

 **NOVARTIS**
caring and curing



ANNUAL REPORT 2010





OUR MISSION

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 ideas and work in our company.





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GROUP REVIEW

Novartis provides healthcare solutions that address the evolving needs of patients and societies worldwide.

We offer a portfolio focused on broad areas of healthcare to best meet these needs: innovative prescription medicines, cost-saving generic pharmaceuticals, preventive vaccines and diagnostic tools, and consumer health products.

FINANCIAL HIGHLIGHTS

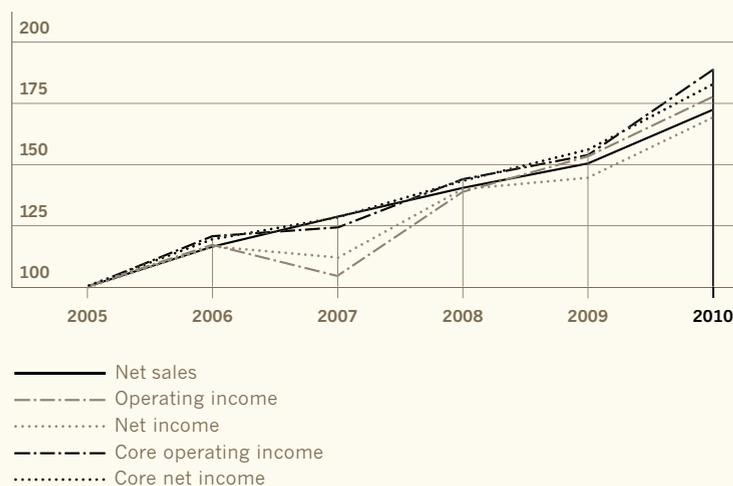
KEY FIGURES

(In USD millions, unless indicated otherwise)

	2010	2009
Net sales	50 624	44 267
Operating income	11 526	9 982
Return on net sales (%)	22.8	22.5
Net income	9 969	8 454
Basic earnings per share ¹ (USD)	4.28	3.70
Core ²		
Operating income	14 006	11 437
Return on core net sales (%)	27.7	25.8
Net income	12 029	10 267
Basic earnings per share ¹ (USD)	5.15	4.50
Research & Development	8 080	7 287
As a % of net sales	16.0	16.5
Number of associates (FTE) ³	119 418	99 834
Return on average equity (%)	15.7	15.7
Free cash flow	7 860	5 505

NET SALES, OPERATING INCOME, NET INCOME, CORE OPERATING INCOME AND CORE NET INCOME⁴

(Index: 2005 = 100%)



SHARE INFORMATION

	2010	2009
Share price at year-end (CHF)	54.95	56.50
ADS price at year-end (USD)	58.95	54.43
Dividend ⁵ (CHF)	2.20	2.10
Pay-out ratio ⁶	55	53

2010 NET SALES BY REGION

(% and in USD millions)

United States	31	15 863
Europe	37	18 558
Asia/Africa/Australasia	18	9 416
Canada and Latin America	9	4 361
Alcon, Inc. ⁷	5	2 426
Total		50 624

¹2010 average number of shares outstanding: 2 285.7 million (2009: 2 267.9 million)

²Core results for operating income, net income, earnings per share (EPS) and R&D eliminate the impact of acquisition-related factors and other significant exceptional items. These adjustments are explained in detail starting on page 143.

³Full-time equivalent positions at year-end, including 16 700 Alcon associates in 2010

⁴To ease comparability, all figures in this chart for the years 2005 to 2007 exclude the Consumer Health Division Nutrition operations divested in 2007

⁵Dividend payment for 2010: proposal to 2011 Annual General Meeting

⁶Pay-out ratio is calculated based on net income attributable to shareholders of Novartis AG

⁷Regional data for Alcon, Inc. is not available

NEWS IN 2010

PERFORMANCE

Recently launched products drive strong top-line growth across broad healthcare portfolio.

Net sales rise 14% (+14% in constant currencies) to USD 50.6 billion driven by strong growth in all businesses, including USD 2.4 billion from consolidation of Alcon. Operating income advances 15% to USD 11.5 billion on business expansion and productivity improvements. Core operating income rises 22% to USD 14.0 billion. Net income up 18% and core net income up 17% to USD 10.0 billion and USD 12.0 billion, respectively.

PRODUCTS

Products launched since 2007 account for 21% of net sales, as more than 13 major pharmaceutical regulatory approvals in 2010 in the US, Europe and Japan continue to rejuvenate the portfolio. Approvals include *Gilenya* (multiple sclerosis) in the US, new indications for *Lucentis* (treatment of diabetic macular edema) in the EU and also for *Tasigna* (newly diagnosed CML) in the US, EU and Japan. Other key approvals include new vaccine *Menveo* (meningococcal disease) in the US and EU as well as US approval for generic enoxaparin.

PIPELINE

Industry-leading pharmaceutical pipeline with 147 projects in development and 16 major submissions in 2010 in the US, EU and Japan including ACZ885 in gout in the EU, *Lucentis* in retinal vein occlusion in the EU, SOM230 in Cushing's disease in the EU, and *Afinitor* in advanced neuroendocrine tumors in the EU and the US. Early pipeline in Vaccines progresses rapidly as *Bexsero*, a breakthrough meningococcal B vaccine, is filed for EU approval.

RESEARCH

Significant investment focusing on areas of greatest patient need and high scientific promise at the Novartis Institutes for BioMedical Research aims to discover novel therapies. Biologics account for an increasing proportion of the exploratory pipeline.

PORTFOLIO

Strengthening our focused portfolio, Novartis completes the purchase from Nestlé S.A. of majority control of Alcon, Inc., the world's leading eye care company and reaches merger agreement with Alcon, Inc., to acquire all outstanding publicly held shares. Sandoz acquires Oriel Therapeutics, gaining rights to a portfolio of generic respiratory products and in Vaccines and Diagnostics the acquisition of a majority holding in Zhejiang Tianyuan nears completion.

CORPORATE CITIZENSHIP

Engaging with society to improve healthcare is integral to how Novartis operates. Access-to-medicine programs for those in need reach 85 million patients in 2010 and, together with our R&D institutes for diseases in developing countries, totaled USD 1.5 billion or 3% of net sales.

DIVIDEND

14th consecutive dividend increase with 5% raise proposed for 2010 to CHF 2.20 per share (2009: CHF 2.10 per share), a dividend yield of 4.0%.

LEADERSHIP

Group leadership strengthened as Joseph Jimenez is promoted to CEO with Daniel Vasella continuing as Chairman of the Board of Directors. David Epstein replaces Mr. Jimenez as Division Head, Pharmaceuticals, and Jonathan Symonds succeeds Raymund Breu as Chief Financial Officer.





Daniel Vasella, M.D.

DEAR SHAREHOLDER

I am pleased to report record results for 2010, both in sales and in profits.

The past year was shaped by repercussions from the global financial crisis and considerable currency turbulence. Despite these difficult conditions, Novartis was very successful. Our well-balanced business portfolio and long-term strategy focused on innovation once more have proved to be robust and appropriate for the future.

The ability to repeatedly launch new and better products, and thus establish market positions, is decisive for the sustainability of our success. We demonstrated both of these core competencies last year. New and recently launched products were a key growth driver in 2010 and hold more promise for the future. Joe Jimenez, our new CEO since February 2010, has successfully continued this strategy and launched new initiatives to improve productivity. His nomination has proven to be right both in terms of timing and in terms of the division of labor between the Chairman and the CEO.

In addition, since August 2010, Novartis has held majority ownership of Alcon, Inc., the global leader in eye care. This year we will propose to you a merger that will fully integrate Alcon into Novartis. While this will result in an increase of the Novartis share capital, the merger not only provides you with a new growth platform but also is expected to allow for the realization of substantial synergies between the two organizations.

Let me summarize the results achieved in the last year:

- Net sales grew 14% (+14% in constant currencies) to USD 50.6 billion.
- Operating income rose by 15% (+17% in constant currencies) to USD 11.5 billion.
- Net income climbed 18% (+20% in constant currencies) to USD 10.0 billion, faster than operating income.
- Free cash flow before dividends reached USD 12.3 billion.
- Alcon was fully consolidated from August 25 when we completed the purchase of an additional 52% stake in the eye care leader. From that date, Alcon net sales totaled USD 2.4 billion; operating income amounted to USD 323 million; and core operating income was USD 852 million.

The **Pharmaceuticals Division** (USD 30.6 billion, +6% in constant currencies) achieved strong volume growth of eight percentage points. Sales of recently launched products were USD 6.6 billion accounting for 21% of the division's sales, a significant increase from 16% the previous year. This enabled Novartis to grow significantly faster than the industry average. One of the most important regulatory approvals was for *Gilenya*, the first oral medication for first-line treatment of relapsing forms of multiple sclerosis (MS), the most common forms of the disease. Currently 2.1 million people worldwide suffer from MS, a lifelong, progressive and disabling disease. Compared to the standard of care, *Gilenya* represents a major break-

through by significantly reducing relapses and improving patients' quality of life.

Our oncology portfolio expanded further during 2010. Longer-term studies demonstrated *Tasigna* continues to surpass the highly effective *Gleevec/Glivec* in patients with newly diagnosed Philadelphia chromosome-positive chronic myeloid leukemia (Ph+ CML), a form of blood cancer. *Tasigna* was approved in the US, the EU, Japan and Switzerland for treatment of patients with newly diagnosed Ph+CML.

The sharp rise in **Vaccines and Diagnostics Division** net sales to USD 2.9 billion (+25% in constant currencies) resulted mainly from sales of influenza A (H1N1) pandemic vaccines, which totaled USD 1.3 billion during the first half of the year. Among the newly developed vaccines, Phase III studies showed that *Bexsero* has the potential to be the first broad coverage vaccine against meningococcal B (MenB) disease. Meningococcal disease is a leading cause of bacterial meningitis, an often deadly disease in infants.

The **generics division Sandoz** achieved double-digit growth (USD 8.5 billion, +15% in constant currencies), thanks to stronger growth in the US, Canada, Italy and emerging markets compared to the previous year. The division's growth rate in Central and Eastern Europe is four times faster than the market – and three times faster in Turkey, the Middle East and Africa. Sandoz posted an excellent result due to the first-to-market launches in the US of differentiated generic versions of complex products such as enoxaparin (the most successful product launch ever by Sandoz), tacrolimus and lansoprazole. This underscores the division's ability to expand its portfolio

with complex and differentiated products. Growth also was attributable to biosimilars, as sales rose 63% in constant currencies. With patents expected to expire over the next five years on biologics with global sales of USD 64 billion, the full strategic importance of our leading position in biosimilars will soon become apparent.

The **Consumer Health Division** overcame the effects of the global recession and increased net sales by 7% (6% in constant currencies) to USD 6.2 billion. With this solid growth, the Consumer Health Division excelled in its respective markets, and continues to grow thanks to the strong performance of several key brands. With sales up 6.4% (in constant currencies) the CIBA Vision Business Unit recorded solid growth, while Animal Health benefitted from some of its top brands. OTC sales growth was driven by analgesics and *Prevacid24HR* for treatment of heartburn.

We achieved strong growth in 2010 despite a global political and economic situation shaped by considerable challenges and uncertainties. Our strategy, which focuses consistently on growth areas of the health-care market while paying careful attention to risks, has proved its value in this dynamic environment. Also in the future, based on this strategy of focused diversification, we expect our company to develop in a more stable way than several of our important competitors. Our acquisition of global eye care leader Alcon is expected to soon provide an additional growth platform with considerable synergy potential. In view of our sustainable success, it is not surprising that our strategy is imitated today. In the long-term, success is reserved for those companies that can systematically focus on their core business, recognize the

inevitable associated risks, and handle them rationally, with strategic vision.

At the core of our corporate culture is the high significance we place on innovation. For several years Novartis has received more approvals for new medicines than competitors. We are recognized as having one of the best pipelines in the industry, and we continue to invest steadily in research and development. Cuts would increase profit in the short-term – but only at a much higher long-term cost. This can already be observed today at other companies that reduced their R&D investments in recent years. Through our ongoing commitment of people and other resources to innovation, we develop differentiated medicines, vaccines and other new products to benefit patients.

Apart from the approvals for *Gilenya* and *Tasigna* mentioned above, we achieved other impressive breakthroughs during the past year.

A clinical trial showed *Onbrez Breezhaler*, a treatment for chronic obstructive pulmonary disease (COPD), was superior to salmeterol, currently one of the mainstays of therapy for this condition. *Onbrez Breezhaler* is already approved in more than 40 countries, including the EU.

Menveo, a groundbreaking vaccine to prevent meningococcal disease, was launched in the US, the EU, and certain countries in Latin America and Asia-Pacific. *Menveo* is an important tool for prevention of meningococcal disease, a life-threatening infection that causes illness in more than 500 000 people each year. Indication extensions are proceeding according to plan and should help to further strengthen this brand.

Biosimilars – high-quality, cost-effective follow-on versions of biologic medicines that are difficult to develop and manufacture – continue their strong sales growth. They are led by products such as *Omnitrope*, which is gaining ground against originator medicines to treat growth hormone deficiency, and by *Binocrit* (epoetin alfa) and *Zarzio* (filgrastim), which were introduced for oncology indications. This success is paving the way to further extend the position of Sandoz as market leader in the field of biosimilars.

Novartis has several very promising medicines in the pipeline for patients with unmet medical need. For example, SOM230 is the first medical therapy to show efficacy in a Phase III trial in Cushing's disease, a debilitating hormonal disorder. There are currently no approved medicines to treat Cushing's disease.

These outstanding innovation milestones will play a key role in sustaining the growth momentum of our company.

Expanding our presence in emerging countries and continuously increasing our productivity are decisive elements of our growth strategy. Last year we were able to further expand our circle of patients and customers in our six key emerging markets, and posted corporate growth of approximately 12% (in constant currencies) compared with the previous year.

It is imperative to steadily increase productivity, particularly in these times of restricted public spending. By consistently simplifying our processes, we can provide added value for patients. This ensures our ability to invest in the future, despite price reductions and

margin pressures. These investments are critical to sustain growth in our industry.

The demand for medicines and therapies will continue to rise in the future for the following reasons:

- **An aging world population with an increasing need for medical care.** The importance of this trend is accentuated by the increasing incidence in the elderly of chronic conditions such as degenerative diseases of the joints, the cardiovascular system and the central nervous system, as well as a heightened risk of cancer.
- **Unhealthy lifestyles and environmental pollution are causing chronic illnesses on a pandemic scale.** Unhealthy eating habits, sedentary lifestyles and environmental pollution have serious consequences including obesity, chronic cardiovascular disorders, diabetes, cancer and pulmonary disease.
- **Rapid economic growth of emerging markets, with better access to medical care.** Expanding populations and increasing prosperity are creating a new middle class of about 2 billion people. The demand for better healthcare is rising disproportionately in China, India, Russia and Brazil. The build up of sustainable healthcare systems also is playing a significant role, as in the case of China, where such expansion is being pursued with substantial political energy.
- **Scientific and technological advances** enable new approaches in pharmaceutical research, leading to innovative medicines against previously incurable diseases or those that lacked sufficient treatment.

Cost increases, which result from rising demand for healthcare services, diagnostics and medicines, have led to a political backlash, aiming to reduce the price of patented medicines and strengthen generics. With financial problems of public healthcare systems exacerbated by the consequences of the global recession, everyone is required to use their resources as efficiently as possible.

We are responding to these intensifying challenges primarily by mobilizing our organization around a common overarching goal: to make the right medicine available to the right patient at the right time. As our company incorporates the rigorous demands of society, patients and payors into its processes, and strives to bring medicines with an optimal cost-benefit profile to market, we will continue to position ourselves as a driver of change. Novartis, which is recognized as an innovative company, has no reason to fear these growing demands, for true innovation will always be valued by society.

Novartis also is responding to increasing pressure on prices by implementing innovative pricing models, in which payment is clearly linked to added value for patients. In Germany, for example, the payment for our osteoporosis medicine *Aclasta* is refunded if a patient suffers a fracture attributable to osteoporosis within one year of treatment. Similarly, in the United Kingdom, we have introduced innovative pricing models for our asthma medicine *Xolair* as well as for *Lucentis*, a treatment for age-related macular degeneration.

Technological advances also help us to respond flexibly and creatively to changing

circumstances. At Novartis, we are committed to developing technology-based healthcare solutions. Examples include applications to remind patients to take their medicines, redeem their prescriptions or check their vaccination status – as well as telemonitoring of patients using mobile technology.

Political debate all too often ignores the fact that medical problems have heavy costs for healthcare systems, but also have various socioeconomic cost implications. Far more political attention should be paid to *indirect* cost savings realized through preventing or treating disease with innovative therapies and procedures. Because the indirect cost of illness is not covered by government budgets, however, it rarely receives systemic cost-benefit analysis or is the subject of debate. Who calculates the economic benefits of a quicker recovery and faster reintegration into work?

Moreover, too little attention is paid to the fact that patented innovations become less expensive with widespread use and the length of time they remain on the market; this is particularly true after patent expiry. Everyone benefits in the end from this price reduction process. Novartis makes a substantial contribution in this respect through Sandoz, a global leader in generics. Medicines generally account for 10% to 15% of total healthcare costs. A rational assessment of drug prices should take into consideration the average price over the entire life cycle.

Broad availability of medical advances played a decisive role in the dramatic improvement of public health in the 20th century. Healthcare must not be allowed to fall victim to shortsighted austerity mea-

asures that ignore the fundamental connections between prevention and treatment. Medicine has seen enormous progress that has vastly improved the treatment and prevention of various illnesses, particularly during the last 50 years. People live longer today and they stay healthier longer. In the middle of the 20th century, cancer patients still had very little chance of survival. Today, almost two-thirds of cancer patients survive at least five years after initial diagnosis. During the last 25 years, deaths of children due to cancer have decreased by 60%.

It is a dangerously short-term view to deny that research and development requires enormous investment to deliver innovation. In other words, innovation has – and *must* have – its price. Allowing austerity to become the principal aim of healthcare policy not only risks lowering the quality of medical care, but also endangers the fundamental impetus for medical progress.

Progress requires tangible incentives. Certainly, it is not always easy to make investments that do not bear fruit for years, or even until the next generation. Such long-term investments, however, are a hallmark of sound policy. The pharmaceutical industry is accustomed to long cycles but, here again, it is not always easy to raise R&D expenditures amid the pressures of short-term expectations.

The post-crisis sobriety now reigning in many of the world's prosperous nations may also have a positive side. Now is the time to ask and answer some fundamental questions. How important is health to us? How important is innovation? Is society willing to continue investing in basic research,

education and training – or will budgets important for the future be cut, and other politically sensitive areas spared instead?

We should remember that our prosperity is founded on innovation and that, especially today, global economic competition is primarily a competition in innovation. Even in today's increasingly volatile and polarized political climate, innovation remains the rational core of society and must be upheld. I place my trust with the majority who see more opportunities than risks in progress, because our industry in particular needs a society that supports the idea of progress. Novartis too can make social progress a reality rather than merely an empty phrase, namely by helping to solve significant social problems. That is the case in particular for health problems arising from extreme poverty in developing countries, precisely during these times of increasing protectionism and shrinking development aid budgets.

Long-term engagement and a clear strategic direction are also essential for corporate citizenship. In view of today's economic uncertainties, both development aid and corporate citizenship face an uncertain future. Moreover, the term corporate citizenship (or corporate social responsibility) risks being devalued from overuse by many economic players.

Today, for those who take corporate citizenship truly seriously, stringent requirements must apply. It must be strategically embedded and it must be quantifiable through concrete indicators. And it must not lose sight of the fact that our successful core business constitutes our main contribution to public welfare: We discover and

market new medicines to help patients worldwide.

Last year Novartis contributed USD 1.5 billion or 3% of net sales through access-to-medicine programs as well as investment in research targeting diseases that are prevalent in the developing world. We strive to eradicate – in the mid-term – diseases such as malaria that can be prevented and treated to alleviate future suffering. In 2010 alone, Novartis access-to-medicine programs reached 85 million patients in need, of whom 81 million were malaria patients.

The last few years have taught us that merely providing medicines is not enough. Here again, a holistic approach is indispensable for sustainable success. Training, logistics management and other forms of technical expertise are necessary to achieve effective solutions. I am pleased that the Novartis Malaria Initiative has been recognized repeatedly for its effectiveness, and as a role model. Last year our anti-malarial medicine *Coartem* and the Novartis Malaria Initiative won the US Prix Galien for Best Pharmaceutical Product, as well as the World Business and Development Award.

Our contributions to corporate citizenship do not depend on the economy or business cycles, but solely on the long-term success of Novartis.

As shareholders you are obviously interested in the development of the value of our company. Our total shareholder return since the founding of Novartis amounts to 9% annually, including continuously increasing dividends and business divestments. Our total shareholder return surpasses not only that of the global market,

but also the pharmaceutical industry index and share price performance of important competitors. Again for 2010, this confirms that Novartis not only fulfills its primary mission effectively, but also represents a sustainable investment, which, especially in times of severe fluctuations and ongoing unease in financial markets, is attractive. Our strategy of focused diversification, together with the traditional strength and consistency of our dividend payout, will ensure Novartis remains an attractive investment in the future.

For 2011, we expect further growth of net sales in local currencies and further improvement in net operating income. Thanks to a number of recently launched products with rapid sales growth, Novartis is less affected by patent expiries than most of its competitors. In the last year, 21% of net sales (excluding Alcon) was attributable to products launched since 2007. Furthermore, we have one of the best pipelines in the industry, with some very promising products at advanced stages of development.

Gilenya has impressive growth potential, and strong successor products are already on the market to replace *Gleevec/Glivec* and *Diovan*. We are confident of our ability to compensate for lost sales due to expiry of *Diovan* patents. Our broad portfolio with varied business cycles should deliver sustainable development compared with the industry. Therefore we have a good chance to more than compensate for the loss in sales, given of course a little luck.

I would like to thank all our associates for their ongoing engagement and tireless commitment. Thanks to our associates we succeeded again last year in sustaining our

leading position in innovation, accelerating our growth, and increasing our productivity. Once again, we will work together to focus our company firmly on the needs of patients throughout the world.

Finally, I thank you, our shareholders, for the trust you place in our company. I am pleased to be able to propose an increase in the dividend to CHF 2.20 (+5%) at the next Annual General Meeting.

Sincerely,



Daniel Vasella, M.D.

Chairman of the Board







Joseph Jimenez

INTERVIEW WITH JOSEPH JIMENEZ

WHAT ARE SOME OF THE CHALLENGES AND OPPORTUNITIES YOU SEE, BASED ON YOUR FIRST YEAR AS CHIEF EXECUTIVE OFFICER (CEO)?

I have inherited a great company with a distinctive strategy that sets us apart from competitors. This strategy of focused diversification was established by Dan Vasella and the Board many years ago – their foresight anticipated many of the major trends that are transforming healthcare today.

Over the past year, along with my colleagues from our business divisions, I have met with patients, customers, and government leaders in markets as diverse as China, Russia, the US and Saudi Arabia. Through these discussions, I have crystallized my thinking about how we will make Novartis the most successful and respected healthcare company in the world.

While healthcare is a growth industry, there are both positive and negative trends impacting how we operate. On one hand, the

rapid aging of the population, greater access to medical care in emerging markets, and advances in science will create more opportunities for us to help improve healthcare and enhance the lives of patients. On the other hand, an uncertain economy and regulatory reform will create downward pressure on the industry. Tensions will grow as healthcare spending outpaces growth in GDP. We have already seen this impact healthcare budgets in many countries, resulting in extreme pricing pressures. These are challenges we will continue to encounter in the years ahead. However, we have a clear vision for how we will navigate the pressures and strengthen our leadership over the next five years.

We are adapting to these changes by shifting from a transactional approach to a more integrated approach where we work together with physicians and our customers to enable better patient outcomes. We are working closely with hospitals, payors and physicians, and initiating pilot programs to determine how best to meet changing customer needs.

NOVARTIS EXPECTS TO GROW IN THE NEXT FIVE YEARS, DESPITE THE LOSS OF PATENT PROTECTION ON BLOCKBUSTER MEDICINES IN MAJOR MARKETS. WHAT WILL DRIVE THIS GROWTH?

We have a long-established track record of being able to outgrow our markets through innovation. From 2005 through 2010, Novartis delivered compound annual net sales growth of 10% – compared to 6% weighted average sector growth for our divisions – an “innovation premium” of more than four percentage points.

We must ensure that our research strategy sustains our position as the most productive R&D group, with more new molecular entities (NMEs) than our competitors. Our track record is excellent in this area and over

the last three years we have brought more NMEs to the market than our peers in both the EU and in the US. During 2010, medicines launched since 2007 generated net sales of USD 6.6 billion, 21% of the total net sales at the Pharmaceuticals Division. Our pipeline and new products will truly transform our portfolio and our future.

We also leverage this core R&D competence across our other divisions. Sandoz, our generics division, is the world leader in biosimilars, biologic medicines that have lost patent protection. During the next five years, patents will expire on biologics with global sales of USD 64 billion and Sandoz is positioned to take full advantage of that opportunity.

In the mid-term, flu and our emerging meningococcal franchise will be the key growth drivers for our Vaccines and Diagnostics Division, and I believe we have one of the best vaccine pipelines in the world. Animal Health and OTC also have built successful franchises by developing self-medication and veterinary formulations of human prescription medicines.

YOU HAVE SUSTAINED AGGRESSIVE INVESTMENT IN RESEARCH AND DEVELOPMENT AS CEO. WHY?

Innovation is fundamental to our business. In 2010, we invested 16% of net sales in R&D (20% of Pharmaceuticals sales), and we will sustain our high level of investments. We have one of the strongest and most productive pipelines in the industry with 147 projects in clinical development, 63 of which are NMEs.

Our research strategy is centered on an understanding of the science of disease and unmet medical need. By understanding the molecular pathways that may be shared by various diseases, we are able to better search for novel therapies.

For example, we developed *Ilaris* to treat CAPS, a rare set of autoimmune diseases, which affects only about 6 000 people worldwide. We are now studying the potential for additional indications, including the potential to treat and prevent painful gout flares, treat chronic obstructive pulmonary disease (COPD) and type 2 diabetes, and prevent cardiovascular events in patients with type 2 diabetes.

Our scientific expertise sustains our position as an industry leader. We are committed to continuing to attract the best scientists in the industry and funding them, even as our peers are cutting spending and outsourcing.

HOW DO YOU EXPECT NEW COMMERCIAL MODELS AND AN INCREASING FOCUS ON PATIENT OUTCOMES TO FOSTER GROWTH?

We are seeing the convergence of regulators and payors toward the common objective of demanding a positive patient outcome with the therapies we provide. Reimbursement and market access increasingly are going to be linked to the ability to demonstrate positive outcomes.

In response, we are shifting from a one-size-fits-all, transactional approach to more flexible sales organizations, tailored to local conditions. We're also implementing broader use of key account management, which is well-established in many other industries but still somewhat new to pharmaceuticals. We need to understand the needs of hospital groups and retailers – and to interact with them in ways that we have not done in the past.

In the future, payors and regulators may require companion diagnostics with new therapies. Our dedicated Molecular Diagnostics Unit seeks to improve the efficacy of our medicines by identifying biomarkers in patient groups who respond to the

new medicines. They will then commercialize companion diagnostics to sell alongside our new drugs. Understanding the right drug for the right patient could greatly improve response rates and patient outcomes.

Information technology has a vast untapped potential to help address areas of unmet medical need. For example, we have initiated a number of pilot programs supporting use of remote monitoring devices that provide physicians with a wealth of information – including adherence to treatment – to proactively manage the health of patients. Of course, ensuring that applications of tele-monitoring remain compatible with patient privacy will be essential to broad adoption of this technology. Still, you can imagine the potential that remote monitoring offers to improve patient outcomes and reduce costs.

Novartis also has emerged as an industry leader in working with health authorities in designing clinical trials to generate data required for rapid health economic assessments. In addition, Novartis has pioneered innovative pricing arrangements including money-back guarantees and other types of performance-based pricing, to accelerate reimbursement negotiations with governments and ensure patients early access to new medicines.

HOW IS NOVARTIS ENCOURAGING EFFICIENCY?

We reduced Sales and Marketing expense as a proportion of net sales by almost three percentage points from 2007 through 2010, in spite of rising net sales and an unprecedented number of new product launches. Pulling costs out of the system will help fund investments in innovation and expansion in emerging markets.

During the next five years, we aim to optimize our production network by creating manufac-

turing centers of excellence. We are looking to improve network utilization to around 80% by 2015, from approximately 50% today, so that we can upgrade our plants to ensure quality and use of new technologies.

We also are scaling up our procurement organization, and our target is to deliver sustainable savings between 6% and 8% per year.

WHY IS CONTINUED EXPANSION IN EMERGING MARKETS ANOTHER KEY ELEMENT OF THE NOVARTIS LONG-TERM STRATEGY?

There is a rebalancing of power in the overall global economy – emerging markets are predicted to represent 60% of the global GDP in just the next 20 years. This growth, coupled with the fact that these governments are devoting more resources to healthcare, provides a tremendous platform for our business. At the same time, this will require an adjustment in the global and organizational strategy for our industry.

At Novartis, we are continuously expanding in emerging markets, outpacing our growth in more developed markets, with a particular focus on Russia, China, Brazil and India. Novartis Group sales grew 13% in emerging markets over last year. Our top six emerging markets grew 12% in 2010, accounting for about 10% of net sales (excluding Alcon, Inc.). That figure will double over the next five years – we will continue investing in emerging markets because of the growth rates we are seeing.

We are also rapidly expanding the vaccine business in emerging markets, and our planned acquisition of a majority holding in Zhejiang Tianyuan Bio-Pharmaceuticals Co. will pave the way for local production of vaccines in China. In Brazil, we are building a plant for local manufacture of vaccines and we also are producing rabies vaccine in India.

We see the benefit of our broad portfolio, particularly in these markets. We are able to compete from the level of essential drugs all the way up to new innovative medicines. This is already showing great results. Sandoz, for example, is growing at four times the market rate in Central and Eastern Europe, and three times the market rate in the Middle East, Turkey and Africa.

HOW ARE GENERICS AND INNOVATIVE PHARMACEUTICALS COMPLEMENTARY?

Fundamentally, Novartis is pro-patent. Strong protection of intellectual property ensures recovery of R&D investment, and ensures future innovation through a virtuous circle of reinvestment. However, we also believe that when those patents expire, it is our obligation to offer low-cost, very high-quality generics, to help lower the overall cost of healthcare, and improve access to medicines for societies around the world. This is not a contradiction. These objectives are absolutely consistent.

We have shaped our portfolio of businesses to address the fundamental needs of patients. A broad, diversified portfolio is going to become increasingly important as more and more payors look for low-cost generics, preventive vaccines, and self-pay over-the-counter medicines as complements to innovative pharmaceuticals.

FINALLY, IN YOUR VIEW, WHAT MAKES NOVARTIS DISTINCTIVE?

Two things: our people and our strategy. First and foremost, Novartis has what I consider to be the best workforce in the industry. Our talent really set us apart from the rest of our competitors.

Second, our strategy of focused diversification helps us to fully leverage the changes

occurring in our industry, while also balancing risk. We have leading businesses in science-based, fast-growing segments of healthcare. We will build sustainable leadership across our portfolio: innovative pharmaceuticals, generics, vaccines and diagnostics, and consumer health, as well as eye care through our planned merger with Alcon.

Our diversified portfolio also allows us to leverage cross-divisional synergies and drive more value as “one Novartis” to customers and patients. In addition to being a strategic business platform, this allows us to touch more patient lives and address unmet needs across the healthcare spectrum.





HEALTHCARE PORTFOLIO

Innovation is flourishing, addressing unmet needs of patients and healthcare systems. In 2010, medicines and vaccines from Novartis were used to treat and protect more than 913 million people around the world, according to internal estimates.

While healthcare remains a growth industry, both positive and negative trends are impacting the way we operate. On one hand, rapid aging of the population, greater access to healthcare in emerging markets and advances in science create opportunities to enhance the lives of patients.

At the same time, an uncertain economy and regulatory reform exert downward pressure. Tensions will grow as healthcare spending outpaces economic growth.

Novartis has a clear vision for how to navigate these pressures to meet changing customer needs and strengthen our leadership over the next five years. Our strategy of focused diversification helps us to fully leverage the changes occurring in our industry, while also balancing risk.

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BUILDING SUSTAINABLE LEADERSHIP IN HEALTHCARE

Novartis strategy is based on focused diversification. Our uniquely broad portfolio focuses on science-based healthcare sectors that are growing, reward innovation, and enhance the lives of patients.

PHARMACEUTICALS

Novartis discovers and develops innovative patent-protected medicines that enhance outcomes for patients and healthcare providers. Our Pharmaceuticals Division is a leader in oncology and cardiovascular medicines, with a strong specialty pipeline. Successful innovation has rejuvenated our product portfolio to drive growth; recently launched medicines represented 21% of division sales in 2010.

VACCINES AND DIAGNOSTICS

Reflecting a commitment to prevention of disease, Novartis is a leader in influenza vaccines. The division has a broad development pipeline, including an emerging platform of meningococcal vaccines. Our diagnostic tools help safeguard blood supplies and ensure patient safety.

SANDOZ

Sandoz is the number two generics company worldwide, providing affordable, high-quality medicines. Sandoz focuses on differentiated generics that are more difficult to develop, manufacture and market, but offer higher growth and profitability. Sandoz is also the worldwide leader in biosimilars.

CONSUMER HEALTH

Novartis develops and markets a range of self-medication products and veterinary medicines. The three Novartis Consumer Health businesses – OTC (over-the-counter medicines), Animal Health and CIBA Vision – have delivered sustained above-market growth in recent years.

ALCON

Alcon is the global leader in eye care, with three major product areas: surgical, pharmaceuticals and consumer eye care. Through a 77% ownership stake in and a planned full merger with Alcon, Novartis has added a dynamic new growth platform to our diversified portfolio.

PATIENT-CENTRIC PORTFOLIO

STRATEGIC PRIORITIES

Extend lead in innovation Our research is driven by a distinctive scientific and clinical strategy, focusing on unmet medical need and knowledge of disease. This approach has resulted in an established track record of outgrowing our markets through innovation. Since 2007, Novartis has received approvals for more innovative medicines in Europe and the United States than any other company.

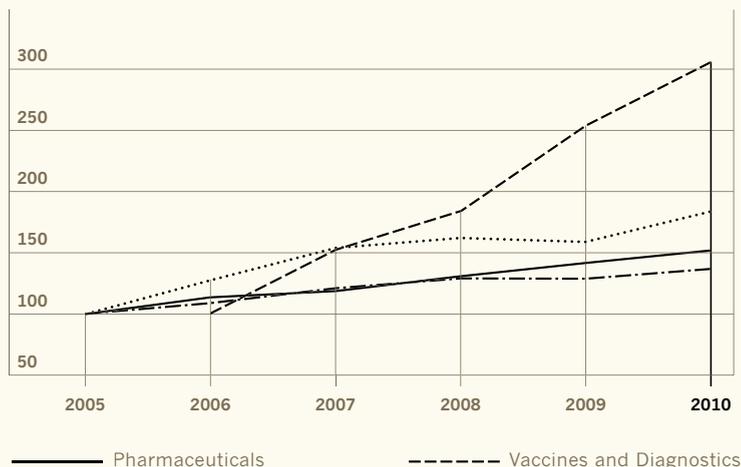
Accelerate growth We are tailoring our commercial model to the rapidly changing healthcare environment, with the aim to better address needs of patients and deliver positive treatment outcomes. We also are leveraging our broad portfolio to expand aggressively in emerging and established markets.

Drive productivity We continuously simplify and streamline processes, and reduce costs, allowing us to reinvest in innovation.

HEALTHCARE PORTFOLIO OVERVIEW

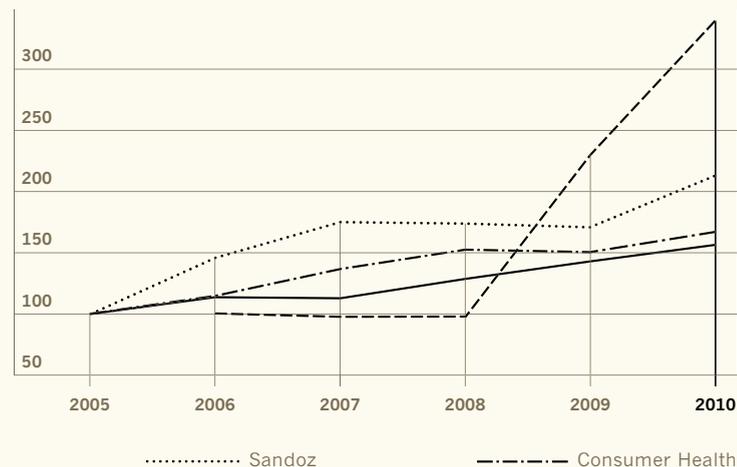
NET SALES BY SEGMENT

(Index: 2005 = 100%; Vaccines and Diagnostics since 2006 acquisition)



CORE OPERATING INCOME¹ BY SEGMENT

(Index: 2005 = 100%; Vaccines and Diagnostics since 2006 acquisition)



2010 NET SALES BY SEGMENT

(% and in USD millions)

Pharmaceuticals	60	30 558
Vaccines and Diagnostics	6	2 918
Sandoz	17	8 518
Consumer Health	12	6 204
Alcon, Inc. ²	5	2 426
Total		50 624

2010 CORE OPERATING INCOME¹ BY SEGMENT

(% and in USD millions)

Pharmaceuticals	67	9 909
Vaccines and Diagnostics	7	1 066
Sandoz	11	1 685
Consumer Health	9	1 253
Alcon, Inc. ²	6	852
Corporate Expenses, net		- 759
Total		14 006

2010 NET SALES BY REGION AND SEGMENT

(% and in USD millions excluding Alcon, Inc.)

	Pharmaceuticals		Vaccines and Diagnostics		Sandoz		Consumer Health	
United States	33	10 043	41	1 184	31	2 630	32	2 006
Europe	36	10 877	27	784	50	4 273	42	2 624
Asia/Africa/Australasia	22	6 720	22	645	12	1 032	17	1 019
Canada and Latin America	9	2 918	10	305	7	583	9	555
Total		30 558		2 918		8 518		6 204

¹Core operating income eliminates the impact of acquisition-related factors and other significant exceptional items. These adjustments are explained in detail starting on page 143.

²Since August 25, 2010 consolidation



PHARMACEUTICALS OVERVIEW

KEY FIGURES

(In USD millions, unless indicated otherwise)

	2010	2009
Net sales	30 558	28 538
Operating income	8 798	8 392
Return on net sales (%)	28.8	29.4
Core operating income ¹	9 909	9 068
Return on core net sales (%)	32.4	31.8
Core Research & Development	6 153	5 715
As % of net sales	20.1	20.0
Free cash flow	10 681	9 170
Net operating assets	15 212	14 519
Additions to property, plant & equipment ²	777	922
Number of associates (FTE) ³	58 424	56 310

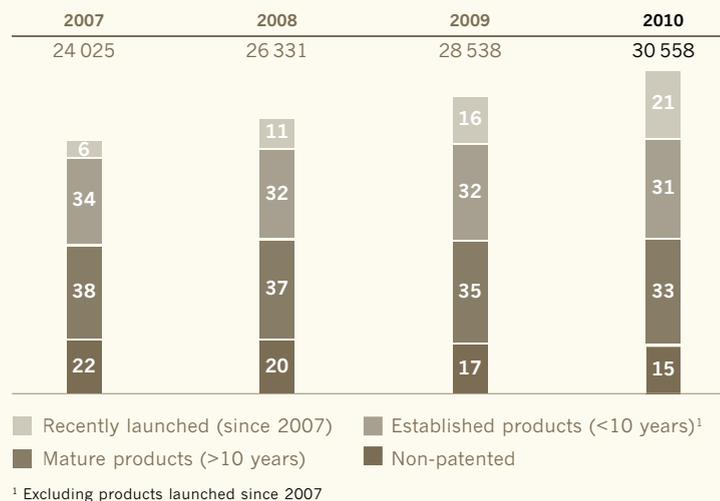
¹Core operating income eliminates the impact of acquisition-related factors and other significant exceptional items. These adjustments are explained in detail starting on page 143.

²Excluding impact of business combinations

³Full-time equivalent positions at year-end

PORTFOLIO REJUVENATION

(% and total net sales in USD millions)



NEWS IN 2010

Continued expansion under new leadership as David Epstein succeeds Joseph Jimenez as Division Head. Recently launched products drive portfolio rejuvenation as all therapeutic franchises show solid growth.

Net sales rise 7% (+6% in constant currencies) to USD 30.6 billion. Europe, our largest region, grows 7% cc in spite of government price cuts, with recently launched products driving 28% of net sales. US, Latin American and Canadian growth is solid, while Japan is flat.

Products launched since 2007 (USD 6.6 billion) comprise 21% of the division's net sales, up from 16% in 2009. Key growth drivers include *Lucentis*, *Exforge*, *Exelon Patch*, *Exjade*, *Reclast/Aclasta*, *Tekturna/Rasilez*, *Tasigna*, *Afinitor*, *Onbrez Breezhaler*, *Ilaris*, and *Gilenya*.

Pharmaceuticals sales growth led by Oncology (USD 10.0 billion, +11% cc), with four top-selling products, including *Gleevec/Glivec* (USD 4.3 billion). *Exforge*, *Tekturna* and *Galvus* groups of products drive growth in our Cardiovascular and Metabolism franchise (USD 9.2 billion, +4% cc), building on global leadership of *Diovan* (USD 6.1 billion). Neuroscience and Ophthalmics (USD 4.3 billion, +11% cc) grows strongly, driven by *Lucentis*.

Operating income grows 5% to USD 8.8 billion and core operating income advances 9% to USD 9.9 billion as core margin expands to 32.4% of net sales from 31.8% in 2009, driven by productivity improvements.

Promising Development pipeline, with 147 projects, achieves several important regulatory decisions. *Gilenya* gains US approval as a first-line treatment for relapsing forms of multiple sclerosis. *Tasigna* is approved in the US, EU, Japan and Switzerland to treat patients with newly diagnosed CML. *Afinitor* is approved in the US for subependymal giant cell astrocytomas associated with tuberous sclerosis (SEGA) and also wins clearance for treatment of advanced kidney cancer in Japan. *Lucentis* gains EU approval to treat visual impairment due to diabetic macular edema, *Rasilez* gains marketing approval in China and Japan for hypertension, and both *Galvus* for type 2 diabetes and *Exforge* for hypertension are also approved in Japan.

PIPELINE

Novartis is consistently rated as having one of the industry's most respected development pipelines with 147 projects in clinical development. Several of these pharmaceutical projects, which include potential uses of new molecular entities as well as additional indications or new formulations for marketed products, are for potentially best-in-class and first-in-class medicines that would significantly advance treatment standards.

The following table provides an overview of selected pharmaceutical projects in confirmatory development.

Project/compound	Common name	Mechanism of action
ACZ885	canakinumab	Anti-interleukin-18 monoclonal antibody
AEB071	sotrastaurin	Protein kinase C inhibitor
AFQ056	–	Metabotropic glutamate receptor 5 antagonist
AG0178	agomelatine	MT1/MT2 ³ agonist and 5-HT2c ⁴ antagonist
AIN457	secukinumab	Anti-interleukin-17 monoclonal antibody
ATI355	–	Anti NOGO-A mAb
CAD106	–	Beta-amyloid-protein therapy
DEB025	alisporivir	Cyclophilin inhibitor
<i>Exjade</i>	deferasirox	Iron chelator
<i>Gilenya</i>	fingolimod	Sphingosine-1-phosphate (S1P) receptor modulator
INC424	ruxolitinib	Janus kinase (JAK) inhibitor
LBH589	panobinostat	Histone deacetylase inhibitor
LCQ908	–	Diacylglycerol acyl transferase-1 inhibitor
LCZ696	–	Angiotensin receptor neprilysin inhibitor (ARNI)
LDE225	–	Smoothed receptor / hedgehog signaling inhibitors
<i>Lucentis</i>	ranibizumab	Anti-VEGF ⁵ monoclonal antibody
NIC002	–	Nicotine Qbeta therapeutic vaccine
NVA237	glycopyrronium bromide	Long-acting muscarinic antagonist
PKC412	midostaurin	Signal transduction inhibitor
PRT128	elinogrel	P2Y12 inhibitor
PTK796	omadacycline	Inhibition of bacterial protein synthesis
QAB149	indacaterol	Long-acting beta-2 agonist
QMF149	indacaterol, mometasone furoate	Long-acting beta-2 agonist and inhaled corticosteroid
QTI571 (<i>Glivec</i>)	imatinib mesylate	Protein tyrosine kinase inhibitor

¹ Refers to planned submission date for lead indication only

² Refers to current phase for lead indication only

³ Melatonin receptor subtypes 1 and 2

⁴ Serotonin receptor subtype 2c

⁵ Vascular endothelial growth factor

continued on next page

Potential indication	Therapeutic area	Formulation / route of administration	Planned submission dates ¹	Current phase ²
Refractory gout (lead indication), systemic onset juvenile idiopathic arthritis, type 2 diabetes, secondary prevention of cardiovascular events	Integrated Hospital Care, Cardiovascular and Metabolism	Subcutaneous injection	Submitted EU	Registration
Prevention of organ rejection, psoriasis	Integrated Hospital Care	Oral	2014	II
Fragile X syndrome (lead indication), L-dopa induced dyskinesia in Parkinson's disease	Neuroscience and Ophthalmics	Oral	2012	II
Major depressive disorder	Neuroscience and Ophthalmics	Oral dispersible	2012	III
Arthritides – rheumatoid arthritis, ankylosing spondylitis, psoriatic arthritis (lead indication), psoriasis, noninfectious uveitis	Neuroscience and Ophthalmics, Integrated Hospital Care	Subcutaneous injection, intravenous infusion	2013	II
Spinal cord injury	Neuroscience and Ophthalmics	Intrathecal spinal infusion	≥ 2015	I
Alzheimer's disease	Neuroscience and Ophthalmics	Subcutaneous, intramuscular injection	≥ 2015	II
Chronic hepatitis C	Integrated Hospital Care	Oral	2013	II
Non-transfusion dependant thalassemia	Oncology	Oral	2011	II
Multiple sclerosis	Neuroscience and Ophthalmics	Tablet	Submitted EU (approved US)	Registration
Myelofibrosis (lead indication), polycythemia vera	Oncology	Oral	2011	III
Hodgkin's lymphoma (lead indication), multiple myeloma	Oncology	Oral	Submitted US	Registration
Metabolic diseases	Cardiovascular and Metabolism	Tablet	2014	II
Heart failure	Cardiovascular and Metabolism	Oral	2014	III
Gorlin syndrome	Integrated Hospital Care	Cream	2012	II
Retinal vein occlusion (lead indication), pathological myopia	Neuroscience and Ophthalmics	Intravitreal injection	Submitted EU	Registration
Smoking cessation	Respiratory	Injection	≥ 2015	II
Chronic obstructive pulmonary disease	Respiratory	Inhalation	2011	III
Aggressive systemic mastocytosis (lead indication), acute myeloid leukemia	Oncology	Oral	2013	II
Acute coronary syndrome, chronic coronary heart disease	Cardiovascular and Metabolism	Intravenous infusion, oral	≥ 2015	II
Acute bacterial skin and skin structure infections, community-acquired bacterial pneumonia	Integrated Hospital Care	Intravenous infusion, oral	2012	III
Chronic obstructive pulmonary disease	Respiratory	Inhalation	Submitted US (approved EU)	Registration
Asthma, chronic obstructive pulmonary disease	Respiratory	Inhalation	2014	II
Pulmonary arterial hypertension	Respiratory	Oral	2011	III

PIPELINE (CONTINUED)

GLOSSARY

Project/compound Novartis brand name for marketed products or development project reference code (combination of three letters and three numbers) for compounds that are individual molecular entities.

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 Disease or condition for which a compound or marketed product is in development and is being studied as a potential therapy.

Formulation/route of administration Form in which a medicinal preparation is administered, such as a tablet, injection, ointment, skin patch, infusion or device.

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

Phase II Clinical studies that are performed on patients with the targeted disease, with a view to continuing Phase I safety assessment in a larger group, to assess the efficacy of the drug in the patient population, and to determine the appropriate doses for further testing.

Phase III Large-scale clinical studies with several hundred to several thousand patients, to establish the safety and effectiveness of the drug for regulatory approval for indicated uses. Phase III trials may also be used to compare a new drug against a current standard of care, in order to evaluate the overall benefit-risk relationship of the new drug.

Submitted Application for marketing approval has already been filed with one or both of the following regulatory agencies: FDA (US), EMA (EU). The application contains comprehensive data and information gathered during the animal studies and human clinical trials conducted through the various phases of development of the drug.

Project/compound	Common name	Mechanism of action
QVA149	indacaterol, glycopyrronium bromide	Long-acting beta-2 agonist and long-acting muscarinic antagonist
RAD001 (<i>Afinitor</i>)	everolimus	mTOR ⁶ inhibitor
RLX030	–	Vascular modulator
SMC021	salmon calcitonin	Regulator of calcium homeostasis, inhibition of osteoclast activity
SOM230	pasireotide	Somatostatin analogue
<i>Tasigna</i>	nilotinib	Signal transduction inhibitor
<i>Tekturna</i> SPC ⁹	aliskiren, amlodipine besylate, hydrochlorothiazide	Direct renin inhibitor, calcium channel blocker and diuretic
<i>Tekturna</i> ASPIRE HIGHER trials	aliskiren	Direct renin inhibitor
TKI258	dovitinib lactate	VEGFR 1-3 ¹⁰ , FGFR 1-3 ¹¹ , PDGFR ¹² and angiogenesis RTK ¹³ inhibitor
<i>Xolair</i>	omalizumab	Anti-IgE monoclonal antibody
<i>Zortress/Certican</i>	everolimus	mTOR ⁶ inhibitor

⁶ Mammalian target of rapamycin protein

⁷ Subependymal giant cell astrocytoma

⁸ Angiomyolipomas

⁹ Single-pill combination

¹⁰ Vascular endothelial growth factor receptor

¹¹ Fibroblast growth factor receptor

¹² Platelet-derived growth factor receptor

¹³ Receptor tyrosine kinase

Potential indication	Therapeutic area	Formulation / route of administration	Planned submission dates ¹	Current phase ²
Chronic obstructive pulmonary disease	Respiratory	Inhalation	2012	III
Tuberous sclerosis complex – SEGA ⁷ (lead indication), neuroendocrine tumors (NET), tuberous sclerosis complex – AML ⁸ , breast cancer, advanced gastric cancer, hepatocellular carcinoma, diffuse large B cell lymphoma	Oncology	Oral	Submitted EU (approved US)	Registration
Acute heart failure	Cardiovascular and Metabolism	Intravenous infusion	2013	III
Osteoporosis (lead indication), osteoarthritis	Integrated Hospital Care	Oral	2011	III
Cushing's disease (lead indication), acromegaly, refractory/resistant carcinoid syndrome	Oncology	Injection	Submitted EU	Registration
Metastatic melanoma with c-KIT mutation (lead indication), first line metastatic gastrointestinal stromal tumor	Oncology	Oral	2012	III
Hypertension	Cardiovascular and Metabolism	Tablet	Submitted EU (approved US)	Registration
Prevention of renal and cardiovascular events	Cardiovascular and Metabolism	Oral	2012	III
Solid tumors	Oncology	Oral	2013	II
Chronic idiopathic urticaria	Respiratory	Lyophilized powder for reconstitution as subcutaneous injection	2013	II
Prevention of organ rejection – liver	Integrated Hospital Care	Oral	2011	III



PHARMACEUTICALS

In 2010, the US Food and Drug Administration approved *Gilenya* to treat relapsing forms of multiple sclerosis – an autoimmune disease that currently affects more than 2 million people globally. Patients and physicians alike acknowledge that approval of the first oral treatment for multiple sclerosis fills a significant unmet medical need, and should increase adherence to treatment and patients' quality of life.

On September 21, 2010, the US Food and Drug Administration (FDA) approved *Gilenya* as the first oral treatment for relapsing forms of multiple sclerosis available in the United States.

Gilenya is indicated for the treatment of patients with relapsing forms of multiple sclerosis to reduce the frequency of clinical exacerbations and to delay the accumulation of physical disability. *Gilenya* also has been approved in Russia and Switzerland, and regulatory applications are pending in Europe and other countries around the world.

The approval of *Gilenya* was based on the largest clinical trial program for a new multiple sclerosis drug submitted to the FDA to date. The FDA regulatory application included data from the TRANSFORMS study showing *Gilenya* administered as a once-daily 0.5 milligram capsule reduced relapses by 52% at one year, compared with interferon beta-1a (intramuscular injection) or Avonex®, a current standard of care. FREEDOMS, a separate two-year, placebo-controlled study, showed *Gilenya* significantly reduced the risk of disability progression.

Multiple sclerosis is an autoimmune disease of the central nervous system that is chronic, progressive and often disabling. The disease affects more than 2 million people worldwide and typically strikes in adulthood, between 20 and 50 years of age. For reasons still not well understood, the

body's immune system attacks myelin, the fatty covering that insulates and protects nerve fibers in the brain and spinal cord. Damage to myelin can disrupt communication between the brain and other parts of the body.

Often the first disease symptoms are blurred or double vision, or even blindness in one eye, followed by muscle weakness and problems with coordination or balance serious enough to impair walking or standing. In severe cases, multiple sclerosis can lead to partial or complete paralysis. Relapsing forms of multiple sclerosis are most common, characterized by exacerbations, or flareups, interspersed with periods of disease remission.

"The multiple sclerosis community has been waiting with hope for this medicine, and I am proud we are the company to provide a new treatment option that is both highly effective and convenient," said David Epstein, Division Head, Novartis Pharmaceuticals, and member of the Executive Committee of Novartis. "The approval of *Gilenya* underscores outstanding progress by Novartis in advancing innovation."

