND PERFORMANCE

The compensation table synchronizes the reporting of Annual Incentive compensation with the performance in the given year (i.e., all amounts awarded for performance in 2014 are disclosed in full). This includes the restricted shares granted under the Annual Incentive, which will vest three years following the grant based on plan rules.

For the LTPP and LTRPP, the target values (based on 100% achievement) at the time of grant are shown. In the past, the Old Long-Term Performance Plan (OLTPP) was only reported in the Executive Committee compensation tables at vesting. This change allows an alignment between reporting and the new binding vote on Executive Committee compensation. It

also increases transparency, as both the grant and vesting of long-term incentives are reported to shareholders.

The performance and vesting value of the LTPP and LTRPP for the 2014–2016 performance cycles will be reported in the 2016 Compensation Report.

The achievement against target, and vesting value of the OLTPP performance cycle 2012–2014 is shown in a separate table on page 114.

### VALUATION PRINCIPLES

For the purpose of the tables contained within this Compensation Report, and in order to allow a comparison with other companies, Novartis shares and ADRs are disclosed at their market value on the date of grant. Market value is the quoted closing share price at that date. Restricted shares and RSUs are disclosed at the underlying value of Novartis shares and ADRs. PSUs are also valued for the purpose of this Compensation Report at the underlying value of the Novartis shares and ADRs at the grant date, and are disclosed at target value, assuming that they will vest at 100% achievement.

### EXECUTIVE COMMITTEE MEMBER COMPENSATION FOR FINANCIAL YEAR 2014<sup>1</sup>

	-								
	_	Fixed compension be			Variable com	pensation			
		Base compensation	Pension benefits	2014 Annual II	ncentive (AI)	Long-Term Performance Plan (LTPP) 2014–2016 cycle	Long-Term Relative Performance Plan (LTRPP) 2014–2016 cycle	Other	Total compensation
	Currency	Cash (Amount)	(Amount) <sup>2</sup>	Cash (Amount)	Shares (Value at grant date) <sup>3</sup>	PSUs (Target value at grant date) <sup>4</sup>	PSUs (Target value at grant date) <sup>4</sup>	(Amount) <sup>5</sup>	(Amount) <sup>6</sup>
Joseph Jimenez (Chief Executive Officer)	CHF	2 060 500	165 584	2 009 000	2 009 084	4 121 003	2 060 501	222 818	12 648 490
Steven Baert (as of February 26, 2014)	CHF	482 426	68 963	309 212	309 253	709 328	136 438	103 147	2 1 18 767
Juergen Brokatzky-Geiger (until February 25, 2014) <sup>7</sup>	CHF	110 650	22 454	0	0	0	0	3 245 256	3 378 360
Kevin Buehler (until April 30, 2014) <sup>8</sup>	USD	382 691	82 991	230 400	230 384	729 614	345 620	4 139 920	6 141 620
Felix R. Ehrat	CHF	875 000	154 299	0	1 408 037	1 496 019	440 066	8 928	4 382 349
David Epstein	USD	1 400 000	343 460	1 260 000	1 260 050	2 520 002	1 260 001	277 804	8 321 317
Mark C. Fishman	USD	990 000	294 572	1 009 800	1 009 818	1 881 034	891 033	78 369	6 154 626
Richard Francis (as of May 1, 2014) <sup>9</sup>	CHF	466 667	114 435	211 450	211 451	871 135	186 735	3 364 623	5 426 496
Jeff George	USD	924 520	127 826	654 341	654 416	1 470 358	275 692	1 084 850	5 192 003
George Gunn <sup>10</sup>	CHF	865 000	116 542	622 800	622 828	1 384 066	346 035	0	3 957 271
Harry Kirsch	CHF	829 167	148 526	888 250	888 265	1 360 024	425 021	31 980	4 571 233
Brian McNamara	USD	673 077	76 484	578 000	578 083	1 020 055	204 076	77 717	3 207 492
Andrin Oswald	CHF	827 500	125 406	539 500	539 519	1 162 005	249 054	233 675	3 676 659
André Wyss (as of May 1, 2014)	CHF	466 667	59 703	0	736 223	935 003	249 349	58 045	2 504 990
Total 11	CHF	10 978 356	1 821 737	7 992 041	10 136 681	19 004 820	6 813 877	12 440 922	69 188 434

See page 122 for 2013 compensation figures.

<sup>1</sup> Does not include reimbursement for travel and other necessary business expenses incurred in the performance of their services as these amounts are not considered compensation. In general, for those who have left the Executive Committee of Novartis (ECN) in the course of 2014, the information under the columns "Base compensation", "Pension benefits", "Annual Incentive", "Long-Term Performance Plan" and "Long-Term Relative Performance Plan" in the table above reflects their pro rata compensation over 2014 for the period they were a member of the ECN. The information under the column "Other" includes inter alia their pro-rata compensation from the date they stepped down from the ECN to December 31, 2014. For those who have joined the ECN in the course of 2014, the information under the columns "Base compensation", "Annual Incentive" includes their pro-rata compensation from the date they joined the ECN to December 31, 2014. The information under the "Long-Term Performance Plan" and "Annual Incentive" includes their pro-rata compensation from the date they joined the ECN to December 31, 2014. The information under the "Long-Term Performance Plan" and "Annual Incentive" includes their pro-rata compensation from the date they joined the ECN to December 31, 2014. The information under the "Long-Term Performance Plan" and

"Long-Term Relative Performance Plan" in the table above reflects their pro rata compensation at target from the date they joined the ECN to December 31, 2016. <sup>2</sup> Includes service costs of pension and post-retirement healthcare benefits accumulated in 2014, in accordance with IAS19. In addition, in compliance with the Minder Ordinance, it

includes an amount of mandatory employer social security contributions of CHF 76 534. This amount provides a right to the maximum future insured government benefit for the members. This is out of a mandatory total of CHF 2 980 528 paid by Novartis to both Swiss and US governmental social security systems. <sup>3</sup> The portion(s) of the Annual Incentive delivered in shares is rounded up to the nearest share based on the closing share price on the grant date, i.e. January 21, 2015.

<sup>4</sup> The amounts shown in these columns represent the underlying share value of the target number of PSUs granted to each ECN member of the performance cycle 2014-2016 based on the closing share price on January 22, 2014. The closing share price on this date was CHF 73.75 per Novartis share and USD 80.79 per ADR.

<sup>5</sup> Includes any other perquisites, benefits in kind, international assignment benefits as per global mobility policy (e.g. housing, international health insurance, children's school fees, tax equalization) and other compensation. Does not include relocation costs paid in 2014.

<sup>6</sup> All amounts are before deduction of employee's social security contribution and income tax due by the Executive Committee member.

<sup>7</sup> Juergen Brokatzky-Geiger stepped down from the Executive Committee on February 25, 2014 and as of February 26, 2014 he has been appointed as Global Head of Corporate Social Responsibility. He remained under the old Executive Committee incentive compensation system. As a result, his variable compensation has been reported in full under the column "Other".

<sup>8</sup> Kevin Buehler stepped down from the Executive Committee on April 30, 2014. In accordance with the contractual 12 month notice period of his employment agreement, he will retire from the Company on April 30, 2015. He will receive further contractual compensation which includes the base salary, pension and other benefits (pro-rata until April 30, 2015) and the vesting of his incentive awards in accordance with the terms of the Novartis plan rules. His compensation does not include an annual pension in payment (USD 507 017) following the acquisition of Alcon in 2011.

<sup>9</sup> Richard Francis will receive compensation in the form of 41 500 Restricted Stock Units (RSUs) for lost entitlements at his former employer with a total value at grant of CHF 3.2 million. The vesting of the RSUs will be staggered based on the vesting period at his former employer, and extend over the period from 2015-2017, provided that he remains employed with Novartis at the respective due dates. 21 500, 13 500 and 6 500 RSUs will respectively vest on February 1, 2015, 2016 and 2017,

<sup>10</sup> Following the completion on January 1, 2015 of the transaction with Eli Lilly, George Gunn, Division Head, Novartis Animal Health, stepped down from the Executive Committee of Novartis. He will provide assistance with regard to the post-closing divestment of Animal Health until he will reach his contractual retirement age in July 2015. George Gunn will receive further contractual compensation which includes the base salary, pension and other benefits (pro-rata until July 31, 2015) and the vesting of his incentive awards in accordance with the terms of the Novartis plan rules.

<sup>11</sup> Amounts in USD for Kevin Buehler, David Epstein, Mark C. Fishman, Jeff George and Brian McNamara were converted at a rate of CHF 1.00 = USD 1.094, which is the same average exchange rate used in the Group's consolidated financial statements. At the time of his appointment as Head of Alcon, Jeff George's Swiss employment agreement was replaced with a US employment agreement in US dollars.

### EXECUTIVE COMMITTEE MEMBER – EQUITY AWARDS FOR FINANCIAL YEAR 2014 (NUMBER OF EQUITY INSTRUMENTS) $^{\rm 1}$

		Variable com	pensation	
	2014 Annual Incentive (Al) 20	Long-Term Performance Plan (LTPP) )14–2016 cycle 20	Long-Term Relative Performance Plan (LTRPP) 014–2016 cycle	Other
	Equity (Number) <sup>2</sup>	Target PSUs (Number) <sup>3</sup>	Target PSUs (Number) <sup>3</sup>	Equity/ Target PSUs (Number)
Joseph Jimenez	23 706	55 878	27 939	0
Steven Baert (as of February 26, 2014)	3 649	9 618	1 850	0
Juergen Brokatzky-Geiger (until February 25, 2014)	0	0	0	30 9534
Kevin Buehler (until April 30, 2014)	2 333	9 0 3 1	4 278	31 936
Felix R. Ehrat	16 614	20 285	5 967	0
David Epstein	12 760	31 192	15 596	0
Mark C. Fishman	10 226	23 283	11 029	0
Richard Francis (as of May 1, 2014)	2 495	11 812	2 532	41 5005
Jeff George	6 627	18 224	3 417	0
George Gunn	7 349	18 767	4 692	0
Harry Kirsch	10 481	18 441	5 763	0
Brian McNamara	5 854	12 626	2 526	0
Andrin Oswald	6 366	15 756	3 377	0
André Wyss (as of May 1, 2014)	8 687	12 678	3 381	0
Total	117 147	257 591	92 347	104 389

See page 123 for 2013 compensation figures.

<sup>1</sup>See also corresponding footnote 1 of the table 'EXECUTIVE COMMITTEE MEMBER COMPENSATION FOR FINANCIAL YEAR 2014' with regard to the Executive Committee members who have left or joined the ECN in the course of 2014.

<sup>2</sup> Vested shares, Restricted Shares and/or Restricted Stock Units (RSUs) granted under the Annual Incentive for performance year 2014.

<sup>3</sup> Target number of Performance Share Units (PSUs) granted under the LTPP and LTRPP as applicable for the 2014-2016 performance cycle.

<sup>4</sup>Juergen Brokatzky-Geiger remained under the old Executive Committee compensation system. The information under the column "Other" includes the following equity awards: 12 638 Restricted Shares granted under the Novartis Equity Plan Select, 6 342 investment shares and 3 171 matching shares under the Employee Share Ownership Plan (ESOP) and 8 802 target PSUs under the Old Long-Term Performance Plan (OLTPP) for the 2014-2016 performance cycle.

<sup>5</sup> This amount reflects the total number of RSUs granted to Richard Francis in 2014 as compensation for lost entitlements at his former employer on joining Novartis.

#### EXECUTIVE COMMITTEE MEMBER COMPENSATION BASE AND VARIABLE COMPENSATION MIX FOR FINANCIAL YEAR 2014<sup>1</sup>

	Base salary	Variable compensation <sup>2</sup>
Joseph Jimenez	16.8%	83.2%
Steven Baert (as of February 26, 2014)	24.8%	75.2%
Felix R. Ehrat	20.7%	79.3%
David Epstein	18.2%	81.8%
Mark C. Fishman	17.1%	82.9%
Richard Francis (as of May 1, 2014)	24.0%	76.0%
Jeff George	23.2%	76.8%
George Gunn	22.5%	77.5%
Harry Kirsch	18.9%	81.1%
Brian McNamara	22.0%	78.0%
Andrin Oswald	24.9%	75.1%
André Wyss (as of May 1, 2014)	19.5%	80.5%
Total <sup>3</sup>	19.8%	80.2%

<sup>1</sup>Excludes pension and other benefits/compensation.

<sup>2</sup>See the table 'EXECUTIVE COMMITTEE MEMBER COMPENSATION FOR FINANCIAL YEAR 2014' on page 110 with regard to the disclosure principles of variable

compensation.

<sup>3</sup>Excludes Juergen Brokatzky-Geiger and Kevin Buehler who stepped down from the Executive Committee during 2014.

### LOANS TO MEMBERS OF THE EXECUTIVE COMMITTEE

No loans were granted to current or former members of the Executive Committee or to "persons closely linked"<sup>1</sup> to them in 2014. No such loans were outstanding as of December 31, 2014.

### OTHER PAYMENTS TO MEMBERS OF THE EXECUTIVE COMMITTEE

During 2014, no other payments (or waivers of claims) were made to members of the Executive Committee or to "persons closely linked" to them.

### PAYMENTS TO FORMER MEMBERS OF THE EXECUTIVE COMMITTEE

During 2014, no payments (or waivers of claims) were made to former members of the Executive Committee or to "persons closely linked" to them, except to Jonathan Symonds, our former CFO, who is currently on notice until January 31, 2015. In 2014, he received CHF 2 963 742, including a final payment in January 2015, under his contract as reported in the 2013 Compensation Report. This excludes CHF 69 030 for support on tax return filings and relocation costs.

### DELIVERY OF EQUITY TO NOVARTIS ASSOCIATES

During 2014, a total of 14.5 million shares, RSUs and PSUs were granted to Novartis associates. This corresponded to a value of CHF 1 075 million. 2.36% of total share capital is currently issued under the equity plans to Novartis associates. Novartis uses treasury shares or shares purchased on the open market at fair value to deliver equity to associates, which results in no dilution to existing shareholders.

### SHARE OWNERSHIP REQUIREMENTS FOR MEMBERS OF THE EXECUTIVE COMMITTEE

Executive Committee members are required to own at least a minimum multiple of their annual base compensation in Novartis shares or share options within three years of hire or promotion, as set out in the table below.

Chief Executive Officer	5 x base compensation
Members of the Executive Committee	3 x base compensation

In the event of a substantial rise or drop in the share price, the Board of Directors may, at its discretion, amend that time period accordingly.

The determination of equity amounts against the share ownership requirements is defined to include vested and unvested Novartis shares or ADRs, as well as RSUs acquired under the compensation plans, but excluding unvested matching shares from LSSP and ESOP and unvested PSUs from LTPP and LTRPP. The determination includes other shares as well as vested options of Novartis shares or ADRs that are owned directly or indirectly by "persons closely linked" to them. The Compensation Committee reviews compliance with the share ownership guideline on an annual basis.

As of December 31, 2014, all members who have served at least three years on the Executive Committee have met or exceeded their personal Novartis share ownership requirements.

 $<sup>^{\</sup>rm 1}$  "Persons closely linked" are (I) their spouse, (II) their children below age 18, (III) any legal entities that they own or otherwise control, and (IV) any legal or natural person who is acting as their fiduciary.

### SHARES, ADRS, EQUITY RIGHTS AND SHARE OPTIONS OWNED BY MEMBERS OF THE EXECUTIVE COMMITTEE

The following tables show the total number of shares, ADRs, other equity rights and share options owned by members of the Executive Committee and "persons closely linked" to them as of December 31, 2014.

As of December 31, 2014, no member of the Executive Committee together with "persons closely linked" to them owned 1% or more of the outstanding shares (or ADRs) of Novartis, either directly or through share options.

The market value of share options (previously granted) is calculated using an option pricing valuation model as at the grant date.

#### SHARES, ADRS AND OTHER EQUITY RIGHTS OWNED BY EXECUTIVE COMMITTEE MEMBERS<sup>1</sup>

		Unvested	
	Vested	shares	Total at
	shares	and other	December 31,
	and ADRs	equity rights <sup>2</sup>	2014
Joseph Jimenez	256 685	399 811	656 496
Steven Baert	0	41 476	41 476
Felix R. Ehrat	48 398	95 424	143 822
David Epstein	72 222	267 940 <sup>3</sup>	340 162
Mark C. Fishman	45 054	342 493 <sup>3</sup>	387 547
Richard Francis	0	46 282	46 282
Jeff George	69 457	128 420	197 877
George Gunn	50 000	100 817	150 817
Harry Kirsch	31 860	90 650	122 510
Brian McNamara	19 216	62 511 <sup>3</sup>	81 727
Andrin Oswald	86 305	115 863	202 168
André Wyss	25 940	68 598	94 538
Total <sup>4</sup>	705 137	1 760 285	2 465 422

<sup>1</sup>Includes holdings of "persons closely linked" to members of the Executive Committee (see definition on page 112)

<sup>2</sup>Includes Restricted Shares, Restricted Stock Units (RSUs) and target number of Performance Share Units (PSUs). Matching shares under the Employee Share Ownership Plan (ESOP), Leveraged Share Savings Plan (LSSP) and target number of PSUs are disclosed pro-rata to December 31, unless the award qualified for full vesting under the relevant plan rules. Awards under all other incentive plans are disclosed in full.

<sup>3</sup>Includes both deferred and unvested cash-settled equity awards and holdings of Novartis shares in US defined contribution plans.

<sup>4</sup> Juergen Brokatzky-Geiger and Kevin Buehler stepped down from the Executive Committee on February 25, 2014 and April 30, 2014, respectively. Juergen Brokatzky-Geiger owned 257 640 vested shares and 114 080 unvested shares and other equity rights at February 25, 2014. Kevin Buehler owned 158 090 vested shares and 267 436 unvested shares and other equity rights at April 30, 2014.

### SHARE OPTIONS OWNED BY EXECUTIVE COMMITTEE MEMBERS<sup>1</sup>

	Number of share options		
			Total at December 31,
	2011	Other <sup>2</sup>	2014
Joseph Jimenez	0	157 266	157 266
Jeff George	141 396	0	141 396
Brian McNamara	0	50 764	50 764
André Wyss	0	658 313	658 313
Total <sup>3,4</sup>	141 396	866 343	1 007 739

<sup>1</sup>The last share options under the Novartis Equity Plan "Select" were granted in January 2013.

<sup>2</sup>Share options disclosed for a specific year were granted in that year under the Novartis Equity Plan Select. The column "Other" refers to share options granted in 2008 or earlier, to share options granted to these executives while they were not Executive Committee members (nor Permanent Attendees), and to share options bought on the market by the Executive Committee members or "persons closely linked" to them (see definition on page 112). Share options granted from 2012 onwards are unvested at December 31, 2014.

<sup>3</sup>No other Executive Committee members owned share options at December 31, 2014.

<sup>4</sup> Juergen Brokatzky-Geiger and Kevin Buehler stepped down from the Executive Committee on February 25, 2014 and April 30, 2014, respectively. At February 25, 2014, Juergen Brokatzky-Geiger owned 211 766 share options. At April 30, 2014, Kevin Buehler owned 605 877 share settled appreciation rights resulting from conversion of Alcon equity into Novartis equity.

### PERFORMANCE VESTING OF LEGACY LONG-TERM PERFORMANCE PLAN (2012–2014)

### Overview

Grants are no longer made under this plan to members of the Executive Committee, however performance for the vesting cycles 2012–2014 is reported in this Compensation Report. The final Old Long-Term Performance Plan (OLTPP) cycle 2013–2015 will be reported in the Compensation Report of 2015.

The OLTPP provided grants based on a target percentage of base compensation at the beginning of each plan cycle. It represented 175% of base salary for the CEO.

### Form of award at grant

At the beginning of the performance period, participants were granted a target number of PSUs according to the following formula:

STEP 1	Annual Base Compensation	x	Target Incentive %	=	Grant Value
STEP 2	Grant Value	/	Share Price	=	Target Number of PSUs

#### Performance measure

The rewards were based on rolling three-year Group performance objectives focused on the Novartis Economic Value Added (NVA) measured annually. NVA takes into account Group operating income adjusted for interest, taxes and cost of capital charge. The formula is included on page 151 of the Financial Report.

The NVA performance factor was based on a 1:5 payout curve, where a 1% deviation in realization versus target led to a 5% change in payout (for example, a performance ratio of 105% would have led to a performance factor of 125%). If

performance over the three-year vesting period would have fallen below 80% of target, no shares would have vested. The performance factor was capped at 200% of target, corresponding to an achievement of 20% above target.

### **Delivery at vesting**

At the end of the three-year performance period, the target number of PSUs was multiplied by the performance factor approved by the Compensation Committee. PSUs were converted into Novartis shares and immediately vested. In the United States, awards may also have been delivered in cash under the US deferred compensation plan.

### **OUTCOME OF THE PERFORMANCE CYCLE 2012 – 2014**

Over the three-year performance period, 2012 to 2014, Novartis performed 13.5% ahead of the USD 6.5 billion NVA target, corresponding to a payout of 168% following the application of the 1:5 payout curve. This achievement was mainly driven by strong operating income performance. While the entire three-year cycle was impacted by significant negative exchange rate differences (more than USD 1.4 billion), which are not adjusted in NVA, this was more than offset by strong performance in growth products and in emerging growth markets, and productivity initiatives (procurement and resource allocation). In arriving at the NVA performance score, the Compensation Committee excluded the favorable impact from the delayed entry of generic competition for Diovan monotherapy in the US, income generated from the sale of the Idenix Pharmaceuticals, Inc. and LTS Lohmann Therapie-Systeme AG stakes, and the negative impact from executing the Group portfolio transformation (including an exceptional pre-tax impairment charge of USD 1.1 billion related to the pending divestment of the influenza vaccines business).

The table below shows the vesting of the OLTPP 2012–2014 cycle for the CEO and the other members of the Executive Committee.

### PAYOUT SCHEDULE FOR OLTPP 2012–2014 PERFORMANCE CYCLE<sup>1</sup>

		Grant date		Performance factor payout for OLTPP	Number of Novartis shares	Value realized on vesting at vesting
	Currency	target value of PSUs granted	Number of PSUs granted	2012–2014 cycle	delivered at vesting	date share price
Joseph Jimenez	CHF	3 605 926	66 530	168%	111 771	9 472 592
Other 13 members of the Executive Committee	CHF	7 783 335	142 747	168%	239 822	20 539 978
Total	CHF	11 389 261	209 277	168%	351 593	30 012 570

<sup>1</sup> For those who have left or joined the ECN in the course of the 2012-2014 performance period, the information disclosed under this table reflects the pro-rata LTPP 2012-2014 payout attributable to the period they were a member of the Executive Committee.

For the Executive Committee, including the CEO, the impact of the share price appreciation over the vesting period on the total value realized at vesting was CHF 10.9 million. For the CEO, the impact of the share price appreciation was 3.4 million. This represents 36% of the overall vesting value.

# 2015 EXECUTIVE COMMITTEE COMPENSATION SYSTEM

The 2015 compensation system for members of the Executive Committee will remain the same as the 2014 system (see pages 102-107), except for the Annual Incentive component.

### **ANNUAL INCENTIVE**

The Annual Incentive continues to be based on a payout matrix made up of a balanced scorecard, including financial targets and individual objectives, and an assessment against the Novartis Values and Behaviors.

### BALANCED SCORECARD

Short-term innovation has been removed from the Annual Incentive due to the inclusion of long-term innovation in the LTPP. The removal of this metric has resulted in a corresponding increase in the weighting of Group net sales for the CEO and function heads. Individual objectives will be specific to the business requirements of 2015.

### VALUES AND BEHAVIORS

The updated Values and Behaviors are as follows:

	What we value	Observed Behaviors				
Patients and Customers	Innovation by experimenting and delivering solutions	<ul> <li>Experiments and encourages others to do so</li> <li>Takes smart risks that benefit patients and customers</li> <li>Delivers new solutions with speed and simplicity</li> </ul>				
	Quality by taking pride in doing ordinary things extra- ordinarily well	<ul> <li>Is always looking for better ways to do things</li> <li>Does not compromise on quality and safety and strives for excellence</li> <li>Continuously works to improve own strengths and weaknesses</li> </ul>				
Team	<b>Collaboration</b> by championing high performing teams with diversity and inclusion	<ul> <li>Champions working together in high performing teams</li> <li>Knows self and impact on others</li> <li>Welcomes diversity and inclusion of styles, ideas and perspectives</li> </ul>				
	<b>Performance</b> by prioritizing and making things happen with urgency	<ul> <li>Is passionate to achieve goals, goes the extra mile</li> <li>Puts team results before own success, acknowledges contribution of others</li> <li>Prioritizes, decides and makes things happen with urgency</li> </ul>				
Self	Courage by speaking up, giving and receiving feedback	<ul> <li>Speaks up and challenges the norm</li> <li>Acknowledges when things don't work and learns</li> <li>Gives and accepts constructive feedback</li> </ul>				
	Integrity by advocating and applying high ethical standards every day	<ul> <li>Operates with high ethical standards</li> <li>I Is humble, caring, shows trust, respect and empathy</li> <li>Lives by the code of conduct even when facing resistance or difficulties</li> </ul>				

#### **PAYOUT MATRIX**

In order to align recognition of performance and demonstration of the Novartis Values and Behaviors, the Compensation Committee approved a mirrored payout matrix for the 2015 Annual Incentive, which is outlined below. Changes from the previous matrix applicable for 2014 (page 104) are shown in red.

### **2015 ANNUAL INCENTIVE PAYOUT MATRIX**

					% Payout	
		Exceeded Expectations	3	60-90%	130-160%	170-200%
,	Performance vs. Balanced Scorecard	Fully met Expectations	2	0-70%	90-120%	130-160%
		Partially met Expectations	1	0%	0-70%	60-90%
				1	2	3
				Partially met Ex- pectations	Fully met Ex- pectations	Exeeded Ex- pectations
					Values and E Assessment	<b>Behaviors</b>

### 2014 BOARD COMPENSATION SYSTEM

### BOARD COMPENSATION PHILOSOPHY AND BENCHMARKING

The Board of Directors sets compensation for its members at a level that allows for the attraction and retention of high-caliber individuals with global experience, including a mix of Swiss and International members. The members of the Board of Directors do not receive variable compensation, underscoring their focus on corporate strategy, supervision and governance.

The Board sets the level of compensation for its Chairman and the other members to be in line with relevant benchmark companies, which include other large Swiss-headquartered multinational companies, ABB, Credit Suisse, Holcim, Nestlé, Roche, Syngenta and UBS. This peer group has been chosen for Board compensation due to the comparability of Swiss legal requirements, including broad personal and individual liabilities under Swiss law (and new criminal liability under the Swiss rules regarding executive compensation related to the Minder Initiative) and under US law (due to Novartis' secondary listing on the New York Stock Exchange).

The Board of Directors reviews the compensation of its members, including the Chairman, each year, based on a proposal by the Compensation Committee and advice from its independent advisor, including relevant benchmarking information.

#### **COMPENSATION OF THE CHAIRMAN OF THE BOARD**

As Chairman, Dr. Reinhardt receives total annual compensation valued at CHF 3.8 million. The total compensation is comprised equally of cash and shares, as follows:

- Cash compensation: CHF 1.9 million per year
- Share compensation: annual value equal to CHF 1.9 million of unrestricted Novartis shares

In 2014, the company made employer contributions regarding the Chairman's participation in the Novartis Swiss standard pension and life insurance benefit plans. These contributions amounted to CHF 144 816. From the 2015 Annual General Meeting, Dr. Reinhardt will voluntarily waive the company contribution for pension and insurance benefits.

Dr. Reinhardt also receives compensation for lost entitlements at his former employer, with a total value of EUR 2.6 million, as reported in the 2013 Compensation Report. Payments are staggered based on the vesting period at his former employer, and extend over the period from 2014–2016, provided that he remains in office as Chairman at the respective due dates. On January 31, 2014, he received EUR 748 000 in cash<sup>1</sup>.

For 2014, the Chairman voluntarily waived the increase in compensation to which he is entitled, which is an amount not lower than the average annual compensation increase awarded to associates based in Switzerland (1.5% for 2014). For the year 2015, the Chairman will also voluntarily waive this increase.

 $^{\rm 1}$  On January 31, 2015 and 2016 he will respectively receive EUR 871 251 and EUR 1 045 800.

### COMPENSATION OF THE OTHER MEMBERS OF THE BOARD OF DIRECTORS.

With effect from the AGM 2014, following a detailed review of Board compensation, the Board approved a revised policy, which reflects some of the changes to the company's governance model, and led to a reduction in fees. It better aligns the Board's compensation to the current levels of Swiss peers. The annual fee rates for Board membership and additional functions are included in the table below.

### **2014 BOARD MEMBER ANNUAL FEE RATES**

	Annual fee (CHF)
Chairman of the Board	3 800 0001
Board membership	300 000
Vice Chairman	50 000
Chair of Audit and Compliance Committee	120 000
Chair of the following Committees: — Compensation Committee — Governance, Nomination and Corporate Responsibilities Committee — Risk Committee — Research and Development Committee <sup>2</sup>	60 000
Membership of Audit and Compliance Committee	60 000
Membership of the following Committees: — Compensation Committee — Governance, Nomination and Corporate Responsibilities Committee — Risk Committee — Research and Development Committee	30 000

<sup>1</sup>The Chairman also received company's pension contributions for 2014, which will be removed as of AGM 2015, and payment for loss of other entitlements with his previous employer of EUR 2 665 051.

 $^2{\rm The}$  Chairman receives no additional Committee fees for Chairing the Research and Development Committee.

In addition, the Board adopted the following policies regarding their compensation:

- 50% of compensation is delivered in cash, paid on a quarterly basis in arrears;
- 50% of compensation is delivered in shares in two installments; one six months after the AGM and one twelve months after the AGM; and
- Since the 2014 AGM, Board members bear the full cost of their employee social security contributions, if any, and do not receive share options or pension benefits.

Finally, two Board members, who stepped down at the 2014 AGM, received delegated Board membership fees of CHF 100 000 each per year for their work respectively on the boards of the Novartis Institute for Tropical Diseases and the Genomics Institute of the Novartis Research Foundation.

The Board compensation system will remain unchanged in 2015.

### 2014 BOARD COMPENSATION

#### **BOARD MEMBER COMPENSATION TABLE (AUDITED)**

The following table discloses the 2014 Board member compensation. Board compensation is reported as the amount earned in the financial year. This represents a difference from the 2013 Compensation Report, which reported Board member compensation for the period covering the 2013 AGM to the 2014 AGM.

### BOARD MEMBER COMPENSATION EARNED FOR FINANCIAL YEAR 20141

m	Board		Audit and Compliance Committee	Compen- sation Committee	Governance, Nomination and Corporate Respon- sibilities Committee	Research and Develop- ment Committee <sup>2</sup>	Risk Committee	Chairman's Committee <sup>2</sup>	Delegated board member- ship	Cash (CHF) (A)	Shares (CHF) (B)	Shares (Number) <sup>3</sup>	Other (CHF) (C) <sup>4</sup>	Total (CHF) (A)+(B)+(C) <sup>5</sup>
Joerg Reinhardt <sup>6</sup>	Chair					Chair		Chair		2 058 334	1 741 666	12 180	157 844 <sup>7</sup>	3 957 844
Ulrich Lehner	•	•	•	•	•		•8	•		262 500	262 500	1 527	37 851°	562 851
Enrico Vanni	•	•	•	Chair		•		•		267 500	267 500	1 625	11 173°	546 173
Dimitri Azar	•		•			•				86 250	313 750	2 154	-	400 000
Verena A. Briner	•						•1	.0		166 667	166 667	1 073	7 468°	340 802
William Brody (until February 25, 2	2014) •								• 11	43 750	43 750	-	83 333 <sup>12</sup>	170 833
Srikant Datar	•		Chair	•			•	•		260 000	260 000	1 560	-	520 000
Ann Fudge	•			•	•		•			204 167	204 167	1 268	-	408 334
Pierre Landolt <sup>13</sup>	•				Chair					-	368 333	2 340	7 031 9	375 364
Charles L. Sawyers	•					•				166 667	166 667	1 073	-	333 334
Andreas von Planta	•		•		•		Chair			234 167	234 167	1 462	9 175°	477 509
Wendelin Wiedeking (until February 25, 2	·				•					_	75 000	-	4 482°	79 482
William T. Winters	•									29 167	279 167	1 950	-	308 334
Rolf M. Zinkernagel (until February 25, 2	2014) •				•				• 14	54 167	54 167	_	175 870 <sup>9, 15</sup>	284 204
Total										3 833 336	4 437 501	28 212	494 227	8 765 064

See page 124 for 2013 compensation figures.

<sup>1</sup> Does not include reimbursement for travel and other necessary business expenses incurred in the performance of their services as these are not considered compensation. <sup>2</sup> As of February 26, 2014, the Research & Development Committee has been introduced and the Chairman's Committee disbanded.

<sup>3</sup> Represents the gross number of shares delivered to each Board member in 2014 in respect of the first of two equity instalments for the services from the 2014 AGM to the 2015 AGM. The second equity instalment will take place in February 2015. This number does not include the number of shares for the compensation for services for the period from January 1, 2014 to the 2014 AGM.

<sup>4</sup> In compliance with the Minder Ordinance, it includes an amount of mandatory employer social security contributions of CHF 27 771. This amount provides a right to the

maximum future insured government benefit for the members. This is out of a mandatory total of CHF 359 890 paid by Novartis to both Swiss governmental social security systems.

<sup>5</sup> All amounts are before deduction of employee's social security contribution and income tax due by the Board member.

<sup>6</sup> Does not include EUR 748 000 paid to Joerg Reinhardt on January 31, 2014 for lost entitlements at his former employer. This amount is the first of three instalments comprising to a total amount of EUR 2 665 051, which compensates him for lost entitlements with his previous employer due to him on joining Novartis. The second and third installment are staggered based on the vesting period at his former employer, and extend over the period from 2015-2016, provided that he remains in office as our Chairman at the respective due dates. On January 31, 2015 and 2016 he will respectively receive EUR 871 251 and EUR 1 045 800. The lost entitlements of EUR 2 665 051 of Joerg Reinhardt are included in full in the 2013 Board compensation table on page 124 based on our disclosure policy to report compensation for lost entitlements in full in the year the member of the Board or ECN joined Novartis.

<sup>7</sup> Includes social security costs due by the individual and paid by the company until January 31, 2014 and service costs of pension and post-retirement healthcare benefits accumulated in 2014 in accordance with IAS19.

<sup>8</sup> Until February 25, 2014.

<sup>9</sup> Includes social security costs due by the individual and paid by the company until February 25, 2014. As of February 26, 2014, all Board members bear the full cost of their employee social security.

<sup>10</sup> As of February 26, 2014.

<sup>11</sup> The Board of Directors has delegated William Brody to the Board of Directors of the Genomics Institute of the Novartis Research Foundation (GNF) for the period from the 2014 AGM to the 2016 AGM.

<sup>12</sup> Includes his pro rata compensation for the delegated Board membership of GNF from February 26, 2014 to December 31, 2014.

<sup>13</sup> According to Pierre Landolt, the Sandoz Family Foundation is the economic beneficiary of the compensation.

<sup>14</sup> The Board of Directors has delegated Rolf M. Zinkernagel to the Scientific Advisory Board of the Novartis Institute for Tropical Diseases (NITD) and to the Board of Directors of the Genomics Institute of the Novartis Research Foundation (GNF) for the period from the 2014 AGM to the 2016 AGM.

<sup>15</sup> Includes his pro rata compensation for the delegated Board memberships of NITD and GNF from February 26, 2014 to December 31, 2014.

### RECONCILIATION BETWEEN THE REPORTED BOARD COMPENSATION AND THE AMOUNT ENDORSED BY SHAREHOLDERS AT THE 2014 AGM $^{\rm 1}$

			Less Board				
			compensation paid				
			for the period from	Plus Board			
			January 1, 2014	compensation			
		Board	to the 2014 AGM	to be earned/paid	Total Board	Amount endorsed	
		compensation	(2 months),	(in arrears) for	compensation	by shareholders at	Amount within the
		earned during the	delegated Board	the period from	earned for	the 2014 AGM for	endorsed amount
		financial year 2014	membership fees	January 1, 2015	the period from	the period from	approved by
		(as reported on	and employer	to the 2015 AGM	the 2014 AGM	the 2014 AGM	shareholders at
	Currency	page 117)	social security <sup>2</sup>	(2 months) <sup>3</sup>	to the 2015 AGM	to the 2015 AGM	the 2014 AGM
Joerg Reinhardt	CHF	3 957 844	(670 497)	657 737	3 945 084	3 962 000	Yes
Other Board members	CHF	4 807 220	(1 446 909)4	666 668	4 026 979	4 060 000	Yes
Total	CHF	8 765 064	(2 117 406)	1 324 405	7 972 063	8 022 000	Yes

<sup>1</sup> The amount endorsed in an advisory capacity by shareholders at the 2014 AGM is the total maximum amount of compensation for the members of the Board of Directors covering the period from the 2014 Annual General Meeting to the 2015 Annual General Meeting, i.e. CHF 8 022 000.

<sup>2</sup> It includes an amount of mandatory employer social security contributions of CHF 27 771. This amount provides a right to the maximum future insured government benefit for the members. This is out of a mandatory total of CHF 359 890 paid by Novartis to both Swiss governmental social security systems.

<sup>3</sup> To be confirmed and reported in the Compensation Report of the 2015 Annual Report.

<sup>4</sup> Delegated Board membership fees earned after the 2014 AGM by William Brody and Rolf M. Zinkernagel are included in this amount.

#### Loans to members of the Board of Directors

No loans were granted to current or former members of the Board of Directors or to "persons closely linked" to them during 2014. No such loans were outstanding as of December 31, 2014.

#### Other payments to members of the Board of Directors

During 2014, no payments (or waivers of claims) other than those set out in the Board Member Compensation table (including its footnotes) on page 117 were made to current members of the Board of Directors or to "persons closely linked" to them.

### Share ownership requirements for members of the Board of Directors

The Chairman is required to own a minimum of 30 000 shares and, other members of the Board of Directors are required to own at least 4 000 Novartis shares within three years after joining the Board of Directors, to ensure alignment of their interests with shareholders. Board members are prohibited from hedging or pledging their ownership positions in Novartis shares that are part of their guideline share ownership requirement, and are required to hold these shares for 12 months after retiring from the Board. As of December 31, 2014, all members of the Board of Directors who have served at least three years on the Board of Directors have complied with the share ownership guidelines.

### Shares, ADRs and share options owned by members of the Board of Directors

The total number of vested Novartis shares and ADRs owned by members of the Board of Directors and "persons closely linked" to them as of December 31, 2014, is shown in the table below.

As of December 31, 2014, no member of the Board of Directors together with "persons closely linked" to them owned 1% or more of the outstanding shares (or ADRs) of Novartis. As of the same date, no member of the Board of Directors held any share options.

### SHARES AND ADRS OWNED BY BOARD MEMBERS<sup>1</sup>

	Number of shares <sup>2</sup>
	At
	December 31,
	2014
Joerg Reinhardt	466 951
Ulrich Lehner	36 405
Enrico Vanni	13 805
Dimitri Azar	7 258
Verena A. Briner	4 845
Srikant Datar	30 792
Ann Fudge	14 112
Pierre Landolt <sup>3</sup>	52 290
Charles L. Sawyers	2 933
Andreas von Planta	122 709
William T. Winters	3 590
Total <sup>4</sup>	755 690

<sup>1</sup>Includes holdings of "persons closely linked" to Board members (see definition on page 112).

<sup>2</sup>Each share provides entitlement to one vote.

<sup>3</sup>According to Pierre Landolt, the Sandoz Family Foundation is the economic beneficiary of the shares.

<sup>4</sup>William Brody, Wendelin Wiedeking and Rolf M. Zinkernagel stepped down from the Board of Directors on February 25, 2014. At February 25, 2014, William Brody owned 17 356 shares, Wendelin Wiedeking 278 139 shares and Rolf M. Zinkernagel 40 000 shares.

#### Payments to former members of the Board of Directors

During 2014, no payments (or waivers of claims) were made to former Board members or to "persons closely linked" to them, except for the amounts reported in Note 27 to the Group's audited consolidated financial statements (page 212).

### Note 27 to the Group's audited consolidated financial statements

The total expense for the year for the compensation awarded to the members of the Board of Directors and the members of the Executive Committee using IFRS measurement rules is presented in the Financial Report in note 27 to the Group's audited consolidated financial statements.

### COMPENSATION GOVERNANCE

#### **LEGAL FRAMEWORK**

The Swiss Code of Obligations as well as the Corporate Governance Guidelines of the SIX Swiss Exchange require listed companies to disclose certain information about the compensation of members of the Board of Directors and members of the Executive Committee, their equity participation in the Group as well as loans made to them. This Annual Report fulfills that requirement. In addition, the Annual Report is in line with the principles of the Swiss Code of Best Practice for Corporate Governance of the Swiss Business Federation (economiesuisse).

### **COMPENSATION DECISION-MAKING AUTHORITIES**

Authority for decisions related to compensation are governed by the Articles of Incorporation, the Board Regulations and the Compensation Committee Charter, which are all published on the company website: www.novartis.com/corporate-governance. Amendments to the Articles of Incorporation will be proposed at the 2015 AGM (see brochure "Shareholder Information on the Compensation Votes at the 2015 AGM", which will include a description of the tasks and responsibilities of the Compensation Committee). Pending approval, the Board Regulations (including the charter of the Compensation Committee) will be amended accordingly. The current main responsibilities of the Compensation Committee are shown under "Corporate Governance Report – Board of Directors – Role of the Board of Directors and the Board Committees on page 78."

The Compensation Committee serves as the supervisory and governing body for compensation policies and plans within Novartis and has overall responsibility for determining, reviewing and proposing compensation policies and plans for approval by the Board of Directors in line with the Compensation Committee Charter. A summary of discussions and conclusions of each committee meeting is delivered to the full Board. A summary of the compensation decision-making authorities is set out below:

#### COMPENSATION AUTHORIZATION LEVELS WITHIN THE PARAMETERS SET BY THE SHAREHOLDER'S MEETING

Decision on	Authority				
Compensation of Board members	Board of Directors				
Compensation of the Chief Executive Officer	Board of Directors				
Compensation of the Executive Committee members	Compensation Committee				

#### **COMMITTEE MEMBER INDEPENDENCE**

The Compensation Committee is composed exclusively of members of the Board of Directors who meet the independence criteria set forth in the Board Regulations. From the 2014 AGM, the Compensation Committee had the following four members: Ann Fudge, Enrico Vanni, Srikant Datar and Ulrich Lehner. Enrico Vanni has served as Chair since 2012. William Brody retired at the AGM 2014 and Ulrich Lehner will not stand for re-election at the 2015 AGM.

### ROLE OF THE COMPENSATION COMMITTEE'S INDEPENDENT ADVISOR

The Compensation Committee retained Frederic W. Cook & Co. Inc. as its independent external compensation advisor for 2014. The advisor was hired directly by the Compensation Committee in 2011, and the Committee has been fully satisfied with the performance and independence of the advisor since its engagement. Frederic W. Cook & Co. Inc. is independent of management and does not perform any other consulting work for Novartis. In determining whether or not to renew the engagement with the advisor, the Compensation Committee evaluates, at least annually, the quality of the consulting service, the independence of the advisor and the benefits of rotating advisors.

### **COMPENSATION COMMITTEE MEETINGS HELD IN 2014**

In 2014, the Compensation Committee held six formal meetings and three additional joint meetings with the Governance, Nomination and Corporate Responsibilities Committee to implement the requirements of the Swiss rules regarding executive compensation related to the Minder Initiative in 2014. It also held two additional joint meetings with the Risk Committee to review risk within the compensation systems for executives and other associates, including the sales force. The Compensation Committee conducted a performance self-evaluation in 2014, and conducted a review of its charter, as it does every year.

### COMPENSATION GOVERNANCE AND RISK MANAGEMENT

The Compensation Committee, with support from its independent advisor, reviews market trends in compensation and changes in corporate governance rules. It also reviews, together with the Risk Committee, the Novartis compensation systems to ensure that it does not encourage inappropriate or excessive risk taking and instead encourages behaviors that support sustainable value creation.

A summary of the risk management principles is outlined below:

#### **RISK MANAGEMENT PRINCIPLES**

- **Rigorous** performance management process, with approval of targets and evaluation of performance for the CEO by the Board of 12 months Directors
- Balanced mix of short-term and long-term variable compensation elements
- Balanced scorecard approach to performance evaluation under the annual incentive, including values and behaviors
- Clawback principles
- Performance-vesting longterm incentives only, with three-year overlapping cycles

- Variable compensation is capped at 200% of target Contractual notice period of
  - Post-contractual noncompete limited to a maximum of 12 months (annual base compensation and annual incentive of the prior year only)
  - No severance payments or change of control clauses
  - Share ownership requirements; no hedging or pledging of Novartis share ownership position (this element also applies to Board members)

During 2014, the Board revised the employment contracts of all Executive Committee members to align with the new Swiss law. Executive Committee employment contracts provide for a notice period of up to 12 months and contain no change-ofcontrol clauses or severance provisions (i.e. agreements concerning special notice periods, longer-term contracts, "golden parachutes", waiver of lock-up periods for equities and bonds, shorter vesting periods and additional contributions to occupational pension schemes).

### **EXECUTIVE COMMITTEE PERFORMANCE MANAGEMENT PROCESS**

To foster a high-performance culture, the company applies a uniform Performance Management Process worldwide, based on quantitative and qualitative criteria, including Novartis Values and Behaviors. Novartis associates, including the CEO and the members of the Executive Committee, are subject to a three-step formal process.



#### Performance management process for the CEO

At the beginning of the year, the CEO presents the Group and divisional financial targets to the Board for approval. The Board also approves the performance against these targets at year end.

The CEO discusses his individual objectives for the coming vear with the Chairman of the Board. The Board of Directors reviews and approves these objectives, which are incorporated into the balanced scorecard used for evaluating the CEO's performance. Details of the individual objectives for the CEO for 2014 are on page 108.

The Board of Directors periodically assesses the Group business performance and progress of the CEO against his objectives and incentive plan targets. At the mid-year performance review, the performance of the CEO is reviewed by the Chairman. For the year-end review, the CEO prepares and presents to the Chairman, and later to the Board of Directors, the actual results against the previously agreed-upon objectives, taking into account the audited financial results as well as an assessment against the Novartis Values and Behaviors. At the year-end review the Board of Directors discusses the performance of the CEO without him being present. It evaluates the extent to which targeted objectives have been achieved and, to the extent possible, compares these results with peer industry companies, taking into account general economic and financial criteria and industry developments. The Board of Directors later shares its assessment with the CEO.

At its January meeting, following a recommendation from the Compensation Committee, the Board of Directors decides on the CEO's variable compensation for the prior performance cycles and the target compensation for the coming year. This meeting takes place without the CEO being present. The Board of Directors later shares its decisions with the CEO.

#### Performance management process for the other members of the Executive Committee (excluding the CEO)

Executive Committee members set their individual objectives with the CEO, who also reviews their performance at mid-year and vear-end.

In the presence of the CEO and taking into consideration his recommendations, the Compensation Committee decides in January on the variable compensation of the members of the Executive Committee for the prior year and their target compensation for the coming year. The Compensation Committee informs the Board of its decisions, and the CEO later shares these decisions with the Executive Committee members.

### 2013 COMPARATIVE INFORMATION

The following information was published in the 2013 Compensation Report, and is replicated here, or amended as described, so that shareholders may compare the figures to the 2014 data.

### 2013 EXECUTIVE COMMITTEE COMPENSATION

In the 2015 Compensation Report, all elements of Executive Committee will be directly comparable with the 2014 Compensation Report. However for this year, a full direct comparison is not so straightforward, due to the major changes in the compensation system, as well as the change in reporting of equity compensation to align with the new binding votes on compensation, which are required under Swiss law. The following changes apply compared to the 2013 Compensation Report:

### Compensation System changes in the 2014 Compensation Report

- Introduction of a new Annual Incentive plan, with a mandatory deferred portion
- Removal of Equity Plan "Select", Employee Share
   Ownership Plan, Leveraged Share Savings Plan and Old
   Long-Term Performance Plan
- Rebalancing of the Long-Term Incentives and the Annual Incentive target compensation following the elimination of the above-mentioned plans
- Introduction of new Long-Term Incentive Plans i.e.
   LTPP and LTRPP

### Equity reporting difference in the 2014 Compensation Report

As outlined on page 109, the target values for the new LTPP and LTRPP are shown at the time of grant. In the table on page 122, the OLTPP was only reported in the Executive Committee compensation tables at vesting. This change allows an alignment between reporting and the new binding vote on Executive Committee compensation. It also increases transparency, as both the grant and vesting of long-term incentives is reported to shareholders.

The performance and vesting value of the LTPP and LTRPP for the 2014–2016 performance cycle will be reported in the 2016 Compensation Report. The achievement against target, and vesting value of the OLTPP performance cycle 2012–2014 is shown in a separate table on page 114.

### Social security reporting difference in the 2014 Compensation Report

As outlined in the table on page 110, the compensation under the column "pension benefits" includes service costs of pension and post-retirement healthcare benefits accumulated in 2014 (in accordance with IAS19). In addition, and in compliance with the Minder Ordinance, "pension benefits" include an amount of mandatory employer social security contributions that provides a right to the maximum future insured government benefit for the Executive Committee members, out of a mandatory total amount paid by Novartis to both Swiss and US governmental social security systems. In the table on page 122, the employer social security contributions are not included. Had this item been included in the 2013 Compensation Report, the reported amount would have been CHF 60 840 out of a total amount of CHF 2 802 489.

The 2013 Executive Committee compensation tables are reproduced on the following pages.

### EXECUTIVE COMMITTEE MEMBER MARKET VALUE COMPENSATION FOR PERFORMANCE YEAR 20131

	Base compensation	Variable compensation			Benefits		Total		Total	
		Short-term inc	entive plans	Long-term ince	entive plans					
				Equity Plan "Select"	Old Long-Term Performance Plan (OLTPP)	Pension benefits	Other benefits		Future <sup>8</sup> LSSP/ESOP match	Including <sup>9,10</sup> future LSSP/ESOP match
	Cash (Amount)	Cash (Amount)	Shares (Market value) <sup>2</sup>	Shares (Market value) <sup>3</sup>	Shares (Market value) <sup>4</sup>	(Amount) <sup>5</sup>	(Amount) <sup>6</sup>	(Amount) <sup>7</sup>	Shares (Market value)	(Amount)
Joseph Jimenez (Chief Executive Officer) CHF	2 055 417	1 061 200	0	3 714 124	6 125 823	176 071	93 652	13 226 287	0	13 226 287
Juergen Brokatzky-Geiger CHF	719 417	0	562 639	1 125 130	980 285	111 750	25 521	3 524 742	421 998°	3 946 740
Kevin Buehler USD	1 136 792	755 700	0	3 022 839	2 042 452	221 243	67 832	7 246 858	0	7 246 858
Felix R. Ehrat CHF	841 667	0	718 325	1 436 503	1 155 441	169 575	0	4 321 511	718 325	5 039 836
David Epstein USD	1 400 000	579 600	579 668	2 898 018	2 830 397	375 079	30 013	8 692 775	579 668	9 272 443
Mark C. Fishman USD	990 000	866 300	0	3 465 002	1 765 989	244 152	208 836	7 540 279	0	7 540 279
Jeff George CHF	816 667	387 450	387 483	1 549 856	975 344	126 872	62 607	4 306 279	193 741	4 500 020
George Gunn CHF	865 000	545 000	0	908 305	1 469 616	119 676	44 682	3 952 279	0	3 952 279
Brian McNamara USD	633 231	14 527	567 873	1 164 830	552 038	80 203	30 430	3 043 132	567 873	3 611 005
Andrin Oswald CHF	812 500	0	529 820	1 059 566	877 035	129 813	9 388	3 418 122	529 820	3 947 942
Jonathan Symonds (until April 30, 2013) CHF <sup>11</sup>	310 833	194 792	0	0	1 400 291	56 529	2 985 401	4 947 846	0	4 947 846
Harry Kirsch (as from May 1, 2013) CHF <sup>12</sup>	483 333	263 720	175 820	879 026	428 856	53 918	59 613	2 344 286	175 820	2 520 106
Total 13	10 760 277	4 506 033	3 437 610	20 450 720	20 077 080	1 797 473	3 593 293	64 622 486	3 103 227	67 725 713

<sup>1</sup> Does not include reimbursement for travel and other necessary business expenses incurred in the performance of their services as these are not considered compensation. <sup>2</sup> Participants elected to invest some or all of the value of their annual incentive in the Leveraged Share Savings Plan (LSSP) with a five-year vesting period or the Swiss

Employee Share Ownership Plan (ESOP) with a three-year vesting period rather than to receive cash.

<sup>3</sup> Novartis shares granted under the Novartis Equity Plan "Select" have a three-year vesting period.

<sup>4</sup> Awarded based on the achievement of Novartis Economic Value Added (NVA) objectives over the three-year performance period ended December 31, 2013.

<sup>5</sup> Service costs of pension and post-retirement healthcare benefits accumulated in 2013.

<sup>6</sup> Includes perquisites and other compensation valued at market price. Does not include cost allowances and 2013 tax-equalization regarding the international assignment of David Epstein (USD 90 163), Jeff George (CHF 459 764) and Andrin Oswald (CHF 36 056). Does not include an annual pension in payment for Kevin Buehler as a result of a change of control clause (USD 499 524) relating to the acquisition of Alcon in 2011. Does not include dividend equivalents paid in 2013 to Kevin Buehler (USD 256 784) for pre Alcon merger RSUs grants, to David Epstein (USD 41 150) and Brian McNamara (USD 6 173) for RSUs grants made in or prior to 2010.
<sup>7</sup> The value of all equity grants included in this table has been calculated based on the closing price of January 22, 2014.

<sup>8</sup> Reflects shares to be awarded in the future under the share saving plans, either the five-year Leveraged Share Savings Plan (LSSP) or the three-year Swiss Employee Share Ownership Plan (ESOP). Participants will receive the full amount of additional shares ("matching shares") after the expiration of either the five- or three-year vesting period, assuming that they are still in service on the respective vesting date. Since Juergen Brokatzky-Geiger will reach the statutory retirement age before vesting of the LSSP, the matching award disclosed in the table reflects the value of the applicable prorated number of matching shares at his statutory age of retirement.

<sup>9</sup> The values of the shares and RSUs reflected in this table have been calculated based on market value at the date of grant. The closing share price on the grant date January 22, 2014 was CHF 73.75 per Novartis share and USD 80.79 per ADR.

<sup>10</sup> All amounts are gross amounts (i.e., before deduction of social security and income tax due by the executives). The employer social security contribution is not included.
<sup>11</sup> Jonathan Symonds stepped down from the Executive Committee as of April 30, 2013 and provides advisory work to Novartis since May 1, 2013. The information under the columns "Base compensation", "Short-term incentive plans" and "Pension benefits" in the table reflects his pro rata compensation over the period from January 1, 2013 to April 30, 2013 (i.e. the period during which he was member of the Executive Committee). The information under the column "Long-Term Performance Plan" in the table reflects his pro rata compensation for the performance period from January 1, 2011 to April 30, 2013 (i.e. the portion of the LTPP three-year performance period during which he was a member of the Executive Compensation ("Other benefits") includes the contractual compensation and benefits from May 1, 2013 to December 31, 2013. Jonathan Symonds may receive further contractual compensation until January 2015 up to a maximum of CHF 2,969,293 in addition to relocation and financial planning reimbursements.

<sup>12</sup> The amounts reflect the compensation as Permanent Attendee to the Executive Committee from May 1, 2013 until December 31, 2013.

<sup>13</sup> Amounts in USD for Kevin Buehler, David Epstein, Mark C. Fishman and Brian McNamara were converted at a rate of CHF 1.00 = USD 1.079, which is the same average exchange rate used in the Group's consolidated financial statements.

