NOVARTIS

caring and curing

ANNUAL REPORT 2013

COVER PHOTO

JAPAN

Tomi Miagi, on the day of her "kajimaya" – an official birthday ceremony for residents of Ōgimi, Okinawa who turn 97 years old. Ms. Miagi's seaside town is famous for the longevity of its citizens, with the highest percentage of centenarians anywhere in the world.

ABOVE

SOUTH SUDAN

Lillian Seneme, 23, holds her newborn baby, Innocent, in swaddling blankets at the Juba Teaching Hospital. Hospitals throughout Sudan often struggle to find enough resources for their maternity wards.

CONTENTS

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.

GROUP REVIEW

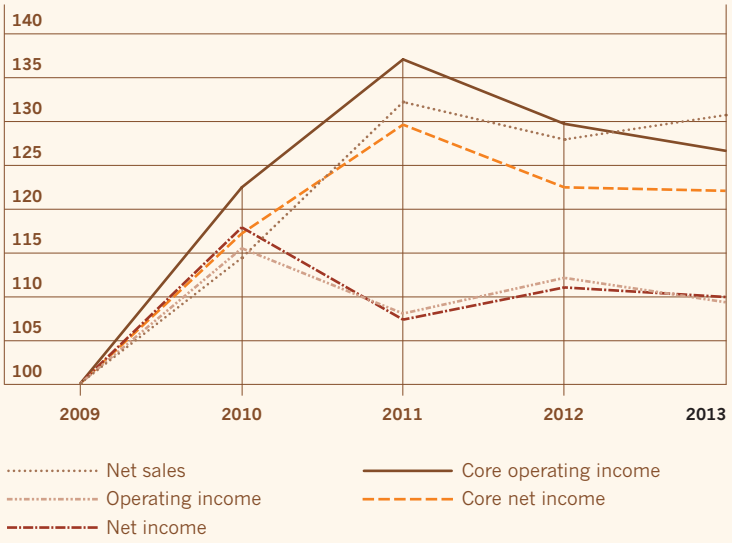
Novartis provides healthcare solutions that address the evolving needs of patients and societies worldwide. Our portfolio focuses on broad areas of healthcare: pharmaceuticals, eye care, generics, vaccines, over-the-counter medicines and animal health.

FINANCIAL HIGHLIGHTS 2013

KEY FIGURES
(in USD millions, unless indicated otherwise)

	2013	2012[1]
Net sales	**57 920**	56 673
Operating income	**10 910**	11 193
Return on net sales (%)	**18.8**	19.8
Net income	**9 292**	9 383
Basic earnings per share[2] (USD)	**3.76**	3.83
Core operating income[3]	**14 485**	14 842
Core return on net sales (%)	**25.0**	26.2
Core net income[3]	**12 533**	12 576
Core earnings per share[2,3] (USD)	**5.09**	5.15
Core Research & Development[3]	**9 642**	9 116
As a % of net sales	**16.6**	16.1
Number of associates (FTE)[4]	**135 696**	127 724
Group free cash flow	**9 945**	11 383

NET SALES, OPERATING INCOME, NET INCOME, CORE OPERATING INCOME AND CORE NET INCOME
(Index: 2009 = 100%)



SHARE INFORMATION

	2013	2012
Share price at year end (CHF)	**71.20**	57.45
ADR price at year end (USD)	**80.38**	63.30
Dividend[5] (CHF)	**2.45**	2.30
Payout ratio[6]	**74**	66

2013 NET SALES BY REGION
(% and in USD millions)

Europe	36	21 078
United States	33	18 924
Asia/Africa/Australasia	22	12 585
Canada and Latin America	9	5 333
Total		**57 920**

[1] 2012 has been restated to reflect the adoption of revised IAS 19 on *Employee Benefits* as explained on pages 247 and 248.
[2] 2013 average number of shares outstanding: 2 441 million (2012: 2 418 million)
[3] Core results for operating income, net income, earnings per share (EPS) and R&D eliminate the impact of acquisition-related factors and certain significant exceptional items. These adjustments are explained in detail starting on page 176.
[4] Full-time equivalent positions at year end
[5] Dividend payment for 2013: proposal to 2014 Annual General Meeting
[6] 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, 2013 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 Novartis Group's 2013 consolidated financial statements.

NEWS IN 2013

PERFORMANCE	Net sales were USD 57.9 billion, up 2% (+4% in constant currencies, or cc) over 2012. Operating income was USD 10.9 billion (–3%, +5% cc). Core operating income was USD 14.5 billion (–2%, +3% cc). Core operating income margin decreased by 0.3 percentage points (cc), with a negative currency impact of 0.9 percentage points, to 25.0% of net sales.
PRODUCTS	Growth products accounted for USD 18.1 billion or 31% of Group net sales, up from 28% in 2012. Continuing to rejuvenate the portfolio, Pharmaceuticals achieved several major regulatory approvals for innovative medicines and new indications in the United States (US) and European Union (EU). Key approvals included: *Ilaris* in the EU for gouty arthritis, and in the US and EU for treatment of active systemic juvenile idiopathic arthritis; *Lucentis* in the EU and Japan for myopic choroidal neovascularization; *Ultibro Breezhaler* in the EU and Japan for chronic obstructive pulmonary disease; and *Exelon* Patch in the US and EU for Alzheimer's disease. Alcon received approval in the US and EU for the *Centurion* vision system and *Verion* image guided system, two components of its next-generation Cataract Refractive Suite. Alcon also received approvals for *Jetrea* intravitreal injection, a first-in-class treatment for vitreomacular traction and macular hole in the EU, and *Simbrinza* suspension for glaucoma in the US. Sandoz received its first European approval for *AirFluSal Forspiro*, a novel inhaler for patients with asthma and/or chronic obstructive pulmonary disease, in Denmark, and additional approvals including Germany and Sweden in January 2014. In Vaccines and Diagnostics, *Bexsero* was approved in the EU to prevent meningococcal serogroup B infections in all age groups, and in the US, the age indication for *Menveo* (meningococcal serogroup A, C, W-135 and Y conjugate vaccine) was expanded to include infants and toddlers from 2 months of age.
PIPELINE	Novartis has a leading new product pipeline with more than 200 projects in clinical development, including 144 in the Pharmaceuticals Division. In pipeline highlights, Novartis received three US FDA Breakthrough Therapy designations: LDK378 in lung cancer, RLX030 (serelaxin) in acute heart failure and BYM338 (bimagrumab) in sporadic inclusion body myositis. In addition, results from multiple Phase III studies underscored the strength of our pipeline in dermatology: AIN457 (secukinumab) showed superior efficacy in moderate-to-severe plaque psoriasis over the current standard of care, and *Xolair* (omalizumab) produced clinically meaningful improvement in chronic spontaneous urticaria. Additionally, LBH589 (panobinostat) significantly extended time without disease progression in patients with relapsed or relapsed and refractory multiple myeloma. Sandoz reinforced its leadership in biosimilars with the launch of Phase III trials for etanercept (Enbrel®) and adalimumab (Humira®) in psoriasis.
RESEARCH AND DEVELOPMENT	Reflecting our commitment to innovation, Novartis Group invested 17% of net sales or USD 9.9 billion in research and development. In Pharmaceuticals, R&D investments were USD 7.2 billion or 22% of Pharmaceuticals net sales, focusing on the areas of greatest patient need and scientific promise.
PORTFOLIO	We agreed to divest our blood transfusion diagnostics unit to Grifols for USD 1.7 billion. This deal, which closed on January 9, 2014, enables us to focus more sharply on our strategic businesses.
CORPORATE RESPONSIBILITY	Engaging with society to improve access to healthcare is integral to the way Novartis operates. In 2013, our contributions and programs in this area were valued at USD 2.1 billion, providing medicine to more than 100 million patients and health education, infrastructure development and other programs to another 8.1 million people worldwide.
DIVIDEND	We propose to deliver our 17th consecutive dividend increase, with a 7% raise proposed for 2013 to CHF 2.45 per share (2012: CHF 2.30 per share), a dividend yield of 3.4%.

PERU

Nurse Carmen Gonzales Zapata approaches Della Maqquerbua Ballòn and her sons, Lucas, 4, and Lucero, 1, as they wait in the hallway of the burn unit at the Hospital Regional del Cusco. The hospital is a critical lifeline for many of the region's indigenous residents and is the only public hospital in Cusco that offers pediatric surgery.

Joerg Reinhardt

DEAR SHAREHOLDER,

Novartis achieved another strong operating result in 2013 and reinforced its leadership position as a diversified global healthcare company. With the launch of innovative therapies, a clear focus on growth markets, and productivity-oriented cost control, we increased sales and net income at constant currency exchange rates.

This success was due primarily to the continued dynamic development of our largest division, Pharmaceuticals, which has one of the industry's most robust product portfolios. Our eye care division, Alcon, and our generics business, Sandoz, also contributed to the positive result. With the market launch of state-of-the-art eye surgery systems, Alcon strengthened its leading position in the fast-growing area of cataract operations, while Sandoz gained further market share amid accelerated demand for sophisticated biosimilars.

The smaller businesses – Vaccines and Diagnostics, and Consumer Health – also improved their operations and created a solid basis for their activities following a series of difficult quarters. Our goal is to strengthen Novartis as a diversified healthcare company in its individual fields of business and as a whole. Given our continuous effort to optimize our businesses, we divested our blood transfusion diagnostics unit in January 2014 for USD 1.7 billion.

As a science-based healthcare company dedicated to serving the interests of patients, Novartis strives for a broad and competitive product portfolio and strong positioning in long-term growth markets. To this end, we are continuing to pursue our long-standing and proven diversification strategy, which – alongside our focus on innovation – includes the development of affordable and non-patented medicines.

Research and development of innovative and highly effective drugs that fulfill unmet patient needs remains central to our strategy and fundamental to our future success. With more than 6 000 scientists in our global research organization, Novartis aims to provide measurable benefits for patients and for society.

Due to the ongoing demographic change – which affects developing and emerging countries and coincides with growing urbanization and high environmental pollution – chronic and age-related disorders such as eye diseases, diabetes, cardiovascular conditions, and cancer are rising. This will continue to put a great strain on public health, the economy and the labor market.

In this context, we are systematically working on innovative compounds that are aimed at enhancing treatment results and increasing patient satisfaction. In the past year, we have

achieved significant progress to this end with the introduction of medicines in the areas of oncology and difficult-to-treat lung diseases that enabled Novartis to broaden its product portfolio.

Novartis can only operate successfully if the company acts as a trustworthy, cooperative and transparent partner. With this in mind, we are continuously reviewing our corporate governance principles and compensation systems – and adapting them regularly in consultation with investors and other stakeholder groups, while aspiring to the leading industry standards. We have simplified our corporate governance structure to free up resources, reduce bureaucratic hurdles, cut costs, and accelerate decision-making. We have empowered management to make decisions that were previously made by the Chairman's Committee, which has been disbanded. These changes have also led to adjustments to the compensation system of the Board of Directors. Finally, the Board of Directors has set up a Research and Development Committee that is designed to oversee our research and development strategy and organization.

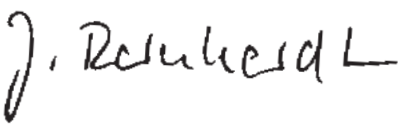
To help establish efficient healthcare systems amid rapidly evolving patient needs, Novartis also intends to assume greater social responsibility. We are seeking to enhance dialogue and collaboration with governments and health organizations to expedite the development of more comprehensive, integrated and cost-effective medical services. The creation and production of nonpatented therapies and generics remain essential to this goal, as millions of people in developing and emerging countries have no sustainable access to safe and effective medical care and rely – more than ever – on affordable, yet high-quality medicines.

Moreover, we strive to accelerate specifically-designed social business programs in fast-growing regions of Asia, Africa and Latin America that enable us to benefit from economic growth, while helping to build a sustainable base for regional healthcare systems. We are also continuing our fight against malaria and we delivered more than 600 million *Coartem* and *Coartem* Dispersible treatments without profit since 2001.

The strategic positioning of Novartis and the performance of our approximately 136 000 associates give us confidence about our medium- and long-term prospects. Following the strong results of the past year, we are poised in 2014 to consolidate our leading position as a science-based and patient-oriented healthcare company, and to sustainably increase shareholder value through the continuous management of our diversified product portfolio. Although economic and regulatory conditions remain generally challenging, and price and competitive pressures persist, Novartis stands on firm ground and is ready to address future challenges. We will continue to make every effort to fulfill our core tasks in the interest of all stakeholder groups: to cure diseases, ease suffering, and enhance the quality of life for patients around the world.

I would like to thank you, our shareholders, for the trust you have placed in our company, and am pleased to propose a 7% dividend increase to CHF 2.45 at the next Annual General Meeting.

Sincerely,



Joerg Reinhardt
Chairman of the Board

Joseph Jimenez

DEAR SHAREHOLDER,

Novartis made significant progress in 2013. We have reached an inflection point in our history, having fully integrated Alcon, and are starting the company's next growth phase. In 2013, we increased net sales by 4% in constant currencies to USD 57.9 billion. Core operating income rose 3% in constant currencies to USD 14.5 billion. Core earnings per share were USD 5.09. These results were achieved despite challenges including the patent expiration of our successful blood pressure medication *Diovan* and a volatile economic environment.

All Novartis divisions contributed to our strong performance. The Pharmaceuticals Division had several major product approvals in 2013, and delivered excellent product launches. Sales of our growth products – defined as products introduced in the past five years or with patent protection until 2017 – increased 15% and accounted for 31% of Novartis net sales. This demonstrates the dramatic transformation of our portfolio. Examples include our multiple sclerosis drug *Gilenya*, which saw sales rise 62% to USD 1.9 billion – a strong performance considering the recent launch of competitors. Breast cancer drug *Afinitor* rose 66% to USD 1.3 billion, and *Galvus* – our oral treatment for type 2 diabetes – rose 40% to USD 1.2 billion, achieving blockbuster status.

Our commitment to science-based innovation remains the centerpiece of our strategy. We sustained strong levels of investment in research and development across our company, equal to 17% of Group sales. Pharmaceuticals led, investing 22% of the division's sales in R&D. Our pharmaceuticals innovation engine has built a rich pipeline of potential new products. We received breakthrough therapy designation from the US Food and Drug Administration (FDA) for three drug candidates – among the highest number received by any company in 2013. These were: RLX030 (serelaxin) for acute heart failure, LDK378 for non-small cell lung cancer, and BYM338 (bimagrumab) for a rare degenerative muscle disease. We expect to have at least 14 blockbusters by 2018, which will be key to our future success.

We made progress in each of our three strategic priorities: innovation, growth and productivity.

INNOVATION – DISCOVERY CENTERED ON STUDYING MOLECULAR PATHWAYS

We lead the industry in our ability to bring new drugs from the lab to patients. Our success rate with new drug candidates, taking into account all stages of preclinical and clinical development, is more than twice the industry median. The foundation of our success is our approach to discovery, which centers on studying molecular pathways in homogenous populations. We focus on the underlying causes of diseases, where scientific understanding is strongest and where unmet patient need is greatest. Once we achieve success with one disease, we expand into other disease areas that are impacted by the same pathway.

We are among the leaders of dynamic change in R&D, marked by emerging technologies that are transforming pharmaceutical development. For example, our bioinformatics capability is revolutionizing drug discovery efforts, such as our work to understand the specific mutations that lead to cancers and rare diseases. Big data also has the potential to unlock personalized medicine and accelerate clinical trials. For example, up to 95% of the variability in patient drug response may be due to genetic differences. By interpreting the data, we can find the most effective treatments for individual patients. This could lead to improved patient response rates and potentially shorter development times, safer therapies and faster regulatory approvals. Our broad portfolio in oncology also gives Novartis a strategic advantage in developing targeted and cellular therapies. This provides us access to single agents and unique proprietary combinations that can target specific tumor mutations and potentially overcome resistance mechanisms.

GROWTH – SUPPORTED BY ALL NOVARTIS DIVISIONS

Our Alcon Division rolled out an exciting Cataract Refractive Suite – launched in Europe and the United States – that improves the surgeon's ability to provide patients with the sharpest possible vision by increasing precision at each step of the procedure. Alcon also launched *Jetrea* intravitreal injection, the first pharmaceutical treatment for an age-related retinal disease called vitreomacular traction, in Europe and Canada. And *Dailies Total1* contact lenses launched successfully in the US market.

Sandoz benefited from strong growth in generics and biosimilars in Europe and emerging markets. The division advanced its strategy of focusing on generics that are difficult to develop, manufacture and market. Sandoz leads in the promising field of biosimilars, with six biosimilar molecules in

eight Phase III trials, including rituximab for blood cancer patients.

The Vaccines and Diagnostics Division gained approval in Europe, Canada and Australia for *Bexsero*, the world's first vaccine to protect against meningitis B.

Consumer Health relaunched products impacted by supply interruptions from our manufacturing facility in Lincoln, Nebraska, USA. Sales rebounded for over-the-counter medicines *Excedrin* Migraine, *Excedrin* Extra Strength, *Lamisil* and *Benefiber*, while the Animal Health Division saw increased sales of antiparasitic *Sentinel*.

We continue to see a shift toward emerging growth markets, where 2013 sales rose 10% in constant currencies to USD 14.7 billion, led by increases in China and Russia. Healthcare spending in emerging markets is expected to reach nearly USD 345 billion in 2016. Our opportunities in these markets are driven by two main factors: the increase in patient demand for healthcare and the prioritization of healthcare by governments. Rising living standards and changing lifestyles in developing countries are leading to more chronic illnesses. In China alone, an alarming 85% of deaths are caused by chronic diseases. Similarly in Africa – which we consider to be the next emerging market frontier – noncommunicable diseases such as diabetes and cancer are on the rise. Governments in emerging economies are taking significant steps to improve healthcare for their citizens. For example, in China, recent reforms are bringing safe, affordable healthcare to 95% of the population – most of whom have never had health insurance.

PRODUCTIVITY AND ORGANIZATIONAL HEALTH

Productivity is strategic for Novartis. It supports continued steady investment in R&D, while also helping us to achieve our profit targets. We have implemented a global procurement organization across divisions to better address business needs, while reducing total costs. Procurement contributed savings in 2013 of USD 1.5 billion. We are also making steady progress on quality. Our plant in Lincoln had a positive FDA inspection in October. Overall, we hosted 228 inspections by health authorities at our manufacturing facilities worldwide in 2013, with 225 having positive outcomes. In the few instances where inspectors identified issues, we are working closely with health authorities to address them.

Longer term, we are implementing a comprehensive plan for all of our 109 manufacturing sites worldwide to strengthen our sustainable culture of quality. The plan includes upgraded standards, technology and training for our people. More work remains, but we are already seeing results.

PERFORMANCE WITH INTEGRITY

We reinforced our commitment to ethical business practices in 2013, strengthening our comprehensive training programs to ensure that associates follow our Code of Conduct and embody our high standards in their daily work. We encouraged associates to report suspected breaches of our code and we reinforced our efforts to take corrective actions where appropriate. We are committed to educating our associates to go beyond legal requirements to do business in a socially responsible way.

We continued to develop Social Ventures, innovative business models that build sustainable healthcare capabilities in underserved communities. In 2013 we expanded Social Ventures in India, Kenya, Vietnam, Indonesia and China.

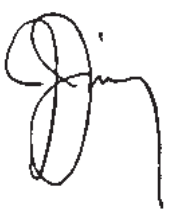
SHARPENED FOCUS ON DELIVERING GREATER SHAREHOLDER RETURNS

In today's world, it is becoming increasingly important to have global scale to compete effectively in individual segments of the healthcare industry. We are committed to creating leading businesses with enough scale to compete globally. As part of a strategic review, we have sold our blood transfusion diagnostics business to Spain-based Grifols for USD 1.7 billion. The transaction was completed on January 9, 2014.

As I look ahead to 2014, I am optimistic. We have strong momentum, even as we continue to face challenges. We are optimistic about the strength of our new product pipeline and the potential for major filings and new approvals across our divisions and key markets. We will continue to follow our strategy of leading through science-based innovation to deliver positive outcomes for patients around the world.

In closing, I want to thank you, our shareholders, for the confidence you have in Novartis. In 2013, we delivered a total shareholder return of 32.3%, outpacing the average return in the pharmaceuticals industry. And investors who have trusted Novartis over the long term have achieved superior returns. As Novartis enters a new growth phase, we will continue to strive to earn your trust.

Sincerely,



Joseph Jimenez
Chief Executive Officer

INDIA

Shanker Kumar Biswal, center, sits behind the counter at the Lavanya Nursing Center, a small roadside clinic in Banswara that typically treats minor ailments like stomach illnesses and colds.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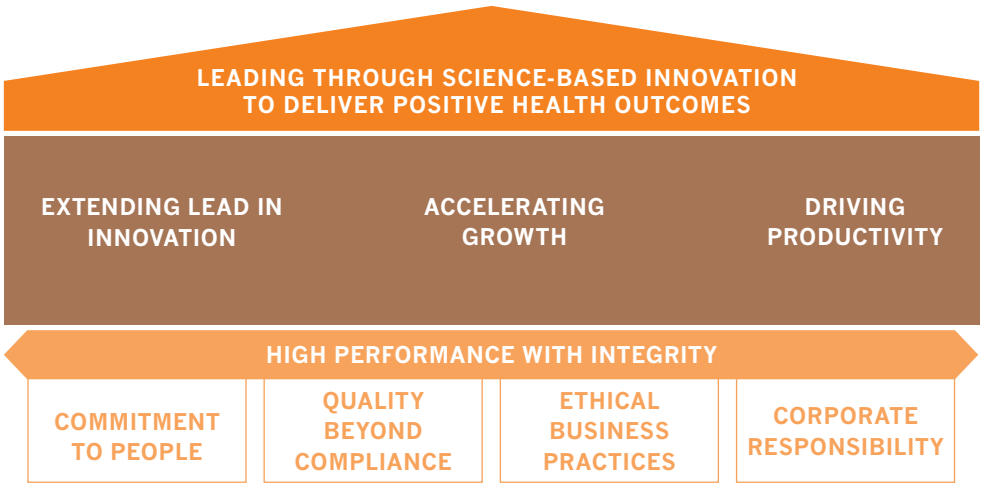
OUR STRATEGY: LEADING THROUGH SCIENCE-BASED INNOVATION

A global leader in healthcare, Novartis is uniquely positioned to take advantage of the fast-changing industry environment and to fulfill its mission of caring and curing. As we enter our next growth phase, we are accelerating the execution of our strategy of leading through science-based innovation to deliver positive health outcomes for patients and payers. Our strategic priorities are to **extend our lead in innovation, accelerate growth** and **drive productivity** across our diversified portfolio in order to generate profits and increase shareholder return. Committed to high performance with integrity, we are engaged in an open and cooperative dialogue with all of our stakeholders.

Extending lead in innovation: Science-based innovation is at the heart of Novartis. We follow a distinct research and clinical approach to build an industry-leading pipeline of differentiated medicines and treatments with the goal of delivering real-world benefits to patients and healthcare providers.

Accelerating growth: Novartis is pursuing long-term growth by maximizing product launches and leveraging its robust portfolio. We are expanding in established and emerging markets and adapting our commercial model to the rapidly changing healthcare environment.

Driving productivity: Novartis is driving productivity by simplifying its processes, accelerating cross-divisional collaboration, and improving global procurement and supply chain management. We are using rigorous resource allocation to improve cash management and profitability.



Our four strategic enablers allow us to pursue high performance with integrity.

Commitment to people: We strive to attract and retain the best talent in the industry, nurture team diversity and cultivate high engagement.

Quality beyond compliance: We are dedicated to producing high-quality pharmaceutical and medical therapies that exceed industry standards to protect patient safety and build trust with our stakeholders.

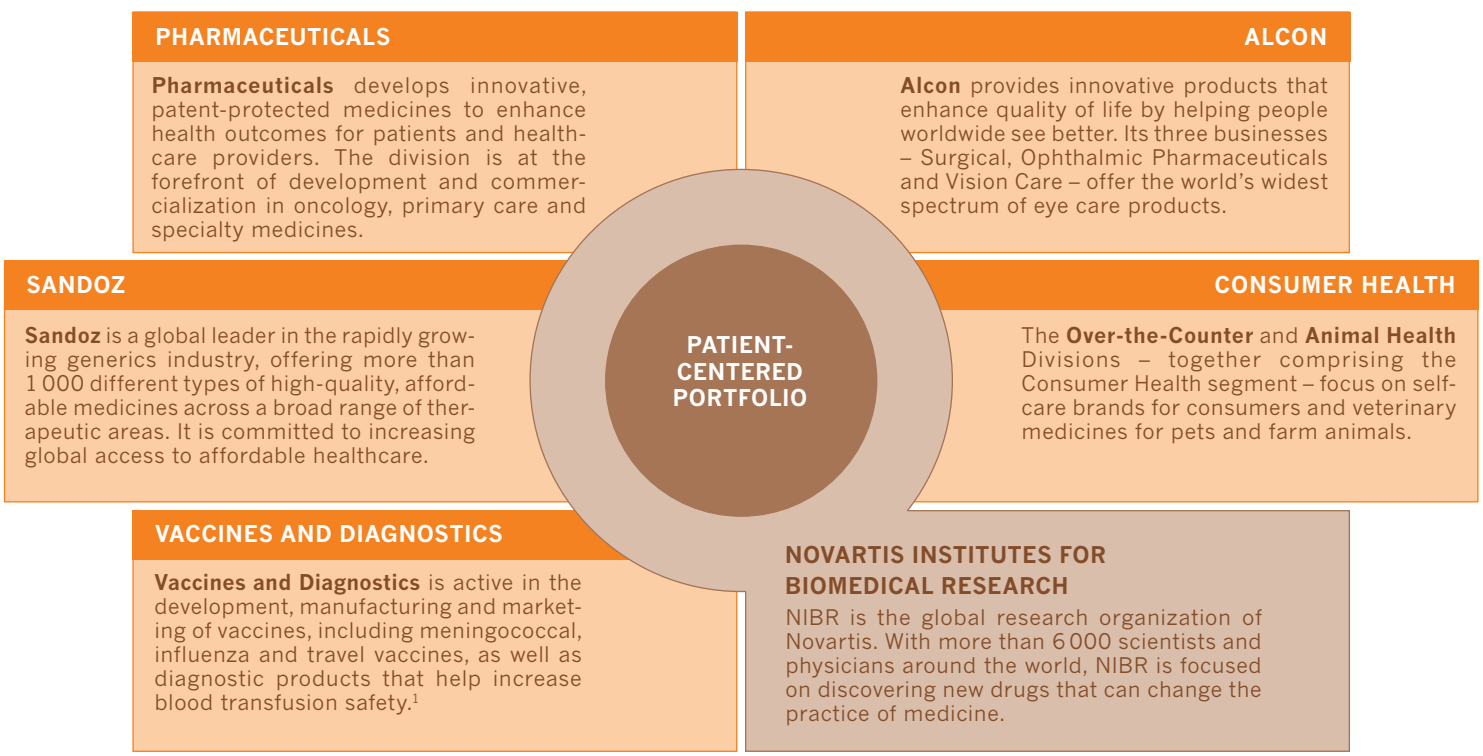
Ethical business practices: Through global adherence to our Code of Conduct, we consistently strive for the highest ethical standards around the world.

Corporate responsibility: We are committed to enhancing access to medicines and healthcare services for underserved populations through innovative patient support programs and Social Ventures.

Novartis has five business segments and is supported by our global research organization, the Novartis Institutes for BioMedical Research (NIBR). These segments are strategically aligned to bring innovative, high-quality and affordable medicines and therapies to patients around the world.

Making full use of its cross-divisional cooperation potential, Novartis continually looks for opportunities to leverage the strength of its global and diverse businesses to meet patient needs and extend its differentiated leadership position.

We continuously evolve our businesses to create a patient-centered portfolio consisting of a wide range of products and treatments to address unmet medical needs.



[1] In January 2014, Novartis completed the divestment of its blood transfusion diagnostics unit to Grifols for USD 1.7 billion.

HEALTHCARE PORTFOLIO

Our products reached 1.2 billion patients around the world in 2013, according to internal estimates.

While healthcare remains a growth industry, both positive and negative trends continue to impact the way we operate. Aging populations, greater access to healthcare in emerging markets, and scientific advances create opportunities to enhance patients' lives.

At the same time, uncertain economic conditions, patent expirations, regulatory issues, pricing pressures, and investigations and litigation exert downward pressure. Tensions will increase as healthcare spending outpaces economic growth.

Novartis is a leader in successfully navigating these pressures and meeting changing customer needs. Our strategy of focusing on science-based innovation helps us fully leverage the changes in our industry while balancing risk.

CONTENTS

JAPAN

PAGE 14 *Nobuko Oshiro, 65, stands in the middle of a group of women she is leading in the end-of-summer performances that are part of an annual festival in Ōgimi, Okinawa. Residents say that maintaining strong social health is as important as maintaining good physical health.*

PAGE 16 *Kakusei Yamashiro, 85 – an octopus fisherman who spends nearly eight hours every day free-diving with a spear gun – acknowledges a typical Ōgimi diet of nutrient-rich foods like sweet potatoes, fish and seaweed plays a role in his good health. But he insists daily physical activity is vital, saying he might keep diving until he's 90 years old.*

PAGE 19 *Fumiyasu Yamakawa, 91, laughs during his morning exercises at the beach near his home in Naha, Okinawa. "You have vitamin C; we have vitamin S, for smile," he jokes. "It's very important for a long life."*

HEALTHCARE PORTFOLIO OVERVIEW

2013 NET SALES BY SEGMENT

	%	USD millions
Pharmaceuticals	56	32 214
Alcon	18	10 496
Sandoz	16	9 159
Vaccines and Diagnostics	3	1 987
Consumer Health	7	4 064
Total		**57 920**

2013 CORE OPERATING INCOME[1] BY SEGMENT

	%	USD millions
Pharmaceuticals	63	9 523
Alcon	25	3 694
Sandoz	10	1 541
Vaccines and Diagnostics	0	65
Consumer Health	2	298
Corporate Expenses, net		– 636
Total		**14 485**

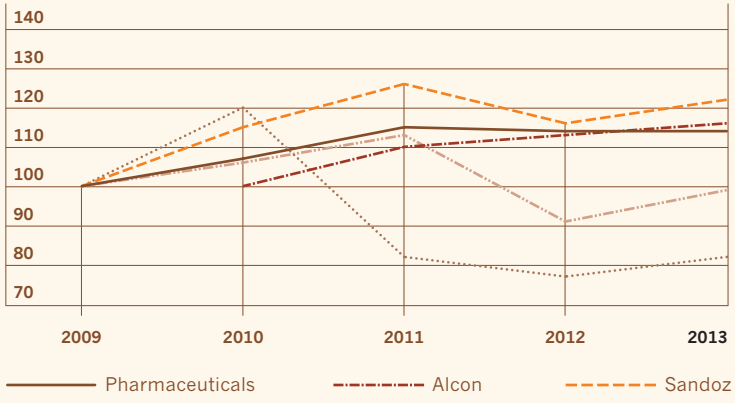
2013 NET SALES BY REGION AND SEGMENT

(% and in USD millions)

	Pharmaceuticals		Alcon		Sandoz		Vaccines and Diagnostics		Consumer Health	
Europe	34	10 993	27	2 831	50	4 596	33	654	49	2 004
United States	32	10 256	40	4 179	31	2 821	41	821	21	847
Asia/Africa/Australasia	25	7 947	23	2 378	12	1 139	17	328	20	793
Canada and Latin America	9	3 018	10	1 108	7	603	9	184	10	420
Total		**32 214**		**10 496**		**9 159**		**1 987**		**4 064**
Established Markets[2]	76	24 493	75	7 918	72	6 625	76	1 512	65	2 636
Emerging Growth Markets[2]	24	7 721	25	2 578	28	2 534	24	475	35	1 428
Total		**32 214**		**10 496**		**9 159**		**1 987**		**4 064**

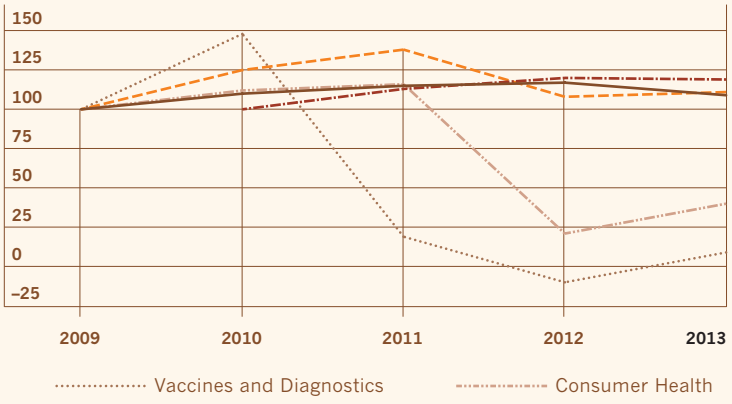
NET SALES BY SEGMENT

(Index: 2009 = 100%; Alcon only consolidated from August 25, 2010. However, Alcon 2011 growth rate is based on pro forma full year data for 2010)



CORE OPERATING INCOME[1] BY SEGMENT

(Index: 2009 = 100%; Alcon only consolidated from August 25, 2010. However, Alcon 2011 growth rate is based on pro forma full year data for 2010)



[1] Core operating income eliminates the impact of acquisition-related factors and certain significant exceptional items. These adjustments are explained in detail starting on page 176.
[2] Emerging Growth Markets comprise all markets other than the Established Markets of the US, Canada, Western Europe, Japan, Australia and New Zealand.

PHARMACEUTICALS OVERVIEW

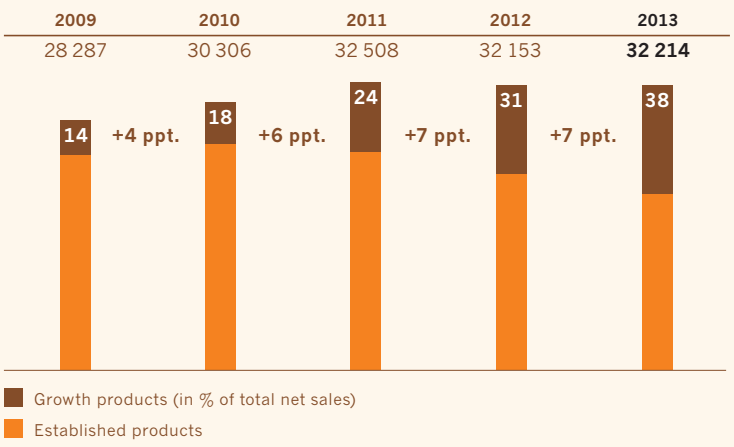
KEY FIGURES

(in USD millions, unless indicated otherwise)

	2013	2012
Net sales	**32 214**	32 153
Operating income	**9 376**	9 598
Return on net sales (%)	**29.1**	29.9
Core operating income[1]	**9 523**	10 213
Core return on net sales (%)	**29.6**	31.8
Core Research & Development[1]	**7 161**	6 697
As a % of net sales	**22.2**	20.8
Free cash flow[2]	**8 332**	9 491
Net operating assets	**15 424**	14 283
Number of associates (FTE)[3]	**65 262**	61 268

[1] Core operating income eliminates the impact of acquisition-related factors and certain significant exceptional items. These adjustments are explained in detail starting on page 176.
[2] 2012 restated due to the post-employment benefit service cost allocation to the division
[3] Full-time equivalent positions at year end

INCREASING CONTRIBUTION OF GROWTH PRODUCTS[1]



NEWS IN 2013

Pharmaceuticals delivered net sales of USD 32.2 billion (+0%, +3% cc) in 2013, with strong volume growth (+9 percentage points) and pricing (+1 percentage point) more than offsetting the negative impact of generic competition (USD 2.2 billion, –7 percentage points).

Growth products[1] accounted for USD 12.3 billion or 38% of division net sales, up from 31% in 2012, driving portfolio rejuvenation across therapeutic areas. These products include *Gilenya*, *Afinitor*, *Tasigna*, *Galvus*, *Xolair*, *Lucentis*, the Q Family[2] and *Jakavi*, among others.

The division achieved several major regulatory approvals in 2013, including *Ultibro Breezhaler* in the EU (as well as in Japan and Canada) as the first once-daily long-acting dual bronchodilator for chronic obstructive pulmonary disease. Pharmaceuticals also received three US FDA Breakthrough Therapy designations: LDK378 in ALK+ metastatic non-small cell lung cancer, RLX030 (serelaxin) in acute heart failure, and BYM338 (bimagrumab) in sporadic inclusion body myositis.

Europe (USD 11.0 billion, +5% cc) and the US (USD 10.3 billion, –1% cc) – our largest regions – maintained strong volume in growth products, which generated 50% and 34% of net sales in those regions, respectively. This helped offset the negative impact of generic competition, particularly for *Diovan* and *Zometa/Aclasta*. Emerging Growth Markets[3] (USD 7.7 billion, +9% cc) were led by double-digit growth in China and Russia.

Operating income was USD 9.4 billion (–2%, +3% cc). Core operating income declined 7% (–1% cc) to USD 9.5 billion.

Core operating income margin was 29.6% of net sales, a decrease of 1.3 percentage points in constant currencies that was mainly due to increased investments into promising R&D pipeline assets, increased royalties and generic erosion; partly offset by productivity savings from Marketing & Sales. Currency reduced core operating income margin by 0.9 percentage points.

[1] Growth products are defined as products launched in 2008 or later, or with exclusivity until at least 2017 in key markets (EU, US, Japan).
[2] The Q Family includes *Arcapta Neohaler/Onbrez Breezhaler*, *Seebri Breezhaler* and *Ultibro Breezhaler*
[3] Emerging Growth Markets comprise all markets except the US, Canada, Western Europe, Japan, Australia and New Zealand

PHARMACEUTICALS

The Pharmaceuticals Division's product pipeline includes three new drug candidates that received breakthrough therapy designations from the US Food and Drug Administration (FDA) during 2013. One of those drug candidates offers the potential for the first significant new treatment in more than 20 years for acute heart failure, which affects over 20 million people worldwide.

DIVERSE PIPELINE INCLUDES BREAKTHROUGH THERAPIES

The Pharmaceuticals Division has a strong pipeline of more than 140 potential new products or indications in clinical development. Areas of particular focus include oncology, cardiology, respiratory and immune and inflammatory conditions.

Underscoring the breadth of the pipeline, the division received three breakthrough therapy designations during 2013 from the US Food and Drug Administration (FDA) – among the highest number for any company. Breakthrough therapy designation is intended to expedite the development and review of drugs for serious or life-threatening conditions.

One compound to receive breakthrough designation was LDK378, a potential treatment for a specific type of non-small cell lung cancer. It represents a possible backup and alternative therapy to crizotinib, a commonly used drug to which some lung cancer patients develop resistance. Results from clinical trials so far show a marked clinical response among patients who have already received crizotinib, as well as those who have not. The Pharmaceuticals Division could make an initial regulatory filing for LDK378 in early 2014.

Breakthrough designation was also awarded to BYM338 (bimagrumab) for sporadic inclusion body myositis, a rare but potentially life-threatening degenerative muscle disease. Patients who have the disease can gradually lose the ability to walk, lose hand function and experience difficulty swallowing. Although rare, it is the most common degenerative muscle disease in adults older than 65. There is currently no approved or established treatment for the disease.

BYM338 is a human monoclonal antibody that stimulates muscle growth by blocking signals from molecules that inhibit growth.

HEART FAILURE DRUG ALTERS UNDERSTANDING OF THE DISEASE

Another Novartis drug candidate to receive breakthrough designation was RLX030 (serelaxin), a treatment for acute heart failure. While researchers have made dramatic progress in recent decades in developing effective treatments for heart attacks and other aspects of cardiovascular disease, acute heart failure is one area where there has been little progress. Acute heart failure affects more than 20 million people worldwide and is the most common cause of hospitalization for patients over 65 years old. In the past 25 years, only a handful of new treatments have been developed and their effectiveness has been limited.

But the results from clinical trials of serelaxin/RLX030 have brought new hope for the first acute heart failure treatment breakthrough in more than 20 years. A form of naturally occurring human hormone found in higher levels in pregnant women, serelaxin is the only drug shown in a major study to reduce the chance of death for patients six months after an acute heart failure episode.

The research results are prompting many doctors and others in the cardiology community to rethink their views about acute heart failure. The traditional view of acute heart failure focuses on the deteriorating function of the heart. However, a growing body of evidence supports an emerging theory that an acute heart failure episode triggers a cascade of damage to the heart, kidneys, liver and other organs. If doctors can interrupt the damage, they can potentially improve the longer-term prognosis for patients.

"This has resulted in a paradigm shift in how acute heart failure is viewed," said Dr. John Teerlink, a cardiologist at the University of California at San Francisco in the United States and a co-leader of the serelaxin Phase III clinical trial RELAX-AHF – initial results of which were first revealed at an American Heart Association meeting in late 2012.

This new thinking and the possibility of new treatment options could dramatically influence how doctors treat acute heart failure patients in the future.

A PARADIGM SHIFT

Heart failure occurs when the heart weakens and can no longer pump sufficient blood around the body, causing fluid to build up in the lungs, legs and feet. Patients typically gain weight rapidly and experience shortness of breath, among other symptoms. Some patients report feeling like they are drowning and they are often rushed to the emergency room at night when lying down in bed causes fluid to shift in their lungs and breathing suddenly becomes more difficult.

The usual treatment for heart failure patients includes diuretics to reduce fluid buildup and vasodilators to dilate blood vessels and reduce pressure on the heart. This relieves symptoms and makes patients feel better, but doesn't treat the underlying problem of a weakening heart. Some 3% to 4% of patients don't survive their initial heart failure episode. Those who do survive typically experience a steady decline in health. About 50% of people hospitalized for heart failure are readmitted after six months and between 20% to 30% die within a year.

Reviews of serelaxin are underway with health authorities in 16 countries worldwide. It remains unclear how long these reviews will last and whether regulators will ultimately approve use of the drug.

In late 2012, Novartis filed with the European Medicines Agency (EMA) to request approval for serelaxin and in May 2013 with the FDA.

Novartis launched a second serelaxin Phase III clinical trial in September 2013 to verify the results seen in the RELAX-AHF study and an earlier, smaller Phase II trial (PRE-RELAX). The study is planned to include 6 000 people with a primary aim to measure serelaxin's impact on deaths among patients in the six months after they receive the drug.

The research so far into serelaxin has shown that a 48-hour infusion has multiple positive effects. In the short term, it relieved patients' shortness of breath by slowing the rate of heart failure worsening. Its longer-term benefits may be influenced by a reduction in the biological indicators for damage to the kidneys and other organs. In the most dramatic finding, serelaxin reduced deaths of patients by 37% in the six months following treatment, compared to patients receiving standard care.

To some cardiac experts, the lower death rate among serelaxin recipients – combined with indications that the drug may reduce vital organ damage – supports the theory that heart failure episodes result in a downward spiral of damage to other organs in addition to the heart. Further study will be needed to fully understand how serelaxin helps to protect these organs, but the research results have opened a new avenue of inquiry into the mechanisms behind heart failure and potential ways to treat them.

"This is a lifelong dream of some of us working in this field," said Dr. Ameet Nathwani, Head of Critical Care at Novartis Pharmaceuticals. "We're building a deeper understanding of acute heart failure as we go. Our data is allowing people to piece together a fuller picture of what is actually happening during an acute heart failure episode."

Underscoring serelaxin's potential significance for cardiology, it was chosen from among nearly 125 nominations as one of the top 10 medical innovations of the year by the Cleveland Clinic, an academic medical center based in the United States.

While the organ damage theory is gaining supporters thanks to the serelaxin research results, some cardiologists and researchers believe more research is needed to verify the link among reduced heart, kidney and liver function and its importance in understanding the disease.

Some cardiac specialists also think further research is needed to verify the lower death rate observed among acute heart failure patients receiving serelaxin. This skepticism is reinforced by more than 20 years of failed attempts to develop an effective drug to treat the disease.

"I understand the skeptics," said Dr. Adriaan Voors, a cardiologist at the University of Groningen in the Netherlands. "We didn't expect a drug you give for 48 hours to have such a long-term effect. We need further evidence."

RESEARCHERS RETHINK HEART FAILURE

Prior to the serelaxin results becoming public, many researchers and companies had written off heart failure as a clinical area worth pursuing. The lack of success over more than 20 years at achieving a therapeutic breakthrough for heart failure acted as a deterrent.

But the encouraging results from the serelaxin trials have contributed to a surge of other research. For instance, the number of scientific articles published on the topic of acute heart failure requiring hospitalization has nearly doubled since 2007, before the PRE-RELAX trial results became public. Likewise, the number of new heart failure medicines in clinical development at pharmaceutical companies worldwide has more than tripled since 2007, to 64.

"It really did breathe new life into an entire field," Dr. Teerlink said. "It's given new credence to the concept that there is something really going on in an acute heart failure episode that has long-term effects."

If serelaxin wins approval from regulators, there could be a similarly significant impact on the way healthcare professionals treat heart failure patients. Cardiologists and emergency room doctors and nurses will need to know how to quickly determine whether a patient is likely to benefit from serelaxin. Training may be needed to help them make fast, informed decisions.

Looking ahead, there could be other therapeutic areas where serelaxin might be an effective treatment, or there may be alternative ways of administering the drug that are even more effective than a 48-hour infusion. Novartis researchers are in the early stages of exploring these and other possibilities.

"People were starting to think that finding a new treatment for acute heart failure was a nut that couldn't be cracked," said Dr. Laurie Letvak, Franchise Head for Critical Care. "Now that we've seen some success with serelaxin, suddenly people are saying, 'Isn't there something we can do to follow up on that?' People are interested again and that brings hope for patients."

PERU

[From left to right] Sebastiana Huamaní Humpre, Antolina Sayre, Elena Gamarra, Noima Huallpayunca, and Cirila Amachi Huamaní wait in line to see resident Will Galvin outside a small clinic on the outskirts of Cusco, as Francisca Huamaní Huamaní looks from the inside. Mr. Galvin works with CerviCusco, a non-profit organization dedicated to reducing the incidence of cervical cancer in Peruvian women, who have one of the highest rates of this disease in the world.


Dientes SANOS...
niños y niñas felices!

NOVARTIS INSTITUTES FOR BIOMEDICAL RESEARCH

The Novartis Institutes for BioMedical Research (NIBR) is the innovation engine of Novartis. Its goal is to change the practice of medicine and it is achieving this primarily by discovering novel medicines that address unmet patient needs. Now it is also starting to apply creative thinking to healthcare challenges in the developing world. In Africa, NIBR is working with local partners to build research capacity and strengthen healthcare systems.

STRENGTHENING SCIENCE AND HEALTH SYSTEMS IN THE DEVELOPING WORLD

Through its focus on innovation, the Novartis Institutes for BioMedical Research (NIBR) has helped build one of the pharmaceutical industry's leading new-product pipelines. NIBR scientists use small-scale proof-of-concept studies to get an early read on a drug's safety and effectiveness, helping identify and advance the most promising candidates. They also collaborate with more than 300 academic and biotechnology partners worldwide to accelerate research and deliver the benefits of scientific progress to patients.

Recently, NIBR has also begun finding innovative ways to strengthen healthcare in the developing world. The primary focus is on Africa, where NIBR is working with local partners to develop new approaches to address the unmet needs of patients across the continent.

Medicines for diseases that affect patients in the developing world are in desperate demand. This is true for major killers such as malaria and for other infectious diseases such as African sleeping sickness, which are sometimes neglected because they affect the poorest of the poor.

Local health systems are also coping with an epidemic of noncommunicable diseases such as cancer, diabetes, cardiovascular disease and respiratory disease. For these complex health problems, medicines are essential but are not the sole solutions.

"It is a privilege to work with colleagues in Africa on approaches attuned to their specific medical needs," said Dr. Mark Fishman, President of NIBR. "Our drug discovery successes are great, but there is more work to do. It is critical to learn where we can help with education and healthcare delivery if we are to be a true agent for change in Africa."

Driven by the diverse health needs in developing countries, NIBR is taking a three-pronged approach to bolstering science and health in Africa. In addition to its ongoing work of discovering new medicines for infectious diseases, it is building local research capabilities through infrastructure improvements and training for African scientists, as well as fighting noncommunicable diseases by collaborating with African partners to strengthen health systems. NIBR made progress in all of those areas in 2013.

BUILDING RESEARCH CAPACITY

Limited resources and other barriers have long stymied advancements in research infrastructure in Africa. But the situation is starting to change. Many countries are making greater investments in science as part of broader efforts to tackle local health problems. NIBR supports these efforts by partnering with colleagues across Africa to promote scientific education and research.

In the area of education, NIBR (with Novartis Pharmaceuticals and Sandoz) sponsored training programs in six African countries in 2013, attracting more than 500 scientists and physicians. In addition, Novartis granted personalized training to more than 50 African scientists at its labs in Switzerland and the United States. The ties established during these exchanges often create enduring scientific collaborations.

NIBR also supports specific research initiatives, including one that is building local

capabilities to conduct clinical trials that test the safety and effectiveness of new drug candidates. People in different parts of the world respond differently to drugs due to their unique genetic makeups. So the ability to run early clinical trials in Africa is crucial for designing drugs that work well in African patients. But today, very few such trials are conducted in Africa, even for diseases primarily found there.

In 2013, NIBR and Novartis Pharmaceuticals created a workshop to help African researchers construct safe and effective Phase I trial facilities. These workshops were very successful in Kenya and Ghana, and Novartis is now responding to requests to bring this capability to colleagues in Tanzania, Ethiopia and other countries.

Another NIBR partnership focuses on early stage drug discovery. In 2013, NIBR and the University of Cape Town in South Africa launched a collaboration to expand research capabilities at the university's Drug Discovery and Development Center. The center is the first research institution in Africa to successfully bring a new compound – an antimalarial drug candidate – from the screening phase to preclinical development. As part of the collaboration, NIBR will provide training grants and infrastructure upgrades, offer university researchers advanced education at Novartis labs, and deliver on-site training by NIBR scientists.

BREATHING EASIER IN ZAMBIA

NIBR's asthma initiative in Zambia demonstrates how strengthening health systems can positively impact medical practice.

Until recently, asthma was essentially a neglected disease in Zambia. The national treatment guidelines were outdated, health workers often mistakenly called it bronchitis and managed it improperly, and those with asthma knew little about the disease.

In 2008, NIBR and Novartis Pharmaceuticals began working with Lusaka University Teaching Hospital, the Zambian Ministry of Health, and the Spanish Society of Pneumology and Thoracic Surgery to address these issues. The partnership filled a longstanding research gap by conducting epidemiological studies. The studies found that up to 8% of adolescents in Zambia suffer from asthma and more than 40% of asthma patients had major misconceptions about asthma treatment, including the false belief that inhalers are addictive.

The partners used the research data to design and roll out training programs for health workers in Zambia's largest population hubs and to launch a media campaign to address misconceptions about the use of inhalers. Physicians from Zambia traveled to Spain for intensive training in state-of-the-art asthma management and Sandoz donated two types of inhaled asthma medications.

The collaboration is transforming the way asthma is treated in Zambia. In 2013, the Zambian Ministry of Health adopted new treatment guidelines – in line with internationally recognized standards of care – which now emphasize the use of inhalers for chronic asthma. The change is expected to influence how doctors treat asthma in Zambia for years to come.

PREVENTING AVOIDABLE HEART DISEASE

The success of the asthma collaboration encouraged the development in 2013 of another initiative to strengthen the health system in Zambia. NIBR is working with Lusaka University Teaching Hospital, the Zambian Ministry of Health, the University of Cape Town, and Massachusetts General Hospital to combat rheumatic heart disease.

"This is an effort to eliminate the disease across Zambia in our lifetime," said Dr. John Musuku, a pediatrician at the university hospital.

It is an ambitious goal. The disease has been eliminated in developed countries but remains endemic in the developing world, where tens of millions of people are affected, largely because patients have poor access to treatment.

Rheumatic heart disease is caused by streptococcal pharyngitis – commonly known as strep throat – which can be easily treated with a single penicillin injection. But if left untreated, a small percentage of patients will eventually form scars on the valves of the heart. Over time, this can lead to heart failure and, ultimately, early death. Once rheumatic heart disease develops, monthly penicillin injections are required to slow its progression.

Fortunately, new technology has revolutionized doctors' ability to identify children with rheumatic heart disease early in the course of their illness. Portable echocardiography machines create ultrasound images of the heart that can show tissue damage even before symptoms appear.

Using this new technology, NIBR and its partners plan to screen up to 10 000 schoolchildren in Lusaka in 2014. Children diagnosed with rheumatic heart disease will receive monthly penicillin injections donated by Sandoz. And the results of the screening will, for the first time, indicate the prevalence of rheumatic heart disease in a Zambian population.

To help ensure patients receive their monthly injections, local doctors will use a new electronic registry to track patients and send automatic SMS reminders to their mobile phones when it is time for treatment. NIBR will also support efforts to strengthen health systems in Lusaka to help children with strep throat receive the treatment they need. Only then can new cases of rheumatic heart disease be prevented.

INDIA

In Kolkata, Sunita Singh holds her child, Ayush, as she descends the stairs of the ORBIS aircraft, the world's only airborne ophthalmic surgical and training facility. ORBIS is a nonprofit organization devoted to blindness prevention and treatment in developing countries. Alcon is an ORBIS Global Sponsor and has been working with the organization since 1979.

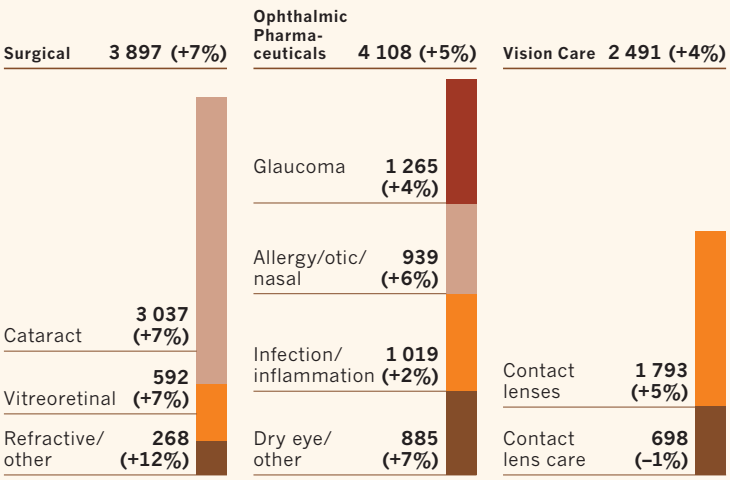
ALCON OVERVIEW

KEY FIGURES
(in USD millions, unless indicated otherwise)

	2013	2012
Net sales	**10 496**	10 225
Operating income	**1 232**	1 465
Return on net sales (%)	**11.7**	14.3
Core operating income[1]	**3 694**	3 698
Core return on net sales (%)	**35.2**	36.2
Core Research & Development[1]	**939**	950
As a % of net sales	**8.9**	9.3
Free cash flow[2]	**2 755**	2 845
Net operating assets	**41 102**	42 588
Number of associates (FTE)[3]	**25 494**	23 874

[1] Core operating income eliminates the impact of acquisition-related factors and certain significant exceptional items. These adjustments are explained in detail starting on page 176.
[2] 2012 restated due to the post-employment benefit service cost allocation to the division
[3] Full-time equivalent positions at year end

NET SALES AND GROWTH BY FRANCHISE AND TREATMENT AREA
(in USD millions and growth in cc %)



NEWS IN 2013

Alcon full year net sales were up 3% (+5% cc) to USD 10.5 billion in 2013, driven by growth in all three franchises.

Operating income of USD 1.2 billion (–16%, –2% cc) was impacted by integration and restructuring charges, partially offset by sales growth and productivity gains. Core operating income of USD 3.7 billion was in line with prior year in reported terms, but up 6% in constant currencies. Core operating income margin grew by 0.1 percentage points (cc), as productivity gains were reinvested in key product launches; currency had a negative impact of 1.1 percentage points, resulting in a core margin of 35.2% of net sales.

Surgical (USD 3.9 billion, +7% cc) was the fastest-growing franchise, driven by growth in the installed equipment base, including the *LenSx* femtosecond laser and the newly launched *Centurion* vision system. Cataract procedure growth and market share gains in intraocular lenses also contributed to Surgical franchise performance.

The Ophthalmic Pharmaceuticals franchise (USD 4.1 billion, +5% cc) experienced broad market share gains across key segments. Glaucoma sales were driven by combination products, including *Duotrav* solution, *Azarga* suspension, and the recently launched *Simbrinza* ophthalmic suspension, despite generic competition for *Travatan* in the US. In the Dry Eye segment, Alcon grew its global share, led by *Systane* lubricant eye drops. The division also continued to launch *Jetrea* intravitreal injection in Europe and Canada, securing reimbursement recommendations in key European countries.

In Vision Care (USD 2.5 billion, +4% cc), contact lens performance was driven by strong global growth of the *AirOptix* contact lens portfolio. Alcon's *Dailies* portfolio also experienced continued growth, driven by a strong market response to *Dailies Total1*, with its continued success in Europe and launches in the US and Canada. Growth in the contact lens business was partially offset by declines in the contact lens solutions market.

ALCON

Alcon, the global leader in eye care, continues to address unmet patient needs through innovative products and technologies. The division recently launched the Cataract Refractive Suite by Alcon, *Jetrea* and *Dailies Total1* products – the result of an ongoing research and development program designed to enhance quality of life by improving people's vision.

DRIVING PATIENT OUTCOMES THROUGH CUTTING-EDGE INNOVATION

Alcon continues to set standards for innovation by developing new products and technologies to treat a broad range of eye diseases and conditions affecting people of all ages around the globe. About 800 million people worldwide live with some form of visual impairment, and nearly 40 million of them are blind. Yet at least 90% of vision problems or blindness can be prevented, treated or cured, provided people have access to treatment.

Last year, Alcon launched innovative new products to address three areas of unmet patient need. The Cataract Refractive Suite by Alcon is designed to streamline cataract surgical procedures and help improve patient outcomes. Additionally, a new drug – *Jetrea* – is the first and only pharmacological treatment for a sight-threatening eye condition, while *Dailies Total1* contact lenses offer a major improvement in comfort for wearers.

These products are three tangible outcomes from a significant ongoing research and development program at Alcon.

"We're looking for areas of big unmet patient need where genuine technological innovation can make a real difference in their lives," said Kevin Buehler, Division Head of Alcon. "Our mission is to provide products that enhance quality of life by helping people see better."

IMPROVED VISION FOR CATARACT PATIENTS

More than half of all cases of blindness and about one-third of all visual impairment today are caused by cataracts. A clouding of the lens inside the eye, cataracts are a natural part of aging and predominantly affect people over the age of 55. Patients who suffer from cataracts compare their vision to seeing life through a cloudy window. Objects may be blurred, colors may be duller – and seeing after dusk may be more difficult.

During surgery, the ophthalmic surgeon removes the clouded lens of the eye and replaces it with an artificial intraocular lens. Surgery to treat cataracts is one of the safest and most cost-effective procedures in modern medicine. The World Health Organization estimates that by 2020 more than 32 million cataract procedures will be carried out worldwide each year.

Cataract surgery has made huge advances thanks to the introduction of improved surgical techniques, advanced laser surgery systems and intraocular lenses.

"Patients often ask if they'll be able to get rid of their glasses," said Dr. Dan Serafano, an ophthalmic surgeon and associate clinical professor of ophthalmology at the University of Southern California in the United States. "On average, however, only 55% of cataract surgeries hit their refractive target."

This gap is partly due to limitations in the planning and execution of cataract surgery. Surgeons take patients through several measuring and analytical processes using multiple medical devices. With the measurements taken, they use a computer and various online calculators to create a surgical plan.

"At each device there is information to be entered by hand and the procedure itself is guided manually," Dr. Serafano said. "You give away a tiny little bit of accuracy at every step and that invariably affects the visual outcome for the patient."

The new Cataract Refractive Suite by Alcon brings together multiple innovations and advanced technologies from an extensive portfolio of surgical devices. The suite helps eye surgeons improve how they plan and perform some of the most challenging steps of cataract surgery with automation and precision. It also enables surgeons to achieve the best level of visual acuity for their patients.

In the first stage of the process, the *Verion* image guided system captures a precise digital image of the eye. The *Verion* software performs the necessary calculations to help the surgeon devise a surgical plan. The biometric data can be transferred to other devices used by the surgeon to perform the procedure, with the help of an on-screen digital marker. These devices include the *LenSx* femtosecond laser, which helps the surgeon perform the most challenging steps of cataract surgery with laser precision, and the *Centurion* vision system, which removes the clouded lens and replaces it with a new, man-made intraocular lens, as well as the *LuxOR* surgical microscope, which gives the surgeon detailed views of the eye during cataract surgery.

"The technology streamlines how we do cataract surgery," said Paul Soye, Global Head, Research and Development, Cataract Franchise, Alcon. "It helps improve the accuracy of the surgical procedure by guiding the surgeon when performing the different steps needed to remove a cataract, as well as implanting and aligning an advanced technology intraocular lens. We believe this added precision will lead to improved visual results for patients."

The Cataract Refractive Suite by Alcon was introduced at the European Society for Cataract and Refractive Surgeons conference in Amsterdam in October and at the American Academy of Ophthalmology in the United States in November. Market launches are planned for 2014.

"Nothing makes me happier than for the patient to give me a hug after their surgery and say, 'I don't have to wear glasses, thank you,'" Dr. Serafano said.

PHARMACEUTICAL OPTION FOR A RETINAL DISEASE

Imagine visiting an eye specialist when you have a serious visual problem, only to be told to go home and wait to see if it gets worse.

That's the typical experience of patients who are diagnosed with vitreomacular traction. This age-related retinal disease occurs in an estimated 250 000 to 300 000 people per year in Europe alone, and if left untreated, it can lead to irreversible vision loss and central blindness.

Vitreomacular traction is a condition that can occur as a natural part of the aging process when the vitreous – a jelly-like substance that fills the eye and helps it keep its usual round shape – becomes more watery and begins to shrink. As it does so, it usually detaches itself naturally from the retina. As long as this happens smoothly or evenly, there will not be a problem for many. But for some, the vitreous only separates partially.

When this happens, the vitreous will continue to reduce in size, but it may exert an abnormally strong pull on the retina. This tugging can lead to irreversible eyesight problems, including blind spots in the center of one's field of vision. Untreated vitreomacular traction can eventually result in the formation of a hole in the macula, the part of the retina that ensures central vision.

Until now, patients and doctors have had limited options to treat this potentially debilitating eye condition. Surgery is possible, but the procedure typically has a difficult recovery process that requires patients to remain immobile for several weeks. The alternative for many patients was the wait-and-see approach. The condition may actually resolve itself, but only in about 10% of patients. For the rest, vision may continue to deteriorate until surgery is deemed essential to avoid the risk of permanent eyesight damage.

"Being sent home to wait until things get worse is not a good option at all," said Jeff Evanson, Global Head, Pharmaceutical Franchise at Alcon.

Now, however, patients have an alternative: an injection of a drug called *Jetrea*. It is the first non-surgical treatment for the condition, as well as the first injectable pharmaceutical product from Alcon.

Jetrea intravitreal injection works by dissolving proteins in the eye that cause the vitreous to adhere to the macula near the center of the retina. Delivered in a single injection, the drug can ensure complete separation of the vitreous in many patients, protecting eyesight and making surgery unnecessary.

The active substance in *Jetrea* is a protein called ocriplasmin. Developed by ThromboGenics and licensed by Alcon in all markets outside the United States, *Jetrea* received approval in the European Union in March and Alcon began rolling out the product in the United Kingdom, Denmark, Sweden, Finland, Norway and Germany. In Germany and the United Kingdom, *Jetrea* intravitreal injection has been recommended for reimbursement as the first and only pharmacological treatment for this sight-threatening eye condition. Alcon also received approval for *Jetrea* in Canada, where it launched in mid-2013.

"The in-licensing agreement shows that we're committed to finding innovative eye care treatments wherever they are developed and working to get them out to patients," Mr. Evanson said. "The drug is also groundbreaking for Alcon because it extends our reach to retina specialists who, so far, had limited options to treat patients suffering from this disease."

DAILIES TOTAL1

These new water-gradient contact lenses allow for a measurable change in water content throughout the lens. Introduced in Europe, the United States and Canada, they have been engineered to provide superior

comfort throughout the day. *Dailies Total1* contact lenses are the first significant product launch for the Vision Care team since the merger of CIBA Vision and Alcon in 2011.

"*Dailies Total1* took a decade's worth of research and development by CIBA Vision," Mr. Buehler said. "But it took the commercial strength and footprint of Alcon to get them to the market and to consumers quickly. This is a major milestone as we continue to build our leadership in vision care."

CIBA Vision introduced its first contact lens more than 30 years ago. Steady technical advances followed, including disposable lenses, multifocal optics, and lenses designed for extended wear. Silicone hydrogel materials introduced in the early 1990s greatly improved the oxygen flow through the lens, which is important for the health of the eye.

Despite these improvements, about one in seven lens wearers still finds his or her lenses uncomfortable enough to stop using them. Some people find their lenses begin to dry out toward the end of the day and their eyes become irritated. Working in an air-conditioned office or staring at a computer screen for hours can contribute to the problem. Medications, such as antihistamines, can also dry the eyes. These problems tend to worsen as patients age and tear production is reduced or impaired.

"There is clearly a problem when people tell you they get a better visual experience with contact lenses, but still decide to stop wearing them and instead go back to wearing spectacles due to the lack of comfort," said Franck Leveiller, Head of Research and Development for Vision Care at Alcon.

Several years before the Alcon merger, CIBA Vision spearheaded the development of the next-generation silicone hydrogel daily contact lens with the aim of achieving a breakthrough in comfort. The developers' mandate was to design a lens that would be just as comfortable as wearing no lens at all.

With previous silicone hydrogel materials, researchers were forced to accept a trade-off between higher silicone content in the lens – delivering greater oxygen flow – and a higher water content, which can improve comfort.

The *Dailies Total1* lens eliminates the need for this trade-off with a water gradient design that changes properties across its thickness. The core of the lens is made up of a highly breathable silicone hydrogel material with a low water content of 33%. The lens transitions to a water-retaining surface gel layer with essentially no silicone, which is made up of more than 80% water, nearly the same as the surface of the eye. This keeps the surface wet and helps minimize friction with the delicate tissues of the eye.

"The ability to vary the concentration of water and silicone in different parts of the lens, providing the right combination of oxygen for eye health and water for comfort, took years to achieve," Mr. Leveiller said.

In addition to designing the new lenses, the Alcon team needed to devise an innovative new manufacturing process.

Producing the new lens involves a multi-step process to surround the silicone hydrogel core material with a water-retaining surface gel inside a two-part mold.

Researchers developing the manufacturing process initially found that the silicone hydrogel material shrank during the curing of the lens, damaging its optical properties. To overcome this issue, the team created a technical solution that involved highly precise molding operations, capable of controlling mold positioning during the curing process to just one-tenth of the thickness of a human hair.

"In the end there were two real breakthroughs," Mr. Leveiller said. "One was in the material science that went into the lens and the other was in the manufacturing know-how we needed to make the lenses. Neither was easy to achieve."

Feedback from customers on the new lenses has been consistently positive. Many eye care professionals say they can now resolve previously untreatable comfort issues and even get patients back to wearing contact lenses.

"It was immediately obvious to me that the lenses were much more comfortable than the ones I'd previously been wearing," said Pamela Date, an insurance claims adjuster from the US state of Michigan, who has worn contact lenses for about 40 years. "You just don't notice them in your eye at all."

SOUTH SUDAN

Zalinango Bienda prepares to give shots to Mariara Aguek Mariaz and his two children, Aguerk, 3, and Yom, 5, at Dokuni Medical Drug Service, an independently-owned clinic at a refugee camp outside of Juba. Many clinic visitors are ethnic Dinkas being treated for typhoid and malaria.

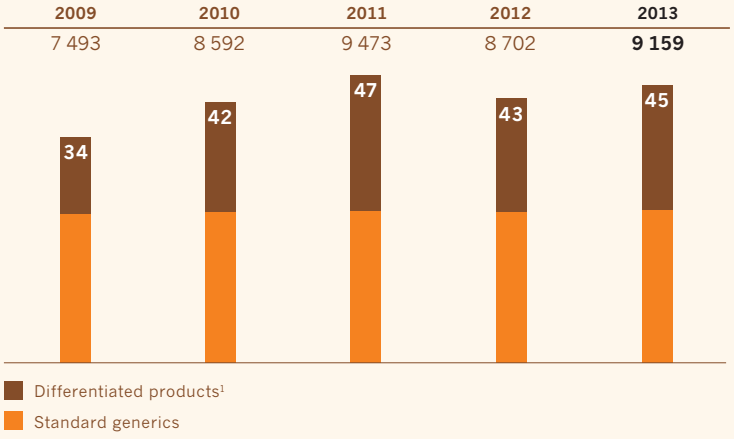
SANDOZ OVERVIEW

KEY FIGURES
(in USD millions, unless indicated otherwise)

	2013	2012
Net sales	**9 159**	8 702
Operating income	**1 028**	1 091
Return on net sales (%)	**11.2**	12.5
Core operating income[1]	**1 541**	1 503
Core return on net sales (%)	**16.8**	17.3
Core Research & Development[1]	**785**	749
As a % of net sales	**8.6**	8.6
Free cash flow[2]	**1 055**	1 423
Net operating assets	**16 869**	16 730
Number of associates (FTE)[3]	**26 905**	25 835

[1] Core operating income eliminates the impact of acquisition-related factors and certain significant exceptional items. These adjustments are explained in detail starting on page 176.
[2] 2012 restated due to the post-employment benefit service cost allocation to the division
[3] Full-time equivalent positions at year end

PORTFOLIO SPLIT BETWEEN STANDARD GENERICS AND DIFFERENTIATED PRODUCTS[1]
(in USD millions, % of net sales)



[1] Differentiated products comprise difficult-to-make, injectables, oncology injectables, biosimilars, inhalables, Falcon; tacrolimus included in difficult-to-make

NEWS IN 2013

Sandoz achieved net sales of USD 9.2 billion in 2013, an increase of 5% (+5% cc), driven by double-digit retail generics and biosimilar sales increases in Western Europe (excluding Germany), Japan and emerging markets.

Volume increased 14 percentage points in 2013, including 3 percentage points contributed by Fougera, more than offsetting price erosion of 9 percentage points.

Operating income decreased by 6% (–3% cc) to USD 1.0 billion. Core operating income increased by 3% (+4% cc) to USD 1.5 billion. Core operating income margin decreased by 0.1 percentage points in constant currencies; currency had a negative impact of 0.4 percentage points, resulting in a net decrease of 0.5 percentage points to 16.8% of net sales.

Retail generics and biosimilar sales in Western Europe (excluding Germany) grew double digits for the third year in a row, advancing 12% (cc) and offsetting a reduction of sales in Germany, a declining market. The US returned to growth with sales up 2% (cc) in 2013, driven by 31 new launches and the strong performance of the Fougera business, which more than compensated for the high prior-year comparator with the authorized generic launch of valsartan HCT (*Diovan HCT*) and significantly higher prior-year enoxaparin (Lovenox®) sales.

Robust emerging markets growth was led by Russia, China, Brazil, Mexico, Africa and the Middle East. In Japan, Sandoz achieved double-digit growth for the sixth year in a row, continuing to outperform the market.

Sandoz also accelerated its growth momentum in biosimilars (USD 420 million, +23% cc), where each of its three marketed products is the number one biosimilar in its respective category. The division now has six molecules in eight Phase III clinical trials, including the monoclonal antibodies rituximab (Rituxan®/MabThera®) and adalimumab (Humira®).

In addition, Sandoz received its first European approval in Denmark for *AirFluSal Forspiro* (salmeterol and fluticasone), a novel inhaler for patients with asthma and chronic obstructive pulmonary disease. *AirFluSal Forspiro* received additional approvals, including Germany and Sweden in January 2014.

Sandoz continued to make good progress on quality in 2013. All commitments to the US FDA relating to warning letters are on track, and in the fourth quarter, the FDA upgraded the compliance status of our manufacturing site in Boucherville, Canada. Sandoz had more than 72 successful health authority inspections at its global manufacturing facilities in 2013.

SANDOZ

As emerging market populations become larger, older and wealthier, demand for high-quality healthcare and medicines continues to grow. Sandoz is meeting evolving patient needs by building innovative partnerships and expanding its product portfolio in places such as Asia, Russia and sub-Saharan Africa.

BRINGING MORE HIGH-QUALITY GENERICS TO EMERGING MARKETS

Sandoz, the generics division of Novartis, delivered strong growth in emerging markets during 2013, continuing to expand in some of the world's most dynamic regions.

The division's double-digit sales increases significantly outpaced overall market growth in Central and Eastern Europe, Asia Pacific and Latin America – boosting emerging markets to 28% of Sandoz net sales, up two percentage points from 2012.

That broad and diverse geographical base is a key competitive edge for Sandoz, given that emerging markets are expected to continue to grow more rapidly than the developed markets of Western Europe and North America in coming years. From 2013 through 2018, sales of generic medicines in emerging markets are expected to grow at an average annual rate of more than 8%, triple the projected growth rate for developed markets.

Increased demand for medicines reflects population growth in emerging countries, aging of populations, and rising incomes that are lifting millions of people into the middle class. At the same time, changes in lifestyle and longer life expectancy are contributing to a shift in the burden of disease, from the traditional dominance of infectious disease to the rising incidence of noncommunicable diseases – from high blood pressure and diabetes to cancer.

Aggressive expansion is making Sandoz a partner of choice for governments aiming to improve access to medicines and upgrade healthcare systems despite limited financial resources. Demonstrating the long-term commitment of Sandoz to improving access to medicines, emerging markets accounted for 1 300 of the total 2 250 approvals received by Sandoz during 2013.

"The importance of registrations and expanding our portfolio really spans the spectrum of emerging markets, from large, complex markets like Russia and Brazil to frontier markets in Africa, where the challenge is laying out infrastructure and getting people on the ground, as well as adding registrations," said Jeff George, Division Head of Sandoz.

"Being a leader in standard generics – in addition to differentiated generics such as biosimilars, injectables and respiratory medicines – is essential to driving our mission and providing access to affordable, high-quality medicines for hundreds of millions of people around the world," continued Mr. George. "During 2013, we touched hundreds of millions of people with our medicines."

Efforts to gain regulatory approval for more drugs and to reinforce Sandoz teams in a number of emerging markets helped drive growth in 2013 in three key locations: Russia, Asia and Africa.

RUSSIA: THE POWER OF ORGANIC GROWTH

Sandoz laid the foundation for a leading position in Central and Eastern Europe a decade ago with the acquisition of Lek, Slovenia's leading drug company. Lek was a major supplier of generic medicines to Russia, as

well as the Commonwealth of Independent States (CIS) – an association of several former member countries of the Soviet Union. Over the past four years, Sandoz sales in Russia have nearly doubled – advancing at a 16% compound annual rate. Sandoz has become the second-largest generics company in the Russian market behind local leader Pharmstandard, through organic growth and without the benefit of further acquisitions.

In a model replicated in many other emerging markets, Sandoz management in Russia expanded the product portfolio from the traditional core, antibiotics, to medicines to treat noncommunicable diseases. Sandoz has registered more than 70 new generic medicines in Russia in the past five years. These approvals include three biosimilars, which are follow-on versions of biologic drugs that have lost patent protection. Sandoz is a global biosimilars leader, accounting for more than half of all biosimilars sold in highly regulated markets in Europe, North America, Australia and Japan in 2013.

Sandoz also expects to improve its competitive position with a new state-of-the-art manufacturing facility currently under construction in St. Petersburg. Generic products will account for the majority of output from the new plant, which is part of a five-year, USD 500 million investment program by the Novartis Group in Russia. The St. Petersburg facility is expected to begin full commercial operations in 2016.

"With local production at the new facility, we see an opportunity to play an even more important role in the modernization of Russia's healthcare system," said Altan Demirdere, Country Head for Sandoz in Russia.

Moreover, building on its success in Russia, Mr. Demirdere is supporting expansion by Sandoz across the CIS. Teams from Sandoz country organizations in both Russia and Slovenia are fanning out to train colleagues in countries ranging from Georgia and Belarus to Azerbaijan and Uzbekistan. In all, Sandoz sales in 11 CIS markets grew 30% in 2013, while Ukraine advanced more than 24%.

ASIA: A HEAD START

By expanding aggressively throughout Asia in recent years, Sandoz now operates in all major markets across the region, while global competitors are present in only a handful of Asian countries.

"We are the only generics company with a footprint covering all of Asia," said Paul Geymayer, Region Head Asia Pacific for Sandoz.

Emerging markets are prone to greater volatility than more mature, developed markets – and Asian countries are no exception. In 2012, the government of Taiwan imposed price reductions of 40%, one of the most draconian cost-containment reductions by any nation in the Asia Pacific region to date. Sandoz rebounded strongly in 2013, however, posting a double-digit sales increase in Taiwan that outpaced the overall market by a wide margin.

Despite unexpected market fluctuations, there are signs that markets across Asia are evolving to promote the use of even more generics. In Japan, the government has launched a program of incentives to encourage greater use of generics to help control escalating healthcare costs. While Japan is the world's number two market for innovative prescription medicines, it is an emerging market in generics with penetration of only 26%, approximately one-quarter of the level in the United States and less than half that of most European countries.

Japan's pro-generics policy focused initially on large hospitals but the government has extended incentives to physicians and pharmacists as well. Combined with the expected loss of protection on a large number of blockbuster primary care medicines over the coming five years, the Japanese generics market is poised for dynamic growth.

"There is increasing recognition that the generics industry will play an important role in Japan's healthcare system," said Junichi Nakamichi, Sandoz Country Head for Japan. "Generics companies are gaining traction in the registration of new products."

SUB-SAHARAN AFRICA: THE NEXT FRONTIER

In 2013, Sandoz reinforced its local presence in the frontier emerging markets of sub-Saharan Africa by establishing country organizations in West, Central, East and Southern Africa, with dedicated country heads. Sales climbed more than 20% and the number of Sandoz associates based in sub-Saharan Africa outside South Africa nearly doubled during the year.

In particular, the 22 French-speaking countries in West Africa – stretching from Mauritania to the Democratic Republic of Congo – epitomize both the solid progress achieved by Sandoz and the challenges and opportunities in improving access to healthcare for millions of people in sub-Saharan Africa. Only a tiny percentage of West Africa's 230 million residents are covered by any form of health insurance. Donations and access-to-medicine programs financed by international organizations and companies like Novartis provide limited access to vaccines and medicines against major diseases such as malaria, HIV/AIDS and tuberculosis. But all other healthcare is self-funded.

"One of the most important things to understand is that these are out-of-pocket markets," said Annette Ake, Head of the fledgling Sandoz organization for French-speaking West Africa, based in Dakar, Senegal. "As a generics company, Sandoz can make

a big difference, not only with the quality of medicines we provide but also in terms of affordability."

Born and raised in the Ivory Coast, Ms. Ake spent four years as Head of Marketing for Novartis in the Maghreb countries of North Africa, before moving to Senegal where she has assembled a geographically diverse team of nearly 100 employees over the past 24 months.

"Diversity is a reality in the area in which we work – and women have featured strongly in our recruiting efforts. The majority of my management team is female," Ms. Ake said. "As an African, I find it particularly exciting that there is a huge pool of talent in our region. That has made it possible not only to implement operations but also to think ahead to where we want to be in a couple of years."

As in other emerging markets, a key goal of the Sandoz strategy in Africa is to address the rising incidence of noncommunicable diseases.

"In our countries we have gone from a rural lifestyle to a very urban one – with all the impact of that change on health," Ms. Ake said. "Diabetes is going to be a major health issue in the coming years and we've seen the number of specialist physicians increasing in our countries. But healthcare funding has not kept pace. And these diseases are chronic, not an episode you can cure, which makes the accessibility issue even more acute."

After consultations that established a relationship with Senegal's Ministry of Health, Sandoz reviewed its product portfolio and aggressively reduced the price of about a third of those medicines to improve access for patients. In addition to popular antibiotics, prices were reduced on medicines ranging from treatments for ulcers and fungal diseases to high blood pressure and high cholesterol. Despite the price reductions, higher volume still enabled sales to climb at a double-digit rate. Similar price reductions to improve access will be introduced in Cameroon this year.

During 2013, successful registration of new products across West Africa expanded the Sandoz portfolio by about 30%, including comprehensive offerings for treatment of metabolic and cardiovascular diseases.

"We have become a one-stop shop for cardiovascular generics in French West Africa," Ms. Ake said.

The next phase of regulatory submissions during 2014 will focus on generic medicines against respiratory disease, as well as cancer.

"In addition to medicines people need today, we want to be ready when this growing incidence of noncommunicable diseases develops into a full-blown epidemic," Ms. Ake said. "In some of our countries, that's going to happen sooner rather than later."