QUALITY OF LIFE

The lack of an effective therapy for multiple sclerosis that has the convenience of a once-daily pill has been an area of urgent unmet need. Existing first-line, disease-modifying therapies in multiple sclerosis all require

frequent injections, ranging from daily to weekly administration. Many people with multiple sclerosis cannot tolerate these injections or the treatment-related side effects caused by these first-line therapies. Other disease-modifying treatments are administered by monthly infusions.

At a meeting of an FDA Peripheral and Central Nervous System Advisory Committee in June 2010, a number of patients shared their personal experiences of living with multiple sclerosis and emphasized the potential impact of an effective oral therapy. Doug Franklin, Chief Executive Officer of the Multiple Sclerosis Association, a nonprofit patient support group, estimated that up to a third of those diagnosed with multiple sclerosis are not on any form of medication to slow the progression of their disease. "There's no denying that one important reason is people's reluctance to inject or be infused," Mr. Franklin added. "An oral medication such as *Gilenya* should increase adherence rates and, as a consequence, stave off disability in many more people."

Melissa Losasso, diagnosed with multiple sclerosis in 2004, described sitting for 30 minutes or more with the syringe poised above her thigh, trying to force herself to take the intramuscular injection of a multiple sclerosis therapy. Symptoms including body aches, fever and pain prevented her from taking part in activities with her husband and young children for several days after the injection. "I knew as a mother with young children at home, I had to be proactive with my treatment if I wanted to delay disease progression," Mrs. Losasso told the Advisory Committee. Nevertheless, she discontinued therapy requiring injections and within months experienced a relapse.

After joining the clinical trial for *Gilenya* in early 2009, her quality of life improved. "I cannot imagine going back to taking injections daily and losing quality time with my family due to the side effects that I had

been experiencing," she added. In the summer of 2010, Mrs. Losasso was able to travel with her family to the Grand Teton National Park in the state of Wyoming, climbing to the same spot where, earlier, she and her husband had become engaged.

NOVEL MECHANISM

Gilenya is the first medicine in a new class called sphingosine 1-phosphate (S1P) receptor modulators. *Gilenya* is thought to work by reducing the immune system's attack on the central nervous system by retaining selected subsets of lymphocytes, or white blood cells, in the lymph nodes. By preventing these blood cells from reaching the central nervous system, treatment with *Gilenya* diminishes inflammatory damage to the protective covering around nerve fibers. Retention of white blood cells within lymph nodes is reversible if treatment with *Gilenya* is stopped.

Novartis acquired rights to *Gilenya*, known by the common name fingolimod (formerly known by the research number FTY720), from the Japanese pharmaceutical company Mitsubishi Tanabe Pharma Corp. in 1997. The compound was initially developed for prevention of acute rejection after renal transplantation. Because of its novel mechanism of action, use of fingolimod in combination with existing immunosuppressant drugs from Novartis offered promise to reduce dosage and mitigate side effects. The program did not confer advantages over the standard of care, however, and the renal transplantation clinical program was discontinued.

In parallel, Novartis scientists explored other potential indications, including multiple sclerosis. Following tests in a series of preclinical models of multiple sclerosis, fingolimod completed a positive proof-of-concept study in 2005 and a formal development program began.

The biology of the S1P receptor family is complex and still not completely under-

stood. Signaling through S1P receptors appears to play a role in normal embryonic development of the vascular system, for example. The main biological activity of the receptors is to regulate trafficking of lymphocytes, or white blood cells.

When *Gilenya* binds with the S1P1 receptor on the surface of selected subsets of lymphocytes, the cells are retained within the body's lymph node system. In particular, auto-reactive T-cells, which play a central role in the inflammatory process that is the hallmark of multiple sclerosis, are prevented from recirculating to the central nervous system. By sequestering these white blood cells, treatment with *Gilenya* reduces inflammatory damage to nerve cells in the central nervous system.

Elucidation of this mechanism of action has progressed hand-in-hand with clinical testing of *Gilenya*. "It has been a parallel story, reconciling biological hypotheses with clinical observations," said Pascale Burtin, M.D., Global Program Head for *Gilenya*. "The biology of S1P receptors has progressed because *Gilenya* existed – the drug has been a pathfinder for *in vitro* and *in vivo* experiments."

COMPREHENSIVE SAFETY ASSESSMENTS

The regulatory submission to the FDA included studies spanning 2 600 patients and 4 500 patient years of data. A pair of ongoing Phase III trials of *Gilenya* will provide further data from approximately 2 000 additional patients.

Clinical testing of *Gilenya* included a six-month Phase II study, with an ongoing long-term, open label extension with some patients now in their seventh year of treatment. Two Phase III clinical trials, TRANSFORMS and FREEDOMS, were conducted in patients with relapsing-remitting multiple sclerosis; the trials showed superior efficacy of *Gilenya* in reducing relapse rates compared with an approved first-line therapy – intramuscular interferon beta 1a – at one year and placebo

at two years, respectively. In FREEDOMS, *Gilenya* also significantly reduced the risk of disability progression versus placebo. Clinical efficacy was supported by positive effects on objective magnetic-resonance imaging measures of inflammation, disease burden and brain atrophy.

Befitting a novel therapeutic class, the program focused not only on general safety but also on certain areas of special interest. Ultimately, the *Gilenya* program succeeded in large part thanks to a proactive, comprehensive approach to safety issues that fostered confidence in the ability to manage side effects of treatment and establish a favorable benefit-risk profile. In the Phase III studies, each patient visit to a clinical site was spread over several days to accommodate both detailed examinations by neurologists primarily responsible for care, and additional assessments by cardiac, ophthalmic, pulmonary and dermatological specialists.

Paul O'Connor, M.D., a neurologist, director of the multiple sclerosis clinic at St. Michael's Hospital in Toronto, Canada, and professor of medicine at the University of Toronto, was involved in the Phase II study and both Phase III trials of *Gilenya*. "I was impressed by the care taken by Novartis to monitor for specific types of adverse effects," Dr. O'Connor said. "And I think it's a good example of how trials will likely be conducted in the future for drugs that have potential side effects of one type or another."

Dr. Burtin attributes the design of *Gilenya* trials to increasingly stringent requirements of regulatory agencies. "The external environment has changed," she said. "Health authorities are demanding a lot more evidence today – and have high hurdles for how well you understand your drug, as well as the ability to show real benefits compared to treatments that are already available."

The most common side effects with *Gilenya* versus placebo were headache,

flu, diarrhea, back pain, cough and liver-enzyme elevations. Prescribing instructions recommend certain tests and observations. *Gilenya* can cause a patient's heart rate to slow, especially following the first dose. The US package insert recommends that all patients taking their first dose of the drug be observed for the first six hours after they take the first dose to monitor for signs and symptoms of bradycardia (slow heart rate). Review of a recent cardiogram is recommended, and special care should be used in treating patients with existing cardiac conditions.

The US prescribing information also recommends review of recent blood and liver tests before initiation of therapy. Because *Gilenya* lowers the number of white blood cells, treatment can increase the risk of serious infections. Some patients who take *Gilenya* have shortness of breath; patients should call their doctor right away if they have trouble breathing.

Before starting treatment and again after three to four months of therapy, a doctor should also test a patient for macular edema, a swelling of the retina. Macular edema can cause some of the same vision symptoms as a multiple sclerosis attack.

POST-APPROVAL COMMITMENTS

This focus on safety will not end with regulatory approval.

Novartis plans to conduct a worldwide post-authorization safety study to monitor the incidence of selected safety-related outcomes in patients with relapsing multiple sclerosis who are being treated with *Gilenya*. The multinational study will be a five-year observational, parallel-cohort design including an estimated 6 000 patients. An estimated 4 000 participants will comprise a cohort being treated with *Gilenya*, and the remaining 2 000 participants a parallel cohort treated with other disease-modifying therapies. The study will enable Novartis to further explore the

overall safety of *Gilenya* under conditions of routine practical care.

In the United States, Novartis submitted a Risk Evaluation and Mitigation Strategy (REMS) to help inform patients and health-care providers about potential risks, and support safe use of *Gilenya*. The REMS agreed upon with the FDA includes a medication guide and healthcare provider communication plan – plus a timetable for submission of assessments.

In an additional post-marketing commitment, Novartis will conduct a study to evaluate whether a lower 0.25 milligram once-daily dose of *Gilenya* would be effective.

Separately, the FDA requested a 24-month pediatric study to evaluate pharmacokinetics, safety and efficacy of *Gilenya* in children with multiple sclerosis, in compliance with pediatric regulations. Another post-approval study will monitor incidence of selected safety-related outcomes in patients with relapsing forms of multiple sclerosis. A pregnancy registry will be established to collect information about pregnancies and births.

To expedite access to *Gilenya*, Novartis is rolling out a broad support program for patients in the United States. The program covers out-of-pocket costs for eligible patients with commercial health insurance, as well as a portion of the expenses for testing and monitoring recommended by the FDA. In addition, the Novartis program will assign so-called nurse navigators for patients who enroll independently or are enrolled through their doctors. Nurses will provide logistical support, educational materials and a hotline to answer questions from patients and physicians.

“Prior to the launch of *Gilenya*, we talked with patients, physicians and payors about possible hurdles to access to treatment. We wanted to design a program that would address their needs,” Mr. Epstein explained.

Novartis also is committed to ensuring access for eligible patients who cannot

afford treatment. A process is in place to work on an individual basis to determine a patient’s specific needs, and help identify appropriate forms of reimbursement and financial support. Patients experiencing financial hardship who have no third-party coverage may be eligible to receive *Gilenya* at no cost through a Novartis Patient Assistance Program. Initial reactions from the online multiple sclerosis community hailed the initiatives as “the most ambitious patient co-payment support program yet attempted in the industry.”

UNMET NEED

Most people with multiple sclerosis are initially diagnosed with a relapsing-remitting form of the disease. Approximately 10% of people are initially found to have a primary progressive form of the disease, characterized by a gradual worsening of symptoms with no distinct remissions. Currently there is no approved therapy for primary progressive multiple sclerosis. Existing medications approved for relapsing forms of multiple sclerosis have not shown efficacy in treatment of the primary progressive disease.

Novartis is embarking on a three-year, placebo-controlled Phase III clinical trial called INFORMS to evaluate the efficacy of fingolimod in delaying disability progression in patients with primary progressive multiple sclerosis. “This is a big step in our commitment to multiple sclerosis,” said Irene Hunt, Senior Global Brand Director, Multiple Sclerosis. “We are going after an unmet patient need in a difficult area that few companies have been willing to tackle.”

Dr. O’Connor, who also is involved in the INFORMS study, is cautiously optimistic. “No therapy has worked at all in the primary progressive multiple sclerosis population,” he cautioned. “So it’s a huge challenge.”





NOVARTIS INSTITUTES FOR BIOMEDICAL RESEARCH

The distinctive scientific and clinical strategy of the Novartis Institutes for BioMedical Research (NIBR) focuses on areas of high unmet medical need and understanding of the fundamental mechanisms underlying disease. By mapping core signaling pathways that have been conserved through evolution, NIBR scientists are discovering novel targets for new medicines and expanding development of new medicines to other diseases where the same mechanism is believed to be involved.

The Novartis Institutes for BioMedical Research (NIBR) achieved major milestones along the entire drug discovery continuum during 2010, driven by a distinctive scientific and clinical strategy.

“We choose to work where there is unmet need and where the science is strongest,” said Mark C. Fishman, M.D., President of NIBR and member of the Executive Committee of Novartis. “Unmet need can mean a rare disease with a small number of patients,” he added. “It does not have to be a large population – and it certainly is not judged by the size of the potential market.”

In October 2010, the US Food and Drug Administration approved use of a Novartis medicine known by the common name everolimus for treatment of patients with subependymal giant cell astrocytomas (SEGA) associated with tuberous sclerosis complex. Tuberous sclerosis complex is a rare genetic disease that causes tumors to grow in the brain and on other vital organs such as the kidneys. In severe cases, symptoms include frequent seizures and mental retardation. According to the US National Institutes of Health, tuberous sclerosis affects up to 40 000 people in the United States, a miniscule figure compared with millions of people who suffer from hypertension or type 2 diabetes.

Still, even tuberous sclerosis dwarfs the size of some diseases NIBR has tackled. In 2009, regulators in the United States and

Europe approved *Ilaris*, a fully human monoclonal antibody from Novartis, for treatment of cryopyrin-associated periodic syndrome (CAPS). CAPS is an umbrella term for several lifelong auto-inflammatory disorders with debilitating symptoms that affect an estimated 6 000 people worldwide.

“As a physician, I start by thinking about treating the individual patient,” Dr. Fishman said. “Rare diseases also have a huge impact on families, which has influenced me in focusing a significant portion of our research programs on these disorders.”

COMMON CAUSES

The driving force to focus on CAPS was another central tenet in NIBR strategy: the importance of understanding fundamental biological mechanisms underlying a disease. “If we understand the fundamental mechanism, we can expand to other diseases as we go along,” Dr. Fishman explained. “We might start with a very rare disease in what we call a proof-of-concept study. If successful, we quickly extend development to other diseases in which the same mechanism is believed to be involved.”

CAPS is caused by a single genetic mutation that spurs excessive production of interleukin-1 beta (IL-1 beta), a key weapon in the body’s immune system. Excessive output of IL-1 beta is believed to play a role in diseases ranging from rheumatoid arthritis to diabetes.

Recent scientific breakthroughs suggested other possible disease targets as well. For example, accumulation of uric acid crystals in joints causes acute attacks of gout by activating the same inflammatory pathway responsible for excessive production of IL-1 beta. Gout is a painful form of arthritis and is estimated to affect more than 1% of adults in Western countries.

Knowledge from the CAPS development program gave Novartis a head start in gout as well. Results from clinical studies show that canakinumab, the common name for *Ilaris*, has the potential to treat and prevent flares, or repeat attacks of gout, and control the debilitating symptoms of inflammation in gout. In 2010, pivotal Phase III clinical trials were completed and regulatory applications for use of canakinumab against gout submitted to authorities in Europe. An application in the United States is expected during 2011.

More recently, evidence emerged that crystals of cholesterol activate the same pathway, triggering production of IL-1 beta in atherosclerosis, where plaque builds up inside arteries, raising the risk of heart attack or stroke. “So far the residual risk of atherosclerosis after treatment with statins has been refractory to every medicine, but we believe it might be treated by *Ilaris*,” Dr. Fishman said. “We are looking for appropriate trials to test *Ilaris* in that indication too.”

UNEXPECTED DIRECTIONS

AFQ056 is an innovative Novartis investigational medicine that blocks a particular subtype of receptors in the brain known as metabotropic glutamate receptors (mGluR). The mGluR5 receptor, the target of AFQ056, plays an essential role in many aspects of normal brain function, but also is implicated in the pathology of a number of neurological diseases. AFQ056 was tested against models of anxiety and smoking cessation, but results of initial proof-of-concept studies were negative.

Translating fundamental science into concrete therapies can lead researchers in unexpected directions. Physician-scientists from NIBR’s Translational Medicine group next zeroed in on a complication related to standard therapy for Parkinson’s disease.

Levodopa, a medicine introduced in the early 1960s, is the cornerstone of therapy for Parkinson’s disease. The complication of treatment, known as levodopa-induced dyskinesia (PD-LID), affects a majority of patients after years of chronic therapy. The symptoms of PD-LID – which include irregular involuntary movements such as flinging and flailing of arms – can be as crippling as the underlying disease. No effective treatment for PD-LID is yet available, and severe cases are treated with surgical methods.

A positive proof-of-concept study of AFQ056 in treatment of PD-LID was completed in May 2008 and the medicine now has advanced to full development. Buoyed by that success, the Translational Medicine group turned their attention to Fragile X syndrome, the most common cause of inherited mental impairment and the most common genetically defined cause of autism.

People with Fragile X syndrome suffer from a broad range of symptoms including mental retardation, developmental delay, and social withdrawal. The disease currently has no cure, and treatment consists of informing and supporting the patient as well as parents or other family members.

Fragile X is caused by a mutation in a single gene, known as Fragile X Mental Retardation-1 (FMR1), which is elongated because of the addition of repeats to the normal DNA sequence. The degree of elongation varies. Some individuals have little expansion (called “pre-mutation”) and do not display Fragile X symptoms, whereas others have large expansion of the gene, resulting in “full mutation.” For individuals with full mutation, FMR1 is shut down. This results in delayed development of neuronal

connections, which are critically important for learning and memory, and in manifestation of Fragile X symptoms.

PERSONALIZED MEDICINE

The AFQ056 program underscores two of the biggest challenges in developing drugs for brain diseases: choosing a disease and designing studies to test a clinical hypothesis. The Translational Medicine group assembled an interdisciplinary team including independent external academic experts to design the proof-of-concept trial for AFQ056 in Fragile X. The result was a double-blind, randomized, two-way crossover study involving 30 male patients with a confirmed diagnosis of Fragile X.

Initial study results appeared negative but reanalyzing data based on genetic biomarkers collected prospectively identified a subset of patients who had responded positively to AFQ056. “Using the biomarker as a tool in clinical testing, we hope that we will be able to predict each Fragile X patient’s response to AFQ056 with a high level of accuracy,” said Baltazar Gomez Mancilla, M.D., Executive Director, Neuroscience Translational Medicine. “This is new for the field of Fragile X treatment, and an encouraging step toward realizing a personalized medicine approach for these patients.”

Although the proof-of-concept study in Fragile X was declared successful in January 2010, Dr. Fishman cautioned that the potential of the genetic biomarker still must be confirmed in larger clinical studies. After preliminary consultations with regulatory authorities, NIBR scientists and colleagues from the Novartis Molecular Diagnostics unit translated the biomarker research assay into a diagnostic test in record time.

“The companion diagnostic passed validation and is being used in clinical trials of AFQ056 in Fragile X that began in November,” said Michael Nohaile, Ph.D., Head of Novartis Molecular Diagnostics. “It shows

how we are moving into an era in which many compounds discovered by NIBR are coming forward with a clinically important biomarker that needs to be translated into a diagnostic test.”

HEDGEHOG SIGNALING

Another central principle of NIBR strategy is the critical importance of signaling pathways in human biology and disease. A relatively small number of core pathways play fundamental roles during embryonic development as well as later in life.

Nature is deeply conservative and these core pathways are used time and again across species. Defects in major pathway components are the underlying cause of disease and provide targets for discovery of innovative therapies.

“The first stage of drug discovery is to identify all the elements in a pathway that are linked to each other,” Dr. Fishman said. “Core pathways usually have been conserved from yeast to humans. That means that pathway elucidation in organisms such as yeast, fruit flies or zebra fish is part of our drug discovery process at NIBR.”

Parallel with mapping a pathway, NIBR scientists pay particular attention to major nodes – components so critical that, if discovered and disabled, they could cause the entire pathway to collapse. “Think of the pathway as the US financial system and each node as a major bank or insurer,” Dr. Fishman explained. “We’re trying to find the weak link that is most likely to fail.”

The “hedgehog” pathway was discovered as part of a series of pioneering experiments in the 1970s that earned Edward Lewis, Christiane Nüsslein-Volhard and Eric Wieschaus the 1995 Nobel Prize in medicine. Signaling through the hedgehog pathway regulates both cellular growth and differentiation during embryonic development. Uncontrolled activation of the pathway is known to be involved in cancers

including basal cell carcinoma, the most common form of cancer.

A key node in the hedgehog pathway is a gene called Patched 1 that acts as a negative control, obstructing signal transduction except when activated by chemical messengers from outside the cell. Genetic mutations, however, can disable the Patched 1 gene and activate the pathway, fueling aberrant growth.

An inherited mutation in Patched 1 causes a rare genetic disorder called Nevoid Basal Cell Carcinoma syndrome (Gorlin syndrome) in which patients repeatedly develop basal cell cancers. The cancers can be removed surgically but lead to the accumulation of disfiguring scars. Somatic mutations – which occur during life, by contrast to inherited mutations – can lead to sporadic basal cell cancer.

NIBR scientists at the Genomics Institute of the Novartis Research Foundation in La Jolla, California, discovered an investigational compound known as LDE225 that can halt the abnormal signaling. LDE225 works by inhibiting a gene called Smoothed, located downstream from Patched 1 in the hedgehog pathway. LDE225 has been developed in a topical formulation that is applied to the skin at the site of basal cell cancers. A proof-of-concept study for LDE225 in treatment of patients with Gorlin syndrome was declared successful in October 2009.

“Sporadic basal cell cancers usually occur in sun-exposed areas where people don’t have a lot of protection, especially if they don’t adequately use sunscreens,” said Arthur Bertolino, M.D., Ph.D., Head Autoimmunity, Immunology and Dermatology Translational Medicine. “This drug could change the way a very significant disease can be approached to benefit not only patients with Gorlin syndrome, but also more than a million people per year who get sporadic basal cell carcinomas but don’t want surgical scars.”



VACCINES AND DIAGNOSTICS OVERVIEW

KEY FIGURES

(In USD millions, unless indicated otherwise)

	2010	2009
Net sales	2 918	2 424
Operating income	612	372
Return on net sales (%)	21.0	15.3
Core operating income ¹	1 066	719
Return on core net sales (%)	36.5	29.7
Core Research & Development	506	465
As a % of net sales	17.3	19.2
Free cash flow	1 336	- 82
Net operating assets	4 804	5 583
Additions to property, plant & equipment ²	159	437
Number of associates (FTE) ³	5 394	5 416

¹Core operating income eliminates the impact of acquisition-related factors and other significant exceptional items. These adjustments are explained in detail starting on page 143.

²Excluding impact of business combinations

³Full-time equivalent positions at year-end

VACCINES DEVELOPMENT PIPELINE

	Phase I	Phase II	Phase III	Registration
<i>Menveo</i> 2-10 ¹	█	█	█	█
<i>Menveo</i> infant ¹	█	█	█	█
<i>Bexsero</i> ²	█	█	█	█
<i>Fluad</i> pediatric	█	█	█	█
<i>Optaflu</i> ³	█	█	█	
<i>Agriflu</i> pediatric	█	█	█	
<i>Pseudomonas aeruginosa</i> ⁴	█	█		
FCC ³ H5N1	█	█		
MenABCWY ⁵	█	█		
GBS ⁶	█			
CMV ⁷	█			

¹*Neisseria meningitidis* bacteria serogroups A, C, W-135 and Y

²*Neisseria meningitidis* bacteria serogroup B

³Influenza cell culture

⁴Collaboration with Intercell

⁵*Neisseria meningitidis* bacteria serogroups A, B, C, W-135 and Y

⁶Group B Streptococcus

⁷Cytomegalovirus, in-licensed from AlphaVax

NEWS IN 2010

Net sales advance 20% (+25% in constant currencies) to USD 2.9 billion as deliveries for supply contracts to governments around the world for A (H1N1) influenza pandemic vaccine generate USD 1.3 billion of sales. Excluding A (H1N1) pandemic flu, strong growth (+16% cc) driven by seasonal flu and emerging growth market sales, as well as meningococcal disease franchise.

Operating income lifted to USD 612 million as a result of A (H1N1) pandemic sales, despite increasing investments in innovation and launch of *Menveo*.

Strong pipeline with 15 vaccines currently in clinical trials to prevent a variety of serious infectious diseases. *Menveo* gains approvals in over 35 countries including US and EU for prevention of meningococcal serogroups A, C, W-135 and Y in adolescents; with applications to expand the approval for use in younger patients under review. EU regulatory filing submitted for *Bexsero* for prevention of meningococcal serogroup B. *Fluad* pediatric filed for EU approval.

Majority acquisition of Chinese vaccines supplier Zhejiang Tianyuan on track for completion in early 2011.

VACCINES AND DIAGNOSTICS

Meningococcal disease, the leading cause of bacterial meningitis, is a major area of unmet medical need. The approval and rollout of *Menveo* is an important step in prevention, as is continued innovation in the form of *Bexsero*, another investigational vaccine to protect against meningitis B. These two innovative vaccines also represent excellent progress in the Novartis Vaccines development pipeline.

The global rollout of *Menveo*, a vaccine to help prevent meningococcal disease, is the latest sign of rejuvenation at the Novartis Vaccines and Diagnostics Division.

Meningococcal disease is a leading cause of bacterial meningitis, an infection of the membrane around the brain and spine, and sepsis, a bloodstream infection. According to the World Health Organization, meningococcal disease infects more than 500 000 people worldwide each year, leading to more than 50 000 deaths.

Menveo is approved for active immunization of adolescents and adults to prevent invasive meningococcal disease caused by four of the five most common serogroups of the bacterium *Neisseria meningitidis* – A, C, W-135 and Y. Moreover, *Bexsero*, the investigational Multicomponent Meningococcal Serogroup B vaccine, may have the potential to be the first broad-coverage vaccine against the dynamic and deadly B strain of *N. meningitidis*.

“Marketing approval for *Menveo* is the culmination of 10 years of dedicated effort,” said Andrin Oswald, M.D., Division Head, Vaccines and Diagnostics, and member of the Executive Committee of Novartis. “We are dedicated to applying our industry-leading technology and expertise to further develop *Menveo* and other vaccines to elicit robust, long-lasting protective immune responses for all age groups at risk.”

This emerging meningococcal franchise underscores the sweeping transformation of the Vaccines and Diagnostics Division since Novartis acquired the former Chiron Corp. in 2006.

The division passed a critical test during the 2009-2010 influenza pandemic by successfully developing a portfolio of vaccines against the influenza A (H1N1) virus and delivering more than 130 million doses in response to a global public health challenge.

Uniquely for any manufacturer, Novartis developed three different A (H1N1) pandemic vaccines, building on a longstanding commitment to influenza.

Novartis also is focusing on cell culture-based manufacturing technology that can allow for more rapid scale-up of production than traditional egg-based methods. *Optaflu* – a seasonal, cell culture-based influenza vaccine – is licensed in Europe. *Celtura*, a cell culture-based pandemic vaccine, was licensed in Germany, Switzerland and Japan as well as other countries in connection with the 2009 pandemic.

In Holly Springs, North Carolina, Novartis has inaugurated the first large-scale manufacturing facility for both flu cell-culture vaccine and adjuvant. The facility is the result of a partnership between Novartis and the US Department of Health and Human Services. It marks an important

milestone in efforts to improve influenza vaccine manufacturing technology and enhance domestic pandemic preparedness. The plant is planned to reach full-scale commercial production in 2013.

DIRECT DISTRIBUTION

The *Menveo* program has been a catalyst for change since the Vaccines and Diagnostics Division was created in the wake of the Chiron acquisition. At an advanced stage of negotiations with Chiron, Novartis executives learned that future development of *Menveo* was in doubt because of funding shortages.

Once in control, Novartis stepped up funding to accelerate development. During 2007 more than 10 000 new study participants were enrolled in clinical trials of the vaccine. It signaled a broader commitment to innovation: By 2010 the development pipeline included 15 vaccines and the number of participants in clinical trials had reached 60 000 – compared with only 5 000 participants in 2006. To date, *Menveo* has been administered to more than 18 500 people in multiple Phase III clinical trials.

The buildup extended to technical operations, supply chain and the division's commercial organization as *Menveo* neared the market. To ensure reliable supply, the Vaccines and Diagnostics Division has built an online direct distribution system in conjunction with a third-party logistics provider that serves more than 20 000 physicians, retailers and health networks across the United States. And in a similar progression, the number of sales and marketing staff climbed to 225 by 2010, including a key account team, a public health account team and a pediatric sales force reaching more than 50 000 physicians across the United States.

“Now we have the opportunity to prove that these investments have led us to success,” Dr. Oswald said.

CONJUGATE VACCINES

Menveo is a conjugate vaccine, based on a carrier protein known as CRM197 that was characterized and engineered for industrial use by Rino Rappuoli, Ph.D., Global Head of Research at the Vaccines and Diagnostics Division.

Before the advent of CRM197, researchers relied on capsular polysaccharides – long chains of sugar molecules found on the surface of *N. meningitidis* – as antigens, or active ingredients of a vaccine. Polysaccharides alone generally induce weak, poorly sustained immunity but appear to become highly effective antigens when linked to CRM197, which may generate a vigorous immune response.

Menveo was approved in early 2010 by regulators in the United States for the vaccination of people ages 11 to 55, and in Europe for people over the age of 11. Since then, regulatory applications have been submitted to the US Food and Drug Administration (FDA) and the European Medicines Agency seeking to expand use of *Menveo* to vaccination of children from ages 2 to 10.

Separately, regulatory applications were filed during 2010 in selected countries in Latin America for vaccination of children between the ages of two months and 10 years. In addition, during 2011, Novartis plans to submit further applications for use of *Menveo* for vaccination of infants.

The broad protection conferred by *Menveo* is critical because distribution of *N. meningitidis* serogroups varies widely among different geographic regions – and changes over time.

Most meningococcal disease in the United States is currently caused by serogroups C and Y, while the prevalence of serogroup Y has increased to 39% of reported cases in 2006, from 9% of cases between 1990 and 1992. By contrast, the majority of cases in the United Kingdom and Australia is caused by meningitis B.

Meanwhile, meningitis C is the predominant serogroup in Brazil.

REVERSE VACCINOLOGY

Mr. Rappuoli's team produced another breakthrough with *Bexsero*, a prototype for use of genomics in vaccine development. There currently is no approved vaccine that provides broad coverage against literally thousands of circulating strains of the B serogroup of *N. meningitidis*. One pitfall is that the polysaccharide found on the surface of serogroup B is identical to a polysaccharide present in the human body, so cannot be used safely as an antigen in conjugate vaccines.

Stepping up the search for novel antigens, Mr. Rappuoli pioneered an approach called reverse vaccinology that relies as much on computers as petri dishes. In 1997, he convinced maverick US gene hunter Craig Venter and The Institute for Genomic Research (TIGR) to sequence the genome of *N. meningitidis*.

Combing that sequence, Novartis scientists uncovered dozens of potential targets – from analogues of known genes to secreted proteins located on the surface of the bacterium – likely to interact with the immune system. “The entire scientific community working for 50 years had found about a dozen antigens to use in a potential MenB vaccine,” Mr. Rappuoli said. “Using reverse vaccinology we identified more than 90 antigens within 18 months.”

The list of candidate antigens was narrowed to five finalists, which were combined into *Bexsero*, a multicomponent vaccine designed to address the constantly changing nature of the bacterium. The vaccine provides an optimal immune response against the majority of meningitis B strains.

In September 2010, Novartis presented initial data from clinical trials of *Bexsero* at the International Pathogenic Neisseria Conference. A Phase III study involving more

than 3 600 infants met its primary end-points. Results indicate the large majority of infants vaccinated with *Bexsero* at the same time as other routine vaccines achieved a robust immune response against all vaccine meningitis B antigens. Additionally, *Bexsero* had an acceptable tolerability profile when coadministered with other routine infant vaccines. This profile supports potential use of the vaccine in the first year of life, when the medical need is greatest.

The Phase III clinical program – which includes comprehensive data from more than 7 500 infants, toddlers and adolescents – was the basis of an application submitted to European regulatory authorities in December.

MARKET ACCESS

As clinical testing progressed, Novartis Vaccines and Diagnostics raced to ensure market access for its new vaccines in the United States. After the FDA approves a new vaccine, several expert committees make recommendations to healthcare providers and public health programs regarding use of the vaccine in specified target groups.

“Novartis is the first company to launch a new pediatric vaccine in the United States in more than 20 years,” said Vas Narasimhan, M.D., Head, Vaccines North America. “There are 65 projects in the United States to which you need access to cover 50% of the pediatric vaccine market that is federally funded. We also have to set up contracts with a whole set of different private entities that ultimately have to reimburse or support the use of *Menveo*,” he added.

Meticulous planning helped ensure that 90% of adolescents were able to access *Menveo* through public or state programs – or private payor coverage – within six months of launch. “Frankly, a lot of know-how can only be gained by actually launching a product,” Dr. Narasimhan said. “When, in effect, you haven’t had a new vaccine to

launch in a decade – excluding the A (H1N1) pandemic influenza vaccine – you don’t really exercise those muscles. But building this commercial infrastructure is essential so that when *Bexsero* and the rest of our pipeline come to market, we’ll be in a strong position to launch those products.”

NEW FRONTIERS

Meanwhile, Mr. Rappuoli sees a bright future for vaccine innovation. “*Menveo* and *Bexsero* are based on technologies that were revolutionary in the 1990s but today are proven platforms that we know we can build on,” he mused. Reverse vaccinology continues to generate new antigens that were difficult, if not impossible, to identify with traditional discovery techniques. A key focus of Novartis research will be vaccines offering protection against bacteria that cause frequent hospital-acquired infections and have developed resistance to many current antibiotics.

Conjugation, the technology used for *Menveo*, is also used in an investigational vaccine from Novartis currently undergoing clinical trials to prevent infection by Group B *Streptococcus*, the pathogen that causes the majority of cases of neonatal sepsis in most parts of the world, including the United States and Europe. The Group B *Streptococcus* program illustrates the potential for vaccines to help protect people at all stages of life.

“Besides influenza vaccine for the elderly, we haven’t been using this great tool of preventive vaccines for the rest of the population,” Mr. Rappuoli said. “My vision is to provide a package of vaccines to keep people healthy and fight diseases that are a particular threat at certain ages. From about the age of 50, the immune system begins to decline and people once again become susceptible to childhood diseases to which they previously had immunity. A package of vaccines could potentially prolong the

healthy status of the immune system of individuals for another 20 years.”

Just as Mr. Venter and his institute TIGR helped pave the way to reverse vaccinology, he has agreed to team up with Novartis again, this time with a focus on yet another revolutionary technology. The collaboration will explore new frontiers in synthetic genomics, aiming to design and build synthetic microorganisms to carry out industrial tasks such as delivering vaccines. This approach could also accelerate the production of the influenza seed virus strains required for vaccine manufacture.

In recent years, Mr. Rappuoli and research colleagues met regularly with Mr. Venter, and those discussions crystallized in a handful of proposed projects. “One of these projects will focus on influenza and test whether synthetic genomics will work in vaccines,” Mr. Rappuoli said. “It’s very early and high risk. Together we changed the field of vaccines once – now we’ll see if we can do it again.”





SANDOZ OVERVIEW

KEY FIGURES

(In USD millions, unless indicated otherwise)

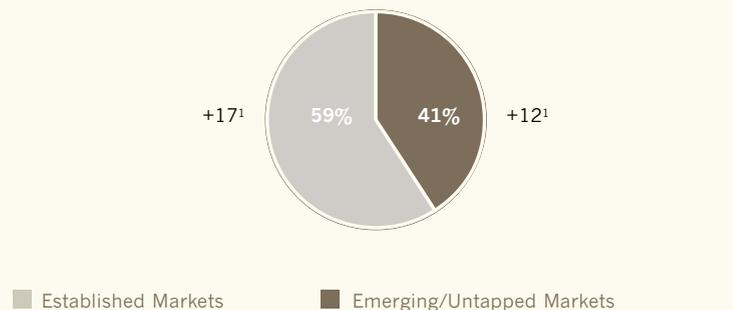
	2010	2009
Net sales	8 518	7 493
Operating income	1 272	1 071
Return on net sales (%)	14.9	14.3
Core operating income ¹	1 685	1 395
Return on core net sales (%)	19.8	18.6
Core Research & Development	618	603
As a % of net sales	7.3	8.0
Free cash flow	2 084	1 841
Net operating assets	14 026	15 151
Additions to property, plant & equipment ²	307	282
Number of associates (FTE) ³	23 536	23 423

¹Core operating income eliminates the impact of acquisition-related factors and other significant exceptional items. These adjustments are explained in detail starting on page 143.

²Excluding impact of business combinations

³Full-time equivalent positions at year-end

2010 NET SALES – ESTABLISHED VS. EMERGING/UNTAPPED MARKETS (In %)



¹2010 Sandoz third party net sales growth in cc vs. 2009 (including impact of EBEWE acquisition)

NEWS IN 2010

Growth accelerates to double digits as portfolio of differentiated difficult-to-make generic medicines expands, despite pricing pressures in several key markets. US market leads growth, with strong performances in emerging markets.

Net sales up 14% to USD 8.5 billion (+15% in constant currencies), driven by US retail generics and biosimilars (+46%) and emerging markets. Key US growth drivers include recent launches of enoxaparin, tacrolimus, losartan, lansoprazole and gemcitabine. German retail generics and biosimilars (–6% cc) declined as the market was impacted by numerous healthcare reforms.

Profitability improves significantly as business mix and productivity gains leverage strong top-line expansion. Operating income rises 19% to USD 1.3 billion, for an all-time high operating margin of 14.9%. Improvements in Cost of Goods Sold, and Marketing and Sales expenses enable significant investments in Development, in particular for complex products and biosimilars.

Complex and difficult-to-make product pipeline bolstered by the acquisition of Oriel Therapeutics, gaining rights to a portfolio of respiratory products targeting asthma and chronic obstructive pulmonary disease. Sandoz, the leader in biosimilars, now has approvals for biosimilars in all key markets worldwide including the US, EU and Japan; sales of biosimilars expand rapidly to USD 185 million (+63% cc).

Differentiated products, including complex mixtures such as enoxaparin, and a portfolio of biosimilar medicines make up 42% of sales in 2010, an increase of approximately 10% versus 2009. Emerging and untapped markets grow by 12% since last year, and comprise 41% of Sandoz sales.

SANDOZ

The Sandoz strategy of targeting differentiated generic medicines has led to a number of successes in 2010, including the US Food and Drug Administration approval of enoxaparin, the division's growing portfolio of treatments for chronic respiratory conditions, and its pioneering position in biosimilars.

Sandoz, the generics division of Novartis, is a world leader in differentiated generic medicines that are more difficult to develop, manufacture and market than more commoditized products but offer higher growth and profitability.

Through a strategy focusing on medicines with challenging active ingredients, specialized formulations or innovative underlying technologies, Sandoz repeatedly has pioneered novel regulatory pathways – and 2010 was no exception.

The US Food and Drug Administration (FDA) approved Sandoz enoxaparin in July, as the first generic version of the low molecular weight heparin that helps prevent formation of blood clots. The originator product, Lovenox[®], was developed and manufactured by Sanofi-Aventis SA.

With sales of USD 2.7 billion in the United States alone during 2009, Lovenox[®] was the single largest pharmacy expenditure for most US hospitals. Availability of a generic alternative offered substantial savings for hospitals that had suffered greatly in difficult economic times. Sandoz enoxaparin achieved sales of USD 292 million during the first nine weeks following launch, underscoring the commercial potential of first-to-market launches of complex injectable generic medicines.

Sandoz was also the first company to win approval for a generic version of an inhaled respiratory medicine under new guidelines

adopted by the European Union. Skillful navigation of its version of generic salbutamol through Europe's new regulatory pathway promises to give Sandoz a competitive edge as it aggressively expands the respiratory franchise as a third pillar in the differentiated generics strategy, complementing injectables and biosimilars, or follow-on versions of existing biotechnology medicines that have lost patent protection.

"We're delivering on our strategy of being first to market and achieving leadership in differentiated generics," said Jeff George, Division Head, Sandoz, and member of the Executive Committee of Novartis.

The FDA's review of Sandoz enoxaparin – which took five years from the time of filing – set important precedents for generic versions of large complex molecules that reside on the border of traditional drugs and biologics. Enoxaparin is a complex, heterogeneous mixture of sugar molecules derived from heparin, a natural product extracted from pig intestines. Sandoz and its collaboration partner Momenta Pharmaceuticals Inc., Cambridge, Massachusetts, invested heavily in development of state-of-the-art analytical methods to show convincingly equivalence of the Sandoz generic and Lovenox[®].

By designating the Sandoz generic enoxaparin therapeutically equivalent to Lovenox[®], the FDA paved the way for free substitution of the generic across the coun-

try. “It was a milestone for the generics industry,” Mr. George said. “Approval of our high-quality, affordable generic enoxaparin significantly increases access to a vital medicine for patients and payors.”

FIERCE BATTLE

Sandoz filed its abbreviated new drug application for generic enoxaparin in August 2005. It was a bold challenge to Sanofi-Aventis, which already had filed a citizen petition asking the FDA to withhold approval of generic copies unless they fulfilled a spate of stringent conditions.

First, the French drugmaker demanded that generic products be completely characterized by isolating and sequencing each unique sugar chain – a feat Sanofi-Aventis itself had never managed with Lovenox®. In addition, the citizen petition insisted that the manufacturing process for any generic product equal that of the originator product – and that equivalent safety and effectiveness be proven through clinical trials.

Undeterred, Sandoz and Momenta worked closely with the FDA, using advanced, proprietary analytic techniques developed by Momenta to comply with requests for additional data.

As the regulatory review progressed, Sandoz assembled a complex supply chain stretching across three continents. “For the past few years we had been preparing the supply chain to begin shipping Sandoz enoxaparin immediately after FDA approval,” explained Cesare Frontini, Head of Global Technical Operations at Sandoz. Once the building blocks of the supply chain were in place, the TechOps team continued with fine-tuning, improving production yields and flexibility.

Recalls of certain heparin products in the United States during 2008 following discovery of adulterated raw material supplies from China prompted further delays and heightened regulatory scrutiny. “Partly

because of the type of product – and partly because of the sensitivity of this particular launch – the FDA performed a very comprehensive set of audits before approval. Inspectors went four levels back in the supply chain to ensure that we had the right controls and capacity in place,” Mr. Frontini added.

FIRST TO MARKET

Ultimately, the citizen petition from Sanofi-Aventis was the last remaining hurdle. On July 23, a Friday, the FDA issued its long-awaited response letter denying most requests from Sanofi-Aventis and simultaneously approving the Sandoz generic enoxaparin.

With the Sandoz product the only generic enoxaparin approved, associates across the Sandoz US supply chain worked with great passion and commitment through the summer weekend. Within the first 36 hours, more than 6 million vials had been shipped to customers, resulting in sales of more than USD 120 million.

The response letter from the FDA acknowledged that the application from Sandoz and Momenta raised complicated scientific and regulatory issues. In a precedent-setting step, the agency established five evaluation criteria for the approval of complex generics. “Collectively the five criteria are designed to provide overlapping evidence upon which we can conclude that the generic drug product enoxaparin is the same as [the] Lovenox® enoxaparin,” the FDA declared.

Sanofi-Aventis appealed the FDA decision but the motion for a preliminary injunction was denied by a US District Court for the District of Columbia. Sandoz had filed an opposition brief but also received vocal support in the legal battle from other payors and healthcare providers, underscoring the growing acceptance of generic versions of large complex molecules.

Medco Health Solutions Inc., the largest US pharmacy benefits manager with about 60 million patients under management, submitted a declaration to the District Court asserting that entry of generic enoxaparin was in the public interest. “Especially after the FDA’s lengthy review, Medco is confident in using generic equivalents of Lovenox® in its generic substitutions programs as safe, effective and lower-cost equivalents of the brand,” Medco declared in court documents.

AARP, a nonpartisan organization for millions of older Americans, filed a separate brief reaffirming its call for laws and policies to bring more generic competition to the marketplace. “The lack of lower-cost treatment options reverberates throughout the entire healthcare system,” the AARP wrote in its brief. “Access to affordable treatment can mean the difference between life and death for people with devastating chronic conditions.”

CHRONIC RESPIRATORY DISEASES

Respiratory disorders impose an enormous medical and financial burden on society. According to the World Health Organization (WHO), that burden will increase steadily in coming decades due to aging populations, air pollution and smoking, particularly in emerging countries. Asthma affects more than 150 million people worldwide and the WHO expects chronic obstructive pulmonary disease (COPD) to become the third-leading cause of death worldwide by 2030. Yet chronic respiratory diseases are not receiving the attention and services necessary in many developing countries to prevent and manage them appropriately, the WHO cautions.

With several blockbuster treatments for asthma and COPD poised to lose patent protection within the next five years, respiratory medicine is one of the biggest future opportunities for Sandoz. According to industry estimates, about 50% of the USD 32 billion

global market segment for asthma and COPD medicines is expected to lose patent protection by the end of 2016.

“Our ambition is to build a respiratory franchise with annual sales of more than a billion dollars,” Mr. George said.

Sandoz inherited a small portfolio of respiratory products, marketed primarily in Germany, through its acquisition of Hexal AG in 2005. To underpin expansion plans, Sandoz invested EUR 80 million in a new development and production site in Rudolstadt, Germany. The Rudolstadt facility provides manufacturing capacity for both metered dose inhalers and dry powder inhalers, the most common formulations of inhaled respiratory medicines.

Collaborations helped to assemble a promising development pipeline. In 2006, Sandoz secured a licensing agreement with Vectura Group PLC, a UK-based firm specializing in inhaled respiratory products. By contrast to standard generics, inhaled products require integrated development of active ingredients and formulations, as well as inhalation devices, Vectura’s area of special expertise. Sandoz obtained rights to develop leading therapies for asthma and COPD, including combination products.

In 2010, Sandoz broadened its respiratory strategy further by acquiring Oriel Therapeutics, a US company based in Research Triangle Park, North Carolina. The purchase brought Sandoz several additional respiratory products under development. In addition, Sandoz broadened its portfolio of inhalers available to meet regulatory requirements in countries around the world – the United States in particular. “Oriel gives us access to the enormous potential of the US market and could also help us to overcome some of the barriers to achieving full substitutability for inhaled generic products,” said Jan-Torsten Tews, M.D., Global Head of the Sandoz Respiratory business.

LONG-TERM COMMITMENT

Dr. Tews sees parallels between biosimilars and the evolution of regulatory pathways for inhaled respiratory medicines. Sandoz achieved a succession of regulatory breakthroughs by winning regulatory approval for the first biosimilar medicines in Europe, the United States, Canada, Australia and Japan between 2006 and 2009. As in biosimilars, Dr. Tews added, Europe has adopted clear regulatory guidelines with very high hurdles for generic versions of inhaled respiratory medicines. The United States and Japan currently are taking a more case-by-case approach.

To complement its generic salbutamol in Europe, Sandoz launched a generic version of montelukast sodium in several European markets in 2010. Montelukast sodium, marketed under the brand name Singulair®, is a once-a-day oral medicine indicated for the chronic treatment of asthma and relief of symptoms of allergic rhinitis. In 2009, global sales were USD 4.7 billion. Sandoz expects to launch its generic montelukast sodium in additional markets as patents expire.

“Regulators have placed extremely high thresholds for approval of generic inhaled respiratory medicines,” Dr. Tews said. “Successful development will require significant technological know-how and substantial investments. But both the Pharmaceuticals Division and Sandoz have made a long-term commitment to patients with respiratory disease. And with the combined resources of the entire Novartis Group behind us, we will be formidable competitors.”





CONSUMER HEALTH OVERVIEW

KEY FIGURES

(In USD millions, unless indicated otherwise)

	2010	2009
Net sales	6 204	5 812
Operating income	1 153	1 016
Return on net sales (%)	18.6	17.5
Core operating income ¹	1 253	1 118
Return on core net sales (%)	20.2	19.2
Core Research & Development	359	345
As a % of net sales	5.8	5.9
Free cash flow	1 325	1 139
Net operating assets	3 208	3 168
Additions to property, plant & equipment ²	150	164
Number of associates (FTE) ³	13 136	12 539

¹Core operating income eliminates the impact of acquisition-related factors and other significant exceptional items. These adjustments are explained in detail starting on page 143.

²Excluding impact of business combinations

³Full-time equivalent positions at year-end

2010 CONSUMER HEALTH MARKET INFORMATION

	OTC	Animal Health	CIBA Vision
Novartis net sales in USD millions	3 154	1 208	1 842
Novartis sales growth (cc) ¹	5.0%	7.5%	6.4%
Market segment growth ²	4.4%	3.5%	3.2%
Novartis market share ³	3.2%	6.1%	22.3%
Global industry rank ⁴	4	7	2

¹2010 constant currency growth vs. prior year

²Sources: OTC: Nicholas Hall, MAT Q3 2010, local currency; Animal Health: CEESA data MAT Q3 2010 and internal analysis, local currency; CIBA Vision: GfK US, Europe and Japan (soft contact lens) and US-IRI, Japan-Intage (lens care), all YTD October 2010

³Sources: OTC: Nicholas Hall, MAT Q3 2010, local currency; Animal Health: YTD December 2010 as reported, internal analysis; CIBA Vision: GfK US, Europe and Japan (contact lens share), YTD October 2010

⁴Sources: OTC: Nicholas Hall, MAT Q3 2010, local currency; Animal Health: Vetnosis report "Monitor 97 (12.11.2010)" and internal NAH MAT Q3 2010 figures; CIBA Vision: GfK US, Europe and Japan (contact lens share), YTD October 2010

NEWS IN 2010

Portfolio of consumer-driven businesses provides trusted brands for healthy lifestyles. OTC, Animal Health and CIBA Vision are driving strong growth through key brands, innovative new products and geographic expansion.

Net sales (USD 6.2 billion, +7% in USD; +6% in constant currencies) up significantly as all businesses grow ahead of their markets.

Operating income rose 13% (17% cc) to USD 1.2 billion, with the operating income margin improving by 1.1 percentage points, to 18.6% of net sales. Excluding the impact of currency movements the division showed strong operating leverage by growing operating income +17% (cc), nearly three times the rate of sales growth.

Key gastrointestinal brands drive expansion for OTC as *Prevacid24HR* becomes the number two brand for Novartis OTC in the US. *Voltaren* maintained its position in Germany as the country's largest self-medication brand.

Animal Health benefits from strong performances of *Interceptor* and *Sentinel* in the US, and *Milbemax* in Europe, as well as robust growth of US cattle vaccines.

CIBA Vision continues to experience robust growth in the fast-growing contact lens and lens care markets on the strength of *Air Optix* across all regions.

CONSUMER HEALTH

Above-market growth in all three Novartis Consumer Health businesses was driven by the launch of an innovative medicine to keep livestock healthy, development of new OTC products to fill a vacuum in children's fever reducers and pain relievers, and global expansion along with new product launches in contact lenses, lens care.

All three business units at the Novartis Consumer Health Division – OTC (over-the-counter medicines), Animal Health and CIBA Vision – continued to grow ahead of their respective markets during 2010 despite challenging economic conditions in many parts of the world.

“Growth above the market is one thing, but sustainable growth in a recession is a far bigger achievement,” said George Gunn, MRCVS, Division Head, Novartis Consumer Health, and member of the Executive Committee of Novartis. “It’s important to remain ultracompetitive and have costs under control,” he added. “But you can’t lose your nerve, and we have continued to invest aggressively in research and development, as well as marketing, for our traditionally strong franchises.”

Novartis Animal Health remained one of the fastest-growing companies in its industry, as *Interceptor* and *Sentinel* brands for control of heartworm and fleas in companion animals strengthened their competitive positions. A breakthrough treatment for control of parasitic worms in sheep epitomized the commitment to innovation, and *Zolvix* now offers farmers a new weapon in their battle against drug-resistant parasites.

For OTC, key franchises include Pain as well as Cough, Cold and Respiratory Disease – while the Gastrointestinal category expanded through rollout of self-medication brands for treatment of frequent heartburn

in the United States and Europe. A highlight of 2010 was the nimble introduction of a new pediatric fever and pain reliever under the *Triaminic* brand, filling a vacuum created by a major recall of competing brands in the United States.

Growth at CIBA Vision was driven by strong performance of the *Air Optix* brand of contact lenses that expanded in all regions, underpinned by new product launches.

LANDMARK DISCOVERY

Parasiticides – treatments to control parasites like worms, flies and fleas – comprise the single biggest product category in veterinary medicine and the single biggest franchise at Novartis Animal Health. Novartis has built a thriving range of parasiticides for companion animals based on the active ingredients milbemycin and lufenuron. The flagship *Interceptor* brand of beef-flavored tablets provides protection against heartworm, hookworm and whipworm in dogs. The *Sentinel* brand combines integrated parasite management with prevention and control of fleas. Sales of both brands climbed robustly during 2010.

A landmark discovery at Novartis labs in Switzerland has reinforced this parasiticide portfolio. Launched under the brand name *Zolvix* in 2009, the active ingredient monepantel represents the first new dewormer for livestock to reach the market in more

than 25 years. Other compounds discovered by Novartis in the pioneering class of amino-acetonitrile derivatives (AAD) could find applications in treatment of companion animals as well as in human health.

“We are exploring the efficacy of new compounds to control worm infections, including heartworms and intestinal nematodes, in companion animals,” said Ronald Kaminsky, Ph.D., Head of Parasitology at the Animal Health research center in St. Aubin, Switzerland. “And the excellent safety profile of the AADs makes development of compounds for horses interesting as well.”

Mr. Kaminsky also has facilitated agreements to develop a human formulation of monepantel for potential use in deworming campaigns in schools across the developing world. Safe and effective new drugs are urgently needed.

The *Zolvix* story began in the year 2000 when researchers at Novartis Animal Health spotted promising results from early tests of a novel class of compounds against parasitic nematodes. Nematodes are tiny worms that invade the gastrointestinal tracts of farm animals or pets, causing anemia and even death without effective treatment. It was an area of major unmet need in veterinary medicine: Resistant strains of parasitic nematodes were taking a heavy toll, particularly in sheep-farming regions of the world.

Novartis chemists synthesized more than 700 new molecules in an attempt to optimize the properties of the class of compounds known as AADs. Working back from the positive screening results, biologists at Novartis Animal Health raced to identify the target of the lead compound, monepantel. Through meticulous studies comparing the genome sequences of several nematode strains, they pinpointed the target – an esoteric receptor found uniquely in the nervous system of nematodes but not in host mammals. Exquisite selectivity enables monepantel to kill nematodes – including

multidrug resistant strains – with high levels of efficacy but a robust safety profile.

A publication in the prestigious scientific journal *Nature* in March 2008 recounted the development program and identified the target of monepantel. Mr. Kaminsky and co-authors cautioned that nematodes ultimately will develop resistance to any drug, including the AAD family, and urged careful monitoring of drug sensitivity of all anthelmintics and use of monepantel in combination, or rotation, with current or future anti-parasitic drugs.