### EXECUTIVE COMMITTEE MEMBER – EQUITY AWARDS FOR PERFORMANCE YEAR 2013 (NUMBER OF EQUITY **INSTRUMENTS)**

	Var	riable compensat	ion	
	Short-term incentive plans	Long-term inc	entive plans	
	-	Equity Plan "Select"	Old Long-Term Performance Plan (OLTPP)	Future LSSP/ESOP match
	Shares (Number) <sup>1</sup>	Shares (Number) <sup>2</sup>	Shares (Number)	Shares (Number)
Joseph Jimenez (Chief Executive Officer)	0	50 361	83 062	0
Juergen Brokatzky-Geiger	7 629	15 256	13 292	5 722
Kevin Buehler	0	37 416	25 281	0
Felix R. Ehrat	9 740	19 478	15 667	9 740
David Epstein	7 175	35 871	35 034	7 175
Mark C. Fishman	0	42 889	21 859	0
Jeff George	5 254	21 015	13 225	2 627
George Gunn	0	12 316	19 927	0
Brian McNamara	7 029	14 418	6 833	7 029
Andrin Oswald	7 184	14 367	11 892	7 184
Jonathan Symonds (until April 30, 2013) <sup>3</sup>	0	0	18 987	0
Harry Kirsch (as from May 1, 2013) <sup>4</sup>	2 384	11 919	5815	2 384
Total	46 395	275 306	270 874	41 861

<sup>1</sup>These shares have a five-year vesting period under LSSP and a three-year vesting period under ESOP.

<sup>2</sup>These shares awarded under the Equity Plan "Select" have a three-year vesting period.

<sup>3</sup> The shares under the column "Long-Term Performance Plan" in the table reflects his pro rata compensation for the performance period from January 1, 2011 to April 30, 2013 (i.e. the portion of the LTPP three-year performance period during which he was member of the Executive Committee). <sup>4</sup> The amounts reflect the compensation as Permanent Attendee to the Executive Committee from May 1, 2013 until December 31, 2013.

#### 2013 BOARD COMPENSATION

The 2013 Compensation Report shows Board member compensation for the period covering the 2013 AGM to the 2014 AGM. The table is reproduced from the 2013 Annual Report, amended for the change in presentation of the Chairman's lost entitlements at his former employer. In 2014, Board compensation is reported as the amount earned in the financial year. In addition, it may be noted that the Board compensation fees were reduced from the 2014 AGM onwards (see page 116 for details of current fees). Starting in 2014 'other' compensation includes the full amount of lost entitlements from former employers in the year the executive joins the executive committee group or a Board Member joins the Board of Directors. For consistency purposes the lost entitlements of EUR 2 665 051 of Dr Jörg Reinhardt are included in the 2013 compensation table.

### Social security reporting difference in the 2014 Compensation Report

As outlined in the table on page 117, the compensation under the column "other" includes service costs of pension and post-retirement healthcare benefits accumulated in 2014 (in accordance with IAS19). In addition, and in compliance with the Minder Ordinance, "pension benefits" include an amount of mandatory employer social security contributions that provides a right to the maximum future insured government benefit for the Board members, out of a mandatory total amount paid by Novartis to the Swiss governmental social security system. In the table below, these contributions were not included. Had this item been included in the 2013 Compensation Report, the reported amount would have been CHF 32 111 out of a total amount of CHF 795 519.

### **BOARD MEMBER COMPENSATION IN 2013**<sup>1</sup>

	Board member- ship	Vice Chairman	Chairman's Committee	Audit and Compliance Committee	Risk Committee	Compen- sation Committee	Corporate Governance and Delegated Nomination board Committee membership	I (CHF)	Shares (Market value) (CHF) (B) <sup>2</sup>	Shares (Number)	Other (CHF) (C)	Total (CHF) (A)+(B)+(C)
Daniel Vasella (until Feb 22, 2013)³	Chair		Chair	• 4	• 4	•	• 4	707 283	697 148	11 299	1 573 3345	2 977 765
Joerg Reinhardt (as of Aug 1, 2013)	Chair		Chair					791 667	950 023	14 064	3 439 8026	5 181 492
Ulrich Lehner	Chair a.i.7	•	•	•	•	•	•	629 168 <sup>7</sup>	629 217 <sup>7</sup>	10 198	69 825 <sup>8</sup>	1 328 210
Enrico Vanni	•	•	•	•		Chair		355 000	355 022	5 754	41 010 <sup>8</sup>	751 032
Dimitri Azar	•			•				225 000	225 020	3 647	-	450 020
Verena A. Briner	•							175 000	175 043	2 837	18 782 <sup>8</sup>	368 825
William Brody <sup>9</sup>	•					•	•	262 500	262 534	4 255	-	525 034
Srikant Datar	•		•	Chair	•	•		360 000	360 020	5 835	-	720 020
Ann Fudge	•				•	•	•	250 000	250 008	4 052	_	500 008
Pierre Landolt <sup>10</sup>	•						Chair	-	410 058	6 646	21 349 <sup>8</sup>	431 407
Charles L. Sawyers	•							175 000	175 043	2 837	_	350 043
Andreas von Planta	•			•	Chair		•	280 000	280 056	4 539	29 023 <sup>8</sup>	589 079
Wendelin Wiedeking	•				•		•	-	450 040	7 294	26 893 <sup>s</sup>	476 933
William T. Winters	•							175 000	175 043	2 837	_	350 043
Rolf M. Zinkernagel <sup>11</sup>	•						• •	325 000	325 036	5 268	34 382 <sup>8</sup>	684 418
Total <sup>12</sup>								4 710 618	5 719 311	91 362	5 254 400	15 684 329

<sup>1</sup> Does not include reimbursement for travel and other necessary business expenses incurred in the performance of their services as these are not compensation. <sup>2</sup> The value of the shares reflected in this column has been calculated based on market value of the shares at grant date. All shares, except those granted to Joerg Reinhardt,

were granted as per January 17, 2013 against the prevailing share price of CHF 61.70. Joerg Reinhardt's compensation in the form of shares was granted as per August 2, 2013 against the prevailing share price of CHF 67.55.

<sup>3</sup> Daniel Vasella's compensation set out in this table reflects the Chairman period from Jan 1, 2013 to Feb 22, 2013. It does not include an amount of CHF 5.1 million which Daniel Vasella received from the date of the 2013 AGM, when he stepped down as Chairman and Board member, to December 31, 2013.

<sup>4</sup> During his Chairmanship (i.e. until February 22, 2013), Daniel Vasella attended the meetings of these Committees as a guest without voting rights.

<sup>5</sup> Includes inter alia social security costs due by the individual and paid by the company, pension costs for the Chairman period as well as a one-off pension contribution.
<sup>6</sup> Includes social security costs due by the individual and paid by the company, pension costs and the total value of the compensation for lost entitlements at his former employer of EUR 2 665 051. Payments will be staggered based on the vesting period at his former employer, and extend over the period from 2014-2016, provided that he remains in office as our Chairman at the respective due dates. On January 31, 2014, 2015 and 2016 he will respectively receive EUR 748 000, EUR 871 251 and EUR 1 045 800. The lost entitlements were converted at a rate of EUR 1.00 = CHF 1.231, based on the exchange rates used in the Group's consolidated financial statements.

<sup>2</sup> Ulrich Lehner was Chairman of the Board on an ad interim basis for the period from February 22, 2013 until July 31, 2013. For this role and time interval, he received a cash compensation of CHF 395 834 and an equal payment in form of shares granted as per January 17, 2013 against the prevailing share price of CHF 61.70 (6 416 shares) and delivered on August 2, 2013.

<sup>8</sup> Includes social security costs due by the individual and paid by the company.

<sup>9</sup> The Board of Directors has delegated William Brody to the Board of Directors of the Genomics Institute of the Novartis Research Foundation (GNF).

<sup>10</sup> According to Pierre Landolt, the Sandoz Family Foundation is the economic beneficiary of the compensation.

<sup>11</sup> The Board of Directors has delegated Rolf M. Zinkernagel to the Scientific Advisory Board of the Novartis Institute for Tropical Diseases (NITD) and to the Board of Directors of the Genomics Institute of the Novartis Research Foundation (GNF).

<sup>12</sup> Starting in 2014, "Other" compensation includes the full amount of lost entitlements from former employers in the year an executive joins the Executive Committee or a Board member joins the Board of Directors. For consistency purposes, the lost entitlements of EUR 2 665 051 of Joerg Reinhardt are included in the 2013 Board compensation table. In addition, the employer social security contribution is not included in this table.

### Report of the Statutory Auditor on the Compensation Report of Novartis AG

### TO THE GENERAL MEETING OF NOVARTIS AG, BASEL

We have audited pages 109–112 and pages 117–118 of the accompanying Compensation Report of Novartis AG for the year ended December 31, 2014.

### BOARD OF DIRECTORS' RESPONSIBILITY

The Board of Directors is responsible for the preparation and overall fair presentation of the Compensation Report in accordance with Swiss law and the Ordinance against Excessive Compensation in Stock Exchange Listed Companies (Ordinance). The Board of Directors is also responsible for designing the compensation system and defining individual compensation packages.

### AUDITOR'S RESPONSIBILITY

Our responsibility is to express an opinion on the accompanying Compensation Report. We conducted our audit in accordance with Swiss Auditing Standards. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the compensation report complies with Swiss law and articles 14–16 of the Ordinance.

An audit involves performing procedures to obtain audit evidence on the disclosures made in the Compensation Report with regard to compensation, loans and credits in accordance with articles 14–16 of the Ordinance. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatements in the Compensation Report, whether due to fraud or error. This audit also includes evaluating the reasonableness of the methods applied to value components of compensation, as well as assessing the overall presentation of the Compensation Report.

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

### OPINION

In our opinion, the Compensation Report of Novartis AG for the year ended December 31, 2014 complies with Swiss law and articles 14–16 of the Ordinance.

PricewaterhouseCoopers AG



RomaR

**Bruno Rossi** Audit Expert Auditor in charge

Basel, January 26, 2015



**Stephen Johnson** Global relationship partner

## FINANCIAL REPORT



Fernando Sánchez, seated on the left, has Type 2 diabetes but exercises regularly, eats carefully and enjoys socializing, here playing dominos with friends in the Andalusian village of Carcabuey in Spain.



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### 2014 OPERATING AND FINANCIAL REVIEW

This operating and financial review should be read together with the performance summary on pages 22–37 of this Annual Report, and with the Group's consolidated financial statements in this Annual Report, which have been prepared in accordance with International Financial Reporting Standards (IFRS) as published by the International Accounting Standards Board.

#### **OPPORTUNITY AND RISK SUMMARY**

Our financial results are affected, to varying degrees, by external factors. The aging of the global population and prevalence of behaviors that increase the risk of obesity and other chronic diseases is driving demand for treatments that Novartis provides, while the continued rise in healthcare spending causes customers to gravitate toward lower-cost treatment options which we produce at Sandoz and OTC. Advances in the fields of genomics and biotechnology and increasing use of connected medical devices and health information technology provide new opportunities for more tailored treatments to individual patients.

However, the loss of market exclusivity and the introduction of branded and generic competitors could significantly erode sales of our innovative products. Heightened regulatory requirements, the inherent complexity of our industry, and the risk of safety events increase our cost of doing business, and could lead to difficulties in bringing products to market and maintaining supply. The increasing trend of government investigations and litigations against healthcare companies, despite our best efforts to comply with local laws, could also have an adverse effect on our business and reputation.

For more detail on these trends and how they could impact our results, see details starting on page 146.

### Results of operations

In evaluating the Group's performance, we consider not only the IFRS results, but also certain non-IFRS measures, including core results and constant currency results. These measures assist us in evaluating our ongoing performance from year to year and we believe this additional information is useful to investors in understanding our business.

The Group's core results exclude the amortization of intangible assets and impairment charges. They also exclude expenses relating to divestments, the integration of acquisitions, and other income and expense items that are over a USD 25 million threshold that management deems exceptional. A reconciliation between IFRS results and core results is shown on pages 152–155. We present information about our revenue and other key figures relating to operating profit and net income in constant currencies (cc). We calculate constant currency revenue and operating profit by applying the prior-year average exchange rates to current financial data expressed in local currencies in order to estimate an elimination of the impact of foreign exchange rate movements. These and other non-IFRS measures are explained in more detail starting on page 150 and are not intended to be substitutes for the equivalent measures of financial performance prepared in accordance with IFRS. These measures may differ from similarly titled non-IFRS measures of other companies.

### **GROUP OVERVIEW**

The following table presents certain key figures for the Novartis Group, including net sales and net income and a comparison of those figures for 2014 against those for 2013. In addition, the table presents the same information adjusted to enable a comparison of our 2014 results against 2013 results excluding the results of our former blood transfusion diagnostics unit, which Novartis divested on January 9, 2014. No other adjustments are made to the 2013 figures. Novartis believes that this comparison will enhance investors' understanding of the performance of our ongoing business. For more information, please see page 153.

Net sales were at the prior year's level (+2% in constant currencies, or cc) at USD 58.0 billion. On a more comparable basis, excluding the 2013 net sales of the blood transfusion diagnostics unit, net sales increased 1% (+3% cc). Loss of exclusivity, including for *Diovan*, impacted sales by approximately USD 2.4 billion.

Group operating income decreased 2% (+5% cc) to USD 10.7 billion as the strong business performance helped to counter the impact of generic competition. The exceptional gain in 2014 of USD 0.9 billion from the divestment of our blood transfusion diagnostics unit and a USD 0.3 billion commercial settlement gain were offset by an exceptional impairment charge of USD 1.1 billion for the pending divestment to CSL Limited, Australia (CSL) of the influenza vaccines business. Operating income margin was 18.5% of net sales.

Group net income rose 11% (+17% cc) to USD 10.3 billion, growing ahead of operating income mainly due to higher income from associated companies, which included a gain of USD 0.8 billion from the sale of the shares of Idenix Pharmaceuticals, Inc., US (Idenix) to Merck & Co., US, and a gain of USD 0.4 billion from the divestment of the shareholding in LTS Lohmann Therapie-Systeme AG, Germany (LTS), partly offset by an increase in tax expense.

Earnings per share rose 12% (+18% cc) to USD 4.21.

### **KEY FIGURES**

	TOTAL GROUP Year ended Dec 31, 2014 USD millions	TOTAL GROUP Year ended Dec 31, 2013 USD millions	Change in USD %	Change in constant currencies %	TOTAL GROUP excluding Diagnostics Year ended Dec 31, 2013 <sup>1</sup> USD millions	Change in USD % (excluding Diagnostics) <sup>1</sup>	Change in constant currencies % (excluding Diagnostics) <sup>1</sup>
Net sales to third parties	57 996	57 920	0	2	57 355	1	3
Other revenues	1 280	911	41	41	699	83	83
Cost of goods sold	- 20 101	- 19 608	- 3	- 3	- 19 171	- 5	- 6
Gross profit	39 175	39 223	0	3	38 883	1	4
Marketing & Sales	- 14 189	- 14 549	2	0	- 14 504	2	0
Research & Development	- 9 943	-9852	- 1	- 1	-9823	- 1	- 1
General & Administration	- 3 047	-3060	0	0	- 3 039	0	- 1
Other income	2 380	1 367	74	74	1 358	75	75
Other expense	- 3 640	-2219	- 64	- 64	-2204	- 65	- 66
Operating income	10 736	10 910	- 2	5	10 671	1	7
Return on net sales (%)	18.5	18.8			18.6		
Income from associated companies	1 920	600	220	220	600	220	220
Interest expense	- 704	- 683	- 3	- 6	- 683	- 3	- 6
Other financial income and expense	- 31	- 92	66	31	- 92	66	31
Income before taxes	11 921	10 735	11	17	10 496	14	20
Taxes	-1641	-1443	-14	- 20	-1352	-21	- 28
Net income	10 280	9 292	11	17	9 144	12	19
Attributable to:							
Shareholders of Novartis AG	10210	9 1 7 5	11	18	9 027	13	19
Non-controlling interests	70	117	- 40	- 41	117	- 40	- 41
Basic earnings per share (USD)	4.21	3.76	12	18	3.70	14	20
Free cash flow	10 762	9 945	8		9 592	12	

<sup>1</sup>Excluding the blood transfusion diagnostics unit divested on January 9, 2014.

### **NET SALES BY SEGMENT**

The following table provides an overview of net sales to third parties by segment:

Net sales	<b>57 996</b>	<b>57 920</b>	-4	2
Discontinuing operations <sup>1</sup>	5816	6 051	- 4	- 1
Continuing operations	52 180	51 869	1	3
Sandoz	9 562	9 159	4	7
Alcon	10 827	10 496	3	6
Pharmaceuticals	31 791	32 214	-1	1
	Year ended Dec 31, 2014 USD millions	Year ended Dec 31, 2013 USD millions	Change in USD %	Change in constant currencies %

<sup>1</sup>Discontinuing operations are explained in more detail in Notes 3 and 30 of the consolidated financial statements.

Additional comments on the changes in the net sales by division can be found starting on page 30.

#### **GROUP OPERATING INCOME**

On a more comparable basis, excluding the 2013 results of the divested blood transfusion diagnostics unit, Group operating income increased 1% (+7% cc) to USD 10.7 billion. Group operating income included a USD 0.9 billion exceptional gain from the divestment of the blood transfusion diagnostics unit to Grifols S.A. and a USD 0.3 billion commercial settlement gain which was offset by an exceptional impairment charge of USD 1.1 billion related to the pending divestment to CSL of the influenza vaccines business. The negative currency impact of 6 percentage points was mainly due to the weakening of emerging market currencies (especially the ruble) and the yen against the US dollar. Operating income margin was 18.5% of net sales, which was 0.1 pertentage points less than the prior year. A 0.8 percentage-point increase (in constant currencies) from the prior-year, was offset by a negative currency impact of 0.9 percentage points. IFRS requires that depreciation and amortization charges on tangible and intangible assets related to the discontinuing operations of the OTC, Animal Health and Vaccines divisions cease from the April 2014 portfolio transformation announcement date. This had a positive impact of USD 277 million for the year, improving operating income margin by 0.5 percentage points (cc).

Additional comments on the changes in operating income by division can be found starting on page 30.

As the following table shows, Corporate income and expense of continuing operations amounted to a net expense of USD 67 million in 2014 compared to USD 653 million in the prior year, mainly due to a USD 456 million increase in other revenues principally related to the retained Vaccines intellectual property rights, including a USD 302 million commercial settlement gain and a USD 248 million gain from the sale of a Novartis Venture Fund investment. The total operating income from continuing operations of USD 11.1 billion in 2014 increased 1% (+7% cc) compared to USD 11.0 billion in the prior year, whereas the operating loss from discontinuing operations amounted to USD 353 million in 2014 compared to a loss of USD 73 million in the prior year. This is a result of the operating income of Consumer Health of USD 470 million (2013: USD 178 million) being more than

offset by the operating loss of Vaccines of USD 552 million (2013: USD 238 million loss) and total expenses recognized in Corporate discontinuing operations in 2014 of USD 271 million related to certain portfolio transformation transaction-related expenses.

More information on the operating income of Novartis by division is presented starting on page 22.

The following table provides an overview of operating income by segment:

	Year ended Dec 31, 2014 USD millions	% of net sales	Year ended Dec 31, 2013 USD millions	% of net sales	Change in USD %	Change in constant currencies %
Pharmaceuticals	8 471	26.6	9 376	29.1	- 10	- 5
Alcon	1 597	14.8	1 232	11.7	30	43
Sandoz	1 088	11.4	1 028	11.2	6	14
Corporate continuing operations	- 67		- 653		nm	nm
Continuing operations	11 089	21.3	10 983	21.2	1	7
Discontinuing operations <sup>1</sup>	- 353	- 6.1	- 73	- 1.2	nm	nm
Group operating income	10 736	18.5	10 910	18.8	-2	5

nm = not meaningful

<sup>1</sup>Discontinuing operations are explained in more detail in Notes 3 and 30 of the consolidated financial statements.

### **RESEARCH & DEVELOPMENT**

Research and development for the whole of Novartis totaled USD 9.9 billion and increased 1% compared to the prior year. As shown in the table, in the Pharmaceuticals Division, Research and Exploratory Development expenditure amounted to USD 2.7 billion in 2014, up 2% from 2013, and Confirmatory Development expenditures amounted to USD 4.6 billion, practically unchanged from 2013.

		ended 1, 2014	Year ended Dec 31, 2013		
	USD millions	Core R&D <sup>1</sup> USD millions	USD millions	Core R&D <sup>1</sup> USD millions	
Research and Exploratory Development	2 724	2 654	2 664	2611	
Confirmatory Development	4 607	4 343	4 578	4 550	
Total	7 331	6 997	7 242	7 161	
% of Pharmaceuticals net sales	23.1%	22.0%	22.5%	22.2%	

<sup>1</sup>Core excludes impairments, amortization and certain exceptional items.

### CORE KEY FIGURES<sup>1</sup>

Core basic earnings per share (USD)	5.23	5.01	4	10
Core net income	12 755	12 351	3	8
Core return on net sales (%)	25.2	24.7		
Core operating income	14 616	14 191	3	8
Other expense	-1341	-1267	- 6	- 5
Other income	586	799	- 27	- 27
General & Administration	- 2 983	-3014	1	0
Research & Development	-9572	-9613	0	0
Marketing & Sales	- 14 167	- 14 477	2	0
Core gross profit	42 093	41 763	1	3
	TOTAL GROUP Year ended Dec 31, 2014 USD millions	TOTAL GROUP excluding Diagnostics Year ended Dec 31, 2013 USD millions <sup>2</sup>	Change in USD % (excluding Diagnostics) <sup>2</sup>	Change in constant currencies % (excluding Diagnostics) <sup>2</sup>

<sup>1</sup>An explanation of non-IFRS measures and reconciliation tables can be found starting on page 150.

 $^{2}\,2013$  excludes the blood transfusion diagnostics unit divested on January 9, 2014.

The adjustments made to Group operating income to arrive at core operating income amounted to USD 3.9 billion (2013: USD 3.5 billion). These adjustments include amortization of intangible assets of USD 2.8 billion; the exceptional non-tax deductible US Healthcare Fee levy of USD 204 million in the year due to a change in regulations; impairment charges of USD 1.6 billion including an exceptional impairment charge of USD 1.1 billion, related to the pending divestment to CSL of the influenza vaccines business; and net restructuring charges of USD 0.7 billion. These were partly offset by the USD 0.9 billion pre-tax gain from the divestment of the blood transfusion diagnostics unit; a USD 302 million commercial settlement gain; and a USD 248 million gain from selling a Novartis Venture Fund investment.

Excluding these items, Group core operating income increased 3% (+8% cc) to USD 14.6 billion. Core operating income margin in constant currencies increased 1.2 percentage points; currency had a negative impact of 0.7 percentage points, resulting in a net increase of 0.5 percentage points to 25.2 % of net sales. The cessation of depreciation charges related to the discontinuing operations had a positive impact of USD 134 million, improving the core operating income margin by 0.2 percentage points. Additional comments on the changes in the core operating income by division can be found starting on page 30.

The following table provides an overview of core operating income by segment:

	Year ended Dec 31, 2014 USD millions	% of net sales	Year ended Dec 31, 2013 USD millions	% of net sales	Change in USD %	Change in constant currencies %
Pharmaceuticals	9 514	29.9	9 523	29.6	0	4
Alcon	3 811	35.2	3 694	35.2	3	8
Sandoz	1 571	16.4	1 541	16.8	2	7
Corporate continuing operations	- 423		- 551		23	25
Continuing operations	14 473	27.7	14 207	27.4	2	7
Discontinuing operations <sup>1</sup>	143	2.5	-16	- 0.3	nm	nm
Group core operating income 1	14 616	25.2	14 191	24.7	3	8

nm = not meaningful

<sup>1</sup>2013 excludes the blood transfusion diagnostics unit divested on January 9, 2014.

### **NON-OPERATING INCOME & EXPENSE**

The following table provides an overview of non-operating income and expense:

	Year ended Dec 31, 2014 USD millions	Year ended Dec 31, 2013 USD millions	Change in USD %	Change in constant currencies %
Group operating income	10 736	10 910	-2	5
Income from associated companies	1 920	600	220	220
Interest expense	- 704	- 683	-3	- 6
Other financial income and expense	-31	- 92	66	31
Group income before taxes	11 921	10 735	11	17
Taxes	-1641	-1443	-14	- 20
Group net income	10 280	9 292	11	17
Attributable to:				
Shareholders of Novartis AG	10210	9 175	11	18
Non-controlling interests	70	117	- 40	- 41
Basic EPS (USD)	4.21	3.76	12	18

The following table provides an overview of core non-operating income and expense:

	Year ended Dec 31, 2014 USD millions	Year ended Dec 31, 2013 <sup>1</sup> USD millions	Change in USD %	Change in constant currencies %
Group core operating income	14 616	14 191	3	8
Income from associated companies	945	877	8	8
Interest expense	- 704	- 683	- 3	- 6
Other financial income and expense	-31	- 48	35	31
Group core income before taxes	14 826	14 337	3	9
Taxes	-2071	-1986	- 4	- 10
Group core net income	12 755	12 351	3	8
Attributable to:				
Shareholders of Novartis AG	12 685	12 234	4	9
Non-controlling interests	70	117	- 40	- 41
Core basic EPS (USD)	5.23	5.01	4	10

<sup>1</sup>2013 excludes the blood transfusion diagnostics unit divested on January 9, 2014.

Income from associated companies amounted to USD 1.9 billion in 2014, compared to USD 600 million in 2013. The increase was mainly due to the gains recognized on the sale of shares of LTS Lohmann Therapie-Systeme AG, Germany, (LTS) and on the sale of the shares of Idenix Pharmaceuticals, Inc., US, (Idenix) which amounted to USD 421 million and USD 812 million, respectively. An additional income of USD 64 million was recorded on investments in associated companies held by the Novartis Venture Funds, which have been accounted at fair value from January 1, 2014 onwards, consistent with other investments held by these Funds, instead of using the equity method of accounting. The contribution from the investment in Roche of USD 599 million was approximately in line with the prior-year level.

Core income from associated companies increased to USD 945 million from USD 877 million in the prior-year period.

Interest expense increased slightly to USD 704 million from USD 683 million in the prior year. Other financial income and expense amounted to a net expense of USD 31 million, compared to USD 92 million in 2013, mainly as a result of hedging gains.

The total Group's tax rate in the full year of 2014 increased to 13.8% from 13.4%, or 12.9% excluding the divested transfusion diagnostics unit, principally due to the impact of taxes on the various exceptional gains and impairments and other exceptional charges which occurred during the year.

The core tax rate increased slightly to 14.0% from 13.9% in 2013.

Group net income of USD 10.3 billion was up 11% (+17%), or 12% (+19% cc), excluding the divested blood transfusion diagnostics unit, growing ahead of operating income mainly due to higher income from associated companies, which included a gain of USD 0.8 billion from the sale of the shares of Idenix to Merck & Co., and a gain of USD 0.4 billion from the divestment of the shareholding in LTS, partly offset by an increase in tax expense.

Earnings per share (EPS) was USD 4.21 per share, up 12% (+18% cc), or on a more comparable basis excluding the 2013 impact of the blood transfusion diagnostics unit, up 14% (+20% cc), growing ahead of net income due to lower average outstanding shares and lower minority interests.

Group core net income of USD 12.8 billion was up 3% (+8% cc), in line with core operating income.

Core EPS was USD 5.23 (+4%, +10% cc), growing ahead of core net income due to lower average outstanding shares and lower minority interests.

### Factors affecting comparability of year-on-year results of operations

### **RECENT SIGNIFICANT TRANSACTIONS**

The comparability of the year-on-year results of our operations for the total Group can be significantly affected by acquisitions and divestments. The transactions of significance during 2014 are mentioned below. There were no significant acquisition or divestment transactions in 2013.

### VACCINES – DIVESTMENT OF BLOOD TRANSFUSION DIAGNOSTICS UNIT

On January 9, 2014, Novartis completed the divestment of its blood transfusion diagnostics unit to the Spanish company Grifols S.A., for USD 1.7 billion in cash. The pre-tax gain on this transaction was approximately USD 0.9 billion and was recorded in operating income from discontinuing operations.

### PHARMACEUTICALS – ACQUISITION OF CoSTIM PHARMACEUTICALS, INC.

On February 17, 2014, Novartis acquired all of the outstanding shares of CoStim Pharmaceuticals Inc., a Cambridge, Massachusetts, US-based, privately held biotechnology company focused on harnessing the immune system to eliminate immune-blocking signals from cancer, for a total purchase consideration of USD 248 million (excluding cash acquired). This amount consists of an initial cash payment and the net present value of contingent consideration of USD 153 million due to previous CoStim shareholders, which they are eligible to receive upon the achievement of specified development and commercialization milestones. The purchase price allocation resulted in net identified assets of USD 152 million (excluding cash acquired) and goodwill of USD 96 million. Results of operations since the acquisition were not material.

### PHARMACEUTICALS – DIVESTMENT OF IDENIX PHARMACEUTICALS, INC. (IDENIX) SHAREHOLDING

On August 5, 2014, Merck & Co., USA completed a tender offer for Idenix. As a result, Novartis divested its 22% shareholding in Idenix and realized a gain of approximately USD 0.8 billion which was recorded in income from associated companies.

### CORPORATE – DIVESTMENT OF LTS LOHMANN THERAPIE-SYSTEME AG (LTS) SHAREHOLDING

On November 5, 2014, Novartis divested its 43% shareholding in LTS and realized a gain of approximately USD 0.4 billion which was recorded in income from associated companies.

### ALCON – ACQUISITION OF WAVETEC VISION SYSTEMS, INC. (WAVETEC)

On October 16, 2014, Alcon acquired all of the outstanding shares of WaveTec, a privately held company, for USD 350 million in cash. The purchase price allocation resulted in net identified assets of USD 180 million and goodwill of USD 170 million. Results of operations since the acquisition were not material.

### MAJOR PENDING TRANSACTIONS TRANSACTION WITH ELI LILLY AND COMPANY

### TRANSACTION WITH ELI LILLI AND COMPANY

On April 22, 2014, Novartis entered into an agreement with Eli Lilly and Company, USA (Lilly) to divest its Animal Health business to Lilly for approximately USD 5.4 billion in cash to be paid on closing. This transaction closed on January 1, 2015 and will result in a pre-tax gain of approximately USD 4.6 billion.

### TRANSACTIONS WITH GLAXOSMITHKLINE PLC

On April 22, 2014 (and as amended and restated on May 29, 2014), Novartis entered into the following agreements with GlaxoSmithKline plc, Great Britain (GSK). These transactions with GSK are inter-conditional and were approved by GSK shareholders in December 2014. They are still subject to other closing conditions, including regulatory approvals. The transactions are expected to close during the first half of 2015.

Novartis expects upon closing of the pending transactions with GSK to report substantial gains.

#### Pharmaceuticals – Acquisition of GSK oncology products

Novartis has agreed to acquire GSK's oncology products for an aggregate cash consideration of USD 16 billion. Up to USD 1.5 billion of this cash consideration is contingent on certain development milestones. In addition, under the terms of the agreement, Novartis was granted a right of first negotiation over the co-development or commercialization of GSK's current and future oncology R&D pipeline, excluding oncology vaccines. The right of first negotiation is for a period of 12.5 years from the acquisition closing date.

### Vaccines – Divestment

Novartis has agreed to divest its Vaccines business to GSK for up to USD 7.1 billion, plus royalties. The USD 7.1 billion consists of USD 5.25 billion to be paid on closing and up to USD 1.8 billion in future milestone payments. Novartis's Vaccines influenza business is excluded from the GSK Vaccines business acquisition. However, GSK has entered into a future option arrangement with Novartis in relation to the Vaccines influenza business, pursuant to which Novartis may unilaterally require GSK to acquire the entire or certain parts of its vaccines influenza business for consideration of up to USD 250 million (the Influenza Put Option), if the divestment to CSL Limited, Australia (CSL) discussed below is not completed. The option period is 18 months, beginning the earlier of the GSK transaction closing date and October 22, 2015. Novartis paid GSK a fee of USD 5 million in consideration for the grant of the Influenza Put Option.

### Consumer Health – Combination of Novartis OTC with GSK consumer healthcare in a joint venture

Novartis and GSK have agreed to create a combined consumer healthcare business through a joint venture between Novartis OTC and GSK consumer healthcare. Upon completion, Novartis will own a 36.5% share of the joint venture and will have four of eleven seats on the joint venture's Board. Furthermore, Novartis will have customary minority rights and also exit rights at a pre-defined, market-based pricing mechanism. The investment will be accounted for using the equity method of accounting.

#### TRANSACTION WITH CSL

On October 26, 2014 Novartis entered into a transaction with CSL to sell its Vaccines influenza business to CSL for USD 275 million. This transaction is expected to be completed in the second half of 2015, subject to all necessary regulatory approvals.

Entering into the separate divestment agreement with CSL resulted in the vaccines influenza business being a separate cash generating unit within the Vaccines Division, requiring the performance of a separate valuation of the influenza vaccines business' net assets. This triggered the recognition of an exceptional impairment charge of approximately USD 1.1 billion (pre-tax), as the book value of the influenza vaccines business net assets was above the USD 275 million consideration to be paid by CSL.

#### CLASSIFICATION AS DISCONTINUING OPERATIONS

These major pending transactions, combined with the divestment of the blood transfusion diagnostics unit, which closed on January 9, 2014, result from the portfolio review which commenced in mid-2013.

As a result, Novartis is required to separate the Group's reported financial data for the current and prior year into "discontinuing" and "continuing" operations.

**Discontinuing operations** include the Animal Health Division, the OTC Division, and the Vaccines Division, including the USD 0.9 billion pre-tax gain arising from the USD 1.7 billion divestment of the blood transfusion diagnostics unit to Grifols S.A., completed on January 9, 2014, and related prior-year results for this unit's activity. Excluded from discontinuing operations are certain intellectual property rights and related other revenues of the Vaccines Division, which are retained by Novartis and are now reported under Corporate activities. Also included in discontinuing operations, under Corporate, are certain portfolio transformation transaction and other related expenses.

As required by IFRS, 2014 results exclude from the portfolio transformation announcement date any further depreciation and amortization related to discontinuing operations.

**Continuing operations** comprise all other activities of the Novartis Group, including the Pharmaceuticals, Alcon and Sandoz Divisions and the retained Corporate activities.

Continuing operations do not yet include the results from oncology assets to be acquired from GSK on closing of the transaction or the results from the 36.5% interest in the GSK/ Novartis consumer healthcare joint venture that will be created at the same time.

	Continuing operations Year ended Dec 31, 2014 USD millions	Continuing operations Year ended Dec 31, 2013 USD millions	Change in USD %	Change in constant currencies %	Discontinuing operations Year ended Dec 31, 2014 USD millions	Discontinuing operations Year ended Dec 31, 2013 USD millions	Change in USD %	Change in constant currencies %
Net sales to third parties	52 180	51 869	1	3	5 816	6 051	-4	-1
Operating income/loss	11 089	10 983	1	7	- 353	- 73	nm	nm
Return on net sales (%)	21.3	21.2			- 6.1	- 1.2		
Core operating income/loss	14 473	14 207	2	7	143	- 16	nm	nm
Core return on net sales (%)	27.7	27.4			2.5	- 0.3		

The following table provides an overview of key figures for continuing and discontinuing operations:

nm = non meaningful

### Free cash flow

Novartis defines free cash flow as cash flow from operating activities adjusted to exclude cash flow associated with the purchase or sale of property, plant and equipment, intangible, other non-current and financial assets. Cash flows in connection with the acquisition or divestment of subsidiaries, associated companies and non-controlling interests in subsidiaries are not taken into account to determine free cash flow. The Group's free cash flow measure, which is a non-IFRS measure, is discussed more on page 151. The following is a summary of the Group's free cash flow:

	2014 USD millions	2013 USD millions	Change USD millions
Operating income from continuing operations	11 089	10 983	106
Reversal of non-cash items			
Depreciation, amortization and impairments	4 751	4 462	289
Change in provisions and other non-current liabilities	1 490	736	754
Other	122	307	- 185
Operating income adjusted for non-cash items	17 452	16 488	964
Interest and other financial receipts	1 067	539	528
Interest and other financial payments	- 692	-631	- 61
Taxes paid	-2179	-2054	- 125
Payments out of provisions and other net cash movements in non-current liabilities	-1125	- 947	-178
Change in inventory and trade receivables less trade payables	- 731	- 588	-143
Change in other net current assets and other operating cash flow items	106	- 190	296
Cash flows from operating activities from continuing operations	13 898	12 617	1 281
Purchase of property, plant & equipment	- 2 624	- 2 903	279
Purchase of intangible assets	- 780	- 475	- 305
Purchase of financial assets	- 239	- 152	- 87
Purchase of other non-current assets	- 60	- 38	- 22
Proceeds from sales of property, plant & equipment	60	48	12
Proceeds from sales of intangible assets	246	96	150
Proceeds from sales of financial assets	431	313	118
Proceeds from sales of other non-current assets	2	15	- 13
Free cash flow from continuing operations	10 934	9 521	1 4 1 3
Free cash flow used in/from discontinuing operations	- 172	424	- 596
Group free cash flow	10 762	9 945	817

In 2014, free cash flow of the total Group increased by USD 0.8 billion to USD 10.8 billion compared to USD 9.9 billion in 2013. The free cash flow from continuing operations increased by USD 1.4 billion to USD 10.9 billion. This was primarily due to higher cash flows from operating activities, which mainly

benefited from higher operating income adjusted for non-cash items, despite negative currency effects and increased hedging gains, partially offset by higher investments in intangible assets.

## Liquidity, cash flow and capital resources

The following tables summarize the Group's cash flow and net debt.

	2014 USD millions	2013 USD millions	Change USD millions
Group cash flows from operating activities	13 897	13 174	723
Group cash flows from/ used in investing activities	881	-3352	4 233
Group cash flows used in financing activities	-8147	-8769	622
Currency translation effect on cash and cash equivalents	- 295	82	-377
Net change in cash and cash equivalents	6 336	1 135	5 201
Change in marketable securities, commodities, time deposits and derivative financial instruments	- 1 696	- 32	- 1 664
Change in current and non-current financial debts and derivative financial instruments	-2393	1 708	-4101
Change in net debt	2 247	2 811	- 564
Net debt at January 1	-8796	- 11 607	2811
Net debt at December 31	- 6 549	- 8 796	2 247

Group net debt consists of:

	2014 USD millions	2013 USD millions	Change USD millions
Current financial debts and derivative financial instruments	-6612	-6776	164
Non-current financial debts	- 13 799	- 11 242	- 2 557
Total financial debt	- 20 411	- 18 018	- 2 393
Less liquidity:			
Cash and cash equivalents	13 023	6 687	6 336
Marketable securities, commodities, time deposits and derivative financial instruments	839	2 535	- 1 696
Total liquidity	13 862	9 222	4 640
Net debt at December 31	- 6 549	- 8 796	2 247

Cash flow from Group total operating activities increased to USD 13.9 billion from USD 13.2 billion in 2013, an increase of USD 0.7 billion. This was primarily due to higher operating income adjusted for non-cash items, despite negative currency effects and increased hedging gains, partially offset by payments for legal settlements and restructuring.

The Group's total investing activities resulted in an inflow of USD 0.9 billion compared to an outflow of USD 3.4 billion in 2013 mainly on account of an inflow from the net proceeds of USD 1.1 billion related to the divestment of the blood transfusion diagnostics unit to Grifols S.A.. In 2014, there were also proceeds from the sale of investments in associated companies included, in particular LTS Lohmann Therapie-Systeme AG and Idenix Pharmaceuticals, Inc. of USD 0.6 billion and USD 0.8 billion respectively and of USD 1.9 billion from the net sale of other marketable securities including maturing longterm deposits. These inflows were offset by outflows of USD 2.6 billion for property, plant and equipment and a net amount of USD 0.7 billion for acquisition of businesses mainly the acquisition of WaveTec (USD 0.4 billion) and other non-current assets, primarily intangible assets. The prior year outflow for investing activities of USD 3.4 billion was primarily related to investments in property, plant and equipment of USD 2.9 billion and a net outflow of USD 0.5 billion for the acquisition of businesses and other non-current assets, mainly intangible assets.

The Group total cash flows used in financing activities amounted to USD 8.1 billion, compared to USD 8.8 billion in 2013. The current year includes the dividend payment of USD 6.8 billion, net treasury share transactions of USD 4.5 billion and a net increase in financial debt of USD 3.3 billion, principally due to the issuance of four bonds totaling USD 5.5 billion reduced by the repayment at maturity of a bond of USD 2.0 billion. In 2013, the dividend payment amounted to USD 6.1 billion, net treasury share transactions were USD 1.2 billion and financial debt decreased by a net amount of USD 1.3 billion.

In 2014, the total gross financial debt increased by USD 2.4 billion and amounted to USD 20.4 billion, compared to USD 18.0 billion in 2013.

Non-current financial debt amounted to USD 13.8 billion which is a net increase of USD 2.6 billion compared to 2013, mainly due to the issuance of four bonds and additional longterm debt totaling USD 5.5 billion. This is partly offset by USD 2.9 billion bond and loan reclassification to current financial debt for the portion which is due within the next twelve months. Non-current financial debt consists of bonds of USD 13.2 billion and other non-current financial debt of USD 0.6 billion.

Current financial debt decreased from USD 6.8 billion at December 31, 2013 to USD 6.6 billion at December 31, 2014, mainly due to a decrease of commercial paper and other financial debt, including derivatives, totaling USD 0.6 billion. This was partially offset by the reclassification of non-current financial debt of USD 3.0 billion, combined with repayments in 2014 of non-current financial debts amounting to USD 2.6 billion, totaling to a net increase of USD 0.4 billion.

Overall current financial debt consists of commercial paper of USD 0.6 billion, the current portion of non-current debt of USD 3.0 billion and other short-term borrowings (including derivatives) of USD 3.0 billion. Group net debt decreased to USD 6.5 billion at the end of 2014 compared to USD 8.8 billion at the end of 2013.

The long-term credit rating for the company continues to be double-A (Moody's Aa3; Standard & Poor's AA–; Fitch AA).

We are not aware of significant demands to change our level of liquidity needed to support our normal business activities. We make use of various borrowing facilities provided by several financial institutions. We also successfully issued various bonds in 2010, 2012 and 2014 and raised funds through our commercial paper programs. In addition, reverse repurchasing agreements are contracted and Novartis has entered into credit support agreements with various banks for derivative transactions. An overview of the movements in our current financial debt and related interest rates is set forth below:

	December 31 USD millions	Average interest rate at year end %	Average balance during the year USD millions	Average interest rate during the year %	Maximum balance during the year USD millions
2014		70		70	
Interest-bearing accounts of associates payable on demand	1 651	1.00	1 792	1.00	1 891
Other bank and financial debt	1 272	5.32	1 537	4.40	2 074
Commercial paper	648	0.26	1 260	0.13	3 076
Current portion of non-current financial debt	2 989	na	2 565	na	3 500
Fair value of derivative financial instruments	52	na	51	na	92
Total current financial debt	6 612		7 204		10 633
2013					
Interest-bearing accounts of associates payable on demand	1 718	0.96	1 658	1.00	1 718
Other bank and financial debt	1 323	4.27	1 485	3.77	1 940
Commercial paper	1 042	0.24	1 935	0.13	3 867
Current portion of non-current financial debt	2 590	na	3 319	na	4 007
Fair value of derivative financial instruments	103	na	118	na	259
Total current financial debt	6 776		8 515		11 791

na = not applicable or available

Interest bearing accounts of associates payable on demand relate to employee deposits in CHF from the compensation of associates employed by Swiss entities (actual interest rate: 1%). Other bank and financial debt refer to usual lending and overdraft facilities.

The maturity schedule of our net debt is as follows:

December 31, 2014 <b>Current assets</b> Marketable securities and time deposits Commodities	Due or due within one month USD millions 21 97	Due later than one month but less than three months USD millions	Due later than three months but less than one year USD millions 37	Due later than one year but less than five years USD millions 181	Due after five years USD millions 76	Total USD millions 383 97
Derivative financial instruments and accrued interest	161	126	72			359
Cash and cash equivalents	9 623	3 400				13 023
Total current financial assets	9 902	3 594	109	181	76	13 862
Non-current liabilities Financial debt Financial debt – undiscounted Total non-current financial debt				- 5 423 - 5 434 <b>- 5 423</b>	- 8 376 - 8 470 <b>- 8 376</b>	- 13 799 - <i>1</i> 3 904 <b>- 13 799</b>
Current liabilities						
Financial debt	-2678	- 335	-3547			-6560
Financial debt – undiscounted	-2678	- 335	- 3 549			- 6 562
Derivative financial instruments	- 18	- 32	-2			- 52
Total current financial debt	- 2 696	- 367	- 3 549			-6612
Net debt	7 206	3 227	- 3 440	- 5 242	- 8 300	- 6 549

Net debt	3 382	223	-1425	- 5 022	- 5 954	- 8 796
Total current financial debt	- 2 940	- 2 307	- 1 529			- 6 776
Derivative financial instruments	- 44	- 37	- 22			- 103
Financial debt – undiscounted	-2896	-2270	-1 507			- 6 673
Financial debt	- 2 896	-2270	-1 507			-6673
Current liabilities						
Total non-current financial debt				- 5 201	-6041	- 11 242
Financial debt – undiscounted				-5212	- 6 087	- 11 299
Financial debt				-5201	-6041	- 11 242
Non-current liabilities						
Total current financial assets	6 322	2 530	104	179	87	9 222
Cash and cash equivalents	6 187	500				6 687
Derivative financial instruments and accrued interest	26	97	3			126
Commodities	97					97
Marketable securities and time deposits	12	1 933	101	179	87	2 312
Current assets						
December 31, 2013	Due or due within one month USD millions	Due later than one month but less than three months USD millions	Due later than three months but less than one year USD millions	Due later than one year but less than five years USD millions	Due after five years USD millions	Total USD millions

The following table provides a breakdown of liquidity and financial debt by currency:

### LIQUIDITY AND FINANCIAL DEBT BY CURRENCY

(as of December 31)

	Liquidity in % 2014 <sup>1</sup>	Liquidity in % 2013 <sup>1</sup>	Financial debt in % 2014 <sup>2</sup>	Financial debt in % 2013 <sup>2</sup>
USD	80	80	59	58
EUR	1	1	17	12
CHF	10	11	13	15
JPY			8	11
Other	9	8	3	4
	100	100	100	100

<sup>1</sup> Liquidity includes cash and cash equivalents, marketable securities, commodities and time deposits.
 <sup>2</sup> Financial debt includes non-current and current financial debt.

### Contractual obligations

The following table summarizes the Group's contractual obligations and other commercial commitments as well as the effect these obligations and commitments are expected to have on the Group's liquidity and cash flow in future periods<sup>1</sup>:

ontractual cash obligations	25 260	4 575	3 504	4 613	12 568	
perty, plant & equipment	826	648	174	4		
se commitments						
ential milestone commitments	2 207	459	616	693	439	
conditional commitments	309	93	120	73	23	
ch & Development						
ed pensions and other post-employment benefit plans	2 358	113	236	257	1 752	
ng leases	2 772	273	345	176	1 978	
rrent financial debt (including current portion)	16 788	2 989	2013	3 410	8 3 7 6	
	Total USD millions	Less than 1 year USD millions	2–3 years USD millions	4–5 years USD millions	After 5 years USD millions	
	Payments due by period					
		Payr	nents due by per	iod		

<sup>1</sup> Excluding commitments related to the transactions agreed upon with GSK on April 22, 2014.

The Group intends to fund the R&D and purchase commitments with internally generated resources.

## Effects of currency fluctuations

We transact our business in many currencies other than the US dollar, our reporting currency.

The following provides an overview of net sales and operating expenses for our continuing operations based on IFRS values for 2014 and 2013 for currencies most important to the Group:

Currency		2014 %	2013 %
US dollar (USD)	Net sales	36	36
	Operating expenses	39	40
Euro (EUR)	Net sales	26	26
	Operating expenses	25	25
Swiss franc (CHF)	Net sales	2	2
	Operating expenses	13	12
Japanese yen (JPY)	Net sales	7	8
	Operating expenses	5	5
Russian ruble (RUB)	Net sales	2	2
	Operating expenses	1	1
Other currencies	Net sales	27	26
	Operating expenses	17	17

Operating expenses in the above table include Cost of goods sold, Marketing & Sales, Research & Development, General & Administration, Other income and Other expense.

We prepare our consolidated financial statements in US dollars. As a result, fluctuations in the exchange rates between the US dollar and other currencies can have a significant effect on both the Group's results of operations as well as on the reported value of our assets, liabilities and cash flows. This in turn may significantly affect reported earnings (both positively and negatively) and the comparability of period-to-period results of operations.

For purposes of our consolidated balance sheets, we translate assets and liabilities denominated in other currencies into US dollars at the prevailing market exchange rates as of the relevant balance sheet date. For purposes of the Group's consolidated income and cash flow statements, revenue, expense and cash flow items in local currencies are translated into US dollars at average exchange rates prevailing during the relevant period. As a result, even if the amounts or values of these items remain unchanged in the respective local currency, changes in exchange rates have an impact on the amounts or values of these items in our consolidated financial statements.

Because our expenditures in Swiss francs are significantly higher than our revenues in Swiss francs, volatility in the value of the Swiss franc can have a significant impact on the reported value of our earnings, assets and liabilities, and the timing and extent of such volatility can be difficult to predict. In addition, there is a risk that certain countries could take other steps which could significantly impact the value of their currencies. Such steps could include "quantitative easing" measures and potential withdrawals by countries from common currencies.

There is also a risk that certain countries could devalue their currency. If this occurs, then it could impact the effective prices we would be able to charge for our products and also have an adverse impact on both our consolidated income statement and balance sheet. The Group is exposed to a potential adverse devaluation risk on its intercompany funding and total investment in certain subsidiaries operating in countries with exchange controls. The most significant country in this respect is Venezuela, where the Group has an equivalent of approximately USD 0.4 billion of cash in local currency, which is only slowly being approved for remittance outside of the country. As a result, the Group is exposed to a potential devaluation loss in the income statement on its total intercompany balances with its subsidiaries in Venezuela, which at December 31, 2014 amounted to USD 0.4 billion. The Group continues to use for the consolidation of the financial statements of its Venezuelan subsidiaries the official exchange rate of VEF 6.3/USD, which is applied for health and food imports as published by the Centro Nacional de Comercio Exterior (CENCOEX, formerly CADIVI).

We seek to manage currency exposure by engaging in hedging transactions where management deems appropriate, after taking into account the natural hedging afforded by our global business activity. For 2014, we entered into various contracts that change in value with movements in foreign exchange rates in order to preserve the value of assets, commitments and expected transactions. We use forward contracts and foreign currency options to hedge expected transactions denominated in foreign currencies. For more information on how these transactions affect our consolidated financial statements and on how foreign exchange rate exposure is managed, see Notes 1, 5, 16 and 29 to the Group's consolidated financial statements.

In 2014, the US dollar significantly increased in value against most currencies. In particular, the average value of the Japanese yen and emerging market currencies (especially the ruble) decreased in 2014 against the USD dollar. In January 2015, following an announcement by the Swiss National Bank that it was discontinuing its minimum exchange rate with the euro, the value of the Swiss franc increased substantially.

The following table sets forth the foreign exchange rates of the US dollar against key currencies used for foreign currency translation when preparing the Group's consolidated financial statements:

		Average for year			Year-end		
USD per unit	2014	2013	Change in %	2014	2013	Change in %	
EUR	1.329	1.328	0%	1.215	1.378	-12%	
CHF	1.094	1.079	1%	1.010	1.124	- 10%	
GBP	1.648	1.564	5%	1.556	1.653	-6%	
JPY (100)	0.947	1.026	-8%	0.836	0.952	- 12%	
RUB (100)	2.649	3.142	-16%	1.722	3.044	- 43%	

The following table provides a summary of the currency impact on key Group figures due to their conversion into USD, the Group's reporting currency, of the financial data from entities reporting in non-US dollars. Constant currency (cc) calculations apply the exchange rates of the prior year to the current year financial data for entities reporting in non-US dollars.

### **CURRENCY IMPACT ON KEY FIGURES**

	Change in constant currencies % 2014	Change in USD % 2014	Percentage point currency impact 2014	Change in constant currencies % 2013	Change in USD % 2013	Percentage point currency impact 2013
Net sales	2	0	- 2	4	2	-2
Operating income	5	-2	- 7	5	- 3	-8
Net income	17	11	- 6	7	- 1	-8
Core operating income <sup>1</sup>	8	3	- 5	3	-2	- 5
Core net income <sup>1</sup>	8	3	- 5	5	0	- 5

<sup>1</sup> In 2014, the comparisons to prior year for the core operating income and core net income are based on 2013 data excluding the divested blood transfusion diagnostics unit.

For additional information on the effects of currency fluctuations, see Note 29 to the Group's consolidated financial statements.

### Condensed Consolidated Balance Sheets

	Dec 31, 2014 USD millions	Dec 31, 2013 USD millions	Change USD millions
Assets			
Property, plant & equipment	15 983	18 197	-2214
Goodwill	29 311	31 026	-1715
Intangible assets other than goodwill	23 832	27 841	-4 009
Financial and other non-current assets	18 700	18 648	52
Total non-current assets	87 826	95 712	- 7 886
Inventories	6 093	7 267	-1174
Trade receivables	8 275	9 902	-1627
Other current assets	2 530	3 392	- 862
Cash, marketable securities, commodities, time deposits and derivative financial instruments	13 862	9 222	4 640
Assets related to discontinuing operations <sup>1</sup>	6 801	759	6 042
Total current assets	37 561	30 542	7 019
Total assets	125 387	126 254	- 867
Equity and liabilities			
Total equity	70 844	74 472	- 3 628
Financial debts	13 799	11 242	2 557
Other non-current liabilities	13 771	14 172	- 401
Total non-current liabilities	27 570	25 414	2 156
Trade payables	5 419	6 1 4 8	- 729
Financial debts and derivatives	6 6 1 2	6 776	- 164
Other current liabilities	12 524	13 394	- 870
Liabilities related to discontinuing operations <sup>1</sup>	2 4 1 8	50	2 368
Total current liabilities	26 973	26 368	605
Total liabilities	54 543	51 782	2 761
Total equity and liabilities	125 387	126 254	- 867

<sup>1</sup> For details of discontinuing operations in the consolidated balance sheet refer to Note 30 of the consolidated financial statements.

There has been a significant reclassification of assets as a result of the portfolio transformation announced on April 22, 2014. Total non-current assets of USD 87.8 billion at December 31, 2014 decreased by USD 7.9 billion as compared to 2013, mainly as a result of the assets transferred to discontinuing operations. Total current assets increased by USD 7.0 billion to USD 37.6 billion at December 31, 2014, also mainly due to the reclassification mentioned above.

Excluding the effect of the reclassifications, total non-current assets decreased by USD 3.7 billion to USD 92.1 billion at December 31, 2014. The reduction of USD 3.3 billion in intangible assets and goodwill was driven by the amortization and impairment charges of USD 3.5 billion. Property, plant and equipment reduced by USD 0.8 billion. This was partially offset by an increase in financial and other non-current assets of USD 0.4 billion. Excluding the effect of reclassifications, trade receivables and other current assets decreased by USD 0.5 billion respectively while inventory remained stable at USD 7.3 billion.

Based on our current incurred loss provisioning approach, we consider that our doubtful debt provisions are adequate. However, we intend to continue to monitor the level of trade receivables in Greece, Italy, Portugal and Spain (the "GIPS countries"). Should there be a substantial deterioration in our economic exposure with respect to those countries, we may increase our level of provisions by moving to an expected loss provisioning approach or may change the terms of trade on which we operate.