UNITED STATES

Don Hoyle, Manufacturing Associate II with the Vaccines and Diagnostics Division in Holly Springs, North Carolina, returns a pair of forceps to its hanger inside a laboratory isolator that will be used for a vaccine trial filling run.

VACCINES AND DIAGNOSTICS OVERVIEW

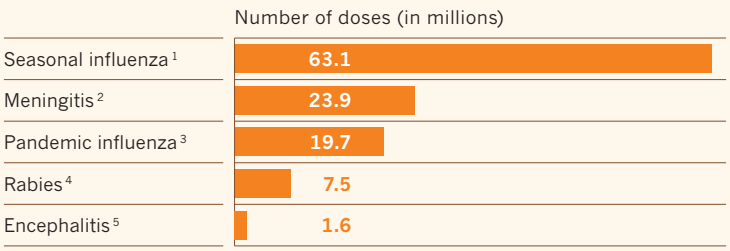
KEY FIGURES

(in USD millions, unless indicated otherwise)

	2013	2012
Net sales	**1 987**	1 858
Operating loss	**– 165**	– 250
Return on net sales (%)	**– 8.3**	– 13.5
Core operating income/loss[1]	**65**	– 75
Core return on net sales (%)	**3.3**	– 4.0
Core Research & Development[1]	**452**	429
As a % of net sales	**22.7**	23.1
Free cash flow[2]	**104**	– 78
Net operating assets	**4 863**	4 977
Number of associates (FTE)[3]	**6 997**	6 391

[1] Core operating loss/income eliminates the impact of acquisition-related factors and certain significant exceptional items. These adjustments are explained in detail starting on page 176.
[2] 2012 restated due to the post-employment benefit service cost allocation to the division
[3] Full-time equivalent positions at year end

DOSES SOLD FOR THE PREVENTION OF MAJOR DISEASES



[1] *Fluad, Fluvirin, Agrippal, Agriflu, Flucelvax, Optaflu*
[2] *Menveo, Menjugate*
[3] *Celtura, Focetria, Aflunov,* H1N9 vaccine, H7N9 vaccine
[4] *Rabipur, Rabavert*
[5] *Ixiaro;* in collaboration with Valneva

NEWS IN 2013

Vaccines and Diagnostics net sales increased 7% (+6% cc) to USD 2.0 billion in 2013, driven by higher *Menveo* sales and seasonal influenza demand, with over 31 million doses of seasonal influenza vaccine shipped to customers in the US, in addition to pre-pandemic shipments.

Operating loss was USD 165 million, USD 85 million less than the prior-year operating loss of USD 250 million. Core operating income was USD 65 million, compared to a loss of USD 75 million in 2012. This improvement was driven by strong sales growth and higher other revenues.

The division reached several key milestones in 2013. *Bexsero*, our meningococcal serogroup B vaccine, was approved in Europe, Australia and Canada, with shipments to several European private markets starting in the fourth quarter. We also supplied *Bexsero* to Princeton University in the US in response to a potentially deadly outbreak of meningococcal serogroup B disease. Additionally, in the US, the FDA expanded the approval of *Menveo* for the prevention of meningococcal disease in infants and toddlers as young as 2 months of age.

The division also successfully launched *Flucelvax* in the US, making it the first influenza vaccine manufactured with innovative cell-culture technology in the country. In addition, the division announced interim results from a Phase I clinical trial with its investigative vaccine for the H7N9 avian influenza virus, showing that 85% of subjects achieved a protective immune response after two doses of the 15 ug vaccine with the division's proprietary MF59 adjuvant. Only 6% of subjects achieved a protective response when given two doses of the 15 ug un-adjuvanted vaccine.

In the fourth quarter, Novartis announced a definitive agreement to divest its blood transfusion diagnostics unit to Spanish company Grifols S.A. for USD 1.7 billion. This transaction was completed on January 9, 2014.

VACCINES AND DIAGNOSTICS

Thanks to a decades-long effort by the Novartis Vaccines and Diagnostics Division, we are closer than ever to eliminating bacterial meningitis. Today, with a portfolio including *Menjugate*, *Menveo* and now *Bexsero*, Novartis is the only company that can help protect all age groups against the most prevalent forms of this deadly disease.

THE 30-YEAR FIGHT TO ELIMINATE A DEADLY CHILDHOOD DISEASE

While bacterial meningitis is often mistaken for a flu-like illness in its early stages, it is a much more serious disease – and the speed with which it develops is what makes it so feared. In fact, by the time it is diagnosed, it can be too late.

Meningitis is one of the few conditions that can kill an otherwise healthy child within 24 hours of initial symptoms.

Each year, meningococcal disease affects approximately 500 000 people around the world, including many infants and young children who lack sufficient immunity to the infection-causing bacteria. Some 10% do not survive and of those who do, about 20% are left with life-altering after-effects, including deafness, brain damage or lost limbs.

"You do not forget the first meningitis patient you meet," said Dr. Andrin Oswald, Head of the Vaccines and Diagnostics Division. "It is a truly devastating disease and we are all deeply motivated to contribute to its prevention."

No one understands the pain of losing a child to meningitis better than transport company director Steve Dayman and his wife Gloria. On the afternoon of November 1, 1982, the British couple took their otherwise healthy but suddenly listless 14-month-old son Spencer to the hospital in Bristol, western England as a precaution on their physician's advice. Shortly after arriving at the hospital, he was diagnosed with meningitis and his condition soon worsened. The fight to save Spencer lasted all night and most of the following day before he succumbed.

"Losing a child is the worst thing that can happen to anyone," Mr. Dayman said. "It was like being hit by a sledgehammer."

Following his son's death, Mr. Dayman devoted himself to learning about the disease. He focused on fundraising, while his wife managed the family business. Over the next decade and a half, he established three non-profit organizations to raise awareness about the disease and fund related research.

"The situation was bleak," Mr. Dayman said. "Experts said there would be no vaccine for any strain of meningitis in my lifetime."

The quest by Novartis to develop vaccines for meningococcal disease took more than three decades. And researchers at the company's laboratories in Siena, Italy had to overcome multiple hurdles and setbacks.

Dr. Rino Rappuoli, Head of Vaccines Research at Novartis, began by developing a more effective vaccine for the bacterial disease Haemophilus influenza type B (HIB), which – like meningococcus – was a major cause of bacterial meningitis.

A key problem in developing vaccines for HIB and some strains of meningitis was that they did not work properly in young children. This was a critical flaw because a child's less developed immune system means he or she is among the most vulnerable to infection.

"These bacteria have a sugar-like coating that limited the vaccines' effectiveness," Dr. Rappuoli said. "This was especially evident in children, whose immune systems did not respond properly to the vaccines."

A solution came with conjugate vaccines, through which researchers linked the sugar to a carrier protein, enabling it to more actively engage the body's immune system so it could then target the bacteria. Young children's T cells – the white blood cells responsible for fighting infection – recognized the carrier proteins and the new vaccines led to a dramatic immune response.

The conjugate approach became the model for many other vaccines. Today, Novartis provides two such vaccines, *Quinvaxem* and *VaxemHib*, which help protect children from HIB infection.

Dr. Rappuoli soon realized this technology could be used to tackle meningococcus.

Most meningococcal meningitis cases are caused by the five most common strains of the bacteria, known as serogroups A, B, C, W and Y. In four of the strains – A, C, W and Y – the bacteria have a polysaccharide coating and, as a result, vaccines for these can be developed in the same way as those for HIB.

Like HIB, most meningococcal disease occurs in infants. And the only existing vaccine in the 1980s for meningitis C – then the most common form of the disease in Europe – was a polysaccharide that did not work in infants.

In 1989, the Novartis research team began developing conjugate vaccines for meningitis C and A, the most common forms of the disease in Africa. By growing the meningococcal bacteria in a laboratory, removing their sugar coatings, and linking them to a protein, the researchers began what would become a decade-long effort to produce the first conjugate vaccine against the two strains of meningitis.

By the mid- to late 1990s, the quest to develop a vaccine for meningitis C was close to fruition. Toward the end of the decade, Dr. Rappuoli's team worked with UK health authorities to complete work on the vaccine and ready it for full-scale production. 1999 saw the UK launch of *Menjugate*, the first conjugate meningitis C vaccine indicated for children.

Within a year, every person between the ages of 2 months and 18 years in Britain – 13 million people in all – could receive immunization against meningitis C.

The results were dramatic. Before the vaccine's introduction, some 1 500 people in England and Wales alone contracted the disease each year – and about 150 died. Ten years later, there were just eight cases and not a single fatality. By 2010, this one strain of the disease was considered to have been eliminated in the United Kingdom.

2010 also saw the launch of *Menveo*, a conjugate vaccine against serogroups A, C, W and Y. Today, *Menveo* is still the only vaccine that can protect children from 2 months old against four of the five most common serogroups that cause meningococcal disease.

Researchers working to develop a vaccine for meningitis B, however, had a much more difficult challenge that they had struggled with since the 1980s. Bacteria associated with meningitis B have a different form of sugar coating, which is very similar to a molecule in humans' central nervous systems. Consequently, patients' immune systems cannot recognize the bug as a foreign agent. Considering there are more than 3 000 variants of the meningitis B bacterium, it also was impractical to develop a vaccine for each one.

In 1994, after years of research, Dr. Rappuoli and his colleagues briefly admitted defeat in their work.

"With the technology available at the time, we knew we could not develop a vaccine for all the strains of meningitis B without some real breakthrough," Dr. Rappuoli said.

This much-needed breakthrough came in 1995. A new technology, genetic engineering, appeared to offer a possible solution. Genome researcher Craig Venter, who later became famous for sequencing the human genome, published research showing how he had sequenced the genetic code of the HIB bacterium. Dr. Rappuoli persuaded Mr. Venter to sequence the meningitis B genome at the Genomic Institute in the United States, launching a decisive stage of research.

After mapping the bacterium's genetic code, Dr. Rappuoli's team used computer modeling to identify the protein building blocks likely to generate an immune response that could be used to produce a vaccine.

"Genetic sequencing proved a goldmine," Dr. Rappuoli said. "We had spent years identifying a handful of antigens common to just a few strains of meningitis B. Now we had many to choose from."

Through genetic sequencing, Novartis researchers could identify the elusive proteins common to the more than 3 000 different disease-causing strains of meningitis B. Targeting them ensured a vaccine would be broadly effective against most of its variants.

The approach was dubbed "reverse vaccinology." It was, according to Dr. Rappuoli,

a revolution in vaccine development, enabling researchers to find vaccine targets at a much faster rate.

The culmination of the Novartis team's work was *Bexsero*, the world's first vaccine for meningitis B. Clinical trial data showed it can help protect vulnerable age groups, including infants at greatest risk of infection.

Bexsero was approved by the European Medicines Agency in January, by Australian authorities in August and by Canadian regulators in December 2013. Regulatory filings are underway elsewhere, including in Brazil. However, countries must take further steps to ensure the next generation of children will benefit from the protection the drug can bring. They are currently evaluating *Bexsero* to determine how it will fit into national immunization schedules and reimbursement systems. These evaluations and the eventual implementation of *Bexsero* may take several months to a few years.

Once new vaccines are broadly available, their public health value can last for generations and they can potentially eliminate a disease from a region, as was the case with meningitis C in the United Kingdom.

Bexsero cannot come too soon for Amelia Vitiello. She lost her 18-month-old daughter Alessia to meningitis B in 2007. The toddler fell ill with mild flu-like symptoms. Only when the condition worsened did Ms. Vitiello rush her daughter to the hospital where doctors battled unsuccessfully to save her.

"A part of my heart died then," said Ms. Vitiello, who founded a support group in Italy for families affected by meningitis. While Ms. Vitiello went on to have two more children, Alessia's death cast a long shadow.

"My husband and I try to be rational but every time one of my children has a raised temperature the tension rises. The feeling is terrifying; it creates a true psychosis. It is a fear you carry with you forever."

With *Menjugate*, *Menveo* and now *Bexsero*, Novartis is the only company with a portfolio that can help protect all age groups against the most prevalent forms of bacterial meningitis. But Novartis is not stopping there. The company's researchers continue to work toward a possible combination vaccine that, with a single shot, would protect against all of the most prevalent serogroups.

"Through the combined efforts of many people at Novartis over the decades, we are closer than ever to seeing an end to the death and suffering caused by this devastating disease," Dr. Oswald said. "Every life saved makes a difference and we remain focused on making this vaccine broadly available so that the tremendous public health value of *Bexsero* can be fully realized."

INDIA

Purvi Sharma, 3, looks away as his 45-day-old puppy, Rocky, is examined by veterinarians at Help in Suffering, a nonprofit animal hospital in Jaipur.

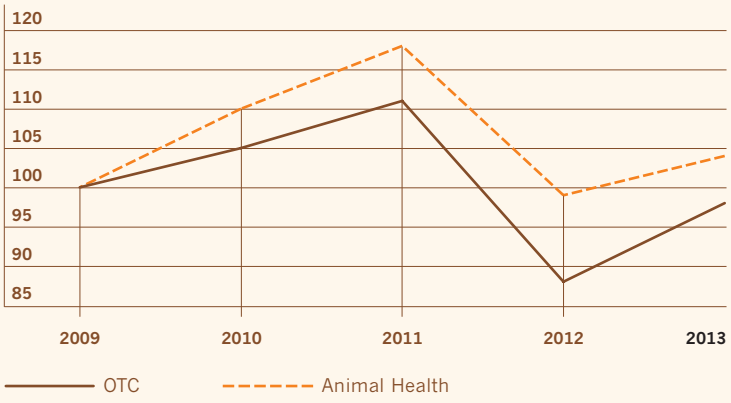
CONSUMER HEALTH OVERVIEW

KEY FIGURES
(in USD millions, unless indicated otherwise)

	2013	2012
Net sales	**4 064**	3 735
Operating income	**178**	48
Return on net sales (%)	**4.4**	1.3
Core operating income[1]	**298**	159
Core return on net sales (%)	**7.3**	4.3
Core Research & Development[1]	**305**	291
As a % of net sales	**7.5**	7.8
Free cash flow[2]	**208**	48
Net operating assets	**1 677**	1 761
Number of associates (FTE)[3]	**9 213**	8 752

[1] Core operating income eliminates the impact of acquisition-related factors and certain significant exceptional items. These adjustments are explained in detail starting on page 176.
[2] 2012 restated due to the post-employment benefit service cost allocation to the division
[3] Full-time equivalent positions at year end

OTC AND ANIMAL HEALTH TRENDS IN NET SALES INDEXED GROWTH 2009–2013
(Index: 2009 = 100%)



NEWS IN 2013

Consumer Health returned to growth in 2013, as sales increased 9% (+10% cc) to USD 4.1 billion, driven by both the Over-the-Counter (OTC) and Animal Health Divisions. Both divisions continued to recover from supply disruption in 2012, following the December 2011 shutdown of the Lincoln, Nebraska manufacturing site in the US. Reported operating income increased to USD 178 million compared to USD 48 million in 2012. Core operating income increased 87% (+95% cc) to USD 298 million, and core operating income margin increased 3.4 percentage points (cc), with a negative currency impact of 0.4 percentage points, to 7.3% of net sales.

OTC sales grew double digits (cc) over the prior year. Topical pain reliever *Voltaren* became the world's tenth-largest OTC brand, delivering double-digit sales growth, and *Otrivin* remains the best-selling non-prescription nasal decongestant spray worldwide. OTC also successfully re-launched headache and migraine brand *Excedrin*, fiber supplement *Benefiber*, antifungal *Lamisil*, and children's cough and cold treatment *Triaminic* in the US, after a market absence due to the Lincoln shutdown in 2011. Remediation efforts continue at the site – which is restarting on a line-by-line, product-by-product basis – and shipments of *Excedrin* and Animal Health brand *Sentinel* have already resumed from the site.

Animal Health delivered high single-digit growth (cc) compared to last year. The successful second quarter relaunch of *Sentinel* Flavor Tabs in the United States enabled the brand to recapture a significant share of the US heartworm prevention market. *Milbemax* remains the number one deworming product for cats and dogs in Europe and strengthened its position in 2013 with the reintroduction of the brand's popular chewy formulation. *Denagard*, our anti-infective in the pig and poultry categories, continued its global growth. Key companion animal therapeutic products such as *Atopica*, for atopic dermatitis, and *Onsior*, a non-steroidal anti-inflammatory drug, continued to gain share.

Across the Consumer Health businesses, Emerging Growth Markets delivered double-digit growth (cc), with exceptional results for OTC in China, Poland and the Ukraine, and for Animal Health in India, Bangladesh and Vietnam. Both divisions achieved strong results in Russia.

CONSUMER HEALTH

Novartis Consumer Health comprises the Over-the-Counter (OTC) and Animal Health Divisions. Both made strong progress in 2013. Animal Health continued to mine the human medicine pipeline for product innovations, focusing on treatments for skin disorders, cardiac and kidney problems, and pain relief. The OTC business made advances with several of its core brands amid rising global demand for reliable and affordable self-care products.

THE POWER OF BRANDS

Aging populations, a rising global middle class, and individuals' increasingly active role in managing their own health have created more demand for affordable and reliable over-the-counter products.

Novartis is meeting this demand by investing in its strong Over-the-Counter (OTC) brands, developing innovative new formulations, and expanding their reach globally. In 2013, OTC expanded its improved formulation of the topical pain reliever *Voltaren* in Europe and successfully relaunched *Excedrin* in the United States after a nearly year-long market absence. OTC is also working more closely in several markets with customers, retailers and pharmacists to build market share in places like the United States – where the division's products are returning to stores – and the Middle East and North Africa, where *Otrivin*, the world's best-selling non-prescription nasal decongestant spray, is a market leader.

CONSUMER INSIGHTS LEAD TO *VOLTAREN* 12HR INNOVATION

Voltaren gel launched as a prescription topical pain relief product more than 25 years ago. It is now the second-largest and fastest-growing over-the-counter analgesic brand globally and is trusted by millions to relieve joint pain and inflammation. But consumer research found clear demand for a stronger, longer-lasting formulation that could provide pain relief throughout the day and night.

In response, OTC conducted a multi-year scientific research program to develop an extended-relief (12hr) formula of topical *Voltaren*, which is now available in 21 markets around the world after the gel was launched in 10 European markets and Brazil in the past year.

Developing the new formulation involved 120 Novartis associates working to overcome some demanding technical hurdles. For example, the development team sought to extend the effectiveness of *Voltaren* gel by increasing the concentration of diclofenac – its active ingredient – from 1% to 2%. However, they found that the solubility of diclofenac could lead to the creation of drug crystals in higher concentrations, which would affect the rate of absorption through the skin.

"It was a deep and complicated technical challenge," said Dr. Gabi Hecker-Barth, Chief Medical Officer at Novartis OTC. "The thoroughness of the development program necessary to overcome that challenge underscores the science and innovation at the heart of the new formulation."

After many different prototype formulations and analytical tests, the development team's ultimate solution involved adding an ingredient that increased diclofenac's ability to penetrate the skin and enabled the new 2% formula to be highly effective at the appropriate concentration.

A three-year stability testing program verified the new product's shelf life and an almost four-year clinical phase confirmed the formula's safety, efficacy and tolerance on users' skin.

Throughout development, the team was careful to retain other key aspects of the original 1% gel.

"We've kept all the attributes users told us they liked," Dr. Hecker-Barth said. "The scent and cosmetic appeal are unchanged."

RECONNECTING WITH DEVOTED *EXCEDRIN* USERS

Novartis OTC began reintroducing the headache and migraine brand *Excedrin* in the United States in late 2012 and early 2013 after a market absence following the shutdown of its Lincoln, Nebraska, USA manufacturing plant in December 2011. Two popular *Excedrin* products – Migraine and Extra Strength – are now back on store shelves, and the *Excedrin* brand has already climbed back to the number five market position in the United States adult analgesics market.

The successful return of *Excedrin* required an ambitious campaign to reconnect with previous users, re-establish the product in stores, and rebuild brand loyalty. A dedicated team of OTC associates listened to consumers to understand their needs and past motivation in buying *Excedrin*. In the case of *Excedrin* Migraine, the marketing team launched an innovative marketing promotion employing traditional and social media, as well as an educational campaign to raise awareness among migraine sufferers of the importance of identifying and tracking the factors that trigger attacks.

"Migraine is a highly personal condition," said Roger Gravitte, Head of Sales for OTC Americas. "Once users find a treatment that works for them, they stick with it. We found people who could not wait to buy *Excedrin* again."

In an effort to re-establish the product in stores, the business development team worked closely with large retail groups and pharmacy chains – including Walmart, Rite Aid, Walgreens and CVS – to identify those consumers who had frequently purchased *Excedrin* Migraine. Market data revealed that 20% of customers had accounted for approximately 65% to 70% of product sales, and OTC ultimately sent some 1.4 million people who'd previously bought the product a complimentary package of *Excedrin* Migraine.

"It was the most aggressive, personalized loyalty campaign we've ever run," Mr. Gravitte said.

A series of outside partnerships also helped to cultivate *Excedrin* brand awareness.

The brand team partnered with singer, actress and migraine sufferer Jordin Sparks, who fronted the education campaign and talked widely about her personal experiences with migraines.

The product team also worked with a neurologist to develop My Migraine Triggers, a mobile app that enabled migraine sufferers to track the causes of their migraines – such as certain foods, beverages and activities – and share them with their physician. To date, more than 35 000 people have downloaded the app.

In addition, partnerships with several health websites and bloggers helped raise awareness of migraines. Engaging consumers through Facebook – which helped build an *Excedrin* fan base of more than 600 000 people – enabled visitors to share migraine relief stories and win prizes.

By late 2013, sales of *Excedrin* Migraine had returned to 88% of prior levels.

"We worked with our customers and listened to what they're telling us. We're rebuilding market share fast," Mr. Gravitte said.

COLLABORATION WITH PHARMACISTS BOOSTS *OTRIVIN* IN THE MIDDLE EAST

Otrivin is the world's best-selling nonprescription nasal decongestant spray. In the Middle East and North Africa, sales growth has been driven by working closely with pharmacists, who are the key link between over-the-counter medications and consumers. Buyers rely on them for their perspective on symptoms and their treatment recommendations.

"Pharmacists have a lot on their plate," said Odai El-Sayeh, Marketing Head for the Arabian Peninsula. "They need up-to-date information to be able to understand what the consumer needs are, what products are available to address these needs and how they work. The educational aspects are really important for them."

In response, OTC created the Novartis Pharmacists Academy (NPA), an educational framework designed to meet the professional training needs of pharmacists. It was launched in the Middle East and North Africa five years ago.

The academy has grown to almost 2 000 members, who are able to attend quarterly lectures, seminars and conferences in different locations across the region to stay up-to-date with medical developments and prescribing patterns.

Regular events have attracted participants from Egypt, Lebanon, Libya, Saudi Arabia, the United Arab Emirates and French-speaking countries in North Africa.

External experts lead discussions at the NPA on a wide range of health-related topics, such as pain management and cough and cold relief. Pharmacists can also attend product presentations connected to these topics and accrue continuing medical education points needed to renew their annual prescribing license.

"It's a very helpful initiative," said Maya Premchandran, a pharmacist in Dubai who joined the academy two years ago. "The seminars let us update our knowledge and the case studies get us to work our brains when it

comes to analyzing the needs of different age groups when they have various conditions."

Otrivin, in particular, has benefited from this close work with pharmacists in the Middle East. The brand has a 90% share of the nasal decongestants market in Egypt, an 88% share in Saudi Arabia, and an 86% share in the United Arab Emirates. Egypt is the largest *Otrivin* market worldwide in terms of units, reaching 22 million per year and growing – a reflection of the OTC Division's successful marketing strategy.

HUMAN DRUGS FOR ANIMAL PATIENTS

Using drugs on humans before using them on animals sounds counterintuitive – but it's an increasingly successful approach for the Novartis Animal Health Division.

Animal Health is working with other Novartis divisions and international scientific institutions to select and assess human drugs for veterinary development in areas such as oncology and allergy.

One noteworthy example of this approach occurred when veterinarian Dr. Thierry Olivry used cyclosporine as a last resort to treat a severe skin disorder on a colleague's dog.

The drug – originally developed as an immunosuppressant to prevent the rejection of transplanted organs in humans – was already widely used to treat human atopic dermatitis, a type of eczema that can lead to severe itching and flaky skin.

With his team at the University of North Carolina in the United States, Dr. Olivry devised an appropriate canine dose using laboratory samples of the Novartis drug.

The results were dramatic.

"Within four or five days the itch was gone," Dr. Olivry recalled. "And in just weeks the condition began to clear up completely."

The drug underwent extensive clinical trials in the United States, Japan and Europe. It was approved by the US Food and Drug Administration in 2003 and launched in the United States in January 2004. Branded as *Atopica*, it went on to become the market leader in the pet skincare market.

There are now a growing number of animal health products coming from the human medicine business at Novartis and nearly half of the division's top sellers have some connection with a human product.

Other examples include the Novartis product *Fortekor*, or benazepril, originally used to treat high blood pressure in humans and now administered in tablet form to treat cardiac problems in dogs and chronic kidney disease in cats.

And *Deramaxx*, given to dogs with osteoarthritis, contains deracoxib – a derivative of a compound used in some pain relief products for patients with arthritis and acute pain.

"Animal Health exploits synergies with other Novartis divisions," said Michaela Dehio, Global Head of R&D Strategy for Novartis Animal Health. "Our scientists are working to bring more products from the human health business to the veterinary health market."

These include *Lenziaren*, a phosphate-binding complex that was intended for human use and was registered in 2012 in Japan for feline use. Phosphate binders are administered to patients with chronic kidney disease who cannot otherwise remove high levels of phosphate that build up in their blood. *Lenziaren* can now be used to support phosphate control in cats with kidney problems.

The most promising products for animal health within the human medicine business are those for cancer, and heart and eye problems. These products have significant business development potential.

"A big part of our pipeline comes from the Pharmaceuticals Division," Ms. Dehio said. "Diseases are often very comparable and it's possible that we can translate a lot to animal health."

Clinical trials also benefit. Data from studies conducted by the Pharmaceuticals Division, for example, can support the development of veterinary products and vice versa.

Animal species mimicking the human disease can act as a proof-of-principle model for human diseases. Examples are dog trials for atopic dermatitis and congestive heart failure that have been used for human pharmaceutical drug development. As a result, there are numerous synergies, including benefits in terms of compound manufacturing and processing, which result in shorter development timelines and increased productivity.

"Leveraging synergies between the development of human and animal drugs ensures that we can provide fast-to-market innovative solutions for the unmet needs of our four-legged patients," Ms. Dehio added.

PIPELINE

Novartis is consistently rated as having one of the industry's most respected development pipelines, with over 200 projects in clinical development, including 144 in the Pharmaceuticals Division. 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.

See glossary on page 54.

Pharmaceuticals

Project/product	Common name	Mechanism of action
ACZ885	canakinumab	Anti-interleukin-1ß monoclonal antibody
AFQ056	mavoglurant	Metabotropic glutamate receptor 5 antagonist
AIN457	secukinumab	Anti-interleukin-17 monoclonal antibody
AUY922	luminespib	ATP-competitive non-geldanamycin inhibitor of HSP90[3]
BAF312	siponimod	Sphingosine-1-phosphate receptor modulator
BCT197	–	Anti-inflammatory agent
BGJ398	–	Pan-FGF receptor kinase inhibitor
BGS649	–	Aromatase inhibitor
BKM120	buparlisib	PI3K inhibitor
BYL719	–	PI3K inhibitor
BYM338	bimagrumab	Inhibitor of activin receptor type II
CAD106	–	Beta-amyloid-protein therapy
CTL019	–	CD19-targeted chimeric antigen receptor T-cell immunotherapy
DEB025	alisporivir	Cyclophilin inhibitor
Gilenya	fingolimod	Sphingosine-1-phosphate receptor modulator
HSC835	–	Stem cell regeneration
Jakavi	ruxolitinib	Janus kinase inhibitor
KAE609	–	PfATP4 inhibitor
LBH589	panobinostat	Histone deacetylase inhibitor
LCI699	–	Aldosterone synthase inhibitor
LCQ908	pradigastat	Diacylglycerol acyl transferase-1 inhibitor
LCZ696	–	Angiotensin receptor-neprilysin inhibitor
LDE225	sonidegib	Smoothened receptor/ hedgehog signaling inhibitor
LDK378	ceritinib	ALK inhibitor
LEE011	–	CDK4[4] inhibitor
LFF571	–	Bacterial elongation factor Tu inhibitor
LGX818	encorafenib	RAF inhibitor
LIK066	–	SGLT 1/2 inhibitor
LJM716	–	HER3 inhibitor
Lucentis	ranibizumab	Anti-VEGF[5] monoclonal antibody
MEK162	binimetinib	MEK[7] inhibitor
MEK162 + LGX818	binimetinib + encorafenib	MEK[7] inhibitor + RAF inhibitor
NVA237 *(Seebri)*	glycopyrronium bromide	Long-acting muscarinic antagonist

[1] Filings that have received approval in one of the markets (either United States or European Union) but are awaiting approval in the other market are included in the table.
[2] Refers to lead indication only
[3] Heat shock protein 90
[4] Cyclin-dependent kinase 4

Potential indication/indications	Therapeutic area	Route of administration	Planned submission dates [1, 2]	Current phase [2]
Gouty arthritis (lead development indication), hereditary periodic fevers, secondary prevention of cardiovascular events	Integrated Hospital Care, Critical Care	Subcutaneous	Approved EU	III (US)
Fragile X syndrome	Neuroscience	Oral	2015	III
Psoriasis (lead indication), rheumatoid arthritis, ankylosing spondylitis, psoriatic arthritis, uveitis	Integrated Hospital Care, Ophthalmology	Subcutaneous, intravenous	Submitted US, EU	Submission
Solid tumors	Oncology	Intravenous	≥2018	II
Secondary progressive multiple sclerosis	Neuroscience	Oral	≥2018	III
Chronic obstructive pulmonary disease	Primary Care	Oral	≥2018	II
Solid tumors	Oncology	Oral	≥2018	II
Obese hypogonadotropic hypogonadism	Critical Care	Oral	≥2018	II
Breast cancer (lead indication), solid tumors	Oncology	Oral	2015	III
Solid tumors	Oncology	Tablet	≥2018	I
Sporadic inclusion body myositis (lead indication), hip fracture	Integrated Hospital Care	Intravenous	2016	III
Alzheimer's disease	Neuroscience	Subcutaneous, intramuscular	≥2018	II
Leukemia	Oncology	Intravenous	2016	II
Chronic hepatitis C	Integrated Hospital Care	Oral	2017	II
Primary progressive multiple sclerosis (lead development indication), chronic inflammatory demyelinating polyradiculoneuropathy	Neuroscience	Oral	2015	III
Stem cell transplantation	Integrated Hospital Care	Infusion	≥2018	II
Polycythemia vera	Oncology	Oral	2014	III
Malaria	Established Medicines	Oral	2017	II
Relapsed or relapsed-and-refractory multiple myeloma	Oncology	Oral	2014	III
Cushing's disease	Oncology	Oral	2017	II
Familial chylomicronemia syndrome	Critical Care	Oral	2014	III
Hypertension (lead indication), heart failure (reduced ejection fraction), heart failure (preserved ejection fraction)	Critical Care, Primary Care	Oral	2014	III
Advanced basal cell carcinoma (lead indication), medulloblastoma, solid tumors	Oncology	Oral	2014	II
ALK+ advanced non-small cell lung cancer	Oncology	Oral	2014	II
Breast cancer (lead indication), solid tumors	Oncology	Oral	2016	III
C. difficile infection	Integrated Hospital Care	Oral	≥2018	II
BRAF mutant melanoma (lead indication), solid tumors	Oncology	Oral	2016	III
Type II diabetes	Primary Care	Oral	≥2018	II
Solid tumors	Oncology	Intravenous	≥2018	I
Choroidal neovascularization and macular edema[6]	Ophthalmology	Intravitreal	2016	III
NRAS mutant melanoma (lead indication), LGSOC,[8] solid tumors	Oncology	Oral	2015	III
BRAF mutant melanoma	Oncology	Oral	2016	III
Chronic obstructive pulmonary disease (lead indication), asthma	Primary Care	Inhalation	Approved EU	III (US)

[5] Vascular endothelial growth factor
[6] Choroidal neovascularization and macular edema secondary to conditions other than age-related macular degeneration, diabetic macular edema, retinal vein occlusion and pathologic myopia
[7] Combination of mitogen-activated protein kinase and extracellular signal-regulated kinase
[8] Low-grade serous ovarian cancer

PIPELINE GLOSSARY

Confirmatory development Projects for which a positive proof of concept (POC) has been established and that are currently in either post-POC clinical trials (Phase I/II/III) or under review by regulatory agencies for the purpose of granting marketing authorization (submission).

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 non-proprietary 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.

The glossary continues on page 56.

Project/product	Common name	Mechanism of action
PKC412	midostaurin	Signal transduction inhibitor
QAW039	–	Anti-inflammatory agent
QAX576	–	Anti-interleukin-13 monoclonal antibody
QGE031	–	High affinity anti-IgE monoclonal antibody
QVA149 *(Ultibro)*	indacaterol, glycopyrronium bromide	Long-acting beta$_2$ agonist and long-acting muscarinic antagonist
RAD001 *(Afinitor/Votubia)*	everolimus	mTOR[9] inhibitor
RLX030	serelaxin	Recombinant form of human relaxin-2 hormone
SOM230 *(Signifor LAR)*	pasireotide	Somatostatin analogue
Tasigna	nilotinib	Signal transduction inhibitor
Tekturna	aliskiren	Direct renin inhibitor
TKI258	dovitinib lactate	VEGFR 1-3,[11] FGFR 1-3,[12] PDGFR[13] and angiogenesis RTK[14] inhibitor
Xolair	omalizumab	Anti-IgE monoclonal antibody

Alcon

Project/product	Common name	Mechanism of action
AcrySof IQ ReSTOR 2.5D	–	Multifocal aspheric intraocular lens
AcrySof IQ ReSTOR Toric 2.5D	–	Multifocal, aspheric and cylinder correcting intraocular lens
AcrySof IQ ReSTOR Toric 3.0D	–	Multifocal, aspheric and cylinder correcting intraocular lens
Air Optix Aqua Colors	–	Spherical correction with color enhancement
Allegretto EX-500 laser	–	Refractive correction
CLM041	–	Presbyopia correcting contact lens
GLT137	travoprost	Prostaglandin analogue
EXE844	–	Anti-infective
EXE844b	–	Anti-infective
EXZ829	olopatadine hydrochloride	Antihistamine and mast cell stabilization
Ilevro suspension	nepafenac	Anti-inflammatory
LCE293	–	Disinfection and cleaning
LFG316	–	Complement Inhibition
LuxOR microscope	–	Visualization
RTH258	–	Anti-VEGF
Simbrinza suspension	brinzolamide/ brimonidine tartrate	Carbonic anhydrase inhibitor/ alpha agonist

[1] Filings that have received approval in one of the markets (either United States or European Union) but are awaiting approval in the other market are included in the table.
[2] Refers to lead indication only
[9] Mammalian target of rapamycin
[10] Diffuse large B-cell lymphoma

Potential indication/indications	Therapeutic area	Route of administration	Planned submission dates [1, 2]	Current phase [2]
Acute myeloid leukemia (lead indication), aggressive systemic mastocytosis	Oncology	Oral	2015	III
Asthma	Primary Care	Oral	≥2018	II
Allergic diseases	Primary Cary	Subcutaneous	≥2018	II
Allergic diseases	Primary Care	Subcutaneous	≥2018	II
Chronic obstructive pulmonary disease	Primary Care	Inhalation	Approved EU	III (US)
HER2+ breast cancer 1st line, HER2+ breast cancer 2nd/3rd line, DLBCL,[10] non-functioning GI and lung neuroendocrine tumors, tuberous sclerosis complex seizures	Oncology	Oral	2014	III
Acute heart failure	Critical Care	Intravenous	Submitted US, EU	Submission
Acromegaly (lead development indication), Cushing's disease	Oncology	Subcutaneous, intramuscular	Submitted US, EU	Submission
CML treatment-free remission	Oncology	Oral	2016	II
Reduction of CV death/ hospitalizations in chronic heart failure	Critical Care	Oral	2016	III
Solid tumors	Oncology	Oral	2017	II
Chronic idiopathic urticaria	Critical Care	Subcutaneous	Submitted US, EU	Submission

Potential indication/indications	Therapeutic area	Route of administration	Planned submission dates [1, 2]	Current phase [2]
Presbyopia and cataractous lens replacement	Surgical	Surgical	Submitted US	Submission
Presbyopia and cataractous lens replacement with astigmatism correction	Surgical	Surgical	2014 US	Advanced development
Presbyopia and cataractous lens replacement with astigmatism correction	Surgical	Surgical	Submitted US	Submission
Contact lens wear	Vision Care	Contact lens	Submitted US	Submission
Photorefractive keratotomy	Surgical	Surgical	2014 US	Advanced development
Presbyopia correction	Vision Care	Contact lens	Submitted	Submission
Glaucoma/ocular hypertension	Ophthalmic Pharmaceuticals	Topical ocular	Submitted	Submission
Otitis externa	Ophthalmic Pharmaceuticals	Topical	2014	III
Otic infections	Ophthalmic Pharmaceuticals	Topical	2015	II
Allergic conjunctivitis	Ophthalmic Pharmaceuticals	Topical ocular	2014	III
Macular edema	Ophthalmic Pharmaceuticals	Topical ocular	2015	III
Contact lens care	Vision Care	Lens care	≥2014	Advanced development
Geographic atrophy	Ophthalmic Pharmaceuticals	Intravitreal	≥2017	II
Cataract surgery	Surgical	Surgical	2014	Advanced development
Wet macular degeneration	Ophthalmic Pharmaceuticals	Intravitreal	≥2016	II
Glaucoma/ocular hypertension	Ophthalmic Pharmaceuticals	Topical ocular	Submitted EU	III

[11] Vascular endothelial growth factor receptor
[12] Fibroblast growth factor receptor
[13] Platelet-derived growth factor receptor
[14] Receptor tyrosine kinase

PIPELINE (CONTINUED)

GLOSSARY (CONTINUED)

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.

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 POC has been established and studies are being conducted to establish the safety, efficacy or performance to address regulatory requirements for obtaining marketing authorization.

Submitted 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.[1] The application contains comprehensive data and information gathered during human clinical trials and animal studies conducted through the various phases of drug development.

Sandoz (biosimilars)

Project/product	Common name	Mechanism of action
EP2006	filgrastim	Granulocyte colony-stimulating factor
GP2013	rituximab	Anti-CD20 antibody
GP2015	etanercept	TNF-α inhibitor
GP2017	adalimumab	TNF-α inhibitor
HX575	epoetin alfa	Erythropoiesis-stimulating agent
HX575 s.c.	epoetin alfa	Erythropoiesis-stimulating agent
LA-EP2006	pegfilgrastim	Pegylated granulocyte colony-stimulating factor

Vaccines & Diagnostics

Project/product	Common name	Vaccine Type
Acellular Pertussis combination	Tdap vaccine	Pediatric
Bexsero US	Meningococcal B vaccine	Meningitis
C. difficile[15]	C. difficile vaccine	Hospital Infections
Fluad US	Seasonal influenza vaccine	Seasonal Influenza
Flucelvax pediatric US	Seasonal influenza vaccine	Seasonal Influenza
Flucelvax QIV	Seasonal influenza vaccine	Seasonal Influenza
Group B streptococcus	Group B streptococcus vaccine	Maternal
H5N1 flu cell culture vaccine[16]	Pandemic influenza vaccine	Pandemic
H7N9[16]	H7N9 vaccine	Pandemic Influenza
Human immunodeficiency virus (HIV)[17]	HIV vaccine	HIV
MenABCWY	Meningococcal A, B, C, W and Y vaccine	Meningitis
Menjugate liquid	Meningococcal C vaccine	Meningitis
P. aeruginosa[15]	P. aeruginosa vaccine	Hospital Infections
Quadrivalent influenza vaccine – pediatric adjuvanted	Seasonal influenza vaccine	Seasonal Influenza
S. aureus	S. aureus vaccine	Hospital Infections

[1] Filings that have received approval in one of the markets (either United States or European Union) but are awaiting approval in the other market are included in the table.
[2] Refers to lead indication only
[15] Collaboration with Valneva
[16] Collaboration with United States Department of Health and Human Services
[17] Collaboration with United States National Institutes of Health

Potential indication/indications	Therapeutic area	Route of administration	Planned submission dates [1, 2]	Current phase [2]
Chemotherapy-induced neutropenia; mobilization of peripheral blood progenitor cells and others (same as originator)	Oncology	Subcutaneous and intravenous		III
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)	Oncology and Immunology	Intravenous		II and III
Arthritidies (rheumatoid arthritis, ankylosing spondylitis, psoriatic arthritis), plaque psoriasis and others (same as originator)	Immunology	Subcutaneous		III
Arthritidies (rheumatoid arthritis, ankylosing spondylitis, psoriatic arthritis), plaque psoriasis and others (same as originator)	Immunology	Subcutaneous		III
Chronic kidney disease, chemotherapy-induced anemia and others (same as originator)	Oncology and Nephrology	Subcutaneous and intravenous	US	III
Chronic kidney disease	Oncology and Nephrology	Subcutaneous	EU (extension nephrology, appproved as *Binocrit* since 2007)	III
Chemotherapy-induced neutropenia and others (same as originator)	Oncology	Subcutaneous		III

Potential indication/indications	Therapeutic area	Route of administration	Planned submission dates [1, 2]	Current phase [2]
Prevention of tetanus, diphtheria and pertussis	Infectious Disease	Intramuscular	≥2015	I
Prevention of meningococcal B disease	Infectious Disease	Intramuscular	≥2015	II
Prevention of C. difficile disease	Infectious Disease	Intramuscular	≥2015	I
Prevention of seasonal influenza	Infectious Disease	Intramuscular	2014	III
Prevention of seasonal influenza	Infectious Disease	Intramuscular	≥2015	III
Prevention of seasonal influenza	Infectious Disease	Intramuscular	≥2015	III
Prevention of group B streptococcus	Infectious Disease	Intramuscular	≥2015	II
Prevention of H5N1 influenza	Infectious Disease	Intramuscular	≥2015	II
Prevention of H7N9 influenza	Infectious Disease	Intramuscular	≥2015	Not applicable
Prevention of HIV disease	Infectious Disease	Intramuscular	≥2015	I
Prevention of meningococcal A, B, C, W and Y disease	Infectious Disease	Intramuscular	≥2015	II
Prevention of meningococcal C disease	Infectious Disease	Intramuscular	Submitted	Submission
Prevention of P. aeruginosa disease	Infectious Disease	Intramuscular	≥2015	II
Prevention of seasonal influenza	Infectious Disease	Intramuscular	≥2015	III
Prevention of S. aureus disease	Infectious Disease	Intramuscular	≥2015	I

CORPORATE RESPONSIBILITY

We aim to improve global health by discovering and developing innovative healthcare products, targeting unmet medical needs.

Novartis collaborates with others to help address some of the world's greatest health challenges. We focus our corporate responsibility work on two areas:

Expanding access to healthcare

We work to expand access to healthcare and reach more patients with our medicines and vaccines. We concentrate our efforts on controlling and eliminating diseases such as malaria and leprosy, and finding new treatments and adaptive solutions to improve health in the developing world. This past year, we also worked to strengthen Social Ventures, innovative business approaches that build local healthcare capabilities in emerging markets.

Doing business responsibly

Responsibility is a core part of our business and underscores our mission of caring and curing. We care for our associates, strive to positively contribute to the communities where we live and work, and protect the environment. We also conduct business ethically, maintaining a Code of Conduct and governance system to ensure our associates uphold our values.

CONTENTS

TANZANIA

PAGE 58 *A child with albinism takes her plate to the dining hall as a storm comes in at the Kabanga Protectorate Center. Albinism affects roughly one in 20 000 people worldwide. But in Tanzania – where rural gene pools are more isolated – as many as one in 2 000 are estimated to have the disorder that hinders the body's ability to produce pigment.*

PAGE 60 *Children play after school at the Kabanga Protectorate Center. The center is an essential sanctuary and provider of medical care for Tanzanian children with albinism, who face social stigma and elevated risks of serious health problems such as skin cancer and blindness.*

KEY PERFORMANCE INDICATORS

Indicator	2013	2012	2011	2010	2009
Economic					
Net sales in USD billions	**57.9**	56.7	58.6	50.6	44.3
Net income in USD billions; % of net sales [1]	**9.3; 16%**	9.4; 17%	9.1; 15%	10; 20%	8.5; 19%
Core Research & Development in USD billions; % of net sales	**9.6; 17%**	9.1; 16%	9.2; 16%	8.1; 16%	7.3; 16%
Personnel costs in USD billions; % of net sales	**15.6; 27%**	14.8; 26%	14.9; 26%	12.2; 24%	10.9; 25%
Taxes in USD billions; % of net income before taxes [1]	**1.4; 13%**	1.5; 14%	1.5; 14%	1.7; 15%	1.5; 15%
Dividends in USD billions; % of net income attributable to Novartis shareholders [1,2]	**6.8; 74%**	6.1; 66%	6; 67%	5.4; 55%	4.5; 53%
Cash returned to shareholders via second-line share repurchases in USD billions; % of Group total net income	**0.2; 2%**	0; 0%	2.4; 26%	0; 0%	0; 0%
Share price at year end (CHF)	**71.20**	57.45	53.70	54.95	56.50
Expanding access to healthcare [3]					
Total patients reached with Novartis products (millions) [4]	**1 215**	1 200	1 148	913	930
Patients reached through access-to-healthcare programs (millions)	**103.6**	101.4	89.6	85.5	79.5
Value of access-to-healthcare programs (USD millions)	**2 126**	2 051	1 784	1 544	1 510
Doing business responsibly					
Full-time equivalent positions	**135 696**	127 724	123 686	119 418	99 834
Resignations (incl. retirements); separations; hiring (% of associates)	**8; 4; 18**	9; 5; 17	8; 4; 15	8; 3; 14	8; 3; 14
Women in management: [5] % of management; % of Board of Directors	**38%; 14.3%**	37%; 16.7%	36%; 18.2%	36%; 16.7%	35%; 16.7%
Number of associate nationalities	**155**	153	153	149	144
Lost-time injury and illness rate (per 200 000 hours worked) [6,7]	**0.12**	0.14	0.19	0.18	0.22
Total recordable case rate (per 200 000 hours worked) [6,7,8]	**0.42**	0.45	0.61	0.73	0.93
Transportation-related injuries leading to lost time [6,7]	**26**	37	39	49	58
Contact water use, excluding cooling water (million m^3) [7,9]	**17.3**	17.1	17.1	15.1	15.0
Energy use (million GJ), on site and purchased [7,9]	**20.0**	19.4	19.2	17.6	17.0
GHG emissions, Scope 1 vehicles (1 000 t) [7,9]	**170**	177	192	166	174
GHG emissions, total Scope 1, including vehicles, and Scope 2 (1 000 t) [7,9]	**1 626**	1 644	1 703	1 505	1 509
Total operational waste not recycled (1 000 t), hazardous and non-hazardous [7,9]	**138**	133	142	154	141
Active Novartis associates with email addresses trained and certified on Code of Conduct via e-learning course [10]	**113 092**	98 175	47 499	48 137	55 793
Cases of misconduct reported; substantiated [11]	**1 501; 768**	1 675; 1 083	1 522; 842	1 236; 743	913; 541
Dismissals and resignations related to misconduct [11]	**357**	566	716	608	564
Number of suppliers posing an elevated risk under Responsible Procurement [12]	**357**				
Suppliers with active follow-up [12,13]	**129**				
Suppliers audited [12,14]	**28**				

[1] Operating income, tax and net income 2012 and 2011 were restated to reflect the adoption of the revised IAS19 on *Employee Benefits* (see pages 247 and 248).
[2] Dividend payment 2013: proposal to the 2014 Annual General Meeting
[3] See table on page 73 for additional details
[4] 2013 and 2012 number not fully comparable to previous years due to methodology changes
[5] Management defined locally. Data source % of management: FirstPort (Local Mgmt.Flag) as of December 2013
[6] Excludes data for contractors
[7] Alcon data included in Group figures from 2011 onwards
[8] Includes all work-related injury and illness, whether leading to lost time or not
[9] For details on environment see: www.novartis.com/environmental-care
[10] Prior to 2012: Target population did not include all Novartis associates but did include certain third-party employees.
[11] Figures of previous years have been updated to reflect completion of outstanding investigation.
[12] On April 1, 2013, Responsible Procurement (RP) was launched and replaced the former Third-Party Management Program (including KPIs). RP includes new suppliers, products, services or sites from existing suppliers. Figures include data on labor rights, HSE and animal welfare only.
[13] Active follow-up includes information requests or audits commissioned to gauge labor rights, HSE or animal welfare standards.
[14] Suppliers' labor rights, HSE or animal welfare audits

EXPANDING ACCESS TO HEALTHCARE

NEWS IN 2013

The Novartis Vaccines Institute for Global Health developed affordable vaccines for typhoid and paratyphoid A fevers, and reached a licensing agreement with Biological E Limited for further development and delivery of these vaccines in the developing world.

Novartis joined the Power of One® campaign of Malaria No More, committing to donate up to 3 million pediatric antimalarial treatments through 2015.

Novartis received several industry awards for its Social Ventures, including: GBCHealth Business Action on Health, Ethics in Business Award for "Outstanding Corporation" by World Forum for Ethics in Business, Scrip Award for "Best Advance in an Emerging Market," and "Responsible CEO of the Year" by CR Magazine.

Dr. Ann Aerts was appointed Head of the Novartis Foundation for Sustainable Development (NFSD), as of January 1, 2013. Dr. Aerts took over from Prof. Klaus M. Leisinger, who led NFSD for more than 30 years.

NFSD worked with leading leprosy experts to develop a new strategy to help eliminate leprosy.

NFSD, the Swiss Tropical and Public Health Institute, and the World Health Organization released Essential Newborn Care, the first of four e-learning courses on maternal and child health as part of IMPACtt – Integrated Management of Pregnancy and Childbirth training tool.

Novartis signed the Business for Social Responsibility Guiding Principles on Access to Healthcare.

REINFORCING INITIATIVES TO EXPAND ACCESS TO HEALTHCARE

Our strategy for expanding access to healthcare has three pillars: pioneer new business approaches to tackle health problems; contribute to the control and elimination of diseases, with a specific focus on malaria and leprosy; and find new treatments for illnesses endemic to developing regions. In 2013 we made progress in all three areas.

TACKLING HEALTH PROBLEMS THROUGH A UNIQUE BUSINESS APPROACH

Over the past year we took steps to improve and expand our Social Ventures, innovative business models that align the ambitions of society and business to create sustainable benefits for both. They bring medicines and improved healthcare to underserved people with limited incomes in the developing world. And they generate a small profit that we can reinvest in the ventures, which makes them self-sustaining with the capacity to grow.

These ventures complement our philanthropic efforts, which focus on providing health education and medicines to people who would otherwise be unable to afford treatment. They also complement the company's overall strategy of expanding our presence in emerging markets, where rising living standards are lifting millions of people into the middle class.

India is home to our oldest and most fully developed Social Venture, Healthy Family ("*Arogya Parivar*" in Hindi), launched in 2007. This venture was highlighted in a September 2013 article in the Harvard Business Review that focused on companies addressing societal needs while building profitable enterprises.

"This is novel and is much needed," said Anita Wagner, a public health expert at Harvard Medical School in the United States. "It is very unique for a pharmaceutical company to try to work on a systems level and to do a comprehensive intervention."

Novartis also initiated several changes this year in India to improve the program's effectiveness. For example, we are increasing the number of available medicines from 28

to 109. These additional medicines will target illnesses that typically afflict rural Indians, including a majority of prevalent communicable diseases such as infections, tuberculosis, malaria and diarrhea. In addition, these medicines will cover more than half of non-communicable diseases such as diabetes and heart disease, which represent a fast-growing area of need.

Forty of the Novartis products available through the Healthy Family venture will be on India's list of essential medicines, with prices set by the government.

We are also in the process of establishing at least one dedicated distributor in each of the 250 geographic areas where we operate, which will improve our ability to keep essential medicines in stock. We are increasing training for our two village representatives in each geographic area, as well.

These measures are designed to strengthen a venture that is already having an impact. Since 2010, Healthy Family employees in India have organized more than 300 000 village health meetings and health camps attended by almost 11 million people. Through a system of referral cards, we know that at least 12% of the people who attended village health information meetings subsequently consulted a doctor. That's up from just 2% at the venture's outset. We believe the actual percentage may be even higher based on the possibility that some people misplaced their cards.

While improving the operating model in India, we made modest expansions to our Social Ventures in other countries, adapting the model to local needs. In Vietnam, where we have an agreement with the government to help improve access to healthcare in rural areas, we are together creating pilots in 12 locations, adding to three begun in 2012. In Kenya, we are adding 10 more pilots and are testing ways to overcome the challenges of limited healthcare infrastructure and weak distribution channels. And in Indonesia, we initiated four pilot projects.

TARGETING MALARIA

In 2013 we launched a new initiative as part of our ongoing battle against malaria, which affects an estimated 219 million people worldwide and kills more than 600 000 each year. In collaboration with the nonprofit organization Malaria No More and other partners, Novartis is supporting a three-year social engagement campaign to enlist the general public in fighting malaria.

The campaign – called Power of One® – launched last autumn and is built around a simple, potent fact: USD 1 can provide a child with the medicine needed to fight this life-threatening disease, which is prevalent in nearly 100 countries worldwide.

"Power of One® offers everyone a chance to engage and make a difference for children suffering from malaria," said Joseph Jimenez, Novartis Chief Executive Officer.

Every dollar donated to the campaign will buy and deliver a complete malaria treatment for a child diagnosed with the disease. Novartis provides financial support to the campaign as its exclusive treatment partner, and we are also supplying our antimalarial medicine without profit. In addition, Novartis will match public donations with up to 3 million more treatments of our antimalarial medicine over three years, doubling the public impact.

The campaign harnesses the creative strengths of more than a dozen partners with skills in campaigning and digital technology. Malaria No More enlisted West, a marketing and creative group founded by a former Apple marketing executive, to help shape the campaign's strategy. Blue State Digital, a specialist in online fundraising and social networking, is applying lessons from the election campaigns of US President Barack Obama.

The Power of One® website is designed to make it easy for people to donate and to use social media to encourage friends to get involved.

Treatments are initially being shipped to Zambia and about 400 000 have already been delivered. Malaria No More plans to add other countries to the list of recipients as the campaign gains momentum.

Our support for the campaign builds on our other ongoing efforts to combat malaria. Since 2001, we have supplied more than 600 million malaria treatments without profit, more than 200 million of which were developed specifically for children.

TARGETING LEPROSY

Our nearly three-decade effort to eliminate another devastating disease, leprosy, illustrates the special challenge posed by the final stretch before the finish line. Over the past 30 years, more than 15 million leprosy patients have been treated and the incidence of the disease has declined significantly – a tremendous public health success. Since 2000, we have contributed by donating Novartis multidrug therapy to leprosy patients worldwide through the World Health Organization.

But progress against the disease – which can result in disability and carries a severe social stigma – has slowed in recent years. The number of new leprosy patients reported annually is about 230 000 and has remained stable over the past seven years. Most new cases are concentrated in a few countries, such as India, Brazil and Indonesia. At the same time, public health officials have understandably been shifting their focus to diseases affecting more people, such as HIV/AIDS and tuberculosis.

"When you reach the last mile, people kind of forget about the disease," said Dr. Ann Aerts, Head of the Novartis Foundation for Sustainable Development (NFSD), which is playing a leading role in the effort to eliminate leprosy.

To regain momentum and put the disease back on the global health agenda, NFSD invited leprosy experts in June 2013 to discuss future approaches to curbing the disease. These experts agreed that leprosy transmission can be halted through several

measures. One is early diagnosis and treatment. Another is tracking down and testing family members, neighbors and others who have had close contact with leprosy patients in the past. This is particularly important because the disease is transmitted through close and frequent personal contact. Because leprosy is caused by slow-growing bacteria, symptoms can take up to 20 years to appear.

With feedback from experts, NFSD adopted a new leprosy strategy with a greater focus on interrupting transmission of the disease.

But challenges still exist. For one, knowledge of leprosy among healthcare workers is declining given the relative rarity of the disease. NFSD is therefore exploring ways to use technology such as e-learning programs to further educate healthcare workers.

And while finding people who have had close contact with leprosy patients can be painstaking work, it is proving to be an effective way to identify and treat new patients as soon as possible. In Cambodia, NFSD has spent two years working with the government and a local partner to pilot this novel way of identifying new patients. This approach accounted for about 60% of the total number of new patients detected in Cambodia in 2012, the most recent year for which numbers are available.

As a next step, NFSD plans to evaluate the effectiveness of administering preventive drug treatments to people who have had close contact with leprosy patients, even if they do not show signs of infection.

FINDING NEW TREATMENTS FOR DEVELOPING WORLD DISEASES

Novartis made progress in 2013 on developing two new treatments for malaria, and agreed to license vaccines developed to protect against typhoid fever.

The parasites that cause malaria eventually become resistant to treatment with common medicines. There are early signs of emerging resistance in Southeast Asia to the current standard of treatment, artemisinin-based combination therapy (ACT), developed by Novartis and others.

Novartis is continuing to work on several new drug candidates to treat malaria. One, KAE609, is in Phase II clinical development. This compound is a new class of chemical that acts faster than existing ACT therapies and may combat the parasite's ability to develop resistance to treatment.

However, to ensure all parasites are eliminated and to minimize the potential for them to develop resistance to the drug, the new compound must be paired with a slower-acting compound. Novartis researchers are testing possible partner drugs.

Another compound, KAF156, is in Phase I clinical trials. According to initial results, it appears effective in treating malaria and may also prevent people from developing the disease. Another study is underway to assess the compound's effectiveness in prevention.

Beyond malaria, the Novartis Vaccines Institute for Global Health developed a vaccine for typhoid – a significant public health problem for countries with insufficient clean water and proper sanitation. In July 2013, Novartis joined forces with Biological E Limited (BioE), a biopharmaceutical company based in India, to further develop and produce two vaccines to protect against typhoid and paratyphoid fevers. Novartis agreed to transfer technology to BioE, which will handle manufacturing, regulatory approvals and distribution in the developing world.

The agreement will make the vaccines widely available in India and other countries where there is greatest need for protection. More than 21 million cases of typhoid fever and 5 million cases of paratyphoid A fever are reported each year worldwide, especially in areas with poor sanitation and lack of access to clean water.

NOVARTIS ACCESS TO HEALTHCARE PROGRAMS 2013

Research & Development

Program	Strategic objective	FTEs[1]	Value[2] (USD millions)
Novartis Institute for Tropical Diseases	Discover and develop effective and affordable treatments for major tropical diseases, such as malaria, dengue fever and African sleeping sickness	111	17.8
Novartis Vaccines Institute for Global Health	Discover and develop effective and affordable vaccines to prevent infectious diseases prevalent in developing countries, such as typhoid	46	8.8
Novartis Institutes for BioMedical Research neglected disease programs	Discover and develop novel and affordable treatments for infectious diseases prevalent in developing countries, such as Chagas disease, leishmaniasis and infectious diarrhea	35	8.3
Total		192	34.9

Patient assistance

Program	Strategic objective	Patients reached (thousands)	Value[3] (USD millions)
Novartis Patient Assistance Foundation, Inc.	Assist patients experiencing financial hardship, without private or public prescription coverage for their medicines (US)	85.0	538.0
Glivec patient assistance	Ensure access to *Glivec* – where needed and possible – for patients with rare cancers who cannot afford the drug	55.0	1 107.9
Tasigna patient assistance	Expand access to *Tasigna* for patients with rare cancers through Novartis Oncology Access	4.1	107.8
Exjade patient assistance	Expand access to *Exjade* for more patients with thalassemia and sickle cell diseases, in more places	6.8	26.8
Alcon medical missions[4]	Provide traveling medical teams with Alcon products	549.3	65.9
Alcon US patient assistance	Assist patients experiencing financial hardship by providing Alcon products	11.9	13.9
Malaria/*Coartem*	Provide *Coartem* without profit for public sector use	102 273.5	208.8
Leprosy (WHO)	Contribute to the global elimination of leprosy by providing multidrug therapy (MDT) to all patients through WHO	243.6	4.5
Tuberculosis[5]	Provide fixed-dose combination tablets to all adult category I and III patients in Tanzania	22.0	0.5
Fascioliasis/*Egaten*[6]	Provide *Egaten* free of charge to treat fascioliasis and paragonimiasis	152.7	0.1
Emergency relief (medicine donations)	Support humanitarian organizations to enable them to help people with first aid activities[3]	–	2.1
Total		103 403.9	2 076.3

Health systems strengthening

Program	Strategic objective	FTEs[1]	People reached (thousands)[7]	Patients reached (thousands)	Value[2] (USD millions)
Capacity building					
Novartis Foundation for Sustainable Development	Improve access to quality healthcare and social services for poor people in developing countries through project work, and think tank and stakeholder dialogue	7	3 613.8	–	9.2
Novartis research capacity-building programs	Educate the next generation of scientists and clinicians and improve research infrastructure in the developing world	6	1.0	–	6.0
Social business innovation					
Social Business:[8] Healthy Family in India, Kenya and Vietnam	Improve healthcare and medicine access in villages of developing countries for poor patients	563	4 503.8	239.2	–
Total		576	8 118.6	239.2	15.2
Grand total		**768**	**8 118.6**	**103 643.1**	**2 126.4**

[1] Full-time equivalent positions and contractors
[2] Operating costs
[3] Wholesale acquisition cost (WAC) plus logistics costs for some programs
[4] Retail value for surgical products
[5] Last shipments of fixed-dose combination tablets to adult patients in Tanzania to complete TB drug donation
[6] Manufacturing costs
[7] Via training and service delivery
[8] People reached via training

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

CORPORATE RESPONSIBILITY: KEY TARGETS AND RESULTS FOR 2013 AND KEY FUTURE TARGETS

EXPANDING ACCESS TO HEALTHCARE

Targets 2013	Results 2013	Future targets
Continue to expand access to *Coartem* and *Coartem* Dispersible through new channels driven by the private sector in select malaria-endemic countries.	Access to lower-priced *Coartem* and *Coartem* Dispersible was improved through wider availability in the private sector of nine malaria-endemic countries, benefiting the emerging middle class population.	Expand access to *Coartem* and *Coartem* Dispersible through new private sector channels in five additional countries by 2015. Match up to 3 million malaria treatments by 2015 through the Power of One® partnership with Malaria No More. Launch *Coartem* formulation requiring fewer tablets in five countries in 2014 and 10 countries in 2015.
Increase direct distribution to 50% of network. Expand Kenya pilot from three to 20 cells covering 1 000 villages, and increase portfolio to 15 medicines covering four additional disease areas. Expand Vietnam pilot from four to 20 cells. Initiate pilots in Indonesia, Nigeria and Ghana.	Appointed direct distribution to about 25% of India *Arogya Parivar* network. Expanded Kenya program to 20 cells, covering a population of 1.4 million, and increased portfolio to 14 medicines, covering eight disease areas. Expanded Vietnam program to 10 cells, covering a population of 1.2 million. Pilot launched in Indonesia; launches deferred in Nigeria and Ghana to increase focus on four existing country programs.	Provide health education to 12 million people through at least 300 000 community education meetings in rural communities across Kenya, India, Indonesia and Vietnam by 2016.
Successfully complete clinical POC study for KAF156. Identify new preclinical compound to eradicate liver-stage infection of *Plasmodium vivax.* Continue Phase II clinical testing for KAE609 against *Plasmodium falciparum* and *vivax.*	Phase II clinical studies for KAE609 demonstrated rapid parasite clearance for both types of malaria (*vivax* and *falciparum*). Clinical POC study with KAF156 achieved a positive outcome (parasite clearance of *P. vivax* and *falciparum*). New malaria target identified with potential to treat multiple stages of the malaria life cycle, including liver-stage infections of *P. vivax.*	Continue Phase II clinical testing with KAE609 in combination with other compounds. Between 2014 and 2016, invest USD 35 million per year into research for vaccines and medicines for diseases that disproportionately affect populations in the developing world. Bring at least one compound against dengue fever and one vaccine into the clinic by 2016.

DOING BUSINESS RESPONSIBLY

Targets 2013	Results 2013	Future targets
Conduct materiality analysis to identify the key corporate responsibility issues that impact our company based on surveys and interviews with internal and external stakeholders and incorporate results into decision-making and 2014 planning.	Completed best-in-class materiality analysis, with input from 43 internal and 50 external stakeholders. Identified key issues in three clusters: Access to Healthcare, Governance and Ethical Business Practices, and Research & Development.	Publish process and results of materiality analysis, and conduct at least two stakeholder events on key material issues in 2014.
Reduce total greenhouse gas (GHG) emissions by 15% by 2015 and 20% by 2020, including carbon offsets, based on 2008.	GHG emissions (gross emissions minus offsets) totaled 1 530 kilotons CO_2e (carbon dioxide equivalent), a reduction of 13.7% compared to 2008.	Reduce total GHG emissions by 15% by 2015 and 20% by 2020, including carbon offsets, based on 2008.
Specific water saving targets issued to top 10 sites in water scarce regions.	Water Savings program conducted at 10 Novartis manufacturing sites with highest water footprint located in water scarce[1] areas. Water savings projects identified are being implemented with savings between 10% and 20%.	Continue the Water Savings program in 2014 and apply experience of potential water savings identified in 10 additional manufacturing locations.
Roll out Code of Conduct refresher campaign. Deliver 2013 e-training curriculum, including annual Code of Conduct training and certification to all associates. Strengthen anti-bribery controls.	Code of Conduct reminder campaign rolled out globally. Eight e-training courses were rolled out including Anti-Bribery, Misconduct Reporting (BPO) and the annual Code of Conduct certification, with Code of Conduct certification completed by 113 092 Novartis associates[2]. Anti-bribery controls included in divisional control frameworks with global application.	Each operating unit will implement an annual assessment of top risks in marketing and sales, and design and execute a mitigation plan. Deliver 2014 e-training curriculum, including annual Code of Conduct training and certification to more than 95% of Novartis associates with email addresses.

For a full list of detailed targets and results, please see www.novartis.com/AR2013targets.

1 Water scarcity is evaluated for all Novartis manufacturing locations using the Global Water Tool of the World Business Council for Sustainable Development and scarcity indicators of the World Resources Institute.
2 Active Novartis associates with email addresses

INDIA

Staff nurse Ann Marie Ablett hugs patient Ruby Kahtun onboard the ORBIS aircraft during the plane's visit to Kolkata.


ORBIS

NEWS IN 2013

Novartis identified key areas of focus for corporate responsibility efforts – based on surveys and interviews with approximately 100 internal and external stakeholders – as the result of a best-in-class materiality assessment.

Novartis again outperformed all other pharmaceutical companies in Fortune's "World's Most Admired Companies" and Barron's "World's Most Respected Companies" surveys. Novartis was one of only six pharmaceutical companies included in the Dow Jones Sustainability World Index.

Novartis was recognized among the 25 best multinational employers by Great Place to Work® Institute based on workplace culture.

More than 9 000 associates joined the Global Corporate Challenge®, a 16-week workplace well-being competition. Thanks to their efforts, Novartis ranked fourth most active out of 1 200 companies globally. It was ranked most active in the healthcare and medical sector and was also ranked most active in the continental Europe region.

Novartis launched Responsible Procurement, a new integrated approach to ethical issues in our supply chain including labor rights; health, safety and environment; animal welfare; and anti-bribery. The risk-based approach focuses on new suppliers, offering a framework for capability-building projects among selected suppliers.

The Novartis Environment and Energy Awards recognized projects that improve our environmental footprint. Associates submitted 130 projects for the 10th anniversary of the awards; when implemented, these projects are expected to offer savings of USD 37 million in resource and environmental costs, plus reductions in waste, energy, water use and greenhouse gas (GHG) emissions.

Novartis initiated the company's fourth carbon offset project, acquiring about 2 300 hectares of farmland in Colombia to be planted with native tree species. Forestry projects in Argentina and Mali delivered more than 96 000 tons of certified carbon offsets, and the China forestry project received UN registration as a Clean Development Mechanism project.

DOING BUSINESS RESPONSIBLY

At Novartis, we are committed to operating our business in a way that earns the trust of patients, customers, healthcare partners, governments, shareholders and the communities in which we operate.

We continue to emphasize our deep commitment to ethical conduct across all our divisions.

In 2013, we invested in a comprehensive awareness campaign to remind associates of the ethical standards that all of us are expected to maintain.

We also took steps to further expand our environmental activities, including investing in renewable forms of energy and developing new forestry and agriculture projects to help meet ambitious greenhouse gas (GHG) emissions reduction targets.

UPHOLDING HIGH ETHICAL STANDARDS

Our associates may encounter ethical dilemmas while conducting business and we work hard to ensure that they have the protocols and training to make the right decisions.

We have developed a very clear Code of Conduct that reflects the continuing global evolution of our business and the legal environment. We train all associates annually on the Code of Conduct to make certain they know what to do when faced with a difficult situation.

During the hiring process, we screen potential job candidates by probing their previous experience in dealing with ethical dilemmas and risks. And we carry out detailed vetting of the resumes and qualifications of applicants for certain senior roles and positions where there is a greater potential exposure to ethical challenges.

All associates also receive training on the provisions of our Anti-Bribery Policy, which strictly prohibits any form of bribery. Third parties with whom we work are expected to uphold high anticorruption standards, as well.

"The pressure to succeed in business can be considerable, but the Code of Conduct is not optional," said Peter Kornicker, Chief Compliance Officer at Novartis. "Our message to associates is that our Code of Conduct applies to everyone, every day and everywhere, and that it is never acceptable to breach the code."

In 2013, 113 092 associates completed the annual Code of Conduct e-training and certification.

MANAGING MISCONDUCT AND NON-COMPLIANCE

Novartis takes allegations of inappropriate behavior very seriously, actively investigates them, and takes appropriate disciplinary action. Associates can report suspected misconduct to the Business Practices Office (BPO) – an independent team that reports to the Head of Corporate Security, who reports to the Chairman of the Board of Directors.

The BPO is responsible for handling all allegations of misconduct and for ensuring they are assessed and investigated impartially. When misconduct is proven, a report is issued either to the relevant business managers, who are required to take appropriate remedial action or, if appropriate, to a relevant law enforcement agency.

The BPO handles reports of a wide range of alleged or suspected misconduct, from concerns over improper business practices to complaints about expenses and interactions with healthcare professionals and patients.

An e-training module launched in September reminded associates of the options available to them for reporting suspected misconduct. They can report concerns in person or by letter, email or phone. A confidential helpline and email system are available for associates who wish to remain anonymous.

"The message is that if you think it looks wrong, the chances are it is," said Franziska Janorschke, Head of the BPO. "And at that point you have an obligation to report your concerns to us."

ASSOCIATES BY REGION AND SEGMENT AS OF DECEMBER 31 [1]

	United States		Canada and Latin America		Europe		Asia/Africa/ Australasia		Total	
	2013	2012	2013	2012	2013	2012	2013	2012	2013	2012
Pharmaceuticals	11 756	11 352	4 762	4 569	28 172	26 784	20 572	18 563	65 262	61 268
Alcon	9 327	9 472	1 888	1 960	7 682	7 629	6 597	4 813	25 494	23 874
Sandoz	1 944	2 066	2 626	2 618	17 523	16 403	4 812	4 748	26 905	25 835
Vaccines and Diagnostics	1 670	1 553	130	116	4 212	3 931	985	791	6 997	6 391
Consumer Health	1 893	1 880	1 016	1 016	3 854	3 583	2 450	2 273	9 213	8 752
Shared services	334	234	6	9	352	329	74	22	766	594
Corporate	147	147	21	21	820	769	71	73	1 059	1 010
Total	**27 071**	26 704	**10 449**	10 309	**62 615**	59 428	**35 561**	31 283	**135 696**	127 724

[1] Full-time equivalent positions at year end

During the past year, public allegations of a conflict of interest arose in Japan. We conducted a review and then took immediate corrective actions, including reorganizing our Japanese management team and establishing a Compliance Advisory Board comprised of senior executives and external experts. Collectively, these actions will strengthen governance across the organization in Japan and ensure adherence to the highest standards of ethics and compliance.

Novartis reacts promptly to allegations of ethical transgressions, but we also act proactively to prevent future problems. Following media reports of bribery in the pharmaceutical industry in China, we promptly initiated measures to further enhance compliance with our Code of Conduct in China and to strengthen the Chinese organization's culture of performance with integrity. These steps included enhanced financial controls, tightened protocols for providing funding to healthcare organizations in China and a review of salesforce incentives. They ensure we are applying the same high standards for business practices in China that we do across Novartis.

PROTECTING THE ENVIRONMENT

In 2013, we made progress toward achieving the tough GHG emissions reduction targets we set in 2010: reduce emissions by 15% by 2015 and 20% by 2020, against 2008 levels. So far we have reduced GHG emissions by 243 kilotons (kt) to 1 530 kt, a fall of 13.7% since 2008. Energy efficiency measures and renewable energy projects contributed 147 kt or 8.3% of the reduction, with 96 kt – or 5.4% – coming from carbon offsets from forestry and agriculture projects in Argentina and Mali.

Novartis took steps during the year to reduce GHG emissions of vehicles owned or leased by Group companies. By selecting more fuel-efficient cars and teaching drivers to use them more effectively, Novartis aims to cut vehicle emissions by 20% by 2015, based on 2010 levels.

Novartis company sites are audited regularly to assess energy use and to identify potential savings, or options for using renewable energy – and we are seeing increased opportunities to use cleaner energy and to reduce energy costs.

Recently, a Sandoz plant in Rovereto, Italy installed a USD 6 million biowaste recycling facility to generate biogas, which fuels a combined heat and power unit. The heat produced is used for conventional waste water treatment and for drying solid waste before it is incinerated, which will save more than USD 3 million in waste and energy costs each year.

At our Pharmaceuticals Division US headquarters in East Hanover, New Jersey, a canopy of solar panels shades the visitor parking lot and generates electricity for use on the site. In Basel, Switzerland, three new buildings under construction will use the thermal properties of the bedrock underneath the main campus to store heat in the summer and recuperate it in winter – saving energy and reducing the need to use river water for cooling or air conditioning.

Novartis has also expanded several projects that provide emission offsets. We acquired about 2 300 hectares of land to reforest in Colombia. In China, we are planting 9 million trees on 4 100 hectares of barren land in Szechuan province. During 2013, we also increased the size of our jatropha plantation in Mali to more than 5 000 hectares. The oily seeds of the jatropha shrub are used to make biofuel and a natural fertilizer. The project provides valuable additional income for rural farmers and creates jobs with a local company.

Building on our success, we aim to continue to reduce GHG emissions – notwithstanding significant increases in Novartis product sales.

NOVARTIS HEALTH, SAFETY AND ENVIRONMENT (HSE) DATA 2013

	Novartis Group [1]		Pharmaceuticals		Novartis Institutes for BioMedical Research		Alcon		Sandoz		Vaccines and Diagnostics		Consumer Health [2]	
	2013	2012	2013	2012	2013	2012	2013	2012	2013	2012	2013	2012	2013	2012
HSE personnel	**523**	505	**217**	217	**34**	32	**63**	64	**135**	119	**36**	36	**27**	23
Lost-time injury and illness rate (LTIR)	**0.12**	0.14	**0.12**	0.12	**0.06**	0.01	**0.14**	0.17	**0.11**	0.16	**0.16**	0.09	**0.08**	0.27
Total recordable case rate	**0.42**	0.45	**0.38**	0.43	**0.69**	0.45	**0.56**	0.58	**0.33**	0.37	**0.27**	0.34	**0.37**	0.50
Total production (1 000 t)	**204**	214	**30**	33	**0**	0	**73**	78	**83**	85	**0.2**	0.2	**18**	17
Contact water use (million m^3)	**17.3**	17.1	**3.9**	3.9	**0.5**	0.5	**2.8**	2.7	**8.2**	8.3	**1.2**	1.1	**0.6**	0.5
Energy use (million GJ)	**20.0**	19.4	**5.6**	5.4	**1.2**	1.2	**3.2**	3.0	**7.6**	7.6	**1.6**	1.6	**0.6**	0.6
Emissions														
Effluent discharge (million m^3)	**18.1**	17.9	**4.2**	4.0	**0.5**	0.5	**2.6**	2.5	**8.2**	8.3	**1.1**	1.2	**1.5**	1.4
COD into water (1 000 t)	**3.8**	3.9	**0.5**	0.7	**0**	0	**0.1**	0.1	**3.1**	3.1	**0**	0	**0**	0
Sulfur dioxide SO_2 (t)	**49**	65	**4.4**	8.1	**0.4**	0.4	**2.0**	2.1	**42**	54	**0.1**	0.1	**0.3**	0.5
Nitrogen oxide NO_2 (t)	**302**	302	**90**	94	**10**	10	**41**	46	**135**	128	**15**	13	**10**	11
Halogenated VOCs (t)	**105**	111	**1.2**	1.0	**0**	0	**0**	0	**103**	110	**0**	0	**0.3**	0
Non-halogenated VOCs (t)	**894**	947	**235**	230	**3**	3	**49**	51	**590**	650	**0.9**	1.1	**17**	13
GHG Scope 1, combustion and process (1 000 t)	**473**	463	**133**	133	**17**	19	**71**	66	**185**	186	**46**	42	**20**	18
GHG Scope 1, vehicles (1 000 t)	**170**	177	**85**	89	**0.1**	0.1	**36**	40	**28**	29	**4.4**	4.5	**7.1**	7.5
GHG Scope 2, purchased energy (1 000 t)	**984**	1 003	**221**	215	**64**	77	**266**	267	**301**	309	**92**	95	**39**	39
Operational waste														
Non-hazardous waste not recycled (1 000 t)	**42**	41	**5.9**	6.0	**1.5**	1.6	**5.4**	5.4	**8.3**	8.6	**17**	16	**3.2**	3.4
Hazardous waste not recycled (1 000 t)	**97**	92	**65**	63	**1.2**	1.2	**0.8**	1.0	**26**	23	**1.6**	1.1	**1.8**	2.2
Non-hazardous waste recycled (1 000 t)	**68**	57	**13**	13	**1.3**	1.3	**11**	12	**37**	26	**3.1**	1.6	**2.0**	2.7
Hazardous waste recycled (1 000 t)	**96**	94	**21**	20	**0**	0	**9.0**	5.6	**66**	68	**0.1**	0.1	**0**	0

[1] Novartis Group includes Novartis Corporate. Novartis Group totals may vary slightly from the sums of individual values due to rounding.
[2] Consumer Health data includes Animal Health and OTC.

For more information on Health, Safety and Environment at Novartis, please see www.novartis.com/hse2013.

PERU

A traditionally dressed Andean woman peers down the hallway of the Hospital Regional del Cusco.

INDEPENDENT ASSURANCE REPORT ON THE NOVARTIS CORPORATE RESPONSIBILITY REPORTING

TO THE AUDIT AND COMPLIANCE COMMITTEE OF THE BOARD OF DIRECTORS OF NOVARTIS AG, BASEL

We have been engaged to perform assurance procedures to provide limited assurance on aspects of the 2013 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 the Novartis Group for the year ended December 31, 2013:

- Reporting processes with respect to the CR reporting and CR key figures as well as the related control environment in relation to data aggregation of CR key figures.
- "Key performance indicators" on page 62, the "Novartis Access to Healthcare Programs 2013" figures on page 66 and the "Novartis Health, Safety and Environment (HSE) Data 2013" on page 73 as published in the "Novartis Annual Report 2013" (CR indicators).

CRITERIA

The management reporting processes with respect to the CR reporting and CR key figures were assessed against Novartis Group internal policies and procedures, as set forth in the following:

- Corporate Citizenship (CC) Policy including CC Guidelines and the Code of Conduct.
- Procedures, by which CR and Health, Safety and Environment (HSE) data is gathered, collated 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 reporting of its CR performance.

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 3000) "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.

The nature, timing and extent of limited assurance engagement procedures for gathering sufficient appropriate evidence are deliberately limited relative to a reasonable assurance engagement.

SUMMARY OF WORK PERFORMED

Our assurance procedures included the following:

- **Evaluation of the application of Group guidelines**
  Reviewing application of the Novartis Group internal CR reporting guidelines.
- **Management inquiry**
  Interviewing personnel responsible for internal reporting and data collection at Group, divisional and local level.
- **Assessment of key figures**
  Performing tests on a sample basis of evidence supporting selected HSE data concerning completeness, accuracy, adequacy and consistency.
- **Inspection of documentation and analysis of relevant policies and principles**
  Inspecting relevant documentation on a sample basis, including Group CR policies, management reporting structures and documentation.
- **Assessment of the processes and data consolidation**
  Reviewing the management reporting processes for CR reporting and assessing the consolidation process of data at Group level.

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 has not been prepared, in all material aspects, in accordance with Novartis Group internal policies and procedures.