“We need *Zolvix* there as a break treatment. When farmers get into trouble with multidrug resistance, this is the treatment they will fall back on,” said Mr. Gunn. “When *Zolvix* is used in a program with other drugs it can substantially delay development of resistance to all anthelmintics.”

MAINSTAY FORMULATION

At the OTC business unit, the Pain franchise posted double-digit growth buoyed by the complementary strengths of the two leading brands *Voltaren* and *Excedrin*. *Voltaren* is the number one OTC brand for Novartis. Originally a blockbuster prescription painkiller, the OTC formulation was launched in 1999 and sales have grown at a compound annual growth rate of 15% for the past decade.

Geographical expansion has been a key growth driver and OTC *Voltaren* is available in more than 130 countries today. Line extensions have been another key to success: *Voltaren* is available in lower strength tablets and a spate of other formulations, from a heat patch to spray and foam.

Still *Voltaren Emulgel*, a convenient topical gel formulation, is the mainstay of the brand and the number one selling OTC topical pain reliever worldwide. The gel formulation reflects a focus on muscle and joint pain. Topical delivery penetrates the skin and targets the source of pain,

delivering anti-inflammatory action as well as pain relief.

In 2005, Novartis acquired a portfolio of OTC brands led by *Excedrin*, an analgesic medicine known for its strong positioning and potency in relieving migraine and headache. The *Excedrin* Migraine indication for relief of migraine pain is supported by clinical data demonstrating that relief of pain begins within 30 minutes. Double-digit growth of the Pain franchise during 2010 reflected the *Excedrin* brand heritage coupled with geographical expansion such as recent launches in Mexico and South Africa.

OTC’s Gastrointestinal franchise, which is anchored by established brands such as *ex-lax* and *Maalox*, gained added momentum with the launch of new brand presentations of the well-established *Benefiber* brand.

Benefiber is a clear, tasteless dietary fiber that dissolves completely in water. These key attributes enable *Benefiber* to be easily mixed with foods or beverages to ensure recommended daily intake of fiber, providing health and wellness benefits.

Novartis launched *Prevacid24HR* in 2009. A new OTC version of the widely prescribed proton pump inhibitor lansoprazole, or *Prevacid*, *Prevacid24HR* is approved for treatment of frequent heartburn pain and is available only in the United States.

But in 2010 Novartis broadened the frequent heartburn franchise to Europe with the introduction of *Pantoloc Control*, an OTC treatment for symptoms such as heartburn and acid regurgitation. *Pantoloc Control* is an OTC formulation of another proton pump inhibitor, pantoprazole.

UNDERPINNING CLAIMS

Cough, Cold and Respiratory Disease is the second-biggest OTC franchise at Novartis and number two across the OTC industry, behind Vitamins, Minerals and Supplements, a category in which Novartis is not active.

Since 2007, the Novartis Cough, Cold and Respiratory Disease franchise has posted double-digit annual sales growth, a performance that reflects innovation, geographical expansion and deft line extensions of leading brands.

Cornerstone of the franchise is *Otrivin*, the biggest and fastest-growing OTC nasal spray brand worldwide. *Otrivin* sales have doubled since 2007, yet untapped potential remains. The brand still is not available in the United States, China or Japan. “Launches in the United States and China are likely within the next two years,” said Fred Walker, Head of Cough, Cold and Respiratory Disease for the OTC business. “There is still a lot of runway left for *Otrivin*.”

Novartis has driven sales growth by underpinning existing claims with fresh clinical studies and revamping the original *Otrivin* formula with line extensions. Clinical studies demonstrated that *Otrivin* relieves nasal congestion within two minutes, Mr. Walker said, “and along the way we checked with consumers and healthcare professionals to make sure the claims we were building actually are meaningful.”

That clinical program paralleled the development of a dual-action formulation that added a new active ingredient, significantly reducing runny nose. “We found this dual-action concept in Sweden, acquired rights to the new ingredient, and our research and development team did a great job with the reformulation and getting registrations for *Otrivin Complete*,” Mr. Walker said. “It gives consumers additional benefit, and brings news to the brand.”

“DOUBLE-QUICK”

OTC seized the opportunity during 2010 to rejuvenate the portfolio of another cough and cold brand, *Triaminic*. On April 30, a competitor announced a nation-wide recall in the United States of infant and children’s versions of popular OTC brands. Novartis

and other OTC companies scrambled to fill the vacuum.

Mr. Walker huddled with his leadership team, but also hastily convened the group of pediatricians he had established as external advisors two years earlier. “We could have begun developing lots of different flavors and formulations, but we wanted to put the interests of consumers and healthcare professionals first,” Mr. Walker said.

Guidance from the Pediatrician Advisory Panel was unequivocal. “There was a huge void,” said Norman “Chip” Harbaugh, M.D., Chairman of the advisory group. “Our advice to Novartis was to fill that breach quickly. Speed was critical – just get a basic product out there for parents who had cleaned out their medicine cabinets and didn’t know where to turn. Credit to Novartis, they moved double-quick,” Dr. Harbaugh added.

The *Triaminic* brand included combination cough and cold products – but no single-ingredient infant and pediatric formulations of fever and pain relievers. Combing the *Triaminic* portfolio, the team found a combination product with only a single ingredient in addition to acetaminophen, the active ingredient in the competitor product.

“The genius of R&D came in figuring out how to take out the cough-cold ingredient, leaving acetaminophen in the right strength and dose – basically mirroring the most popular formulation of the competitor product,” Mr. Walker explained.

OTC swiftly confirmed that the reformulated *Triaminic* fever reducer could be produced in mass quantity. “We kept the same bottle so we didn’t have to deal with changing any part of the manufacturing facilities,” Mr. Walker said.

Sticking to basics paid off. Novartis began shipping the new *Triaminic* fever reducer on June 15, a mere 45 days after the recall. Additional extensions to the *Triaminic* portfolio are under development.







CORPORATE CITIZENSHIP

Corporate Citizenship at Novartis is an integral part of how we operate and key to our success.

Our Corporate Citizenship commitment rests on four pillars:

Patients

We help patients worldwide share the benefits of advances in medicine and technology. Even as we seek to prevent, diagnose and treat disease, we forge innovative, sustainable commercial models to expand access to healthcare.

People and Communities

We want to ensure that we treat our people with respect and fairness, and that we are integrated in the communities in which we live and work.

Environment

Careful stewardship of natural resources – particularly tight control of waste, greenhouse gas emissions and energy efficiency – is important to Novartis.

Ethical Business Conduct

We strive for high performance with integrity.

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CORPORATE CITIZENSHIP KEY PERFORMANCE INDICATORS

Indicator ¹	2010	2009	2008	2007	2006
Economic²					
Net sales in USD billions	50.6	44.3	41.5	38.1	34.4
Net income in USD billions; % of net sales	10.0; 20%	8.5; 19%	8.2; 20%	6.5; 17%	6.8; 20%
Core Research & Development in USD billions; % of net sales	8.1; 16%	7.3; 16%	6.8; 16%	6.2; 16%	5.2; 15%
Purchased goods and services ³ in USD billions; % of net sales	22.3; 44%	21.3; 48%	20.3; 49%	19.4; 51%	15.8; 46%
Personnel costs in USD billions; % of net sales	12.2; 24%	10.9; 25%	10.6; 26%	9.9; 26%	8.7; 25%
Taxes in USD billions; % of net income before taxes	1.7; 15%	1.5; 15%	1.3; 14%	0.9; 13%	1.2; 25%
Dividends in USD billions; % of net income attributable to Novartis shareholders	5.4; 55%	4.5; 53%	3.9; 49%	3.3; 51%	2.6; 38%
Cash returned to shareholders via share repurchases in USD billions; % of Group total net income	0; 0%	0; 0%	0.3; 0%	4.7; 39%	0; 0%
Share price at year-end (CHF)	54.95	56.50	52.70	62.1	70.25
Patients⁴					
Access to medicine: value in USD millions	1 544	1 510	1 259	937	755
Access to medicine: number of patients reached in millions	85.5	79.5	73.7	65.7	33.6
People and Communities					
Full-time equivalent positions	119 418	99 834	96 717	98 200	100 735
Resignations (incl. retirements), separations, hiring (% of associates)	8; 3; 14	8; 3; 14	10; 5; 14	9; 4; 17	8; 4; 19
Women in management ⁵ : % of management; % of Board of Directors ⁶	36%; 16.7%	35%; 16.7%	37%; 8.3%	35%; 8.3%	31%; 0.0%
Number of associate nationalities	146	144	143	139	–
Lost-time injury and illness rate (LTIR) ⁷ (per 200 000 hours worked) ²	0.18	0.22	0.34	0.42	0.45
Total recordable case rate (TRCR) ^{7,8} (per 200 000 hours worked) ²	0.84	0.93	1.09	1.42	1.43
Transportation-related injuries leading to lost time ^{2,7}	49	58	77	92	–
Environment^{2,9}					
Contact Water use, excluding cooling water (million m ³)	14.9	15.0	15.1	15.4	15.6
Energy use (million GJ), on site and purchased	17.4	17.0	16.9	16.7	16.4
GHG emissions, Scope 1 vehicles (1000 t)	173	178	183	197	187
GHG emissions, total Scope 1, including vehicles, and Scope 2 (1000 t)	1 500	1 513	1 526	1 497	1 482
Total operational waste not recycled (1000 t), hazardous and non-hazardous	153	142	139	175	156
Ethical Business Conduct					
Novartis and third-party associates trained on Code of Conduct via e-learning courses ¹⁰	18 302	29 493	15 990	16 697	14 574
Associates completing certification on Code of Conduct	29 835	26 300	26 750	27 000	23 000
Cases of misconduct reported; substantiated ¹¹	1 236; 570	913; 541	884; 374	906; 421	651; 326
Dismissals and resignations related to misconduct ¹¹	432	564	217	249	154
Total number of suppliers	241 365	206 155	228 769	228 558	–
Suppliers informed of Novartis Third-Party Guidelines (annual sales of more than USD 100 000 and not requiring a self-declaration)	39 575	45 858	28 792	61 715	42 200
Suppliers to confirm key standards ¹² (self-declaration)	3 388	842	1 157	1 377	8 600

¹ Economic indicators and full-time equivalent positions include Alcon, Inc.; all other indicators exclude Alcon, Inc.

² Years 2006 and 2007 have been adjusted to exclude the Consumer Health Division Nutrition operations divested in 2007, unless otherwise stated

³ As included in the Group's Value Added Statement

⁴ See table on page 63 for additional detail

⁵ Management defined locally; the actual reporting relationship of these executives is to executives and/or the boards of directors within the companies that employ them. Data source % of management: FirstPort (Local Mgmt.Flag) as of October 2010.

⁶ 2009 figures corrected

⁷ Excludes data for contractors

⁸ Includes all work-related injury and illness, whether leading to lost time or not

⁹ Details see: www.corporatecitizenship.novartis.com/environmental-care

¹⁰ Figures include new Novartis associates and those not previously trained, as well as certain associates of third parties who work within Novartis

¹¹ Figures of previous years have been updated to reflect completion of outstanding investigation

¹² In 2009 Novartis modified the overall risk classification process, which changed the number of suppliers requiring a self-declaration. This element of the process will be revised next year.

CORPORATE CITIZENSHIP: TARGETS AND RESULTS FOR 2010 AND TARGETS FOR 2011

UN GLOBAL COMPACT

Targets 2010

Participate in the Human Rights Working Group and produce another Communication on Progress Report acknowledged as “notable” by the Global Compact Office.

Results 2010

Organized Swiss “10 years Global Compact” with Global Compact Office and the Swiss Agency for Development and Cooperation. Published booklet “Novartis and the Global Compact,” aimed at inspiring other companies.

Targets 2011

Actively support the Global Compact Office in its endeavors to create a Leadership Initiative and to help develop a sector-related specification.

RESPECT FOR HUMAN RIGHTS

Targets 2010

Compile the learnings of the four pilot applications of the Human Rights Compliance Assessment tool in order to further integrate it into existing management systems.

Results 2010

Human Rights Compliance Assessment tool applied in China, the largest and fastest-growing country organization included so far. Initiated and funded a state-of-play analysis on human rights due diligence procedures by the Institute for Business and Human Rights.

Targets 2011

Support the Danish Institute for Human Rights in finalizing a pharmaceutical industry version of its self-assessment tool, and increase the exchange of application experiences with other companies.

TRANSPARENT REPORTING

Targets 2010

Release 2009 Communication on Progress. Continuously update Citizenship@Novartis. Release 2009 Novartis GRI report at an application level of A+.

Results 2010

2009 UNGC Communication on Progress released in January 2010. Novartis GRI report received application level A+. Published the names of patient groups in EU/US supported during 2010, as well as funding purpose.

Targets 2011

Release 2010 UNCG Communication on Progress. Release 2010 Novartis GRI report at an application level of A+. Consistently update online Citizenship communications.

GOVERNMENT RELATIONS/LOBBYING

Targets 2010

Continue to identify and publish Novartis perspectives on healthcare issues.

Results 2010

Published new or updated Novartis perspectives on key topics (patent pools, clinical research). Supported major international, US and European trade associations (total of USD 22.5 million).

Targets 2011

Continue to identify and publish Novartis perspectives on healthcare issues.

INDUSTRY RANKINGS

Targets 2010

Strive to maintain high ratings on key industry corporate citizenship rankings.

Results 2010

Novartis continued to achieve high ratings in several corporate citizenship and industry rankings, e.g., Gold Class in SAM, number three in Access to Medicines index, number three in Fortune magazine's list of “World's Most Admired Companies” in the pharmaceutical industry, number seven in Diversity Inc's “Top 10 Companies for Global Diversity”.

Targets 2011

Strive to maintain high ratings on key industry and corporate citizenship rankings.



COMMITMENT TO PATIENTS

Heart failure is a pressing public health problem that affects more than 20 million people around the world. Novartis has established a comprehensive development program with three innovative medicines currently in advanced stage clinical trials. The heart failure development program employs pioneering applications of technologies to identify patients most likely to respond to treatment – and to monitor patients remotely to detect signs of destabilization, adjust medication and avert rehospitalization, the major driver of treatment costs.

As a globe-trotting executive for a French chemical company, Gerard Priet traveled incessantly, often eating and sleeping on planes during long flights to Africa and South America. Stress and his hectic lifestyle took a heavy toll, however, and Mr. Priet suffered a heart attack at the age of 45.

Thanks to excellent medical care he survived and was able to resume his career until finally retiring at the age of 60 in 2008. Six months into retirement, Mr. Priet had difficulty breathing on yet another international flight and, after consultations with doctors in his native Paris, he underwent urgent coronary bypass surgery. Pulmonary complications followed and he was ultimately diagnosed with heart failure.

Today he is a model patient, maintaining a careful diet, walking up to an hour every day, and adhering closely to prescribed medication and regular medical checkups. Before his most recent hospitalization, Mr. Priet was often short of breath after physical exertion or even climbing stairs. The surgery, physical activity, adherence to medical treatment and a sound diet have improved his condition, allowing him to live a full and active life. He remains a director of several companies and travels regularly with his wife Catherine to cultivate their shared interest in art.

“This kind of experience is painful but it makes people like me think,” Mr. Priet said. “You realize this is not something that only

happens to others. I was fortunate and I am more cautious now – I savor this second chance at life.”

Mr. Priet’s is an individual patient journey but heart failure is a pressing public health problem that affects more than 20 million people around the world. Prevalence is growing due to the global epidemic of high blood pressure, aging populations and improved treatment of heart attacks that has prolonged the survival of many patients like Mr. Priet.

The outlook for many heart failure patients is as grim as certain forms of cancer – about half die within four years of diagnosis. Recurrent hospitalization is a hallmark of heart failure. An estimated 30% of all heart failure patients are hospitalized each year. The frequency of hospital stays increases as the disease progresses, and the patient’s prognosis is worse for each successive hospitalization. During 2007, the most recent year for which complete data is available, heart failure accounted for more than 1 million hospital admissions in the United States. Direct costs of heart failure worldwide exceed USD 50 billion per year.

Novartis has established a comprehensive research and development program in heart failure. Three innovative medicines are currently undergoing Phase III clinical trials for treatment of chronic or acute heart failure. The program is a showcase for state-of-the-art drug development, employing

diagnostic tests in an effort to identify patients most likely to respond to targeted medicines. “Our goal is to match the right patient with the right drug at the right dose at the right time,” said David Epstein, Division Head, Novartis Pharmaceuticals, and member of the Executive Committee of Novartis.

Moreover, Novartis is stretching beyond the pill to include pioneering applications of telemonitoring – remote monitoring devices that provide feedback to patients and health-care providers to improve adherence to treatment. In one application, the heart failure development program will explore the use of sensor-based technology in the form of ingestible microchips to monitor if patients are taking medication as prescribed. Poor adherence to treatment often is the cause of destabilization in a patient’s condition, and hospitalization.

“This type of monitoring is an interesting experiment in combining devices and technology with our medicines,” said Trevor Mundel, M.D., Global Head of Development at the Pharmaceuticals Division. “Heart failure will be one of our first clinical pilots using this technology, but it is possible that in the future many patients with complex diseases will have some form of continuous or semicontinuous monitoring.”

DEVELOPING NEW MEDICINES

Heart failure is a condition in which the heart can’t pump enough blood to meet the body’s needs. The disorder develops over time as the heart’s pumping action grows weaker. In some cases, a patient’s heart no longer is able to pump blood to the rest of the body with enough force; in others, the heart no longer is able to fill with enough blood.

Heart failure can be triggered by different forms of cardiovascular disease, from uncontrolled high blood pressure or injured heart valves to sequelae of a heart attack. Despite the immense clinical and financial burden of heart failure, however, there has been limited innovation in recent decades.

Novartis currently is exploring the potential of three medicines to prevent progression of patients with chronic heart failure, as well as acute care in hospitals and post-acute care both in the hospital and after discharge.

In chronic heart failure, Novartis is testing two medicines, aliskiren and LCZ696, for patients with reduced ejection fraction, or weakened ability of the heart to pump.

Aliskiren is approved to treat high blood pressure and is the first and only approved direct renin inhibitor, the first new class of antihypertensive approved for treatment of hypertension in more than a decade. Data from the ALOFT trial (heart failure) have been added to the European product information.

LCZ696 is an investigational drug that is the first in a new class called angiotensin receptor neprilysin inhibitors (ARNI). LCZ696’s mechanism of action works through a dual action: concomitant inhibition of the enzyme neprilysin and the angiotensin (AT1) receptor. This activity promotes vasodilation, as well as natriuretic effects on the heart by enhancing the body’s intrinsic protective mechanisms.

Results of a Phase II study comparing LCZ696 to valsartan to treat high blood pressure were published in the medical journal *Lancet* in 2010. LCZ696 is being studied for heart failure – the PARADIGM trial is studying the potential of LCZ696 to replace ACE inhibitors as the standard of care in heart failure with reduced ejection fraction. LCZ696 also is being studied in treatment of chronic heart failure with preserved ejection fraction in which patients’ hearts no longer fill with blood appropriately.

URGENT THERAPY

Acute heart failure is a rapid onset or change in the signs and symptoms of heart failure, resulting in the need for urgent therapy. It may be the initial presentation or first episode of a previously unknown condition; new onset of heart failure; or worsening of

pre-existing chronic heart failure. Patients suffer from severe shortness of breath, and the heart’s ability to pump the blood it receives from the lungs to the body is impaired, causing the lungs to fill with fluid. The result is a reduction in the uptake and delivery of oxygen and patients normally require hospitalization.

The 2009 acquisition of US biopharmaceutical company Corthera Inc. brought Novartis exclusive worldwide rights to RLX030, a recombinant version of the naturally occurring human peptide relaxin. RLX030, which is administered to hospitalized patients via a 48-hour infusion, has been shown to cause an increase in cardiac output as well as systemic and renal vasodilation, which suggests potential benefits for patients with acute heart failure.

The US Food and Drug Administration granted “Fast Track” designation to RLX030, based on results of Phase II studies. The designation is reserved for drugs that potentially address major unmet medical need and provides an accelerated review cycle.

RELAX-AHF-1, a Phase III trial currently under way, will focus on acute heart failure patients who have intense vasoconstriction. “For this patient group, we are testing the hypothesis that RLX030 will improve their symptoms, and potentially reduce the length of hospital stay and the risk of future hospitalization,” said Andrew Zalewski, M.D., Head of a Clinical Science Unit of the Novartis Cardiovascular and Metabolism Development Franchise. “This is a very important group of patients. Statistics suggest that their rate of rehospitalization is on the rise, and there are no existing treatments that would provide more sustained prevention of hospitalization.”

HOLISTIC TRIAL DESIGN

Conscious of the daunting financial burden of heart failure, Novartis has consulted extensively with health authorities, payors and health technology assessment agencies

NOVARTIS ACCESS-TO-MEDICINE PROJECTS 2010 ¹

Project	Description	Target region	Value (USD millions)	Patients
Malaria/WHO ²	Provide <i>Coartem</i> at cost for public sector use	Africa, Asia, Latin America	218	81 309 000
Leprosy/WHO ^{3,4}	Eliminate leprosy by providing free medications to all patients worldwide with WHO	Global	5	268 000
Tuberculosis ^{3,4}	Donate fixed-dose combinations	Tanzania	2	87 000
Fascioliasis ⁵	Provide <i>Egaten</i> free of charge to treat patients infected with fascioliasis	Bolivia, Egypt, Madagascar, Yemen	0.2	222 000
Novartis Foundation for Sustainable Development (NFSD) ^{6,7}	Improve health and quality of life of poor people in developing countries through think tank, policy and project work	Developing countries	9	3 442 000
Novartis Institute for Tropical Diseases (NITD) ⁶	Discover novel treatments and prevention methods for major tropical diseases; NITD discoveries to be available in poor endemic countries without profit	Developing countries	14	–
Novartis Vaccines Institute for Global Health (NVGH) ⁶	Develop effective and affordable vaccines for neglected infectious diseases of developing countries	Developing countries	7	–
US patient assistance program (PAP) ³ (excl. <i>Gleevec</i>)	Assist patients experiencing financial hardship, without third-party insurance coverage for their medicines	United States	188	100 000
<i>Gleevec</i> US PAP ^{3,8}	Within capability of Novartis, continue to ensure access for patients in the US who cannot afford the drug	United States	131	5 000
<i>Glivec</i> Global PAP/ <i>Tasigna</i> Global PAP ^{3,8,9}	Within capability of Novartis, continue to ensure access for patients outside the US who cannot afford the drug	Global (excluding US)	923	37 000
Together Rx Access	Participate in discount program for the uninsured	United States	0.2	3 000
Emergency relief and other donations	Support humanitarian organizations	Global	47	–
Total			1 544	85.5 million

¹Excluding Alcon, Inc.

²During 2010, 81.3 million *Coartem* treatments reached patients based on a preliminary analysis of local distribution. Of these, 42.8 million treatments came from shipments completed in 2009, and 38.5 million from shipments in 2010. A total of 82.4 million treatments were shipped in 2010. Value was calculated using the number of treatments shipped in 2010 and the ex-factory price of *Coartem* to private-sector purchasers in malaria-endemic developing countries, minus payments to Novartis to cover costs under terms of the public-private partnership with the WHO. These payments were received through the WHO, UNICEF and other procurement agencies, acting on behalf of governments and other public sector institutions in developing countries eligible to receive *Coartem* at the not-for-profit price.

³Ex-factory price to private market

⁴Value and patients are based on WHO estimates

⁵Manufacturing costs

⁶Novartis operating costs

⁷Patients number indicates beneficiaries of projects supported by NFSD and partners; beneficiaries include patients, healthcare professionals and members of health insurance schemes. Patients number for 2010 is not comparable to previous years due to changes in methodology, reporting cycles and beneficiary groups included.

⁸US donations of *Tasigna* are included in US patient assistance program

⁹Value and patients include donations under shared contribution and co-pay models

in designing the heart failure outcome trials. “These development programs are extremely holistic in the way we look at outcomes and the benefits we provide to both patients and payors,” said Ameet Nathwani, M.D., Global Head of the Cardiovascular and Metabolism Development Franchise.

The LCZ696 development program, for example, aims to investigate potential reductions in mortality and heart failure symptoms, as well as improvement in physical function. But other key measures include reductions in the rate of hospitalization, the average length of hospital stay and time spent in either intensive care or coronary care units.

“We’ve designed the trials to provide data that inform listing and reimbursement decisions by governments, other payors and health technology assessment agencies,” Dr. Nathwani added. “The goal is to enable payors to make decisions on access quickly without needing to request additional data so these new drugs reach patients as soon as possible.”

Novartis also has embarked on an aggressive in-house biomarker research program. “The wealth of biomarker data and other readouts from our ongoing outcome trials represents the pharmaceutical industry’s biggest heart failure bio-bank,” Dr. Zalewski explained.

In another novel initiative, Novartis plans to establish a global patient registry to enhance understanding of epidemiology of heart failure. “We want to understand disease patterns, standards of care and where our new medicines would fit into the continuum of treatment,” Dr. Zalewski said.

REMOTE MONITORING

Novartis is also exploring opportunities to combine its new heart failure medicines with remote monitoring devices that provide feedback to healthcare providers. “Our

future vision for high-risk patients would include continuous monitoring with devices worn or carried by patients to detect advance signs of destabilization,” Dr. Mundel added. “By adjusting medication early enough, it might be possible to avert the need for hospitalization, which is the real cost driver in treatment of heart failure.” Ensuring that potential applications of telemonitoring remain compatible with standards of patient privacy will be essential to broader use of these technologies.

Telemonitoring – by which the symptoms of heart failure can be remotely assessed – represents a major step toward personalized care of patients, according to John Cleland, M.D., Professor of Cardiology in the Division of Cardiovascular and Respiratory Studies at the University of Hull, England. One of the biggest challenges in heart failure is the low rate of adherence to prescribed medication as well as recommended changes in lifestyle and diet. A paper published in 2010 by the *Journal of the American Medical Association* (JAMA) estimated that nonadherence to heart failure drugs ranges from 30% to 60% and nonadherence to lifestyle recommendations from 50% to 80%.

“We are considering setting up clinical programs using sensor technology that would provide an assessment of adherence to treatment of heart failure and perhaps also provide feedback to the patients,” Dr. Zalewski said. “It is also possible that in the future we may also have tools that provide feedback to healthcare professionals or patients – for example, signaling impending decompensation and thus allowing prompt adjustment of treatment to prevent rehospitalization.”

Dr. Cleland has almost a decade of direct experience with telemonitoring systems. “I’m sure that remote monitoring for most people with a variety of chronic diseases is the way ahead to improve the quality of care

in an affordable way. This applies especially to high-cost-per-month medical conditions such as heart failure,” he said.

“Telemonitoring systems seem to exert a large effect in reducing mortality in patients discharged from hospital after an episode of worsening heart failure. There is pretty good evidence that is because of a better management of patients, particularly tailoring of treatments and dosage. As we move forward we’re going to see expert systems with decision support, and integration of those systems with electronic patient records.”

Dr. Cleland believes that by involving patients actively in the management of their disease, telemonitoring can promote adherence to treatment. In an editorial in *JAMA* Dr. Cleland and Inger Ekman, Ph.D., of the University of Gothenburg, Sweden, wrote: “Ultimately, patients are the largest health care workforce available. Investing in patients to give them the knowledge, confidence and tools that enable them to become an effective and reliable workforce will be essential to maintain, and hopefully improve, the quality of care for most long-term illnesses.”

COMMITMENT TO PATIENTS: TARGETS AND RESULTS FOR 2010 AND TARGETS FOR 2011

STAKEHOLDER ENGAGEMENT

Targets 2010

Further develop links with patient groups in strategic areas for Novartis: multiple sclerosis (MS), chronic obstructive pulmonary disease (COPD). Support efforts by patient advocates to define disease burden and help improve treatment outcomes. Expand Corporate Citizenship dialogue with stakeholders.

Results 2010

Completed survey with relevant healthcare professionals on MS, published results at NGO meetings to help demonstrate the significant disease burden for patients and caretakers. Partnered with global patient, nursing and academic groups to launch COPD Uncovered, a global initiative to provide insight into the burden of COPD on young, active and working population. Reached out to EU institutions, NGOs, WHO, investors, and other national and international stakeholders on Corporate Citizenship-related issues. Participated in the finalization and launch of the GRI NGO reporting tool.

Targets 2011

Further develop links with patient groups in strategic therapy areas for Novartis (MS, COPD, cardiovascular, gout). Support efforts of patient advocates to define disease burden and help improve treatment outcomes. Partner on key global outreach activities.

ACCESS TO MEDICINE

Targets 2010

Continue rollout of *Coartem* Dispersible. Complete first deliveries of *Coartem* and *Coartem* Dispersible under phase one of the Affordable Medicines Facility – malaria (AMFm) – meant to serve underprivileged malaria patients.

Extend reach of Arogya Parivar in India to 50 million people and initiate similar programs in China and sub-Saharan Africa.

Results 2010

Coartem Dispersible has been rolled out in 32 countries, up from 18 countries in 2009. 30 million *Coartem* Dispersible treatments delivered in 2010, representing 84% of *Coartem* treatments for children with a body weight 5 kg - 25kg. Completed first deliveries of *Coartem* and *Coartem* Dispersible under AMFm to Nigeria.

Arogya Parivar expanded to increase accessibility of healthcare education and products for 42 million people in underprivileged rural communities in India. A similar program has been piloted in China, and a pilot will be launched in Kenya in 2011.

Targets 2011

Complete rollout of *Coartem* Dispersible in the public sector. Continue rollout of *Coartem* and *Coartem* Dispersible under phase one of AMFm.

Broaden the Arogya Parivar portfolio with four additional products covering two therapeutic areas.

NOVARTIS INSTITUTE FOR TROPICAL DISEASES

Targets 2010

Continue progression of dengue and malaria development candidates and selection of drug candidates active against multidrug resistant and extensively drug-resistant tuberculosis (TB) bacterial strains.

Results 2010

Started clinical trials for NITD609, an investigational new antimalarial with a novel mechanism of action. sPoC declaration of a second malaria compound with potential as a prophylactic. Continued building dengue and TB pipelines.

Targets 2011

Proof-of-concept studies with NITD609. Start of clinical trials with second compound. Deliver dengue or TB early pipeline compounds.

NOVARTIS VACCINES INSTITUTE FOR GLOBAL HEALTH

Targets 2010

Start Phase I and Phase II of typhoid vaccine trials in Europe and India. Launch pilot scale manufacture of the paratyphoid vaccine. Develop pilot scale process for nontyphoid salmonella and *Shigella* vaccines.

Results 2010

Phase I of the Vi-CRM₁₉₇ salmonella typhi conjugate vaccine completed. Start of global Phase II study to evaluate the clinical profile (safety and immunogenicity) of Vi-CRM₁₉₇ in various age groups in India and Pakistan. Continue nontyphoid salmonella, *Shigella* and African meningitis projects.

Targets 2011

Vi-CRM₁₉₇ Phase II dose ranging study completed and substantial progress toward Paratyphi A and *Shigella* vaccines.



COMMITMENT TO PEOPLE AND COMMUNITIES

Novartis products treat and protect patients, who have diverse backgrounds and individual needs. Novartis aims to maintain a global workforce that reflects this diversity by providing career mobility across areas of our business, by establishing health promotion programs for associates, and by creating a state-of-the-art workplace to foster innovation, science and collaboration.

The Novartis Group of companies aims to attract, develop and retain highly talented people who have diverse backgrounds, mirroring the societies in which they do business. The Group as a whole represents more than 140 nationalities among about 100 000 Novartis associates worldwide. The Corporate Executive Group – the 350 most senior executives at Novartis – includes 31 nationalities. The sales force spans 116 nationalities; Development and Medical Affairs, 104 nationalities each; Production, 84 nationalities; and Research, 61 nationalities.

Novartis associates work in an ethical, high-performance culture that provides opportunities to progress personally and professionally. The Novartis performance and rewards system ensures achievements are recognized, while professional development is encouraged and supported.

Fair evaluation of an associate's performance considers both the achievement of objectives and adherence to the Novartis Values and Behaviors. These set out expectations for associates to demonstrate respect toward each other; any form of harassment or discrimination is not tolerated. While Novartis has implemented strong programs to support these core values, programs alone are not enough. Leaders and associates must strive constantly to maintain an inclusive culture that will enable Novartis to respond successfully to evolving needs of patients and societies around the world.

FUTURE TALENT PIPELINE

Diversity and inclusion are cornerstones of the Novartis culture. An external Diversity and Inclusion Advisory Council, established in 2006, provides strategic guidance and consultative services that have had a significant positive impact on business achievements and culture.

Another dimension of diversity and inclusion is the commitment of Novartis Group companies to address unmet medical needs worldwide – including rare and neglected diseases. By establishing scientific and clinical capability in emerging and developing countries, Novartis aims to step up development of medicines and vaccines against diseases prevalent in these regions.

“Changing demographics – and better understanding of the biological causes underpinning different disease predispositions in different parts of the world – challenge our thinking about medical need,” said Brigitta Tadmor, Ph.D., Global Head, Diversity and Inclusion and Health Policy for the Novartis Institutes for BioMedical Research (NIBR). At the research center in Shanghai, China, for example, NIBR scientists are focusing on liver cancer, while building broad expertise about other forms of liver disease prevalent in Asia. The NIBR center in Shanghai has recruited many scientists who trained in Europe or the United States and then returned home to China.

“To build a diverse talent pipeline from other parts of the world where Novartis traditionally hasn’t been active, we are taking advantage of existing internship and fellowship programs to partner with universities in the developing world,” Ms. Tadmor added.

One example is a certificate program in vaccinology tailored to needs of physicians from developing countries. The program includes an initial year of academic training courses at both the University of Siena, Italy, and Novartis sites in Siena. The second year includes a clinical development internship at either the Novartis Vaccines Institute for Global Health or the Vaccines and Diagnostics Division in Siena.

In collaboration with medical schools in South Africa, Novartis provides fellowships for students working toward a master’s degree in clinical epidemiology at Stellenbosch University. As part of the program, Novartis scientists lead a course on drug development.

Through an exchange program with Kenyatta University in Nairobi, Kenya, NIBR offers training in research methods, laboratory safety and data handling. The initiative supports equipment donations by Seeding Labs, a nonprofit organization based in Cambridge, Massachusetts. Seeding Labs

helps to expand research in developing countries by making affordable, reclaimed laboratory equipment available within the global scientific community.

Internships enable students at TSIBA, a business school in Cape Town, South Africa, to spend 10 weeks working within marketing and general business functions at Novartis headquarters in Basel, Switzerland.

COMPREHENSIVE PROGRAMS

At the Pharmaceuticals Division, the Executive Female Leadership Program supports promising associates through mentoring, sponsoring and individualized development planning. The 12-month program provides interaction with senior Group management and includes participation in business-critical projects.

Mentoring and sponsoring programs are a key tool for knowledge transfer between senior leaders and promising high potential executives. In recent years, Novartis also has unveiled accelerated development programs to increase diversity within the senior management of Group companies.

As part of a settlement of a class action lawsuit (for further information, see page 230), and consistent with its philosophy to

ASSOCIATES BY REGION AND SEGMENT AS OF DECEMBER 31¹

	United States		Canada and Latin America		Europe		Asia/Africa/Australasia		Total	
	2010	2009	2010	2009	2010	2009	2010	2009	2010	2009
Pharmaceuticals	13 134	13 504	4 390	4 351	25 959	25 073	14 941	13 382	58 424	56 310
Vaccines and Diagnostics	1 394	1 322	83	64	3 604	3 792	313	238	5 394	5 416
Sandoz	1 349	1 222	2 427	2 597	15 308	15 286	4 452	4 318	23 536	23 423
Consumer Health	3 606	3 687	1 470	1 423	4 936	4 735	3 124	2 694	13 136	12 539
Alcon, Inc.	7 300		1 300		5 200		2 900		16 700	
Corporate Research & Shared Services	687	677	23	22	584	564	149	159	1 443	1 422
Corporate	117	113	21	20	599	544	48	47	785	724
Total Novartis including Alcon, Inc.	27 587	20 525	9 714	8 477	56 190	49 994	25 927	20 838	119 418	99 834

¹ Full-time equivalent positions

foster a diverse and inclusive workforce, one of our US affiliates, Novartis Pharmaceuticals Corporation (NPC), is implementing comprehensive programs designed to ensure fair treatment of all members of its sales force. As part of the measures, NPC will enhance many of its ongoing commitments to all employees and will add additional programs and initiatives to further strengthen its commitment to a diverse and inclusive environment.

CORPORATE CAMPUS

Changes in the way work is organized at Novartis have been catalyzed by the transformation of global headquarters in Basel, Switzerland, from a chemical complex with aging office buildings to a center for research, development and management.

Italian urban planner Vittorio Lampugnani laid out the master plan for the new corporate campus. Hand-picked international architects have put their personal stamp on the projected grid of almost 20 new buildings. The vision of the campus transcends these architectural treasures, however.

Novartis Chairman Daniel Vasella, M.D., envisaged the campus revamp as a way to reorganize the entire social fabric of the company and foster better communication among associates. Office floors would be laid out to stimulate cross-disciplinary interaction; every square inch, in essence, is designed to encourage the flow of ideas.

The initial phase of construction focused on office buildings with multispace designs in which associates have a combination of individual, shared, open and private work areas at their disposal. A prototype building designed by British architect David Chipperfield has applied the open space/multispace framework to research and development laboratories.

This is only the beginning: Basel is a test laboratory for promulgation of the campus vision in other parts of the world. Four office buildings and two laboratory

buildings are planned or under construction in Shanghai, China; all incorporate the new multispace design.

Leadership of the Oncology Business Unit will move to a pair of new multispace office buildings on the site of the Pharmaceuticals Division's US head offices, in East Hanover, New Jersey. New laboratory buildings are also planned for NIBR's global headquarters in Cambridge, Massachusetts.

RECRUITING TOOL

Clearly, Novartis expects the new Basel campus to become a potent recruiting tool. "As a company based on innovation, we compete for scientists and executives who are highly educated and have opportunities to work virtually anywhere in the world," said Bernard Aebischer, Ph.D., Head Planning and Construction for Novartis Campuses.

"We have to make our sites appealing to potential associates. By creating this distinctive, convivial campus atmosphere, we believe that people not only will be attracted to join Novartis, they also will be more likely to stay."

Another central objective of the headquarters campus project is to help associates synchronize their professional and private lives more efficiently. A post office, pharmacy and even a grocery store on the Basel campus eliminate the stress of daily shopping for associates in Switzerland, a country that maintains tight restrictions on shop opening hours.

"More and more, you see associates meet their families for lunch on campus. That wasn't possible a few years ago; today it is encouraged," Mr. Aebischer added. "And lively new restaurants on campus are magnets where people meet colleagues they don't normally see. We are confident that opportunities to interact informally, outside meetings, can enhance the flow of ideas, speed decision-making and, ultimately, improve the quality of our products."

CAREER MOBILITY

Along with global experience, career development for Novartis executives today often includes exposure to multiple divisions. Chief Executive Officer Joseph Jimenez is a prime example. Mr. Jimenez joined Novartis in 2007 as Division Head, Consumer Health, then headed the Pharmaceuticals Division until his appointment as CEO in 2010. Andrin Oswald, M.D., Division Head, Vaccines and Diagnostics, and Jeff George, Division Head, Sandoz, moved to their current positions from the Pharmaceuticals Division.

This heightened executive mobility is deliberate. Since 2009, the Executive Committee of Novartis has conducted its Organization and Talent Review, a yearly worldwide assessment of performance and development plans, on a cross-divisional basis. "Encouraging and implementing more cross-divisional moves is clearly our goal," said Juergen Brokatky-Geiger, Ph.D., Head of Human Resources and member of the Executive Committee of Novartis.

HEALTH PROMOTION

To safeguard the health and welfare of associates, Novartis has established a worldwide health promotion program to support lifestyle changes and prevent disease. The program focuses on five areas: smoking cessation, vaccinations, healthy weight management, and prevention of hypertension as well as cancer.

The fledgling weight management program will promote healthy eating behavior and encourage physical exercise. A ban on smoking had already been adopted by Novartis sites in many parts of the world. From January 1, 2011, however, the policy will be applied by Group companies worldwide, in line with local legal requirements. Academic studies have shown that a strict no-smoking policy reduces the number of smokers by about 10%, compared with only 4% when exceptions are permitted.



COMMITMENT TO PEOPLE AND COMMUNITIES: TARGETS AND RESULTS FOR 2010 AND TARGETS FOR 2011

LIVING WAGE

Targets 2010	Results 2010	Targets 2011
Continue to update living wage levels annually and adjust salaries of associates that are below those levels.	Completed wage-level review. Identified 24 cases globally that required salary adjustments to the living wage level.	Continue using established processes to update living wage levels annually and adjust associate salaries that are below those levels.

GLOBAL EMPLOYEE SURVEY

Targets 2010	Results 2010	Targets 2011
Continue implementation of Group-wide, division and local follow-on actions to further improve employee engagement and retention.	Responded to global survey results correlating employee engagement to Integrity & Social Responsibility, Senior Leadership, and Training & Career Development. Divisions, business units and geographies identified focus areas based on 2009 data, and took actions to strengthen these areas to improve overall employee engagement and retention.	Administer Novartis Global Employee Survey in March 2011 and communicate results. Identify focus areas based on employee data, develop action plans, and begin implementation at global, local and functional levels.

DIVERSITY AND INCLUSION (D&I)

Targets 2010	Results 2010	Targets 2011
Create divisional D&I action plans based on Global Employee Survey results. Establish group and divisional D&I goals. Establish Inclusive Leadership metrics linked to the Performance Management process. Develop internal and external staffing strategies to further improve diversity.	Commercial practices within some Sales and Marketing teams developed and implemented. Group companies enriched female talent pipeline through selection and development of high-potential female employees during the systematic yearly Organization and Talent Review Process. Designed Executive Female Leadership Development Program. Ensured consistency through implementation of Life-Work Integration Policy. Focused D&I network to develop a comprehensive global strategy. Established D&I Office and D&I Council within Novartis Institutes for BioMedical Research.	Continue high level of business commitment to D&I. Refine divisional D&I scorecards and continue to implement Group-wide D&I strategy actions as defined.

LOST-TIME INJURY AND ILLNESS RATE (LTIR)

Targets 2010	Results 2010	Targets 2011
Reduce LTIR to 0.20.	0.18	LTIR ≤ 0.18

TOTAL RECORDABLE CASE RATE (TRCR)

Targets 2010	Results 2010	Targets 2011
Annual improvement of 10% while ensuring uniform measurement across the Group.	0.84	Reduce TRCR by 5% based on 2010.



COMMITMENT TO THE ENVIRONMENT

Novartis is committed to environmental sustainability, working within the framework of the United Nations Global Compact's Environmental Stewardship Strategy. We work to reduce the impact of our products over their entire life cycle, as well as reduce overall energy consumption. Natural resources also represent a source of potential new treatments, and preserving biodiversity is essential to our efforts to discover medicines.

In 2010, the United Nations Global Compact unveiled a new Environmental Stewardship Strategy for the 21st century. Although corporate sustainability management has made great strides in recent years, the new strategy acknowledges that environmental challenges are growing in scale and complexity. A higher level of stewardship will be required in coming years and decades.

Keith Saveal, Head Corporate Health, Safety, Environment and Business Continuity at Novartis, was a member of the Global Compact working group that produced the new strategy. He emphasizes the importance of vision, measurement and disclosure underpinning leadership in environmental management.

"Novartis strategy aims to address all areas of the environment in terms of the way we use the limited resources in the world – and in limiting pollution. That leads, in turn, to specific targets and actions," Mr. Saveal said. "If you don't measure, you don't know what is happening and you certainly can't manage it. Once measurement systems are in place, it is possible to set ambitious improvement goals in the areas that matter."

It is also essential to anticipate future trends, Mr. Saveal added. "Twenty-five years ago, hardly anyone expected carbon dioxide emissions to become the issue that it is today. So the question is what issues will be paramount in 25 years," he explained. "The aquatic environment could be a future chal-

lenge. Nanotechnology is another important future area because the science could be very helpful in drug delivery systems. But there are concerns about the toxicity and the persistence of the materials. That is why Novartis has established a policy that currently limits development to the use of biodegradable nanoparticles."

LIFE CYCLE ASSESSMENTS

Novartis already had identified certain challenges highlighted in the Global Compact's Environmental Stewardship strategy such as life cycle assessments of the environmental impact of products. Environmental impact stems from the use of products as well as their creation, the Global Compact wrote in the Environmental Stewardship Strategy document, and added: "It is imperative to utilize a life cycle assessment approach to assess the impacts of products 'from cradle to grave.'"

That is often a complex analysis. A prescription medicine can start with production of raw materials and intermediates by suppliers, followed by multiple chemical steps at Novartis manufacturing plants, and pharmaceutical formulation and packaging at many sites around the world – all coordinated through a global supply chain.

A life cycle analysis of *Diovan*, the biggest prescription medicine from Novartis, showed the total life cycle carbon impact of an average yearly dose is about 10 kilograms

of CO₂ equivalent, roughly equal to a single 35-kilometer drive with a midrange sedan car. According to the analysis, about 60% of the carbon footprint of *Diovan* stems from the generation of raw materials, intermediates and solvents upstream in the supply chain. Fuel use and electricity consumption were the dominant factors in the carbon footprint resulting from in-house chemical processes.

While the carbon and material footprints tend to have the greatest impact in the supply chain, pharmaceuticals in the environment is another potentially important factor of increasing interest. All major Novartis products have undergone a comprehensive assessment of potential long-term risks to the environment. As scientific knowledge evolves, however, we continue to benchmark ongoing activities. We also actively support efforts of regulators and other stakeholders in developing more efficient risk-management and wastewater treatment practices.

FLEET SAFETY

Associates drive millions of kilometers every year on Novartis business. Transportation on public roads ranks among the most hazardous occupational activities. We deeply regret the deaths during 2010 of two Novartis sales force associates in road accidents. We extend our condolences to the families.

Under fleet safety programs, associates receive initial training in defensive and ecological driving, as well as maintenance, and driving in wet or cold conditions. Refresher courses are mandatory. Line managers are required to coach associates on driving habits and driving is part of the annual performance review.

Novartis tracks four key indicators of driving safety across the Group: number of accidents with and without lost-time, number of accidents with personal injury per million kilometers driven, and incidents with vehicle damage per million kilometers driven.

At the same time, Novartis has embarked on a global effort to reduce CO₂ emissions from vehicles, by establishing an initial reduction target of 10%. In 2010, the Group exceeded that target by lowering emissions from the sales force fleet by 14%. In Germany, CO₂ emissions have shrunk by 13% since 2008, as 85% of the German sales force have chosen to drive fuel-efficient vehicles.

In the United States, the sales force has also exceeded its initial target, slashing CO₂ emissions by 18%. By adding hybrid cars and other fuel-efficient vehicles, the US fleet has increased fuel efficiency by 40% since 2006.

ENERGY EFFICIENCY

Novartis seeks to reduce energy consumption by improving efficiency of energy use in its operations. Renewable energy sources are adopted where economically attractive, and carbon offset projects are undertaken to complement internal initiatives.

In 2005, the Executive Committee of Novartis set a greenhouse gas target for the Group by voluntarily agreeing to abide by the Kyoto protocol. That commitment amounted to reducing 2005 greenhouse gas emissions by about 30% by 2012. Novartis is on track to achieve that target: During the past five years, energy efficiency has improved by 26% – almost double the original target set in 2005.

The largest source of greenhouse gas emissions at Novartis is purchased energy – primarily electricity. Accordingly, greenhouse gas emissions from purchased energy have been included under the Group's climate target. In 2010, a new target was set, calling for a 15% reduction by 2015 in total greenhouse gas emissions, including carbon offsets. The target rises to 20% by 2020.

Significant improvements in energy efficiency at plants in Europe since 2005 have enabled Novartis to satisfy requirements of

the European Union's "cap and trade" legislation. "Had we not been able to improve energy efficiency, we would have needed to buy emission allowances within Europe," Mr. Saveal explained. "Not only have we not had to buy any allowances – we have a surplus that we are carrying forward for future years."

As part of the voluntary Kyoto commitment, Novartis has embarked on carbon-offset projects in Argentina and Mali. "These two projects will be sufficient to meet our Kyoto commitment for 2012," Mr. Saveal added. "Although there isn't yet a post-Kyoto agreement in place, we decided that further projects would be needed to be able to meet the expected levels of greenhouse gas emission reductions."

In 2010, Novartis unveiled its latest carbon-offset project, reforestation of an estimated 3 800 hectares in Sichuan province in China. The Sichuan Carbon, Community and Biodiversity Project is a partnership with the Chinese branch of The Nature Conservancy, a leading global conservation organization, plus Shan Shui, an affiliated Chinese nongovernmental organization. The Nature Conservancy has firsthand experience from carbon-offset projects in China that received registration under the United Nations Framework Convention for Climate Change. Shan Shui will oversee local community involvement and development. In addition, Novartis and its partners will work closely with forestry departments at the national, provincial and local levels.

Under the project, an estimated 5 million trees will be planted on mountainsides in southwest Sichuan province, within and adjacent to nature reserves. "The sites are in remote areas, at quite high elevations," Mr. Saveal said.

"These areas were deforested many years ago. Mountain slopes are critical because there is a potential for soil erosion. Reforestation can help avoid potential landslides,

enhance biodiversity and maintain or restore habitats for endangered rare animals."

The Sichuan project includes environmentally sensitive areas that are the habitat of the giant panda.

BIODIVERSITY

The United Nations declared 2010 the International Year of Biodiversity.

The Earth's biological resources are a treasure trove, underpinning economic and social development, and industries ranging from tourism and cosmetics to agriculture and pharmaceuticals. Yet the UN warns that the threat to species and ecosystems has never been greater. Species extinction caused by human activities continues at an alarming rate.

In 1992, more than 180 parties signed an international treaty called the Convention on Biological Diversity. The accord aims to ensure conservation and sustainable use of biodiversity and the equitable sharing of benefits from utilization of genetic resources.

Novartis policy on biodiversity acknowledges that countries maintain sovereignty over their genetic resources and may limit access to them in collaborations with natural product providers. Novartis strongly endorses sharing of benefits derived from future products in accordance with principles of the Convention on Biological Diversity while ensuring compliance with intellectual property law.

Novartis has forged research collaborations in several countries that are conducted in accordance with the Convention on Biological Diversity, as well as local regulations. The joint development of a pioneering medicine against malaria by Novartis and Chinese partners remains a prototype for effective natural product research.

Another prominent partner in China is the Shanghai Institute of Materia Medica

(SIMM), which played a key role in discovery of the antimalarial medicine *Coartem*. In 2001, Novartis and SIMM announced a drug discovery collaboration based on natural products. Under the agreement, SIMM has isolated hundreds of new compounds from medicinal plants known in traditional Chinese medicine. In return, Novartis provided financial support, shared know-how in natural product research and advanced drug discovery techniques such as high-throughput screening. In 2004, Novartis and SIMM extended and expanded the collaboration.

In 2005, Novartis unveiled a collaboration with Thailand's National Center for Genetic Engineering and Biotechnology (BIOTEC), one of four centers under the auspices of the government-financed Science and Technology Development Agency. The objective was to develop new medicines based on natural products found in Thailand. As with SIMM, Novartis provides BIOTEC with financial and technical support as well as training of Thai scientists through internships at the Natural Products research unit in Switzerland.

In 2009, Novartis laid the foundation for natural product research in Malaysia by signing a memorandum of understanding with Sarawak Biodiversity Center (SBC). SBC is a scientific institute established by the state of Sarawak, on the island of Borneo, which encompasses rain forests with extraordinarily rich biodiversity.

The agreement with Novartis reflects ambitions by Malaysia to nurture a domestic biotechnology and pharmaceutical industry. Like other collaborations, Novartis will provide financial support, identify new natural compounds from materials supplied by SBC, and help upgrade the technology base as well as offer internships for microbiologists and natural product chemists at the Novartis Natural Products research unit.

NOVARTIS HEALTH, SAFETY AND ENVIRONMENT (HSE) DATA 2010

	Novartis Group ¹		Pharmaceuticals (excl. NIBR)		NIBR		Vaccines and Diagnostics		Sandoz		Consumer Health	
	2010	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010	2009
Employees												
HSE personnel (number of associates working at least 50% for HSE)	469	474	191	201	22	24	31	35	165	153	50	50
Health/Safety												
Lost-time injury and illness rate (LTIR) [per 200 000 hours worked]	0.18	0.22	0.20	0.24	0.17	0.24	0.17	0.16	0.19	0.22	0.13	0.17
Total Recordable Case Rate (TRCR) [per 200 000 hours worked]	0.84	0.93	0.95	0.98	1.28	1.68	0.41	0.40	0.64	0.78	0.74	0.90
Production												
Total production (1000 t = metric tons)	165	161	24	24	0	0	0.4	0.5	88	88	52	49
Resources												
Contact Water use (million m ³)	14.9	15.0	4.1	4.2	0.4	0.4	1.1	1.0	7.7	7.8	1.6	1.5
Energy use (million GJ)	17.4	17.0	5.7	5.7	1.0	1.1	1.5	1.3	7.7	7.4	1.5	1.5
Emissions into water												
Effluent discharge (million m ³)	15.3	15.3	4.4	4.1	0.4	0.4	0.7	1.1	7.6	7.8	2.1	1.9
Chemical oxygen demand (COD) (1000 t)	3.4	3.5	0.6	0.5	0.0	0.0	0.0	0.0	2.7	2.9	0.1	0.1
Emissions into air												
Sulfur dioxide SO ₂ (t)	76	72	4.4	7.5	0.3	0.3	0.1	0.1	70	63	1.3	1.3
Nitrogen oxide NO ₂ (t)	300	295	104	108	7.3	7.1	21	26	146	131	22	23
Volatile organic compounds (VOC) halogenated (t)	258	215	3.2	3.3	6.9	10	0.0	0.0	248	202	0.0	0.0
Volatile organic compounds (VOC) non-halogenated (t)	1 334	1 508	241	232	24	32	1.7	2.1	984	1 170	83	71
Emissions CO₂/GHG												
Scope 1, Combustion and process (1000 t)	411	401	144	152	8.6	10	42	32	189	178	27	29
Scope 1, Vehicles (1000 t)	173	178	125	130	0.1	0.2	4.4	3.1	25	25	14	14
Scope 2, From purchased energy (1000 t)	916	934	242	235	74	74	79	86	379	391	141	148
Waste												
Non-hazardous operational waste not recycled (1000 t)	59	55	7.4	7.0	1.5	1.5	36	32	8.1	8.9	5.8	5.8
Hazardous operational waste not recycled (1000 t)	94	87	63	56	1.1	1.2	1.2	0.8	26	27	2.4	2.1
Non-hazardous operational waste recycled (1000 t)	35	34	11	11	0.9	0.8	2.6	2.0	14	14	6.9	6.3
Hazardous operational waste recycled (1000 t)	88	70	39	27	0.0	0.0	0.2	0.1	49	43	0.0	0.1

¹Novartis Group includes Novartis Corporate; Alcon, Inc. is not included.