The following table provides an overview of our aging analysis of our trade receivables as of December 31, 2014 and 2013:

	2014 USD millions	2013 USD millions
Not overdue	7 406	8 522
Past due for not more than one month	334	502
Past due for more than one month but less than three months	275	297
Past due for more than three months but less than six months	174	254
Past due for more than six months but less than one year	102	257
Past due for more than one year	140	265
Provisions for doubtful trade receivables	- 156	- 195
Total trade receivables, net	8 275	9 902

With regard to the GIPS countries, the countries with the largest outstanding trade receivables exposure are Italy and Spain. Substantially all of the outstanding trade receivables from these countries are due directly from local governments or from government-funded entities. The movement in the outstanding trade receivables from Italy and Spain during the year and the related outstanding trade receivables and provision at December 31, 2014 and 2013 is as follows:

### ITALY

	2014 USD millions	2013 USD millions
Gross trade receivables at December 31	385	636
Past due for more than one year at December 31	37	55
Provision at December 31	29	43

#### SPAIN

	2014 USD millions	2013 USD millions
Gross trade receivables at December 31	271	563
Past due for more than one year at December 31	13	111
Provision at December 31	6	22

At December 31, 2014 trade payables of USD 5.4 billion, other current liabilities of USD 12.5 billion and other non-current liabilities of USD 13.8 billion decreased compared to prior year, mainly due to the reclassification to discontinuing operations. On a comparable basis, trade payables of the Group decreased slightly by USD 0.1 billion compared to the prior year while other current liabilities and other non-current liabilities increased by USD 0.2 billion and by USD 0.3 billion respectively.

Included in other current liabilities are USD 2.1 billion relating to outstanding taxes. While there is some uncertainty about the final taxes to be assessed in our major countries, we consider this uncertainty to be limited since our tax assessments are generally relatively current. In our key countries, Switzerland and the US, assessments have been agreed by the tax authorities up to 2009, with the exception of one open US position in 2007. The Group's equity decreased by USD 3.6 billion to USD 70.8 billion at December 31, 2014 mainly on account of currency translation differences of USD 2.2 billion. Net actuarial losses and the repurchase commitment under the share buy-back trading plan further reduced equity by USD 0.8 billion and USD 0.7 billion respectively while positive impact of the net income of USD 10.3 billion and from equity-based compensation of USD 1.1 billion were compensated by the dividend payments for 2013 of USD 6.8 billion and net purchases of treasury shares for USD 4.5 billion.

The Group's liquidity amounted to USD 13.9 billion at December 31, 2014, compared to USD 9.2 billion at December 31, 2013, and net debt decreased over the same period by USD 2.3 billion to USD 6.5 billion. The debt/equity ratio increased to 0.29:1 at December 31, 2014 compared to 0.24:1 at December 31, 2013.

#### SUMMARY OF EQUITY MOVEMENTS ATTRIBUTABLE TO NOVARTIS AG SHAREHOLDERS

	Number of outstanding shares (in millions)		Issued share capital and reserves attributable to Novartis AG shareholders			
	2014	2013	Change	2014 USD millions	2013 USD millions	Change USD millions
Balance at beginning of year	2 426.1	2 420.6	5.5	74 343	69 137	5 206
Shares acquired to be held in Group Treasury	- 46.8	- 33.3	- 13.5	-4057	-2464	- 1 593
Shares acquired to be cancelled	- 27.0	- 2.2	- 24.8	-2396	- 170	- 2 226
Other share purchases	- 5.4	- 4.8	- 0.6	- 473	- 356	-117
Increase in equity from exercise of options and employee transactions	41.4	34.3	7.1	2 400	1 691	709
Equity-based compensation	10.3	11.5	- 1.2	1 1 4 3	1 077	66
Treasury share repurchase commitment under a share buy-back trading plan				- 658		- 658
Dividends				-6810	-6100	-710
Net income of the year attributable to shareholders of Novartis AG				10 210	9 1 7 5	1 035
Other comprehensive income attributable to shareholders of Novartis AG				- 2 936	2 363	- 5 299
Impact of change of ownership of consolidated entities					- 10	10
Balance at end of year	2 398.6	2 426.1	- 27.5	70 766	74 343	- 3 577

During 2014, 51.7 million treasury shares were delivered as a result of options being exercised and physical share deliveries related to employee participation programs (2013: 45.8 million shares). 52.2 million shares were repurchased on the SIX Swiss Exchange first trading line and from employees (shares previously granted under the respective programs). In 2013, shares repurchased via these channels amounted to 38.1 million

treasury shares. In addition, Novartis repurchased 27.0 million shares on the second trading line in 2014 under the announced share buy-back of USD 5.0 billion spread over two years (2013: 2.2 million shares). With these transactions, the total number of shares outstanding was reduced by 27.5 million in 2014 (2013: increase of 5.5 million shares).

## Critical accounting policies and estimates

Our significant accounting policies are set out in Note 1 to the Group's consolidated financial statements, which are prepared in accordance with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB).

Given the uncertainties inherent in our business activities, we must make certain estimates and assumptions that require difficult, subjective and complex judgments. Because of uncertainties inherent in such judgments, actual outcomes and results may differ from our assumptions and estimates, which could materially affect the Group's consolidated financial statements. Application of the following accounting policies requires certain assumptions and estimates that have the potential for the most significant impact on our consolidated financial statements.

### **DEDUCTIONS FROM REVENUES**

As is typical in the pharmaceuticals industry, our gross sales are subject to various deductions which are composed primarily of rebates and discounts to retail customers, government agencies, wholesalers, health insurance companies and managed healthcare organizations. These deductions represent estimates of the related obligations, requiring the use of judgment when estimating the effect of these sales deductions on gross sales for a reporting period. These adjustments are deducted from gross sales to arrive at net sales.

The following summarizes the nature of some of these deductions and how the deduction is estimated. After recording these, net sales represent our best estimate of the cash that we expect to ultimately collect. The US market has the most complex arrangements related to revenue deductions.

### UNITED STATES SPECIFIC HEALTHCARE PLANS AND PROGRAM REBATES

The United States Medicaid Drug Rebate Program is administered by State governments using State and Federal funds to provide assistance to certain vulnerable and needy individuals and families. Calculating the rebates to be paid related to this Program involves interpreting relevant regulations, which are subject to challenge or change in interpretative guidance by government authorities. Provisions for estimating Medicaid rebates are calculated using a combination of historical experience, product and population growth, product price increases and the mix of contracts and specific terms in the individual State agreements. These provisions are adjusted based on established processes and experiences from filing data with individual States.

The United States Federal Medicare Program, which funds healthcare benefits to individuals age 65 or older, provides prescription drug benefits under Part D of the program. This benefit is provided through private prescription drug plans. Provisions for estimating Medicare Part D rebates are calculated based on the terms of individual plan agreements, product sales and population growth, product price increases and the mix of contracts, and are adjusted periodically.

We offer rebates to key managed healthcare plans in an effort to increase sales of our products. These rebate programs provide payors a rebate after they have demonstrated they have met all terms and conditions set forth in their contract with us. These rebates are estimated based on the terms of individual agreements, historical experience and projected product growth rates. We adjust provisions related to these rebates periodically to reflect actual experience.

There is often a time lag of several months between us recording the revenue deductions and our final accounting for them.

### NON-UNITED STATES SPECIFIC HEALTHCARE PLANS AND PROGRAM REBATES

In certain countries other than the US, we provide rebates to governments and other entities. These rebates are often mandated by laws or government regulations.

In several countries we enter into innovative pay-forperformance arrangements with certain healthcare providers, especially in Europe and Australia. Under these agreements, we may be required to make refunds to the healthcare providers or to provide additional medicines free of charge if anticipated treatment outcomes do not meet predefined targets. Potential refunds and the delivery of additional medicines at no cost are estimated and recorded as a deduction of revenue at the time the related revenues are recorded. Estimates are based on historical experience and clinical data. In cases where historical experience and clinical data are not sufficient for a reliable estimation of the outcome, revenue recognition would be deferred until such history would be available.

There is often a time lag of several months between us recording the revenue deductions and our final accounting for them.

### NON-HEALTHCARE PLANS AND PROGRAM REBATES, RETURNS AND OTHER DEDUCTIONS

Charge-backs occur where our subsidiaries have arrangements with indirect customers to sell products at prices that are lower than the price charged to wholesalers. A charge-back represents the difference between the invoice price to the wholesaler and the indirect customer's contract price. We account for vendor charge-backs by reducing revenue by an amount equal to our estimate of charge-backs attributable to a sale and they are generally settled within one to three months of incurring the liability. Provisions for estimated charge-backs are calculated using a combination of factors such as historical experience, product growth rates, payments, level of inventory in the distribution channel, the terms of individual agreements and our estimate of the claims processing time lag.

We offer rebates to purchasing organizations and other direct and indirect customers to sustain and increase market share for our products. Since rebates are contractually agreed upon, rebates are estimated based on the terms of the individual agreements, historical experience, and projected product growth rates.

When we sell a product providing a customer the right to return it, we record a provision for estimated sales returns based on our sales returns policy and historical rates. Other factors considered include actual product recalls, expected marketplace changes, the remaining shelf life of the product, and the expected entry of generic products. In 2014, sales returns amounted to approximately 1% of gross product sales. If sufficient experience is not available, sales are only recorded based on evidence of product consumption or when the right of return has expired.

We enter into distribution service agreements with major wholesalers, which provide a financial disincentive for the wholesalers to purchase product quantities exceeding current customer demand. Where possible, we adjust shipping patterns for our products to maintain wholesalers' inventories level consistent with underlying patient demand.

We offer cash discounts to customers to encourage prompt payment. Cash discounts are accrued at the time of invoicing and deducted from revenue.

Following a decrease in the price of a product, we generally grant customers a "shelf stock adjustment" for a customer's

existing inventory for the involved product. Provisions for shelf stock adjustments, which are primarily relevant within the Sandoz Division, are determined at the time of the price decline or at the point of sale, if the impact of a price decline on the products sold can be reasonably estimated based on the customer's inventory levels of the relevant product.

Other sales discounts, such as consumer coupons and co-pay discount cards, are offered in some markets. These discounts are recorded at the time of sale, or when the coupon is issued, and are estimated utilizing historical experience and the specific terms for each program. If a discount for a probable future transaction is offered as part of a sales transaction then an appropriate portion of revenue is deferred to cover this estimated obligation.

We adjust provisions for revenue deductions periodically to reflect actual experience. To evaluate the adequacy of provision balances, we use internal and external estimates of the level of inventory in the distribution channel, actual claims data received and the time lag for processing rebate claims. Management also estimates the level of inventory of the relevant product held by retailers and in transit. External data sources include reports of wholesalers and third-party market data purchased by Novartis.

The following table shows the worldwide extent of our revenue deductions provisions and related payment experiences for the Pharmaceuticals, Alcon and Sandoz divisions:

				Income state	ment charge		
	January 1	Effect of currency translation and business combinations USD millions		Adjustments of prior years USD millions	2		Revenue deductions provisions at December 31 USD millions
2014							
US specific healthcare plans and program rebates	1 376		-3118	-186	3 025		1 097
Non-US specific healthcare plans and program rebates	1 145	-124	-1743	- 19	1 787	-31	1 015
Non-healthcare plans and program related rebates, returns and other deductions	1 427	- 83	-9046	- 52	9 564	- 389	1 421
Total continuing operations 2014	3 948	- 207	- 13 907	- 257	14 376	- 420	3 533
2013							
US specific healthcare plans and program rebates	1 434		- 2 990	- 74	3 006		1 376
Non-US specific healthcare plans and program rebates	942	10	-1634	- 45	1 935	- 63	1 1 4 5
Non-healthcare plans and program related rebates, returns and other deductions	1 444	- 10	- 7 745	- 34	7 934	- 162	1 427
Total continuing operations 2013	3 820	0	- 12 369	- 153	12 875	- 225	3 948

### **PROVISIONS FOR REVENUE DEDUCTIONS**

The table below shows the gross to net sales reconciliation for our Pharmaceuticals Division:

### **GROSS TO NET SALES RECONCILIATION**

Income state	ment charge		
Charged through revenue deduction provisions USD millions	Charged directly without being recorded in revenue deduction provisions USD millions	Total USD millions	In % of gross sales
		39 529	100.0
- 1 800		-1800	- 4.6
- 1 200	- 877	-2077	- 5.3
-1873	- 1 989	- 3 862	- 9.8
- 4 873	- 2 866	- 7 739	- 19.6
		31 790	80.4
		40 188	100.0
- 2 125		-2125	- 5.3
- 1 368	- 802	-2170	- 5.4
-1731	- 1 948	- 3 679	- 9.2
- 5 224	- 2 750	-7974	- 19.8
		32 214	80.2
	Charged through revenue deduction provisions USD millions - 1 800 - 1 200 - 1 873 - 4 873 - 4 873 - 2 125 - 1 368 - 1 731	Charged through revenue deduction provisions USD millions         without being recorded in revenue deduction provisions USD millions           - 1 800	Charged directly without being revenue deduction provisions USD millions         Total USD millions           -1800         -1800           -1200         -877           -1873         -1989           -1873         -2077           -1873         -2866           -7739         31790           -1368         -802           -1368         -802           -1731         -1948           -1732         -1948

### IMPAIRMENT OF GOODWILL, INTANGIBLE ASSETS AND PROPERTY, PLANT AND EQUIPMENT

We review long-lived intangible assets and property, plant and equipment for impairment whenever events or changes in circumstance indicate that the asset's balance sheet carrying amount may not be recoverable. Goodwill, the Alcon brandname and other currently not amortized intangible assets are reviewed for impairment at least annually.

An asset is generally considered impaired when its balance sheet carrying amount exceeds its estimated recoverable amount, which is defined as the higher of its fair value less costs of disposal and its value in use. Usually, Novartis adopts the fair value less costs of disposal method for its impairment evaluation. In most cases no directly observable market inputs are available to measure the fair value less costs of disposal. Therefore an estimate of fair value less costs of disposal is derived indirectly and is based on net present value techniques utilizing post-tax cash flows and discount rates. In the limited cases where the value in use method is applied, net present value techniques are utilized using pre-tax cash flows and discount rates.

Fair value reflects estimates of assumptions that market participants would be expected to use when pricing the asset and for this purpose management considers the range of economic conditions that are expected to exist over the remaining useful life of the asset. The estimates used in calculating net present values are highly sensitive, and depend on assumptions specific to the nature of the Group's activities with regard to:

- amount and timing of projected future cash flows;
- future tax rates;

 behavior of competitors (launch of competing products, marketing initiatives, etc.); and

appropriate discount rate.

Due to the above factors, actual cash flows and values could vary significantly from forecasted future cash flows and related values derived using discounting techniques.

The recoverable amount of a cash-generating unit and related goodwill is usually based on the fair value less costs of sale derived from applying discounted future cash flows based on the key assumptions in the following table:

	Pharmaceuticals %	Alcon %	Sandoz %
Sales growth rate assumptions after forecast period	1.25	3	0 to 2
Discount rate (post-tax)	7	7	7

In 2014, intangible asset impairment charges of USD 752 million were recognized. These relate to impairment charges in continuing operations of USD 347 million (USD 302 million in the Pharmaceuticals Division and USD 45 million in total in the Sandoz and Alcon divisions) and USD 405 million in discontinuing operations.

In 2013, intangible asset impairment charges in continuing operations of USD 108 million were recognized. These relate to impairment charges of USD 57 million in the Alcon Division and USD 51 million in total in the Sandoz and Pharmaceuticals divisions. USD 8 million were recognized in discontinuing operations. Reversal of prior year impairment charges amounted to USD 70 million in continuing operations (2013: USD 2 million).

Goodwill and other intangible assets represent a significant part of our consolidated balance sheet, primarily due to acquisitions. Although no significant additional impairments are currently anticipated, impairment evaluation could lead to material impairment charges in the future. For more information, see Note 11 to the Group's consolidated financial statements.

Additionally, net impairment charges for property, plant and equipment during 2014 amounted to USD 780 million (2013: USD 80 million). This relates to net impairment charges of USD 44 million in continuing operations and USD 736 million in discontinuing operations.

### **TRADE RECEIVABLES**

Trade receivables are initially recognized at their invoiced amounts including any related sales taxes less adjustments for estimated revenue deductions such as rebates, charge backs and cash discounts.

Provisions for doubtful trade receivables are established once there is an indication that it is likely that a loss will be incurred and represent the difference between the receivable value in the balance sheet and the estimated net collectible amount. Significant financial difficulties of a customer, such as probability of bankruptcy, financial reorganization, default or delinquency in payments are considered indicators that recovery of the trade receivable is doubtful. Trade receivable balances include sales to drug wholesalers, retailers, private health systems, government agencies, managed care providers, pharmacy benefit managers and government-supported healthcare systems. Novartis continues to monitor sovereign debt issues and economic conditions in Greece, Italy, Portugal, Spain and other countries, and evaluates trade receivables in these countries for potential collection risks. Substantially all of the trade receivables overdue from such countries are due directly from local governments or from government-funded entities. Deteriorating credit and economic conditions and other factors in these countries have resulted in, and may continue to result in an increase in the average length of time that it takes to collect these trade receivables and may require Novartis to re-evaluate the collectability of these trade receivables in future periods.

### RETIREMENT AND OTHER POST-EMPLOYMENT BENEFIT PLANS

We sponsor pension and other post-employment benefit plans in various forms that cover a significant portion of our current and former associates. For post-employment plans with defined benefit obligations, we are required to make significant assumptions and estimates about future events in calculating the expense and the present value of the liability related to these plans. These include assumptions about the interest rates we apply to estimate future defined benefit obligations and net periodic pension expense as well as rates of future pension increases. In addition, our actuarial consultants provide our management with historical statistical information such as withdrawal and mortality rates in connection with these estimates.

Assumptions and estimates used by the Group may differ materially from the actual results we experience due to changing market and economic conditions, higher or lower withdrawal rates, and longer or shorter life spans of participants among other factors. For example, in 2014, a decrease in the interest rate we apply in determining the present value of the defined benefit obligations of one quarter of one percent would have increased our year-end defined benefit pension obligation for plans in Switzerland, US, UK, Germany and Japan, which represent 95% of the Group total defined benefit pension obligation, by approximately USD 0.8 billion. Similarly, if the 2014 interest rate had been one quarter of one percentage point lower than actually assumed, net periodic pension cost for pension plans in these countries, which represent about 88% of the Group's total net periodic pension cost for pension plans, would have increased by approximately USD 37 million. Depending on events, such differences could have a material effect on our total equity. For more information on obligations under retirement and other post-employment benefit plans and underlying actuarial assumptions, see Note 25 to the Group's consolidated financial statements.

#### **CONTINGENCIES**

A number of our subsidiaries are involved in various government investigations and legal proceedings (intellectual property, sales and marketing practices, product liability, commercial, employment and wrongful discharge, environmental claims, etc.) arising out of the normal conduct of their businesses. For more information, see Note 20 to the Group's consolidated financial statements.

We record accruals for contingencies when it is probable that a liability has been incurred and the amount can be reliably estimated. These accruals are adjusted periodically as assessments change or additional information becomes available. For significant product liability cases the accrual is actuarially determined based on factors such as past experience, amount and number of claims reported, and estimates of claims incurred but not yet reported. Expected legal defense costs are accrued when the amount can be reliably estimated.

In some instances, the inherent uncertainty of litigation, the resources required to defend against governmental actions, the potential impact on our reputation, and the potential for exclusion from government reimbursement programs in the US and other countries have contributed to decisions by Novartis and other companies in our industry to enter into settlement agreements with governmental authorities. These settlements have had in the past, and may continue in the future, to involve large cash payments, including potential repayment of amounts that were allegedly improperly obtained and other penalties including treble damages. In addition, settlements of governmental healthcare fraud cases often require companies to enter into corporate integrity agreements, which are intended to regulate company behavior for a period of years. Our affiliate Novartis Pharmaceuticals Corporation is a party to such an agreement, which will expire in 2015. Also, matters underlying governmental investigations and settlements may be the subject of separate private litigation.

Provisions are recorded for environmental remediation costs when expenditure on remedial work is probable and the cost can be reliably estimated. Remediation costs are provided for under "Non-current liabilities" in the Group's consolidated balance sheet.

Provisions relating to estimated future expenditure for liabilities do not usually reflect any insurance or other claims or recoveries, since these are only recognized as assets when the amount is reasonably estimable and collection is virtually certain.

### **RESEARCH & DEVELOPMENT**

Internal Research & Development costs are fully charged to the consolidated income statement in the period in which they are incurred. We consider that regulatory and other uncertainties inherent in the development of new products preclude the capitalization of internal development expenses as an intangible asset usually until marketing approval from the regulatory authority is obtained in a relevant major market, such as for the US, the EU, Switzerland or Japan.

#### **HEALTHCARE CONTRIBUTIONS**

In many countries our subsidiaries are required to make contributions to the countries' healthcare costs as part of programs other than the ones mentioned above under deductions from revenue. The amounts to be paid depend on various criteria such as the subsidiary's sales volume compared to certain targets or the subsidiary's market share. There is considerable judgment required in estimating these contributions as not all data is available at the period end when the estimates need to be made.

The largest of these healthcare contributions relates to the US Healthcare Reform fee, which was introduced in 2011. This fee is an annual levy to be paid by US pharmaceutical companies, including various Novartis subsidiaries, based on each company's qualifying sales as a percentage of the prior year's government-funded program sales. This pharmaceutical fee levy is recognized in "Other expense".

On July 25, 2014, the US Department of the Treasury and the US Internal Revenue Service issued final guidance on this pharmaceutical fee levy which stipulated that instead of a liability being estimated and recognized immediately with the first qualifying sale in the following fee year, as had been industry practice, the levy is now owed in the year in which the sales occur.

As a result of this final guidance, in 2014, "Other expense" includes the recurring non-tax deductible annual expense of approximately USD 200 million for the 2014 pharmaceutical fee levy, as well as the non-tax deductible expense of USD 204 million for the 2013 pharmaceutical fee levy. USD 204 million of this charge has been considered as an additional exceptional charge in 2014 since it results from the change in timing of recognition of the pharmaceutical fee levy as required by the final guidance.

In addition, effective 2013, the US government also implemented a medical device sales tax which is levied on the Alcon Division's US sales of products which are considered surgical devices under the law. This medical device tax is initially included in the cost of inventory as, for Alcon, the tax is usually levied on intercompany sales. It is expensed as cost of goods sold when the inventory is sold to third parties.

#### TAXES

We prepare and file our tax returns based on an interpretation of tax laws and regulations, and record estimates based on these judgments and interpretations. Our tax returns are subject to examination by the competent taxing authorities, which may result in an assessment being made requiring payments of additional tax, interest or penalties. Inherent uncertainties exist in our estimates of our tax positions. We believe that our estimated amounts for current and deferred tax assets or liabilities, including any amounts related to any uncertain tax positions, are appropriate based on currently known facts and circumstances.

### NEW ACCOUNTING PRONOUNCEMENTS

See Note 1 to the Group's consolidated financial statements.

### INTERNAL CONTROL OVER FINANCIAL REPORTING

The Group's management has assessed the effectiveness of internal control over financial reporting. The Group's independent statutory auditor also issued an opinion on the effectiveness of internal control over financial reporting. Both the Group's management and its external auditors concluded that the Group maintained, in all material respects, effective internal control over financial reporting as of December 31, 2014.

# Factors affecting results of operations

Long-term trends in the composition and behavior of the global population, as well as advances in science and technology, are opening new frontiers in patient treatments and driving demand for healthcare around the world. In the coming years, these changes are expected to drive steady growth overall in the healthcare market and accelerate growth in key segments of our business. At the same time, the current business and regulatory environment poses significant risks and potential impediments to our growth and to the growth of the healthcare industry.

### TRANSFORMATIONAL CHANGES FUELING DEMAND AGING POPULATION AND SHIFTING BEHAVIORS

Scientific advances and increased access to healthcare have contributed to a rise in life expectancy and a fall in birth rates, increasing the proportion of elderly people worldwide. The world's population is projected to increase by nearly 1 billion people by 2025, with the segment of the population over age 50 rising by about 500 million. With the aging of the global population, there has been an increase in conditions that disproportionately affect the elderly, such as cancers, neurodegenerative diseases, ophthalmological diseases and cardiovascular diseases. Novartis currently develops and offers innovative treatments for many of these conditions. In 2014, for example, Novartis announced the results of the largest heart failure study ever done indicating that LCZ696, its investigational heart failure medicine, demonstrated superiority to the standard of care. There are 26 million people across the US and Europe alone living with heart failure, facing high risk of death and poor quality of life.

Another major trend in global health is an increase in obesity rates. In the last 20 years, obesity rates have doubled among adults and tripled among children. Today, nearly 30% of the global population is overweight or obese, according to the McKinsey Global Institute. Obesity, combined with inactive lifestyles, contributed to the increased prevalence of chronic diseases, including cardiovascular diseases, respiratory diseases and diabetes. We plan to continue to invest in new treatments to address these growing health threats.

#### **GLOBAL RISE IN HEALTHCARE SPENDING**

Global healthcare spending continues to rise around the world. IMS Health forecasts USD 1.3 trillion in drug spending by 2018, up from USD 1.0 trillion in 2013. And in OECD countries, average public healthcare expenditures are expected to comprise 8% of total GDP in 2060, compared to 5.5% 2010.

While developed countries still dedicate a higher percentage of their GDP to healthcare than the rest of the world, emerging markets are contributing an increasing proportion of global healthcare spending, due in part to a growing middle class. Over the next five years, IMS Health predicts that drug expenditures in developing markets (including Brazil, Russia, India, China, and other countries in Latin America, Africa and Asia) will grow at a compound annual growth rate (CAGR) of 8% to 11%. In comparison, the US market is expected to grow at a CAGR of 5% to 8%.

The global rise in healthcare spending has increased demand for affordable alternatives to patented pharmaceuticals, including generic equivalents and OTC products. By 2017, it is projected that generics will account for 87% of all prescriptions filled in the US, up from 63% in 2007. With a diversified portfolio spanning pharmaceuticals, generics and ophthalmic medicines, we are well-positioned to meet the evolving needs of patients.

### SCIENTIFIC ADVANCES OPENING NEW OPPORTUNITIES

As research in the fields of biotechnology and genomics has become more sophisticated, we have developed a better understanding of the cellular and genetic basis of diseases. This has given rise to a new generation of innovative therapies that could more effectively target the underlying causes of disease.

For example, our investigational therapy CTL019 works by reprogramming a patient's own T cells to "hunt" cancer cells that express specific proteins. After they have been reprogrammed, the T cells are re-introduced into the patient's blood; they proliferate and bind to the targeted cancer cells and destroy them.

Therapies like these have the potential to transform the treatment of disease. We believe that, as the continuing rapid rise in healthcare spending strains government and household budgets, our ability to leverage scientific advances to generate real innovation – not just incremental innovation – will enable us to create value over the long-term for society, patients and shareholders.

### NEW TECHNOLOGIES CHANGING THE DELIVERY OF HEALTHCARE

New healthcare technologies are streamlining the delivery of healthcare and improving patient outcomes. Connected medical devices, for example, can automatically record and share information about a patient's daily medicine intake, allowing doctors to monitor patient adherence and response to treatment. In our Pharmaceuticals Division, we are developing an "*eBreezhaler*" digital device for chronic obstructive pulmonary disease (COPD) patients so doctors can track key health indicators remotely and in real time. We expect this device to reduce hospitalization and increase treatment adherence, improving outcomes at lower costs.

New technologies in the Alcon Division also improve outcomes for cataract patients. The Cataract Refractive Suite, for example, comprises multiple advanced technologies that optimize consistency in the execution of cataract surgery. The *Verion* Image Guided System captures a reference image and helps generate a surgical plan, which is then integrated in the operating room via a tracking overlay, allowing surgeons to see the alignment of all incisions in real time.

In R&D, technology can help optimize clinical trials and accelerate the drug development process. For example, patient travel to and from clinical trial sites is an inconvenience that often contributes to low retention rates. By using mobile apps to remotely record relevant data from clinical trial participants, we expect to improve retention rates and gather more accurate results. With this approach we also expect to lower costs and to help us bring drugs to market quickly and efficiently.

#### PATIENT ENGAGEMENT

Patients now have greater access to healthcare information as well as easy tools to communicate with providers, allowing them to be active participants in their own health. According to the Pew Research Center's Internet & American Life Project, 59% of all adults in the US have searched online for information about a disease or treatment, and 11% have posted comments or queries online pertaining to medical matters.

We can engage patients seeking health information online by providing them with platforms and tools to become more active managers of their diseases. For example, as part of a multiple sclerosis (MS) disease awareness campaign, we created an online platform with educational resources for people with relapsing MS to learn more about their condition, including tips on how to engage with healthcare practitioners to optimize their care. The platform also features an original song and video by a celebrity, inspired by his own journey with relapsing MS. Separately, in the UK, we launched the SymTrac app for MS patients, helping them record detailed information about their symptoms and track changes over time. Through digital tools and applications like these, we can complement our medicines and deliver more holistic solutions for patients.

### INCREASINGLY CHALLENGING BUSINESS ENVIRONMENT PATENT EXPIRATIONS AND PRODUCT COMPETITION

IMS Health estimates that between 2012 and 2016, patents will expire on branded pharmaceuticals with global sales totaling USD 126 billion. The products of our Pharmaceuticals and Alcon Divisions are generally protected by patent rights, allowing us to exclusively market most products. The loss of market exclusivity has had, and will continue to have, an adverse effect on our results of operations. In 2015, the impact of generic competition on our net sales is expected to be as much as USD 2.5 billion.

Some of our best-selling products have begun to face considerable competition due to the expiration of patent protection. For example:

- The patent on imatinib, the active ingredient in our best-selling product *Gleevec/Glivec* (cancer), will expire in July 2015 in the US, in 2016 in the major European countries and expired in 2014 for the main indications in Japan. Additional patents claiming innovative features of *Gleevec/Glivec* have been challenged in the US. A settlement with one of these generic manufacturers will allow that manufacturer to enter the US market on February 1, 2016. Generic versions of *Gleevec/Glivec* have already launched in a number of countries around the world.
- The patent on valsartan, the active ingredient of *Diovan/Co-Diovan/Diovan HCT* (high blood pressure), which had long been our best-selling product, has expired in the EU, the US and Japan, and generic competitors have launched there. Patent protection for Co-*Diovan* will expire in Japan in 2016 (including patent term extensions).

Aside from generic competition, all of our businesses face competition from the new products and technological advances of other companies. Doctors and patients may choose other products over ours if they perceive the products to be safer, more effective, easier to administer, less expensive, more convenient, or more cost-effective.

Though patent expirations present a significant challenge to our Pharmaceuticals and Alcon Divisions, they also create an opportunity for Sandoz, our generics business. With our global footprint and advanced technical expertise, we expect Sandoz to help offset the financial impact of generic competition on our branded portfolio.

#### HEIGHTENED REGULATORY AND SAFETY HURDLES

Our ability to grow our business is dependent on our ability to bring new products to market. In recent years, health regulators have raised the bar on product innovation, and focused on the benefit-risk profile of pharmaceutical products, emphasizing product safety and incremental improvements over older products in the same therapeutic class. These developments have led to requests for more clinical trial data, the inclusion of significantly higher numbers of patients in those trials, and more detailed analyses post-trial. As a result, the long and expensive process of obtaining regulatory approvals for pharmaceutical products has become even more challenging.

In addition, approved drugs have increasingly been subject to requirements such as risk management plans, comparative effectiveness studies, health technology assessments and post-approval Phase IV clinical trials, making the maintenance of regulatory approvals and achievement of reimbursement for our products increasingly expensive. In addition, these requirements further heighten the risk of recalls, product withdrawals, or loss of market share.

Despite this risk, however, we expect that our focus on understanding disease pathways and improving patient outcomes will allow Novartis to continue to bring innovative, effective and safe medicines to market.

### WEAK ECONOMIC ENVIRONMENT AND INCREASING PRESSURE ON PRICING

Against the backdrop of a gradual and uneven global economic recovery, governments have continued to impose cost-containment measures, such as rebates and price reductions, to make medicines more affordable. Pricing pressures affect all of our divisions, which rely on reimbursement, including Pharmaceuticals, Alcon, Sandoz and Vaccines. For example, in 2013, a German agency, the Gemeinsamer Bundesausschuss (G-BA), initiated an analysis of the benefits of drugs approved prior to 2011. As part of that analysis, the G-BA concluded that our type 2 diabetes medicines Galvus and Eucreas did not provide an added benefit over certain other medicines indicated for the treatment of that disease. As a result, we were unable to reach agreement with the head organization of the German statutory health insurance funds, GKV-Spitzenverband, on an acceptable price for Galvus and Eucreas, and so, in 2014, we stopped distribution of these products in Germany. We expect these pressures to continue in 2015 as healthcare payers around the world, including government-controlled health authorities, insurance companies and managed care organizations, step up initiatives to reduce the overall cost of healthcare.

In addition to pricing pressures, concerns continue that some countries, including Greece, Italy, Portugal and Spain, may not be able to fully pay us for our products. Other countries, such as Venezuela, have taken steps to introduce exchange controls and limit companies from distributing retained earnings or paying intercompany payables due from those countries. In addition, increasing political and social instability around the world, including in Russia, Ukraine and parts of the Middle East, may lead to significant business disruptions, or other adverse business conditions.

The weak economic environment has also had an impact on consumer behavior, with patients around the world looking for ways to keep healthcare spending to a minimum. According to a recent Gallup poll, around 30% of Americans skip or delay medical treatment due to high costs. Some of our businesses, including the elective surgical business of our Alcon Division, may be particularly sensitive to declines in consumer spending. Our Pharmaceuticals and Sandoz divisions, and the other remaining businesses of our Alcon Division, may also be sensitive to consumer cutbacks, particularly given the increasing requirements in certain countries, that make patients pay a larger contribution toward their own healthcare costs. To help offset this trend and ensure that patients get the care they need, Novartis offers coupon programs and incentives for patented products to facilitate access to the most effective treatments at a more affordable price.

### RISK OF LIABILITY AND SUPPLY DISRUPTION FROM MANUFACTURING ISSUES

The manufacture of our products is both highly regulated and complex, which introduces a greater chance for disruptions and liabilities. Government authorities closely regulate our manufacturing processes, and if those processes fail to meet the necessary requirements, then there is a risk that our production facilities could be shut down. Disturbances in our supply chain can lead to product shortages, significant loss in sales revenue, and litigation. Furthermore, since our products are intended to promote the health of patients, any manufacturing issue compromising supply or quality could potentially result in severe government penalties.

In recent years, we have encountered manufacturing issues leading to extended shortages and significant loss in sales and market share. In response, we have outsourced the production of certain key products and devoted considerable resources to resolving issues in our manufacturing processes. These measures to improve quality and assure consistency may limit the profitability of some products.

Beyond regulatory requirements, many of our products involve technically complex manufacturing processes or require a supply of highly specialized raw materials. For example, a significant portion of the Group's portfolio, including products from Pharmaceuticals, Alcon, Sandoz and Vaccines, are "biologic" products, produced from living plant or animal micro-organisms. For biologic-based products, even slight deviations at any point in the production process could lead to production failures or recalls. The Group's portfolio also includes a number of sterile products, such as oncology treatments, which are technically complex to manufacture and require strict environmental controls. Accordingly, there is a greater chance of production failures and supply interruptions for these products.

### POTENTIAL LIABILITY ARISING FROM LEGAL PROCEEDINGS

In recent years, there has been a trend of increasing government investigations and litigation against companies operating in our industry, both in the US and other countries. We are obligated to comply with the laws of all countries in which we operate, with new requirements imposed on us as government and public expectations of corporate behavior change. We have a significant global compliance program in place, and devote substantial time and resources to ensure that our business is conducted in a legal and publicly acceptable manner. Despite our efforts, any failure to comply with the law could lead to substantial liabilities that may not be covered by insurance and could affect our business and reputation.

Governments and regulatory authorities worldwide are also increasingly challenging practices previously considered to be legal, and responding to such challenges and new regulations is costly. Such investigations may affect our reputation, create a risk of potential exclusion from government reimbursement programs in the US and other countries, and may lead to costly litigation.

These factors have contributed to recent trends in the pharmaceutical industry to enter into settlement agreements with governmental authorities around the world prior to any formal decision by the authorities. These settlements have involved large cash payments, including the potential repayment of amounts allegedly obtained improperly and penalties of up to treble damages. Settlements of healthcare fraud cases often require companies to enter into corporate integrity agreements, which are intended to regulate company behavior for a period of years. Our affiliate Novartis Pharmaceuticals Corporation is a party to such an agreement, which is scheduled to expire in 2015. Matters underlying governmental investigations and settlements may also be the subject of separate private litigation. As a result, our subsidiaries are occasionally subject to various legal proceedings, and we may incur future judgments or enter into settlements of claims that could have a material adverse effect on our results of operations or cash flows.

### RISKS INVOLVED IN STRATEGIC TRANSACTIONS AND REORGANIZATIONS

In 2014, we announced agreements with GlaxoSmithKline plc (GSK), Eli Lilly and Company (Lilly) and CSL Limited (CSL) on a set of transactions intended to transform our portfolio of businesses. In a series of inter-conditional transactions with GSK, Novartis agreed to: acquire GSK oncology products and certain related assets, and become GSK's preferred commercialization partner for its oncology pipeline; create a joint venture with GSK in consumer healthcare, in which Novartis would own 36.5%; and divest its Vaccines Division (excluding the influenza vaccines business) to GSK. Separately, Novartis agreed to divest its Animal Health Division to Lilly, and to divest our influenza vaccines business to CSL.

On January 1, 2015, we completed our divestiture of Animal Health to Lilly. The remaining transactions are subject to closing conditions, including regulatory approvals. The transactions with GSK are expected to close in the first half of 2015, and the transaction with CSL is expected to close in the second half of 2015.

Because of the need for external approvals and certain other contingencies, the remaining transactions may not be completed in the expected form or within the expected time frame, or at all. If the transactions are completed, then certain milestone and royalty payments may be owed if certain conditions are met. But because of the uncertainties involved, we cannot ensure that any such payments will be made either by us or to us. In addition, in agreeing to all of these transactions, we expect to achieve certain strategic benefits, synergies and opportunities, including certain financial results, but such expected benefits may never be fully realized or may take longer to be realized than expected. With respect to the acquisition of the GSK oncology products and related assets, we cannot be certain that the GSK business will be successfully integrated with ours and that key personnel will be retained. Disruption from these transactions may make it more difficult to maintain relationships with customers, employees or suppliers. Lastly, extensive preparations are needed to complete these transactions, as well as the integration and de-integration of the respective businesses, requiring substantial attention from our management. The potential diversion of management's attention away from our continuing businesses could result in the continuing businesses failing to fully achieve expected financial or other results, or in liabilities being incurred that were not known at the time of the transactions, or the creation of tax or accounting issues.

In addition, in 2014, we announced the creation of a shared services organization, Novartis Business Services (NBS). NBS consolidated a number of business support services previously spread across divisions. This reorganization was designed to improve profitability and free up resources that could be reinvested in growth and innovation, and to allow our divisions to focus more on customer-facing activities. But the expected benefits of this reorganization may never be fully realized or may take longer to be realized than expected. There can be no certainty that the numerous business functions involved will be successfully integrated into a single organization and that key personnel will be retained. Disruption from the reorganization may potentially make it more difficult to maintain relationships with customers, employees or suppliers.

# Non-IFRS measures as defined by Novartis

Novartis uses certain non-IFRS metrics when measuring performance, especially when measuring current year results against prior periods, including core results, figures excluding 2013 Diagnostics business results, constant currencies, EBITDA, free cash flow and net debt.

Despite the use of these measures by management in setting goals and measuring the Group's performance, these are non-IFRS measures that have no standardized meaning prescribed by IFRS. As a result, such measures have limits in their usefulness to investors.

Because of their non-standardized definitions, the non-IFRS measures (unlike IFRS measures) may not be comparable to the calculation of similar measures of other companies. These measures are presented solely to permit investors to more fully understand how the Group's management assesses underlying performance. These measures are not, and should not be viewed as, a substitute for IFRS measures.

As an internal measure of Group performance, these measures have limitations, and the Group's performance management process is not solely restricted to these metrics.

### CORE RESULTS

The Group's core results – including core operating income, core net income and core earnings per share – exclude the amortization of intangible assets, impairment charges, expenses relating to the integration of acquisitions as well as certain other income and expense items that are, or are expected to accumulate within the year to be, over a USD 25 million threshold that management deems exceptional.

Novartis believes that investor understanding of the Group's performance is enhanced by disclosing core measures of performance because, since they exclude items which can vary significantly from year to year, the core measures enable better comparison across years. For this same reason, Novartis uses these core measures in addition to IFRS and other measures as important factors in assessing the Group's performance.

The following are examples of how these core measures are utilized:

- In addition to monthly reports containing financial information prepared under IFRS, senior management receives a monthly analysis incorporating these core measures.
- Annual budgets are prepared for both IFRS and core measures.

#### 2013 RESULTS EXCLUDING DIAGNOSTICS UNIT

On January 9, 2014, Novartis completed the divestment to Grifols S.A. of our former blood transfusion diagnostics unit, which had been included in our former Vaccines and Diagnostics Division. Because the divestment occurred near the beginning of 2014, Novartis believes that investor understanding of the Group's performance would be enhanced by disclosing a comparison of the Novartis 2014 results against 2013 results that exclude the results of the divested business, since it will assist investors in evaluating the Group's performance on a more comparable basis from year to year. For this reason, management has used this comparison, in addition to IFRS and other measures, in its assessments of the Group's performance.

### **CONSTANT CURRENCIES**

Changes in the relative values of non-US currencies to the US dollar can affect the Group's financial results and financial position. To provide additional information that may be useful to investors, including changes in sales volume, we present information about our net sales and various values relating to operating and net income that are adjusted for such foreign currency effects.

Constant currency calculations have the goal of eliminating two exchange rate effects so that an estimate can be made of underlying changes in the consolidated income statement excluding the impact of fluctuations in exchange rates:

- the impact of translating the income statements of consolidated entities from their non-USD functional currencies to USD; and
- the impact of exchange rate movements on the major transactions of consolidated entities performed in currencies other than their functional currency.

We calculate constant currency measures by translating the current year's foreign currency values for sales and other income statement items into USD using the average exchange rates from the prior year and comparing them to the prior year values in USD.

We use these constant currency measures in evaluating the Group's performance, since they may assist us in evaluating our ongoing performance from year to year. However, in performing our evaluation, we also consider equivalent measures of performance which are not affected by changes in the relative value of currencies.

### **GROWTH RATE CALCULATION**

For ease of understanding, Novartis uses a sign convention for its growth rates such that a reduction in operating expenses or losses compared to the prior year is shown as a positive growth.

### **FREE CASH FLOW**

Novartis defines free cash flow as cash flow from operating activities adjusted to exclude cash flow associated with the purchase or sale of property, plant and equipment, intangible, other non-current and financial assets. Cash flows in connection with the acquisition or divestment of subsidiaries, associated companies and non-controlling interests in subsidiaries are not taken into account to determine free cash flow.

Free cash flow is presented as additional information because Novartis considers it to be a useful indicator of the Group's ability to operate without relying on additional borrowing or the use of existing cash. Free cash flow is a measure of the net cash generated that is available for debt repayment, investment in strategic opportunities and for returning to shareholders. Novartis uses free cash flow in internal comparisons of results from the Group's divisions. Free cash flow of the divisions uses the same definition as for the Group. No tax or financial receipts or payments are included in the division calculations. The definition of free cash flow used by Novartis does not include amounts related to changes in investments in associated companies nor related to acquisitions or divestments of subsidiaries. Free cash flow is not intended to be a substitute measure for cash flow from operating activities (as determined under IFRS).

### **NET DEBT**

Novartis defines net debt as current and non-current financial debt less cash and cash equivalents, current investments and derivative financial instruments.

### **EBITDA**

Novartis defines earnings before interest, tax, depreciation and amortization (EBITDA) as operating income excluding depreciation of property, plant and equipment (including any related impairment charges) and amortization of intangible assets (including any related impairment charges).

	2014 USD millions	2013 USD millions	Change USD millions
Group operating income	10 736	10 910	- 174
Depreciation of property, plant & equipment	1 652	1 755	- 103
Amortization of intangible assets	2 852	2 976	- 124
Impairments of property, plant & equipment and intangible assets	1 462	194	1 268
Group EBITDA	16 702	15 835	867

#### **ENTERPRISE VALUE**

Enterprise value represents the total amount that shareholders and debt holders have invested in Novartis, less the Group's liquidity.

	Dec 31, 2014 USD millions	Dec 31, 2013 USD millions	Change USD millions
Market capitalization	223 728	194 157	29 571
Non-controlling interests	78	129	- 51
Financial debts and derivatives	20 41 1	18018	2 393
Liquidity	- 13 862	-9222	-4640
Enterprise value	230 355	203 082	27 273
Enterprise value/EBITDA	14	13	

#### NOVARTIS ECONOMIC VALUE ADDED

Novartis utilizes its own definition for measuring Novartis Economic Value Added (NVA), which is utilized for determining payouts under the Old Long-Term Performance Plan (OLTPP). The following table shows NVA for 2014 and 2013 utilizing the Novartis definition:

	Year ended Dec 31, 2014 USD millions	Year ended Dec 31, 2013 USD millions	Change in USD %
Group operating income	10 736	10 910	- 2
Income from associated companies	1 920	600	220
Operating interest	- 336	- 335	0
Operating tax	- 2 500	-2151	- 16
Capital charge	- 6 300	- 6 330	0
Novartis Economic Value Added	3 520	2 694	31

Operating interest is the internal charge on average working capital based on the short-term borrowing rates of the entity owning them.

Operating tax is the internal tax charge for each entity applying the applicable tax rate to the operational profit before tax of each entity unadjusted for tax-disallowed items or tax loss carryforwards.

The capital charge is the notional interest charge on the Group's average non-current assets based on an internally calculated weighted average cost of capital for the Group.

### 2014 AND 2013 RECONCILIATION OF GROUP IFRS RESULTS TO GROUP CORE RESULTS

2014	IFRS results USD millions	Amortization of intangible assets <sup>1</sup> USD millions	Impairments <sup>2</sup> USD millions	Acquisition or divestment related items, including restructuring and integration charges <sup>3</sup> USD millions	Other exceptional items <sup>4</sup> USD millions	Core results USD millions
Gross profit	39 175	2 757	281		- 120	42 093
Operating income	10 736	2 816	1 574	- 647	137	14 616
Income before taxes	11 921	3 073	1 575	- 647	-1096	14 826
Taxes	-1641					-2071⁵
Net income	10 280					12 755
Basic earnings per share (USD) <sup>6</sup>	4.21					5.23
The following are adjustments to arrive at Core Gross Pr	ofit					
The following are adjustments to arrive at Core Gross Pr Other revenues	ofit 1 280				- 302	978
		2 757	281		- 302 182	978 - 16 881
Other revenues	1 280 - 20 101	2 757	281			
Other revenues Cost of goods sold	1 280 - 20 101	2 757	281			
Other revenues Cost of goods sold The following are adjustments to arrive at Core Operation	1 280 - 20 101 g Income	2 757 56	281		182	- 16 881
Other revenues Cost of goods sold The following are adjustments to arrive at Core Operation Marketing & Sales	1 280 - 20 101 g Income - 14 189				182	- 16 881 - 14 167
Other revenues Cost of goods sold The following are adjustments to arrive at Core Operation Marketing & Sales Research & Development	1 280 - 20 101 g Income - 14 189 - 9 943			- 876	182 22 17	- 16 881 - 14 167 - 9 572
Other revenues Cost of goods sold The following are adjustments to arrive at Core Operation Marketing & Sales Research & Development General & Administration	1 280 -20 101 g Income -14 189 -9 943 -3 047		298	- 876 229	182 22 17 64	- 16 881 - 14 167 - 9 572 - 2 983
Other revenues Cost of goods sold The following are adjustments to arrive at Core Operation Marketing & Sales Research & Development General & Administration Other income	1 280 -20 101 g Income - 14 189 - 9 943 - 3 047 2 380 - 3 640	56	298		182 22 17 64 -902	- 16 881 - 14 167 - 9 572 - 2 983 586

<sup>1</sup>Amortization of intangible assets: Cost of goods sold includes recurring amortization of acquired rights to in-market products and other production-related intangible assets; Research & Development includes the recurring amortization of acquired rights for technology platforms; Other expense includes amortization of intangible assets; Income from associated companies includes USD 257 million for the Novartis share of the estimated Roche core items.

<sup>2</sup> Impairments: Cost of goods sold, Research & Development, Other income and Other expense consist principally of net impairment charges or reversals related to intangible assets, property, plant and equipment and financial assets; Cost of goods sold and Other expense also include the USD 1.1 billion impairment charge as a result of the proposed sale of the influenza vaccines business; Other expense also includes an additional impairment charge incurred in Corporate, for an in-process R&D project which is pending divestment as a result of the proposed portfolio transformation transactions.

<sup>3</sup>Acquisition or divestment related items, restructuring and integration charges: Other income includes the gain on the disposal of the blood transfusion diagnostics unit on January 9, 2014; Other expense includes costs related to the planned acquisition of GSK oncology assets as well as professional service fees related to the portfolio transformation divestment activities.

<sup>4</sup>Other exceptional items: Other revenues includes an amount for a commercial settlement; Cost of goods sold includes charges for the Group-wide rationalization of manufacturing sites; Marketing & Sales, Research & Development and General & Administration include charges for transforming IT and finance processes; Other income includes product related divestment gains and gains in the Novartis Venture Fund, an insurance recovery net of a deferred amount, a partial reversal of a legal expense provision, a reduction in restructuring provisions, and the impact from a post-retirement medical plan amendment; Other expense includes restructuring provision charges, charges for transforming IT and finance processes, an expense related to *Lucentis* in Italy, the expense of USD 204 million related to the advancement of the timing of recording the US Healthcare Fee liability as a result of final regulations, and a write-off of a receivable as a result of the proposed portfolio transformation transactions; Income from associated companies includes gains from the divestment of Idenix and Lohmann shareholdings.

<sup>5</sup> Taxes on the adjustments between IFRS and core results take into account, for each individual item included in the adjustment, the tax rate that will finally be applicable to the item based on the jurisdiction where the adjustment will finally have a tax impact. Generally, this results in amortization and impairment of intangible assets and acquisition-related restructuring and integration items having a full tax impact. There is usually a tax impact on exceptional items although this is not the case for items arising from criminal settlements in certain jurisdictions. Adjustments related to income from associated companies are recorded net of any related tax effect. Due to these factors and the differing effective tax rates in the various jurisdictions, the tax on the total adjustments of USD 2.9 billion to arrive at the core results before tax amounts to USD 430 million. The average tax rate on the adjustments is 14.8 % since the estimated full year tax charge has been applied to the pre-tax income of the period. <sup>6</sup>Earnings per share (EPS) is calculated on the amount of net income attributable to shareholders of Novartis AG.

2013	IFRS results excluding diagnostics <sup>1</sup> USD millions	Amortization of intangible assets <sup>1,2</sup> USD millions	Impairments <sup>3</sup> USD millions	Acquisition or divestment related items, including restructuring and integration charges <sup>4</sup> USD millions	Other exceptional items <sup>5</sup> USD millions	Core results excluding diagnostics <sup>1</sup> USD millions
Gross profit	38 883	2 811	28		41	41 763
Operating income	10 671	2 900	259	331	30	14 191
Income before taxes	10 496	3 159	259	349	74	14 337
Taxes	-1352					- 1 986 <sup>6</sup>
Net income	9 144					12 351
Basic earnings per share (USD) <sup>7</sup>	3.70					5.01
The following are adjustments to arrive at Core Grost of goods sold The following are adjustments to arrive at Core Ope	- 19 171	2811	28		41	- 16 291
	- 19 171	2811	28		41	- 16 291 - 14 477
Cost of goods sold The following are adjustments to arrive at Core Ope	- 19 171	2 811	28			
Cost of goods sold The following are adjustments to arrive at Core Ope Marketing & Sales	- 19 171 erating Income - 14 504	-			27	- 14 477
Cost of goods sold The following are adjustments to arrive at Core Ope Marketing & Sales Research & Development	- 19 171 erating Income - 14 504 - 9 823	-			27 39	- 14 477 - 9 613
Cost of goods sold The following are adjustments to arrive at Core Ope Marketing & Sales Research & Development General & Administration	- 19 171 erating Income - 14 504 - 9 823 - 3 039	-	86	331	27 39 25	- 14 477 - 9 613 - 3 014
Cost of goods sold The following are adjustments to arrive at Core Ope Marketing & Sales Research & Development General & Administration Other income	- 19 171 erating Income - 14 504 - 9 823 - 3 039 1 358 - 2 204	85	86 - 53	331	27 39 25 - 506	- 14 477 - 9 613 - 3 014 799
Cost of goods sold The following are adjustments to arrive at Core Ope Marketing & Sales Research & Development General & Administration Other income Other expense	- 19 171 erating Income - 14 504 - 9 823 - 3 039 1 358 - 2 204	85	86 - 53	331	27 39 25 - 506	- 14 477 - 9 613 - 3 014 799

<sup>1</sup>2013 excludes the blood transfusion diagnostics unit divested on January 9, 2014.

<sup>2</sup>Amortization of intangible assets: Cost of goods sold includes recurring amortization of acquired rights to in-market products and other production-related intangible assets; Research & Development includes the recurring amortization of acquired rights for technology platforms; Other expense includes amortization of intangible assets; Income from associated companies includes USD 259 million for the Novartis share of the estimated Roche core items.

<sup>3</sup>Impairments: Cost of goods sold, Research & Development, Other income and Other expense include principally net impairment charges or reversals related to intangible assets and property, plant and equipment, mainly related to the Group-wide rationalization of manufacturing sites.

<sup>4</sup>Acquisition or divestment related items, restructuring and integration charges: Other expense includes Alcon integration costs. Income from associated companies includes restructuring charges related to Roche.

<sup>5</sup>Other exceptional items: Cost of goods sold, Other income and Other expense include restructuring charges related to the Group-wide rationalization of manufacturing sites; Marketing & Sales includes charges related to termination of a co-promotional contract; Research & Development also includes a net increase of contingent consideration liabilities related to acquisitions; General & Administration includes exceptional IT-related costs; Other income includes divestment gains, a reversal of a Corporate provision, income from post-retirement medical plan amendments and reduction in restructuring charge provisions; Other expense includes a restructuring provision charge, provisions for legal matters, and charges for transforming IT and finance processes; Other financial income and expense includes devaluation losses of USD 44 million related to Venezuela.

<sup>6</sup> Taxes on the adjustments between IFRS and core results take into account, for each individual item included in the adjustment, the tax rate that will finally be applicable to the item based on the jurisdiction where the adjustment will finally have a tax impact. Generally, this results in amortization and impairment of intangible assets and acquisition-related restructuring and integration items having a full tax impact. There is usually a tax impact on exceptional items although this is not the case for items arising from criminal settlements in certain jurisdictions. Adjustments related to income from associated companies are recorded net of any related tax effect. Due to these factors and the differing effective tax rates in the various jurisdictions, the tax on the total adjustments of USD 3.8 billion to arrive at the core results before tax amounts to USD 634 million. This results in the average tax rate on the adjustments being 16.5 %.

<sup>7</sup> Earnings per share (EPS) is calculated on the amount of net income attributable to shareholders of Novartis AG.