PricewaterhouseCoopers AG

Bruno Rossi Raphael Rutishauser

Basel, January 28, 2014

CORPORATE GOVERNANCE REPORT

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 tailor-made for Novartis.

CONTENTS

UNITED STATES

Yoga student Audrey Sebbane practices vinyasa yoga at Om Factory in New York City. Vinyasa – often called "flow" yoga – merges movement with breathing. The classes move students through a sequence of postures as their breath flows in and out.

DEAR SHAREHOLDER

Having joined the Board on August 1, 2013, this is the first time that I introduce our Corporate Governance Report to you. I decided to replace the "Introduction" chapter with a letter, conveying my views on some key corporate governance aspects. The letter is intended to share with you my understanding of good corporate governance, a strong Board and the role of Chairman as well as my perspective on shareholder engagement.

A strong Board guarantees good corporate governance

An effective Board must have the right composition, structure, processes and a clear understanding of its role. The Novartis Board meets these requirements:

Our Board is composed of members who are diverse in terms of education, experience, geographical origin and interpersonal skills. We put great emphasis on the training of our Board members, on performance evaluation and on the improvement of our individual Board members and the Board as a whole, and finally on succession planning. All our Board members are independent and we have appropriate processes in place that are crucial for the effective functioning of our Board. They ensure efficient and balanced decision making, and guarantee a seamless information transfer, allowing the Board to perform its supervisory duty and to make decisions that are reserved for the Board.

The key roles of the Board include setting the strategic direction of Novartis and appointing the members of the Executive Committee. We closely communicate with the Executive Committee, making sure our strategy is properly implemented and our ethical standards are applied. In our work with the Executive Committee we assert independent judgment and work toward fostering a strong relationship based on mutual respect and trust.

The role of the Chairman

In my role as independent, non-executive Chairman I provide leadership to the Board and make sure that it has an excellent collaboration with our CEO and the Executive Committee.

Leading the Board I ensure that the Board and its committees work effectively. I set the agenda, style and tone of the Board discussions, promote constructive debate and effective decision-making, and make sure that the performance of our Board is regularly evaluated and that Board members are properly trained.

I support and mentor our CEO, while not interfering with the operational management of Novartis.

I also support effective communication with you, our shareholders, so that we understand your views.

Novartis is adapting its corporate governance

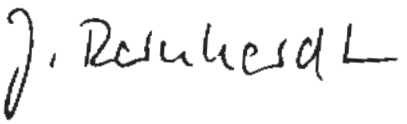
The Novartis corporate governance regime consistently meets international best-practice standards as we continually strive to improve our leadership principles and practices through an intensive exchange with our shareholders and other stakeholders.

Our corporate governance regime supports Novartis in protecting the interests of our shareholders, by creating long term and sustainable shareholder value and to care and cure for another fundamental group of our stakeholders – patients. To achieve this, our governance is structured to address conflicts, align interests and allow for efficient and well-founded Board and management decisions.

As in all other aspects, we continuously strive to improve in the interests of all stakeholders. In 2013, we have undertaken an extensive review of our corporate governance regime, benchmarking it against international best practice, and have identified a number of improvement opportunities that we will implement in 2014: We are creating a new "Research & Development Committee" of the Board to oversee our research and development strategy and evaluate the effectiveness and competitiveness of our research and development organization. We are extending the scope of the mandate of the Corporate Governance and Nomination Committee to cover corporate responsibility matters. We are disbanding the Chairman's Committee, while empowering the Executive Committee and accelerating decision making. In 2014 we intend to introduce, inter alia, the following elements of the "Minder Initiative": the annual election by the General Meeting of all Board members, of the Chairman of the Board and of the Members of the Compensation Committee; the possibility for the shareholders to electronically provide their voting instructions to the independent proxy; and the ban of the corporate and custody proxies. We will also hold a non-binding say-on-pay vote at our AGM in 2014.

The importance of shareholder engagement

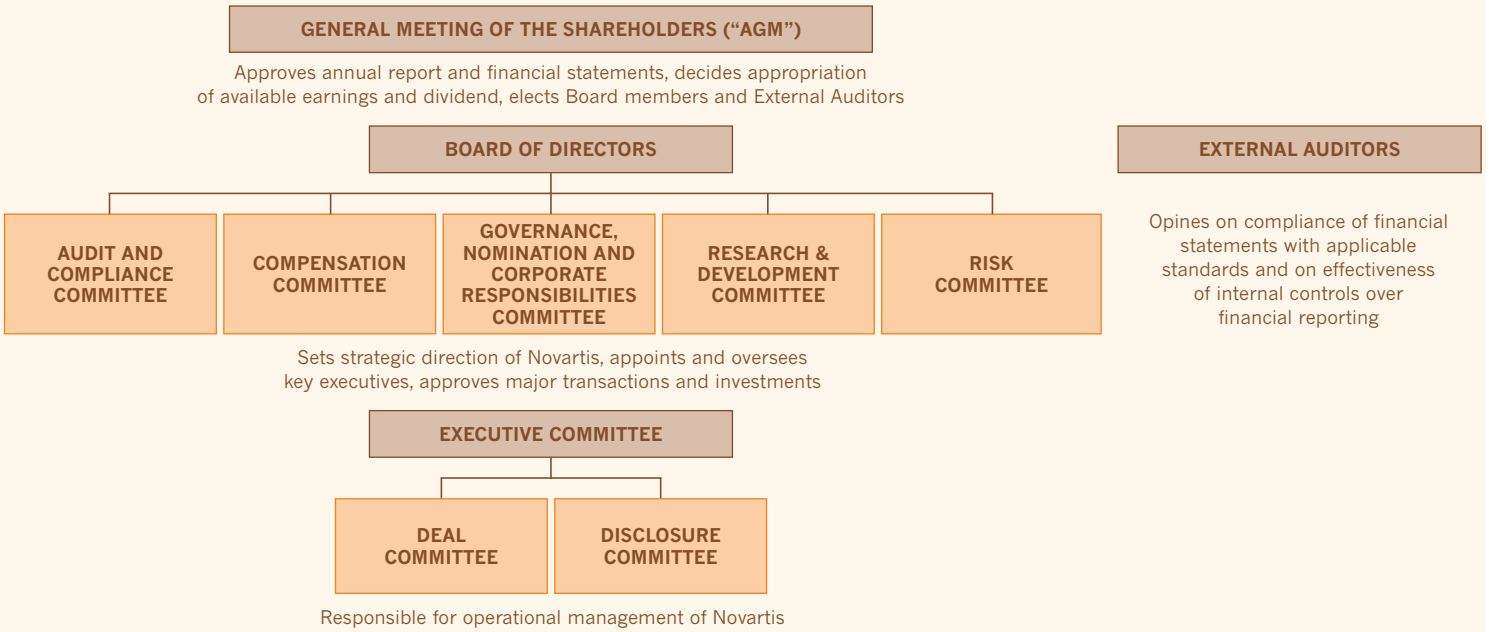
I firmly believe that shareholder engagement is crucial for the long-term success of our company. It should be conducted in an atmosphere of trust and respect that allows for a collaborative dialogue in which views and positions between Novartis and its shareholders are expressed openly to enhance mutual understanding. As part of these efforts we have established regular meetings of our governance specialists with their respective peers from shareholder groups and I have personally met with many of our shareholders. I wish to continue this dialogue in the future.



Joerg Reinhardt
Chairman of the Board of Directors

SUMMARY OF OUR CORPORATE GOVERNANCE REGIME

GOVERNANCE BODIES (AS FROM JANUARY 1, 2014)



LEADERSHIP STRUCTURE

Independent, non-executive Chairman and separate CEO

BOARD GOVERNANCE

STRUCTURE (AS PER JANUARY 1, 2014)

Independence: All Board members are independent. Board Committees: The Board has delegated certain of its duties to five Board Committees:

– Audit and Compliance Committee
– Compensation Committee
– Governance, Nomination and Corporate Responsibilities Committee
– Research & Development Committee
– Risk Committee

COMPOSITION

The Novartis Board of Directors is diverse in terms of education, experience, geographical origin and interpersonal skills. The biographies of the Board members (pages 93–97) set out their particular qualifications.

PROCESSES

The processes of the Board have a decisive influence on the effectiveness of the Board. The Board has implemented best practices for all such processes. Important elements include the agenda of Board meetings (making sure that the Board deals with all important topics), information submitted to the Board (ensuring that the Board receives sufficient information from management to perform its supervisory duty and to make decisions that are reserved for the Board) and Board room behavior (ensuring an efficient and balanced decision-making process).

SHAREHOLDER RIGHTS

Each share registered entitles the holder to one vote at General Meetings. The General Meeting passes resolutions and elections with the absolute majority of the votes represented at the meeting: The approval of two-thirds of the votes represented at the meeting is required by law for certain important resolutions.

Shareholders with 10% of the share capital may request an extraordinary General Meeting of shareholders and shareholders having shares with an aggregate nominal value of CHF 1 million can put items on the agenda of a General Meeting of shareholders.

Shareholders have the right to receive dividends, appoint proxies and hold such other rights as are granted under Swiss Law.

Only shareholders registered in the Novartis share register may exercise their voting rights. The registration does not affect the tradability of Novartis shares.

Shareholders with shares in excess of 2% of the registered share capital who want to vote those shares exceeding the 2% threshold need approval from the Board to register those shares as shares with voting rights. The purpose of this approval is to prevent a minority shareholder from dominating the General Meeting to the disadvantage of the majority of the shareholders. This is necessary given that many shareholders do not register their shares and therefore cannot vote their shares and because shareholder representation at General Meetings has traditionally been low in Switzerland.

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 Swiss Stock Exchange (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 NYSE. These differences are:

- shareholders of Novartis do not receive written reports from committees of the Board of Directors;
- the 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 every third Annual General Meeting;
- the Board of Directors 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 of Directors has responsibility for overseeing the performance evaluation of the Board of Directors and of the Executive Committee; and
- the full Board of Directors has responsibility for setting the objectives relevant to the compensation of the Chief Executive Officer, and for the evaluation of 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 Corporate Governance and Nomination Committee regularly reviews these standards and principles in the light of prevailing best practices and makes recommendations for improvements of the corporate governance framework of Novartis for consideration by the full Board of Directors.

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.

OUR SHAREHOLDERS

SHARES

SHARE CAPITAL OF NOVARTIS AG

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 (Genussscheine) 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 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 vote 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 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.

SHARE REPURCHASE PROGRAMS

Novartis began repurchasing its shares in 1999. Since then, five share repurchase programs have been completed with the repurchase of shares worth CHF 19 billion. Shares repurchased under the first program were not cancelled. However, shares repurchased under the other four programs were cancelled. At the Annual General Meeting in February 2008, shareholders authorized the Board of Directors to launch a sixth program 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 six million shares were repurchased at an average price of CHF 49.42 per share and cancelled. The share repurchase program was suspended in April 2008 in favor of debt repayment. In December 2010, the Board of Directors announced the reactivation of the share repurchase program 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 to buy back shares via the second trading line of up to USD 5 billion spread over two years. Until year-end 2013, 2 160 000 shares were repurchased at an average price of CHF 70.58 per share under the share repurchase program.

CHANGES IN SHARE CAPITAL

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

In 2011, for the purpose of completing the merger of Alcon, Inc. into Novartis AG, the share capital was increased by CHF 54 million, from CHF 1 318 811 500 to CHF 1 372 811 500, through the issuance of 108 000 000 fully paid-in registered shares with a nominal value of CHF 0.50 each.

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, there were no changes to the share capital of Novartis.

CAPITAL CHANGES

	Number of shares			
Year	As of Jan 1	Changes in shares	As of Dec 31	Changes in CHF
2011	2 637 623 000	108 000 000	2 745 623 000	54 000 000
2012	2 745 623 000	– 39 430 000	2 706 193 000	– 19 715 000
2013	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 granted to associates as an element of compensation.

SHAREHOLDINGS

SIGNIFICANT SHAREHOLDERS

According to the share register, as of December 31, 2013, the following registered shareholders (including nominees and the ADS depositary) held more than 2% of the total share capital of Novartis with the right to vote these shares:[1]

– Shareholders: Novartis Foundation for Employee Participation, with its registered office in Basel, Switzerland, holding 3.0%; and Emasan AG, with its registered office in Basel, Switzerland, holding 3.3%;
– Nominees: JPMorgan Chase Bank, New York, holding 11.1%; Nortrust Nominees, London, holding 3.2%; and The Bank of New York Mellon, New York, holding 4.6% through its nominees, Mellon Bank, Everett, (2.8%) and The Bank of New York Mellon, Brussels, Belgium, (1.8%); and
– ADS depositary: JPMorgan Chase Bank, New York, holding 11.7%.

[1] Excluding 4.9% of the share capital held by Novartis AG and its subsidiaries (excluding foundations) as treasury shares

According to a disclosure notification filed with Novartis AG, Norges Bank (Central Bank of Norway), Oslo, Norway, held 2.03% of the share capital of Novartis AG as of December 31, 2013.

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, 2013:

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

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 since nominees and JPMorgan Chase Bank, as ADS depositary, are registered as shareholders for a large number of beneficial owners.

As of December 31, 2013, Novartis had approximately 155 000 registered shareholders.

The following table provides information about the distribution of registered shareholders by number of shares held:

NUMBER OF SHARES HELD

As of December 31, 2013	Number of registered shareholders	% of registered share capital
1–100	19 786	0.05
101–1 000	92 735	1.51
1 001–10 000	38 401	4.00
10 001–100 000	3 600	3.48
100 001–1 000 000	480	5.36
1 000 001–5 000 000	72	5.97
5 000 001 or more[1]	32	52.18
Total registered shareholders/shares	155 106	72.55
Unregistered shares		27.45
Total		**100.00**

[1] Including significant registered shareholders as listed above

The following table provides information about the distribution of registered shareholders by type:

REGISTERED SHAREHOLDERS BY TYPE

As of December 31, 2013	Shareholders in %	Shares in %
Individual shareholders	96.04	11.93
Legal entities	3.87	37.18
Nominees, fiduciaries and ADS depositary	0.09	50.89
Total	**100.00**	**100.00**

The following table provides information about registered shareholders by country:

REGISTERED SHAREHOLDERS BY COUNTRY

As of December 31, 2013	Shareholders in %	Shares in %
France	2.65	0.93
Germany	4.69	3.66
Switzerland[1]	89.29	40.80
United Kingdom	0.48	3.04
United States	0.27	47.35
Other countries	2.62	4.22
Total	**100.00**	**100.00**

[1] Excluding 4.9% of the share capital held by Novartis AG and its subsidiaries (excluding foundations) as treasury shares

SHAREHOLDER RIGHTS

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 at a General Meeting if they are registered with the Novartis Share Register latest on the third business day before the General Meeting ("X-3 business days").

ADR holders may vote by instructing JPMorgan Chase Bank, the ADR depositary, to exercise the voting rights attached to the registered shares underlying the ADSs. 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.

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; or
– The dissolution of Novartis AG.

In addition, the law provides for a special quorum also for other resolutions, such as, for example, for 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. Shareholders representing shares with an aggregate nominal value of at least CHF 1 million may request that an item be included in the agenda of a General Meeting of shareholders. Such requests must be made in writing at least 45 days before the date of the General Meeting, specify the item to be included in the agenda and contain the proposal on which the shareholder requests a vote.

Shareholders have the right to receive dividends, to vote and hold such other rights as granted under Swiss Law. Shareholders can vote their shares by themselves or appoint another shareholder, the corporate proxy, the independent proxy or a custody proxy as proxy. As from the General Meeting 2014 the corporate proxy and the custody proxy are abolished. Shareholders that do not want to vote their shares by themselves, can then either appoint another shareholder or the independent proxy as a proxy. The right to vote and other rights associated with a registered share may only be exercised by a shareholder, usufructuary or nominee who is registered in the Novartis share register.

SHAREHOLDER REGISTRATION

No restrictions apply on the transferability of Novartis shares. However, only shareholders registered in the Novartis share register may exercise their voting rights. In order to be registered, a shareholder must declare that he or she acquired the shares in his or her own name and for his or her own account. The Articles of Incorporation provide that the Board of Directors 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 of Directors may, upon request, grant an exemption from this restriction. When considering the grant of an exemption, particular consideration will be given as to whether the shareholder supports the Board of Directors in creating sustainable value and has a long-term investment horizon. In 2013, 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.

The same restrictions apply to holders of ADRs as those holding Novartis shares.

Given that shareholder representation at General Meetings has traditionally been low in Switzerland, Novartis considers the restriction on registration 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 apply to holders of ADRs as those holding Novartis shares.

The restrictions on registration contained in the Articles of Incorporation may only be removed by 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 that are linked to each other or act in concert to circumvent the restrictions on registration are treated as one person or nominee for the purposes of the restrictions on registration.

NO RESTRICTION ON TRADING OF 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. No restrictions are imposed by Novartis or JPMorgan Chase Bank on the trading of registered Novartis shares or ADRs. Registered Novartis shareholders or ADR holders may, therefore, purchase or sell their Novartis shares or ADRs at any time, including prior to a General Meeting regardless of the record date. The record date serves only to determine the right to vote at a General Meeting of Novartis.

CHANGE-OF-CONTROL PROVISIONS

NO OPTING UP, NO OPTING OUT

The Swiss Stock Exchange Act provides that 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

There are no change-of-control clauses (including no "golden parachutes," special provisions on the cancellation of contractual arrangements, agreements concerning special notice periods or long-term contracts exceeding 12 months, waivers of lock-up periods for options, shorter vesting periods, and no additional contributions to pension funds) benefiting Board members. With respect to members of the Executive Committee, see below under – Our Management – Contracts with Members of the Executive Committee.

COMPOSITION OF THE BOARD OF DIRECTORS AND ITS COMMITTEES (AS PER DECEMBER 31, 2013)

As of January 1, 2014, the Chairman's Committee has been disbanded, a new Research & Development Committee has been created, and the mandate of the Corporate Governance and Nomination Committee (renamed "Governance, Nomination and Corporate Responsibilities Committee") has been amended to cover corporate responsibility matters. The membership of all Board committees will be determined by the Board of Directors effective February 25, 2014.

THE BOARD OF DIRECTORS AND ITS COMMITTEES (AS PER JANUARY 1, 2014)

ELECTION AND TERM OF OFFICE

All Board members are elected individually.

Board members are elected to terms of office of three years or less by shareholders at General Meetings. As from 2014, our Board members will be re-elected annually. Under Swiss law, a General Meeting of shareholders is entitled to remove any Board member at any time, regardless of his or her remaining term of office.

The average tenure of Board members is seven years and the average age is 61. 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 Novartis' 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 [1]
Joerg Reinhardt, Ph.D.	D	1956	2013	2013	2014
Ulrich Lehner, Ph.D.	D	1946	2002	2011	2014
Enrico Vanni, Ph.D.	CH	1951	2011	2011	2014
Dimitri Azar, M.D., MBA	US	1959	2012	2012	2014
Verena A. Briner, M.D.	CH	1951	2013	2013	2014
William Brody, M.D., Ph.D.	US	1944	2009	2012	2014
Srikant Datar, Ph.D.	US	1953	2003	2012	2014
Ann Fudge	US	1951	2008	2011	2014
Pierre Landolt, Ph.D.	CH	1947	1996	2011	2014
Andreas von Planta, Ph.D.	CH	1955	2006	2012	2014
Charles L. Sawyers, M.D.	US	1959	2013	2013	2014
Dr. Ing. Wendelin Wiedeking	D	1952	2003	2012	2014
William T. Winters	UK/US	1961	2013	2013	2014
Rolf M. Zinkernagel, M.D.	CH	1944	1999	2012	2014

[1] Legally required mandatory re-election due to introduction of yearly re-election of Board members under revised Swiss company law

BOARD MEMBER QUALIFICATIONS

The Corporate Governance and Nomination Committee determines the criteria for the selection of Board members and Board committee members. Factors considered include skills and knowledge, diversity of viewpoints, professional backgrounds and expertise, business and other experience relevant to the business of Novartis, the ability and willingness to commit adequate time and effort to Board and committee responsibilities, the extent to which personality, background, expertise, knowledge and experience will enable them to interact with other Board members to build an effective and complementary Board, and whether existing board memberships or other positions held by a candidate could lead to a conflict of interest.

The biographies of the Board members (pages 93–97) set out the particular qualifications that led the Board of Directors to conclude that a Board member is qualified to serve on the Board of Directors, 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 Corporate Governance and Nomination 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 aspects of diversity. This includes diversity in terms of geographic origin, background, gender, race, faith, education, experience, viewpoint, interests and technical and interpersonal skills.

ROLE OF THE BOARD OF DIRECTORS AND THE BOARD COMMITTEES

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

Until the end of 2013, the Board of Directors delegated certain responsibilities to five committees: Chairman's Committee, Compensation Committee, Audit and Compliance Committee, Corporate Governance and Nomination Committee and Risk Committee as set out below (responsibilities described with the terms "overseeing" or "reviewing" are subject to final approval by the Board of Directors). As of January 1, 2014, the Chairman's Committee has been disbanded, a new Research & Development Committee has been created, and the mandate of the Corporate Governance and Nomination Committee has been amended to cover corporate responsibility matters. The membership of all Board committees will be determined by the Board of Directors effective February 25, 2014.

Responsibilities	Membership comprises	Number of meetings held in 2013/approximate average duration (hrs) of each meeting Attendance	Link
THE BOARD OF DIRECTORS		**12/6.30**	
The primary responsibilities of the Board of Directors include: – Setting the strategic direction of the Group; – Determining the organizational structure and governance of the Group; – Appointing, overseeing and dismissing key executives and planning their succession; – Determining and overseeing the financial planning, accounting, reporting and controlling; – Approving the annual financial statements and the corresponding financial results releases; and – Approving major transactions and investments.	**Joerg Reinhardt**[1] Ulrich Lehner Enrico Vanni Dimitri Azar Verena A. Briner[2] William Brody Srikant Datar Ann Fudge Pierre Landolt Andreas von Planta Charles L. Sawyers[2] Wendelin Wiedeking William T. Winters[2] Rolf M. Zinkernagel	4 12 12 11 8 12 12 10 11 12 6 8 9 9	Articles of Incorporation of Novartis AG Regulations of the Board of Directors, its Committees and the Executive Committee of Novartis AG (Board Regulations) http://www.novartis.com/corporate-governance
THE CHAIRMAN'S COMMITTEE		**7/1.45**	
The primary responsibilities of this committee include: – Commenting on significant matters before the Board of Directors makes a decision; – Recommending key executive appointments to the Board of Directors; – Dealing with Board matters arising in between Board meetings, including the taking of required preliminary actions; and – Approving transactions and investments as delegated by the Board of Directors.	**Joerg Reinhardt**[1] Ulrich Lehner Srikant Datar Enrico Vanni[2]	2 6 6 6	Charter of the Chairman's Committee http://www.novartis.com/corporate-governance
THE AUDIT AND COMPLIANCE COMMITTEE		**6/2.30**	
The primary responsibilities of this committee include: – Overseeing the internal auditors; – Supervising the external auditors and selecting and nominating the external auditors for election by the meeting of the shareholders; – Overseeing the accounting policies, financial controls and compliance with accounting and internal control standards; – Approving quarterly financial statements and financial results releases; – Overseeing internal control and compliance processes and procedures; 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.	**Srikant Datar**[3,4] Dimitri Azar[2] Ulrich Lehner[4] Enrico Vanni Andreas von Planta	6 4 5 6 6	Charter of the Audit and Compliance Committee http://www.novartis.com/corporate-governance

[1] Chair, since August 2013
[2] Since February 2013
[3] Chair
[4] Audit Committee Financial Expert as defined by the US Securities and Exchange Commission (SEC)

Responsibilities	Membership comprises	Number of meetings held in 2013/approximate average duration (hrs) of each meeting Attendance	Link
THE RISK COMMITTEE		**4/2.15**	
The primary responsibilities of this committee include: – Ensuring that Novartis has implemented an appropriate and effective risk management system and process; – Ensuring that all necessary steps are taken to foster a culture of risk-adjusted decision making without constraining reasonable risk-taking and innovation; – Approving guidelines and reviewing policies and processes; and – 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 management. The Risk Committee has the authority to retain external consultants and other advisors.	**Andreas von Planta** [1] Srikant Datar Ann Fudge Ulrich Lehner Wendelin Wiedeking	4 4 4 4 4	Charter of the Risk Committee http://www.novartis.com/corporate-governance
THE COMPENSATION COMMITTEE		**6/2.30**	
The primary responsibilities of this committee include: – Designing, reviewing and recommending to the Board compensation policies and programs; – Advising the Board on the compensation of the Board members; – Approving the employment terms of key executives; – Deciding on the variable compensation of the Chief Executive Officer, the members of the Executive Committee and other key executives for the past year; and – Deciding on the base salary and the total target compensation of the Chief Executive Officer, the members of the Executive Committee and other key executives for the coming year. The Compensation Committee has the authority to retain external consultants and other advisors.	**Enrico Vanni** [1] William Brody Srikant Datar Ann Fudge[2] Ulrich Lehner	6 6 5 4 6	Charter of the Compensation Committee http://www.novartis.com/corporate-governance
THE CORPORATE GOVERNANCE AND NOMINATION COMMITTEE		**4/2.15**	
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; and – Developing and reviewing an orientation program for new Board members and an ongoing education plan for existing Board members. The Corporate Governance and Nomination Committee has the authority to retain external consultants and other advisors.	**Pierre Landolt** [1] Ann Fudge Ulrich Lehner Andreas von Planta Wendelin Wiedeking Rolf M. Zinkernagel	4 4 3 3 3 4	Charter of the Corporate Governance and Nomination Committee http://www.novartis.com/corporate-governance

[1] Chair
[2] Since February 2013

THE FUNCTIONING OF THE BOARD OF DIRECTORS

The Novartis Board of Directors takes decisions as a whole, supported by its five Board committees. Each Board committee has a written charter outlining its duties and responsibilities and is led by a Chair elected by the Board of Directors.

The Board of Directors and its Board committees meet regularly throughout the year. The Chairs set the agendas of their meetings. Any Board member may request a Board meeting, a meeting of a Board committee or the inclusion of an item on the agenda of such meetings. Board members are provided, in advance of meetings, with materials intended to prepare them to discuss the items on the agenda.

THE CHAIRMAN

Joerg Reinhardt has been acting as independent, non-executive Chairman since August 1, 2013. He was the Board's preferred candidate for the position, ideally combining industry and Novartis experience while being independent in character and judgment and meeting Novartis' independence criteria.

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

- provides leadership to the Board of Directors in its governance role;
- supports and advises the Chief Executive Officer;
- ensures effective succession plans on Board and Executive Committee level;
- ensures that the Board and its committees work effectively;
- sets the agenda, style and tone of the Board discussions, promoting a constructive debate and effective decision-making;
- supported by the Corporate Governance and Nomination 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 Novartis' shareholders; and
- promotes effective relationships and communications between the Board members and the members of the Group Executive Committee.

MEETINGS OF THE BOARD OF DIRECTORS

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 2013, there were 12 meetings of the Board of Directors. Given that as of February 1, 2013 all Board members were independent, no separate meetings of the independent Board members were held after February 1, 2013.

During 2013, the agendas for Board meetings, among other topics, included the following topics: annual report and media release, agenda for the Annual General Meeting, group targets, personal objectives of the Chief Executive Officer (January meeting), pipeline update and M&A and BD&L review (April meeting), strategy (separate, dedicated 3 day meeting in August), financial and business reviews (at each meeting), and major projects, and investments and transactions (when required).

Topics addressed in private meetings included performance evaluation of top management (January meeting), succession planning (August meeting) and Board self-evaluation (January meeting).

DR. DANIEL VASELLA

Dr. Daniel Vasella, the former Chairman, has been appointed Honorary Chairman in recognition of his significant achievements for Novartis. There are no rights associated with this role, and Dr. Vasella does not attend Board meetings. No compensation is provided in relation to this role other than administrative support and security which are usual and customary for a position of this nature.

In addition, based on a consulting agreement effective until the end of 2016, Dr. Vasella is available to Novartis, at Novartis' request and discretion, to provide specific consulting services, in particular coaching of high potential associates of Novartis, allowing Novartis to benefit from his knowledge and long-term experience in shaping Novartis. Dr. Vasella will not have any influence on the Board or on the management of Novartis.

INDEPENDENCE OF BOARD MEMBERS

The independence of Board members is a key corporate governance issue. Accordingly, Novartis established independence criteria that are intended to reflect international best-practice standards. These independence criteria can be found 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 Corporate Governance and Nomination Committee meet the Novartis independence criteria. In summary, 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 a family member not being employed by the auditor of Novartis, (v) a Board member or a 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.
- In addition, the Board members are bound by the Novartis Conflict of Interest Policy which guarantees that a Board member's potential personal interests cannot influence the decision making of the Board of Directors.
- The Corporate Governance and Nomination Committee annually submits to the Board of Directors 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 top management and from any of his/her current or former colleagues.
- In its meeting of December 13, 2013, the Board of Directors determined that all of its members are independent. The Board of Directors has delegated Rolf M. Zinkernagel, M.D., to the Scientific Advisory Board of the Novartis Institute for Tropical Diseases (NITD), and both Dr. Zinkernagel, M.D. and William Brody, M.D., Ph.D. to the Board of Directors of the Genomics Institute of the Novartis Research Foundation (GNF). The Board of Directors concluded that these activities are supervisory and not consultatory in nature and do not affect Dr. Zinkernagel's or Dr. Brody's independence as a Board member.

RELATIONSHIP OF NON-EXECUTIVE BOARD MEMBERS WITH NOVARTIS

None of the Board members is or was a member of the management of Novartis AG or of any other Novartis Group company in the three financial years until and including 2013.

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

Every year the Board conducts an evaluation of its performance and effectiveness. The process is kicked-off by each Board member completing a questionnaire on the performance and effectiveness of the Board and of each Board committee of which he/she is a member. This is then the basis for a deep, qualitative review of the Board's performance. The review is led by the Chairman who holds individual discussions with each Board member, followed-up by discussions by the full Board and by each Board Committee. Identified gaps and shortcomings are recorded and related remediation actions are agreed.

The performance and effectiveness evaluation includes an assessment of the ability and willingness of each Board member to commit adequate time and effort to Board and committee responsibilities as provided for in the Charter of the Corporate Governance and Nomination Committee.

On a regular basis this internal process is extended to cover individual Board member assessments and/or the process is conducted by an independent outside consultant.

The results of the 2013 performance and effectiveness evaluation were discussed at the January 2014 meeting of the Board. It was concluded that the Board of Directors and its committees operate effectively. Progress in a number of areas was noted, including expanding and deepening shareholder engagement. There is room for further improvement in a number of areas including strengthening the geographic and gender diversity of the Board.

CONTENT

The performance review examines the performance and effectiveness, and strengths and weaknesses of individual Board members, and of the full Board and each Board committee. The review includes composition, structure, processes, tasks and governance of the Board and its committees, effectiveness of meetings, behavior, team dynamics and interactions, quality of briefing materials and presentations, follow-up actions on decisions, relationship to senior management and the role and leadership of the Chairman. The list of performance criteria is customized for each committee, addressing its specific tasks and responsibilities.

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

INFORMATION ON THE MANAGEMENT

The Board of Directors ensures that it receives sufficient information from the Executive Committee to perform its supervisory duty and to make decisions that are reserved for the Board of Directors. The authority of the Board of Directors to determine the compensation of the members of the Executive Committee is an important element to ensure the alignment of Executive Committee members with the interests of Novartis and its shareholders.

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

- the Chief Executive Officer informs the Board regularly about current developments;
- the minutes of Executive Committee meetings are made available to the Board members;
- meetings or teleconferences are held as required between Board members and the Chief Executive Officer;
- the Board of Directors regularly meets with all members of the Executive Committee;
- the Board of Directors is updated in detail by each Division Head on a quarterly basis;
- by invitation, other members of management are invited to attend Board meetings to report on areas of the business within their responsibility; and
- Board members are entitled to request information from members of the Executive Committee or any other Novartis associate, and may also 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 of Directors and the 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 meetings of the Audit and Compliance Committee. Furthermore, the Heads of Internal Audit, Financial Reporting and Accounting, Compliance, Quality as well as the Business Practices Officers, report on a regular basis to the Audit and Compliance Committee.

The Audit and Compliance Committee reviews financial reporting processes on behalf of the Board of Directors. For each quarterly and annual release of financial information, the Disclosure Review Committee reviews the release for accuracy and completeness of disclosures. The Disclosure Review Committee is chaired by the Chief Financial Officer and is attended by the Chief Executive Officer, the Group General Counsel, the Heads of the Divisions, 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. Decisions made by the Disclosure Review Committee are reviewed by the Audit and Compliance Committee before publication of the quarterly and annual releases.

The Risk Committee oversees the risk management system and processes, as well as reviews the risk portfolio of the Group to ensure appropriate and professional management of the risks. 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 and the Head of Internal Audit are also invited to the meetings.

NOVARTIS MANAGEMENT INFORMATION SYSTEM

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

- consolidated income statement of the month, quarter-to-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; and
- supplementary data on a monthly, quarterly and year-to-date basis such as free cash flow and gross and net liquidity, headcount, personnel costs, working capital, earnings per share and economic value added as defined by Novartis and on a USD basis where applicable.

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

The Board also receives on a quarterly basis an outlook of the full year results in accordance with IFRS and Core, together 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 and the consolidated income statement in USD in accordance with IFRS and Core (as defined by Novartis) contained in the Plan.

The Board does not have direct access to Novartis' 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; assists organizational units in the accomplishment of objectives by providing an independent approach to the evaluation, improvement and effectiveness of their internal control framework; prepares reports regarding 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, the audit plans and the results of the internal audits.

RISK MANAGEMENT

The Corporate Risk Management function is overseen by the independent Risk Committee of the Board of Directors. 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 designed 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 Operations, Corporate Health, Safety, Environment, Business Continuity and Compliance, providing support and controlling the effectiveness of risk management by the Divisions in these respective areas.

RELATIONS WITH SHAREHOLDERS

Communication with shareholders allows the shareholders to be better informed on Novartis' strategy, business operations and governance, and the Board to learn about expectations and concerns of the shareholders and to address these.

The CEO, with the CFO and the investor relations team, supported by the Chairman, is responsible for ensuring effective communication with shareholders.

Novartis communicates with its shareholders through the Annual General Meeting, meetings with groups of shareholders or with individual shareholders and through written or electronic communication with shareholders.

At the Annual General Meeting the Chairman, the CEO and other members of the Executive Committee and representatives of the external auditors are present and can answer questions of shareholders. Other meetings with shareholders may be attended by the Chairman, CEO, CFO, members of the Executive Committee and other members of senior management.

Topics discussed with shareholders may include strategy, business performance and corporate governance.

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

BOARD OF DIRECTORS

MEMBERS

Joerg Reinhardt, Ph.D.
Chairman
German, age 57

Ulrich Lehner, Ph.D.
Vice Chairman
German, age 67

Enrico Vanni, Ph.D.
Vice-Chairman
Swiss, age 62

Dimitri Azar, M.D., MBA
American, age 54

Verena A. Briner, M.D.
Swiss, age 62

William Brody, M.D., Ph.D
American, age 69

Srikant Datar, Ph.D.
American, age 60

Ann Fudge
American, age 62

Pierre Landolt, Ph.D.
Swiss, age 66

Andreas von Planta, Ph.D.
Swiss, age 58

Charles L. Sawyers, M.D.
American, age 54

Dr. Ing. Wendelin Wiedeking
German, age 61

William T. Winters
British/American, age 52

Rolf M. Zinkernagel, M.D.
Swiss, age 69

HONORARY CHAIRMEN

Alex Krauer, Ph.D

Daniel Vasella, M.D.

CORPORATE SECRETARY

Charlotte Pamer-Wieser, Ph.D.

Joerg Reinhardt, Ph.D.
German, age 57

Function at Novartis AG Joerg Reinhardt, Ph.D., has been Chairman of the Board of Directors of Novartis AG since August 2013. He is Chairman of the Chairman's Committee.

Other activities Mr. Reinhardt previously served as chairman of the board of management and the executive committee of Bayer HealthCare. 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. He is currently a member of the Council of the International Federation of Pharmaceutical Manufacturers and Associations (IFPMA).

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 COO 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; member of global non-profit representing pharmaceutical industry.

Ulrich Lehner, Ph.D.
German, age 67

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, and is a member of the Chairman's Committee, the Audit and Compliance Committee, the Risk Committee, the Compensation Committee, and the Corporate Governance and Nomination 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, chairman of the supervisory board of Deutsche Telekom AG as well as ThyssenKrupp AG and serves as 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 Dr. August Oetker KG and Krombacher Brauerei, both in Germany.

Professional background Mr. Lehner graduated in business administration and mechanical engineering from the Darmstadt University of Technology, Germany, in 1975. From 1975 to 1981, he was an auditor with KPMG Deutsche Treuhand-Gesellschaft AG in Duesseldorf. 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/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 global telecommunications and 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.
Swiss, age 62

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, and Chairman of the Compensation Committee. He is also a member of the Chairman's Committee and the Audit and Compliance 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, for nonlisted companies including Eclosion2, Denzler & Partners SA and Banque Privée BCP (Suisse) SA, all based in Switzerland. He is also a board member of Advanced Oncotherapy plc in England and of Lombard Odier SA 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; as well as 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 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., MBA
American, age 54

Function at Novartis AG Dimitri Azar, M.D., has been a member of the Board of Directors since February 2012. He qualifies as an independent Non-Executive Director and is a member of the Audit and Compliance 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 sits on the board of trustees of the Chicago Ophthalmological Society and the Association of Research in Vision and Ophthalmology. Dr. Azar is a member of the American Ophthalmological Society and holds committee positions with the American Academy of 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 National Institutes of Health since 1993. Dr. Azar practiced at the Wilmer Ophthalmologic Institute at The Johns Hopkins Hospital School of Medicine, then returned to the Massachusetts Eye and Ear Infirmary as director of the 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 of leading US university medical school. *Biomedical Science experience* – federally funded clinician-scientist and research fellowship recipient.

Verena A. Briner, M.D.
Swiss, age 62

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.

Other activities Dr. Briner is professor of internal medicine at the University of Basel, Switzerland, and chief medical officer and head of the department of medicine at the Lucerne Cantonal Hospital in Switzerland. 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 supervisory group for personalized medicine of the Centre for Technology Assessment TA-SWISS. She also is a member and former president of the Swiss Society of Internal Medicine and 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 Society of General Internal Medicine in 2011, and is 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 at leading Swiss university.

William Brody, M.D., Ph.D.
American, age 69

Function at Novartis AG William Brody, M.D., Ph.D., has been a member of the Board of Directors since 2009. He qualifies as an independent Non-Executive Director and is a member of the Compensation Committee.

Other activities Dr. Brody is president of the Salk Institute for Biological Studies, La Jolla, California, United States. He is also a member of the boards of directors of the U.S.-based International Business Machines Corp. and Kool Smiles Inc., and the mutual funds boards of T. Rowe Price. He is a member of numerous professional associations, and also serves on the advisory boards of various government and nonprofit organizations.

Professional background Dr. Brody earned his bachelor's and master's degrees in electrical engineering from the Massachusetts Institute of Technology before completing his M.D. and Ph.D. at Stanford University, all in the United States. Following training in cardiovascular surgery and radiology he held various academic positions, including professor for radiology and electrical engineering at Stanford University, and director of the department of radiology at The Johns Hopkins University. From 1996 to 2009, he was president of The Johns Hopkins University, and since 2009, president of the Salk Institute for Biological Studies in the United States. He is a member of the US National Academy of Engineering and the Institute of Medicine.

Key knowledge/experience *Leadership, Biomedical Science, Healthcare and Education experience* – president of leading US scientific research institution; former president of leading US university. *Global, Engineering and Technology experience* – former board member of global technology company.

Srikant Datar, Ph.D.
American, age 60

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 Chairman's Committee, 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, and of HCL Technologies in India.

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 of leading US university. *Global and Industry experience* – board member of global professional services firm, leading global medical technology company, major US telecommunications company and global information technology company.

Ann Fudge
American, age 62

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 Corporate Governance and Nomination Committee.

Other activities Ms. Fudge serves on the boards of directors of General Electric Co. in the United States; Unilever NV, London and Rotterdam, Netherlands; and Infosys Ltd., India. She is a trustee of the New York-based Rockefeller Foundation, and is chairman 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 Division of Kraft Foods Inc., Northfield, Illinois.

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 technology company and global consumer goods company.

Pierre Landolt, Ph.D.
Swiss, age 66

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. He is Chairman of the Corporate Governance and Nomination 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 over several years converted it into a model farm in organic and biodynamic production. Since 1997 Mr. Landolt has been associate and chairman 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 cofounded Amazentis SA, a startup company active in the convergence space of medication and nutrition. In 2011 Mr. Landolt received the title of Docteur ès Sciences Économiques Honoris Causa from the University of Lausanne in Switzerland.

Key knowledge/experience *Banking and Industry experience; International and Emerging Market experience* – chairman of private bank; chairman and vice chairman of luxury goods companies. *Leadership and Global experience* – chairman of large family investment holding.

Andreas von Planta, Ph.D.
Swiss, age 58

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 is a member of the Audit and Compliance Committee as well as the Corporate Governance and Nomination Committee.

Other activities Mr. von Planta is chairman of the Schweizerische National-Versicherungs-Gesellschaft AG and a board member of Holcim Ltd., both in Switzerland. He is also a board member of various Swiss subsidiaries of foreign companies and other nonlisted Swiss companies. He is a member of the Board of Editors of the "Swiss Review of Business Law" and is a former chairman of the Geneva Association of Business Law. Mr. von Planta is chairman of the regulatory board of the SIX Swiss Exchange AG.

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, New York, 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; board member of global construction materials manufacturer. *Industry experience* – partner of leading Swiss law firm.

Charles L. Sawyers, M.D.
American, age 54

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.

Other activities In the United States, Dr. Sawyers is chair 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 president of the American Association of Cancer Research and former president of 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., Cambridge, MA/USA.

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

Dr. Ing. Wendelin Wiedeking
German, age 61

Function at Novartis AG Dr. Ing. Wendelin Wiedeking has been a member of the Board of Directors since 2003. He qualifies as an independent Non-Executive Director. He is a member of the Risk Committee and the Corporate Governance and Nomination Committee.

Other activities Mr. Wiedeking was chairman of the executive board of Porsche Automobil Holding SE and of Dr. Ing. h.c. F. Porsche AG, both in Germany, until July 2009. Since then he has been an entrepreneur.

Professional background Mr. Wiedeking graduated in 1978 with a degree in mechanical engineering from the Rhine-Westphalian College of Advanced Technology in Germany, where he also worked as a scientific assistant in the machine tool laboratory. His professional career began in 1983 in Germany as director's assistant in the production and materials management area of Dr. Ing. h.c. F. Porsche AG in Stuttgart-Zuffenhausen. In 1988, he moved to Glyco Metall-Werke KG in Wiesbaden as division manager, where he advanced by 1990 to the position of CEO and chairman of the board of management of Glyco AG. In 1991, he returned to Dr. Ing. h.c. F. Porsche AG as member of the executive board for production. A year later, the supervisory board appointed him spokesman of the executive board (CEO), then chairman in 1993.

Key knowledge/experience *Leadership, Global and Industry experience* – former chairman and CEO of global automotive company. *Engineering and Technology experience* – former chairman and CEO of manufacturing supply company.

William T. Winters
British/American, age 52

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. 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.

Rolf M. Zinkernagel, M.D.
Swiss, age 69

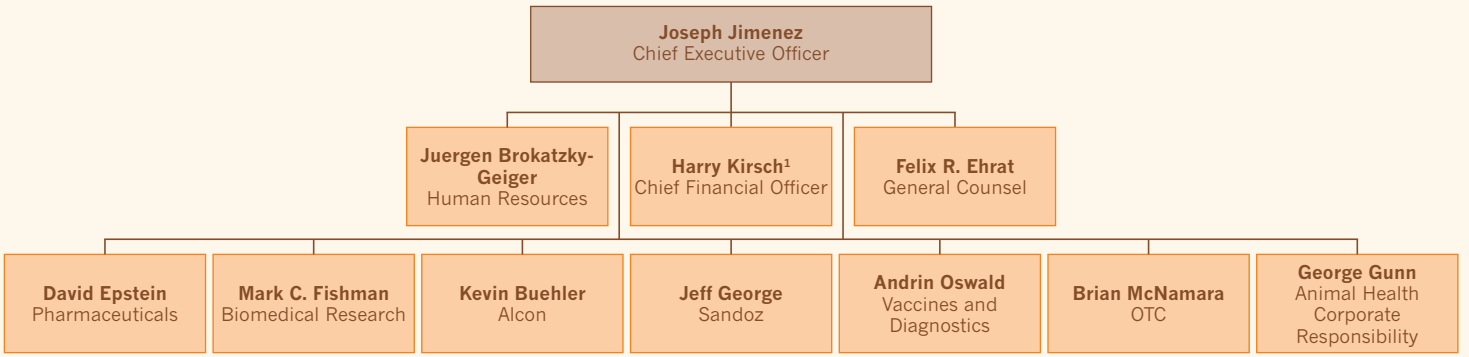
Function at Novartis AG Rolf M. Zinkernagel, M.D., has been a member of the Board of Directors since 1999. He qualifies as an independent Non-Executive Director. He is a member of the Corporate Governance and Nomination Committee.

Other activities Dr. Zinkernagel was vice president of the International Union of Immunological Societies until 2010. He is a member of the scientific advisory boards of BioAlliance AG, Germany; Aravis General Partner Ltd., Cayman Islands and Switzerland; Telormedix, Switzerland; X-Biotech, Canada; Novimmune, Switzerland; Cancevir, Switzerland; MannKind, United States; and the Biomedical Sciences International Advisory Council, Singapore. Dr. Zinkernagel is also a science consultant to Chilka Ltd., Cayman Islands and Ganymed, Germany.

Professional background Dr. Zinkernagel graduated from the University of Basel, Switzerland, with an M.D. in 1970. From 1992 to 2008, he was a professor and director of the Institute of Experimental Immunology at the University of Zurich, and after retirement in 2008 continues to be active at the University of Zurich. Dr. Zinkernagel has received many awards and prizes for his work and contribution to science, notably the Nobel Prize in medicine, which he was awarded in 1996.

Key knowledge/experience *Biomedical Science and Education* experience – former professor and director at leading Swiss university. *Leadership and Global experience* – member of scientific advisory boards of numerous global biotech companies; member of major international research councils.

COMPOSITION OF THE EXECUTIVE COMMITTEE



[1] Permanent attendee until December 31, 2013, full member as per January 1, 2014

COMPOSITION OF THE EXECUTIVE COMMITTEE

The Executive Committee is headed by the Chief Executive Officer. The members of the Executive Committee are appointed by the Board of Directors.

The organizational structure and the details of the responsibility of the Executive Committee are set forth in the Board Regulations (www.novartis.com/corporate-governance).

The Board of Directors has not concluded any contracts with third parties to manage the business.

ROLE AND FUNCTIONING OF THE EXECUTIVE COMMITTEE

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

- Developing policies, strategies and strategic plans for approval by the Board of Directors and implementing those approved by the Board of Directors;
- Submitting to the Board of Directors and its committees proposed changes in management positions of material significance, investments, financial measures, acquisitions or divestitures, contracts of material significance and budgets;
- Preparing and submitting quarterly and annual reports to the Board of Directors or its committees;
- Informing the Board of Directors 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 optimized results;
- Promoting an active internal and external communications policy; and
- Dealing with any other matters as are delegated by the Board of Directors to the Executive Committee.

THE CHIEF EXECUTIVE OFFICER

The Chief Executive Officer, in addition to other duties that may be assigned to him by the Board of Directors:

- leads the Executive Committee, building and maintaining an effective executive team; and, together with the Executive Committee:
- is responsible for the operational management of Novartis;
- develops strategy proposals for recommendation to the Board and ensures that agreed strategies are implemented;
- plans human resourcing to ensure that Novartis has the capabilities and resources required 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, where 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 the business performance is consistent with the business principles and with legal and ethical standards;
- ensures that robust management succession and management development plans are in place and presented to the Board from time to time;
- develops processes and structures to ensure that capital investment proposals are reviewed thoroughly, that associated risks are identified and appropriate steps taken to manage the risks;
- develops and maintains an effective framework of internal controls over risk in relation to all business activities including Novartis' trading activities; and
- ensures that the flow of information to the Board is accurate, timely and clear.

CONTRACTS WITH MEMBERS OF THE EXECUTIVE COMMITTEE

In accordance with good corporate governance, employment contracts with members of the Executive Committee do not contain unusually long notice periods, change-of-control clauses (including no "golden parachutes," special provisions on the cancellation of contractual arrangements, agreements concerning special notice periods or long-term contracts exceeding 12 months, waivers of lock-up periods for options, shorter vesting periods, and no additional contributions to pension funds) or severance payments.

From left to right: Harry Kirsch, Andrin Oswald, Felix R. Ehrat, Mark C. Fishman, David Epstein, Joseph Jimenez, George Gunn, Juergen Brokatzky-Geiger, Jeff George, Kevin Buehler, Brian McNamara

EXECUTIVE COMMITTEE

MEMBERS

Joseph Jimenez
American, age 54

Juergen Brokatzky-Geiger, Ph.D.
German, age 61

Kevin Buehler
American, age 56

Felix R. Ehrat, Ph.D.
Swiss, age 56

David Epstein
American, age 52

Mark C. Fishman, M.D.
American, age 62

Jeff George
American, age 40

George Gunn, MRCVS
British, age 63

Harry Kirsch
German, age 48

Brian McNamara
American, age 47

Andrin Oswald, M.D.
Swiss, age 42

SECRETARY

Bruno Heynen

Joseph Jimenez
American, age 54

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 diagnostics, OTC and animal health. Previously Mr. Jimenez served as Division Head, Novartis Pharmaceuticals. He led the transformation of the pharmaceutical portfolio to balance mass market and specialty products, and significantly increased the percentage of sales from newly launched products. Mr. Jimenez also worked to realign the division's commercial approach to focus on the individual needs of customers, and incorporated more technological tools to better connect with patients and customers. Mr. Jimenez joined Novartis in April 2007 as Division Head, Novartis Consumer Health. Previously, he served as president and CEO of the North America business for the H.J. Heinz Co. 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 was also 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 Co., 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.

Kevin Buehler
American, age 56

Kevin Buehler has been Division Head, Alcon, since April 2011. He is a member of the Executive Committee of Novartis. Mr. Buehler was president and chief executive officer of Alcon Inc. from 2009 to 2011. He began his career with Alcon in 1984 as a regional sales manager in the Consumer Products Division, and held positions of increasing responsibility before being named director of sales and marketing. In 1996, he became director of Alcon's US Managed Care and Falcon Generic Pharmaceutical groups, and became vice president in 1998. The following year he returned to the US Consumer Products Division as vice president and general manager. Mr. Buehler moved to the International Division in 2002 as vice president and regional manager, Latin America and Caribbean. He was later named area vice president, Latin America, Canada, Australia and Far East. Mr. Buehler also served as senior vice president, global markets and as chief marketing officer. Prior to joining Alcon, he worked for The Gillette Co. and Snyder Drug Stores, both in the United States. Mr. Buehler holds a bachelor's degree from Carroll University in Waukesha, Wisconsin, in the United States, with concentrations in business administration and political science. He completed the Harvard Program for Management Development in 1993.

David Epstein
American, age 52

David Epstein has been Division Head, Novartis Pharmaceuticals, since 2010. He is a member of the Executive Committee of Novartis. Prior to his current appointment, Mr. Epstein served as Head of Novartis Oncology for nearly 10 years. Before joining Novartis, Mr. Epstein was an associate in the strategy practice of the consulting firm Booz Allen Hamilton Inc. in the United States. He joined Sandoz, a predecessor company of Novartis, in 1989 and held various leadership positions of increasing responsibility for the company, including Chief Operating Officer of Novartis Pharmaceuticals Corporation in the United States and Head of Novartis Specialty Medicines. Mr. Epstein graduated with a bachelor's degree in pharmacy from The Ernest Mario School of Pharmacy at Rutgers, The State University of New Jersey, in 1984, and with a Master of Business Administration in finance and marketing from New York's Columbia University Graduate School of Business in 1987.

Juergen Brokatzky-Geiger, Ph.D.
German, age 61

Juergen Brokatzky-Geiger, Ph.D., has been Head of Human Resources of Novartis since 2003. He is a member of the Executive Committee of Novartis. Mr. Brokatzky-Geiger joined Ciba-Geigy Ltd. in 1983 as a Ph.D. chemist in the Pharmaceuticals Division in Switzerland. After a job rotation in the United States, he held positions of increasing responsibility in Research and Development (R&D), including Group Leader of Process R&D, Head of Process R&D, and Head of Process Development and Pilot Plant Operations. During the merger of Ciba-Geigy and Sandoz in 1996, Mr. Brokatzky-Geiger was appointed Integration Officer of Technical Operations. He later became the Head of Chemical and Analytical Development, and served as the Global Head of Technical R&D from 1999 to 2003. Mr. Brokatzky-Geiger is a member of the board of Bachem AG in Switzerland. He graduated with a Ph.D. in chemistry from the University of Freiburg, Germany, in 1982.

Felix R. Ehrat, Ph.D.
Swiss, age 56

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 (Swiss Business Federation) and organizations in the cultural field. Previously, he was, among other things, chairman of Banca del Gottardo and a board member of Julius Baer Holding AG, Austriamicrosystems AG, Charles Voegele Holding AG and Carlo Gavazzi Holding AG. 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 LL.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, where he was president from 1998 to 1999. Current memberships include the Swiss Bar Association, the Zurich Bar Association and the Swiss Arbitration Association.

Mark C. Fishman, M.D.
American, age 62

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 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.

Jeff George
American, age 40

Jeff George has been Division Head, Sandoz, since 2008. He is a member of the Executive Committee of Novartis. Mr. George joined the Novartis Vaccines and Diagnostics Division in 2007 as Head of Commercial Operations for Western and Eastern Europe. He then advanced to Head of Emerging Markets for the Middle East, Africa, Southeast Asia and CIS at Novartis Pharmaceuticals. Before joining Novartis, Mr. George was a senior director of strategy and business development at Gap Inc., San Francisco, United States. From 2001 to 2004, he was an engagement manager with McKinsey & Company, also in San Francisco. 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 in international relations from Carleton College in Northfield, Minnesota, in the United States.

Harry Kirsch
German, age 48

Harry Kirsch has been Chief Financial Officer (CFO) of Novartis and a permanent attendee of the Executive Committee of Novartis since May 1, 2013. As of January 1, 2014, 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 expirations. 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").

Andrin Oswald, M.D.
Swiss, age 42

Andrin Oswald, M.D., has been Division Head, Novartis Vaccines and Diagnostics, 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), an Investment Committee member of the Global Health Investment Fund (GHIF), and a member of the Global Agenda Council on Catastrophic Risks of the World Economic Forum. 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.

George Gunn, MRCVS
British, age 63

George Gunn has been Division Head, Novartis Animal Health, and Head, Corporate Responsibility, 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 in healthcare companies. He worked as a veterinary surgeon for nine years before entering 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. 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, Scotland.

Brian McNamara
American, age 47

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 Procter & Gamble Co., Cincinnati, United States, where he gained extensive experience in consumer and brand marketing, product supply, and customer leadership. He was previously on the board of directors and executive committee of the Consumer Healthcare Products Association in the United States, and was s 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.

OUR INDEPENDENT EXTERNAL AUDITORS

DURATION OF THE MANDATE AND TERMS OF OFFICE

Based on a recommendation by the Audit and Compliance Committee, the Board of Directors nominates an independent auditor for election at the Annual General Meeting. PricewaterhouseCoopers (PwC) assumed its existing auditing mandate for Novartis in 1996. Bruno Rossi, auditor in charge, began serving in his role in 2013, and Michael P. Nelligan, global relationship partner, began serving in his role in 2009. The Audit and Compliance Committee ensures that these partners are rotated at least every five years.

INFORMATION TO THE BOARD OF DIRECTORS AND THE AUDIT AND COMPLIANCE COMMITTEE

The independent auditor, PwC, is responsible for opining on whether the audited 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.

The Audit and Compliance Committee, acting on behalf of the Board of Directors, is responsible for overseeing the activities of PwC. During 2013, the Audit and Compliance Committee held 6 meetings. At each of these 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 the written disclosures required by the Public Company Accounting Oversight Board (PCAOB), and the Audit and Compliance Committee and PwC discuss PwC's independence from Novartis and Novartis' management.

The Audit and Compliance Committee recommended to the Board of Directors, and the Board of Directors approved, inclusion of the audited financial statements in the Annual Report for the year ended December 31, 2013.

The Audit and Compliance Committee, on a regular basis, evaluates the performance of PwC and, once yearly, based on this performance evaluation, determines whether PwC should be proposed to the Annual General Meeting for election. Also, once yearly, the auditor in charge and the global relationship partner report to the Board of Directors on the activities of PwC during the current year and on the audit plan for the coming year and 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.

In order to assess the performance of PwC, the Audit and Compliance Committee requires a self-evaluation report from PwC, holds private meetings with the Chief Executive Officer, the Chief Financial Officer and with the Head of Internal Audit and, if necessary, obtains an independent external assessment. The Board of Directors also meets with the auditor in charge and the global relationship partner. 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 work.

Pre-approval is detailed as to the particular services or categories of services, and is subject to a specific budget. PwC and management report, on a quarterly basis, 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.

AUDITING AND ADDITIONAL FEES

PwC charged the following fees for professional services rendered for the 12-month periods ended December 31, 2013 and December 31, 2012:

	2013 USD thousands	2012 USD thousands
Audit Services	28 590	28 960
Audit-Related Services	2 040	2 300
Tax Services	90	500
Other Services	250	190
Total	**30 970**	31 950

Audit Services are defined as the standard audit work performed each year in order to issue opinions on the parent company and consolidated financial statements of the Group, to issue opinions relating to the effectiveness of the Group's internal controls over financial reporting, and to issue reports on local statutory financial statements. Also included are audit services that can only be provided by the Group auditor, such as auditing of non-recurring transactions and implementation of new accounting policies, audits of accounting infrastructure system controls, pre-issuance reviews of quarterly financial results, consents and comfort letters and any other audit services required for SEC or other regulatory filings.

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 auditor signing the audit report. They comprise services such as acquisition due diligence and related audits, audits of pension and benefit plans, IT infrastructure control assessments, contractual audits of third-party arrangements, assurance services on corporate responsibility reporting and compliance with corporate integrity agreements and consultation regarding new accounting pronouncements.

Tax Services represent tax compliance, tax returns, assistance with historical tax matters and other tax-related services.

Other Services include training in the finance area, advice for process improvements, benchmarking studies, assessment of certain non-financial processes and license fees for use of accounting and other reporting guidance databases.

FURTHER INFORMATION

THE GROUP STRUCTURE OF NOVARTIS

NOVARTIS AG AND GROUP COMPANIES

Under Swiss company law, Novartis AG is organized as a corporation which 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 directly or indirectly all companies 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 and Diagnostics, Sandoz (generics), Over-the-Counter and Animal Health, as well as Corporate activities.

MAJORITY HOLDINGS IN PUBLICLY TRADED GROUP COMPANIES

Novartis AG holds 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 59.9 million at December 31, 2013, using the quoted market share price at the year end. Applying this share price to all the shares of the company the market capitalization of the whole company was USD 239.7 million and that of the shares owned by Novartis was USD 179.8 million.

SIGNIFICANT MINORITY HOLDINGS IN PUBLICLY TRADED COMPANIES NOVARTIS AG HOLDS

– 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, 2013, was USD 14.8 billion. The total market value of Roche Holding AG was USD 241.2 billion. Novartis does not exercise control over Roche Holding AG, which is independently governed, managed and operated.
– 24.9% of Idenix Pharmaceuticals, Inc., with its registered office in Delaware, USA, and listed on NASDAQ (Valor No. 1630029, ISIN US45166R2040, symbol: IDIX). The total market value of the 75.1% free float of Idenix Pharmaceuticals, Inc. was USD 602.1 million at December 31, 2013, using the quoted market share price at the year end. Applying this share price to all shares of the company, the market capitalization of the whole company was USD 801.4 million and that of the shares owned by Novartis was USD 199.3 million. Novartis does not exercise control over Idenix Pharmaceuticals, Inc., which is independently governed, managed and operated.

POLITICAL CONTRIBUTIONS

Novartis will only make political contributions that support the strategic interests of Novartis, its shareholders and other stakeholders. 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.

In 2013 Novartis made political contributions (excluding contributions to industry associations) totaling approximately USD 1 million, mostly in the US and in Switzerland.

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 the 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 SEC. Novartis discloses quarterly financial results in accordance with IFRS and issues press releases from time to time regarding developments in its businesses.

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

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 various opportunities to learn more about Novartis.

Investor Relations is based at the Group's headquarters in Basel, Switzerland. A 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.

WEBSITE INFORMATION

Topic	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

COMPENSATION REPORT

Novartis aspires to be an employer of choice and to attract and retain best-in-class talent around the world.

Our compensation plans are designed to support our position as a preeminent global healthcare company. They provide competitive compensation and benefits for world-class talent in a competitive market. They are aligned with our business performance objectives, which are key to our sustained success while being transparent, coherent and consistent with our pay-for-performance philosophy. Our compensation system aims to align with shareholders' interests and encourage innovation and entrepreneurship, while at the same time, deter excessive risk-taking at the expense of the long-term condition of the Group.

The Compensation Report describes our compensation system and philosophy, and provides details on how compensation related to 2013 performance.

CONTENTS

INDIA

An ancient Indian book on elephant maladies and herbal treatments.

Enrico Vanni

DEAR SHAREHOLDER

It is with pleasure that I, as Chair of the Compensation Committee of the Board of Directors, introduce you to the 2013 Compensation Report of Novartis AG.

In 2013, this Committee welcomed Ann Fudge as a new member and has undertaken significant work to:

– improve disclosure in our 2013 Compensation Report;
– finalize the design of our new executive compensation system; and
– conduct a review of our Board compensation system.

During our extensive discussions with shareholders and proxy advisors in 2013, we learned that you would like a better understanding of how our executive incentive plans function, including their link to business strategy and alignment with shareholders' interests. We also learned that you would like more detail regarding how performance against Group targets translated into the incentive amounts earned by our CEO.

In response, we have substantially expanded disclosure in our report regarding how our incentive plans work, including achievements against the 2013 financial targets underpinning our incentive plans. We have also shown how the incentive payouts of our CEO have been earned.

Overall, 2013 was a strong year for Novartis and for our shareholders. We performed above expectations, growing sales in all divisions. The Group met its guidance – which was raised twice during the year – and exceeded its financial targets, including exceeding specific targets in innovation. We also continued to improve in quality, compliance and customer satisfaction, and shareholders benefited with a significant increase in share price, as well as an increased dividend.

In 2013, the Committee concluded the strategic review of the Company's entire approach toward executive compensation that began in 2012. As shown by the positive outcome of the shareholder say-on-pay vote at the 2013 AGM, the Committee believes that shareholders welcome the overall design of the new executive compensation program for the members of the Executive Committee of Novartis (ECN), which will become effective in 2014.

The most important changes in the new compensation system are that we:

- aligned the performance measures underpinning our incentive plans directly to our business strategy (Innovation, Growth and Productivity), therefore ensuring that we drive the right priorities in our leadership team;
- simplified the program by eliminating share options, matching grants, and discretionary awards;
- reformatted the Annual Incentive into one integrated balanced scorecard that considers performance holistically against:
  - Group and divisional financial and innovation targets
  - individual financial and operational objectives
  - our values and behavior standards;
- removed our three-year time-vesting long-term incentive plan "Select" and implemented a three-year performance-vesting for both of our long-term incentive plans; and
- split the new total long-term incentive into two separate plans, which are each subject to a three-year performance period: one based on our Novartis Cash Value Added (NCVA, see definition on page 134) performance and results in innovation; the other based on our Total Shareholder Return measured against 12 other companies that form our healthcare peer group.

The new executive compensation program has the full support of our Board. We believe it will provide a competitive advantage to Novartis in the marketplace for executive talent, is aligned with shareholders' interests and will support our aspiration to be the world's most respected and successful healthcare company.

During 2013, the Compensation Committee, together with its independent advisor, also undertook a detailed review of Board compensation and has approved a revised policy, which is outlined on page 137. It reflects some of our recent governance changes, including the removal of the Chairman's Committee. It aims to better align our Board compensation to the current levels of our international healthcare peer group, and other Swiss industrial companies; the latter being relevant due to the extensive responsibilities that a Swiss board has, including but not limited to setting strategy, ensuring its implementation, making organizational decisions, carrying responsibility for financial performance and integrity, and overseeing senior management.

The new Swiss law regarding Say-on-Pay (the Minder Ordinance) was released on November 20, 2013 and entered into force on January 1, 2014. This will lead to the individual election by the shareholders of the Chairman, the members of the Board and of the Compensation Committee for a term of one year at the 2014 AGM. Other key changes, such as the amendment of the Articles of Association, will have to be implemented in 2015. In the meantime, at the 2014 AGM, we are requesting your endorsement in an advisory capacity on two compensation-related votes. The first vote is on the aggregate amount of Board compensation from the 2014 AGM to the 2015 AGM. The second vote is on the aggregate amount of fixed and variable compensation earned by members of our Executive Committee for the 2013 business year.

On behalf of Novartis and the Compensation Committee, I would like to thank you for your support and your feedback, which I consider extremely valuable in driving improvements in our compensation systems. I invite you to send your comments on our new program to me at the following email address: investor.relations@novartis.com.

Respectfully,

Enrico Vanni, Ph.D.,
Chairman of the Compensation Committee
January 28, 2014

SUMMARY

COMPANY PERFORMANCE 2013

2013 was a strong year for Novartis, growing sales, operating income and net income (in constant currencies). Novartis met its raised guidance across all parameters especially versus our start-of-year outlook. We performed above expectations as a result of strong growth product momentum and growing sales in all divisions, even when excluding the lower than expected impact of generic competition.

Overall, growth products performance offset the impact of sales lost to generics of USD 2.2 billion (mainly due to *Diovan* and *Zometa/Aclasta*). Novartis achieved the significant number of eleven blockbusters (products with sales above USD 1 billion), ten of which were in the Pharmaceuticals division and one with sales across Pharmaceuticals, Consumer Health and Sandoz. Productivity gains allowed for continued investments behind growth products. Currency had a negative impact (–2% on net sales, –8% on operating income) due to a weak yen and weak emerging market currencies against the US dollar. The table below outlines results versus prior year in constant currencies as well as in US dollars:

	Growth in constant currencies versus prior year	Growth in USD versus prior year
Net sales	+4%	+2%
Operating income	+5%	–3%
Net income	+7%	–1%
EPS	+6%	–2%

Free cash flow of USD 9.9 billion was 13% below the prior year. Aside from the significant currency impact, major reasons for the decline were increased accounts receivables and higher capital investments in manufacturing and research facilities.

In addition, we performed well on our three strategic priorities:

Innovation

– In 2013, we secured 18 approvals[1]. Our Pharmaceuticals division alone achieved 13 approvals,[1] including *Ultibro Breezhaler* in Europe, and *Tobi Podhaler* in the US. We also secured key approvals in Alcon (including *Jetrea* for vitreo-macular traction in Europe), and in Vaccines and Diagnostics (including *Bexsero* for meningococcal disease B in Europe).
– Our Pharmaceuticals division filed successfully for AIN457 in psoriasis and omalizumab in chronic spontaneous urticaria.
– We achieved three FDA breakthrough therapy designations in 2013, placing us at the top of our industry for designations for distinct new molecular entities.

Growth

– Net sales grew 4% in constant currency. Excluding the impact of patent expiries, underlying sales grew 8% in constant currencies with underlying core operating income up 15% in constant currency.
– Growth products grew 15% in US dollars, contributing 31% of total Group net sales (up from 28% in 2012).
– Sales in emerging markets grew 10% in constant currencies.

Productivity

– We achieved USD 2.8 billion in productivity cost savings, which exceeded our start of year projections.
– We continued to drive our manufacturing footprint program to increase capacity utilization and reduce cost. So far, we have divested or closed 20 manufacturing sites.[2]
– Further, we drove cross-divisional procurement savings, outsourcing and offshoring, reduced infrastructure cost in research and optimized our returns via proactive and decisive resource allocation. We also made productivity gains through global business service hubs.

In 2013, we continued to improve in quality, compliance and customer satisfaction. We are also proud to have been recognized as one of the 25 best multinational employers by Great Place to Work® Institute, and we ranked top pharmaceutical company in Fortune's World's Most Admired Companies for the third year in a row.

Finally, our shareholders benefited from a share price increase of 24% (from CHF 57.45 at December 31, 2012 to CHF 71.20 at December 31, 2013) and the dividend of CHF 2.30 per share paid in the year, resulting in a Total Shareholder Return of 28% for the year (in Swiss francs, 32% in US dollars).

Details regarding 2013 performance against Group targets can be found on pages 115 and 116.

CEO 2013 COMPENSATION

As outlined above, overall the Company exceeded start-of-year expectations, and the Board recognized that the CEO met or exceeded most of his individual objectives, including his financial targets that were set in constant currencies. However, given that we saw a decline, compared to the prior year, in reported operating income and free cash flow, the Compensation Committee and the CEO determined together, that he would waive a portion of his variable compensation for the performance year 2013. The Board of Directors supported this decision.

This resulted in our CEO earning a total compensation (salary and variable compensation including benefits) of CHF 13.2 million for the year 2013, which is at the same level to the compensation he received for the prior year (2012), as detailed in the table below.

[1] Major approvals across Pharmaceuticals, Alcon and Vaccines and Diagnostics Divisions in the EU and US

[2] Includes Pharmaceuticals manufacturing site in Suffern, NY (USA) as announced in January 2014

CEO COMPENSATION 2013 VERSUS 2012 (CHF EQUIVALENT VALUE)

		2013 Total Compensation (CHF '000)	2012 Total Compensation (CHF '000)
Fixed compensation and benefits			
Annual Base Compensation		2 055	2 025
Pension Benefits		176	161
Other Benefits		94	129
Variable compensation			
Annual Incentive		1 061	1 370
Leveraged Share Savings Plan	Nominal value of potential future share match (5-year time-vesting)	0	0
Equity Plan Select	Nominal value at grant, time-vesting over 3 years	3 714	4 796
Long-Term Performance Plan	Value at vesting date	6 126	4 747
Total Compensation		**13 226**	**13 228**

In authorizing this pay, we are mindful of our responsibility to the Company and to you, its owners, to provide pay opportunities that are competitive in the marketplace for all our key associates, including our CEO, and then to make sure that realized pay relates to our performance and the individual contributions of each ECN member to that performance.

EXECUTIVE COMPENSATION PHILOSOPHY & PRINCIPLES

NOVARTIS COMPENSATION PHILOSOPHY

Our compensation philosophy aims to ensure that executives are rewarded according to their success in implementing the Company strategy and their contribution to company performance. Our key strategic priorities of innovation, growth and productivity form the basis of the performance measures established for both the annual and long-term incentives.

Our compensation system aims to foster personal accountability based on clear individual and business objectives, and also underlines the importance of competence and integrity as drivers of sustainable business success.

A significant portion of total compensation varies with performance, with an emphasis on long-term equity-based compensation to further align the interests of executives with those of our shareholders.

Our compensation systems are designed to meet the following 5 key compensation principles:

Pay for performance	Variable compensation is tied directly to the achievement of strategic Company goals, as measured by specific, pre-determined, short-term and long-term business performance targets. Ambitious targets are set to drive sustained superior Company performance.
Business ethics	All associates are expected to achieve their business results through ethical practices, reflected in our Code of Conduct. The Novartis Values and Behaviors are an integral part of our performance measures.
Balanced rewards to create sustainable value	Compensation programs are designed to strike a balance between incentivizing talented associates while delivering sustainable returns to our shareholders. Incentive programs consider the long-term life cycle that characterizes our industry, in particular, the innovation and development challenges.
Alignment with shareholders	We ensure that the interests of leaders are fully aligned with those of our shareholders. Minimum ownership guidelines are in place for all key senior executives of the Group, and compensation outcomes are tied directly to the performance of Novartis shares.
Competitive compensation	Compensation at competitive levels is essential to attract, retain and motivate talented and diverse associates. Our compensation structure and target levels are comparable to relevant benchmarks at peer companies.

EXECUTIVE COMPENSATION BENCHMARKING

To attract and retain key talent, it is important for us to offer competitive compensation levels on a global basis. In line with our compensation philosophy, associates achieving their objectives are generally awarded target compensation at a level comparable to the median level of the relevant benchmarks. In the event of under- or over-performance, the actual compensation may be lower or higher than the benchmark median. In the event of exceptional and sustained performance, actual compensation may be awarded at the top quartile of the relevant benchmark in order to encourage and reward superior performance.

The Compensation Committee reviews the compensation of the CEO and of the members of the Executive Committee annually and compares these to the relevant compensation level of similar positions at peer companies. For this purpose, we use benchmark data from well-known market data providers and other relevant data sources. In particular, we review the mix of short-term and long-term incentives, the mix of cash and share-based compensation, and the level of deferred compensation as well as current compensation policies. Further, the data analysis conducted by the market data providers takes into account factors such as recent market trends and best practices in compensation. The Compensation Committee's independent advisor reviews and evaluates the data received, and provides independent research and advice for the CEO's target compensation, which comes to the Compensation Committee without the advance knowledge or consent of the CEO.

For the CEO and the members of the Executive Committee, the comparator companies consist of competitors in the healthcare industry which are operating on a global basis and have the same or similar business model, business size, international competition, and need for talent and skills.

BENCHMARK COMPARATOR COMPANIES

AstraZeneca	GlaxoSmithKline	Roche
Sanofi	Abbott	AbbVie
Amgen	Bristol-Myers Squibb	Eli Lilly & Company
Johnson & Johnson	Merck & Co.	Pfizer

Benchmark criteria (in USD billion)	Novartis[1]	Benchmark Peers Median[2]
Net sales/Revenue	57.9	40.9
Market capitalization	194.2	108.3
Operating income[3]	10.9	8.2
Net income	9.3	6.2
Total assets	126.3	63.0

[1] As of December 31, 2013
[2] As at last reported quarter end except for market capitalization, which is as of December 31, 2013.
[3] Operating income for Novartis, earnings before interest and tax for peer companies
Source: ThomsonFinancial, trailing four quarters

EXECUTIVE PERFORMANCE MANAGEMENT PROCESS

To foster a high-performance culture, we apply a uniform People 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-tier formal process.

OBJECTIVE SETTING

OBJECTIVE SETTING FOR THE CEO

At the beginning of each performance year, the Chairman meets with the CEO to discuss his objectives for the coming year following a balanced scorecard approach. The Board of Directors reviews and approves these objectives and ensures that they are in line with our goals of fostering sustainable performance, balancing short- and long-term goals, and not rewarding inappropriate or excessive risk taking at the expense of the long-term condition of the Group.

Details of the individual objectives for the CEO for 2013 are on pages 116 and 117. Details of the long-term performance targets under LTPP are on pages 120 and 121.

OBJECTIVE SETTING FOR THE MEMBERS OF THE EXECUTIVE COMMITTEE

At the beginning of each performance year, the CEO and the members of the Executive Committee that report to him determine together the business objectives and respective metrics applicable to each of the divisional and global functional leaders. The CEO then presents the business objectives of the members of the Executive Committee to the Board of Directors for approval.

PERFORMANCE EVALUATION

PERFORMANCE EVALUATION FOR THE CEO

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 of the extent to which he is a role model for 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. This assessment contributes to the rating used for individual performance under the Annual Incentive and Equity Plan "Select".

PROCESS FOR PERFORMANCE EVALUATION OF THE MEMBERS OF THE EXECUTIVE COMMITTEE

For the mid-year review, the performance of members of the Executive Committee is reviewed by the CEO and then discussed with the Chairman. For the year-end review, the Board of Directors meets in January with the CEO to review and discuss the performance of the members of the Executive Committee for the previous year, taking into account the financial results, the level of achievement of financial and non-financial objectives, as well as adherence to the Novartis Values and Behaviors and the general economic and business environment. In addition, the Board of Directors periodically assesses the Group and divisional business performance and progress of the members of the Executive Committee against their objectives.

COMPENSATION DETERMINATION

COMPENSATION DETERMINATION FOR THE CEO

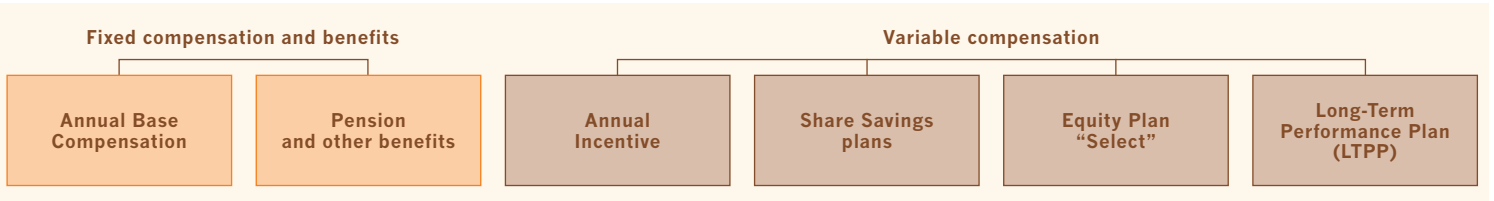
Based on the performance evaluation made by the Board of Directors, the Compensation Committee decides at its January meeting on the CEO's total compensation for the prior year and the target compensation for the coming year without the presence of the CEO. In reaching its decision, the Compensation Committee takes into account incentive plan calculated payouts, as well as other relevant information, including available benchmark information and the advice of the Compensation Committee's independent advisor.

COMPENSATION DETERMINATION FOR THE MEMBERS OF THE EXECUTIVE COMMITTEE

In the presence of the CEO and taking into consideration his recommendations, the Compensation Committee decides, in January, on the variable compensation for the prior year and the target compensation of the members of the Executive Committee for the coming year.

EXECUTIVE COMPENSATION 2013

2013 is the last year in which the current executive compensation system, as described below, is in place. Our 2013 executive compensation system consists of the following components:



ANNUAL BASE COMPENSATION

OVERVIEW

The level of base compensation reflects each associate's key areas of responsibilities, job characteristics, seniority, experience and skill sets. It is paid in cash, typically monthly, and is set according to local practice, designed to provide our associates with fixed compensation comparable to that offered by our peer companies.

In general, base compensation is reviewed annually, and any increases reflect both merit based on performance, as well as market movements.

2013 CEO OUTCOME

Following a review of market conditions as well as his performance, the CEO's annual base compensation was increased to CHF 2 060 500, as of March 1, 2013, which represented an increase of 1.5% versus 2012.

PENSION AND OTHER BENEFITS

OVERVIEW

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 of pension and healthcare benefits provided to associates is country-specific, influenced by local market practice and regulations, and regularly reviewed.

Our policy is to change from defined-benefit (DB) pension plans to defined-contribution (DC) pension plans. All the major plans have now been aligned with our benefits strategy as far as reasonably practicable.

We may provide other benefits in a specific country according to local market practice and regulations, including length-of-service awards and perquisites. Associates who have been transferred on an international assignment also receive benefits in line with our policies.

2013 CEO OUTCOME

As for the other ECN members, the pension and the level of benefits provided to our CEO are the same as those provided to other salaried associates in the relevant country of employment. During 2013, the Company contributed CHF 176 071 into the Swiss pension plans, and CHF 93 652 in other benefits.

ANNUAL INCENTIVE

OVERVIEW

The Annual Incentive ensures that over a single financial year, associates focus on their performance against three factors:

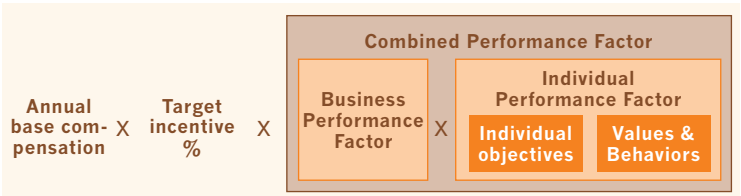
1. Group and divisional financial and innovation performance measures;
2. Individual financial and operational objectives, set according to specific roles; and
3. The Novartis Values and Behaviors.

Measures for the Annual Incentive have been selected because they define, in a balanced way, our success in implementing strategy and driving short-term business performance.

We define a target incentive as a percentage of base compensation for each participating associate at the beginning of each performance period – traditionally the start of each calendar year. Depending on the role and the level of responsibility of the associates, target incentive percentages may reach up to 60% of base compensation. For members of the Executive Committee, the Annual Incentive represents between 13% and 23% of their total variable compensation at target.

PERFORMANCE MEASURES

The Annual Incentive formula is outlined below:



The Business Performance Factor is based on the Company's achievement against key business financial and innovation performance measures, which are defined and weighted according to strategic priorities at the Group, divisional, regional or country level. Targets may include net sales, operating income, free cash flow, market presence and milestones in research and development.