THE REPORTING PROCESS

The HSE Data Management System and data collection process are key elements of Corporate Citizenship Management at Novartis. The data describe our major material flows across company boundaries and environmental impacts originating from our own operations (Scope 1), as well as greenhouse gas emissions from the generation of purchased energy (Scope 2). Except for some specific products where life cycle analysis has been carried out, we do not monitor environmental impacts from the manufacture and delivery of purchased goods and services, nor the use of resources and other related emissions for activities outside company boundaries (Scope 3).

HSE data is collected and reviewed on a quarterly basis. The 2010 environmental and resource data published in the Annual Report and on our website are actual data for the period from January through September and best estimates for the period October through December, which will be updated with actual data in the first quarter of 2011. Any significant deviations will be reported on our website and restated in next year's Annual Report. Employees and Health/Safety data are actual from January through December 2010.

COMMITMENT TO THE ENVIRONMENT: TARGETS AND RESULTS FOR 2010 AND TARGETS FOR 2011

ENERGY-EFFICIENCY IMPROVEMENT

Targets 2010	Results 2010	Targets 2011
Final year of the four-year target to improve energy efficiency by 10% based on 2006.	26% improvement.	Improve by a further 15% by end 2015, based on 2010.

CONTACT-WATER-EFFICIENCY IMPROVEMENT

Targets 2010	Results 2010	Targets 2011
Final year of the five-year target to improve water efficiency by 10% based on 2005.	39% improvement.	Improve by a further 4% by end 2012, based on 2010.

VOLATILE ORGANIC COMPOUNDS EMISSIONS HALOGENATED

Targets 2010	Results 2010	Targets 2011
Decrease to 200 tons by 2010.	258 tons.	Improve by 15% by end 2012, based on 2008.

VOLATILE ORGANIC COMPOUNDS NON-HALOGENATED

Targets 2010	Results 2010	Targets 2011
Decrease to 1,500 tons by 2010.	1 334 tons.	Improve by 15% by end 2012, based on 2008.

CO₂ FROM VEHICLES

Targets 2010	Results 2010	Targets 2011
Final year of the five-year target to improve CO ₂ emissions from vehicles by 10% based on 2005.	14% improvement.	Included in a new reduction target for total Scope 1 and Scope 2 GHG emissions (see below).

SCOPE 1 GHG EMISSIONS FROM OPERATIONS

Targets 2010	Results 2010	Targets 2011
Decrease 5% below 1990 level of 308 kilotons by 2012, including carbon offsetting.	411 kilotons.	Decrease 5% below 1990 level of 308 kilotons by 2012, including carbon offsets.

HAZARDOUS WASTE EFFICIENCY IMPROVEMENT

Targets 2010	Results 2010	Targets 2011
Stabilize efficiency of hazardous waste not recycled.	6% improvement.	Improve efficiency of hazardous waste not recycled by 10% by 2012, based on 2008.

NON-HAZARDOUS WASTE EFFICIENCY IMPROVEMENT

Targets 2010	Results 2010	Targets 2011
Stabilize efficiency of non-hazardous waste not recycled.	12% improvement (excluding V&D, as increases in vaccine production since 2008 distort these figures).	Improve efficiency of non-hazardous waste not recycled by 20% by 2012, based on 2008.

TOTAL GHG EMISSIONS (NEW TARGET)

Targets 2010	Results 2010	Targets 2011
	1.7% reduction.	Reduce total GHG emissions by 15% by 2015 and 20% by 2020, including carbon offsets, based on 2008.

COMMITMENT TO ETHICAL BUSINESS CONDUCT

Ethical considerations inform all dimensions of Novartis business, from research and development to manufacturing and marketing. Arogya Parivar is a novel business model developed by Novartis to reach millions of patients in rural India with health education and affordable products – expanding access in a way that is both socially responsible and sustainable.

In 2007 Novartis embarked on a bold experiment with a novel business model catering to the health needs of impoverished people in rural villages of India.

Known as Arogya Parivar (“healthy family” in Hindi), the initiative builds on a fundamental principle: Social impact and business growth can go hand-in-hand. Qualified doctors are scarce in rural India and poverty-stricken villagers have limited awareness of how to treat or prevent disease. Raising awareness about healthcare, hygiene and nutrition is an essential step in fostering demand.

Over the past three years, more than 12 million villagers have taken part in community health meetings led by Arogya Parivar health educators. In addition, these health educators play a key role in organizing health camps – mobile clinics that provide access to screening, diagnosis and even treatment in villages that lack permanent access to physicians. In 2010 Arogya Parivar hosted more than 3 000 health camps, attended by an estimated 140 000 people.

Yet Arogya Parivar also must pass muster as a self-sustaining business. Revenue from sale of Novartis products has to cover the cost of health education activities and generate a profit. Commercial operations are handled by sales supervisors who call on 22 000 rural physicians to promote products in the Arogya Parivar portfolio

as well as collect orders from more than 17 000 rural pharmacies directly linked to the Arogya Parivar supply chain.

So far, the experiment appears to be working. Net sales have more than doubled every year and Arogya Parivar reached break-even during 2009 with monthly sales exceeding operating costs. Buoyed by success in India, a similar initiative was launched in China during 2010. Further expansion is planned for 2011.

“We expect Arogya Parivar to become an important element of future business growth,” said Anuj Pasrija, Country Head of the Arogya Parivar initiative in India. “The initiative has strengthened relationships among Novartis and local governments as well as with the community at large. We are changing the typical image of a global company in emerging markets.”

BOTTOM OF THE PYRAMID

The inspiration for Arogya Parivar was provided by the late C. K. Prahalad, a management professor and author. He popularized the idea that companies could make money while helping to alleviate poverty.

Traditionally, 5 billion of the world’s poorest people had languished beneath the radar screen of large corporations. Yet, Mr. Prahalad argued, if the poor could be mobilized as active microconsumers and microproducers, they could become the

next engine of economic growth around the world. Companies would also benefit, he predicted, by doing well economically at the same time as dramatically improving quality of life and access to goods and services.

Healthcare is a formidable test of that hypothesis. More than 70% of India's population lives in villages. According to estimates, two-thirds of the population lacks access to essential medicines.

Low levels of literacy are reflected in limited disease awareness, Mr. Pasrija said. "Because of low literacy, people in rural areas don't understand the real causes of disease or how to live healthier. Poor hygiene, lack of effective sanitation and poor quality of drinking water are major burdens for people living in India's villages, and impediments to health."

Arogya Parivar was introduced on a limited scale in 2007, serving 300 villages with about 500 000 residents stretched across the northern and central regions of India. Today the initiative has expanded to a honeycomb of cells spanning 29 000 villages in 11 states – with an estimated 42 million residents.

"Our next objective is to ramp up current activities to provide access to healthcare for 100 million people," Mr. Pasrija said. "That sounds like a lot – but it is still modest compared to the ultimate vision of reaching the many, many more who live in rural villages across India."

Arogya Parivar's complete portfolio includes almost 80 products that address 12 predominantly tropical diseases common in rural India. Sales supervisors focus their efforts on a subset of these products that match the local disease burden and health needs.

Importantly, pack sizes are much smaller than in developed countries – or even standard packs of the same products available

from the Novartis commercial organization in India.

"Our customers are typically people who earn between one and three dollars a day, and lack access to medicine," Mr. Pasrija explained. "Being smaller in size, Arogya Parivar packs are affordable for daily workers. We believe people in rural villages are willing to invest in healthcare as long as the cost doesn't exceed a certain percentage of their daily expenditures, which also include food, shelter, clothing and education."

Volumes are still modest, and manufacture of small pack sizes represents a significant investment. "But it underscores our commitment to making these affordable products broadly available," Mr. Pasrija said. "Arogya Parivar isn't just about profits. Our mission is to help improve access for people at the bottom of the pyramid."

LOCAL FACES

Both Arogya health educators and sales supervisors are local faces, residing within the villages they serve. Health educators have previous experience in healthcare, usually with social development agencies such as Population Services International, nongovernmental organizations or United Nations agencies. Sales supervisors have direct experience in sales, normally from the pharmaceutical industry or fast-moving consumer goods.

Local recruitment is a hallmark of Arogya Parivar. "It ensures the health educator understands the local disease burden and speaks the local language, both of which are critical to our capacity to localize programs," Mr. Pasrija said.

Sunita Bhalerao is an Arogya health educator who covers 20 villages – including her home village Avasar Khurd – in the Pune district of India. A graduate of Pune University, Ms. Bhalerao spent a year with a local rural development agency before

joining Arogya Parivar during the initial stages of the initiative. In parallel with her work as a health educator, Ms. Bhalerao has been able to continue her studies, earning a master's degree in economics. "Helping people take better care of their health makes me feel useful," she said.

In one recent community health meeting with 50 women from Wadgaon village held in a bustling open-air market, Ms. Bhalerao explained how intestinal worms can aggravate malnutrition and iron deficiency, and how to address the problem with a simple medicine available at the local pharmacy. She meets regularly with groups of men to discuss how to protect the health of their wives and families, as well as potential pitfalls of chewing tobacco.

Villagers often are unaware of the significance of certain symptoms, so Arogya health educators draw attention to possible connections between symptoms and disease. "Something as simple as a persistent cough over a few weeks, combined with continuous loss of weight, could mean tuberculosis," Mr. Pasrija said.

Health educators also focus on preventive measures, such as the importance of sufficient calcium in the diets of children and of women who are either pregnant or breast-feeding. At the end of a meeting, educators provide guidance about how and where to consult a doctor for people in need of help.

"The health educators are our ambassadors," Mr. Pasrija added. "It's not enough to deliver a talk and then disappear for six months – they visit their villages regularly, to keep the message alive."

COMMITMENT TO ETHICAL BUSINESS CONDUCT: TARGETS AND RESULTS FOR 2010 AND TARGETS FOR 2011

MANAGEMENT FRAMEWORK

Targets 2010

Strengthen organizational processes that foster key drivers of ethical business conduct. Improve responsible leadership skills through further integration of integrity into leadership training.

Results 2010

Worked together with several departments to strengthen integrity in decision-making processes. Integrity being integrated in three courses of corporate learning program.

Targets 2011

Strengthen overall requirements for compliance standards, training and monitoring. Establish key strategies to further improve integration of integrity and compliance with business practices, e.g., leadership responsibilities, performance management. Align current organization and resourcing with the needs of an effective integrity and compliance program including a concise policy framework.

CODE OF CONDUCT

Targets 2010

Drive cross-divisional organizational development (develop career path for integrity managers, leadership, talent management). Strengthen cross-divisional organizational cooperation.

Results 2010

Talent in the Integrity & Compliance function developed and promoted across divisions. Cross-divisional cooperation strengthened by building cross-divisional task forces and by conducting cross-divisional training sessions and workshops.

Targets 2011

Propose amendments to Group policy framework including Code of Conduct and its governance to reflect external best practice and to allow for periodic updates.

FAIR MARKETING PRACTICES

Targets 2010

Strengthen clearance and self-monitoring processes within divisions.

Results 2010

Maintained policies and processes to ensure accuracy in promotional materials globally. Monitored marketing practices at divisional and business unit levels to reinforce Novartis marketing standards.

Targets 2011

Continue to strengthen clearance, self-monitoring processes and awareness within divisions and business units by introducing new tools.

THIRD PARTY MANAGEMENT

Targets 2010

Optimize current approach to third party management to improve quality and effectiveness by focusing on key risks in the supply chain.

Results 2010

Introduced a revised classification process to prioritize which suppliers to focus activities on. The new process aims to be more tailored to the relationship with the supplier and provide a more focused approach for the future, as to how Novartis engages with its supply chain on sustainability issues.

Targets 2011

Substantially amend approach to third party management, increasing the focus on suppliers with the highest sustainability impact. This will include modifying existing and defining new follow-up actions to better engage suppliers when potential risks have been identified.

ANIMAL WELFARE

Targets 2010

Continuous risk assessment of internal animal experiments based on internal rules and Standard Operating Procedures (SOPs). Promote and monitor in-house animal welfare compliance. Continuous risk assessment of third party providers based on Novartis Standards and SOPs. Promote best animal welfare practices at third parties. Continuous monitoring of animal welfare-related processes at Novartis facilities in Asia. Promote the 3Rs within Novartis and assign Novartis 3Rs Award.

Results 2010

Updated Novartis animal welfare standards in all in-house and partner facilities. Monitored animal welfare at both in-house facilities and with partners. Conducted 76 animal welfare audits of partners globally, with 14 audits in Asia.

Targets 2011

Improve animal welfare standards throughout organization and with partners. Exchange best practices at Animal Welfare Forum and assign 3Rs Award, reinforcing 3Rs principle.

FURTHER INFORMATION

Topic	Website Information
OVERVIEW	
Corporate Citizenship at Novartis	http://www.novartis.com/corporatecitizenship
Perspectives on Key Issues	http://www.novartis.com/key-issues
UN Global Compact	http://www.novartis.com/un-global-compact
Global Reporting Initiative (GRI)	http://www.novartis.com/gri-report
COMMITMENT TO PATIENTS	
Overview: Patient initiatives	http://www.novartis.com/citizenship-patients
Novartis Foundation for Sustainable Development (NFSD)	http://www.novartisfoundation.org
Novartis Institute for Tropical Diseases (NITD)	http://www.nitd.novartis.com
Novartis Vaccines Institute for Global Health (NVGH)	http://www.nvgh.novartis.com
COMMITMENT TO PEOPLE AND COMMUNITIES	
Diversity and Inclusion	http://www.novartis.com/diversity-inclusion
COMMITMENT TO ENVIRONMENT	
Overview: HSE performance	http://www.novartis.com/environmental-care
COMMITMENT TO ETHICAL BUSINESS CONDUCT	
Overview: Ethical business conduct	http://www.novartis.com/business-conduct
Novartis Code of Conduct	http://www.novartis.com/code-of-conduct



INDEPENDENT ASSURANCE REPORT ON THE NOVARTIS CORPORATE CITIZENSHIP REPORTING

To the Audit and Compliance Committee of the Board of Directors of Novartis AG, Basel

We have performed assurance procedures to provide limited assurance on the following aspects of the 2010 Corporate Citizenship (CC) reporting of Novartis AG and its consolidated subsidiaries (Novartis Group).

SUBJECT MATTER

The subject of our assurance procedures related to the data and information disclosed in the consolidated CC reporting of Novartis Group for the year ended December 31, 2010 was limited to the following:

- Management reporting processes with respect to the CC reporting and CC key figures as well as the related control environment in relation to data aggregation of these key figures.
- CC key performance indicators on page 58, and the “Novartis access-to-medicine projects 2010” figures on page 63 as published in the “Novartis Annual Report 2010” (CC indicators).

CRITERIA

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

- CC Policy including the CC Guidelines and the Code of Conduct.
- Procedures, by which CC and Health, Safety and Environment (HSE) data is gathered, collated and aggregated internally.

RESPONSIBILITY AND LIMITATIONS

The accuracy and completeness of CC 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 CC performance.

The Board of Directors of Novartis AG is responsible for preparation and reporting of CC information. Our responsibility is to provide a conclusion on the results of our work in accordance with the International Standard on Assurance Engagements (ISAE) 3000.

ASSURANCE PROCEDURES

Our assurance procedures included the following:

- **Evaluation of the application of Group guidelines**
Reviewing application of the Novartis Group internal CC reporting guidelines.
- **Management inquiry**
Interviewing personnel responsible for internal reporting and data collection at Group level.
- **Inspection of documentation and analysis of relevant policies and principles**
Inspecting relevant documentation on a sample basis, including Group CC policies, management reporting structures and documentation.
- **Assessment of the processes and data consolidation**
Reviewing the management reporting processes for CC reporting and assessing the consolidation process of data at Group level.

CONCLUSIONS

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 subject matter as defined above and disclosed in the Corporate Citizenship reporting has not been prepared in accordance with Novartis Group internal policies and procedures.

PricewaterhouseCoopers AG



Dr. Thomas Scheiwiller *Stefan Rüegg*

Dr. Thomas Scheiwiller

Stefan Rüegg

Basel, January 25, 2011





CORPORATE GOVERNANCE REPORT

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

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INTRODUCTION

The corporate governance framework of Novartis reflects a system of checks and balances between the powers of the shareholders, the Board of Directors and the management with the goal to safeguard the interests of Novartis and its shareholders while creating sustainable value.

Since the creation of Novartis in 1996, the Board of Directors has continuously improved the corporate governance framework of Novartis by proactively implementing emerging best corporate governance standards long before these were embedded in the Swiss Code of Best Practice for Corporate Governance (“the Swiss Code”) or in the law.

In 1999, Novartis established the new position of Lead Director as a check and balance following the election of Chief Executive Officer Daniel Vasella, M.D., to the additional post of Chairman. Moreover, three new Board committees – the Compensation Committee, the Audit and Compliance Committee and the Corporate Governance and Nomination Committee – were created, composed exclusively of independent Board members.

In 2002, five years before legislation came into force in 2007, requiring companies to disclose the total compensation of their executive management group as well as the highest compensation attributed to a member of the executive management, Novartis had already implemented even more rigorous disclosure standards by reporting the individual annual compensation of all members of the Executive Committee.

In 2004, two years earlier than required for non-US corporations, Novartis complied with the challenging certification requirements under the US Sarbanes-Oxley Act, in particular Section 404 of this Act.

In 2009, the Board of Directors established a new Risk Committee that oversees the Group’s enterprise risk management, strengthening the Board of Directors’ supervisory function over management in this critical area. While fostering a culture of risk-adjusted decision making, the Risk Committee ensures that reasonable risk-taking and innovation are not constrained.

In 2010, the Chairman and CEO functions were separated. In addition several emerging best corporate governance standards were proactively implemented, including the introduction of a “say-on-pay” shareholder vote, making changes to our executive compensation system to further strengthen the alignment of incentives with the long-term success of Novartis and a number of new disclosures, including on qualifications of Board members.

Novartis evaluates emerging best governance standards and adopts those that are found to be appropriate for Novartis. These standards are then tailored to Novartis, its business, management, stakeholders and shareholders with a view to create a corporate governance regime that supports the creation of sustainable value. This cannot be achieved by implementing corporate governance standards “as is” (“one size fits all approach”).

There are encouraging signs that the dangers of this “one size fits all approach” to corporate governance are now being acknowledged not only by the issuers but also by investors and regulators. In 2010 several prominent UK pension funds publicly criticized the new rule in the revised UK Corporate Governance Code recommending annual re-election of company directors. The pension funds criticized the new rule as unnecessary and damaging to the interests of companies and shareholders since the rule would lead to a short-term culture with the risk of effective boards being distracted by short-term voting outcomes rather than allowing for long-term, constructive relationships of investors with the companies in which they invest. Another positive example of addressing “real” corporate governance issues is the willingness of the SEC to investigate, and if necessary regulate, deficiencies in the proxy system, including over/under-voting of shares, issuers not being able to communicate with their shareholders, low voting participation of retail investors and potential conflicts of interest and a lack of accuracy and transparency of proxy advisory firms that influence or control a significant percentage of the votes in public companies.

At the heart of good corporate governance lies a strong Board of Directors, which represents the interests of the shareholders and other stakeholders, and the professionalism and integrity of management, creating the foundation for sustainable value. While the size, composition and structure of the Board of Directors are easy to describe and can easily be checked from the outside, it is difficult to demonstrate that the core processes, like information flow and decision making, are state-of-the-art. It is even more difficult, if not impossible, to describe the prevailing board culture, although the latter is essential for its effective function. Novartis aims to foster an atmosphere in which Board members can pose challenging questions, voice dissenting views and secure access to independent information through extensive contacts with senior Novartis executives – inside and outside the boardroom. Diversity of a Board of Directors is a critical success factor for its work. The Novartis Board of Directors today is diverse in terms of background, interests and skills.

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 that of domestic US companies listed on the NYSE. Different from corporate governance rules applicable to domestic US companies listed on NYSE, shareholders of Novartis do not receive written reports from committees of the Board of Directors. Also, the external auditors are appointed by our shareholders at the Annual General Meeting, as opposed to being appointed by the Audit and Compliance Committee. In addition, while our 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. Finally, our Board of Directors has set up a separate Risk Committee that is responsible for risk oversight, as opposed to delegating this responsibility to the Audit and Compliance Committee.

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 1 318 811 500, fully paid-in and divided into 2 637 623 000 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 ADS 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 ADSS, is registered as shareholder in the share register of Novartis. An ADS is not a Novartis share and an ADS holder is not a Novartis shareholder. ADS holders exercise their voting rights by instructing the depositary to exercise their voting rights. Each ADS 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 2010, no shares were repurchased under the share repurchase program.

CHANGES IN SHARE CAPITAL

Novartis has not increased its share capital during the last three years.

As part of various share repurchase programs, Novartis has reduced its share capital as follows:

CAPITAL REDUCTIONS

Year of reduction	Number of shares			Amount of capital reduced in CHF
	As of Jan 1	Shares cancelled	As of Dec 31	
2006	2 739 171 000	10 200 000	2 728 971 000	5 100 000
2007	2 728 971 000	0	2 728 971 000	0
2008	2 728 971 000	85 348 000	2 643 623 000	42 674 000
2009	2 643 623 000	6 000 000	2 637 623 000	3 000 000
2010	2 637 623 000	0	2 637 623 000	0

A table with additional information on changes in the Novartis share capital can be found in Note 5 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, 2010, the following registered shareholders (including nominees and the ADS depository) 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 4.3% and Emasan AG, with its registered office in Basel, Switzerland, holding 3.3%;
- Nominees: JPMorgan Chase Bank, New York (holding 10.7%); Mellon Bank, Everett, Massachusetts (holding 2.9%); Nortrust Nominees, London (holding 2.8%); and
- ADS depository: JPMorgan Chase Bank, New York (holding 9.6%).

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, 2010:

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

¹Excluding 6.33% of the share capital held by Novartis AG, together with Novartis affiliates, as treasury shares.

Disclosure notifications pertaining to shareholdings in Novartis AG that were filed with Novartis AG and the SIX Swiss Exchange are published on the latter's electronic publication platform, and can be accessed via the database search page:
http://www.six-exchange-regulation.com/publications/published_notifications/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 depository, are registered as shareholders for a large number of beneficial owners.

As of December 31, 2010, Novartis had more than 159 000 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, 2010	Number of registered shareholders	% of registered share capital
1–100	20 395	0.05
101–1 000	94 370	1.59
1 001–10 000	40 750	4.31
10 001–100 000	3 850	3.79
100 001–1 000 000	501	5.54
1 000 001–5 000 000	77	6.51
5 000 001 or more ¹	35	53.01
Total registered shareholders/shares	159 978	74.80
Unregistered shares		25.20
Total		100.00

¹Including significant registered shareholders as listed above

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

REGISTERED SHAREHOLDERS BY TYPE		
As of December 31, 2010	Shareholders in %	Shares in %
Individual shareholders	96.01	13.16
Legal entities	3.88	40.21
Nominees, fiduciaries	0.11	46.63
Total	100.00	100.00

The following table provides information about registered shareholders by country:

REGISTERED SHAREHOLDERS BY COUNTRY		
As of December 31, 2010	Shareholders in %	Shares in %
France	2.95	1.40
Germany	4.18	3.63
Switzerland ¹	89.46	44.58
United Kingdom	0.51	3.28
United States	0.38	41.96
Other countries	2.52	5.15
Total	100.00	100.00

¹Excluding 6.33% of the share capital held by Novartis AG, together with Novartis affiliates, 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.

ADS holders may vote by instructing JPMorgan Chase Bank, the ADS depository, to exercise the voting rights attached to the registered shares underlying the ADSs. JPMorgan Chase Bank exercises the voting rights for registered shares underlying ADSs for which no voting instructions have been given by providing a discretionary proxy to the independent proxy (unabhängiger Stimmrechtsvertreter) appointed by Novartis pursuant to Swiss law.

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, appoint another shareholder, the corporate proxy, the independent proxy or a custody proxy as proxy and hold such other rights as are granted under Swiss Law.

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. Exemptions are in force for the registered Significant Shareholders listed under – Our Shareholders – Shareholdings – Significant Shareholders. In 2010, no exemptions were requested.

The same restrictions apply to holders of ADSs 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 regis-

tered 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 ADSs 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, ADS 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 ADS register kept by JPMorgan Chase Bank does not affect the tradability of Novartis shares or ADSs. No restrictions are imposed by Novartis or JPMorgan Chase Bank on the trading of registered

Novartis shares or ADSs. Registered Novartis shareholders or ADS holders may, therefore, purchase or sell their Novartis shares or ADSs 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.

CLAUSES ON CHANGES-OF-CONTROL

There are no change-of-control clauses benefiting Board members. With respect to members of the Executive Committee, see below under – Our Management – Contracts with Members of the Executive Committee.

OUR BOARD OF DIRECTORS

COMPOSITION OF THE BOARD OF DIRECTORS AND ITS COMMITTEES



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. The terms of office among Board members are to be coordinated so that approximately one-third of all Board members are subject each year to re-election or election. Under Swiss law, a General Meeting of share-

holders 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 eight years and the average age is 62. A Board member must retire after reaching age 70. Under special circumstances, shareholders may grant an exemption from this rule and re-elect a Board member for additional terms of office of no more than three years at a time.

Name	Nationality	Year of birth	First election at AGM	Last election at AGM	End of current Term
Daniel Vasella, M.D.	CH	1953	1996	2010	2013
Ulrich Lehner, Ph.D.	D	1946	2002	2008	2011
Hans-Joerg Rudloff	D	1940	1996	2010	2011
William Brody, M.D., Ph.D.	US	1944	2009	2009	2012
Srikant Datar, Ph.D.	US	1953	2003	2009	2012
Ann Fudge	US	1951	2008	2008	2011
Alexandre F. Jetzer-Chung	CH	1941	1996	2008	2011
Pierre Landolt	CH	1947	1996	2008	2011
Andreas von Planta, Ph.D.	CH	1955	2006	2009	2012
Dr. Ing. Wendelin Wiedeking	D	1952	2003	2009	2012
Marjorie M.T. Yang	CHN	1952	2007	2010	2013
Rolf M. Zinkernagel, M.D.	CH	1944	1999	2009	2012

BOARD MEMBER QUALIFICATIONS

The Corporate Governance and Nomination Committee determines the criteria for the selection of the 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 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 97–100) 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.

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.

The Board of Directors has 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).

Responsibilities	Membership comprises	Number of meetings held in 2010/approximate average duration of each meeting Attendance	Link
THE BOARD OF DIRECTORS			
The primary responsibilities of the Board of Directors include:	Daniel Vasella ¹	9	Articles of Incorporation of Novartis AG
– Setting the strategic direction of the Group;	Ulrich Lehner	9	
– Determining the organizational structure and governance of the Group;	Hans-Joerg Rudloff	9	Regulations of the Board of Directors, its Committees and the Executive Committee of Novartis AG (Board Regulations)
– Appointing, overseeing and dismissing key executives and planning their succession;	William Brody	9	
– Determining and overseeing the financial planning, accounting, reporting and controlling;	Srikant Datar	9	
– Approving the annual financial statements and the corresponding financial results releases; and	Ann Fudge	9	
– Approving major transactions and investments.	Alexandre F. Jetzer-Chung	9	
	Pierre Landolt	8	
	Andreas von Planta	9	http://www.novartis.com/corporate-governance
	Wendelin Wiedeking	9	
	Marjorie M.T. Yang	7	
	Rolf M. Zinkernagel	9	
THE CHAIRMAN'S COMMITTEE			
The primary responsibilities of this committee include:	Daniel Vasella ¹	9	Charter of the Chairman's Committee
– Commenting on significant matters before the Board of Directors makes a decision;	Ulrich Lehner	9	
– Recommending key executive appointments to the Board of Directors;	Hans-Joerg Rudloff	9	http://www.novartis.com/corporate-governance
– 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.			
THE AUDIT AND COMPLIANCE COMMITTEE			
The primary responsibilities of this committee include:	Srikant M. Datar ^{1,2}	6	Charter of the Audit and Compliance Committee
– Overseeing the internal auditors;	Ulrich Lehner ²	6	
– Supervising the external auditors and selecting and nominating the external auditors for election by the meeting of the shareholders;	Hans-Joerg Rudloff ²	5	http://www.novartis.com/corporate-governance
– Overseeing the accounting policies, financial controls and compliance with accounting and internal control standards;	Andreas von Planta	6	
– Approving quarterly financial statements and financial results releases;	Wendelin Wiedeking	6	
– 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.			

¹Chair

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

Responsibilities	Membership comprises	Number of meetings held in 2010/approximate average duration of each meeting Attendance	Link
THE RISK COMMITTEE			
<p>The primary responsibilities of this committee include:</p> <ul style="list-style-type: none"> – 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. 	Andreas von Planta ¹	4	Charter of the Risk Committee http://www.novartis.com/corporate-governance
	Srikant M. Datar	4	
	Ulrich Lehner	4	
	Hans-Joerg Rudloff	2	
	Wendelin Wiedeking	4	
THE COMPENSATION COMMITTEE			
<p>The primary responsibilities of this committee include:</p> <ul style="list-style-type: none"> – 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. <p>The Compensation Committee has the authority to retain external consultants and other advisors.</p>	Marjorie M.T. Yang ¹	4	Charter of the Compensation Committee http://www.novartis.com/corporate-governance
	William Brody	4	
	Srikant Datar	4	
	Ulrich Lehner	4	
	Hans-Joerg Rudloff	4	
THE CORPORATE GOVERNANCE AND NOMINATION COMMITTEE			
<p>The primary responsibilities of this committee include:</p> <ul style="list-style-type: none"> – 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. 	Ulrich Lehner ¹	3	Charter of the Corporate Governance and Nomination Committee http://www.novartis.com/corporate-governance
	Ann Fudge	3	
	Pierre Landolt	3	
	Andreas von Planta	3	
	Rolf M. Zinkernagel	3	
¹ Chair			

THE FUNCTIONING OF THE BOARD OF DIRECTORS

The Novartis Board of Directors takes decisions as a whole, supported by its five Board committees (Chairman's Committee, Compensation Committee, Audit and Compliance Committee, Corporate Governance and Nomination Committee and Risk Committee). 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, a meeting of the independent Board members 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

The Chairman provides leadership to the Board of Directors in its governance role, oversees that the strategy agreed by the Board of Directors is implemented by the Chief Executive Officer and his reports, provides support and advice to the Chief Executive Officer, reviews the yearly objectives and prepares the performance evaluation of the Chief Executive Officer before approval by and feedback session with the Board of Directors, works closely with the Chief Executive Officer in nominating and evaluating members and permanent attendees of the Executive Committee and in establishing succession plans for key management positions, represents Novartis with stakeholders and oversees Internal Audit.

MEETINGS OF THE BOARD OF DIRECTORS

The Board of Directors has meetings with the members of the Executive Committee, private meetings of the Board of Directors and meetings of the independent Board members.

Topics addressed in the meetings with the Executive Committee include the strategy, business reviews and major projects, investments and transactions. Topics addressed in the private meetings include performance evaluation of top management, succession planning and Board self-evaluation.

As long as the Chairman is not independent, Dr. Ulrich Lehner, Vice-Chairman, chairs sessions of the independent Board members and leads the independent Board members in case of a crisis or matters requiring their separate consideration or decision. Moreover, every independent Board member may request separate meetings of the independent Board members if the need arises. Dr. Ulrich Lehner also leads the Board if the Chairman is incapacitated.

In 2010, there were nine meetings of the Board of Directors and three meetings of the independent Board members.

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 (last revised on October 16, 2008) can be found on the Novartis website:

www.novartis.com/investors/governance-documents.shtml

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.

In its meeting on December 15, 2010, the Board of Directors determined that all of its members, except for Dr. Vasella and Alexandre F. Jetzer-Chung, were independent.

Dr. Vasella, the Chairman, was until January 31, 2010 also the Chief Executive Officer. Dr. Jetzer-Chung acts for Novartis under a consultancy agreement to support various government relations activities of Novartis.

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. 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 consultative in nature and do not affect Dr. Zinkernagel's or Dr. Brody's independence as Board member.

RELATIONSHIP OF NON-EXECUTIVE BOARD MEMBERS WITH NOVARTIS

With the exception of Dr. Vasella 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 preceding 2010.

There are no significant business relationships of any Board member with Novartis AG or with any other Novartis Group company except for Mr. Jetzer-Chung, who acts for Novartis under a consultancy agreement. The contract with Mr. Jetzer-Chung does not provide for any severance payments.

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

THE BOARD OF DIRECTORS

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, 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 Group General Counsel, the Heads of the Divisions, the Heads of Finance of the Divisions and the Heads of the following Corporate Functions: Treasury, 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 release.

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.

INTERNAL AUDIT

The Internal Audit function carries out operational and system audits in accordance with an audit plan adopted 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 Chairman. 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 reports to the independent Risk Committee of the Board of Directors. The Risk Committee works closely with the Compensation 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 responsibility for risk and risk mitigation is allocated to the divisions, with specialized corporate functions such as Group Finance, Group Quality Operations, Corporate Health, Safety, Environment and Business Continuity providing support and controlling the effectiveness of the risk management by the divisions in these respective areas.



From left to right: Srikant Datar, Wendelin Wiedeking, Ann Fudge, Rolf M. Zinkernagel, Pierre Landolt, Daniel Vasella, William Brody, Alexandre F. Jetzer-Chung, Marjorie Mun Tak Yang, Hans-Joerg Rudloff, Andreas von Planta, Ulrich Lehner

BOARD OF DIRECTORS

MEMBERS

Daniel Vasella, M.D.
Chairman
Swiss, age 57

Ulrich Lehner, Ph.D.
Vice Chairman
German, age 64

Hans-Joerg Rudloff
Vice Chairman
German, age 70

William Brody, M.D., Ph.D.
American, age 66

Srikant Datar, Ph.D.
American, age 57

Ann Fudge
American, age 59

Alexandre F. Jetzer-Chung
Swiss, age 69

Pierre Landolt
Swiss, age 63

Andreas von Planta, Ph.D.
Swiss, age 55

Dr. Ing. Wendelin Wiedeking
German, age 58

Marjorie Mun Tak Yang
Chinese, age 58

Rolf M. Zinkernagel, M.D.
Swiss, age 66

HONORARY CHAIRMAN

Alex Krauer, Ph.D.

CORPORATE SECRETARY

Monika Matti



Daniel Vasella, M.D.
Swiss, age 57

Function at Novartis AG Daniel Vasella, M.D., is Chairman of the Board of Directors for Novartis AG. He served as Chief Executive Officer (CEO) and executive member of the Board of Directors for 14 years following the merger that created Novartis in 1996. Dr. Vasella was appointed Chairman in April 1999.

Other activities Dr. Vasella is Chairman of Alcon, Inc., and a member of the Board of Directors of PepsiCo, Inc. He is also a member of the International Board of Governors of the Peres Center for Peace in Israel, the International Business Leaders Advisory Council for the Mayor of Shanghai, the Global Health Program Advisory Panel of the Bill & Melinda Gates Foundation, and is a foreign honorary member of the American Academy of Arts and Sciences. In addition, Dr. Vasella serves as a member of several industry associations and educational institutions.

Professional background Before the Novartis merger, Dr. Vasella was CEO of Sandoz Pharma Ltd. and a member of the Sandoz Group Executive Committee. From 1988 to 1992, he was with Sandoz Pharmaceuticals Corporation in the United States, prior to which he held a number of medical positions in Switzerland. He graduated with an M.D. from the University of Bern in Switzerland and completed executive training at the Harvard Business School in the United States. He was also awarded an honorary doctorate by the University of Basel.

Key knowledge/experience *Leadership, Biomedical Science and Global Marketing experience* – former CEO of Novartis; chairman of global eye care company; advisory panel member for international health and development foundation. *Industry experience* – director of global consumer goods company.



Ulrich Lehner, Ph.D.
German, age 64

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 Chairman of the Corporate Governance and Nomination Committee. He is also a member of the Audit and Compliance Committee, the Risk Committee, the Chairman's Committee, and the Compensation Committee. The Board of Directors has appointed him as Audit Committee Financial Expert.

Other activities Mr. Lehner is member of the Shareholders' Committee of Henkel AG & Co. KGaA, Chairman of the Supervisory Board of Deutsche Telekom AG, and serves as a member of the Supervisory Boards of E.ON AG, ThyssenKrupp AG, HSBC Trinkaus & Burkhardt AG, Porsche Automobil Holding SE and Henkel Management AG, all in Germany. He is also a member of the Shareholders' Committees 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, 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 telecommunication company; former chairman of the management board of global consumer goods company. *Industry experience* – member of supervisory boards of global energy, automotive and manufacturing technology companies.



Hans-Joerg Rudloff
German, age 70

Function at Novartis AG Hans-Joerg Rudloff has been a member of the Board of Directors since 1996. He qualifies as an independent Non-Executive Director. He is Vice Chairman and a member of the Audit and Compliance Committee, the Risk Committee, the Compensation Committee, and the Chairman's Committee. The Board of Directors has appointed him as Audit Committee Financial Expert.

Other activities In 2006, Mr. Rudloff joined the Board of Directors of Rosneft, a Russian state-controlled oil company, and became Chairman of the audit committee. He serves as the Chairman of the Board of Directors of Bluebay Asset Management Ltd., United Kingdom, and the Marcuard Group, Switzerland. He was also a member of the Boards of Directors of the Thyssen-Bornemisza Group and is now a consultant to the board. He joined New World Resources B.V., Netherlands, as a Board Member and a Member of the Audit and Remuneration Committees. In addition, Mr. Rudloff is a member of the Advisory Boards of Landesbank Baden-Wuerttemberg and EnBW, both in Germany. In 2005, Mr. Rudloff became Chairman of the International Capital Markets Association (ICMA), Switzerland.

Professional background Mr. Rudloff studied economics at the University of Bern, Switzerland. After graduating in 1965, he joined Credit Suisse in Geneva. He moved to the US-based investment banking firm of Kidder Peabody Inc. in 1968. He later headed Swiss operations and was elected Chairman of Kidder Peabody International. In 1978 he became a member of the Board of Directors of Kidder Peabody Inc., United States. In 1980, he joined Credit Suisse First Boston, Switzerland, was elected Vice Chairman in 1983, and became Chairman and CEO in 1989. From 1986 to 1990, Mr. Rudloff was also a member of the Executive Board of Credit Suisse in Zurich, in charge of all securities and capital market departments. From 1994 to 1998, Mr. Rudloff was Chairman of MCBBL in Luxembourg. In 1994, he was appointed to the Board of Directors of Sandoz AG in Switzerland. In 1998, Mr. Rudloff joined Barclays Capital, United Kingdom, where he is presently Chairman.

Key knowledge/experience *Leadership and Banking experience* – chairman of investment bank; chairman of asset management company. *Industry and Global experience* – director of global energy company.



William Brody, M.D., Ph.D.

American, age 66

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. He is a member of the Compensation Committee.

Other activities Dr. Brody is a member of the Board of Directors of the US-based IBM, and the Mutual Funds Boards of T. Rowe Price, and the China-based Novamed. He is also a member of numerous professional associations, and 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. 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* – director of global technology company.



Srikant Datar, Ph.D.

American, age 57

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

Other activities Mr. Datar is Arthur Lowes Dickinson Professor at the Graduate School of Business Administration at Harvard University. He is also a member of the Board of Directors of ICF International Inc. and of Stryker Corporation, both in the United States, and of KPIT Cummins Infosystems Ltd., 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 Ph.D. 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 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* – director of global professional services firm; director of global leading medical technology company; director of Indian high-technology company.



Ann Fudge

American, age 59

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 Corporate Governance and Nomination Committee.

Other activities Ms. Fudge serves on the Board of Directors of General Electric and on the Board of Directors of Unilever, UK/Netherlands. She is a Trustee of the New York-based Rockefeller Foundation and of Atlanta-based Morehouse College, and is Chairman of the US Programs Advisory Panel of the Bill & Melinda Gates Foundation. 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 MBA from Harvard University Graduate School of Business in the United States. She is former Chairman and CEO of Young & Rubicam Brands. Before that, she served as President of the Beverages, Desserts and Post Division of Kraft Foods.

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* – director of global technology company and global consumer goods company.



Alexandre F. Jetzer-Chung
Swiss, age 69

Function at Novartis AG Alexandre F. Jetzer-Chung has been a member of the Board of Directors since 1996.

Other activities Mr. Jetzer-Chung is a member of the Supervisory Board of Compagnie Financière Michelin and of the Board of the Lucerne Festival Foundation, both in Switzerland. He is a member of the International Advisory Panel on Biotechnology Strategy of the Prime Minister of Malaysia, a member of the Investment Advisory Council of the Prime Minister of Turkey, and an economic advisor to the Governor of Guangdong Province, China. He is also a member of the Development Committee of the Neuroscience Center of the University of Zurich, Switzerland.

Professional background Mr. Jetzer-Chung graduated with master's degrees in law and economics from the University of Neuchâtel, Switzerland, and is a licensed attorney. From 1967 to 1980, he served as General Secretary of the Swiss Federation of Commerce and Industry (Vorort). Mr. Jetzer-Chung joined Sandoz in 1980. In 1981, he was appointed member of the Sandoz Group Executive Committee in the capacity of Chief Financial Officer and, from 1990 on, as Head of Management Resources and International Coordination. From 1995 to 1996, he was Chairman and Chief Executive Officer of Sandoz Pharmaceuticals Corporation, and at the same time served as President and CEO of Sandoz Corporation in the United States. After the merger that created Novartis in 1996 until 1999, he was Head of International Coordination, Legal and Taxes, and a member of the Executive Committee of Novartis.

Permanent Novartis management or consultancy engagements Mr. Jetzer-Chung has a consultancy agreement with Novartis International AG.

Key knowledge/experience *Leadership and Finance experience* – former chief financial officer of global healthcare company. *Global experience* – advisor to governments in emerging markets.



Pierre Landolt
Swiss, age 63

Function at Novartis AG Pierre Landolt has been a member of the Board of Directors since 1996. He qualifies as an independent Non-Executive Director. He is a member 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 a Director of Syngenta AG. He is a partner with unlimited liabilities of the Swiss private bank Landolt & Cie. In Brazil, Mr. Landolt serves as President of the Instituto Fazenda Tamanduá, the Instituto Estrela de Fomento ao Microcrédito, AxialPar Ltda and Moco Agropecuaria Ltda. In Switzerland, he is Chairman of Emasan AG and Vaucher Manufacture Fleurier SA, Vice Chairman of Parmigiani Fleurier SA, and is on the Board of the Syngenta Foundation for Sustainable Agriculture, Switzerland. He is a Director of EcoCarbone SA, France, and Swiss Amazentis SA. He is also Vice Chairman of the Montreux Jazz Festival Foundation.

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 SA. 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 SA, France, a company active in the design and development of carbon-sequestration processes. In 2007, he co-founded Amazentis SA, Switzerland, a startup company active in the convergence space of medication and nutrition.

Key knowledge/experience *Banking and Industry experience; International and Emerging Market experience* – partner of private bank; chairman and vice-chairman of luxury goods companies. *Leadership and Global experience* – President of large family investment holding; director of global agribusiness company; director of sustainable agriculture foundation.



Andreas von Planta, Ph.D.
Swiss, age 55

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

Other activities Mr. von Planta is Chairman of the Schweizerische National-Versicherungs-Gesellschaft AG and Vice Chairman of Holcim Ltd., both in Switzerland. He is also a member of the Boards of various Swiss subsidiaries of foreign companies and other non-listed 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 been living in Geneva, working 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; vice chairman of global construction materials manufacturer. *Industry experience* – partner of leading Swiss law firm.



Dr. Ing. Wendelin Wiedeking
German, age 58

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 Audit and Compliance Committee and the Risk 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 is an entrepreneur.

Professional background Mr. Wiedeking graduated in mechanical engineering in 1978 and worked as a scientific assistant in the Machine Tool Laboratory of the Rhine-Westphalian College of Advanced Technology in Germany. 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 Chief Executive Officer and Chairman of the Board of Management of Glyco AG. In 1991, he returned to Dr. Ing. h.c. F. Porsche AG as Production Director. 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.



Marjorie Mun Tak Yang
Chinese, age 58

Function at Novartis AG Marjorie Mun Tak Yang has been a member of the Board of Directors since 2008. She qualifies as an independent Non-Executive Director. She is Chairman of the Compensation Committee.

Other activities Ms. Yang is Chairman of the Esquel Group, Hong Kong, China. She is a Non-official Member of the Executive Council of the Hong Kong Special Administrative Region. In China, she is a member of the National Committee of the Chinese People's Political Consultative Conference. She currently serves on the boards of Swire Pacific Limited, and The Hong Kong and Shanghai Banking Corporation Limited in Hong Kong. Ms. Yang has been a member of the MIT Corporation since 2001. In January 2010 she was appointed as Chairman of the Council of the Hong Kong Polytechnic University. She also serves on the advisory boards of Harvard Business School, and Tsinghua School of Economics and Management.

Professional background Ms. Yang graduated with a bachelor's degree in mathematics from Massachusetts Institute of Technology and holds a master's degree from Harvard Business School, both in the United States. From 1976 to 1978 she was an associate in Corporate Finance, Mergers and Acquisitions, with the First Boston Corporation in New York, United States. In 1979 she returned to Hong Kong and became a founding member of Esquel Group. She was appointed Chairman of the Group in 1995.

Key knowledge/experience *Leadership, Global and Industry experience* – chairman of global textile manufacturing company. *Education and Science experience* – trustee of leading US research university; leadership roles at multiple universities.



Rolf M. Zinkernagel, M.D.
Swiss, age 66

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.

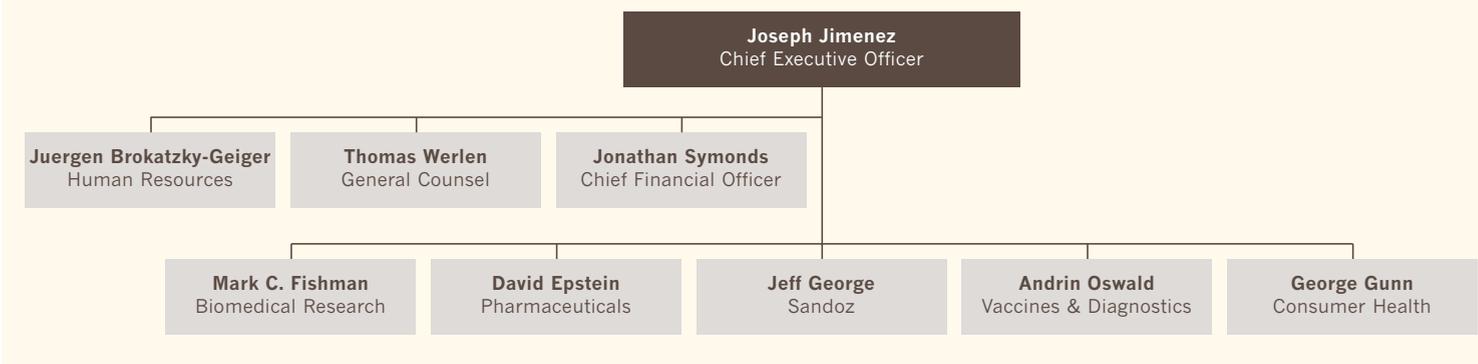
Other activities Dr. Zinkernagel was Vice President of the International Union of Immunological Societies until August 2010. He is a member of the Scientific Advisory Boards of Bio-Alliance AG, Germany; Aravis General Partner Ltd., Cayman Islands; Telormedix, Switzerland; X-Biotech, Canada; Novimmune, Switzerland; Cancevir, Switzerland; Nuvo Research Inc., Canada; ImVision, Germany; MannKind, United States; Laboratoire Koch, Switzerland; Biomedical Sciences International Advisory Council, Singapore; and ERC European Research Council, Brussels. Dr. Zinkernagel is also a science consultant to Chilka Ltd., Cayman Islands; Ganymed, Germany; and Zhen-Ao Group, China. He is a member of the Advisory Panel of Swiss Re, Switzerland.

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 council.

OUR MANAGEMENT

COMPOSITION OF THE EXECUTIVE COMMITTEE



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 Chief Executive Officer may appoint or remove non-voting Permanent Attendees to attend the meetings of the Executive Committee. As of December 31, 2010, there were no Permanent Attendees attending meetings of the Executive Committee.

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 coordination of the Group's day-to-day business operations. 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

In addition to other duties that may be assigned by the Board of Directors, the Chief Executive Officer, supported by the Executive Committee, is responsible overall for the management and performance of the business, leads the Executive Committee, builds and maintains an effective executive team and represents Novartis with major customers, financial analysts, investors and with the media.

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 or severance payments.



From left to right: Mark C. Fishman, Thomas Werlen, Jonathan Symonds, George Gunn, Joseph Jimenez, David Epstein, Andrin Oswald, Jeff George, Juergen Brokatzky-Geiger

EXECUTIVE COMMITTEE

MEMBERS

Joseph Jimenez
American, age 51

Juergen Brokatzky-Geiger, Ph.D.
German, age 58

David Epstein
American, age 49

Mark C. Fishman, M.D.
American, age 59

Jeff George
American, age 37

George Gunn, MRCVS
British, age 60

Andrin Oswald, M.D.
Swiss, age 39

Jonathan Symonds
British, age 51

Thomas Werlen, Ph.D.
Swiss, age 45

SECRETARY

Bruno Heynen

MEMBERS OF THE EXECUTIVE COMMITTEE



Joseph Jimenez
American, age 51

Joseph Jimenez is Chief Executive Officer (CEO) of Novartis, responsible for leading the company's diversified healthcare portfolio of innovative pharmaceuticals, generics, vaccines and diagnostics and consumer health products since February 1, 2010. Previously, Mr. Jimenez served as Division Head, Novartis Pharmaceuticals. Mr. Jimenez led the transformation of the pharmaceutical portfolio to balance both mass market and specialty products and significantly increased the percent 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 Company and as President and CEO of Heinz in Europe from 2002 to 2006. Prior to joining Novartis, he was a NonExecutive Director of Astra-Zeneca plc, United Kingdom, from 2002 to 2007. He was also an advisor for the private equity organization Blackstone Group in the United States. Mr. Jimenez is a member of the Board of Directors of Colgate-Palmolive. He graduated with a bachelor's degree from Stanford University in 1982 and with an MBA from the University of California, Berkeley, in 1984.



Juergen Brokatzky-Geiger, Ph.D.
German, age 58

Juergen Brokatzky-Geiger, Ph.D., is 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 Laboratory Head 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 graduated with a Ph.D. in chemistry from the University of Freiburg, Germany, in 1982.



David Epstein
American, age 49

David Epstein is Division Head, Novartis Pharmaceuticals, since February 1, 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. In addition, Mr. Epstein led the Molecular Diagnostics Unit since its creation in 2008. Before joining Novartis, Mr. Epstein was an associate in the Strategy Practice of the consulting firm, Booz Allen & Hamilton. Mr. Epstein 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 Rutgers University College of Pharmacy in 1984, and with an MBA in finance and marketing from New York's Columbia University Graduate School of Business in 1987.



Mark C. Fishman, M.D.
American, age 59

Mark C. Fishman, M.D., is 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 Professor of Medicine at Harvard Medical School, both in the United States. Dr. Fishman has worked with national policy and scientific committees, including those of

the US National Institutes of Health (NIH) and the Wellcome Trust. He 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 is a member of the Institute of Medicine of the National Academies (US) and a Fellow of the American Academy of Arts and Sciences.



Jeff George
American, age 37

Jeff George is Division Head, Sandoz, since 2008. He is a member of the Executive Committee of Novartis. Before joining Novartis, Mr. George was a Senior Director of Strategy and Business Development at Gap Inc. From 2001 to 2004, he was with McKinsey & Company in San Francisco, United States, where he was an Engagement Manager. Mr. George joined Novartis in the Vaccines and Diagnostics Division in January 2007 as Head of Commercial Operations for Western and Eastern Europe, then

advanced to Head of Emerging Markets for the Middle East, Africa, Southeast Asia and CIS at Novartis Pharma. Mr. George received his bachelor's degree in international relations in 1996 from Carleton College. He graduated in 1999 with a master's degree from the Johns Hopkins University School of Advanced International Studies, where he studied international economics and emerging markets political economy. He received an MBA from Harvard University in 2001.



George Gunn, MRCVS
British, age 60

George Gunn is Division Head, Novartis Consumer Health, since 2008. 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 joining the industry. Mr. Gunn joined Novartis in 2003 as Head of Novartis Animal Health, North Amer-

ica. In January 2004, he assumed his position as Head of the Animal Health Business Unit. In addition to this role, he was appointed Division Head, Novartis Consumer Health, in December 2008. 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.