#### 2013 RECONCILIATION OF GROUP IFRS AND CORE RESULTS EXCLUDING BLOOD TRANSFUSION DIAGNOSTICS UNIT

		IFRS		Core				
					Divested blood			
	Group		Group	Group	transfusion	Group		
	results	Divested blood	results	core results	diagnostics	core results		
	as published		excluding	as published	unit core	excluding		
		diagnostics unit	diagnostics	in 2013	adjustments	diagnostics		
2013	USD millions	USD millions	USD millions	USD millions	USD millions	USD millions		
Net sales	57 920	- 565	57 355	57 920	- 565	57 355		
Other revenues	911	-212	699	911	-212	699		
Cost of goods sold	- 19 608	437	- 19 171	- 16 673	382	- 16 291		
Gross profit	39 223	- 340	38 883	42 158	- 395	41 763		
Marketing & Sales	- 14 549	45	- 14 504	- 14 522	45	- 14 477		
Research & Development	-9852	29	-9823	-9642	29	-9613		
General & Administration	- 3 060	21	-3039	-3035	21	-3014		
Other income	1 367	- 9	1 358	808	- 9	799		
Other expense	-2219	15	-2204	-1282	15	-1267		
Operating income	10 910	- 239	10 671	14 485	- 294	14 191		
Net income	9 292	- 148	9 144	12 533	- 182	12 351		

### 2014 AND 2013 RECONCILIATION OF SEGMENT OPERATING INCOME TO CORE OPERATING INCOME

	Pharmac	ceuticals	uticals Alco		
	2014	2013	2014	2013	
	USD millions		USD millions		
IFRS Operating income	8 471	9 376	1 597	1 232	
Adjustment for divested blood transfusion diagnostics unit					
Operating income excluding blood transfusion diagnostics unit	8 471	9 376	1 597	1 232	
Amortization of intangible assets	276	278	2 064	1 989	
Impairments					
Intangible assets	231	29	7	57	
Property, plant & equipment related to the Group-wide rationalization of manufacturing sites	23	1			
Other property, plant & equipment	-8	28	- 1	4	
Financial assets	20	16			
Total impairment charges	266	74	6	61	
Acquisition or divestment related items					
- Gains					
- Expenses	33	1		330	
Total acquisition-related items, net	33			330	
Other exceptional items					
Exceptional divestment gains	- 237	- 313			
Restructuring items					
- Income	- 56	- 40	- 24		
- Expense	632	122	95	77	
Legal-related items					
- Income					
- Expense	125	33			
Additional exceptional income	- 158	- 70	- 29	- 56	
Additional exceptional expense	162	63	102	61	
Total other exceptional items	468	- 205	144	82	
Total adjustments	1 043	147	2 214	2 462	
Core operating income	9 514	9 523	3 811	3 694	
Core return on net sales (%)	29.9	29.6	35.2	35.2	

Sandoz Corporate continuing operations		Total con operat		Total disco operat		Grou	ıp		
2014 USD millions	2013 USD millions	2014 USD millions	2013 USD millions	2014 USD millions	2013 USD millions	2014 USD millions	2013 USD millions	2014 USD millions	2013 USD millions
1 088	1 028	-67	- 653	11 089	10 983	- 353	- 73	10 736	10 910
							- 239		- 239
1 088	1 028	- 67	- 653	11 089	10 983	- 353	- 312	10 736	10 671
400	409	3	4	2 743	2 680	73	220	2 816	2 900
39	20			277	106	405	8	682	114
				23	1	- 1	33	22	34
7	-3	23	17	21	46	737		758	46
1		91	41	112	57		8	112	65
47	17	114	58	433	210	1 141	49	1 574	259
						- 876		- 876	
			1	33	331	196		229	331
			1	33	331	- 680		- 647	331
		- 294		- 531	-313			- 531	-313
- 3				- 83	-40	- 7		- 90	- 40
21	2	1		749	201	28	25	777	226
						- 2		-2	
	85	30		155	118			155	118
	-4	-315	- 75	- 502	- 205	-81		- 583	- 205
18	4	105	114	387	242	24	2	411	244
36	87	- 473	39	175	3	- 38	27	137	30
483	513	- 356	102	3 384	3 224	496	296	3 880	3 520
1 571	1 541	- 423	- 551	14 473	14 207	143	- 16	14 616	14 191
16.4	16.8			27.7	27.4	2.5	- 0.3	25.2	24.7

## SUMMARY OF QUARTERLY FINANCIAL DATA FOR 2014 AND 2013

USD millions unless indicated otherwise	Q1	Q2	Q3	Q4	2014	Q1	Q2	Q3	Q4	2013
Net sales to third parties	14 022	14 637	14 704	14 633	57 996	14 016	14 488	14 338	15 078	57 920
Other revenues	217	554	269	240	1 280	190	216	220	285	911
Cost of goods sold	-4723	-4913	- 5 096	- 5 369	-20101	-4606	-4780	-4910	-5312	- 19 608
Gross profit	9 516	10 278	9 877	9 504	39 175	9 600	9 924	9 648	10 051	39 223
Marketing & Sales	-3457	-3651	- 3 405	-3676	- 14 189	-3457	-3657	-3481	-3954	- 14 549
Research & Development	-2432	-2386	-2372	-2753	-9943	-2297	-2439	-2419	-2697	-9852
General & Administration	- 765	- 743	- 695	- 844	-3047	-761	-731	- 746	- 822	-3060
Other income	1 1 3 3	214	344	689	2 380	369	264	172	562	1 367
Other expense	- 506	-617	- 769	-1748	-3640	- 558	-391	- 503	- 767	-2219
Operating income	3 489	3 095	2 980	1 172	10 736	2 896	2 970	2 671	2 373	10 910
Income from associated companies	216	187	938	579	1 920	111	174	161	154	600
Interest expense	-168	-166	- 182	- 188	- 704	-175	-175	- 170	-163	- 683
Other financial income and expense	- 25	- 56	37	13	-31	7	5	- 62	-42	- 92
Income before taxes	3 512	3 060	3 773	1 576	11 921	2 839	2 974	2 600	2 322	10 735
Taxes	- 544	-475	- 533	- 89	-1641	-417	-426	- 336	- 264	-1443
Group net income	2 968	2 585	3 240	1 487	10 280	2 422	2 548	2 264	2 058	9 292
Attributable to:										
Shareholders of Novartis AG	2 941	2 555	3 223	1 491	10210	2 398	2516	2 232	2 029	9 1 7 5
Non-controlling interests	27	30	17	- 4	70	24	32	32	29	117
Basic earnings per share (USD)	1.21	1.05	1.33	0.62	4.21	0.98	1.03	0.91	0.83	3.76
Net sales to third parties by segment										
Pharmaceuticals	7 807	8 199	7 925	7 860	31 791	7 877	8 121	7 893	8 323	32 214
Alcon	2 642	2 817	2 665	2 703	10 827	2 566	2 736	2 539	2 655	10 496
Sandoz	2 318	2 331	2 401	2 512	9 562	2 259	2 216	2 273	2 411	9 159
Continuing operations	12 767	13 347	12 991	13 075	52 180	12 702	13 073	12 705	13 389	51 869
Discontinuing operations	1 255	1 290	1 713	1 558	5816	1 314	1 415	1 633	1 689	6 0 5 1
Group net sales	14 022	14 637	14 704	14 633	57 996	14 016	14 488	14 338	15 078	57 920
Operating income by segment										
Pharmaceuticals	2 221	2 406	2 233	1611	8 471	2 539	2 557	2 267	2 013	9 376
Alcon	380	471	381	365	1 597	412	397	251	172	1 232
Sandoz	282	244	272	290	1 088	251	259	242	276	1 028
Corporate continuing operations	- 68	63	- 147	85	-67	-143	-180	- 202	- 128	- 653
Continuing operations	2 815	3 184	2 739	2 351	11 089	3 059	3 033	2 558	2 333	10 983
Discontinuing operations	674	- 89	241	-1179	- 353	- 163	- 63	113	40	- 73
Group operating income	3 489	3 095	2 980	1 172	10 736	2 896	2 970	2 671	2 373	10 910
Core operating income 1	3 657	3 797	3 840	3 322	14 616	3 651	3 692	3 555	3 293	14 191
Core net income <sup>1</sup>	3 212	3 283	3 346	2 914	12 755	3 209	3 188	3 062	2 892	12 351
Core basic earnings per share (USD) <sup>1</sup>	1.31	1.34	1.37	1.21	5.23	1.30	1.29	1.24	1.18	5.01

<sup>1</sup>2013 excludes the blood transfusion diagnostics unit divested on January 9, 2014.

# SUMMARY OF GROUP FINANCIAL DATA 2010–2014

USD millions unless indicated otherwise		2014	2013	2012	2011	2010
Net sales to third parties	_	57 996	57 920	56 673	58 566	50 624
Change relative to preceding year	%	0.1	2.2	- 3.2	15.7	14.4
Pharmaceuticals net sales		31 791	32 214	32 153	32 508	30 306
Change relative to preceding year	%	- 1.3	0.2	- 1.1	7.3	7.1
Alcon net sales		10 827	10 496	10 225	9 958	4 4 4 6
Change relative to preceding year	%	3.2	2.7	2.7	nm	nm
Sandoz net sales		9 562	9 1 5 9	8 702	9 473	8 592
Change relative to preceding year	%	4.4	5.3	- 8.1	10.3	14.7
Discontinuing operations – Vaccines net sales		1 537	1 987	1 858	1 996	2 918
Change relative to preceding year	%	- 22.6	6.9	- 6.9	-31.6	20.4
Discontinuing operations – Consumer Health net sales		4 279	4 064	3 735	4 631	4 362
Change relative to preceding year	%	5.3	8.8	- 19.3	6.2	6.4
Operating income		10 736	10 910	11 193	10 780	11 526
Change relative to preceding year	%	- 1.6	- 2.5	3.8	- 6.5	15.5
As a % of net sales	%	18.5	18.8	19.8	18.4	22.8
As a % of average equity	%	14.8	15.2	16.6	15.9	18.1
As a % of average net operating assets	%	13.4	13.3	13.8	13.0	16.6
Net income	70	10 280	9 292	9 383	9 072	9 969
Change relative to preceding year	%	10.6	- 1.0	3.4	- 9.0	17.9
As a % of net sales	%	17.7	16.0	16.6	15.5	19.7
As a % of average equity	%	14.1	12.9	13.9	13.4	15.7
Dividends of Novartis AG <sup>1</sup>	70	6 384	6 810	6 100	6 030	5 368
As % of net income <sup>2</sup>	%	63	74	66	67	55
Cash flows from operating activities	70	13 897	13 174	14 194	14 309	14 067
Change relative to preceding year	%	5.5	- 7.2	- 0.8	1.7	15.4
As a % of net sales	%	24.0	22.7	25.0	24.4	27.8
Free cash flow	70	10 762	9 945	11 383	12 503	12 346
Change relative to preceding year	%	8.2	- 12.6	- 9.0	1.3	30.7
As a % of net sales	%	18.6	17.2	20.1	21.3	24.4
Purchase of property, plant & equipment	70	2 847	3 064	2 698	2 167	1 678
Change relative to preceding year	%	- 7.1	13.6	24.5	29.1	- 11.1
As a % of net sales	%	4.9	5.3	4.8	3.7	3.3
Depreciation of property, plant & equipment	70	1 652	1 755	1 704	1 728	1 363
As a % of net sales	%	2.8	3.0	3.0	3.0	2.7
Core Research & Development	70	9 572	9 642	9 116	9 239	8 080
As a % of net sales	%	16.5	16.6	16.1	15.8	16.0
Core Pharmaceuticals Division Research & Development	/0	<b>6 997</b>	7 161	6 697	<b>6 860</b>	6 344
As a % of Pharmaceuticals Division net sales	%	22.0	22.2	20.8	21.1	20.9
Total assets	/0	125 387	126 254	124 191	117 468	123 318
Liquidity	_	13 862	9 222	8 119	5 075	8 134
Equity		70 844	74 472	69 263	65 989	69 769
Debt/equity ratio		0.29:1	0.24:1	0.28:1	0.31:1	0.33:1
Current ratio	_	1.39:1	1.16:1	1.16:1	1.04:1	1.08:1
Net operating assets	_	77 393	83 268	80 870	81 143	84 622
	07					
Change relative to preceding year	%	- 7.1	3.0	- 0.3	- 4.1	56.7
As a % of net sales	%	133.4	143.8	142.7	138.5	167.2
Personnel costs	~	<b>16 416</b>	15 595	<b>14 772</b>	<b>14 913</b>	12 240
As a % of net sales	%	28.3	26.9	26.1	25.5	24.2
Full-time equivalent associates at year-end	1100	133 413	135 696	127 724	123 686	119 418
Net sales per full-time equivalent associate (average)	USD	431 022	439 754	450 841	481 818	461 788

<sup>1</sup> 2014 dividend: Proposal for shareholder approval at the Annual General Meeting on February 27, 2015. In all years, this figure reflects only amounts paid to third party shareholders of Novartis AG.

<sup>2</sup>Based on net income attributable to the shareholders of Novartis AG.

nm = not meaningful

# NOVARTIS GROUP CONSOLIDATED FINANCIAL STATEMENTS

### CONSOLIDATED INCOME STATEMENTS

(For the years ended December 31, 2014 and 2013)

Net sales to third parties from continuing operations         Sales to discontinuing segments         Net sales from continuing operations         Other revenues	3	<b>52 180</b> 239 <b>52 419</b> 1 215 - 17 345	<b>51 869</b> 221 <b>52 090</b>
Net sales from continuing operations	3	<b>52 419</b> 1 215	52 090
	3	1 215	
Other revenues			
		- 17 345	626
Cost of goods sold			- 16 579
Gross profit from continuing operations		36 289	36 137
Marketing & Sales		- 12 377	- 12 638
Research & Development		-9086	-9071
General & Administration		-2616	- 2 603
Other income		1 391	1 205
Other expense		-2512	-2047
Operating income from continuing operations	3	11 089	10 983
Income from associated companies	4	1 918	599
Interest expense	5	- 704	- 683
Other financial income and expense	5	-31	- 92
Income before taxes from continuing operations		12 272	10 807
Taxes	6	-1 545	-1498
Net income from continuing operations		10 727	9 309
Net loss from discontinuing operations	30	- 447	- 17
Group net income		10 280	9 292
Attributable to:			
Shareholders of Novartis AG		10 210	9 1 7 5
Non-controlling interests		70	117
Basic earnings per share (USD) from continuing operations		4.39	3.76
Basic earnings per share (USD) from discontinuing operations		- 0.18	0.00
Total basic earnings per share (USD)	7	4.21	3.76
Diluted earnings per share (USD) from continuing operations		4.31	3.70
Diluted earnings per share (USD) from discontinuing operations		- 0.18	0.00
Total diluted earnings per share (USD)	7	4.13	3.70

### CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

(For the years ended December 31, 2014 and 2013)

		2014	2013
	Note	USD millions	USD millions
Net income		10 280	9 292
Other comprehensive income to be eventually recycled into the consolidated income statement:			
Fair value adjustments on marketable securities, net of taxes	8.1	89	132
Fair value adjustments on deferred cash flow hedges, net of taxes	8.1	21	41
Total fair value adjustments on financial instruments, net of taxes	8.1	110	173
Novartis share of other items recorded in comprehensive income recognized by associated companies, net of taxes	8.2	- 5	5
Currency translation effects	8.3	-2220	676
Total of items to eventually recycle		-2115	854
Other comprehensive income never to be recycled into the consolidated income statement:			
Actuarial (losses)/gains from defined benefit plans, net of taxes	8.4	- 822	1 504
Total comprehensive income		7 343	11 650
Attributable to:			
Shareholders of Novartis AG		7 2 7 4	11 538
Continuing operations		7 820	11 512
Discontinuing operations		- 546	26
Non-controlling interests		69	112

### CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY

(For the years ended December 31, 2014 and 2013)  $% \left( \left( {{{\rm{A}}} \right)_{\rm{A}}} \right)$ 

Total equity at January 1, 2013	Note	Share capital USD millions <b>1 001</b>	Treasury shares USD millions	Retained earnings USD millions 70 220	,	Issued share capital and reserves attributable to Novartis shareholders USD millions <b>69 137</b>	Non- controlling interests USD millions <b>126</b>	Total equity USD millions 69 263
Net income		1001	- 52	9 175	- 1 332	9 175	117	9 292
Other comprehensive income	8			5 5	2 358	2 363	- 5	2 358
Total comprehensive income	0			9 180	2 358	11 538	112	11 650
Dividends	9.1			-6100	2 3 3 0	-6100	112	-6100
Purchase of treasury shares	9.2		- 22	- 2 968		- 2 990		- 2 990
Increase in equity from exercise of								
options and employee transactions	9.4		19	1 672		1 691		1 691
Equity-based compensation	9.5		6	1 071		1 077		1 077
Impact of change in ownership of consolidated entities	9.6			- 10		-10		- 10
Changes in non-controlling interests	9.7						- 109	- 109
Total of other equity movements			3	-6335		-6332	- 109	-6441
Total equity at December 31, 2013		1 001	- 89	73 065	366	74 343	129	74 472
Net income				10 210		10 210	70	10 280
Other comprehensive income	8			- 5	-2931	- 2 936	- 1	- 2 937
Total comprehensive income				10 205	- 2 931	7 274	69	7 343
Dividends	9.1			-6810		-6810		-6810
Purchase of treasury shares	9.2		- 43	- 6 883		- 6 926		-6926
Treasury share repurchase commitment under a share buy-back trading plan	9.3			- 658		- 658		- 658
Increase in equity from exercise of options and employee transactions	9.4		23	2 377		2 400		2 400
Equity-based compensation	9.5		6	1 137		1 143		1 1 4 3
Changes in non-controlling interests	9.7						- 120	- 120
Total of other equity movements			- 14	- 10 837		- 10 851	- 120	- 10 971
Total equity at December 31, 2014		1 001	- 103	72 433	- 2 565	70 766	78	70 844

### CONSOLIDATED BALANCE SHEETS

(At December 31, 2014 and 2013)

	Note	2014 USD millions	2013 USD millions
Assets	11010		
Non-current assets			
Property, plant & equipment	10	15 983	18 197
Goodwill	11	29 311	31 026
Intangible assets other than goodwill	11	23 832	27 841
Investments in associated companies	4	8 4 3 2	9 225
Deferred tax assets	12	7 994	7 375
Financial assets	13	1 720	1 523
Other non-current assets	13	554	525
Total non-current assets related to continuing operations		87 826	95 712
Current assets			
Inventories	14	6 093	7 267
Trade receivables	15	8 275	9 902
Marketable securities, commodities, time deposits and derivative financial instruments	16	839	2 535
Cash and cash equivalents	16	13 023	6 687
Other current assets	17	2 530	3 392
Total current assets related to continuing operations		30 760	29 783
Assets related to discontinuing operations	30	6 801	759
Total current assets		37 561	30 542
Total assets		125 387	126 254
Equity and liabilities Equity Share capital Treasury shares	18 18	1 001 - 103	1 001
Reserves		69 868	73 431
Issued share capital and reserves attributable to Novartis AG shareholders		70 766	74 343
Non-controlling interests		78	129
Total equity		70 844	74 472
Liabilities			
Non-current liabilities			
Financial debts	19	13 799	11 242
Deferred tax liabilities	12	6 099	6 904
Provisions and other non-current liabilities	20	7 672	7 268
Total non-current liabilities related to continuing operations		27 570	25 414
Current liabilities			
Trade payables		5 419	6 1 4 8
Financial debts and derivative financial instruments	21	6 612	6 776
Current income tax liabilities		2 076	2 459
Provisions and other current liabilities	22	10 448	10 935
Total current liabilities related to continuing operations		24 555	26 318
Liabilities related to discontinuing operations	30	2 418	50
Total current liabilities		26 973	26 368
Total liabilities		54 543	51 782
Total equity and liabilities		125 387	126 254

### CONSOLIDATED CASH FLOW STATEMENTS

(For the years ended December 31, 2014 and 2013)

Note	2014 USD millions	2013 USD millions
Net income from continuing operations	10 727	9 3 0 9
Reversal of non-cash items 23.1	6 725	7 1 7 9
Dividends received from associated companies and others	479	444
Interest received	35	40
Interest paid	- 668	- 609
Other financial receipts	553	55
Other financial payments	- 24	- 22
Taxes paid <sup>1</sup>	-2179	-2054
Cash flows before working capital and provision changes from continuing operations	15 648	14 342
Payments out of provisions and other net cash movements in non-current liabilities	-1125	- 947
Change in net current assets and other operating cash flow items 23.2	- 625	- 778
Cash flows from operating activities from continuing operations	13 898	12 617
Cash flows used in/from operating activities from discontinuing operations <sup>1</sup>	- 1	557
Total cash flows from operating activities	13 897	13 174
Purchase of property, plant & equipment	-2624	- 2 903
Proceeds from sales of property, plant & equipment	60	48
Purchase of intangible assets	- 780	- 475
Proceeds from sales of intangible assets	246	96
Purchase of financial assets	- 239	-152
Proceeds from sales of financial assets	431	313
Purchase of other non-current assets	- 60	- 38
Proceeds from sales of other non-current assets	2	15
Divestments/acquisitions of interests in associated companies	1 370	- 52
Acquisitions of businesses 23.3	- 331	- 42
Purchase of marketable securities and commodities	-169	- 278
Proceeds from sales of marketable securities and commodities	2 086	249
Cash flows used in investing activities from continuing operations	- 8	-3219
Cash flows from/used in investing activities from discontinuing operations <sup>1</sup> 23.4	889	-133
Total cash flows from/used in investing activities	881	- 3 352
Dividends paid to shareholders of Novartis AG	-6810	-6100
Acquisition of treasury shares	-6915	-2930
Proceeds from exercise options and other treasury share transactions	2 400	1 693
Increase in non-current financial debts	6 024	93
Repayment of non-current financial debts	- 2 599	-2022
Change in current financial debts	- 107	596
Impact of change in ownership of consolidated entities		4
Dividends paid to non-controlling interests and other financing cash flows	- 140	- 103
Cash flows used in financing activities	-8147	- 8 769
Net effect of currency translation on cash and cash equivalents	- 295	82
Net change in cash and cash equivalents	6 336	1 1 3 5
Cash and cash equivalents at January 1	6 687	5 552
Cash and cash equivalents at December 31	13 023	6 687

The accompanying Notes form an integral part of the consolidated financial statements.

<sup>1</sup> In 2014, total Group tax payments amounted to USD 2.6 billion when also taking into account payments of USD 7 million and USD 459 million, included in the cash flows from operating activities and investing activities, respectively, of discontinuing operations.

# NOTES TO THE NOVARTIS GROUP CONSOLIDATED FINANCIAL STATEMENTS

### 1. Significant Accounting Policies

The Novartis Group (Novartis or Group) is a multinational group of companies specializing in the research, development, manufacturing and marketing of a broad range of healthcare products led by innovative pharmaceuticals. It is headquartered in Basel, Switzerland.

The consolidated financial statements of the Group are prepared in accordance with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB). They are prepared in accordance with the historical cost convention except for items that are required to be accounted for at fair value.

The Group's financial year-end is December 31 which is also the annual closing date of the individual entities' financial statements incorporated into the Group's consolidated financial statements.

The preparation of financial statements requires management to make certain estimates and assumptions, either at the balance sheet date or during the year that affect the reported amounts of assets and liabilities, including any contingent amounts, as well as of revenues and expenses. Actual outcomes and results could differ from those estimates and assumptions.

Listed below are accounting policies of significance to Novartis or, in cases where IFRS provides alternatives, the option adopted by Novartis.

### SCOPE OF CONSOLIDATION

The consolidated financial statements include all entities, including structured entities, over which Novartis AG, Basel, Switzerland, directly or indirectly has control (generally as a result of owning more than 50% of the entity's voting interest). Consolidated entities are also referred to as "subsidiaries".

In cases where Novartis does not fully own a subsidiary it has elected to value any remaining outstanding non-controlling interest at the time of acquiring control of the subsidiary at its proportionate share of the fair value of the net identified assets.

Investments in associated companies (generally defined as investments in entities in which Novartis holds between 20% and 50% of voting shares or over which it otherwise has significant influence) and joint ventures are accounted for using the equity method except for selected venture fund investments for which the Group has elected to apply the method of fair value through the consolidated income statement.

#### **FOREIGN CURRENCIES**

The consolidated financial statements of Novartis are presented in US dollars (USD). The functional currency of subsidiaries is generally the local currency of the respective entity. The functional currency used for the reporting of certain Swiss and foreign finance entities is USD instead of their respective local currencies. This reflects the fact that the cash flows and transactions of these entities are primarily denominated in these currencies.

For subsidiaries not operating in hyperinflationary economies, the subsidiary's results, financial position and cash flows that do not have USD as their functional currency are translated into USD using the following exchange rates:

- income, expense and cash flows using for each month the average exchange rate with the US dollar values for each month being aggregated during the year.
- balance sheets using year-end exchange rates.
- resulting exchange rate differences are recognized in other comprehensive income.

The only hyperinflationary economy applicable to Novartis is Venezuela. The financial statements of the major subsidiaries in this country are first adjusted for the effect of inflation with any gain or loss on the net monetary position recorded in the related functional lines in the consolidated income statement and then translated into USD.

### **ACQUISITION OF ASSETS**

Acquired assets are initially recognized on the balance sheet at cost if they meet the criteria for capitalization. If acquired as part of a business combination, the fair value of identified assets represents the cost for these assets. If separately acquired, the cost of the asset includes the purchase price and any directly attributable costs for bringing the asset into the condition to operate as intended. Expected costs for obligations to dismantle and remove property, plant and equipment when it is no longer used are included in their cost.

### **PROPERTY, PLANT AND EQUIPMENT**

Property, plant and equipment are depreciated on a straightline basis in the consolidated income statement over their estimated useful lives. Leasehold land is depreciated over the period of its lease whereas freehold land is not depreciated.

Property, plant and equipment are assessed for impairment whenever there is an indication that the balance sheet carrying amount may not be recoverable using cash flow projections for the whole useful life. The related depreciation expense is included in the costs of the functions using the asset.

### 1. Significant Accounting Policies (Continued)

The following table shows the respective useful lives for property, plant and equipment:

	Useful life
Buildings	20 to 40 years
Machinery and other equipment	
Machinery and equipment	7 to 20 years
Furniture and vehicles	5 to 10 years
Computer hardware	3 to 7 years

Government grants obtained for construction activities, including any related equipment, are deducted from the gross acquisition cost to arrive at the balance sheet carrying value of the related assets.

### GOODWILL AND INTANGIBLE ASSETS GOODWILL

Goodwill arises in a business combination and is the excess of the consideration transferred to acquire a business over the underlying fair value of the net identified assets acquired. It is allocated to cash generating units (CGUs) which are usually represented by the reported segments. Goodwill is tested for impairment annually at the CGU level and any impairment charges are recorded under "Other Expense" in the consolidated income statement.

### INTANGIBLE ASSETS AVAILABLE FOR USE

Novartis has the following classes of available-for-use intangible assets other than goodwill: Currently marketed products; Marketing know-how; Technologies; Other intangible assets (including computer software) and the Alcon brand name.

Currently marketed products represent the composite value of acquired intellectual property, patents, and distribution rights and product trade names.

Marketing know-how represents the value attributable to the expertise acquired for marketing and distributing Alcon surgical equipment.

Technologies represent identified and separable acquired know-how used in the research, development and production processes.

Significant investments in internally developed and acquired computer software are capitalized and included in the "Other" category and amortized once available for use.

The Alcon brand name is shown separately as it is the only Novartis intangible asset that is available for use with an indefinite useful life. Novartis considers that it is appropriate that the Alcon brand name has an indefinite life since Alcon has a history of strong revenue and cash flow performance, and Novartis has the intent and ability to support the brand with spending to maintain its value for the foreseeable future.

Except for the Alcon brand name, intangible assets available for use are amortized over their estimated useful lives on a straight-line basis and evaluated for potential impairment whenever facts and circumstances indicate that their carrying value may not be recoverable. The Alcon brand name is not amortized, but evaluated for potential impairment annually. The following table shows the respective useful lives for available-for-use intangible assets and the location in the consolidated income statement in which the respective amortization and any potential impairment charge is recognized:

	Useful life	Income statement location for amortization and impairment charges
Currently marketed products	s 5 to 20 years	"Cost of goods sold"
Marketing know-how	25 years	"Cost of goods sold"
Technologies	10 to 30 years	"Cost of goods sold" or "Research and Development"
Other (including computer software)	3 to 5 years	In the respective functional expense
Alcon brand name inde	not amortized, finite useful life	Not applicable

### INTANGIBLE ASSETS NOT YET AVAILABLE FOR USE

Acquired research and development intangible assets, which are still under development and have accordingly not yet obtained marketing approval, are recognized as In-Process Research & Development (IPR&D). IPR&D assets are only capitalized if they are deemed to enhance the intellectual property of Novartis and include items such as initial upfront and milestone payments on licensed or acquired compounds.

IPR&D is not amortized, but evaluated for potential impairment on an annual basis or when facts and circumstances warrant. Any impairment charge is recorded in the consolidated income statement under "Research & Development". Once a project included in IPR&D has been successfully developed it is transferred to the "Currently marketed product" category.

### **IMPAIRMENT OF GOODWILL AND INTANGIBLE ASSETS**

An asset is considered impaired when its balance sheet carrying amount exceeds its estimated recoverable amount, which is defined as the higher of its fair value less costs of disposal and its value in use. Usually, Novartis applies the fair value less costs of disposal method for its impairment assessment. In most cases no directly observable market inputs are available to measure the fair value less costs of disposal. Therefore, an estimate is derived indirectly and is based on net present value techniques utilizing post-tax cash flows and discount rates. In the limited cases where the value in use method is applied, net present value techniques are applied using pre-tax cash flows and discount rates.

Fair value reflects estimates of assumptions that market participants would be expected to use when pricing the asset or CGU, and for this purpose management considers the range of economic conditions that are expected to exist over the remaining useful life of the asset. The estimates used in calculating the net present values are highly sensitive and depend on assumptions specific to the nature of the Group's activities with regard to:

- amount and timing of projected future cash flows;
- outcome of R&D activities (compound efficacy, results of clinical trials, etc.);
- amount and timing of projected costs to develop IPR&D into commercially viable products;
- probability of obtaining regulatory approval;
- long-term sales forecasts for periods of up to 25 years;
- sales erosion rates after the end of patent protection and timing of the entry of generic competition;
- selected tax rate;
- behavior of competitors (launch of competing products, marketing initiatives, etc.); and
- selected discount rate.

Generally, for intangible assets with a definite useful life Novartis uses cash flow projections for the whole useful life of these assets, and for goodwill and the Alcon brand name, Novartis utilizes cash flow projections for a five-year period based on management forecasts, with a terminal value based on sales projections usually in line with or lower than inflation rates for later periods. Probability-weighted scenarios are typically used.

Discount rates used are based on the Group's estimated weighted average cost of capital adjusted for specific country and currency risks associated with cash flow projections as an approximation of the weighted average cost of capital of a comparable market participant.

Due to the above factors, actual cash flows and values could vary significantly from forecasted future cash flows and related values derived using discounting techniques.

### IMPAIRMENT OF ASSOCIATED COMPANIES ACCOUNTED FOR AT EQUITY

Novartis considers investments in associated companies for impairment evaluation whenever there is a quoted share price indicating a fair value less than the per-share balance sheet carrying value for the investment. For unquoted investments in associated companies recent financial information is taken into account to assess whether an impairment evaluation is necessary.

If the recoverable amount of the investment is estimated to be lower than the balance sheet carrying amount an impairment charge is recognized for the difference in the consolidated income statement under "Income from associated companies".

### CASH AND CASH EQUIVALENTS, MARKETABLE SECURITIES, COMMODITIES, DERIVATIVE FINANCIAL INSTRUMENTS AND NON-CURRENT FINANCIAL ASSETS

Cash and cash equivalents include highly liquid investments with original maturities of three months or less which are readily convertible to known amounts of cash. Bank overdrafts are usually presented within current financial debts on the consolidated balance sheet except in cases where a right of offset has been agreed with a bank which then allows for presentation on a net basis. The Group defines "marketable securities" as those financial assets which are managed by the Group's Corporate Treasury and consist principally of quoted equity and quoted debt securities as well as fund investments which are principally traded in liquid markets. Certain marketable securities are managed independently of Corporate Treasury, and these are typically held for long-term strategic purposes and are therefore classified as non-current financial assets. They include equity securities and fund investments.

Marketable securities are initially recorded at fair value on their trade date which is different from the settlement date when the transaction is ultimately effected. Quoted securities are re-measured at each reporting date to fair value based on current market prices. If the market for a financial asset is not active or no market is available, fair values are established using valuation techniques. Apart from discounted cash flow analysis and other pricing models, for the majority of investments in what is known as the "Level 3" hierarchy, the valuation is based on the acquisition cost as the best approximation of the fair value of the investee. This is adjusted for a higher or lower valuation in connection with a partial disposal, a new round of financing and for the investee's performance below or above expectations. The fair value of investments in "Level 3" is reviewed regularly for a possible diminution in value.

The Group has classified all its equity and quoted debt securities as well as fund investments as available-for-sale, as they are not acquired to generate profit from short-term fluctuations in price. Unrealized gains, except exchange gains related to quoted debt instruments, are recorded as a fair value adjustment in the consolidated statement of comprehensive income. They are recognized in the consolidated income statement when the financial asset is sold at which time the gain is transferred either to "Other financial income and expense" for the marketable securities managed by the Group's Corporate Treasury or to "Other income" in the consolidated income statement for all other equity securities and fund investments. Exchange gains related to quoted debt instruments are immediately recognized in the consolidated income statement under "Other financial income and expense".

A security is assessed for impairment when its market value at the balance sheet date is less than initial cost reduced by any previously recognized impairment. Impairments on equity securities, quoted debt securities and fund investments, and exchange rate gains and losses on quoted debt securities in a foreign currency which are managed by the Group's Corporate Treasury are immediately recorded in "Other financial income and expense". Impairments are recorded for all other equity securities and other fund investments in "Other expense" or "Other income" in the consolidated income statement.

Commodities include gold bullion or coins which are valued at the lower of cost or fair value using current market prices. The changes in fair value below cost are immediately recorded in "Other financial income and expense".

Other non-current financial assets including loans are carried at either amortized cost, which reflects the time value of money, or cost adjusted for any accrued interest, less any allowances for uncollectable amounts. Impairments and exchange rate gains and losses on other non-current financial assets, including loans, as well as interest income using the

### 1. Significant Accounting Policies (Continued)

effective interest rate method, are immediately recorded in "Other income" or "Other expense" in the consolidated income statement.

Derivative financial instruments are initially recognized in the balance sheet at fair value and are re-measured to their current fair value at the end of each subsequent reporting period. The valuation of a forward exchange rate contract is based on the discounted cash flow model, using interest curves and spot rates at the reporting date as observable inputs.

Options are valued based on a modified Black-Scholes model using volatility and exercise prices as major observable inputs.

The Group utilizes derivative financial instruments for the purpose of hedging to reduce the volatility in the Group's performance due to the exposure to various types of business risks. The Group, therefore, enters into certain derivative financial instruments which provide effective economic hedges. The risk reduction is obtained because the derivative's value or cash flows are expected, wholly or partly, to move inversely to the hedged item and, therefore, offset changes in the value or cash flows of the hedged item. The overall hedging strategy is aiming to mitigate the currency and interest exposure risk of positions which are contractually agreed and to partially hedge the exposure risk of selected anticipated transactions. However, the Group generally does not hedge the translation risk related to its foreign investments.

Not all of the financial impact of derivative financial instruments can be matched with the financial impact of the economically hedged item. A prerequisite for obtaining this accounting-hedge relationship is extensive documentation on inception and proving on a regular basis that the economic hedge is effective for accounting purposes. Changes in the fair value of any derivative instruments that do not qualify for cash flow hedge accounting are recognized immediately in "Other financial income and expense" in the consolidated income statement.

### **INVENTORIES**

Inventory is valued at acquisition or production cost determined on a first-in first-out basis. This value is used for the "Cost of goods sold" in the consolidated income statement. Unsalable inventory is fully written off in the consolidated income statement under "Cost of goods sold".

### TRADE RECEIVABLES

Trade receivables are initially recognized at their invoiced amounts including any related sales taxes less adjustments for estimated revenue deductions such as rebates, chargebacks and cash discounts.

Provisions for doubtful trade receivables are established once there is an indication that it is likely that a loss will be incurred. These provisions represent the difference between the trade receivable's carrying amount in the consolidated balance sheet and the estimated net collectible amount. Significant financial difficulties of a customer, such as probability of bankruptcy, financial reorganization, default or delinquency in payments are considered indicators that recovery of the trade receivable is doubtful. Charges for doubtful trade receivables are recognized in the consolidated income statement within "Marketing & Sales" expenses.

### LEGAL AND ENVIRONMENTAL LIABILITIES

Novartis and its subsidiaries are subject to contingencies arising in the ordinary course of business such as patent litigation, environmental remediation liabilities and other product-related litigation, commercial litigation, and governmental investigations and proceedings. Provisions are made where a reliable estimate can be made of the probable outcome of legal or other disputes including related fees and expenses against the subsidiary. Novartis believes that its total provisions are adequate based upon currently available information, however, given the inherent difficulties in estimating liabilities in this area, Novartis may incur additional costs beyond the amounts provided. Management believes that such additional amounts, if any, would not be material to the Group's financial condition but could be material to the results of operations or cash flows in a given period.

### **CONTINGENT CONSIDERATION**

In a business combination it is necessary to recognize contingent future payments to previous owners representing contractually defined potential amounts as a liability. Usually for Novartis these are linked to milestone or royalty payments related to intangible assets and are recognized as a financial liability at their fair value which is then re-measured at each subsequent reporting date. These estimations typically depend on factors such as technical milestones or market performance and are adjusted for the probability of their likelihood of payment and if material, appropriately discounted to reflect the impact of time. Changes in the fair value of contingent payments in subsequent periods are recognized in the consolidated income statement in "Cost of goods sold" for currently marketed products and in "Research & Development" for IPR&D. The effect of unwinding the discount over time is recognized in "Interest expense" in the consolidated income statement. Novartis does not recognize contingent consideration associated with asset purchases outside of a business combination that are conditional upon future events which are within its control until such time as there is an unconditional obligation. If the contingent consideration is outside the control of Novartis a liability is recognized once it becomes probable that the contingent consideration will become due. In both cases, if appropriate, a corresponding asset is recorded.

### DEFINED BENEFIT PENSION PLANS AND OTHER POST-EMPLOYMENT BENEFITS

The liability in respect of defined benefit pension plans and other post-employment benefits is the defined benefit obligation calculated annually by independent actuaries using the projected unit credit method. The current service cost for such postemployment benefit plans is included in the personnel expenses of the various functions where the associates are employed, while the net interest on the net defined benefit liability or asset is recognized as "Other expense" or "Other income".

### **TREASURY SHARES**

Treasury shares are initially recorded at fair value on their trade date which is different from the settlement date when the transaction is ultimately effected. Treasury shares are deducted from consolidated equity at their nominal value of CHF 0.50 per share. Differences between the nominal amount and the transaction price on purchases or sales of treasury shares with third parties, or the value of services received for the shares allocated to associates as part of share-based compensation arrangements, are recorded in "Retained earnings" in the consolidated statement of changes in equity.

### **REVENUE RECOGNITION**

### REVENUE

Revenue is recognized on the sale of Novartis Group products and services and recorded as "Net sales" in the consolidated income statement when there is persuasive evidence that a sales arrangement exists, title and risks and rewards for the products are transferred to the customer, the price is determinable and collectability is reasonably assured. When contracts contain customer acceptance provisions, sales are recognized upon the satisfaction of acceptance criteria. If products are stockpiled at the request of the customer, revenue is only recognized once the products have been inspected and accepted by the customer and there is no right of return or replenishment on product expiry and cost of storage will be paid by the customer on normal commercial terms.

Provisions for rebates and discounts granted to government agencies, wholesalers, retail pharmacies, managed care and other customers are recorded as a reduction of revenue at the time the related revenues are recorded or when the incentives are offered. They are calculated on the basis of historical experience and the specific terms in the individual agreements. Provisions for refunds granted to healthcare providers under innovative pay-for-performance agreements are recorded as a reduction of revenue at the time the related sales are recorded. They are calculated on the basis of historical experience and clinical data available for the product as well as the specific terms in the individual agreements. In cases where historical experience and clinical data are not sufficient for a reliable estimation of the outcome, revenue recognition is deferred until such history is available.

Cash discounts are offered to customers to encourage prompt payment and are recorded as revenue deductions. Following a decrease in the price of a product, we generally grant customers a "shelf stock adjustment" for a customer's existing inventory for the involved product. Provisions for shelf stock adjustments, which are primarily relevant within the Sandoz Division, are determined at the time of the price decline or at the point of sale, if the impact of a price decline on the products sold can be reasonably estimated based on the customer's inventory levels of the relevant product. When there is historical experience of Novartis agreeing to customer returns or Novartis can otherwise reasonably estimate expected future returns, a provision is recorded for estimated sales returns. In doing so the estimated rate of return is applied, determined based on historical experience of customer returns or considering any other relevant factors. This is applied to the amounts invoiced also considering the amount of returned products to be destroyed versus products that can be placed back in inventory for resale. Where shipments are made on a re-sale or return basis, without sufficient historical experience for estimating sales returns, revenue is only recorded when there is evidence of consumption or when the right of return has expired.

Provisions for revenue deductions are adjusted to actual amounts as rebates, discounts and returns are processed. The provision represents estimates of the related obligations, requiring the use of judgment when estimating the effect of these sales deductions.

### **REVENUE FROM LEASE ARRANGEMENTS**

For surgical equipment, in addition to cash and instalment sales, revenue is recognized under finance and operating lease arrangements. An arrangement that is not in the legal form of a lease is accounted for as a lease if it is dependent on the use of a specific asset or assets and the arrangement conveys a right to use the asset. Arrangements in which Novartis transfers substantially all the risks and rewards incidental to ownership to the customer are treated as finance lease arrangements. Revenue from finance lease arrangements is recognized at amounts equal to the fair values of the equipment, which approximate the present values of the minimum lease payments under the arrangements. As interest rates embedded in lease arrangements are approximately market rates, revenue under finance lease arrangements is comparable to revenue for outright sales. Finance income for arrangements in excess of twelve months is deferred and subsequently recognized based on a pattern that approximates the use of the effective interest method and recorded in "Other income". Operating lease revenue for equipment rentals is recognized on a straight-line basis over the lease term.

### **OTHER REVENUE**

Other revenue includes royalty income and revenue from ordinary activity such as manufacturing services or other services rendered to the extent such revenue is not recorded under net sales.

### **RESEARCH & DEVELOPMENT**

Internal Research & Development (R&D) costs are fully charged to "Research & Development" in the consolidated income statement in the period in which they are incurred. The Group considers that regulatory and other uncertainties inherent in the development of new products preclude the capitalization of internal development expenses as an intangible asset until marketing approval from a regulatory authority is obtained in a major market such as the United States, the European Union, Switzerland or Japan.

Payments made to third parties in compensation for subcontracted R&D, such as contract research and development organizations, that is deemed not to enhance the intellectual property of Novartis are expensed as internal R&D expenses in the period in which they are incurred. Such payments are only capitalized if they meet the criteria for recognition of an internally generated intangible asset, usually when marketing approval has been achieved from a regulatory authority in a major market.

### 1. Significant Accounting Policies (Continued)

Payments made to third parties in order to in-license or acquire intellectual property rights, compounds and products (IPR&D), including initial upfront and subsequent milestone payments, are capitalized as are payments for other assets, such as technologies to be used in R&D activities. If additional payments are made to the originator company to continue to perform R&D activities, an evaluation is made as to the nature of the payments. Such additional payments will be expensed if they are deemed to be compensation for subcontracted R&D services not resulting in an additional transfer of intellectual property rights to Novartis. By contrast, such additional payments will be capitalized if they are deemed to be compensation for the transfer to Novartis of additional intellectual property developed at the risk of the originator company. Subsequent internal R&D costs in relation to IPR&D and other assets are expensed since the technical feasibility of the internal R&D activity can only be demonstrated by the receipt of marketing approval for a related product from a regulatory authority in a major market.

Costs for post-approval studies performed to support the continued registration of a marketed product are recognized as marketing expenses. Costs for activities that are required by regulatory authorities as a condition for obtaining marketing approval are charged as development expenses as they are incurred, in cases where it is anticipated that the related product will be sold over a longer period than the activities required to be performed to obtain the marketing approval. In the rare cases when costs related to the conditional approval need to be incurred over a period beyond that of the anticipated product sales, then the expected costs of these activities will be expensed over the shorter period of the anticipated product sales. As a result, all activities necessary as a condition to maintain a received approval, whether conditional or not, are expensed in the consolidated income statement.

IPR&D assets are transferred to "Currently marketed products" once the related project has been successfully developed and then are amortized in the consolidated income statement over their useful life. Other acquired technologies included in intangible assets are amortized in the consolidated income statement over their estimated useful lives.

Inventory produced ahead of regulatory approval is provisioned against and the charge is included in "Other expense" in the consolidated income statement as its ultimate use cannot be assured. If this inventory can be subsequently sold, the provision is released to "Other income" in the consolidated income statement either on approval by the appropriate regulatory authority or, exceptionally in Europe, on recommendation by the Committee for Medicinal Products for Human Use (CHMP) if approval is virtually certain.

#### SHARE-BASED COMPENSATION

Vested Novartis shares and ADRs which are granted as compensation are valued at their market value on the grant date and are immediately expensed in the consolidated income statement.

The fair values of unvested restricted shares, restricted share units (RSUs) and performance share units (PSUs) in

Novartis shares and American Depositary Receipts (ADRs) and related options granted to associates as compensation are recognized as an expense over the related vesting period. The expense recorded in the consolidated income statement is included in the personnel expenses of the various functions where the associates are employed.

Unvested restricted shares, restricted ADRs and RSUs and any related options are only conditional on the provision of services by the plan participant during the vesting period. As a result, restricted shares, restricted ADRs, RSUs and any related options are valued using their market value on the grant date. The value of these grants, after making adjustment for assumptions related to their forfeiture during the vesting period, are expensed on a straight-line basis over the respective vesting period.

PSUs require the plan participant to not only provide services during the vesting period but they are also subject to certain performance criteria being achieved during the vesting period. PSUs granted under plans defined as "Long-Term Performance Plans" are subject to performance criteria based on Novartis internal performance metrics. The expense is determined taking into account assumptions concerning performance during the period against targets and expected forfeitures due to plan participants not meeting their service conditions. These assumptions are periodically adjusted. Any change in estimates for past services is recorded immediately as an expense or income in the consolidated income statement and amounts for future periods are expensed over the remaining vesting period. As a result, at the end of the vesting period, the total charge during the whole vesting period represents the amount which will finally vest. The number of equity instruments that finally vest is determined at the vesting date.

In 2014, a Long-Term Relative Performance Plan (LTRPP) was introduced. PSUs granted under this plan are not only conditional on the provision of services by the plan participant during the vesting period but are also conditional on the Total Shareholder Return (TSR) performance of Novartis relative to a specific peer group of companies over the vesting period. These performance conditions are based on variables which can be observed in the market. IFRS requires that these observations are taken into account in determining the fair value of these PSUs at the date of grant. Novartis has determined the fair value of these PSUs at the date of grant using a "Monte Carlo" simulation model. The total fair value of this grant is expensed on a straight-line basis over the vesting period. Adjustments to the number of equity instruments granted are only made if a plan participant does not fulfill the service conditions.

If a plan participant leaves Novartis, for reasons other than retirement, disability or death, then unvested restricted shares, restricted ADRs, RSUs and related share options and PSUs are forfeited, unless determined otherwise by the provision of the plan rules or by the Compensation Committee, for example, in connection with a reorganization or divestment.

Measuring the fair values of PSUs granted under the LTRPP and share and ADR options granted under other plans, requires an estimation of the probability of uncertain future events and various other factors used in the valuation models. The Monte Carlo simulation used for determining the fair value of the PSUs related to the LTRPP requires as input parameters the probability of factors related to uncertain future events; the term of the award; grant price of underlying shares or ADRs; expected volatilities; expected correlation matrix of the underlying equity instruments with those of the peer group of companies and the risk free interest rate. The fair values of options on Novartis shares and ADRs are calculated using the trinomial valuation method and has as input parameters the expected dividend yield and expected price volatility. Expected volatilities are based on those implied from listed financial instruments on Novartis shares, and – to the extent that equivalent values are not available – a future extrapolation based on historical volatility.

#### **GOVERNMENT GRANTS**

Grants from governments or similar organizations are recognized at their fair value when there is a reasonable assurance that the grant will be received and the Group will comply with all attached conditions.

Government grants related to income are deferred and recognized in the consolidated income statement over the period necessary to match them with the related costs which they are intended to compensate.

The accounting policy for property, plant and equipment describes the treatment of any related grants.

#### **RESTRUCTURING CHARGES**

Charges to increase restructuring provisions are included in "Other expense" in the consolidated income statements. Corresponding releases are recorded in "Other income" in the consolidated income statement.

### TAXES

Taxes on income are provided in the same periods as the revenues and expenses to which they relate and include any interest and penalties incurred during the period. Deferred taxes are determined using the comprehensive liability method and are calculated on the temporary differences that arise between the tax base of an asset or liability and its carrying value in the balance sheet prepared for consolidation purposes, except for those temporary differences related to investments in subsidiaries and associated companies, where the timing of their reversal can be controlled and it is probable that the difference will not reverse in the foreseeable future. Furthermore, withholding or other taxes on eventual distribution of a subsidiary's retained earnings are only taken into account when a dividend has been planned since generally the retained earnings are reinvested.

The estimated amounts for current and deferred tax assets or liabilities, including any amounts related to any uncertain tax positions, are based on currently known facts and circumstances. Tax returns are based on an interpretation of tax laws and regulations and reflect estimates based on these judgments and interpretations. The tax returns are subject to examination by the competent taxing authorities which may result in an assessment being made requiring payments of additional tax, interest or penalties. Inherent uncertainties exist in the estimates of the tax positions.

### NON-CURRENT ASSETS HELD FOR SALE OR RELATED TO DISCONTINUING OPERATIONS

Non-current assets are classified as assets held for sale or related to discontinuing operations when their carrying amount is to be recovered principally through a sale transaction and a sale is considered highly probable. They are stated at the lower of carrying amount and fair value less costs to sell. Assets held for sale or included within a disposal group are not depreciated or amortized.

### STATUS OF ADOPTION OF SIGNIFICANT NEW OR AMENDED IFRS STANDARDS OR INTERPRETATIONS

The adoption of new or amended IFRS standards and interpretations which are effective for the financial year beginning on January 1, 2014 did not have a material impact on the Group's consolidated financial statements. Specifically, the impact of IFRIC 21 *Levies*, which sets out the accounting for an obligation to pay a levy if that liability is within the scope of IAS 37 *Provisions*, was insignificant.

### **ISSUED IFRS STANDARDS NOT YET EFFECTIVE**

The following new IFRS standards will, based on a Novartis analysis, be of significance to the Group, but have not yet been early adopted:

- IFRS 9 Financial Instruments will substantially change the classification and measurement of financial instruments; will require impairments to be based on a forward-look-ing model; will change the approach to hedging financial exposures and related documentation and also the recognition of certain fair value changes. The mandatory effective date for requirements issued as part of IFRS 9 is January 1, 2018 with early adoption permitted. The Group is currently assessing the impact of IFRS 9.
- IFRS 15 Revenue from contracts with customers amends revenue recognition requirements and establishes principles for reporting information about the nature, amount, timing and uncertainty of revenue and cash flows arising from contracts with customers. The standard replaces IAS 18 Revenue and IAS 11 Construction contracts and related interpretations. The standard is effective for annual periods beginning on or after January 1, 2017 with earlier adoption permitted. The Group is currently assessing the impact of adopting IFRS 15.

There are no other IFRSs or interpretations which are not yet effective which would be expected to have a material impact on the Group.

### 2. Significant Transactions

### **SIGNIFICANT TRANSACTIONS IN 2014**

### VACCINES – DIVESTMENT OF BLOOD TRANSFUSION DIAGNOSTICS UNIT

On January 9, 2014, Novartis completed the divestment of its blood transfusion diagnostics unit announced on November 11, 2013 to the Spanish company Grifols S.A., for USD 1.7 billion in cash. The pre-tax gain on this transaction was approximately USD 0.9 billion and was recorded in operating income from discontinuing operations.

### PHARMACEUTICALS – ACQUISITION OF CoSTIM PHARMACEUTICALS, INC.

On February 17, 2014, Novartis acquired all of the outstanding shares of CoStim Pharmaceuticals, Inc., a Cambridge, Massachusetts, US-based, privately held biotechnology company focused on harnessing the immune system to eliminate immune-blocking signals from cancer, for a total purchase consideration of USD 248 million (excluding cash acquired). This amount consists of an initial cash payment and the net present value of contingent consideration of USD 153 million due to previous CoStim shareholders, which they are eligible to receive upon the achievement of specified development and commercialization milestones. The purchase price allocation resulted in net identified assets of USD 152 million (excluding cash acquired) and goodwill of USD 96 million. Results of operations since the acquisition were not material.

### PHARMACEUTICALS – DIVESTMENT OF IDENIX PHARMACEUTICALS, INC. (IDENIX) SHAREHOLDING

On August 5, 2014, Merck & Co., USA completed a tender offer for Idenix. As a result, Novartis divested its 22% shareholding in Idenix and realized a gain of approximately USD 0.8 billion which was recorded in income from associated companies.

### CORPORATE – DIVESTMENT OF LTS LOHMANN THERAPIE-SYSTEME AG (LTS) SHAREHOLDING

On November 5, 2014, Novartis divested its 43% shareholding in LTS and realized a gain of approximately USD 0.4 billion which was recorded in income from associated companies.

### ALCON – ACQUISITION OF WAVETEC VISION SYSTEMS, INC. (WAVETEC)

On October 16, 2014, Alcon acquired all of the outstanding shares of WaveTec, a privately held company, for USD 350 million in cash. The purchase price allocation resulted in net identified assets of USD 180 million and goodwill of USD 170 million. Results of operations since the acquisition were not material.

### MAJOR PENDING TRANSACTIONS TRANSACTION WITH ELI LILLY AND COMPANY

On April 22, 2014, Novartis entered into an agreement with Eli Lilly and Company, USA (Lilly) to divest its Animal Health business to Lilly for approximately USD 5.4 billion in cash to be paid on closing. This transaction closed on January 1, 2015, and will result in a pre-tax gain of approximately USD 4.6 billion.

### TRANSACTIONS WITH GLAXOSMITHKLINE PLC

On April 22, 2014 (and as amended and restated on May 29, 2014), Novartis entered into the following agreements with GlaxoSmithKline plc, Great Britain (GSK). These transactions with GSK are inter-conditional and were approved by GSK shareholders in December 2014. They are still subject to other closing conditions, including regulatory approvals. The transactions are expected to close during the first half of 2015.

### Pharmaceuticals – Acquisition of GSK oncology products

Novartis has agreed to acquire GSK's oncology products for an aggregate cash consideration of USD 16 billion. Up to USD 1.5 billion of this cash consideration is contingent on certain development milestones. In addition, under the terms of the agreement, Novartis was granted a right of first negotiation over the co-development or commercialization of GSK's current and future oncology R&D pipeline, excluding oncology vaccines. The right of first negotiation is for a period of 12.5 years, from the acquisition closing date.

### Vaccines – Divestment

Novartis has agreed to divest its Vaccines business to GSK for up to USD 7.1 billion plus royalties. The USD 7.1 billion consists of USD 5.25 billion to be paid on closing and up to USD 1.8 billion in future milestone payments. Novartis's Vaccines influenza business is excluded from the GSK Vaccines business acquisition. However, GSK has entered into a future option arrangement with Novartis in relation to the Vaccines influenza business, pursuant to which Novartis may unilaterally require GSK to acquire the entire or certain parts of its vaccines influenza business for consideration of up to USD 250 million (the Influenza Put Option) if the divestment to CSL Limited, Australia (CSL) discussed below is not completed. The option period is 18 months, beginning the earlier of the GSK transaction closing date and October 22, 2015. Novartis paid GSK a fee of USD 5 million in consideration for the grant of the Influenza Put Option.

### Consumer Health – Combination of Novartis OTC with GSK consumer healthcare in a joint venture

Novartis and GSK have agreed to create a combined consumer healthcare business through a joint venture between Novartis OTC and GSK consumer healthcare. Upon completion, Novartis will own a 36.5% share of the joint venture and will have four of eleven seats on the joint venture's Board. Furthermore, Novartis will have customary minority rights and also exit rights at a pre-defined, market-based pricing mechanism. The investment will be accounted for using the equity method of accounting.