The Individual Performance Factor comprises two separate elements. The first element is based on the achievement against individually set financial and non-financial associates' objectives. Depending on functional responsibility, non-financial objectives typically include innovation; product launches; successful implementation of growth and productivity initiatives; process improvements; leadership and people management; and successful acquisitions, disposals and licensing transactions. The second element ensures that the associate's performance is achieved in line with the highest standards in business conduct, as outlined in the Novartis Values and Behaviors. Our leaders are expected to live up to these behaviors on a daily basis, and to inspire other associates to do the same.

The Individual Performance Factor is determined according to a pre-defined matrix based on the associate's evaluated performance against the two elements. The Business Performance Factor and Individual Performance Factor may range from 0–150% and have equal weighting. No awards are granted for performance ratings below a certain threshold.

The Combined Performance Factor is derived by multiplying the Individual and Business Performance Factors, and is subject to a cap at 200% of target.

FORM OF AWARD

In principle, the Annual Incentive is paid in cash following the achievement of the yearly objectives. However, a number of associates in certain countries and certain key executives worldwide are encouraged to invest their Annual Incentive in a share savings plan. Details of the Novartis share savings plans are on pages 117 and 118.

2013 CEO OUTCOME

The following is a description of the CEO's performance in 2013, including the Group Business Performance Factor, his Individual Performance Factor, and the resulting amount of his Annual Incentive.

2013 CEO BUSINESS PERFORMANCE FACTOR

The CEO is measured against the Group Business Performance Factor of the Group. The determination of the Group Business Performance Factor is based on four key performance measures: Group net income; Corporate net result (those financial elements controlled by Group, such as Corporate cost, taxes, financial income and expenses); Group free cash flow as a percentage of sales; and innovation.

All four performance measures have a threshold of achievement at 80% of target, below which a performance factor of zero would be awarded. The Committee has discretion to adjust for unplanned acquisitions or divestments, changes in accounting policies, income from associated companies, tax adjustments and other significant events not reflected in the targets. These adjustments can be positive, to give relief for unplanned expenses, as well as negative, to reverse unplanned income. All measures have a 1:5 payout leverage, where a 1% deviation in realization versus target leads to a 5% change in payout (e.g. a realization of 105% leads to a payout factor of 125% for a measure). The Business Performance Factor can range between 0–150%.

The table below shows the weighting of these measures and the financial targets, as well as the realization as a percentage of target for 2013. Financial targets are evaluated in constant currencies (cc) for the Annual Incentive.

BUSINESS PERFORMANCE FACTOR FOR GROUP (INCLUDING CEO)

Financial and innovation metrics	Weight	Target
Group net income (USD m)	50%	7 969
Net corporate result (USD m)	20%	– 2 628
Group free cash flow as % of sales	20%	15.2%
Innovation	10%	Weighted average of divisional performance
Total realization approved by the Compensation Committee: 106%[1]		
Resulting in a Business Performance Factor after 1:5 leverage of 130%		

[1] Realization in constant currencies mainly adjusted for contribution from delayed generic competition from *Diovan* monotherapy in the US.

The Group performed well versus these targets established in constant currencies by the Board at the beginning of the year on all performance metrics even after adjusting for the lower than expected impact of generic competition. Group net income was ahead of target mainly due to strong operating income performance. The favorable impact from the delayed entry of generic competition for *Diovan* monotherapy in the US was excluded from the calculation of the Business Performance Factor. Group free cash flow as a percentage of sales was ahead of target due to higher operating income performance in all divisions. With regards to innovation, the Group performance is a reflection of a strong year in all divisions and at the Novartis Institutes of BioMedical Research.

The Group Business Performance Factor approved by the Compensation Committee for 2013 was 130%.

2013 CEO INDIVIDUAL PERFORMANCE FACTOR

The CEO's individual objectives for 2013 were set by the Board based on a balanced scorecard with a mix of quantitative and qualitative targets for the Group in four key areas: financial performance, innovation and growth, organizational health, and customer satisfaction. In addition, the CEO was also assessed against our values and behaviors. Overall, the CEO's Individual Performance Factor is 110%. Below is a review of his 2013 performance in each area.

Specific financial targets for the CEO

In addition to the above business performance factors, the CEO's objectives for 2013 also included financial targets such as Group net sales, operating income, core operating income, net income, earnings per share, core earnings per share and free cash flow. The overall assessment against these metrics was above expectations set at the beginning of the year.

Innovation and growth

The CEO's objectives for 2013 included targets to extend our lead in innovation, accelerate growth and drive productivity. The innovation and growth targets are intended to deliver breakthroughs in areas of highest unmet medical needs, to help mitigate the effect of the expiration of certain patents, including *Diovan* (sales in 2012 were USD 4.4 billion), and to establish a sound platform for the long-term growth of the Group. Overall performance for the Group in 2013 exceeded the goals set by the Board.

Novartis invested USD 9.9 billion in research and development, significantly advancing our promising pipeline projects and securing major FDA and European approvals across our portfolio in 2013. Overall, regulatory approvals, submissions and Phase III clinical trials either met or exceeded targets. Three FDA breakthrough therapy designations were achieved: BYM338 indicated for sporadic inclusion body myositis, RLX030 in acute heart failure, and LDK378 in ALK positive non-small cell lung cancer. However, performance in innovation and growth fell short in two areas: the response to the competitive threat to *Lucentis* was delayed, as was public market reimbursement for *Bexsero* in the UK.

Our strong underlying sales growth (excluding patent expirations) more than offset the impact of generic competition. Net sales growth in emerging growth markets was also strong, up 10% (versus a growth rate of 6% in 2012) in constant currencies. In China, our net sales grew 23% in constant currencies.

Organizational health

The CEO's objectives for 2013 included goals for strengthening quality assurance, driving productivity, developing people, strengthening corporate responsibility, and enhancing the Group's reputation. In 2013, Novartis made a significant investment and strengthened measures toward achieving "quality beyond compliance". We completed 262 health authority inspections across our network, with 258 assessed as good or satisfactory. These included 31 inspections from the FDA, of which 28 were assessed as good or satisfactory. Notably, Novartis achieved compliant status for our Consumer Health plant in Lincoln, Nebraska, USA. Isolated quality issues remain at three manufacturing sites in the network, which Novartis is committed to address. Novartis also delivered savings of USD 1.5 billion from our procurement initiatives.

We continued to successfully implement the Corporate Responsibility strategy, as approved by the Board of Directors in 2012. Novartis continued to reach more patients by delivering *Coartem* without profit for malaria patients in endemic countries, and continuing to donate leprosy medicines through the WHO. Novartis also expanded Social Ventures, innovative business models that build local, sustainable capabilities for healthcare around the world.

We further deepened and broadened programs to strengthen our leadership, to develop talent and to renew our focus on employee engagement.

In organizational health, we were disappointed by the isolated conflict of interest issues we faced in Japan, regarding historical valsartan investigator-initiated trials, which impacted our reputation. We are working closely with the Japanese Ministry of Health, Labor and Welfare to resolve these issues.

Customer satisfaction

In 2013, our "Customers First" initiative to improve cross-divisional collaboration and better serve our customers' needs delivered incremental sales of more than USD 1 billion, exceeding the objective.

2013 CEO COMBINED PERFORMANCE FACTOR

Following multiplication of the Group Business Performance Factor (130%) and the CEO's Individual Performance Factor (110%), the Combined Performance Factor for the CEO would have been 143%.

However, given that we saw a decline, compared to the prior year, in reported operating income and free cash flow, the Compensation Committee and the CEO determined together, that he would waive a portion of his variable compensation for the performance year 2013. The Board of Directors supported this decision.

The value of his Annual Incentive award was determined as follows:

ANNUAL INCENTIVE FORMULA FOR CEO

	Annual base salary (CHF 000)		target incentive %		Calculated Combined Performance Factor		Calculated award value prior to amount waived (CHF 000)		Amount waived (CHF 000)	=	Final award (CHF 000)
Annual Incentive	2 061	x	50%	x	143%	=	1 473	–	412	=	1 061

NOVARTIS SHARE SAVINGS PLANS

OVERVIEW

Where available, associates have the choice to receive part or all of their Annual Incentive in the form of Novartis shares in lieu of cash, by participating in one of the Novartis share savings plans. As a reward for their participation, we match their investments in shares after a holding period of three or five years. Through participation in a share savings plan, our associates are incentivized to remain with Novartis for the long-term, while sharing in the future financial success of Novartis and further aligning with the long-term interests of our shareholders.

We currently have three share savings plans:

– Leveraged Share Savings Plan (LSSP): Worldwide, 27 key executives were invited to participate in LSSP based on their performance in 2013. Annual Incentive is invested in Novartis shares and is subject to a holding period of five years. At the end of the holding period, participants will receive one free matching share for every share invested;

– Employee Share Ownership Plan (ESOP): In Switzerland, ESOP is available to 13 751 associates. Participants in this plan may choose to receive their Annual Incentive (i) 100% in shares; (ii) 50% in shares and 50% in cash; or (iii) 100% in cash. At the end of a three-year holding period, each participant will receive one free matching share for every two shares invested. A total of 6 321 associates chose to receive shares under ESOP for their performance in 2013; and
– United Kingdom Plan (ESOP UK): In the United Kingdom, 2 600 associates can invest up to 5% of their monthly base compensation in shares (up to a maximum of GBP 125) and may also be invited to invest all or part of their net Annual Incentive in shares. At the end of a three-year holding period, participants will receive one free matching share for every two shares invested. During 2013, 1 404 associates elected to participate in this plan.

Associates may participate in only one of these plans in any given year.

No shares are matched under these plans if an associate leaves Novartis prior to the end of the holding period for reasons other than retirement, disability or death, unless determined otherwise by the Compensation Committee (for example, in connection with a reorganization or divestment).

For those who have chosen to receive their Annual Incentive in shares, the number of shares awarded is determined by dividing the actual incentive amount by the closing price of the shares on the grant date.

Following shareholder approval at the 2013 AGM of the new executive compensation system, this is the last year that Executive Committee members are eligible to participate and receive awards under the share savings plans.

2013 CEO OUTCOME

In 2013, the CEO was eligible to participate in either the Leveraged Share Savings Plan, or the Employee Share Ownership Plan. He decided not to participate in either plan.

EQUITY PLAN "SELECT"

OVERVIEW

The Equity Plan "Select" is a global equity incentive plan under which eligible associates may receive an annual award.

Under the Equity Plan "Select", we define a target incentive as a percentage of base compensation for each participating associate at the beginning of each performance period – traditionally the start of each calendar year. Depending on the role, including its focus on the long-term success of Novartis, target incentive percentages may reach up to 200% of base compensation. For members of the Executive Committee, Equity Plan "Select" represents between 37% and 57% of their total variable compensation at target.

Once the award has been granted, it is subject to a three-year vesting period. The long-term value of this award is tied to share price development, allowing executives to realize the long-term impact of their decisions and actions.

Following shareholder approval at the 2013 AGM of the new executive compensation system, this is the last year that members of the Executive Committee are eligible to receive an award under the plan.

PERFORMANCE MEASURES

For all executives, the Equity Plan "Select" award is subject to the same Combined Performance Factor as the Annual Incentive. Details of the measures contained within the Combined Performance Factor are on page 115.

Awards are subject to a cap of 200% of target.

FORM OF AWARD AT GRANT

The Equity Plan "Select" allows participants to choose the form of their award. At grant, equity may be taken in the form of restricted shares or Restricted Share Units (RSUs). Tradable share options were removed as a choice under this plan from December 31, 2013.

Restricted shares: Each restricted share is entitled to voting rights and payment of dividends during the vesting period.

RSUs: 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 dividend or voting rights, except in the United States where associates receive a dividend equivalent during the vesting period for 2010 and 2011 awards.

Tradable share options from former plan cycles: Tradable share options expire on their 10th anniversary from the grant date. Each tradable share option granted to associates 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 of the tradable share options granted since 2010 are shown in the table below:

TERMS OF SHARE OPTIONS

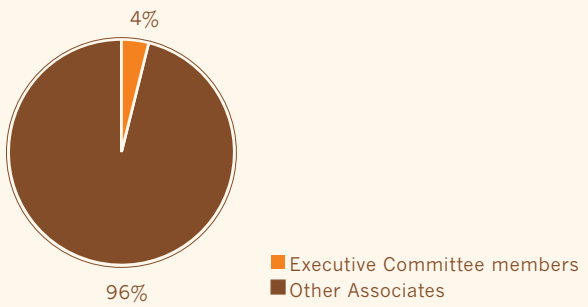
Grant year	Exercise price (CHF/USD)	Vesting (years) (Switzerland/ other countries)	Term (years)
2013	61.70/66.07	3/3	10
2012	54.20/58.33	3/3	10
2011	54.70/57.07	2/3	10
2010	55.85/53.70	2/3	10

A total of 12 943 participants received 774 373 restricted shares and 6 449 201 RSUs under the Novartis Equity Plan "Select" for their performance in 2013, representing a participation rate of about 9.5% of all full-time-equivalent associates worldwide.

As of December 31, 2013, 89.5 million share options granted to associates were outstanding, covered by an equal number of shares and corresponding to 3.7% of the total number of outstanding Novartis shares.

Approximately 3.9% of the total equity value awarded under the Equity Plan "Select" was granted to the members of the Executive Committee.

2013 EQUITY GRANTED UNDER THE EQUITY PLAN "SELECT"



If a participant leaves Novartis for reasons other than retirement, disability or death, unvested shares, RSUs and share options are forfeited, unless determined otherwise by the Compensation Committee (for example, in connection with a reorganization or divestment).

DELIVERY AT VESTING

Following the vesting period, settlement is made in unrestricted Novartis shares or American Depositary Receipts (US only).

2013 CEO OUTCOME

As for the Annual Incentive (described on page 117), the Compensation Committee and the CEO determined together that he would waive a portion of his variable compensation for 2013. The value of his award was determined as follows:

SELECT AWARD FORMULA FOR CEO

	Annual base salary (CHF 000)		target incentive %		Calculated Combined Performance Factor		Calculated award value prior to amount waived (CHF 000)		Amount waived (CHF 000)	=	Final award value (CHF 000)
Select	2 061	x	175%	x	143%	=	5 156	–	1 442	=	3 714[1]

[1] Select was awarded in the form of 50 361 RSUs (at a share price of CHF 73.75) which will vest in January 2017 provided that the CEO remains with the Group and complies with the regulations of the plan.

LONG-TERM PERFORMANCE PLAN (LTPP)

OVERVIEW

The Long-Term Performance Plan (LTPP) is an equity plan for key executives only, designed to drive long-term shareholder value creation. The LTPP is offered to selected executives, who are in key positions and have a significant impact on the long-term success of Novartis.

LTPP provides grants based on a target percentage of base compensation at the beginning of each plan cycle, and adjusted for changes in base compensation and target percentage increases during the plan cycle. Depending on the role and the level of responsibility of the associates, the target incentive percentages may reach up to 175% of base compensation. For members of the Executive Committee, LTPP represents between 20% and 44% of their total variable compensation at target.

PERFORMANCE MEASURE

The LTPP payout is based on the achievement of long-term shareholder value creation. The rewards are based on rolling three-year Group performance objectives focused on the Novartis Economic Value Added (NVA) measured annually. The NVA is a measure of the Group's performance, taking into account Group operating income adjusted for interest, taxes and cost of capital charge. More simply, NVA is a measure of the value created for our shareholders over and above an expected return.

The performance ratio of a plan cycle is determined right after the end of the third plan year by adding together the annual NVA realizations of all plan years of the plan cycle, dividing by the sum of performance targets for each year of the plan cycle and expressing the result as a percentage. The LTPP only vests if the realized NVA for the 3 year cycle exceeds 80% of target NVA, and it is capped at 120% of target NVA.

FORM OF AWARD AT GRANT

At the beginning of every performance period, plan participants are granted a target number of RSUs according to the following formula:

STEP 1	Annual base compensation	X	Target incentive %	=	Grant Value
STEP 2	Grant Value	/	Share price	=	Target number of RSUs

DELIVERY AT VESTING

At the end of the three-year performance period, the Compensation Committee multiplies the adjusted target number of RSUs by the performance factor approved by the Compensation Committee. RSUs are converted into unrestricted Novartis shares and immediately vested. In the United States, awards may also be delivered in cash under the US deferred compensation plan.

The NVA performance factor is based on a 1:5 payout curve, where a 1% deviation in realization versus target leads to a 5% change in payout (for example, a performance ratio of 105% leads to a performance factor of 125%). If performance over the three-year vesting period falls below 80% of target, no shares will vest. If the participant leaves Novartis during the performance period for reasons other than retirement, disability or death, none of the award vests, unless determined otherwise by the Compensation Committee (for example, in connection with a reorganization or divestment). The performance factor is capped at 200% of target, corresponding to an achievement of 20% above target.

LTPP PAYOUT FORMULA

Target number of RSUs	X	Novartis Economic Value Added performance factor	=	Realized RSUs

130 key executives earned 494 522 shares under the LTPP 2014 cycle, based on NVA achievement that exceeded our target for the performance period 2011 to 2013.

2013 CEO OUTCOME

For this cycle, NVA achievement was measured over a three-year performance period, 2011 to 2013, and was 5% ahead of the cumulative three-year target of USD 6.0 billion driven by strong operating income performance.

While the entire three-year cycle was impacted by significant negative exchange rate differences (more than USD 2.0 billion in total across the three years), which do not get adjusted in NVA, this was more than offset by strong commercial execution versus the strategy. Growth products performed consistently well throughout the cycle and the expansion into emerging markets was successfully implemented. Further, a continued focus on productivity initiatives – through procurement and resource allocation – has also made a significant impact on the NVA result. In arriving at our final NVA performance score, the Compensation Committee excluded the favorable impact from the delayed entry of generic competition for *Diovan* monotherapy in the US.

The following table shows the three-year cumulative NVA financial target, realization as a percentage of target and the NVA performance factor:

NVA PERFORMANCE FACTOR

LTPP metrics	Cumulative 3 year target	Realization[1]	NVA performance factor
Group NVA (USD m)	5 998	105.2%	126%

[1] Realization mainly adjusted for 2013 NVA contribution arising from delayed generic competition from *Diovan* monotherapy in the US and 2011 impairment charges related to *Tekturna/Rasilez*

The CEO's LTPP award for the performance period 2011-2013 was determined as follows:

LTPP FORMULA FOR CEO

	Target RSUs	x	NVA performance factor	=	Realized RSUs	Value (CHF '000)[1]
CEO	65 922	x	126%	=	83 062	6 126

[1] Based on the share price of CHF 73.75 at closing on award date.

The impact of the appreciation in our share price between the award date of the LTPP granted last year (share price of CHF 61.70) to our CEO and the award date of his LTPP for this year (share price of CHF 73.75) was CHF 1 million.

No future grants for the CEO and the other Executive Committee members will be made under this form of the LTPP, using the performance measure NVA. However two outstanding cycles will vest over 2014 and 2015 respectively.

EXECUTIVE COMPENSATION TABLES

COMPENSATION OF MEMBERS OF THE EXECUTIVE COMMITTEE FOR 2013

The following table discloses the compensation earned by the CEO and other members of the Executive Committee for performance in 2013.

ALIGNMENT OF REPORTING AND PERFORMANCE

The compensation table synchronizes the reporting of annual compensation with the performance in the given year (i.e., all amounts awarded for performance in 2013 are disclosed in full). The column "Future LSSP/ESOP match" reflects shares to be awarded in the future if the Executive Committee member remains with Novartis for at least five or three years, respectively.

VALUATION PRINCIPLES

In order to allow a comparison with other companies, shares, restricted shares, RSUs and ADRs are disclosed at their market value on the date of grant. Market value is the quoted closing share price at that date. The market value of share options is calculated using an option pricing valuation model as at the grant date.

EXECUTIVE COMMITTEE MEMBER MARKET VALUE COMPENSATION FOR PERFORMANCE YEAR 2013 [1]

		Base compensation	Variable compensation				Benefits		Total		Total compensation
			Short-term incentive plans		Long-term incentive plans						
	Currency	Cash (Amount)	Cash (Amount)	Shares (Market value) [2]	Equity Plan "Select" Shares (Market value) [3]	Long-Term Performance Plan Shares (Market value) [4]	Pension benefits (Amount) [5]	Other benefits (Amount) [6]	(Amount) [7]	Future LSSP/ESOP match [8] Shares (Market value)	Including future LSSP/ESOP match [9,10] (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 [8]	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) [11]	CHF	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) [12]	CHF	483 333	263 720	175 820	879 026	428 856	53 918	59 613	2 344 286	175 820	2 520 106
Total [13]	**CHF**	**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**

See note 12 to the Financial Statements of Novartis AG for 2012 data.

[1] Does not include reimbursement for travel and other necessary business expenses incurred in the performance of their services as these are not considered compensation.

[2] 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.

[3] Novartis shares granted under the Novartis Equity Plan "Select" have a three-year vesting period.

[4] Awarded based on the achievement of Novartis Economic Value Added (NVA) objectives over the three-year performance period ended December 31, 2013.

[5] Service costs of pension and post-retirement healthcare benefits accumulated in 2013.

[6] 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.

[7] The value of all equity grants included in this table has been calculated based on the closing price of January 22, 2014.

[8] 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.

[9] 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.

[10] 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.

[11] 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 Committee). The other 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.

[12] The amounts reflect the compensation as Permanent Attendee to the Executive Committee from May 1, 2013 until December 31, 2013.

[13] 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)

	Variable compensation			
	Short-term incentive plans	Long-term incentive plans		
		Equity Plan "Select"	Long-Term Performance Plan	Future LSSP/ESOP match
	Shares (Number)[1]	Shares (Number)[2]	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)[3]	0	0	18 987	0
Harry Kirsch (as from May 1, 2013)[4]	2 384	11 919	5 815	2 384
Total	**46 395**	**275 306**	**270 874**	**41 861**

[1] These shares have a five-year vesting period under LSSP and a three-year vesting period under ESOP.
[2] These shares awarded under the Equity Plan "Select" have a three-year vesting period.
[3] 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).
[4] The amounts reflect the compensation as Permanent Attendee to the Executive Committee from May 1, 2013 until December 31, 2013.

As the table below shows, the majority of Executive Committee compensation is variable and awarded under the long-term incentive plans. This ensures alignment with the interests of our shareholders.

EXECUTIVE COMMITTEE MEMBER ACTUAL COMPENSATION MIX IN 2013 – BASE AND VARIABLE COMPENSATION [1]

		Variable (%)	
	Base salary	Annual incentive	Long-term incentive [2]
Joseph Jimenez (Chief Executive Officer)	15.9%	8.2%	75.9%
Juergen Brokatzky-Geiger	21.2%	16.6%	62.2%
Kevin Buehler	16.3%	10.9%	72.8%
Felix R. Ehrat	20.3%	17.3%	62.4%
David Epstein	16.9%	14.0%	69.1%
Mark C. Fishman	14.0%	12.2%	73.8%
Jeff George	19.8%	18.8%	61.3%
George Gunn	22.8%	14.4%	62.8%
Brian McNamara	21.6%	19.9%	58.5%
Andrin Oswald	24.8%	16.2%	59.1%
Harry Kirsch (as from May 1, 2013) [3]	21.7%	19.7%	58.6%
Total [4]	**18.2%**	**13.5%**	**68.3%**

[1] Excludes pension, other benefits and future LSSP/ESOP match.
[2] Long-term incentive includes Equity Plan "Select" and LTPP grants.
[3] Permanent Attendee to the Executive Committee.
[4] Excludes Jonathan Symonds who stepped down from the Executive Committee as per April 30, 2013.

SHARES AND SHARE OPTIONS OWNED BY MEMBERS OF THE EXECUTIVE COMMITTEE

The following tables show the total number of vested and unvested Novartis shares or ADRs, as well as RSUs (but excluding unvested matching RSUs from LSSP/ESOP and unvested RSUs from LTPP) and the total number of share options owned by members of the Executive Committee and "persons closely linked to them" (see definition on page 131) as of December 31, 2013.

As of December 31, 2013, no member of the Executive Committee together with "persons closely linked" to them owned 1% or more of the outstanding shares of Novartis, either directly or through share options.

As of December 31, 2013, all members of the Executive Committee who have served at least three years on the Executive Committee have met or exceeded their personal Novartis share ownership requirements.

SHARES OWNED BY EXECUTIVE COMMITTEE MEMBERS

	Number of shares [1]
Joseph Jimenez	465 007
Juergen Brokatzky-Geiger	268 498
Kevin Buehler	316 038
Felix R. Ehrat	52 616
David Epstein	259 854
Mark C. Fishman	347 359
Jeff George	127 666
George Gunn	157 468
Brian McNamara	39 242
Andrin Oswald	150 810
Harry Kirsch (as from May 1, 2013) [2]	68 102
Total [3]	**2 252 660**

[1] Includes holdings of "persons closely linked" to members of the Executive Committee (see definition under – Compensation Governance – Share Ownership Requirements).
[2] Permanent attendee to the Executive Committee.
[3] Excludes the holdings of Jonathan Symonds who stepped down from the Executive Committee as per April 30, 2013, consisting of 171 503 shares as per April 30, 2013.

SHARE OPTIONS OWNED BY EXECUTIVE COMMITTEE MEMBERS[1]

	Number of share options[2]						
	2013	2012	2011	2010	2009	Other	Total
Joseph Jimenez					552 076	157 266	709 342
Juergen Brokatzky-Geiger						211 766	211 766
Kevin Buehler						605 877[3]	605 877
Felix R. Ehrat							
David Epstein							
Mark C. Fishman						327 594	327 594
Jeff George			141 396	97 827	15 359	1 793	256 375
George Gunn						94 371	94 371
Brian McNamara						78 973	78 973
Andrin Oswald							
Harry Kirsch (as from May 1, 2013)[4]						44 569	44 569
Total[5]	**0**	**0**	**141 396**	**97 827**	**567 435**	**1 522 209**	**2 328 867**

[1] As of 2014, the share option grants have been discontinued under the Novartis Equity Plan "Select".
[2] 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 under – Compensation Governance – Share Ownership Requirements).
[3] Consists of share settled appreciation rights resulting from conversion of Alcon equity into Novartis equity.
[4] Permanent Attendee to the Executive Committee.
[5] Excludes the holdings of Jonathan Symonds who stepped down from the Executive Committee as per April 30, 2013, consisting of 54 348 share options as per April 30, 2013.

LOANS TO MEMBERS OF THE EXECUTIVE COMMITTEE

No loans were granted to current or former members of the Executive Committee in 2013. No such loans were outstanding as of December 31, 2013.

OTHER PAYMENTS TO MEMBERS OF THE EXECUTIVE COMMITTEE

During 2013, no payments (or waivers of claims) other than those set out in the Executive Committee Member Compensation tables (including their footnotes) were made to current members of the Executive Committee or to "persons closely linked" to them.

PAYMENTS TO FORMER MEMBERS OF THE EXECUTIVE COMMITTEE

During 2013, no payments (or waivers of claims) were made to former members of the Executive Committee or to "persons closely linked" to them, except for an amount of CHF 1 146 000, which includes CHF 1 125 000 paid to a former member of the Executive Committee in relation to his obligation to refrain from activities that compete with any business of Novartis and an amount of USD 429 560 paid to a former member of the Executive Committee for the period January 1 to February 28, 2013 in relation to the end of her notice period and in relation to her obligation to refrain from activities that compete with any business of Novartis.

BOARD COMPENSATION 2013

Members of boards of directors of global companies today face increasing responsibilities and must deal with issues that require ever higher levels of expertise and engagement. As a global healthcare company, Novartis shareholders have elected members of the Board of Directors who bring the skills required to meet these challenges. We set the compensation for the members of the Board of Directors at a level that allows for the attraction and retention of high-caliber individuals with global experience. The members of its Board of Directors do not receive variable compensation, underscoring their focus on long-term corporate strategy, supervision and governance.

COMPENSATION STRUCTURE

	Board compensation
Fixed compensation	Yes
Variable compensation	No

The Board of Directors determines the compensation of its members, other than the Chairman, each year, based on a proposal by the Compensation Committee and advice from its independent advisor.

COMPENSATION OF THE CHAIRMAN OF THE BOARD

Daniel Vasella, M.D.

After 17 years of service as our Chairman, including 14 years as CEO and Chairman, 2013 saw the retirement of Dr. Daniel Vasella from the Board of Directors. The Board of Directors wishes to thank Dr. Vasella for his leadership in creating Novartis; for his dedication to the Company; for transforming the business portfolio to focus on healthcare, building a world-leading research organization and a strong leadership team; and for forging a reputation that is among the best in the industry and beyond.

Since the 2013 AGM, when he stepped down, Dr. Vasella has provided certain transitional services, including select Board mandates with subsidiaries of the Company, to support the ad-interim Chairman and the new Chairman. For his services during this transition period, from the AGM on February 22, 2013 to October 31, 2013, Dr. Vasella received cash compensation of CHF 2.7 million, and 31 724 unrestricted shares on October 31, 2013 (market value of the shares at the time of delivery was CHF 2.2 million). During the same period, the Company reimbursed the cost of Dr. Vasella's professional legal and financial advice amounting to CHF 161 983, and the cost of terminating his life insurance, amounting to CHF 60 166. For this period, a total amount of CHF 5.1 million was paid to him.

Dr. Vasella has subsequently been available to the Company, at the CEO's request and discretion, to provide coaching to high-potential Novartis associates and for speeches at key Novartis events. This agreement became effective on November 1, 2013 and will last until the end of 2016. Dr. Vasella will be 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. During November and December 2013, Dr. Vasella did not provide any coaching to associates and did not receive any compensation for this period.

Dr. Vasella will hold the title of Honorary Chairman in recognition of his significant achievements on behalf of the Company. There are no rights associated with this role in addition to his fiduciary duty as Honorary Chairman, and Dr. Vasella will not attend Board meetings or receive Board documents. No compensation will be provided in relation to this role other than administrative support and security which are usual and customary for a position of this nature.

Joerg Reinhardt, Ph.D.

At the 2013, AGM shareholders elected Dr. Joerg Reinhardt to the Board of Directors as our Chairman, effective August 1, 2013.

As our Chairman, Dr. Reinhardt will receive 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

Unless the Chairman decides to waive it, his total compensation shall increase for each period from Annual General Meeting to the succeeding Annual General Meeting at a rate at least equal to the average rate of the base salary increase granted to the Swiss executive associates of Novartis. Dr. Reinhardt is eligible for pension and insurance benefits according to the standard Novartis benefit plans. There is no variable or other component to his regular compensation.

Dr. Reinhardt will also receive compensation for lost entitlements at his former employer, with a total value of EUR 2.6 million. 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.

Ulrich Lehner, Ph.D.

During the transition period between the departure of Dr. Vasella and the arrival of Dr. Reinhardt, Vice Chairman Dr. Ulrich Lehner led the Board of Directors as Chairman on an ad-interim basis.

Dr. Lehner received an amount of CHF 791 668, which was a pro rata of CHF 1.9 million total annual compensation, for his tenure as Chairman ad-interim between the AGM on February 22, 2013 and July 31, 2013. This amount was paid equally in cash and shares. There was no variable or other component to Dr. Lehner's compensation. During his service as Chairman ad-interim, he did not receive regular Board fees and was not eligible to receive pension or any other insurance benefits.

Following completion of his tenure as Chairman ad-interim, the compensation of Dr. Lehner reverted to the ordinary compensation for a member of the Board of Directors.

Other members of the Board of Directors

For 2013, other members of the Board of Directors received, in one installment, an annual fixed Board membership fee and additional fees for committee chairmanships, committee memberships, and other functions to compensate for their increased responsibilities and engagements. Members of the Board of Directors do not receive additional fees for attending meetings. The annual fees cover the period from the AGM of the year of disclosure to the next AGM. Members of the Board of Directors are required to receive at least 50% of their total fees in the form of unrestricted Novartis shares. Members of the Board of Directors do not receive share options and do not have pension benefits.

The annual fee rates for Board membership and additional functions, to be paid in cash and shares, are as follows:

BOARD MEMBER ANNUAL FEE RATES (EXCL. CHAIRMAN)

	Annual fee (CHF)
Board membership	350 000
Chairman's Committee membership	150 000
Audit and Compliance Committee membership	100 000
Other Board Committee membership	50 000
Vice chairmanship of the Board of Directors	50 000
Board Committee chairmanship (except for ACC)	60 000
Audit and Compliance Committee chairmanship	120 000
Delegated board membership[1]	125 000

[1] The Board of Directors has delegated Rolf M. Zinkernagel to the Scientific Advisory Board of the Novartis Institute for Tropical Diseases (NITD). The Board of Directors has delegated both Rolf M. Zinkernagel and William Brody to the Board of Directors of the Genomics Institute of the Novartis Research Foundation (GNF).

BENCHMARKING THE COMPENSATION OF THE MEMBERS OF THE BOARD OF DIRECTORS

The level of compensation for the members of the Board of Directors is set based on benchmarks that include the remuneration of members of boards of directors of comparable global healthcare companies (listed on page 112) and other large Swiss companies.

BOARD MEMBER COMPENSATION TABLE

COMPENSATION OF MEMBERS OF THE BOARD OF DIRECTORS FOR 2013

The following table discloses the compensation received by the members of the Board of Directors in 2013.

BOARD MEMBER COMPENSATION IN 2013 [1]

	Board membership	Vice Chairman	Chairman's Committee	Audit and Compliance Committee	Risk Committee	Compensation Committee	Corporate Governance and Nomination Committee	Delegated board membership	Annual cash compensation (CHF) (A)	Shares (Market value) (CHF) (B) [2]	Shares (Number)	Other (CHF) (C)	Total (CHF) (A)+(B)+(C)
Daniel Vasella (until Feb 22, 2013) [3]	**Chair**		**Chair**	•[4]	•[4]	•[4]	•[4]		707 283	697 148	11 299	1 573 334 [5]	2 977 765
Joerg Reinhardt (as of Aug 1, 2013) [6]	**Chair**		**Chair**						791 667	950 023	14 064	159 124 [7]	1 900 814
Ulrich Lehner	**Chair a.i.** [8]	•	•	•	•	•	•		629 168 [8]	629 217 [8]	10 198	69 825 [9]	1 328 210
Enrico Vanni	•	•	•	•		**Chair**			355 000	355 022	5 754	41 010 [9]	751 032
Dimitri Azar	•			•					225 000	225 020	3 647	–	450 020
Verena A. Briner	•								175 000	175 043	2 837	18 782 [9]	368 825
William Brody [10]	•					•		•	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 [11]	•						**Chair**		–	410 058	6 646	21 349 [9]	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 [9]	589 079
Wendelin Wiedeking	•				•		•		–	450 040	7 294	26 893 [9]	476 933
William T. Winters	•								175 000	175 043	2 837	–	350 043
Rolf M. Zinkernagel [12]	•						•	•	325 000	325 036	5 268	34 382 [9]	684 418
Total									**4 710 618**	**5 719 311**	**91 362**	**1 973 722**	**12 403 651**

See note 12 to the Financial Statements of Novartis AG for 2012 data.

[1] Does not include reimbursement for travel and other necessary business expenses incurred in the performance of their services as these are not compensation.

[2] 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.

[3] Daniel Vasella's compensation set out in this table reflects the Chairman period from Jan 1, 2013 to Feb 22, 2013 and does not include further payments related to the post Chairman period, which are disclosed in the section "Compensation of the Chairman of the Board".

[4] During his Chairmanship (i.e. until February 22, 2013), Daniel Vasella attended the meetings of these Committees as a guest without voting rights.

[5] 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.

[6] Dr. Reinhardt will also receive compensation for lost entitlements at his former employer, with a total value of EUR 2.6 million. 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.

[7] Includes social security costs due by the individual and paid by the company and pension costs.

[8] 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.

[9] Includes social security costs due by the individual and paid by the company.

[10] The Board of Directors has delegated William Brody to the Board of Directors of the Genomics Institute of the Novartis Research Foundation (GNF).

[11] According to Pierre Landolt, the Sandoz Family Foundation is the economic beneficiary of the compensation.

[12] 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).

SHARES AND SHARE OPTIONS OWNED BY MEMBERS OF THE BOARD OF DIRECTORS

Members of the Board of Directors are required to own at least 5 000 Novartis shares within three years after joining the Board of Directors, to ensure alignment of their interests with our shareholders. As of December 31, 2013, 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.

The total number of vested and unvested Novartis shares, ADRs and share options owned by members of the Board of Directors and "persons closely linked" to them (see definition on page 131) as of December 31, 2013, is shown in the table below. We last granted share options to non-executive members of the Board of Directors in 2002.

As of December 31, 2013, 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, either directly or through share options. As of the same date, no member of the Board of Directors held any share options.

SHARES OWNED BY BOARD MEMBERS [1,2]

	Number of shares [3]
Joerg Reinhardt	558 511
Ulrich Lehner	35 351
Enrico Vanni	12 684
Dimitri Azar	5 642
Verena A. Briner	3 837
William Brody	17 356
Srikant Datar	29 622
Ann Fudge	13 161
Pierre Landolt [4]	50 644
Charles L. Sawyers	2 128
Andreas von Planta	121 334
Wendelin Wiedeking	278 139
William T. Winters	2 128
Rolf M. Zinkernagel	40 000
Total [5,6]	**1 170 537**

[1] Includes holdings of "persons closely linked" to Board members (see definition under – Compensation Governance – Share Ownership Requirements).
[2] 2002 was the last year during which Novartis granted share options to non-executive Board members. All these options have expired in 2011.
[3] Each share provides entitlement to one vote.
[4] According to Pierre Landolt, the Sandoz Family Foundation is the economic beneficiary of all shares.
[5] Excludes the holdings of Daniel Vasella who did not stand, at his own wishes, for re-election to the Board of Directors at the AGM 2013, consisting of 3 409 035 shares and of 1 633 290 share options as per February 22, 2013. The options were granted to him during his tenure as CEO and Chairman.
[6] Excludes the holdings of Marjorie M.T. Yang who did not stand, at her own wishes, for re-election to the Board of Directors at the AGM 2013, consisting of 18 000 shares as per February 22, 2013.

LOANS TO MEMBERS OF THE BOARD OF DIRECTORS

No loans were granted to current or former members of the Board of Directors during 2013. No such loans were outstanding as of December 31, 2013.

OTHER PAYMENTS TO MEMBERS OF THE BOARD OF DIRECTORS

During 2013, no payments (or waivers of claims) other than those set out in the Board Member Compensation table (including its footnotes) and the accompanying text on pages 126–128 were made to current members of the Board of Directors or to "persons closely linked" to them.

PAYMENTS TO FORMER MEMBERS OF THE BOARD OF DIRECTORS

During 2013, no payments (or waivers of claims) were made to former Board members or to "persons closely linked" to them, except for an amount of CHF 62 346 that was paid to Dr. Alex Krauer, Honorary Chairman.

NOTE 27 TO THE GROUP'S AUDITED CONSOLIDATED FINANCIAL STATEMENTS AND NOTE 12 TO THE AUDITED FINANCIAL STATEMENTS OF NOVARTIS AG

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 our Financial Report in note 27 to the Group's audited consolidated financial statements.

Note 12 included in the audited financial statements of Novartis AG represents the total compensation related to the 2013 and 2012 performance years respectively.

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, our Annual Report is in line with the principles of the Swiss Code of Best Practice for Corporate Governance of the Swiss Business Federation (economiesuisse).

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 published on our website: www.novartis.com/corporate-governance. The main responsibilities of the Compensation Committee are shown under "Corporate Governance Report – Our Board of Directors – Role of the Board of Directors and the Board Committees on page 87."

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. The main discussion points and conclusions of each meeting of the Compensation Committee are summarized in a brief report to the next meeting of the full Board.

The Compensation Committee carefully analyzes and discusses on an ongoing basis (but at least annually) the trends and developments in the field of compensation (including changes in corporate governance rules and best practices relevant to it), as well as compensation plans and pay levels, with guidance from outside experts and its independent advisor. The goal is to strengthen the relationship between the compensation plans and the Group's performance. It also reviews the compensation system to ensure that it does not encourage inappropriate or excessive risk taking and instead encourages behaviors that support sustainable value creation.

The Compensation Committee is composed exclusively of members of the Board of Directors who meet the independence criteria set forth in our Board Regulations. The Compensation Committee has the following five members: Anne Fudge, Enrico Vanni, William Brody, Srikant Datar and Ulrich Lehner. Enrico Vanni has served as Chair since 2012.

The Compensation Committee held six formal meetings and two additional joint telephone conferences with the Corporate Governance and Nomination Committee (to review the impact of the changes in Swiss remuneration rules) in 2013. The Committee conducted a self-performance evaluation in 2013, as it does every year.

A summary of the compensation decision-making authorities is set out below:

COMPENSATION AUTHORIZATION LEVELS

Decision on	Recommendation	Authority
Compensation of Board members	Compensation Committee	Board of Directors
Compensation of the Chief Executive Officer	Chairman of the Board	Compensation Committee
Compensation of the Executive Committee members	Chief Executive Officer	Compensation Committee
Special Share Awards[1]	Chairman of the Board or Chief Executive Officer	Compensation Committee

[1] Executive Committee members are not eligible.

ROLE OF THE COMPENSATION COMMITTEE'S INDEPENDENT ADVISOR

The Compensation Committee retained Frederic W. Cook & Co., Inc., as its independent external compensation advisor for 2013. The advisor was hired directly by the Compensation Committee in 2011, and the Committee has been fully satisfied with the performance of the advisor since its engagement. The Committee Advisor is independent of management and does not perform any other consulting work for Novartis. The key task of the independent advisor is to assist the Compensation Committee in ensuring that our compensation policies and plans are competitive, correspond to market practice, and are in line with our compensation principles.

The Compensation Committee enters into a consulting agreement with its independent advisor on an annual basis. In determining whether or not to renew the engagement with the advisor, the Compensation Committee evaluates the quality of the consulting service and the benefits of rotating advisors. In addition, the Compensation Committee assesses on an annual basis the projected scope of work for the coming year.

The Compensation Committee determined that Frederic W. Cook & Co., Inc. is free of any relationship that would impair professional and objective judgment and advice to the Compensation Committee, and has never been hired for work by the management of Novartis.

CLAWBACK

Any incentive compensation paid to senior executives, including members of the Executive Committee, is subject to "clawback." This means that we may choose not to pay future incentive compensation or seek to recover incentive compensation where the payout has been proven to conflict with internal management standards (including Company policies and Novartis Values and Behaviors), accounting policies or a violation of law.

SHARE OWNERSHIP REQUIREMENTS

In line with our equity ownership principle, key executives 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. In the event of a substantial drop in the share price, the Board of Directors may, at its discretion, extend that time period.

Chief Executive Officer	5 x base compensation
Members of the Executive Committee	3 x base compensation
Selected Key Associates	1 x or 2 x base compensation

The determination of equity amounts against the share ownership requirements includes vested and unvested shares or ADRs, as well as RSUs, acquired under our compensation plans, but excluding unvested matching RSUs from LSSP/ESOP and unvested RSUs from LTPP. The determination includes other shares as well as vested options on Novartis shares or ADRs that are owned directly or indirectly by "persons closely linked"[1] to them.

The Compensation Committee reviews compliance with the share ownership guideline on an annual basis.

RISK MANAGEMENT

We believe that our compensation system encourages performance, loyalty and entrepreneurship, and creates sustainable value that is in the interest of Novartis and our shareholders. However, shareholders also expect that risks are appropriately managed. At Novartis, appropriate target setting combined with proper incentive-plan design and rigorous safeguard measures allow our leaders and associates to focus on long-term value creation.

Our compensation system is intended to encourage high performance and entrepreneurship, but not to reward inappropriate or excessive risk taking or short-term profit maximization at the expense of the long-term health of Novartis.

[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.

The following characteristics of our compensation system foster a culture of entrepreneurial risk management:

- Balanced Scorecard Approach to Performance-based Incentives: The annual and long-term incentive compensation plans are not overly focused on any single measure of performance. Instead, a balanced set of financial and non-financial objectives are applied. Financial objectives include net sales, operating income, free cash flow as a percentage of sales, and Novartis Economic Value Added (NVA). Non-financial objectives emphasize the achievement of strategic and leadership objectives, and managing people, but also market presence, innovation and process and productivity improvement. Under the incentive plans, performance multipliers may not exceed 200% of target;
- Novartis Values and Behaviors: Compliance and ethical conduct are integral factors considered in the overall performance review, setting clear behavioral boundaries;
- People Performance Management Process: A rigorous performance management system is in place based on agreed-upon objectives, values and behaviors reflecting compliance and meritocracy;
- Balanced Mix of Compensation Elements and Performance Measures: The target compensation mix is not overly weighted toward Annual Incentive awards but represents a combination of cash and long-term share-based compensation vesting over three years;
- Performance Period and Vesting Schedules: For long-term incentives, performance period and vesting schedules overlap, reducing the motivation to maximize performance in any one period. The equity awarded under the Equity Plan "Select" vests after a period of three years. LTPP is an equity plan based on a three-year performance period;
- Clawback: We implemented "clawback" provisions in individual employment contracts of all members of the Executive Committee, as well as in most incentive plans and corresponding documentation;
- No Severance Payments or Change-of-Control Clauses: Employment contracts for members of the Executive Committee provide for a notice period of 12 months and contain no change-of-control 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); and
- Share Ownership Requirements: Members of the Executive Committee, as well as selected key executives are required to own a certain multiple of their annual base compensation in Novartis shares or share options.

EXECUTIVE COMPENSATION 2014

OBJECTIVES OF THE 2014 COMPENSATION SYSTEM

At the 2013 AGM, shareholders approved, with a significant majority, key changes to our executive compensation system.

Changes will be effective for the CEO and members of the Executive Committee for performance periods beginning in January 2014.

Our new executive compensation system is intended to even better align with the interests of our shareholders, foster long-term value creation and to reward sustained superior performance.

The following aims were considered by the Compensation Committee in the design of the new compensation system:

- Further simplify our program, facilitating communication internally and externally;
- Better differentiate between the performance measures to be used for the short-term and long-term incentive plans;
- Grant only performance-vesting awards under the long-term incentive plans; and
- Create two long-term incentives, one that focuses on internal measures, including financial and innovation targets, and one that focuses on external measures to further align with the interests of our shareholders.

KEY FEATURES OF THE 2014 COMPENSATION SYSTEM

The key features of the new compensation system can be summarized as follows:

- All variable compensation is performance-based, with separate performance measures used for the short-term and long-term incentive plans;
- The Annual Incentive plan (around one third of the overall incentive opportunity for the CEO and Executive Committee members) is based on an individual balanced scorecard of 1-year financial and non-financial performance measures, together with assessed values and behaviors. This incentive is paid annually half in cash and half in shares (the latter deferred and subject to forfeiture for three years);
- The two long-term incentive plans (totaling around two thirds of the overall incentive opportunity for the CEO and Executive Committee members) are based on different performance measures, and are paid in shares after a three-year performance period;
  - The Long-Term Performance Plan (LTPP) includes a three-year forward-looking financial measure at Group level (Novartis Cash Value Added, NCVA), and an innovation measure at divisional level;
  - The Long-Term Relative Performance Plan (LTRPP) rewards for performance of the Group's Total Shareholder Return (TSR) measured over a three-year period relative to a peer group of comparator companies; and
- The new compensation system no longer contains discretionary or matching share awards for Executive Committee members or share options.

Pension and insurance benefits are provided in addition to the above based on applicable local market practices and regulations.

In 2013, the Compensation Committee undertook a detailed benchmarking analysis with the support of its independent advisor, Frederic W. Cook & Co., Inc., and based on data provided by Towers Watson, to rebalance the compensation of the Executive Committee members between the new Annual Incentive and long-term incentive plans, ensuring that we are in line with market practice.

In addition, the Compensation Committee reviewed the performance measures for the variable compensation plans to ensure full alignment with our stated strategy focusing on innovation, growth and productivity.

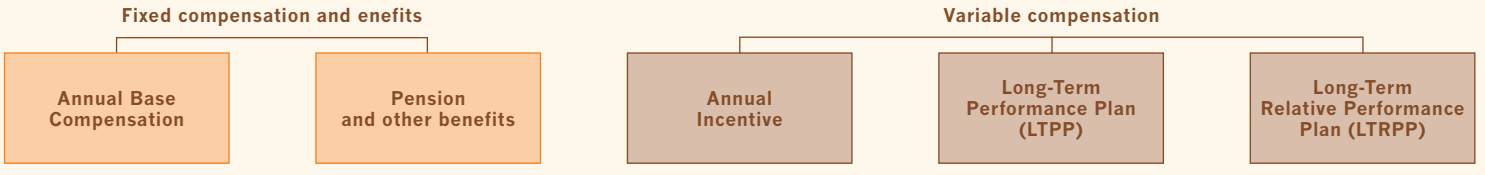
For the LTPP, the Compensation Committee decided that all Executive Committee members should be measured on Group, rather than divisional, NCVA targets to drive cross-divisional collaboration for the benefit of the Group. For the LTRPP, which focuses on relative Total Shareholder Return, the Compensation Committee determined the payout scale after incorporating feedback from our shareholders.

The new compensation system is simpler, and will allow shareholders to better evaluate the link between pay and performance for the CEO and Executive Committee members.

Compensation for the CEO and Executive Committee members going forward will be awarded under the new compensation system. Awards granted under the previous compensation system will continue according to the vesting schedules and rules that were applicable at the time.

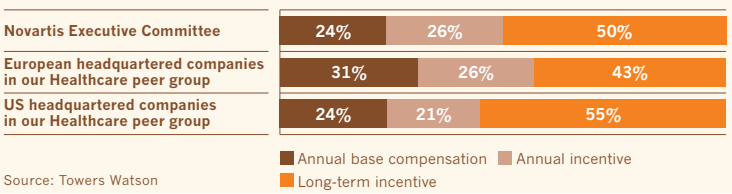
EXECUTIVE COMPENSATION SYSTEM 2014 FOR THE CEO AND EXECUTIVE COMMITTEE MEMBERS

Our 2014 compensation system for the CEO and Executive Committee members is based on the following components:



Under our 2014 compensation system, our variable compensation is split between the Annual Incentive and the two long-term incentives for the CEO and Executive Committee in the ratio of one to two. This is in line with our strategy and the long-term innovation-driven business cycle which characterizes our industry. For our 2014 system we apply the same benchmarking philosophy as described on page 112. Members of the Executive Committee achieving their objectives are generally awarded target compensation at a level comparable to the median level of the relevant benchmarks. In the event of under- or over-performance, the actual compensation may be lower or higher than the benchmark median. The graph below illustrates the average target pay mix of the 2014 Novartis Executive Committee, excluding the CEO, compared to the average target pay mixes of our European and US peer groups using 2013 data.

NOVARTIS EXECUTIVE COMMITTEE PAY MIX COMPARED TO US AND EUROPEAN PEERS (EXCLUDING THE CEO)



Source: Towers Watson

ANNUAL INCENTIVE

Overview

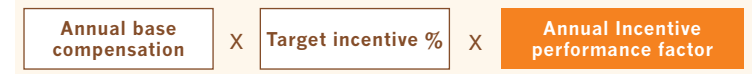
The new Annual Incentive for the CEO and Executive Committee members continues to ensure that, over a single financial year, executives focus on key business financial and innovation performance measures, as well as the Novartis Values and Behaviors.

We define a target incentive as a percentage of base compensation at the beginning of each performance period – traditionally the start of each calendar year. The target incentive is 150% of base compensation for the CEO, and up to 120% for Executive Committee members, to be paid half in cash and half in shares deferred for three years. For members of the Executive Committee, the Annual Incentive represents between 30% and 38% of their 2014 total target variable compensation.

Performance measures

The new Annual Incentive is based on an individual balanced scorecard of 1-year financial and non-financial performance targets, together with assessed values and behaviors. Business and Individual Performance Factors are no longer applied to determine payouts. The formula for the new Annual Incentive is outlined below:

ANNUAL INCENTIVE FORMULA



An illustrative balanced scorecard for the CEO is set out below:

ILLUSTRATIVE 2014 BALANCED SCORECARD FOR THE CEO

Performance measures	Weight	Breakdown of performance measures
Group Financial and Innovation Targets	60%	Group sales
		Group net income
		Group free cash flow as % of sales
		Corporate net result (see page 115)
		Weighted average of division innovation
		Total
CEO Individual Objectives	40%	Additional key financial targets e.g. EPS
		Market share and growth targets
		Organizational health goals
		Customer satisfaction targets
Overall total	**100%**	

Group Financial and Innovation targets and Individual objectives are weighted 60% and 40% respectively. Within the Group Financial and Innovation targets, each measure such as sales or net income is weighted individually.

Following a thorough review of performance against balanced scorecard objectives, as well as an assessment of values and behaviors, a rating will be assigned 1-3 for each.

The following payout matrix shows how the Annual Incentive performance factor will then be derived. The Compensation Committee will use its discretion to determine the final payout factor taking into account the ranges shown. Payouts are capped at 200% of target.

ANNUAL INCENTIVE PAYOUT MATRIX

			% Payout		
Performance vs. Balanced scorecard	Exceeded Expectations	3	70%–100%	130%–160%	170%–200%
	Fully met expectations	2	50%–80%	90%–120%	130%–160%
	Partially met expectations	1	0%	0%–70%	60%–90%
			1	2	3
			Partially met expectations	Fully met expectations	Exceeded expectations
			Values and Behaviors Assessment		

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 that are deferred and restricted for three years (or RSUs if restricted shares are not possible). 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 do not carry any dividend or voting rights.

If a participant leaves Novartis for reasons other than retirement, disability or death, unvested shares (and RSUs) are forfeited, unless determined otherwise by the Compensation Committee (for example in connection with a reorganization or divestment).

Executives may choose to receive some or all of the cash portion of their Annual Incentive in shares.

Delivery of equity at vesting

Following the vesting period, settlement is made in unrestricted Novartis shares or American Depositary Receipts (US only).

LONG-TERM PERFORMANCE PLAN (LTPP)

Overview

The new Long-Term Performance Plan (LTPP), designed to drive long-term shareholder value creation and long-term innovation, will be available only to the CEO and Executive Committee members in 2014. It is intended that additional executives in key positions, with a significant impact on the long-term success of Novartis, will be invited to participate in the new LTPP, which will replace the current LTPP in the future.

The target incentive is 200% of base compensation for the CEO. For members of the Executive Committee, LTPP represents between 44% and 55% of their total variable compensation at target.

Performance measures

The LTPP payout is based on the achievement of long-term shareholder value creation and innovation. The rewards are based on rolling three-year global performance objectives focused on financial and innovation measures. The split of performance measures is set out below:

	75% Financial	25% Innovation
Measure	Group Novartis Cash Value Added (NCVA)	5–10 key innovation milestones
CEO & Function Heads	100% Group	Weighted average of division performance
Division Heads		100% Division

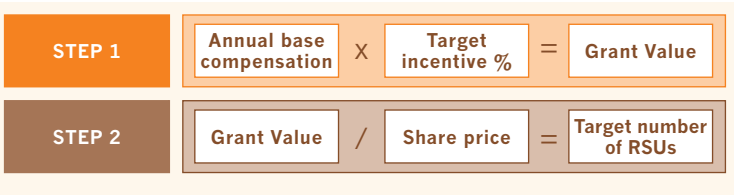
Financial measure (Group Novartis Cash Value Added)

The Novartis Economic Value Added (NVA) metric that was used in our previous Long-Term Performance Plan has been revised and replaced by a metric that is based on what we assess to be our sustainable cash flow less a capital charge on gross operating assets. We call this metric Novartis Cash Value Added (NCVA), and this will be used for awards under our Long-Term Performance Plan starting with the 2014-2016 performance cycle. Although both metrics aim to evaluate long-term business performance and value creation, NCVA is better aligned with the way we drive business performance at all levels throughout the organization. Our sustainable cash flow is defined as our operating income after tax and reversing for amortization charges on intangible assets, gains and losses from non-operating financial assets which contribute to operating income and impairment charges. Our capital charge is defined as the notional interest using an interest rate, representing our internally calculated weighted average cost of capital for the Group. It is calculated on our gross operating asset base, represented by net working capital, property, plant and equipment, goodwill and other intangible assets.

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 calculated performance realization is adjusted by major events during the cycle (e.g. divestments, acquisitions). The weighting of this measure is 75% within LTPP.

Innovation measure
Innovation is of key importance to the future of Novartis. A holistic approach is used by the Compensation Committee to determine the realization and performance factor of this portion of LTPP. 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. These milestones might be chosen because of the future quantitative 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. 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 LTPP.

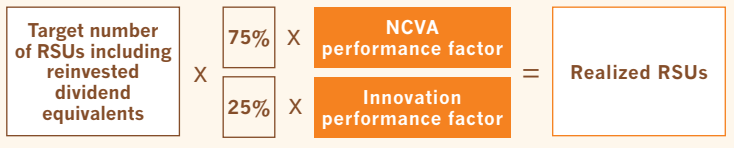
Form of the award at grant
At the beginning of every performance period, plan participants are granted a target number of RSUs according to the following formula:



Delivery at Vesting
At the end of the three-year performance period, the Compensation Committee adjusts the number of RSUs earned based on actual performance against the financial and innovation targets.

The NCVA performance factor is based on a 1:5 payout curve, where a 1% deviation in realization versus target leads to a 5% change in payout (for example, a realization of 105% leads to a payout factor of 125%). If performance over the three-year vesting period falls below 80% of target, no payout is made for this portion of LTPP. If performance over the three-year vesting period is above 120% of target, payout for this portion of LTPP is capped at 200% of target. The innovation performance factor is determined directly by the Compensation Committee.

LTPP PAYOUT FORMULA



The performance factors are capped at 200% of the target RSUs including reinvested dividend equivalent RSUs. For the financial measure, this corresponds to an achievement of 20% above target. If a participant leaves Novartis for reasons other than retirement, disability or death, none of the award vests. 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 testing 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 or disability, will receive full vesting of their award on the normal vesting date (no acceleration). The award will be subject to performance testing and it will also be subject to other conditions such as observing the conditions of a non-compete agreement. In the case of termination upon death, accelerated vesting will be applied.

At the end of the performance period, RSUs are converted into unrestricted Novartis shares and immediately vest. In the United States, awards may also be delivered in cash under the US deferred compensation plan. Each RSU is equivalent in value to one Novartis share and is converted into one share at the vesting date. RSUs do not carry voting rights, but do carry dividend equivalents that are reinvested in additional RSUs and paid at vesting to the extent that performance conditions have been met.

LONG-TERM RELATIVE PERFORMANCE PLAN (LTRPP)

Overview
The new Long-Term Relative Performance Plan (LTRPP) is an equity plan for key executives, designed to drive competitive long-term shareholder return. The target incentive is 100% of base compensation for the CEO. For other members of the Executive Committee, LTRPP represents between 10% and 23% of their total variable compensation at target.

Performance measure
LTRPP is based on the achievement of long-term Group Total Shareholder Return (TSR) versus our 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 (see page 112).

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 set out below:

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%

TSR performance above median (above position 7 of 13) is required for awards to be earned at or above 100% of target. Thus, if Novartis' relative TSR is median or less, the maximum payout is 80% of target. No awards are granted for performance 11 of 13 or below. The Compensation Committee retains overall discretion to determine the payout within the ranges shown, and will take into consideration factors such as absolute TSR and overall economic conditions, as well as anomalous situations.

Form of the award at grant

At the beginning of every performance period, plan participants are granted a target number of RSUs, in the same way that applies for LTPP (see page 135).

Delivery at Vesting

At the end of the performance period, RSUs are converted into unrestricted Novartis shares and immediately vest. In the United States, awards may also be delivered in cash under the US deferred compensation plan. The rules for participants leaving Novartis under this incentive plan are the same as those applied for the LTPP plan (see page 135)

Each RSU is equivalent in value to one Novartis share and is converted into one share at the vesting date. RSUs do not carry voting rights, but do carry dividend equivalents that are reinvested in additional RSUs and paid at vesting to the extent that performance conditions have been met.

TRANSITION TO THE COMPENSATION SYSTEM 2014

From 2014, grants will be made to the CEO and ECN Members under the new compensation system as described herein. However, previous cycles of long-term incentives from the current compensation system will vest according to their normal cycles and plan rules.

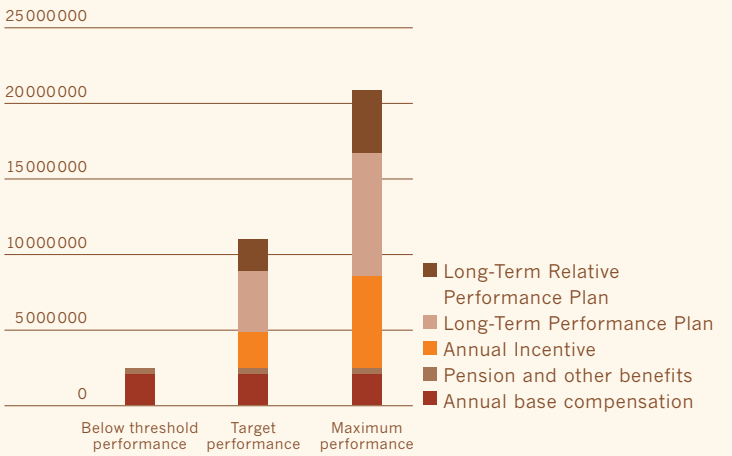
PROPOSED CEO COMPENSATION MIX 2014

At target, the CEO's compensation is made up of 18% annual base compensation, 2% benefits, 26% Annual Incentive and 54% long-term incentive. The long-term incentive is split according to a ratio of 2:1 LTPP to LTRPP. The emphasis on the long-term incentive reflects our strategy and the long-term innovation-focused business cycle which characterizes our industry.

The CEO compensation for 2014 at minimum, target and maximum performance is set out in the table below. All incentives may payout at 0–200% of target.

2014 CEO COMPENSATION[1]

(In CHF)



[1] Values of LTPP and LTRPP exclude share price development over performance period and exclude dividend equivalent rights. Pension and other benefits are in addition

BOARD COMPENSATION 2014

COMPENSATION OF THE CHAIRMAN OF THE BOARD

For 2014, the Chairman voluntarily waived his contractual opportunity to receive 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). Therefore, his total annual compensation will remain at CHF 3.8 million, to be paid 50% in cash, and 50% in shares. In addition to his annual compensation, he will receive an amount of EUR 871 251 on January 31, 2015, should he remain in his position until that date. This amount is the second of three installments comprising a total buy out of EUR 2 665 051, which compensates him for lost entitlements with his previous employer due to him joining Novartis. Finally, in 2014 the Company will make employer contributions regarding the Chairman's participation in the Novartis Swiss standard pension and life insurance benefit plans. These contributions are estimated not to exceed CHF 162 000.

COMPENSATION OF THE OTHER MEMBERS OF THE BOARD

During 2013, the Compensation Committee, together with its independent advisor, also undertook a detailed review of Board compensation and has approved a revised policy, which is outlined on this page. It reflects some of our recent governance changes, including the removal of the Chairman's Committee. It aims to better align our Board compensation to the current levels of our international healthcare peer group, and other Swiss industrial companies; the latter being relevant due to the extensive responsibilities that a Swiss board has, including but not limited to setting strategy, ensuring its implementation, making organizational decisions, carrying responsibility for financial performance and integrity, and overseeing senior management. The Board decided to:

- reduce the annual retainer for Board members from CHF 350 000 to CHF 300 000 per year;
- maintain the same level of fees for the Vice Chairman position;
- maintain the same level of fees for the Chairs of the Board Committees;
- reduce the fees of members of Board Committees (the Chairman's Committee has been disbanded as of 2014 and a new Research and Development Committee has been introduced) to half of the amount paid to the Chair of the Committee; and

The annual fee rates to apply from the 2014 AGM are set out below:

2014 BOARD MEMBER ANNUAL FEE RATES (EXCL. CHAIRMAN)

	Annual fee (CHF)
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 Responsibility Committee – Risk Committee – Research & Development Committee	60 000
Membership of Audit and Compliance Committee	60 000
Membership of the following Committees: – Compensation Committee – Governance, Nomination and Corporate Responsibility Committee – Risk Committee – Research & Development Committee	30 000

In addition, the Board decided to adopt the following policies regarding their compensation:

- 50% of compensation will be delivered in cash, paid on a quarterly basis in arrears;
- 50% of compensation will be delivered in shares in two installments; one six months after the AGM and one a full year after the AGM;
- Share ownership guidelines for the Chairman are increased to a minimum of 30 000 shares and, for the other members of the Board of Directors, a minimum of 4 000 shares to be obtained over a period of three years; and
- Board members will bear the full cost of their employee social security contributions, if any.

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.

FINANCIAL REPORT

CONTENTS

TANZANIA

A young boy learns mathematics by reading Braille and using an abacus at the Kabanga Protectorate Center.

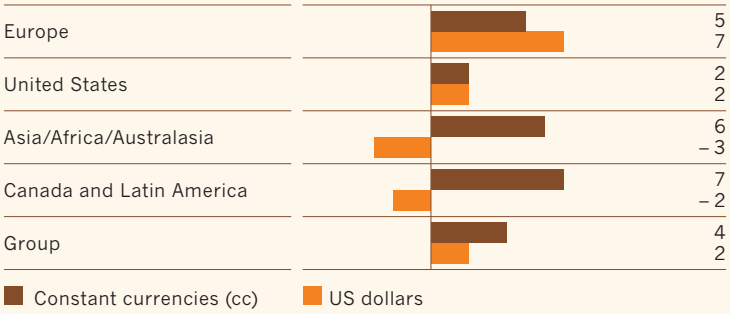
FINANCIAL HIGHLIGHTS 2013

KEY FIGURES

	2013 USD millions	Restated 2012 USD millions[4]	Change USD %	Change cc %
Net sales	**57 920**	56 673	2	4
Operating income	**10 910**	11 193	– 3	5
Return on net sales (%)	**18.8**	19.8		
Net income	**9 292**	9 383	– 1	7
Basic earnings per share (USD)[1]	**3.76**	3.83	– 2	6
Core operating income[2]	**14 485**	14 842	– 2	3
Core return on net sales (%)	**25.0**	26.2		
Core net income[2]	**12 533**	12 576	0	5
Core earnings per share (USD)[1, 2]	**5.09**	5.15	– 1	4
Equity at year end	**74 472**	69 263	8	
Dividend (CHF)[3]	**2.45**	2.30	7	

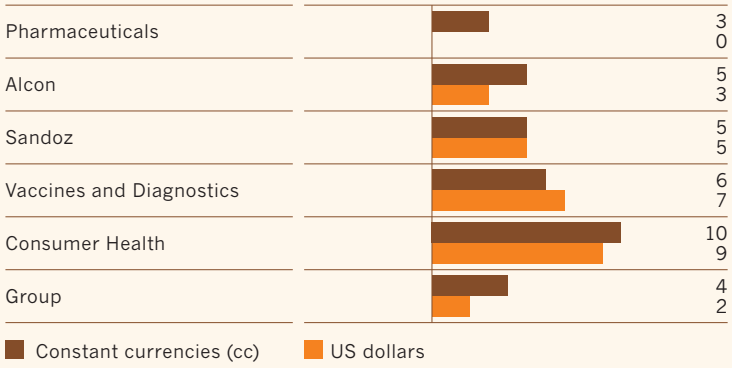
NET SALES GROWTH BY REGION

(in %)



NET SALES GROWTH BY SEGMENT

(in %)

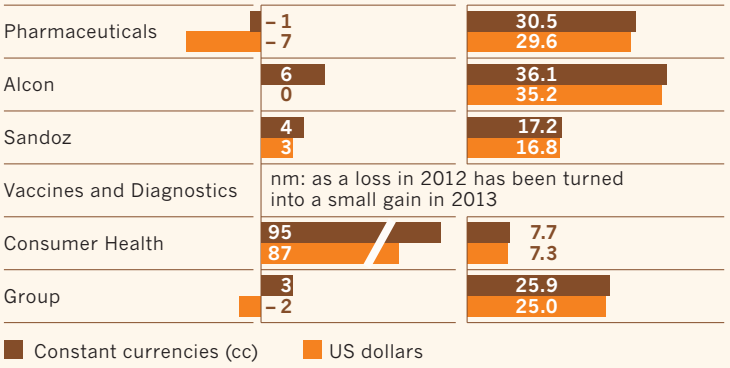


CORE OPERATING INCOME GROWTH

(in %)[2]

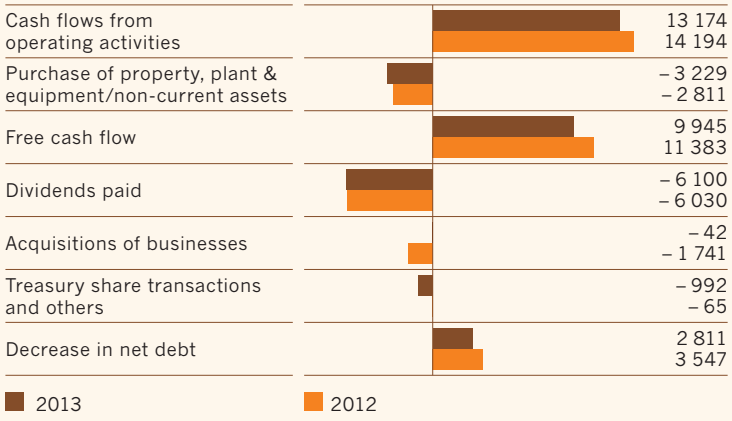
CORE OPERATING MARGIN

(in %)[2]



FREE CASH FLOW AND CHANGE IN NET DEBT

(in USD millions)

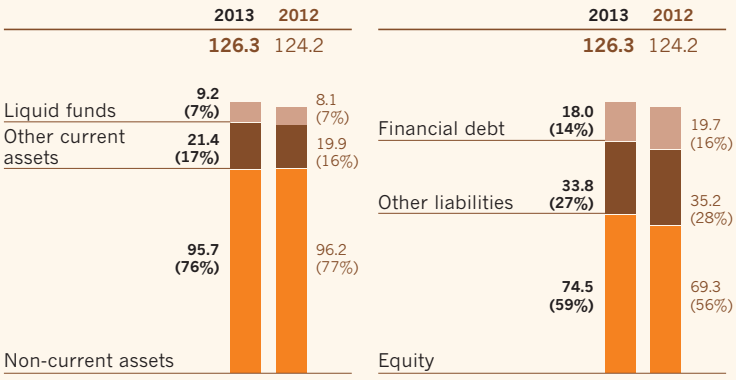


TOTAL ASSETS

(in USD billions and %)

TOTAL EQUITY AND LIABILITIES

(in USD billions and %)



[1] 2013 average number of shares outstanding: 2 441 million (2012: 2 418 million)

[2] Core results for operating income, net income and earnings per share (EPS) eliminate the impact of acquisition-related factors and certain significant exceptional items. These adjustments are explained in detail starting on page 176.

[3] Dividend payment for 2013: proposal to 2014 Annual General Meeting

[4] Operating income and core operating income in 2012 have been restated by an additional USD 318 million expense and net income and core net income by USD 235 million after taxes to reflect the adoption of revised IAS 19 on *Employee Benefits* (see pages 247 and 248).
nm = not meaningful

KEY FINANCIAL DEVELOPMENTS IN 2013

NET SALES	Net sales increased 2% (+4% in constant currencies, or cc) to USD 57.9 billion. Growth products contributed USD 18.1 billion or 31% of Group net sales, up from 28% in 2012, more than absorbing the impact of patent expiries.
PHARMACEUTICALS	Pharmaceuticals delivered net sales of USD 32.2 billion (0%, +3% cc), with strong volume growth (+9 percentage points) and pricing (+1 percentage point) more than offsetting the impact of generic competition (USD 2.2 billion, –7 percentage points). Growth products accounted for USD 12.3 billion – or 38% of division net sales, up from 31% in 2012 – driving portfolio rejuvenation across therapeutic areas.
ALCON	Alcon achieved net sales of USD 10.5 billion (+3%, +5% cc), with sales growth across all three franchises. Surgical (USD 3.9 billion, +7% cc) grew the fastest, driven by cataract procedure growth, market share gains in intraocular lenses and demand for the newly launched *LenSx* and *Centurion* equipment.
SANDOZ	Sandoz achieved net sales of USD 9.2 billion, an increase of 5% (+5% cc), driven by double-digit retail generics and biosimilars sales increases in Western Europe (excluding Germany), Japan and emerging markets. Sandoz also continued to strengthen its global leadership position in biosimilars (USD 420 million, +23% cc) in 2013.
VACCINES AND DIAGNOSTICS	Vaccines and Diagnostics delivered net sales of USD 2.0 billion, up 7% (+6% cc) from 2012, mainly due to higher *Menveo* sales and seasonal influenza demand.
CONSUMER HEALTH	Consumer Health returned to growth in 2013 as net sales increased 9% (+10% cc) to USD 4.1 billion, driven by both the OTC and Animal Health businesses.
OPERATING INCOME	Operating income was USD 10.9 billion (–3%, +5% cc). Currency had a negative impact of 8 percentage points, mainly from the weakening yen and emerging market currencies. Core operating income was USD 14.5 billion (–2%, +3% cc). Core operating income margin in constant currencies decreased by 0.3 percentage points, mainly from lower gross margins due to generic erosion and R&D investment in Pharmaceuticals; currency had a negative impact of 0.9 percentage points, resulting in a net decrease of 1.2 percentage points to 25.0% of net sales.
NET INCOME	Net income of USD 9.3 billion was down 1% (+7% cc) from 2012. Core net income was USD 12.5 billion, stable in reported terms but up 5% in constant currencies, ahead of core operating income mainly due to higher income from associated companies and lower net financial expense.
BASIC EARNINGS PER SHARE	Earnings per share (EPS) decreased 2% (+6% cc) to USD 3.76 from USD 3.83 in 2012, while core EPS was USD 5.09 (–1%, +4% cc).
FREE CASH FLOW	Free cash flow was USD 9.9 billion, 13% below 2012. Aside from the significant currency impact, major reasons for the decline were increased trade receivables and higher capital investments in manufacturing and research facilities.
DIVIDEND	Proposed dividend of CHF 2.45 per share for 2013, up 7% from CHF 2.30 in 2012, represents 17th consecutive annual increase and a dividend yield of 3.4%. The payout ratio as a percentage of net income is expected to increase from 66% to 74%.

This operating and financial review should be read together 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.

BUSINESS AND OPERATING ENVIRONMENT

OPPORTUNITY AND RISK SUMMARY

Our financial results are affected, to varying degrees, by the following external factors.

TRANSFORMATIONAL CHANGES FUELING DEMAND

Aging population and shifting behaviors: The aging of the global population, as well as the prevalence of behaviors that increase risk of obesity and other chronic diseases, is driving demand for treatments Novartis provides.

Global rise in healthcare spending: Despite cost containment measures adopted by governments around the world, healthcare spending continues to increase. This is particularly true in emerging markets, where the expanding middle class has contributed to increased demand for quality care.

Scientific advances: Advances in the fields of genomics and biotechnology have provided new opportunities to more closely tailor treatments to individual patient groups, helping us demonstrate efficacy and bring innovative products to market for patients in need.

New technologies: The increasing use of connected medical devices and health information technology has made it easier for physicians to monitor patient adherence to our treatments, improving outcomes in clinical trials and the post-marketing setting.

Patient engagement: Increased access to health information and tools to communicate with providers is making patients more active participants in their own healthcare, creating a broader audience for our marketing efforts.

Shift to generics and over-the-counter products: As healthcare costs continue to rise, both governments and consumers continue to gravitate toward lower-cost treatment options such as generics and over-the-counter products, which we produce at Sandoz and OTC.

INCREASINGLY CHALLENGING BUSINESS ENVIRONMENT

Patent expirations and product competition: The loss of market exclusivity and the introduction of branded and generic competitors can significantly erode sales of our innovative products.

Regulatory and safety hurdles: The costs associated with bringing a drug to market have increased as a result of heightened regulatory requirements. Even after a drug is approved, there is a possibility that safety events could occur and materially affect our results.

Manufacturing quality and complexity: The manufacture of our products is both highly regulated and complex, and may result in a variety of issues that could lead to extended supply disruptions and significant liability.

Weak economic environment: Despite some improvement in the global economy, governments and patients worldwide continue to seek ways to contain rising healthcare costs.

Legal proceedings: There is a trend of increasing government investigations and litigations against companies in the healthcare industry. Despite our best efforts to comply with the laws of the countries in which we operate and sell products, any failure in compliance could have a material adverse effect on our business and reputation.

For more detail on these trends and how they impact our results, see "Factors Affecting Results of Operations" below.

NOVARTIS STRATEGY FOR SUSTAINABLE GROWTH

We believe our diversified portfolio – with leading positions in pharmaceuticals, eye care, generics, vaccines, over-the-counter medicines and animal health – makes Novartis uniquely positioned to capture opportunities across growing segments of the healthcare industry while mitigating risks in other areas.

OUR PRIORITIES: INNOVATION, GROWTH AND PRODUCTIVITY

Our long-term growth strategy places an emphasis on delivering positive patient outcomes through science-based innovation focused on high-growth segments of healthcare. We remain committed to three core strategic priorities – extending our lead in innovation, accelerating growth and driving productivity – all underpinned by integrity, which means a commitment to people, quality beyond compliance, ethical business practices and corporate responsibility. Our continued focus on R&D investments across divisions is expected to translate into key launches over the coming years. Our ongoing efforts to flawlessly execute product launches and growth programs across key markets help us convert our innovation pipeline into top-line growth. At the same time, our continued efforts to operate as efficiently as possible help us to reduce unnecessary complexity in order to strengthen financial results.

EXTENDING OUR LEAD IN INNOVATION

Patients are at the center of everything we do, and we have continued to prioritize innovation in order to bring new treatment solutions to market in areas where there is high unmet need. In 2013, we maintained our high level of investment in innovation, dedicating USD 9.9 billion, or 17% of Group net sales, to R&D activities, in an effort to help rejuvenate our portfolio.

We conduct research and early-stage development through the Novartis Institutes for BioMedical Research (NIBR), which focuses on studying molecular signaling pathways that can lead to disease. When drugs pass initial safety and efficacy tests in one disease area, we frequently initiate parallel studies in other indications because illnesses can share a common underlying pathway. We also leverage our R&D

investments in Animal Health, as some of the medicines developed for human patients also may have applications for pets or farm animals.

For our oncology monoclonal antibody biosimilars programs, Sandoz and Novartis Oncology have a joint project team which leverages the strengths of both groups. Sandoz brings biosimilars, technical development, manufacturing, regulatory and IP expertise while Novartis Oncology brings therapeutic area expertise and a broad, well respected network to drive clinical trial execution. Sandoz also leverages other R&D capabilities including animal disease models from NIBR, as well as clinical trial operations support and modeling and simulation from the Pharmaceuticals Division.

Our cutting-edge research has resulted in one of the industry's most promising pipelines, both in terms of the potential to change the lives of patients and ultimately the growth prospects of the company. For example, in 2013, we received three Breakthrough Therapy designations from the United States Food and Drug Administration, among the highest number in the industry, for our pipeline products RLX030, LDK378 and BYM338. This new, high-priority designation is intended to increase FDA interactions that may ultimately speed the development of medicines that treat serious conditions, particularly where early clinical evidence indicates that they may yield a substantial improvement over existing therapies. For example, RLX030, an investigational heart failure drug, started a second Phase III trial and is currently the only product for which a reduction in all-cause mortality has been observed in patients with acute heart failure.

Beyond our internal research activities, Novartis also collaborates with partners to develop and commercialize promising treatments that can improve patient outcomes. For example, in September, Novartis entered an exclusive global licensing and research collaboration agreement with Regenerex LLC, a biopharmaceutical company in Louisville, Kentucky regarding the use of the company's novel Facilitating Cell Therapy (FCRx) platform. The stem cell-based FCRx platform has the potential to assist in suppressing immunological responses after kidney transplants and may have curative potential for multiple underserved diseases.

ACCELERATING GROWTH ACROSS SIX DIVISIONS

While our focus on innovation contributes to our portfolio rejuvenation, we are also focused on continuously improving our commercial execution of approved products and expanding access to our medicines in Emerging Growth Markets (EGMs) – which comprise all markets except the US, Canada, Western Europe, Australia, New Zealand and Japan – to drive growth across the portfolio.

In 2013, our growth products[1] – including *Gilenya*, *Afinitor*, *Tasigna*, *Galvus*, *Xolair, Lucentis*, the Q Family[2] and *Jakavi*, amongst others – contributed significantly to overall performance, comprising 31% or USD 18.1 billion of Group net sales, up 15% over the previous year. For example, *Galvus*, our oral type 2 diabetes treatment, reached blockbuster status in 2013 with USD 1.2 billion (+40% cc) in full-year sales.

[1] Growth products are defined as products launched in 2008 or later, or with exclusivity until at least 2017 in key markets (EU, US, Japan), except Sandoz which includes only products launched in the last 24 months. The definition of growth products is maintained in all comparisons to prior year.