Andrin Oswald, M.D.
Swiss, age 39

Andrin Oswald, M.D., is Division Head, Novartis Vaccines and Diagnostics, since 2008. He is a member of the Executive Committee of Novartis. Before joining Novartis, Dr. Oswald was a delegate of the International Committee of the Red Cross to Nepal from 2002 to 2003 and worked with McKinsey & Company, Switzerland. In 2005, Dr. Oswald joined Novartis and advanced from Assistant to the Chairman and CEO, to Head of the Country Pharma Organization (CPO) and Country President for

Novartis in South Korea, to CEO of Speedel and Global Head of Development Franchises at Novartis Pharma in 2008. Dr. Oswald graduated with an M.D. from the University of Geneva, Switzerland, in 1999.



Jonathan Symonds
British, age 51

Jonathan Symonds is Chief Financial Officer (CFO) of Novartis AG since February 1, 2010. He is a member of the Executive Committee of Novartis. Before joining Novartis in 2009, Mr. Symonds was Partner and Managing Director of Goldman Sachs in the United Kingdom. He also has eight years of experience as CFO of AstraZeneca and previously held positions as Group Finance Director at Zeneca and partner at KPMG. From 2004 to 2007, Mr. Symonds was a director of Diageo Plc. and

chairman of the Audit Committee. Other previous roles include director and Audit Committee chairman of Qinetiq Plc., chairman of the 100 Group of Finance Directors, joint chairman of the Business Tax Forum, board member of the Accounting Standards Board and founder of the Oxford University Centre for Business Taxation Research, all in the United Kingdom. Mr. Symonds graduated with a first class degree in business finance from the University of Hertfordshire, United Kingdom, in 1980 and became a Fellow of Chartered Accountants in 1982. He is a Commander of the British Empire (CBE).



Thomas Werlen, Ph.D.
Swiss, age 45

Thomas Werlen is the Group General Counsel of Novartis since 2006. He is a member of the Executive Committee of Novartis. He is Secretary to the Corporate Governance and Nomination Committee of the Board of Directors of Novartis. In 1995, Mr. Werlen started his professional career with Cravath, Swaine & Moore in New York. In 2000, he moved to the Cravath, Swaine & Moore London office and, after a short stint with David Polk & Wardwell, he joined Allen & Overy as a Partner in March 2001. Based in the London office, he focused on corporate and capital markets

law. His clients included multinational corporations and investment banks. Mr. Werlen holds lic.iur. and Ph.D. (Dr.) degrees in law from the University of Zurich and a master's degree in law from Harvard Law School. He is a member of the New York and the Swiss bar. He is also a member of the Regulatory Board of the SIX Swiss Exchange AG and member of the Advisory Board of the European Journal of Risk Regulation. Mr. Werlen has written several books and articles on business and financial law and teaches corporate and capital markets law at the University of St. Gallen.



THE 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. Peter Kartscher, auditor in charge, and Michael P. Nelligan, global relationship partner, began serving in their respective roles in 2009. The Audit and Compliance Committee ensures that the auditor in charge is 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 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 2010, 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 for their audit.

On an annual basis, PwC provides to the Audit and Compliance Committee the written disclosures required by Rule 3526, "Communications with Audit Committees Concerning Independence," of 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, 2010.

The Audit and Compliance Committee on a regular basis evaluates the performance of PwC and, once yearly, based on the outcome of the performance of PwC, decides on its recommendation to the Board of Directors 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 by attending a Board meeting and answering any questions or concerns the Board members might have on the performance of PwC, or on the work PwC 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, and 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 technical and operational competence, independent and objective view, sufficient resources employed, focus on areas of significant risk to Novartis, willingness to probe and challenge, ability to provide effective, practical recommendations and open and effective communication 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 audit and non-audit services provided by PwC. These services may include audit services, audit-related services, tax services and other services.

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, 2010 and December 31, 2009:

	2010 USD thousands	2009 USD thousands
Audit Services	23 675	24 360
Audit-Related Services	2 140	4 300
Tax Services	1 485	110
Other Services	110	100
Total	27 410	28 870

PwC fees charged to Alcon of approximately USD 1.6 million, mainly for tax services, are included, reflecting the professional services rendered after Novartis took over majority ownership on August 25, 2010.

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 amounts for 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 citizenship 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 most important Novartis subsidiaries and associated companies are listed in Note 31 to the Group's consolidated financial statements.

DIVISIONS

The wholly-owned businesses of Novartis are divided on a worldwide basis into four operating divisions, Pharmaceuticals, Vaccines and Diagnostics, Sandoz and Consumer Health, and in Corporate activities.

MAJORITY HOLDINGS IN PUBLICLY TRADED GROUP COMPANIES

- 77% of the registered shares of Alcon, Inc., with its registered office in Hünenberg, Switzerland, and listed on the NYSE (ISIN CH0013826497, symbol: ACL). The total market value of the 23% free float of Alcon Inc. was USD 11.6 billion (due to the limited free float a total market value for the whole company, based on the market price per share at December 31, 2010, is not a meaningful value). The Novartis investment value for the 77% that it holds amounts to USD 37.8 billion at December 31, 2010.
- 76% of Novartis India Limited., with its registered office in Mumbai, India, and listed on the Bombay Stock Exchange (ISIN INE234A01025, symbol: HCBA). The total market value of the 24% free float of Novartis India Limited was USD 109.7 million (due to the limited free float a total market value for the whole company, based on the market price per share at December 31, 2010, is not a meaningful value). The Novartis investment value for the 76% that it holds amounts to USD 355.6 million at December 31, 2010.

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, 2010, was USD 8.1 billion. The total market value of Roche Holding AG was USD 127.1 billion. Novartis does not exercise control over Roche Holding AG, which is independently governed, managed and operated.
- 43% of Idenix Pharmaceuticals, Inc., with its registered office in Delaware, USA, and listed on NASDAQ (Valor No. 1630029, ISIN US45166R2040, symbol: IDIX). The market value of the Group's interest in Idenix Pharmaceuticals, Inc., as of December 31, 2010, was USD 158 million. The total market value of Idenix Pharmaceuticals, Inc., was USD 367.8 million. Novartis does not exercise control over Idenix Pharmaceuticals, Inc., which is independently governed, managed and operated.

INFORMATION OF 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 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 Investor Relations website (www.novartis.com/investors). The archive is available on the Novartis website:

<http://www.novartis.com/newsroom/media-releases/index.shtml>

Information contained in reports and releases issued by Novartis is 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 New York 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 talents around the world.

Novartis offers associates competitive compensation plans that are transparent, coherent and aligned with the Group's pay for performance philosophy. Our compensation system encourages entrepreneurship but at the same time deters excessive risk-taking to enhance short-term financial gain at the expense of the long-term health of the Group.

The independent external advisor to the Board's Compensation Committee reviewed this report and concluded that it addresses required topics adequately to ensure transparency of key elements of the Group's compensation philosophy and executive compensation.

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2010 COMPENSATION REPORT

Novartis had discussions with numerous shareholders on questions of compensation in the past two years. In the current business environment it is important for companies to have a compensation system which not only drives sustainable performance and attracts and retains talented associates, but is also understood and supported by shareholders. In these discussions, interested shareholders who are focused on creation of sustainable value supported this view.

At the 2010 Annual General Meeting, Novartis shareholders approved the proposal by the Board of Directors to introduce a consultative vote on the compensation system in the Articles of Incorporation (a so-called “say on pay” vote). The upcoming Annual General Meeting, to be held in February 2011, will provide shareholders an opportunity to express their views on our compensation system through such a consultative vote. Subsequently, non-binding votes will be held before every significant change in the compensation system, but at a minimum at every third Annual General Meeting. The consultative vote is non-binding and advisory in nature; therefore, the ultimate decision on compensation remains within the authority of the Board of Directors.

The Novartis compensation system is based on the principle of meritocracy. Compensation is designed to attract, develop and retain talented associates, encourage and reward superior performance and align the interests of associates with those of our shareholders and stakeholders by creating economic value in a sustainable way.

The Compensation Committee serves as the supervisory and governing body for compensation policies and plans within Novartis. It reviews and proposes compensation plans and policies for approval by the Board of Directors. The Compensation Committee also reviews and approves employment contracts and individual compensation for selected key executives, including members of the Executive Committee. The five current members of the Compensation Committee all meet the independence criteria set forth in our Board Regulations.

All compensation plans and levels are reviewed regularly based on publicly available data as well as on analyses by independent compensation consultancy companies and external compensation advisors. Trends and developments in the field of compensation and corporate governance are carefully analyzed, reviewed and discussed on an ongoing basis with outside experts and consult-

ants. The Compensation Committee considers methods to further strengthen the interrelation 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.

During 2010, we made the following changes to our compensation system to further ensure that no inappropriate or excessive risk taking is rewarded:

- For all Executive Committee members, effective for the performance as of 2010 onwards, we:
 - Increased the incentive percentage of the Long-Term Performance Plan (with a performance hurdle at vesting); and
 - Decreased the incentive percentages under the Equity Plan “Select” (with a performance hurdle at grant).

Furthermore, we

- Lengthened the vesting period under the Equity Plan “Select” from two to three years in Switzerland effective for the grants made based on 2011 performance; and
- Implemented “clawback” provisions in individual employment contracts of all Executive Committee members – as well as in incentive plans and award letters to associates – allowing Novartis to hold back or seek to recover incentive compensation where the payout has been proven to conflict with internal management standards, accounting procedures or a violation of law.

In summary, our compensation system:

- Includes a rigorous People Performance Management process reflecting meritocracy;
- Applies a balanced scorecard approach to performance-based incentives by considering financial as well as non-financial objectives, including people management. In general, performance multipliers may not exceed 2 on a combined basis;
- Sets overlapping performance periods and vesting schedules for long-term incentives, reducing the motivation to maximize performance in any one period;
- Makes compliance and ethical conduct an integral factor when considering the performance of an executive;
- Balances the mix of compensation of short-term annual incentive awards and long-term share-based compensation; and
- Includes, as mentioned above, “clawback” provisions.

The compensation awarded to Board members and Executive Committee members is also presented in our Financial Report in note 27 to the Group's audited consolidated financial statements and note 11 to the audited financial statements of Novartis AG. The objectives, principles and elements of the Novartis Compensation Policy are set out below.

The Members of the Compensation Committee

Marjorie M.T. Yang (chair)

William Brody

Srikant Datar

Ulrich Lehner

Hans-Joerg Rudloff

For further information on the Compensation Committee organization and responsibilities, see Corporate Governance Report – Our Board of Directors – Role of the Board of Directors and the Board Committees – The Compensation Committee.

INTRODUCTION

Since Novartis was created from two traditional Swiss conglomerates in 1996, management has forged a distinctive culture, and inspired old and new associates alike with the shared aspiration of being one of the world's most admired and respected healthcare companies.

Because the skills and experience of associates needed to realize this vision are highly sought after, Novartis broke ranks with Swiss peers by raising compensation to internationally competitive levels. From the outset of operations, pay for performance has been a byword at Novartis.

Our compensation system aims to foster personal accountability based on clear targets, as well as underline the importance of competence and integrity as drivers of sustainable business success. Compensation includes a significant variable element in addition to a fixed base compensation and benefits. The size of the variable element is based on Group or divisional results, and on individual performance against a written set of objectives, together with appraisal of values and behaviors. To encourage superior performance, variable compensation at Novartis can reach up to 200% of the target amount of an associate's incentive.

To align associates with the interests of shareholders, a large proportion of variable compensation for executives is paid in the form of equity – Novartis shares or share options. A share option plan originally encompassed 400 key executives and has been steadily expanded. Following 2010 performance, almost 11 000 associates participated in the Equity Plan "Select", representing a participation rate of approximately 11% of full-time associates worldwide.

Pay for performance has spurred a culture of meritocracy at Novartis, with checks and balances to ensure integrity and fairness. The "four eyes" rule, for example, requires that associates' annual objectives and performance evaluations be reviewed separately by two levels of supervisors. Our People Performance Management process includes an annual Organization and Talent Review in which career aspirations of associates are discussed. The review includes the assessment of strengths, weaknesses and potential – and development plans are designed. The Organization and Talent Review has become an essential tool for top management in succession planning, and the scope of the program has steadily expanded from a few dozen executives a decade ago to almost 22 000 prospective leaders today.

The core principles of compensation policy and people development have engendered both superior performance and sustained leadership. Novartis has reported record net sales and net income – and raised the annual dividend payout to shareholders – for 14 consecutive years.

COMPENSATION SYSTEM

BOARD OF DIRECTORS

As a global healthcare company, Novartis has established the level of Board compensation to ensure the ability to attract and retain high-caliber members. Board members do not receive variable compensation, underscoring their focus on the long-term corporate strategy and their supervisory role.

The compensation of the Chairman is based on a contract. The compensation of the other Board members is determined by the Board of Directors each year, based on a proposal by the Compensation Committee. Board members are required to own at least 5 000 Novartis shares within three years after joining the Board of Directors.

COMPENSATION OF THE CHAIRMAN

The Chairman receives fixed annual compensation. One third is paid out in monthly cash installments; the remaining two thirds are in the form of unrestricted Novartis shares which are granted to him each year.

COMPENSATION OF THE OTHER BOARD MEMBERS

The other Board members receive an annual Board membership fee and additional fees for committee chairmanships, committee memberships and other functions. Board members do not receive additional fees for attending meetings.

The other Board members can choose to receive their fees in cash, shares or a combination of both. Board members do not receive share options.

COMPENSATION STRUCTURE

	Board compensation	Executive Committee compensation
Fixed compensation	Yes	Yes
Variable compensation	No	Yes

EXECUTIVE COMMITTEE MEMBERS AND OTHER ASSOCIATES

Novartis aspires to be an employer of choice and to attract and retain the best in class talent worldwide. Novartis offers associates competitive compensation, underscoring our pay for performance philosophy.

The compensation awarded to Novartis associates, including the Executive Committee members, reflects the market value of skills, business results, individual contribution and meeting key behavioral standards.

The compensation framework for Novartis associates is based on four key compensation principles and includes three primary elements: base compensation, variable compensation and benefits. Variable compensation takes concrete form in short-term and long-term compensation plans.

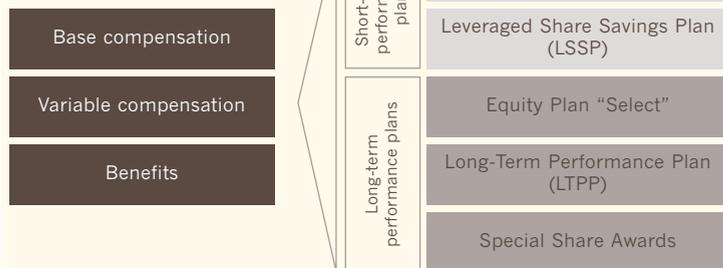
COMPENSATION FRAMEWORK

Compensation principles

Competitive compensation	Pay for performance	Balanced rewards to create sustainable value	Equity ownership
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Compensation plans

Compensation elements



COMPENSATION PRINCIPLES

Our compensation policies and plans are based on four key principles:

- Competitive compensation
- Pay for performance
- Balanced rewards to create sustainable value
- Equity ownership

Competitive Compensation

Competitive compensation is essential to attract and retain talented and diverse associates. Our compensation levels reflect total compensation for comparable positions at relevant benchmark companies.

For example, an associate who achieves his or her performance objectives is generally awarded compensation comparable to the median level of compensation provided by relevant benchmark companies. In case of over- or under-performance, the actual total compensation delivered is adjusted accordingly and may significantly differ from the benchmark median.

Novartis participates in several compensation benchmarking surveys that provide details on levels of salary, target and actual annual incentives and long-term incentives, the relative mix of short- and long-term incentives, and the mix of cash- and share-based compensation. Benchmark companies vary with – and are dependent on the nature of – the positions concerned.

For specific pharmaceutical positions, the benchmark group of industry competitors for our 2010 benchmark survey consisted of the following companies:

BENCHMARK GROUP COMPANIES

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

For other positions we included companies outside our industry, with stature, size, scope and complexity that approximate our own, in recognition of the fact that competition for senior executive talent is not limited to the pharmaceutical industry.

The compensation benchmarking surveys, which analyze factors such as recent market trends and best practices, are conducted by well-established global compensation consultancy firms. These surveys are checked and supplemented by input from the Compensation Committee's independent advisor, Pearl Meyer & Partners LLC.

Pay for Performance

To foster a high performance culture, Novartis applies a uniform People Performance Management process worldwide, based on clear quantitative and qualitative criteria.

Novartis associates, including the Executive Committee members, are subject to a formal process of objective setting and performance appraisal.

For each performance year, line managers and their direct reports jointly determine performance measures and business objectives. These objectives are derived from the business objectives established at the Group, division, function, country or business area levels.

Two reviews are carried out each year – a mid-year and a year-end review. These reviews consist of formal meetings between associates and line managers to evaluate performance. In assessing performance, line managers focus on results-oriented measures, as well as on how results were achieved.

Decisions and actions leading to results must be consistent with Novartis Values and Behaviors, which describe the desired conduct of associates and set boundaries and guidelines as an important building block for the culture of our Group. The Novartis Values and Behaviors provide a focus on quality, commitment, candor, compassion, loyalty and integrity.

Because performance appraisals impact significant elements of reward, we ensure each year that there is consistency of performance ratings across the entire Group.

Based on the year-end performance rating, line managers and next-level line managers determine the incentive awards for each associate under review, as well as the target compensation for the coming year.

To encourage and reward sustained superior performance, total compensation may reach levels comparable to top quartile levels of compensation offered by the relevant benchmark companies.

Any incentive compensation paid to key executives, including the Executive Committee members, is subject to a “clawback” by Novartis. This means that Novartis will hold back or seek to recover incentive compensation where the payout has been proven to conflict with internal management standards, accounting procedures or a violation of law.

Balanced Rewards to Create Sustainable Value

Shareholders expect their investment to deliver sustainable returns while at the same time ensuring that risks are appropriately managed.

Novartis incentives underpin the long-term strategic planning that is essential to address the challenges of innovation and the long development and commercialization cycles that characterize

our industry. Appropriate objective setting combined with proper incentive plan design allow our leaders and associates to focus on shaping the future, rather than simply reacting to change.

We believe that incentivizing our associates encourages performance, loyalty and entrepreneurship, and creates sustainable value which is in the interest of Novartis and our shareholders.

Equity Ownership

Investors want the leaders of companies in which they invest to act as owners. That alignment works best when Board members and key executives hold meaningful equity investments in their company.

Accordingly, Novartis imposes share ownership guidelines on approximately 30 of our key executives.

Key executives are required to own at least a certain multiple of their annual base compensation in Novartis shares or share options. The Chief Executive Officer is required to own Novartis equity worth five times, the other Executive Committee members three times, and other key executives one to two times (position specific) their respective base compensation within three years of hire or promotion. In the event of a substantial drop in the share price, the Board of Directors may, at its discretion, extend that time period.

The Compensation Committee reviews compliance with the share ownership guidelines on an annual basis.

COMPENSATION ELEMENTS

Primary elements of our compensation system are:

- Base compensation – a fixed annual salary
- Variable compensation – rewards for individual and business performance
- Benefits – including pension and healthcare benefits, as well as perquisites

COMPENSATION ELEMENTS



In the summary table below, “short-term” is understood to be performance or equity holdings of less than 12 months and “long-term” more than 12 months.

EXECUTIVE COMPENSATION SUMMARY

Compensation element	Compensation plan	Main drivers	Performance measures	Linkage to compensation principles
Base compensation		Position, experience, sustained performance	Market practice	Attract and retain key executives
Variable compensation				
Short-term performance plans	Short-term incentive plans	Achievement of individual, business and financial annual objectives or achieving milestones in long-term strategic plans	Financial measures such as net sales, operating income, free cash flow, market share, innovation and ongoing efforts to optimize organizational effectiveness and productivity	Pay for performance Attract and retain key executives
Long-term performance plans	Equity Plan “Select”	Achievement of individual, business and financial annual objectives or achievement of milestones in individual objectives or long-term strategic plans	Individual year-end performance rating and Group or business area performance	Align executives with interests of shareholders Sustainable business performance
	Long-Term Performance Plan	Achievement of long-term profit, measured through Economic Value Added (EVA) targets at Group level	Group EVA	Attract and retain key executives
	Special Share Awards	Rewarding particular achievements or exceptional performance	Discretionary	
Benefits		Position, experience, sustained performance	Market practice	Establish a level of security in respect of age, health, disability and death

Base Compensation

Base compensation rewards associates for their key areas of responsibilities and reflects 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 to ensure a reasonable standard of living relative to that offered by our peer companies.

In general, base compensation is reviewed annually to ensure that competitive pay is maintained and undesired fluctuations are minimized.

Base compensation also serves as the basis for determining the variable compensation.

Variable Compensation

Variable compensation is determined by the nature of the business, role, level, local market practice, business performance and an associate’s individual performance.

Variable compensation is a combination of short-term and long-term incentives. Special emphasis is placed on long-term incentives to align the interests of our associates with those of shareholders. This emphasis on long-term incentives also reflects the crucial importance of innovation and the long product development and commercialization cycles that characterize our industry.

The table below provides an example of the components to assess performance and how these components are typically weighted.

COMPONENTS TO ASSESS PERFORMANCE AND THEIR WEIGHTINGS

Components	Drivers	Weighting	Weighting of components
Business performance	Performance of the Group or business area		50%
Individual performance	Achievement of financial and non-financial objectives	25%	50%
	Meeting Novartis Values and Behaviors	25%	
Total			100%

Variable compensation may be granted in cash, shares, share units or share options, depending on the compensation plan. For purposes of the conversion of variable compensation into shares, share units or share options, the conversion values of a Novartis share and share option are the closing prices on the grant date, which for 2010 performance was January 19, 2011.

Short-Term Incentive Plans

Awards under the short-term incentive plans are made each year, calculated by the following formula:

ANNUAL INCENTIVE CALCULATION FORMULA

$$\text{Actual annual incentive percentage} = \text{Target incentive percentage} \times \text{Business performance multiplier} \times \text{Individual performance multiplier}$$

Under these plans, Novartis defines target incentive percentages of base compensation for each participating associate at the beginning of each performance period - traditionally the start of a calendar year. Target incentive percentages may reach up to 100% of base compensation.

The business performance multiplier is based on the performance of the Group or business area and may range from 0 to 1.5.

The individual performance multiplier is based on achievement of individually set performance objectives as well as meeting key behavioral standards (Novartis Values and Behaviors). It may range from 0 up to 1.5.

In general, the business performance multiplier combined with the individual performance multiplier may not exceed 2. For exceptional performance, however, higher performance multipliers may apply. Such cases require the approval of the Chief Executive Officer and, for Executive Committee members and key executives, also the approval of the Compensation Committee.

This broad range of target incentive percentages and multipliers allows for meaningful differentiation on a pay for performance basis.

Associates in certain countries and certain key executives worldwide are encouraged to receive their annual incentive awards fully or partially in Novartis shares instead of cash by participating in a leveraged share savings plan.

Under leveraged share savings plans, Novartis matches investments in shares after a holding period. In general, no shares are matched under these plans if an associate leaves Novartis prior to expiration of the holding period for reasons other than retirement, disability or death.

Novartis has three main leveraged share savings plans:

- The Swiss Employee Share Ownership Plan (ESOP) is available in Switzerland to approximately 12 000 associates. 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 granted under the ESOP, each participant will receive one free matching share for every two Novartis shares granted. A total of 5 454 associates chose to receive shares under the ESOP for their performance in 2010.
- In the United Kingdom, approximately 2 900 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 incentive in shares. Two invested shares are matched with one share after a holding period of three years. During 2010, approximately 1 610 associates participated in this plan.
- 26 key executives worldwide were invited to participate in a Leveraged Share Savings Plan (LSSP) as part of compensation for performance in 2010. Their annual incentive was awarded in shares and blocked for five years. At the end of the investment period, Novartis matches the invested shares at a ratio of 1:1 (i.e., one share awarded for each invested share).

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

Long-Term Incentive Plans

Equity Plan “Select”

Each year, associates, including Executive Committee members, may be eligible for a grant under the Equity Plan “Select.” The grant amount is determined on the basis of business and individual performance. No awards are granted for performance ratings below a certain threshold. Grants can be taken in the form of shares, share options, or a combination of both. In some jurisdictions Restricted Share Units (RSU) are granted rather than shares. In Switzerland, the participants in this plan can elect between shares or RSUs and share options, or a combination of both.

Each 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.

Each share option granted to associates entitles the holder to purchase one Novartis share at a stated exercise price that equals the closing market price of the underlying share at the grant date (January 19, 2011 for performance 2010). If associates in North America choose to receive part or all of their grant under the Equity Plan “Select” in share options on American Depositary Shares (ADSs), the resulting number of share options is determined by dividing the respective incentive amount by a value that equals 95% of the value of the options on ADS as determined in accordance with International Financial Reporting Standards (IFRS). For associates in other countries, the divisor equals 90% of the IFRS value of options on shares.

Share options are tradable, when vested, and expire on their tenth anniversary. Shares and tradable share options have a vesting period of two years in Switzerland and three years in other countries. As mentioned above, to further strengthen the relationships between our associates’ long-term interests and those of the Group and our shareholders, the Compensation Committee decided to adjust the vesting period in Switzerland from two to three years as of 2011 performance onwards. 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).

The terms of the share options granted since 2007 are shown in the table below.

TERMS OF SHARE OPTIONS

Grant year	Exercise price (CHF/USD)	Vesting (years) (CH/other countries)	Term (years)
2011	54.70/57.07	2/3	10
2010	55.85/53.70	2/3	10
2009	53.65/46.42	2/3	10
2008	64.05/57.96	2/3	10
2007	72.85/58.38	2/3	10

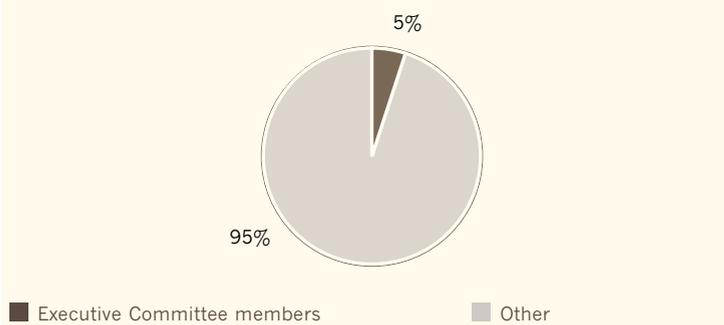
As of December 31, 2010, 94.7 million share options granted to associates were outstanding, covered by an equal number of shares and corresponding to 3.8% of the total number of outstanding Novartis shares (excluding treasury shares).

A total of 10 796 participants received 0.9 million restricted shares, 5.4 million RSUs and 17.5 million share options under the Novartis Equity Plan “Select” for their performance in 2010, representing a participation rate of about 11% of all full-time equivalent associates worldwide.

To further strengthen alignment of the interests of Executive Committee members with those of the Group and our shareholders, the Compensation Committee decided to decrease the target

incentives for Executive Committee members under the Equity Plan “Select” for the performance year 2010 onwards and to increase the target incentives under the Long-Term Performance Plan for these executives. Approximately 5% of the total equity value awarded under the Equity Plan “Select” was granted to the Executive Committee members.

2010 TOTAL EQUITY VALUE AWARDED UNDER THE EQUITY PLAN “SELECT”



Long-Term Performance Plan

The Long-Term Performance Plan is an equity plan for key executives based on a three-year performance period.

At the beginning of the performance period, plan participants are allocated RSUs, which may be converted into Novartis shares after the performance period.

At the end of the performance period, the Compensation Committee adjusts the number of RSUs based on actual performance. The performance is measured by Group Economic Value Added (EVA), a formula to measure corporate profitability while taking into account the cost of capital. The performance target is the sum of three annual Group EVA targets. No incentive is awarded if actual Group EVA performance fails to meet a pre-determined threshold (or if the participant leaves Novartis during the performance period for reasons other than retirement, disability or death). For outstanding Group EVA performance, the adjustment can go up to 200% of the target incentive.

At the Award date, RSUs are converted into unrestricted Novartis shares without a vesting period. In the United States, awards may also be delivered in cash under the Deferred Compensation Plan.

As referred to above, to emphasize the alignment of our Executive Committee members’ interests with those of the Group and our shareholders, the Compensation Committee decided to decrease the target incentives for Executive Committee members under the Equity Plan “Select” for the performance year 2010 onwards and to increase the target incentives under the Long-Term Performance Plan for these executives.

LONG-TERM PERFORMANCE PLAN PERIOD



On January 19, 2011, 117 key executives were awarded Novartis shares under the Novartis Long-Term Performance Plan, based on Group EVA achievement over the performance period 2008 to 2010.

LONG-TERM PERFORMANCE PLAN PARTICIPANTS HISTORY

Grant year = Target setting	Performance period	Award year = Payout in shares	Plan participants (number of key executives)
2011	2011–2013	2014	127
2010	2010–2012	2013	131
2009	2009–2011	2012	132
2008	2008–2010	2011	117

Special Share Awards

Selected associates may exceptionally receive special awards of restricted or unrestricted shares or RSUs. These special awards are discretionary, providing flexibility to attract talent or to reward particular achievements or exceptional performance. They may also serve to retain key contributors.

Restricted special awards generally have a three to five-year vesting period. If an associate leaves Novartis for reasons other than retirement, disability or death, unvested shares or RSUs are generally forfeited. Worldwide 389 associates at different levels in the organization were awarded a total of 1.1 million shares or RSUs in 2010.

Objective Setting

Compensation of Executive Committee members is highly linked to Group performance against performance objectives. Divisional performance objectives include the following key metrics:

DIVISIONAL PERFORMANCE OBJECTIVES

Net sales	Operating income	Market share
Innovation	Free cash flow as a percentage of sales	Optimize organizational effectiveness and productivity

These metrics 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.

Source of Awarded Shares

Novartis uses shares repurchased in the market to fulfill obligations to deliver shares as required by the variable compensation plans and special share awards.

Novartis does not have any approved conditional capital to obtain shares for delivery of our share awards.

Benefits

The primary purpose of pension and healthcare plans is to establish a level of security for associates and their dependents in respect of age, health, disability and death. The level of pension and healthcare benefits provided to associates is country-specific and is influenced by local market practice and regulations, and is reviewed regularly.

The Group has a policy to change from defined benefit pension plans (DB) to defined contribution pension plans (DC). Implementation of this policy is well underway. The shift to a defined contribution plan for the Swiss pension fund, the Group's largest, took effect on January 1, 2011.

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

RISK MANAGEMENT

Our compensation system encourages entrepreneurship but does not reward inappropriate or excessive risk taking and short-term profit maximization at the expense of the long-term health of Novartis. The following characteristics of our compensation system foster a culture of entrepreneurial risk management:

- People Performance Management Process: A rigorous People Performance Management process is in place based on agreed upon objectives, values and behaviors reflecting meritocracy. The performance is monitored and periodically discussed with the associates.
- Balanced Scorecard Approach to Performance-based Incentives: Financial objectives include net sales, operating income, free cash flow as a percentage of sales and Group Economic Value Added (EVA). Non-financial objectives emphasize the achievement of strategic and leadership objectives, and managing people, but also innovation as well as process and productivity improvement.

Under the incentive plans, performance multipliers may, in general, not exceed 2 on a combined basis.

- 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 Long-Term Performance Plan is an equity plan based on a three-year performance period. The equity awarded under the Equity Plan “Select” vests either after a period of two or three years, depending on the country.
- Balanced Mix of Compensation Elements: 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 two or three years, depending on the incentive plan.
- Novartis Values and Behaviors: Compliance and ethical conduct are integral factors considered in all performance reviews.
- No Severance Payments or Change-of-Control Arrangements: No employment contract with Executive Committee members contains unusually long notice periods, change-of-control clauses and severance payments.
- Clawback: We implemented “clawback” provisions in individual employment contracts of all Executive Committee members – as well as in incentive plans, and award letters to associates – allowing Novartis to hold back or seek to recover incentive compensation where the payout has been proven to conflict with internal management standards, accounting procedures or a violation of law.

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 Board members and the Executive Committee members, their equity participation in the Group as well as loans made to them. This Compensation Report fulfills that requirement. In addition, our Compensation 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

Authorities for decisions related to compensation are governed by the Articles of Incorporation, the Board Regulations and the Compensation Committee Charter, which are published on the Novartis website: www.novartis.com/corporate-governance.

The Compensation Committee serves as the supervisory and governing body for compensation policies and plans within Novartis. It reviews and proposes compensation policies and plans for approval by the Board of Directors. The Compensation Committee also reviews and approves the employment contracts and the individual compensation for selected key executives, including the Executive Committee members.

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.

The Compensation Committee is composed exclusively of Board members, who meet the independence criteria set forth in our Board Regulations. Currently, the Compensation Committee has the following five members: Marjorie M.T. Yang (chair), William Brody, Srikant Datar, Ulrich Lehner and Hans-Joerg Rudloff. In 2010, the Compensation Committee held four meetings. The meetings held in January 2010 had the primary purpose of reviewing the performance of the businesses and the respective management teams and determining compensation for the Executive Committee members.

All compensation plans and levels are reviewed regularly based on publicly available data as well as on analyses by independent compensation research companies and external compensation advisors. Trends and developments in the field of compensation and corporate governance are carefully analyzed, reviewed and discussed on an ongoing basis with outside experts and advisors. The authorization levels are shown 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 other Executive Committee members and other selected key executives	Chief Executive Officer	Compensation Committee
Annual incentive plans and Equity Plan “Select”	Chief Executive Officer	Compensation Committee
Long-Term Performance Plan	Chief Executive Officer	Compensation Committee
Special Share Awards	Chairman of the Board or Chief Executive Officer	Compensation Committee

COMPENSATION COMMITTEE ADVISOR

The Compensation Committee currently uses Pearl Meyer & Partners LLC as its independent external compensation advisor. The advisor is independent from management and does not perform any other consulting work for Novartis. The key task of the advisor is to assist the Compensation Committee in ensuring that the Novartis 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 annually assesses the projected scope of work for the coming year.

Based on the appraisal for 2010, the Compensation Committee determined that the advisor is free of any relationships that would impair professional judgment and advice to the Compensation Committee.

COMPENSATION 2010

BOARD OF DIRECTORS

CHAIRMAN

In January 2010, the Board of Directors accepted the proposal of Daniel Vasella, M.D., to complete the succession process and hand over his responsibilities as Chief Executive Officer of Novartis to Joseph Jimenez, effective February 1, 2010. Dr. Vasella had served as Chief Executive Officer for 14 years and as Chairman of the Board of Directors for 11 years. Dr. Vasella continues in his role as Chairman of the Board of Directors, concentrating on strategic priorities.

Under a new contract, the Chairman receives fixed annual compensation. One third is paid out in monthly cash installments; the remaining two thirds are in the form of unrestricted Novartis shares which are granted to him each year. He no longer may participate in any of the variable compensation plans described above.

Following his term as Chairman, Dr. Vasella agreed to continue to make available his know-how to Novartis and to refrain from activities that compete with any business of Novartis for a multi-year period. Dr. Vasella will receive fair market compensation in return for his services and for complying with the restriction not to compete.

In addition, the contract provided for additional retirement benefits through a one-time payment of CHF 12 million in the form of an insurance policy.

OTHER BOARD MEMBERS

The other Board members receive an annual Board membership fee and additional fees for committee chairmanships, committee memberships and other functions to reflect their increased responsibilities and engagements. Board members do not receive additional fees for attending meetings.

Board members do not receive variable compensation, underscoring their focus on the long-term corporate strategy and their supervisory role. The Board of Directors determines the compensation of the other Board members each year, based on a proposal by the Compensation Committee.

The fee rates for the other Board members are the following:

OTHER BOARD MEMBER ANNUAL FEE RATES

	Annual fee (CHF)
Board membership	350 000
Vice Chairman	50 000
Chairman's Committee membership	150 000
Audit and Compliance Committee membership	100 000
Risk Committee membership	50 000
Compensation Committee membership	50 000
Corporate Governance and Nomination Committee membership	50 000
Delegated board membership ¹	125 000

¹The 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).

The other Board members can choose to receive their fees in cash, shares or a combination of both. Board members do not receive share options.

BOARD MEMBER COMPENSATION IN 2010¹

	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)	Shares (number)	Other (CHF) ²	Total (CHF) ³
Daniel Vasella	Chair		Chair	• ⁴	• ⁴	• ⁴	• ⁴		3 666 674	131 304	189 260	7 950 791 ⁵
Ulrich Lehner	•	•	•	•	•	•	Chair		1 110 000		59 034	1 169 034
Hans-Joerg Rudloff	•	•	•	•	•	•			750 000		37 666	787 666
William Brody ⁶	•					•		•	375 000	2 686		525 013
Srikant Datar	•			Chair	•	•			459 688	1 797		560 050
Ann Fudge	•						•		250 000	2 686		400 013
Alexandre F. Jetzer-Chung ⁷	•								350 000		17 722	367 722
Pierre Landolt ⁸	•						•		106 000	5 265	22 604	422 654
Andreas von Planta	•			•	Chair		•		453 000	1 916	28 344	561 307
Wendelin Wiedeking	•			•	•				150 875	6 252	26 593	526 642
Marjorie M.T. Yang	•					Chair			410 000		23 133	433 133
Rolf M. Zinkernagel ⁹	•						•	•	650 000		33 677	683 677
Total									8 731 237	151 906	438 033	14 387 702

See note 11 to the Financial Statements of Novartis AG for 2009 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. All shares were granted as per January 19, 2010 against the prevailing share price of CHF 55.85.

² Pension and social security costs due by the individual and paid by the company.

³ A Board member who is tax resident in Switzerland can voluntarily choose to block the shares. In 2010, Daniel Vasella blocked his shares for ten years and Andreas von Planta for five years. The value of the shares reflected in this table has been calculated using the valuation methodology described under – Compensation 2010 – Compensation for Performance in 2010 – Valuation Principles.

⁴ Daniel Vasella attended the meetings of this Committee as a guest from February 1, 2010.

⁵ Does not include Board member compensation received from Alcon, Inc.

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 In addition, Alexandre F. Jetzer-Chung was paid CHF 380 004 for consulting services.

⁸ According to Pierre Landolt, the Sandoz Family Foundation is the economic beneficiary of the compensation.

⁹ 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).

EXECUTIVE COMMITTEE MEMBERS

PROCESS FOR PERFORMANCE APPRAISAL AND COMPENSATION SETTING FOR THE CHIEF EXECUTIVE OFFICER

At the beginning of a business year, the Chairman meets with the Chief Executive Officer to discuss and set his objectives for the coming year. The Board of Directors reviews and approves these objectives, ensuring that they are in line with the Group's goals of fostering sustainable performance, balancing short- and long-term goals, and does not reward inappropriate or excessive risk taking at the expense of the long-term health of the Group.

At the end of a business year, the Chief Executive Officer prepares and presents to the Chairman and the Board of Directors a self-appraisal assessing actual results against the previously agreed objectives, taking into account the audited financial results as well as Novartis Values and Behaviors. The Board of Directors discusses the self-appraisal without the Chief Executive Officer 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 financial criteria and industry developments. The Board of Directors shares its appraisal with the Chief Executive Officer afterwards. Based on this appraisal, the Compensation Committee decides upon the Chief Executive Officer's total compensation and the target compensation for the coming year. The Compensation Committee takes into account all relevant factors, including available benchmark information and the advice of the Compensation Committee advisor.

PROCESS FOR PERFORMANCE APPRAISAL AND COMPENSATION SETTING FOR THE OTHER EXECUTIVE COMMITTEE MEMBERS

In January, the Board of Directors meets with the Chief Executive Officer to review and discuss the performance of the other Executive Committee members for the previous year, taking into account the audited financial results, the level of achievement of financial and non-financial objectives as well as Novartis Values and Behaviors.

In a separate session, the Compensation Committee decides, in the presence of the Chief Executive Officer and based on his recommendations, on the variable compensation for the other Executive Committee members and other selected key executives for the previous year. At the same meeting, the Compensation Committee decides on the target compensation for these executives for the coming year.

In addition to the full year, the mid-year performance of the other Executive Committee members is reviewed in August. At the same time, the Board of Directors also carries out a mid-year review of the performance of the individual businesses.

CHALLENGING PERFORMANCE OBJECTIVES

Compensation of Executive Committee members is highly linked to business performance against performance objectives. The metrics of performance objectives, including net sales, operating income, market share, Group Economic Value Added (EVA) or innovation, 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.

Novartis does not disclose specific objectives – or their weightings – because it would signal areas of strategic focus and impair the Group's ability to leverage these areas for competitive advantage. For example, disclosure of our cash flow objectives would provide insight into timing of large capital investments or acquisitions. In addition, knowledge of the objectives could be used by competitors to target the recruitment of key executives from Novartis. Disclosing specific objectives and metrics would also give our competitors insight into key market dynamics and areas that could be used against Novartis competitively by industry consultants or competitors targeting existing customers.

OBJECTIVES FOR VARIABLE COMPENSATION OF THE CHIEF EXECUTIVE OFFICER

The financial criteria for short-term performance appraisal typically include growth objectives for net sales, operating income, net income and earnings per share. For long-term performance appraisal, the financial criterion is Group Economic Value Added (EVA).

Non-financial objectives typically include successful acquisitions, disposals and licensing transactions; Research and Development performance; product launches; successful implementation of growth or cost containment initiatives; process improvements; the successful launch or closures of sites or operations; or leadership and people management.

PERFORMANCE IN 2010

At its meeting on January 18, 2011, the Compensation Committee decided on the amounts of variable compensation for 2010 for the Executive Committee members by applying the principles described above. The specific compensation decisions made for the Chief Executive Officer and the Executive Committee members reflect their achievements against the financial and non-financial performance objectives established for each of them at the beginning of the year.

The achievements were assessed from both a quantitative and a qualitative perspective, with the Compensation Committee using its judgment in concert with a review of metrics. This is in line with Novartis best practice in assessing a senior executive's performance.

The Compensation Committee recognized the following key accomplishments:

- The Pharmaceuticals Division achieved strong volume growth of 8 percentage points, significantly higher than the industry average, as sales of recently launched products reached USD 6.6 billion, or 21% of the division's sales, a significant increase from 16% of sales compared to the previous year;
- Sandoz delivered double-digit growth driven by launches of first-to-market differentiated, complex generics in the US, such as the low molecular weight heparin enoxaparin; continued growth of biosimilars; and growth rates several times faster than the market in Central and Eastern Europe, as well as Turkey and the Middle East;
- The Consumer Health Division overcame the effects of the global recession and increased net sales by 6% in constant currencies, growing ahead of market in all businesses thanks to strong performance of several key brands;
- The Vaccines and Diagnostics Division increased net sales to USD 2.9 billion and achieved approval of *Menveo*. Deliveries of influenza A (H1N1) pandemic vaccines generated USD 1.3 billion in sales during the first half of the year;
- The ability to consistently launch new and better products and thus establish market positions is decisive for sustainable success – among the most important approvals were *Gilenya*, the first oral medicine for first-line treatment of relapsing forms of multiple sclerosis approved in the US, and *Tasigna*, which was approved for treatment of patients with newly diagnosed chronic myeloid leukemia in the US, EU, Japan and Switzerland;
- Since August 2010, Novartis has held majority ownership of Alcon, Inc., the global leader in eye care and plans to fully integrate Alcon into Novartis. This will provide shareholders with a new growth platform and allow realization of substantial synergies between the two organizations; and
- During 2010 Novartis was able to further expand its presence in emerging countries and achieved sales growth of 12% in six key emerging markets compared with the previous year.

COMPENSATION FOR PERFORMANCE IN 2010

The compensation table on the following page discloses the compensation granted to the Executive Committee members for performance in 2010. The following paragraphs describe the principles underlying the data in the table.

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 2010, including the future ESOP/LSSP match, are disclosed in full.

Disclosure Structure. The compensation table shows the compensation granted to each Executive Committee member for performance in 2010 for all compensation elements – base compensation, variable compensation and benefits – as described above.

The column “Future ESOP/LSSP match” reflects shares to be awarded in the future if the Executive Committee member remains with Novartis for at least three or five years, respectively. The Executive Committee members were invited to invest their annual incentive awards for 2010 in the leveraged share saving plans – either the three-year Swiss Employee Share Ownership Plan (ESOP) or the five-year Leveraged Share Savings Plan (LSSP) – 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. Shares, RSUs and share options under the variable compensation plans are generally granted with a vesting¹ period. In addition, associates in Switzerland, including the Executive Committee members, may block² shares received under any variable compensation plan for up to 10 years.

The Compensation Committee believes that such restrictions affect the value of the shares, RSUs and share options.

The Swiss Federal Tax Administration, in its “Kreisschreiben Nr. 5”, provides for a methodology pursuant to which unvested or blocked shares or share options shall be valued with a discount for each year they are unvested or blocked. In addition, for the valuation of share options, the Swiss Tax Authorities apply – in a standing practice for Novartis (since 1997) – an option valuation model based on Black-Scholes.

In the Compensation Committee’s view, this is the appropriate methodology to report the economic value of shares, RSUs and share options for executive compensation under Swiss law because, unlike IFRS, it takes into account the trading restrictions due to vesting and blocking. The application of this methodology to determine the value of the shares, RSUs and share options granted for the year 2010 is explained in footnote 9 to the Executive Committee Member Compensation table below and applies to all Executive Committee members.

See note 27 to the Group’s consolidated financial statements for information on executive officer and Board member compensation as reported under IFRS.

¹Vesting refers to the waiting period under a share-based incentive plan that must expire before the associate becomes irrevocably entitled to the shares, RSUs or share options involved. The associate cannot sell or exercise unvested share, RSUs or share options. If an associate leaves Novartis prior to the expiration of the vesting period for reasons other than retirement, disability or death, the associate will generally forfeit rights to such shares, RSUs or share options.

²Blocking refers to the ability of associates in Switzerland to opt for an extended trading restriction period of up to 10 years from the award date (including vesting). Novartis encourages associates to block their shares because doing so aligns the associates’ interests with those of shareholders.

EXECUTIVE COMMITTEE MEMBER COMPENSATION FOR PERFORMANCE IN 2010¹

	Currency	Base compensation		Variable compensation					Benefits		Total	Total compensation		
		Short-term incentive plans			Long-term incentive plans					Pension benefits (Amount) ⁷	Other benefits (Amount) ⁸	(Amount) ⁹	Future ESOP/LSSP match ¹⁰ Shares (Number)	Including future ESOP/LSSP match ^{11,12} (Amount)
		Cash (Amount)	Cash (Amount)	Shares (Number) ²	Equity Plan "Select"			Long-Term Performance Plan Shares (Number) ⁵	Special share awards Shares (Number) ⁶					
					Shares (Number) ³	Options (Number) ⁴	Shares (Number) ⁵							
Joseph Jimenez (Chief Executive Officer since February 1, 2010)	CHF	1 458 334	590 000	16 180	124 552			37 088		166 162	92 287	11 060 421	16 180	11 721 780
Juergen Brokatzky-Geiger	CHF	678 338		12 432	24 863			11 435		146 470	11 965	2 729 841	12 432	3 109 563
David Epstein (since February 1, 2010) ¹³	USD	779 167	358 359	7 944	38 646			17 031		184 984	85 309	4 570 330	7 944	4 909 104
Mark C. Fishman	USD	968 000	14 036	16 716	67 847			31 006		256 555	122 518	7 094 527	16 716	7 807 400
Jeff George (since February 1, 2010) ¹³	CHF	595 833	589 783		10 782	129 613	4 913	9 167		62 006	47 226	2 574 092		2 574 092
George Gunn (since February 1, 2010) ¹³	CHF	756 250	862 217		27 364			13 840		98 780	14 529	3 820 992		3 820 992
Andrin Oswald (since February 1, 2010) ¹³	CHF	595 833	577 317		21 105			6 488	9 167	65 063	27 818	2 635 810		2 635 810
Jonathan Symonds (since February 1, 2010) ¹³	CHF	770 000		14 022	29 159			6 772		125 650		2 937 515	14 022	3 510 676
Thomas Werlen	CHF	725 008		10 010	10 010	120 330	13 718			122 617	22 366	2 442 364	10 010	2 670 839
Total¹⁴	CHF	7 397 668	3 006 825	77 304	354 328	249 943	142 291	18 334		1 246 206	432 452	40 339 284	77 304	43 276 326

See note 11 to the Financial Statements of Novartis AG for 2009 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 incentive in the five-year Leveraged Share Savings Plan (LSSP) or the three-year Swiss Employee Share Ownership Plan (ESOP; if eligible) rather than to receive cash.

³ Juergen Brokatzky-Geiger, Andrin Oswald and Thomas Werlen have voluntarily blocked these shares for ten years, Jonathan Symonds for five years. These blocking periods include the two-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 19, 2021, have a two-year vesting period in Switzerland (three years in other countries) and have an exercise price of CHF 54.70 per share (the closing price of Novartis shares on the grant date of January 19, 2011). Share options on ADSs granted to participants in North America will expire on January 19, 2021, have a three-year vesting period and an exercise price of USD 57.07 per ADS (the closing price of Novartis ADSs on the grant date of January 19, 2011).

⁵ Awarded based on the achievement of Group Economic Value Added (EVA) objectives over the performance period ended December 31, 2010. Jonathan Symonds has voluntarily blocked these shares for five years.

⁶ Consists of a special award of RSUs to Jeff George and to Andrin Oswald, both awarded on September 1, 2010, against the closing share price of that day of CHF 54.05. These awarded RSUs have a five-year vesting period.

⁷ Service costs of pension and post-retirement healthcare benefits accumulated in 2010, and employer contributions to defined contribution pension plans in 2010.

⁸ Includes perquisites and other compensation paid during 2010. Does not include cost allowances and tax-equalization payments regarding the international assignment of David Epstein, Jeff George and Andrin Oswald.

⁹ Values of shares and RSUs granted are discounted by 6% per year depending on the length of the combined vesting and blocking period. For example, the value of a share award subject to a two-year vesting/blocking period calculated in accordance with the methodology described in the Kreisschreiben Nr. 5 equals 89% of its market value at the grant date. The value of a share award with a combined vesting/blocking period of ten years equals 55.839% of its market value at the grant date. The closing share price on the grant date (January 19, 2011) was CHF 54.70

per Novartis share and USD 57.07 per ADS. The values of share options granted are reported based on the valuation principles contained in a tax ruling from the Swiss tax authorities, reflecting the principles as disclosed in the aforementioned Kreisschreiben Nr. 5. According to this methodology, tradable share options under the Equity Plan "Select" with a vesting period of two years have a value of CHF 0.89 per option at grant.

¹⁰ Reflects shares to be awarded in the future under the share saving plans, either the three-year Swiss Employee Share Ownership Plan (ESOP) or the five-year Leveraged Share Savings Plan (LSSP). Participants will receive additional shares ("matching shares") after the expiration of either the three- or five-year vesting period. If a participant leaves prior to the expiration of the vesting period, in general no matching shares are awarded. Thomas Werlen has voluntarily blocked these LSSP matching share units for 15 years (including the five-year vesting period). Juergen Brokatzky-Geiger has voluntarily blocked these LSSP matching share units for ten years (including the five-year vesting period).

¹¹ The values of shares, RSUs and share options reflected in this column have been calculated using the valuation methodology described in footnote 9. Regarding the valuation of matching shares (please see footnote 10) the following applies: if an Executive Committee member has chosen to block the shares to be received in the future under the five-year Leveraged Share Savings Plan for an additional 10 years, leading to a combined vesting/blocking period of 15 years, then the value of the matching shares reflected in the table will be 41.727% of the share price on the grant date. The closing share price on the grant date January 19, 2011 was CHF 54.70 per Novartis share and USD 57.07 per ADS.

¹² All amounts are gross amounts (i.e., before deduction of social security and income tax due by the executives). The employer's share of social security contributions is not included.

¹³ The base compensation and pension benefits in the table reflect the compensation over the period from February 1, 2010 to December 31, 2010. The granted variable compensation and other benefits reflect the compensation that is attributable to the period as an Executive Committee member. This means that for these compensation components 11/12 of the annual compensation is disclosed.

¹⁴ Amounts in USD for David Epstein and Mark C. Fishman were converted at a rate of CHF 1.00 = USD 0.961, which is the same average exchange rate used in the Group's consolidated financial statements.

As shown in the table below, most of executive compensation is variable and awarded in the form of restricted equity. This ensures alignment with the interests of Novartis and its shareholders.

EXECUTIVE COMMITTEE MEMBER COMPENSATION MIX IN 2010 – CASH AND SHARE-BASED COMPENSATION

	Cash ¹	Share-based compensation ²
Joseph Jimenez	18.5%	81.5%
Juergen Brokatzky-Geiger	23.3%	76.7%
David Epstein	25.9%	74.1%
Mark C. Fishman	14.6%	85.4%
Jeff George	49.1%	50.9%
George Gunn	43.9%	56.1%
Andrin Oswald	46.7%	53.3%
Jonathan Symonds	22.7%	77.3%
Thomas Werlen	29.3%	70.7%
Total	25.8%	74.2%

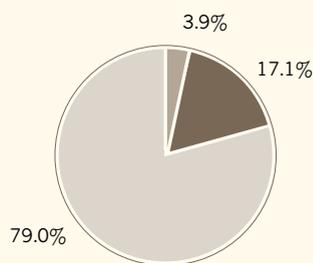
¹Cash includes all benefits except pension benefits.

²Shares, RSUs and share options, including future ESOP/LSSP match.

The variable compensation for performance in 2010 awarded to the Executive Committee members amounted to between 314% and 686% percent of the base compensation.

In 2010, the Executive Committee members earned 17.1% as base compensation, 79.0% as variable compensation, and 3.9% as benefits.

2010 EXECUTIVE COMMITTEE COMPENSATION ELEMENTS



■ Base compensation ■ Variable compensation¹ ■ Benefits

¹Including future ESOP/LSSP match.

EXECUTIVE COMMITTEE COMPENSATION HISTORY

	Executive Committee members	Total compensation (CHF)
2010	9 ¹	43 276 326
2009	9	59 952 704
2008	10 ²	55 017 871
2007 ³	11 ⁴	55 812 695
2006	8	60 988 500
2005	7	51 771 841
2004	6	46 190 589

¹ Does not include the five Executive Committee members who stepped down during 2010. For details on these members see under Compensation 2010 - Compensation of the Executive Committee Members - Compensation for Executive Committee Members who stepped down during 2010.