### TRANSACTION WITH CSL

On October 26, 2014, Novartis entered into a transaction with CSL to sell its Vaccines influenza business to CSL for USD 275 million. This transaction is expected to be completed in the second half of 2015, subject to all necessary regulatory approvals.

Entering into the separate divestment agreement with CSL resulted in the vaccines influenza business being a separate cash generating unit within the Vaccines Division, requiring the per-

formance of a separate valuation of the influenza vaccines business net assets. This triggered the recognition of an exceptional impairment charge of approximately USD 1.1 billion (pre-tax), as the book value of the influenza vaccines business net assets was above the USD 275 million consideration to be paid by CSL.

#### **SIGNIFICANT TRANSACTIONS IN 2013**

There were no significant acquisition or divestment transactions during 2013.

### 3. Segmentation of Key Figures 2014 and 2013

The businesses of Novartis are divided operationally on a worldwide basis into five reporting segments. In addition, we separately report Corporate activities.

Reporting segments are presented in a manner consistent with the internal reporting to the chief operating decision maker which is the Executive Committee of Novartis, except for Consumer Health which aggregates the OTC and Animal Health divisions. The Executive Committee of Novartis is responsible for allocating resources and assessing the performance of the reporting segments.

Following the major pending transactions described in Note 2, Novartis has separated the Group's reported financial data for the current and prior year into "continuing" operations and "discontinuing" operations:

Continuing operations comprise:

- Pharmaceuticals: Innovative patent-protected prescription medicines
- Alcon: Surgical, ophthalmic pharmaceutical and vision care products
- Sandoz: Generic pharmaceuticals
- Corporate activities

Discontinuing operations comprise:

- Vaccines: Preventive human vaccines and the blood transfusion diagnostics unit, which was divested on January 9, 2014, see Note 2. Excluded are certain intellectual property rights and related other revenues of the Vaccines Division which are now reported under Corporate continuing activities.
- Consumer Health: OTC (over-the-counter medicines) and Animal Health. These two divisions are managed separately. However, neither is material enough to the Group to be disclosed separately as a reporting segment.
- Corporate: certain transactional and other expenses related to the portfolio transformation.

Our divisions are supported by Novartis Business Services and the Novartis Institutes for BioMedical Research.

- Novartis Business Services (NBS) was launched in July 2014 with the transfer of over 7,000 associates, and organizational structures are being implemented to start operations in January 2015 as a shared services organization.
- The Novartis Institutes for BioMedical Research (NIBR) was created in 2003, and is headquartered in Cambridge, Massachusetts. NIBR supports the Pharmaceuticals and Alcon divisions research activities.

Except for Consumer Health, our reporting segments are managed separately because they each research, develop, manufacture, distribute, and sell distinct products that require differing marketing strategies.

The reporting segments are as follows:

Pharmaceuticals researches, develops, manufactures, distributes and sells patented prescription medicines and reports results based on the following business franchises: Oncology, Primary Care, consisting of Primary Care medicines and Established Medicines; and Specialty Care, consisting of Ophthalmology, Neuroscience and Integrated Hospital Care.

Alcon researches, discovers, develops, manufactures, distributes and sells eye care products. Alcon is the global leader in eye care with product offerings in Surgical, Ophthalmic Pharmaceuticals and Vision Care. In Surgical, Alcon develops, manufactures, distributes and sells ophthalmic surgical equipment, instruments, disposable products and intraocular lenses. In Ophthalmic Pharmaceuticals, Alcon discovers, develops, manufactures, distributes and sells medicines to treat chronic and acute diseases of the eye, as well as overthe-counter medicines for the eye. In Vision Care, Alcon develops, manufactures, distributes and sells contact lenses and lens care products.

Sandoz develops, manufactures, distributes and sells prescription medicines, as well as pharmaceutical and biotechnological active substances, which are not protected by valid and enforceable third-party patents. Sandoz structures its global business around Retail Generics, Anti-Infectives and Biopharmaceuticals & Oncology Injectables. In Retail Generics, Sandoz develops, manufactures and markets active ingredients and finished dosage forms of pharmaceuticals to third parties. Retail Generics includes the areas of Dermatology, Respiratory and Ophthalmics, as well as specialty franchises in cardiovascular, metabolism, central nervous system, pain, gastrointestinal, and hormonal therapies. In Anti-Infectives, Sandoz supplies generic antibiotics to a broad range of customers, as well as active pharmaceutical ingredients and intermediates to the pharmaceutical industry worldwide. In Biopharmaceuticals, Sandoz develops, manufactures and markets protein- or other biotechnology manufacturing services to other companies. In Oncology Injectables, Sandoz develops, manufactures and markets cytotoxic products for the hospital market.

Vaccines: Following the January 9, 2014 completion of the divestment of our blood transfusion diagnostics unit to Grifols S.A., the segment now consists only of Vaccines. Vaccines

### 3. Segmentation of Key Figures 2014 and 2013 (Continued)

researches, develops, manufactures, distributes and sells human vaccines worldwide. Prior to the completion of the divestment to Grifols S.A., the division was known as Vaccines and Diagnostics. Diagnostics researched, developed, distributed and sold blood testing products.

Consumer Health consists of two divisions: OTC (over-thecounter medicines) and Animal Health. OTC offers readily available consumer medicines. Animal Health provides veterinary products for farm and companion animals.

Income and expenses relating to Corporate include the costs of the Group headquarters and those of corporate coordination functions in major countries. In addition, Corporate includes other items of income and expense which are not attributable to specific segments such as certain expenses related to post-employment benefits, environmental remediation liabilities, charitable activities, donations and sponsorships.

The accounting policies mentioned above are used in the reporting of segment results. Inter-segmental sales are made at amounts which are considered to approximate arm's length transactions. The Executive Committee of Novartis evaluates segmental performance and allocates resources among the segments based on a number of measures including net sales, operating income and net operating assets. Segment net operating assets consist primarily of property, plant and equipment, intangible assets, inventories and trade and other operating receivables less operating liabilities.

Usually, no allocation of Corporate items is made to the segments. As a result, Corporate assets and liabilities principally consist of net liquidity (cash and cash equivalents, marketable securities less financial debts), investments in associated companies and current and deferred taxes and non-segment specific environmental remediation and post-employment benefit liabilities.

### SEGMENTATION – CONSOLIDATED INCOME STATEMENTS

	Pharmace	uticals	Alcon		Sanc	loz
(In USD millions)	2014	2013	2014	2013	2014	2013
Net sales to third parties	31 791	32 214	10 827	10 496	9 562	9 1 5 9
Sales to other segments	262	202	49	50	286	294
Net sales	32 053	32 416	10 876	10 546	9 848	9 453
Other revenues	629	497	34	27	12	18
Cost of goods sold	- 6 889	- 6 655	-5193	- 4 900	-5751	- 5 476
Gross profit	25 793	26 258	5 717	5 673	4 109	3 995
Marketing & Sales	-8178	-8514	-2474	-2452	-1725	-1672
Research & Development	-7331	-7242	- 928	-1042	- 827	- 787
General & Administration	-1009	-1051	-613	- 589	- 376	- 374
Other income	734	699	79	79	97	106
Other expense	-1538	- 774	- 184	- 437	- 190	-240
Operating income	8 471	9 376	1 597	1 232	1 088	1 028
Income from associated companies	812				4	2
Interest expense						
Other financial income and expense						
Income before taxes						
Taxes						
Net income						
Attributable to:						
Shareholders of Novartis AG						
Non-controlling interests						
Included in net income <sup>1</sup> are:						
Interest income						
Depreciation of property, plant & equipment	- 856	- 822	- 307	-319	-317	- 307
Amortization of intangible assets	- 287	- 284	-2080	- 1 999	- 403	-411
Impairment charges on property, plant & equipment, net	- 15	- 29	1	- 4	- 7	3
Impairment charges on intangible assets, net	-231	- 29	- 7	- 57	- 39	- 20
Impairment charges/fair value gains on financial assets	- 20	- 16			- 1	
Additions to restructuring provisions	- 433	- 88	- 64	- 71	- 4	- 3
Equity-based compensation of Novartis and Alcon						- 38

<sup>1</sup>Income statement items reflect the continuing/discontinuing operations allocation as described on page 171.

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Corpor	ate	Total continuing op		Total discontinuing operations		Group eliminatio	าร	Total Group	
2014	2013	2014	2013	2014	2013	2014	2013	2014	2013
		52 180	51 869	5 816	6 051			57 996	57 920
- 358	- 325	239	221	78	72	-317	- 293		
- 358	- 325	52 419	52 090	5 894	6 123	- 317	- 293	57 996	57 920
540	84	1 215	626	65	285		_	1 280	911
488	452	- 17 345	- 16 579	-3073	- 3 322	317	293	- 20 101	- 19 608
670	211	36 289	36 137	2 886	3 086	0	0	39 175	39 223
		- 12 377	- 12 638	-1812	-1911		_	- 14 189	- 14 549
		- 9 086	-9071	- 857	- 781			-9943	- 9 852
-618	- 589	-2616	- 2 603	-431	- 457			-3047	- 3 060
481	321	1 391	1 205	1 007	174	- 18	-12	2 380	1 367
- 600	- 596	-2512	-2047	-1146	- 184	18	12	-3640	-2219
- 67	- 653	11 089	10 983	- 353	- 73	0	0	10 736	10 910
1 102	597	1 918	599	2	1			1 920	600
		- 704	- 683					- 704	- 683
		-31	- 92					-31	- 92
		12 272	10 807	- 351	- 72			11 921	10 735
		-1545	-1498	- 96	55			-1641	-1443
		10 727	9 309	- 447	- 17			10 280	9 292
		10 654	9 1 8 9	- 444	-14			10210	9 175
		73	120	- 3	- 3			70	117
		33	34					33	34
- 106	- 106	-1 586	-1554	- 66	- 201			-1652	-1755
- 5	- 4	-2775	- 2 698	- 77	- 278			-2852	-2976
- 23	- 17	- 44	- 47	- 736	- 33			- 780	- 80
		- 277	- 106	- 405	- 8			- 682	-114
- 48	-41	- 69	- 57		- 8			- 69	- 65
- 3	- 1	- 504	- 163	-14	-12			- 518	- 175
- 179	- 139	- 1 007	- 892	- 124	- 95			-1131	- 987

FINANCIAL REPORT | NOTES TO THE NOVARTIS GROUP CONSOLIDATED FINANCIAL STATEMENTS

### 3. Segmentation of Key Figures 2014 and 2013 (Continued)

### **SEGMENTATION – CONSOLIDATED BALANCE SHEETS**

	Pharmac	euticals	Alcon		
(In USD millions)	2014	2013	2014	2013	
Assets related to continuing operations	25 657	26 633	42 494	43 761	
Assets related to discontinuing operations					
Total assets	25 657	26 633	42 494	43 761	
Liabilities related to continuing operations	- 10 532	- 11 209	- 2 709	- 2 659	
Liabilities related to discontinuing operations					
Total liabilities	- 10 532	- 11 209	- 2 709	- 2 659	
Total equity	15 125	15 424	39 785	41 102	
Net debt					
Net operating assets	15 125	15 424	39 785	41 102	
Included in assets and liabilities related to continuing operations <sup>1</sup> are:					
Total property, plant & equipment	9 732	9 647	2 413	2 396	
Additions to property, plant & equipment <sup>2</sup>	1 676	1 755	517	523	
Total goodwill and intangible assets	6 0 9 6	6 099	35 642	37 133	
Additions to goodwill and intangible assets <sup>2</sup>	493	299	192	191	
Total investment in associated companies	11	2			
Additions to investment in associated companies	9	1			
Cash and cash equivalents, marketable securities, commodities, time deposits and derivative financial instruments					
Financial debts and derivative financial instruments					
Current income tax and deferred tax liabilities					

<sup>1</sup>Items reflect the allocation to continuing operations as described on page 171. 2013 balance sheet movements only excludes the divested blood transfusion diagnostics unit. <sup>2</sup>Excluding impact of business combinations.

Country		les 1	Total of selected non-current assets <sup>2</sup>					
USD millions	2014	%	2013	%	2014	%	2013	%
Switzerland	658	1	625	1	34 399	44	37 337	43
United States	17 337	33	17 257	33	28 329	37	30 391	35
Germany	3 742	7	3 628	7	3 365	4	4 323	5
Japan	3 781	7	4 4 1 2	9	141		150	
France	2 638	5	2 779	5	228		309	
Other	24 024	47	23 168	45	11 096	15	13 779	17
Group	52 180	100	51 869	100	77 558	100	86 289	100
Europe	18 690	36	18 421	36	45 040	58	50 582	59
Americas	22 218	43	21 984	42	30 074	39	33 391	39
Asia/Africa/Australasia	11 272	21	11 464	22	2 4 4 4	3	2 316	2
Group	52 180	100	51 869	100	77 558	100	86 289	100

The following countries accounted for more than 5% of at least one of the respective continuing operations totals for the years ended December 31, 2014 and 2013:

<sup>1</sup>Net sales from operations by location of third party customer.

<sup>2</sup> Total of property, plant and equipment, goodwill, intangible assets and investment in associated companies.

The Group's largest customer accounts for approximately 15% of net sales, and the second and third largest customers account for 13% and 6% of net sales (2013: 10%, 9% and 7% respectively). No other customer accounted for 5% or more of net sales, in either year.

The highest amounts of trade receivables outstanding were for these same three customers. They amounted to 11%, 8%and 4%, respectively, of the trade receivables at December 31, 2014 (2013: 9%, 7% and 5% respectively).

Sand	loz	Vaccir	nes	Consumer H	lealth	Corpo (including eli		Total Gr	oup
2014	2013	2014	2013	2014	2013	2014	2013	2014	2013
18 771	20 144		4 724		2 634	31 664	27 599	118 586	125 495
		3 710	759	2 684		407		6 801	759
18 771	20 144	3 710	5 483	2 684	2 634	32 071	27 599	125 387	126 254
- 3 449	-3275		- 730		- 957	- 35 435	- 32 902	- 52 125	- 51 732
		-715	- 50	- 922		- 781		-2418	- 50
- 3 449	- 3 275	-715	- 780	- 922	- 957	- 36 216	- 32 902	- 54 543	- 51 782
15 322	16 869	2 995	4 703	1 762	1 677	- 4 145	- 5 303	70 844	74 472
						6 549	8 796	6 549	8 796
15 322	16 869	2 995	4 703	1 762	1677	2 404	3 493	77 393	83 268
3 123	3 304		1 608		453	715	789	15 983	18 19
531	500		106		79	180	190	2 904	3 153
11 378	12 640		2 534		786	27	- 325	53 143	58 867
110	31		1		31	4	17	799	570
16	19		1			8 405	9 203	8 432	9 225
						21	54	30	55
						13 862	9 222	13 862	9 222
						20 41 1	18 018	20 41 1	18 018
						8 1 7 5	9 363	8 1 7 5	9 363

## 3. Segmentation of Key Figures 2014 and 2013 (Continued)

### PHARMACEUTICALS BUSINESS FRANCHISE NET SALES

	2014 USD millions	2013 USD millions	Change USD %
Primary Care			
Onbrez Breezhaler/Arcapta Neohaler	220	192	15
Seebri Breezhaler	146	58	152
Ultibro Breezhaler	118	6	nm
Subtotal COPD <sup>1</sup> portfolio	484	256	89
Galvus	1 224	1 200	2
Xolair <sup>2</sup>	777	613	27
ТОВІ	281	387	-27
Other	46	40	15
Total strategic franchise products	2 812	2 496	13
Diovan	2 345	3 524	- 33
Exforge	1 396	1 456	-4
Tekturna/Rasilez	207	290	- 29
Other	1 201	1 312	-8
Total Established medicines	5 149	6 582	- 22
Total Primary Care products	7 961	9 078	- 12
Oncology			
Gleevec/Glivec	4 746	4 693	1
Tasigna	1 529	1 266	21
Subtotal Bcr-Abl franchise	6 275	5 959	5
Sandostatin	1 650	1 589	4
Afinitor/Votubia	1 575	1 309	20
Exjade	926	893	4
Femara	380	384	- 1
Jakavi	279	163	71
Zometa	264	600	- 56
Proleukin	74	91	- 19
Zykadia	31	0	nm
Other	249	228	9
Total Oncology products	11 703	11 216	4
Specialty – Neuroscience			
Gilenya	2 477	1 934	28
Exelon/Exelon Patch	1 009	1 032	-2
Comtan/Stalevo	371	401	- 7
Extavia	177	159	11
Other	66	78	- 15
Total strategic franchise products	4 100	3 604	14
Established medicines	409	444	-8
Total Neuroscience products	4 509	4 048	11

	2014 USD millions	2013 USD millions	Change USD %
Specialty – Ophthalmics			
Lucentis	2 441	2 383	2
Other	63	61	3
Total Ophthalmics products	2 504	2 444	2
Specialty – Integrated Hospital Care (IHC)			
Neoral/Sandimmun	684	750	-9
Myfortic	543	637	-15
Zortress/Certican	327	249	31
llaris	199	119	67
Other	173	169	2
Total strategic franchise products	1 926	1 924	0
Everolimus stent drug	205	247	-17
Established medicines	981	1 1 1 2	-12
Total IHC products	3 112	3 283	- 5
Established medicines – additional products			
Voltaren (excl. other divisions)	632	675	-6
Ritalin/Focalin	492	594	-17
Tegretol	346	342	1
Trileptal	265	257	3
Foradil	175	205	-15
Other	92	72	28
Total additional products	2 002	2 145	- 7
Total strategic franchise products	23 045	21 684	6
Total established medicines and additional products	8 746	10 530	- 17
Total Division net sales	31 791	32 214	-1

<sup>1</sup>Chronic Obstructive Pulmonary Disease

<sup>2</sup>Net sales reflect *Xolair* sales for all indications (i.e. *Xolair* SAA and *Xolair* CSU, which are managed by the Integrated Hospital Care franchise).

nm = not meaningful

The product portfolio of other segments is widely spread in 2014 and 2013.

### 4. Associated Companies

	Net income statement effect		Other comprehensive income effect		Total comprehensive income effect	
	2014 USD millions	2013 USD millions	2014 USD millions	2013 USD millions	2014 USD millions	2013 USD millions
Roche Holding AG, Switzerland	599	604	- 51	- 37	548	567
Idenix Pharmaceuticals, Inc., US	812				812	
LTS Lohmann Therapie-Systeme AG, Germany	436	31		- 6	436	25
Others	71	- 36	20	11	91	- 25
Associated companies related to continuing operations	1 918	599	-31	- 32	1 887	567
Associated companies related to discontinuing operations	2	1			2	1
Total Group	1 920	600	- 31	- 32	1 889	568

Novartis has a significant investment in Roche Holding AG, Basel (Roche) and certain other smaller investments which are accounted for as associated companies:

	Balance sheet value		
	2014 USD millions	2013 USD millions	
Roche Holding AG, Switzerland	8 1 5 9	8 982	
Others	273	243	
Total	8 432	9 225	

#### **ROCHE HOLDING AG**

The Group's holding in Roche voting shares was 33.3% at December 31, 2014 and 2013. This investment represents approximately 6.3% of Roche's total outstanding voting and non-voting equity instruments at December 31, 2014 (2013: 6.3%).

Since up-to-date financial data for Roche are not available when Novartis produces its consolidated financial results, a survey of analyst estimates is used to estimate the Group's share of Roche's net income. Any differences between these estimates and actual results will be adjusted in the Group's 2015 consolidated financial statements when available.

The following tables show summarized financial information of Roche, including current values of fair value adjustments made at the time of the acquisition of the shares, for the year ended December 31, 2013 and for the six months ended June 30, 2014 since full year 2014 data is not yet available:

	Current assets CHF billions	Non-current assets CHF billions	Current liabilities CHF billions	Non-current liabilities CHF billions
December 31, 2013	29.2	54.9	15.8	25.2
June 30, 2014	28.0	54.5	17.9	24.6

	Revenue CHF billions	Net income CHF billions	Other comprehen- sive income CHF billions	Total comprehen- sive income CHF billions
December 31, 2013	46.8	8.5	- 0.6	7.9
June 30, 2014	23.0	4.2	- 0.6	3.6

A purchase price allocation was performed on the basis of publicly available information at the time of acquisition of the investment. The December 31, 2014 balance sheet value allocation is as follows:

	USD millions
Novartis share of Roche's estimated net assets	2 461
Novartis share of re-appraised intangible assets	1 226
Implicit Novartis goodwill	2 877
Current value of share in net identifiable assets and goodwill	6 564
Accumulated equity accounting adjustments and translation effects less dividends received	1 595
December 31, 2014 balance sheet value	8 159

The identified intangible assets principally relate to the value of currently marketed products and are amortized on a straight-line basis over their estimated average useful life of 20 years.

In 2014, dividends received from Roche in relation to the distribution of its 2013 net income amounted to USD 473 million (2013: USD 413 million in relation with the distribution of its 2012 net income).

The consolidated income statement effects from applying Novartis accounting principles for this investment in 2014 and 2013 are as follows:

	2014 USD millions	2013 USD millions
Novartis share of Roche's estimated current-year consolidated net income	813	817
Prior-year adjustment	- 56	- 59
Amortization of fair value adjustments relating to intangible assets, net of taxes of USD 45 million (2013: USD 45 million)	- 158	- 154
Net income effect	599	604

The publicly quoted market value of the Novartis interest in Roche (Reuters symbol: RO.S) at December 31, 2014, was USD 14.4 billion (2013: USD 14.8 billion).

### 4. Associated Companies (Continued)

### **OTHER ASSOCIATED COMPANIES**

During 2014, the shareholdings of 22% in Idenix Pharmaceuticals, Inc. and 43% in LTS Lohmann Therapie-Systeme AG were sold realizing gains of USD 812 million and USD 421 million, respectively. Others include a gain of USD 64 million recorded on investments in associated companies held by the Novartis Venture Funds, which are accounted at fair value from January 1, 2014 onwards, consistent with other investments held by these Funds.

## 5. Interest Expense and Other Financial Income and Expense

### INTEREST EXPENSE

	2014 USD millions	2013 USD millions
Interest expense	- 701	- 664
Expense due to discounting long-term liabilities	- 3	- 19
Total interest expense	- 704	- 683

### OTHER FINANCIAL INCOME AND EXPENSE

	2014 USD millions	2013 USD millions
Interest income	33	34
Dividend income	1	1
Net capital (losses)/gains on available-for-sale securities	-2	28
Net capital losses on cash and cash equivalents		- 1
Income on forward contracts and options	1	2
Impairment of commodities and available-for-sale securities		- 14
Other financial expense	- 25	- 20
Monetary loss from hyperinflation accounting	- 61	- 32
Currency result, net	22	- 90
Total other financial income and expense	- 31	- 92

### 6. Taxes

#### **INCOME BEFORE TAXES**

	2014 USD millions	2013 USD millions
Switzerland	5 245	5 435
Foreign	7 027	5 372
Total income before taxes from continuing operations	12 272	10 807
Total loss before taxes from discontinuing operations	- 351	- 72
Group income before taxes	11 921	10 735

#### ANALYSIS OF TAX RATE

The main elements contributing to the difference between the Group's overall expected tax rate (which can change each year since it is calculated as the weighted average tax rate based on pre-tax income of each subsidiary) and the effective tax rate are:

	2014	2013
	%	%
Expected tax rate	11.7	12.9
Effect of disallowed expenditures	2.9	3.4
Effect of utilization of tax losses brought forward from prior periods	- 0.3	- 0.1
Effect of income taxed at reduced rates	- 0.6	- 0.1
Effect of tax credits and allowances	- 1.8	- 2.0
Effect of write-off of deferred tax assets		0.1
Effect of tax rate change on opening balance		- 0.2
Effect of tax benefits expiring in 2017	- 0.8	- 0.7
Effect of reversal of write-down of investments in subsidiaries	0.9	
Prior year and other items	0.6	0.6
Effective tax rate for continuing operations	12.6	13.9
Effective tax rate for discontinuing operations	-27.4	76.4
Group effective tax rate	13.8	13.4

The utilization of tax-loss carry-forwards lowered the tax charge by USD 34 million in 2014 and by USD 13 million in 2013, respectively.

#### CURRENT AND DEFERRED INCOME TAX EXPENSE

	2014	2013
	USD millions	USD millions
Switzerland	- 661	- 524
Foreign	-1952	-1793
Total current income tax expense from continuing operations	-2613	-2317
Switzerland	309	160
Foreign	759	659
Total deferred tax income from continuing operations	1 068	819
Total income tax expense from continuing operations	- 1 545	- 1 498
Total income tax (expense)/income from discontinuing operations	- 96	55
Group income tax expense	-1641	-1443

### 7. Earnings per Share

Basic earnings per share (EPS) is calculated by dividing net income attributable to shareholders of Novartis AG by the weighted average number of shares outstanding in a reporting period. This calculation excludes the average number of issued shares purchased by the Group and held as treasury shares.

	2014	2013
Basic earnings per share		
Weighted average number of shares outstanding (in millions)	2 426	2 441
Net income attributable to shareholders of Novartis AG (USD millions)		
– Continuing operations	10 654	9 1 8 9
– Discontinuing operations	- 444	- 14
– Total	10 210	9 175
Basic earnings per share (USD)		
<ul> <li>Continuing operations</li> </ul>	4.39	3.76
- Discontinuing operations	-0.18	0.00
– Total	4.21	3.76

For diluted EPS, the weighted average number of shares outstanding is adjusted to assume the vesting of all restricted shares and the conversion of all potentially dilutive shares arising from options on Novartis shares that have been issued.

	2014	2013
Diluted earnings per share		
Weighted average number of shares outstanding (in millions)	2 426	2 4 4 1
Adjustment for vesting of restricted shares and dilutive shares from options (in millions)	44	38
Weighted average number of shares for diluted earnings per share (in millions)	2 470	2 479
Net income attributable to shareholders of Novartis AG (USD millions)		
<ul> <li>Continuing operations</li> </ul>	10 654	9 1 8 9
– Discontinuing operations	- 444	- 14
– Total	10 210	9 175
Diluted earnings per share (USD)		
– Continuing operations	4.31	3.70
– Discontinuing operations	-0.18	0.00
– Total	4.13	3.70

No options were excluded from the calculation of diluted EPS in 2013 or 2014, as all options were dilutive in both years.

## 8. Changes in Consolidated Statements of Comprehensive Income

The consolidated statements of comprehensive income include the Group's net income for the year as well as all other valuation adjustments recorded in the Group's consolidated balance sheet but which under IFRS are not recorded in the consolidated income statement. These include fair value adjustments to financial instruments, actuarial gains or losses on defined benefit pension and other post-employment plans and currency translation effects, net of tax.

These amounts are subject to significant volatility outside of the control of management due to such factors as share price, foreign currency and interest rate movements.

The following table summarizes these value adjustments and currency translation effects attributable to Novartis shareholders:

	Fair value adjustments on marketable securities USD millions	Fair value adjustments on deferred cash flow hedges USD millions	Actuarial losses from defined benefit plans USD millions	Cumulative currency translation effects USD millions	Total value adjustments USD millions
Value adjustments at January 1, 2013	212	- 100	- 6 048	3 944	- 1 992
Fair value adjustments on financial instruments	132	41			173
Net actuarial gains from defined benefit plans <sup>1</sup>			1 504		1 504
Currency translation effects <sup>2</sup>				681	681
Total value adjustments in 2013	132	41	1 504	681	2 358
Value adjustments at December 31, 2013	344	- 59	- 4 544	4 625	366
Fair value adjustments on financial instruments	89	21			110
Net actuarial losses from defined benefit plans 1			- 822		- 822
Currency translation effects <sup>2</sup>				-2219	-2219
Total value adjustments in 2014	89	21	- 822	- 2 219	-2931
Value adjustments at December 31, 2014	433	- 38	- 5 366	2 406	- 2 565

<sup>1</sup>Net actuarial losses of USD 65 million are attributable to discontinuing operations (2013: net actuarial gains of USD 39 million).

<sup>2</sup> USD 37 million accumulated currency translation losses are attributable to discontinuing operations (2013: gains of USD 1 million).

#### 8.1) The 2014 and 2013 changes in the fair value of financial instruments were as follows:

	Fair value adjustments on marketable securities USD millions	flow hedges	Total USD millions
Fair value adjustments at January 1, 2014	344	- 59	285
Changes in fair value:			
– Available-for-sale marketable securities	- 3		-3
- Available-for-sale financial investments	91		91
- Associated companies' movements in comprehensive income	5		5
Realized net gains transferred to the consolidated income statement:			
– Marketable securities sold	- 4		- 4
– Other financial assets sold	- 81		-81
Amortized net losses on cash flow hedges transferred to the consolidated income statement		23	23
Impaired financial assets transferred to the consolidated income statement	87		87
Deferred tax on above items	- 6	- 2	-8
Fair value adjustments during the year	89	21	110
Fair value adjustments at December 31, 2014	433	- 38	395

## 8. Changes in Consolidated Statements of Comprehensive Income (Continued)

	Fair value	Fair value	
		adjustments on	
	on marketable	deferred cash	
	securities	flow hedges	Total
	USD millions	USD millions	USD millions
Fair value adjustments at January 1, 2013	212	- 100	112
Changes in fair value:			
– Available-for-sale marketable securities	3		3
<ul> <li>Available-for-sale financial investments</li> </ul>	204		204
- Associated companies' movements in comprehensive income	7		7
Realized net gains transferred to the consolidated income statement:			
- Marketable securities sold	- 46		- 46
– Other financial assets sold	- 74		- 74
Amortized net losses on cash flow hedges transferred to the consolidated income statement		44	44
Impaired financial assets transferred to the consolidated income statement	65		65
Deferred tax on above items	- 27	-3	- 30
Fair value adjustments during the year	132	41	173
Fair value adjustments at December 31, 2013	344	- 59	285

8.2) The Group has investments in associated companies, principally Roche Holding AG. The Group's share in movements in these companies' other comprehensive income are recognized directly in the respective categories of the Novartis consolidated statement of comprehensive income, net of tax. The currency translation effects and fair value adjustments of associated companies are included in the corresponding Group amounts. All other movements in these companies' statements of comprehensive income are recognized directly in the consolidated statement of comprehensive income under "Novartis share of other items recorded in comprehensive income under "Novartis share of other items recorded in comprehensive income of taxes". These amounted to a loss of USD 5 million (2013: income of USD 5 million).

8.3) In 2013, cumulative currency translation gains of USD 1 million have been transferred into financial income as a result of the liquidation of a subsidiary. In 2014, no cumulative translation gains or losses have been transferred into financial income.

Currency translation losses of associated companies of USD 31 million were recognized in 2014 (2013: loss of USD 43 million).

8.4) Remeasurements from defined benefit plans arise as follows:

	2014 USD millions	2013 USD millions
Defined benefit pension plans before tax	- 999	1 977
Other post-employment benefit plans before tax	- 235	163
Taxation on above items	412	- 636
Total after tax	- 822	1 504

8.5) The following table shows contributions of associated companies to other comprehensive income:

	Note	2014 USD millions	2013 USD millions
Fair value adjustments attributable to associated companies		5	6
Novartis share of other items recorded in comprehensive income recognized by associated companies, net of taxes	8.2	- 5	5
Currency translation adjustments		-31	- 43
Other comprehensive income attributable to associated companie	es 4	- 31	- 32

### 9. Changes in Consolidated Equity

9.1) A dividend of CHF 2.45 per share was approved at the 2014 Annual General meeting for the year ended December 31, 2013, resulting in a total dividend payment of USD 6.8 billion in 2014 (2013: the CHF 2.30 per share dividend amounted to USD 6.1 billion). The amount available for distribution as a dividend to shareholders is based on the available distributable retained earnings of Novartis AG determined in accordance with the legal provisions of the Swiss Code of Obligations.

9.2) Share purchases of 79.2 million shares for USD 6.9 billion occurred during 2014 (2013: 40.3 million shares for USD 3.0 billion). This comprises purchases of 46.8 million shares on the first trading line of the SIX Swiss Stock Exchange for USD 4.1 billion (2013: 33.3 million shares for USD 2.5 billion) and 27.0 million shares on the second trading line for USD 2.4 billion under the share buy-back announced in November 2013 (2013: 2.2 million shares for USD 170 million). The latter are intended for cancellation. An additional 5.4 million shares were acquired from employees for USD 473 million (2013: 4.8 million shares for USD 356 million).

9.3) In 2014, Novartis has entered into a share buy-back trading plan with a third party to repurchase shares on the Group's behalf under irrevocable, non-discretionary arrangements. As of December 2014, the commitment under this trading plan amounted to USD 658 million (2013: nil). This amount reflects expected purchases by a third party under a trading plan over a rolling 90 days period. This trading plan will terminate on November 30, 2015. 9.4) 41.4 million shares were delivered as a result of options being exercised related to employee participation programs and delivery of treasury shares, which contributed USD 2.4 billion (2013: 34.3 million shares for USD 1.7 billion). The average share price of the shares delivered was significantly below market price reflecting the strike price of the options exercised.

9.5) Equity-settled share-based compensation is expensed in the consolidated income statement in accordance with the vesting period of the share-based compensation plans. The value for the shares and options granted is credited to consolidated equity over the respective vesting period. In 2014, 10.3 million shares were transferred to associates as part of equity-settled compensation (2013: 11.5 million shares). In addition, tax benefits arising from tax deductible amounts exceeding the expense recognized in the income statement are credited to equity.

9.6) In 2013, additional interests in subsidiaries were acquired. The reduction in equity of USD 10 million represents the excess of the amount paid over the amount recognized for the acquired non-controlling interest. In 2014, no such transaction took place.

9.7) Changes in non-controlling interests in subsidiaries resulted in a reduction in consolidated equity of USD 120 million (2013: reduction of USD 109 million).

### 10. Property, Plant & Equipment Movements

	Land USD millions	Buildings USD millions	Construction in progress USD millions	Machinery & other equipment USD millions	Total USD millions
2014					
Cost					
January 1	920	12 933	3 635	17 813	35 301
Cost of assets related to discontinuing operations	-115	-1175	- 445	-1597	- 3 332
Reclassifications <sup>1</sup>		455	-1291	836	
Additions <sup>2</sup>	5	113	2 397	389	2 904
Disposals and derecognitions <sup>3</sup>	-8	- 127	- 15	- 544	- 694
Currency translation effects	- 58	- 887	- 296	-1510	-2751
December 31	744	11 312	3 985	15 387	31 428
Accumulated depreciation January 1	- 29	- 5 560	- 29	- 11 486	- 17 104
January 1	- 29	- 5 560	- 29	- 11 486	- 17 104
Accumulated depreciation on assets related to discontinuing operations	1	377	4	827	1 209
Depreciation charge <sup>4</sup>	-3	- 450		-1133	-1 586
Accumulated depreciation on disposals and derecognitions <sup>3</sup>	1	91		464	556
Impairment charge	- 1	- 10	- 37	- 18	- 66
Reversal of impairment charge			21	1	22
Currency translation effects	1	459	4	1 060	1 524
December 31	- 30	- 5 093	- 37	- 10 285	- 15 445
Net book value at December 31	714	6 219	3 948	5 102	15 983
					35 534
Insured value at December 31					
Insured value at December 31 Net book value of property, plant & equipment under finance lease contra	icts				1

<sup>1</sup>Reclassifications between various asset categories due to completion of plant and other equipment under construction.

<sup>2</sup>Additions in discontinuing operations, for the period from January 1, 2014 to the portfolio transformation announcement on April 22, 2014, were USD 50 million.

<sup>3</sup> Derecognition of assets which are no longer used and are not considered to have a significant disposal value or other alternative use.

<sup>4</sup> Depreciation charge in discontinuing operations, for the period from January 1, 2014 to the portfolio transformation announcement on April 22, 2014, was USD 66 million.

The Group was awarded government grants in the United States for the construction of a manufacturing facility to produce influenza vaccines which is reported in discontinuing operations. The contracts included a maximum of USD 330 million of cost reimbursement for construction activities and equipment, of which USD 284 million was received up to December 31, 2014 (2013: USD 260 million). These grants are deducted in arriving at the balance sheet carrying value of the assets since the receipt of the respective government grant is reasonably assured. There are no onerous contracts or unfulfilled conditions in connection with this grant.

The reversal of the impairment charge during 2013 principally relates to finding an alternative use for the previously impaired machinery and equipment initially used to manufacture aliskiren.

Borrowing costs on new additions to property, plant and equipment have been capitalized and amounted to USD 20 million in 2014 (2013: USD 9 million).

			Construction	Machinery & other	
	Land USD millions	Buildings USD millions	in progress USD millions	equipment USD millions	Total USD millions
2013					
Cost					
January 1	867	12 029	3 113	16 763	32 772
Cost of assets related to discontinuing operations	- 34	- 178	- 2	- 82	- 296
Reclassifications <sup>1</sup>		1014	-2102	1 088	
Additions <sup>2</sup>	79	67	2 604	403	3 153
Disposals and derecognitions <sup>3</sup>	-2	- 171	-21	- 640	- 834
Currency translation effects	10	172	43	281	506
December 31	920	12 933	3 635	17 813	35 301
Accumulated depreciation					
Accumulated depreciation					
Accumulated depreciation January 1	- 25	- 5 176	- 10	- 10 622	- 15 833
-	- 25	<b>- 5 176</b> 91	- 10	<b>- 10 622</b> 57	<b>- 15 833</b> 148
January 1	<b>- 25</b>		- 10		
January 1 Accumulated depreciation on assets related to discontinuing operations		91	- 10	57	148
January 1 Accumulated depreciation on assets related to discontinuing operations Depreciation charge <sup>4</sup>		91 - 465	<b>- 10</b>	57 - 1 273	148 - 1 742
January 1 Accumulated depreciation on assets related to discontinuing operations Depreciation charge <sup>4</sup> Accumulated depreciation on disposals and derecognitions <sup>3</sup>		91 - 465 144		57 - 1 273 562	148 - 1 742 706
January 1 Accumulated depreciation on assets related to discontinuing operations Depreciation charge <sup>4</sup> Accumulated depreciation on disposals and derecognitions <sup>3</sup> Impairment charge		91 - 465 144		57 - 1 273 562 - 50	148 - 1 742 706 - 129
January 1 Accumulated depreciation on assets related to discontinuing operations Depreciation charge <sup>4</sup> Accumulated depreciation on disposals and derecognitions <sup>3</sup> Impairment charge Reversal of impairment charge		91 - 465 144 - 60		57 -1273 562 -50 49	148 - 1 742 706 - 129 49
January 1 Accumulated depreciation on assets related to discontinuing operations Depreciation charge <sup>4</sup> Accumulated depreciation on disposals and derecognitions <sup>3</sup> Impairment charge Reversal of impairment charge Currency translation effects	- 4	91 -465 144 -60 -94	- 19	57 -1273 562 -50 49 -209	148 - 1 742 706 - 129 49 - 303
January 1 Accumulated depreciation on assets related to discontinuing operations Depreciation charge <sup>4</sup> Accumulated depreciation on disposals and derecognitions <sup>3</sup> Impairment charge Reversal of impairment charge Currency translation effects December 31	-4	91 -465 144 -60 -94 -5560	- 19 - 29	57 -1273 562 -50 49 -209 -11486	148 -1742 706 -129 49 -303 -17104
January 1 Accumulated depreciation on assets related to discontinuing operations Depreciation charge <sup>4</sup> Accumulated depreciation on disposals and derecognitions <sup>3</sup> Impairment charge Reversal of impairment charge Currency translation effects December 31 Net book value at December 31	-4 -29 891	91 -465 144 -60 -94 -5560	- 19 - 29	57 -1273 562 -50 49 -209 -11486	148 -1742 706 -129 49 -303 -17104 18197

<sup>1</sup>Reclassifications between various asset categories due to completion of plant and other equipment under construction.

<sup>2</sup>Additions in discontinuing operations, for the period from January 1, 2013 to the announcement of the blood transfusion diagnostics unit divestment on November 11, 2013, were USD 11 million.

<sup>a</sup> Depreciation of assets which are no longer used and are not considered to have a significant disposal value or other alternative use. <sup>a</sup> Depreciation charge in discontinuing operations, for the period from January 1, 2013 to the announcement of the blood transfusion diagnostics unit divestment on November 11, 2013, was USD 13 million.

### 11. Goodwill and Intangible Asset Movements

l		Acquired research & development USD millions	Alcon brand name USD millions	Technologies USD millions	Currently marketed products USD millions	Marketing know-how USD millions		Total of intangible assets other than goodwill USD millions
2014								
Cost								
January 1	31 554	2 648	2 980	7 104	24 160	5 960	1 479	44 331
Cost of assets related to discontinuing operations	-1222	- 25		- 346	-2833		- 359	- 3 563
Impact of business combinations	131	248			234			482
Reclassifications <sup>1</sup>		- 139		- 125	95		169	
Additions <sup>2</sup>		405		125	216		53	799
Disposals and derecognitions <sup>3</sup>		- 159			- 286		- 18	- 463
Currency translation effects	- 726	- 135		- 100	- 670		- 73	- 978
December 31	29 737	2 843	2 980	6 658	20 916	5 960	1 251	40 608
Accumulated amortization								
January 1	- 528	- 575		- 2 168	- 11 953	- 715	-1079	- 16 490
Accumulated amortization of assets related to discontinuing operations	61	13		167	1 369		213	1 762
Amortization charge <sup>4</sup>				- 587	-1868	- 239	-81	-2775
Accumulated amortization on disposals and derecognitions <sup>3</sup>		159			283		17	459
Impairment charge		-271			- 46		- 30	- 347
Reversal of impairment charge					70			70
Currency translation effects	41	- 11		49	461		46	545
December 31	- 426	- 685		- 2 539	- 11 684	- 954	-914	- 16 776
Net book value at December 31	29 311	2 158	2 980	4 119	9 232	5 006	337	23 832

<sup>1</sup>Reclassifications between various asset categories as a result of product launches of acquired In-Process Research & Development.

<sup>2</sup>Additions in discontinuing operations, for the period from January 1, 2014 to the portfolio transformation announcement on April 22, 2014, were USD 11 million.

<sup>3</sup> Derecognitions of assets which are no longer used or being developed and are not considered to have a significant disposal value or other alternative use. <sup>4</sup> Amortization charge in discontinuing operations, for the period from January 1, 2014 to the portfolio transformation announcement on April 22, 2014, was USD 77 million.

### SEGMENTATION OF GOODWILL AND INTANGIBLE ASSETS

The net book values at December 31, 2014 of goodwill and intangible assets are allocated to the Group's reporting segments as summarized below.

	Goodwill USD millions	Acquired research & development USD millions	Alcon brand name USD millions	Technologies USD millions	Currently marketed products USD millions	Marketing know-how USD millions		Total of intangible assets other than goodwill USD millions
Pharmaceuticals	3 177	1 358		19	1 425		117	2 919
Alcon	17 946	301	2 980	3 367	5 848	5 006	194	17 696
Sandoz	8 180	487		733	1 959		19	3 198
Corporate	8	12					7	19
Total	29 311	2 158	2 980	4 1 19	9 232	5 006	337	23 832
Potential impairment charge, if any, if discounted cash flows fell by 5%					2			
Potential impairment charge, if any, if discounted cash flows fell by 10%					3			

		Acquired research & development	Alcon brand name	Technologies	Currently marketed products	Marketing know-how	assets	Total of intangible assets other than goodwill
2013	JSD millions	USD millions	USD millions	USD millions	USD millions	USD millions	USD millions	USD millions
Cost								
January 1	31 605	2 857	2 980	7 079	24 412	5 960	1 303	44 591
Cost of assets related to discontinuing operations		-8	2 300	7075	- 1 059	5 500	1 303	-1067
Reclassifications <sup>1</sup>	3 - 207	- 447			431		16	-1007
								==0
Additions		251		4	170		145	570
Disposals and derecognitions <sup>2</sup>		- 40			-21		- 10	- 71
Currency translation effects	216	35		21	227		25	308
December 31	31 554	2 648	2 980	7 104	24 160	5 960	1 479	44 331
Accumulated amortization January 1	- 515	- 543		-1551	- 10 750	- 476	- 940	- 14 260
Accumulated amortization of assets related to discontinuing operations		8			913			921
Amortization charge <sup>3</sup>				-610	-1963	- 239	- 109	-2921
Accumulated amortization on disposals and derecognitions <sup>2</sup>		39			19		10	68
Impairment charge		- 64			- 28		-24	-116
Developed of increases at all sums					2			2
Reversal of impairment charge								
Currency translation effects	-13	-15		- 7	-146		-16	- 184
1 0	- 13 <b>- 528</b>	- 15 <b>- 575</b>		- 7 - 2 168	- 146 - <b>11 953</b>	- 715	- 16 - <b>1 079</b>	- 184 - <b>16 490</b>

<sup>1</sup>Reclassifications between various asset categories as a result of product launches of acquired In-Process Research & Development.

<sup>2</sup>Derecognitions of assets which are no longer used or being developed and are not considered to have a significant disposal value or other alternative use.

<sup>3</sup>Amortization charge in discontinuing operations, for the period from January 1, 2013 to the announcement of the blood transfusion diagnostics unit divestment on November 11, 2013, was USD 55 million.

The recoverable amount of a cash-generating unit and related goodwill is usually based on the fair value less costs of disposal valuation method. The following assumptions are used in the calculations:

	Pharmaceuticals %	Alcon %	Sandoz %
Sales growth rate assumptions after forecast period	1.25	3	0 to 2
Discount rate (post-tax)	7	7	7

In 2014, intangible asset impairment charges of USD 752 million were recognized. These relate to impairment charges in continuing operations of USD 347 million (USD 302 million in the Pharmaceuticals Division and USD 45 million in total in the Sandoz and Alcon divisions) and USD 405 million in discontinuing operations.

In 2013, intangible asset impairment charges in continuing operations of USD 108 million were recognized. These relate to impairment charges of USD 57 million in the Alcon Division and USD 51 million in total in the Sandoz and Pharmaceuticals divisions. USD 8 million were recognized in discontinuing operations.

Reversal of prior year impairment charges amounted to USD 70 million (2013: USD 2 million).

7 375

### 12. Deferred Tax Assets and Liabilities

	Property, plant & equipment SD millions	Intangible assets USD millions	Pensions and other benefit obligations of associates USD millions		Tax loss carryforwards USD millions	Other assets, provisions and accruals USD millions	Valuation allowance USD millions	Total USD millions
Gross deferred tax assets at January 1, 2014	159	270	1 515	3 026	142	2 651	- 22	7 741
Gross deferred tax liabilities at January 1, 2014	- 886	- 4 796	- 448	- 514	-4	- 622		- 7 270
Net deferred tax balance at January 1, 2014	- 727	- 4 526	1 067	2 512	138	2 029	- 22	471
At January 1, 2014	- 727	-4 526	1 067	2 512	138	2 029	- 22	471
Net deferred tax balance related to discontinuing operations	39	92	- 73	- 40	- 19	- 93		- 94
Credited/(charged) to income	256	525	17	395	- 60	- 60	- 5	1 068
Credited to equity						157		157
Credited/(charged) to other comprehensive incon	пе		389			-8		381
Impact of business combinations		- 159			30	- 1		- 130
Other movements	61	40	-61	25	- 7	- 29	13	42
Net deferred tax balance at December 31, 2014	- 371	-4 028	1 339	2 892	82	1 995	- 14	1 895
Gross deferred tax assets at December 31, 2014	268	214	1 749	3 470	85	2 601	-14	8 3 7 3
Gross deferred tax liabilities at December 31, 2014	- 639	- 4 242	-410	- 578	-3	- 606		-6478
Net deferred tax balance at December 31, 2014	- 371	-4 028	1 3 3 9	2 892	82	1 995	- 14	1 895
After offsetting USD 379 million of deferred tax as Deferred tax assets at December 31, 2014		napinties wit	nin the same	e tax jurisuit			15 10.	7 994
Deferred tax liabilities at December 31, 2014								- 6 099
Net deferred tax balance at December 31, 2014								1 895
Gross deferred tax assets at January 1, 2013	163	301	2 1 1 3	2 689	215	2 258	- 11	7 728
Gross deferred tax liabilities at January 1, 2013	- 950	- 5 260	- 429	- 447	- 16	- 547		- 7 649
Net deferred tax balance at January 1, 2013	- 787	- 4 959	1 684	2 242	199	1 711	- 11	79
At January 1, 2013	- 787	-4959	1 684	2 242	199	1711	- 11	79
Net deferred tax balance related to discontinuing operations					-3			-3
Credited/(charged) to income	96	462	16	293	- 56	21	- 4	828
Credited to equity						311		311
Charged to other comprehensive income			- 636			- 30		- 666
Other movements	-36	- 29	3	- 23	- 2	16	- 7	- 78
Net deferred tax balance at December 31, 2013	- 727	- 4 526	1 067	2 512	138	2 029	- 22	471
Gross deferred tax assets at December 31, 2013	159	270	1 515	3 026	142	2 651	- 22	7 741
Gross deferred tax liabilities at December 31, 2013	- 886	- 4 796	- 448	- 514	-4	- 622		-7270

After offsetting USD 366 million of deferred tax assets and liabilities within the same tax jurisdiction the balance amounts to: Deferred tax assets at December 31, 2013 Deferred tax liabilities at December 31, 2013

Deferred tax liabilities at December 31, 2013	- 6 904
Net deferred tax balance at December 31, 2013	471

A reversal of valuation allowance could occur when circumstances make the realization of deferred taxes probable. This would result in a decrease in the Group's effective tax rate.

Deferred tax assets of USD 3.6 billion (2013: USD 3.2 billion) and deferred tax liabilities of USD 5.6 billion (2013: USD 6.4 billion) are expected to have an impact on current taxes payable after more than twelve months.

At December 31, 2014, unremitted earnings of USD 55 billion (2013: USD 48 billion) have been retained by consolidated entities for reinvestment. Therefore, no provision is made for income taxes that would be payable upon the distribution of these earnings. If these earnings were remitted, an income tax charge could result based on the tax statutes currently in effect.

	2014 USD millions	2013 USD millions
Temporary differences on which no deferred tax has been provided as they are permanent in nature related to:		
<ul> <li>Investments in subsidiaries</li> </ul>	7 802	6818
- Goodwill from acquisitions	- 28 567	- 30 279

The gross value of tax-loss carry-forwards that have, or have not, been capitalized as deferred tax assets, with their expiry dates is as follows:

	Not capitalized USD millions	Capitalized USD millions	2014 total USD millions
One year	12	3	15
Two years	22	26	48
Three years	14		14
Four years	13	5	18
Five years	52	8	60
More than five years	345	396	741
Total	458	438	896

In 2014, USD 14 million (2013: USD 181 million) of tax-loss carry-forwards expired.

	Not capitalized USD millions	Capitalized USD millions	2013 total USD millions
One year	175	21	196
Two years	50	16	66
Three years	31	32	63
Four years	106	16	122
Five years	49	42	91
More than five years	936	581	1 517
Total	1 347	708	2 055

Deferred tax assets related to taxable losses of relevant Group entities are recognized to the extent it is considered probable that future taxable profits will be available against which such losses can be utilized in the foreseeable future.

### 13. Financial and Other Non-Current Assets

#### FINANCIAL ASSETS

	2014 USD millions	2013 USD millions
Available-for-sale long-term financial investments	1 008	876
Long-term receivables from customers	334	305
Minimum lease payments from finance lease agreements	199	101
Long-term loans, advances and security deposits	179	241
Total financial assets	1 720	1 523

#### **OTHER NON-CURRENT ASSETS**

	2014 USD millions	2013 USD millions
Deferred compensation plans	381	375
Prepaid post-employment benefit plans	37	42
Other non-current assets	136	108
Total other non-current assets	554	525

### 14. Inventories

	2014 USD millions	2013 USD millions
Raw material, consumables	756	954
Finished products	5 337	6 313
Total inventories	6 093	7 267

The reversals mainly result from the release of products initially requiring additional quality control inspections and from the reassessment of inventory values manufactured prior to regulatory approval but for which approval was subsequently received.

The amount of inventory recognized as an expense in "Cost of goods sold" in the consolidated income statements during 2014 amounted to USD 11.6 billion (2013: USD 13.3 billion). The group recognized inventory provisions amounting to USD 1.1 billion (2013: USD 1.4 billion) and reversed inventory provisions amounting to USD 379 million (2013: USD 474 million).

### 15. Trade Receivables

	2014 USD millions	2013 USD millions
Total gross trade receivables	8 4 3 1	10 097
Provisions for doubtful trade receivables	- 156	- 195
Total trade receivables, net	8 275	9 902

The following table summarizes the movement in the provision for doubtful trade receivables:

	2014 USD millions	2013 USD millions
January 1	- 195	- 217
Provisions on doubtful trade receivable related to discontinuing operations	15	1
Provisions for doubtful trade receivables charged to the consolidated income statement	- 92	- 98
Utilization or reversal of provisions for doubtful trade receivables	101	120
Currency translation effects	15	- 1
December 31	- 156	- 195

The following sets forth details of the age of trade receivables that are not overdue as specified in the payment terms and conditions established with Novartis customers as well as an analysis of overdue amounts and related provisions for doubtful trade receivables:

	2014 USD millions	2013 USD millions
Not overdue	7 406	8 522
Past due for not more than one month	334	502
Past due for more than one month but less than three months	275	297
Past due for more than three months but less than six months	174	254
Past due for more than six months but less than one year	102	257
Past due for more than one year	140	265
Provisions for doubtful trade receivables	- 156	- 195
Total trade receivables, net	8 275	9 902

Trade receivable balances include sales to drug wholesalers, retailers, private health systems, government agencies, managed care providers, pharmacy benefit managers and government-supported healthcare systems. Novartis continues to monitor sovereign debt issues and economic conditions in Greece, Italy, Portugal, Spain (GIPS) and other countries and evaluates trade receivables in these countries for potential collection risks. Substantially all of the trade receivables from such countries are due directly from local governments or from government-funded entities. Deteriorating credit and economic conditions and other factors in these countries have resulted in, and may continue to result in an increase in the average length of time that it takes to collect these trade receivables and may require Novartis to re-evaluate the collectability of these trade receivables in future periods.

With regard to the GIPS countries, the countries with the largest outstanding trade receivables exposure are Italy and Spain. The majority of the outstanding trade receivables from these countries are due directly from local governments or from government-funded entities. A summary of the outstanding trade receivables from these countries and related provisions at December 31, 2014 and 2013 is as follows:

Novartis does not expect to write off trade receivable amounts that are not past due nor unprovided for.

Trade receivables include amounts denominated in the following major currencies:

Total trade receivables, net	8 275	9 902
Other	2 335	2 756
USD	3 059	2 823
JPY	951	1 464
GBP	184	223
EUR	1 562	2 401
CHF	184	235
Currency	2014 USD millions	2013 USD millions

#### ITALY

	2014 USD millions	2013 USD millions
Gross trade receivables at December 31	385	636
Past due for more than one year at December 31	37	55
Provision at December 31	29	43

#### SPAIN

	2014 USD millions	2013 USD millions
Gross trade receivables at December 31	271	563
Past due for more than one year at December 31	13	111
Provision at December 31	6	22

### 16. Marketable Securities, Commodities, Time Deposits, Derivative Financial Instruments and Cash and Cash Equivalents

#### MARKETABLE SECURITIES, COMMODITIES, TIME DEPOSITS AND DERIVATIVE FINANCIAL INSTRUMENTS

	2014 USD millions	2013 USD millions
Debt securities	327	323
Equity securities	15	47
Fund investments	35	11
Total available-for-sale marketable securities	377	381
Commodities	97	97
Time deposits with original maturity more than 90 days	6	1 931
Derivative financial instruments	356	121
Accrued interest on debt securities and time deposits	3	5
Total marketable securities, commodities, time deposits and derivative financial instruments	839	2 535

At December 31, 2014 all debt securities are denominated in USD except for USD 1 million in CHF (2013: USD 1 million) and USD 25 million in EUR (2013: USD 26 million), respectively.