[2] The Q Family includes *Arcapta Neohaler/Onbrez Breezhaler*, *Seebri Breezhaler* and *Ultibro Breezhaler*.

Emerging Growth Markets (EGM) also performed strongly, up 10% (cc) over 2012 to USD 14.7 billion or 25% of Group net sales in 2013. We made significant investments to strengthen our footprint in key markets and establish ourselves as a market leader. In Russia and Brazil, Novartis is building a significant manufacturing presence. In China, we continued our strong growth trajectory, with net sales up 23% (cc) over the previous year. China became one of our top 10 markets in 2013.

In some EGMs, where healthcare infrastructure is limited, we have created innovative business models, or "Social Ventures," to build local capabilities in healthcare. Social Ventures address societal problems that impact access to healthcare in a way that also creates a financial return for the company. In 2013, Novartis took steps to expand *Arogya Parivar* ("Healthy Family" in Hindi), a Social Venture that helps enhance access to health education, care and treatments in rural India, to additional countries. Since launching *Arogya Parivar* in 2007, Novartis has increased access to healthcare across about 30,000 villages in India, home to more than 50 million people.

ENHANCING PRODUCTIVITY

Across divisions, Novartis maintains a consistent focus on improving efficiency and enhancing margins, allowing us to reinvest in the business and provide value for shareholders. Ongoing productivity initiatives relate to procurement and resource allocation across the portfolio, as well as our manufacturing network, offshoring, service hubs and R&D.

In Procurement, we leveraged our scale, implemented global category management and created country Centers of Excellence in key markets. These efforts generated savings of approximately USD 1.5 billion in 2013.

In addition, we continued to optimize our manufacturing footprint in 2013 with the announced closure of the Alcon contact lens care manufacturing facility in Mississauga, Canada in the fourth quarter. In January 2014, we also announced the closing of the Pharmaceuticals manufacturing site in Suffern, New York, US, bringing the total number of production sites that are in process of being restructured or divested to 20. Related to these initiatives, we recorded exceptional charges of USD 115 million in 2013, bringing total charges to USD 515 million cumulatively since the program began in the fourth quarter of 2010. In January 2014, the Pharmaceuticals Division announced plans to change the size and structure of the US Primary Care Business Unit and a shift of positions within Switzerland.

We anticipate that these initiatives, coupled with the Suffern plant closure, will contribute to an exceptional charge of approximately USD 150 million in the first quarter of 2014.

We also made productivity gains through global business service hubs, with a focus on knowledge services like clinical development and regulatory and medical affairs, and outsourcing, with a focus on transactional and commoditized processes in Finance and IT.

Taken together, our productivity initiatives allowed us achieve savings of approximately 5% of net sales.

NOVARTIS STRUCTURE

The Novartis Group strategy for sustainable, long-term growth is based on focused diversification, in which we seek to access multiple, growing segments of the healthcare market. Reflecting our leadership positions across the market, the Group's businesses are divided on a worldwide basis into six global operating divisions, which report results in five segments (Pharmaceuticals, Alcon, Sandoz, Vaccines and Diagnostics, and Consumer Health), and Corporate activities. Except for Consumer Health, which comprises two divisions (Over-the-Counter, or OTC, and Animal Health) that are not material enough to the Group to be reported on an individual basis, these segments reflect the Group's internal management structure and are disclosed separately because they research, develop, manufacture, distribute and sell distinct products that require different marketing strategies.

PHARMACEUTICALS

Pharmaceuticals researches, develops, manufactures, distributes and sells patented prescription medicines and is organized in the following business franchises: Primary Care, consisting of Primary Care medicines and Established Medicines; and Specialty Care, consisting of Ophthalmology, Neuroscience, Integrated Hospital Care and Critical Care medicines. Novartis Oncology is organized as a business unit, responsible for the global development and marketing of oncology products.

Pharmaceuticals is the largest contributor among the segments, and in 2013 accounted for USD 32.2 billion, or 56%, of Group net sales and USD 9.4 billion, or 80%, of Group operating income (excluding Corporate Income and Expense, net).

ALCON

As the global leader in eye care, Alcon researches, develops, manufactures, distributes and sells eye care products and technologies to serve the full lifecycle of eye care needs. Alcon offers a broad range of products to treat many eye diseases and conditions, and is organized into three businesses: Surgical, Ophthalmic Pharmaceuticals and Vision Care.

The Surgical portfolio includes technologies and devices for cataract, retinal, glaucoma and refractive surgery, as well as intraocular lenses to treat cataracts and refractive errors, like presbyopia and astigmatism. Alcon also provides viscoelastics, surgical solutions, surgical packs, and other disposable products for cataract and vitreoretinal surgery.

In Ophthalmic Pharmaceuticals, the portfolio includes treatment options for elevated intraocular pressure caused by glaucoma, anti-infectives to aid in the treatment of bacterial infections and bacterial conjunctivitis, ophthalmic solutions to treat inflammation and pain associated with ocular surgery, as well as an intravitreal injection for vitreomacular traction, including macular hole. The Ophthalmic Pharmaceuticals product portfolio also includes eye and nasal allergy treatments, as well as over-the-counter dry eye relief and ocular vitamins.

The Vision Care is comprised of disposable, monthly replacement, and color-enhancing contact lenses, as well as a complete line of contact lens care products including multi-purpose and hydrogen peroxide-based solutions, rewetting drops, and daily protein removers.

In 2013, Alcon accounted for USD 10.5 billion, or 18 %, of Group net sales, and USD 1.2 billion, or 11% of Group operating income (excluding Corporate Income and Expense, net).

SANDOZ

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 has activities in 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 specialty areas of Dermatology, Respiratory and Ophthalmics. In Anti-Infectives, Sandoz manufactures active pharmaceutical ingredients and intermediates – mainly antibiotics – for internal use by Retail Generics and for sale to third-party customers. In Biopharmaceuticals, Sandoz develops, manufactures and markets protein- or other biotechnology-based products (known as biosimilars or follow-on biologics) and sells biotechnology manufacturing services to other companies, and in Oncology Injectables, Sandoz develops, manufactures and markets cytotoxic products for the hospital market.

In 2013, Sandoz accounted for USD 9.2 billion, or 16%, of Group net sales and USD 1.0 billion, or 9% of Group operating income (excluding Corporate Income and Expense, net).

VACCINES AND DIAGNOSTICS

Vaccines and Diagnostics consists of two activities: Vaccines and Diagnostics. 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 researches, develops, manufactures, distributes and sells human vaccines worldwide. Diagnostics researched, developed, distributed and sold blood testing and molecular diagnostics products.

In 2013, Vaccines and Diagnostics accounted for USD 2.0 billion, or 3%, of Group net sales and generated an operating loss of USD 165 million.

CONSUMER HEALTH

Consumer Health consists of two divisions: OTC and Animal Health. Each has its own research, development, manufacturing, distribution and selling capabilities, but neither is material enough to the Group to be separately disclosed as a segment. OTC offers readily-available consumer medicine, and Animal Health provides veterinary products for farm and companion animals.

In 2013, Consumer Health accounted for USD 4.1 billion, or 7%, of Group net sales and USD 178 million, or 1%, of Group operating income (excluding Corporate Income and Expense, net).

CORPORATE

Corporate activities include certain functions – such as Financial Reporting & Accounting, Treasury, Internal Audit, IT, Legal, Compliance, Tax and Investor Relations – that are managed at the Corporate level and provide support to the organization but are not attributable to specific divisions. Corporate also includes the costs of our headquarters and corporate coordination functions in major countries.

RESULTS OF OPERATIONS

In evaluating the Group's performance, we consider not only the IFRS results, but also additional non-IFRS measures, in particular 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, impairment charges, expenses relating to the integration of acquisitions as well as 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. A reconciliation between IFRS results and core results is shown on pages 178 to 181.

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 measures by applying the prior-year average exchange rates to current financial data expressed in non-US dollars in order to estimate an elimination of the impact of foreign exchange rate movements.

These non-IFRS measures are explained in more detail starting on page 176 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.

KEY FIGURES

	Year ended Dec 31, 2013 USD millions	Restated Year ended Dec 31, 2012[1] USD millions	Change in USD %	Change in constant currencies %
Net sales	**57 920**	**56 673**	**2**	**4**
Other revenues	911	888	3	2
Cost of goods sold	– 19 608	– 18 756	– 5	– 5
Gross profit	**39 223**	**38 805**	**1**	**4**
Marketing & Sales	– 14 549	– 14 353	– 1	– 3
Research & Development	– 9 852	– 9 332	– 6	– 6
General & Administration	– 3 060	– 2 937	– 4	– 5
Other income	1 367	1 049	30	30
Other expense	– 2 219	– 2 039	– 9	– 9
Operating income	**10 910**	**11 193**	**– 3**	**5**
Income from associated companies	600	552	9	9
Interest expense	– 683	– 724	6	6
Other financial income and expense	– 92	– 96	4	30
Income before taxes	**10 735**	**10 925**	**– 2**	**6**
Taxes	– 1 443	– 1 542	6	– 1
Net income	**9 292**	**9 383**	**– 1**	**7**
Attributable to:				
Shareholders of Novartis AG	*9 175*	*9 270*	*– 1*	*7*
Non-controlling interests	*117*	*113*	*4*	*4*
Basic earnings per share	**3.76**	**3.83**	**– 2**	**6**
Free cash flow	**9 945**	**11 383**	**– 13**	

[1] Other income and Other expense have been restated by an additional USD 318 million expense (USD 235 million after taxes) to reflect the adoption of revised IAS 19 on *Employee Benefits* (see pages 247 and 248).

CORE KEY FIGURES

	Year ended Dec 31, 2013 USD millions	Restated Year ended Dec 31, 2012[1] USD millions	Change in USD %	Change in constant currencies %
Core gross profit	**42 158**	**41 847**	**1**	**3**
Marketing & Sales	– 14 522	– 14 352	– 1	– 3
Research & Development	– 9 642	– 9 116	– 6	– 6
General & Administration	– 3 035	– 2 923	– 4	– 4
Other income	808	675	20	20
Other expense	– 1 282	– 1 289	1	0
Core operating income	**14 485**	**14 842**	**– 2**	**3**
Core net income	**12 533**	**12 576**	**0**	**5**
Core basic earnings per share	**5.09**	**5.15**	**– 1**	**4**

[1] Other income and Other expense have been restated by an additional USD 318 million expense (USD 235 million after taxes) to reflect the adoption of revised IAS 19 on *Employee Benefits* (see pages 247 and 248).

GROUP OVERVIEW

Group net sales increased to USD 57.9 billion in the full year, up 2% (+4% cc) over 2012. Currency had a negative impact of 2 percentage points, mainly from the weakening yen and emerging market currencies against the US dollar.

Excluding the impact of generic competition, underlying sales grew 8% in constant currencies. Growth products[1] contributed USD 18.1 billion or 31% of Group net sales, up from 28% in 2012. Loss of exclusivity impacted sales by approximately USD 2.2 billion, mainly due to *Diovan* and *Zometa/Aclasta*.

Group operating income was USD 10.9 billion (–3%, +5% cc). The negative currency impact of 8 percentage points was greater than the currency impact on sales, as the yen and emerging market currencies represent a larger proportion of operating income than sales.

The adjustments made to Group operating income to arrive at core operating income amounted to USD 3.6 billion (2012: USD 3.6 billion). These adjustments included USD 3.0 billion (2012: USD 2.9 billion) of amortization of intangible assets, USD 0.3 billion (2012: USD 0.4 billion) of impairment charges, USD 0.3 billion (2012: USD 0.3 billion) of acquisition-related items and in 2012 USD 0.1 billion of other exceptional items.

Significant exceptional items in 2013, which exclude amortization, included USD 331 million of integration costs, mainly in Alcon; USD 259 million of impairment charges, of which USD 74 million was in Pharmaceuticals, USD 61 million in Alcon, USD 59 million in Corporate and USD 65 million in other divisions; restructuring charges totaling USD 226 million, mainly USD 122 million in Pharmaceuticals, and USD 77 million in Alcon, offset by gains from divesting products and financial assets of USD 313 million in Pharmaceuticals and a net USD 117 million of other exceptional expenses. Prior year adjustments of significant exceptional items, which exclude amortization, were mainly driven by USD 330 million of integration costs principally from Alcon; USD 356 million of impairment charges of which the majority was in Pharmaceuticals; USD 272 million of restructuring charges offset by gains from divesting products and financial assets of USD 144 million; and a net USD 41 million of other exceptional income.

Excluding these items, Group core operating income in 2013 was USD 14.5 billion (–2%, +3% cc). Excluding the impact of generic competition, underlying core operating income grew 15% in constant currencies. Core operating income margin in constant currencies decreased by 0.3 percentage points, mainly from lower core gross margins due to higher royalties and generic erosion as well as R&D investment in Pharmaceuticals; currency had a negative impact of 0.9 percentage points, resulting in a net decrease of 1.2 percentage points to 25.0% of net sales.

Group net income of USD 9.3 billion was down 1% in reported terms, but up 7 % in constant currencies due to operating income performance, higher income from associated companies and lower net financial expense.

EPS was down 2% (+6% cc), in line with net income, to USD 3.76.

Group core net income was USD 12.5 billion (0%, +5% cc), ahead of core operating income mainly due to higher income from associated companies and lower net financial expenses. Core EPS was USD 5.09 (–1%, +4% cc), largely following core net income.

For the full year, free cash flow of USD 9.9 billion was 13% below the prior year. Aside from the significant currency impact, major reasons for the decline were increased trade receivables and higher capital investments in manufacturing and research facilities.

NET SALES BY SEGMENT

	Year ended Dec 31, 2013 USD millions	Year ended Dec 31, 2012 USD millions	Change in USD %	Change in constant currencies %
Pharmaceuticals	**32 214**	**32 153**	**0**	**3**
Alcon	**10 496**	**10 225**	**3**	**5**
Sandoz	**9 159**	**8 702**	**5**	**5**
Vaccines and Diagnostics	**1 987**	**1 858**	**7**	**6**
Consumer Health	**4 064**	**3 735**	**9**	**10**
Net sales	**57 920**	**56 673**	**2**	**4**

PHARMACEUTICALS

Pharmaceuticals delivered net sales of USD 32.2 billion (0%, +3% cc) for the full year, driven by strong volume growth (+9 percentage points) and pricing (+1 percentage point), which more than offset the impact of generic competition (USD 2.2 billion, -7 percentage points). Growth products[1] grew 25% in constant currencies and contributed USD 12.3 billion or 38% of division net sales in 2013, compared to 31% in 2012.

Europe (USD 11.0 billion, +5% cc) benefited from the continued strong performance of growth products. The US (USD 10.3 billion, –1% cc) was impacted by generic competition for *Zometa/Aclasta* and *Diovan HCT*. Japan's performance (USD 3.3 billion, +1% cc) improved versus prior year due to new launches. Emerging Growth Markets[2] (USD 7.7 billion, +9% cc) grew strongly.

[1] "Growth products" are defined as products launched in 2008 or later, or products with exclusivity until at least 2017 in key markets (EU, US, Japan) (except Sandoz, which includes only products launched in the last 24 months). The definition of growth products is maintained in all comparisons to prior year.

[2] "Emerging Growth Markets" comprises all markets except the US, Canada, Western Europe, Japan, Australia and New Zealand.

TOP 20 PHARMACEUTICALS DIVISION PRODUCT NET SALES – 2013

			US		Rest of world		Total		
Brands	**Business franchise**	**Indication**	**USD millions**	**% change in constant currencies**	**USD millions**	**% change in constant currencies**	**USD millions**	**% change in USD**	**% change in constant currencies**
Gleevec/Glivec	Oncology	Chronic myeloid leukemia	1 939	14	2 754	– 6	**4 693**	**0**	**1**
Diovan/Co–Diovan	Primary Care	Hypertension	1 679	– 20	1 845	– 12	**3 524**	**– 20**	**– 16**
Lucentis	Ophthalmics	Age-related macular degeneration			2 383	1	**2 383**	**– 1**	**1**
Gilenya	Neuroscience	Relapsing multiple sclerosis	1 023	41	911	94	**1 934**	**62**	**62**
Sandostatin	Oncology	Acromegaly	710	9	879	6	**1 589**	**5**	**8**
Exforge	Primary Care	Hypertension	356	– 1	1 100	16	**1 456**	**8**	**12**
Afinitor/Votubia	Oncology	Breast cancer	691	68	618	64	**1 309**	**64**	**66**
Tasigna	Oncology	Chronic myeloid leukemia	428	22	838	36	**1 266**	**27**	**31**
Galvus	Primary Care	Diabetes			1 200	40	**1 200**	**32**	**40**
***Exelon/Exelon* Patch**	Neuroscience	Alzheimer's disease	457	7	575	– 5	**1 032**	**– 2**	**0**
Exjade	Oncology	Iron chelator	265	6	628	4	**893**	**3**	**4**
Neoral/Sandimmun	Integrated Hospital Care	Transplantation	56	– 13	694	– 3	**750**	**– 9**	**– 4**
***Voltaren* (excl. other divisions)**	Established medicines	Inflammation/pain	2	100	673	– 4	**675**	**– 11**	**– 4**
Myfortic	Integrated Hospital Care	Transplantation	270	13	367	13	**637**	**10**	**13**
Xolair	Primary Care	Asthma			613	24	**613**	**22**	**24**
Zometa	Oncology	Cancer complications	115	– 80	485	– 30	**600**	**– 53**	**– 52**
Ritalin/Focalin	Established medicines	Attention deficit/ hyperactivity disorder	435	8	159	6	**594**	**7**	**8**
Comtan/Stalevo	Neuroscience	Parkinson's disease	33	– 78	368	0	**401**	**– 24**	**– 21**
TOBI	Critical Care	Cystic fibrosis	268	28	119	12	**387**	**22**	**22**
Femara	Oncology	Breast cancer	19	– 14	365	– 7	**384**	**– 12**	**– 7**
Top 20 products total			**8 746**	**2**	**17 574**	**5**	**26 320**	**1**	**4**
Rest of portfolio			1 510	– 15	4 384	3	**5 894**	**– 5**	**– 2**
Total Division sales			**10 256**	**– 1**	**21 958**	**5**	**32 214**	**0**	**3**

Pharmaceuticals Division Product Highlights – Leading Products

Net sales growth data below refer to 2013 worldwide performance. Growth rates are not provided for some products since they are not meaningful.

Gleevec/Glivec (USD 4.7 billion, +1% cc) maintained steady sales as a treatment for adult patients with metastatic and/or unresectable KIT+ gastrointestinal stromal tumors (GIST), as an adjuvant treatment for certain adult patients following resection of KIT+ GIST, and as a targeted therapy for Philadelphia chromosome-positive chronic myeloid leukemia (Ph+ CML). In 2013, *Gleevec/Glivec* was approved in the US and EU for treatment of acute lymphocytic leukemia in pediatric patients. Our Bcr-Abl franchise, which consists of *Gleevec/Glivec* and *Tasigna*, grew strongly in 2013, reaching net sales of USD 6.0 billion (+7% cc).

***Diovan* Group** (USD 3.5 billion, –16% cc), consisting of *Diovan* monotherapy and the combination product *Co-Diovan/Diovan HCT*, saw worldwide sales decline due to the loss of exclusivity in the EU, US, Canada and other markets, as well as the impact of the conflict of interest issue regarding valsartan investigator-initiated trials in Japan. Continued growth was seen in China and select markets in Latin America, Asia Pacific, the Middle East, and Africa. With respect to *Diovan* monotherapy in the US (90% of *Diovan* Group sales in the US in 2013), no generic competitor has yet been approved by the FDA. *Diovan HCT*, however, already faces competition from multiple generic competitors in the US.

Lucentis (USD 2.4 billion, +1% cc) saw total sales figures equal to the previous year and double-digit volume growth, despite entry of licensed competition and one-time price adjustments due to reimbursement expansion in recently launched new indications. *Lucentis* is the only anti-VEGF therapy licensed in many countries for the treatment of four ocular indications: wet age-related macular degeneration (wet AMD), visual impairment due to diabetic macular edema (DME), visual impairment due to macular edema secondary to retinal vein occlusion (RVO, including both branch and central RVO), and visual impairment due to choroidal neovascularization secondary to

pathologic myopia (mCNV). *Lucentis* is approved in more than 100 countries to treat patients with the first three conditions, and in more than 40 countries for the fourth condition. Since its launch in 2007, there have been more than 2.2 million patient-treatment years of exposure for *Lucentis. Lucentis received several regulatory approvals in 2013:* EU approval in July for the treatment of visual impairment due to mCNV; Japan approval in August as a treatment for visual impairment due to mCNV and for visual impairment due to RVO, including both branch and central RVO; and EU approval in October for a pre-filled syringe. Genentech/Roche holds the rights to *Lucentis* in the US.

Gilenya (USD 1.9 billion, +62% cc) continued to show rapid growth as the first once-daily oral therapy approved to treat relapsing forms of multiple sclerosis (MS) and the first in a new class of compounds called sphingosine 1-phosphate receptor modulators. In the US, *Gilenya* is indicated for relapsing forms of MS. In the EU, *Gilenya* is indicated for adult patients with highly active relapsing remitting MS (RRMS) defined as either high disease activity despite treatment with beta interferon, or rapidly evolving severe RRMS. In an expanding oral market with multiple options, *Gilenya* is the only oral MS treatment that provides early and long-term reduction in the rate of brain volume loss and enduring high efficacy across all key disease activity measures (disability progression, relapses, MRI activity, brain volume loss). *Gilenya* is proven to consistently limit brain volume loss, seen within 6 months and sustained for up to 4 years in Phase III studies and up to 7 years in a Phase II study. In addition, *Gilenya* is the only oral disease-modifying therapy with proven superior relapse reduction versus an active comparator (61% in interferon non-responders). *Gilenya* has shown very good tolerability over the long term. Nine in 10 patients and their physicians confirm favorable tolerability in a real-world setting. As of December 2013, more than 84 500 patients have been treated in clinical trials and in a post-marketing setting, and there are currently more than 118 000 patient years of exposure. *Gilenya* is currently approved in over 78 countries around the world, and is licensed from Mitsubishi Tanabe Pharma Corporation.

Sandostatin (USD 1.6 billion, +8% cc), a somatostatin analogue used as a treatment for patients with functional gastroenteropancreatic tumors as well as acromegaly, continued to benefit from increasing use of *Sandostatin LAR* in key markets. A new presentation of *Sandostatin LAR*, which includes an enhanced diluent, safety needle and vial adapter, has been approved in 40 countries to date with additional filings underway. *Sandostatin LAR* is also approved in 44 countries for the delay of disease progression in patients with advanced neuroendocrine tumors of the midgut or unknown primary tumor location. *Sandostatin* was first launched in 1988 and is approved in more than 100 countries.

***Exforge* Group** (USD 1.5 billion, +12% cc) includes two medicines approved for the treatment of hypertension *Exforge*, a single-pill combination of the angiotensin receptor blocker (ARB) valsartan and the calcium channel blocker amlodipine besylate; and *Exforge HCT*, a single pill combining an ARB (valsartan), calcium channel blocker (amlodipine) and a diuretic (hydrochlorothiazide). *Exforge* Group continued to grow at a double-digit rate, fueled by robust growth in Europe, Latin America, Asia Pacific, and the Middle East, as well as ongoing *Exforge HCT* launches in Asia and Latin America. *Exforge* is now available in more than 100 countries. *Exforge HCT* is available in over 60 countries.

Afinitor/Votubia (USD 1.3 billion, +66% cc), an oral inhibitor of the mTOR pathway, continued its strong growth trajectory in 2013 with sales across multiple indications. *Afinitor* is approved in more than 100 countries for the treatment of various cancers including HR+/HER2- advanced breast cancer, advanced renal cell carcinoma and advanced pancreatic neuroendocrine tumors (NET). Everolimus, the active ingredient in *Afinitor/Votubia*, is also available in more than 60 countries for the treatment of renal angiomyolipomas and/or subependymal giant cell astrocytomas (SEGA) associated with tuberous sclerosis complex (TSC), including as a dispersible tablet formulation in the US and EU for SEGA. Everolimus is also in Phase III development for patients with gastrointestinal and lung NET, HER2+ breast cancer, lymphoma and TSC-related seizures. Everolimus is available under the trade names *Zortress/Certican* for use in other non-oncology indications and is exclusively licensed to Abbott and sublicensed to Boston Scientific for use in drug-eluting stents.

Tasigna (USD 1.3 billion, +31% cc) grew rapidly as a more effective, targeted therapy for certain adult patients with Ph+ CML. It is currently approved as a first-line therapy for newly diagnosed patients with Ph+ CML in the chronic phase in more than 85 countries globally, including the US, EU, Japan and Switzerland, with additional submissions pending worldwide. *Tasigna* (nilotinib) is also approved in more than 110 countries as a second-line treatment for patients with Ph+ CML in chronic and/or accelerated phase who are resistant or intolerant to existing treatment, such as *Gleevec/Glivec*. *Tasigna* market share continues to rise in markets around the world in both the first-line and second-line settings. This product is part of our Bcr-Abl franchise with net sales of USD 6.0 billion, (+7% cc), which also includes *Gleevec/Glivec*. Novartis has initiated a global clinical trial program to evaluate the potential for Ph+ CML patients to maintain deep molecular response after stopping nilotinib therapy – a concept called treatment-free remission.

***Galvus* Group** (USD 1.2 billion, +40% cc), which includes *Galvus*, an oral treatment for type 2 diabetes, and *Eucreas*, a single-pill combination of vildagliptin (the active ingredient in *Galvus*) and metformin, continued to deliver strong growth across markets including Europe, Japan, Latin America, and Asia Pacific. Performance was driven by a continued focus on patients whose diabetes remains uncontrolled on metformin, as well as an expansion of usage in new patient segments based on new indications. *Galvus* and *Eucreas* are currently approved in more than 110 countries. In October, the German Federal Joint Committee (G-BA) announced the results of its benefit assessment of *Galvus* and *Eucreas*, finding that they do not provide an additional benefit relative to sulphonylureas in combination with metformin. This decision is not consistent with the views of other Health Technology Assessment bodies and is the result of the German assessment process that limited its review to specific comparators.

***Exelon/Exelon* Patch** (USD 1.0 billion, 0% cc) had stable combined sales in 2013 as a therapy for Alzheimer's disease (AD) dementia and Parkinson's disease (PD) dementia. *Exelon* Patch, the novel transdermal form of the medicine launched in 2007 and now available in more than 90 countries worldwide, generated the majority of the sales. In June 2013, the US FDA expanded the approved indication for *Exelon* Patch, which was already approved for the treatment of mild to-moderate dementia of the Alzheimer's type and mild to-moderate dementia associated with PD, to include the treatment of patients with severe AD. The severe AD indication has subsequently been approved in Argentina (Sep. 2013) and Chile (Oct. 2013). In January 2013, European marketing authorization was obtained for the higher dose in mild-to-moderate AD. The first generic versions of *Exelon* Patch have been launched in the EU.

Exjade (USD 893 million, +4% cc), a once-daily oral therapy for the treatment of chronic iron overload due to blood transfusions in patients two years of age and older, saw steady sales growth in the US, Europe, Latin America, China, Middle East and Japan. *Exjade* was first approved in 2005 and is now approved in more than 100 countries. *Exjade* is also approved for the treatment of chronic iron overload in patients 10 years of age and older with non-transfusion-dependent thalassemia in more than 60 countries, including the US and the member states of the EU.

Neoral/Sandimmun (USD 750 million, –4% cc), a micro-emulsion formulation of cyclosporine is an immunosuppressant to prevent organ rejection following a kidney, liver or heart transplant. *Neoral* is also approved for use in lung transplant in many countries outside of the US. Additionally, it is indicated for treating selected autoimmune disorders such as psoriasis and rheumatoid arthritis. First launched in 1995, *Neoral* is marketed in approximately 100 countries. This product is subject to generic competition.

Voltaren*/*Cataflam (USD 675 million, –4% cc), is a leading non-steroidal anti-inflammatory drug (NSAID) for the relief of symptoms in rheumatic diseases such as rheumatoid arthritis and osteoarthritis, and for various other inflammatory and pain conditions. *Voltaren/Cataflam* was first launched in 1973 and is available in more than 140 countries. This product, which is subject to generic competition, is marketed by the Pharmaceuticals Division in a wide variety of dosage forms, including tablets, drops, suppositories, ampoules and topical therapy. In addition, in various countries, our Sandoz Division markets generic versions of *Voltaren*, our Alcon Division markets *Voltaren* for ophthalmic indications, and our OTC Division markets low-dose oral forms and the topical therapy of *Voltaren* as over-the-counter products.

Total sales across all divisions of *Voltaren/Cataflam* (diclofenac) amounted to USD 1.5 billion in 2013 and grew 7% in constant currencies against the prior year.

Myfortic (USD 637 million, +13% cc), a transplantation medicine, continued to grow as a treatment for the prevention of acute rejection of kidney allografts. It is indicated for treatment in combination with cyclosporine and corticosteroids, and approved in more than 90 countries.

Xolair (USD 613 million, +24% cc), a biologic drug for appropriate patients with severe persistent allergic asthma in Europe and moderate-to-severe persistent allergic asthma in the US, is now approved in more than 90 countries and in 2013 continued to grow strongly in Europe, Japan, Canada and Latin America. Novartis co-promotes *Xolair* with Genentech/Roche in the US and shares a portion of operating income, but does not book US sales. A Phase III trial is progressing to support registration in China. Results from three pivotal Phase III registration studies for omalizumab, the active ingredient in *Xolair*, for the treatment of chronic spontaneous urticaria (CSU) were presented in 2013. CSU is also known as chronic idiopathic urticaria (CIU) in the US, and is a persistent, debilitating form of hives and chronic itch with limited approved treatment options. Regulatory submissions for omalizumab in CSU were completed in the EU, US and Switzerland in the third quarter of 2013.

Zometa (USD 600 million, –52% cc), which is used in an oncology setting to reduce or delay skeletal-related events in patients with bone metastases from solid tumors and multiple myeloma, continued to decline as anticipated in 2013 due to competition and generic challenges following patent expirations in 2013 on its active ingredient, zoledronic acid.

Ritalin*/*Focalin (USD 594 million, +8% cc) continued to grow as a treatment for attention deficit hyperactivity disorder (ADHD) in children. *Ritalin* and *Ritalin LA* are available in more than 70 and 30 countries, respectively, and are also indicated for narcolepsy. *Focalin* and *Focalin XR* are available in the US and *Focalin XR* is additionally indicated for adults. *Focalin XR* is also approved in Switzerland. *Ritalin* Immediate Release has generic competition in most countries. Some strengths of *Ritalin* and *Focalin* are subject to generic competition in the US.

Femara (USD 384 million, –7% cc), a treatment for early stage and advanced breast cancer in postmenopausal women, experienced a continued decline in sales due to multiple generic entries in the US, Europe and other key markets.

Reclast*/*Aclasta (USD 337 million, –42% cc), is the first once-yearly bisphosphonate infusion for the treatment of certain forms of osteoporosis in both men and women. *Reclast/Aclasta* is also indicated for the treatment of Paget's disease of the bone in men and women. Sold as *Reclast* in the US and *Aclasta* in the rest of the world, the product is approved in more than 100 countries for up to six indications. It is also the only bisphosphonate approved to reduce the incidence of fractures at all three key fracture sites (hip, spine and non-spine) in the treatment of postmenopausal osteoporosis. Zoledronic acid, the active ingredient in *Reclast/Aclasta*, is also approved in a number of countries in a different dosage under the trade name *Zometa* for certain oncology indications. *Reclast/Aclasta* is facing generic competition in 2013 since the patent on its active ingredient, zoledronic acid, expired in the US and other major markets.

Other Products of Significance

TOBI/TOBI Podhaler (USD 387 million, +22% cc). Sales of both *TOBI* (tobramycin inhalation solution) and *TOBI Podhaler* (tobramycin inhalation powder) formulations of the antibiotic tobramycin, continued to grow, in particular following the approval of *TOBI Podhaler* in the US in March 2013, with *TOBI Podhaler* representing 33% of total sales in 2013. Both products are used for the management of pulmonary Pseudomonas aeruginosa infection in cystic fibrosis patients aged six years and older. *TOBI Podhaler*, now approved in over 55 countries, delivers tobramycin using a portable, pocket-sized inhaler and reduces administration time by approximately 70% relative to *TOBI*.

Zortress/Certican (USD 249 million, +20% cc), is a transplantation medicine approved in more than 90 countries to prevent organ rejection for renal and heart transplant patients, and in addition, in more than 50 countries worldwide to prevent organ rejection for liver transplant patients. In the US, under the trade name *Zortress*, the drug is approved for the prophylaxis of organ rejection in adult patients at low-moderate immunologic risk receiving a kidney transplant, as well as for the prophylaxis of allograft rejection in adult liver transplant recipients. Everolimus, the active ingredient in *Zortress/Certican,* is marketed for other indications under the trade names *Afinitor/Votubia.* Everolimus is exclusively licensed to Abbott and sublicensed to Boston Scientific for use in drug-eluting stents.

Arcapta Neohaler/Onbrez Breezhaler (USD 192 million, +47% cc) continued to grow strongly worldwide as a once-daily long-acting beta$_2$-agonist (LABA) for the maintenance bronchodilator treatment of airflow obstruction in adult patients with chronic obstructive pulmonary disease (COPD). Indacaterol, the active ingredient in *Arcapta Neohaler/Onbrez Breezhaler*, is now approved in more than 100 countries.

Jakavi (USD 163 million) sales grew as an oral inhibitor of the JAK 1 and JAK 2 tyrosine kinases. It is the first JAK inhibitor indicated for the treatment of disease-related splenomegaly or symptoms in adult patients with primary myelofibrosis (also known as chronic idiopathic myelofibrosis), post-polycythemia vera myelofibrosis or post-essential thrombocythemia myelofibrosis. *Jakavi* is approved in more than 50 countries, including EU member states, Canada, Australia, Russia, Mexico and Argentina; with additional worldwide regulatory filings underway. Incyte Corporation holds the rights for *Jakavi* in the US, where it is sold as Jakafi®. Trials, including a Phase III registration study, are underway examining the use of *Jakavi* in patients with polycythemia vera, with data expected to be presented at medical congresses and filed with health authorities in 2014.

Extavia (USD 159 million, –1% cc), the Novartis version of Betaferon®/Betaseron® (interferon beta-1b) for relapsing forms of MS is available in more than 35 countries, including the US. A new auto-injector device, *EXTAVIPro 30G*, was launched in October 2013 for self-injection of *Extavia*. The auto injector is an enhanced version of the *EXTAVIJECT 30G* and has been designed for greater convenience and patient comfort.

Ilaris (USD 119 million, +65% cc), is a fully human monoclonal antibody that selectively binds and neutralizes interleukin-1β, a pro-inflammatory cytokine. Since 2009, *Ilaris* has been approved in over 60 countries for the treatment of children and adults suffering from cryopyrin associated periodic syndrome (CAPS), a group of rare disorders characterized by chronic recurrent fever, urticaria, occasional arthritis, deafness, and potentially life-threatening amyloidosis. In March 2013, *Ilaris* was approved in the EU for the treatment of acute gouty arthritis in patients who cannot be managed with the standard of care. Also in 2013, *Ilaris* was approved for the treatment of systemic juvenile idiopathic arthritis in the US, EU and other countries, and it was granted a CAPS label extension in the EU for use in younger children.

Seebri Breezhaler (USD 58 million) saw strong growth and is now approved in the EU, Japan, Switzerland, Canada, Australia and a number of other countries. *Seebri Breezhaler* (glycopyrronium bromide) is a novel inhaled long-acting muscarinic antagonist (LAMA) indicated as a once-daily maintenance bronchodilator treatment to relieve symptoms in patients with COPD. Glycopyrronium bromide was exclusively licensed to Novartis in April 2005 by Vectura and its co-development partner Sosei.

Ultibro Breezhaler (USD 6 million), is a once-daily fixed-dose combination of the LABA indacaterol and the LAMA glycopyrronium bromide. In September 2013, *Ultibro Breezhaler* was approved in the EU as a maintenance bronchodilator treatment to relieve symptoms in adult patients with COPD, and in Japan the Ministry of Health Labour and Welfare approved *Ultibro* Inhalation Capsules, delivered through the *Breezhaler* inhalation device, for relief of various symptoms due to airway obstruction in COPD. *Ultibro Breezhaler* was also approved in Canada in 2013 as a long-term once-daily maintenance bronchodilator treatment of airflow obstruction in patients with COPD, including chronic bronchitis and emphysema. Glycopyrronium bromide was exclusively licensed to Novartis in April 2005 by Vectura and its co-development partner Sosei.

ALCON

Alcon net sales were USD 10.5 billion (+3%, +5% cc) for the full year 2013. The Surgical franchise grew 4% (+7% cc), driven by procedure growth, market share gains, and demand for *LenSx* and *Centurion* equipment. Ophthalmic Pharmaceuticals growth (+2%, +5% cc) was due to broad market share gains across key segments but was impacted by generic competition in the US glaucoma market. Vision Care grew 2% (+4% cc), as sales growth in the contact lens business was partly offset by declines in the contact lens care market.

Alcon Division net sales by product category:

	Year ended Dec 31, 2013 USD millions	Year ended Dec 31, 2012 USD millions	Change in USD %	Constant currencies change %
Surgical				
Cataract products	3 037	2 932	4	7
of which IOLs	*1 297*	*1 281*	*1*	*5*
Vitreoretinal products	592	578	2	7
Refractive/other	268	242	11	12
Total	**3 897**	**3 752**	**4**	**7**
Ophthalmic Pharmaceuticals				
Glaucoma	1 265	1 259	0	4
Allergy/otic/nasal	939	901	4	6
Infection/inflammation	1 019	1 011	1	2
Dry eye/other	885	848	4	7
Total	**4 108**	**4 019**	**2**	**5**
Vision Care				
Contact lenses	1 793	1 732	4	5
Contact lens care	698	722	– 3	– 1
Total	**2 491**	**2 454**	**2**	**4**
Total net sales	**10 496**	**10 225**	**3**	**5**

Alcon Division Highlights

Net sales growth data below refer to 2013 worldwide performance.

Surgical

Surgical was the Alcon Division's fastest-growing franchise in 2013, with global net sales of USD 3.9 billion up 7% (cc) over the previous year. This performance was driven by growth in the installed equipment base, including *LenSx* and the recently launched *Centurion* equipment, as well as cataract procedure growth and share gains in intraocular lenses (IOLs).

Global sales of the *LenSx* femtosecond laser grew 30% (cc), with increasing use of disposable products for the platform, as well as disposables for Constellation, which grew 34% (cc).

In addition, Alcon launched the *Centurion* vision system, its latest phacoemulsification platform, in the US and Europe, as part of the Cataract Refractive Suite, which is comprised of multiple innovations and advanced technologies from its surgical device portfolio, including the Verion image guided system and *LuxOR* surgical microscopes in addition to the *LenSx* laser and Centurion vision system.

Sales of base IOLs increased by 6% (cc), growing ahead of the market. Advanced technology intraocular lenses (ATIOLs) (+4% cc) were driven primarily by the continued penetration of toric ATIOLs, partially offset by price erosion.

Ophthalmic Pharmaceuticals

Ophthalmic Pharmaceuticals global net sales were USD 4.1 billion (+5% cc) in 2013, driven by broad market share gains across key segments.

Within Glaucoma, the positive US response to the April 2013 launch of *Simbrinza* ophthamlic suspension, overall pricing discipline, and continued non-US growth (+5% cc), driven by fixed-dose combinations *DuoTrav* solution and *Azarga* suspension, were partially offset by US generic prostaglandin competition. US sales of *Travatan* (–5% cc) declined due to prostaglandin generic competition.

Allergy/otic/nasal sales were up 4% in USD (+6% cc) driven by *Nevanac* suspension (+13% cc) and Dry Eye continued to show global growth within the *Systane* product family (+17% cc).

Market access for *Jetrea* intravitreal injection, a first-in-class treatment for symptomatic vitreomacular adhesion and vitreomacular traction when associated with macular hole, continued to make significant progress. In 2013, it was launched in Germany, Benelux, the Nordics, Canada, and the UK. In the UK, the National Institute for Health and Care Excellence (NICE) confirmed its positive recommendation for reimbursement to the NHS with final written guidance received in October 2013. In Germany, the Institute for Quality and Efficiency in Health Care (IQWiG) assessed the additional benefit of *Jetrea* intravitreal injection versus standard of care as "major" for patients with mild symptoms and "significant" for patients with moderate to severe symptoms. Additionally, in January 2014, Canada's Common Drug Review issued a positive recommendation.

Vision Care

Vision Care global product net sales were USD 2.5 billion (+4% cc), with solid sales in contact lenses (+5% cc), offset by a slight decline in sales of contact lens care products (–1% cc). Contact lens segment performance was driven by the continued strong global growth of the *Air Optix* portfolio (+12% cc), which leads the market in the multifocal segment. The *Dailies* brand experienced continued growth in the US and Europe due to the positive market response to the launch of *Dailies Total1* water gradient contact lenses. In 2013, the product was introduced in the US, Canada, Switzerland, the UK, Spain and Portugal, while also receiving approval in China. Alcon also received FDA approval for its *Dailies Aqua Comfort Plus* Toric silicone hydrogel lenses. Performance of contact lens care products was mixed, driven by strength in *Clear Care*, offset by declines in non-promoted chemical disinfectant brands and softness in *Opti-Free* products.

SANDOZ

Net sales increased by 5% (+5% cc) to USD 9.2 billion, driven by double-digit retail generics and biosimilars sales increases in Western Europe (excluding Germany) (+12% cc), Central & Eastern Europe (+11% cc), the Middle East & Africa (+19% cc), Latin America (+16% cc) and Asia (excluding Japan) (+13% cc). Japan (+19% cc) grew double digit for the 6th year in a row. The US was up 2% (cc) in a flat generics market, as new product launches and the acquisition of

Fougera more than compensated for the decline in sales of enoxaparin (generic Lovenox®) (which fell from USD 451 million in 2012 to USD 213 million in 2013) and the US authorized generic launch of the valsartan HCT in 2012. German retail generics and biosimilars sales declined by 1% (cc) in a declining market. Biosimilars sales grew 23% (cc) to reach USD 420 million globally.

Volume increased 14 percentage points, including 3 percentage points contributed by Fougera. Price erosion was 9 percentage points, driven primarily by higher pricing for enoxaparin in the first half of 2012.

VACCINES AND DIAGNOSTICS

Net sales increased 7% (+6% cc) to USD 2.0 billion for the full year compared to USD 1.9 billion in 2012. The sales increase was driven by higher *Menveo* sales and seasonal influenza demand and pre-pandemic sales.

Key progress was achieved this year with the approval of *Menveo* for infants as young as 2 months of age in the US as well as the approval of *Bexsero* in Europe, Australia and Canada, with shipments to several European private markets starting in the fourth quarter. Additionally, we supplied *Bexsero* to Princeton University in response to a potentially deadly outbreak of meningococcal serogroup B disease.

CONSUMER HEALTH

Consumer Health returned to growth in 2013 as sales increased 9% (+10% cc) to USD 4.1 billion, driven by both the OTC and Animal Health businesses.

OTC sales grew double-digit (cc) versus the prior-year period, mainly due to product re-launches in the US and Canada, new product launches globally, the ability to increase price behind strong brands, and a focus on priority brands around the world. Double-digit sales growth (cc) continued in Emerging Growth Markets, particularly in China, Poland and Russia. Russia became OTC's biggest growth driver and second-largest market this year. *Voltaren* became the world's tenth-largest OTC brand in 2013, delivering double-digit sales growth (cc) supported by continued success of the extra-strength and extended-relief (12 hours) topical formulation, now available in 21 countries. *Theraflu* and *Otrivin* also achieved double-digit growth, supported by a strong cough/cold season in Russia and Poland. *Excedrin* continued to regain momentum following US re-launches in the fourth quarter of 2012 and the first quarter of 2013.

Animal Health delivered high single-digit growth (cc) over the prior-year period, driven by the *Sentinel* re-launch in the US market in the beginning of the second quarter. In Europe, after adjusting for the impact of a minor divestment in 2012, the business grew at a high single-digit rate, led by strong sales of *Milbemax*. *Denagard*, an anti-infective for pigs and poultry, continued to drive growth across several markets with particularly strong results in Southeast Asia. Emerging Growth Markets delivered high single-digit growth (cc), led by Russia, India and Vietnam.

OPERATING INCOME BY SEGMENTS

	Year ended Dec 31, 2013 USD millions	% of net sales	Year ended Dec 31, 2012 USD millions	% of net sales	Change in USD %	Change in constant currencies %
Pharmaceuticals	**9 376**	**29.1**	**9 598**	**29.9**	**– 2**	**3**
Alcon	**1 232**	**11.7**	**1 465**	**14.3**	**– 16**	**– 2**
Sandoz	**1 028**	**11.2**	**1 091**	**12.5**	**– 6**	**– 3**
Vaccines and Diagnostics	**– 165**	**– 8.3**	**– 250**	**– 13.5**	**34**	**34**
Consumer Health	**178**	**4.4**	**48**	**1.3**	**nm**	**nm**
Corporate income & expenses, net	– 739		– 759[1]		3	4
Operating income	**10 910**	**18.8**	**11 193[1]**	**19.8**	**– 3**	**5**

[1] Other income and Other expense have been restated by an additional USD 318 million expense (USD 235 million after taxes) to reflect the adoption of revised IAS 19 on *Employee Benefits* (see pages 247 and 248).
nm = not meaningful

CORE OPERATING INCOME BY SEGMENTS

	Year ended Dec 31, 2013 USD millions	% of net sales	Year ended Dec 31, 2012 USD millions	% of net sales	Change in USD %	Change in constant currencies %
Pharmaceuticals	**9 523**	**29.6**	**10 213**	**31.8**	**– 7**	**– 1**
Alcon	**3 694**	**35.2**	**3 698**	**36.2**	**0**	**6**
Sandoz	**1 541**	**16.8**	**1 503**	**17.3**	**3**	**4**
Vaccines and Diagnostics	**65**	**3.3**	**– 75**	**– 4.0**	**nm**	**nm**
Consumer Health	**298**	**7.3**	**159**	**4.3**	**87**	**95**
Corporate income & expenses, net	– 636		– 656[1]		3	5
Core operating income	**14 485**	**25.0**	**14 842[1]**	**26.2**	**– 2**	**3**

[1] Other income and Other expense have been restated by an additional USD 318 million expense (USD 235 million after taxes) to reflect the adoption of revised IAS 19 on *Employee Benefits* (see pages 247 and 248).
nm = not meaningful

PHARMACEUTICALS

Operating income was USD 9.4 billion (–2%, +3% cc) for the full year. Operating income margin in constant currencies increased by 0.1 percentage points, and currency had a negative impact of 0.9 percentage points, resulting in a net decline of 0.8 percentage points to 29.1% of net sales. Adjustments to arrive at core operating income amounted to USD 147 million, mainly due to the amortization of intangible assets of USD 278 million and impairment charges of USD 74 million, partially offset by gains from divesting products and financial assets of USD 313 million. Prior-year adjustments of USD 615 million included USD 322 million for the amortization of intangible assets, USD 238 million of impairments and USD 55 million of other exceptional charges.

Core operating income declined 7% (–1% cc) to USD 9.5 billion. Core operating income margin in constant currencies declined by 1.3 percentage points, mainly due to increased investments into promising R&D pipeline assets and lower gross margins, partly offset by productivity savings from Marketing & Sales. Currency had a negative impact of 0.9 percentage points, resulting in a net decrease of 2.2 percentage points to 29.6% of net sales.

Core gross margin declined by 0.7 percentage points (cc) mainly due to the impact of increased royalties, principally for *Gilenya*, and generic erosion. R&D expenses as a percentage of net sales increased by 0.9 percentage points (cc) to support key projects. Marketing & Sales and General & Administration expenses improved margin by 0.4 percentage points (cc). Other Income and Expense, net reduced the margin by 0.1 percentage points (cc).

As shown below, Pharmaceuticals invested USD 7.2 billion (on a core basis also USD 7.2 billion) in research and development in 2013. Total Research and Development expenses of the Pharmaceuticals Division in 2013 represents 22.5% of Pharmaceuticals net sales compared to 21.5% in 2012.

Research and Exploratory Development expenditure was USD 2.7 billion in 2013, practically unchanged from 2012. Confirmatory Development expenditures in 2013 increased by 6% to USD 4.6 billion as compared against 2012.

PHARMACEUTICALS RESEARCH AND DEVELOPMENT EXPENDITURE

	Year ended Dec 31, 2013		Year ended Dec 31, 2012	
	USD millions	Core R&D[1] USD millions	USD millions	Core R&D[1] USD millions
Research and Exploratory Development	2 664	2 611	2 584	2 530
Confirmatory Development	4 578	4 550	4 334	4 167
Total	**7 242**	**7 161**	**6 918**	**6 697**
% of Pharmaceuticals net sales	22.5%	22.2%	21.5%	20.8%

[1] Core excludes impairments, amortization and certain exceptional items.

ALCON

Operating income of USD 1.2 billion (–16%, –2% cc) was impacted by integration and restructuring charges, partially offset by sales growth and productivity gains. Operating income margin in constant currencies decreased by 1.0 percentage point, and currency had a negative impact of 1.6 percentage points, resulting in a net decline of 2.6 percentage points to 11.7% of net sales. Adjustments to arrive at core operating income amounted to USD 2.5 billion, consisting of USD 2.0 billion for the amortization of intangible assets, USD 330 million of acquisition-related items, USD 61 million for the impairment of intangible assets and property, plant and equipment, USD 18 million for a net increase in contingent consideration, and USD 64 million of other costs. Prior-year adjustments of USD 2.2 billion included USD 1.9 billion of intangible asset amortization and USD 0.3 billion of acquisition-related items.

Core operating income was in line with prior year in reported terms, but up 6% in constant currencies. Core operating income margin in constant currencies increased by 0.1 percentage points; currency had a negative impact of 1.1 percentage points, resulting in a net decrease of 1.0 percentage points to 35.2% of net sales.

Core gross margin declined by 1.0 percentage point (cc), mainly due to product mix as Alcon refreshes and expands its surgical equipment install base. Marketing & Sales expenses as a percentage of net sales decreased by 0.8 percentage points (cc) compared to 2012, driven by synergies and productivity improvements, partially offset by investments in new launches. General & Administration expenses increased by 0.4 percentage points (cc), while R&D expenses decreased by 0.6 percentage points (cc). Other Income and Expense, net increased margin by 0.1 percentage points (cc).

SANDOZ

Operating income decreased by 6% (–3% cc) to USD 1.0 billion. The operating income margin in constant currencies decreased by 1.0 percentage point; currency had a negative impact of 0.3 percentage points, resulting in a net decrease of 1.3 percentage points to 11.2% of net sales, driven by USD 85 million of legal provisions and the prior-year US authorized generic launch of valsartan HCT. Adjustments to arrive at core operating income amounted to a net expense of USD 513 million, mainly driven by USD 409 million for the amortization of intangible assets, as well as USD 85 million for legal provisions and USD 20 million for impairments of intangible assets. Prior-year adjustments of USD 412 million included USD 364 million of intangible asset amortization and USD 62 million of acquisition-related items.

Core operating income grew by 3% (+4% cc) to USD 1.5 billion. The difference between reported and core operating income growth was driven by higher exceptional items, particularly the aforementioned USD 85 million for legal provisions, compared to the previous year. Core operating income margin in constant currencies decreased by 0.1 percentage points; currency had a negative impact of 0.4 percentage points, resulting in a net decrease of 0.5 percentage points to 16.8% of net sales.

Core gross margin decreased by 1.0 percentage points (cc) as a result of the very high-margin US authorized generic sales of valsartan HCT in the prior year. Marketing & Sales expenses as a percentage of net sales increased by 0.4 percentage points (cc), driven by investments into strongly growing businesses in emerging markets. R&D expenses decreased by 0.1 percentage points (cc) as overall investments grew slower than sales, despite the continued ramp-up of investments into biosimilars and respiratory pipeline products. General & Administration expenses increased by 0.1 percentage points (cc). Other Income and Expense, net improved margin by 1.3 percentage points (cc) due to lower litigation costs and legal settlements in 2013 and restructuring costs in the prior year.

VACCINES AND DIAGNOSTICS

Operating loss was USD 165 million, USD 85 million less than the USD 250 million operating loss in 2012. Adjustments to arrive at core operating loss amounted to USD 230 million, including USD 222 million for the amortization of intangible assets. This compares to adjustments of USD 175 million in 2012, which benefited from an exceptional licensing settlement of USD 56 million.

Core operating income was USD 65 million compared to a loss of USD 75 million for the prior period. This improvement was mainly driven by the impact of strong sales and higher other revenues.

CONSUMER HEALTH

Consumer Health, which is continuing to recover from supply disruption in 2012, reported operating income of USD 178 million compared to USD 48 million in the prior-year period, driven by gross margin from incremental sales and higher income from minor divestments, partially offset by commercial investment behind re-launches and Lincoln restructuring expenses in the first quarter of 2013. Operating income margin in constant currencies increased by 3.4 percentage points, and currency had a negative impact of 0.3 percentage points, resulting in a margin of 4.4% of net sales. Adjustments to arrive at core operating income for the year amounted to USD 120 million, consisting mainly of the amortization and impairment of intangible assets and Lincoln restructuring costs. Prior-year adjustments amounted to USD 111 million.

Core operating income increased 87% (+95% cc) to USD 298 million. Core operating income margin in constant currencies increased 3.4 percentage points; currency had a negative impact of 0.4 percentage points, resulting in a net increase of 3.0 percentage points to 7.3% of net sales.

Lower costs to upgrade quality at the Lincoln facility and higher revenues generated a core gross margin increase of 2.8 percentage points (cc). Marketing & Sales expenses as a percentage of net sales increased by 0.1 percentage points (cc) behind investments to support the re-launch of products as well as investments into key brands and Emerging Growth Markets. R&D expenses decreased by 0.4 percentage points (cc), and General & Administration expenses increased by 0.5 percentage points (cc). Other Income and Expense, net increased core operating income margin by 0.8 percentage points (cc).

CORPORATE INCOME AND EXPENSE, NET

Corporate income and expense amounted to a net expense of USD 739 million compared to USD 759 million in the prior-year period. Total adjustments of USD 103 million in both periods were mainly related to finance and IT transformation costs, which were partly offset by the release of Corporate provisions of USD 75 million in 2013 and in 2012 by the exceptional gain of USD 51 million from the sale of financial assets.

NON-OPERATING INCOME AND EXPENSE

	Year ended Dec 31, 2013 USD millions	Restated Year ended Dec 31, 2012[1] USD millions	Change in USD %	Change in constant currencies %
Operating income	**10 910**	**11 193**	**– 3**	**5**
Income from associated companies	600	552	9	9
Interest expense	– 683	– 724	6	6
Other financial income and expense	– 92	– 96	4	30
Income before taxes	**10 735**	**10 925**	**– 2**	**6**
Taxes	– 1 443	– 1 542	6	– 1
Group net income	**9 292**	**9 383**	**– 1**	**7**
Attributable to:				
Shareholders of Novartis AG	*9 175*	*9 270*	*– 1*	*7*
Non-controlling interests	*117*	*113*	*4*	*4*
Basic EPS (USD)	3.76	3.83	– 2	6

[1] Other income and Other expense have been restated by an additional USD 318 million expense (USD 235 million after taxes) to reflect the adoption of revised IAS 19 on *Employee Benefits* (see pages 247 and 248).

CORE NON-OPERATING INCOME AND EXPENSE

	Year ended Dec 31, 2013 USD millions	Restated Year ended Dec 31, 2012[1] USD millions	Change in USD %	Change in constant currencies %
Core operating income	**14 485**	**14 842**	**– 2**	**3**
Income from associated companies	877	755	16	16
Interest expense	– 683	– 724	6	6
Other financial income and expense	– 48	– 96	50	30
Core income before taxes	**14 631**	**14 777**	**– 1**	**4**
Taxes	– 2 098	– 2 201	5	0
Core net income	**12 533**	**12 576**	**0**	**5**
Attributable to:				
Shareholders of Novartis AG	*12 416*	*12 463*	*0*	*5*
Non-controlling interests	*117*	*113*	*4*	*4*
Core basic EPS (USD)	5.09	5.15	– 1	4

[1] Other income and Other expense have been restated by an additional USD 318 million expense (USD 235 million after taxes) to reflect the adoption of revised IAS 19 on *Employee Benefits* (see pages 247 and 248).

INCOME FROM ASSOCIATED COMPANIES

The income from associated companies increased from USD 552 million in 2012 to USD 600 million in 2013. The increase was primarily due to an estimated higher net result of Roche AG.

The following is a summary of the individual components included in the income from associated companies:

	2013 USD millions	2012 USD millions
Novartis share of Roche's estimated current-year consolidated net income	817	709
Prior-year adjustment	– 59	– 18
Amortization of additional intangible assets recognized by Novartis on initial accounting for the equity interest	– 154	– 153
Net income effect from Roche	**604**	**538**
Net (loss)/income from other associated companies	**– 4**	**14**
Income from associated companies	**600**	**552**

The Group's 33.3% interest in Roche's voting shares, which represents a 6.3% interest in Roche's total equity, generated income of USD 604 million in 2013, up from USD 538 million in 2012. The 2013 contribution reflects an estimated USD 817 million share of Roche's net income in 2013. This contribution, however, was reduced by a prior year adjustment of USD 59 million based on the Roche 2012 results published after the 2012 Novartis consolidated financial statements and USD 154 million for the amortization of intangible assets arising from the allocation to intangible assets of the purchase price paid by Novartis for this investment in Roche. A survey of analyst estimates is used to estimate the Group's share of net income in Roche. Any differences between these estimates and actual results will be adjusted in the 2014 consolidated financial statements.

Adjusting for the exceptional items in both years, core income from associated companies increased 16% from USD 755 million to USD 877 million.

INTEREST EXPENSE AND OTHER FINANCIAL INCOME/EXPENSE

Interest expense decreased to USD 683 million in 2013 from USD 724 million in 2012. Slightly higher interest expenses were more than offset by lower charges from the unwinding of discounted liabilities. Other financial income and expense amounted to a net expense of USD 92 million compared to USD 96 million in 2012 mainly due to lower currency losses.

TAXES

The tax rate (taxes as percentage of pre-tax income) decreased to 13.4% in 2013 from 14.1% in 2012 due to lower profit before tax in higher tax jurisdictions.

The core tax rate (taxes as a percentage of core pre-tax income) was 14.3% in 2013, down from 14.9% in 2012.

For further information on the main elements contributing to the difference, see the core tables starting on page 176 and Note 6 to the Group's consolidated financial statements.

FREE CASH FLOW

Novartis defines free cash flow as cash flow from operating activities adjusted for 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 also 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 177. The following is a summary of the Group's free cash flow:

	2013 USD millions	Restated 2012[1] USD millions	Change USD millions
Operating income	**10 910**	**11 193**	**– 283**
Reversal of non-cash items			
Depreciation, amortization and impairments	4 990	4 954	36
Change in provisions and other non-current liabilities	807	857	– 50
Other	335	452	– 117
Operating income adjusted for non-cash items	**17 042**	**17 456**	**– 414**
Interest and other financial receipts	541	689	– 148
Interest and other financial payments	– 631	– 616	– 15
Taxes paid	– 2 024	– 2 022	– 2
Payments out of provisions and other net cash movements in non-current liabilities	– 1 015	– 1 173	158
Change in inventory and trade receivables less trade payables	– 562	183	– 745
Change in other net current assets and other operating cash flow items	– 177	– 323	146
Cash flows from operating activities	**13 174**	**14 194**	**– 1 020**
Purchase of property, plant & equipment	– 3 064	– 2 698	– 366
Purchase of intangible assets	– 507	– 370	– 137
Purchase of financial assets	– 165	– 180	15
Purchase of other non-current assets	– 39	– 57	18
Proceeds from sales of property, plant & equipment	60	92	– 32
Proceeds from sales of intangible assets	154	163	– 9
Proceeds from sales of financial assets	315	221	94
Proceeds from sales of other non-current assets	17	18	– 1
Group free cash flow	**9 945**	**11 383**	**– 1 438**

[1] Restated to reflect the adoption of revised IAS19 on *Employee Benefits* (see pages 247 and 248).

For 2013, the free cash flow of USD 9.9 billion was 13% below the prior year. Aside from the significant currency impact, major reasons for the decline were increased trade receivables and higher capital investments in manufacturing and research facilities. The free cash flow was primarily used for the dividend payments to shareholders of USD 6.1 billion as well as a USD 1.3 billion net repayment of financial debt and for treasury share purchases of net USD 1.2 billion. This allocation reflects management's intention to optimize shareholder returns whilst at the same time reinvesting surplus funds in the business to promote future growth.

LIQUIDITY, CASH FLOW AND CAPITAL RESOURCES

The following table sets forth certain information about the Group's cash flow and net debt.

	2013 USD millions	2012 USD millions	Change USD millions
Cash flows from operating activities	13 174	14 194	– 1 020
Cash flows used in investing activities	– 3 352	– 5 675	2 323
Cash flows used in financing activities	– 8 769	– 6 675	– 2 094
Currency translation effect on cash and cash equivalents	82	– 1	83
Net change in cash and cash equivalents	**1 135**	**1 843**	**– 708**
Change in marketable securities, commodities, time deposits and derivative financial instruments	– 32	1 201	– 1 233
Change in current and non-current financial debts and derivative financial instruments	1 708	503	1 205
Change in net debt	**2 811**	**3 547**	**– 736**
Net debt at January 1	– 11 607	– 15 154	3 547
Net debt at December 31	**– 8 796**	**– 11 607**	**2 811**

Net debt consists of:

	2013 USD millions	2012 USD millions	Change USD millions
Current financial debts and derivative financial instruments	– 6 776	– 5 945	– 831
Non-current financial debts	– 11 242	– 13 781	2 539
Total financial debt	**– 18 018**	**– 19 726**	**1 708**
Less liquidity:			
Cash and cash equivalents	6 687	5 552	1 135
Marketable securities, commodities, time deposits and derivative financial instruments	2 535	2 567	– 32
Total liquidity	**9 222**	**8 119**	**1 103**
Net debt at December 31	**– 8 796**	**– 11 607**	**2 811**

The cash flow from operating activities amounted to USD 13.2 billion compared to USD 14.2 billion in the prior year, mainly due to lower operating income and higher working capital requirements.

The cash flow used in investing activities was USD 3.4 billion compared to USD 5.7 billion in the prior year. It includes investments in property, plant and equipment, which amounted to USD 3.1 billion compared to USD 2.7 billion in the prior year. These expenditures represent 5.3% and 4.8% of net sales in 2013 and 2012, respectively. The prior year cash flow used in investing activities included higher net investments in marketable securities of USD 1.1 billion and USD 1.7 billion for the acquisition of businesses mainly for the acquisition of Fougera Pharmaceuticals.

The cash flow used in financing activities amounted to USD 8.8 billion compared to USD 6.7 billion in 2012. The 2013 amount included a dividend payment of USD 6.1 billion, compared to USD 6.0 billion in 2012. There was a further USD 2.7 billion cash outflow in 2013, mainly related to net repayments of financial debts of USD 1.3 billion as well as a net outflow of USD 1.2 billion for treasury share purchases. This net outflow results from USD 2.9 billion spent on the acquisition of treasury shares and USD 1.7 billion of proceeds mainly from exercised options. In 2012, besides the dividend payment the cash flow used in financing activities mainly includes a net repayment of financial debts of USD 0.5 billion and a net cash outflow of USD 0.1 billion for treasury share transactions.

In 2013, the total gross financial debt decreased by USD 1.7 billion and amounted to USD 18.0 billion compared to USD 19.7 billion in 2012.

Long-term financial debt amounted to USD 11.2 billion which is a reduction of USD 2.6 billion compared to 2012, mainly due to a bond and loan reclassification to short-term financial debt which are due within the next twelve months. Long-term financial debt consists of bonds of USD 10.9 billion and other long-term financial debt of USD 0.3 billion. Short-term debt increased by USD 0.9 billion from USD 5.9 billion at December 31, 2012 to USD 6.8 billion at December 31, 2013, mainly due to the USD 2.6 billion reclassification of long-term financial debt and a repayment of a USD 2.0 billion bond in the second quarter of 2013 totaling a net increase of USD 0.6 billion. In addition, commercial paper and other short-term debts, including derivatives, increased by USD 0.3 billion. Overall short-term debt consists of commercial paper of USD 1.0 billion, the current portion of long-term debt of USD 2.6 billion and other short-term borrowings (including derivatives) of USD 3.2 billion.

Group net debt decreased to USD 8.8 billion at the end of 2013 compared to USD 11.6 billion at the end of 2012.

The long-term credit rating for the company continues to be double-A (Moody's Aa3; Standard & Poor's AA–; Fitch AA). Moody's downgraded Novartis from Aa2 to Aa3 in February 2013.

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 and 2012. In addition, we raised funds through our commercial paper programs. We have no commitments from repurchase or securities lending transactions at the end of 2013.

CONDENSED CONSOLIDATED BALANCE SHEETS

	Dec 31, 2013 USD millions	Restated Dec 31, 2012[1] USD millions	Change USD millions
Assets			
Property, plant & equipment	18 197	16 939	1 258
Goodwill	31 026	31 090	– 64
Intangible assets other than goodwill	27 841	30 331	– 2 490
Financial and other non-current assets	18 648	17 827	821
Total non-current assets	**95 712**	**96 187**	**– 475**
Inventories	7 267	6 744	523
Trade receivables	9 902	10 051	– 149
Other current assets	3 392	3 090	302
Cash, marketable securities, commodities, time deposits and derivative financial instruments	9 222	8 119	1 103
Assets of disposal group held for sale	759		759
Total current assets	**30 542**	**28 004**	**2 538**
Total assets	**126 254**	**124 191**	**2 063**
Equity and liabilities			
Total equity	**74 472**	**69 263**	**5 209**
Financial debts	11 242	13 781	– 2 539
Other non-current liabilities	14 172	17 096	– 2 924
Total non-current liabilities	**25 414**	**30 877**	**– 5 463**
Trade payables	6 148	5 593	555
Financial debts and derivatives	6 776	5 945	831
Other current liabilities	13 394	12 513	881
Liabilities of disposal group held for sale	50		50
Total current liabilities	**26 368**	**24 051**	**2 317**
Total liabilities	**51 782**	**54 928**	**– 3 146**
Total equity and liabilities	**126 254**	**124 191**	**2 063**

[1] The December 31, 2012 balance sheet totals have been restated by a net USD 25 million reduction to reflect the adoption of revised IAS 19 on *Employee Benefits* (see pages 247 and 248).

Total non-current assets amounted to USD 95.7 billion at December 31, 2013, compared to USD 96.2 billion at December 31, 2012. Property, plant and equipment increased by USD 1.3 billion, as net additions of USD 2.9 billion and favorable currency translation differences of USD 0.2 billion exceeded depreciation and impairments of USD 1.8 billion. Goodwill decreased slightly to USD 31.0 billion as positive currency translation differences of USD 0.2 billion were more than offset by the decrease in goodwill of USD 0.3 billion attributable to the Diagnostics business, which has been reclassified into the disposal group held for sale. Financial and other non-current assets increased by USD 0.8 billion while intangible assets decreased by USD 2.5 billion since the beginning of the year to USD 27.8 billion as the amortization and impairments of USD 3.1 billion exceeded net additions of USD 0.6 billion.

Total current assets of USD 30.5 billion at December 31, 2013 increased by USD 2.5 billion compared to the prior year-end, driven by an increase in cash and cash equivalents of USD 1.1 billion and the separate disclosure of the current and non-current assets of the Diagnostics business divested in January 2014, amounting to USD 0.8 billion.

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 receivables in future periods.

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 the GIPS countries. Should there be a substantial deterioration in our economic exposure, 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, 2013 and 2012:

	2013 USD millions	2012 USD millions
Not overdue	8 650	8 584
Past due for not more than one month	509	552
Past due for more than one month but less than three months	303	321
Past due for more than three months but less than six months	259	301
Past due for more than six months but less than one year	263	205
Past due for more than one year	268	305
Provisions for doubtful trade receivables	– 196	– 217
Total trade receivables, net	**10 056**	**10 051**
Less assets of disposal group held for sale	– 154	
Total trade receivables excluding disposal group, net	**9 902**	**10 051**

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, 2013 and 2012 is as follows:

ITALY

	2013 USD millions	2012 USD millions
Gross trade receivables at December 31	636	712
Past due for more than one year at December 31	55	68
Provision at December 31	43	41

SPAIN

	2013 USD millions	2012 USD millions
Gross trade receivables at December 31	563	435
Past due for more than one year at December 31	111	6
Provision at December 31	22	5

The Government of Spain has established a plan, known as ICO 2, to help repay debts owed by local Spanish governmental authorities. A significant portion of the amounts due to Novartis from Spain that are past due for more than one year have been accepted into this plan. It is intended that payments will be made from this plan in 2014.

Other non-current liabilities amounted to USD 14.2 billion compared to USD 17.1 billion in the prior year. A major portion of this decrease of USD 2.9 billion arose from the decrease in the accrued liability for employee benefits related to our funded and unfunded defined benefit pension plans around the world, but principally in Switzerland and the US, as well as unfunded and funded US post-retirement medical benefit schemes. The net unfunded deficit of USD 4.2 billion related to the defined benefit schemes comprises actuarially determined liabilities of USD 25.9 billion partially offset by funded plan assets of USD 21.7 billion.

This deficit adjusted for the overfunding of certain plans, is recognized in our provisions and fluctuates considerably from time to time. This is due to the fact that the assets consist of both marketable securities and other investments which are valued at their current market value. The actuarially calculated post-employment defined benefit obligations of USD 25.9 billion have an average duration of 13.8 years and are extremely sensitive to movements in interest rates which are currently still rather low.

Trade payables of USD 6.1 billion and other current liabilities of USD 13.4 billion increased by USD 0.6 billion and USD 0.9 billion, respectively.

Included in other current liabilities are USD 2.5 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 is exposed to a potential adverse devaluation risk on its intercompany funding and total investment in certain subsidiaries operating in countries with exchange control. The most significant country in this respect is Venezuela, where the Group has approximately USD 220 million of cash in the country, which is only slowly being approved for remittance outside the country. As a result, the Group is exposed to a potential income statement financial result devaluation loss on its total intercompany balances with subsidiaries in Venezuela and related net investments, which at December 31, 2013 amounted to approximately USD 340 million and USD 35 million, respectively. The Group used the official exchange rate as published by CADIVI (Venezuelan Commission for the Administration of Foreign Currency) of VEF 4.3/USD until the devaluation on February 8, 2013 and VEF 6.3/USD since then for the consolidation of the financial statements of the Venezuelan subsidiaries.

The Group's total equity increased by USD 5.2 billion over the year to USD 74.5 billion at December 31, 2013, compared to USD 69.3 billion at the end of 2012. This increase was driven by net income of USD 9.3 billion and actuarial gains of USD 1.5 billion. Movements related to share-based compensation and favorable currency translation differences contributed an additional USD 1.1 billion and USD 0.7 billion, respectively. This more than offset the USD 6.1 billion dividend payment for 2012 and the net purchases of treasury shares of USD 1.3 billion.

As of December 31, 2013, net debt decreased to USD 8.8 billion, compared to USD 11.6 billion at December 31, 2012. The total gross short and long-term debt of USD 18.0 billion at December 31, 2013 was USD 1.7 billion less than the prior year-end level of USD 19.7 billion. As a result of the strong cash flow generation, the Group liquidity increased over the year to USD 9.2 billion at December 31, 2013 from USD 8.1 billion at the prior year-end even after repayment of the USD 2.0 billion bond that matured in April 2013.

The Group's debt/equity ratio improved slightly to 0.24:1 at December 31, 2013 compared to 0.28:1 at the beginning of the year.

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
2013					
Interest-bearing accounts of associates	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**
2012					
Interest-bearing accounts of associates	1 541	1.03	1 490	1.06	1 554
Other bank and financial debt	1 270	3.99	1 662	3.05	2 049
Commercial paper	963	0.66	3 738	0.17	6 287
Current portion of non-current financial debt	2 009	na	1 597	na	2 009
Fair value of derivative financial instruments	162	na	102	na	219
Total current financial debt	**5 945**		**8 589**		**12 118**

na = not applicable or available

Interest bearing accounts of associates 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, 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
Current assets						
Marketable securities and time deposits	12	1 933	101	179	87	2 312
Commodities	97					97
Derivative financial instruments and accrued interest	26	97	3			126
Cash and cash equivalents	6 187	500				6 687
Total current financial assets	**6 322**	**2 530**	**104**	**179**	**87**	**9 222**
Non-current liabilities						
Financial debt				– 5 201	– 6 041	– 11 242
Financial debt – undiscounted				*– 5 212*	*– 6 087*	*– 11 299*
Total non-current financial debt				**– 5 201**	**– 6 041**	**– 11 242**
Current liabilities						
Financial debt	– 2 896	– 2 270	– 1 507			– 6 673
Financial debt – undiscounted	*– 2 896*	*– 2 270*	*– 1 507*			*– 6 673*
Derivative financial instruments	– 44	– 37	– 22			– 103
Total current financial debt	**– 2 940**	**– 2 307**	**– 1 529**			**– 6 776**
Net debt	**3 382**	**223**	**– 1 425**	**– 5 022**	**– 5 954**	**– 8 796**

December 31, 2012	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
Current assets						
Marketable securities and time deposits		1 240	26	543	606	2 415
Derivative financial instruments and accrued interest	36	106	10			152
Cash and cash equivalents	3 852	1 700				5 552
Total current financial assets	**3 888**	**3 046**	**36**	**543**	**606**	**8 119**
Non-current liabilities						
Financial debt				– 7 829	– 5 952	– 13 781
Financial debt – undiscounted				*– 7 848*	*– 6 002*	*– 13 850*
Total non-current financial debt				**– 7 829**	**– 5 952**	**– 13 781**
Current liabilities						
Financial debt	– 2 607	– 764	– 2 412			– 5 783
Financial debt – undiscounted	*– 2 607*	*– 764*	*– 2 413*			*– 5 784*
Derivative financial instruments	– 60	– 54	– 48			– 162
Total current financial debt	**– 2 667**	**– 818**	**– 2 460**			**– 5 945**
Net debt	**1 221**	**2 228**	**– 2 424**	**– 7 286**	**– 5 346**	**– 11 607**

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 % 2013	Liquidity in % 2012	Financial debt in % 2013	Financial debt in % 2012
USD	80	72	58	63
EUR	1	5	12	11
CHF	11	15	15	13
JPY			11	10
Other	8	8	4	3
	100	100	100	100

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:

		Payments due by period			
	Total USD millions	Less than 1 year USD millions	2–3 years USD millions	4–5 years USD millions	After 5 years USD millions
Non-current financial debt[1]	**13 832**	2 590	5 183	18	6 041
Operating leases	**2 882**	336	384	193	1 969
Unfunded pensions and other post-employment benefit plans	**2 067**	113	235	257	1 462
Research & Development					
– Unconditional commitments	**350**	131	123	64	32
– Potential milestone commitments	**1 881**	326	497	523	535
Purchase commitments					
– Property, plant & equipment	**1 021**	751	261	9	
Total contractual cash obligations	**22 033**	**4 247**	**6 683**	**1 064**	**10 039**

[1] including current portion of non-current financial debt of USD 2 590 million.

The Group intends to fund the R&D and purchase commitments with internally generated resources.

SHARE INFORMATION

NOVARTIS SHARE DEVELOPMENTS IN 2013

– Swiss-listed Novartis shares rise 24% to CHF 71.20
– American Depositary Receipts (ADRs) rise 27% to USD 80.38

Novartis shares finished at CHF 71.20, an increase of 24% from the 2012 year-end closing price of CHF 57.45. The Novartis American Depositary Receipts (ADRs) increased by 27% to USD 80.38 from USD 63.30 in 2012. The Swiss Market Index (SMI) in comparison rose at a 20.2% pace in 2013, whereas the world pharmaceutical index (MSCI) grew by 28.9% in the year. Over a longer-term period, Novartis has consistently delivered a solid performance, providing a 10.2% compounded annual total shareholder return between January 1, 1996, and December 31, 2013, exceeding the 9.1% compounded returns of its large pharmaceutical peers or the returns of 9.2% of the world pharmaceutical index (MSCI).

The market capitalization of Novartis based on number of shares outstanding (excluding treasury shares) amounted to USD 194 billion as of December 31, 2013, compared to USD 152 billion as of December 31, 2012.

SHARE REPURCHASES

During 2013, approximately 34.3 million treasury shares were delivered as a result of options exercised related to employee participation programs and related transactions. Novartis is mitigating the dilutive impact of these programs on an ongoing basis and repurchased 33.3 million of its shares for USD 2.5 billion in 2013 on the first trading line on the SIX. These shares will be kept as treasury shares principally for future employee participation program purposes. An additional 4.8 million shares have been purchased from employees for USD 0.4 billion. On November 22, 2013, Novartis announced to buy back shares on the second trading line up to an amount of USD 5.0 billion spread over two years. This repurchase is done on the basis of a decision made by the 2008 Annual General Meeting for a share buy-back program of up to CHF 10.0 billion, of which CHF 7.5 billion is still available. 2.2 million shares have already been purchased in 2013 as part of this buy-back.

CONTINUOUSLY RISING DIVIDEND SINCE 1996

The Board of Directors proposes a 7% increase in the dividend payment for 2013 to CHF 2.45 per share (2012: CHF 2.30) for approval at the Annual General Meeting on February 25, 2014. This represents the 17th consecutive increase in the dividend paid per share since the creation of Novartis in December 1996. If the 2013 dividend proposal is approved by shareholders, dividends to be paid out will amount to approximately USD 6.8 billion (2012: USD 6.1 billion), resulting in an expected payout ratio of 74% of net income attributable to Novartis shareholders (2012: 66%). Based on the 2013 year-end share price of CHF 71.20, the dividend yield will be 3.4% (2012: 4.0%). The dividend payment date has been set for March 4, 2014. With the exception of 115.6 million treasury shares, all shares issued are dividend-bearing.

DIRECT SHARE PURCHASE PLAN

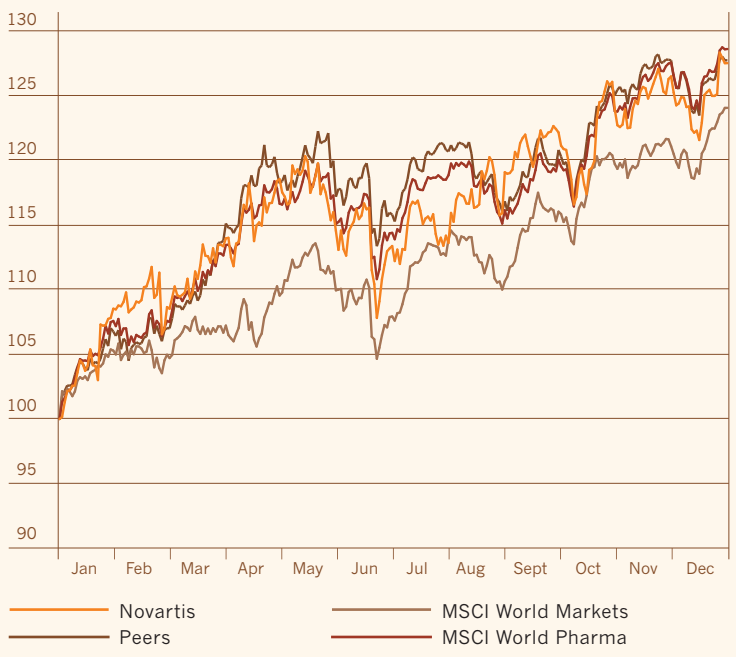
Since 2004, Novartis has offered a Direct Share Purchase Plan to investors residing in Switzerland, Liechtenstein, France and the United Kingdom. This plan was the first of its kind in Europe. It offers an easy and inexpensive way for investors to directly purchase Novartis registered shares and for them to be held at no cost in a deposit account with SIX SAG AG. At the beginning of 2013, Novartis closed the plan for non-Swiss residents. At the end of 2013, a total of 7 946 shareholders were enrolled in this plan.

INFORMATION ON NOVARTIS SHARES

Further information can be found on the Internet at http://www.novartis.com/investors.