² Includes Thomas Ebeling who served on the Executive Committee until December 1, 2008.

³ Since 2007, disclosed compensation includes all amounts awarded for performance in the given year, i.e., the reporting of the annual compensation is synchronised with the performance in that specific year.

⁴ Includes Paul Choffat who retired May 11, 2007 and Urs Baerlocher who retired August 31, 2007.

EXECUTIVE COMMITTEE COMPENSATION HISTORY IN RELATION TO NET INCOME



COMPENSATION FOR EXECUTIVE COMMITTEE MEMBERS WHO STEPPED DOWN DURING 2010

In January 2010, the Board of Directors accepted the proposal of Daniel Vasella, M.D., to complete the succession process and hand over his responsibilities as Chief Executive Officer of Novartis to Joseph Jimenez, effective February 1, 2010. Dr. Vasella had served as Chief Executive Officer for 14 years and as Chairman of the Board of Directors for 11 years. Dr. Vasella continues in his role as Chairman of the Board of Directors, concentrating on strategic priorities.

Raymund Breu stepped down from the Executive Committee as of February 1, 2010. He retired on March 31, 2010, having reached the mandatory retirement age.

With effect from February 1, 2010, Novartis simplified its leadership structure and reduced the size of the Executive Committee from 12 to 9 members. Joerg Reinhardt, Andreas Rummelt and Thomas Wellauer stepped down from the Executive Committee and decided to pursue their careers outside of Novartis.

COMPENSATION FOR EXECUTIVE COMMITTEE MEMBERS WHO STEPPED DOWN DURING 2010

	Total compensation (CHF) ¹
Daniel Vasella ²	14 179 305
Raymund Breu ³	2 370 073
Joerg Reinhardt ⁴	3 524 149
Andreas Rummelt ⁵	1 738 299
Thomas Wellauer ⁶	2 593 081
Total	24 404 907

¹ Compensation has been calculated using the valuation methodology described under Compensation 2010 - Compensation for Performance in 2010 - Valuation Principles.

² Compensation relates to the period until January 31, 2010 during which Daniel Vasella served in his role as Chairman and Chief Executive Officer. Includes shares to be awarded in the future under the Leveraged Shares Savings Plan (LSSP). Includes a one-time payment of CHF 12 million in the form of an insurance policy and the conclusion of his residual statutory and contractual employment entitlements.

³ Compensation relates to the period until January 31, 2010 when Raymund Breu stepped down from the Executive Committee. Includes a special award in recognition of his contributions to Novartis.

⁴ Compensation relates to the period until Joerg Reinhardt left Novartis.

⁵ Compensation relates to the period until Andreas Rummelt left Novartis. Includes a special award in recognition of his contribution to the A (H1N1) project.

⁶ Compensation relates to the period until Thomas Wellauer left Novartis. Includes a special award in recognition of his contributions to the procurement savings project. Also includes a special contribution to his pension fund.

TOTAL COMPENSATION TO EXECUTIVE COMMITTEE MEMBERS IN 2010

The aggregate amount of compensation awarded to all Executive Committee members in 2010 (incl. compensation awarded to Executive Committee members who stepped down during 2010) is CHF 67 681 233.

TOTAL COMPENSATION TO EXECUTIVE COMMITTEE MEMBERS IN 2010

	Total compensation (CHF)
Executive Committee member compensation for performance in 2010	43 276 326
Compensation for Executive Committee members who stepped down during 2010	24 404 907
Total	67 681 233

SHARE OWNERSHIP

OWNERSHIP GUIDELINES

Investors want the leaders of the companies they invest in to act like owners. In the Board of Directors' view, that alignment works best when Board members and key executives have meaningful portions of their personal holdings invested in the equity of their company. This is why Novartis sets share ownership guidelines for Board members and approximately 30 of the key executives of the Group.

Board members are required to own at least 5 000 Novartis shares within three years after joining the Board of Directors.

Key executives are required to own at least a certain multiple of their annual base salary in Novartis shares or share options. The Chief Executive Officer is required to own Novartis equity worth five times, the other Executive Committee members three times, and other key executives one to two times (position specific) their respective base compensation within three years of hire or promotion. In the event of a substantial drop in the share price, the Board of Directors may, at its discretion, extend that time period.

The Compensation Committee reviews compliance with the share ownership guideline on an annual basis.

Novartis equity counting against the share ownership requirement includes vested and unvested shares or ADSs acquired under the Novartis compensation plans, as well as RSUs thereof, with the exception of unvested matching RSUs from leveraged share savings plans and unvested RSUs from the Long-Term Performance Plan. In addition, it includes other shares as well as vested options on Novartis shares or ADSs that are owned directly or indirectly by "persons closely linked"¹ to the Board member or key executive.

SHARES AND SHARE OPTIONS OWNED BY BOARD MEMBERS

The total number of vested and unvested Novartis shares and share options owned by Board members and "persons closely linked"¹ to them as of January 19, 2011, is shown in the following tables.

As of January 19, 2011, none of the Board members together with "persons closely linked"¹ to them owned 1% or more of the outstanding shares of Novartis, either directly or through share options.

As of December 31, 2010, all Board members who have served at least three years on the Board of Directors complied with the share ownership guidelines.

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 BOARD MEMBERS

	Number of shares ¹
Daniel Vasella	3 288 608
Ulrich Lehner	22 193
Hans-Joerg Rudloff	40 080
William Brody	5 133
Srikant Datar	17 342
Ann Fudge	6 008
Alexandre F. Jetzer-Chung	80 800
Pierre Landolt ²	35 061
Andreas von Planta	109 580
Wendelin Wiedeking	34 182
Marjorie M.T. Yang	18 000
Rolf M. Zinkernagel	22 800
Total	3 679 787

¹Includes holdings of "persons closely linked" to Board members (see definition under – Share Ownership – Ownership Guidelines).

²According to Pierre Landolt, the Sandoz Family Foundation is the economic beneficiary of all shares.

SHARE OPTIONS OWNED BY BOARD MEMBERS

	Number of share options ¹
Daniel Vasella	3 565 366
Ulrich Lehner	
Hans-Joerg Rudloff	24 570
William Brody	
Srikant Datar	
Ann Fudge	
Alexandre F. Jetzer-Chung	9 214
Pierre Landolt ²	6 911
Andreas von Planta	
Wendelin Wiedeking	
Marjorie M.T. Yang	
Rolf M. Zinkernagel	15 357
Total	3 621 418

¹Includes holdings of "persons closely linked" to Board members (see definition under – Share Ownership – Ownership Guidelines). The last year in which Novartis granted share options to non-executive Board members was in 2002. In 2002, Novartis granted 79 087 share options to non-executive Board members at an exercise price of CHF 62 and a term of nine years.

²According to Pierre Landolt, the Sandoz Family Foundation is the economic beneficiary of all share options.

SHARES AND SHARE OPTIONS OWNED BY THE EXECUTIVE COMMITTEE MEMBERS

The following tables show the total number of vested and unvested Novartis shares (including share units but excluding unvested matching share units from leveraged share savings plans and unvested target units from the Long-Term Performance Plan) and the total number of share options owned by the Executive Committee members as of January 19, 2011.

As of January 19, 2011, no member of the Executive Committee together with "persons closely linked" to them (see definition under – Share Ownership – Ownership Guidelines) owned 1% or more of the outstanding shares of Novartis, either directly or through share options.

As of December 31, 2010, all Executive Committee members who have served at least three years on the Executive Committee have met or exceeded their personal Novartis ownership requirements.

SHARES OWNED BY EXECUTIVE COMMITTEE MEMBERS

	Number of shares ¹
Joseph Jimenez	298 366
Juergen Brokatzky-Geiger	199 600
David Epstein	245 201
Mark C. Fishman	385 921
Jeff George	47 613
George Gunn	210 932
Andrin Oswald	90 347
Jonathan Symonds	79 548
Thomas Werlen	109 797
Total	1 667 325

¹Includes holdings of "persons closely linked" to Executive Committee members (see definition under – Share Ownership – Ownership Guidelines).

SHARE OPTIONS OWNED BY EXECUTIVE COMMITTEE MEMBERS

	Number of share options ¹						Total
	2011	2010	2009	2008	2007	Other	
Joseph Jimenez			552 076	157 266			709 342
Juergen Brokatzky-Geiger			75 705	109 016	55 130	91 306	331 157
David Epstein						590 229	590 229
Mark C. Fishman				184 870	142 724	523 215	850 809
Jeff George	141 396					114 979	256 375
George Gunn						94 371	94 371
Andrin Oswald						5 633	5 633
Jonathan Symonds						54 348	54 348
Thomas Werlen	120 330	171 196	175 912			141 215	608 653
Total	261 726	171 196	803 693	451 152	197 854	1 615 296	3 500 917

¹Share 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 2006 or earlier, to share options granted to these executives while they were not Executive Committee members, and to share options bought on the market by the Executive Committee members or "persons closely linked" to them (see definition under – Share Ownership – Ownership Guidelines).

LOANS AND OTHER PAYMENTS

LOANS TO BOARD MEMBERS OR EXECUTIVE COMMITTEE MEMBERS

No loans were granted to current or former Board members or Executive Committee members during 2010. No such loans were outstanding as of December 31, 2010.

OTHER PAYMENTS TO BOARD MEMBERS OR EXECUTIVE COMMITTEE MEMBERS

During 2010, no payments (or waivers of claims) other than those set out in the Board Members Compensation table, in the Executive Committee Member Compensation table and in the table of compensation for Executive Committee members who stepped down during 2010 were made to current Board members or Executive Committee members or to "persons closely linked" to them (see definition under – Share Ownership – Ownership Guidelines).

PAYMENTS TO FORMER BOARD MEMBERS OR EXECUTIVE COMMITTEE MEMBERS

During 2010, no payments (or waivers of claims) were made to former Board members or Executive Committee members or to "persons closely linked" to them (see definition under – Share Ownership – Ownership Guidelines), except for an amount of CHF 62 298 that was paid to the Honorary Chairman.



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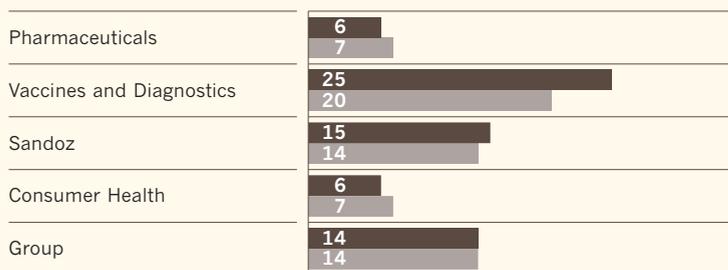
FINANCIAL HIGHLIGHTS 2010

KEY FIGURES

	2010 USD millions	2009 USD millions	Change %
Net sales	50 624	44 267	14
Operating income	11 526	9 982	15
Return on net sales (%)	22.8	22.5	
Net income	9 969	8 454	18
Basic earnings per share (USD) ¹	4.28	3.70	16
Core ²			
Operating income	14 006	11 437	22
Return on core net sales (%)	27.7	25.8	
Net income	12 029	10 267	17
Basic earnings per share (USD) ¹	5.15	4.50	14
Change in net liquidity	- 18 314	4 708	
Equity at year-end	69 769	57 462	21
Dividend (CHF) ³	2.20	2.10	5

NET SALES GROWTH⁴

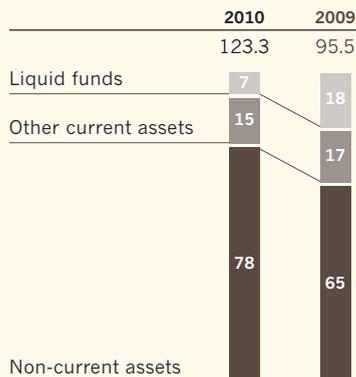
(In %)



■ Constant Currencies ■ US Dollars

TOTAL ASSETS

(In USD billions and %)



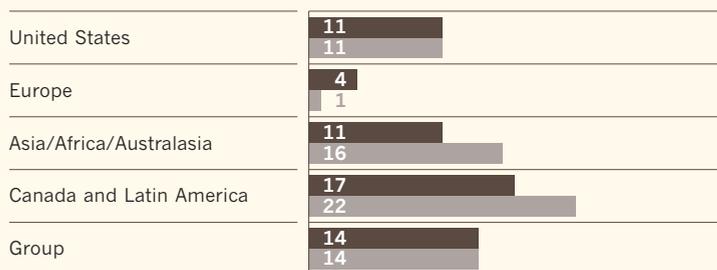
TOTAL EQUITY AND LIABILITIES

(In USD billions and %)



NET SALES GROWTH BY REGION⁴

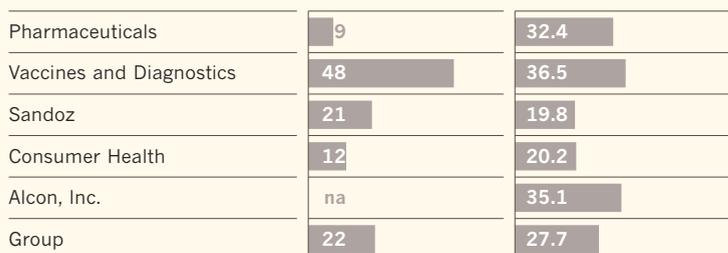
(In %)



■ Constant Currencies ■ US Dollars

CORE OPERATING INCOME GROWTH

(In %)²

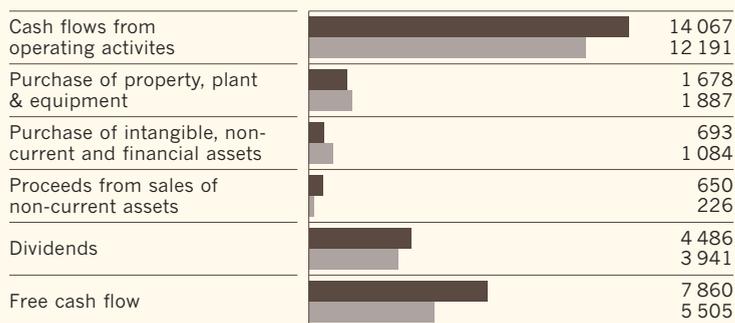


CORE OPERATING MARGIN

(In %)²

CASH FLOWS FROM OPERATING ACTIVITIES AND FREE CASH FLOW

(In USD millions)



■ 2010 ■ 2009

¹ 2010 average number of shares outstanding: 2 285.7 million (2009: 2 267.9 million)

² Core results for operating income, net income and earnings per share (EPS) eliminate the impact of acquisition-related factors and other significant exceptional items. These adjustments are explained in detail starting on page 143.

³ Dividend payment for 2010: proposal to 2011 Annual General Meeting

⁴ Net sales growth excludes Alcon, Inc. since it has only been consolidated from August 25, 2010. na = not available

KEY FINANCIAL DEVELOPMENTS IN 2010

NOVARTIS IN 2010	Innovation drives Novartis continued double-digit growth through portfolio regeneration with recently launched products.
NET SALES	Net sales rise 14% (+14% in constant currencies, or cc) to USD 50.6 billion on the underlying strong expansion in all businesses.
PHARMACEUTICALS	Strong sales growth across all regions drives net sales up 7% (+6% cc) to USD 30.6 billion driven by 8 percentage points of volume expansion. Recently launched products comprise 21% of net sales.
VACCINES AND DIAGNOSTICS	Total net sales increase 20% (+25% cc) to USD 2.9 billion. Underlying net sales (excluding sales of influenza A (H1N1) pandemic vaccines) increase 16% cc to USD 1.6 billion.
SANDOZ	Net sales grow at double-digit rate to USD 8.5 billion, +14% (15% cc) as key new products and biosimilars drive expansion in North America and key emerging markets.
CONSUMER HEALTH	All business units drive growth ahead of respective market segments despite challenging economic conditions, with net sales of USD 6.2 billion (7% in USD, +6% cc).
ALCON, INC.	Consolidation of Alcon, Inc., from August 25, 2010 adds USD 2.4 billion to Group net sales.
OPERATING INCOME	Operating income advances 15% to USD 11.5 billion on the volume-driven sales expansion and productivity gains, offset by currency movements. Operating income margin improves to 22.8% of net sales from 22.5% in 2009. Core operating income grows 22% to USD 14.0 billion, with core operating margin up 1.9 percentage points to 27.7%.
NET INCOME	Net income grows 18% to USD 10.0 billion, ahead of operating income due to higher income from associated companies, offset by higher financial expenses. Core net income rises 17% to USD 12.0 billion.
BASIC EARNINGS PER SHARE	Basic EPS rise 16% to USD 4.28 from USD 3.70 in 2009, while core basic EPS rise 14% to USD 5.15.
FREE CASH FLOW	Free cash flow before dividends rises 31% to USD 12.3 billion, principally due to improved cash flow from operations.
DIVIDEND	Proposed dividend of CHF 2.20 per share for 2010 represents 14th consecutive annual increase, up 5% from CHF 2.10 in 2009, a dividend yield of 4.0%.

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.

OVERVIEW

Novartis provides healthcare solutions that address the evolving needs of patients and societies worldwide. Our focused, diversified portfolio of businesses is organized in four global operating divisions:

- Pharmaceuticals: Innovative patent-protected prescription medicines
- Vaccines and Diagnostics: Human vaccines and blood-testing diagnostics
- Sandoz: Generic pharmaceuticals
- Consumer Health: OTC (over-the-counter medicines), Animal Health and CIBA Vision

In addition, the Group's healthcare portfolio is complemented by its 77% ownership of Alcon, Inc. (Alcon), which discovers and develops innovative eye care products to improve the quality of life by helping people see better. On December 15, 2010, we announced that we had entered into a definitive agreement with Alcon to merge Alcon into Novartis, subject to certain approvals and conditions. The merger is currently expected to be completed during the first half of 2011. Following the expected successful completion of the merger, Alcon is planned to be established as a new Novartis division that will include CIBA Vision and selected ophthalmic medicines.

Novartis has leadership positions in each of these businesses, giving us the capacity to address customer and patient needs across segments of the healthcare marketplace. We believe that our ability to innovate in all these segments will allow us to tailor our portfolio in response to market opportunities, and will enable Novartis to continue as an industry leader.

Headquartered in Basel, Switzerland, the Group employed approximately 119,000 full-time equivalent associates as of December 31, 2010 (including Alcon), with operations in more than 140 countries around the world.

FACTORS AFFECTING RESULTS OF OPERATIONS

A number of key factors influence the Group's results of operations and the development of our businesses.

The fundamentals of the healthcare industry remain robust due to long-term demographic and socioeconomic trends worldwide. Both in industrialized countries and emerging markets, the aging of the population, together with sedentary lifestyles and poor nutrition, are producing a rising incidence of chronic diseases. These and other factors, including greater demand for medical care in emerging markets, are prompting greater use of medicines and other healthcare products. Consistent investments in innovation and advancing technologies also are supporting the development of new medicines to better treat many diseases.

At the same time, other factors have created a business environment that has increased risks. The growing burden of healthcare costs as a percentage of Gross Domestic Product (GDP) in many countries has led governments and payors to focus on controlling spending ever more tightly, including through price reductions on our products and greater use of generic drugs. In addition, greater emphasis on safety by government regulators has made securing approvals for new drugs increasingly difficult.

We believe that Novartis is strategically well-positioned to operate successfully in this evolving landscape. We expect that our broad, focused portfolio, our capacity to innovate resulting in a rich pipeline of new medicines, and our established presence across regions should enable us to grow and change along with the healthcare marketplace.

FUNDAMENTAL DRIVERS REMAIN STRONG

Long-term trends in the composition and behavior of the worldwide population are fueling access to and demand for healthcare. The global population is becoming older, rapid economic development in the emerging markets is fueling demand for greater healthcare as lifestyles are becoming less active, and chronic diseases are becoming increasingly common. In addition, scientific advances continue to open new frontiers in patient treatment, creating major opportunities for improved care. 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.

AN AGING GLOBAL POPULATION

Scientific advances in treating diseases and increased access to healthcare worldwide have enabled people across the globe to enjoy longer and healthier lives. The rise in life expectancy is coincident with a decline in birth rates, increasing the proportion of the elderly around the world. Over the next decade, there is expected to be a 75% increase in the number of people over the age of 60 and by 2040, there are expected to be twice as many people in the developed world over the age of 60 as there will be under 15. The

proportion of the elderly is growing even faster in the developing world; according to the United Nations, in China the ratio of people over 60 to the rest of the population is projected to rise by more than 15% annually until 2040.

As the global population ages, there will continue to be an accelerating need for treatments for the diseases and conditions that disproportionately afflict the elderly. Novartis has many such products in its portfolio, including innovative offerings for the treatment of cancer, neurodegenerative diseases, ophthalmological diseases, and cardiovascular conditions.

GROWTH OF EMERGING MARKETS

The growing prosperity of the developing world is expected to accelerate in the coming years. It is estimated that by 2030 emerging markets will account for 60% of global GDP. This economic growth is greatly expanding access to healthcare in these geographies. In India, for example, rising income is fueling the purchase of insurance coverage, and it is estimated that approximately 220 million people will have coverage by 2015. Further, economic studies have shown that once a country's GDP reaches a certain level, its healthcare spending usually accelerates. IMS Health, a leading provider of industry data, estimates that key emerging healthcare markets – including markets such as Brazil, China, India, Mexico, Russia, South Korea and Turkey – will grow 14% to 17% per year through 2014, while developed markets will likely grow only 3% to 6% over the same period. According to IMS Health, by 2013, China is expected to become the third largest prescription drug market behind the United States and Japan. The healthcare needs of emerging markets are also evolving to more closely match their counterparts in the developed world. Cancer is now a bigger killer in developing countries than tuberculosis, malaria and AIDS combined, and chronic diseases are increasingly replacing infectious diseases as the most urgent healthcare issue.

In order to meet the healthcare needs of their citizens, many governments of developing countries are significantly increasing their healthcare spending. For instance, in 2009, 70% of China's 1.3 billion people were uninsured. In response, the Chinese government launched an ambitious, USD 124 billion effort to provide insurance coverage to approximately 90% of its population by 2011. The Russian government recently pledged USD 10 billion to reform its healthcare system, and Pharmexpert, a leading Russian market research firm, forecasts that if current trends continue, the Russian pharmaceutical industry/market will exceed USD 60 billion by the end of the decade.

At a time of slowing pharmaceutical sales growth in many industrialized countries, this expansion in many emerging markets has led to higher sales growth rates and an increasing contribution to the industry's global performance. The recent government investments in healthcare in key emerging markets can be expected to increase the healthcare industry's opportunities in such markets. As a result we expect that, in the long term, success in our industry will increasingly depend on the ability to meet not only the needs

of patients in developed markets, but also those of patients in emerging markets all over the world.

Many of these emerging markets have little, if any, distinction between pharmaceuticals, OTC and generic products. Given the Group's portfolio, Novartis has an advantage in such markets. We have the ability to offer a broad spectrum of medicines to treat various diseases and we have launched initiatives to take better advantage of growth opportunities. As a result, emerging markets and other markets excluding the US, Europe and Japan accounted for approximately 25% of Group net sales in 2010, and they are expected to make increasingly significant contributions to future results of operations.

LIFESTYLE CHANGES BOOST PREVALENCE OF CHRONIC ILLNESSES

The global healthcare community has had success over the last decade reducing the rates of infectious diseases such as malaria and tuberculosis. Increasingly, chronic diseases are being identified as a key threat to global health. As a result of the aging of the global population, increased rates of obesity, and habits such as cigarette smoking, chronic diseases – including cardiovascular disease, diabetes, glaucoma and chronic respiratory diseases – now account for 60% of deaths around the world. Chronic obstructive pulmonary disease (COPD) alone affects more than 200 million people worldwide, and is projected to become the world's third-leading cause of death by the end of this decade.

Once considered a problem only in wealthy countries, due to economic growth and shifting nutritional habits, the prevalence of people who are overweight or are obese is dramatically increasing in low- and middle-income countries, as reported by the World Health Organization (WHO) in a 2006 study. In fact, there are now more obese people in the world than there are malnourished people, and the WHO ranks obesity as the world's largest public health problem. Obesity rates are rising among both children and adults, in the developed world and in developing economies. One study conducted by Tulane University in the United States estimated that by 2030, the majority of the world's population will be overweight or obese. Obesity and inactive lifestyles are important risk factors for diabetes, cardiovascular conditions and other serious diseases, including cancer. Novartis offers many products to help address the needs of patients with these diseases and other chronic diseases, and plans to continue to make significant investments in new treatments to address this growing health threat.

SCIENTIFIC ADVANCES OPENING NEW OPPORTUNITIES FOR TARGETED THERAPIES

Ongoing developments in technology and advances in scientific understanding, particularly around the human genome, are laying the foundation for the creation of new treatments for medical conditions for which current treatment options are inadequate or non-existent. Further, we are gaining a greater capability to identify the specific biological factors, called "biomarkers," that indicate whether or not a given drug will be effective for a particular patient.

It is estimated that up to 95% of the variability in drug response may be due to genetic differences. Effectively pairing treatments and genetic biomarkers has tremendous potential both in terms of patient health and healthcare savings.

The science of biomarkers is just one element of a larger industry trend towards what is called “personalized medicine.” The emphasis of personalized medicine is on finding the most appropriate treatment for an individual patient. Personalized medicine is expected to be a major growth driver for the industry, with the market expected to quadruple in size over the next five years, growing to approximately USD 160 billion.

The principle of “following the science” forms the basis of the Novartis approach to research and development. We employ state-of-the-art technology in order to achieve an understanding of the mechanism of diseases within the body, and then use this understanding as the basis for the development of targeted therapies, a number of which have already been brought to market. In addition, consistent with our science-focused strategy, Novartis has developed a unit within our Pharmaceuticals Division to refine the diagnostic tools made possible by personalized medicine with a goal of capitalizing on the commercial opportunities they represent.

INCREASINGLY CHALLENGING BUSINESS ENVIRONMENT

The increasing demand for healthcare worldwide and the advances of science offer healthcare companies opportunities for growth and to help improve patient outcomes. However, the operating environment for healthcare companies has become increasingly challenging. The recent global financial crisis coupled with rising demands on healthcare systems have led to a renewed focus on cost containment by governments and payors across the globe. Research and development of new products has been made more complicated and costly due to high levels of regulatory and safety scrutiny. In addition, the industry faces the continued expiration of patents and the growing market prominence of generic products, which represents a significant challenge to our Pharmaceuticals Division.

INCREASED PRESSURE TO CONTAIN HEALTHCARE SPENDING

The growth of overall healthcare costs as a percentage of GDP in many countries means that governments and payors are under intense pressure to control spending even more tightly. These pressures are particularly strong given the lingering effects of the recent global economic and financial crisis, including the ongoing debt crisis in certain countries in Europe. As a result, our businesses, and the healthcare industry in general, are operating in an ever more challenging environment with very significant pricing pressures. These ongoing pressures affect all of our businesses that rely on reimbursement – including Pharmaceuticals, Sandoz, Vaccines and Diagnostics – and involve government imposed industry-wide price reductions, mandatory pricing systems, reference pricing initiatives, an increase in imports of drugs from lower-cost countries to higher-cost countries, shifting of the payment burden to patients through higher co-payments, limiting physicians’ ability to choose among

competing medicines, mandatory substitution of generic drugs, and growing pressure on physicians to reduce the prescribing of patented prescription medicines.

As a result of such measures, we faced downward pricing pressures on our branded and generic drugs in many countries in 2010. For example, Greece imposed temporary price cuts of 3% to 27%. Germany increased the required rebate for certain products from 6% to 16%. Turkey imposed a discount on certain products of 11% to 23%. And Spain imposed a discount of 7.5% on branded drugs and a discount of 25% on generic drugs.

We expect these pressures to continue in 2011 as healthcare payors around the globe – in particular government-controlled health authorities, insurance companies and managed care organizations – step up initiatives to reduce the overall cost of healthcare.

INCREASING REGULATORY, SAFETY HURDLES

Our ability to continue to grow our business and to replace sales lost due to the end of market exclusivity depends upon the success of our research and development activities in identifying and developing high-potential breakthrough products that address unmet needs, are accepted by regulators, patients and physicians, and are reimbursed by payors. Developing new pharmaceutical, biologic and vaccine products and bringing them to market, however, is a highly costly, lengthy and uncertain process. Following several widely publicized issues in recent years, health regulators are increasingly focusing on product safety. In addition, authorities have paid increased attention to the risk/benefit profile of pharmaceutical products with an increasing emphasis on product safety and the value-add of products. 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 analysis 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 pharmaceutical 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 detailed safety and other data on products. These requirements make the maintenance of regulatory approvals and achieving reimbursement for our products increasingly expensive, and further heighten the risk of recalls, product withdrawals, or loss of market share. Going forward, we expect that there will be even greater regulatory attention to minimizing risk and to maximizing benefit on the level of the individual patient.

While Novartis continues to be an industry leader in approvals, similar to 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. We have had REMS and other such requirements imposed as a condi-

tion of approval of our new drugs. These have increased our costs of, and caused delays in obtaining approvals of new products, and have created a risk that safe and efficacious products will not be approved, or will be removed from the market after previously having been approved. Novartis aims to counter such challenges through our focus on quality and innovation, and through our emphasis on understanding disease pathways, which we believe will enable us to continue to bring differentiated new medicines to the market that effectively address patients' unmet medical needs.

PATENT EXPIRATIONS AND GENERIC COMPETITION PRESSURE THE PHARMACEUTICAL INDUSTRY

The pharmaceutical industry faces an unprecedented level of patent expirations in the coming years, a primary factor cited by experts as limiting industry growth. For the industry as a whole, the introduction of new products is not expected to generate the same magnitude of industry sales as the products losing market exclusivity.

The ability to successfully secure and defend intellectual property rights is important to the Pharmaceuticals Division. The loss of exclusivity for one or more important products – due to patent expiration, generic challenges, competition from new branded products, or changes in regulatory status – could have a material negative impact on the Group's results of operations. Novartis takes legally permissible steps to defend its intellectual property rights, including initiating patent infringement lawsuits against generic drug manufacturers.

Some of our best-selling products are expected to face significant competition beginning as early as this year due to the end of market exclusivity resulting from the expiry of patent protection.

- The patent on valsartan, the active ingredient of *Diovan/Co-Diovan/Diovan HCT* (high blood pressure), expires in the major countries of the EU during 2011, in the US in September 2012, and in Japan in 2013. In addition, the active ingredient valsartan is also used in the single-pill combination therapies *Exforge/Exforge HCT* (high blood pressure). While there is an expectation that market exclusivities for *Exforge/Exforge HCT* will remain in the EU and Japan due to regulatory exclusivities, there is a risk that the product may face generic competition in the US beginning in September 2012.
- The patent on zoledronic acid, the active ingredient in *Zometa* (cancer), as well as in *Reclast/Aclasta* (osteoporosis), will expire in 2013 in the US and in 2012 and 2013 in other major markets.
- The patent on *Femara* (cancer) will expire in 2011 in the US and in major European markets, while generic versions have already been launched in some smaller European markets.

We plan to replace revenue lost from such products with revenue from our recently launched products (products launched since 2007 comprised 21% of our sales in 2010). Nevertheless, the loss of sales from key products remains a major challenge to our business.

LEGAL PROCEEDINGS MAY HAVE A SIGNIFICANT NEGATIVE EFFECT ON RESULTS OF OPERATIONS

In recent years, there has been a trend of increasing litigation against the industries of which we are a part, especially in the US. A number of our subsidiaries are, and will likely continue to be, subject to various legal proceedings that arise from time to time. As a result, we may become subject to substantial liabilities that may not be covered by insurance. Litigation is inherently unpredictable, and large verdicts can occur. As a consequence, we may in the future incur judgments or enter into settlements of claims that may have a material adverse effect on our results of operations or cash flows.

Governments and regulatory authorities have been stepping up their compliance and law enforcement activities in recent years in key areas, including corruption, marketing practices, antitrust and trade sanctions. Our businesses have been subject to significant civil litigation as well as governmental investigations and information requests by regulatory authorities. See note 20 to our consolidated financial statements for further information on various legal proceedings.

NOVARTIS STRATEGIES FOR SUSTAINABLE GROWTH

Novartis believes it has an excellent portfolio to address the demands of the fast-changing healthcare environment. In addition, we are implementing longer-term strategic initiatives focusing on our key priorities of innovation, growth and productivity in order to make our growth sustainable.

The Novartis Growth Strategy: Focused Diversification

The Novartis portfolio of healthcare businesses gives us a strong position to meet many of the needs of customers and patients in today's healthcare marketplace. Sustained growth in the industry requires the capacity to adapt to changing and expanding markets, to collaborate with industry stakeholders, and to deliver new treatments based on new medical advancements that improve patient health. We believe that Novartis has both the scope and innovative capacity to deliver this in many attractive segments of the healthcare market globally.

Novartis maintains a leadership position in developing and delivering prescription medicines (Pharmaceuticals), preventative vaccines and diagnostic tools (Vaccines and Diagnostics), complex, differentiated generics and biosimilars (Sandoz), as well as market-leading over-the-counter offerings, medicines for animals, and consumer eye-care products (Consumer Health). In addition, through Alcon, we have acquired a leading presence in the dynamic eye care market. As a consequence, Novartis is not dependent for growth on any one product, region, or market. Our growth is sustained by our strong position in diverse market segments, with a focus on the areas of greatest customer and patient need.

Despite governmental pressure on prices and generic competition, the healthcare landscape continues to offer growth opportunities. We believe that the Novartis portfolio will allow us to continue to grow, and to improve healthcare outcomes for patients across treatment categories all over the world.

Pharmaceuticals: Expanding a Pipeline of Innovative Medicines

Novartis has developed innovative medicines for the treatment of cancer, cardiovascular disease, and neurological conditions, to name a few. Yet urgent patient need remains, as many diseases and conditions lack effective treatments, or any treatment at all. In addition, the aging of the global population and the worldwide acceleration in the incidence of chronic disease and obesity have created new urgency for treatments of conditions such as chronic respiratory conditions, hypertension and diabetes.

Novartis Pharmaceuticals continues to invest in a robust pipeline of promising new medicines to meet the needs of the global patient population. We have led the industry in approvals of new molecular entities in the US and EU over the last several years, and in 2010, our Pharmaceuticals Division invested USD 6.2 billion in core R&D, or 20.1% of net sales.

Further, our ability to constantly rejuvenate our portfolio through new offerings, such as *Gilenya*, which was approved in the US and other countries in 2010 for relapsing forms of multiple sclerosis, allows us to sustain growth even in the face of factors such as patent loss, increased generics competition and government pricing caps. In 2010, recently launched products (those launched since 2007) accounted for USD 6.6 billion, 21% of net sales, compared to 16% in 2009. We expect these products as well as new products to be launched over the next five years to generate an increasing proportion of our sales.

Vaccines and Diagnostics: Preventing Disease

As global healthcare costs rise and chronic diseases become a greater burden in emerging markets, the prevention of disease has taken on new urgency. Governments and payors are increasingly recognizing the essential roles played by vaccines and blood screening in prevention, and in generally maintaining worldwide health.

The vaccines market continues to expand, with expected growth of approximately 10% annually for the next five years. We are focused on developing safe and effective methods to better prevent various forms of the flu as well as other major causes of human illness. Novartis vaccines research is leading advances in the way vaccines are made in order to bring to patients novel offerings to effectively prevent devastating infectious diseases.

We have successfully incorporated cutting edge technologies into our research practices, including the use of genomics and reverse vaccinology. These processes were essential in the development, for example, of our response to last year's A (H1N1) pandemic flu, and in our development of *Bexsero*, our investigative vaccine against the B serogroup of meningococcal disease, which

infects between 20 000 and 80 000 people each year, with infants being most at risk. We have also launched several tailored alliances to bring vaccines to many parts of the developing world, strengthening our presence in key emerging markets and providing vaccines for patients with critical unmet needs.

Sandoz: Creating Affordable, Effective Alternatives to Complex Drugs

Governments and healthcare providers worldwide are increasingly transitioning to generic medicines as an alternative to branded prescription products in order to contain overall healthcare spending. By 2015, branded pharmaceuticals with sales totaling USD 140 billion will lose their patent protection and face potential competition from generic alternatives. There is a particular demand for generic alternatives to complex branded treatments, as these treatments are often among the most costly. This demand has made the market for differentiated, "difficult-to-make" generics one of the fastest growing and most attractive segments of the generics industry. Sandoz has established itself as a leader in developing "difficult-to-make" products, including inhalers, oncology injectables, patches and biosimilars. The significant technological capabilities and expertise required to develop such treatments and related costs represent a significant barrier to entry for most companies. However, Sandoz has been effective in leveraging the innovative technological capabilities and commercial scope of the entire Novartis Group in order to overcome these hurdles. In 2010, Sandoz became the first company to launch generic enoxaparin sodium – the best-selling medicine in its class in the US – delivering on our strategy of being first-to-market with key products, and underscoring our leadership in differentiated products.

In addition, we have selectively strengthened these capabilities via targeted acquisitions, for example of EBEWE Pharma, a private Austrian generics manufacturer specializing in oncology injectables, and of Oriel Therapeutics, a private US company specializing in the development of generic inhaled medicines.

Sandoz has had great success in creating highly complex biosimilars, with a 2010 market segment share of over 50%. Sandoz is also the first and only company with more than one biosimilar on the market in Europe, and achieved the first-ever biosimilar approvals in the US, Japan and Canada. Our strong biosimilars pipeline, with more than eight molecules in development, give us an opportunity to remain at the forefront of this key sector, driving continued growth and making healthcare more affordable for patients.

Consumer Health: Offering At-Home Treatment Options to Patients Worldwide, Medicines for Animals and Consumer Eye Care Products

Accelerated healthcare spending is leading governments, payors and other healthcare providers to seek ways to reduce overall healthcare costs. In many cases, over-the-counter (OTC) medicines provide a cheaper, effective alternative to prescription options. In addition, wider availability of health information via the internet that empowers patients to play a greater role in their own healthcare can lead them to choose OTC offerings in treating or preventing ill-

ness. We plan to drive growth in OTC by increasing the scale of business in top markets and expanding our portfolio in core disease areas such as gastrointestinal and pain relief.

Another way we can maximize the return on investment in research into new medicines is to seek to treat animals with the same compounds as those in medicines for humans. In many cases, our Pharmaceuticals Division's medicines in adjusted doses and dosage forms have applications for animal populations that are important to human societies, such as farm and companion animals. We are able to leverage synergies across research and development and manufacturing to make Animal Health an important second stream of growth for our new and existing treatments.

CIBA Vision, which experienced robust growth in 2010, offers a range of contact lenses and contact lens supplies. These include technologically sophisticated products such as the *Air Optix* line of next generation silicone hydrogel lenses. One of the key products in this line, the *Air Optix Aqua Multifocal* lens, continues to grow sharply after becoming the number one lens for presbyopic users in April 2010, less than 12 months after its launch. We will continue to harness our innovation resources to create tailored vision offerings for developed countries and emerging markets.

Alcon, Inc.: Addressing the World's Eye Care Needs

As the global population continues to age, healthcare demands in eye care are expected to accelerate. Globally, there are already 65 million people with glaucoma and 22 million people with age-related macular degeneration. As a result, eye care has been one of the fastest growing therapeutic areas in the healthcare industry.

Novartis has long held an established position in the eye care segment through CIBA Vision and our ophthalmological pharmaceutical portfolio. In 2010, we further strengthened our ability to meet the needs of patients suffering from eye diseases and to capture the growth opportunities of this sector with the completion in August of our acquisition of a 77% majority ownership interest in Alcon, Inc., the world's largest eye care company. In December, we announced a definitive agreement with Alcon to merge Alcon, Inc. into Novartis, subject to certain approvals and conditions. We currently expect this merger to be completed during the first half of 2011.

Complementary to the portfolios of Novartis Pharmaceuticals and CIBA Vision, Alcon provides innovative pharmaceuticals and surgical equipment that specialist physicians use to treat glaucoma, cataracts, eye infections and allergies and retinal diseases. It also provides consumer eye care products to patients. Once the merger is completed, we intend to combine our complementary businesses into a new division called Alcon in order to better address patient needs as well as to create value for shareholders.

OUR PRIORITIES: INNOVATION, GROWTH AND PRODUCTIVITY

Novartis is committed to the larger goal of becoming the most successful and respected healthcare company in the world. To achieve this, we base our operations on three strategic priorities: leading innovation through new research methods and new collaborations with industry stakeholders to better address customer and patient needs; accelerating growth by responding to key market opportunities and developing new treatments and delivering them quickly and efficiently to customers and patients; and improving productivity by streamlining our organization in order to improve profitability and free up resources for new research and development investments. We believe by focusing on these principles we can enhance our capabilities in meeting the world's healthcare needs and continue to drive value for our investors.

LEADING INNOVATION

Our commitment to scientific innovation underpins our strategy. Our research approach, which focuses on understanding diseases and the molecular pathways that lead to them, has fundamentally changed how we do business. Researching these pathways allows us to establish "proof of concept" via small clinical studies, often in rare diseases, early in the research and development process. Regulatory approval can often also be achieved relatively quickly because of the tremendous unmet need of patients with such rare diseases. While growth is supported by the initial launch of the given compound in the targeted population, we are often also able to conduct parallel development into other potential treatment applications, often with much larger patient populations.

For example, *Ilaris*, a medication initially developed and approved for use in the treatment of cryopyrin-associated periodic syndrome (CAPS), a rare disease with a global patient population of only a few thousand people worldwide, has been shown in recent studies to have the potential to treat gout, certain forms of arthritis, diabetes and cardiovascular disease – conditions with patient populations significantly larger than that of CAPS. *Afinitor*, approved for the treatment of patients with renal cell carcinoma, has received an additional approval this year for the treatment of subependymal giant cell astrocytomas, a benign brain tumor associated with tuberous sclerosis. *Afinitor* is undergoing priority FDA review for treatment of advanced pancreatic neuro-endocrine tumors for which there are no approved treatments, and is currently being studied in late-stage clinical trials for several other cancers, including advanced breast cancer.

Our track record of bringing new medicines to the market continues to be industry-leading. Between 2007 and 2010, we secured approval for 12 new molecular entities from the European Medicines Agency and for six from the US Food and Drug Administration. In each case this tally was higher than any other company, indicating that our commitment to consistent investment in innovation is achieving success.

Novartis is also exploring ways to use technology to improve patient outcomes beyond traditional research and development. We are actively exploring the implementation of telehealth technology, which allows remote monitoring of key health indicators and patient compliance. These technologies could both reduce healthcare costs and improve patient outcomes by allowing healthcare professionals to assess treatments and identify problems in real time.

We believe that our focus on innovation will enable us to continue to produce breakthroughs that address unmet patient need and further grow our business.

ACCELERATING GROWTH

Novartis aims to accelerate growth in two key ways – via the introduction of innovative new products as described above and through expansion of our business in the rapidly expanding so-called emerging markets. We have increased our presence in high-growth markets around the world, particularly in the key markets of Brazil, China, India, Russia, South Korea and Turkey. Long-term investments in these areas are crucial to winning market share and being well-positioned to capture the opportunities their expected growth will offer.

Novartis has taken steps to tailor our presence in these markets to their specific needs. In China, for example, we actively responded to the government's healthcare reform programs by moving from a centralized commercial model to a flexible, decentralized one, in which local teams were empowered to allocate resources and launch programs that made sense for their particular customers. We will continue to expand our commercial infrastructure and capabilities in China, while also pursuing targeted licensing, acquisition and alliance opportunities. In Brazil, we are leveraging our broad portfolio in order to gain scale to compete with consolidating retail channels and to provide key accounts with the full range of Novartis offerings. In India, we are leveraging the capabilities of Pharmaceuticals, Sandoz, and Vaccines and Diagnostics to gain critical mass, and investing in localized products and commercial infrastructure. In Russia, we are building alliances with government, regions and local companies and strengthening key account management to expand our reach. For example, in late 2010, we confirmed our intent to build a new full-scale pharmaceutical manufacturing plant in St. Petersburg, as part of an overall USD 500 million commitment in local infrastructure and collaborative healthcare initiatives planned over a five-year period.

In 2010, Novartis (excluding Alcon) generated USD 4.6 billion, or approximately 10% (2009: 9%) of net sales, from the Group's six priority emerging markets of Brazil, China, India, Russia, South Korea and Turkey, as compared with USD 30.8 billion, or approximately 64% (2009: 65%) of the Group's net sales, in the world's

seven largest developed markets. However, combined net sales in the six priority emerging markets grew at the more rapid pace of 12% in constant currencies in 2010, compared to 8% constant currency growth achieved in the seven largest developed markets. Hence, emerging markets are making increasingly significant contributions to our results, a trend we expect to continue.

In addition, Novartis recognizes that in order to achieve our larger goal of addressing unmet customer and patient needs worldwide, we must work with other stakeholders to help them achieve their goals. Hence, we are adapting our commercial strategy, moving away from a transactional model and instead seeking new alliances with our customers based on a shared commitment to improving patient outcomes. We are working together with hospitals to improve patient care through our broad portfolio, with retailers to provide comprehensive healthcare solutions, and with payors to support disease management programs and to apply health economics and outcomes research. As the healthcare marketplace expands and evolves, Novartis believes such tailored approaches to customers will be essential to sustaining long-term growth and promoting global health.

DRIVING PRODUCTIVITY

Productivity forms a central strategic principle for Novartis. We integrate efforts toward greater productivity and increased efficiency into all our operations, constantly seeking ways to simplify and streamline processes and to reduce costs to improve margins. Productivity thus forms part of the culture within Novartis, as we look for ways to free up resources that can be devoted to customers, growth initiatives, and research and development into new offerings for patients with unmet needs.

In recent years, we have also launched several specific initiatives to improve productivity. Our Customers First program, first launched in 2009, continues to capture cross-divisional synergies that lower operational costs and foster additional growth. The program leverages the breadth of divisions to better meet customer needs, to drive top-line growth, to increase service quality, and to achieve back-office savings. Rolled out in 45 countries, the program has been successful in improving annual incremental sales in several regions.

In addition, we recently launched a Group-wide review of our manufacturing footprint of 86 manufacturing sites and 17 in-house operated warehouses. We have also realigned our Pharmaceuticals commercial team in the US to put additional resources behind the greatest growth opportunities. Finally, we have made Procurement a major source of savings by leveraging our scale through implementation of global category management and by creating country Centers of Excellence in key markets.

ACQUISITIONS, DIVESTMENTS AND OTHER SIGNIFICANT TRANSACTIONS

ACQUISITIONS IN 2010

Corporate – Alcon, Inc.

On August 25, Novartis completed the acquisition of a further 52% interest in Alcon, Inc. (Alcon) following on from the January 4, 2010 announcement that Novartis had exercised its call option to acquire Nestlé's remaining 52% Alcon interest for approximately USD 28.3 billion or USD 180 per share. This increased the interest in Alcon to a 77% controlling interest as Novartis had already acquired an initial 25% Alcon interest from Nestlé for USD 10.4 billion or USD 143 per share in July 2008.

The overall purchase price of USD 38.7 billion includes certain adjustments for Alcon dividends and interest due. Sources of financing for the 77% ownership, including the initial 25% stake purchased in mid-2008, were USD 17.0 billion of available cash, and USD 13.5 billion from bonds raised in March 2010 as well as in 2008 and 2009, with the remaining USD 8.2 billion financed with US commercial paper issued in 2010.

The purchase price allocation is final, except for any matters that may arise following 100% ownership. It resulted in a fair value of net identifiable assets of USD 27.1 billion. Novartis has chosen to record the outstanding non-controlling interests in Alcon at their proportionate share of identifiable net assets amounting to USD 6.3 billion. Accordingly, goodwill (USD 17.9 billion) is calculated as the difference between the sum of the fair value of the consideration transferred for the additional 52% interest (USD 28.3 billion) and the fair value of the initial 25% interest of Novartis (USD 10.4 billion) in Alcon less 77% of the amount of net identifiable assets recognized (USD 20.8 billion) at the acquisition date.

For business combinations achieved in stages, IFRS requires that any previously held interest of an acquirer in an acquiree is adjusted to its fair value through the consolidated income statement as of the acquisition date. The agreement that Novartis entered into with Nestlé in 2008 specified an average price of up to USD 168 per share for all of the approximately 77% interest in Alcon held by Nestlé, including USD 143 per share for the initial 25% interest acquired by Novartis in 2008, and a maximum of USD 181 per share for the remaining 52%, including a premium for the change of majority ownership.

Novartis has reassessed the fair value of the initial 25% non-controlling interest in Alcon it acquired from Nestlé in 2008. Novartis determined a fair value of approximately USD 38.7 billion for the total interest in Alcon currently owned by Novartis based on a price of USD 168 per Alcon share, which is the per share value proposed for acquiring the outstanding non-controlling interests, discussed further below, and also the approximate average price per share paid by Novartis for the total interest acquired from Nestlé. Novartis assessed the fair value attributable to the initial 25% non-controlling interest as of August 25, 2010 (the date of the

acquisition of the 52% majority ownership interest in Alcon) by deducting from the fair value of approximately USD 38.7 billion for its total interest in Alcon acquired from Nestlé the amount paid for the 52% majority ownership interest of USD 28.3 billion (which included a premium for gaining majority ownership). This results in a fair value for the initial non-controlling interest in Alcon of approximately USD 10.4 billion. As this fair value of the initial non-controlling interest exceeds the recorded book value of the initial non-controlling interest of approximately USD 10.0 billion, Novartis has recorded a revaluation gain of USD 378 million.

This gain has been reduced by USD 43 million of accumulated losses recorded in the comprehensive income of Novartis since the July 2008 acquisition date of the initial interest. These accumulated losses were recorded under the equity accounting method, which requires such accumulated losses to be recycled into the consolidated income statement at the time of acquiring majority ownership. The net amount of USD 335 million is recorded as a gain under Income from Associated Companies.

Since the acquisition of majority ownership in Alcon, Inc. on August 25, 2010, Alcon has contributed net sales USD 2.4 billion and operating income of USD 323 million.

On December 15, Novartis announced that it has entered into a definitive agreement to merge Alcon into Novartis for Novartis shares and a Contingent Value Amount (CVA). Under the terms of the agreement, the merger consideration will include up to 2.8 Novartis shares and a CVA to be settled in cash that will in aggregate equal USD 168 per share. If the value of 2.8 Novartis shares is more than USD 168 the number of Novartis shares will be reduced accordingly. The total merger consideration for the non-controlling interest will be USD 12.9 billion, comprising of up to 215 million Novartis shares and a potential CVA to be settled in cash.

The merger is currently expected to be completed during the first half of 2011 and is conditional on clearance of a registration statement by the US Securities and Exchange Commission, two-thirds approval by the shareholders of each of Novartis and Alcon voting at their respective meetings and other customary closing conditions.

The proposed acquisition of the remaining outstanding non-controlling interests in Alcon via the merger is a separate transaction following the previous acquisition of majority ownership in Alcon by Novartis. As it changes the Novartis ownership in Alcon but does not result in a change of control, it is accounted for as an equity transaction as required by IAS 27R, meaning assets and liabilities are not revalued as of the date of the acquisition of the outstanding non-controlling interests via the merger, goodwill does not arise and any excess of the consideration paid to acquire the outstanding non-controlling interest over the proportionate share of the outstanding non-controlling interests' net assets is recognized against consolidated equity.

Pharmaceuticals – Corthera

On February 3, Novartis completed the 100% acquisition (announced on December 23, 2009) of the privately held US-based Corthera Inc., gaining worldwide rights to relaxin for the treatment of acute decompensated heart failure and assumed full responsibility for development and commercialization for a total purchase consideration of USD 327 million. This amount consists of an initial cash payment of USD 120 million and USD 207 million of deferred contingent consideration. The deferred contingent consideration is the net present value of the additional milestone payments due to Corthera's previous shareholders which they are eligible to receive contingent upon the achievement of specified development and commercialization milestones. The final purchase price allocation resulted in net identified assets of USD 309 million and goodwill of USD 18 million. Results of operations since the acquisition date were not material.

Sandoz – Oriel Therapeutics

On June 1, Sandoz completed the 100% acquisition of the privately held US-based Oriel Therapeutics Inc., to broaden its portfolio of projects in the field of respiratory drugs for a total purchase consideration of USD 332 million. This amount consists of an initial cash payment of USD 74 million and USD 258 million of deferred contingent consideration. Oriel's previous shareholders are eligible to receive milestone payments, which are contingent upon the company achieving future development steps, regulatory approvals and market launches, and sales royalties. The total USD 258 million of deferred contingent consideration represents the net present value of expected milestone and royalty payments. The final purchase price allocation, including the valuation of the contingent payment elements of the purchase price, resulted in net identified assets of USD 281 million and goodwill of USD 51 million. Results of operations since the acquisition date were not material.

ACQUISITIONS IN 2009

Sandoz – EBEWE Pharma

On May 20, Novartis announced a definitive agreement for Sandoz to acquire 100% of the specialty generic injectables business of EBEWE Pharma for EUR 925 million (USD 1.3 billion) in cash, to be adjusted for any cash or debt assumed at closing. This transaction was completed on September 22, 2009. The first payment of EUR 600 million (USD 0.9 billion) was made in 2009, with the balance paid in 2010. Based on a final purchase price allocation, EBEWE's net identified assets were USD 0.7 billion, which resulted in goodwill of USD 0.5 billion. Results of operations from this acquisition, which were not material in 2009, were included from the completion date of this transaction.

Vaccines and Diagnostics – Zhejiang Tianyuan

On November 4, Novartis announced a definitive agreement to acquire an 85% stake in the Chinese vaccines company Zhejiang Tianyuan Bio-Pharmaceutical Co., Ltd. as part of a strategic initiative to build a vaccines industry leader in China and expand the Group's limited presence in this fast-growing market segment. China is the world's third-largest vaccines market, with annual industry sales of more than USD 1 billion and expectations for sustained double-digit growth given the government's commitment to improve access to quality healthcare. Terms call for Novartis to purchase an 85% majority interest for approximately USD 125 million in cash. The transaction, which is expected to be completed in 2011, is subject to certain closing conditions, including receipt of government and regulatory approvals in China.