#### CASH AND CASH EQUIVALENTS

	2014 USD millions	2013 USD millions
Current accounts	3 607	3 995
Time deposits and short-term investments with original maturity less than 90 days	9 416	2 692
Total cash and cash equivalents	13 023	6 687

### 17. Other Current Assets

Total other current assets	2 530	3 392
- Associated companies	5	5
– Third parties	1 033	978
Other receivables		
- Associated companies	3	3
– Third parties	547	668
Prepaid expenses		
Reimbursements from insurers	87	145
Income tax receivables	202	265
Withholding tax recoverable	144	107
VAT receivable	509	1 221
	2014 USD millions	2013 USD millions

### 18. Details of Shares and Share Capital Movements

Outstanding share capital	909	3	912	- 14	898
Treasury shares	- 92	3	- 89	- 14	- 103
Share capital	1 001		1 001		1 001
	USD millions	USD millions	USD millions	USD millions	USD millions
Total outstanding shares	2 420 620 174	5 464 134	2 426 084 308	- 27 458 051	2 398 626 257
Total treasury shares	- 285 572 826	5 464 134	- 280 108 692	- 27 458 051	- 307 566 743
Total Novartis shares	2 706 193 000		2 706 193 000		2 706 193 000
	Dec 31, 2012	Movement in year	Dec 31, 2013	Movement in year	Dec 31, 2014
			Number of shares <sup>1</sup>		

<sup>1</sup>All shares are voting shares, which are registered, authorized, issued and fully paid.

During 2014, 51.7 million treasury shares were delivered as a result of options exercised and physical share deliveries related to employee participation programs (2013: 45.8 million shares). 52.2 million shares were repurchased on the SIX Swiss Exchange first trading line and from employees (shares previously granted under the respective programs). In 2013, shares repurchased via these channels amounted to 38.1 million treasury shares. In addition, Novartis repurchased 27.0 million shares on the second trading line in 2014 under the announced share buy-back of USD 5.0 billion spread over two

years (2013: 2.2 million shares). With these transactions, the total number of shares outstanding was reduced by 27.5 million in 2014 (2013: increase of 5.5 million shares). There are 17 million outstanding written call options on Novartis shares, originally issued as part of the share-based compensation for associates. The market maker has acquired these options but they have not yet been exercised. The weighted average exercise price of these options is USD 56.36 and they have contractual lives of 10 years.

### 19. Non-Current Financial Debt

	2014 USD millions	2013 USD millions
Straight bonds	15 982	12 909
Liabilities to banks and other financial institutions <sup>1</sup>	803	919
Finance lease obligations	3	4
Total (including current portion of non-current financial debt)	16 788	13 832
Less current portion of non-current financial debt	- 2 989	- 2 590
Total non-current financial debts	13 799	11 242
Straight bonds		
3.625% CHF 800 million bond 2008/2015 of Novartis AG, Basel, Switzerland, issued at 100.35%	807	896
5.125% USD 3 000 million bond 2009/2019 of Novartis Securities Investment Ltd., Hamilton, Bermuda, issued at 99.822%	2 991	2 989
4.125% USD 2 000 million bond 2009/2014 of Novartis Capital Corporation, New York, United States, issued at 99.897%		2 000
4.25% EUR 1 500 million bond 2009/2016 of Novartis Finance S.A., Luxembourg, Luxembourg, issued at 99.757%	1 821	2 064
2.9% USD 2 000 million bond 2010/2015 of Novartis Capital Corporation, New York, United States, issued at 99.522%	1 999	1 996
4.4% USD 1 000 million bond 2010/2020 of Novartis Capital Corporation, New York, United States, issued at 99.237%	993	992
2.4% USD 1 500 million bond 2012/2022 of Novartis Capital Corporation, New York, United States, issued at 99.225%	1 486	1 484
3.7% USD 500 million bond 2012/2042 of Novartis Capital Corporation, New York, United States, issued at 98.325%	488	488
3.4% USD 2 150 million bond 2014/2024 of Novartis Capital Corporation, New York, United States, issued at 99.287%	2 128	
4.4% USD 1 850 million bond 2014/2044 of Novartis Capital Corporation, New York, United States, issued at 99.196%	1 823	
0.75% EUR 600 million bond 2014/2021 of Novartis Finance S.A., Luxembourg, Luxembourg, issued at 99.134%	721	
1.625% EUR 600 million bond 2014/2026 of Novartis Finance S.A., Luxembourg, Luxembourg, issued at 99.697%	725	
Total straight bonds	15 982	12 909

<sup>1</sup> Average interest rate 0.9% (2013: 0.8%)

	2014 USD millions	2013 USD millions
Breakdown by maturity 2014		2 590
2015	2 989	3 098
2016	1 838	2 085
2017	175	9
2018	342	9
2019	3 068	3 072
After 2019	8 3 7 6	2 969
Total	16 788	13 832

	2014	2014	2013	2013
	Balance sheet	Fair values	Balance sheet	Fair values
Fair value comparison	USD millions	USD millions	USD millions	USD millions
Straight bonds	15 982	17 013	12 909	13 547
Others	806	806	923	923
Total	16 788	17 819	13 832	14 470

The fair values of straight bonds are determined by quoted market prices. Other financial debts are recorded at notional amounts which are a reasonable approximation of the fair values.

	2014 USD millions	2013 USD millions
Breakdown by currency USD	11 912	9 953
EUR	3 329	2 1 4 1
JPY	669	762
CHF	807	896
Others	71	80
Total	16 788	13 832

Collateralized non-current financial debt and pledged assets	2014 USD millions	2013 USD millions
Total amount of collateralized non-current financial debts	1	7
Total net book value of property, plant & equipment pledged as collateral for non-current financial debts	184	139

### 19. Non-Current Financial Debt (Continued)

The Group's collateralized non-current financial debt consists of loan facilities at usual market conditions.

The percentage of fixed rate financial debt to total financial debt was 82% at December 31, 2014, and 77% at December 31, 2013. Financial debts, including current financial debts, contain only general default covenants. The Group is in compliance with these covenants.

The average interest rate on total financial debt in 2014 was 3.4% (2013: 3.3%).

### 20. Provisions and Other Non-Current Liabilities

Total	7 672	7 268
Other non-current liabilities	447	560
Contingent consideration	465	460
Provisions for product liabilities, governmental investigations and other legal matters	521	463
Environmental remediation provisions	828	961
- Other post-employment benefits	1 054	860
<ul> <li>Other long-term employee benefits and deferred compensation</li> </ul>	518	557
<ul> <li>Defined benefit pension plans</li> </ul>	3 839	3 407
Accrued liability for employee benefits:		
	2014 USD millions	2013 USD millions

#### ENVIRONMENTAL REMEDIATION PROVISIONS

The material components of the environmental remediation provisions consist of costs to sufficiently clean and refurbish contaminated sites to the extent necessary and to treat and where necessary continue surveillance at sites where the environmental remediation exposure is less significant. The provision recorded at December 31, 2014 totals USD 0.9 billion (2013: USD 1.1 billion) of which USD 95 million (2013: USD 100 million) is current.

A substantial portion of the environmental remediation provision relates to the remediation of Basel regional landfills in the adjacent border areas in Switzerland, Germany and France following internal and external investigations completed during 2007 and the subsequent creation of an environmental remediation provision. The provisions are re-assessed on a yearly basis and have been adjusted as necessary.

In the United States, Novartis has been named under federal legislation (the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended) as a potentially responsible party (PRP) in respect of certain sites. Novartis actively participates in, or monitors, the clean-up activities at the sites in which it is a PRP. The provision takes into consideration the number of other PRPs at each site and the identity and financial position of such parties in light of the joint and several nature of the liability. The following table shows the movements in the environmental liability provisions during 2014 and 2013:

	2014 USD millions	2013 USD millions
January 1	1 061	1 120
Cash payments	- 33	- 68
Releases	- 6	- 19
Additions	2	2
Currency translation effects	- 101	26
December 31	923	1 061
Less current liability	- 95	-100
Non-current environmental remediation provisions at December 31	828	961

The expected timing of the related cash outflows as of December 31, 2014 is currently projected as follows:

Due within two years Due later than two years, but within five years	USD millions 195 187
Due later than five years but within ten years	483
Due after ten years Total environmental remediation liability provisions	58 <b>923</b>

#### PROVISIONS FOR PRODUCT LIABILITIES, GOVERNMENTAL INVESTIGATIONS AND OTHER LEGAL MATTERS

Novartis has established provisions for certain product liabilities, governmental investigations and other legal matters, including provisions for expected legal costs where a potential cash outflow is probable and Novartis can make a reliable estimate of the amount of the outflow. These provisions represent the Group's current best estimate of the total financial effect for the matters listed below and for other less significant matters. Potential cash outflows reflected in a provision might be fully or partially off-set by insurance in certain circumstances. Novartis has not established provisions for potential damage awards for certain additional legal claims against our subsidiaries if Novartis currently believes it is likely that it ultimately will prevail in them. In addition, with respect to the matters listed below in which the Group has an adverse damage award, no provision has been made for certain of them, because it is the Group's current best estimate based on its views as to the merits of the cases and its experience in such matters, that it ultimately will prevail in these cases on appeal. Such cases include a USD 30 million Mississippi Chancery Court Average Wholesale Price verdict against Sandoz that is currently on appeal. In total, these not-provisioned-for matters include more than 1,000 individual product liability cases and certain other legal matters. Plaintiffs' alleged claims in these matters, which Novartis does not believe to be entirely remote but which do not fulfill the conditions for the establishment of provisions, currently aggregate to, according to Novartis' current best belief, approximately USD 1.3 billion. In addition, in some of these matters there are claims for punitive or multiple (treble) damages, civil penalties and disgorgement of profits that, in Novartis' view, are either wholly or partially unspecified or wholly or partially unquantifiable at present. While it discloses the amounts claimed by plaintiffs in these not-provisioned-for matters, the Group believes that information about the amounts claimed by plaintiffs generally is not meaningful for purposes of determining a reliable estimate of a loss that is probable or more than remote. A number of other legal matters are in such early stages or the issues presented are such that the Group has not made any provisions other than for legal fees since it cannot currently estimate either a potential outcome or the amount of any potential losses. For these reasons, among others, the Group generally is unable to make a reliable estimate of possible loss with respect to such cases. It is therefore not practicable to provide information about the potential financial impact of those cases. In a limited number of cases for which the Group was able to make a reliable estimate of the possible loss or the range of possible loss, the Group believes that publication of such information on a case-by-case basis would seriously prejudice the Group's position in ongoing legal proceedings or in any related settlement discussions. Accordingly, in such cases, information has been disclosed with respect to the nature of the contingency, but no disclosure is provided as to an estimate of the possible loss or range of possible loss.

#### **LEGAL MATTERS**

A number of Novartis companies are, and will likely continue to be, subject to various legal proceedings and investigations that arise from time to time, including proceedings regarding product liability, sales and marketing practices, commercial disputes, employment, and wrongful discharge, antitrust, securities, health and safety, environmental, tax, international trade, privacy, and intellectual property matters. As a result, the Group may become subject to substantial liabilities that may not be covered by insurance and could affect our business and reputation. While Novartis does not believe that any of these legal proceedings will have a material adverse effect on its financial position, litigation is inherently unpredictable and large judgments sometimes occur. As a consequence, Novartis may in the future incur judgments or enter into settlements of claims that could have a material adverse effect on its results of operations or cash flow.

Governments and regulatory authorities around the world have been stepping up their compliance and law enforcement activities in recent years in key areas, including marketing practices, pricing, corruption, trade restrictions, embargo legislation, insider trading, antitrust, and data privacy. Further, when one government or regulatory authority undertakes an investigation, it is not uncommon for other governments or regulators to undertake investigations regarding the same or similar matters. Responding to such investigations is costly and requires an increasing amount of management's time and attention. In addition, such investigations may affect our reputation, create a risk of potential exclusion from government reimbursement programs in the US and other countries, and may lead to (or arise from) litigation. These factors have contributed to decisions by Novartis and other companies in the healthcare industry, when deemed in their interest, to enter into settlement agreements with governmental authorities around the world prior to any formal decision by the authorities or a court. Those government settlements have involved and may continue to involve, in current government investigations and proceedings, large cash payments, sometimes in the hundreds of millions of dollars or more, including the potential repayment of amounts allegedly obtained improperly and other penalties, including treble damages. In addition, settlements of government healthcare fraud cases often require companies to enter into corporate integrity agreements, which are intended to regulate company behavior for a period of years. Our affiliate Novartis Pharmaceuticals Corporation is a party to such an agreement, which will expire in 2015. Also, matters underlying governmental investigations and settlements may be the subject of separate private litigation.

The following is a summary of significant legal proceedings to which Novartis or its subsidiaries are a party or were a party and that concluded in 2014.

#### INVESTIGATIONS AND RELATED LITIGATIONS Southern District of New York (SDNY) marketing practices investigation and litigation

In April 2013, the US government filed a civil complaint in intervention to an individual qui tam action against Novartis Pharmaceuticals Corporation (NPC) in the United States District Court (USDC) for the SDNY involving several of NPC's cardiovascular medications. The suit is related to a previously disclosed 2011 investigation of the United States Attorney's Office (USAO) for the SDNY relating to marketing practices, including the remuneration of healthcare providers, in connection with three NPC products (Lotrel, Starlix and Valturna). The complaint, as subsequently amended, asserts federal False Claims Act and common law claims with respect to speaker programs for NPC's cardiovascular medications allegedly serving as mechanisms to provide kickbacks to healthcare professionals. It seeks unspecified damages, which according to the complaint are "substantial", including treble damages and maximum civil penalties per claim, as well as disgorgement of Novartis profits from the alleged unlawful conduct. In August 2013, New York State filed a civil complaint in intervention asserting similar claims. Neither government complaint in intervention adopted the individual relator's claims with respect to off-label promotion of Valturna, which were subsequently dismissed with prejudice by the court. NPC vigorously

### 20. Provisions and Other Non-Current Liabilities (Continued)

contests the SDNY, New York State and individual claims, both as to alleged liability and amount of damages and penalties.

### SDNY / Western District of New York (WDNY) healthcare fraud investigation

In 2011, Alcon Laboratories, Inc. (ALI) received a subpoena from the United States Department of Health & Human Services relating to an investigation into allegations of healthcare fraud. The subpoena requests the production of documents relating to marketing practices, including the remuneration of healthcare providers, in connection with certain ALI products (*Vigamox, Nevanac, Omnipred, Econopred*; surgical equipment). ALI is cooperating with the investigation, which is civil in nature.

#### Western District of Kentucky (WDKY) investigation

In 2012, NPC received a subpoena from the USAO for the WDKY requesting the production of documents relating to marketing practices, including alleged remuneration of healthcare providers and off-label promotion, in connection with certain NPC products (including *Tekturna, Valturna, Reclast, Exelon* Patch and other products). NPC is cooperating with the investigation, which is civil and criminal in nature.

#### SDNY specialty pharmacies investigation and litigation

In April 2013, the US government filed a civil complaint in intervention to a qui tam action against NPC in the USDC for the SDNY. The suit is related to a previously disclosed 2012 investigation of the USAO for the SDNY into NPC's interactions with certain specialty pharmacies concerning in particular Myfortic, Exjade, Gleevec, Tasigna and TOBI. The complaint, as subsequently amended, asserts federal False Claims Act and state law claims related to alleged unlawful contractual discounts and rebates to specialty pharmacies in connection with Myfortic, and alleged unlawful contractual discounts, rebates and patient referrals to one specialty pharmacy in connection with Exjade. The US government seeks unspecified damages, which according to the complaint are "substantial", including treble damages and maximum civil penalties per claim. In January 2014, eleven states filed three complaints in intervention asserting similar claims related to Exjade; and the qui tam relator served on NPC an amended complaint also asserting similar claims with respect to Myfortic and Exjade, as well as claims involving Tasigna, Gleevec and TOBI that the federal and various state governments declined to pursue. NPC vigorously contests all government and relator claims, both as to alleged liability and amount of damages and penalties.

#### Northern District of Texas (NDTX) investigation

In 2012, Alcon was notified that the USAO for the NDTX is conducting an investigation relating to the export of Alcon products to various countries subject to United States trade sanctions, including Iran, allegedly in violation of applicable trade sanctions, and received a grand jury subpoena requesting the production of documents for a period beginning in 2005 relating to this investigation. Alcon is cooperating with the investigation.

#### SDNY Gilenya investigation

In 2013, NPC received a civil investigative demand (CID) from the USAO for the SDNY requesting the production of documents and information relating to marketing practices for *Gilenya*, including the remuneration of healthcare providers in connection therewith. NPC is cooperating with this civil investigation.

#### District of New Jersey (DNJ) investigation

In late September 2014, ALI received a subpoena from the USAO for the DNJ relating to an investigation of Alcon sales practices. ALI is cooperating with this investigation.

#### New York state investigation

In November 2014, ALI received a civil subpoena from the New York state attorney general relating to an investigation into a unilateral pricing policy program. ALI is at the outset of assessing the facts and is cooperating with this investigation.

#### Lucentis/Avastin® matters in Italy and France

In 2013, the Italian Competition Authority (ICA) opened an investigation to assess whether Novartis Farma S.p.A., Novartis AG, F. Hoffmann-La Roche AG, Genentech Inc. and Roche S.p.A. colluded to artificially differentiate Avastin® and Lucentis in order to avoid the erosion of the sales of *Lucentis* by off-label Avastin® with the aim of preserving the market position of Lucentis in Italy. In March 2014, the ICA imposed a fine equivalent to USD 125 million on Novartis AG and Novartis Farma S.p.A. and a fine on F. Hoffmann-La Roche AG and Roche S.p.A. equivalent to USD 122 million. Novartis appealed the ICA decision and, as required by Italian law, has paid the ICA fine, subject to the right to later claim recoupment. In December 2014, the Tribunale amministrativo regionale (TAR) del Lazio published a decision rejecting all appeals. Novartis intends to appeal the decision of the TAR Lazio. In October 2014, Novartis also appealed the resolution of the Italian Medicines Agency to include Avastin® in a list of drugs to be reimbursed off-label. The Italian Ministry of Health (MoH) has indicated in a letter that it intended to seek a total equivalent of approximately USD 1.4 billion in damages from Novartis and Roche entities based on the above allegations, and the Lombardia region has sent a payment request equivalent to approximately USD 71 million. Novartis vigorously contests the MoH and Lombardia claims.

The French Competition Authority carried out an inspection in April 2014 on the premises of Novartis Groupe France and Roche with respect to the French market for anti-vascular endothelial growth factor (VEGF) products indicated for the treatment of wet age-related macular degeneration.

#### Japan investigations

Novartis Pharma K.K. (NPKK) has completed a comprehensive investigation with external specialists launched in April 2013 which identified that two former employees of NPKK were not appropriately identified as NPKK employees in the trial publications for five post-registration investigator initiated trials (IITs) regarding valsartan. In October 2013, the Japanese Ministry of Health, Labor and Welfare (MHLW) published an interim report in which it required further actions, including investigations by the government into allegations of exaggerated advertising. None of the trials/publications were used for registration purposes. In July 2014, the Tokyo District Public Prosecutor Office indicted a former NPKK employee, and also NPKK under the dual liability concept in Japanese law, in two counts for alleged manipulation of data in sub-analysis publications of the Kyoto Heart Study regarding valsartan. The charges against NPKK are subject to a maximum total fine of JPY 4 million. Novartis is cooperating fully with the authorities.

Also in January 2014, allegations of inappropriate involvement of NPKK representatives in a nilotinib IIT being conducted by the University of Tokyo Hospital were raised in the media. In February 2014, NPKK established an External Investigation Committee (EIC) to clarify the actual involvement in the IIT as well as the root cause and provide a proposal for preventing recurrence. In March 2014, the EIC issued a final report finding various instances of improper conduct, including improper handling of confidential patient information, document destruction and failure to report adverse events. The MHLW issued a business improvement order in July 2014, following NPKK's disclosure of its failure to report adverse events. Novartis is implementing a business improvement plan and has notified all competent health authorities worldwide about the adverse events reporting issue, and several have requested additional information and clarification from Novartis. In addition to taking remedial action, Novartis also conducted a comprehensive review of NPKK's conduct and business practices related to IITs and the other above issues in Japan, and has released new global guidelines for IITs.

The MHLW plans to issue new guidelines governing the conduct of IITs in Japan, and it is in the process of determining any additional sanctions against NPKK for the above conduct which could potentially include a temporary suspension of certain business activities.

#### Internal travel agencies investigation

After reports of Chinese government investigations of competitors for alleged improper use of certain China-based travel agencies to reward healthcare providers, Novartis commenced an internal investigation in 2013 concerning its local affiliates' relationships with China-based travel agencies (and other vendors). Novartis is communicating with the US Securities and Exchange Commission (SEC) about this internal investigation.

#### **Italy investigations**

In January 2014, the ICA opened an investigation to assess whether Novartis Farma S.p.A. and Italfarmaco S.p.A. colluded on the supply of octreotide acetate (*Sandostatin LAR* and Longastatina® LAR, respectively) to prevent competition in tenders issued by the regions of Emilia Romagna, Veneto and Lombardia.

In June 2014, the public prosecutor of Siena initiated a criminal investigation of Novartis Vaccines and Diagnostics

S.r.l. with respect to allegations that the transfer price of the adjuvant *MF59* was unlawfully marked up. The investigation concerns whether the *Focetria* and *Fluad* vaccines sold to the government were over-priced and whether the Italian Ministry of Health paid an inflated amount in a dispute settlement relating to the supply of *Focetria* during the 2009 pandemic.

#### PRODUCT LIABILITY MATTERS Zometa/Aredia product liability litigation

NPC is a defendant in approximately 525 remaining cases brought in US courts, in which plaintiffs claim to have experienced osteonecrosis of the jaw or atypical femur fracture after treatment with *Zometa* or *Aredia*, which are used to treat patients whose cancer has spread to the bones. From the outset of the litigation, approximately 332 cases have been dismissed on pre-trial summary judgment or other dismissal, of which 16 remain on appeal.

Through the end of the fourth quarter of 2014, judgment has been entered in favor of NPC in nine jury trials, seven of which are final, and plaintiffs have obtained one verdict outside the centralized proceedings and six verdicts in the centralized litigation. In the centralized proceedings, juries awarded compensatory damages (averaging approximately USD 0.7 million in each case), no punitive damages in four cases, and punitive damages (as capped by applicable state and federal laws) totaling approximately USD 1.8 million in the remaining two. Four of the verdicts in favor of plaintiffs in the centralized litigation are not final given remaining post-trial and appeal options in each. In the one plaintiff's verdict outside the centralized proceedings, the jury awarded USD 2.65 million in compensatory damages and no punitive damages.

Further trials are scheduled. Individual case results, which can depend on the particular facts of a given case, may not necessarily be predictive for other cases. The cases are being vigorously defended.

#### Aclasta/Reclast product liability litigation

NPC is a defendant in 21 US product liability actions involving *Aclasta* and *Reclast* and alleging atypical femur fracture injuries, most of which are in New Jersey state or federal court coordinated with claims against other bisphosphonate manufacturers. There are also three Canadian putative class actions brought against numerous bisphosphonate manufacturers including NPC, Novartis Pharmaceuticals Canada Inc. and Novartis International AG in Quebec, Alberta and Saskatchewan. All cases are being vigorously defended.

#### Metoclopramide product liability litigation

Sandoz is a defendant, along with numerous manufacturers of brand pharmaceuticals, in 395 product liability actions in the state courts in Pennsylvania and California claiming that the use of metoclopramide, the generic version of the brand name drug Reglan<sup>®</sup>, caused personal injuries including tardive dyskinesia. Sandoz denies the allegations and is vigorously defending the cases.

### 20. Provisions and Other Non-Current Liabilities (Continued)

#### Tekturna/Rasilez/Valturna product liability litigation

NPC and certain other Novartis affiliates are defendants in 12 individual lawsuits pending in the USDC for the DNJ, and one in Alberta, Canada, claiming that treatment with *Tekturna*, *Rasilez* and/or *Valturna* caused renal failure, kidney disease or stroke. The cases are being vigorously defended.

#### ARBITRATION

#### Equa arbitration

In 2013, Sanofi K.K. (Sanofi) commenced an arbitration against NPKK relating to the termination of a co-promotion agreement in Japan of *Equa* (*Galvus*), which is used to treat type 2 diabetes. Sanofi seeks an award equivalent to USD 386 million, at a minimum, together with a request for payment of interest and expenses as well as legal and other costs of the proceedings. NPKK is vigorously defending the action as well as prosecuting a counterclaim against Sanofi.

#### OTHER MATTERS

#### Average Wholesale Price (AWP) litigation

Claims have been brought by various US state governmental entities against various pharmaceutical companies, including certain Sandoz entities and NPC, alleging that they fraudulently overstated the AWP that is or has been used by payors, including state Medicaid agencies, to calculate reimbursements to healthcare providers. In the second quarter of 2014, Sandoz reached a settlement of the Illinois claims against it for USD 63 million. Further settlements have been obtained in the cases brought by the states of Kansas and Utah against NPC, each for amounts that are not material to Novartis. Actions brought by the states of Illinois, Mississippi, Utah and Wisconsin remain pending against one or more Novartis companies. At least one trial is scheduled for 2015. NPC is also a defendant in a putative class action brought by private payors in New Jersey. The cases are being vigorously defended.

#### Qui tam actions

NPC is a defendant in a relator's *qui tam* action in the USDC for the Eastern District of Pennsylvania (EDPA) asserting federal and state False Claims Act claims relating to certain alleged marketing practices involving Elidel<sup>®</sup>. The federal government and several states declined to intervene in the EDPA action. The relator's complaint does not specify an amount of monetary damages sought but alleges that NPC's alleged misconduct has caused the submission of millions of false claims in violation of state and federal laws. NPC is vigorously contesting the action.

In 2006, NPC received a subpoena from the US government seeking certain information regarding the marketing and promotion of *Xolair*. The investigation, which was previously disclosed, was prompted by a *qui tam* complaint filed in the District of Massachusetts (D. Mass.) in 2006, asserting various federal False Claims Act and state claims relating to certain alleged improper marketing practices involving *Xolair*. In addition to the 2006 suit, relator complaints were filed in D. Mass. in 2010 and 2012 against various Novartis, Genentech and Roche entities, containing allegations similar to those in the 2006 complaint. In 2011, the US and various state governments declined to intervene in the relators' actions, and closed the investigation. In June 2014, the relator in the 2010 action voluntarily dismissed his claims in that complaint with prejudice; the US and various states subsequently consented to the dismissal. The relator complaints in combination claim more than USD 1.5 billion in alleged treble damages, civil penalties and disgorgement of profits. Novartis denies the allegations both as to the merits and the monetary claims and is vigorously contesting these actions.

#### Solodyn® antitrust class actions and FTC investigation

Since July 22, 2013, fifteen class action complaints have been filed against manufacturers of the brand drug Solodyn<sup>®</sup> and its generic equivalents, including Sandoz Inc. The cases have been consolidated and transferred for pretrial purposes to the D. Mass. The plaintiffs purport to represent direct and indirect purchasers of Solodyn® branded products and assert violations of federal and state antitrust laws, including allegations in connection with separate settlements by Medicis with each of the other defendants, including Sandoz Inc., of patent litigation relating to generic Solodyn®. Plaintiffs seek, among other things, treble damages and other damages and costs. The conduct challenged in these cases is also the subject of a pending investigation by the Federal Trade Commission (FTC) in which Sandoz Inc. has cooperated in providing documents and other information in response to a CID. Sandoz is vigorously defending this litigation.

#### **Oriel litigation**

A complaint was filed in October 2013 in the Supreme Court-New York County by Shareholder Representative Services LLC, purportedly on its own behalf and in its capacity as representative of former shareholders of Oriel Therapeutics, Inc. (Oriel) against Sandoz Inc. and two affiliates and two former officers of Sandoz AG. Plaintiffs assert various common law and statutory contract, fraud and negligent misrepresentation claims arising out of the Sandoz Inc. purchase of Oriel and seek USD 335 million in compensatory damages as well as certain recissionary relief and punitive damages. Sandoz denies the allegations and is vigorously defending the case.

#### **Consumer class actions**

Novartis companies have been the subject of various consumer lawsuits that are brought as proposed class actions but in which class certification has not been decided. For example, four putative class actions were brought in December 2013 and January 2014 against Novartis and its consumer health unit. They generally claim that it was a deceptive practice to sell *Excedrin* Migraine at a higher price than *Excedrin* Extra Strength when the two have the same active ingredients, even though the products have different labels and clearly disclose their active ingredients. In 2014, three of the four putative class actions were dismissed; the remaining one is pending in the DNJ. Since November 2012, six putative consumer fraud class action litigations were commenced against Alcon (and in four cases Sandoz) in federal courts in the Southern Districts of Illinois (S.D. III.) and Florida and the Districts of Missouri, Massachusetts and New Jersey. They claim that Alcon's, Sandoz's and many other manufacturers defendants' eye drop products were deceptively designed so that the drop dosage is more than necessary to be absorbed in the eye or there is too much solution in each bottle for the course of the treatment, leading to wastage and higher costs to patient consumers. Three cases remain pending in the S.D. III., D. Mass. and DNJ. Novartis is vigorously defending the remaining cases, both on the merits and with respect to class certification.

#### INTELLECTUAL PROPERTY

Novartis companies are involved in legal proceedings concerning intellectual property rights owned either by Novartis companies or third parties. The inherent unpredictability of such proceedings means that there can be no assurances as to their ultimate outcome. A negative result in any such proceeding could potentially adversely affect the ability of certain Novartis companies to sell their products or require the payment of substantial damages or royalties.

#### **CONCLUDED LEGAL MATTERS**

### European Commission (EC) dawn raid at Sandoz S.A.S. (Sandoz France)

In 2009, the EC searched the offices of Sandoz France, alleging that Sandoz France entered into anti-competitive price coordination practices with other generic pharmaceutical companies and via the French trade association for generic pharmaceutical companies. In July 2014, the EC closed this investigation.

#### Fanapt® arbitration

In May 2014, Vanda Pharmaceuticals Inc. commenced an arbitration against Novartis Pharma AG relating to the licensing of Fanapt<sup>®</sup>. The case was resolved in the fourth quarter of 2014 for an amount that is not material to Novartis.

#### SUMMARY OF PRODUCT LIABILITY, GOVERNMENTAL INVESTIGATIONS AND OTHER LEGAL MATTERS PROVISION MOVEMENTS

	2014 USD millions	2013 USD millions
January 1	924	998
Provisions related to discontinuing operations	- 37	
Cash payments	- 454	- 373
Releases of provisions	- 135	- 184
Additions to provisions	549	499
Currency translation effects	2	- 16
December 31	849	924
Less current portion	- 328	- 461
Non-current product liabilities, governmental investigations and other legal matters provisions at December 31	521	463

Novartis believes that its total provisions for investigations, product liability, arbitration and other legal matters are adequate based upon currently available information. However, given the inherent difficulties in estimating liabilities, there can be no assurance that additional liabilities and costs will not be incurred beyond the amounts provided.

### 21. Current Financial Debt

	2014 USD millions	2013 USD millions
Interest-bearing accounts of associates payable on demand	1 651	1 718
Bank and other financial debt	1 272	1 323
Commercial paper	648	1 042
Current portion of non-current financial debt	2 989	2 590
Fair value of derivative financial instruments	52	103
Total current financial debt	6 612	6 776

The consolidated balance sheet amounts of current financial debt, other than the current portion of non-current financial debt, approximate the estimated fair value due to the short-term nature of these instruments.

The weighted average interest rate on the bank and other current financial debt (including employee deposits from the compensation of associates employed by Swiss entities) was 2.6% in 2014 and 2.3% in 2013.

### 22. Provisions and Other Current Liabilities

	2014 USD millions	2013 USD millions
Taxes other than income taxes	549	624
Restructuring provisions	333	174
Accrued expenses for goods and services received but not invoiced	1 076	553
Accruals for royalties	561	468
Provisions for revenue deductions	3 533	4 182
Accruals for compensation and benefits including social security	1 968	2 386
Environmental remediation liabilities	95	100
Deferred income	329	70
Provision for product liabilities, governmental investigations and other legal matters	328	461
Accrued share-based payments	248	255
Contingent considerations	291	112
Commitment for repurchase of own shares	658	
Other payables	479	1 550
Total provisions and other current liabilities	10 448	10 935

Provisions are based upon management's best estimate and adjusted for actual experience. Such adjustments to the historic estimates have not been material.

#### **PROVISION FOR DEDUCTIONS FROM REVENUE**

The following table shows the movement of the provision for deductions from revenue:

	2014 USD millions	2013 USD millions
January 1	4 182	4 072
Provisions related to discontinuing operations	- 234	
Additions	14 119	13 095
Payments/utilizations	- 13 907	- 12 762
Changes in offset against gross trade receivables	- 420	- 224
Currency translation effects	- 207	1
December 31	3 533	4 182

#### **RESTRUCTURING PROVISION MOVEMENTS**

	USD millions
January 1, 2013	221
Additions	175
Cash payments	- 134
Releases	- 47
Transfer	- 42
Currency translation effects	1
December 31, 2013	174
Provisions related to discontinuing operations	- 4
Additions	504
Cash payments	- 295
Releases	- 52
Currency translation effects	6
December 31, 2014	333

In 2014, additions to provisions of USD 504 million in continuing operations were mainly related to reorganizations in the Pharmaceuticals Division. In Pharmaceuticals an initiative in Development totaling USD 72 million was targeted at establishing an organizational model for the development activities which allows for greater focus on high priority programs in specialty medicines, more flexibility to adapt to changes in the portfolio, and which strengthens operational excellence. Activities in General Medicines were also subject to a restructuring program totaling USD 286 million which was targeted at increasing operational leverage. Alcon has established a USD 56 million initiative to realize productivity opportunities.

In 2013, additions to provisions of USD 175 million in the Group were mainly related to reorganizations of the Pharmaceuticals research and development activities and the integration of Alcon.

The releases to income in 2014 of USD 52 million in continuing operations and USD 5 million in discontinuing operations, respectively, and in 2013 of USD 47 million for the entire Group were mainly due to settlement of liabilities at lower amounts than originally anticipated.

	Third party costs <sup>1</sup> Termination costs		ion costs	Additions to provision		
Restructuring initiatives	2014 USD millions	2013 USD millions	2014 USD millions	2013 USD millions	2014 USD millions	2013 USD millions
Pharmaceuticals – Research & Development		35	72	25	72	60
Pharmaceuticals – General Medicines	8		278		286	
Alcon initiative to increase operating leverage			56		56	
Various Group initiatives to simplify organizational structure – including manufacturing sites	1	8	89	30	90	38
Pharmaceuticals – Marketing & Sales organization		2		20	0	22
Alcon integration		1		53		54
Fougera integration				1		1
Total	9	46	495	129	504	175

<sup>1</sup>Third party costs are mainly associated with lease and other obligations due to abandonment of certain facilities.

### 23. Details to the Consolidated Cash Flow Statements

### 23.1) ADJUSTMENTS FOR NON-CASH ITEMS FROM CONTINUING OPERATIONS

	2014 USD millions	2013 USD millions
Taxes	1 545	1 498
Depreciation, amortization and impairments on		
Property, plant & equipment	1 630	1 601
Intangible assets	3 052	2 804
Financial assets <sup>1</sup>	69	57
Income from associated companies	-1918	- 599
Gains on disposal of property, plant & equipment, intangible, financial and other non-current assets, net	- 622	- 347
Equity-settled compensation expense	744	654
Change in provisions and other non-current liabilities	1 490	736
Net financial income	735	775
Total	6 725	7 179

#### 23.2) CASH FLOWS FROM CHANGES IN WORKING CAPITAL AND OTHER OPERATING ITEMS INCLUDED IN OPERATING CASH FLOW FROM CONTINUING OPERATIONS

	2014 USD millions	2013 USD millions
(Increase) in inventories	- 506	- 454
(Increase) in trade receivables	- 367	- 548
Increase in trade payables	142	414
Change in other net current assets and other operating cash flow items	106	- 190
Total	- 625	- 778

<sup>1</sup>Including fair value gains

#### 23.3) CASH FLOW ARISING FROM ACQUISITIONS AND DIVESTMENTS OF BUSINESSES

The following is a summary of the cash flow impact of those significant transactions described in Note 2:

	2014 Acquisitions	2014 Divestments
	USD millions	USD millions
Property, plant & equipment		145
Currently marketed products	-234	91
Acquired research & development	- 248	
Financial and other assets including deferred tax assets <sup>1</sup>	- 53	7
Inventories	- 1	87
Trade receivables and other current assets	- 3	159
Cash and cash equivalents	-2	
Trade payables and other liabilities including deferred tax liabilities	186	- 50
Net identifiable assets acquired or divested	- 355	439
Currency translation effect		- 3
Acquired liquidity	2	
Sub-total	- 353	436
Goodwill <sup>1</sup>	- 131	267
Divestment gain		876
Taxes paid and other portfolio transformation related payments		- 566
Contingent consideration	153	
Prepaid/deferred portion of sales price <sup>2</sup>		47
Net cash flow	- 331	1 060
Of which:		
Net cash flow from discontinuing operations		1 060
Net cash flow used in continuing operations	- 331	

<sup>1</sup>Includes an adjustment regarding a previous acquisition to deferred tax assets of USD 21 million and goodwill of USD 135 million. <sup>2</sup>Includes USD 49 million prepaid proceeds for the divestment of the Animal Health business.

There were no significant acquisitions or divestments which had an impact on the cash flow statement in 2013, however USD 42 million were paid for contingent considerations regarding acquisitions from previous years.

Notes 2 and 24 provide further information regarding acquisitions and divestments of businesses. All acquisitions were for cash.

# 23. Details to the Consolidated Cash Flow Statements (Continued)

#### 23.4) CASH FLOW FROM DISCONTINUING OPERATIONS

	2014 USD millions	2013 USD millions
Cash flows used in/from operating activities	-1	557
Purchase of property, plant & equipment	- 223	- 161
Proceeds from sales of property, plant & equipment	4	12
Purchase of intangible assets	- 18	- 32
Proceeds from sales of intangible assets	79	58
Purchase of financial and other non-current assets, net	- 13	- 10
Divestments of businesses	1 060	
Cash flows from/used in investing activities	889	- 133
Total net cash flows from discontinuing operations	888	424

### 24. Acquisitions of Businesses

### ASSETS AND LIABILITIES ARISING FROM ACQUISITIONS

2014
USD millions
234
248
53
1
3
2
- 186
355
-2
131
484

<sup>1</sup> Includes an adjustment regarding a previous acquisition to deferred tax assets of USD 21 million and goodwill of USD 135 million.

Note 2 details significant acquisition of businesses, which in 2014, were CoStim Pharmaceuticals and WaveTec. The goodwill arising out of these acquisitions is principally attributable to buyer specific synergies and to the accounting for deferred taxes on the acquired net assets. There were no significant acquisitions in 2013.

### 25. Post-Employment Benefits for Associates

#### **DEFINED BENEFIT PLANS**

In addition to the legally required social security schemes, the Group has numerous independent pension and other post-employment benefit plans. In most cases these plans are externally funded in entities which are legally separate from the Group. For certain Group companies, however, no independent plan assets exist for the pension and other post-employment benefit obligations of associates. In these cases the related unfunded liability is included in the balance sheet. The defined benefit obligations (DBO) of all major pension and other post-employment benefit plans are reappraised annually by independent actuaries. Plan assets are recognized at fair value. The major plans are based in Switzerland, United States, United Kingdom, Germany and Japan, which represent 95% of the Group's total DBO for pension plans for continuing operations. Details of the plans in the two most significant countries of Switzerland and the US are provided below.

Swiss-based pension plans represent the most significant portion of the Group's total DBO and plan assets. For the active insured members born on or after January 1, 1956, or having joined the plans after December 31, 2010 the benefits are partially linked to the contributions paid into the plan. Certain features of Swiss pension plans required by law preclude the plans being categorized as defined contribution plans. These factors include a minimum interest guarantee on retirement savings accounts, a pre-determined factor for converting the accumulated savings account balance into a pension and embedded death and disability benefits.

All benefits granted under Swiss pension plans are vested and Swiss legislation prescribes that the employer has to contribute a fixed percentage of an associate's pay to an external pension fund. Additional employer's contributions may be required whenever the plan's statutory funding ratio falls below a certain level. The associate also contributes to the plan. The pension plans are run by separate legal entities, each governed by a Board of Trustees which for the principal plans consists of representatives nominated by Novartis and by the active insured associates. The Boards of Trustees are responsible for the plan design and the asset investment strategy.

The US pension plans represent the second largest component of the Group's total DBO and plan assets. The principal plans (Qualified Plans) are funded whereas plans providing additional benefits for executives (Restoration Plans) are unfunded. Employer contributions are required for Qualified Plans whenever the statutory funding ratio falls below a certain level. Furthermore, associates in the US are covered under other post-employment benefit plans and post-retirement medical plans.

## 25. Post-Employment Benefits for Associates (Continued)

The following tables are a summary of the funded and unfunded defined benefit obligation for pension and other postemployment benefit plans of associates at December 31, 2014 and 2013:

	Pensior	plans	Other post-er benefit	
	2014 USD millions	2013 USD millions	2014 USD millions	2013 USD millions
Benefit obligation at January 1	24 801	25 503	1 069	1 271
Benefit obligations related to discontinuing operations	- 848		-21	
Current service cost	418	478	35	48
Interest cost	654	580	49	46
Past service costs and settlements	6	- 66	- 89	- 73
Administrative expenses	21	18		
Remeasurement losses/(gains) arising from changes in financial assumptions	2 1 2 9	-1248	164	- 131
Remeasurement losses/(gains) arising from changes in demographic assumptions	229	- 60	121	- 7
Experience related remeasurement (gains)/losses	- 14	160	- 22	- 19
Currency translation effects	-2156	442	- 5	- 6
Benefit payments	-1282	-1240	- 48	- 60
Contributions of associates	210	221		
Effect of acquisitions, divestments or transfers	10	13		
Benefit obligation at December 31	24 178	24 801	1 253	1 069
Fair value of plan assets at January 1	21 481	20 282	209	237
Plan assets related to discontinuing operations	- 530			
Interest income	550	438	10	8
Return on plan assets excluding interest income	1 442	850	28	6
Currency translation effects	-1917	383		
Novartis Group contributions	485	560		18
Contributions of associates	210	221		
Settlements	- 9	- 14		
Benefit payments	-1282	-1240	- 48	- 60
Effect of acquisitions, divestments or transfers	4	1		
Fair value of plan assets at December 31	20 434	21 481	199	209
Funded status	- 3 744	- 3 320	-1054	- 860
Limitation on recognition of fund surplus at January 1	- 45	-21		
Change in limitation on recognition of fund surplus (incl. exchange rate differences)	- 9	-21		
Interest income on limitation of fund surplus	-4	- 3		
Limitation on recognition of fund surplus at December 31	- 58	- 45		
Net liability in the balance sheet at December 31	- 3 802	- 3 365	-1054	- 860

The reconciliation of the net liability from January 1 to December 31 is as follows:

	F	ensio	n plans	Other post-employment benefit plans	
	USD mil	2014 lions	2013 USD millions	2014 USD millions	2013 USD millions
Net liability at January 1	- 3	365	- 5 242	- 860	-1034
Less: Net liability related to discontinuing operations		318		21	
Current service cost	-	418	- 478	- 35	- 48
Net interest expense	-	108	- 145	- 39	- 38
Administrative expenses	-	-21	- 18		
Past service costs and settlements		- 15	52	89	73
Remeasurements	-	902	1 998	- 235	163
Currency translation effects		239	- 59	5	6
Novartis Group contributions		485	560		18
Effect of acquisitions, divestments or transfers		-6	- 12		
Change in limitation on recognition of fund surplus		-9	-21		
Net liability at December 31	- 3	802	- 3 365	-1054	- 860
Amounts recognized in the consolidated balance sheet					
Prepaid benefit cost		37	42		
Accrued benefit liability	- 3	839	-3407	-1054	- 860

The following table shows a breakdown of the DBO for pension plans by geography and type of member and the breakdown of plan assets into the geographical locations in which they are held.

	2014     2013       USD millions     USD millions							
	Switzerland	US	Rest of the World	Total	Switzerland	US	Rest of the World	Total
Benefit obligation at December 31	15 578	4 092	4 508	24 178	16 683	3 430	4 688	24 801
Thereof unfunded		820	484	1 304		685	522	1 207
Analysed by type of member								
Active	6 268	1 182	1 502	8 952	6617	1 087	1 634	9 338
Deferred pensioners		947	1 499	2 446		757	1 427	2 184
Pensioners	9 310	1 963	1 507	12 780	10 066	1 586	1 627	13 279
Fair value of plan assets at December 31	14 869	2 521	3 044	20 434	15 873	2 460	3 148	21 481
Funded Status	- 709	-1571	-1464	- 3 744	-810	- 970	-1540	- 3 320

The following table shows the principal weighted average actuarial assumptions used for calculating defined benefit plans and other post-employment benefits of associates:

	Pension plans		Other post-employment benefit plans	
	2014 %		2014 %	
Weighted average assumptions used to determine benefit obligations at December 31				
Discount rate	1.8%	2.9%	3.8%	4.7%
Expected rate of pension increase	0.4%	1.1%		
Expected rate of salary increase	3.2%	3.5%		
Interest on savings account	0.9%	2.1%		
Current average life expectancy for a 65-year-old male/female	21/24 years	21/23 years	22/24 years	19/21 years

Changes in the above-mentioned actuarial assumptions can result in significant volatility in the accounting for the Group's pension plans in the consolidated financial statements. This can result in substantial changes in the Group's other comprehensive income, long-term liabilities and prepaid pension assets.

The DBO is significantly impacted by assumptions regarding the rate that is used to discount the actuarially determined post-employment benefit liability. This rate is based on yields of high quality corporate bonds in the country of the plan. Decreasing corporate bond yields decrease the discount rate, so that the DBO increases and the funded status decreases.

In Switzerland an increase in the DBO due to lower discount rates is slightly offset by lower future benefits expected to be paid on the associate's savings account where the assumption on interest accrued changes in line with the discount rate.

The impact of decreasing interest rates on a plan's assets is more difficult to predict. A significant part of the plan assets is invested in bonds. Bond values usually rise when interest rates decrease and may therefore partially compensate for the decrease in the funded status. Furthermore, pension assets also include significant holdings of equity instruments. Share prices tend to rise when interest rates decrease and therefore often counteract the negative impact of the rising defined benefit obligation on the funded status although correlation of interest rates with equities is not as strong as with bonds, especially in the short term.

The expected rate for pension increases significantly affects the DBO of most plans in Switzerland, Germany and the United Kingdom. Such pension increases also decrease the funded status although there is no strong correlation between the value of the plan assets and pension/inflation increases.

Assumptions regarding life expectancy significantly impact the DBO. An increase in longevity increases the DBO. There is no offsetting impact from the plan assets as no longevity bonds or swaps are held by the pension funds. Generational mortality tables are used where this data is available.

The following table shows the sensitivity of the defined benefit pension obligation to the principal actuarial assumptions for the major plans in Switzerland, United States, United Kingdom, Germany and Japan on an aggregated basis:

Change in 2 defined benefit pens	2014 year end ion obligation USD millions
25 basis point increase in discount rate	- 760
25 basis point decrease in discount rate	805
1 year increase in life expectancy	793
25 basis point increase in rate of pension increase	501
25 basis point decrease in rate of pension increase	- 119
25 basis point increase of interest on savings account	63
25 basis point decrease of interest on savings account	- 63
25 basis point increase in rate of salary increase	70
25 basis point decrease in rate of salary increase	- 73

The healthcare cost trend rate assumptions for other postemployment benefits are as follows:

Healthcare cost trend rate assumptions used	2014	2013
Healthcare cost trend rate assumed for next year	7.0%	7.0%
Rate to which the cost trend rate is assumed to decline	5.0%	5.0%
Year that the rate reaches the ultimate trend rate	2021	2021

The following table shows the weighted average plan asset allocation of funded defined benefit pension plans at December 31, 2014 and 2013:

	F	ension plans	
	Long-term target %	2014 %	2013 %
Equity securities	15–40	35	39
Debt securities	20–60	34	32
Real estate	5–20	13	13
Alternative investments	0–20	10	10
Cash and other investments	0–15	8	6
Total		100	100

Cash, as well as most of the equity and debt securities have a quoted market price in an active market. Real estate and alternative investments, which include hedge fund and private equity investments usually do not have a quoted market price.

The strategic allocation of assets of the different pension plans are determined with the objective of achieving an investment return which, together with the contributions paid by the Group and its associates, is sufficient to maintain reasonable control over the various funding risks of the plans. Based upon the market and economic environments, actual asset allocations may temporarily be permitted to deviate from policy targets. The asset allocation currently includes investments in shares of Novartis AG which totaled at December 31, 2014, 11 million shares with a market value of USD 1.0 billion (2013: 19.8 million shares with a market value of USD 1.6 billion). The weighted average duration of the defined benefit obligation is 14.3 years (2013: 13.8 years). The Group's ordinary contribution to the various pension plans are based on the rules of each plan. Additional contributions are made whenever this is required by statute or law; i.e. usually when statutory funding levels fall below pre-determined thresholds. The only significant plans that are foreseen to require additional funding are those in UK.

The expected future cash flows in respect of pension and other post-employment benefit plans at December 31, 2014 were as follows:

	Pension plans USD millions	Other post- employment benefit plans USD millions
Novartis Group contributions		
2015 (estimated)	540	58
Expected future benefit payments		
2015	1 227	58
2016	1 230	61
2017	1 240	64
2018	1 245	66
2019	1 239	69
2020–2024	6 121	371

#### **DEFINED CONTRIBUTION PLANS**

In many subsidiaries associates are covered by defined contribution plans. Contributions charged to the 2014 consolidated income statement for the defined contribution plans were USD 348 million (2013: USD 332 million). The 2014 amount excludes USD 14 million (2013: USD 19 million) related to discontinuing operations.

### 26. Equity-Based Participation Plans for Associates

The expense related to all equity-based participation plans in the 2014 consolidated income statement was USD 1.1 billion (2013: USD 987 million) resulting in total liabilities arising from equity-based payment transactions of USD 277 million (2013: USD 255 million) of which USD 248 million is recognized in continuing operations. Out of the total expense, an amount of USD 1.0 billion (2013: USD 892 million) was recognized in continuing operations and USD 124 million (2013: USD 95 million) was recognized in discontinuing operations.

Equity-based participation plans can be separated into the following plans.

#### **ANNUAL INCENTIVE**

The Annual Incentive of the CEO and other key executives is paid 50% in cash in March of the year following the performance period, and 50% in Novartis shares (or Restricted Share Units (RSUs)) that are deferred and restricted for three years. The executives may elect to also receive their cash incentive in shares.

#### SHARE SAVINGS PLANS

A number of associates in certain countries and certain key executives worldwide are encouraged to invest their Annual Incentive, and in the UK also their salary, in a share savings plan. Under the share savings plan, participants may elect to receive their Annual Incentive fully or partially in Novartis shares in lieu of cash. As a reward for their participation in the share savings plan, at no additional cost to the participant, Novartis matches their investments in shares after a holding period of three or five years.

Novartis currently has three share savings plans:

- Worldwide 27 key executives were invited to participate in the Leveraged Share Savings Plan (LSSP) based on their performance in 2013. At the participant's election, the Annual Incentive is awarded partly or entirely in shares. The elected number of shares was delivered in 2014 and is subject to a holding period of five years. At the end of the holding period, Novartis will match the invested shares at a ratio of 1-to-1 (i.e. one share awarded for each invested share). In the US both the LSSP award and the corresponding match are cash settled.
- In Switzerland, the Employee Share Ownership Plan (ESOP) was available to 13 742 associates in 2013. ESOP participants may choose to receive their Annual Incentive (i) 100% in shares, (ii) 50% in shares and 50% in cash or (iii) 100% in cash. After expiration of a three-

### 26. Equity-Based Participation Plans for Associates (Continued)

year holding period for Novartis shares invested under the ESOP, each participant will receive one matching share for every two Novartis shares invested. A total of 6 324 associates chose to receive shares under the ESOP for their performance in 2013 and the invested shares were delivered in 2014.

In the United Kingdom, 2 355 associates can invest up to 5% of their monthly salary in shares (up to a maximum of GBP 125) and also may be invited to invest all or part of their net Annual Incentive in shares. Two invested shares are matched with one share with a holding period of three years. During 2014, 1 497 participants elected to participate in this plan.

Following the introduction of the new compensation programs in 2014, the CEO and the other Executive Committee members are no longer eligible to participate in the share savings plans.

Associates may only participate in one of these plans in any given year.

During 2014, a total of 4.8 million shares (2013: 5.7 million shares) were granted to participants of these plans.

#### **NOVARTIS EQUITY PLAN "SELECT"**

The Equity Plan "Select" is a global equity incentive plan under which eligible associates, including Executive Committee members up to performance year 2013, may annually be awarded a grant under the plan. For certain associates the grant is subject to the achievement of predetermined business and individual performance objectives typically set at the start of the calendar year prior to the date of grant. For these associates the Select award is capped at 200% of target. No awards are granted for performance ratings below a certain threshold.

The Equity Plan "Select" currently allows its participants in Switzerland to choose the form of their equity compensation in restricted shares or restricted share units (RSUs). In all other jurisdictions, RSU's are typically granted. Until 2013, participants could also choose to receive part or the entire grant in the form of tradable share options. The vesting period for the plan is three years.

Each RSU is equivalent in value to one Novartis share and is converted into one share at the vesting date. RSUs do not carry any voting or dividend rights. Each restricted share entitles the holder to voting rights and payment of dividends during the vesting period.

Tradable share options expire on their 10th anniversary from the grant date. Each tradable share option entitles the holder to purchase after vesting (and before the 10th anniversary from the grant date) one Novartis share at a stated exercise price that equals the closing market price of the underlying share at the grant date.

The terms and conditions of the Novartis Equity Plan "Select" outside North America are substantially equivalent to the Novartis Equity Plan "Select" for North America. Share options of the Novartis Equity Plan "Select" for North America have only been tradable since 2004.

#### NOVARTIS EQUITY PLAN "SELECT" OUTSIDE NORTH AMERICA

Participants in this plan were granted in 2014 a total of 2.1 million restricted shares and RSUs at CHF 73.75 (2013: 2.1 million restricted shares and RSUs at CHF 61.70).

The following table shows the assumptions used for the valuation of the share options granted for the last time in 2013:

	Novartis Equity Plan "Select" outside North America
Valuation date	January 17, 2013
Expiration date	January 17, 2023
Closing share price on grant date	CHF 61.70
Exercise price	CHF 61.70
Implied bid volatility	13.40%
Expected dividend yield	4.64%
Interest rate	0.94%
Market value of option at grant date	CHF 4.28

The following table shows the activity associated with the share options during the period. The weighted average prices in the table below are translated from Swiss Francs into USD at historical rates for the granted, sold, and forfeited or expired options. The year-end prices are translated using the corresponding year-end rates.

	20	2014		2014 20		2013	
	Options (millions)	Weighted average exercise price (USD)	Options (millions)	Weighted average exercise price (USD)			
Options outstanding at January 1	26.4	57.3	33.2	54.5			
Granted	0.0	0.0	5.6	66.0			
Sold	- 9.8	54.0	- 12.1	53.6			
Forfeited or expired	- 0.5	62.2	- 0.3	60.1			
Outstanding at December 31	16.1	59.2	26.4	57.3			
Exercisable at December 31	7.0	55.0	16.8	54.4			

All share options were granted at an exercise price which was equal to the closing market price of the Group's shares at the grant date. The weighted average exercise price during the period the options were sold in 2014 was USD 54.0. The weighted average share price at the dates of sale was USD 78.4.

The following table summarizes information about share options outstanding at December 31, 2014:

	Options outstanding			
Range of exercice prices (USD)	Number outstanding (millions)	Average remaining contractual life (years)	Weighted average exercise price (USD)	
45–49	1.2	3.3	46.9	
50–54	2.1	3.9	54.4	
55–59	7.6	5.5	57.8	
60–65	5.2	8.0	66.0	
Total	16.1	5.9	59.2	

#### NOVARTIS EQUITY PLAN "SELECT" FOR NORTH AMERICA

Participants in this plan were granted a total of 5.1 million RSUs at USD 80.79 (2013: 4.7 million RSUs at USD 66.07).