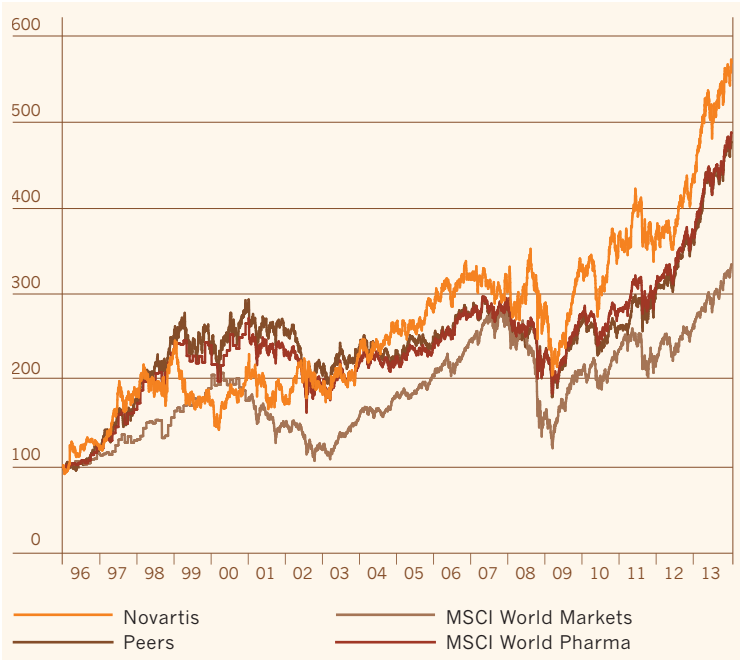
NOVARTIS 2013 SHARE PRICE MOVEMENT

(Based on USD amounts)



NOVARTIS 1996–2013 TOTAL SHAREHOLDER RETURN

(Based on USD amounts)



Source: Datastream. NB 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

	2013	2012
Issued shares	**2 706 193 000**	**2 706 193 000**
Treasury shares[1]	280 108 692	285 572 826
Outstanding shares at December 31	**2 426 084 308**	**2 420 620 174**
Average number of shares outstanding	**2 440 849 805**	**2 418 145 330**

[1] Approximately 149 million treasury shares (2012: 175 million) are held in entities that limit their availability for use.

PER-SHARE INFORMATION[1]

	2013	2012[2]
Basic earnings per share (USD)	3.76	3.83
Diluted earnings per share (USD)	3.70	3.79
Operating cash flow (USD)	5.40	5.87
Year-end equity for Novartis AG shareholders (USD)	30.64	28.56
Dividend (CHF)[3]	2.45	2.30

[1] Calculated on average number of shares outstanding, except year-end equity per share.
[2] Restated to reflect the adoption of revised IAS19 on *Employee Benefits* (see pages 247 and 248).
[3] 2013: Proposal to shareholders for approval at the Annual General Meeting on February 25, 2014.

KEY RATIOS – DECEMBER 31

	2013	2012[1]
Price/earnings ratio[2]	21.3	16.4
Enterprise value/EBITDA	13	10
Dividend yield (%)[2]	3.4	4.0

[1] Restated to reflect the adoption of revised IAS19 on *Employee Benefits* (see pages 247 and 248).
[2] Based on Novartis share price at the end of each year.

KEY DATA ON AMERICAN DEPOSITARY RECEIPTS (ADRs) ISSUED IN THE US

	2013	2012
Year-end ADR price (USD)	80.38	63.30
High[1]	80.39	63.96
Low[1]	63.70	51.48
Number of ADRs outstanding[2]	317 193 803	315 795 416

[1] Based on the daily closing prices.
[2] The depositary, JPMorgan Chase Bank, holds one Novartis AG share for every American Depositary Receipt (ADR) issued.

SHARE PRICE (CHF)

	2013	2012
Year-end share price	71.20	57.45
High[1]	73.65	59.00
Low[1]	58.70	48.80
Year-end market capitalization (USD billions)[2]	**194.2**	**152.0**
Year-end market capitalization (CHF billions)[2]	**172.7**	**139.1**

[1] Based on the daily closing prices.
[2] Market capitalization calculated based on number of shares outstanding (excluding treasury shares).

TRADING

Novartis shares are listed in Switzerland and traded on the SIX Swiss Exchange, while American Depositary Receipts (ADRs) are listed on the New York Stock Exchange.

SYMBOLS

	SIX Swiss Exchange (Reuters/Bloomberg)	NYSE (Reuters/Bloomberg)
Shares	NOVN.VX/NOVN VX	
ADRs		NVS

WIDELY DISPERSED SHAREHOLDINGS

Novartis shares are widely held. As of December 31, 2013, Novartis had approximately 155 000 shareholders (2012: 161 000) listed in its share register, representing 73% of issued shares. Based on the Novartis AG share register and excluding treasury shares held by Novartis AG and its subsidiaries (excluding foundations), approximately 41% (2012: 42%) of the shares registered by name were held in Switzerland and 47% were held in the US (2012: 46%). Approximately 12% of the shares registered in the share register were held by individual investors, while 88% were held by legal entities, nominees, fiduciaries and the ADS depositary.

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		
	2013	2012	Change	2013 USD millions	Restated 2012[1] USD millions	Change USD millions
Balance at beginning of year	**2 421**	**2 407**	**14**	**69 137**[1]	**65 893**	**3 244**
Shares acquired to be held in Group Treasury	– 33	– 5	– 28	– 2 464	– 240	– 2 224
Shares acquired to be cancelled	– 2		– 2	– 170		– 170
Other share purchases	– 5	– 4	– 1	– 356	– 265	– 91
Increase in equity from exercise of options and employee transactions	34	12	22	1 691	416	1 275
Equity-based compensation	11	11		1 077	856	221
Dividends				– 6 100	– 6 030	– 70
Net income of the year attributable to shareholders of Novartis AG				9 175	9 270	– 95
Other comprehensive income attributable to shareholders of Novartis AG				2 363	– 763	3 126
Impact of change of ownership of consolidated entities				– 10		– 10
Balance at end of year	**2 426**	**2 421**	**5**	**74 343**	**69 137**	**5 206**

[1] 2012 and the consolidated equity at January 1, 2013 has been restated to reflect the adoption of revised IAS19 on *Employee Benefits* (see pages 247 and 248).

In 2013, the number of outstanding shares increased by 5 million, net (2012: 14 million shares, net). 33 million shares were purchased on the first trading line for USD 2.5 billion with the intention of being retained in Group Treasury (2012: 5 million shares for USD 240 million).

2 million shares were bought for USD 170 million on the second trading line of the SIX Swiss Exchange (2012: nil). These shares are part of the share buy-back announced on November 22, 2013 and are subject to cancellation upon completion of the program. Purchases from associates of 5 million shares amounted to USD 356 million (2012: 4 million shares for USD 265 million), resulting in total shares purchased of 40 million for USD 3.0 billion (2012: 9 million shares for USD 505 million).

34 million treasury shares for USD 1.7 billion were delivered as a result of options exercised related to employee participation programs and related transactions (2012: 12 million shares for USD 416 million). An additional 11 million shares were transferred to associates as part of the equity-settled compensation (2012: 11 million shares).

CRITICAL ACCOUNTING POLICIES AND ESTIMATES

Our principal 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 contractual agreement. 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-for-performance 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 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 2013, 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 a price decline can be reasonably estimated based on 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:

PROVISIONS FOR REVENUE DEDUCTIONS

				Income statement charge			
	Revenue deductions provisions at January 1 USD millions	Effect of currency translation and business combinations USD millions	Payments/ utilizations USD millions	Adjustments of prior years USD millions	Current year USD millions	Change in provisions offset against gross trade receivables USD millions	Revenue deductions provisions at December 31 USD millions
2013							
US specific healthcare plans and program rebates	1 442		– 3 000	– 74	3 014		1 382
Non-US specific healthcare plans and program rebates	966	11	– 1 674	– 45	1 961	– 63	1 156
Non-healthcare plans and program related rebates, returns and other deductions	1 664	– 10	– 8 088	– 80	8 319	– 161	1 644
Total 2013	**4 072**	**1**	**– 12 762**	**– 199**	**13 294**	**– 224**	**4 182**
2012							
US specific healthcare plans and program rebates	1 440	17	– 3 191	– 46	3 222		1 442
Non-US specific healthcare plans and program rebates	766	15	– 1 423	94	1 514		966
Non-healthcare plans and program related rebates, returns and other deductions	1 536	176	– 7 324	– 143	7 509	– 90	1 664
Total 2012	**3 742**	**208**	**– 11 938**	**– 95**	**12 245**	**– 90**	**4 072**

The table below shows the gross to net sales reconciliation for our Pharmaceuticals Division:

GROSS TO NET SALES RECONCILIATION

	Income statement 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
2013				
Pharmaceuticals gross sales subject to deductions			**40 188**	**100.0**
US specific healthcare plans and program rebates	– 2 125		– 2 125	– 5.3
Non-US specific healthcare plans and program rebates	– 1 368	– 802	– 2 170	– 5.4
Non-healthcare plans and program related rebates, returns and other deductions	– 1 731	– 1 948	– 3 679	– 9.2
Total Pharmaceuticals gross to net sales adjustments	**– 5 224**	**– 2 750**	**– 7 974**	**– 19.8**
Pharmaceuticals net sales 2013			**32 214**	**80.2**
2012				
Pharmaceuticals gross sales subject to deductions			**39 912**	**100.0**
US specific healthcare plans and program rebates	– 2 358		– 2 358	– 5.9
Non-US specific healthcare plans and program rebates	– 1 096	– 842	– 1 938	– 4.8
Non-healthcare plans and program related rebates, returns and other deductions	– 1 579	– 1 884	– 3 463	– 8.7
Total Pharmaceuticals gross to net sales adjustments	**– 5 033**	**– 2 726**	**– 7 759**	**– 19.4**
Pharmaceuticals net sales 2012			**32 153**	**80.6**

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 brand-name 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 %	Vaccines and Diagnostics %	Consumer Health %
Sales growth rate assumptions after forecast period	1.5	3	0 to 2	0.5	0
Discount rate (post-tax)	6	6	6	6	6

In 2013, intangible asset impairment charges of USD 116 million were recognized. These relate to impairment charges of USD 57 million in the Alcon Division and USD 59 million in all other divisions.

In 2012, intangible asset impairment charges of USD 286 million were recognized. These relate to impairment charges of USD 211 million in the Pharmaceuticals Division. Novartis also recorded various impairment charges of USD 75 million in all other divisions.

Reversal of prior year impairment charges amounted to USD 2 million (2012: USD 3 million).

The amount of goodwill and other intangible assets on our consolidated balance sheet has increased significantly in recent years, 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 2013 amounted to USD 80 million (2012: USD 39 million).

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 2013, 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 2013 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 92% of the Group's total net periodic pension cost for pension plans, would have increased by approximately USD 34 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 product liability claims, a significant portion of the overall 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. We provide for individually significant cases when probable and the amount can be reliably estimated. 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. They are estimated by calculating the present value of expected costs.

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 under deductions from revenue above. The amounts to be paid depend on various criteria such as the sales volume compared to certain targets, compared to the competition or to the Group's market share. There is considerable judgment required in estimating these contributions. The most important healthcare contributions relate to the United States Healthcare Reform fee which was introduced in 2011. This fee is an annual fee to be paid by pharmaceutical companies based on the prior year's government program sales. Effective 2013, the US government has also implemented a medical device sales tax which is levied on Alcon's US sales of products that are considered surgical devices under the respective act. The Pharmaceutical fee and the Medical Device Tax are recorded in "Other expenses" since they are considered to be an indirect tax or in inventory and cost of goods sold when the tax is levied on intercompany sales. The annual expense for these US taxes is approximately USD 200 million.

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.

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 expenses for 2013 and 2012 for currencies most important to the Group:

Currency		2013 %	2012 %
US dollar (USD)	Net sales	36	36
	Operating expenses	40	39
Euro (EUR)	Net sales	26	25
	Operating expenses	25	25
Swiss franc (CHF)	Net sales	2	2
	Operating expenses	12	13
Japanese yen (JPY)	Net sales	8	9
	Operating expenses	4	5
Other currencies	Net sales	28	28
	Operating expenses	19	18

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.

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 2013, 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 also use forward contracts and foreign currency options to hedge expected net revenues 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.

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 approximately USD 220 million of cash in the country, which is only slowly being approved for remittance outside the country. As a result the Group is exposed to a potential income statement financial result devaluation loss on its total intercompany balances with subsidiaries in Venezuela and related net investments, which at December 31, 2013 amounted to approximately USD 340 million and USD 35 million, respectively. The Group used the official exchange rate as published by CADIVI (Venezuelan Commission for the Administration of Foreign Currency) of VEF 4.3/USD until the devaluation on February 8, 2013 and VEF 6.3/USD since then for the consolidation of the financial statements of the Venezuelan subsidiaries.

The average value of the EUR and CHF in 2013 increased against the USD whereas the GBP, JPY and certain emerging market currencies were weaker. 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	2013	2012	Change in %	2013	2012	Change in %
EUR	1.328	1.286	3%	1.378	1.319	4%
CHF	1.079	1.067	1%	1.124	1.093	3%
GBP	1.564	1.585	– 1%	1.653	1.616	2%
JPY (100)	1.026	1.254	– 18%	0.952	1.161	– 18%

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 % 2013	Change in USD % 2013	Percentage point currency impact 2013	Change in constant currencies % 2012[1]	Change in USD % 2012[1]	Percentage point currency impact 2012
Net sales	4	2	– 2	0	– 3	– 3
Operating income	5	– 3	– 8	7	4	– 3
Net income	7	– 1	– 8	7	3	– 4
Core operating income	3	– 2	– 5	– 3	– 5	– 2
Core net income	5	0	– 5	– 4	– 6	– 2

[1] Restated to reflect the adoption of revised IAS19 on *Employee Benefits* (see pages 247 and 248).

For additional information on the effects of currency fluctuations, see Note 29 to the Group's consolidated financial statements.

FACTORS AFFECTING RESULTS OF OPERATIONS

A number of key factors impact the Group's results of operations and the development of our businesses.

We believe that these factors, which include demographic and socioeconomic shifts, scientific and technological advances and changing patient behaviors, will continue to drive growth in the demand for and access to healthcare. At the same time, the current business and regulatory environment presents significant risks and potential impediments to our growth and to the broader global healthcare industry.

TRANSFORMATIONAL CHANGES FUELING DEMAND

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 treatment and driving demand for healthcare around the world. These trends are expected to sustain steady growth in the healthcare market overall in the coming years and to drive accelerating growth in key segments.

AGING POPULATION AND SHIFTING BEHAVIORS

Scientific advances in treating diseases and increased access to healthcare worldwide have contributed to a rise in life expectancy and fall in birth rates, increasing the proportion of elderly people around the world. According to the United Nations Population Fund, the number of people aged 60 or over has quadrupled in just 60 years and is projected to reach 2 billion by 2050.

With the aging of the global population, we have seen an increase in diseases and conditions that disproportionately affect the elderly, such as lung cancer and Alzheimer's disease. Novartis has many products in its portfolio to help patients with diseases and conditions such as these, including innovative offerings for the treatment of cancer, neurodegenerative diseases, ophthalmological diseases and cardiovascular conditions.

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. Together with inactive lifestyles and habits, this has boosted the prevalence of chronic diseases, including cardiovascular disease, diabetes and chronic respiratory diseases, which now account for over 60% of deaths worldwide, according to the World Health Organization (WHO). Novartis businesses, particularly Pharmaceuticals, Alcon and Sandoz, offer products that help patients suffering from chronic diseases. We plan to continue to invest in new treatments to address this growing health threat.

GLOBAL RISE IN HEALTHCARE SPENDING LED BY EMERGING MARKETS

Despite a difficult economic environment, global healthcare spending continues to rise around the world. In OECD countries, for example, average public healthcare expenditures are expected to comprise 8% of total GDP in 2060, a 2.5 percentage point increase from 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 total global healthcare expenditures, due in part to a growing middle class. According to the Brookings Institute, the global middle class, defined as households with daily expenditures between USD 10 and USD 100 per person, is on track to more than double in size in 20 years, from roughly 2 billion in 2013 to 4.9 billion in 2030. Most of that growth is expected to come from emerging markets, led by China and India. At present growth rates, Asia will have more than 2 billion people in middle class households within the next decade.

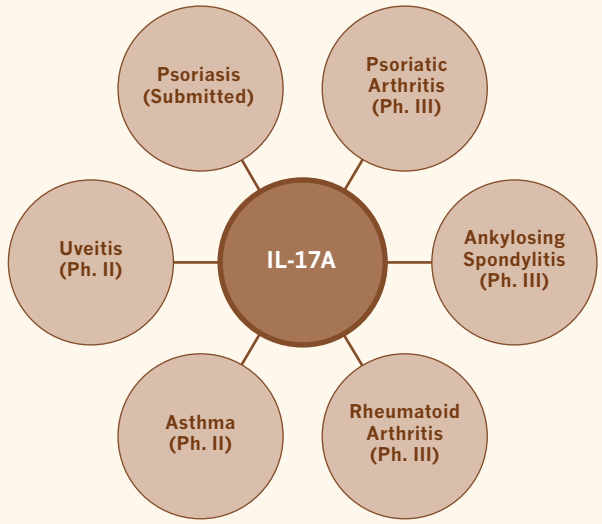
According to IMS Health, emerging markets are expected to make up 30% of global medicine expenditures by 2016, spending USD 35-40 billion on pharmaceuticals alone. At a time of slowing growth in industrialized countries, many emerging markets have experienced proportionately higher sales growth and an increasing contribution to the industry's global performance. In 2013, we generated USD 14.7 billion, or approximately 25% (2012: 24%) of net sales from Emerging Growth Markets, (defined as all markets except the US, Canada, Western Europe, Japan, Australia and New Zealand), as compared with USD 43.2 billion, or approximately 75% (2012: 76%) of our net sales, in the Established Markets.

We expect this trend to continue in the long term, and with our diversified portfolio spanning patented pharmaceuticals, generics and OTC medicines, we are well-positioned to meet the needs of patients in emerging markets.

SCIENTIFIC ADVANCES OPENING NEW OPPORTUNITIES FOR TARGETED THERAPIES

As research in the fields of genomics and biotechnology becomes more sophisticated, we are developing a better understanding of the molecular and genetic basis of diseases. We have successfully utilized our understanding of basic molecular pathways to expand the applicability of medicines towards novel targets. For example, we unraveled the biology of cytokine IL-17A by studying the effect of AIN457 in clearing skin lesions in psoriasis patients. We are also studying the applicability of AIN457 in multiple other diseases based on its ability to inhibit IL-17A, including psoriatic arthritis, ankylosing spondylitis, rheumatoid arthritis, uveitis, multiple sclerosis and asthma. Further, we are gaining a greater capability to identify specific biological factors, called "biomarkers," that could indicate whether or not a given drug will be effective for a particular patient. For example, in the case of Fragile X syndrome, we developed a diagnostic test that determines the methylation level of the DNA in these patients, which appears to be a predictor of response to our drug, AFQ056. Over the period of 2012 to 2016, the global market for targeted therapies is expected to grow at a double-digit rate of approximately 12%.

FOLLOWING THE SCIENCE IN IMMUNE-MEDIATED DISEASES
Single target – potential indications (AIN457, Secukinumab)



The science of biomarkers is just one element of a larger industry trend toward personalized medicine, which has the potential to shape not only the way diseases are managed, but also how new drugs are developed. It could, for example, accelerate the drug development process if regulators were to accept smaller trials geared toward patients with specific disease subtypes or mutations, as opposed to traditional large-scale clinical trials for which it can be more difficult to demonstrate that a drug is effective in certain subsections of the patient population. This would further enhance our ability to streamline the innovation process and deliver customized medicines for improved patient outcomes.

NEW TECHNOLOGIES CHANGING THE DELIVERY OF HEALTHCARE

New technologies, such as connected medical devices and health information technology systems, are streamlining the delivery of healthcare and improving patient outcomes. Connected medical devices, for example, offer the potential to record and share information about a patient's daily medicine intake, making it easier for doctors to monitor patient compliance and response to treatment. In our Pharmaceuticals Division, we are developing an "*eBreezhaler*" device for chronic obstructive pulmonary disease (COPD) patients so that their doctors could have the ability to track key health indicators remotely and in real time. We expect this device to reduce the occurrence of hospitalization and contribute to greater treatment adherence, improving outcomes at lower costs.

We are also using new technologies in the Alcon Division to improve outcomes for cataract patients. The latest example is our Cataract Refractive Suite, which comprises multiple innovations and advanced technologies from Alcon's extensive surgical device portfolio working seamlessly together to optimize consistency in how cataract surgery is approached and executed. One component of the Suite, the *Verion* image guided system, captures a reference image and helps to generate a surgical plan, which is then integrated in the operating room via a tracking overlay, allowing surgeons to see all incisions and alignment in real time. As the leader in the global refractive cataract surgery category, Alcon constantly strives to introduce the latest advancements in surgical innovations and technologies to optimize and improve the refractive cataract procedure and improve patient outcomes.

In the R&D setting, new technologies can also help improve the accuracy of clinical trials and accelerate the drug development process. For example, the need to travel to and from clinical trial sites poses an inconvenience for many patients and contributes to low retention rates. By using mobile apps to check and record relevant data from clinical trial participants in their homes, we expect to improve retention and streamline the reporting process, which in turn has the potential to contribute to increased accuracy. In clinical trials, Novartis also uses tablets to reduce the potential for human error in transcribing patient data on paper forms, and facilitate monitoring from a central database. With this approach, we both enhance accuracy and lower costs, which could help us to bring drugs to market more quickly and efficiently.

PATIENT ENGAGEMENT

Greater access to health information and tools to communicate with providers is making patients more active participants in their own healthcare. 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 health or medical matters.

With patients actively seeking health information online, we have an opportunity to deliver more holistic healthcare solutions. For example, we are developing the *myGIST Companion* app for patients with gastrointestinal stromal tumors (GIST). The app is designed to be interactive, and provide a checklist for patients to chart their symptoms and measure their progress, which we expect will allow them to play an active role in managing their disease.

In addition, we are engaging patients by providing them with tools and platforms to share their experiences and learn about their conditions and treatment options. For example, in multiple sclerosis (MS) – where we offer *Gilenya*, the first oral therapy approved to treat relapsing forms of the disease – we launched a set of interactive, patient-friendly web-based tools, including an animated video series and a Pinterest page. Through these online interactions, we gain a better understanding of patient concerns, which we can then address in our product development and marketing efforts.

SHIFT TO GENERICS AND OTC PRODUCTS

Rising healthcare costs have precipitated greater consumer demand for affordable products, such as generic equivalents and alternatives to the originating pharmaceutical products. According to IMS Health, 84% of prescriptions dispensed in the US in 2012 were for generic medications, up from 63% five years earlier. By 2017, it is projected that generics will account for 87% of all prescriptions filled. Similarly, a study by Booz & Company found that OTC products are used by 79% of US consumers, or 240 million people, and save the US healthcare system more than USD 100 billion per year.

With leadership positions in both generics and over-the-counter medicines, we believe that we are well-positioned to take advantage of these trends and meet the needs of consumers worldwide.

INCREASINGLY CHALLENGING BUSINESS ENVIRONMENT

While these transformational changes present opportunities for growth, our businesses also face significant risks and uncertainties. Our business, as well as our financial condition or results of operations, could be materially adversely affected by a number of risks, including those set out here.

PATENT EXPIRATIONS AND PRODUCT COMPETITION

It is estimated that, in the five years between 2007 and 2012, generic erosion of patented pharmaceuticals accounted for an estimated loss of USD 67 billion in annual sales among the top drug companies. Current estimates suggest that this impact could be even greater in the future, potentially amounting to USD 250 billion in lost sales from 2012 to 2015.

The ability to secure and defend our intellectual property is particularly crucial for our Pharmaceuticals and Alcon Divisions. The products of these divisions, as well as key products from our other divisions, are generally protected by patent rights, which are intended to provide us with exclusive rights to market the patented products. However, those patent rights are of varying strengths and durations. Loss of market exclusivity for one or more important products has had, and can be expected to continue to have, a material adverse effect on our results of operations.

Some of our best-selling products have begun to face considerable competition due to the expiration of patent protection. For example:

– The patent on valsartan, the active ingredient of *Diovan/Co-Diovan/Diovan HCT* (high blood pressure), which was long our best-selling product, expired in the major countries of the EU in November 2011, and generic competitors have launched there. In addition, patent protection expired in the US in September 2012, and generic versions of *Diovan HCT* have launched in the US. Generic versions of *Diovan* monotherapy have not yet launched in the US but could potentially launch at any time. In addition, patent protection for *Diovan* expired in Japan in 2013, and will expire there in 2016 for *Co-Diovan* (including patent term extensions).
– The patent on the active ingredient in *Gleevec/Glivec* (cancer) will expire in 2015 in the US, in 2016 in the major EU countries and in September 2014 for the main indications in Japan. However, the product is protected by additional patents claiming innovative features of *Gleevec/Glivec*. Generic versions of *Gleevec/Glivec* have already launched in Turkey, Brazil, Canada, China, India, Russia and for a minor indication in Japan.

In 2014, the impact of generic competition on our net sales is expected to be as much as USD 3.0 billion. Because we typically have reduced marketing and R&D expenses related to a product in its final year of exclusivity, it is anticipated that the loss of patent protection will have an impact on our operating income, which can be expected to correspond to a significant portion of the product's lost sales.

Aside from generic competition, all of our businesses face other competing healthcare products. Doctors, patients or those responsible for the reimbursement of the cost of healthcare products may choose competitor products over ours if they perceive the products to be safer, more effective, easier to administer, less expensive or more cost effective. In 2013, for example, we saw launches of products significantly competitive to *Lucentis* and *Gilenya*, two growth products in our Pharmaceuticals Division. Such competitive products could affect the revenues from our products, and could affect our results of operations.

Though the wave of patent expiries presents a significant challenge to our Pharmaceuticals and Alcon Divisions, it is also an opportunity for our Sandoz Division, which develops, manufactures, distributes and sells prescription medicines that are not protected by valid and enforceable third-party patents. According to IMS Health, Sandoz is the number two company in worldwide generics sales and is the global leader in biosimilars. With our global footprint and advanced technical expertise, as well as our strong track record of being first to market with new generic medicines, we expect Sandoz to help offset the impact of generic competition on our branded portfolio.

HEIGHTENED REGULATORY AND SAFETY HURDLES

Following a series of widely publicized issues in recent years, health regulators are increasingly focusing on product safety. In addition, government authorities around the world have paid increased attention to the risk/benefit profile of pharmaceutical products with an emphasis on product safety and on incremental improvement over older products in the same therapeutic class. These developments have led to requests for more clinical trial data, for the inclusion of a significantly higher number of patients in clinical trials and for more detailed analyses of the trials. As a result, the already lengthy and expensive process of obtaining regulatory approvals for pharmaceutical products has become even more challenging.

The post-approval regulatory burden on healthcare companies has also been growing. Approved drugs have increasingly been subject to requirements such as Risk Evaluation and Mitigation Strategies (REMS), risk management plans, comparative effectiveness studies, health technology assessments and requirements to conduct post-approval Phase IV clinical trials to gather far more detailed safety and other data on products. These requirements make the maintenance of regulatory approvals and achievement of reimbursement for our products increasingly expensive and further heighten the risk of recalls, product withdrawals, or loss of market share. Like our industry peers, we have been required by health authorities to conduct additional clinical trials, and to submit additional analyses of our data in order to obtain product approvals or reimbursement by government or private payors. We have had REMS and other such requirements imposed as a condition for approval of our new drugs. By increasing the costs of and causing delays in obtaining approvals, and by creating an increased risk that products either will not be approved, or will be removed from the market after previously having been approved, these regulatory developments have had, and can be expected to continue to have, a material adverse effect on our business, financial condition and results of operations.

Despite this risk, however, we expect that our focus on improving patient outcomes and understanding disease pathways will allow Novartis to continue to bring innovative, effective and safe medicines to market.

RISK OF LIABILITY AND SUPPLY DISRUPTION FROM MANUFACTURING ISSUES

The manufacture of our products is both highly regulated and complex, and may result in a variety of issues that could lead to extended supply disruptions and significant liability. Governmental health authorities around the world, including the US FDA, closely regulate the manufacture of our products, and continue to intensify their scrutiny of manufacturers' compliance with their requirements. If we or our third party suppliers fail to comply fully with these requirements and the health authorities' expectations, then we could be required to shut down our production facilities or production lines. In this event, we could experience product shortages, or be unable to supply products to patients for an extended period of time, and such shortages or supply failures have led to, and could continue to lead to, significant losses of sales revenue and to potential third party litigation. Health authorities could also impose significant penalties on us.

We have faced, and in some cases continue to face, significant manufacturing issues. For example, in 2013, Sandoz continued to upgrade its systems and processes to ensure one quality standard across the organization following a warning letter from the US FDA in 2011 pertaining to three of the division's North American manufacturing facilities, and another received in 2013 with respect to the Sandoz site in Unterach, Austria. Sandoz has now achieved upgraded compliance status at two of those sites (Broomfield, Colorado, US in 2012 and Boucherville, Canada in 2013). We also continued to make progress on quality remediation at Consumer Health's manufacturing facility in Lincoln, Nebraska, US, where we suspended operations and shipments at the end of 2011. In 2013, the FDA re-inspected the Lincoln site and made zero Form 483 observations relating to its manufacturing operations. Consequently, we resumed shipments of newly validated *Sentinel* and *Excedrin*, two of the products produced at that site, to our customers in North America.

As a result of such manufacturing issues, we have been unable to supply certain products to the market for significant periods of time, and so have suffered and may continue to suffer significant losses in sales and market share. In addition, supply issues have required us to outsource the production of certain key products that were previously manufactured in our own production facilities, as well as expend considerable resources on the remediation of the issues at our sites, which may limit the potential profitability of such products. To meet increasing health authority expectations, we are devoting substantial time and resources to improve quality and assure consistency of product supply at our other manufacturing sites around the world.

In addition to 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 of products, including products from Pharmaceuticals, Alcon, Sandoz, and Vaccines and Diagnostics, are "biologic" products, which cannot be manufactured synthetically, but instead must be produced from living plant or animal microorganisms. As a result, the production of biologic-based products which meet all regulatory requirements is especially complex. Furthermore, because the production process is based on living plant or animal micro-organisms, the process could be affected by contaminants which could impact those micro-organisms. As a result, the inherent fragility of certain of our raw material supplies and production processes may cause the production of one or more of our products to be disrupted, potentially for extended periods of time.

In addition, the Group's portfolio includes a number of sterile products such as oncology treatments, which are considered to be technically complex to manufacture and require strict environmental controls. Because the production process for these products is complex and sensitive, there is a greater chance of production failures and lengthy supply interruptions.

Finally, because our products are intended to promote the health of patients, any manufacturing issues that result in supply disruptions or other production problems could potentially subject us, not only to government penalties, but also to lawsuits or allegations that the public health, or the health of individuals, has been endangered.

WEAK ECONOMIC ENVIRONMENT AND INCREASING PRESSURE ON PRICING

Though the global economy showed signs of recovery in 2013, overall growth was weak. In a cost-constrained environment, governments have continued to impose measures, such as rebates and price reductions, to make medicines more affordable.

These ongoing pricing pressures affect all of our businesses that rely on reimbursement, including Pharmaceuticals, Alcon, Sandoz, and Vaccines and Diagnostics. For example, in 2013, the UK's National Institute for Health and Clinical Excellence (NICE) recommended against the UK NHS funding the use of our products *Jakavi* (myelofibrosis) and *Afinitor* (advanced breast cancer indication). NICE did recommend the funding of the use of our products *Xolair* (allergic asthma), *Lucentis* (diabetic macular edema indication) and *Jetrea* (vitreomacular traction), but only after we offered significant price discounts. In the US, under the Affordable Care Act (ACA), there is a newly created entity, the Independent Payment Advisory Board, which has been granted unprecedented authority to implement broad actions, such as required prescription drug discounts or rebates, to reduce future costs of the Medicare program. This could include required prescription drug discounts or rebates. In addition, as a result of the ongoing implementation of the ACA, some patients may be required to switch from existing commercial health insurance policies to policies offered on the new healthcare exchanges. Should a significant number of patients switch to policies offered on the exchanges that offer lesser benefits than their prior policies, there could be an impact on the sales or pricing of our products.

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. Certain 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.

Current economic conditions may also adversely affect the ability of our distributors, customers, suppliers and service providers to obtain the liquidity required to pay for our products, or otherwise to buy necessary inventory or raw materials, and to perform their obligations under agreements with us, which could disrupt our operations, and could negatively impact our business and cash flow. In addition, the varying effects of difficult economic times on the economies, currencies and financial markets of different countries has impacted, and may continue to impact, the conversion of our operating results into our reporting currency, the US dollar, as well as the value of our investments in our pension plans. The financial situation may also result in a lower return on our financial investments, and a lower value on some of our assets. Alternately, inflation could accelerate, which could lead to higher interest rates and increase our costs of raising capital.

Consumer behavior has also been impacted by the weak economic environment, with patients around the world looking for ways to keep healthcare spending to a minimum. According to a study by the Commonwealth Fund, 80 million people in the US skipped recommended medical care or services because of high costs in 2012, up from 75 million people in 2011. Some of our businesses, including the elective surgical business of our Alcon Division and our OTC and Animal Health Divisions, may be particularly sensitive to declines in consumer spending. Our Pharmaceuticals, Vaccines and Diagnostics, 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 patients pay a larger contribution toward their own healthcare costs. As a result, there is a risk that consumers may cut back on prescription drugs and vaccines, as well as consumer health products, to help cope with rising costs and difficult economic times. To offset this trend and help 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 an affordable price.

POTENTIAL LIABILITY ARISING FROM LEGAL PROCEEDINGS

In recent years, there has been a trend of increasing government investigations and litigations against companies operating in the industries of which we are a part, both in the US and in an increasing number of countries around the world. We are obligated to comply with the laws of all of the countries around the world in which we operate and sell products, both with respect to an extremely wide and growing range of activities, and with new requirements imposed on us from time to time as government and public expectations regarding acceptable corporate behavior change. To that end, we have a significant global compliance program in place, and devote substantial time and resources to efforts to ensure that our business is conducted in a legal and publicly acceptable manner. Nonetheless, despite our efforts, any failure to comply with the law or with heightened public expectations could lead to substantial liabilities that may not be covered by insurance and could affect our business and reputation.

A number of our subsidiaries are, and will likely continue to be, subject to various legal proceedings 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 remediation, taxation, privacy and intellectual property matters. Such proceedings are inherently unpredictable, and large judgments sometimes occur. As a consequence, we may in the future incur judgments or enter into settlements of claims that could have a material adverse effect on our results of operations or cash flows.

Governments and regulatory authorities around the world have been stepping up their compliance and law enforcement activities in recent years, and are increasingly challenging practices previously considered to be legal. Responding to such challenges and new regulations is costly, and requires an increasing amount of our 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 litigation.

These factors have contributed to recent decisions by us and other companies in our 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. These settlements have involved and may continue to involve large cash payments, including the potential repayment of amounts allegedly obtained improperly and penalties of up to treble damages. In addition, 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 will expire in 2015. Also, matters underlying governmental investigations and settlements may be the subject of separate private litigation. Adverse judgments or settlements in any significant investigations or cases against us could have a material adverse effect on our business, financial condition and results of operations.

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 only transactions of significance during 2013 and 2012 are mentioned below.

Sandoz – Acquisition of Fougera Pharmaceuticals, Inc.

On July 20, 2012, Sandoz completed the acquisition of 100% of Fougera Pharmaceuticals, Inc., a specialty dermatology generics company based in Melville, New York, for USD 1.5 billion in cash. Sandoz acquired Fougera for its strong dermatology development and manufacturing expertise. Fougera employed approximately 700 people.

The final purchase price allocation resulted in net identified assets of USD 0.6 billion (excluding acquired cash) and goodwill of USD 0.9 billion being recognized.

Divestment of Vaccines and Diagnostics' blood transfusion diagnostics unit in January 2014

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. This unit was part of Novartis Vaccines and Diagnostics and was dedicated to increasing transfusion safety worldwide. The estimated pre-tax gain on this transaction, subject to finalization of the accounting, will be approximately USD 0.9 billion.

NON-IFRS MEASURES AS DEFINED BY NOVARTIS

The following non-IFRS metrics are used by Novartis when measuring performance, especially when measuring current year results against prior periods: core 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 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.

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 for 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 also 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 our cash and cash equivalents, current investments and derivative financial instruments less interest-bearing loans and borrowings.

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), amortization of intangible assets (including any related impairment charges), income from associated companies, interest expense, other financial income/expense, other expense and taxes.

	2013 USD millions	Restated 2012[1] USD millions	Change USD millions
Operating income	**10 910**	**11 193**	**– 283**
Depreciation of property, plant & equipment	1 755	1 704	51
Amortization of intangible assets	2 976	2 894	82
Impairments of property, plant & equipment and intangible assets	194	322	– 128
Group EBITDA	**15 835**	**16 113**	**– 278**

[1] Other income and Other expense have been restated by an additional USD 318 million expense (USD 235 million after taxes) to reflect the adoption of revised IAS 19 on *Employee Benefits* (see pages 247 and 248).

2013 AND 2012 RECONCILIATION OF IFRS RESULTS TO CORE RESULTS

2013	IFRS results USD millions	Amortization of intangible assets[1] USD millions	Impairments[2] USD millions	Acquisition or divestment related items, restructuring and integration charges[3] USD millions	Other exceptional items[4] USD millions	Core results USD millions
Gross profit	**39 223**	**2 866**	**28**		**41**	**42 158**
Operating income	**10 910**	**2 955**	**259**	**331**	**30**	**14 485**
Income before taxes	**10 735**	**3 214**	**259**	**349**	**74**	**14 631**
Taxes	– 1 443					– 2 098[5]
Net income	**9 292**					**12 533**
Basic earnings per share (USD)[6]	3.76					5.09
The following are adjustments to arrive at Core Gross Profit						
Cost of goods sold	– 19 608	2 866	28		41	– 16 673
The following are adjustments to arrive at Core Operating Income						
Marketing & Sales	– 14 549				27	– 14 522
Research & Development	– 9 852	85	86		39	– 9 642
General & Administration	– 3 060				25	– 3 035
Other income	1 367		– 53		– 506	808
Other expense	– 2 219	4	198	331	404	– 1 282
The following are adjustments to arrive at Core Income before taxes						
Income from associated companies	600	259		18		877
Other financial income and expense	– 92				44	– 48

[1] 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 the Novartis share of the estimated Roche core items.

[2] 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.

[3] 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.

[4] 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.

[5] 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 3.9 billion to arrive at the core results before tax amounts to USD 655 million. This results in the average tax rate on the adjustments being 16.8 %.

[6] Earnings per share (EPS) is calculated on the amount of net income attributable to shareholders of Novartis AG.

2012	Restated[1] IFRS results USD millions	Amortization of intangible assets[2] USD millions	Impairments[3] USD millions	Acquisition or divestment related items, restructuring and integration charges[4] USD millions	Other exceptional items[5] USD millions	Restated[1] Core results USD millions
Gross profit	**38 805**	**2 786**	**174**	**39**	**43**	**41 847**
Operating income	**11 193**	**2 876**	**356**	**330**	**87**	**14 842**
Income before taxes	**10 925**	**3 045**	**356**	**364**	**87**	**14 777**
Taxes	– 1 542					– 2 201[6]
Net income	**9 383**					**12 576**
Basic earnings per share (USD)[7]	3.83					5.15
The following are adjustments to arrive at Core Gross Profit						
Other revenues	888				– 56	832
Cost of goods sold	– 18 756	2 786	174	39	99	– 15 658
The following are adjustments to arrive at Core Operating Income						
Marketing & Sales	– 14 353			1		– 14 352
Research & Development	– 9 332	87	109		20	– 9 116
General & Administration	– 2 937				14	– 2 923
Other income	1 049		– 1		– 373	675
Other expense	– 2 039	3	74	290	383	– 1 289
The following are adjustments to arrive at Core Income before taxes						
Income from associated companies	552	169		34		755

[1] Other income and Other expense have been restated by an additional USD 318 million expense (USD 235 million after taxes) to reflect the adoption of revised IAS 19 on *Employee Benefits* (see pages 247 and 248).

[2] 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 the recurring amortization of the purchase price allocation related to intangible assets included in the Novartis equity-method accounting for Roche of USD 153 million and USD 16 million for the Novartis share of the estimated Roche core items.

[3] Impairments: Cost of goods sold, Research & Development, Other income, and Other expense include principally impairments of intangible assets and property, plant & equipment; Other expense also includes impairments of financial assets.

[4] Acquisition or divestment related items, restructuring and integration charges: Cost of goods sold includes acquisition related inventory step-up adjustments; Marketing & Sales and Other expense relate to Alcon and Fougera integration costs; Income from associated companies includes a USD 16 million revaluation gain on the initial interest in an acquired company and the Novartis share of USD 50 million restructuring charge related to Roche.

[5] Other exceptional items: Other revenues include an income of USD 56 million related to an intellectual property settlement and license agreement; Cost of goods sold, Research & Development, Other income, and Other expense include restructuring charges related to the Group-wide rationalization of manufacturing sites; Cost of goods sold also includes an additional charge of USD 22 million for product recalls related to a US production plant; Research & Development also includes a net USD 18 million increase of contingent consideration liabilities related to business combinations; General & Administration includes exceptional IT-related costs; Other income includes a provision reduction of USD 137 million mainly related to *Tekturna/Rasilez* inventories, a product divestment gain of USD 93 million, a reversal of prior year restructuring charges of USD 76 million, and a gain on divestment from the sale of financial assets of USD 51 million; Other expense includes principally a restructuring charge of USD 149 million related to the US business, and charges for transforming IT and finance processes of USD 117 million.

[6] 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 3.9 billion to arrive at the core results before tax amounts to USD 659 million. This results in the average tax rate on the adjustments being 17.1 %.

[7] Earnings per share (EPS) is calculated on the amount of net income attributable to shareholders of Novartis AG.

2013 AND 2012 RECONCILIATION OF SEGMENT OPERATING INCOME TO CORE OPERATING INCOME

	Pharmaceuticals		Alcon	
	2013 USD millions	2012 USD millions	2013 USD millions	2012 USD millions
Operating income	**9 376**	**9 598**	**1 232**	**1 465**
Amortization of intangible assets	**278**	**322**	**1 989**	**1 915**
Impairments				
Intangible assets	29	211	57	17
Property, plant & equipment related to the Group-wide rationalization of manufacturing sites	1			
Other property, plant & equipment	28	25	4	
Financial assets	16	2		
Total impairment charges	**74**	**238**	**61**	**17**
Acquisition-related items				
- Expenses			330	264
Total acquisition-related items, net			**330**	**264**
Other exceptional items				
Exceptional divestment gains	– 313	– 93		
Restructuring items				
- Income	– 40	– 70		– 1
- Expense	122	240	77	24
Legal-related items				
- Expense	33	19		
Additional exceptional income	– 70	– 137	– 56	
Additional exceptional expense	63	96	61	14
Total other exceptional items	**– 205**	**55**	**82**	**37**
Total adjustments	**147**	**615**	**2 462**	**2 233**
Core operating income	**9 523**	**10 213**	**3 694**	**3 698**
Core return on net sales	**29.6%**	**31.8%**	**35.2%**	**36.2%**

[1] Other income and Other expense have been restated by an additional USD 318 million expense (USD 235 million after taxes) to reflect the adoption of revised IAS 19 on *Employee Benefits* (see pages 247 and 248).

ENTERPRISE VALUE

Enterprise value represents the total amount that shareholders and debt holders have invested in Novartis, less the Group's liquidity.

	Dec 31, 2013 USD millions	Dec 31, 2012 USD millions	Change USD millions
Market capitalization	194 157	151 998	42 159
Non-controlling interests	129	126	3
Financial debts and derivatives	18 018	19 726	– 1 708
Liquidity	– 9 222	– 8 119	– 1 103
Enterprise value	**203 082**	**163 731**	**39 351**
Enterprise value/EBITDA	**13**	**10**[1]	

[1] EBITDA for 2012 is restated to reflect the adoption of revised IAS19 on *Employee Benefits* (see pages 247 and 248).

NOVARTIS ECONOMIC VALUE ADDED

Novartis utilizes its own definition for measuring Novartis Economic Value Added (NVA), which is utilized for determining payouts under the Long-Term Performance Plan (LTPP). The following table shows NVA for 2013 and 2012 utilizing the Novartis definition.

	Year ended Dec 31, 2013 USD millions	Year ended Dec 31, 2012[1] USD millions	Change in USD %
Operating income	**10 910**	**11 511**	**– 5**
Income from associated companies	600	552	9
Operating interest	– 335	– 348	4
Operating tax	– 2 151	– 2 334	8
Capital charge	– 6 330	– 7 060	10
Novartis Economic Value Added	**2 694**	**2 321**	**16**

[1] Since in 2012 these values were used for the payouts under the LTTP there has been no restatement to reflect the adoption of revised IAS 19 on *Employee Benefits* (see pages 247 and 248).

Sandoz		Vaccines and Diagnostics		Consumer Health		Corporate		Total	
2013 USD millions	2012 USD millions	2013 USD millions	2012 USD millions	2013 USD millions	2012 USD millions	2013 USD millions	Restated 2012[1] USD millions	2013 USD millions	Restated 2012[1] USD millions
1 028	**1 091**	**– 165**	**– 250**	**178**	**48**	**– 739**	**– 759**	**10 910**	**11 193**
409	**364**	**222**	**215**	**53**	**57**	**4**	**3**	**2 955**	**2 876**
20	43		5	8	7			114	283
				33				34	
– 3	3	1	6	– 1	3	17	2	46	39
		7	1			42	31	65	34
17	**46**	**8**	**12**	**40**	**10**	**59**	**33**	**259**	**356**
	62		3			1	1	331	330
	62		**3**			**1**	**1**	**331**	**330**
							– 51	– 313	– 144
	– 10				– 8			– 40	– 89
2	4		1	25	3			226	272
85					25			118	44
– 4	– 59		– 56			– 75		– 205	– 252
4	5			2	24	114	117	244	256
87	**– 60**		**– 55**	**27**	**44**	**39**	**66**	**30**	**87**
513	**412**	**230**	**175**	**120**	**111**	**103**	**103**	**3 575**	**3 649**
1 541	**1 503**	**65**	**– 75**	**298**	**159**	**– 636**	**– 656**	**14 485**	**14 842**
16.8%	**17.3%**	**3.3%**	**– 4.0%**	**7.3%**	**4.3%**			**25.0%**	**26.2%**

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.

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, 2013.

SUMMARY OF QUARTERLY FINANCIAL DATA FOR 2013 AND 2012

USD millions unless indicated otherwise	Q1	Q2	Q3	Q4	2013	Restated Q1[1]	Restated Q2[1]	Restated Q3[1]	Restated Q4[1]	Restated 2012[1]
Net sales	**14 016**	**14 488**	**14 338**	**15 078**	**57 920**	**13 735**	**14 303**	**13 807**	**14 828**	**56 673**
Other revenues	190	216	220	285	911	178	238	232	240	888
Cost of goods sold	– 4 606	– 4 780	– 4 910	– 5 312	– 19 608	– 4 484	– 4 610	– 4 575	– 5 087	– 18 756
Gross profit	**9 600**	**9 924**	**9 648**	**10 051**	**39 223**	**9 429**	**9 931**	**9 464**	**9 981**	**38 805**
Marketing & Sales	– 3 457	– 3 657	– 3 481	– 3 954	– 14 549	– 3 495	– 3 613	– 3 393	– 3 852	– 14 353
Research & Development	– 2 297	– 2 439	– 2 419	– 2 697	– 9 852	– 2 235	– 2 285	– 2 191	– 2 621	– 9 332
General & Administration	– 761	– 731	– 746	– 822	– 3 060	– 719	– 737	– 693	– 788	– 2 937
Other income	369	264	172	562	1 367	319	228	258	244	1 049
Other expense	– 558	– 391	– 503	– 767	– 2 219	– 563	– 416	– 497	– 563	– 2 039
Operating income	**2 896**	**2 970**	**2 671**	**2 373**	**10 910**	**2 736**	**3 108**	**2 948**	**2 401**	**11 193**
Income from associated companies	111	174	161	154	600	128	176	81	167	552
Interest expense	– 175	– 175	– 170	– 163	– 683	– 164	– 183	– 178	– 199	– 724
Other financial income and expense	7	5	– 62	– 42	– 92	– 41	34	– 70	– 19	– 96
Income before taxes	**2 839**	**2 974**	**2 600**	**2 322**	**10 735**	**2 659**	**3 135**	**2 781**	**2 350**	**10 925**
Taxes	– 417	– 426	– 336	– 264	– 1 443	– 390	– 460	– 364	– 328	– 1 542
Group net income	**2 422**	**2 548**	**2 264**	**2 058**	**9 292**	**2 269**	**2 675**	**2 417**	**2 022**	**9 383**
Attributable to:										
Shareholders of Novartis AG	*2 398*	*2 516*	*2 232*	*2 029*	*9 175*	*2 247*	*2 648*	*2 390*	*1 985*	*9 270*
Non-controlling interests	*24*	*32*	*32*	*29*	*117*	*22*	*27*	*27*	*37*	113
Basic earnings per share (USD)	*0.98*	*1.03*	*0.91*	*0.83*	*3.76*	*0.93*	*1.09*	*0.99*	*0.82*	*3.83*
Net sales by segment										
Pharmaceuticals	**7 877**	**8 121**	**7 893**	**8 323**	**32 214**	**7 839**	**8 255**	**7 783**	**8 276**	**32 153**
Alcon	**2 566**	**2 736**	**2 539**	**2 655**	**10 496**	**2 541**	**2 648**	**2 460**	**2 576**	**10 225**
Sandoz	**2 259**	**2 216**	**2 273**	**2 411**	**9 159**	**2 124**	**2 147**	**2 044**	**2 387**	**8 702**
Vaccines and Diagnostics	**327**	**411**	**594**	**655**	**1 987**	**299**	**349**	**582**	**628**	**1 858**
Consumer Health	**987**	**1 004**	**1 039**	**1 034**	**4 064**	**932**	**904**	**938**	**961**	**3 735**
Group net sales	**14 016**	**14 488**	**14 338**	**15 078**	**57 920**	**13 735**	**14 303**	**13 807**	**14 828**	**56 673**
Operating income by segment										
Pharmaceuticals	**2 539**	**2 557**	**2 267**	**2 013**	**9 376**	**2 402**	**2 741**	**2 531**	**1 924**	**9 598**
Alcon	**412**	**397**	**251**	**172**	**1 232**	**363**	**419**	**360**	**323**	**1 465**
Sandoz	**251**	**259**	**242**	**276**	**1 028**	**298**	**259**	**250**	**284**	**1 091**
Vaccines and Diagnostics	**– 157**	**– 83**	**33**	**42**	**– 165**	**– 173**	**– 96**	**– 22**	**41**	**– 250**
Consumer Health	**11**	**29**	**90**	**48**	**178**	**12**	**0**	**48**	**– 12**	**48**
Corporate income & expense, net	– 160	– 189	– 212	– 178	– 739	– 166	– 215	– 219	– 159	– 759
Group operating income	**2 896**	**2 970**	**2 671**	**2 373**	**10 910**	**2 736**	**3 108**	**2 948**	**2 401**	**11 193**
Core operating income	**3 714**	**3 755**	**3 621**	**3 395**	**14 485**	**3 607**	**3 831**	**3 810**	**3 594**	**14 842**
Core net income	**3 248**	**3 227**	**3 103**	**2 955**	**12 533**	**3 035**	**3 298**	**3 201**	**3 042**	**12 576**
Core basic earnings per share	*1.32*	*1.30*	*1.26*	*1.20*	*5.09*	*1.25*	*1.35*	*1.31*	*1.24*	*5.15*

[1] Other income and Other expense have been restated by an additional USD 318 million expense (USD 235 million after taxes) to reflect the adoption of revised IAS 19 on *Employee Benefits* (see pages 247 and 248).

SUMMARY OF GROUP FINANCIAL DATA 2009–2013

USD millions unless indicated otherwise		2013	2012[1]	2011[1]	2010	2009
Net sales to third parties		**57 920**	**56 673**	**58 566**	**50 624**	**44 267**
Change relative to preceding year	%	2.2	– 3.2	15.7	14.4	6.8
Pharmaceuticals net sales		32 214	32 153	32 508	30 306	28 287
Change relative to preceding year	%	0.2	– 1.1	7.3	7.1	7.4
Alcon net sales		10 496	10 225	9 958	4 446	1 965
Change relative to preceding year	%	2.7	2.7	nm	nm	nm
Sandoz net sales		9 159	8 702	9 473	8 592	7 493
Change relative to preceding year	%	5.3	– 8.1	10.3	14.7	– 0.8
Vaccines and Diagnostics net sales		1 987	1 858	1 996	2 918	2 424
Change relative to preceding year	%	6.9	– 6.9	– 31.6	20.4	37.8
Consumer Health net sales		4 064	3 735	4 631	4 362	4 098
Change relative to preceding year	%	8.8	– 19.3	6.2	6.4	– 0.6
Operating income		**10 910**	**11 193**	**10 780**	**11 526**	**9 982**
Change relative to preceding year	%	– 2.5	3.8	– 6.5	15.5	11.4
As a % of net sales	%	18.8	19.8	18.4	22.8	22.5
As a % of average equity	%	15.2	16.6	15.9	18.1	18.5
As a % of average net operating assets	%	13.3	13.8	13.0	16.6	18.9
Net income		**9 292**	**9 383**	**9 072**	**9 969**	**8 454**
Change relative to preceding year	%	– 1.0	3.4	– 9.0	17.9	3.6
As a % of net sales	%	16.0	16.6	15.5	19.7	19.1
As a % of average equity	%	12.9	13.9	13.4	15.7	15.7
Dividends of Novartis AG[2]		**6 775**	**6 100**	**6 030**	**5 368**	**4 486**
As % of net income[3]	%	74	66	67	55	53
Cash flows from operating activities		**13 174**	**14 194**	**14 309**	**14 067**	**12 191**
Change relative to preceding year	%	– 7.2	– 0.8	1.7	15.4	24.8
As a % of net sales	%	22.7	25.0	24.4	27.8	27.5
Free cash flow		**9 945**	**11 383**	**12 503**	**12 346**	**9 446**
Change relative to preceding year	%	– 12.6	– 9.0	1.3	30.7	23.5
As a % of net sales	%	17.2	20.1	21.3	24.4	21.3
Purchase of property, plant & equipment		**3 064**	**2 698**	**2 167**	**1 678**	**1 887**
Change relative to preceding year	%	13.6	24.5	29.1	– 11.1	– 10.4
As a % of net sales	%	5.3	4.8	3.7	3.3	4.3
Depreciation of property, plant & equipment		**1 755**	**1 704**	**1 728**	**1 363**	**1 241**
As a % of net sales	%	3.0	3.0	3.0	2.7	2.8
Core Research & Development		**9 642**	**9 116**	**9 239**	**8 080**	**7 287**
As a % of net sales	%	16.6	16.1	15.8	16.0	16.5
Core Pharmaceuticals Division Research & Development		**7 161**	**6 697**	**6 860**	**6 344**	**5 909**
As a % of Pharmaceuticals Division net sales	%	22.2	20.8	21.1	20.9	20.9
Total assets		**126 254**	**124 191**	**117 468**	**123 318**	**95 505**
Liquidity		9 222	8 119	5 075	8 134	17 449
Equity		74 472	69 263	65 989	69 769	57 462
Debt/equity ratio		0.24:1	0.28:1	0.31:1	0.33:1	0.24:1
Current ratio		1.16:1	1.16:1	1.04:1	1.08:1	1.7:1
Net operating assets		**83 268**	**80 870**	**81 143**	**84 622**	**54 001**
Change relative to preceding year	%	3.0	– 0.3	– 4.1	56.7	4.5
As a % of net sales	%	143.8	142.7	138.5	167.2	122.0
Personnel costs		**15 595**	**14 772**	**14 913**	**12 240**	**10 920**
As a % of net sales	%	26.9	26.1	25.5	24.2	24.7
Full-time equivalent associates at year-end		**135 696**	**127 724**	**123 686**	**119 418**	**99 834**
Net sales per full-time equivalent associate (average)	USD	439 754	450 841	481 818	461 788	450 438

[1] Operating income for 2012 has been restated by an additional USD 318 million expense (2011: USD 218 million) and net income by USD 235 million after taxes (2011: USD 173 million) to reflect the adoption of revised IAS 19 on *Employee Benefits* (see pages 247 and 248).
[2] 2013: Proposed dividend for approval at the Annual General Meeting in February 2014. In all years, figure reflects only amounts paid to third party shareholders of Novartis AG.
[3] Based on net income attributable to the shareholders of Novartis AG.

nm = not meaningful

CONSOLIDATED INCOME STATEMENTS

(For the years ended December 31, 2013 and 2012)

	Note	2013 USD millions	Restated 2012[1] USD millions
Net sales	3	**57 920**	**56 673**
Other revenues		911	888
Cost of goods sold		– 19 608	– 18 756
Gross profit		**39 223**	**38 805**
Marketing & Sales		– 14 549	– 14 353
Research & Development		– 9 852	– 9 332
General & Administration		– 3 060	– 2 937
Other income		1 367	1 049
Other expense		– 2 219	– 2 039
Operating income	3	**10 910**	**11 193**
Income from associated companies	4	600	552
Interest expense	5	– 683	– 724
Other financial income and expense	5	– 92	– 96
Income before taxes		**10 735**	**10 925**
Taxes	6	– 1 443	– 1 542
Net income		**9 292**	**9 383**
Attributable to:			
Shareholders of Novartis AG		*9 175*	*9 270*
Non-controlling interests		*117*	*113*
Basic earnings per share (USD)	7	3.76	3.83
Diluted earnings per share (USD)	7	3.70	3.79

The accompanying Notes form an integral part of the consolidated financial statements.

[1] Restated to reflect the adoption of revised IAS19 on *Employee Benefits* (see Note 30).

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

(For the years ended December 31, 2013 and 2012)

	Note	2013 USD millions	Restated 2012[1] USD millions
Net income		**9 292**	**9 383**
Other comprehensive income to be eventually recycled into the consolidated income statement:			
Fair value adjustments on marketable securities, net of taxes	8.1	132	75
Fair value adjustments on deferred cash flow hedges, net of taxes	8.1	41	41
Total fair value adjustments on financial instruments, net of taxes	8.1	173	116
Novartis share of other items recorded in comprehensive income recognized by associated companies, net of taxes	8.2	5	– 107
Currency translation effects	8.3	676	808
Total of items to eventually recycle		854	817
Other comprehensive income never to be recycled into the consolidated income statement:			
Actuarial gains/(losses) from defined benefit plans, net of taxes	8.4	1 504	– 1 581
Total comprehensive income		**11 650**	**8 619**
Attributable to:			
Shareholders of Novartis AG		*11 538*	*8 507*
Non-controlling interests		*112*	*112*

The accompanying Notes form an integral part of the consolidated financial statements.
[1] Restated to reflect the adoption of revised IAS19 on *Employee Benefits* (see Note 30).

CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY

(For the years ended December 31, 2013 and 2012)

	Note	Share capital USD millions	Treasury shares USD millions	Share premium USD millions	Retained earnings USD millions	Total value adjustments USD millions	Issued share capital and reserves attributable to Novartis shareholders USD millions	Non-controlling interests USD millions	Total equity USD millions
Total equity at January 1, 2012 – published		**1 016**	**– 121**	**198**	**65 602**	**– 851**	**65 844**	**96**	**65 940**
Reclassification of share premium to retained earnings	9.1			– 198	198				
Reclassification of revaluation of previously held equity interest to retained earnings	8				685	– 685			
Restatement due to revised IAS 19 on *Employee Benefits* [1]	8/30				– 151	200	49		49
Total equity at January 1, 2012 – restated		**1 016**	**– 121**		**66 334**	**– 1 336**	**65 893**	**96**	**65 989**
Net income, restated					9 270		9 270	113	9 383
Other comprehensive income, restated [1]	8				– 107	– 656	– 763	– 1	– 764
Total comprehensive income					**9 163**	**– 656**	**8 507**	**112**	**8 619**
Dividends	9.2				– 6 030		– 6 030		– 6 030
Purchase of treasury shares	9.3		– 5		– 500		– 505		– 505
Increase in equity from exercise of options and employee transactions	9.4		7		409		416		416
Reduction of share capital	9.5	– 15	21		– 6				
Equity-based compensation	9.6		6		850		856		856
Changes in non-controlling interests	9.8							– 82	– 82
Total of other equity movements		**– 15**	**29**		**– 5 277**		**– 5 263**	**– 82**	**– 5 345**
Total equity at December 31, 2012		**1 001**	**– 92**		**70 220**	**– 1 992**	**69 137**	**126**	**69 263**
Net income					9 175		9 175	117	9 292
Other comprehensive income	8				5	2 358	2 363	– 5	2 358
Total comprehensive income					**9 180**	**2 358**	**11 538**	**112**	**11 650**
Dividends	9.2				– 6 100		– 6 100		– 6 100
Purchase of treasury shares	9.3		– 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	9.6		6		1 071		1 077		1 077
Impact of change in ownership of consolidated entities	9.7				– 10		– 10		– 10
Changes in non-controlling interests	9.8							– 109	– 109
Total of other equity movements			**3**		**– 6 335**		**– 6 332**	**– 109**	**– 6 441**
Total equity at December 31, 2013		**1 001**	**– 89**		**73 065**	**366**	**74 343**	**129**	**74 472**

The accompanying Notes form an integral part of the consolidated financial statements.

[1] Restated to reflect the adoption of revised IAS19 on *Employee Benefits* (see Note 30).

CONSOLIDATED BALANCE SHEETS

(At December 31, 2013 and 2012)

	Note	2013 USD millions	Restated 2012[1] USD millions
Assets			
Non-current assets			
Property, plant & equipment	10	18 197	16 939
Goodwill	11	31 026	31 090
Intangible assets other than goodwill	11	27 841	30 331
Investments in associated companies	4	9 225	8 840
Deferred tax assets	12	7 375	7 365
Financial assets	13	1 523	1 117
Other non-current assets	13	525	505
Total non-current assets without disposal group		**95 712**	**96 187**
Current assets			
Inventories	14	7 267	6 744
Trade receivables	15	9 902	10 051
Total marketable securities, commodities, time deposits and derivative financial instruments	16	2 535	2 567
Cash and cash equivalents	16	6 687	5 552
Other current assets	17	3 392	3 090
Total current assets without disposal group		**29 783**	**28 004**
Assets of disposal group held for sale	2	759	
Total current assets		**30 542**	**28 004**
Total assets		**126 254**	**124 191**
Equity and liabilities			
Equity			
Share capital	18	1 001	1 001
Treasury shares	18	– 89	– 92
Reserves		73 431	68 228
Issued share capital and reserves attributable to Novartis AG shareholders		**74 343**	**69 137**
Non-controlling interests		129	126
Total equity		**74 472**	**69 263**
Liabilities			
Non-current liabilities			
Financial debts	19	11 242	13 781
Deferred tax liabilities	12	6 904	7 286
Provisions and other non-current liabilities	20	7 268	9 810
Total non-current liabilities		**25 414**	**30 877**
Current liabilities			
Trade payables		6 148	5 593
Financial debts and derivative financial instruments	21	6 776	5 945
Current income tax liabilities		2 459	2 070
Provisions and other current liabilities	22	10 935	10 443
Total current liabilities without disposal group		**26 318**	**24 051**
Liabilities of disposal group held for sale	2	50	
Total current liabilities		**26 368**	**24 051**
Total liabilities		**51 782**	**54 928**
Total equity and liabilities		**126 254**	**124 191**

The accompanying Notes form an integral part of the consolidated financial statements.

[1] Restated to reflect the adoption of revised IAS19 on *Employee Benefits* (see Note 30).

CONSOLIDATED CASH FLOW STATEMENTS

(For the years ended December 31, 2013 and 2012)

	Note	2013 USD millions	Restated 2012[1] USD millions
Net income		**9 292**	**9 383**
Reversal of non-cash items	23.1	7 750	8 073
Dividends received from associated companies and others		446	426
Interest received		40	49
Interest paid		– 609	– 594
Other financial receipts		55	214
Other financial payments		– 22	– 22
Taxes paid		– 2 024	– 2 022
Cash flows before working capital and provision changes		***14 928***	***15 507***
Restructuring payments and other cash payments from provisions		– 1 015	– 1 173
Change in net current assets and other operating cash flow items	23.2	– 739	– 140
Cash flows from operating activities		**13 174**	**14 194**
Purchase of property, plant & equipment		– 3 064	– 2 698
Proceeds from sales of property, plant & equipment		60	92
Purchase of intangible assets		– 507	– 370
Proceeds from sales of intangible assets		154	163
Purchase of financial assets		– 165	– 180
Proceeds from sales of financial assets		315	221
Purchase of other non-current assets		– 39	– 57
Proceeds from sales of other non-current assets		17	18
Acquisitions of interests in associated companies		– 52	
Acquisitions of businesses	23.3	– 42	– 1 741
Purchase of marketable securities and commodities		– 278	– 1 639
Proceeds from sales of marketable securities and commodities		249	516
Cash flows used in investing activities		**– 3 352**	**– 5 675**
Dividends paid to shareholders of Novartis AG		– 6 100	– 6 030
Acquisition of treasury shares		– 2 930	– 505
Proceeds from exercise options and other treasury share transactions		1 693	414
Increase in non-current financial debts		93	1 979
Repayment of non-current financial debts		– 2 022	– 704
Change in current financial debts		596	– 1 737
Impact of change in ownership of consolidated entities		4	– 6
Dividends paid to non-controlling interests and other financing cash flows		– 103	– 86
Cash flows used in financing activities		**– 8 769**	**– 6 675**
Net effect of currency translation on cash and cash equivalents		82	– 1
Net change in cash and cash equivalents		**1 135**	**1 843**
Cash and cash equivalents at January 1		5 552	3 709
Cash and cash equivalents at December 31		**6 687**	**5 552**

The accompanying Notes form an integral part of the consolidated financial statements.

[1] Restated to reflect the adoption of revised IAS19 on *Employee Benefits* (see Note 30).

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.

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 and then translated into USD at the year-end exchange rate with any gain or loss on the net monetary position recorded in the related functional lines in the consolidated income statement.

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 straight-line 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.

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. For Consumer Health, each division is a separate CGU. 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	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	not amortized, indefinite 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

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 on 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 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 post-employment 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 this 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. For surgical equipment this occurs when title and risk and rewards are transferred after installation and any required training has been completed. For surgical equipment leased to customers, revenue representing the net present value of the minimum lease payments is recognized at the commencement of the lease term if the lease term is for the major part of the economic life of the asset or if the payments represent substantially most of its fair value, even if the legal ownership is not transferred. 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. Wholesaler shelf-inventory adjustments are granted to customers based on the existing inventory of a product at the time of decreases in the invoice or contract price of a product or at the point of sale if a price decline is reasonably estimable. 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.

OTHER REVENUE

Royalty income is reported under "Other revenue" in the consolidated income statement and recognized on an accrual basis in accordance with the substance of the relevant agreements.

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.

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

The fair value of Novartis shares, restricted shares, restricted share units (RSU) and American Depositary Receipts (ADRs) and related options granted to associates as compensation is 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. Assumptions are made concerning the forfeiture rate of not meeting the vesting conditions which are adjusted during the vesting period so that at the end of the vesting period there is only a charge for vested amounts. If a participant leaves Novartis, for reasons other than retirement, disability or death, then unvested shares, ADRs, RSUs and share options are forfeited, unless determined otherwise by the Compensation Committee, for example, in connection with a reorganization or divestment.

An option's fair value at grant date is calculated using the trinomial valuation method. Accurately measuring the value of share options is difficult and requires an estimate of factors used in the valuation model. These key factors involve uncertain future events, such as expected dividend yield and expected share price volatility. Expected volatilities are based on those implied from listed warrants on Novartis shares, and – to the extent that equivalent options are not available – a future extrapolation based on historical volatility. Novartis shares, restricted shares, RSUs and ADRs are valued using the market value on the grant date.

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

Non-current assets are classified as assets held for sale 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.

STATUS OF ADOPTION OF SIGNIFICANT NEW OR AMENDED IFRS STANDARDS OR INTERPRETATIONS

The Group introduced the revised IFRS accounting standard IAS 19 on *Employee Benefits* as of January 1, 2013 including the amendment issued in November 2013. The principal impact of this is that the return on pension plan assets and the interest calculated on the defined benefit obligations now use the same interest rate reflecting the current market yield of high-quality corporate bonds. Previously the return on plan assets was calculated based on the higher long-term expected return on assets, so the adoption of the new accounting standard increases the annual cost of post-employment benefits included in "Other Expense" in Corporate. It has also been required to restate for the amortization of previously unrecognized past service credits.

As required by the new standard, the Group's 2012 consolidated financial statements have been retrospectively restated to reflect these changes. For the full year 2012, the impact of these restatements is an additional expense of USD 318 million before tax (USD 235 million after tax), offset by an adjustment of the actuarial losses recognized in consolidated comprehensive income.

Furthermore, the revised IAS 19 requires the immediate recognition of past service costs in the consolidated income statement, which were previously only recognized upon vesting. Accordingly, Novartis has restated its January 1, 2012 and December 31, 2012 consolidated balance sheet so that past service credits of USD 77 million and USD 69 million, net were recognized against other non-current liabilities. The related tax impact amounted to USD 28 million and USD 25 million, respectively.

A tabular reconciliation of the restatement impact of implementing the revised IAS 19 can be found in Note 30.

The following additional new standards and amendments have been adopted by Novartis from January 1, 2013 but have had no significant impact on the Group's consolidated financial statements:

- IFRS 10 *Consolidated Financial Statements.* This requires consolidation of an investee based on control, i.e. when it is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee.
- IFRS 11 *Joint Arrangements*. This requires classification of joint arrangements as either joint operations, where assets, liabilities, revenues and expenses are accounted for proportionally in accordance with the agreement, or as joint ventures, which are accounted for under the equity method.
- IFRS 12 *Disclosures of interests in other entities*. This brings together the disclosure requirements that apply to subsidiaries, associated companies, joint ventures, structured entities and unconsolidated structured entities.
- IFRS 13 *Fair value measurement*. This standard introduces a fair value hierarchy, additional disclosures, a requirement for the fair value of liabilities to be based on the assumption that the liability will be transferred to another party and will remove the requirements to use bid and ask prices for actively quoted financial assets and liabilities.
- Amendment to IAS 1 *Financial statement presentation*. This amendment introduces a requirement to group items presented in "Other comprehensive income" on the basis of whether they are potentially reclassifiable to profit or loss subsequently.

ISSUED IFRS STANDARDS NOT YET EFFECTIVE

The following new IFRS standard will, based on a Novartis analysis, be of significance to the Group, but has not yet been early adopted.

In 2009, 2010 and 2011, IFRS 9 *Financial Instruments* was issued which will substantially change the classification and measurement of financial instruments, hedging requirements and the recognition of certain fair value changes in the consolidated financial statements. Currently, only new requirements on the classification and measurement for financial assets and financial liabilities have been issued. The mandatory effective date for requirements issued as part of IFRS 9 will be determined once the project is closer to completion.

IFRIC 21 *Levies*, an interpretation of IAS 37 *Provisions, Contingent Liabilities and Contingent Assets,* was issued in May 2013 and is required to be adopted on January 1, 2014. The interpretation clarifies that the obligating event giving rise to a liability to pay a levy to a government agency is the activity that triggers the payment.

2. SIGNIFICANT TRANSACTIONS

In 2013, there were no significant acquisitions, business combinations or other significant transactions. The only significant transaction in 2012 was the acquisition of Fougera described below, with further details in Note 24. In 2013 the divestment of the blood transfusion diagnostics unit of the Vaccines and Diagnostics Division was announced and this closed on January 9, 2014.

SIGNIFICANT TRANSACTION IN 2012

Sandoz – Acquisition of Fougera Pharmaceuticals, Inc.

On July 20, 2012, Sandoz completed the acquisition of 100% of Fougera Pharmaceuticals, Inc., a specialty dermatology generics company based in Melville, New York, for USD 1.5 billion in cash. Sandoz acquired Fougera for its strong dermatology development and manufacturing expertise. Fougera employed approximately 700 people.

The final purchase price allocation resulted in net identified assets of USD 0.6 billion (excluding acquired cash) and goodwill of USD 0.9 billion being recognized.

SIGNIFICANT TRANSACTION IN 2014

Divestment of blood transfusion diagnostic 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 estimated pre-tax gain on this transaction, subject to finalization of the accounting, will be approximately USD 0.9 billion. This unit was part of the Novartis Vaccines and Diagnostics Division and was dedicated to increasing transfusion safety worldwide.

In the Group's consolidated balance sheet at December 31, 2013 the unit's assets and liabilities are separately shown as held for sale. Goodwill has been allocated to this disposal group based on the relative fair value of the disposal group and retained portion of the Division. The disposal group consists of the following:

	2013 USD millions
Assets of disposal group classified as held for sale	
Property, plant & equipment	145
Goodwill	267
Intangible assets other than goodwill	91
Deferred tax asset	3
Financial assets	7
Inventories	87
Trade receivables	154
Other current assets	5
Total	**759**

	2013 USD millions
Liabilities of disposal group classified as held for sale	
Trade payables	38
Provisions and other current liabilities	12
Total	**50**

3. SEGMENTATION OF KEY FIGURES 2013 AND 2012

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.

The businesses of Novartis are divided operationally on a worldwide basis into five reporting segments: Pharmaceuticals, Alcon, Sandoz, Vaccines and Diagnostics and Consumer Health. In addition, we separately report Corporate activities. Except for Consumer Health, these segments are managed separately because they research, develop, manufacture, distribute, and sell distinct products which require differing marketing strategies. In the case of Consumer Health, the segment comprises two divisions which are also managed separately, however, neither of these two divisions is material enough to the Group to be disclosed separately as a reporting segment. The reporting segments are as follows:

Pharmaceuticals researches, develops, manufactures, distributes and sells patented prescription medicines and is organized in the following business franchises: Primary Care, consisting of Primary Care medicines and Established Medicines; and Specialty Care, consisting of Ophthalmology, Neuroscience, Integrated Hospital Care, and Critical Care medicines. Novartis Oncology is organized as a business unit, responsible for the global development and marketing of oncology products. The Novartis Oncology Business Unit is not required to be disclosed separately as a segment since it shares common long-term economic perspectives, customers, research, development, production, distribution and regulatory factors with the rest of the division.

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 over-the-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 has activities in 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 specialty areas of Dermatology, Respiratory and Ophthalmics. In Anti-Infectives, Sandoz manufactures active pharmaceutical ingredients and intermediates – mainly antibiotics – for internal use by Retail Generics and for sale to third-party customers. In Biopharmaceuticals, Sandoz develops, manufactures and markets protein- or other biotechnology manufacturing services to other companies, and in Oncology Injectables, Sandoz develops, manufactures and markets cytotoxic products for the hospital market.

Vaccines and Diagnostics consists of two activities: Vaccines and Diagnostics. 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 researches, develops, manufactures, distributes and sells human vaccines worldwide. Diagnostics researched, developed, distributed and sold blood testing and molecular diagnostics products.

Consumer Health consists of two divisions: OTC (over-the-counter medicines) and Animal Health. OTC offers readily available consumer medicine. 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.

3. SEGMENTATION OF KEY FIGURES 2013 AND 2012 (CONTINUED)

	Pharmaceuticals		Alcon	
(In USD millions)	**2013**	**2012**	**2013**	**2012**
Net sales to third parties	**32 214**	**32 153**	**10 496**	**10 225**
Sales to other segments	202	277	50	56
Net sales of segments	**32 416**	**32 430**	**10 546**	**10 281**
Other revenues	497	471	27	53
Cost of goods sold	– 6 655	– 6 578	– 4 900	– 4 618
Gross profit	**26 258**	**26 323**	**5 673**	**5 716**
Marketing & Sales	– 8 514	– 8 568	– 2 452	– 2 462
Research & Development	– 7 242	– 6 918	– 1 042	– 975
General & Administration	– 1 051	– 1 061	– 589	– 510
Other income	699	577	79	49
Other expense	– 774	– 755	– 437	– 353
Operating income	**9 376**	**9 598**	**1 232**	**1 465**
Income from associated companies		– 2		16
Interest expense				
Other financial income and expense				
Income before taxes				
Taxes				
Group net income				
Attributable to:				
Shareholders of Novartis AG				
Non-controlling interests				
Included in net income are:				
Interest income				
Depreciation of property, plant & equipment	– 822	– 825	– 319	– 305
Amortization of intangible assets	– 284	– 324	– 1 999	– 1 926
Impairment charges on property, plant & equipment, net	– 29	– 25	– 4	
Impairment charges on intangible assets, net	– 29	– 211	– 57	– 17
Impairment charges on financial assets	– 16	– 2		
Additions to restructuring provisions	– 88	– 190	– 71	– 23
Equity-based compensation of Novartis and Alcon equity plans	– 610	– 641	– 105	– 113
Total assets	**26 633**	**24 956**	**43 761**	**45 166**
Total liabilities	– 11 209	– 10 673	– 2 659	– 2 578
Total equity	**15 424**	**14 283**	**41 102**	**42 588**
Net debt				
Net operating assets	**15 424**	**14 283**	**41 102**	**42 588**
Included in total assets and total liabilities are:				
Total property, plant & equipment[2]	9 647	8 723	2 396	2 274
Additions to property, plant & equipment[3]	1 755	1 334	523	529
Total goodwill and intangible assets[2]	6 099	6 056	37 133	38 913
Additions to goodwill and intangible assets[3]	299	165	191	130
Total investment in associated companies	2	1		
Additions to investment in associated companies	1			
Total marketable securities, commodities, time deposits and derivative financial instruments				
Financial debts and derivative financial instruments				
Current income tax and deferred tax liabilities				

[1] Restated to reflect the adoption of revised IAS19 on *Employee Benefits* (see Note 30).
[2] Excluding disposal group held for sale
[3] Excluding impact of business combinations

Sandoz		Vaccines and Diagnostics		Consumer Health		Corporate (including eliminations)		Total Group	
2013	2012	2013	2012	2013	2012	2013	Restated 2012[1]	2013	Restated 2012[1]
9 159	**8 702**	**1 987**	**1 858**	**4 064**	**3 735**			**57 920**	**56 673**
294	279	61	44	11	18	– 618	– 674		
9 453	**8 981**	**2 048**	**1 902**	**4 075**	**3 753**	**– 618**	**– 674**	**57 920**	**56 673**
18	12	333	331	36	26		– 5	911	888
– 5 476	– 5 126	– 1 578	– 1 478	– 1 751	– 1 729	752	773	– 19 608	– 18 756
3 995	**3 867**	**803**	**755**	**2 360**	**2 050**	**134**	**94**	**39 223**	**38 805**
– 1 672	– 1 561	– 334	– 324	– 1 577	– 1 442		4	– 14 549	– 14 353
– 787	– 695	– 476	– 453	– 305	– 291			– 9 852	– 9 332
– 374	– 350	– 140	– 136	– 316	– 271	– 590	– 609	– 3 060	– 2 937
106	74	70	23	79	75	334	251	1 367	1 049
– 240	– 244	– 88	– 115	– 63	– 73	– 617	– 499	– 2 219	– 2 039
1 028	**1 091**	**– 165**	**– 250**	**178**	**48**	**– 739**	**– 759**	**10 910**	**11 193**
2	5	1	3			597	530	600	552
								– 683	– 724
								– 92	– 96
								10 735	**10 925**
								– 1 443	– 1 542
								9 292	**9 383**
								9 175	*9 270*
								117	*113*
								34	50
– 307	– 287	– 150	– 135	– 47	– 47	– 110	– 105	– 1 755	– 1 704
– 411	– 368	– 222	– 215	– 56	– 57	– 4	– 4	– 2 976	– 2 894
3	– 3	– 1	– 6	– 32	– 3	– 17	– 2	– 80	– 39
– 20	– 43		– 5	– 8	– 7			– 114	– 283
		– 7	– 1			– 42	– 31	– 65	– 34
– 3	– 28		– 4	– 12	– 24	– 1	– 12	– 175	– 281
– 38	– 41	– 39	– 37	– 56	– 45	– 139	– 126	– 987	– 1 003
20 144	**19 938**	**5 656**	**5 713**	**2 634**	**2 644**	**27 426**	**25 774**	**126 254**	**124 191**
– 3 275	– 3 208	– 793	– 736	– 957	– 883	– 32 889	– 36 850	– 51 782	– 54 928
16 869	**16 730**	**4 863**	**4 977**	**1 677**	**1 761**	**– 5 463**	**– 11 076**	**74 472**	**69 263**
						8 796	11 607	8 796	11 607
16 869	**16 730**	**4 863**	**4 977**	**1 677**	**1 761**	**3 333**	**531**	**83 268**	**80 870**
3 304	3 103	1 584	1 581	453	457	813	801	18 197	16 939
500	462	181	165	79	76	126	188	3 164	2 754
12 640	12 881	2 176	2 724	786	829	33	18	58 867	61 421
31	22	1	33	31	24	17	6	570	380
19	22	1	2			9 203	8 815	9 225	8 840
						54	36	55	36
						9 222	8 119	9 222	8 119
						18 018	19 726	18 018	19 726
						9 363	9 356	9 363	9 356

3. SEGMENTATION OF KEY FIGURES 2013 AND 2012 (CONTINUED)

The following countries accounted for more than 5% of at least one of the respective Group totals for the years ended December 31, 2013 and 2012:

Country	Net sales[1]				Total of selected non-current assets[2]			
USD millions	2013	%	2012	%	2013	%	2012	%
Switzerland	735	1	706	1	37 337	43	37 579	43
United States	18 924	33	18 592	33	30 894	36	31 559	36
Germany	4 090	7	3 797	7	4 323	5	4 242	5
Japan	4 516	8	5 361	9	150		188	
France	2 951	5	2 709	5	309		301	
Other	26 704	46	25 508	45	13 779	16	13 331	16
Group	**57 920**	**100**	**56 673**	**100**	**86 792**	**100**	**87 200**	**100**
Less assets of disposal group held for sale					– 503			
Group excluding disposal group	**57 920**		**56 673**		**86 289**		**87 200**	
Europe	21 078	36	19 708	35	50 582	58	50 566	58
Americas	24 257	42	24 029	42	33 894	39	34 611	40
Asia/Africa/Australasia	12 585	22	12 936	23	2 316	3	2 023	2
Group	**57 920**	**100**	**56 673**	**100**	**86 792**	**100**	**87 200**	**100**
Less assets of disposal group held for sale					– 503			
Group excluding disposal group	**57 920**		**56 673**		**86 289**		**87 200**	

[1] Net sales from operations by location of third party customer.
[2] Total of property, plant and equipment, goodwill, intangible assets and investment in associated companies.