OTHER SIGNIFICANT TRANSACTIONS IN 2010

Corporate – Issuance of bond in US dollars

On March 9, Novartis issued a three-tranche bond totaling USD 5.0 billion registered with the US Securities and Exchange Commission as part of a shelf registration statement filed by Novartis in 2008. A 1.9% three-year tranche totaling USD 2.0 billion, a 2.9% five-year tranche totaling USD 2.0 billion and a 4.4% 10-year tranche totaling USD 1.0 billion were issued by the Group's US entity, Novartis Capital Corp. All tranches are unconditionally guaranteed by Novartis AG.

Corporate – Change of pension plan in Switzerland

On April 23, the Board of Trustees of the Novartis Swiss Pension Fund agreed to amend the conditions and insured benefits of the current Swiss pension plan with effect from January 1, 2011. These amendments do not have an impact on existing pensions in payment or on plan members born before January 1, 1956. Under the previous rules, benefits from the plan are primarily linked to the level of salary in the years prior to retirement while under the new rules benefits are also partially linked to the level of contributions made by the members during their active service period up to their retirement. This has led to changes in the amounts that need to be included in the Group's consolidated financial statements prepared using IFRS in respect of the Swiss Pension Fund.

As part of this change, Novartis, supported by the Swiss Pension Fund, will make transitional payments, which vary according to the member's age and years of service. As a result, it is estimated that additional payments will be made over a ten-year period of up to approximately USD 481 million (CHF 453 million) depending on whether or not all current members affected by the change remain in the plan over this ten-year period.

The accounting consequence of this change in the Swiss pension plan rules results in the Group's consolidated financial statements prepared under IFRS reflecting a net pre-tax curtailment gain of USD 265 million (CHF 283 million) in 2010. This calculation only takes into account the discounted value of transition payments of USD 202 million (CHF 219 million) attributed to already completed years of service of the affected plan members as calculated in accordance with IFRS requirements. It does not take into account any amount for transitional payments related to their future years of service.

OTHER SIGNIFICANT TRANSACTIONS IN 2009

Corporate – Issuance of bond in US dollars

On February 5, Novartis issued a two-tranche bond totaling USD 5.0 billion registered with the US Securities and Exchange Commission as part of a shelf registration statement filed by Novartis in 2008. A 4.125% five-year tranche totaling USD 2.0 billion was issued by the Group's US entity, Novartis Capital Corp., while a 5.125% 10-year tranche totaling USD 3.0 billion was issued by the Group's Bermuda unit, Novartis Securities Investment Ltd. Both tranches are unconditionally guaranteed by Novartis AG.

Corporate – Issuance of bond in euros

On June 2, Novartis issued a EUR 1.5 billion bond (approximately USD 2.1 billion) with a coupon of 4.25% under its EUR 15 billion Euro Medium Term Note Programme. The seven-year bond, issued by Novartis Finance S.A., Luxembourg, has a maturity date of June 15, 2016, and is guaranteed by Novartis AG.

Corporate – Novartis India Ltd.

On June 8, Novartis completed a tender offer to acquire additional shares from public shareholders and increased its stake in the majority-owned Indian subsidiary, Novartis India Ltd., to 76.4% from 50.9% for approximately INR 3.8 billion (USD 80 million). Almost all large institutional investors and quasi-institutional shareholders participated in the offer. This transaction resulted in USD 57 million of goodwill.

Pharmaceuticals – Idenix

On August 5, Novartis did not participate in an underwritten public offering by Idenix Pharmaceuticals, which reduced the Group's stake to 47% from the pre-offering level of 53%. As a result of this offering, Novartis no longer controls this company, so Idenix was deconsolidated with effect from September 1, 2009. Idenix has been accounted for on an equity basis since this date, which had no material impact on the Group's consolidated income statement.

CORE RESULTS AS DEFINED BY NOVARTIS

The Group's operating income, net income and earnings per share from continuing operations have been significantly affected by acquisition-related factors, including the amortization of intangible assets, impairment charges, expenses relating to the integration of acquisitions as well as other items that are, or are expected to accumulate 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 these performance measures.

Novartis uses these core measures as important factors in assessing the Group's performance in conjunction with other performance metrics. The following are examples of how these core measures are utilized:

- In addition to monthly reports containing financial information prepared under International Financial Reporting Standards (IFRS), senior management receives a monthly analysis incorporating these core measures.
- Annual budgets are prepared for both IFRS and core measures.

Despite the use of these measures to 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 core measures (unlike IFRS measures) may not be comparable to the calculation of similar measures of other companies. These core measures are presented solely to permit investors to more fully understand how the Group's management assesses underlying performance. These core measures are not, and should not be viewed as, a substitute for IFRS measures.

As an internal measure of Group performance, these core measures have limitations, and the performance management process is not solely restricted to these metrics. A limitation of the core measures is that they provide a view of the Group's operations without including all events during a period, such as the effects of an acquisition or amortization of purchased intangible assets.

The following tables reconcile IFRS results to core results:

2010 AND 2009 RECONCILIATION OF IFRS RESULTS TO CORE RESULTS – GROUP

2010	IFRS results USD millions	Amortization of intangible assets ¹ USD millions	Impairments ² USD millions	Acquisition- related restructuring and integration items ³ USD millions	Exceptional items ⁴ USD millions	Core results USD millions
Gross profit	37 073	1 061	- 90	471	2	38 517
Operating income	11 526	1 135	981	600	- 236	14 006
Income before taxes	11 702	1 560	981	280	- 104	14 419
Taxes	- 1 733					- 2 390 ⁵
Net income	9 969					12 029
Basic earnings per share (USD) ⁶	4.28					5.15
The following are adjustments to arrive at Core Gross Profit						
Cost of Goods Sold	- 14 488	1 061	- 90	471	2	- 13 044
The following are adjustments to arrive at Core Operating Income						
Marketing & Sales	- 13 316	1				- 13 315
Research & Development	- 9 070	69	903		18	- 8 080
General & Administration	- 2 481	4				- 2 477
Other income	1 234		- 10		- 739	485
Other expense	- 1 914		178	129	483	- 1 124
The following are adjustments to arrive at Core Income before taxes						
Income from associated companies	804	425		- 320	132	1 041

¹Amortization of intangible assets: Cost of Goods Sold includes recurring amortization of acquired rights to in-market products and other production-related intangible assets; Marketing & Sales includes the recurring amortization of intangible assets; Research & Development includes the recurring amortization of acquired rights for technology platforms; General & Administration includes the recurring amortization of intangible assets; Income from associated companies includes the recurring amortization of the purchase price allocation related to intangible assets, primarily for the Roche and Alcon investments.

²Impairments: Cost of Goods Sold includes impairment charges for acquired rights to in-market products and production-related impairment charges, including an additional reversal of USD 100 million in Pharmaceuticals for an impairment charge taken in 2007 for *Famvir*; Research & Development includes write-offs related to in-process Research & Development, mainly charges totalling USD 856 million for the discontinuation of *Mycograb*, albinterferon alfa-2b, PTZ601 and ASA404 development projects; Other income includes the reversal of impairments, primarily for property, plant & equipment; Other expense includes impairments, primarily for financial assets, thereof USD 45 million in Pharmaceuticals, USD 98 million in Vaccines and Diagnostics and USD 20 million in Corporate as well as USD 14 million in Vaccines and Diagnostics for property, plant & equipment.

³Acquisition-related restructuring and integration items: Cost of Goods Sold includes mainly charges of USD 467 million related to the required inventory step-up to estimated fair value in Alcon; Other expense includes charges in Corporate of USD 99 million related to the acquisition of Alcon and USD 30 million recorded in Alcon related to the change of majority ownership of Alcon; Income from associated companies includes a USD 378 million revaluation gain on the initial 25% interest in Alcon, a USD 43 million charge for the recycling of losses accumulated in comprehensive income related to Alcon since its inclusion as an associated company in 2008, and a USD 15 million charge for the change of majority ownership.

⁴Exceptional items: Cost of Goods Sold includes charges related to inventory write-off in Vaccines and Diagnostics due to a restructuring program; Research & Development includes an expense of USD 18 million for termination of a co-development contract in Sandoz; Other income includes a divestment gain of USD 392 million for the divestment of *Enablex* in Pharmaceuticals, proceeds of USD 42 million from a legal settlement in Pharmaceuticals with Teva regarding *Famvir*, a divestment gain of USD 33 million for *Tofranil* in Pharmaceuticals and a Swiss pension curtailment gain of USD 265 million in Corporate; Other expense includes mainly a USD 152.5 million provision for a gender discrimination case in the US in Pharmaceuticals, charges of USD 203 million for restructuring programs in Pharmaceuticals, Vaccines and Diagnostics, and Sandoz, a USD 25.5 million provision in connection with a government investigation in the US in Pharmaceuticals, USD 45 million for a legal settlement in Vaccines and Diagnostics, and a USD 38 million charge for a legal settlement in Sandoz; Income from associated companies reflects an additional charge of USD 43 million for the Novartis share of Roche's restructuring charges for Genentech taken in the second half of 2009 but recorded by Novartis in 2010 as well as an estimated charge of USD 89 million for the Novartis share of Roche's restructuring that was recently announced.

⁵Taxes on the adjustments between IFRS and core results take into account, for each individual item included in the adjustment, the tax rate that is applicable to the item in the jurisdiction where the adjustment arises. Generally this results in amortization of intangible assets and acquisition-related restructuring and integration items having a full tax impact whereas tax impacts on impairments can only be taken into account if the changes in value in the underlying asset are tax deductible in the respective jurisdiction where the asset is recorded. There is usually a tax impact on exceptional items although this is not the case for items arising from criminal settlements in certain jurisdictions. Adjustments related to income from associated companies are recorded net of any related tax effect. Due to these factors and the differing effective tax rates in the various jurisdictions, the tax on the total adjustments of USD 2.7 billion to arrive at the core results before tax amounts to USD 657 million. This results in the average tax rate on the adjustments being 24.2%.

⁶Earnings per share (EPS) is calculated on the amount of net income attributable to shareholders of Novartis AG.

2009	IFRS results USD millions	Amortization of intangible assets ¹ USD millions	Impairments ² USD millions	Acquisition- related restructuring and integration items ³ USD millions	Exceptional items ⁴ USD millions	Core results USD millions
Gross profit	32 924	938	- 69	18	- 28	33 783
Operating income	9 982	1 025	75	18	337	11 437
Income before taxes	9 922	1 594	167	18	434	12 135
Taxes	- 1 468					- 1 868 ⁵
Net income	8 454					10 267
Basic earnings per share (USD) ⁶	3.70					4.50

The following are adjustments to arrive at Core Gross Profit

Other revenues	836				- 28	808
Cost of Goods Sold	- 12 179	938	- 69	18		- 11 292

The following are adjustments to arrive at Core Operating Income

Research & Development	- 7 469	87	95			- 7 287
Other income	782				- 65	717
Other expense	- 1 924		49		430	- 1 445

The following are adjustments to arrive at Core Income before taxes

Income from associated companies	293	569	92		97	1 051
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¹Amortization of intangible assets: Cost of Goods Sold includes recurring amortization of acquired rights to in-market products and other production-related intangible assets; R&D includes the recurring amortization of acquired rights for technology platforms; Income from associated companies includes the amortization of the purchase price allocation related to intangible assets, primarily for the Roche and Alcon investments.

²Impairments: Cost of Goods Sold includes impairment charges for acquired rights to in-market products and production-related impairment charges, including a partial reversal of USD 100 million in Pharmaceuticals for an impairment taken in 2007 for *Famvir*; R&D includes write-offs related to in-process R&D; Other expense includes impairments, primarily for financial assets; Income from associated companies reflects the USD 92 million impairment charge taken for an Alcon pharmaceuticals development project.

³Acquisition-related restructuring and integration items: Cost of Goods Sold includes charges of USD 18 million related to the EBEWE Pharma specialty generics business acquisition.

⁴Exceptional items: Other revenues reflects a USD 28 million gain from a settlement of Vaccines and Diagnostics; Other income reflects divestment gains in Pharmaceuticals; Other expense includes an increase of USD 345 million in legal provisions principally for the *Trileptal* and *TOBI* US government investigations; Income from associated companies reflects a USD 97 million one-time charge for the Novartis share of Roche's restructuring charges for Genentech.

⁵Taxes on the adjustments between IFRS and core results take into account, for each individual item included in the adjustment, the tax rate that is applicable to the item in the jurisdiction where the adjustment arises. Generally this results in amortization of intangible assets and acquisition-related restructuring and integration items having a full tax impact whereas tax impacts on impairments can only be taken into account if the changes in value in the underlying asset are tax deductible in the respective jurisdiction where the asset is recorded. There is usually a tax impact on exceptional items although this is not the case for items arising from criminal settlements in certain jurisdictions. Adjustments related to income from associated companies are recorded net of any related tax effect. Due to these factors and the differing effective tax rates in the various jurisdictions, the tax on the total adjustments of USD 2.2 billion to arrive at the core results before tax amounts to USD 400 million. This results in the average tax rate on the adjustments being 18.1%.

⁶Earnings per share (EPS) is calculated on the amount of net income attributable to shareholders of Novartis AG.

2010 AND 2009 RECONCILIATION OF IFRS RESULTS TO CORE RESULTS – PHARMACEUTICALS

	FY 2010 IFRS results USD m	Amortization of intangible assets ¹ USD m	Impairments ² USD m	Acquisition-related restructuring and integration items USD m	Exceptional items ³ USD m	FY 2010 Core results USD m
Gross profit	25 776	421	- 100			26 097
Operating income	8 798	453	833		- 175	9 909

The following are adjustments to arrive at Core Gross Profit

Cost of Goods Sold	- 5 361	421	- 100			- 5 040
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The following are adjustments to arrive at Core Operating Income

Research & Development	- 7 081	32	896			- 6 153
Other income	687		- 8		- 474	205
Other expense	- 971		45		299	- 627

¹Amortization 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.

²Impairments: Cost of Goods Sold includes impairment charges for acquired rights to in-market products and other production-related impairment charges, including an additional reversal of USD 100 million for an impairment charge taken in 2007 for *Famvir*; Research & Development includes write-offs related to in-process Research & Development, mainly a total of USD 704 million charge for the discontinuation of *Mycograb* (USD 356 million), albinterferon alfa-2b (USD 228 million) and ASA404 (USD 120 million) development projects and a net pre-tax impairment charge of USD 152 million (USD 250 million related to the value of the intangible asset offset by a release of a USD 98 million liability related to the estimated value of a contingent milestone consideration) for termination of the PTZ601 development project; Other income includes the reversal of impairments, primarily for property, plant & equipment; Other expense includes impairments, primarily for financial assets.

³Exceptional items: Other income includes a divestment gain of USD 392 million for the divestment of *Enblex*, proceeds of USD 42 million from a legal settlement with Teva regarding *Famvir* and a divestment gain of USD 33 million for *Totranil*; Other expense includes a USD 152.5 million provision for a gender discrimination case in the US, a USD 111 million charge for restructuring in the US as well as a USD 25.5 million provision in connection with a government investigation in the US.

	FY 2009 IFRS results USD m	Amortization of intangible assets ¹ USD m	Impairments ² USD m	Acquisition-related restructuring and integration items USD m	Exceptional items ³ USD m	FY 2009 Core results USD m
Gross profit	24 135	322	- 92			24 365
Operating income	8 392	366	30		280	9 068

The following are adjustments to arrive at Core Gross Profit

Cost of Goods Sold	- 4 955	322	- 92			- 4 725
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The following are adjustments to arrive at Core Operating Income

Research & Development	- 5 840	44	81			- 5 715
Other income	414				- 65	349
Other expense	- 1 078		41		345	- 692

¹Amortization of intangible assets: Cost of Goods Sold includes recurring amortization of acquired rights to in-market products and other production-related intangible assets; R&D includes the recurring amortization of acquired rights for technology platforms.

²Impairments: Cost of Goods Sold includes impairment charges for acquired rights to in-market products and production-related impairment charges, including a partial reversal of USD 100 million for an impairment taken in 2007 for *Famvir*; R&D includes write-offs related to in-process R&D; Other expense includes impairments, primarily for financial assets.

³Exceptional items: Other income reflects divestment gains; Other expense includes USD 345 million for legal provisions, litigations and exceptional settlements principally for the *Trileptal* US government investigation.

2010 AND 2009 RECONCILIATION OF IFRS RESULTS TO CORE RESULTS – VACCINES AND DIAGNOSTICS

	FY 2010 IFRS results USD m	Amortization of intangible assets ¹ USD m	Impairments ² USD m	Acquisition-related restructuring and integration items USD m	Exceptional items ³ USD m	FY 2010 Core results USD m
Gross profit	1 860	242			2	2 104
Operating income	612	259	112		83	1 066
The following are adjustments to arrive at Core Gross Profit						
Cost of Goods Sold	- 1 551	242			2	- 1 307
The following are adjustments to arrive at Core Operating Income						
Research & Development	- 523	17				- 506
Other expense	- 273		112		81	- 80
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. ² Impairments: Other expense relates to a charge of USD 98 million for an impairment of a financial asset and a charge of USD 14 million for impairments for property, plant & equipment due to a restructuring program in the UK. ³ Exceptional items: Cost of Goods Sold includes charges related to inventory write-off due to a restructuring program; Other expense relates to a USD 45 million expense for a legal settlement and to a USD 36 million expense for a restructuring program in the UK.						

	FY 2009 IFRS results USD m	Amortization of intangible assets ¹ USD m	Impairments ² USD m	Acquisition-related restructuring and integration items USD m	Exceptional items ³ USD m	FY 2009 Core results USD m
Gross profit	1 445	287			- 28	1 704
Operating income	372	312	18		17	719
The following are adjustments to arrive at Core Gross Profit						
Other revenues	390				- 28	362
Cost of Goods Sold	- 1 415	287				- 1 128
The following are adjustments to arrive at Core Operating Income						
Research & Development	- 508	25	18			- 465
Other expense	- 119				45	- 74
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; R&D includes the recurring amortization of acquired rights for technology platforms. ² Impairments: R&D includes write-offs related to in-process R&D. ³ Exceptional items: Other revenues reflects a USD 28 million gain from a settlement; Other expense includes USD 45 million for legal provisions, litigations and exceptional settlements.						

2010 AND 2009 RECONCILIATION OF IFRS RESULTS TO CORE RESULTS – SANDOZ

	FY 2010 IFRS results USD m	Amortization of intangible assets ¹ USD m	Impairments ² USD m	Acquisition-related restructuring and integration items ³ USD m	Exceptional items ⁴ USD m	FY 2010 Core results USD m
Gross profit	3 947	278	4	4		4 233
Operating income	1 272	293	11	4	105	1 685

The following are adjustments to arrive at Core Gross Profit

Cost of Goods Sold	-4 854	278	4	4		-4 568
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The following are adjustments to arrive at Core Operating Income

Research & Development	-658	15	7		18	-618
Other income	77		-1			76
Other expense	-295		1		87	-207

¹Amortization 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.

²Impairments: Cost of Goods Sold includes impairment charges for acquired rights to in-market products and other production-related impairment charges; Research & Development includes write-offs related to in-process Research & Development; Other income includes impairment reversals, primarily for property, plant & equipment; Other expense includes impairments, primarily for property, plant & equipment.

³Acquisition-related restructuring and integration items: Cost of Goods Sold includes charges of USD 4 million related to business acquisitions.

⁴Exceptional items: Research & Development includes an expense for termination of a co-development contract; Other expense includes a USD 49 million charge for a restructuring program in Germany and a USD 38 million charge for a legal settlement in the US.

	FY 2009 IFRS results USD m	Amortization of intangible assets ¹ USD m	Impairments ² USD m	Acquisition-related restructuring and integration items ³ USD m	Exceptional items ⁴ USD m	FY 2009 Core results USD m
Gross profit	3 566	246	10	18		3 840
Operating income	1 071	260	6	18	40	1 395

The following are adjustments to arrive at Core Gross Profit

Cost of Goods Sold	-4 201	246	10	18		-3 927
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The following are adjustments to arrive at Core Operating Income

Research & Development	-613	14	-4			-603
Other expense	-272				40	-232

¹Amortization of intangible assets: Cost of Goods Sold includes recurring amortization of acquired rights to in-market products and other production-related intangible assets; R&D includes the recurring amortization of acquired rights for technology platforms.

²Impairments: Cost of Goods Sold includes impairment charges for acquired rights to in-market products and production-related impairment charges; R&D includes write-offs related to in-process R&D.

³Acquisition-related restructuring and integration items: Cost of Goods Sold includes charges of USD 18 million related to the EBEWE Pharma specialty generics business acquisition.

⁴Exceptional items: Other expense includes a USD 40 million one-time charge in Sandoz for German commercial operations restructuring.

2010 AND 2009 RECONCILIATION OF IFRS RESULTS TO CORE RESULTS – CONSUMER HEALTH

	FY 2010 IFRS results USD m	Amortization of intangible assets ¹ USD m	Impairments ² USD m	Acquisition-related restructuring and integration items USD m	Exceptional items USD m	FY 2010 Core results USD m
Gross profit	4 145	93	6			4 244
Operating income	1 153	94	6			1 253
The following are adjustments to arrive at Core Gross Profit						
Cost of Goods Sold	- 2 173	93	6			- 2 074
The following are adjustments to arrive at Core Operating Income						
Marketing & Sales	- 2 238	1				- 2 237
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; Marketing & Sales includes the recurring amortization of intangible assets.						
² Impairments: Cost of Goods Sold includes impairment charges for acquired rights to in-market products and other production-related impairment charges.						

	FY 2009 IFRS results USD m	Amortization of intangible assets ¹ USD m	Impairments ² USD m	Acquisition-related restructuring and integration items USD m	Exceptional items USD m	FY 2009 Core results USD m
Gross profit	3 804	83	13			3 900
Operating income	1 016	84	18			1 118
The following are adjustments to arrive at Core Gross Profit						
Cost of Goods Sold	- 2 111	83	13			- 2 015
The following are adjustments to arrive at Core Operating Income						
Research & Development	- 346	1				- 345
Other expense	- 84		5			- 79
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; R&D includes the recurring amortization of acquired rights for technology platforms.						
² Impairments: Cost of Goods Sold includes impairment charges for acquired rights to in-market products and production-related impairment charges; Other expense includes impairments, primarily for property, plant and equipment.						

2010 RECONCILIATION OF IFRS RESULTS TO CORE RESULTS – ALCON, INC. (CONSOLIDATED FROM AUGUST 25, 2010)

	FY 2010 IFRS results USD m	Amortization of intangible assets ¹ USD m	Impairments USD m	Acquisition-related restructuring and integration items ² USD m	Exceptional items USD m	FY 2010 Core results USD m
Gross profit	1 347	27		467		1 841
Operating income	323	32		497		852
The following are adjustments to arrive at Core Gross Profit						
Cost of Goods Sold	- 1 082	27		467		- 588
The following are adjustments to arrive at Core Operating Income						
Research & Development	- 254	1				- 253
General & Administration	- 140	4				- 136
Other expense	- 30			30		
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; General & Administration includes the recurring amortization of intangible assets.						
² Acquisition-related restructuring and integration items: Cost of Goods Sold includes charges of USD 467 million related to the required inventory step-up to estimated fair value; Other expense includes charges of USD 30 million related to the change of majority ownership.						

2010 AND 2009 RECONCILIATION OF SEGMENT OPERATING INCOME TO CORE OPERATING INCOME

	Pharmaceuticals		Vaccines and Diagnostics	
	2010 USD millions	2009 USD millions	2010 USD millions	2009 USD millions
Operating income	8 798	8 392	612	372
Amortization of intangible assets	453	366	259	312
Impairments				
Intangible assets	796	- 11		18
Property, plant & equipment	- 4	4	14	
Financial assets	41	37	98	
Total impairments	833	30	112	18
Acquisition-related restructuring and integration items (including acquisition-related accounting impact of inventory adjustments), net				
Exceptional items				
Exceptional gains from divesting brands, subsidiaries and financial investments	- 425	- 65		
Other restructuring expenses	111		38	
Legal provisions, litigations and exceptional settlements	139	345	45	17
Swiss pension curtailment gain				
Other exceptional items				
Total exceptional items	- 175	280	83	17
Total adjustments	1 111	676	454	347
Core operating income	9 909	9 068	1 066	719
Core return on net sales	32.4%	31.8%	36.5%	29.7%

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 2010 and 2009 for currencies most important to the Group (excl. Alcon):

Currency		2010 %	2009 %
US dollar (USD)	Net sales	36	35
	Operating expenses	34	33
Euro (EUR)	Net sales	29	31
	Operating expenses	27	31
Swiss franc (CHF)	Net sales	2	3
	Operating expenses	13	12
Japanese yen (JPY)	Net sales	8	8
	Operating expenses	4	4
Other currencies	Net sales	25	23
	Operating expenses	22	20

We prepare our consolidated financial statements in US dollars. As a result, fluctuations in the exchange rates between the US dollar and other currencies may have a significant effect on both the Group's results of operations as well as on the reported value of our assets, liabilities, revenue and expenses as measured in US dollars. 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. 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. For purposes of the Group's consolidated income statements, revenue and expense items in local currencies are translated into US dollars at average exchange rates prevailing during the relevant period.

We seek to manage currency exposure by engaging in hedging transactions where management deems appropriate. For 2010, 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 transac-

Sandoz		Consumer Health		Alcon, Inc.	Corporate		Total	
2010 USD millions	2009 USD millions	2010 USD millions	2009 USD millions	2010 USD millions	2010 USD millions	2009 USD millions	2010 USD millions	2009 USD millions
1 272	1 071	1 153	1 016	323	- 632	- 869	11 526	9 982
293	260	94	84	32	4	3	1 135	1 025
11	6	6	13				813	26
			5				10	9
					19	3	158	40
11	6	6	18		19	3	981	75
4	18			497	99		600	18
							- 425	- 65
49	40						198	40
56							240	362
					- 265		- 265	
					16		16	
105	40				- 249		- 236	337
413	324	100	102	529	- 127	6	2 480	1 455
1 685	1 395	1 253	1 118	852	- 759	- 863	14 006	11 437
19.8%	18.6%	20.2%	19.2%	35.1%			27.7%	25.8%

tions affect our consolidated financial statements and on how foreign exchange rate exposure is managed, see notes 1, 5 and 16 to the Group's consolidated financial statements.

The average value of the US dollar in 2010 increased against the euro and decreased against the CHF, JPY and other currencies. The following table sets forth the foreign exchange rates of the US dollar against the Swiss franc, euro and Japanese yen, respectively, used for foreign currency translation when preparing the Group's consolidated financial statements:

USD per unit	2010		2009	
	Average for year	Year end	Average for year	Year end
EUR	1.327	1.324	1.393	1.436
CHF	0.961	1.063	0.923	0.965
JPY (100)	1.141	1.227	1.070	1.086

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 calculations apply the exchange rates of the prior year to the current year financial data from entities reporting in non-US dollars.

CURRENCY IMPACT ON KEY FIGURES

	Constant currencies change in % 2010	USD change in % 2010	Constant currencies change in % 2009	USD change in % 2009
Net sales	14	14	11	7
Operating income	17	15	13	11
Net income	20	18	5	4
Core operating income	24	22	13	11
Core net income	18	17	11	8

For additional information on the effects of currency fluctuations, see note 16 to the Group's consolidated financial statements.

The following table provides a breakdown of liquid funds and financial debt by currency:

LIQUID FUNDS AND FINANCIAL DEBT BY CURRENCY

(As of December 31)

	Liquid funds in % 2010	Liquid funds in % 2009	Financial debt in % 2010	Financial debt in % 2009
USD	82	92	64	46
EUR	3	1	13	21
CHF	11	7	13	19
JPY			8	12
Other	4		2	2
	100	100	100	100

CRITICAL ACCOUNTING POLICIES AND ESTIMATES

Our principal accounting policies are set out in note 1 to the Group's consolidated financial statements and 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.

REVENUE

We recognize product sales when there is persuasive evidence that a sales arrangement exists, title and risk and rewards for the products are transferred to the customer, the price is fixed and determinable, and collectability is reasonably assured. Where contracts contain customer acceptance provisions, typically with government agencies, we recognize sales upon the satisfaction of acceptance criteria.

At the time of recognizing revenue, we also record estimates for a variety of sales deductions, including rebates, discounts, refunds, incentives and product returns. Sales deductions are reported as a reduction of revenue.

DEDUCTIONS FROM REVENUES

As is typical in the pharmaceuticals industry, our gross sales are subject to various deductions that 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. The US market has the most complex arrangements related to revenue deductions.

US SPECIFIC HEALTHCARE PLANS AND PROGRAM REBATES

- The US 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 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 re-filing data with individual States.
- The US 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.
- We offer rebates to key managed healthcare plans to sustain and increase market share for our products. These rebate programs provide payors a rebate after they attain certain performance parameters related to product purchases, formulary status or pre-established market share milestones relative to competitors. These rebates are estimated based on the terms of individual agreements, historical experience and projected product growth rates. We adjust provisions related to rebates periodically to reflect actual experience.

NON-US 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 government regulations or laws.
- In several countries we enter into innovative pay-for-performance arrangements with certain healthcare providers, especially in the UK, Germany 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.

NON-HEALTHCARE PLANS AND PROGRAM REBATES, RETURNS AND OTHER DEDUCTIONS

- Chargebacks occur where our subsidiaries have arrangements with indirect customers to sell products at prices that are lower than the price charged to wholesalers. A chargeback represents the difference between the invoice price to the wholesaler and the indirect customer’s contract price. We account for vendor chargebacks by reducing revenue by an amount equal to our estimate of chargebacks attributable to a sale and they are generally settled within one to three months of incurring the liability. Provisions for estimated chargebacks 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 claims processing time lag.
- We offer rebates to group 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, we record a provision for estimated sales returns based on our sales returns policy and historical rates. Other factors considered include product recalls, expected marketplace changes and the remaining shelf life of the product, and the entry of generic products. In 2010, sales returns amounted to approximately 1% of gross product sales. Especially in the Vaccines and Diagnostics Division, where there is often no Novartis-specific historical return rate experience available, sales are only recorded based on evidence of product consumption or when the right of return has expired.
- We entered into distribution service agreements with major wholesalers, which provide a financial disincentive for 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 lag time 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 tables show the worldwide extent of our revenue deductions, related payment experiences and provisions:

PROVISIONS FOR REVENUE DEDUCTIONS

2010	Provisions offset against gross trade receivables at Jan 1, 2010 USD millions	Provisions at Jan 1, 2010 USD millions	Effect of currency translation and business combinations USD millions	Income statement charge			Provisions offset against gross trade receivables at Dec 31, 2010 USD millions	Provisions at Dec 31, 2010 USD millions
				Payments/utilizations USD millions	Adjustments of prior years USD millions	Current year USD millions		
US specific healthcare plans and program rebates		755	226	– 1 949	– 8	2 138		1 162
Non-US specific healthcare plans and program rebates		455	– 34	– 444	– 9	607		575
Non-healthcare plans and program related rebates, returns and other deductions	850	884	163	– 5 779	– 32	6 056	– 782	1 360
Total	850	2 094	355	– 8 172	– 49	8 801	– 782	3 097

2009	Provisions offset against gross trade receivables at Jan 1, 2009 USD millions	Provisions at Jan 1, 2009 USD millions	Effect of currency translation USD millions	Income statement charge			Provisions offset against gross trade receivables at Dec 31, 2009 USD millions	Provisions at Dec 31, 2009 USD millions
				Payments/utilizations USD millions	Adjustments of prior years USD millions	Current year USD millions		
US specific healthcare plans and program rebates		632		-1 425	-13	1 561		755
Non-US specific healthcare plans and program rebates		333	10	-282	3	391		455
Non-healthcare plans and program related rebates, returns and other deductions	529	700	77	-3 875	5	4 298	-850	884
Total	529	1 665	87	-5 582	-5	6 250	-850	2 094

GROSS TO NET SALES RECONCILIATION

2010	Income statement charge		Total 2010 USD millions	In % of 2010 gross sales
	Charged through revenue deduction provisions 2010 USD millions	Charged directly without being recorded in revenue deduction provisions 2010 USD millions		
Gross sales subject to deductions			64 069	100.0
US specific healthcare plans and program rebates	-2 130	-117	-2 247	-3.5
Non-US specific healthcare plans and program rebates	-598	-393	-991	-1.5
Non-healthcare plans and program related rebates, returns and other deductions	-6 024	-4 183	-10 207	-15.9
Total gross to net sales adjustments	-8 752	-4 693	-13 445	-20.9
Net sales			50 624	79.1

2009	Income statement charge		Total 2009 USD millions	In % of 2009 gross sales
	Charged through revenue deduction provisions 2009 USD millions	Charged directly without being recorded in revenue deduction provisions 2009 USD millions		
Gross sales subject to deductions			54 691	100.0
US specific healthcare plans and program rebates	-1 548		-1 548	-2.8
Non-US specific healthcare plans and program rebates	-394	-388	-782	-1.5
Non-healthcare plans and program related rebates, returns and other deductions	-4 303	-3 791	-8 094	-14.8
Total gross to net sales adjustments	-6 245	-4 179	-10 424	-19.1
Net sales			44 267	80.9

ACQUISITION ACCOUNTING

Due to the acquisition of a majority interest in Alcon during 2010, acquisition accounting has had a significant impact on the Group's consolidated financial statements. The Group's consolidated financial statements reflect an acquired business from the date the acquisition has been completed. We account for acquired businesses resulting in majority ownership using the acquisition method of accounting, which requires the acquired assets and assumed liabilities to be recorded as of the acquisition date at their respective fair values. Any excess of the purchase consideration over the estimated fair values of acquired net identified assets is recorded as goodwill in the balance sheet and denominated in the functional currency of the related acquisition. Goodwill is allocated to an appropriate cash-generating unit, which is defined as the smallest group of assets that generates independent cash inflows that support the goodwill.

In-Process Research & Development (IPR&D) is valued as part of the acquisition accounting. Payments for other separately acquired assets in development, such as those related to initial and milestone payments for licensed or acquired compounds, are capitalized as IPR&D intangible assets if they are deemed to enhance our intellectual property. This occurs even if uncertainties continue to exist as to whether the R&D projects will ultimately be successful in producing a commercial product. Estimating the fair value assigned to each class of acquired assets and assumed liabilities is based on expectations and assumptions that have been deemed reasonable by management.

Contingent considerations to former owners agreed in a business combination, e.g., in the form of milestone payments upon the achievement of certain development stages or sales targets as well as royalties, are recognized as liabilities at fair value as of the acquisition date. Any subsequent changes in amounts recorded as a liability are recognized in the consolidated income statement.

IMPAIRMENT OF LONG-LIVED INTANGIBLE AND TANGIBLE ASSETS

We review long-lived intangible and tangible assets for impairment whenever events or changes in circumstance indicate that the asset's balance sheet carrying amount may not be recoverable. In order to assess if there is an impairment, we estimate the future cash flows expected to result from the asset and its eventual disposal.

Goodwill and the Alcon brand name have an indefinite useful life and impairment testing is done at least annually. Any impairment charge is recorded in the income statement under "Other expenses". IPR&D is also assessed for impairment at least on an annual basis, with any impairment charge recorded in the income statement under "Research & Development expenses". Once a project included in IPR&D has been successfully developed and is available for use, it is amortized over its useful life in the income statement under "Cost of Goods Sold", where any related future impairment charge is also recorded.

If an asset's balance sheet carrying amount exceeds the higher of its "value in use" to Novartis or "fair value less costs to sell," we

will recognize an impairment loss for the difference. "Value in use" is defined as the net present value of future cash flows expected from an asset or cash-generating unit. For intangible assets, we typically use the Discounted Cash Flow method for determining both the value in use and fair value less costs to sell. This method starts with a forecast of all expected future net cash flows. These cash flows, which reflect the risks and uncertainties associated with the assets, are then discounted at an appropriate rate to net present value. The cash flows utilized for value in use are based on management's forecasts. They are adjusted as necessary to use market participant assumptions for a fair value less costs to sell calculation.

The net present values involve highly sensitive estimates and assumptions specific to the nature of the Group's activities with regard to:

- the amount and timing of projected future cash flows;
- the selected discount and tax rate;
- the outcome of R&D activities (compound efficacy, results of clinical trials, etc.);
- the amount and timing of projected costs to develop IPR&D into commercially viable products;
- the probability of obtaining regulatory approval;
- long-term sales forecasts for periods of up to 20 years;
- sales erosion rates after the end of patent protection and timing of the entry of generic competition; and
- the behavior of competitors (launch of competing products, marketing initiatives, etc.).

Factors that could result in shortened useful lives or impairments include:

- entry into the market of generic or alternative products;
- lower-than-expected sales for acquired products or for sales associated with patents and trademarks;
- lower-than-anticipated future sales resulting from acquired IPR&D;
- the closing of facilities; and
- changes in the planned use of property, plant & equipment.

We have adopted a uniform method for assessing goodwill for impairment and any other intangible asset indicated as being possibly impaired. Generally, for intangible assets we use cash flow projections for the whole useful life of these assets, and for goodwill and the Alcon brand name, we utilize 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 in these scenarios are based on the Group's weighted average cost of capital as an approximation of the weighted average cost of capital of a comparable market participant, which are adjusted for specific country and currency risks associated with cash flow projections.

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 higher of “fair value less costs of sale” or on the “value in use” derived from applying discounted future cash flows based on the key assumptions in the following table:

	Pharmaceuticals %	Vaccines and Diagnostics %	Sandoz %	Consumer Health %
Sales growth rate assumptions after forecast period	0.6	2.0	0 to 2.0	-10.0 to 2.0
Discount rate	7.0	7.0	7.0	7.0

There has been no triggering event concerning Alcon between the date of acquisition of majority ownership of August 25, 2010 and December 31, 2010 that indicates that an impairment is necessary of any values determined as part of the final allocation of the purchase price as of August 25, 2010.

In 2010, Novartis recorded impairment charges totaling USD 1.0 billion. These relate to impairment charges related to terminated development projects of USD 356 million for *Mycograb*, USD 250 million for PTZ601, USD 228 million for *Albinterferon alfa-2b* and USD 120 million for ASA404. Additionally, USD 40 million were recorded for various other impairments in the Pharmaceuticals Division. Novartis also recorded various impairment charges of USD 24 million in the Sandoz and Consumer Health Divisions.

In 2009, impairment charges of USD 132 million were recorded, mainly for terminated development projects or for where the anticipated cash flows from future sales no longer supported the carrying value of the intangible assets. This related to various impairment charges of USD 88 million, mainly for upfront and milestone payments in the Pharmaceuticals Division and USD 44 million in the Vaccines and Diagnostics, Sandoz and Consumer Health Divisions.

Impairment charges that were recorded in previous years led to reversals in 2010 that amounted to USD 107 million mainly relating to *Famvir* product rights (2009: USD 106 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 testing could lead to material impairment charges in the future. For more information, see note 11 to the Group’s consolidated financial statements.

INVESTMENTS IN ASSOCIATED COMPANIES

We use the equity method to account for investments in associated companies (defined as investments in companies that correspond to holdings of between 20% and 50% of a company’s voting shares or over which we otherwise have significant influence).

Various estimates are used in applying the equity method, so subsequent adjustments may be required once an associated company publishes financial results or makes public other information. This applies in particular to our investment in Roche Holding AG.

We consider investments in associated companies for impairment testing whenever a company’s quoted share price has fallen to a fair value below our per-share carrying value. For unquoted investments in associated companies, the latest available financial information is used to assess whether impairment testing is necessary. Where there is an indication that separately identified assets of the associated company, other than implicit goodwill, might be impaired an impairment test is performed. Any impairment charge is recorded in the consolidated income statement under “Income from associated companies”.

The amount of investments in associated companies on our consolidated balance sheet increased significantly in recent years, primarily due to the Alcon investment in 2008. Following the increase in the Novartis interest to a majority ownership of approximately 77% as of August 25, 2010, Alcon is no longer an associated company but is fully consolidated.

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. 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 discount rates we apply to estimate future liabilities, expected returns on plan assets and rates of future compensation 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, or longer/shorter life spans of participants among other factors. For example, a decrease in the discount rate we apply in determining the present value of the obligations of one-half of one percent would have increased our year-end defined benefit obligation by approximately USD 1.1 billion. If the 2010 discount rate had been one-half of one percentage point lower than actually assumed, pension expense would have decreased by approximately USD 9 million, and if the same decrease was also assumed for the return on assets, pension expense would have increased by USD 76 million. We record differences between assumed and actual income and expense as “Actuarial gains/losses” in the consolidated statement of comprehensive income. These 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.

DERIVATIVE FINANCIAL INSTRUMENTS AND RELATED CASH FLOW HEDGING

Derivative financial instruments are initially recognized in the balance sheet at fair value and subsequently remeasured to their current fair value. Any gain or loss on the hedging instrument relating to the effective portion of changes in the fair value of derivatives in cash flow hedges are recognized in the statement of comprehensive income. The gain or loss relating to the ineffective portion is recognized immediately in the income statement.

When a hedging instrument expires or is sold, or when a hedge no longer meets the criteria for hedge accounting, any cumulative gain or loss existing in the consolidated statement of comprehensive income at that time is recognized in the consolidated income statement when the committed or forecasted transaction is ultimately recognized. Management assesses the probability of the forecasted transaction occurring when determining whether the impact of a cash flow hedge can be deferred in the consolidated statement of comprehensive income. Amounts are only deferred when management judges the forecasted transaction to be probable.

EQUITY-BASED COMPENSATION

The fair value of Novartis shares, restricted shares, restricted share units (RSU) and American Depositary Shares (ADS) and Alcon restricted share units (RSU) and related Novartis and Alcon options granted to associates as compensation are recognized as an expense over the related vesting or service period adjusted to reflect actual and expected vesting levels. The charge for equity-based compensation is included in personnel expenses in the subsidiaries where associates receiving equity-based compensation are employed. An option's fair value at grant date is calculated using an option pricing valuation method. Novartis shares, restricted shares, RSUs and ADSs and Alcon RSUs are valued using the market value on grant date. Accurately measuring the value of share options is difficult and requires an estimate of key factors used in the valuation model. These key factors involve uncertain future events, expected share price volatility and expected dividend yield. For detailed information on the Group's equity-based compensation plans and underlying assumptions for valuation of share options granted in 2010, see note 26 to the Group's consolidated financial statements.

CONTINGENCIES

A number of our subsidiaries are involved in various government investigations and legal proceedings (intellectual property, 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. Legal defense costs are accrued when they are expected to be incurred in connection with a loss contingency and 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 US federal government reimbursement programs have contributed to decisions by 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 penalties of up to treble damages. In addition, 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 when the amount is reasonably estimable and collection is virtually certain.

RESEARCH & DEVELOPMENT

Internal Research & Development (R&D) 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 until marketing approval from the regulatory authority is obtained in a relevant major market, such as for the US, the EU, Switzerland or Japan.

Payments made to third parties in compensation for subcontracted R&D that is deemed not to enhance our intellectual property, such as contract research and development organizations, 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 as 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 (In-Process Research & Development assets, "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 such additional payments 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 these additional payments 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 where 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.

IPR&D assets are amortized once the related project has been successfully developed and regulatory approval for a product launch obtained and acquired technologies are amortized over their estimated useful lives.

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

The following new or amended IFRS standard which, based on a Novartis analysis, is the only one of significance to the Group, has not yet been adopted.

In 2009, sections of IFRS 9 "*Financial Instruments: Classification and Measurement*" and "*Financial Assets*" were issued but only require to be adopted by January 1, 2013 although earlier adoption is permitted. This standard 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. Novartis is currently evaluating the potential impact that this standard will have on the Group's consolidated financial statements.

SEGMENT REPORTING

The wholly-owned businesses of Novartis are divided on a worldwide basis into four operating divisions (Pharmaceuticals, Vaccines and Diagnostics, Sandoz and Consumer Health) and Corporate activities. As of December 31, Novartis owned 77% of Alcon, Inc., an independent Swiss corporation, listed on the New York Stock Exchange, and it is treated as a separate segment. These segments reflect the Group's internal management structure. They are managed separately because they each manufacture, distribute and sell distinct products that require differing marketing strategies.

Inter-segmental sales are made at amounts considered to approximate arm's-length transactions. Currently, we principally evaluate segment performance and allocate resources based on operating income.

PHARMACEUTICALS DIVISION

Pharmaceuticals researches, develops, manufactures, distributes, and sells branded prescription medicines in the following therapeutic areas: Cardiovascular and Metabolism; Oncology; Neuroscience and Ophthalmics; Respiratory; Integrated Hospital Care; and additional products. Pharmaceuticals is organized into global business franchises responsible for the development and marketing of various products as well as a business unit, called Novartis Oncology, 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.

Pharmaceuticals is the largest contributor among the segments, accounting in 2010 for USD 30.6 billion, or 60.3%, of net sales and for USD 8.8 billion, or 72.3%, of operating income (excluding Corporate Income & Expense, net).

VACCINES AND DIAGNOSTICS DIVISION

Vaccines and Diagnostics researches, develops, manufactures, distributes and sells preventive vaccines and diagnostic tools. Novartis Vaccines is a leading global developer and manufacturer of human vaccines. Key products include influenza, meningococcal, pediatric and traveler vaccines.

Novartis Diagnostics is a blood testing and molecular diagnostics business dedicated to preventing the spread of infectious diseases through novel blood-screening tools that protect the world's blood supply.

In 2010, Vaccines and Diagnostics accounted for USD 2.9 billion, or 5.8%, of net sales and provided USD 612 million, or 5.0%, of operating income (excluding Corporate Income & Expense, net).

SANDOZ DIVISION

Sandoz is a leading global generic pharmaceuticals company that 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, Biopharmaceuticals and Oncology Injectables (following the acquisition of EBEWE Pharma, which was completed in September 2009). In Retail Generics, Sandoz develops, manufactures, distributes and sells active ingredients and finished dosage forms of medicines, as well as supplying active ingredients to third parties. In Anti-Infectives, Sandoz develops, manufactures, distributes and sells 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, distributes and sells protein- or biotechnology-based products (known as “biosimilars” or follow-on biologics) and sells biotech manufacturing services to other companies. In Oncology Injectables, Sandoz develops, manufactures, distributes and sells cytotoxic products for the hospital market.

Sandoz offers more than 1 000 compounds in more than 130 countries. Sandoz is the Group’s second largest division, both in terms of contributions to net sales and operating income. In 2010, Sandoz accounted for USD 8.5 billion, or 16.8%, of net sales and for USD 1.3 billion, or 10.5% of operating income (excluding Corporate Income & Expense, net).

CONSUMER HEALTH DIVISION

Consumer Health consists of three Business Units: OTC (over-the-counter medicines), Animal Health and CIBA Vision. Each has its own research, development, manufacturing, distribution and selling capabilities. However, none are material enough to the Group to be separately disclosed as a segment. OTC offers readily available consumer medicine; Animal Health provides veterinary products for farm and companion animals; and CIBA Vision markets contact lenses and lens care products.

In 2010, Consumer Health accounted for USD 6.2 billion, or 12.3%, of net sales and for USD 1.2 billion, or 9.5%, of operating income (excluding Corporate Income & Expense, net).

ALCON, INC.

Alcon, Inc. is an independent Swiss corporation listed on the New York Stock Exchange (NYSE: ACL), which discovers, develops, manufactures and markets innovative eye care products to improve the quality of life by helping people see better. Since our acquisition of Nestlé’s remaining 52% interest in Alcon on August 25, 2010, Novartis became the majority owner of Alcon. With the achievement of the 77% majority ownership, Novartis and Alcon have sought to create greater value together for all stakeholders through collaborations that would benefit both companies. On December 15, 2010, Novartis announced that it had entered into a definitive agreement with Alcon to merge Alcon into Novartis, subject to clearance of a registration statement by the US Securities and Exchange Commission, two-thirds approval by the shareholders of each of Novartis and Alcon voting at their respective meetings, and other customary closing conditions. Since the achievement of the majority ownership, and until a 100% merger is completed, all collaborations between the companies have been within the framework of arm’s length transactions. In 2010, Alcon (consolidated since August 25, 2010) accounted for USD 2.4 billion, or 4.8%, of Group net sales, and for USD 323 million, or 2.7%, of Group operating income (excluding Corporate income and expense, net).

CORPORATE

Income and expenses relating to Corporate include the costs of our headquarters and corporate coordination functions in major countries. In addition, Corporate includes certain items of income and expense that are not attributable to specific divisions, including global IT infrastructure and corporate research. This latter activity will be reported in the Pharmaceuticals Division from January 1, 2011.

FACTORS AFFECTING COMPARABILITY OF YEAR-ON-YEAR RESULTS OF OPERATIONS

RECENT ACQUISITIONS AND DIVESTMENTS

The comparability of the year-on-year results of our operations for the total Group can be significantly affected by acquisitions and divestments. For more detail how these actions have affected our results, see “Factors Affecting Results of Operations – Acquisitions, Divestments and Other Significant Transactions” above.

RESULTS OF OPERATIONS

KEY FIGURES

	Year ended Dec 31, 2010 USD millions	Year ended Dec 31, 2009 USD millions	Change in USD %	Constant currencies change %
Net sales	50 624	44 267	14	14
Other Revenues	937	836	12	11
Cost of Goods Sold	- 14 488	- 12 179	19	19
Marketing & Sales	- 13 316	- 12 050	11	10
Research & Development	- 9 070	- 7 469	21	20
General & Administration	- 2 481	- 2 281	9	7
Other income	1 234	782	58	56
Other expense	- 1 914	- 1 924	- 1	- 1
Operating income	11 526	9 982	15	17
Income from associated companies	804	293	174	173
Financial income	64	198	- 68	- 68
Interest expense	- 692	- 551	26	25
Income before taxes	11 702	9 922	18	19
Taxes	- 1 733	- 1 468	18	18
Group net income	9 969	8 454	18	20
<i>Attributable to:</i>				
Shareholders of Novartis AG	9 794	8 400	17	18
Non-controlling interests	175	54	224	226
Basic earnings per share	4.28	3.70	16	17

CORE KEY FIGURES

	Year ended Dec 31, 2010 USD millions	Year ended Dec 31, 2009 USD millions	Change in USD %	Constant currencies change %
Core operating income	14 006	11 437	22	24
Core net income	12 029	10 267	17	18
Core earnings per share	5.15	4.50	14	15

CURRENCY FLUCTUATIONS

Significant changes in the value of the US dollar, our reporting currency, in 2010 against various currencies – particularly the Swiss franc and euro – had an overall negative currency translation effect on results of operations in 2010, and as a result affected the comparability of results of operations for 2010 with 2009. For more information, see “Effects of Currency Fluctuations” above.

OVERVIEW – RESULTS OF OPERATIONS

Strong growth in all businesses including the consolidation of Alcon, Inc. (Alcon) drove the Group’s healthcare portfolio in 2010 to another year of record results.

Net sales rose 14% (+14% cc) to USD 50.6 billion driven by strong growth in all businesses, including USD 2.4 billion from the consolidation of Alcon. Recently launched products provided USD 10.4 billion of net sales in the 2010 period (excluding Alcon), representing 21% of net sales compared to 16% in the 2009 period. Pharmaceuticals sales expanded 7% (+6% cc) to USD 30.6 billion driven by 8 percentage points of volume expansion. Recently launched products contributed 21% of Pharmaceuticals sales, up from 16% in 2009. Sandoz achieved double-digit sales growth in 2010 (USD 8.5 billion, +14%, +15% cc) supported by strong growth in US retail generics and biosimilars (+46% cc) and emerging markets such as Middle East, Turkey and Africa (+22% cc). Vaccines and Diagnostics grew to USD 2.9 billion (+25% cc), including USD 1.3 billion of A (H1N1) pandemic flu vaccines. Excluding A (H1N1) pandemic flu vaccines, the business grew 16%. Consumer Health grew 7% (+6% cc) to USD 6.2 billion, with all three business units delivering solid growth in their respective markets.

Operating income rose 15% (+17% cc) to USD 11.5 billion on the volume-driven sales expansion. Unfavorable currency movements negatively impacted operating income by two percentage points. Operating income margin improved 0.3 percentage points to 22.8% of net sales. Exceptional items arising in the year totaled a net USD 1.3 billion, comprising: impairments (USD 1.0 billion), legal settlements (USD 240 million), restructuring costs (USD 198 million), and Alcon-related costs (USD 596 million), partially offset by divestment and pension curtailment gains (USD 690 million).

Core operating income rose 22% (+24% cc) to USD 14.0 billion, and the core operating income margin rose 1.9 percentage points to 27.7% of net sales. Included in the core operating margin improvement of 1.9 percentage points were a benefit from Alcon of 0.4 percentage points and higher A (H1N1) pandemic flu vaccine sales of 0.5 percentage points, resulting in the increase in the underlying margin of 1.0 percentage points.

Net income advanced 18% to USD 10.0 billion ahead of operating income growth due to higher income from associated companies (+173% cc), offset by higher financial expenses from the Alcon financing. Earnings per share (EPS) rose 16% (+17% cc) to USD 4.28 from USD 3.70 in the 2009 period. Core net income grew 17% (+18% cc) to USD 12.0 billion, while core EPS was up 14% (+15% cc) to USD 5.15 from USD 4.50 in the year-ago period.

NET SALES

	Year ended Dec 31, 2010 USD millions	Year ended Dec 31, 2009 USD millions	Change in USD %	Change in constant currencies %
Pharmaceuticals	30 558	28 538	7	6
Vaccines and Diagnostics	2 918	2 424	20	25
Sandoz	8 518	7 493	14	15
Consumer Health	6 204	5 812	7	6
Total Novartis excl. Alcon, Inc.	48 198	44 267	9	9
Alcon, Inc.	2 426			
Net sales	50 624	44 267	14	14

PHARMACEUTICALS DIVISION

Net sales expanded 7% (+6% cc) to USD 30.6 billion driven by 8 percentage points of volume expansion, partly offset by a negative pricing impact of 2 percentage points. Recently launched products provided USD 6.6 billion of net sales in the 2010 period, representing 21% of net sales compared to 16% in the 2009 period.