The following table shows the assumptions used for the valuation of the ADR options granted for the last time in 2013:

	Novartis Equity Plan "Select" for North America
Valuation date	January 17, 2013
Expiration date	January 17, 2023
Closing ADR price on grant date	USD 66.07
Exercise price	USD 66.07
Implied bid volatility	11.60%
Expected dividend yield	4.65%
Interest rate	1.96%
Market value of option at grant date	USD 4.37

The following table shows the activity associated with the ADR options during the period:

	2014		20	013	
	ADR options (millions)	Weighted average exercise price (USD)	ADR options (millions)	Weighted average exercise price (USD)	
Options outstanding at January 1	58.8	58.9	56.3	55.1	
Granted	0.0	0.0	18.6	66.1	
Sold or exercised	- 12.2	55.5	- 13.3	52.5	
Forfeited or expired	- 2.2	62.6	- 2.8	60.3	
Outstanding at December 31	44.4	59.6	58.8	58.9	
Exercisable at December 31	16.3	54.7	17.8	53.2	

All ADR options were granted at an exercise price which was equal to the closing market price of the American Depositary Receipts (ADRs) at the grant date. The weighted average exercise price during the period the ADR options were sold or exercised in 2014 was USD 55.5. The weighted average ADR price at the dates of sale or exercise was USD 85.6.

The following table summarizes information about ADR options outstanding at December 31, 2014:

	ADR options outstanding			
Range of exercice prices (USD)	Number outstanding (millions)	Average remaining contractual life (years)	Weighted average exercise price (USD)	
45–49	3.3	3.5	46.6	
50–54	4.3	4.3	53.9	
55–59	21.3	6.2	58.1	
65–69	15.5	8.0	66.1	
Total	44.4	6.4	59.6	

#### LONG-TERM PERFORMANCE PLANS

From 2014 onwards, a new LTPP was introduced which is designed to not only drive long-term shareholder value, but also innovation. It is available to the CEO and other key executives, who are no longer participating in the OLTPP described below. The rewards are based on rolling three year global performance objectives focused on financial and innovation measures. For the Executive Committee members and certain other key executives who participate in the LTPP introduced in 2014, the financial measure is Novartis Cash Value Added (NCVA). The weighting of this measure is 75% for this LTPP introduced in 2014. Three-year forward-looking targets are set at the beginning of the performance cycle by the Board of Directors. The performance ratio of a plan cycle is obtained right after the end of the third plan year by dividing the performance realization for the plan cycle by the performance target for the plan cycle and expressing the result as a percentage.

The innovation measure is based on a holistic approach under which three-year forward looking divisional innovation targets are set at the beginning of the cycle, comprised of five to ten target milestones that represent the most important research and development project milestones for each division. At the end of the performance period, the Compensation Committee will consider the achievement on both a qualitative and quantitative basis, taking into account the difficulty of each milestone. The weighting of this measure is 25% within this LTPP introduced in 2014.

The old Long-Term Performance Plan (OLTPP) was also granted to other selected key executives who are not eligible for the LTPP described above, who are in key positions and have a significant impact on the long-term success of Novartis. It is capped at 200% of target. The rewards are based on rolling three year global performance objectives focused on the Novartis Economic Value Added (NVA) measured annually. The NVA is calculated based on Group operating income and income from associated companies adjusted for interest, taxes and cost of capital charge. The performance realization of a plan cycle is obtained right after the end of the third plan year by adding together the annual NVA realizations of all plan years of the plan cycle. The performance ratio for a plan cycle is obtained by dividing the performance realization for the plan cycle with the performance target for the plan cycle, expressing the result as a percentage. The OLTPP only allows a payout if the actual NVA exceeds predetermined target thresholds.

Under both the old and the new LTPP plan, participants are granted a target number of Performance Share Units (PSUs) at the beginning of every performance period, which are converted into Novartis shares after the performance period. At the end of the three-year performance period, the Compensation Committee adjusts the target number of PSUs earned based on actual performance. PSUs are converted into unrestricted Novartis shares without an additional vesting period. In the United States, awards may also be delivered in cash under the United States deferred compensation plan.

In 2014, 0.3 million LTPP PSUs based on achieving 100% of target were granted to 14 key executives. In the same year 0.2 million OLTPP PSUs (2013: 0.4 million OLTPP PSUs) based on achieving 100% of target were granted to 119 key executives.

#### LONG-TERM RELATIVE PERFORMANCE PLAN (LTRPP)

The Long-Term Relative Performance Plan, was introduced in 2014, and is an equity plan for the CEO and other key executives. The target incentive is 100% of base compensation for the CEO. For other key executives, the LTRPP represents between 10% and 23% of their total variable compensation at target. It is capped at 200% of target. LTRPP is based on the achievement of long-term Group Total Shareholder Return (TSR) versus our peer group of 12 companies in the health-care industry over rolling three-year performance periods. TSR is calculated in USD as share price growth plus dividends over the three-year performance period. The calculation will be based on Bloomberg standard published TSR data, which is publicly available. The position in the peer group determines the payout range.

The fair value of the LTRPP award was determined to be CHF 62.59 and USD 68.56 as of the grant date. In 2014, a total of 0.1 million LTRPP PSUs based on achieving 100% of target were granted to 14 executives.

#### **OTHER SHARE AWARDS**

Selected associates, excluding the Executive Committee members, may exceptionally receive Special Share Awards of restricted shares or RSUs. These Special Share Awards provide an opportunity to reward outstanding achievements or exceptional performance and aim at retaining key contributors. They are based on a formal internal selection process, in which the individual performance of each candidate is thoroughly assessed at several management levels. Special Share Awards generally have a five-year vesting period. In exceptional circumstances, Special Share Awards may be rewarded to attract special expertise and new talents into the organization. These grants are consistent with market practice and Novartis' philosophy to attract, retain and motivate best–in-class talents around the world.

Worldwide 455 associates at different levels in the organization were awarded restricted shares in 2014. During 2014, a total of 0.8 million restricted shares and RSUs (2013: 0.8 million restricted shares and RSUs) were granted to executives and selected associates.

In addition, in 2014, Board members received 20 643 unrestricted shares as part of their regular compensation.

#### SUMMARY OF NON-VESTED SHARE MOVEMENTS

The table below provides a summary of non-vested share movements (restricted shares, RSUs and ADRs) for all plans:

	20	14	20	13
	Number of shares in millions	Fair value in USD millions	Number of shares in millions	Fair value in USD millions
Non-vested shares at January 1	23.1	1 370.6	23.7	1 329.7
Granted	14.5	1 153.4	14.8	932.2
Vested	- 11.5	- 709.2	- 13.4	- 776.9
Forfeited	- 1.9	- 112.3	- 2.0	-114.4
Non-vested shares at December 31	24.2	1 702.5	23.1	1 370.6

### ALCON, INC., EQUITY PLANS GRANTED TO ASSOCIATES PRIOR TO THE MERGER

At the completion of the merger of Alcon, Inc., into Novartis on April 8, 2011, all awards outstanding under the Alcon equity plans were converted into awards based upon Novartis shares with a conversion factor of 3.0727 as defined in the Merger Agreement. There were no grants in 2014 and 2013 although certain of the unvested awards under the Alcon equity plans continued to have an expense in 2014.

### SHARE OPTIONS AND SHARE-SETTLED APPRECIATION RIGHTS

Share options entitle the recipient to purchase Novartis shares at the closing market price of the former Alcon, Inc., share on the day of grant divided by the conversion factor.

Share-settled appreciation rights (SSAR) entitle the participant to receive, in the form of Novartis shares, the difference between the values of the former Alcon, Inc., share at the date of grant, converted into Novartis shares using the conversion factor, and the Novartis share price at the date of exercise.

The following table shows the activity associated with the converted Novartis share options and SSARs during 2014 and 2013:

	Number of options (millions)	exercise	Number of SSARs (millions)	0
Outstanding at January 1, 2013	2.0	26.7	3.8	36.3
Exercised	- 0.8	25.1	- 0.7	36.6
Outstanding at December 31, 2013	1.2	27.7	3.1	36.3
Exercisable at December 31, 2013	1.2	27.7	3.1	36.3
Outstanding at January 1, 2014	1.2	27.7	3.1	36.3
Exercised	- 0.5	24.4	- 0.7	38.7
Outstanding at December 31, 2014	0.7	30.1	2.4	35.6
Exercisable at December 31, 2014	0.7	30.1	2.4	35.6

### 27. Transactions with Related Parties

#### **GENENTECH/ROCHE**

Novartis has two agreements with Genentech, Inc., USA, a subsidiary of Roche Holding AG which is indirectly included in the consolidated financial statements using equity accounting since Novartis holds 33.3% of the outstanding voting shares of Roche.

#### LUCENTIS

Novartis has licensed the exclusive rights to develop and market *Lucentis* outside the United States for indications related to diseases of the eye. As part of this agreement, Novartis paid Genentech/Roche an initial milestone and shared the cost for the subsequent development by making additional milestone payments upon the achievement of certain clinical development points and product approval. Novartis also pays royalties on the net sales of *Lucentis* products outside the United States. In 2014, *Lucentis* sales of USD 2.4 billion (2013: USD 2.4 billion) have been recognized by Novartis.

#### XOLAIR

In February 2004, Novartis Pharma AG, Genentech, Inc., and Tanox, Inc., finalized a three-party collaboration to govern the

development and commercialization of certain anti-IgE antibodies including *Xolair* and TNX-901. Under this agreement, all three parties co-developed *Xolair*. On August 2, 2007, Genentech, Inc. completed the acquisition of Tanox, Inc. and has taken over its rights and obligations. Novartis and Genentech/Roche are co-promoting *Xolair* in the United States where Genentech/Roche records all sales. Novartis records sales outside of the United States.

Novartis markets *Xolair* and records all sales and related costs outside the United States as well as co-promotion costs in the United States. Genentech/Roche and Novartis share the resulting profits from sales in the United States, Europe and other countries, according to agreed profit-sharing percentages. In 2014, Novartis recognized total sales of *Xolair* of USD 777 million (2013: USD 613 million) including sales to them for the United States market.

The net expense for royalties, cost sharing and profit sharing arising out of the *Lucentis* and *Xolair* agreements with Genentech/Roche totaled USD 536 million in 2014 (2013: USD 570 million).

Furthermore, Novartis has several patent license, supply and distribution agreements with Roche.

#### EXECUTIVE OFFICER AND NON-EXECUTIVE DIRECTOR COMPENSATION

During 2014, there were 14 Executive Committee members ("Executive Officers"), including those who stepped down during the year (12 members in 2013 also including those who stepped down).

The total compensation for members of the Executive Committee and the 14 Non-Executive Directors (15 in 2013) using the Group's accounting policies for equity-based compensation and pension benefits was as follows:

	Executive Officers		Non-Executive Directors		Total	
	2014 USD millions	2013 USD millions	2014 USD millions	2013 USD millions	2014 USD millions	2013 USD millions
Benefits other than equity-based amounts	18.3	16.0	6.2	8.6	24.5	24.6
Post-employment benefits	2.1	1.9	0.1	1.4	2.2	3.3
Termination benefits		4.0				4.0
Equity-based compensation	81.7	46.5	4.9	5.7	86.6	52.2
Total	102.1	68.4	11.2	15.7	113.3	84.1

During 2014, there was an increase in the IFRS expense, compared to 2013, for equity-based compensation for Executive Committee members principally due to the following factors:

- In the year, certain Executive Committee members either retired or met the early retirement conditions resulting in an accelerated expense under IFRS, in accordance with the relevant plan terms.
- There was a net increase in the number of Executive Committee members; higher equity-based compensation expense for prior year grants not yet fully vested; and the expense relating to the loss of equity-based entitlements from a previous employer.

The annual incentive award, which is fully included in equitybased compensation even when paid out in cash, is granted in January in the year following the reporting period.

The disclosures required by the Swiss Code of Obligations and in accordance with the Swiss Ordinance against Excessive Compensation in Stock Exchange Listed Companies on Board and Executive compensation are shown in the Compensation Report.

### 27. Transactions with Related Parties (Continued)

#### TRANSACTIONS WITH FORMER MEMBERS OF THE BOARD OF DIRECTORS

During 2014, no payments (or waivers of claims) were made to former Board members or to "persons closely" linked to them, except for the following amounts:

Dr. Alex Krauer, Honorary Chairman, is entitled to an amount of CHF 60 000 for annual periods from one AGM to the next. This amount was fixed in 1998 upon his departure from the Board in 1999, and has not been revised since that date. Due to a change in the timing of payments, an amount of CHF 45 000 was paid to Dr. Krauer, during 2014.

In 2014, an amount of CHF 330 645 (USD 363 552) was paid to Dr. Daniel Vasella, Honorary Chairman, for 14 days of coaching of high-potential associates and for being a member of the local Novartis Boards in France and Spain under an agreement which became effective on November 1, 2013 and will last until the end of 2016. Dr. Vasella is compensated at a rate of USD 25 000 per day, with an annual guaranteed minimum fee of USD 250 000 for each of the calendar years 2014, 2015 and 2016. This amount was determined by decision of the Board of Directors, taking into consideration the compensation practices of other large companies when retired Chairmen or CEOs were retained in consulting agreements after leaving the board of directors.

In 2013, Dr. Vasella received a total amount of CHF 5.1 million from the date of the AGM, when he stepped down as Chairman and Board member, to December 31, 2013.

In 2014, Dr. Vasella exercised an option to acquire, at a future date, real estate in Risch, Zug, Switzerland from a consolidated entity for a price corresponding to the average of two independent external valuation reports. Novartis considers this transaction as not financially material. During 2014, Dr. Vasella acquired an asset for CHF 2.0 million from a consolidated entity. The transaction price was at a value matching the best of the offers for the asset received in an open bidding process from unrelated third parties.

The disclosures made related to Dr. Vasella are made on a voluntary basis.

### 28. Commitments and Contingencies

#### LEASING COMMITMENTS

The Group has entered into various fixed term operational leases, mainly for cars and real estate. As of December 31, 2014 the Group's commitments with respect to these leases, including estimated payment dates, were as follows:

	2014 USD millions
2015	273
2016	200
2017	145
2018	99
2019	77
Thereafter	1 978
Total	2 772
Expense of current year	344

#### **RESEARCH & DEVELOPMENT COMMITMENTS**

The Group has entered into long-term research agreements with various institutions which provide for potential milestone payments and other payments by Novartis that may be capitalized. As of December 31, 2014 the Group's commitments to make payments under those agreements, and their estimated timing, were as follows:

	Unconditional commitments USD millions	Potential milestone payments USD millions	Total 2014 USD millions
2015	93	459	552
2016	72	250	322
2017	48	366	414
2018	37	205	242
2019	36	488	524
Thereafter	23	439	462
Total	309	2 207	2 516

#### **OTHER COMMITMENTS**

The Novartis Group entered into various purchase commitments for services and materials as well as for equipment in the ordinary course of business. These commitments are generally entered into at current market prices and reflect normal business operations.

#### CONTINGENCIES

Group companies have to observe the laws, government orders and regulations of the country in which they operate.

The Group's potential environmental remediation liability is assessed based on a risk assessment and investigation of the various sites identified by the Group as at risk for environmental remediation exposure. The Group's future remediation expenses are affected by a number of uncertainties. These uncertainties include, but are not limited to, the method and extent of remediation, the percentage of material attributable to the Group at the remediation sites relative to that attributable to other parties, and the financial capabilities of the other potentially responsible parties.

A number of Group companies are currently involved in administrative proceedings, litigations and investigations arising out of the normal conduct of their business. These litigations include product liabilities, governmental investigations and other legal matters. Whilst provisions have been made for probable losses that management deems to be reasonable or appropriate there are uncertainties connected with these estimates.

Note 20 contains a more extensive discussion of these matters.

In the opinion of management, however, the outcome of these actions will not materially affect the Group's financial position but could be material to the results of operations or cash flow in a given period.

## 29. Financial Instruments – additional disclosures

		2014	2013
	Note	USD millions <sup>1</sup>	USD millions <sup>1</sup>
Cash and cash equivalents	16	13 023	6 687
Financial assets – measured at fair value through other comprehensive income			
Available-for-sale marketable securities			
Debt securities	16	327	323
Equity securities	16	15	47
Fund investments	16	35	11
Total available-for-sale marketable securities		377	381
Available-for-sale long-term financial investments			
Equity securities	13	937	824
Fund investments	13	71	52
Total available-for-sale long-term financial investments		1 008	876
Total financial assets – measured at fair value through other comprehensive income		1 385	1 257
Financial assets – measured at amortized costs			
Trade receivables and other current assets (excluding pre-payments)	15/17	10 255	12 623
Accrued interest on debt securities and time deposits	16	3	5
Time deposits with original maturity more than 90 days	16	6	1 931
Long-term loans and receivables from customers and finance lease, advances, security deposits	13	712	647
Total financial assets – measured at amortized costs		10 976	15 206
Financial assets – measured at fair value through the consolidated income statement			
Associated companies at fair value through profit and loss	1.0	234	1.01
Derivative financial instruments	16	356	121
		500	101
Total financial assets – measured at fair value through the consolidated income statement		590	121
Total financial assets – measured at fair value through the consolidated income statement Total financial assets		590 25 974	121 23 271
Total financial assets			
Total financial assets Financial liabilities – measured at amortized costs			
Total financial assets Financial liabilities – measured at amortized costs <i>Current financial debt</i>		25 974	23 271
Total financial assets Financial liabilities – measured at amortized costs Current financial debt Interest bearing accounts of associates payable on demand	21	<b>25 974</b> 1 651	<b>23 271</b> 1 718
Total financial assets Financial liabilities – measured at amortized costs Current financial debt Interest bearing accounts of associates payable on demand Bank and other financial debt	21	<b>25 974</b> 1 651 1 272	23 271 1 718 1 323
Total financial assets         Financial liabilities – measured at amortized costs         Current financial debt         Interest bearing accounts of associates payable on demand         Bank and other financial debt         Commercial paper	21 21	25 974 1 651 1 272 648	23 271 1 718 1 323 1 042
Total financial assets Financial liabilities – measured at amortized costs Current financial debt Interest bearing accounts of associates payable on demand Bank and other financial debt Commercial paper Current portion of non-current debt	21	25 974 1 651 1 272 648 2 989	23 271 1 718 1 323 1 042 2 590
Total financial assets         Financial liabilities – measured at amortized costs         Current financial debt         Interest bearing accounts of associates payable on demand         Bank and other financial debt         Commercial paper         Current portion of non-current debt         Total current financial debt	21 21	25 974 1 651 1 272 648	23 271 1 718 1 323 1 042 2 590
Total financial assets         Financial liabilities – measured at amortized costs         Current financial debt         Interest bearing accounts of associates payable on demand         Bank and other financial debt         Commercial paper         Current portion of non-current debt         Total current financial debt         Non-current financial debt	21 21 21	25 974 1 651 1 272 648 2 989 6 560	23 271 1 718 1 323 1 042 2 590 6 673
Total financial assets         Financial liabilities – measured at amortized costs         Current financial debt         Interest bearing accounts of associates payable on demand         Bank and other financial debt         Commercial paper         Current portion of non-current debt         Total current financial debt         Non-current financial debt         Straight bonds	21 21 21 19	25 974 1 651 1 272 648 2 989 6 560 15 982	23 271 1 718 1 323 1 042 2 590 6 673 12 909
Total financial assets         Financial liabilities – measured at amortized costs         Current financial debt         Interest bearing accounts of associates payable on demand         Bank and other financial debt         Commercial paper         Current portion of non-current debt         Total current financial debt         Non-current financial debt         Straight bonds         Liabilities to banks and other financial institutions	21 21 21 19 19	25 974 1 651 1 272 648 2 989 6 560 15 982 803	23 271 1 718 1 323 1 042 2 590 6 673 12 909 919
Total financial assets         Financial liabilities – measured at amortized costs         Current financial debt         Interest bearing accounts of associates payable on demand         Bank and other financial debt         Commercial paper         Current portion of non-current debt         Total current financial debt         Non-current financial debt         Straight bonds         Liabilities to banks and other financial institutions         Finance lease obligations	21 21 21 19 19 19	25 974 1 651 1 272 648 2 989 6 560 15 982 803 3	23 271 1 718 1 323 1 042 2 590 6 673 12 909 919 4
Total financial assets         Financial liabilities – measured at amortized costs         Current financial debt         Interest bearing accounts of associates payable on demand         Bank and other financial debt         Commercial paper         Current portion of non-current debt         Total current financial debt         Non-current financial debt         Straight bonds         Liabilities to banks and other financial institutions	21 21 21 19 19	25 974 1 651 1 272 648 2 989 6 560 15 982 803	23 271 1 718 1 323 1 042 2 590 6 673
Total financial assets         Financial liabilities – measured at amortized costs         Current financial debt         Interest bearing accounts of associates payable on demand         Bank and other financial debt         Commercial paper         Current portion of non-current debt         Total current financial debt         Straight bonds         Liabilities to banks and other financial institutions         Finance lease obligations         Current portion of non-current debt	21 21 21 19 19 19	25 974 1 651 1 272 648 2 989 6 560 15 982 803 3 -2 989 13 799	23 271 1 718 1 323 1 042 2 590 6 673 12 909 919 4 -2 590 11 242
Total financial assets         Financial liabilities – measured at amortized costs         Current financial debt         Interest bearing accounts of associates payable on demand         Bank and other financial debt         Commercial paper         Current portion of non-current debt         Total current financial debt         Non-current financial debt         Straight bonds         Liabilities to banks and other financial institutions         Finance lease obligations         Current portion of non-current debt	21 21 21 19 19 19	25 974 1 651 1 272 648 2 989 6 560 15 982 803 3 - 2 989	23 271 1 718 1 323 1 042 2 590 6 673 12 909 919 4 - 2 590
Total financial assets         Financial liabilities – measured at amortized costs         Current financial debt         Interest bearing accounts of associates payable on demand         Bank and other financial debt         Commercial paper         Current portion of non-current debt         Total current financial debt         Straight bonds         Liabilities to banks and other financial institutions         Finance lease obligations         Current portion of non-current debt	21 21 21 19 19 19	25 974 1 651 1 272 648 2 989 6 560 15 982 803 3 -2 989 13 799	23 271 1 718 1 323 1 042 2 590 6 673 12 909 919 4 - 2 590 11 242 6 148
Total financial assets         Financial liabilities – measured at amortized costs         Current financial debt         Interest bearing accounts of associates payable on demand         Bank and other financial debt         Commercial paper         Current portion of non-current debt         Total current financial debt         Non-current financial debt         Straight bonds         Liabilities to banks and other financial institutions         Finance lease obligations         Current portion of non-current debt         Total non-current financial debt         Total non-current financial debt	21 21 21 19 19 19 19	25 974 1 651 1 272 648 2 989 6 560 15 982 803 3 - 2 989 13 799 6 077 26 436	23 271 1 718 1 323 1 042 2 590 6 673 12 909 919 4 - 2 590 11 242 6 148
Total financial assets         Financial liabilities – measured at amortized costs         Current financial debt         Interest bearing accounts of associates payable on demand         Bank and other financial debt         Commercial paper         Current portion of non-current debt         Total current financial debt         Non-current financial debt         Straight bonds         Liabilities to banks and other financial institutions         Finance lease obligations         Current portion of non-current debt         Total non-current financial debt         Total non-current financial debt         Total non-current financial debt         Total non-current financial debt         Financial liabilities – measured at amortized costs         Financial liabilities – measured at fair value through the consolidated income statement         Contingent consideration	21 21 21 19 19 19	25 974 1 651 1 272 648 2 989 6 560 15 982 803 3 - 2 989 13 799 6 077 6 077 26 436	23 271 1 718 1 323 1 042 2 590 6 673 12 909 919 4 - 2 590 11 242 6 148 24 063
Total financial assets         Financial liabilities - measured at amortized costs         Current financial debt         Interest bearing accounts of associates payable on demand         Bank and other financial debt         Commercial paper         Current portion of non-current debt         Total current financial debt         Non-current financial debt         Straight bonds         Liabilities to banks and other financial institutions         Finance lease obligations         Current portion of non-current debt         Total non-current financial debt         Total non-current financial debt         Total non-current financial debt         Total non-current financial debt         Financial liabilities - measured at amortized costs         Financial liabilities - measured at fair value through the consolidated income statement         Contingent consideration         Derivative financial instruments	21 21 21 19 19 19 19	25 974 1 651 1 272 648 2 989 6 560 15 982 803 3 - 2 989 13 799 6 077 26 436	23 271 1 718 1 323 1 042 2 590 6 673 12 909 919 4 -2 590 11 242
Total financial assets         Financial liabilities – measured at amortized costs         Current financial debt         Interest bearing accounts of associates payable on demand         Bank and other financial debt         Commercial paper         Current portion of non-current debt         Total current financial debt         Non-current financial debt         Straight bonds         Liabilities to banks and other financial institutions         Finance lease obligations         Current portion of non-current debt         Total non-current financial debt         Total non-current financial debt         Total non-current financial debt         Total non-current financial debt         Financial liabilities – measured at amortized costs         Financial liabilities – measured at fair value through the consolidated income statement         Contingent consideration	21 21 21 19 19 19 19 19 20/22	25 974 1 651 1 272 648 2 989 6 560 15 982 803 3 - 2 989 13 799 6 077 6 077 26 436	23 271 1 718 1 323 1 042 2 590 6 673 12 909 919 4 - 2 590 11 242 6 148 24 063 572

 $^{1}$ Except for straight bonds (see Note 19) the carrying amount is a reasonable approximation of fair value.

#### **DERIVATIVE FINANCIAL INSTRUMENTS**

The following tables show the contract or underlying principal amounts and fair values of derivative financial instruments analyzed by type of contract at December 31, 2014 and 2013. Contract or underlying principal amounts indicate the volume of business outstanding at the consolidated balance sheet date and do not represent amounts at risk. The fair values are determined by reference to market prices or standard pricing models that used observable market inputs at December 31, 2014 and 2013.

	Contract or underlying principal amount		Positive fair values		Negative fair values	
	2014 USD millions	2013 USD millions	2014 USD millions	2013 USD millions	2014 USD millions	2013 USD millions
Currency related instruments						
Forward foreign exchange rate contracts	10 072	10 137	283	117	- 52	-100
Over-the-Counter currency options	1 715	2 427	73	4		-3
Total of currency related instruments	11 787	12 564	356	121	- 52	- 103
Total derivative financial instruments included in marketable securities and in current financial debts	11 787	12 564	356	121	- 52	- 103

The following table shows by currency contract or underlying principal amount the derivative financial instruments at December 31, 2014 and 2013:

December 31, 2014	EUR USD millions	USD USD millions	JPY USD millions	Other USD millions	Total USD millions
Currency related instruments					
Forward foreign exchange rate contracts	3 681	3 1 5 9	38	3 194	10 072
Over-the-Counter currency options	1 215	500			1 715
Total of currency related instruments	4 896	3 659	38	3 194	11 787
Total derivative financial instruments	4 896	3 659	38	3 194	11 787

December 31, 2013	EUR USD millions	USD USD millions	JPY USD millions	Other USD millions	Total USD millions
Currency related instruments					
Forward foreign exchange rate contracts	3 727	3 802	230	2 378	10 137
Over-the-Counter currency options	827	1 600			2 427
Total of currency related instruments	4 554	5 402	230	2 378	12 564
Total derivative financial instruments	4 554	5 402	230	2 378	12 564

#### DERIVATIVE FINANCIAL INSTRUMENTS EFFECTIVE FOR HEDGE ACCOUNTING PURPOSES

At the end of 2014 and 2013, there were no open hedging instruments for anticipated transactions.

#### FAIR VALUE BY HIERARCHY

As required by IFRS, financial assets and liabilities recorded at fair value in the consolidated financial statements are categorized based upon the level of judgment associated with the inputs used to measure their fair value. There are three hierarchical levels, based on an increasing amount of subjectivity associated with the inputs to derive fair valuation for these assets and liabilities, which are as follows:

The assets carried at Level 1 fair value are equity and debt securities listed in active markets.

The assets generally included in Level 2 fair value hierarchy are foreign exchange and interest rate derivatives and certain debt securities. Foreign exchange derivatives and interest rate derivatives are valued using corroborated market data. The liabilities generally included in this fair value hierarchy consist of foreign exchange and interest rate derivatives.

Level 3 inputs are unobservable for the asset or liability. The assets generally included in Level 3 fair value hierarchy are various investments in hedge funds and unquoted equity security investments. Contingent consideration carried at fair value is included in this category.

### 29. Financial Instruments – additional disclosures (Continued)

2014	Level 1 USD millions	Level 2 USD millions	Level 3 USD millions	Valued at amortized cost USD millions	Total USD millions
Debt securities	301	26			327
Equity securities	15				15
Fund investments	29		6		35
Total available-for-sale marketable securities	345	26	6		377
Time deposits with original maturity more than 90 days				6	6
Derivative financial instruments		356			356
Accrued interest on debt securities				3	3
Total marketable securities, time deposits and derivative financial instrume	ents 345	382	6	9	742
Available-for-sale financial investments	605		332		937
Fund investments			71		71
Long-term loans and receivables from customers and finance lease, advances, security deposits				712	712
Total financial investments and long-term loans	605		403	712	1 720
Associated companies	66		168		234
Total associated companies at fair value through profit and loss	66		168		234
Contingent consideration			- 756		- 756
Derivative financial instruments		- 52			- 52
Total financial liabilities at fair value		- 52	- 756		- 808

2013	Level 1 USD millions	Level 2 USD millions	Level 3 USD millions	Valued at amortized cost USD millions	Total USD millions
Debt securities	294	29			323
Equity securities	21		26		47
Fund investments			11		11
Total available-for-sale marketable securities	315	29	37		381
Time deposits with original maturity more than 90 days				1 931	1 931
Derivative financial instruments		121			121
Accrued interest on debt securities				5	5
Total marketable securities, time deposits and derivative financial instrume	ents 315	150	37	1 936	2 438
Available-for-sale financial investments	458		366		824
Fund investments			52		52
Long-term loans and receivables from customers and finance lease, advances, security deposits				647	647
Total financial investments and long-term loans	458		418	647	1 523
Contingent consideration			- 572		- 572
Derivative financial instruments		- 103			- 103
Total financial liabilities at fair value		- 103	- 572		- 675

The analysis above includes all financial instruments including those measured at amortized cost or at cost.

The change in carrying values associated with Level 3 financial instruments using significant unobservable inputs during the year ended December 31 are set forth below:

2014	Equity securities USD millions	Fund investments USD millions	Available- for-sale financial investments USD millions	Contingent consideration USD millions
January 1	26	63	366	572
Fair value gains recognized in the consolidated income statement		2	17	51
Fair value losses (including impairments and amortizations) recognized in the consolidated income statement			- 51	- 20
Gains recognized in the consolidated statement of comprehensive income	3	3	7	
Purchases		7	140	153
Proceeds from sales		-9	- 23	
Reclassification	- 29	16	-114	
Currency translation effects		- 5	- 10	
December 31	0	77	332	756
	0	77	332	75
Total of fair value gains and losses recognized in the consolidated income statement for assets and liabilities held at December 31, 2014		2	- 34	31

			Available- for-sale		
2013	Equity securities USD millions	Fund investments USD millions	financial investments USD millions	Contingent consideration USD millions	
January 1	23	36	359	573	
Fair value gains recognized in the consolidated income statement		3	32	- 39	
Fair value losses (including impairments and amortizations) recognized in the consolidated income statement			- 52	81	
Gains recognized in the consolidated statement of comprehensive income	3	4	25		
Purchases		7	86		
Payments				- 43	
Proceeds from sales		-21	- 80		
At equity investments reclassified due to loss of significant influence		33			
Reclassification			- 6		
Currency translation effects		1	2		
December 31	26	63	366	572	

statement for assets and liabilities held at December 31, 2013

No significant transfers from one level to the other occurred during the reporting period. Gains and losses associated with Level 3 available-for-sale marketable securities are recorded in the consolidated income statement under "Other financial income and expense" and gains and losses associated with Level 3 available-for-sale financial investments are recorded in the consolidated income statement under "Other expense" or "Other income", respectively.

If the pricing parameters for the Level 3 input were to change for equity securities and fund investments by 5% and for available-for-sale financial investments by 10% positively or negatively, respectively, this would change the amounts recorded in the consolidated statement of comprehensive income by USD 4 million or USD 33 million, respectively (2013: USD 4 million and USD 37 million).

For the determination of the fair value of a contingent consideration various unobservable inputs are used. A change

in these inputs might result in a significantly higher or lower fair value measurement. The significance and usage of these inputs may vary amongst the existing contingent considerations due to differences in the triggering events for payments or in the nature of the asset the contingent consideration relates to. Amongst others, the probability of success, sales forecast and assumptions regarding the timing and different scenarios of triggering events are used. The inputs are interrelated.

3

- 20

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### NATURE AND EXTENT OF RISKS ARISING FROM FINANCIAL INSTRUMENTS

### MARKET RISK

Novartis is exposed to market risk, primarily related to foreign currency exchange rates, interest rates and the market value of the investments of liquid funds. The Group actively monitors and seeks to reduce, where it deems it appropriate to do

### 29. Financial Instruments - additional disclosures (Continued)

so, fluctuations in these exposures. It is the Group's policy and practice to enter into a variety of derivative financial instruments to manage the volatility of these exposures and to enhance the yield on the investment of liquid funds. It does not enter any financial transactions containing a risk that cannot be quantified at the time the transaction is concluded. In addition, it does not sell short assets it does not have, or does not know it will have, in the future. The Group only sells existing assets or enters into transactions and future transactions (in the case of anticipatory hedges) that it confidently expects it will have in the future, based on past experience. In the case of liquid funds, the Group writes call options on assets it has or it writes put options on positions it wants to acquire and has the liquidity to acquire. The Group expects that any loss in value for these instruments generally would be offset by increases in the value of the underlying transactions.

#### FOREIGN CURRENCY EXCHANGE RATE RISK

The Group uses the USD as its reporting currency. As a result, the Group is exposed to foreign currency exchange movements, primarily in European, Japanese and emerging market currencies. Fluctuations in the exchange rates between the US dollar and other currencies can have a significant effect on both the Group's results of operations, including reported sales and earnings, as well as on the reported value of our assets, liabilities and cash flows. This in turn may significantly affect the comparability of period-to-period results of operations.

Because our expenditures in Swiss francs are significantly higher than our revenues in Swiss francs, volatility in the value of the Swiss franc can have a significant impact on the reported value of our earnings, assets and liabilities, and the timing and extent of such volatility can be difficult to predict. In addition, there is a risk that certain countries could take other steps which could significantly impact the value of their currencies. Such steps could include "quantitative easing" measures and potential withdrawals by countries from common currencies, as has been advocated by some with respect to Greece's membership in the euro.

The Group is exposed to a potential adverse devaluation risk on its intercompany funding and total investment in certain subsidiaries operating in countries with exchange controls. The most significant country in this respect is Venezuela, where the Group has an equivalent of approximately USD 0.4 billion of cash in local currency, which is only slowly being approved for remittance outside of the country. As a result, the Group is exposed to a potential devaluation loss in the income statement on its total intercompany balances with its subsidiaries in Venezuela, which at December 31, 2014 amounted to USD 0.4 billion. The Group continues to use for the consolidation of the financial statements of its Venezuelan subsidiaries the official exchange rate of VEF 6.3/USD, which is applied for health and food imports as published by the Centro Nacional de Comercio Exterior (CENCOEX, formerly CADIVI).

Novartis seeks to manage currency exposure by engaging in hedging transactions where management deems appropriate. We may enter into various contracts that reflect the changes in the value of foreign currency exchange rates to preserve the value of assets, commitments and anticipated transactions. Novartis also uses forward contracts and foreign currency option contracts to hedge certain anticipated transactions denominated in foreign currencies.

Net investments in subsidiaries in foreign countries are long-term investments. Their fair value changes through movements of foreign currency exchange rates. The Group only hedges the net investments in foreign subsidiaries in exceptional cases.

#### **COMMODITY PRICE RISK**

The Group has only a very limited exposure to price risk related to anticipated purchases of certain commodities used as raw materials by the Group's businesses. A change in those prices may alter the gross margin of a specific business, but generally by not more than 10% of the margin and thus below the Group's risk management tolerance levels. Accordingly, the Group does not enter into significant commodity futures, forward and option contracts to manage fluctuations in prices of anticipated purchases.

#### **INTEREST RATE RISK**

The Group addresses its net exposure to interest rate risk mainly through the ratio of its fixed rate financial debt to variable rate financial debt contained in its total financial debt portfolio. To manage this mix, Novartis may enter into interest rate swap agreements, in which it exchanges periodic payments based on a notional amount and agreed upon fixed and variable interest rates.

#### **EQUITY RISK**

The Group may purchase equities as investments of its liquid funds. As a policy, it limits its holdings in an unrelated company to less than 5% of its liquid funds. Potential investments are thoroughly analyzed. Call options are written on equities that the Group owns, and put options are written on equities which the Group wants to buy and for which cash is available.

#### **CREDIT RISK**

Credit risks arise from the possibility that customers may not be able to settle their obligations as agreed. To manage this risk the Group periodically assesses the financial reliability of customers, taking into account their financial position, past experience and other factors. Individual risk limits are set accordingly.

The Group's largest customer accounts for approximately 15% of net sales, and the second and third largest customers account for 13% and 6% of net sales (2013: 10%, 9% and 7% respectively). No other customer accounts for 5% or more of net sales, in either year.

The highest amounts of trade receivables outstanding were for these same three customers. They amounted to 11%, 8% and 4%, respectively, of the Group's trade receivables at December 31, 2014. There is no other significant concentration of credit risk (2013: 9%, 7% and 5% respectively).

#### COUNTERPARTY RISK

Counterparty risk encompasses issuer risk on marketable securities and money market instruments, credit risk on cash, time deposits and derivatives as well as settlement risk for different instruments. Issuer risk is reduced by only buying securities which are at least AA- rated. Counterparty credit risk and settlement risk is reduced by a policy of entering into transactions with counterparties (banks or financial institutions) that feature a strong credit rating. For short-term investments of less than six months of maturity, the counterparty must be at least A-1/P-1/F-1 rated. Exposure to these risks is closely monitored and kept within predetermined parameters. The limits are regularly assessed and determined based upon credit analysis including financial statement and capital adequacy ratio reviews. In addition, reverse repurchasing agreements are contracted and Novartis has entered into credit support agreements with various banks for derivative transactions.

The Group's cash and cash equivalents are held with major regulated financial institutions, the three largest ones hold

approximately 11.8%, 7.7% and 7.7%, respectively (2013: 21.8%, 18.4% and 8.9%, respectively).

The Group does not expect any losses from non-performance by these counterparties and does not have any significant grouping of exposures to financial sector or country risk.

#### LIQUIDITY RISK

Liquidity risk is defined as the risk that the Group could not be able to settle or meet its obligations on time or at a reasonable price. Group Treasury is responsible for liquidity, funding as well as settlement management. In addition, liquidity and funding risks, related processes and policies are overseen by management. Novartis manages its liquidity risk on a consolidated basis based on business needs, tax, capital or regulatory considerations, if applicable, through numerous sources of financing in order to maintain flexibility. Management monitors the Group's net debt or liquidity position through rolling forecasts on the basis of expected cash flows.

The following table sets forth how management monitors net debt or liquidity based on details of the remaining contractual maturities of current financial assets and liabilities excluding trade receivables and payables and contingent considerations at December 31, 2014 and 2013:

- 2 678 - 2 678 - 18 - 2 696	- 335 - 335 - 32 <b>- 367</b>	- 3 547 - 3 549 - 2 - <b>3 549</b>	- 5 423	-8376	- 13 904 - 13 799 - 6 560 - 6 562 - 52 - 6 612
-2678 -18	- 335	- 3 549			- <b>13 799</b> - 6 560 - 6 562
					<b>- 13 799</b> - 6 560
- 2 678	- 335	- 3 547			- 13 799
			0 10 1	-0470	- 13 904
			- 5 434	- 8 470	- 13 904
			-5423	-8376	- 13 799
9 902	3 594	109	181	76	13 862
9 623	3 400				13 023
161	126	72			359
97					97
21	68	37	181	76	383
Due or due within one month USD millions	Due later than one month but less than three months USD millions	Due later than three months but less than one year USD millions	Due later than one year but less than five years USD millions	Due after five years USD millions	Total USD millions
	within one month USD millions 21 97 161 9 623	Due or due within one month USD millionsone month but less than three months USD millions21689796216112696233400	Due or due within one monthi but less than three months USD millionsthree months but less than one year USD millions21683797	Due or due within one month but less than three months USD millionsthree months but less than one year USD millionsone year but less than five years USD millions216837181971611267296233400-99023594109181	Due or due within one month but less than three months USD millionsone year but less than one year USD millionsDue after five years USD millions2168371817697-5423-8376

### 29. Financial Instruments - additional disclosures (Continued)

2 2 530 5 - 2 270 5 - 2 270 4 - 37 0 - 2 307	- 1 507 - 1 507 - 22 - 1 529	- 5 201 - 5 212 - <b>5 201</b>	- 6 041 - 6 087 <b>- 6 041</b>	- 11 242 - 11 299 - 11 242 - 6 673 - 6 673 - 103 - 6 776
5 – 2 270 5 – <i>2 270</i>	- 1 507 - 1 507	- 5 212	- 6 087	- 11 299 - <b>11 242</b> - 6 673 - 6 673
5 -2 270	- 1 507	- 5 212	- 6 087	- 11 299 - 11 242 - 6 673
		- 5 212	- 6 087	- 11 299 <b>- 11 242</b>
2 2 530		- 5 212	- 6 087	- 11 299
2 2 530	104	- 5 212	- 6 087	- 11 299
2 2 530	104			
2 2 530	104	- 5 201	-6041	- 11 242
2 2 530	104			
2 2 5 3 0	104			
	104	179	87	9 222
500				6 687
5 97	3			126
7				97
2 1 933	101	179	87	2 312
e one month but less than three months	three months but less than one year USD millions	but less than five years USD millions	Due after five years USD millions	Total USD millions
nir ntr	but less than the three months ns USD millions	ue one month but less than three months USD millions USD millions 12 1 933 101	ueone monththree monthsone yearbut less thanbut less thanbut less thanbut less thanthree monthsone yearone yearbut less thanUSD millionsUSD millionsUSD millionsL21 933101179	ue nin hin three months but less than nsone year but less than one year USD millionsone year but less than one year USD millionsDue after five years USD millions121 93310117987

The consolidated balance sheet amounts of financial liabilities included in the above analysis are not materially different to the contractual amounts due on maturity. The positive and negative fair values on derivative financial instruments represent the net contractual amounts to be exchanged at maturity.

The Group's contractual undiscounted potential cash flows from derivative financial instruments to be settled on a gross basis are as follows:

December 31, 2014	Due or due within one month USD millions	Due later than one month but less than three months USD millions	Due later than three months but less than one year USD millions	Total USD millions
Derivative financial instruments and accrued interest on derivative financial instruments				
Potential outflows in various currencies – from financial derivative liabilities	-3 549	- 3 695	-2527	-9771
Potential inflows in various currencies – from financial derivative assets	3 688	3 780	2 646	10 1 14
December 31, 2013	Due or due within one month USD millions	Due later than one month but less than three months USD millions	Due later than three months but less than one year USD millions	Total USD millions
Derivative financial instruments and accrued interest on derivative financial instruments				
Potential outflows in various currencies – from financial derivative liabilities	-3648	-6007	-2476	- 12 131
Potential inflows in various currencies – from financial derivative assets	3 627	5 989	2 417	12 033

Other contractual liabilities which are not part of management's monitoring of the net debt or liquidity consist of the following items:

December 31, 2014	Due later than one month but less than three months USD millions	Due later than three months but less than one year USD millions	Due later than one year but less than five years USD millions	Due after five years USD millions	Total USD millions
Contractual interest on non-current liabilities	-154	- 436	-1778	- 3 087	- 5 455
Trade payables and commitment for repurchase of own shares (see Note 22	2) -6077				-6077

December 31, 2013	Due later than one month but less than three months USD millions	Due later than three months but less than one year USD millions	Due later than one year but less than five years USD millions	Due after five years USD millions	Total USD millions
Contractual interest on non-current liabilities	- 236	- 236	-1146	- 830	-2448
Trade payables	-6148				-6148

#### **CAPITAL RISK MANAGEMENT**

Novartis strives to maintain a strong credit rating. In managing its capital, Novartis focuses on maintaining a strong balance sheet. Moody's rated the Group as Aa3 for long-term maturities and P-1 for short-term maturities and Standard & Poor's had a rating of AA- for long-term and A-1+ for shortterm maturities. Fitch had a long-term rating of AA and a shortterm rating of F1+.

The Group's debt/equity ratio increased to 0.29:1 at December 31, 2014 compared to 0.24:1 at the beginning of the year.

#### **VALUE AT RISK**

The Group uses a value at risk (VAR) computation to estimate the potential ten-day loss in the fair value of its financial instruments.

A ten-day period is used because of an assumption that not all positions could be undone in one day given the size of the positions. Apart from contingent consideration, finance lease obligations, and long-term loans and receivables, advances and security deposits the VAR computation includes all financial assets and financial liabilities as set forth above in this Note. Trade payables and receivables are considered only to the extent they comprise a foreign currency exposure. In addition, commodities are included in the computation.

The VAR estimates are made assuming normal market conditions, using a 95% confidence interval. The Group uses a "Delta Normal" model to determine the observed inter-relationships between movements in interest rates, stock markets and various currencies. These inter-relationships are determined by observing interest rate, stock market movements and forward foreign currency rate movements over a sixty-day period for the calculation of VAR amounts.

The estimated potential ten-day loss in pre-tax income from the Group's foreign currency instruments, the estimated potential ten-day loss of its equity holdings, and the estimated potential ten-day loss in fair value of its interest rate sensitive instruments (primarily financial debt and investments of liquid funds under normal market conditions) as calculated in the VAR model are the following:

	2014 USD millions	2013 USD millions
All financial instruments	272	195
Analyzed by components:		
Instruments sensitive to foreign currency exchange rates	272	131
Instruments sensitive to equity market movements	48	27
Instruments sensitive to interest rates	254	93

The average, high, and low VAR amounts are as follows:

2014	Average USD millions	High USD millions	Low USD millions
All financial instruments	240	306	193
Analyzed by components:			
Instruments sensitive to foreig currency exchange rates	n 154	272	83
Instruments sensitive to equit market movements	y 32	48	18
Instruments sensitive to interest rates	177	254	96

2013	Average USD millions	High USD millions	Low USD millions
All financial instruments	188	238	150
Analyzed by components:			
Instruments sensitive to foreig currency exchange rates	yn 156	244	115
Instruments sensitive to equit market movements	y 39	56	24
Instruments sensitive to interest rates	115	195	68

### 29. Financial Instruments - additional disclosures (Continued)

The VAR computation is a risk analysis tool designed to statistically estimate the maximum potential ten day loss from adverse movements in foreign currency exchange rates, equity prices and interest rates under normal market conditions. The computation does not purport to represent actual losses in fair value on earnings to be incurred by the Group, nor does it consider the effect of favorable changes in market rates. The Group cannot predict actual future movements in such market rates and it does not claim that these VAR results are indicative of future movements in such market rates or to be representative of any actual impact that future changes in market rates may have on the Group's future results of operations or financial position.

In addition to these VAR analyses, the Group uses stress testing techniques that aim to reflect a worst case scenario on the marketable securities which are monitored by Group Treasury. For these calculations, the Group uses the six-months period with the worst performance observed over the past twenty years in each category. For 2014 and 2013, the worst case loss scenario was calculated as follows:

	2014 USD millions	2013 USD millions
All financial instruments	16	24
Analyzed by components:		
Instruments sensitive to foreign currency exchange rates	1	7
Instruments sensitive to equity market movements	8	12
Instruments sensitive to interest rates	7	5

In the Group's risk analysis, Novartis considered this worst case scenario acceptable as it could reduce income, but would not endanger the solvency or the investment grade credit standing of the Group.

### 30. Discontinuing Operations

### DISCONTINUING OPERATIONS CONSOLIDATED INCOME STATEMENT SEGMENTATION

	Vacci	nes1	Consume	er Health	Transf continuing		Corpo (including e		Tota discontinuing	
(In USD millions)	2014	2013	2014	2013	2014	2013	2014	2013	2014	2013
Net sales to third parties of discontinuing operations	1 537	1 987	4 279	4 064					5 816	6051
Sales to other segments	65	61	13	11					78	72
Net sales of discontinuing operations	1 602	2 048	4 292	4 075					5 894	6 123
Other revenues	32	333	33	36		- 84			65	285
Cost of goods sold	-1336	-1578	-1737	-1751		7			-3073	-3322
Gross profit of discontinuing operations	298	803	2 588	2 360		- 77			2 886	3 086
Marketing & Sales	- 280	- 334	-1532	-1577					-1812	-1911
Research & Development	- 545	-476	-312	- 305					- 857	- 781
General & Administration	-118	- 140	-313	-316				- 1	-431	- 457
Other income	905	70	99	79			3	25	1 007	174
Other expense	-812	- 88	- 60	- 63		4	-274	- 37	-1146	- 184
Operating loss of discontinuing operations	- 552	- 165	470	178		- 73	- 271	- 13	- 353	- 73
Income from associated companies	2	1							2	1
Loss before taxes of discontinuing operations									- 351	- 72
Taxes									- 96	55
Net loss of discontinuing operations									- 447	- 17

<sup>1</sup>2013 as previously published, including the blood transfusion diagnostics unit.

<sup>2</sup>Other revenue contains royalties and out-licensing revenues of Vaccines which are to be retained by Novartis.

### DISCONTINUING OPERATIONS CONSOLIDATED BALANCE SHEET

	2014 USD millions	2013 USD millions
Assets of disposal groups classified as discontinuing operations		
Property, plant and equipment	1 411	145
Goodwill	1 1 1 9	267
Intangible assets other than goodwill	1 343	91
Investments in associated companies	1	
Deferred tax assets	304	3
Other non-current assets	47	
Financial assets		7
Inventories	1 155	87
Trade receivables	1 085	154
Other current assets	336	5
Total	6 801	759

	2014 USD millions	2013 USD millions
Liabilities of disposal groups classified as discontinuing operations		
Deferred tax liabilities	209	
Provisions and other non-current liabilities	497	
Trade payables	612	38
Current income tax liabilities	176	
Provisions and other current liabilities	924	12
Total	2 418	50

## 31. Events Subsequent to the December 31, 2014 Consolidated Balance Sheet Date

### DIVIDEND PROPOSAL FOR 2014 AND APPROVAL OF THE GROUP'S 2014 CONSOLIDATED FINANCIAL STATEMENTS

On January 26, 2015, the Novartis AG Board of Directors proposed the acceptance of the 2014 consolidated financial statements of the Novartis Group for approval by the Annual General Meeting on February 27, 2015. Furthermore, also on January 26, 2015, the Board proposed a dividend of CHF 2.60 per share to be approved at the Annual General Meeting on February 27, 2015. If approved, total dividend payments would amount to approximately USD 6.4 billion (2013: USD 6.8 billion) using the CHF/USD December 31 exchange rate.

#### **DIVESTMENT OF THE ANIMAL HEALTH DIVISION**

On January 1, 2015, Novartis completed the divestment of its Animal Health Division to Eli Lilly and Company, USA, for approximately USD 5.4 billion. This will result in a pre-tax gain of approximately USD 4.6 billion.