The Group's largest customer accounts for approximately 10% of net sales, and the second and third largest customers account for 9% and 7% of net sales (2012: 10%, 9% and 8% 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 9%, 7% and 5%, respectively, of the Group's trade receivables at December 31, 2013 (2012: 8%, 7% and 6% respectively).

PHARMACEUTICALS BUSINESS FRANCHISE NET SALES

	2013 USD millions	2012 USD millions	Change USD %
Primary Care			
Hypertension medicines			
Diovan	3 524	4 417	– 20
Exforge	1 456	1 352	8
Subtotal Valsartan Group	**4 980**	**5 769**	**– 14**
Tekturna/Rasilez	290	383	– 24
Subtotal Hypertension	**5 270**	**6 152**	**– 14**
Arcapta Neohaler/Onbrez Breezhaler	192	134	43
Seebri Breezhaler	58	3	nm
Ultibro Breezhaler	6		nm
Subtotal Q Family	**256**	**137**	**87**
Galvus	1 200	910	32
Xolair	613	504	22
Total strategic franchise products	**7 339**	**7 703**	**– 5**
Established medicines	1 352	1 532	– 12
Total Primary Care products	**8 691**	**9 235**	**– 6**
Oncology			
Gleevec/Glivec	4 693	4 675	0
Tasigna	1 266	998	27
Subtotal Bcr-Abl franchise	**5 959**	**5 673**	**5**
Sandostatin	1 589	1 512	5
Afinitor/Votubia	1 309	797	64
Exjade	893	870	3
Zometa	600	1 288	– 53
Femara	384	438	– 12
Jakavi	163	30	nm
Proleukin	91	59	54
Other	228	257	– 11
Total Oncology products	**11 216**	**10 924**	**3**
Specialty – Neuroscience			
Gilenya	1 934	1 195	62
Exelon/Exelon Patch	1 032	1 050	– 2
Comtan/Stalevo	401	530	– 24
Extavia	159	159	0
Other	78	62	26
Total strategic franchise products	**3 604**	**2 996**	**20**
Established medicines	444	483	– 8
Total Neuroscience products	**4 048**	**3 479**	**16**

	2013 USD millions	2012 USD millions	Change USD %
Specialty – Ophthalmics			
Lucentis	2 383	2 398	– 1
Other	61	88	– 31
Total Ophthalmics products	**2 444**	**2 486**	**– 2**
Specialty – Integrated Hospital Care (IHC) [1]			
Neoral/Sandimmun	750	821	– 9
Myfortic	637	579	10
Zortress/Certican	249	210	19
Ilaris	119	72	65
Other	429	398	8
Total strategic franchise products	**2 184**	**2 080**	**5**
Everolimus stent drug	247	256	– 4
Established medicines	852	1 160	– 27
Total IHC products	**3 283**	**3 496**	**– 6**
Specialty – Critical Care			
TOBI	387	317	22
Total Critical Care products	**387**	**317**	**22**
Established medicines – additional products			
Voltaren (excl. other divisions)	675	759	– 11
Ritalin/Focalin	594	554	7
Tegretol	342	348	– 2
Trileptal	257	279	– 8
Foradil	205	240	– 15
Other	72	36	100
Total additional products	**2 145**	**2 216**	**– 3**
Total strategic franchise products	**27 174**	**26 506**	**3**
Total established medicines and additional products	5 040	5 647	– 11
Total Division net sales	**32 214**	**32 153**	**0**

[1] Includes Transplantation
nm = not meaningful

The product portfolio of other segments is widely spread in 2013 and 2012.

4. ASSOCIATED COMPANIES

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		Net income statement effect	
	2013 USD millions	2012 USD millions	2013 USD millions	2012 USD millions
Roche Holding AG, Switzerland	8 982	8 588	604	538
Others	243	252	– 4	14
Total	**9 225**	**8 840**	**600**	**552**

	Other comprehensive income effect		Total comprehensive income effect	
	2013 USD millions	2012 USD millions	2013 USD millions	2012 USD millions
Roche Holding AG, Switzerland	– 37	– 152	567	386
Others	5	– 2	1	12
Total	**– 32**	**– 154**	**568**	**398**

ROCHE HOLDING AG

The Group's holding in Roche voting shares was 33.3% at December 31, 2013 and 2012. This investment represents approximately 6.3% of Roche's total outstanding voting and non-voting equity instruments at December 31, 2013 (2012: 6.4%).

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 2014 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, 2012 and for the six months ended June 30, 2013 since full year 2013 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, 2012	31.4	58.2	20.2	27.9
June 30, 2013	25.7	57.1	16.2	27.1

	Revenue CHF billions	Net income CHF billions	Other comprehensive income CHF billions	Total comprehensive income CHF billions
December 31, 2012	47.4	6.9	– 1.9	5.0
June 30, 2013	24.3	4.6	– 0.2	4.4

A purchase price allocation was performed on the basis of publicly available information at the time of acquisition of the investment. The December 31, 2013 balance sheet value allocation is as follows:

	USD millions
Novartis share of Roche's estimated net assets	2 793
Novartis share of re-appraised intangible assets	1 571
Implicit Novartis goodwill	3 200
Current value of share in net identifiable assets and goodwill	**7 564**
Accumulated equity accounting adjustments and translation effects less dividends received	1 418
December 31, 2013 balance sheet value	**8 982**

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 2013, dividends received from Roche in relation to the distribution of its 2012 net income amounted to USD 413 million (2012: USD 396 million in relation with the distribution of its 2011 net income).

The consolidated income statement effects from applying Novartis accounting principles for this investment in 2013 and 2012 are as follows:

	2013 USD millions	2012 USD millions
Novartis share of Roche's estimated current-year consolidated net income	817	709
Prior-year adjustment	– 59	– 18
Amortization of fair value adjustments relating to intangible assets, net of taxes of USD 45 million (2012: USD 45 million)	– 154	– 153
Net income effect	**604**	**538**

The publicly quoted market value of the Novartis interest in Roche (Reuters symbol: RO.S) at December 31, 2013, was USD 14.8 billion (2012: USD 10.9 billion).

5. INTEREST EXPENSE AND OTHER FINANCIAL INCOME AND EXPENSE

INTEREST EXPENSE

	2013 USD millions	2012 USD millions
Interest expense	– 664	– 655
Expense due to discounting long-term liabilities	– 19	– 69
Total interest expense	**– 683**	**– 724**

OTHER FINANCIAL INCOME AND EXPENSE

	2013 USD millions	2012 USD millions
Interest income	34	50
Dividend income	1	1
Net capital gains/(losses) on available-for-sale securities	28	– 6
Net capital (losses)/gains on cash and cash equivalents	– 1	47
Income on forward contracts and options	2	86
Expenses on forward contracts and options		– 129
Impairment of commodities and available-for-sale securities	– 14	
Other financial expense	– 20	– 20
Monetary loss from hyperinflation accounting	– 32	– 19
Currency result, net	– 90	– 106
Total other financial income and expense	**– 92**	**– 96**

6. TAXES

INCOME BEFORE TAXES

	2013 USD millions	Restated 2012[1] USD millions
Switzerland	5 516	5 059
Foreign	5 219	5 866
Total income before taxes	**10 735**	**10 925**

[1] 2012 restated to reflect the adoption of revised IAS19 on *Employee Benefits* (see Note 30).

CURRENT AND DEFERRED INCOME TAX EXPENSE

	2013 USD millions	Restated 2012[1] USD millions
Switzerland	– 507	– 530
Foreign	– 1 764	– 1 806
Total current income tax expense	**– 2 271**	**– 2 336**
Switzerland	157	267
Foreign	671	527
Total deferred tax income	**828**	**794**
Total income tax expense	**– 1 443**	**– 1 542**

[1] 2012 restated to reflect the adoption of revised IAS19 on *Employee Benefits* (see Note 30).

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:

	2013 %	Restated 2012[1] %
Expected tax rate	12.1	13.3
Effect of disallowed expenditures	3.5	2.9
Effect of utilization of tax losses brought forward from prior periods	– 0.1	– 0.1
Effect of income taxed at reduced rates	– 0.1	– 0.3
Effect of tax credits and allowances	– 2.0	– 1.7
Effect of write-off of deferred tax assets	0.3	
Effect of tax rate change on opening balance	– 0.2	
Effect of tax benefits expiring in 2017	– 0.7	– 0.8
Prior year and other items	0.6	0.8
Effective tax rate	**13.4**	**14.1**

[1] 2012 restated to reflect the adoption of revised IAS19 on *Employee Benefits* (see Note 30).

The utilization of tax-loss carry-forwards lowered the tax charge by USD 13 million in 2013 and by USD 11 million in 2012, respectively.

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.

	2013	Restated 2012[1]
Basic earnings per share		
Weighted average number of shares outstanding (in millions)	2 441	2 418
Net income attributable to shareholders of Novartis AG (USD millions)	**9 175**	**9 270**
Basic earnings per share (USD)	**3.76**	**3.83**

[1] Restated to reflect the adoption of revised IAS19 on *Employee Benefits* (see Note 30).

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.

	2013	Restated 2012[1]
Diluted earnings per share		
Weighted average number of shares outstanding (in millions)	2 441	2 418
Adjustment for vesting of restricted shares and dilutive shares from options (in millions)	38	27
Weighted average number of shares for diluted earnings per share (in millions)	2 479	2 445
Net income attributable to shareholders of Novartis AG (USD millions)	**9 175**	**9 270**
Diluted earnings per share (USD)	**3.70**	**3.79**

[1] Restated to reflect the adoption of revised IAS19 on *Employee Benefits* (see Note 30).

In 2013, no options (2012: options equivalent to 77.2 million shares) were excluded from the calculation of diluted EPS as all options were dilutive.

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.

Up to December 31, 2009 the applicable accounting standard required revaluations of previously held equity interests to be recognized in the consolidated statement of comprehensive income. Since January 1, 2010 such revaluations need to be recorded in the consolidated income statement. As no further amounts will be recognized in other comprehensive income, the cumulative amounts previously recorded in this separate reserve have been transferred to consolidated retained earnings as of January 1, 2012.

Furthermore, as part of the implementation of revised IAS 19 on *Employee Benefits*, a retroactive restatement of consolidated retained earnings and reserve for actuarial losses from defined benefit plans has been recognized as explained in more detail in Note 30.

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	Revaluation of previously held equity interests USD millions	Cumulative currency translation effects USD millions	Total value adjustments USD millions
Value adjustments at January 1, 2012 – published	**137**	**– 141**	**– 4 667**	**685**	**3 135**	**– 851**
Reclassification of revaluation of previously held equity interest to retained earnings				– 685		– 685
Restatement due to revised IAS 19 on *Employee Benefits* [1]			200			200
Value adjustments at January 1, 2012 – restated	**137**	**– 141**	**– 4 467**		**3 135**	**– 1 336**
Fair value adjustments on financial instruments	75	41				116
Net actuarial losses from defined benefit plans [1]			– 1 581			– 1 581
Currency translation effects					809	809
Total value adjustments in 2012	**75**	**41**	**– 1 581**		**809**	**– 656**
Value adjustments at December 31, 2012	**212**	**– 100**	**– 6 048**		**3 944**	**– 1 992**
Fair value adjustments on financial instruments	132	41				173
Net actuarial gains from defined benefit plans			1 504			1 504
Currency translation effects					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**

[1] Restated to reflect the adoption of revised IAS19 on *Employee Benefits* (see Note 30).

8.1) The 2013 and 2012 changes in the fair value of financial instruments were as follows:

	Fair value adjustments on marketable securities USD millions	Fair value adjustments on deferred cash flow hedges USD millions	Total USD millions
Fair value adjustments at January 1, 2013	**212**	**– 100**	**112**
Changes in fair value:			
– Available-for-sale marketable securities	3		3
– Available-for-sale financial investments	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**

	Fair value adjustments on marketable securities USD millions	Fair value adjustments on deferred cash flow hedges USD millions	Total USD millions
Fair value adjustments at January 1, 2012	**137**	**– 141**	**– 4**
Changes in fair value:			
– Available-for-sale marketable securities	20		20
– Available-for-sale financial investments	41		41
– Associated companies' movements in comprehensive income	5		5
Realized net losses/(gains) transferred to the consolidated income statement:			
– Marketable securities sold	3		3
– Other financial assets sold	– 19		– 19
Amortized net losses on cash flow hedges transferred to the consolidated income statement		44	44
Impaired marketable securities and other financial assets transferred to the consolidated income statement	35		35
Deferred tax on above items	– 10	– 3	– 13
Fair value adjustments during the year	**75**	**41**	**116**
Fair value adjustments at December 31, 2012	**212**	**– 100**	**112**

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 recognized by associated companies, net of taxes". These amounted to an income of USD 5 million (2012: loss of USD 107 million).

8.3) Cumulative currency translation gains of USD 1 million have been transferred into financial income in 2013 as a result of the liquidation of a subsidiary (2012: USD 6 million).

Currency translation losses of associated companies of USD 43 million were recognized in 2013 (2012: loss of USD 52 million).

8.4) Remeasurements from defined benefit plans arise as follows:

	2013 USD millions	Restated 2012[1] USD millions
Defined benefit pension plans before tax	1 977	– 2 066
Other post-employment benefit plans before tax	163	32
Taxation on above items	– 636	453
Total after tax	**1 504**	**– 1 581**

[1] Restated to reflect the adoption of revised IAS19 on *Employee Benefits* (see Note 30).

9. CHANGES IN CONSOLIDATED EQUITY

9.1) As of January 1, 2012, Novartis has changed its presentation policy to include share premium arising from share transactions in consolidated retained earnings.

9.2) A dividend of CHF 2.30 per share was approved at the 2013 Annual General meeting for the year ended December 31, 2012, resulting in a total dividend payment of USD 6.1 billion in 2013 (2012: the CHF 2.25 per share dividend amounted to USD 6.0 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.

9.3) Share purchases of 40.3 million shares for USD 3.0 billion occurred during 2013 (2012: 8.6 million shares for USD 505 million). This comprises purchases of 33.3 million shares on the first trading line of the SIX Swiss Stock Exchange for USD 2.5 billion (2012: 4.6 million shares for USD 240 million) and purchases of 4.8 million shares from employees for USD 356 million (2012: 4.0 million shares for USD 265 million). An additional 2.2 million shares were acquired on the second trading line for USD 170 million under the share buy-back announced in November 2013 and are intended for cancellation (2012: no share buy-backs). The withholding tax on the second trading line purchases amounts to USD 60 million and will be paid in 2014.

9.4) There was a disposal of 34.3 million shares, mainly due to the exercise of options and delivery of treasury shares, which contributed USD 1.7 billion (2012: 12.0 million shares for USD 416 million). The average share price was significantly below market price due to the low strike price of the exercised options.

9.5) In 2013, no shares were cancelled. In 2012, a total of 39.4 million shares were cancelled. These shares had been repurchased via the second trading line of the SIX Swiss Exchange in 2011.

9.6) 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 2013, 11.5 million shares were transferred to associates as part of equity-based compensation (2012: 10.6 million shares). In addition tax benefits arising from tax deductible amounts exceeding the expense recognized in the income statement are credited to equity.

9.7) During 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 (2012: nil).

9.8) Changes in non-controlling interests in subsidiaries resulted in a reduction in consolidated equity of USD 109 million (2012: reduction of USD 82 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
2013					
Cost					
January 1	**867**	**12 029**	**3 113**	**16 763**	**32 772**
Reclassifications[1]		1 014	– 2 104	1 090	
Additions	79	67	2 609	409	3 164
Disposals and derecognitions[2]	– 2	– 171	– 21	– 648	– 842
Currency translation effects	10	172	42	283	507
December 31	**954**	**13 111**	**3 639**	**17 897**	**35 601**
Accumulated depreciation					
January 1	**– 25**	**– 5 176**	**– 10**	**– 10 622**	**– 15 833**
Depreciation charge	– 4	– 470		– 1 281	– 1 755
Depreciation on disposals and derecognitions[2]		144		568	712
Impairment charge		– 60	– 19	– 50	– 129
Reversal of impairment charge				49	49
Currency translation effects		– 94		– 209	– 303
December 31	**– 29**	**– 5 656**	**– 29**	**– 11 545**	**– 17 259**
Net book value at December 31	**925**	**7 455**	**3 610**	**6 352**	**18 342**
Less assets of disposal group held for sale	– 34	– 82	– 4	– 25	– 145
Net book value excluding disposal group	**891**	**7 373**	**3 606**	**6 327**	**18 197**
Insured value at December 31					**38 106**
Net book value of property, plant & equipment under finance lease contracts					**3**
Commitments for purchases of property, plant & equipment					**1 021**

[1] Reclassifications between various asset categories due to completion of plant and other equipment under construction.
[2] Derecognition of assets which are no longer used and are not considered to have a significant disposal value or other alternative use.

The Group was awarded government grants in the United States for the construction of a manufacturing facility to produce flu vaccines. The contracts included a maximum of USD 330 million of cost reimbursement for construction activities and equipment, of which USD 260 million was received up to December 31, 2013 (2012: USD 240 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 9 million in 2013 (2012: USD 4 million).

	Land USD millions	Buildings USD millions	Construction in progress USD millions	Machinery & other equipment USD millions	Total USD millions
2012					
Cost					
January 1	**831**	**11 429**	**2 164**	**15 511**	**29 935**
Impact of business combinations	10	76	12	28	126
Reclassifications[1]	11	296	– 1 226	919	
Additions	5	105	2 117	527	2 754
Disposals and derecognitions[2]	– 5	– 54	– 14	– 523	– 596
Currency translation effects	15	177	60	301	553
December 31	**867**	**12 029**	**3 113**	**16 763**	**32 772**
Accumulated depreciation					
January 1	**– 22**	**– 4 646**	**– 10**	**– 9 630**	**– 14 308**
Depreciation charge	– 4	– 465		– 1 235	– 1 704
Depreciation on disposals and derecognitions[2]	2	35		462	499
Impairment charge		– 20		– 19	– 39
Currency translation effects	– 1	– 80		– 200	– 281
December 31	**– 25**	**– 5 176**	**– 10**	**– 10 622**	**– 15 833**
Net book value at December 31	**842**	**6 853**	**3 103**	**6 141**	**16 939**
Insured value at December 31					**37 405**
Net book value of property, plant & equipment under finance lease contracts					**1**
Commitments for purchases of property, plant & equipment					**755**

[1] Reclassifications between various asset categories due to completion of plant and other equipment under construction.
[2] Derecognition of assets which are no longer used and are not considered to have a significant disposal value or other alternative use.

11. GOODWILL AND INTANGIBLE ASSET MOVEMENTS

	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	Other intangible assets USD millions	Total of intangible assets other than goodwill USD millions
2013								
Cost								
January 1	**31 605**	**2 857**	**2 980**	**7 079**	**24 412**	**5 960**	**1 303**	**44 591**
Reclassifications[1]		– 447			431		16	
Additions		251		4	170		145	570
Disposals and derecognitions[2]		– 40			– 21		– 10	– 71
Currency translation effects	216	35		21	227		25	308
December 31	**31 821**	**2 656**	**2 980**	**7 104**	**25 219**	**5 960**	**1 479**	**45 398**
Accumulated amortization								
January 1	**– 515**	**– 543**		**– 1 551**	**– 10 750**	**– 476**	**– 940**	**– 14 260**
Amortization charge				– 610	– 2 018	– 239	– 109	– 2 976
Amortization on disposals and derecognitions[2]		39			19		10	68
Impairment charge		– 64			– 28		– 24	– 116
Reversal of impairment charge					2			2
Currency translation effects	– 13	– 15		– 7	– 146		– 16	– 184
December 31	**– 528**	**– 583**		**– 2 168**	**– 12 921**	**– 715**	**– 1 079**	**– 17 466**
Net book value at December 31	**31 293**	**2 073**	**2 980**	**4 936**	**12 298**	**5 245**	**400**	**27 932**
Less assets of disposal group held for sale	– 267				– 91			– 91
Net book value excluding disposal group at December 31	**31 026**	**2 073**	**2 980**	**4 936**	**12 207**	**5 245**	**400**	**27 841**

[1] Reclassifications between various asset categories as a result of product launches of acquired In-Process Research & Development.
[2] 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.

SEGMENTATION OF GOODWILL AND INTANGIBLE ASSETS

The net book values at December 31, 2013 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	Other intangible assets USD millions	Total of intangible assets other than goodwill USD millions
Pharmaceuticals	3 154	1 213		19	1 566		147	2 945
Alcon	17 776	328	2 980	3 884	6 839	5 245	81	19 357
Sandoz	8 928	507		853	2 338		14	3 712
Vaccines and Diagnostics (excluding assets of disposal group held for sale)	933	7		180	955		101	1 243
Consumer Health	228	4			509		45	558
Corporate	7	14					12	26
Total	**31 026**	**2 073**	**2 980**	**4 936**	**12 207**	**5 245**	**400**	**27 841**
Potential impairment charge, if any, if discounted cash flows fell by 5%					6			
Potential impairment charge, if any, if discounted cash flows fell by 10%		3			14			

	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	Other intangible assets USD millions	Total of intangible assets other than goodwill USD millions
2012								
Cost								
January 1	**30 451**	**3 091**	**2 980**	**6 681**	**23 040**	**5 960**	**1 222**	**42 974**
Impact of business combinations	1 026	173		371	521			1 065
Reclassifications[1]		– 574			574			
Additions		175			136		69	380
Disposals and derecognitions[2]		– 34			– 19		– 10	– 63
Currency translation effects	128	26		27	160		22	235
December 31	**31 605**	**2 857**	**2 980**	**7 079**	**24 412**	**5 960**	**1 303**	**44 591**
Accumulated amortization								
January 1	**– 508**	**– 461**		**– 950**	**– 8 535**	**– 238**	**– 821**	**– 11 005**
Amortization charge				– 590	– 1 959	– 238	– 107	– 2 894
Amortization on disposals and derecognitions[2]		34			17		10	61
Impairment charge		– 107			– 172		– 7	– 286
Reversal of impairment charge		3						3
Currency translation effects	– 7	– 12		– 11	– 101		– 15	– 139
December 31	**– 515**	**– 543**		**– 1 551**	**– 10 750**	**– 476**	**– 940**	**– 14 260**
Net book value at December 31	**31 090**	**2 314**	**2 980**	**5 528**	**13 662**	**5 484**	**363**	**30 331**

[1] Reclassifications between various asset categories as a result of product launches of acquired In-Process Research & Development.
[2] 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.

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 %	Vaccines and Diagnostics %	Consumer Health %
Sales growth rate assumptions after forecast period	1.5	3	0 to 2	0.5	0
Discount rate (post-tax)	6	6	6	6	6

In 2013, intangible asset impairment charges of USD 116 million were recognized. These relate to impairment charges of USD 57 million in the Alcon Division and USD 59 million in all other divisions.

In 2012, intangible asset impairment charges of USD 286 million were recognized. These relate to impairment charges of USD 211 million in the Pharmaceuticals Division and USD 75 million in all other divisions.

12. DEFERRED TAX ASSETS AND LIABILITIES

	Property, plant & equipment USD millions	Intangible assets USD millions	Pensions and other benefit obligations of associates USD millions	Inventories 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, 2013	**163**	**301**	**2 113**	**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**	**– 4 959**	**1 684**	**2 242**	**199**	**1 711**	**– 11**	**79**
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**	**141**	**2 029**	**– 22**	**474**
Less deferred tax assets of disposal group held for sale					– 3			– 3
Net deferred tax balance at December 31, 2013 without disposal group	**– 727**	**– 4 526**	**1 067**	**2 512**	**138**	**2 029**	**– 22**	**471**
Gross deferred tax assets at December 31, 2013 without disposal group	**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**		**– 7 270**
Net deferred tax balance at December 31, 2013 without disposal group	**– 727**	**– 4 526**	**1 067**	**2 512**	**138**	**2 029**	**– 22**	**471**
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 without disposal group								**7 375**
Deferred tax liabilities at December 31, 2013								**– 6 904**
Net deferred tax balance at December 31, 2013 without disposal group								**471**
Gross deferred tax assets at January 1, 2012[1]	**157**	**234**	**1 548**	**2 020**	**201**	**2 221**	**– 32**	**6 349**
Gross deferred tax liabilities at January 1, 2012[1]	**– 947**	**– 5 168**	**– 373**	**– 225**	**– 13**	**– 555**		**– 7 281**
Net deferred tax balance at January 1, 2012[1]	**– 790**	**– 4 934**	**1 175**	**1 795**	**188**	**1 666**	**– 32**	**– 932**
At January 1, 2012	**– 790**	**– 4 934**	**1 175**	**1 795**	**188**	**1 666**	**– 32**	**– 932**
Credited/(charged) to income	16	347	56	464	12	– 100	– 1	794
Credited to equity						49		49
Credited/(charged) to other comprehensive income[1]			453			– 11		442
Impact of business combinations	– 3	– 326	29	– 6	5	71		– 230
Other movements	– 10	– 46	– 29	– 11	– 6	36	22	– 44
Net deferred tax balance at December 31, 2012	**– 787**	**– 4 959**	**1 684**	**2 242**	**199**	**1 711**	**– 11**	**79**
Gross deferred tax assets at December 31, 2012	**163**	**301**	**2 113**	**2 689**	**215**	**2 258**	**– 11**	**7 728**
Gross deferred tax liabilities at December 31, 2012	**– 950**	**– 5 260**	**– 429**	**– 447**	**– 16**	**– 547**		**– 7 649**
Net deferred tax balance at December 31, 2012	**– 787**	**– 4 959**	**1 684**	**2 242**	**199**	**1 711**	**– 11**	**79**
After offsetting USD 363 million of deferred tax assets and liabilities within the same tax jurisdiction the balance amounts to:								
Deferred tax assets at December 31, 2012								**7 365**
Deferred tax liabilities at December 31, 2012								**– 7 286**
Net deferred tax balance at December 31, 2012								**79**

[1] Restated to reflect the adoption of revised IAS19 on *Employee Benefits* (see Note 30).

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 3.2 billion (2012: USD 3.3 billion) and deferred tax liabilities of USD 6.4 billion (2012: USD 6.9 billion) are expected to have an impact on current taxes payable after more than twelve months.

At December 31, 2013, unremitted earnings of USD 48 billion (2012: USD 45 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.

	2013 USD millions	2012 USD millions
Temporary differences on which no deferred tax has been provided as they are permanent in nature related to:		
– Investments in subsidiaries	6 818	5 777
– Goodwill from acquisitions	– 30 279	– 26 097

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	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**

In 2013, USD 181 million (2012: USD 75 million) of tax-loss carry-forwards expired.

	Not capitalized USD millions	Capitalized USD millions	2012 total USD millions
One year	178	28	206
Two years	175	23	198
Three years	76	61	137
Four years	78	26	104
Five years	116	32	148
More than five years	268	1 010	1 278
Total	**891**	**1 180**	**2 071**

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

	2013 USD millions	2012 USD millions
Available-for-sale long-term financial investments	876	674
Long-term loans and receivables, advances and security deposits	654	443
Total financial assets	**1 530**	**1 117**
Less financial assets of disposal group held for sale	– 7	
Total financial assets excluding disposal group	**1 523**	**1 117**

OTHER NON-CURRENT ASSETS

	2013 USD millions	2012 USD millions
Deferred compensation plans	375	315
Prepaid post-employment benefit plans	42	55
Other non-current assets	108	135
Total other non-current assets	**525**	**505**

14. INVENTORIES

	2013 USD millions	2012 USD millions
Raw material, consumables	954	955
Finished products	6 400	5 789
Total inventories	**7 354**	**6 744**
Less assets of disposal group held for sale	– 87	
Total inventories excluding disposal group	**7 267**	**6 744**

The amount of inventory recognized as an expense in "Cost of goods sold" in the consolidated income statements during 2013 amounted to USD 13.7 billion (2012: USD 12.9 billion).

The following summarizes movements in inventory write-downs deducted from inventory categories. Reversals of inventory provisions 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.

	2013 USD millions	2012 USD millions
January 1	**– 904**	**– 741**
Impact of business combinations		– 19
Inventory write-downs charged to the consolidated income statement	– 1 439	– 1 430
Utilization of inventory provisions	882	585
Reversal of inventory provisions	474	723
Currency translation effects	3	– 22
December 31	**– 984**	**– 904**

15. TRADE RECEIVABLES

	2013 USD millions	2012 USD millions
Total gross trade receivables	10 252	10 268
Provisions for doubtful trade receivables	– 196	– 217
Total trade receivables, net	**10 056**	**10 051**
Less assets of disposal group held for sale	– 154	
Total trade receivables excluding disposal group, net	**9 902**	**10 051**

The following table summarizes the movement in the provision for doubtful trade receivables:

	2013 USD millions	2012 USD millions
January 1	**– 217**	**– 219**
Impact of business combinations		– 1
Provisions for doubtful trade receivables charged to the consolidated income statement	– 98	– 107
Utilization or reversal of provisions for doubtful trade receivables	120	111
Currency translation effects	– 1	– 1
December 31	**– 196**	**– 217**

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:

	2013 USD millions	2012 USD millions
Not overdue	8 650	8 584
Past due for not more than one month	509	552
Past due for more than one month but less than three months	303	321
Past due for more than three months but less than six months	259	301
Past due for more than six months but less than one year	263	205
Past due for more than one year	268	305
Provisions for doubtful trade receivables	– 196	– 217
Total trade receivables, net	**10 056**	**10 051**
Less assets of disposal group held for sale	– 154	
Total trade receivables excluding disposal group, net	**9 902**	**10 051**

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. Substantially all 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, 2013 and 2012 is as follows:

ITALY

	2013 USD millions	2012 USD millions
Gross trade receivables at December 31	636	712
Past due for more than one year at December 31	55	68
Provision at December 31	43	41

SPAIN

	2013 USD millions	2012 USD millions
Gross trade receivables at December 31	563	435
Past due for more than one year at December 31	111	6
Provision at December 31	22	5

The Government of Spain has established a plan, known as ICO 2, to help repay debts owed by local Spanish governmental authorities. A significant portion of the amounts due to Novartis from Spain that are past due for more than one year have been accepted into this plan. It is intended that payments will be made from this plan in 2014.

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:

Currency	2013 USD millions	2012 USD millions
CHF	235	307
EUR	2 401	2 482
GBP	223	136
JPY	1 464	1 765
USD	2 977	2 650
Other	2 756	2 711
Total trade receivables, net	**10 056**	**10 051**
Less assets of disposal group held for sale	– 154	
Total trade receivables excluding disposal group, net	**9 902**	**10 051**

16. MARKETABLE SECURITIES, COMMODITIES, TIME DEPOSITS, DERIVATIVE FINANCIAL INSTRUMENTS AND CASH AND CASH EQUIVALENTS

MARKETABLE SECURITIES, COMMODITIES, TIME DEPOSITS AND DERIVATIVE FINANCIAL INSTRUMENTS

	2013 USD millions	2012 USD millions
Debt securities	323	1 084
Equity securities	47	68
Fund investments	11	23
Total available-for-sale marketable securities	**381**	**1 175**
Commodities	97	
Time deposits with original maturity more than 90 days	1 931	1 240
Derivative financial instruments	121	140
Accrued interest on debt securities and time deposits	5	12
Total marketable securities, commodities, time deposits and derivative financial instruments	**2 535**	**2 567**

At December 31, 2013 all debt securities are denominated in USD except for USD 1 million in CHF (2012: USD 645 million) and USD 26 million in EUR (2012: USD 26 million), respectively.

CASH AND CASH EQUIVALENTS

	2013 USD millions	2012 USD millions
Current accounts	3 995	2 323
Time deposits and short-term investments[1] with original maturity less than 90 days	2 692	3 229
Total cash and cash equivalents	**6 687**	**5 552**

[1] 2012 contains USD 79 million which covers a guarantee and so it was restricted in use.

17. OTHER CURRENT ASSETS

	2013 USD millions	2012 USD millions
VAT receivable	1 223	1 250
Withholding tax recoverable	107	167
Income tax receivables	265	
Reimbursements from insurers	145	50
Prepaid expenses		
– Third parties	671	602
– Associated companies	3	6
Other receivables		
– Third parties	978	1 007
– Associated companies	5	8
Total other current assets	**3 397**	**3 090**
Less assets of disposal group held for sale	– 5	
Total other current assets excluding disposal group	**3 392**	**3 090**

18. DETAILS OF SHARES AND SHARE CAPITAL MOVEMENTS

	Number of shares[1]				
	Dec 31, 2011	Movement in year	Dec 31, 2012	Movement in year	Dec 31, 2013
Total Novartis shares	2 745 623 000	– 39 430 000	2 706 193 000		2 706 193 000
Total treasury shares	– 338 929 143	53 356 317	– 285 572 826	5 464 134	– 280 108 692
Total outstanding shares	**2 406 693 857**	**13 926 317**	**2 420 620 174**	**5 464 134**	**2 426 084 308**
	USD millions	USD millions	USD millions	USD millions	USD millions
Share capital	1 016	– 15	1 001		1 001
Treasury shares	– 121	29	– 92	3	– 89
Outstanding share capital	**895**	**14**	**909**	**3**	**912**

[1] All shares are registered, authorized, issued and fully paid. All are voting shares and, except for 115 612 073 treasury shares at December 31, 2013 (2012: 99 859 750), are dividend bearing.

In 2013, outstanding shares have increased by 5.5 million shares (2012: 13.9 million shares).

The net increase consists of 11.5 million treasury shares, which were transferred to associates as part of equity based compensation (2012: 10.6 million shares) and the delivery of 34.3 million treasury shares, mainly due to options being exercised (2012: 12.0 million shares).

Furthermore, on November 22, 2013, Novartis announced a share buy-back on the second trading line up to an amount of USD 5.0 billion spread over two years. The share buy-back is based on the decision made at the 2008 Annual General Meeting for a share buy-back program of up to CHF 10.0 billion, of which CHF 7.5 billion is still available. As of December 31, 2013, 2.2 million shares have been purchased under this buy-back (2012: nil). Additionally, 33.3 million shares were purchased on the first trading line (2012: 4.6 million shares) and 4.8 million shares were acquired from associates (2012: 4.0 million shares).

In 2012, the 39.4 million shares from the last buy-back were cancelled. Shares acquired under the new share buy-back are also subject to cancellation.

There are outstanding written call options on Novartis shares of 38 million originally issued as part of the share-based compensation of 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 54.78 and they have contractual lives of up to 10 years.

19. NON-CURRENT FINANCIAL DEBTS

	2013 USD millions	2012 USD millions
Straight bonds	12 909	14 783
Liabilities to banks and other financial institutions [1]	919	1 004
Finance lease obligations	4	3
Total (including current portion of non-current financial debt)	**13 832**	**15 790**
Less current portion of non-current financial debt	– 2 590	– 2 009
Total non-current financial debts	**11 242**	**13 781**
Straight bonds		
3.625% CHF 800 million bond 2008/2015 of Novartis AG, Basel, Switzerland, issued at 100.35%	896	869
5.125% USD 3 000 million bond 2009/2019 of Novartis Securities Investment Ltd., Hamilton, Bermuda, issued at 99.822%	2 989	2 988
4.125% USD 2 000 million bond 2009/2014 of Novartis Capital Corporation, New York, United States, issued at 99.897%	2 000	1 998
4.25% EUR 1 500 million bond 2009/2016 of Novartis Finance S.A., Luxembourg, Luxembourg, issued at 99.757%	2 064	1 974
1.9% USD 2 000 million bond 2010/2013 of Novartis Capital Corporation, New York, United States, issued at 99.867%		1 999
2.9% USD 2 000 million bond 2010/2015 of Novartis Capital Corporation, New York, United States, issued at 99.522%	1 996	1 993
4.4% USD 1 000 million bond 2010/2020 of Novartis Capital Corporation, New York, United States, issued at 99.237%	992	991
2.4% USD 1 500 million bond 2012/2022 of Novartis Capital Corporation, New York, United States, issued at 99.225%	1 484	1 483
3.7% USD 500 million bond 2012/2042 of Novartis Capital Corporation, New York, United States, issued at 98.325%	488	488
Total straight bonds	**12 909**	**14 783**

[1] Average interest rate 0.8% (2012: 0.8%)

		2013 USD millions	2012 USD millions
Breakdown by maturity	2013		2 009
	2014	2 590	2 713
	2015	3 098	3 110
	2016	2 085	1 987
	2017	9	19
	2018	9	1
	After 2018	6 041	5 951
Total		**13 832**	**15 790**

		2013 USD millions	2012 USD millions
Breakdown by currency	USD	9 953	11 943
	EUR	2 141	2 043
	JPY	762	929
	CHF	896	869
	Others	80	6
Total		**13 832**	**15 790**

Fair value comparison	2013 Balance sheet USD millions	2013 Fair values USD millions	2012 Balance sheet USD millions	2012 Fair values USD millions
Straight bonds	12 909	13 547	14 783	16 130
Others	923	923	1 007	1 007
Total	**13 832**	**14 470**	**15 790**	**17 137**

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.

Collateralized non-current financial debt and pledged assets	2013 USD millions	2012 USD millions
Total amount of collateralized non-current financial debts	7	12
Total net book value of property, plant & equipment pledged as collateral for non-current financial debts	139	136

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 77% at December 31, 2013, and 80% at the end of 2012.

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 2013 was 3.3% (2012: 2.9%).

20. PROVISIONS AND OTHER NON-CURRENT LIABILITIES

	2013 USD millions	Restated 2012[1] USD millions
Accrued liability for employee benefits:		
– Defined benefit pension plans	3 407	5 297
– Other long-term employee benefits and deferred compensation	557	631
– Other post-employment benefits	860	1 034
Environmental remediation provisions	961	1 001
Provisions for product liabilities, governmental investigations and other legal matters	463	630
Contingent consideration	460	573
Other non-current liabilities	560	644
Total	**7 268**	**9 810**

[1] Restated to reflect the adoption of revised IAS19 on *Employee Benefits* (see Note 30).

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, 2013 totals USD 1.1 billion (2012: USD 1.1 billion) of which USD 100 million (2012: USD 119 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 2013 and 2012:

	2013 USD millions	2012 USD millions
January 1	**1 120**	**1 118**
Cash payments	– 68	– 30
Releases	– 19	– 39
Interest expense arising from discounting provisions		33
Additions	2	10
Currency translation effects	26	28
December 31	**1 061**	**1 120**
Less current liability	– 100	– 119
Non-current environmental remediation provisions at December 31	**961**	**1 001**

The expected timing of the related cash outflows as of December 31, 2013 is currently projected as follows:

	Expected cash outflows USD millions
Due within two years	188
Due later than two years, but less than five years	219
Due later than five years but less than ten years	505
Due after ten years	149
Total environmental remediation liability provisions	**1 061**

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. 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 where there is a probable potential cash outflow. Such potential cash outflows 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. 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.

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. 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 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 were concluded in 2013.

INVESTIGATIONS AND RELATED LITIGATIONS

Southern District of New York (SDNY) marketing practices investigation and litigation

In 2011, Novartis Pharmaceuticals Corporation (NPC) received a subpoena from the United States Attorney's Office (USAO) for the SDNY requesting the production of documents relating to marketing practices, including the remuneration of healthcare providers, in connection with three NPC products (*Lotrel*, *Starlix* and *Valturna*). The investigation is civil and criminal in nature. On April 26, 2013, the US government brought a civil complaint in intervention to an individual *qui tam* action against NPC in the United States District Court (USDC) for the SDNY which is related to the above investigation, asserting claims under the federal False Claims Act and under common law, claiming violations of the federal anti-kickback statute with respect to speaker programs allegedly serving as mechanisms to provide kickbacks to healthcare professionals, seeking unspecified damages, which according to the complaint are "substantial", treble damages and civil penalties. On August 26, 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*. NPC vigorously 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 2012, NPC received a civil investigative demand (CID) from the USAO for the SDNY requesting information regarding its interactions with certain specialty pharmacies concerning certain NPC products. The investigation is civil in nature. On April 23, 2013, the US government brought a civil complaint in intervention to a *qui tam* action against NPC in the USDC for the SDNY which is related to the above investigation, asserting claims under the federal False Claims Act and under common law claiming violations of the federal anti-kickback statute with respect to alleged contractual discounts and rebates with pharmacies for *Myfortic*, seeking unspecified damages, which according to the complaint are "substantial", treble damages and civil penalties of USD 11,000 per incident as well as disgorgement of Novartis profits from the alleged unlawful conduct. On January 8, 2014, the USAO for the SDNY filed an amended civil complaint in intervention asserting additional federal anti-kickback statute claims as to NPC's relationships with another specialty pharmacy, Bioscrip, Inc., involving *Exjade*. The amended complaint seeks unspecified "substantial" damages, treble damages and civil penalties of USD 11,000 per incident as well as disgorgement of Novartis profits from the alleged unlawful conduct. On that same day, the States of New York, Georgia, Illinois, Indiana, Michigan, Maryland, New Jersey, Oklahoma and Wisconsin filed a joint complaint in intervention asserting similar claims relating to *Exjade*. On the next day, the State of California filed its own complaint asserting similar claims relating to *Exjade*. NPC vigorously contests the government claims regarding *Myfortic* and *Exjade*, 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 July 2013, NPC received a 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.

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. Sandoz France is cooperating with the EC. No follow-up requests have been received from the EC so far.

Italy *Lucentis*/Avastin® investigation
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 prevent the commercialization of Avastin® for ophthalmic use and preserve the market position of *Lucentis* in Italy. On October 25, 2013, the ICA issued its Statement of Objections containing the ICA's preliminary view that there was a concertation between Novartis and Roche (Genentech) aimed at maximizing *Lucentis* sales to the detriment of Avastin®. Novartis intends to vigorously defend the allegations.

Japan investigation
In April 2013, Novartis Pharma K.K. (NPKK) launched a comprehensive investigation with external specialists into allegations of an undisclosed conflict of interest related to Japanese post-registration researcher initiated valsartan trials. The investigation identified that two former employees of NPKK were not appropriately disclosed as NPKK employees in the trial publications for 5 studies. The Japanese Ministry of Health, Labor and Welfare (MHLW) subsequently established a Committee to investigate the facts surrounding this case, and in September 2013, the MHLW published a draft 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.

On January 9, 2014, the MHLW filed a criminal complaint which has the effect of transferring the investigation of the Japanese researcher initiated valsartan trials to the prosecutor's office for criminal investigation of NPKK. Novartis is cooperating fully with the authorities.

On January 17, 2014, allegations of inappropriate involvement of NPKK representatives in a nilotinib researcher initiated study were raised in the media. Novartis is conducting a comprehensive investigation into such allegations.

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 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 its investigation.

PRODUCT LIABILITY MATTERS
***Zometa/Aredia* product liability litigation**
NPC is a defendant in approximately 592 cases brought in US courts, in which plaintiffs claim to have experienced osteonecrosis of the jaw after treatment with *Zometa* or *Aredia*, which are used to treat patients whose cancer has spread to the bones. The majority of US cases were initially centralized in two venues – a federal multidistrict proceeding for pre-trial proceedings and a separate state court proceeding in New Jersey for pre-trial proceedings and trial. Cases from the federal

multidistrict proceeding are tried in the plaintiffs' home jurisdictions after completion of pre-trial proceedings. As of April 2011, new federal cases are no longer transferred to the multidistrict proceeding but proceed in the federal court in which they were filed. From the outset of the litigation, approximately 269 cases have been dismissed on pre-trial summary judgment or other dismissal motion, of which 15 remain on appeal.

Through the end of the fourth quarter of 2013, judgment has been entered in favor of NPC in seven jury trials, six of which are now 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 0.8 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 in 2014. Individual case results, which can depend on the particular facts of a given case, may not necessarily be predictive of results in 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*, most of which are in New Jersey state or federal court coordinated with claims against other bisphosphonate manufacturers and claim atypical femur fracture injuries. One claimant alleges other bodily injuries. 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 387 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®, caused personal injuries including tardive dyskinesia. Sandoz denies the allegations and is vigorously defending the cases.

***Tekturna/Rasilez/Valturna* product liability litigation**

NPC and certain other Novartis affiliates are defendants in ten individual lawsuits pending in the USDC for the District of New Jersey (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

NPKK is a respondent and counter-claimant in an arbitration proceeding commenced by Sanofi K.K. (Sanofi) relating to the termination of a co-promotion agreement in Japan of *Equa* (*Galvus*), which is used to treat type 2 diabetes. In November 2013, Sanofi filed a request for an award of approximately USD 416 million, together with a request for payment of related legal costs and interest. 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, NPC and ALI, 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 2013, following appellate review, judgment was entered in favor of Sandoz on the claims against it in Kentucky. Also in 2013, settlements have been obtained in the cases brought by the states of Idaho (NPC), Mississippi (NPC), Alaska (NPC), Louisiana (Sandoz, NPC and ALI), Alabama (ALI), and Kansas (Sandoz), each for amounts that are not material to Novartis. Actions brought by the states of Illinois, Kansas, Mississippi, Utah and Wisconsin remain pending against one or more Novartis companies. At least one trial is scheduled for 2014. 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®. The same relator filed a similar suit in Texas state court that was voluntarily dismissed as part of a settlement in 2012. The federal government and several states declined to intervene in the EDPA action. In the second quarter of 2013, the court granted in part and denied in part NPC's motion to dismiss the relator's amended complaint, allowing the relator to file a more limited second amended complaint asserting claims under the federal False Claims Act solely as to certain allegations of off-label marketing, as well as kickback and off-label claims under the laws of six states with certain time limitations. The court subsequently ruled that the relator could reinstate claims under the laws of two additional states. 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 seeking certain information regarding the marketing and promotion of *Xolair*. The investigation was prompted by a relator's *qui tam* action. The investigation was

closed in 2011, and the federal and various state governments declined to intervene and join in that action, which the relator then dismissed without prejudice. In 2012, approximately six years after her filing of the original *qui tam* action, the relator re-filed her complaint in the USDC for the District of Massachusetts (DMA). In 2014, NPC and Novartis Corporation were served with that complaint, which names NPC, Novartis Corporation and Novartis AG as well as various Roche and Genentech entities as defendants. The action asserts various federal False Claims Act claims, as well as similar claims under the laws of 27 states and the District of Columbia, relating to certain alleged improper marketing practices involving *Xolair*. No government entity has intervened in the current action. Novartis denies the allegations and intends to vigorously contest the action, which is at the earliest stage.

Solodyn® antitrust class actions and FTC investigation

Since July 22, 2013, thirteen class action complaints have been filed against manufacturers of the brand drug Solodyn® and its generic equivalents, including Sandoz Inc. The cases are currently pending in the USDC for the EDPA, the DMA and the District of Arizona. 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, unspecified monetary damages and equitable relief. 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 intends to vigorously defend 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 one current and one former officer 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 intends to vigorously defend 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, in California Superior Court, in the USDC for the DNJ, in the USDC for the Eastern District of New York and in the USDC for the Northern District of California, generally claiming 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. Between November 2012 and December 2013, four putative consumer fraud class action litigations were commenced in the Southern District of Illinois, the Eastern District of Missouri and the Southern District of Florida claiming that Alcon (and in two cases Sandoz) 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. These cases are being vigorously defended, both on the merits and with respect to class certification.

INTELLECTUAL PROPERTY LITIGATION

Novartis companies are involved in legal proceedings challenging the scope and/or validity of the patents on their products. In addition, Novartis companies are also involved in legal proceedings challenging third party patents and/or defending infringement proceedings relating to third party intellectual property rights. The inherent unpredictability of patent litigation means that there can be no assurances as to the ultimate outcome of these proceedings. A negative result in any such proceeding could potentially adversely affect the ability of the Novartis company concerned to sell its products or require the payment of substantial damages or royalties.

CONCLUDED LEGAL MATTERS

Elidel® product liability litigation

NPC and other Novartis subsidiaries were defendants in more than 20 cases brought in US courts in which plaintiffs claimed to have experienced injuries, mainly various types of cancer, after having been treated with Elidel®, a medicine for atopic dermatitis. These cases were resolved in the second quarter of 2013 for an amount that is not material to Novartis.

WDNY investigation

In 2010, NPC became aware of an investigation by the USAO for the WDNY into informed consent issues relating to clinical trials in China and into marketing practices, including the remuneration of healthcare providers, in connection with a number of Novartis products. NPC cooperated with the investigation which was civil in nature. In the fourth quarter of 2012, Novartis learned that the government was not pursuing further informed consent issues relating to clinical trials in China. The government continued to investigate marketing practices, including marketing practices concerning *Zometa*. In October 2013, the government informed NPC that it no longer was going to pursue this investigation and that the underlying *qui tam* actions were dismissed.

20. PROVISIONS AND OTHER NON-CURRENT LIABILITIES (CONTINUED)

Hormone Replacement Therapy product liability litigation
As of 2013, NPC and other Novartis subsidiaries were defendants, along with various other pharmaceutical companies in the US, in numerous cases brought in the US courts in which plaintiffs claimed to have been injured by hormone replacement therapy products. In October 2013, all cases were resolved on behalf of the Novartis companies for an amount that is not material to Novartis.

EC fentanyl investigation
In 2010, the EC conducted dawn raids at the Dutch and German offices of Sandoz. On October 18, 2011, the EC initiated proceedings against Sandoz BV, Novartis AG, Janssen-Cilag BV and Johnson & Johnson to assess whether contractual arrangements among Janssen-Cilag BV and Sandoz subsidiaries in the Netherlands may have had the object or effect of hindering the entry of generic fentanyl patches in the Netherlands. On December 10, 2013, the EC issued a decision finding that a 2005 agreement between Janssen-Cilag BV and Sandoz subsidiaries in the Netherlands related to the co-promotion of fentanyl in the Netherlands violated EU competition law and imposed a fine equivalent to USD 7.4 million on Sandoz BV and Novartis AG.

DMA investigation
In the first quarter of 2013, Novartis Vaccines and Diagnostics, Inc. (NVD) received a subpoena from the USAO for the DMA requesting the production of documents relating to alleged quality issues at NVD's Emeryville and NPC's Vacaville facilities in California in relation to antigens. NVD cooperated with the investigation which was civil and criminal in nature. In January 2014, the USAO decided to close its investigation without criminal charges or civil sanctions.

SUMMARY OF PRODUCT LIABILITY, GOVERNMENTAL INVESTIGATIONS AND OTHER LEGAL MATTERS PROVISION MOVEMENTS

	2013 USD millions	2012 USD millions
January 1	**998**	**1 182**
Impact of business combinations		60
Cash payments	– 373	– 362
Releases of provisions	– 184	– 262
Additions to provisions	499	389
Currency translation effects	– 16	– 9
December 31	**924**	**998**
Less current portion	– 461	– 368
Non-current product liabilities, governmental investigations and other legal matters provisions at December 31	**463**	**630**

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

	2013 USD millions	2012 USD millions
Interest-bearing accounts of associates	1 718	1 541
Bank and other financial debt	1 323	1 270
Commercial paper	1 042	963
Current portion of non-current financial debt	2 590	2 009
Fair value of derivative financial instruments	103	162
Total current financial debt	**6 776**	**5 945**

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 2.3% in 2013 and 2.1% in 2012.

22. PROVISIONS AND OTHER CURRENT LIABILITIES

	2013 USD millions	2012 USD millions
Taxes other than income taxes	624	561
Restructuring provisions	174	221
Accrued expenses for goods and services received but not invoiced	553	576
Accruals for royalties	468	452
Provisions for revenue deductions	4 182	4 072
Accruals for compensation and benefits including social security	2 386	2 222
Environmental remediation liabilities	100	119
Deferred income	70	71
Provision for product liabilities, governmental investigations and other legal matters	461	368
Accrued share-based payments	255	262
Contingent considerations	112	
Other payables	1 562	1 519
Total provisions and other current liabilities	**10 947**	**10 443**
Less provisions and other current liabilities of disposal group held for sale	– 12	
Total provisions and other current liabilities, excluding disposal group	**10 935**	**10 443**

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:

	2013 USD millions	2012 USD millions
January 1	**4 072**	**3 742**
Impact of business combinations		174
Additions	13 095	12 150
Payments/utilizations	– 12 762	– 11 938
Changes in offset against gross trade receivables	– 224	– 90
Currency translation effects	1	34
December 31	**4 182**	**4 072**

RESTRUCTURING PROVISION MOVEMENTS

	USD millions
January 1, 2012	**349**
Additions	281
Cash payments	– 299
Releases	– 115
Currency translation effects	5
December 31, 2012	**221**
Additions	175
Cash payments	– 134
Releases	– 47
Transfer	– 42
Currency translation effects	1
December 31, 2013	**174**

In 2013, additions to provisions of USD 175 million were mainly related to reorganizations of the Pharmaceuticals research and development activities and the integration of Alcon.

In 2012, additions to provisions of USD 281 million were incurred in the Pharmaceuticals Division Marketing & Sales organization in conjunction with the anticipation of patent expirations; in Alcon as a result of continuous integration and in Sandoz due to the integration of the acquired company Fougera. Other Group initiatives to further simplify the organization were mainly related to Consumer Health and Sandoz.

The releases to income in 2013 and 2012 of USD 47 million and USD 115 million, respectively, were mainly due to settlement of liabilities at lower amounts than originally anticipated.

	Third party costs[1]		Termination costs		Additions to provision		Number of employees affected	
Restructuring initiatives	2013 USD millions	2012 USD millions	2013 USD millions	2012 USD millions	2013 USD millions	2012 USD millions	2013	2012
Pharmaceuticals Research & Development	35		25		60		710	
Pharmaceuticals Marketing & Sales organization	2	9	20	181	22	190	380	1 850
Alcon integration	1	1	53	31	54	32	275	320
Fougera integration		3	1	15	1	18	100	140
Various Group initiatives to simplify organizational structure – including manufacturing sites	8	13	30	28	38	41	830	150
Total	**46**	**26**	**129**	**255**	**175**	**281**	**2 295**	**2 460**

[1] 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

	2013 USD millions	Restated 2012[1] USD millions
Taxes	1 443	1 542
Depreciation, amortization and impairments on		
Property, plant & equipment	1 835	1 743
Intangible assets	3 090	3 177
Financial assets	65	34
Income from associated companies	– 600	– 552
Gains on disposal of property, plant & equipment, intangible, financial and other non-current assets, net	– 395	– 294
Equity-settled compensation expense	730	746
Change in provisions and other non-current liabilities	807	857
Net financial income	775	820
Total	**7 750**	**8 073**

[1] Restated to reflect the adoption of revised IAS19 on *Employee Benefits* (see Note 30).

23.2) CASH FLOWS FROM CHANGES IN WORKING CAPITAL AND OTHER OPERATING ITEMS INCLUDED IN OPERATING CASH FLOW

	2013 USD millions	2012 USD millions
(Increase) in inventories	– 653	– 701
(Increase)/decrease in trade receivables	– 411	369
Increase in trade payables	502	515
Change in other net current assets and other operating cash flow items	– 177	– 323
Total	**– 739**	**– 140**

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 and other smaller transactions:

	2012 Acquisitions USD millions
Property, plant & equipment	– 126
Currently marketed products	– 521
Acquired research & development	– 173
Technologies	– 371
Financial and other assets including deferred tax assets	– 165
Inventories	– 88
Trade receivables and other current assets	– 90
Marketable securities and cash	– 167
Current and non-current financial debts	4
Trade payables and other liabilities including deferred tax liabilities	747
Net identifiable assets acquired	**– 950**
Acquired liquidity	167
Non-controlling interest	29
Fair value of previously held equity interests	22
Sub-total	**– 732**
Goodwill	– 1 026
Deferred consideration (including payment of contingent considerations)	17
Net cash flow	**– 1 741**

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.

24. ACQUISITIONS OF BUSINESSES

ASSETS AND LIABILITIES ARISING FROM ACQUISITIONS

Fair value	2012 USD millions
Property, plant & equipment	126
Currently marketed products	521
Acquired research & development	173
Technologies	371
Financial and other assets including deferred tax assets	165
Inventories	88
Trade receivables and other current assets	90
Marketable securities and cash	167
Current and non-current financial debts	– 4
Trade payables and other liabilities including deferred tax liabilities	– 747
Net identifiable assets acquired	**950**
Acquired liquidity	– 167
Non-controlling interest	– 29
Goodwill	1 026
Net assets recognized as a result of business combinations	**1 780**

Note 2 details significant acquisition of businesses. There were no significant acquisitions in 2013. In 2012, goodwill arising out of the acquisitions reflects mainly the value of future products and the acquired assembled workforce.

25. POST-EMPLOYMENT BENEFITS OF 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. 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.

25. POST-EMPLOYMENT BENEFITS OF ASSOCIATES (CONTINUED)

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.

The following tables are a summary of the funded and unfunded defined benefit obligation for pension and other post-employment benefit plans of associates at December 31, 2013 and 2012:

	Pension plans		Other post-employment benefit plans	
	2013 USD millions	Restated 2012[1] USD millions	2013 USD millions	Restated 2012[1] USD millions
Benefit obligation at January 1	**25 503**	**21 730**	**1 271**	**1 241**
Current service cost	478	395	48	44
Interest cost	580	665	46	48
Past service costs and settlements	– 66	– 6	– 73	– 3
Administrative expenses	18	15		
Remeasurement (gains)/losses arising from changes in financial assumptions	– 1 248	2 175	– 131	– 52
Remeasurement (gains)/losses arising from changes in demographic assumptions	– 60	889	– 7	3
Experience related remeasurement losses/(gains)	160	16	– 19	35
Currency translation effects	442	488	– 6	2
Benefit payments	– 1 240	– 1 238	– 60	– 50
Contributions of associates	221	189		3
Effect of acquisitions, divestments or transfers	13	185		
Benefit obligation at December 31	**24 801**	**25 503**	**1 069**	**1 271**
Fair value of plan assets at January 1	**20 282**	**18 826**	**237**	**222**
Interest income	438	539	8	9
Return on plan assets excluding interest income	850	984	6	18
Currency translation effects	383	408		
Novartis Group contributions	560	497	18	35
Contributions of associates	221	189		3
Settlements	– 14	– 2		
Benefit payments	– 1 240	– 1 238	– 60	– 50
Effect of acquisitions, divestments or transfers	1	79		
Fair value of plan assets at December 31	**21 481**	**20 282**	**209**	**237**
Funded status	**– 3 320**	**– 5 221**	**– 860**	**– 1 034**
Limitation on recognition of fund surplus at January 1	**– 21**	**– 51**		
Change in limitation on recognition of fund surplus	– 21	30		
Interest income on limitation of fund surplus	– 3			
Limitation on recognition of fund surplus at December 31	**– 45**	**– 21**		
Net liability in the balance sheet at December 31	**– 3 365**	**– 5 242**	**– 860**	**– 1 034**

[1] Restated to reflect the adoption of revised IAS19 on *Employee Benefits* (see Note 30).

The reconciliation of the net liability from January 1 to December 31 is as follows:

	Pension plans		Other post-employment benefit plans	
	2013 USD millions	Restated 2012[1] USD millions	2013 USD millions	Restated 2012[1] USD millions
Net liability at January 1	**– 5 242**	**– 2 955**	**– 1 034**	**– 1 019**
Current service cost	– 478	– 395	– 48	– 44
Net interest expense	– 145	– 126	– 38	– 39
Administrative expenses	– 18	– 15		
Past service costs and settlements	52	4	73	3
Remeasurements	1 998	– 2 096	163	32
Currency translation effects	– 59	– 80	6	– 2
Novartis Group contributions	560	497	18	35
Effect of acquisitions, divestments or transfers	– 12	– 106		
Change in limitation on recognition of fund surplus	– 21	30		
Net liability at December 31	**– 3 365**	**– 5 242**	**– 860**	**– 1 034**
Amounts recognized in the consolidated balance sheet				
Prepaid benefit cost	42	55		
Accrued benefit liability	– 3 407	– 5 297	– 860	– 1 034

[1] Restated to reflect the adoption of revised IAS19 on *Employee Benefits* (see Note 30).

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.

	2013 USD millions				2012 USD millions			
	Switzerland	US	Rest of the World	Total	Switzerland	US	Rest of the World	Total
Benefit obligation at December 31	**16 683**	**3 430**	**4 688**	**24 801**	**17 103**	**3 822**	**4 578**	**25 503**
Thereof unfunded		*685*	*522*	*1 207*		*735*	*547*	*1 282*
Analysed by type of member								
Active	6 617	1 087	1 634	9 338	6 682	1 382	1 641	9 705
Deferred pensioners		757	1 427	2 184		792	1 652	2 444
Pensioners	10 066	1 586	1 627	13 279	10 421	1 648	1 285	13 354
Fair value of plan assets at December 31	**15 873**	**2 460**	**3 148**	**21 481**	**15 042**	**2 203**	**3 037**	**20 282**
Funded Status	**– 810**	**– 970**	**– 1 540**	**– 3 320**	**– 2 061**	**– 1 619**	**– 1 541**	**– 5 221**

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	
	2013 %	2012 %	2013 %	2012 %
Weighted average assumptions used to determine benefit obligations at December 31				
Discount rate	2.9%	2.4%	4.7%	3.6%
Expected rate of pension increase	1.1%	0.9%		
Expected rate of salary increase	3.5%	3.3%		
Interest on savings account	2.1%	1.6%		
Current average life expectancy for a 65-year-old male/female	21/23 years	21/23 years	19/21 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 2013 year end defined benefit pension obligation USD millions
25 basis point increase in discount rate	– 755
25 basis point decrease in discount rate	799
1 year increase in life expectancy	810
25 basis point increase in rate of pension increase	509
25 basis point decrease in rate of pension increase	– 484
25 basis point increase of interest on savings account	66
25 basis point decrease of interest on savings account	– 64
25 basis point increase in rate of salary increase	61
25 basis point decrease in rate of salary increase	– 64

The healthcare cost trend rate assumptions for other post-employment benefits are as follows:

Healthcare cost trend rate assumptions used	2013	2012
Healthcare cost trend rate assumed for next year	7.0%	7.1%
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	2020

The following table shows the weighted average plan asset allocation of funded defined benefit pension plans at December 31, 2013 and 2012:

	Pension plans		
	Long-term target %	2013 %	2012 %
Equity securities	15–40	39	29
Debt securities	20–60	32	43
Real estate	5–20	13	13
Alternative investments	0–20	10	9
Cash and other investments	0–15	6	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, 2013 19.8 million shares with a market value of USD 1.6 billion (2012: 19.8 million shares with a market value of USD 1.2 billion).

The weighted average duration of the defined benefit obligation is 13.8 years (2012: 14.1 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 the US and UK.

The expected future cash flows in respect of pension and other post-employment benefit plans at December 31, 2013 were as follows:

	Pension plans USD millions	Other post-employment benefit plans USD millions
Novartis Group contributions		
2014 (estimated)	471	55
Expected future benefit payments		
2014	1 351	55
2015	1 355	58
2016	1 377	61
2017	1 389	64
2018	1 402	67
2019–2023	7 073	369

DEFINED CONTRIBUTION PLANS

In many subsidiaries associates are covered by defined contribution plans. Contributions charged to the 2013 consolidated income statement for the defined contribution plans were USD 351 million (2012: USD 345 million).

26. EQUITY-BASED PARTICIPATION PLANS OF ASSOCIATES

The expense related to all equity-based participation plans in the 2013 consolidated income statement was USD 987 million (2012: USD 1.0 billion) resulting in a total carrying amount for liabilities arising from share-based payment transactions of USD 255 million (2012: USD 262 million).

Equity-based participation plans can be separated into the following 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 2013, may annually be awarded a grant capped at 200% of target. The equity-based long-term incentive is subject to the achievement of predetermined business and individual performance objectives at grant. No awards are granted for performance ratings below a certain threshold.

The Equity Plan "Select" allows its participants to choose the form of their equity compensation in restricted shares (or, in some jurisdictions, restricted share units (RSUs)), and until 2013, tradable share options, or a combination of both. The vesting period for the plan is three years except for grants prior to 2012 in Switzerland which had a two years vesting period.

In some jurisdictions, RSUs are granted rather than shares. 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, except for the United States where employees receive a dividend equivalent during the vesting period for the 2010 and 2011 grants. Each restricted share is entitled to voting rights and payment of dividends during the vesting period.

Tradable share options expire on their 10th anniversary from grant date. Each tradable share option granted to associates entitles the holder to purchase after vesting (and before the 10th anniversary from 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

The expense recorded in the 2013 consolidated income statement relating to both shares and share options under this plan amounted to USD 116 million (2012: USD 122 million). Participants in this plan were granted in 2013 a total of 2.1 million restricted shares and RSUs at CHF 61.70 (2012: 2.4 million restricted shares and RSUs at CHF 54.20).

The following table shows the assumptions on which the valuation of share options granted during the period was based:

	Novartis Equity Plan "Select" outside North America	
	2013	2012
Valuation date	January 17, 2013	January 19, 2012
Expiration date	January 17, 2023	January 19, 2022
Closing share price on grant date	CHF 61.70	CHF 54.20
Exercise price	CHF 61.70	CHF 54.20
Implied bid volatility	13.40%	14.85%
Expected dividend yield	4.64%	4.82%
Interest rate	0.94%	0.94%
Market value of option at grant date	CHF 4.28	CHF 4.30

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.

	2013		2012	
	Options (millions)	Weighted average exercise price (USD)	Options (millions)	Weighted average exercise price (USD)
Options outstanding at January 1	**33.2**	**54.5**	**35.5**	**53.5**
Granted	5.6	66.0	5.4	57.6
Sold	– 12.1	53.6	– 6.3	50.8
Forfeited or expired	– 0.3	60.1	– 1.4	57.5
Outstanding at December 31	**26.4**	**57.3**	**33.2**	**54.5**
Exercisable at December 31	**16.8**	**54.4**	**24.4**	**53.5**

All share options were granted at an exercise price which was equal to the market price of the Group's shares at the grant date. The weighted average exercise price during the period the options were sold in 2013 was USD 53.57. The weighted average share price at the dates of sale was USD 74.04.

The following table summarizes information about share options outstanding at December 31, 2013:

	Options outstanding		
Range of exercice prices (USD)	Number outstanding (millions)	Average remaining contractual life (years)	Weighted average exercise price (USD)
45–49	3.6	4.1	46.9
50–54	5.0	5.0	54.4
55–59	12.3	5.9	57.8
60–65	5.5	9.1	66.0
Total	**26.4**	**6.2**	**57.3**

NOVARTIS EQUITY PLAN "SELECT" FOR NORTH AMERICA

The expense recorded in the 2013 consolidated income statement relating to both shares and share options under this plan amounted to USD 329 million (2012: USD 297 million). Participants in this plan were granted a total of 4.7 million restricted shares and RSUs at USD 66.07 (2012: 5.1 million restricted shares and RSUs at USD 58.33).

The following table shows the assumptions on which the valuation of share options granted during the period was based:

	Novartis Equity Plan "Select" for North America	
	2013	2012
Valuation date	January 17, 2013	January 19, 2012
Expiration date	January 17, 2023	January 19, 2022
Closing ADR price on grant date	USD 66.07	USD 58.33
Exercise price	USD 66.07	USD 58.33
Implied bid volatility	11.60%	12.20%
Expected dividend yield	4.65%	4.82%
Interest rate	1.96%	2.09%
Market value of option at grant date	USD 4.37	USD 4.14

The following table shows the activity associated with the share options during the period:

	2013		2012	
	ADR options (millions)	Weighted average exercise price (USD)	ADR options (millions)	Weighted average exercise price (USD)
Options outstanding at January 1	**56.3**	**55.1**	**58.5**	**52.1**
Granted	18.6	66.1	18.5	58.3
Sold or exercised	– 13.3	52.5	– 17.0	48.3
Forfeited or expired	– 2.8	60.3	– 3.7	56.1
Outstanding at December 31	**58.8**	**58.9**	**56.3**	**55.1**
Exercisable at December 31	**17.8**	**53.2**	**19.0**	**51.9**

All share options were granted at an exercise price which was equal to the market price of the American Depositary Receipts (ADRs) at the grant date. The weighted average exercise price during the period the share options were sold or exercised in 2013 was USD 52.54. The weighted average share price at the dates of sale or exercise was USD 70.27.

The following table summarizes information about ADR options outstanding at December 31, 2013:

	ADR options outstanding		
Range of exercice prices (USD)	Number outstanding (millions)	Average remaining contractual life (years)	Weighted average exercise price (USD)
45–49	5.3	4.1	46.6
50–54	6.5	5.3	53.9
55–59	29.6	7.0	57.9
65–69	17.4	9.0	66.1
Total	**58.8**	**7.1**	**58.9**

LONG-TERM PERFORMANCE PLAN

The Long-Term Performance Plan (LTPP) is an equity plan for key executives designed to drive long-term shareholder value creation. The LTPP is offered to selected executives, 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 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 LTPP only allows a payout if the actual NVA exceeds predetermined target thresholds.

At the beginning of every performance period, plan participants are granted RSUs, which are converted into Novartis shares after the performance period.

At the end of the three-year performance period, the Compensation Committee adjusts the number of RSUs earned based on actual performance. RSUs 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.

The expense recorded in the 2013 income statement related to this plan amounted to USD 37 million (2012: USD 34 million). In 2013, a total of 0.4 million RSUs (2012: 0.4 million RSUs) were granted to 140 key executives participating in this plan.

OTHER SHARE AWARDS

Selected associates may exceptionally receive special 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. In exceptional circumstances, special equity grants 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.

Restricted special awards generally have a five-year vesting period. Worldwide 392 associates at different levels in the organization were awarded restricted shares in 2013. The expense recorded for such special share awards in the 2013 consolidated income statement amounted to USD 50 million (2012: USD 24 million). During 2013, a total of 0.8 million restricted shares and RSUs (2012: 0.8 million restricted shares and RSUs) were granted to executives and selected associates.

In addition, in 2013, Board members received 0.1 million unrestricted shares with a market value of USD 5 million as part of their remuneration.

LEVERAGED SHARE SAVINGS PLANS

A number of associates in certain countries and certain key executives worldwide are encouraged to invest their annual incentive in a share savings plan, which is capped at 200% of target. Under the share savings plan, they will receive their annual incentive awards fully or partially in Novartis shares in lieu of cash. As a reward for their participation in the share savings plan, Novartis matches their investments in shares after a holding period of three or five years.

Novartis currently has three share savings plans:

- Worldwide 29 key executives were invited to participate in a leveraged share savings plan based on their performance in 2012. Instead of cash, their annual incentive was elected to be awarded partly or entirely in shares. The elected number of shares were delivered in 2013 and are 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 Switzerland, the Employee Share Ownership Plan (ESOP) was available to 13 341 associates in 2012. Participants within this plan may choose to receive the incentive (i) 100% in shares, (ii) 50% in shares and 50% in cash or (iii) 100% in cash. After expiration of a three-year holding period of Novartis shares invested under the ESOP, each participant will receive one free matching share for every two Novartis shares invested. A total of 5 557 associates chose to receive shares under the ESOP for their performance in 2012 and the shares were delivered in 2013.
- In the United Kingdom, 2 600 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 2013, 1 404 participants elected to participate in this plan.

Associates may only participate in one of these plans in any given year.

The expense recorded in the 2013 consolidated income statement related to these plans amounted to USD 419 million (2012: USD 459 million). During 2013, a total of 5.7 million shares (2012: 5.7 million shares) were granted to participants of these plans.

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:

	2013		2012	
	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	**23.7**	**1 329.7**	**20.8**	**1 180.1**
Granted	14.8	932.2	16.3	935.3
Vested	– 13.4	– 776.9	– 12.0	– 701.2
Forfeited	– 2.0	– 114.4	– 1.4	– 84.5
Non-vested shares at December 31	**23.1**	**1 370.6**	**23.7**	**1 329.7**

ALCON, INC., EQUITY PLANS GRANTED TO ASSOCIATES PRIOR TO THE MERGER

The expense recorded in the 2013 consolidated income statement relating to equity-based compensation awards granted to Alcon, Inc., associates prior to the merger on April 8, 2011 amounted to USD 31 million (2012: USD 55 million). There were no grants in 2013 and 2012.

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.

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 2013 and 2012:

	Number of options (millions)	Weighted average exercise price (USD)	Number of SSARs (millions)	Weighted average exercise price (USD)
Outstanding at January 1, 2012	**4.5**	**23.5**	**8.4**	**34.2**
Exercised	– 2.5	20.9	– 4.6	31.9
Outstanding at December 31, 2012	**2.0**	**26.7**	**3.8**	**36.3**
Exercisable at December 31, 2012	**1.9**	**26.7**	**3.8**	**36.3**
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**

RESTRICTED SHARE UNITS

Restricted Share Units (RSUs) entitle the recipient to receive a specified number of Novartis shares on the date of vesting. RSUs will vest and become transferable upon satisfaction of the conditions set forth in the restricted share unit award agreements, generally three years following the grant date. The compensation expense is recognized over the required service period, generally three years following the day of grant. Holders of RSUs have no voting rights and receive dividend equivalents prior to vesting.

At December 31, 2013, there were 1.5 million Novartis RSUs outstanding with a fair value of USD 124 million.

27. TRANSACTIONS WITH RELATED PARTIES AND A CLOSELY AFFILIATED PERSON

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 2013, *Lucentis* sales of USD 2.4 billion (2012: 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 2013, Novartis recognized total sales of *Xolair* of USD 613 million (2012: USD 504 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 570 million in 2013 (2012: USD 514 million).

Furthermore, Novartis has several patent license, supply and distribution agreements with Roche. Novartis entities held no Roche bonds at December 31, 2013 (2012: USD 20 million).

EXECUTIVE OFFICER AND NON-EXECUTIVE DIRECTOR COMPENSATION

During 2013, there were 12 Executive Committee members and Permanent Attendees ("Executive Officers"), including those who stepped down during the year (12 members in 2012 also including those who stepped down).

The total compensation for members of the Executive Committee and the 15 Non-Executive Directors (12 in 2012) using the Group's accounting policies for equity-based compensation and pension benefits was as follows:

	Executive Officers		Non-Executive Directors		Total	
	2013 USD millions	2012 USD millions	2013 USD millions	2012 USD millions	2013 USD millions	2012 USD millions
Benefits other than equity-based amounts	16.0	14.2	8.6	8.1	24.6	22.3
Post-employment benefits	1.9	2.1	1.4	0.2	3.3	2.3
Termination benefits	4.0	2.2			4.0	2.2
Equity-based compensation	46.5	54.5	5.7	16.4	52.2	70.9
Total	**68.4**	**73.0**	**15.7**	**24.7**	**84.1**	**97.7**

The annual incentive award, which is fully included in equity-based 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 on Board and Executive compensation are shown in Note 12 to the Novartis AG financial statements.

During 2012, a non-executive director exercised an option and acquired Group assets at fair market values, based on independent external valuation reports, of CHF 11.6 million (approximately USD 12.0 million).

2013 TRANSACTIONS WITH THE COMPANY'S FORMER CHAIRMAN, DR. DANIEL VASELLA

The Group considers that its former chairman, Dr. Vasella was a related party for the purposes of disclosure in these consolidated financial statements up to the expiration of his Board membership and Chairmanship at the Group's Annual General Meeting held on February 22, 2013. Compensation in Dr. Vasella's capacity as Board member and Chairman up to the end of his terms in February 2013 are included in the above Executive Officer and Non-Executive Director Compensation table. For the period thereafter, Novartis is voluntarily disclosing transactions with Dr. Vasella as a "closely affiliated person".

During 2013, Novartis agreed with Dr. Vasella to cancel his non-compete agreement with Novartis and all related conditional compensation following his term as Chairman. Accordingly, a provision of CHF 72 million related to this agreement, accrued in prior periods, was reversed in 2013. This amount is not reflected in the above Executive Officer and Non-Executive Director Compensation table.

Since the 2013 AGM, when he stepped down, Dr. Vasella has provided certain transitional services, including select board mandates with subsidiaries of the Group, to support the ad-interim Chairman and the new Chairman. For his services during this transition period, from the AGM on February 22, 2013 to October 31, 2013, Dr. Vasella received cash compensation of CHF 2.7 million, and 31 724 unrestricted shares on October 31, 2013 (market value of the shares at the time of delivery was CHF 2.2 million). During the same period, Novartis reimbursed the cost of Dr. Vasella's professional legal and financial advice amounting to CHF 161 983, and the cost of terminating his life insurance, amounting to CHF 60 166. For this period, a total amount of CHF 5.1 million was paid to him.

Dr. Vasella has subsequently been available to Novartis, at the CEO's request and discretion, to provide coaching to high potential Novartis associates and speeches at key Novartis events. This agreement became effective on November 1, 2013 and will last until the end of 2016. Dr. Vasella will be 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. During November and December 2013, Dr. Vasella did not provide any coaching to associates and did not receive any compensation for this period.

Given the decision of Novartis not to build the Novartis Corporate Learning Center in Risch, Zug, Switzerland, Dr. Vasella has an option to acquire the respective real estate from a consolidated entity for a price corresponding to the average of two independent external evaluation reports. Novartis considers this transaction as not financially material.

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, 2013 the Group's commitments with respect to these leases, including estimated payment dates, were as follows:

	2013 USD millions
2014	336
2015	225
2016	159
2017	109
2018	84
Thereafter	1 969
Total	**2 882**
Expense of current year	**384**

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, 2013 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 2013 USD millions
2014	131	326	457
2015	78	333	411
2016	45	164	209
2017	37	199	236
2018	27	324	351
Thereafter	32	535	567
Total	**350**	**1 881**	**2 231**

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

BALANCE SHEET DISCLOSURES	Note	2013 USD millions[1]	2012 USD millions[1]
Cash and cash equivalents	16	**6 687**	**5 552**
Financial assets – measured at fair value through other comprehensive income			
Available-for-sale marketable securities			
Debt securities	16	323	1 084
Equity securities	16	47	68
Fund investments	16	11	23
Total available-for-sale marketable securities		**381**	**1 175**
Available-for-sale long-term financial investments			
Equity securities	13	824	661
Fund investments	13	52	13
Total available-for-sale long-term financial investments		**876**	**674**
Total financial assets – measured at fair value through other comprehensive income		**1 257**	**1 849**
Financial assets – measured at amortized costs			
Trade receivables and other current assets (excluding pre-payments)[2]	15/17	12 620	12 533
Accrued interest on debt securities and time deposits	16	5	12
Time deposits with original maturity more than 90 days	16	1 931	1 240
Long-term loans and receivables, advances, security deposits[2]	13	647	443
Total financial assets – measured at amortized costs		**15 203**	**14 228**
Financial assets – measured at fair value through the consolidated income statement			
Derivative financial instruments	16	121	140
Total financial assets – measured at fair value through the consolidated income statement		**121**	**140**
Total financial assets		**23 268**	**21 769**
Financial liabilities – measured at amortized costs			
Current financial debt			
Interest bearing accounts of associates	21	1 718	1 541
Bank and other financial debt	21	1 323	1 270
Commercial paper	21	1 042	963
Currrent portion of non-current debt	21	2 590	2 009
Total current financial debt		**6 673**	**5 783**
Non-current financial debt			
Straight bonds	19	12 909	14 783
Liabilities to banks and other financial institutions	19	919	1 004
Finance lease obligations	19	4	3
Current portion of non-current debt	19	– 2 590	– 2 009
Total non-current financial debt		**11 242**	**13 781**
Trade payables[2]		**6 148**	**5 593**
Total financial liabilites – measured at amortized costs		**24 063**	**25 157**
Financial liabilities – measured at fair value through the consolidated income statement			
Contingent consideration	20/22	572	573
Derivative financial instruments	21	103	162
Total financial liabilities – measured at fair value through the consolidated income statement		**675**	**735**
Total financial liabilities		**24 738**	**25 892**

[1] Except for straight bonds (see Note 19) the carrying amount is a reasonable approximation of fair value.
[2] 2013 excluding financial assets and liabilities of disposal group held for sale

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, 2013 and 2012. 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, 2013 and 2012.

	Contract or underlying principal amount		Positive fair values		Negative fair values	
	2013 USD millions	2012 USD millions	2013 USD millions	2012 USD millions	2013 USD millions	2012 USD millions
Currency related instruments						
Forward foreign exchange rate contracts	10 137	10 517	117	120	– 100	– 160
Over-the-Counter currency options	2 427	2 644	4	20	– 3	– 1
Total of currency related instruments	**12 564**	**13 161**	**121**	**140**	**– 103**	**– 161**
Interest rate related instruments						
Interest rate swaps		33				– 1
Total of interest rate related instruments		**33**				**– 1**
Total derivative financial instruments included in marketable securities and in current financial debts	**12 564**	**13 194**	**121**	**140**	**– 103**	**– 162**

The following table shows by currency contract or underlying principal amount the derivative financial instruments at December 31, 2013 and 2012:

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**

December 31, 2012	EUR USD millions	USD USD millions	JPY USD millions	Other USD millions	Total USD millions
Currency related instruments					
Forward foreign exchange rate contracts	3 760	3 169	704	2 884	10 517
Over-the-Counter currency options		2 125		519	2 644
Total of currency related instruments	**3 760**	**5 294**	**704**	**3 403**	**13 161**
Interest rate related instruments					
Interest rate swaps				33	33
Total of interest rate related instruments				**33**	**33**
Total derivative financial instruments	**3 760**	**5 294**	**704**	**3 436**	**13 194**

DERIVATIVE FINANCIAL INSTRUMENTS EFFECTIVE FOR HEDGE ACCOUNTING PURPOSES

At the end of 2013 and 2012, 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 types of 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 this 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.

2013	Level 1 USD millions	Level 2 USD millions	Level 3 USD millions	Valued at amortized cost USD millions	Total USD millions
Available-for-sale marketable securities					
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 instruments	**315**	**150**	**37**	**1 936**	**2 438**
Financial investments and long-term loans					
Available-for-sale financial investments	458		366		824
Fund investments			52		52
Long-term loans and receivables, advances, security deposits [1]				647	647
Total financial investments and long-term loans	**458**		**418**	**647**	**1 523**
Financial liabilities					
Contingent consideration			– 572		– 572
Derivative financial instruments		– 103			– 103
Total financial liabilities at fair value		**– 103**	**– 572**		**– 675**

[1] excluding financial assets of disposal group held for sale of USD 7 million

2012	Level 1 USD millions	Level 2 USD millions	Level 3 USD millions	Valued at amortized cost USD millions	Total USD millions
Available-for-sale marketable securities					
Debt securities	1 056	28			1 084
Equity securities	45		23		68
Fund investments			23		23
Total available-for-sale marketable securities	**1 101**	**28**	**46**		**1 175**
Time deposits with original maturity more than 90 days				**1 240**	**1 240**
Derivative financial instruments		140			140
Accrued interest on debt securities				12	12
Total marketable securities, time deposits and derivative financial instruments	**1 101**	**168**	**46**	**1 252**	**2 567**
Financial investments and long-term loans					
Available-for-sale financial investments	302		359		661
Fund investments			13		13
Long-term loans and receivables, advances, security deposits				443	443
Total financial investments and long-term loans	**302**		**372**	**443**	**1 117**
Financial liabilities					
Contingent consideration			– 573		– 573
Derivative financial instruments		– 162			– 162
Total financial liabilities at fair value		**– 162**	**– 573**		**– 735**

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:

2013	Equity securities USD millions	Fund investments USD millions	Available-for-sale 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**
Total of gains and impairments, net recognized in the consolidated income statement for assets and liabilities held at December 31, 2013		3	– 20	42

2012	Equity securities USD millions	Fund investments USD millions	Available-for-sale financial investments USD millions	Contingent consideration USD millions
January 1	**20**	**44**	**331**	**482**
Impact of business combinations				41
Fair value gains recognized in the consolidated income statement			101	– 61
Fair value losses (including impairments and amortizations) recognized in the consolidated income statement		– 1	– 29	114
Gains/(losses) recognized in the consolidated statement of comprehensive income	2	2	– 13	
Purchases	1		99	
Payments				– 75
Proceeds from sales		– 10	– 150	
At equity investments reclassified due to loss of significant influence			9	
Reclassification			8	72
Currency translation effects		1	3	
December 31	**23**	**36**	**359**	**573**
Total of gains and impairments, net recognized in the consolidated income statement for assets and liabilities held at December 31, 2012		– 1	72	53

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 37 million, respectively (2012: USD 3 million and USD 36 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.

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 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 other Asian and Latin American currencies. Consequently, it enters 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 net revenues 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.

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 control. The most significant country in this respect is Venezuela, where the Group has approximately USD 220 million of cash in the country, which is only slowly being approved for remittance outside the country. As a result the Group is exposed to a potential income statement financial result devaluation loss on its total intercompany balances with subsidiaries in Venezuela and related net investments, which at December 31, 2013 amounted to approximately USD 340 million and USD 35 million, respectively. The Group used the official exchange rate as published by CADIVI (Venezuelan Commission for the Administration of Foreign Currency) of VEF 4.3/USD until the devaluation on February 8, 2013 and VEF 6.3/USD since then for the consolidation of the financial statements of the Venezuelan subsidiaries.

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 10% of net sales, and the second and third largest customers account for 9% and 7% of net sales (2012: 10%, 9% and 8% 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 9%, 7% and 5%, respectively, of the Group's trade receivables at December 31, 2013. There is no other significant concentration of credit risk (2012: 8%, 7% and 6% respectively).

COUNTERPARTY RISK

Counterparty risk encompasses issuer risk on marketable securities, settlement risk on derivative and money market contracts and credit risk on cash and time deposits. Issuer risk is reduced by only buying securities which are at least AA- rated. Settlement and credit risk is reduced by the policy of entering into transactions with counterparties that are usually at least AA- rated banks or financial institutions. For short-term investments less than six months 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. Novartis has policies that limit the amount of credit exposure to any financial institution. 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.

The Group's cash and cash equivalents are held with major regulated financial institutions, the three largest ones hold approximately 21.8%, 18.4% and 8.9%, respectively (2012: 19.8%, 15.5% and 10.9%, 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.

29. FINANCIAL INSTRUMENTS – ADDITIONAL DISCLOSURES (CONTINUED)

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, 2013 and 2012:

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
Current assets						
Marketable securities and time deposits	12	1 933	101	179	87	2 312
Commodities	97					97
Derivative financial instruments and accrued interest	26	97	3			126
Cash and cash equivalents	6 187	500				6 687
Total current financial assets	**6 322**	**2 530**	**104**	**179**	**87**	**9 222**
Non-current liabilities						
Financial debt				– 5 201	– 6 041	– 11 242
Financial debt – undiscounted				*– 5 212*	*– 6 087*	*– 11 299*
Total non-current financial debt				**– 5 201**	**– 6 041**	**– 11 242**
Current liabilities						
Financial debt	– 2 896	– 2 270	– 1 507			– 6 673
Financial debt – undiscounted	*– 2 896*	*– 2 270*	*– 1 507*			*– 6 673*
Derivative financial instruments	– 44	– 37	– 22			– 103
Total current financial debt	**– 2 940**	**– 2 307**	**– 1 529**			**– 6 776**
Net debt	**3 382**	**223**	**– 1 425**	**– 5 022**	**– 5 954**	**– 8 796**

December 31, 2012	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
Current assets						
Marketable securities and time deposits		1 240	26	543	606	2 415
Derivative financial instruments and accrued interest	36	106	10			152
Cash and cash equivalents	3 852	1 700				5 552
Total current financial assets	**3 888**	**3 046**	**36**	**543**	**606**	**8 119**
Non-current liabilities						
Financial debt				– 7 829	– 5 952	– 13 781
Financial debt – undiscounted				*– 7 848*	*– 6 002*	*– 13 850*
Total non-current financial debt				**– 7 829**	**– 5 952**	**– 13 781**
Current liabilities						
Financial debt	– 2 607	– 764	– 2 412			– 5 783
Financial debt – undiscounted	*– 2 607*	*– 764*	*– 2 413*			*– 5 784*
Derivative financial instruments	– 60	– 54	– 48			– 162
Total current financial debt	**– 2 667**	**– 818**	**– 2 460**			**– 5 945**
Net debt	**1 221**	**2 228**	**– 2 424**	**– 7 286**	**– 5 346**	**– 11 607**

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, 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	– 3 648	– 6 007	– 2 476	– 12 131
Potential inflows in various currencies – from financial derivative assets	3 627	5 989	2 417	12 033

December 31, 2012	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	– 3 483	– 3 691	– 2 330	– 9 504
Potential inflows in various currencies – from financial derivative assets	3 458	3 714	2 285	9 457

Other contractual liabilities which are not part of management's monitoring of the net debt or liquidity consist of the following items:

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	– 1 146	– 830	– 2 448
Trade payables [1]	– 6 148				– 6 148

[1] excluding trade payables of disposal group held for sale of USD 38 million

December 31, 2012	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	– 275	– 1 368	– 1 082	– 2 961
Trade payables	– 5 593				– 5 593

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 short-term maturities. Fitch had a long-term rating of AA and a short-term rating of F1+.

The Group's debt/equity ratio improved slightly to 0.24:1 at December 31, 2013 compared to 0.28:1 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:

	2013 USD millions	2012 USD millions
All financial instruments	195	183
Analyzed by components:		
Instruments sensitive to foreign currency exchange rates	131	61
Instruments sensitive to equity market movements	27	40
Instruments sensitive to interest rates	93	86

The average, high, and low VAR amounts are as follows:

2013	Average USD millions	High USD millions	Low USD millions
All financial instruments	188	238	150
Analyzed by components:			
Instruments sensitive to foreign currency exchange rates	156	244	115
Instruments sensitive to equity market movements	39	56	24
Instruments sensitive to interest rates	115	195	68

2012	Average USD millions	High USD millions	Low USD millions
All financial instruments	262	351	183
Analyzed by components:			
Instruments sensitive to foreign currency exchange rates	141	255	61
Instruments sensitive to equity market movements	41	59	30
Instruments sensitive to interest rates	93	129	57

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 2013 and 2012, the worst case loss scenario was calculated as follows:

	2013 USD millions	2012 USD millions
All financial instruments	24	284
Analyzed by components:		
Instruments sensitive to foreign currency exchange rates	7	212
Instruments sensitive to equity market movements	12	26
Instruments sensitive to interest rates	5	46

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. 2012 AND 2011 RESTATEMENT INFORMATION

IMPACT OF INTRODUCING REVISED ACCOUNTING STANDARD ON EMPLOYEE BENEFITS IN 2013

The Group introduced the revised IFRS accounting standard IAS 19 on *Employee Benefits* on January 1, 2013. The principal impact of this is that the return on pension plan assets and the interest calculated on the defined benefit obligations now use the same interest rate reflecting the current market yield of high-quality corporate bonds. Previously the return on plan assets was calculated based on the higher long-term expected return on assets, so the adoption of the new accounting standard increases the annual cost of post-employment benefits included in Corporate Other Expense. It has also been required to restate for the amortization of previously unrecognized past service credits. As required by the new standard, the Group's 2012 consolidated financial statements have been retrospectively restated to reflect these changes. For the full year 2012, the impact of these restatements is an additional expense of USD 318 million before tax (USD 235 million after tax), offset by an adjustment of the actuarial losses recognized in consolidated comprehensive income.

Furthermore, the revised IAS 19 requires the immediate recognition of past service costs in the consolidated income statement, which were previously only recognized upon vesting. Due to the required retroactive implementation of revised IAS 19, Novartis has restated its January 1, and December 31, 2012 consolidated balance sheets so that past service credits of USD 77 million and USD 69 million, respectively net were recognized against other non-current liabilities with a corresponding increase in consolidated equity. The related tax impact amounted to USD 28 million and USD 25 million, respectively.

Additionally, as part of the implementation of the revised standard, Novartis has also reclassified USD 200 million from consolidated retained earnings to actuarial losses as of January 1, 2012.

EXTRACT OF RESTATED 2012 CONSOLIDATED INCOME STATEMENT INFORMATION

	Published 2012 USD millions	Adjustment USD millions	Restated 2012 USD millions
Other income	1 187	– 138	1 049
Other expense	– 1 859	– 180	– 2 039
Operating income	**11 511**	**– 318**	**11 193**
Income before taxes	**11 243**	**– 318**	**10 925**
Taxes	– 1 625	83	– 1 542
Net income	**9 618**	**– 235**	**9 383**
Attributable to:			
Shareholders of Novartis AG	*9 505*	*– 235*	*9 270*
Non-controlling interests	*113*		*113*
Basic earnings per share (USD)	3.93	– 0.10	3.83
Diluted earnings per share (USD)	3.89	– 0.10	3.79

30. 2012 AND 2011 RESTATEMENT INFORMATION (CONTINUED)

EXTRACT OF RESTATED DECEMBER 31, 2012 AND 2011 CONSOLIDATED BALANCE SHEET INFORMATION

	Published 2012 USD millions	Adjustment USD millions	Restated 2012 USD millions	Published 2011 USD millions	Adjustment USD millions	Restated 2011 USD millions
Assets						
Non-current assets						
Deferred tax assets	7 390	– 25	7 365	5 857	– 28	5 829
Total non-current assets	**96 212**	**– 25**	**96 187**	**93 412**	**– 28**	**93 384**
Total assets	**124 216**	**– 25**	**124 191**	**117 496**	**– 28**	**117 468**
Equity and liabilities						
Equity						
Reserves	68 184	44	68 228	64 949	49	64 998
Issued share capital and reserves attributable to Novartis AG shareholders	**69 093**	**44**	**69 137**	**65 844**	**49**	**65 893**
Total equity	**69 219**	**44**	**69 263**	**65 940**	**49**	**65 989**
Liabilities						
Non-current liabilities						
Provisions and other non-current liabilities	9 879	– 69	9 810	7 792	– 77	7 715
Total non-current liabilities	**30 946**	**– 69**	**30 877**	**28 408**	**– 77**	**28 331**
Total liabilities	**54 997**	**– 69**	**54 928**	**51 556**	**– 77**	**51 479**
Total equity and liabilities	**124 216**	**– 25**	**124 191**	**117 496**	**– 28**	**117 468**

31. EVENTS SUBSEQUENT TO THE DECEMBER 31, 2013 CONSOLIDATED BALANCE SHEET DATE

DIVIDEND PROPOSAL FOR 2013 AND APPROVAL OF THE GROUP'S 2013 CONSOLIDATED FINANCIAL STATEMENTS

On January 28, 2014, the Novartis AG Board of Directors proposed the acceptance of the 2013 consolidated financial statements of the Novartis Group for approval by the Annual General Meeting on February 25, 2014. Furthermore, also on January 28, 2014, the Board proposed a dividend of CHF 2.45 per share to be approved at the Annual General Meeting on February 25, 2014. If approved, total dividend payments would amount to approximately USD 6.8 billion (2012: USD 6.1 billion).

DIVESTMENT OF VACCINES AND DIAGNOSTICS' BLOOD TRANSFUSION 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 estimated pre-tax gain on this transaction, subject to finalization of the accounting, will be approximately USD 0.9 billion.

RESTRUCTURING ANNOUNCEMENTS

During January 2014, the Pharmaceuticals Division announced plans to change the size and structure of the US Primary Care Business Unit, a shift of positions within Switzerland, and announced the closure of a production facility in Suffern, New York, US.

We anticipate that these three initiatives in the US and Switzerland will contribute to an exceptional charge of approximately USD 150 million being recorded in the first quarter of 2014.

32. PRINCIPAL GROUP SUBSIDIARIES AND ASSOCIATED COMPANIES

As at December 31, 2013	Share/paid-in capital[1]	Equity interest %	Activities
Argentina			
Novartis Argentina S.A., Buenos Aires	ARS 231.3 m	100	◆▲
Alcon Laboratorios Argentina S.A., Buenos Aires	ARS 80.0 m	100	◆
Sandoz S.A., Buenos Aires	ARS 182.7 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., Frenchs Forest, NSW	AUD 2.6 m	100	◆
Sandoz Pty Ltd., North Ryde, NSW	AUD 11.6 m	100	◆
Novartis Consumer Health Australasia Pty Ltd., Melbourne, Victoria	AUD 7.6 m	100	◆▼
Novartis Animal Health Australasia Pty Ltd., North Ryde, NSW	AUD 3.0 m	100	◆▲
Austria			
Novartis Austria GmbH, Vienna	EUR 1.0 m	100	■
Novartis Pharma GmbH, Vienna	EUR 1.1 m	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, Dhaka	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., Hamilton	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			
Novartis Biociências S.A., São Paulo	BRL 265.0 m	100	◆▼
Sandoz do Brasil Indústria Farmacêutica Ltda., Cambé, PR	BRL 190.0 m	100	◆▼▲
Novartis Saúde Animal Ltda., São Paulo	BRL 50.7 m	100	◆▼
Canada			
Novartis Pharmaceuticals Canada Inc., Dorval/ Quebec	CAD 0[2]	100	◆▲
Alcon Canada Inc., Mississauga, Ontario	CAD 0[2]	100	◆
CIBA Vision Canada Inc., Mississauga, Ontario	CAD 1	100	◆▼
Sandoz Canada Inc., Boucherville, Quebec	CAD 76.8 m	100	◆▼▲
Novartis Consumer Health Canada Inc., Mississauga, Ontario	CAD 2	100	◆
Novartis Animal Health Canada Inc., Charlottetown, Prince Edward Island	CAD 2	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 Kong	HKD 200	100	◆
China Novartis Institutes for BioMedical Research Co. Ltd., Shanghai	USD 133.0 m	100	▲
Suzhou Novartis Pharma Technology Co. Ltd., Changshu	USD 97.4 m	100	▼
Shanghai Novartis Trading Ltd., Shanghai	USD 2.5 m	100	◆
Alcon Hong Kong Limited, Hong Kong	HKD 77 000	100	◆
Alcon (China) Ophthalmic Product Co., Ltd., Beijing	USD 2.2 m	100	◆
Sandoz (China) Pharmaceutical Co., Ltd., Zhongshan	USD 22.0 m	100	◆▼
Novartis Vaccines and Diagnostics (HK) Ltd., Hong Kong	HKD 80.0 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	◆▼

As at December 31, 2013	Share/paid-in capital[1]	Equity interest %	Activities
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	◆
Denmark			
Novartis Healthcare A/S, Copenhagen	DKK 14.0 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			
Novartis Finland Oy, Espoo	EUR 459 000	100	◆
Alcon Finland Oy, Vantaa	EUR 84 094	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 Vaccines and Diagnostics S.A.S., Suresnes	EUR 1.5 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	◆▼
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	◆▼▲
Sandoz International GmbH, Holzkirchen	EUR 100 000	100	■
Sandoz Pharmaceuticals GmbH, Holzkirchen	EUR 5.1 m	100	◆
Sandoz Industrial Products GmbH, Frankfurt a. M.	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	■◆▼▲
Novartis Vaccines and Diagnostics GmbH, Marburg	EUR 5.0 m	100	◆▼▲
Novartis Vaccines Vertriebs GmbH, Holzkirchen	EUR 26 000	100	◆
Novartis Consumer Health GmbH, Munich	EUR 14.6 m	100	◆▼▲
Novartis Tiergesundheit GmbH, Munich	EUR 256 000	100	◆
LTS Lohmann Therapie-Systeme AG, Andernach	EUR 31.2 m	43	■
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 & Industrial 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 Healthcare Private Limited, Mumbai	INR 60.0 m	100	◆
Alcon Laboratories (India) Private Limited, 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			
Novartis Ireland Limited, Dublin	EUR 25 000	100	◆
Novartis Ringaskiddy Limited, Ringaskiddy, County Cork	EUR 2.0 m	100	▼
Alcon Laboratories Ireland Limited, Cork City	EUR 541 251	100	▼

32. PRINCIPAL GROUP SUBSIDIARIES AND ASSOCIATED COMPANIES (CONTINUED)

As at December 31, 2013	Share/paid-in capital[1]	Equity interest %	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	◆
Sandoz Industrial Products S.p.A., Rovereto	EUR 2.6 m	100	▼
Novartis Vaccines and Diagnostics S.r.l., Siena	EUR 41.6 m	100	◆▼▲
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	◆
CIBA Vision K.K., Tokyo	JPY 100.0 m	100	◆
Sandoz K.K., Tokyo	JPY 100.0 m	100	◆▼▲
Novartis Animal Health K.K., Tokyo	JPY 50.0 m	100	◆▲
Luxembourg			
Novartis Investments S.à r.l., 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., Petaling Jaya	MYR 1.0 m	100	◆
CIBA Vision Johor Sdn. Bhd., Gelang Patah	MYR 5.0 m	100	▼
Mexico			
Novartis Farmacéutica, S.A. de C.V., Mexico City	MXN 205.0 m	100	◆▼
Alcon Laboratorios, S.A. de C.V., Mexico City	MXN 5.9 m	100	◆▼
Sandoz S.A. de C.V., Mexico City	MXN 468.2 m	100	◆▼
Netherlands			
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	EUR 907 570	100	◆▼
Novartis Consumer Health B.V., Breda	EUR 23 830	100	◆▼
New Zealand			
Novartis New Zealand Ltd., Auckland	NZD 820 000	100	◆
Norway			
Novartis Norge AS, Oslo	NOK 1.5 m	100	◆
Pakistan			
Novartis Pharma (Pakistan) Limited, Karachi	PKR 1.8 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	◆
Lek S.A., Strykow	PLN 11.4 m	100	◆▼
Portugal			
Novartis Portugal SGPS Lda., Sintra	EUR 500 000	100	■
Novartis Farma – Produtos Farmacêuticos S.A., Sintra	EUR 2.4 m	100	◆
Alcon Portugal-Produtos e Equipamentos Oftalmologicos Lda., Paco d'Arcos	EUR 4.5 m	100	◆
Sandoz Pharmaceutica Lta., Sintra	EUR 5.0 m	100	◆
Novartis Consumer Health – Produtos Farmacêuticos e Nutrição Lda., Sintra	EUR 100 000	100	◆
Puerto Rico			
Ex-Lax, Inc., Humacao	USD 10 000	100	▼
Alcon (Puerto Rico) Inc., Catano	USD 15.5	100	◆
Romania			
Sandoz S.R.L., Targu-Mures	RON 105.2 m	100	◆▼

As at December 31, 2013	Share/paid-in capital[1]	Equity 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			
Saudi Pharmaceutical Distribution Co. Ltd., Riyadh	SAR 26.8 m	75	◆
Singapore			
Novartis (Singapore) Pte Ltd., Singapore	SGD 100 000	100	◆
Novartis Singapore Pharmaceutical Manufacturing 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	▲
Alcon Singapore Manufacturing Pte Ltd., Singapore	SGD 101 000	100	▼
CIBA Vision Asian Manufacturing and Logistics Pte Ltd., Singapore	SGD 1.0 m	100	▼
Slovakia			
Novartis Slovakia s.r.o., Bratislava	EUR 2.0 m	100	◆
Slovenia			
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	■◆▼
Alcon Cusi S.A., El Masnou	EUR 11.6 m	100	◆▼
Sandoz Farmacéutica, S.A., Madrid	EUR 270 450	100	◆
Sandoz Industrial Products, S.A., Les Franqueses del Vallés/Barcelona	EUR 9.3 m	100	◆▼▲
Novartis Vaccines and Diagnostics, S.L., Barcelona	EUR 675 450	100	◆
Novartis Consumer Health, S.A., Barcelona	EUR 876 919	100	◆
Sweden			
Novartis Sverige Participations AB, Täby/Stockholm	SEK 1.0 m	100	■
Novartis Sverige AB, Täby/Stockholm	SEK 5.0 m	100	◆
Alcon Sverige AB, Bromma	SEK 100 000	100	◆
CIBA Vision Nordic AB, Askim/Göteborg	SEK 2.5 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, 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	▼
Novartis Pharma Stein AG, Stein	CHF 251 000	100	▼▲
Novartis Pharma Schweiz AG, Rotkreuz	CHF 5.0 m	100	◆▲
Alcon Switzerland SA, Rotkreuz	CHF 100 000	100	◆
Alcon Pharmaceuticals Ltd., Fribourg	CHF 200 000	100	■◆
ESBATech, a Novartis Company GmbH, Schlieren	CHF 14.0 m	100	▲
Sandoz AG, Basel	CHF 5.0 m	100	■◆▲
Sandoz Pharmaceuticals AG, Rotkreuz	CHF 100 000	100	◆
Novartis Vaccines and Diagnostics AG, Basel	CHF 800 000	100	■▲
Novartis Vaccines and Diagnostics Services AG, Basel	CHF 100 000	100	■▼

As at December 31, 2013	Share/paid-in capital[1]	Equity interest %	Activities
Switzerland (continued)			
Novartis Consumer Health S.A., Prangins	CHF 30.0 m	100	■◆▼▲
Novartis Consumer Health Schweiz AG, Rotkreuz	CHF 250 000	100	◆
Novartis Animal Health AG, Basel	CHF 101 000	100	■◆▼▲
Novartis Centre de Recherche Santé Animale S.A., St. Aubin	CHF 250 000	100	▲
Roche Holding AG, Basel	CHF 160.0 m	33/6[3]	■
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 205.1 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 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	GBP 550 000	100	◆
Sandoz Limited, Frimley/Camberley	GBP 2.0 m	100	◆
Novartis Vaccines and Diagnostics Limited, Frimley/Camberley	GBP 100	100	◆▼
Novartis Consumer Health UK Limited, Horsham	GBP 25 000	100	◆▼
Novartis Animal Health UK Limited, Frimley/Camberley	GBP 100 000	100	◆▲
United States of America			
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	◆▼▲
Novartis Institutes for BioMedical Research, Inc., Cambridge, MA	USD 1	100	▲
Novartis Institute for Functional Genomics, Inc., San Diego, CA	USD 21 000	100	▲
Genoptix, Inc., Carlsbad, CA	USD 1	100	◆▲
Alcon Laboratories, Inc., Fort Worth, TX	USD 1 000	100	■◆▼
Alcon Refractive Horizons, LLC, Fort Worth, TX	USD 10	100	▼

As at December 31, 2013	Share/paid-in capital[1]	Equity interest %	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	▼
CIBA Vision Corporation, Duluth, GA	USD 301.3 m	100	■◆▼▲
Sandoz Inc., Princeton, NJ	USD 25 000	100	◆▼▲
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	◆▼▲
Novartis Consumer Health, Inc., Parsippany, NJ	USD 0[2]	100	◆▼▲
Novartis Animal Health US, Inc., Greensboro, NC	USD 100	100	◆▼▲
Idenix Pharmaceuticals, Inc., Cambridge, MA	USD 134 001	25	■
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, the Former Yugoslav Republic of Macedonia, Morocco, Ukraine and Uruguay.

[1] Share/paid-in capital may not reflect the taxable share/paid-in capital amount and does not include any paid-in surplus.

[2] 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 Corporate Risk Management 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 Financial Reporting & Accounting, 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 to the Group's consolidated financial statements.

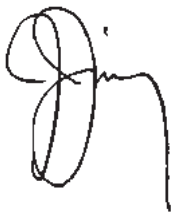
REPORT OF NOVARTIS MANAGEMENT ON INTERNAL CONTROL OVER FINANCIAL REPORTING

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, 2013. In making this assessment, it used the criteria established in *Internal Control – Integrated Framework (1992)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on its assessment, management has concluded that, as of December 31, 2013, 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 254 and 255.



Joseph Jimenez
Chief Executive Officer

Harry Kirsch
Chief Financial Officer

Basel, January 28, 2014

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 OF NOVARTIS AG

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 184 to 252), for the year ended December 31, 2013.

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, 2013 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, 2013, based on criteria established in *Internal Control – Integrated Framework (1992)* 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 253. 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 consider 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, 2013, based on criteria established in *Internal Control – Integrated Framework (1992)* issued by the COSO.

PricewaterhouseCoopers AG

Bruno Rossi
Audit expert
Auditor in charge

Michael P. Nelligan
Global relationship partner

Basel, January 28, 2014

INCOME STATEMENTS

(For the years ended December 31, 2013 and 2012)

	Note	2013 CHF millions	2012 CHF millions
Income			
Income from financial assets		5 605	5 221
Gain from disposal of intangible assets		159	76
License fees		1 494	1 491
Other income		5	3
Total income		**7 263**	**6 791**
Expenses			
Financial expense		– 287	– 306
Administrative expenses		– 29	– 21
Amortization of intangible assets	3	– 1 154	– 1 153
Other expenses		– 8	– 25
Taxes		– 154	– 145
Total expenses		**– 1 632**	**– 1 650**
Net income		**5 631**	**5 141**

The accompanying Notes form an integral part of these unconsolidated financial statements.

BALANCE SHEETS (PRIOR TO PROFIT APPROPRIATION)

(At December 31, 2013 and 2012)

	Note	2013 CHF millions	2012 CHF millions
Assets			
Non-current assets			
Goodwill and other intangible assets	3	19 066	20 220
Financial assets – subsidiaries and associated companies	4	19 613	19 654
Other receivables		47	
Total non-current assets		**38 726**	**39 874**
Current assets			
Receivables			
– subsidiaries		11 774	11 105
– others		67	47
Marketable securities	5	240	101
Total current assets		**12 081**	**11 253**
Total assets		**50 807**	**51 127**
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
– Reserve for treasury shares		4 768	3 214
Free reserves	8	36 850	39 262
Total reserves		**42 136**	**42 994**
Unappropriated earnings			
Net income of the year		5 631	5 141
Total unappropriated earnings		**5 631**	**5 141**
Total equity		**49 120**	**49 488**
Liabilities			
Bonds	9	797	795
Provisions		501	518
Accounts payable and accrued liabilities			
– subsidiaries		56	81
– others		333	245
Total liabilities		**1 687**	**1 639**
Total equity and liabilities		**50 807**	**51 127**

The accompanying Notes form an integral part of these unconsolidated financial statements.

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

These are valued at acquisition cost less adjustments for foreign currency losses and any other impairment of value.

MARKETABLE SECURITIES

These are valued at the lower of cost and market value.

BONDS

These 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	2013 CHF millions	2012 CHF millions
Cost		
January 1	**22 350**	**22 384**
Disposals as a result of a Novartis Group internal legal company reorganization	–	– 34
December 31	**22 350**	**22 350**
Accumulated amortization		
January 1	**– 2 280**	**– 1 140**
Amortization charges	– 1 140	– 1 140
December 31	**– 3 420**	**– 2 280**
Net book value at December 31	**18 930**	**20 070**
Other intangible assets		
Cost		
January 1 and December 31	**242**	**242**
Accumulated amortization		
January 1	**– 92**	**– 79**
Amortization charges	– 14	– 13
December 31	**– 106**	**– 92**
Net book value at December 31	**136**	**150**
Goodwill and other intangible assets		
Net book value at December 31	**19 066**	**20 220**

4. FINANCIAL ASSETS

Included in financial assets are CHF 14 433 million (2012: CHF 14 395 million) of investments in subsidiaries and associated companies and CHF 5 180 million (2012: CHF 5 259 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 178 million (2012: CHF 25 million) (see Notes 6 and 7 below). This position also included time deposits of CHF 72 million in 2012 to cover a guarantee and so was restricted in its use.

6. SHARE CAPITAL

	Number of shares				
	Dec 31, 2011	Movement in year	Dec 31, 2012	Movement in year	Dec 31, 2013
Total Novartis AG shares	**2 745 623 000**	**– 39 430 000**	**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	90 737 458	– 39 430 000	51 307 458	2 160 000	53 467 458
Treasury shares held by subsidiaries	67 435 782	– 7 883 490	59 552 292	18 292 323	77 844 615
Total treasury shares held by Novartis AG and its subsidiaries (excluding foundations)	**158 173 240**	**– 47 313 490**	**110 859 750**	**20 452 323**	**131 312 073**

The Novartis AG share capital consists of registered shares with a nominal value of CHF 0.50 each.

The Novartis AG share capital is unchanged in 2013.

During 2012, the total share capital decreased from CHF 1 372.8 million at December 31, 2011 to CHF 1 353.1 million at December 31, 2012 due to a share capital reduction as a result of the cancellation of 39.4 million repurchased shares with a nominal value of CHF 19.7 million. The cancellation was approved at the Annual General Meeting of February 23, 2012 and became effective on May 3, 2012.

Treasury share purchases during 2013 totaled 36.5 million (2012: 6.3 million) with an average purchase price of CHF 68 (2012: CHF 51), treasury share sales totaled 4.7 million (2012: 3.8 million) with an average sale price of CHF 56 (2012: CHF 55) and share-based compensation transactions totaled 11.3 million shares (2012: 10.4 million shares).

The number of treasury shares held by the Company and its subsidiaries meet the definitions and requirements of Art. 659b SCO.

At December 31, 2013, treasury shares held by Novartis AG and its subsidiaries totaled 131 312 073, of which 115 612 073 are non-dividend bearing. The remaining balance are dividend bearing and held principally for share-based compensation purposes. It should be noted that within the Novartis Group's 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

	2013 CHF millions	2012 CHF millions
January 1 and December 31	**320**	**320**

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

	2013 CHF millions	2012 CHF millions
January 1 and December 31	**198**	**198**

RESERVE FOR TREASURY SHARES HELD BY THE GROUP

	2013 CHF millions	2012 CHF millions
January 1	**3 214**	**5 744**
Reduction due to cancellation of treasury shares (CHF 2 081 million of repurchased shares less their nominal value of CHF 20 million)		– 2 061
Transfer from/to free reserves	1 554	– 469
December 31	**4 768**	**3 214**

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

	2013 CHF millions	2012 CHF millions
January 1	**39 262**	**39 271**
Transfer to unappropriated earnings	– 858	– 478
Transfer to/from reserve for treasury shares	– 1 554	469
December 31	**36 850**	**39 262**

9. CHF 800 MILLION BONDS 3.625% 2008/2015

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, 2013 CHF millions	Dec 31, 2012 CHF millions
Guarantees in favor of subsidiaries to cover capital and interest of bonds and commercial paper programs – total maximum amount CHF 22 142 million (2012: CHF 25 247 million)	11 667	13 674
Other guarantees in favor of subsidiaries, associated companies and others – total maximum amount CHF 2 592 million (2012: CHF 2 688 million)	1 308	1 220
Total contingent liabilities	**12 975**	**14 894**

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, 2013	% holding of share capital December 31, 2012
Novartis Foundation for Employee Participation, Basel, Switzerland	3.0	4.0
Emasan AG, Basel, Switzerland	3.3	3.3

In addition, Novartis AG was informed through a notification that Norges Bank (Central Bank of Norway), Oslo, Norway, holds 2.03% (2012: 2.29%).

Furthermore, there are the following other significant shareholders:

Shareholders registered as nominees:
- JPMorgan Chase Bank, New York, United States, holds 11.1% (2012: 11.4%).
- Nortrust Nominees, London, United Kingdom, holds 3.2% (2012: 3.3%).
- The Bank of New York Mellon, New York, United States, holds 4.6% (2012: 5.0%) through its Nominees Mellon Bank, Everett, United States, with a holding of 2.8% (2012: 3.3%) and The Bank of New York Mellon, Brussels, Belgium, with a holding of 1.8% (2012: 1.7%).

Shareholder acting as American Depositary Share (ADS) depositary:
- JPMorgan Chase Bank, New York, United States, holds 11.7% (2012: 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. EXECUTIVE AND BOARD OF DIRECTORS COMPENSATION DISCLOSURES

Novartis AG's financial statements have been prepared in accordance with the requirements of Swiss company law, the Swiss Code of Obligations (SCO). This note therefore differs in certain significant respects from compensation disclosures in note 27 to the Group's consolidated financial statements, which have been prepared in accordance with International Financial Reporting Standards (IFRS), mainly due to different expense recognition rules being applied.

12.1) COMPENSATION OF MEMBERS OF THE EXECUTIVE COMMITTEE

GENERAL PRINCIPLES

The compensation policies, performance management process and incentive plans apply equally to the members of the Executive Committee.

Decisions concerning the compensation of the members of the Executive Committee are based on an evaluation of the individual performance of the members of the Executive Committee as well as on the performance of their respective business area or function. Compensation of the members of the Executive Committee is highly linked to Novartis' performance against performance objectives. The financial criteria for short-term performance appraisal of the CEO include growth objectives for net sales, operating income, net income, free cash-flow, earnings per share as well as market share. For long-term performance appraisal, the financial criterion is the Novartis Economic Value Added (NVA). NVA is a measure of the Group's performance taking into account Group operating income adjusted for interest, taxes and charge for the cost of capital or, more simply, the value created in excess of the expected return of the Company's investors (i.e. the shareholders and debt holders). See also page 120 of the Annual Report for information regarding NVA calculation.

The metrics of performance objectives are designed to appropriately balance short-term and long-term objectives. On the one hand, objectives are set at ambitious levels each year to motivate a high degree of business performance with emphasis on longer term financial objectives. On the other hand, they are also designed to avoid inappropriate or excessive risk.

COMPENSATION FOR PERFORMANCE IN 2013 AND 2012

The following compensation tables disclose the compensation granted to the CEO and the members of the Executive Committee for performance in 2013 with comparatives to 2012. The following paragraphs describe the principles underlying the data in the tables.

ALIGNMENT OF REPORTING AND PERFORMANCE

The compensation tables synchronize the reporting of annual compensation with the performance in the given year, i.e., all amounts awarded for performance in 2013 and 2012, including the future LSSP/ESOP match, are disclosed in full in the tables of 2013 and 2012.

DISCLOSURE STRUCTURE

The compensation table shows the compensation granted to the CEO and each member of the Executive Committee for performance in 2013 for all compensation elements.

The column "Future LSSP/ESOP match" reflects shares to be awarded in the future if the member of the Executive Committee remains with Novartis for at least three or five years, respectively.

The members of the Executive Committee were invited to invest their annual incentive awards for 2013 and 2012 either in the five-year Leveraged Share Savings Plan (LSSP) or in the three-year Swiss Employee Share Ownership Plan (ESOP) to further align their interests with those of our shareholders. Under the plan rules, participants will receive additional shares ("matching shares") after the expiration of either the three- or five-year vesting period. Under the three-year ESOP, for every two shares invested, the participant receives one matching share. Under the five-year LSSP, each share invested entitles the participant to receive one matching share. If a participant leaves Novartis prior to the expiration of the vesting period, in general, no matching shares are awarded.

VALUATION PRINCIPLES

In order to allow a comparison with other companies, the Compensation Committee decided to disclose shares, restricted shares, RSUs and ADR at their market value on the date of grant. Market value is the current quoted share price at which a director or an associate is granted a share, a restricted share or a restricted stock unit at grant date. The market value of share options was calculated for past years by using an option pricing valuation model as per grant date.

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 our Financial Report in note 27 to the Group's audited consolidated financial statements.

EXECUTIVE COMMITTEE MEMBER MARKET VALUE COMPENSATION FOR PERFORMANCE YEAR 2013 [1]

		Base compensation	Variable compensation				Benefits		Total		Total compensation
			Short-term incentive plans		Long-term incentive plans						
	Currency	Cash (Amount)	Cash (Amount)	Shares (Market value) [2]	Equity Plan "Select" Shares (Market value) [3]	Long-Term Performance Plan Shares (Market value) [4]	Pension benefits (Amount) [5]	Other benefits (Amount) [6]	(Amount) [7]	Future LSSP/ESOP match [8] Shares (Market value)	Including future LSSP/ESOP match [9,10] (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 [8]	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) [11]	CHF	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) [12]	CHF	483 333	263 720	175 820	879 026	428 856	53 918	59 613	2 344 286	175 820	2 520 106
Total [13]	**CHF**	**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**

[1] Does not include reimbursement for travel and other necessary business expenses incurred in the performance of their services as these are not considered compensation.

[2] 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.

[3] Novartis shares granted under the Novartis Equity Plan "Select" have a three-year vesting period.

[4] Awarded based on the achievement of Novartis Economic Value Added (NVA) objectives over the three-year performance period ended December 31, 2013.

[5] Service costs of pension and post-retirement healthcare benefits accumulated in 2013.

[6] 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.

[7] The value of all equity grants included in this table has been calculated based on the closing price of January 22, 2014.

[8] 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.

[9] 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.

[10] 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.

[11] 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 Committee). The other 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.

[12] The amounts reflect the compensation as Permanent Attendee to the Executive Committee from May 1, 2013 until December 31, 2013.

[13] 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 MARKET VALUE COMPENSATION FOR PERFORMANCE YEAR 2012 [1]

		Base compensation	Variable compensation					Benefits		Total		Total compensation
			Short-term incentive plans		Long-term incentive plans							
					Equity Plan "Select"		Long-Term Performance Plan	Pension benefits	Other benefits		Future LSSP/ESOP match [9]	Including future LSSP/ESOP match [10,11]
	Currency	Cash (Amount)	Cash (Amount)	Shares (Market value) [2]	Shares (Market value) [3]	Options (Market value) [4]	Shares (Market value) [5]	(Amount) [6]	(Amount) [7]	(Amount) [8]	Shares (Market value)	(Amount)
Joseph Jimenez (Chief Executive Officer)	CHF	2 025 000	1 370 300	0	4 795 941	0	4 747 013	161 200	128 734	13 228 188	0	13 228 188
Juergen Brokatzky-Geiger	CHF	708 750	0	625 330	1 250 536	0	731 145	148 594	10 084	3 474 439	625 330	4 099 769
Kevin Buehler [12]	USD	1 118 333	202 897	504 048	2 827 532	0	1 753 300	413 056	62 930	6 882 096	504 048	7 386 144
Felix R. Ehrat	CHF	743 333	0	750 149	1 500 112	0	432 702	158 498	0	3 584 794	750 149	4 334 943
David Epstein	USD	1 158 332	525 953	727 166	3 132 643	0	1 666 814	325 563	26 191	7 562 662	727 166	8 289 828
Mark C. Fishman	USD	990 000	23 265	966 736	3 960 038	0	1 547 029	242 832	118 319	7 848 219	966 736	8 814 955
Jeff George	CHF	791 667	220 000	220 022	880 027	0	636 250	111 932	55 412	2 915 310	110 011	3 025 321
George Gunn	CHF	862 500	716 300	0	1 193 710	0	1 213 762	108 382	0	4 094 654	0	4 094 654
Naomi Kelman (until February 29, 2012) [13]	USD	102 782	51 667	0	0	0	0	3 196	904 469	1 062 114	0	1 062 114
Andrin Oswald	CHF	791 667	0	304 058	608 054	0	636 250	118 132	38 520	2 496 681	304 058	2 800 739
Jonathan Symonds	CHF	916 667	0	621 011	1 552 557	0	1 377 021	161 817	17 135	4 646 208	621 011	5 267 219
Brian McNamara (as from March 1, 2012) [14]	USD	500 000	94 169	140 002	464 869	0	260 580	45 053	19 710	1 524 383	140 002	1 664 385
Total [15]	**CHF**	**10 466 057**	**3 148 166**	**4 711 715**	**21 513 910**	**0**	**14 673 602**	**1 933 597**	**1 310 446**	**57 757 493**	**4 601 704**	**62 359 197**

[1] Does not include reimbursement for travel and other necessary business expenses incurred in the performance of their services as these are not considered compensation.

[2] 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.

[3] Novartis shares granted under the Novartis Equity Plan "Select" have a three-year vesting period.

[4] Novartis share options granted under the Novartis Equity Plan "Select" are tradable. Share options granted outside North America will expire on January 17, 2023, have a three-year vesting period and have an exercise price of CHF 61.70 per share (the closing price of Novartis shares on the grant date of January 17, 2013). Based on the option pricing valuation model as per grant date, the value of the share options granted outside North America used in this table was CHF 4.28. Share options on ADSs granted to participants in North America will expire on January 17, 2023, have a three-year vesting period and an exercise price of USD 66.07 per ADS (the closing price of Novartis ADSs on the grant date of January 17, 2013). Based on the option pricing valuation model as per grant date, the value of the share options on ADSs granted to participants in North America used in this table was USD 4.37.

[5] Awarded based on the achievement of Novartis Economic Value Added (NVA) objectives over the performance period ended December 31, 2012.

[6] Service costs of pension and post-retirement healthcare benefits accumulated in 2012.

[7] Includes perquisites and other compensation valued at market price. Does not include cost allowances and tax-equalization payments regarding the international assignment of David Epstein, Jeff George and Andrin Oswald. Does not include an annual pension in payment for Kevin Buehler as a result of a change of control clause (USD 491 174). Does not include dividend equivalents paid in 2012 to Kevin Buehler (USD 529 387) for pre Alcon merger RSUs grants, to David Epstein (USD 138 011), Mark C. Fishman (USD 189 845) and Brian McNamara (USD 17 122) for RSUs grants made in or prior to 2010.

[8] The value of all equity grants included in this table has been calculated based on market value.

[9] 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 additional shares ("matching shares") after the expiration of either the five- or three-year vesting period.

[10] The values of the shares, RSUs and share options reflected in this table have been calculated based on market value. The closing share price on the grant date January 17, 2013 was CHF 61.70 per Novartis share and USD 66.07 per ADS.

[11] 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.

[12] Excludes 35 153 performance shares awarded to Kevin Buehler, against the share price of USD 54.51 for performance prior to the Alcon merger.

[13] Naomi Kelman stepped down from the Executive Committee as per February 29, 2012. The base compensation and benefits information in the table reflects her pro rata compensation over the period from January 1, 2012 to February 29, 2012 (i.e. the period during which she was member of the Executive Committee). The other compensation ("Other benefits") includes the contractual compensation and benefits from March 1, 2012 to December 31, 2012 due in compensation for the twelve-month notice set forth in her employment contract. The other compensation ("Other benefits") does not include the fair market compensation (USD 1 263 223 related to the period between March 1, 2012 and December 31, 2012) for refraining to compete with any business of Novartis for twelve months following her departure. Ms. Kelman will receive this payment in 2013 partly in cash and partly in shares subject to her continued compliance with the non-compete terms. Of the 88 000 shares reported in the Annual Report 2011 as a Special Share Award, 70 500 shares have forfeited, while 17 500 shares contractually vested in 2012.

[14] The table reflects the compensation as Permanent Attendee to the Executive Committee from March 1, 2012 until December 31, 2012.

[15] Amounts in USD for Kevin Buehler, David Epstein, Mark C. Fishman, Naomi Kelman and Brian McNamara were converted at a rate of CHF 1.00 = USD 1.067, 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)

	Variable compensation			
	Short-term incentive plans	Long-term incentive plans		
		Equity Plan "Select"	Long-Term Performance Plan	Future LSSP/ESOP match
	Shares (Number)[1]	Shares (Number)[2]	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)[3]	0	0	18 987	0
Harry Kirsch (as from May 1, 2013)[4]	2 384	11 919	5 815	2 384
Total	**46 395**	**275 306**	**270 874**	**41 861**

[1] These shares have a five-year vesting period under LSSP and a three-year vesting period under ESOP.
[2] These shares awarded under the Equity Plan "Select" have a three-year vesting period.
[3] 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).
[4] The amounts reflect the compensation as Permanent Attendee to the Executive Committee from May 1, 2013 until December 31, 2013.

EXECUTIVE COMMITTEE MEMBER – EQUITY AWARDS FOR PERFORMANCE YEAR 2012 (NUMBER OF EQUITY INSTRUMENTS)

	Variable compensation				
	Short-term incentive plans	Long-term incentive plans			
		Equity Plan "Select"		Long-Term Performance Plan	Future LSSP/ESOP match
	Shares (Number)[2]	Shares (Number)[3]	Options (Number)[3]	Shares (Number)	Shares (Number)
Joseph Jimenez (Chief Executive Officer)	0	77 730	0	76 937	0
Juergen Brokatzky-Geiger	10 135	20 268	0	11 850	10 135
Kevin Buehler	7 629	42 796	0	26 537	7 629
Felix R. Ehrat	12 158	24 313	0	7 013	12 158
David Epstein	11 006	47 414	0	25 228	11 006
Mark C. Fishman	14 632	59 937	0	23 415	14 632
Jeff George	3 566	14 263	0	10 312	1 783
George Gunn	0	19 347	0	19 672	0
Naomi Kelman (until February 29, 2012)	0	0	0	0	0
Andrin Oswald	4 928	9 855	0	10 312	4 928
Jonathan Symonds	10 065	25 163	0	22 318	10 065
Brian McNamara (as from March 1, 2012)[1]	2 119	7 036	0	3 944	2 119
Total	**76 238**	**348 122**	**0**	**237 538**	**74 455**

[1] The table reflects the compensation as Permanent Attendee to the Executive Committee from March 1, 2012 until December 31, 2012.
[2] These shares have a five-year vesting period under LSSP and a three-year vesting period under ESOP.
[3] These shares and the options awarded under the Equity Plan "Select" have a three-year vesting period.

The aggregate amount of compensation of all members of the Executive Committee in 2013 is CHF 67 725 713 (compared to CHF 62 359 198 in 2012). The factors which may influence in one way or another the difference of the aggregate amount of compensation of all members of the Executive Committee between 2013 and 2012 include, among others, the share price evolution over the last 12 months (i.e. an impact of CHF 3.3 million) and personnel changes within the Executive Committee.

12.2) COMPENSATION OF BOARD MEMBERS

GENERAL PRINCIPLES

The Board of Directors determines the compensation of its members, other than the Chairman, each year, based on a proposal by the Compensation Committee and advice from its independent advisor.

COMPENSATION OF THE CHAIRMAN OF THE BOARD

Daniel Vasella, M.D.

After 17 years of service as our Chairman, including 14 years as CEO and Chairman, 2013 saw the retirement of Dr. Daniel Vasella from the Board of Directors. The Board of Directors wishes to thank Dr. Vasella for his leadership in creating Novartis; for his dedication to the Company; for transforming the business portfolio to focus on healthcare, building a world-leading research organization and a strong leadership team; and for forging a reputation that is among the best in the industry and beyond.

Since the 2013 AGM, when he stepped down, Dr. Vasella has provided certain transitional services, including select Board mandates with subsidiaries of the Company, to support the ad-interim Chairman and the new Chairman. For his services during this transition period, from the AGM on February 22, 2013 to October 31, 2013, Dr. Vasella received cash compensation of CHF 2.7 million, and 31 724 unrestricted shares on October 31, 2013 (market value of the shares at the time of delivery was CHF 2.2 million). During the same period, the Company reimbursed the cost of Dr. Vasella's professional legal and financial advice amounting to CHF 161 983, and the cost of terminating his life insurance, amounting to CHF 60 166. For this period, a total amount of CHF 5.1 million was paid to him.

Dr. Vasella has subsequently been available to the Company, at the CEO's request and discretion, to provide coaching to high-potential Novartis associates and for speeches at key Novartis events. This agreement became effective on November 1, 2013 and will last until the end of 2016. Dr. Vasella will be 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. During November and December 2013, Dr. Vasella did not provide any coaching to associates and did not receive any compensation for this period.

Dr. Vasella will hold the title of Honorary Chairman in recognition of his significant achievements on behalf of the Company. There are no rights associated with this role in addition to his fiduciary duty as Honorary Chairman, and Dr. Vasella will not attend Board meetings or receive Board documents. No compensation will be provided in relation to this role other than administrative support and security which are usual and customary for a position of this nature.

Joerg Reinhardt, Ph.D.

At the 2013, AGM shareholders elected Dr. Joerg Reinhardt to the Board of Directors as our Chairman, effective August 1, 2013.

As our Chairman, Dr. Reinhardt will receive 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

Unless the Chairman decides to waive it, his total compensation shall increase for each period from Annual General Meeting to the succeeding Annual General Meeting at a rate at least equal to the average rate of the base salary increase granted to the Swiss executive associates of Novartis. Dr. Reinhardt is eligible for pension and insurance benefits according to the standard Novartis benefit plans. There is no variable or other component to his regular compensation.

Dr. Reinhardt will also receive compensation for lost entitlements at his former employer, with a total value of EUR 2.6 million. 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.

Ulrich Lehner, Ph.D.

During the transition period between the departure of Dr. Vasella and the arrival of Dr. Reinhardt, Vice Chairman Dr. Ulrich Lehner led the Board of Directors as Chairman on an ad-interim basis.

Dr. Lehner received an amount of CHF 791 668, which was a pro rata of CHF 1.9 million total annual compensation, for his tenure as Chairman ad-interim between the AGM on February 22, 2013 and July 31, 2013. This amount was paid equally in cash and shares. There was no variable or other component to Dr. Lehner's compensation. During his service as Chairman ad-interim, he did not receive regular Board fees and was not eligible to receive pension or any other insurance benefits.

Following completion of his tenure as Chairman ad-interim, the compensation of Dr. Lehner reverted to the ordinary compensation for a member of the Board of Directors.

Other members of the Board of Directors

For 2013, other members of the Board of Directors received, in one installment, an annual fixed Board membership fee and additional fees for committee chairmanships, committee memberships, and other functions to compensate for their increased responsibilities and engagements. Members of the Board of Directors do not receive additional fees for attending meetings. The annual fees cover the period from the AGM of the year of disclosure to the next AGM. Members of the Board of Directors are required to receive at least 50% of their total fees in the form of unrestricted Novartis shares. Members of the Board of Directors do not receive share options and do not have pension benefits.

The annual fee rates for Board membership and additional functions, to be paid in cash and shares, are as follows:

BOARD MEMBER ANNUAL FEE RATES (EXCL. CHAIRMAN)

	Annual fee (CHF)
Board membership	350 000
Chairman's Committee membership	150 000
Audit and Compliance Committee membership	100 000
Other Board Committee membership	50 000
Vice chairmanship of the Board of Directors	50 000
Board Committee chairmanship (except for ACC)	60 000
Audit and Compliance Committee chairmanship	120 000
Delegated board membership [1]	125 000

[1] The Board of Directors has delegated Rolf M. Zinkernagel to the Scientific Advisory Board of the Novartis Institute for Tropical Diseases (NITD). The Board of Directors has delegated both Rolf M. Zinkernagel and William Brody to the Board of Directors of the Genomics Institute of the Novartis Research Foundation (GNF).

COMPENSATION IN 2013 AND 2012

The following compensation tables disclose the compensation granted to Board members in 2013 with comparatives to 2012.

BOARD MEMBER COMPENSATION IN 2013 [1]

	Board membership	Vice Chairman	Chairman's Committee	Audit and Compliance Committee	Risk Committee	Compensation Committee	Corporate Governance and Nomination Committee	Delegated board membership	Annual cash compensation (CHF) (A)	Shares (Market value) (CHF) (B) [2]	Shares (Number)	Other (CHF) (C)	Total (CHF) (A)+(B)+(C)
Daniel Vasella (until Feb 22, 2013) [3]	**Chair**		**Chair**	•[4]	•[4]	•[4]	•[4]		707 283	697 148	11 299	1 573 334 [5]	2 977 765
Joerg Reinhardt (as of Aug 1, 2013) [6]	**Chair**		**Chair**						791 667	950 023	14 064	159 124 [7]	1 900 814
Ulrich Lehner	**Chair a.i.** [8]	•	•	•	•	•	•		629 168 [8]	629 217 [8]	10 198	69 825 [9]	1 328 210
Enrico Vanni	•	•	•	•		**Chair**			355 000	355 022	5 754	41 010 [9]	751 032
Dimitri Azar	•			•					225 000	225 020	3 647	–	450 020
Verena A. Briner	•								175 000	175 043	2 837	18 782 [9]	368 825
William Brody [10]	•					•		•	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 [11]	•						**Chair**		–	410 058	6 646	21 349 [9]	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 [9]	589 079
Wendelin Wiedeking	•				•		•		–	450 040	7 294	26 893 [9]	476 933
William T. Winters	•								175 000	175 043	2 837	–	350 043
Rolf M. Zinkernagel [12]	•						•	•	325 000	325 036	5 268	34 382 [9]	684 418
Total									**4 710 618**	**5 719 311**	**91 362**	**1 973 722**	**12 403 651**

[1] Does not include reimbursement for travel and other necessary business expenses incurred in the performance of their services as these are not compensation.

[2] 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.

[3] Daniel Vasella's compensation set out in this table reflects the Chairman period from Jan 1, 2013 to Feb 22, 2013 and does not include further payments related to the post Chairman period, which are disclosed in the section "Compensation of the Chairman of the Board".

[4] During his Chairmanship (i.e. until February 22, 2013), Daniel Vasella attended the meetings of these Committees as a guest without voting rights.

[5] 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.

[6] Dr. Reinhardt will also receive compensation for lost entitlements at his former employer, with a total value of EUR 2.6 million. 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.

[7] Includes social security costs due by the individual and paid by the company and pension costs.

[8] 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.

[9] Includes social security costs due by the individual and paid by the company.

[10] The Board of Directors has delegated William Brody to the Board of Directors of the Genomics Institute of the Novartis Research Foundation (GNF).

[11] According to Pierre Landolt, the Sandoz Family Foundation is the economic beneficiary of the compensation.

[12] 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).

BOARD MEMBER COMPENSATION IN 2012[1]

	Board membership	Vice Chairman	Chairman's Committee	Audit and Compliance Committee	Risk Committee	Compensation Committee	Corporate Governance and Nomination Committee	Delegated board membership	Annual cash compensation (CHF) (A)	Shares (Market value) (CHF) (B)[2]	Shares (Number)	Other (CHF) (C)	Total (CHF) (A)+(B)+(C)
Daniel Vasella	Chair		Chair	•[3]	•[3]	•[3]	•[3]		4 110 750	8 241 815	152 063	715 027[4]	13 067 592
Ulrich Lehner	•	•	•	•	•	•	Chair		405 000	405 037	7 473	43 070[5]	853 107
Dimitri Azar	•								140 000	210 025	3 875	–	350 025
William Brody[6]	•					•		•	262 500	262 545	4 844	–	525 045
Srikant Datar	•		•	Chair	•	•			360 000	360 051	6 643	–	720 051
Ann Fudge	•				•		•		225 000	225 038	4 152	–	450 038
Pierre Landolt[7]	•						•		–	400 050	7 381	23 977[5]	424 027
Enrico Vanni	•			•		Chair			255 000	255 011	4 705	30 150[5]	540 161
Andreas von Planta	•			•	Chair		•		280 000	280 051	5 167	29 023[5]	589 074
Wendelin Wiedeking	•			•	•				–	500 049	9 226	29 607[5]	529 656
Marjorie M.T. Yang	•					•			200 000	200 052	3 691	24 177[5]	424 229
Rolf M. Zinkernagel[8]	•						•	•	325 000	325 037	5 997	34 383[5]	684 420
Total									**6 563 250**	**11 664 761**	**215 217**	**929 414**	**19 157 425**

[1] Does not include reimbursement for travel and other necessary business expenses incurred in the performance of their services as these are not compensation.
[2] The value of the shares reflected in this column has been calculated based on market value of the shares at grant date. All shares were granted as per January 19, 2012 against the prevailing share price of CHF 54.20.
[3] Daniel Vasella attended the meetings of these Committees as a guest without voting rights.
[4] Includes inter alia social security costs due by the individual and paid by the company, pension and life insurance.
[5] Includes social security costs due by the individual and paid by the company.
[6] The Board of Directors has delegated William Brody to the Board of Directors of the Genomics Institute of the Novartis Research Foundation (GNF).
[7] According to Pierre Landolt, the Sandoz Family Foundation is the economic beneficiary of the compensation.
[8] 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).

12.3) SHARES AND SHARE OPTIONS OWNED BY EXECUTIVE COMMITTEE MEMBERS

SHARES AND SHARE OPTIONS OWNED

The following tables show the total number of vested and unvested Novartis shares or ADRs, as well as RSUs (but excluding unvested matching RSUs from LSSP/ESOP and unvested RSUs from LTPP) and the total number of share options owned by members of the Executive Committee and "persons closely linked to them"[1] as of December 31, 2013, and January 17, 2013.

As of December 31, 2013 and January 17, 2013, no member of the Executive Committee together with "persons closely linked"[1] to them owned 1% or more of the outstanding shares of Novartis, either directly or through share options.

[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 OWNED BY EXECUTIVE COMMITTEE MEMBERS

	Number of shares[1]	
	As of December 31, 2013	As of January 17, 2013 (restated)[2]
Joseph Jimenez	465 007	410 340
Juergen Brokatzky-Geiger	268 498	226 245
Kevin Buehler	316 038	434 898
Felix R. Ehrat	52 616	9 132
David Epstein	259 854	246 205
Mark C. Fishman	347 359	365 377
Jeff George	127 666	109 525
George Gunn	157 468	228 449
Brian McNamara	39 242	27 180
Andrin Oswald	150 810	125 715
Jonathan Symonds	NA[3]	144 829
Harry Kirsch (as from May 1, 2013)[4]	68 102	NA
Total	**2 252 660**	**2 327 895**

NA – Not applicable.
[1] Includes holdings of "persons closely linked" to Executive Committee members (see definition under 12.3).
[2] In 2013, Novartis has decided to disclose shareholdings of Executive Committee members at the year end. In order to achieve comparability with the prior year, the January 17, 2013 shareholdings have been restated to exclude shares granted on that date.
[3] Jonathan Symonds, who stepped down from the Executive Committee as per April 30, 2013, owned 171 503 shares as per April 30, 2013.
[4] Permanent attendee to the Executive Committee.

SHARE OPTIONS OWNED BY EXECUTIVE COMMITTEE MEMBERS[1]

	Number of share options[2]							
	2013	2012	2011	2010	2009	Other	As of December 31, 2013	As of January 17, 2013
Joseph Jimenez					552 076	157 266	709 342	709 342
Juergen Brokatzky-Geiger						211 766	211 766	331 157
Kevin Buehler						605 877[3]	605 877	605 877
Felix R. Ehrat								0
David Epstein								0
Mark C. Fishman						327 594	327 594	604 129
Jeff George			141 396	97 827	15 359	1 793	256 375	256 375
George Gunn						94 371	94 371	94 371
Brian McNamara						78 973	78 973	88 005
Andrin Oswald								5 633
Jonathan Symonds[4]	NA	NA	NA	NA	NA	NA	NA	54 348
Harry Kirsch (as from May 1, 2013)[5]						44 569	44 569	NA
Total	**0**	**0**	**141 396**	**97 827**	**567 435**	**1 522 209**	**2 328 867**	**2 749 237**

NA – Not applicable.
[1] As of 2014, the share option grants have been discontinued under the Novartis Equity Plan "Select".
[2] 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 under 12.3).
[3] Consists of share settled appreciation rights resulting from conversion of Alcon equity into Novartis equity.
[4] Jonathan Symonds, who stepped down from the Executive Committee as per April 30, 2013, owned 54 348 share options as per April 30, 2013.
[5] Permanent Attendee to the Executive Committee.

12.4) SHARES AND SHARE OPTIONS OWNED BY BOARD MEMBERS

The total number of vested and unvested Novartis shares, ADRs and share options owned by Board members and "persons closely linked" (see definition under 12.3) to them as of the end of the day of December 31, 2013, and the end of the day of January 17, 2013, is shown in the following tables.

As of December 31, 2013 and January 17, 2013, none of the Board members together with "persons closely linked" (see definition under 12.3) to them owned 1% or more of the outstanding shares of Novartis, either directly or through share options.

SHARES OWNED BY BOARD MEMBERS [1]

	Number of shares [2]	
	As of December 31, 2013	As of January 17, 2013 (restated) [3]
Daniel Vasella (Chairman until Feb 22, 2013)	NA [4]	3 159 430
Joerg Reinhardt	558 511	NA
Ulrich Lehner	35 351	27 798
Enrico Vanni	12 684	8 368
Dimitri Azar	5 642	2 906
Verena A. Briner	3 837	NA
William Brody	17 356	14 165
Srikant Datar	29 622	25 245
Ann Fudge	13 161	10 122
Pierre Landolt [5]	50 644	45 873
Charles L. Sawyers	2 128	NA
Andreas von Planta	121 334	116 795
Wendelin Wiedeking	278 139	252 182
William T. Winters	2 128	NA
Marjorie M.T. Yang	NA [6]	18 000
Rolf M. Zinkernagel	40 000	40 680
Total	**1 170 537**	**3 721 564**

NA – Not applicable.
[1] Includes holdings of "persons closely linked" to Board members (see definition under 12.3).
[2] Each share provides entitlement to one vote.
[3] In 2013, Novartis has decided to disclose shareholdings of Board members at the year end. In order to achieve comparability with the prior year, the January 17, 2013 shareholdings have been restated to exclude shares granted on that date. Shares granted to non-Swiss tax residents are subject to immediate withholding tax of 25% at grant.
[4] Daniel Vasella, who did not stand, at his own wishes, for re-election to the Board of Directors at the AGM 2013, owned 3 409 035 shares as per February 22, 2013.
[5] According to Pierre Landolt, the Sandoz Family Foundation is the economic beneficiary of all shares.
[6] Marjorie M.T. Yang, who did not stand, at her own wishes, for re-election to the Board of Directors at the AGM 2013, owned 18 000 shares as per February 22, 2013.

SHARE OPTIONS OWNED BY BOARD MEMBERS [1]

	Number of share options [2]	
	As of December 31, 2013	As of January 17, 2013
Daniel Vasella (Chairman until Feb 22, 2013)	NA [3]	1 633 290
Joerg Reinhardt	0	NA
Ulrich Lehner	0	0
Enrico Vanni	0	0
Dimitri Azar	0	0
Verena A. Briner	0	NA
William Brody	0	0
Srikant Datar	0	0
Ann Fudge	0	0
Pierre Landolt [4]	0	0
Charles L. Sawyers	0	NA
Andreas von Planta	0	0
Wendelin Wiedeking	0	0
William T. Winters	0	NA
Marjorie M.T. Yang	NA [5]	0
Rolf M. Zinkernagel	0	0
Total	**0**	**1 633 290**

NA – Not applicable.
[1] Includes holdings of "persons closely linked" to Board members (see definition under 12.3).
[2] 2002 was the last year during which Novartis granted share options to non-executive Board members. All these options have expired in 2011.
[3] Daniel Vasella, who did not stand, at his own wishes, for re-election to the Board of Directors at the AGM 2013, owned 1 633 290 share options as per February 22, 2013. The options were granted to him during his tenure as CEO and Chairman.
[4] According to Pierre Landolt, the Sandoz Family Foundation is the economic beneficiary of all share options.
[5] Marjorie M.T. Yang, who did not stand, at her own wishes, for re-election to the Board of Directors at the AGM 2013, owned no share options as per February 22, 2013.

TERMS OF SHARE OPTIONS GRANTED

The share options granted to the members of the Executive Committee under the variable compensation plans are exercisable for one share each (1:1). The terms of the share options granted since 2010 are shown in the table below.

TERMS OF SHARE OPTIONS

Grant year	Exercise price (CHF/USD)	Vesting (years) (Switzerland/ other countries)	Term (years)
2013	61.70/66.07	3/3	10
2012	54.20/58.33	3/3	10
2011	54.70/57.07	2/3	10
2010	55.85/53.70	2/3	10

12.5) LOANS AND OTHER PAYMENTS

LOANS TO BOARD MEMBERS OR MEMBERS OF THE EXECUTIVE COMMITTEE

No loans were granted to current or former Board members or members of the Executive Committee during 2013 and 2012. No such loans were outstanding as of December 31, 2013 and December 31, 2012.

OTHER PAYMENTS TO BOARD MEMBERS OR MEMBERS OF THE EXECUTIVE COMMITTEE

During 2013 and 2012, no payments (or waivers of claims) other than those set out in the Board Member Compensation tables and the Executive Committee Member Compensation tables (including their footnotes) and the accompanying text on pages 267–268 were made to current Board members or members of the Executive Committee or to "persons closely linked" to them (see definition under 12.3).

PAYMENTS TO FORMER BOARD MEMBERS OR MEMBERS OF THE EXECUTIVE COMMITTEE

During 2013 and 2012, no payments (or waivers of claims) were made to former Board members or members of the Executive Committee or to "persons closely linked" to them (see definition under 12.4), except for an amount of CHF 62 346 which was paid to the Mr. Krauer, Honorary Chairman in 2013 (and an amount of CHF 62 346 which was paid to Mr. Krauer, Honorary Chairman in 2012), an amount of CHF 1 146 000, which includes CHF 1 125 000 paid to a former member of the Executive Committee in relation to his obligation to refrain from activities that compete with any business of Novartis in 2013 (and an amount of CHF 1 156 414, which includes CHF 1 125 000 paid to a former member of the Executive Committee in relation to his obligation to refrain from activities that compete with any business of Novartis in 2012 and an amount of CHF 31 414 as other benefits related to his Executive Committee tenure) as well as an amount of USD 429 560 paid to a former member of the Executive Committee for the period January 1 to February 28, 2013 in relation to the end of her notice period and in relation to her obligation to refrain from activities that compete with any business of Novartis in 2013.

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.

APPROPRIATION OF AVAILABLE EARNINGS OF NOVARTIS AG AND DECLARATION OF DIVIDEND

The Board of Directors proposes to use the available earnings of Novartis AG of 2013 for the purpose of distributing a gross dividend of CHF 2.45 per share as follows. This will result in a payout ratio of 74% of the Group's consolidated net income expressed in USD. The 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, 2013 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 2013 Novartis Group consolidated financial statements.

	2013 CHF	2012 CHF
Available unappropriated earnings		
Balance brought forward		
Net income of the year	5 630 725 971	5 141 036 034
Partial use of free reserves	716 197 300	853 530 441
Total available earnings at the disposal of the Annual General Meeting	**6 346 923 271**	**5 994 566 475**
Appropriation		
Payment of a gross dividend of CHF 2.45 (2012: CHF 2.30) on 2 590 580 927 (2012: 2 606 333 250) dividend bearing shares[1] with a nominal value of CHF 0.50 each	– 6 346 923 271	– 5 994 566 475
Balance to be carried forward		

[1] No dividend will be declared on treasury shares held by Novartis AG, and certain other treasury shares held by other Group companies.

Assuming that this proposal by the Board of Directors is approved, payment of the dividend will be made as from March 4, 2014 to those shareholders holding Novartis shares on February 26, 2014. As from February 27, 2014 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 OF NOVARTIS AG

As statutory auditor, we have audited the financial statements of Novartis AG, which comprise the income statement, balance sheet and notes (pages 256 to 273), for the year ended December 31, 2013.

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, 2013 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.

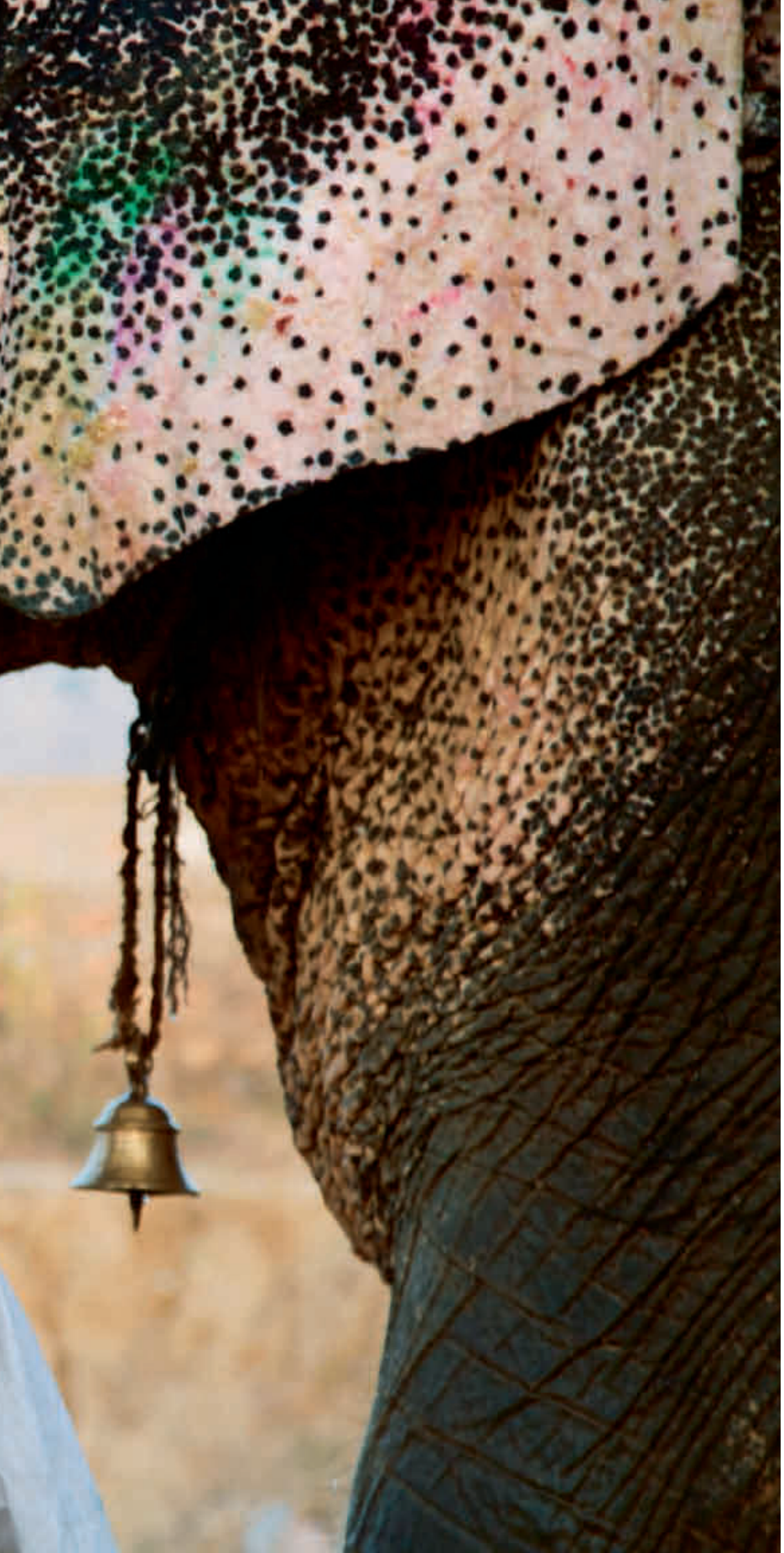
We further confirm that the proposed appropriation of available earnings complies with Swiss law and the Company's articles of incorporation. We recommend that the financial statements submitted to you be approved.

PricewaterhouseCoopers AG

Bruno Rossi
Audit expert
Auditor in charge

Michael P. Nelligan
Global relationship partner

Basel, January 28, 2014



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, photographs demonstrate the complex realities of global healthcare.
We are grateful to Stephanie Sinclair and to those who shared their experiences for the Annual Report 2013.

STEPHANIE SINCLAIR

Stephanie Sinclair (American, b.1973) is known for gaining unique access to the most sensitive gender and human rights issues around the world. Sinclair has documented the defining conflicts of the past decade with a fearless persistence. Her widely published images of the occupation of Iraq and the war in Afghanistan refute characterizations of violence in anything but human terms. Although she has covered the dramatic events of war, many of Sinclair's most arresting works confront the everyday brutality faced by young girls around the world. Her studies of domestic life in developing countries and the United States bring into sharp relief the physical and emotional tolls that entrenched social conventions can take on those most vulnerable to abuse. Ms. Sinclair's 2013 series, "Too Young to Wed," is a decade-long project that has earned global recognition, including three World Press Photo awards and prestigious exhibitions at the United Nations (2012) and the Whitney Biennial (2010) in New York. Other awards for this project include the Alexia Foundation Professional Grant, UNICEF's Photo of the Year, and the Lumix Festival for Young Photojournalism Freelens Award. She has also earned the 2008 CARE International Award for Humanitarian Reportage and The Overseas Press Club's Olivier Rebbot Award (2009) for her essay, "A Cutting Tradition: Inside An Indonesian Female Circumcision Celebration." Other honors for Ms. Sinclair include three Visa D'Or Feature awards from the prestigious Visa Pour L'Image photojournalism festival in France, another World Press Photo award for her coverage of the 2006 war between Israel and Hezbollah in Lebanon, and a Pulitzer Prize (2000). Sinclair's photographs are regularly published worldwide in esteemed outlets such as National Geographic and The New York Times Magazine, among others.

INDIA

Mir Hasan holds his daughter, Chandtara, with the elephant they keep and care for – Rajleali – at the Elephant Village in Jaipur. Mahouts – or elephant keepers – are common family professions in India. Each trainer is assigned an elephant early in its life, and they maintain a close bond.

KEY DATES FOR 2014

Anticipated key reporting dates

Annual General Meeting	February 25, 2014
First Quarter 2014 Results	April 24, 2014
Novartis investor event in Switzerland	June 17–18, 2014
Second Quarter and First Half 2014 Results	July 17, 2014
Third Quarter and First Nine Months 2014 Results	October 28, 2014

ACKNOWLEDGEMENTS

We would like to thank all contributors to this Novartis Annual Report for sharing their knowledge and personal experiences.

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The business policy of Novartis takes into account the OECD's Guidelines for Multinational Enterprises, with their recommendations on the disclosure of information.

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FORWARD-LOOKING STATEMENTS

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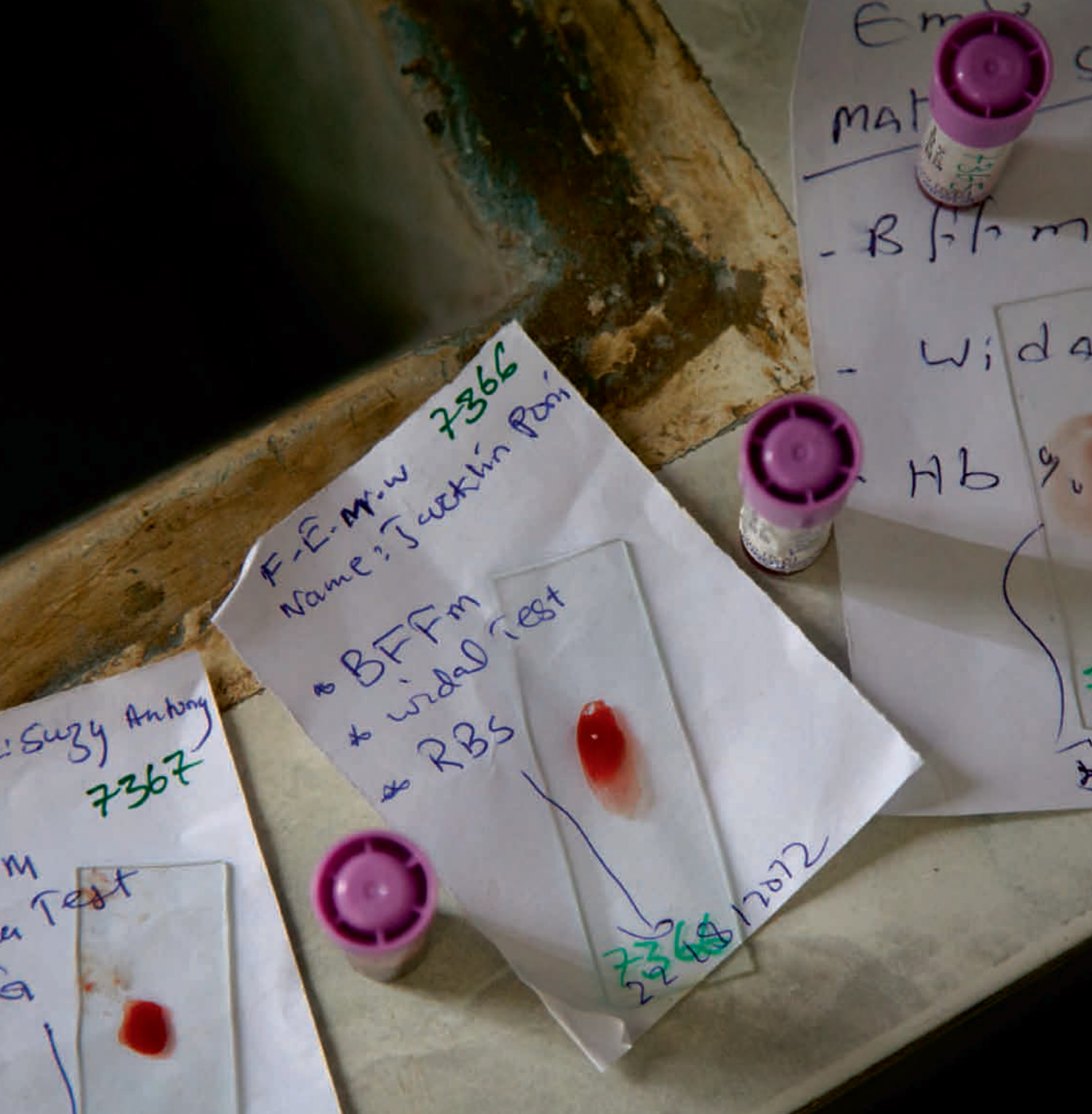
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