### 32. Principal Group Subsidiaries and Associated Companies

	Share/paid-in	Equity	
As at December 31, 2014	capital <sup>1</sup> ii	nterest %	Activities
Argentina			_
Novartis Argentina S.A., Buenos Aires	ARS 231.3 m	100	♦▲
Alcon Laboratorios Argentina S.A., Buenos Aires	ARS 83.9 m	100	•
Sandoz S.A., Buenos Aires	ARS 88.0 m	100	•
Australia			
Novartis Australia Pty Ltd., North Ryde, NSW	AUD 11.0 m	100	
Novartis Pharmaceuticals Australia Pty Ltd.,			
North Ryde, NSW	AUD 3.8 m	100	◆▲
Alcon Laboratories (Australia) Pty Ltd.,		100	
Frenchs Forest, NSW Sandoz Pty Ltd., North Ryde, NSW	AUD 2.6 m AUD 11.6 m	100 100	
Novartis Consumer Health Australasia Pty Ltd.,	AUD 11.0 III	100	•
Melbourne, Victoria	AUD 7.6 m	100	•
Novartis Animal Health Australasia Pty Ltd.,	100 110 111	100	•
North Ryde, NSW	AUD 3.0 m	100	♦▲
Austria			
Novartis Austria GmbH, Vienna	EUR 1.0 m	100	- <b>1</b> - 1
Novartis Pharma GmbH, Vienna	EUR 1.1 m	100	•
Alcon Ophthalmika GmbH, Vienna	EUR 36 336.4	100	•
Sandoz GmbH, Kundl	EUR 32.7 m	100	■♦▼▲
EBEWE Pharma Ges.m.b.H Nfg., Unterach am			
Attersee	EUR 1.0 m	100	♦▼▲
Bangladesh			
Novartis (Bangladesh) Limited, Gazipur	BDT 162.5 m	60	♦▼
Belgium			
N.V. Novartis Pharma S.A., Vilvoorde	EUR 7.1 m	100	•
S.A. Alcon-Couvreur N.V., Puurs	EUR 360.6 m	100	♦▼
N.V. Alcon S.A., Vilvoorde	EUR 141 856	100	•
N.V. Sandoz S.A., Vilvoorde	EUR 19.2 m	100	•
N.V. Novartis Consumer Health S.A., Vilvoorde	EUR 4.3 m	100	•
Bermuda			
Triangle International Reinsurance Ltd., Hamiltor	n CHF 1.0 m	100	
Novartis Securities Investment Ltd., Hamilton	CHF 30 000	100	
Novartis International Pharmaceutical Ltd.,			
Hamilton	CHF 20 000	100	
Trinity River Insurance Co. Ltd., Hamilton	USD 370 000	100	
Brazil		100	. –
Novartis Biociências S.A., São Paulo	BRL 265.0 m	100	♦ ▼
Sandoz do Brasil Indústria Farmacêutica Ltda., Cambé, PR	BRL 190.0 m	100	<b>♦▼</b> ▲
Novartis Saúde Animal Ltda., São Paulo	BRL 50.7 m	100	• <b>v</b>
Canada	BRE GOD III	100	• •
Novartis Pharmaceuticals Canada Inc., Dorval/			
Quebec	CAD 0 <sup>2</sup>	100	▲ ♦
Alcon Canada Inc., Mississauga, Ontario	CAD 0 <sup>2</sup>	100	•
CIBA Vision Canada Inc., Mississauga, Ontario	CAD 1	100	
Sandoz Canada Inc., Boucherville, Quebec	CAD 76.8 m	100	<b>* V A</b>
Novartis Consumer Health Canada Inc.,			
Mississauga, Ontario	CAD 159 776	100	•
Novartis Animal Health Canada Inc., Charlottetov			
Prince Edward Island	CAD 180 496	100	◆▲
Chile			
Novartis Chile S.A., Santiago de Chile	CLP 2.0 bn	100	•
Alcon Laboratorios Chile Limitada,			
Santiago de Chile	CLP 2.0 bn	100	•
China			
Beijing Novartis Pharma Co., Ltd., Beijing	USD 30.0 m	100	♦ ▼
Novartis Pharmaceuticals (HK) Limited, Hong Ko	0	100	•
China Novartis Institutes for BioMedical Research		100	
Co., Ltd., Shanghai Suzhou Novartis Pharma Tashaology Co., Ltd.	USD 133.0 m	100	<b>A</b>
Suzhou Novartis Pharma Technology Co., Ltd., Changshu	USD 97.4 m	100	•
Shanghai Novartis Trading Ltd., Shanghai	USD 97.4 m USD 2.5 m	100 100	
Alcon Hong Kong Limited, Hong Kong	HKD 77 000	100	•
Alcon (China) Ophthalmic Product Co., Ltd., Beiji		100	•
Sandoz (China) Pharmaceutical Co., Ltd.,	J	100	-
Zhongshan	USD 22.0 m	100	♦▼
Zhejiang Tianyuan Bio-Pharmaceutical Co., Ltd.,			
Hangzhou	CNY 46.8 m	85	♦▼
Shanghai Novartis Animal Health Co., Ltd.,			
Shanghai	CHF 21.6 m	100	♦▼

	_		
	Share/paid-in	Equity	
As at December 31, 2014	capital 1 in		Activities
	capital li	norest 70	710111105
Colombia			
Novartis de Colombia S.A., Santafé de Bogotá	COP 7.9 bn	100	♦ ▼
Laboratorios Alcon de Colombia S.A.,			
Santafé de Bogotá	COP 20.9 m	100	•
Croatia			
Sandoz d.o.o., Zagreb	HRK 25.6 m	100	•
Czech Republic			
Novartis s.r.o., Prague	CZK 51.5 m	100	
Sandoz s.r.o., Prague	CZK 44.7 m	100	
	0211110111	100	
Denmark	DKK 14.0	100	
Novartis Healthcare A/S, Copenhagen	DKK 14.0 m	100	
Alcon Nordic A/S, Copenhagen	DKK 0.5 m	100	
Sandoz A/S, Copenhagen	DKK 8.0 m	100	•
Ecuador			
Novartis Ecuador S.A., Quito	USD 4.0 m	100	•
Egypt			
Novartis Pharma S.A.E., Cairo	EGP 33.8 m	99	• •
Sandoz Egypt Pharma S.A.E., New Cairo	EGP 250 000	100	•
Finland		100	
Novartis Finland Oy, Espoo	EUR 459 000	100	•
France			
Novartis Groupe France S.A., Rueil-Malmaison	EUR 103.0 m	100	
Novartis Pharma S.A.S., Rueil-Malmaison	EUR 43.4 m	100	♦▼▲
Laboratoires Alcon S.A., Rueil-Malmaison	EUR 12.9 m	100	♦ ▼
Sandoz S.A.S., Levallois-Perret	EUR 5.4 m	100	•
Novartis Santé Familiale S.A.S., Rueil-Malmaison	EUR 21.9 m	100	♦▼
Novartis Santé Animale S.A.S., Rueil-Malmaison	EUR 900 000	100	♦ ▼
	2011 300 000	100	• •
Germany			_
Novartis Deutschland GmbH, Wehr	EUR 155.5 m	100	
Novartis Pharma GmbH, Nuremberg	EUR 25.6 m	100	◆▲
Novartis Pharma Produktions GmbH, Wehr	EUR 2.0 m	100	•
Alcon Pharma GmbH, Freiburg	EUR 512 000	100	•
WaveLight GmbH, Erlangen	EUR 6.6 m	100	•
CIBA Vision GmbH, Grosswallstadt	EUR 15.4 m	100	<b>♦▼▲</b>
Sandoz International GmbH, Holzkirchen	EUR 100 000	100	
Sandoz Pharmaceuticals GmbH, Holzkirchen	EUR 5.1 m	100	•
Sandoz Industrial Products GmbH, Frankfurt a. M	I. EUR 2.6 m	100	♦▼
1 A Pharma GmbH, Oberhaching	EUR 26 000	100	
Salutas Pharma GmbH, Barleben	EUR 42.1 m	100	•
Hexal AG, Holzkirchen	EUR 93.7 m	100	
		100	
Novartis Vaccines and Diagnostics GmbH, Marbu			<b>♦</b> ▼▲
Novartis Vaccines Vertriebs GmbH, Holzkirchen	EUR 26 000	100	
Novartis Consumer Health GmbH, Munich	EUR 14.6 m	100	<b>♦</b> ▼▲
Novartis Tiergesundheit GmbH, Munich	EUR 256 000	100	•
Gibraltar			
Novista Insurance Limited, Gibraltar	CHF 130.0 m	100	
Greece			
Novartis (Hellas) S.A.C.I., Metamorphosis/Athens	EUR 23.4 m	100	
Alcon Laboratories Hellas Commercial & Industria		100	•
		100	•
S.A., Maroussi/Athens	EUR 5.7 m	100	•
Hungary			
Novartis Hungary Healthcare Limited Liability			
Company, Budapest	HUF 545.6 m	100	•
Sandoz Hungary Limited Liability Company,			
Budapest	HUF 883.0 m	100	•
India			
Novartis India Limited, Mumbai	INR 159.8 m	75	
Novartis India Limited, Mumbai Novartis Healthcare Private Limited, Mumbai			
	INR 60.0 m	100	•
Alcon Laboratories (India) Private Limited,	IND 1 1	100	
Bangalore	INR 1.1 bn	100	
Sandoz Private Limited, Mumbai	INR 32.0 m	100	♦ ▼
Indonesia			
PT Novartis Indonesia, Jakarta	IDR 7.7 bn	100	♦▼
PT CIBA Vision Batam, Batam	IDR 11.9 bn	100	•
Ireland		100	
Novartis Ireland Limited, Dublin	EUR 25 000	100	•
Novartis Ringaskiddy Limited, Ringaskiddy,			_
County Cork	EUR 2.0 m	100	<b>•</b>
Alcon Laboratories Ireland Limited, Cork City	EUR 541 251	100	•

	Share/paid-in	Equity	
As at December 31, 2014	capital <sup>1</sup> i	nterest %	Activities
Italy			
Novartis Farma S.p.A., Origgio	EUR 18.2 m	100	■♦▼▲
Alcon Italia S.p.A., Milan	EUR 3.7 m	100	•
Sandoz S.p.A., Origgio	EUR 679 900	100	<b>•</b>
Sandoz Industrial Products S.p.A., Rovereto	EUR 2.6 m	100	<b>•</b>
Novartis Vaccines and Diagnostics S.r.l., Siena	EUR 41.6 m	100	<b>♦</b> ▼▲
Novartis Consumer Health S.p.A., Origgio	EUR 2.9 m	100	•
Japan			
Novartis Holding Japan K.K., Tokyo	JPY 10.0 m	100	
Novartis Pharma K.K., Tokyo	JPY 6.0 bn	100	♦▲
Alcon Japan Ltd., Tokyo	JPY 500.0 m	100	•
Sandoz K.K., Tokyo	JPY 100.0 m	100	<b>♦</b> ▼▲
Novartis Animal Health K.K., Tokyo	JPY 50.0 m	100	◆▲
Luxembourg		100	_
Novartis Investments S.à r.I., Luxembourg-Ville	USD 2.6 bn	100	
Novartis Finance S.A., Luxembourg-Ville	USD 100 000	100	-
Malaysia			
Novartis Corporation (Malaysia) Sdn. Bhd.,			
Kuala Lumpur	MYR 3.3 m	100	•
Alcon Laboratories (Malaysia) Sdn. Bhd.,	MVD 1.0	100	•
Petaling Jaya	MYR 1.0 m MYR 5.0 m	100 100	÷
CIBA Vision Johor Sdn. Bhd., Gelang Patah	MIR 5.0 m	100	•
Mexico		100	
Novartis Farmacéutica, S.A. de C.V., Mexico City Alcon Laboratorios, S.A. de C.V., Mexico City	MXN 205.0 m	100	◆ ▼ ◆ ▼
	MXN 5.9 m	100	
Sandoz, S.A. de C.V., Mexico City	MXN 468.2 m	100	♦▼
Netherlands	5115 4 4		_
Novartis Netherlands B.V., Arnhem	EUR 1.4 m	100	
Novartis Pharma B.V., Arnhem	EUR 4.5 m	100	•
Alcon Nederland B.V., Breda	EUR 18 151	100	* * *
Sandoz B.V., Almere Novartis Consumer Health B.V., Breda	EUR 907 570 EUR 23 830	100	• •
	EUR 23 830	100	••
New Zealand	NIZO 000 000	100	•
Novartis New Zealand Ltd., Auckland	NZD 820 000	100	•
Norway		100	•
Novartis Norge AS, Oslo	NOK 1.5 m	100	•
Pakistan			
Novartis Pharma (Pakistan) Limited, Karachi	PKR 3.9 bn	100	◆▼
Panama			
Novartis Pharma (Logistics), Inc.,			
Ciudad de Panama	USD 10 000	100	•
Peru			
Novartis Biosciences Peru S.A., Lima	PEN 6.1 m	100	•
Philippines			
Novartis Healthcare Philippines, Inc.,			
Makati/Manila	PHP 298.8 m	100	•
Sandoz Philippines Corporation, Manila	PHP 30.0 m	100	••
Poland			
Novartis Poland Sp. z o.o., Warszawa	PLN 44.2 m	100	•
Alcon Polska Sp. z o.o., Warszawa	PLN 750 000	100	•
Sandoz Polska Sp. z o.o., Warszawa	PLN 25.6 m	100	<b>•</b>
Lek S.A., Strykow	PLN 11.4 m	100	• •
Portugal			
Novartis Portugal SGPS Lda., Porto Salvo	EUR 500 000	100	- <b>1</b>
Novartis Farma – Produtos Farmacêuticos S.A.,			•
Porto Salvo	EUR 2.4 m	100	•
Alcon Portugal-Produtos e Equipamentos	ELID 4.5 ····	100	
Oftalmologicos Lda., Porto Salvo Sandoz Formacâutica Lda, Porto Salvo	EUR 4.5 m EUR 5.0 m	100	
Sandoz Farmacêutica Lda., Porto Salvo Novartis Consumer Health – Produtos	EUR DU III	100	•
Farmacêuticos e Nutrição Lda., Porto Salvo	EUR 100 000	100	•
	2011 100 000	100	•
Puerto Rico	USD 10 000	100	-
Ex-Lax, Inc., Humacao Alcon (Puerto Rico) Inc., Catano	USD 10 000 USD 15.5	100	
	000 10.0	100	•
Romania Sandoz S.R.L., Targu-Mures	RON 105.2 m	100	A.T.
Januoz J.N.L., laigu-widf85	1/01/ 1/03/5 111	100	•••

	Share/paid-in	Equity	
As at December 31, 2014		interest %	Activities
Russian Federation			
Novartis Pharma LLC, Moscow	RUB 20.0 m	100	•
Alcon Farmacevtika LLC, Moscow	RUB 44.1 m	100	•
ZAO Sandoz, Moscow	RUB 57.4 m	100	•
Novartis Neva LLC, St. Petersburg	RUB 500.0 m	100	▼
Novartis Consumer Health LLC, Moscow	RUB 80.0 m	100	•
Saudi Arabia	- CAD 2C 8	75	•
Saudi Pharmaceutical Distribution Co. Ltd., Riyad	IN SAR 26.8 M	75	•
Singapore Novartis (Singapore) Pte Ltd., Singapore	SGD 100 000	100	
Novartis Singapore Pharmaceutical Manufacturin		100	•
Pte Ltd., Singapore	SGD 45.0 m	100	•
Novartis Asia Pacific Pharmaceuticals Pte Ltd.,			
Singapore	SGD 39.0 m	100	•
Novartis Institute for Tropical Diseases Pte Ltd.,			
Singapore	SGD 2 004	100	<b>A</b>
Alcon Singapore Manufacturing Pte Ltd.,	000 101 000	100	_
Singapore	SGD 101 000	100	•
CIBA Vision Asian Manufacturing and Logistics Pte Ltd., Singapore	SGD 1.0 m	100	•
Slovakia	000 110 111	100	·
Novartis Slovakia s.r.o., Bratislava	EUR 2.0 m	100	•
Slovenia	2011 210 111	100	•
Lek Pharmaceuticals d.d., Ljubljana	EUR 48.4 m	100	
Sandoz Pharmaceuticals d.d., Ljubljana	EUR 1.5 m	100	•
South Africa			
Novartis South Africa (Pty) Ltd., Kempton Park	ZAR 86.3 m	100	•
Alcon Laboratories (South Africa) (Pty) Ltd.,			
Bryanston, Gauteng	ZAR 201 820	100	•
Sandoz South Africa (Pty) Ltd., Kempton Park	ZAR 3.0 m	100	♦▼
South Korea			
Novartis Korea Ltd., Seoul	KRW 24.5 bn	99	•
Alcon Korea Ltd., Seoul	KRW 33.8 bn	100	•
Spain			
Novartis Farmacéutica, S.A., Barcelona	EUR 63.0 m	100	<b>••</b>
Alcon Cusi S.A., El Masnou	EUR 11.6 m	100	♦ ▼
Sandoz Farmacéutica, S.A., Madrid Sandoz Industrial Products, S.A., Les Franqueses	EUR 270 450	100	•
del Vallés/Barcelona	EUR 9.3 m	100	♦▼▲
Novartis Vaccines and Diagnostics, S.L.,	2011 910 111	100	–
Barcelona	EUR 675 450	100	•
Novartis Consumer Health, S.A., Barcelona	EUR 876 919	100	•
Sweden			
Novartis Sverige AB, Täby/Stockholm	SEK 5.0 m	100	•
Switzerland			
Novartis International AG, Basel	CHF 10.0 m	100	
Novartis Holding AG, Basel	CHF 100.2 m	100	•
Novartis Research Foundation, Basel	CHF 29.3 m	100	•
Novartis Foundation for Management Development, Basel	CHF 100 000	100	
Novartis Foundation for Employee Participation,	CIII 100 000	100	
Basel	CHF 100 000	100	
Novartis Sanierungsstiftung, Basel	CHF 2.0 m	100	
Novartis Pharma AG, Basel	CHF 350.0 m	100	■♦▼▲
Novartis Pharma Services AG, Basel	CHF 20.0 m	100	•
Novartis Pharma Schweizerhalle AG,			
Schweizerhalle	CHF 18.9 m	100	<b>.</b>
Novartis Pharma Stein AG, Stein Novartis Pharma Schweiz AG, Rotkreuz	CHF 251 000 CHF 5.0 m	100 100	▼▲ ◆▲
Alcon Switzerland SA, Rotkreuz	CHF 5.0 III CHF 100 000	100	•
Alcon Pharmaceuticals Ltd., Fribourg	CHF 200 000	100	
ESBATech, a Novartis Company GmbH, Schlieren		100	<b>A</b>
Sandoz AG, Basel	CHF 5.0 m	100	
Sandoz Pharmaceuticals AG, Risch	CHF 100 000	100	•
Novartis Vaccines and Diagnostics AG, Basel	CHF 800 000	100	
Novartis Consumer Health S.A., Prangins	CHF 30.0 m	100	
Novartis Consumer Health Schweiz AG, Rotkreuz Novartis Animal Health AG, Basel	CHF 250 000 CHF 101 000	100 100	♦
Novartis Annual Health Ad, Dasel	010 101 000	100	

## 32. Principal Group Subsidiaries and Associated Companies (Continued)

	Share/paid-in	Equity	
As at December 31, 2014	capital <sup>1</sup>	interest %	Activities
Switzerland (continued)			
Novartis Centre de Recherche Santé Animale S.A			
St. Aubin	CHF 250 000	100	<b>A</b>
Roche Holding AG, Basel	CHF 160.0 m	33/6 <sup>3</sup>	
Taiwan			
Novartis (Taiwan) Co., Ltd., Taipei	TWD 170.0 m	100	♦▼
Thailand			
Novartis (Thailand) Limited, Bangkok	THB 230.0 m	100	•
Alcon Laboratories (Thailand) Ltd., Bangkok	THB 228.1 m	100	•
Turkey			
Novartis Saglik, Gida ve Tarim Ürünleri Sanayi ve			
Ticaret A.S., Istanbul	TRY 98.0 m	100	♦▼
Alcon Laboratuvarlari Ticaret A.S., Istanbul	TRY 25.2 m	100	•
Sandoz Ilaç Sanayi ve Ticaret A.S., Istanbul	TRY 165.2 m	100	♦▼
United Arab Emirates			
Novartis Middle East FZE, Dubai	AED 7.0 m	100	•
United Kingdom			
Novartis UK Limited, Frimley/Camberley	GBP 25.5 m	100	
Novartis Pharmaceuticals UK Limited,			
Frimley/Camberley	GBP 5.4 m	100	♦▼▲
Novartis Grimsby Limited, Frimley/Camberley	GBP 230 m	100	•
Alcon Eye Care (UK) Limited, Frimley/Camberley		100	•
Sandoz Limited, Frimley/Camberley	GBP 2.0 m	100	•
Novartis Vaccines and Diagnostics Limited,	GBP 100	100	• •
Frimley/Camberley Novartis Consumer Health UK Limited, Horsham		100 100	• •
Novartis Animal Health UK Limited, Frimley/	GBF 25 000	100	•••
Camberley	GBP 100 000	100	••
United States of America	45. 100 000	100	
Novartis Corporation, East Hanover, NJ	USD 72.2 m	100	
Novartis Finance Corporation, New York, NY	USD 1 002	100	÷
Novartis Capital Corporation, New York, NY	USD 1	100	
Novartis Pharmaceuticals Corporation,			
East Hanover, NJ	USD 5.2 m	100	<b>*VA</b>
Novartis Institutes for BioMedical Research, Inc.,			
Cambridge, MA	USD 1	100	<b>A</b>
CoStim Pharmaceuticals, Inc., Cambridge, MA	USD 1	100	<b>A</b>
Novartis Institute for Functional Genomics, Inc.,			
San Diego, CA	USD 21 000	100	<b>A</b>
Genoptix, Inc., Carlsbad, CA	USD 1	100	◆▲
Alcon Laboratories, Inc., Fort Worth, TX	USD 1 000	100	<b>**</b>
Alcon Refractive Horizons, LLC, Fort Worth, TX	USD 10	100	*

As at December 31, 2014	Share/paid-in	Equity interest %	Activities
,	capitai	interest 70	Activities
United States of America (continued)			
Alcon Research, Ltd., Fort Worth, TX	USD 12.5	100	▼▲
Alcon LenSx, Inc., Alisio Viejo, CA	USD 100	100	•
WaveTec Vision Systems, Inc., Alisio Viejo, CA	USD 1	100	<b>♦▼▲</b>
Sandoz Inc., Princeton, NJ	USD 25 000	100	<b>♦▼▲</b>
Fougera Pharmaceuticals, Inc., Melville, NY	USD 1	100	◆▲
Eon Labs, Inc., Princeton, NJ	USD 1	100	♦▼
Falcon Pharmaceuticals, Ltd., Forth Worth, TX	USD 10	100	•
Novartis Vaccines and Diagnostics, Inc.,			
Cambridge, MA	USD 3.0	100	<b>◆▼▲</b>
Novartis Consumer Health, Inc., Parsippany, NJ	USD 0 <sup>2</sup>	100	<b>◆▼▲</b>
Novartis Animal Health US, Inc., Greensboro, NC	USD 100	100	♦▼▲
Venezuela			
Novartis de Venezuela, S.A., Caracas	VEF 1.4 m	100	•
Alcon Pharmaceutical, C.A., Caracas	VEF 5.5 m	100	•

In addition, the Group is represented by subsidiaries and associated companies in the following countries: Algeria, Bosnia/Herzegovina, Bulgaria, Dominican Republic, Guatemala, Israel, the Former Yugoslav Republic of Macedonia, Morocco, Ukraine and Uruguay.

<sup>1</sup> Share/paid-in capital may not reflect the taxable share/paid-in capital amount and does not include any paid-in surplus.

<sup>2</sup> Shares without par value

 $^3\,$  Approximately 33% of voting shares; approximately 6% of total net income and equity attributable to Novartis

m = million; bn = billion

The following describe the various types of entities within the Group: Holding/Finance: This entity is a holding company and/or performs finance

functions for the Group.Sales: This entity performs sales and marketing activities for the Group.

 Production: This entity performs manufacturing and/or production activities for the Group.

▲ Research: This entity performs research and development activities for the Group.

### 33. Risk Assessment Disclosures Required by Swiss Law

The Risk Committee of the Board ensures the Group has implemented an appropriate and effective risk management system and process. It reviews with management and internal audit the identification, prioritization and management of the risks, the accountabilities and roles of the functions involved with risk management, the risk portfolio and the related actions implemented by management. The Risk Committee informs the Board of Directors on a periodic basis.

The Group Risk function coordinates and aligns the risk management processes, and reports to the Risk Committee on a regular basis on risk assessment and risk management. Organizational and process measures have been designed to identify and mitigate risks at an early stage. Organizationally, the responsibility for risk assessment and management is allocated to the divisions, with specialized Corporate Functions such as Group Financial Reporting & Accounting, Group Treasury, Group Quality Operations, Corporate Health, Safety and Environment, and Business Continuity providing support and controlling the effectiveness of the risk management by the divisions.

Financial risk management is described in more detail in Note 29.

### Report of Novartis Management on Internal Control over Financial Reporting

The Board of Directors and management of the Group are responsible for establishing and maintaining adequate internal control over financial reporting. The Novartis Group's internal control system was designed to provide reasonable assurance to the Novartis Group's management and Board of Directors regarding the reliability of financial reporting and the preparation and fair presentation of its published consolidated financial statements.

All internal control systems, no matter how well designed, have inherent limitations. Therefore, even those systems determined to be effective may not prevent or detect misstatements and can provide only reasonable assurance with respect to financial statement preparation and presentation. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions or that the degree of compliance with the policies or procedures may deteriorate. Novartis Group management assessed the effectiveness of the Group's internal control over financial reporting as of December 31, 2014. In making this assessment, it used the criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on its assessment, management has concluded that, as of December 31, 2014, the Novartis Group's internal control over financial reporting was effective based on those criteria.

PricewaterhouseCoopers AG, Switzerland, an independent registered public accounting firm, has issued an opinion on the effectiveness of the Group's internal control over financial reporting which is included in this financial report on the following pages 228 and 229.



Joseph Jimenez Chief Executive Officer

Kind

Harry Kirsch Chief Financial Officer

Basel, January 26, 2015

### Report of the Statutory Auditor on the Consolidated Financial Statements of Novartis AG and Internal Control over Financial Reporting

### TO THE GENERAL MEETING OF NOVARTIS AG, BASEL

### REPORT OF THE STATUTORY AUDITOR ON THE CONSOLIDATED FINANCIAL STATEMENTS

As statutory auditor, we have audited the consolidated financial statements of Novartis AG and its consolidated subsidiaries ("Novartis Group"), which comprise the consolidated income statements, consolidated statements of comprehensive income, consolidated statements of changes in equity, consolidated balance sheets, consolidated cash flow statements and notes (pages 158 to 226), for the year ended December 31, 2014.

#### **BOARD OF DIRECTORS' RESPONSIBILITY**

The Board of Directors is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with International Financial Reporting Standards (IFRS) and the requirements of Swiss law (SCO). This responsibility includes designing, implementing and maintaining an internal control system relevant to the preparation and fair presentation of consolidated financial statements that are free from material misstatement, whether due to fraud or error. The Board of Directors is further responsible for selecting and applying appropriate accounting policies and making accounting estimates that are reasonable in the circumstances.

#### AUDITOR'S RESPONSIBILITY

Our responsibility is to express an opinion on these consolidated financial statements based on our audit. We conducted our audit in accordance with Swiss law, Swiss Auditing Standards, International Standards on Auditing and the standards of the Public Company Accounting Oversight Board of the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers the internal control system relevant to the entity's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances. An audit also includes evaluating the appropriateness of the accounting policies used and the reasonableness of accounting estimates made, as well as evaluating the overall presentation of the consolidated financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

### OPINION

In our opinion, the consolidated financial statements for the year ended December 31, 2014 present fairly, in all material respects, the financial position, the results of operations and the cash flows in accordance with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board and comply with Swiss law.

#### **REPORT ON OTHER LEGAL REQUIREMENTS**

We confirm that we meet the legal requirements on licensing according to the Auditor Oversight Act (AOA) and independence (article 728 SCO and article 11 AOA) and that there are no circumstances incompatible with our independence.

In accordance with article 728a paragraph 1 item 3 SCO and Swiss Auditing Standard 890, we confirm that an internal control system exists which has been designed for the preparation of consolidated financial statements according to the instructions of the Board of Directors.

We recommend that the consolidated financial statements submitted to you be approved.

### REPORT ON THE EFFECTIVENESS OF INTERNAL CONTROL OVER FINANCIAL REPORTING

We have also audited the effectiveness of Novartis Group's internal control over financial reporting as of December 31, 2014, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

The Board of Directors and management of Novartis Group are responsible for maintaining effective internal control over financial reporting and management is responsible for the assessment of the effectiveness of internal control over financial reporting included in the accompanying *Report of Novartis Management on Internal Control Over Financial Reporting* in this financial report on page 227. Our responsibility is to express an opinion on the effectiveness of Novartis Group's internal control over financial reporting based on our integrated audit.

We conducted our audit of internal control over financial reporting in accordance with the standards of the Public Company Accounting Oversight Board of the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with the applicable accounting standards. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with the applicable accounting standards, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, Novartis Group maintained, in all material respects, effective internal control over financial reporting as of December 31, 2014, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the COSO.

PricewaterhouseCoopers AG

pwc

Kmma K

**Bruno Rossi** Audit expert Auditor in charge

Basel, January 26, 2015

**Stephen Johnson** Global relationship partner

### FINANCIAL STATEMENTS OF NOVARTIS AG

#### **INCOME STATEMENTS**

(For the years ended December 31, 2014 and 2013)

		2014	2013
	Note	CHF millions	CHF millions
Income			
Income from financial assets		7 458	5 605
Gain from disposal of intangible assets		272	159
License fees		1 340	1 494
Extraordinary and other income		36	5
Total income		9 106	7 263
Expenses			
Financial expense		- 287	- 287
Administrative expenses		- 27	- 29
Amortization of goodwill and other intangible assets	3	-1154	-1154
Other expenses		- 11	- 8
Taxes		- 148	-154
Total expenses		-1627	-1632
Net income		7 479	5 631

The accompanying Notes form an integral part of these financial statements.

### BALANCE SHEETS

(At December 31, 2014 and 2013)

		2014	2013
Assets	Note	CHF millions	CHF millions
Non-current assets			
Goodwill and other intangible assets	3	17 925	19 066
Financial assets – subsidiaries and associated companies	4	16 279	19 613
Other receivables	4	24	47
Total non-current assets		34 228	38 726
Current assets		041220	00720
Receivables			
– subsidiaries		15 410	11 774
- others		44	67
Marketable securities	5	2 424	240
Total current assets	-	17 878	12 081
Total assets		52 106	50 807
Equity and liabilities			
Equity			
Total share capital	6	1 353	1 353
Reserves			
Legal reserves	7		
- General reserve		320	320
- Capital contribution reserve		198	198
<ul> <li>Reserve for treasury shares</li> </ul>		6 895	4 768
Free reserves	8	34 007	36 850
Total reserves		41 420	42 136
Unappropriated earnings			
Net income		7 479	5 631
Total unappropriated earnings		7 479	5 631
Total equity		50 252	49 120
Liabilities			
Bonds	9	799	797
Provisions		499	501
Accounts payable and accrued liabilities			
– subsidiaries		223	56
- others		333	333
Total liabilities		1 854	1 687
Total equity and liabilities		52 106	50 807

The accompanying Notes form an integral part of these financial statements.

# NOTES TO THE FINANCIAL STATEMENTS OF NOVARTIS AG

### 1. Introduction

The financial statements of Novartis AG comply with the requirements of the Swiss law for companies, the Swiss Code of Obligations (SCO). Applying the transitional provisions of the new Swiss accounting law, these financial statements have not been prepared in accordance with the provisions on accounting and financial reporting of the Swiss Code of Obligations introduced on January 1, 2013, but with the previous provisions.

### 2. Accounting Policies

### **EXCHANGE RATE DIFFERENCES**

Current assets and current liabilities denominated in foreign currencies are converted at year-end exchange rates. Realized exchange gains and losses as well as all unrealized exchange losses arising from these as well as those from business transactions are recorded in the income statement.

### **GOODWILL AND OTHER INTANGIBLE ASSETS**

Goodwill and other intangible assets are capitalized and amortized over a period of between five and twenty years. Goodwill and other intangible assets are reviewed for impairment on a yearly basis. If necessary an impairment loss is recognized.

#### **FINANCIAL ASSETS**

Financial assets are valued at acquisition cost less adjustments for foreign currency losses and any other impairment of value.

### **MARKETABLE SECURITIES**

Marketable securities are valued at the lower of cost and market value.

#### BONDS

Bonds are valued on an amortized cost basis such that additional interest is accrued over the duration of the bonds so that at maturity the balance sheet amount will equal the amount that is due to be paid.

#### PROVISIONS

Provisions are made to cover general business risks of the Group.

### 3. Goodwill and Other Intangible Asset Movements

Goodwill	2014 CHF millions	2013 CHF millions
Cost	CHF millions	CHF millions
	00.050	00.050
January 1 and December 31	22 350	22 350
Accumulated amortization		
January 1	- 3 420	- 2 280
Amortization charges	-1140	-1140
December 31	- 4 560	- 3 420
Net book value at December 31	17 790	18 930
Other intangible assets		
Cost		
January 1	242	242
Additions	13	
January 1 and December 31	255	242
Accumulated amortization		
January 1	- 106	- 92
Amortization charges	-14	- 14
December 31	- 120	- 106
Net book value at December 31	135	136
Goodwill and other intangible assets		
Net book value at December 31	17 925	19 066

### 4. Financial Assets

Included in financial assets are CHF 14 433 million (2013: CHF 14 433 million) of investments in subsidiaries and associated companies and CHF 1 846 million (2013: CHF 5 180 million) of loans to subsidiaries. The principal direct and indirect subsidiaries and other holdings of Novartis AG are shown in Note 32 to the Group's consolidated financial statements.

### 5. Marketable Securities

Included in marketable securities are Novartis AG treasury shares with a net book value of CHF 2 373 million (2013: CHF 178 million) (see Notes 6 and 7).

### 6. Share Capital

			Number of shares		
	Dec 31, 2012	Movement in year	Dec 31, 2013	Movement in year	Dec 31, 2014
Total Novartis AG shares	2 706 193 000		2 706 193 000		2 706 193 000
Treasury shares held by Novartis AG and its subsidiaries (excluding foundations)					
Treasury shares held by Novartis AG	51 307 458	2 160 000	53 467 458	27 040 000	80 507 458
Treasury shares held by subsidiaries	59 552 292	18 292 323	77 844 615	- 4 280 403	73 564 212
Total treasury shares held by Novartis AG and its subsidiaries (excluding foundations)	110 859 750	20 452 323	131 312 073	22 759 597	154 071 670

The Novartis AG share capital consists of registered shares with a nominal value of CHF 0.50 each.

The total share capital of Novartis AG was CHF 1 353.1 million at December 31, 2014, which is unchanged in the last two years.

The Company has entered into an irrevocable, non-discretionary arrangement with a bank to repurchase own shares on the second trading line under its USD 5 billion share buyback. The commitment under this arrangement amounted to CHF 652 million as per December 31, 2014 (CHF 0 as per December 31, 2013). This amount reflects expected purchases by the bank under a trading plan over a rolling 90 days period. This trading plan will terminate on November 30, 2015.

Treasury share purchases during 2014 totaled 41.8 million (2013: 36.5 million) with an average purchase price of CHF 81 (2013: CHF 68), treasury share sales totaled 8.2 million (2013: 4.7 million) with an average sale price of CHF 57 (2013: CHF 56) and share-based compensation transactions totaled 10.8 million shares (2013: 11.3 million shares).

The number of treasury shares held by the Company and its subsidiaries meet the definitions and requirements of Article 659b SCO.

At December 31, 2014, treasury shares held by Novartis AG and its subsidiaries totaled 154 071 670. As per the dividend payment date, Novartis AG and its subsidiaries are expected to hold 139 671 670 shares. These shares are non-dividend bearing shares. It should be noted that within the Novartis Group's IFRS consolidated financial statements some entities are included in the consolidation scope, mainly foundations, which do not qualify as subsidiaries in the sense of Article 659b SCO.

### 7. Legal Reserves

#### **GENERAL RESERVE**

	2014 CHF millions	2013 CHF millions
January 1 and December 31	320	320

	2014 CHF millions	2013 CHF millions
January 1	4 768	3 214
Transfer from free reserves	2 127	1 554
December 31	6 895	4 768

**RESERVE FOR TREASURY SHARES HELD BY THE GROUP** 

The general reserve must be accumulated until it is at least 20% of the share capital of Novartis AG in order to comply with the SCO.

### **CAPITAL CONTRIBUTION RESERVE**

	2014 CHF millions	2013 CHF millions
January 1 and December 31	198	198

Novartis AG has met the legal requirements for legal reserves under Articles 659 et. seq. and 663b.10 SCO for the treasury shares detailed in Notes 5 and 6.

### 8. Free Reserves

	2014 CHF millions	2013 CHF millions
January 1	36 850	39 262
Transfer to unappropriated earnings	-716	- 858
Transfer to reserve for treasury shares	-2127	-1554
December 31	34 007	36 850

### 9. Bonds

On June 26, 2008, Novartis AG issued CHF 800 million of bonds bearing interest at 3.625% per annum and due on June 26, 2015. The bonds were issued at 100.35% and proceeds received after deducting related costs amounted to CHF 787.9 million. The bonds are valued on an amortized cost basis.

### 10. Contingent Liabilities

	Dec 31, 2014 CHF millions	Dec 31, 2013 CHF millions
Guarantees in favor of subsidiaries to cover capital and interest of bonds and commercial paper programs – total maximum amount CHF 30 420 million (2013: CHF 22 142 million)	15 765	11 667
Other guarantees in favor of subsidiaries, associated companies and others – total maximum amount CHF 2 551 million (2013: CHF 2 592 million)	1 389	1 308
Total contingent liabilities	17 154	12 975

### 11. Registration, Voting Restrictions and Major Shareholders

The Company's Articles of Incorporation state that no person or entity shall be registered with the right to vote for more than 2% of the share capital as set forth in the Commercial Register. In particular cases the Board of Directors may allow exemptions from the limitation for registration in the share register.

According to the share register, shareholders owning 2% or more of the Company's capital at December 31, excluding treasury shares held by Novartis AG and other Novartis subsidiaries, are as follows:

	% holding of share capital December 31, 2014	% holding of share capital December 31, 2013
Novartis Foundation for Employee Participation, Basel, Switzerland	3.2	3.0
Emasan AG, Basel, Switzerland	3.3	3.3

Norges Bank (Central Bank of Norway), Oslo, which held more than 2% of the share capital of Novartis AG as of December 31, 2013, held less than that amount as of December 31, 2014.

Furthermore, there are the following other significant shareholders:

Shareholders registered as nominees:

- JPMorgan Chase Bank, New York, United States, holds 9.1% (2013: 11.1%).
- Nortrust Nominees, London, United Kingdom, holds 3.2% (2013: 3.2%).
- The Bank of New York Mellon, New York, United States, holds 4.6% (2013: 4.6%) through its Nominees Mellon Bank, Everett, United States, with a holding of 2.6% (2013: 2.8%) and The Bank of New York Mellon, Brussels, Belgium, with a holding of 2.0% (2013: 1.8%).

Shareholder acting as American Depositary Share (ADS) depositary:

 JPMorgan Chase Bank, New York, United States, holds 11.4% (2013: 11.7%).

Shareholders disclosed through notifications filed with Novartis AG and the SIX Swiss Exchange:

- Capital Group Companies, Inc., Los Angeles, United States, holds between 3% and 5%.
- BlackRock, Inc., New York, United States, holds between 3% and 5%.

## 12. Equity Instrument Disclosures of Board of Directors and Executive Committee members

### SHARE OWNERSHIP REQUIREMENTS FOR MEMBERS OF THE BOARD OF DIRECTORS

The Chairman is required to own a minimum of 30 000 shares and, other members of the Board of Directors are required to own at least 4 000 Novartis shares within three years after joining the Board of Directors, to ensure alignment of their interests with shareholders. Board members are prohibited from hedging or pledging their ownership positions in Novartis shares that are part of their guideline share ownership requirement, and are required to hold these shares for 12 months after retiring from the Board. As of December 31, 2014, all members of the Board of Directors who have served at least three years on the Board of Directors have complied with the share ownership guidelines.

### SHARES, ADRS AND SHARE OPTIONS OWNED BY MEMBERS OF THE BOARD OF DIRECTORS

The total number of vested Novartis shares and ADRs owned by members of the Board of Directors and "persons closely linked"<sup>1</sup> to them as of December 31, 2014, is shown in the table below.

As of December 31, 2014, no member of the Board of Directors together with "persons closely linked"<sup>1</sup> to them owned 1% or more of the outstanding shares (or ADRs) of Novartis. As of the same date, no member of the Board of Directors held any share options.

#### SHARES AND ADRS OWNED BY BOARD MEMBERS<sup>1</sup>

	Number of shares <sup>2</sup>		
	At December 31, 2014	At December 31, 2013	
Joerg Reinhardt	466 951	558 511	
Ulrich Lehner	36 405	35 351	
Enrico Vanni	13 805	12 684	
Dimitri Azar	7 258	5 642	
Verena A. Briner	4 845	3 837	
William Brody (until February 25, 2014)	NA	17 356	
Srikant Datar	30 792	29 622	
Ann Fudge	14 112	13 161	
Pierre Landolt <sup>3</sup>	52 290	50 644	
Charles L. Sawyers	2 933	2 1 2 8	
Andreas von Planta	122 709	121 334	
Wendelin Wiedeking (until February 25, 2014)	NA	278 139	
William T. Winters	3 590	2 1 2 8	
Rolf M. Zinkernagel (until February 25, 2014)	NA	40 000	
Total <sup>4</sup>	755 690	1 170 537	

NA – Not applicable.

<sup>1</sup> Includes holdings of "persons closely linked" to Board members (see definition in this Note 12).

<sup>2</sup>Each share provides entitlement to one vote.

<sup>3</sup>According to Pierre Landolt, the Sandoz Family Foundation is the economic beneficiary of the shares.

<sup>4</sup>William Brody, Wendelin Wiedeking and Rolf M. Zinkernagel stepped down from the Board of Directors on February 25, 2014. At February 25, 2014, William Brody owned 17 356 shares, Wendelin Wiedeking 278 139 shares and Rolf M. Zinkernagel 40 000 shares.

### SHARE OWNERSHIP REQUIREMENTS FOR MEMBERS OF THE EXECUTIVE COMMITTEE

Executive Committee members are required to own at least a certain multiple of their annual base compensation in Novartis shares or share options within three years of hire or promotion, as set out in the table below.

Chief Executive Officer	5 x base compensation
Members of the Executive Committee	3 x base compensation

In the event of a substantial rise or drop in the share price, the Board of Directors may, at its discretion, amend that time period accordingly.

The determination of equity amounts against the share ownership requirements is defined to include vested and unvested Novartis shares or ADRs, as well as RSUs acquired under the compensation plans, but excluding unvested matching shares from LSSP and ESOP and unvested PSUs from LTPP and LTRPP. The determination includes other shares as well as vested options of Novartis shares or ADRs that are owned directly or indirectly by "persons closely linked"<sup>1</sup> to them. The Compensation Committee reviews compliance with the share ownership guideline on an annual basis.

As of December 31, 2014, all members who have served at least three years on the Executive Committee have met or exceeded their personal Novartis share ownership requirements.

### SHARES, ADRS, EQUITY RIGHTS AND SHARE OPTIONS OWNED BY MEMBERS OF THE EXECUTIVE COMMITTEE

The following tables show the total number of Novartis shares, ADRs, other equity rights and share options owned by members of the Executive Committee and "persons closely linked"<sup>1</sup> to them as of December 31, 2014.

As of December 31, 2014, no member of the Executive Committee together with "persons closely linked"<sup>1</sup> to them owned 1% or more of the outstanding shares (or ADRs) of Novartis, either directly or through share options.

<sup>1</sup> "Persons closely linked" are (I) their spouse, (II) their children below age 18, (III) any legal entities that they own or otherwise control, and (IV) any legal or natural person who is acting as their fiduciary.

## 12. Equity Instrument Disclosures of Board of Directors and Executive Committee members (Continued)

### SHARES, ADRS AND OTHER EQUITY RIGHTS OWNED BY EXECUTIVE COMMITTEE MEMBERS<sup>1</sup>

	Vested shares and ADRs <sup>2</sup>	Unvested shares and other equity rights <sup>3</sup>	Total at December 31, 2014	Vested shares and ADRs <sup>2</sup>	Unvested shares and other equity rights <sup>3</sup>	Total at December 31, 2013
Joseph Jimenez	256 685	399 811	656 496	273 623	338 643	612 266
Steven Baert (as of February 26, 2014)	0	41 476	41 476	NA	NA	NA
Juergen Brokatzky-Geiger (until February 25, 2014)	NA	NA	NA	225 499	99 597	325 096
Kevin Buehler (until April 30, 2014)	NA	NA	NA	70 924	295 6974	366 621
Felix R. Ehrat	48 398	95 424	143 822	23 491	62 315	85 806
David Epstein	72 222	267 940 <sup>4</sup>	340 162	61 430	293 143 <sup>4</sup>	354 573
Mark C. Fishman	45 054	342 493 <sup>4</sup>	387 547	70 997	360 6774	431 674
Richard Francis (as of May 1, 2014)	0	46 282	46 282	NA	NA	NA
Jeff George	69 457	128 420	197 877	56 419	100 850	157 269
George Gunn	50 000	100 817	150 817	117 733	70 864	188 597
Harry Kirsch	31 860	90 650	122 510	27 904	59 290	87 194
Brian McNamara	19 216	62 511 <sup>4</sup>	81 727	10 254	41 8144	52 068
Andrin Oswald	86 305	115 863	202 168	85 770	99 018	184 788
André Wyss (as of May 1, 2014)	25 940	68 598	94 538	NA	NA	NA
Total ⁵	705 137	1 760 285	2 465 422	1 024 044	1 821 908	2 845 952

NA – Not applicable.

<sup>1</sup>Includes holdings of "persons closely linked" to members of the Executive Committee (see definition in this Note 12).

<sup>2</sup> In 2014, Novartis has decided to disclose shareholdings of Executive Committee members categorized as vested shares and ADRs, and other equity rights (see also footnote 3 below). In order to achieve comparability with prior year, the 2013 shareholdings have been disclosed in accordance with these principles.

<sup>3</sup> Includes Restricted Shares, Restricted Stock Units (RSUs) and target number of Performance Share Units (PSUs). Matching shares under the Employee Share Ownership Plan (ESOP), Leveraged Share Savings Plan (LSSP) and target number of PSUs are disclosed pro-rata to December 31, unless the award qualified for full vesting under the relevant

plan rules. Awards under all other incentive plans are disclosed in full.

<sup>4</sup>Includes both deferred and unvested cash-settled equity awards and holdings of Novartis shares in US defined contribution plans.

<sup>5</sup> Juergen Brokatzky-Geiger and Kevin Buehler stepped down from the Executive Committee on February 25, 2014 and April 30, 2014, respectively. Juergen Brokatzky-Geiger owned 257 640 vested shares and 114 080 unvested shares and other equity rights at February 25, 2014. Kevin Buehler owned 158 090 vested shares and 267 436 unvested shares and other equity rights at April 30, 2014.

### SHARE OPTIONS OWNED BY EXECUTIVE COMMITTEE MEMBERS<sup>1</sup>

		Number of share options						
	2013	2012	2011	2010	2009	Other	Total at December 31, 2014	Total at December 31, 2013 <sup>2</sup>
Joseph Jimenez	0	0	0	0	0	157 266	157 266	709 342
Steven Baert (as of February 26, 2014)	0	0	0	0	0	0	0	NA
Juergen Brokatzky-Geiger (until February 25, 2014)	NA	NA	NA	NA	NA	NA	NA	211 766
Kevin Buehler (until April 30, 2014)	NA	NA	NA	NA	NA	NA	NA	605 877 <sup>3</sup>
Felix R. Ehrat	0	0	0	0	0	0	0	0
David Epstein	0	0	0	0	0	0	0	0
Mark C. Fishman	0	0	0	0	0	0	0	327 594
Richard Francis (as of May 1, 2014)	0	0	0	0	0	0	0	NA
Jeff George	0	0	141 396	0	0	0	141 396	256 375
George Gunn	0	0	0	0	0	0	0	94 371
Harry Kirsch	0	0	0	0	0	0	0	44 569
Brian McNamara	0	0	0	0	0	50 764	50 764	78 973
Andrin Oswald	0	0	0	0	0	0	0	0
André Wyss (as of May 1, 2014)	0	0	0	0	0	658 313	658 313	NA
Total <sup>4</sup>	0	0	141 396	0	0	866 343	1 007 739	2 328 867

NA - Not applicable.

<sup>1</sup>The last share options under the Novartis Equity Plan "Select" were granted in January 2013.

<sup>2</sup> Share options disclosed for a specific year were granted in that year under the Novartis Equity Plan Select. The column "Other" refers to share options granted in 2008 or earlier, to share options granted to these executives while they were not Executive Committee members (nor Permanent Attendees), and to share options bought on the market by the Executive Committee members or "persons closely linked" to them (see definition in this Note 12). Share options granted from 2012 onwards are unvested at December 31, 2014.

<sup>3</sup>Consists of share settled appreciation rights resulting from conversion of Alcon equity into Novartis equity.

<sup>4</sup> Juergen Brokatzky-Geiger and Kevin Buehler stepped down from the Executive Committee on February 25, 2014 and April 30, 2014, respectively. At February 25, 2014, Juergen Brokatzky-Geiger owned 211 766 share options. At April 30, 2014, Kevin Buehler owned 605 877 share settled appreciation rights resulting from conversion of Alcon

Juergen Brokatzky-Geiger owned 211 766 share options. At April 30, 2014, Kevin Buehler owned 605 877 share settled appreciation rights resulting from conversion of Alcon equity into Novartis equity.

### 13. Risk Assessment Disclosures

Novartis AG, as the ultimate parent company of the Novartis Group, is fully integrated into the Group-wide internal risk assessment process and is fully integrated into the process described in note 33 to the Group's consolidated financial statements.

### 14. Subsequent Event

### DIVESTMENT OF THE ANIMAL HEALTH DIVISION

On January 1, 2015, Novartis completed the divestment of its Animal Health division to Eli Lilly and Company, USA, with Novartis AG divesting the related intellectual property rights and subsidiaries that it owned.

### APPROPRIATION OF AVAILABLE EARNINGS OF NOVARTIS AG AS PER BALANCE SHEET AND DECLARATION OF DIVIDEND

	2014	2013
	CHF	CHF
Available unappropriated earnings		
Balance brought forward		
Net income of the year	7 478 506 586	5 630 725 971
Partial use of free reserves	-	716 197 300
Total available earnings at the disposal of the Annual General Meeting	7 478 506 586	6 346 923 271
Appropriation proposed by the Board of Directors		
Payment of a gross dividend of CHF 2.60 (2013: CHF 2.45) on 2 566 521 330 (2013: 2 590 580 927) dividend bearing shares <sup>1</sup> with a nominal value of CHF 0.50 each	- 6 672 955 458	- 6 346 923 271
Balance to be carried forward	805 551 128	_

<sup>1</sup>No dividend will be declared on treasury shares held by Novartis AG, and certain treasury shares held by other Group companies.

Assuming that this proposal by the Board of Directors is approved by the Annual General Meeting of shareholders, payment of the dividend will be made on March 5, 2015. The last trading day with entitlement to receive the dividend is March 2, 2015. As from March 3, 2015 the shares will be traded ex-dividend.

## Report of the Statutory Auditor on the Financial Statements of Novartis AG

#### TO THE GENERAL MEETING OF NOVARTIS AG, BASEL

### REPORT OF THE STATUTORY AUDITOR ON THE FINANCIAL STATEMENTS

As statutory auditor, we have audited the financial statements of Novartis AG, which comprise the income statements, balance sheets and notes (pages 230 to 239), for the year ended December 31, 2014.

### BOARD OF DIRECTORS' RESPONSIBILITY

The Board of Directors is responsible for the preparation of the financial statements in accordance with the requirements of Swiss law (SCO) and the Company's articles of incorporation. This responsibility includes designing, implementing and maintaining an internal control system relevant to the preparation of financial statements that are free from material misstatement, whether due to fraud or error. The Board of Directors is further responsible for selecting and applying appropriate accounting policies and making accounting estimates that are reasonable in the circumstances.

#### AUDITOR'S RESPONSIBILITY

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with Swiss law and Swiss Auditing Standards. Those standards require that we plan and perform the audit to obtain reasonable assurance whether the financial statements are free from material misstatement.

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

#### OPINION

In our opinion, the financial statements for the year ended December 31, 2014 comply with Swiss law and the Company's articles of incorporation.

#### **REPORT ON OTHER LEGAL REQUIREMENTS**

We confirm that we meet the legal requirements on licensing according to the Auditor Oversight Act (AOA) and independence (article 728 SCO and article 11 AOA) and that there are no circumstances incompatible with our independence.

In accordance with article 728a paragraph 1 item 3 SCO and Swiss Auditing Standard 890, we confirm that an internal control system exists which has been designed for the preparation of financial statements according to the instructions of the Board of Directors.

We further confirm that the proposed appropriation of available earnings complies with Swiss law and the Company's articles of incorporation. We recommend that the financial statements submitted to you be approved.

PricewaterhouseCoopers AG



Knong Knor

**Bruno Rossi** Audit expert Auditor in charge

Basel, January 26, 2015

**Stephen Johnson** Global relationship partner

## OTHER INFORMATION



Nikolay Ivanovich Platonov and his wife Galina Vasilevna exercise, eat healthily and monitor their blood pressure as part of a Novartis-sponsored hypertension program at a hospital in Yaroslavl, Russia. The program has contributed to a dramatic fall in the number of deaths due to cardiovascular events attributed to hypertension in the region.



Each year, Novartis commissions a photographer to portray a unique, personal and artistic perspective of healthcare around the world. Depicting the diversity of patients, medical professionals, researchers and caregivers, the photographs demonstrate the complex realities of global healthcare. We are grateful to Brent Stirton and to those who shared their experiences for the Annual Report 2014.



#### **BRENT STIRTON**

Brent Stirton is a South African industryleading documentary photographer working with Getty Images reportage agency. His work has been published by National Geographic Magazine, Human Rights Watch, TIME, Newsweek, The New York Times Magazine, The Sunday Times Magazine, GEO, CNN and many other leading titles.

Mr. Stirton has photographed extensive essays on HIV/AIDS issues across multiple countries in an ongoing long-term project. He currently spends most of his time working on long-term investigative projects for National Geographic Magazine and global NGOs, remaining committed to issues relating to health, diminishing cultures, sustainability and the environment.

Mr. Stirton has worked for the Ford, Clinton and Gates foundations, the Nike Foundation and the World Economic Forum – for whom he was elected a Young Global Leader in 2008. He is also a Canon Ambassador, one of 12 photographers representing Canon photography.

Mr. Stirton has received seven World Press Photo awards, seven awards from Pictures of the Year International, six Lucie Awards, and others from the Overseas Press Club, the Frontline Club, the Deadline Club, DAYS JAPAN, China International Photo Awards, the Leads Awards Germany, Graphis, the London Association of Photographers, Communication Arts, American Photography, American Photo, and the American Society of Publication Designers. Additionally, he received two awards from the United Nations for work on the environment and HIV/ AIDS, and won the Visa D'Or at Visa Pour L'Image. He also won the National Magazine Award for his work in the Democratic Republic of Congo.

### Key dates for 2015

#### ANTICIPATED REPORTING DATES

Annual General Meeting February 27, 2015

First quarter 2015 results April 23, 2015

Novartis investor event in Boston **June 17-18, 2015** 

Second quarter and first half 2015 results July 21, 2015

Third quarter and first nine months 2015 results **October 27, 2015** 

### Contact information

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### FURTHER DETAIL

www.novartis.com www.novartis.com/annualreport2014 www.novartis.com/order2014annualreport

## Forward-looking statements

These materials contain forward-looking statements that can be identified by words such as "potential," "expected," "will," "planned," "pipeline," "outlook," or similar terms, or by express or implied discussions regarding potential new products, potential new indications for existing products, or regarding potential future revenues from any such products; potential shareholder returns or credit ratings; or regarding betential completion of the announced transactions with GSK and CSL, or regarding potential future sales or earnings of any of the businesses involved in the transactions with GSK, Lilly or CSL, or regarding any potential strategic benefits, synergies or opportunities as a result of these transactions; or regarding potential future sales or earnings of the Novartis Group or any of its divisions; or by discussions of strategy, plans, expecta-tions or intentions. You should not place undue reliance on these statements. Such forward-looking statements are based on the current beliefs and expectations of management regarding future events, and are subject to significant known and unknown risks and uncertainties. Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove incorrect, actual results may vary materially from those set forth in the forward-looking statements. There can be no guarantee that any new products will be approved for can be no guarantee that any new products will be approved to sale in any market, or that any new indications will be approved for any existing products in any market, or that any approvals which are obtained will be obtained at any particular time, or that any such products will achieve any particular revenue levels. Nor can there be any guarantee that the announced transactions with GSK and CSL will be completed in the expected form or within the expected time frame or at all. Neither can there be any guarantee that Novartis will be able to realize any of the potential strategic benefits, synergies or opportunities as a result of the transactions with GSK, Lilly or CSL. Neither can there be any guarantee that Novartis or any of the businesses involved in the transactions will achieve any particular financial results in the future. Nor can there be any guarantee that shareholders will achieve any particular level of shareholder returns. Neither can there be any guarantee that the Novartis Group, or any of its divisions, will be commercially successful in the future, or achieve any particular credit rating. In particular, management's expectations could be affected by, among other things, unexpected regulatory actions or delays or government regulation generally, including an unexpected failure to obtain necessary government approvals for the transactions, or unex-pected delays in obtaining such approvals; the potential that the strategic benefits, synergies or opportunities expected from the announced transactions, including the divestment of our former Animal Health Division to Lilly, may not be realized or may take longer to realize than expected; the inherent uncertainties involved in predicting shareholder returns or credit ratings; the uncertainties inherent in research and development, including unexpected clinical trial results and additional analysis of existing clinical data; the Company's ability to obtain or maintain proprietary intellectual property protection, including the ultimate extent of the impact on the Company of the loss of patent protection and exclusivity on key products which commenced in prior years and will continue this year; unexpected manufacturing or quality issues; global trends toward health care cost containment, including ongoing pricing pressures; uncertainties regarding actual or ongoing pricing pressures, internames regarding actual or potential legal proceedings, including, among others, actual or potential product liability litigation, litigation and investigations regarding sales and marketing practices, government investigations and intellectual property disputes; general economic and industry and there including a pathibiting magnified to fifth of the fit conditions, including uncertainties regarding the effects of the persistently weak economic and financial environment in many countries; uncertainties regarding future global exchange rates; including as a result of recent changes in monetary policy by the Swiss National Bank; uncertainties regarding future demand for our products; uncertainties involved in the development of new healthcare products; uncertainties regarding potential significant breaches of data security or disruptions of the Company's information technology systems; and other risks and factors referred to in Novartis AG's current Form 20-F on file with the US Securities and Exchange Commission. Novartis is providing the information in these materials as of this date and does not undertake any obligation to update any forward-look-ing statements as a result of new information, future events or otherwise

All product names printed in italics in this Annual Report are trademarks owned by or licensed to the Novartis Group.

The use of the registered trademark ® in combination with products in normal script indicates third-party brands.

The business policy of Novartis takes into account the OECD's Guidelines for Multinational Enterprises, with their recommendations on the disclosure of information.

Our Annual Report is published in English; a German translation is also available.

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### Photo on the right

Whitney Lackey trains for the Special Olympics at a pool near her home in the US state of Tennessee. Whitney manages her training regime despite having tuberous sclerosis, a rare genetic disease that causes benign tumor growth and some cognitive development delays.

#### Back Cover

Nikolay Ivanovich Platonov and his wife Galina Vasilevna go for a walk near their home in Yaroslavl, Russia. Enrolled in a Novartis-sponsored hypertension program at the Yaroslavl Veterans Hospital, they receive help to maintain a healthy lifestyle, including dietary advice, regular blood pressure monitoring and medication.