Europe remained the largest region (USD 10.9 billion, +7% cc) particularly benefiting from recently launched products generating 28% of its net sales. The US (USD 10.0 billion, +5% cc), as well as Latin America and Canada (USD 2.9 billion, +14% cc), maintained solid growth rates. Japan's performance (USD 3.3 billion, 0% cc) was flat versus the prior year due to the biannual price cuts and angiotensin receptor blockers (ARB) market slowdown. The top six emerging markets (USD 2.9 billion, +9% cc) were led by double-digit growth from India, Russia, South Korea and China, partly offset by the impact of cost-containment measures in Turkey.

TOP 20 PHARMACEUTICALS DIVISION PRODUCT NET SALES – 2010

Brands		United States USD millions	% change in constant currencies	Rest of world USD millions	% change in constant currencies	Total USD millions	% change in USD	% change in constant currencies
<i>Diovan/Co-Diovan</i>	Hypertension	2 520	1	3 533	-1	6 053	1	0
<i>Gleevec/Glivec</i>	Chronic myeloid leukemia	1 285	18	2 980	3	4 265	8	7
<i>Lucentis</i>	Age-related macular degeneration			1 533	24	1 533	24	24
<i>Zometa</i>	Cancer complications	721	0	790	4	1 511	3	2
<i>Femara</i>	Breast cancer	650	14	726	5	1 376	9	9
<i>Sandostatin</i>	Acromegaly	511	12	780	11	1 291	12	11
<i>Exelon/Exelon Patch</i>	Alzheimer's disease	379	5	624	6	1 003	5	6
<i>Exforge</i>	Hypertension	284	24	620	41	904	35	35
<i>Neoral/Sandimmun</i>	Transplantation	82	-9	789	-6	871	-5	-7
<i>Voltaren (excl. OTC)</i>	Inflammation/pain		nm	791	0	791	-1	-1
Top ten products total		6 432	7	13 166	5	19 598	6	6
<i>Exjade</i>	Iron chelator	264	7	498	22	762	17	16
<i>Comtan/Stalevo</i>	Parkinson's disease	231	6	369	8	600	8	8
<i>Reclast/Aclasta</i>	Osteoporosis	393	20	186	29	579	23	23
<i>Ritalin/Focalin</i>	Attention Deficit/Hyperactivity Disorder	339	-1	125	15	464	3	3
<i>Myfortic</i>	Transplantation	163	21	281	25	444	26	23
<i>Tekturna/Rasilez</i>	Hypertension	207	29	231	83	438	51	53
<i>Lescol</i>	Cholesterol reduction	97	-20	339	-25	436	-23	-24
<i>Tasigna</i>	Chronic myeloid leukemia	134	116	265	78	399	88	89
<i>Galvus</i>	Diabetes			391	122	391	117	122
<i>Xolair</i>	Asthma	24	-73	345	44	369	9	12
Top 20 products total		8 284	7	16 196	9	24 480	9	8
Rest of portfolio		1 759	-4	4 319	1	6 078	0	-1
Total Division sales		10 043	5	20 515	7	30 558	7	6

nm = not meaningful

Pharmaceuticals Division Product Highlights – Selected Leading Products

Notes: Net sales growth data refer to 2010 worldwide performance in constant currencies. Growth rates are not provided for some recently launched products since they are not meaningful.

Cardiovascular and Metabolism

Diovan (USD 6.1 billion, 0% cc) maintained sales in 2010 based on its status as the only medicine in the angiotensin receptor blocker (ARB) class approved to treat high blood pressure, high risk heart attack survivors and heart failure. Japan, which accounts for 20% of annual sales contracted slightly due to biannual price cuts, while sales also declined modestly in Europe, where the entry of generic versions of losartan, another medicine in the ARB segment, occurred in early 2010. In the US (+1%), *Diovan* increased its leadership of the ARB segment despite the overall shrinking of the branded anti-hypertension market due to increasing use of generic medicines in other anti-hypertensive classes.

Exforge (USD 904 million, +35% cc), a single-pill combination of the angiotensin receptor blocker *Diovan* (valsartan) and the calcium channel blocker amlodipine, has delivered above-market growth and set new standards for high blood pressure combination therapies since its launch in 2007. *Exforge* gained approval in Japan in January 2010. *Exforge HCT*, which adds a diuretic (hydrochlorothiazide), was launched in the US in 2009 and in Europe and Latin America in 2010 as a single-pill therapy with three medicines.

Tekturna/Rasilez (USD 438 million, +53% cc), the first in a new class of medicines known as direct renin inhibitors to treat high blood pressure, has been growing consistently since its launch in 2007 based on positive clinical data demonstrating its prolonged efficacy in lowering blood pressure for more than 24 hours and superiority in clinical trials over ramipril, a leading angiotensin converting enzyme (ACE) inhibitor. *Valturna* – a single-pill combination with *Diovan* (valsartan) – was launched in the US in late 2009, joining the group of single-pill combinations that involve aliskiren, the active ingredient in *Tekturna/Rasilez*. *Tekamlo*, a single-pill combination of aliskiren and amlodipine was approved in the US in August, 2010. *Amturnide*, a triple combination with amlodipine and a diuretic was approved in the US in December, 2010. EU reviews for the double combination of aliskiren and amlodipine as well as the triple combination incorporating a diuretic are ongoing in the EU. The EU application for *Rasival*, a combination of valsartan and aliskiren was withdrawn in September 2010.

Galvus/Eucreas (USD 391 million, +122% cc), oral treatments for type 2 diabetes, more than doubled sales in 2010 due to strong growth in many European, Latin American and Asia-Pacific markets since its launch in 2007. *Galvus* and *Eucreas*, a single-pill combination of *Galvus* with metformin that accounts for the majority of sales, have attained the highest sales in the DPP-4 market segment in some countries. *Galvus* was approved in Japan in January, 2010, under brand name *Equa*, and in November Novartis K.K. signed an agreement to co-promote the product in Japan with Sanofi-Aventis K.K.

Oncology

Gleevec/Glivec (USD 4.3 billion, +7% cc), a targeted therapy for some forms of chronic myeloid leukemia (CML) and gastrointestinal stromal tumors (GIST), maintained solid growth based on its leadership position in treating these cancers backed by new clinical data and regulatory approvals. *Gleevec/Glivec* was approved in 2009 for use in adjuvant (post-surgery) GIST patients, which is now approved in 57 countries.

Tasigna (USD 399 million, +89% cc), has shown rapid growth as a next-generation targeted therapy for newly diagnosed CML patients following approvals in several key markets for this indication including the US, EU, Japan and Switzerland. *Tasigna* also gained increased share in imatinib resistant/intolerant patients. Trials are underway examining the use of *Tasigna* in CML with suboptimal response to *Glivec*, as well as a Phase III trial in patients with GIST.

Zometa (USD 1.5 billion, +2% cc), an intravenous bisphosphonate therapy for patients with certain types of cancer that has spread to the bones, is growing due to improved compliance and use in existing indications. Regulatory submissions in the US and EU for use of *Zometa* as an adjuvant therapy in pre- and post-menopausal women with breast cancer were withdrawn in Q4 2010 after the AZURE trial did not meet its primary endpoint in the overall population. However, in a pre-defined subgroup of women with well-established menopause, an improvement in disease-free survival was shown in the *Zometa* arm. Novartis will discuss future regulatory plans with health authorities based on these data. Zoledronic acid, the active ingredient in *Zometa* (4 mg), is also available under the trade names *Reclast/Aclasta* (5 mg) for use in non-oncology indications with different dosing. *Zometa* is facing new competition from denosumab, a product of Amgen.

Femara (USD 1.4 billion, +9% cc), a treatment for early stage or advanced breast cancer in postmenopausal women, achieved strong sustained growth in key markets. We anticipate new generic competition in the US in the first half of 2011 and later in the year in Europe's major markets thus significantly reducing future sales.

Sandostatin (USD 1.3 billion, +11% cc) benefited from the increasing use of *Sandostatin* LAR in treating symptoms of patients with neuroendocrine tumors (NET).

Exjade (USD 762 million, +16% cc), continued to expand with strong growth based on new patients, expanded access and increased dosing in the US and key markets around the world. *Exjade* is currently approved in more than 100 countries, including China since June 2010, as the only once-daily oral therapy for transfusional iron overload.

Afinitor (USD 243 million), an oral inhibitor of the mTOR pathway used across multiple diseases, expanded its indications in the US with an accelerated FDA approval for the treatment of patients with subependymal giant cell astrocytomas (SEGA), a benign brain tumor associated with tuberous sclerosis requiring therapeutic intervention but who are not candidates for curative surgical resection. The effectiveness of *Afinitor* is based on a 28-patient Phase II study. A Phase III study has completed enrollment to further explore the clinical benefits of *Afinitor* for patients with SEGA associated with tuberous sclerosis. Regulatory submissions have been filed in the EU for this indication under the trade name *Votubia*. *Afinitor* is also an approved treatment for advanced renal cell carcinoma (kidney cancer) following VEGF-targeted therapy. The FDA granted *Afinitor* priority review status for the treatment of advanced neuroendocrine tumors (NET) and a decision is expected in 2011. Worldwide submissions for the treatment of patients with advanced NET are underway. Everolimus, the active ingredient in *Afinitor*, is also available under the trade names *Zortress/Certican* for use in non-oncology indications. Everolimus is exclusively licensed to Abbott and sublicensed to Boston Scientific for use in drug-eluting stents.

Neuroscience and Ophthalmics

Lucentis (USD 1.5 billion, +24% cc), a biotechnology eye therapy now approved in more than 85 countries, delivered sustained growth particularly in France, the United Kingdom, Canada and Japan. *Lucentis* is the only treatment proven to maintain and improve vision in patients with “wet” age-related macular degeneration, a leading cause of blindness in people over age 50. *Lucentis* was approved in January 2011 in Europe for the treatment of visual impairment due to diabetic macular edema (DME), an eye condition related to long-standing diabetes that may lead to blindness. In Q4 2010 Novartis filed an application in the EU for the treatment of visual impairment due to macular edema secondary to branch / central retinal vein occlusion. Genentech holds the US rights to this medicine.

Exelon/Exelon Patch (USD 1.0 billion, +6% cc), a therapy for mild to moderate forms of Alzheimer’s disease dementia as well as dementia linked with Parkinson’s disease, achieved blockbuster status in 2010. The majority of sales are for *Exelon Patch*, the novel skin patch launched in 2007, now available in more than 75 countries worldwide for Alzheimer’s disease dementia, including more than 20 countries where it is also approved for dementia associated with Parkinson’s disease.

Extavia (USD 124 million), for relapsing forms of multiple sclerosis (MS), was launched in 2009 in the US and more than 30 other countries, marked the entry of Novartis into the field of MS. *Extavia* is the Novartis-branded version of Betaferon®/Betaseron®.

Gilenya (USD 15 million) has launched as a first-line treatment for relapsing forms of MS in the US and for relapsing-remitting MS in Russia. It was also approved as a first-line treatment for relapsing forms of MS in Australia, Switzerland and the United Arab Emirates. *Gilenya* is currently under regulatory review in the EU, where it was filed in December 2009, and with health authorities worldwide, including Canada, Turkey and Brazil. Initial sales uptake in the US is in line with expectations with sales of USD 13 million since its launch in October 2010.

Comtan/Stalevo (USD 600 million, +8% cc), a treatment for Parkinson’s disease, has grown mainly due to growing prescriber familiarity and continued geographical expansion of *Stalevo*, an enhanced levodopa therapy.

Respiratory

Xolair (USD 369 million, +12% cc, Novartis sales), a biotechnology drug for moderate to severe persistent allergic asthma in the US and severe persistent allergic asthma in Europe, maintained solid growth due to its global presence and approvals in more than 85 countries. A Phase III trial is progressing to support registration in China. *Xolair Liquid*, a new formulation in pre-filled syringes to enable easier administration than with the conventional lyophilized formulation, is expected to be launched in Europe in 2011. Novartis co-promotes *Xolair* with Genentech in the US and shares a portion of operating income.

Onbrez Breezhaler (QAB149, indacaterol) (USD 33 million) has demonstrated strong sales growth since its approval in the EU in November 2009 as a once-daily long-acting beta-2 agonist (LABA) for adults with chronic obstructive pulmonary disease (COPD). *Onbrez Breezhaler* is now approved in more than 40 countries and is available in 13 European markets, with further launches planned during 2011. In November 2010, Novartis announced results of the blinded Phase III INTENSITY study showing that *Onbrez Breezhaler* 150 mcg is as effective as tiotropium in improving lung function in patients with COPD, while providing greater clinical benefits in terms of reduced breathlessness, lower use of rescue medication and improved health status. The application for US approval (under the brand-name *Arcapta Neohaler*) is expected to be reviewed by an FDA Advisory Committee in March 2011.

Integrated Hospital Care

Reclast/Aclasta (USD 579 million, +23% cc), a once-yearly infusion therapy for osteoporosis, continues to expand on increasing patient access to infusion centers and a broad range of use in patients with various types of this debilitating bone disease. Approvals have been received in over 90 countries for up to six indications, including the treatment of osteoporosis in men and postmenopausal women. Six-year data from a pivotal fracture trial reinforced the long-term efficacy and safety profile of *Reclast/Aclasta*. Zoledronic acid, the active ingredient in *Reclast/Aclasta*, is also available in a number of countries in a different dosage for use in oncology indications under the trade name *Zometa*.

Zortress/Certican (USD 144 million, +25% cc), a transplantation medicine, generated solid growth based on its availability in more than 80 countries to prevent organ rejection in adult kidney and heart transplantation, including the US, where it was launched in April 2010 for adult kidney transplantation under the brand name *Zortress*. This medicine, which has the same active ingredient as *Afinitor* (everolimus), has been shown to have good immunosuppressive efficacy and a manageable side-effect profile.

Ilaris (USD 26 million) is a fully human monoclonal antibody that selectively binds and neutralizes interleukin-1 β (IL-1 β), a pro-inflammatory cytokine. Since 2009, *Ilaris* has been approved in over 40 countries for the treatment of children aged four years and older and adults suffering from cryopyrin-associated periodic syndrome (CAPS), a group of rare auto-inflammatory disorders that affect approximately one out of one million people. Novartis has filed for European regulatory approval of *Ilaris* for the treatment of gouty arthritis attacks based on data from two Phase III registration studies that met their primary endpoints. US submission is on track for the first quarter of 2011. Novartis is also pursuing other diseases in which IL-1 β is believed to play an important role, such as systemic juvenile idiopathic arthritis (SJIA) and cardiovascular indications. Select subsets of patients with these diseases would be eligible for treatment with *Ilaris*, if approved.

Neoral/Sandimmun (USD 871 million, -7% cc), for organ transplantation, has experienced modestly declining sales despite ongoing generic competition in recent years based on its pharmacokinetic profile, reliability and use in treating a life-threatening condition.

Myfortic (USD 444 million, +23% cc), a transplantation medicine, is approved in more than 90 countries for the prevention of acute rejection of kidney allografts and is indicated in combination with cyclosporine and corticosteroids. *Myfortic* was first approved in the US in 2004 and in the EU in 2003.

Other

Voltaren (USD 791 million, -1% cc, excluding OTC sales), a treatment for various inflammation and pain conditions, no longer has patent protection in key markets around the world, but has continued to generate growth in regions such as Latin America, the Middle East, Africa and Asia based on long-term trust in the brand.

Lescol (USD 436 million, -24% cc), a statin drug used to reduce cholesterol, has experienced declining sales in the US following the 2007 launch of a generic version of simvastatin, another medicine in this class. Europe and other regions also have been hurt by the entry of generic versions of rival drugs in this class. Loss of exclusivity and launch of generics in Europe and Japan have negatively impacted performance. Key emerging markets, including China are showing growth.

Ritalin/Focalin (USD 464 million, +3% cc), for treatment of Attention Deficit/Hyperactivity Disorder (ADHD), has benefited from use of the long-acting *Ritalin LA* and *Focalin XR* patent-protected formulations that involve methylphenidate, the active ingredient in *Ritalin* that has faced generic competition for some time in many countries.

VACCINES AND DIAGNOSTICS DIVISION

Net sales were USD 2.9 billion for 2010 (+25% cc) compared to USD 2.4 billion in 2009. Deliveries for supply contracts with governments around the world for A (H1N1) pandemic flu vaccines and adjuvants generated net sales of USD 1.3 billion, significantly driving the sales increase compared to 2009. Excluding the A (H1N1) pandemic flu, the business experienced strong growth (+16% cc) driven by the strong seasonal flu season, expansion of the vaccines business in emerging markets and launch of *Menveo*.

SANDOZ DIVISION

Sandoz achieved double-digit sales growth in 2010 (USD 8.5 billion, +14%, +15% cc) versus 2009 driven by strong growth in US retail generics and biosimilars (+46% cc) and emerging markets. Volume expanded 22 percentage points due to new product launches, the inclusion of EBEWE Pharma's specialty generics business (contributing 4 percentage points) and continued strong results from biosimilars which together more than compensated for price erosion of 7 percentage points. German retail generics and biosimilars declined by USD 100 million, (-6% cc) as the market was impacted by numerous healthcare reforms.

US sales growth in 2010 was driven by successful execution of new product launches including enoxaparin (USD 462 million), tacrolimus (USD 184 million), losartan (USD 145 million), lansoprazole (USD 123 million) and gemcitabine (USD 58 million). Sandoz's enoxaparin exclusivity in the US could change at any time, whereas lansoprazole ODT and gemcitabine will face increased competition in the US in April and May 2011, respectively.

Biosimilar sales expanded rapidly (+63% cc) to USD 185 million.

CONSUMER HEALTH DIVISION

Sales grew 7% (+6% cc) to USD 6.2 billion and all Consumer Health businesses delivered growth ahead of their respective markets for 2010.

All regions contributed to sales growth in OTC (+5% cc), supported by double-digit growth of the key brands *Voltaren*, *Nicotinell* and *Excedrin*. *Pantoloc Control* was successfully launched in 14 European markets in 2010 and will continue to support growth in the gastrointestinal franchise. Retail sales of *Prevacid24HR* have driven the Novartis OTC business in the US to be the fastest growing in its peer group, while *Excedrin* established itself as a top four brand in its category and as the second fastest growing brand among its competitors.

CIBA Vision (+6% cc) continues to show robust growth in the growing contact lens and lens care markets on the strength of *Air Optix* across all regions. *Air Optix Aqua Multifocal* lens continues to grow after becoming the number one lens for presbyopic users in April 2010, less than 12 months after its launch. Launches of *FreshLook Illuminate* in Asia and Japan contributed to 2010 growth, and *ClearCare*, CIBA Vision's leading peroxide-based lens disinfectant solution, experienced its third year of double-digit growth as users continue to migrate to its clinically proven one-bottle regimen.

Animal Health growth (+7% cc) was led mainly by the strong performance of *Interceptor* and *Sentinel* in the US and *Milbemax* in Europe, as well as by the robust growth of cattle vaccines in the US livestock market. Overall, the cattle and sheep brands in key markets, including the US and Australia, and the companion animal parasiticides fueled the high-single-digit business growth in 2010.

The US business grew 6%, supported by a double-digit growth rate in CIBA Vision and a high-single digit growth rate in Animal Health. Net sales in the top six emerging markets experienced solid growth (USD 0.5 billion, +10% cc), with Russia, Turkey, India and South Korea standing out with double-digit growth rates.

ALCON, INC.

Alcon's sales consolidated into Novartis Group results since August 25, 2010 totaled USD 2.4 billion. US sales of USD 1.0 billion accounted for 42% of total net sales, while non-US sales of USD 1.4 billion were 58% of total net sales. Sales in emerging markets continued to be strong, as they contributed USD 0.5 billion or 20% of total net sales. Pharmaceutical sales were USD 1.0 billion, Surgical sales were USD 1.1 billion and Consumer sales were USD 0.3 billion. Key product contributors to sales were the TRAVATAN® and Azopt® families of glaucoma products, Vigamox® for eye infections, Patanol® for eye allergies, AcrySof® intraocular lenses for cataract patients and OPTI-FREE®, EXPRESS®, and Replenish® contact lens disinfecting solutions.

OPERATING INCOME BY SEGMENTS

	Year ended Dec 31, 2010 USD millions	% of net sales	Year ended Dec 31, 2009 USD millions	% of net sales	Change in USD %
Pharmaceuticals	8 798	28.8	8 392	29.4	5
Vaccines and Diagnostics	612	21.0	372	15.3	65
Sandoz	1 272	14.9	1 071	14.3	19
Consumer Health	1 153	18.6	1 016	17.5	13
Alcon, Inc.	323	13.3			
Corporate income & expenses, net	- 632		- 869		
Operating income	11 526	22.8	9 982	22.5	15

CORE OPERATING INCOME BY SEGMENTS

	Year ended Dec 31, 2010 USD millions	% of net sales	Year ended Dec 31, 2009 USD millions	% of net sales	Change in USD %
Pharmaceuticals	9 909	32.4	9 068	31.8	9
Vaccines and Diagnostics	1 066	36.5	719	29.7	48
Sandoz	1 685	19.8	1 395	18.6	21
Consumer Health	1 253	20.2	1 118	19.2	12
Alcon, Inc.	852	35.1			
Corporate income & expenses, net	- 759		- 863		- 12
Core operating income	14 006	27.7	11 437	25.8	22

PHARMACEUTICALS DIVISION

Operating income grew 5% (+6% cc) to USD 8.8 billion. The operating income margin of 28.8% of net sales was mainly impacted by R&D impairments of USD 896 million, litigation charges of USD 181 million and restructuring expenses of USD 111 million, partly offset by divestment income of USD 425 million and the *Famvir* settlement with Teva.

Core operating income grew 9% (+10% cc), ahead of sales, to USD 9.9 billion. The core operating income margin of 32.4% of net sales improved 0.6 percentage points. Cost of Goods Sold remained broadly stable, while total functional costs improved as a percentage of net sales due to continuing productivity initiatives. Other Income and Expense increased as a percentage of sales mainly due to higher pre-launch inventory provisions.

VACCINES AND DIAGNOSTICS DIVISION

Operating income in the period was USD 612 million compared to USD 372 million in the year-ago period, driven substantially by increased contributions from A (H1N1) pandemic flu vaccines.

We continued to invest heavily in development of our late stage pipeline and increased marketing resources to successfully launch *Menveo* globally. 2010 operating income was additionally impacted by a USD 98 million impairment charge related to a financial asset, USD 52 million in restructuring charges related to consolidation of

our manufacturing facilities and a USD 45 million legal settlement expense.

Despite heavy investment in R&D and marketing and sales, core operating income increased by 48% (+58% cc) to USD 1.1 billion, after adjusting for the impairment and restructuring charges and legal settlement above as well as the amortization of intangible assets.

SANDOZ DIVISION

Operating income grew 19% (+18% cc) versus 2009 to USD 1.3 billion. The operating income margin increased 0.6 percentage points to 14.9% of net sales, an all-time high for Sandoz. The operating income margin was negatively impacted by acquisition-related charges for the integration of EBEWE Pharma, one-time charges for the termination of a co-development agreement, provisions for legal settlements and higher levels of restructuring charges than in 2009, totaling 0.6 percentage points of net sales.

Core operating income rose 21% (+21% cc) to USD 1.7 billion, as the core operating income margin improved by 1.2 percentage points to 19.8% of net sales. There were lower sales to other divisions and other revenues and higher Cost of Goods Sold. These impacts were more than offset by a number of positive factors, including: Marketing & Sales costs, which were lower as a percentage of sales due to productivity improvements partly offset by investments in growth areas; R&D costs, which decreased as a percentage of sales as reduced investments in standard generics and productivity savings funded increasing investment in the development of differentiated generics; General & Administration costs, which decreased as a percentage of sales due to ongoing cost reduction measures; and Other Income and Expense, which were positive due to lower legal fees.

CONSUMER HEALTH DIVISION

Operating income rose 13% (+17% cc) to USD 1.2 billion, with the operating income margin improving over 2009 by 1.1 percentage points, to 18.6% of net sales for 2010.

Excluding the impact of currency movements, the division showed strong operating leverage by growing operating income 17% in constant currencies, at nearly three times the rate of sales growth.

Core operating income rose 12% (+15% cc) to USD 1.3 billion, with strong operating leverage, driving the core operating income margin up 1.0 percentage points to 20.2% of net sales versus 2009. Gross margin improvements, productivity gains, and income from an OTC US non-core brand divestment have been the key growth drivers, partially offset by higher investments in Marketing & Sales to support new product launches and geographic expansion.

ALCON, INC.

Alcon has contributed USD 323 million to Novartis operating income since its consolidation from August 25, 2010.

This amount includes an additional charge of USD 467 million relating to the estimated fair value revaluation of inventory as of the change in majority ownership date; USD 32 million for amortization of intangible assets; and USD 30 million of costs resulting from the change in majority ownership.

Excluding these items, core operating income totaled USD 852 million.

CORPORATE INCOME & EXPENSE, NET

Corporate income & expense includes the costs of Group headquarters and costs for corporate research. These net expenses of USD 632 million are 27% less than the prior year primarily due to the impact of an exceptional pension curtailment gain of USD 265 million arising from changing the conditions of the Swiss pension plan offset by USD 99 million of stamp duty and transaction expenses related to the acquisition of the additional 52% interest in Alcon.

Excluding these, corporate income & expense fell 8% compared to the prior year. From January 1, 2011, corporate research will be reported under the Pharmaceuticals Division. These research costs totaled USD 195 million in 2010.

OTHER REVENUES AND OPERATING EXPENSES

	Year ended Dec 31, 2010 USD millions	Year ended Dec 31, 2009 USD millions	Change in USD %
Net sales	50 624	44 267	14
Other revenues	937	836	12
Cost of Goods Sold	- 14 488	- 12 179	19
Marketing & Sales	- 13 316	- 12 050	11
Research & Development	- 9 070	- 7 469	21
General & Administration	- 2 481	- 2 281	9
Other income	1 234	782	58
Other expense	- 1 914	- 1 924	- 1
Operating income	11 526	9 982	15

CORE OTHER REVENUES AND OPERATING EXPENSES

	Year ended Dec 31, 2010 USD millions	Year ended Dec 31, 2009 USD millions	Change in USD %
Net sales	50 624	44 267	14
Other revenues	937	808	16
Cost of Goods Sold	- 13 044	- 11 292	16
Marketing & Sales	- 13 315	- 12 050	10
Research & Development	- 8 080	- 7 287	11
General & Administration	- 2 477	- 2 281	9
Other income	485	717	- 32
Other expense	- 1 124	- 1 445	- 22
Core operating income	14 006	11 437	22

OTHER REVENUES

Other revenues rose 12% to USD 0.9 billion mainly due to increased royalty income in Pharmaceuticals. Other revenues also included profit contributions from sales of the asthma medicine *Xolair* in the US, where it is co-marketed and co-developed in collaboration with Roche-Genentech.

COST OF GOODS SOLD

Cost of Goods Sold rose 19% to USD 14.5 billion in 2010, increasing by 1.1 percentage points to 28.6% of net sales mainly as a result of changes to the Group's portfolio mix (consolidation of Alcon) and price reductions, partially offset by productivity savings and lower sourcing costs. Excluding Alcon, COGS increases by 10% or 0.3 percentage points to 27.8% of sales.

Cost of Goods Sold in core results, which excludes USD 1.0 billion of amortization and impairment of intangible assets and USD 0.5 billion of inventory step-up to estimated fair value in Alcon, increased broadly in line with sales, by 16% to USD 13.0 billion.

MARKETING & SALES

Marketing & Sales rose 11% to USD 13.3 billion, improving 0.9 percentage points to 26.3% of net sales, as productivity improvements across the Group and changes in the portfolio mix (consolidation of Alcon) were offset slightly by investments in new launch products. Excluding Alcon, Marketing and Sales rose 6% to USD 12.7 billion. For core results, Marketing & Sales rose 10% to USD 13.3 billion.

RESEARCH & DEVELOPMENT

Research & Development expenses increased significantly, by 21% in 2010, to USD 9.1 billion. This included USD 0.9 billion in impairments of intangible assets related to acquired in-process R&D mainly due to the discontinuation of *Mycograb*, *Albinterferon alfa-2b*, PTZ601 and ASA404. Excluding these and certain other costs, core R&D investment increased 11% to USD 8.1 billion and represented 16.0% of net sales in 2010 compared to 16.5% in 2009.

GENERAL & ADMINISTRATION

General & Administration expenses increased at a slower pace than sales, up 9% to USD 2.5 billion in 2010 from the benefits of productivity gains and good cost management across all divisions, with core results showing the same trends.

OTHER INCOME AND OTHER EXPENSE

Other income, which largely consists of gains from the disposal of intangible assets and property, plant & equipment, rose by USD 452 million to USD 1.2 billion in 2010. For core results, other income excludes USD 739 million in exceptional gains (e.g. USD 392 million for the divestment of *Enblex* and a Swiss pension fund curtailment gain of USD 265 million) and fell by 32% compared to 2009 to USD 485 million, since the prior year only excluded USD 65 million of divestment gains. Other expense, which largely consists of litigation settlement costs, impairment of financial assets and pension expenses, were flat at USD 1.9 billion in 2010. For core results, which eliminate exceptional charges exceeding a USD 25 million threshold, other expense was down 22% on a comparable basis to USD 1.1 billion in 2010.

NON-DIVISIONAL INCOME AND EXPENSE

	Year ended Dec 31, 2010 USD millions	Year ended Dec 31, 2009 USD millions	Change in USD %
Operating income	11 526	9 982	15
Income from associated companies	804	293	174
Financial income	64	198	-68
Interest expense	-692	-551	26
Income before taxes	11 702	9 922	18
Taxes	-1 733	-1 468	18
Group net income	9 969	8 454	18
<i>Attributable to:</i>			
Shareholders of Novartis AG	9 794	8 400	17
Non-controlling interests	175	54	224
Basic EPS (USD)	4.28	3.70	16

CORE NON-DIVISIONAL INCOME AND EXPENSE

	Year ended Dec 31, 2010 USD millions	Year ended Dec 31, 2009 USD millions	Change in USD %
Core operating income	14 006	11 437	22
Income from associated companies	1 041	1 051	-1
Financial income	64	198	-68
Interest expense	-692	-551	26
Core income before taxes	14 419	12 135	19
Taxes	-2 390	-1 868	28
Core net income	12 029	10 267	17
<i>Attributable to:</i>			
Shareholders of Novartis AG	11 767	10 213	15
Non-controlling interests	262	54	385
Core basic EPS (USD)	5.15	4.50	14

INCOME FROM ASSOCIATED COMPANIES

Associated companies are accounted for using the equity method when Novartis holds between 20% and 50% of the voting shares of these companies, or where Novartis has otherwise significant influence over them. Income from associated companies is mainly derived from the Group's investments in Roche Holding AG and, prior to August 25, 2010, Alcon, Inc. (Alcon).

The income from associated companies for 2010 increased from USD 293 million to USD 804 million. The increase is attributable to higher contributions from the Alcon and Roche investments due to exceptional charges incurred in the prior year period as well as the net revaluation gain of USD 335 million on the initial 25% Alcon interest acquired on July 7, 2008.

The following is a summary of the individual components included in the income from associated companies:

	2010 USD millions	2009 USD millions
Share of estimated Roche reported net income	648	593
Catch-up for actual Roche previous year net income		-40
Restructuring impact (2010 includes USD 43 million from 2009)	-132	-97
Amortization of intangible assets	-136	-135
Net income effect from Roche	380	321
Share of Alcon net income	385	493
Catch-up for actual Alcon previous year net income	2	5
Revaluation of initial 25% interest to deemed fair value	378	
Recycling of losses accumulated in comprehensive income from July 7, 2008 to August 25, 2010	-43	
Intangible asset impairment charge		-92
Amortization of intangible assets	-289	-434
Net income effect from Alcon (in 2010 up to August 25, 2010)	433	-28
Net income from other associated companies	-9	
Income from associated companies	804	293

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 380 million in 2010, up from USD 321 million in 2009. The 2010 contribution reflects an estimated USD 648 million share of Roche's net income in 2010. This contribution, however, was reduced by USD 136 million for the amortization of intangible assets arising from the allocation of the purchase price paid by Novartis for this investment to Roche's intangible assets and an exceptional charge of USD 132 million taken in 2010 as part of Roche's restructuring charges.

Alcon accounted for as an associated company until August 25, 2010 and thereafter fully consolidated, contributed USD 433 million compared to a loss of USD 28 million in the prior year period. Included in this total is a net revaluation gain of USD 335 million to the fair value of the initial 25% Alcon interest acquired on July 7, 2008, required as a result of acquiring majority control on August 25, 2010. The 2010 result includes the actual net income up to

August 25, 2010 of USD 385 million from Alcon and a positive prior-year adjustment of USD 2 million which were reduced by USD 289 million for the amortization of intangible assets and other charges.

Adjusting for the exceptional items in both years, core income from associated companies decreased 1% to USD 1.0 billion.

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 2011 financial statements.

FINANCIAL INCOME AND INTEREST EXPENSE

Financial income decreased by 68% to USD 64 million in 2010. In order to accommodate the payment for the Alcon acquisition financial investments were kept short-term which resulted in lower yields. Interest expense increased by 26% to USD 692 million in 2010 as a result of the issuance of US dollar bonds in February 2009 and March 2010, a euro bond in June 2009 and the increase of short-term debts through the commercial paper program.

TAXES

Tax expenses in 2010 were USD 1.7 billion, a 18% increase from 2009. The tax rate (taxes as a percentage of pre-tax income) remained at the 2009 rate of 14.8%. The effective tax rate is different than the expected tax rate due to various adjustments made to the IFRS results to arrive at taxable income. For further information on the main elements contributing to the difference, see note 6 to the Group's consolidated financial statements.

Excluding the impact of consolidating Alcon, the Group's full year tax rate would have been 16.3%, which is higher than 2009 as it reflects the impact of sales from A (H1N1) pandemic flu vaccines and other sales being recorded in higher tax jurisdictions.

Taxes on the adjustments between IFRS and core results take into account, for each individual item included in the adjustment, the tax rate that is applicable to the item in the jurisdiction where the adjustment arises. Generally this results in amortization of intangible assets and acquisition-related restructuring and integration items having a full tax impact. Tax impacts on impairment charges can only be taken into account if the changes in value in the underlying asset are tax deductible in the respective jurisdiction where the asset is recorded. There is usually a tax impact on exceptional items although this is not the case for items arising from criminal settlements in certain jurisdictions. Adjustments related to income from associated companies are recorded net of any related tax effect. Due to these factors and the differing effective tax rates in the various jurisdictions, the tax on the total adjustments of USD 2.7 billion to arrive at the core results before tax, amounts to USD 657 million. This results in the average tax rate on the adjustments being 24.2%.

NET INCOME

Net income rose 18% to USD 10.0 billion in 2010. Core net income was up 17% to USD 12.0 billion.

BASIC EARNINGS PER SHARE

Basic earnings per share were USD 4.28, up 16% from USD 3.70 in 2009, but less than the net income increase due to higher income attributable to non-controlling minority interests. Core earnings per share grew 14% to USD 5.15 in 2010 from USD 4.50 in 2009.

CONDENSED CONSOLIDATED BALANCE SHEETS

	Dec 31, 2010 USD millions	Dec 31, 2009 USD millions	Change USD millions
Non-current assets	96 633	61 814	34 819
Cash, marketable securities and derivative financial instruments	8 134	17 449	-9 315
Other current assets	18 551	16 242	2 309
Total assets	123 318	95 505	27 813
Equity	69 769	57 462	12 307
Financial debt	22 987	13 988	8 999
Other liabilities	30 562	24 055	6 507
Total equity and liabilities	123 318	95 505	27 813

The full consolidation of Alcon has had a significant impact on the Group's consolidated balance sheet. Non-current assets have increased by USD 34.8 billion since December 31, 2009, of which the major items resulted from the consolidation of Alcon from August 25 and the related purchase price allocation, which increased identified intangible assets by USD 24.5 billion and goodwill by USD 17.9 billion. Furthermore, this also reduced the amount of investments in associated companies by USD 10.0 billion. Current assets decreased by USD 7.0 billion mainly due to USD 9.3 billion lower cash and marketable securities as these funds were used to acquire the additional 52% interest in Alcon. Trade accounts receivable, inventories and other current assets increased by USD 2.3 billion also mainly due to the consolidation of Alcon. As a result of the consolidation of Alcon and other factors, total assets amounted to USD 123.3 billion at December 31, 2010, an increase of USD 27.8 billion compared to the end of 2009.

Similarly, the consolidation of Alcon and related financing for the additional 52% interest has had a significant impact on the Group's liabilities and equity. Financial debts increased by USD 9.0 billion, which was mainly used to fund the Alcon acquisition. Other current and non-current liabilities increased by USD 6.5 billion of which USD 3.3 billion are additional deferred tax liabilities primarily related to the Alcon identified intangible assets. Principally due to these factors, total liabilities increased by USD 15.5 billion to USD 53.5 billion at December 31, 2010. The Group's equity rose by USD 12.3 billion since the prior year-end to USD 69.8 billion at December 31, 2010, which includes the net income of USD 10.0 billion as well as an additional USD 6.3 billion related to the 23% non-controlling interests in

Alcon, and USD 0.9 billion from net sales of treasury shares and share-based compensation as well as favorable currency translation effects which contributed USD 0.6 billion. This increase was partially offset by the dividend payment for 2009 of USD 4.5 billion, net actuarial losses of USD 0.7 billion, and net movements related to non-controlling interests and associated companies of USD 0.3 billion.

The Group's debt/equity ratio rose to 0.33:1 at December 31, 2010, compared to 0.24:1 at the end of 2009, reflecting the higher financial debt for the funding of the Alcon acquisition. The Group's financial debt of USD 23.0 billion consisted of USD 8.6 billion in current and USD 14.4 billion in non-current liabilities. Overall liquidity, including USD 3.8 billion consolidated with Alcon, decreased to USD 8.1 billion from USD 17.4 billion at the end of 2009. Net debt at December 31, 2010 was USD 14.9 billion compared to net liquidity of USD 3.5 billion at the end of the previous year.

Credit agencies maintained their ratings of Novartis debt during 2010. Moody's rated the Group as Aa2 for long-term maturities and P-1 for short-term maturities, and Standard & Poor's had ratings 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+.

LIQUIDITY AND CAPITAL RESOURCES

The following table sets forth certain information about the Group's cash flow and net debt/liquidity.

	2010 USD millions	2009 USD millions	Change USD millions
Cash flows from operating activities	14 067	12 191	1 876
Cash flows used in investing activities	-15 756	-14 219	-1 537
Cash flows from financing activities	4 116	2 809	1 307
Currency translation effect on cash and cash equivalents	-2	75	-77
Net change in cash and cash equivalents	2 425	856	1 569
Change in marketable securities	-11 740	10 476	-22 216
Change in current and non-current financial debts	-8 999	-6 624	-2 375
Change in net (debt) / liquidity	-18 314	4 708	-23 022
Net liquidity / (debt) at January 1	3 461	-1 247	4 708
Net (debt) / liquidity at December 31	-14 853	3 461	-18 314

Cash flow from operating activities was USD 14.1 billion in 2010, a 15.4% increase from USD 12.2 billion in 2009. The additional cash flow of USD 1.9 billion generated by the strong business expansion and lower working capital requirements was partially offset by higher taxes and payments in connection with the resolution of certain legal matters.

The net cash outflow used for investing activities in 2010 amounted to USD 15.8 billion, USD 1.5 billion above the prior-year amount. The cash used for acquisitions was USD 26.7 billion. This amount is comprised of USD 26.1 billion (net of USD 2.2 billion cash acquired) for the purchase of the additional 52% investment in Alcon and of USD 0.5 billion for the acquisition of Corthera and Oriol as well as for deferred payments related to the EBEWE acquisition. The net cash used for investments in property, plant & equipment, intangible and other assets amounted to USD 1.7 billion. These outflows were partially offset by the net proceeds of marketable securities of USD 12.6 billion.

Net cash provided by financing activities increased by USD 1.3 billion to USD 4.1 billion in 2010 compared to USD 2.8 billion in 2009. The USD 8.3 billion proceeds from the bonds and commercial paper programs as well as other net inflows totaling USD 0.3

billion were partially offset by the payment of the 2009 dividend of 4.5 billion in 2010.

Overall liquidity at the end of 2010 amounted to USD 8.1 billion compared to USD 17.4 billion at the end of 2009. Taking into account additional debt raised in 2010, the Group had net debt of USD 14.9 billion at the end of 2010 compared to net liquidity of USD 3.5 billion at the end of 2009.

Net liquidity constitutes a non-IFRS financial measure, which means that it should not be interpreted as a measure determined under International Financial Reporting Standards (IFRS). Net liquidity is presented as additional information as it is a useful indicator of the Group's ability to meet financial commitments and to invest in new strategic opportunities, including strengthening its balance sheet.

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	14 458	98	2 808	5 591	5 961
Operating leases	3 162	363	450	262	2 087
Unfunded pensions and other post-retirement obligations	1 200	66	142	157	835
Research & Development					
– Unconditional commitments	270	84	95	61	30
– Potential milestone commitments	3 264	338	1 133	703	1 090
Purchase commitments					
– Property, plant & equipment	597	460	82	37	18
Total contractual cash obligations	22 951	1 409	4 710	6 811	10 021

The Group expects to fund the R&D and purchase commitments with internally generated resources.

LIQUIDITY/SHORT-TERM FUNDING – 2010 AND 2009

We continuously track our liquidity position and asset/liability profile. This involves modeling cash flow maturity profiles based on both historical experiences and contractual expectations to project our liquidity requirements. We seek to preserve prudent liquidity and funding capabilities.

We are not aware of significant demands to decrease our level of liquidity apart from the usual operating cash flows. We expect that part of our free cash flow will be used to reduce our financial debt. Thus we expect that our level of net debt should decrease absent unforeseen events.

We make use of various borrowing facilities provided by several financial institutions. We also successfully issued various bonds in 2009 and 2010. In addition, we raised funds through our commercial paper program. We have no commitments from repurchase or securities lending transactions.

The principal reason for the increase in average current financial debt in 2010 compared to 2009 is the increase in commercial paper during 2010, which was used for general corporate purposes of the Novartis Group, as well as for intercompany financing purposes in connection with the acquisition of an additional 52% interest in Alcon, Inc. during 2010.

The current financial debt is set forth below:

	December 31, 2010 USD millions	2010 Average interest rate % ¹	2010 Average USD millions	2010 Average interest rate % ¹	2010 Maximum USD millions ²
Interest bearing accounts of associates	1 321	1.15	1 239	1.23	1 321
Other bank and financial debt	2 195	2.37	2 297	2.26	2 692
Commercial paper	4 969	0.20	3 603	0.28	8 719
Current portion of non-current financial debt	98	na	47	na	98
Fair value of derivative financial instruments	44	na	106	na	201
Total current financial debt	8 627		7 292		12 631

	December 31, 2009 USD millions	2009 Average interest rate % ¹	2009 Average USD millions	2009 Average interest rate % ¹	2009 Maximum USD millions ²
Interest bearing accounts of associates	1 175	1.23	1 121	1.29	1 176
Other bank and financial debt	2 142	2.73	2 159	2.70	2 446
Commercial paper	1 887	0.26	1 574	0.31	1 886
Current portion of non-current financial debt	29	na	17	na	29
Fair value of derivative financial instruments	80	na	190	na	329
Total current financial debt	5 313		5 061		5 660

¹ Interest is calculated based on the average balances for a quarter

² maximum amount at end of any quarter in each category

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: 1.25%). Other bank and financial debt refer to usual lending and overdraft facilities. The commercial paper are issued through our commercial paper program.

FREE CASH FLOW

Novartis defines free cash flow as cash flow from operating activities less purchase or sale of property, plant & equipment, intangible, non-current and financial assets and dividends paid. Cash effects realized in connection with the acquisition or divestment of subsidiaries, associated companies and non-controlling interests are excluded from free cash flow. The following is a summary of the Group's free cash flow:

	2010 USD millions	2009 USD millions	Change USD millions
Cash flows from operating activities	14 067	12 191	1 876
Purchase of property, plant & equipment	- 1 678	- 1 887	209
Purchase of intangible assets	- 554	- 846	292
Purchase of financial assets	- 124	- 215	91
Purchase of non-current non-financial assets	- 15	- 23	8
Proceeds from sales of property, plant & equipment	36	48	- 12
Proceeds from sales of intangible assets	545	51	494
Proceeds from sales of financial assets	66	124	- 58
Proceeds from sales of non-current non-financial assets	3	3	
Free cash flow before dividend	12 346	9 446	2 900
Dividends paid to shareholders of Novartis AG	- 4 486	- 3 941	- 545
Group free cash flow	7 860	5 505	2 355

The free cash flow for 2010 was USD 7.9 billion which represents an increase of 42.8% over 2009. The strong business expansion, lower working capital requirements, higher proceeds from the disposal of intangible assets as well as lower capital spending contributed to the growth of the free cash flow.

Net investments in property, plant & equipment in 2010 were USD 1.6 billion, or 3.2% of net sales, down from 4.2% of net sales in 2009. Free cash flow before dividends rose 31% to USD 12.3 billion in 2010 and was mainly attributable to the Pharmaceuticals Division which contributed USD 10.7 billion to the Group total.

Free cash flow is presented as additional information because Novartis considers it is 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 and investment in strategic opportunities.

The Group uses free cash flow as a performance measure when making internal comparisons of the results of divisions. Free cash flow of the divisions uses the same definition as for the Group. However no dividends, tax or financial receipts or payments are included in the operating divisional calculation.

Free cash flow constitutes a non-IFRS financial measure, which means that it should not be interpreted as a measure determined under International Financial Reporting Standards (IFRS). Free cash flow is not intended to be a substitute measure for cash flow from operating activities (as determined under IFRS).

The following table summarizes the free cash flow by segment:

	2010 USD millions	2009 USD millions	Change USD millions
Pharmaceuticals	10 681	9 170	1 511
Vaccines and Diagnostics	1 336	- 82	1 418
Sandoz	2 084	1 841	243
Consumer Health	1 325	1 139	186
Alcon, Inc.	674		674
Corporate and other	- 3 754	- 2 622	- 1 132
Dividends paid to shareholders of Novartis AG	- 4 486	- 3 941	- 545
Group free cash flow	7 860	5 505	2 355

EARNINGS BEFORE INTEREST, TAX, DEPRECIATION AND AMORTIZATION (EBITDA)

The Group defines the non-IFRS measure of earnings before interest, tax, depreciation and amortization (EBITDA) as operating income excluding depreciation of property, plant & equipment, amortization of intangible assets (including any related impairment charges) as well as income from associated companies, financial income, interest expense and taxes.

	2010 USD millions	2009 USD millions	Change USD millions
Operating income	11 526	9 982	1 544
Depreciation of property, plant & equipment	1 363	1 241	122
Amortization of intangible assets	1 135	1 025	110
Impairments of property, plant & equipment and intangible assets	921	35	886
Group EBITDA	14 945	12 283	2 662

The following table provides an overview of EBITDA by segment:

	2010 USD millions	% of net sales	2009 USD millions	% of net sales
Pharmaceuticals	10 867	35.6	9 410	33.0
Vaccines and Diagnostics	985	33.8	800	33.0
Sandoz	1 861	21.8	1 613	21.5
Consumer Health	1 356	21.9	1 217	20.9
Alcon, Inc.	425	17.5		
Corporate and other	- 549		- 757	
Group EBITDA	14 945	29.5	12 283	27.7

As indicated above, EBITDA is an additional non-IFRS measure. It differs from our core non-IFRS measure as it only adjusts for the impact of the significant non-cash items contained in operating income of depreciation, amortization and impairment charges but does not take into account any other exceptional items.

ENTERPRISE VALUE

Enterprise value is a non-IFRS measure representing the total amount that shareholders and debt holders have in Novartis, less the Group's liquidity.

	Dec 31, 2010 USD millions	Dec 31, 2009 USD millions	Change USD millions
Market capitalization	133 731	124 003	9 728
Non-controlling interests	6 573	75	6 498
Financial debts	22 987	13 988	8 999
Liquidity	- 8 134	- 17 449	9 315
Enterprise value	155 157	120 617	34 540
Enterprise value/EBITDA	10	10	

ECONOMIC VALUE ADDED (EVA)

Novartis utilizes its own definitions for measuring Economic Value Added (EVA), a non-IFRS measure, which is utilized for determining payouts under the Long-Term Performance Plan. The following table shows Group EVA for 2010 and 2009 utilizing the Novartis definitions.

	Year ended Dec 31, 2010 USD millions	Year ended Dec 31, 2009 USD millions	Change in USD %
Operating income	11 526	9 982	15
Income from associated companies	804	293	174
Operating interest	- 324	- 366	- 11
Operating tax	- 2 169	- 1 996	9
Capital charge	- 5 495	- 4 379	25
Economic Value Added	4 342	3 534	23

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 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.

VALUE ADDED STATEMENT

A total of 44% of the 2010 revenue from net sales was used to purchase goods and services from suppliers. Of the total of USD 24.8 billion of Net Value Added, a non-IFRS measure, 49% was paid either directly or indirectly to associates, 21% was retained in the business for future expansion and 11% was paid to public authorities and financial institutions. Income attributed to non-controlling interests and dividends paid to shareholders of Novartis AG represented 19% of the Net Value Added.

ORIGIN OF VALUE ADDED

	2010 USD millions	2010 % of net sales	2009 % of net sales
Net sales	50 624	100	100
Other revenues, change in inventory and own manufactured items	- 28	- 0.1	1.4
	50 596	99.9	101.4
Services bought from third parties:			
Material costs and other operating expenses	- 22 289	- 44.0	- 48.2
Gross value added	28 307	55.9	53.2
Depreciation, amortization and impairments	- 3 577	- 7.1	- 5.2
Financial income	64	0.1	0.4
Net Value Added	24 794	48.9	48.4

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 concluding that the Group maintained, in all material respects, effective internal control over financial reporting as of December 31, 2010.

SUMMARY OF QUARTERLY FINANCIAL DATA FOR 2010 AND 2009

USD millions unless indicated otherwise	Q1	Q2	Q3	Q4	2010	Q1	Q2	Q3	Q4	2009
Net sales	12 131	11 716	12 578	14 199	50 624	9 709	10 546	11 086	12 926	44 267
Other revenues	225	205	242	265	937	217	196	204	219	836
Cost of Goods Sold	-3 096	-3 206	-3 662	-4 524	-14 488	-2 585	-2 824	-3 103	-3 667	-12 179
Gross profit	9 260	8 715	9 158	9 940	37 073	7 341	7 918	8 187	9 478	32 924
Marketing & Sales	-3 014	-3 145	-3 167	-3 990	-13 316	-2 721	-2 990	-2 863	-3 476	-12 050
Research & Development	-2 037	-1 893	-2 548	-2 592	-9 070	-1 694	-1 802	-1 825	-2 148	-7 469
General & Administration	-570	-543	-574	-794	-2 481	-505	-542	-542	-692	-2 281
Other income	180	389	97	568	1 234	171	180	70	361	782
Other expense	-308	-562	-379	-665	-1 914	-245	-400	-393	-886	-1 924
Operating income	3 511	2 961	2 587	2 467	11 526	2 347	2 364	2 634	2 637	9 982
Income from associated companies	103	158	368	175	804	83	124	-21	107	293
Financial income	49	14	27	-26	64	-48	91	51	104	198
Interest expense	-133	-175	-188	-196	-692	-86	-136	-173	-156	-551
Income before taxes	3 530	2 958	2 794	2 420	11 702	2 296	2 443	2 491	2 692	9 922
Taxes	-582	-521	-475	-155	-1 733	-321	-399	-379	-369	-1 468
Group net income	2 948	2 437	2 319	2 265	9 969	1 975	2 044	2 112	2 323	8 454
<i>Attributable to:</i>										
Shareholders of Novartis AG	2 933	2 417	2 275	2 169	9 794	1 962	2 035	2 098	2 305	8 400
Non-controlling interests	15	20	44	96	175	13	9	14	18	54
<i>Basic earnings per share (USD)</i>	<i>1.29</i>	<i>1.06</i>	<i>0.99</i>	<i>0.95</i>	<i>4.28</i>	<i>0.87</i>	<i>0.90</i>	<i>0.93</i>	<i>1.01</i>	<i>3.70</i>
Net sales by division										
Pharmaceuticals	7 291	7 670	7 565	8 032	30 558	6 433	7 115	7 217	7 773	28 538
Vaccines and Diagnostics	1 361	564	632	361	2 918	247	247	543	1 387	2 424
Sandoz	2 001	1 973	2 177	2 367	8 518	1 726	1 774	1 850	2 143	7 493
Consumer Health	1 478	1 509	1 587	1 630	6 204	1 303	1 410	1 476	1 623	5 812
Alcon, Inc.			617	1 809	2 426					
Group net sales	12 131	11 716	12 578	14 199	50 624	9 709	10 546	11 086	12 926	44 267
Operating income by division										
Pharmaceuticals	2 327	2 337	1 844	2 290	8 798	2 062	2 213	2 211	1 906	8 392
Vaccines and Diagnostics	839	-42	68	-253	612	-67	-167	23	583	372
Sandoz	310	289	415	258	1 272	291	247	312	221	1 071
Consumer Health	264	294	386	209	1 153	235	271	303	207	1 016
Alcon, Inc.			101	222	323					
Corporate income & expense, net	-229	83	-227	-259	-632	-174	-200	-215	-280	-869
Group operating income	3 511	2 961	2 587	2 467	11 526	2 347	2 364	2 634	2 637	9 982
Core operating income	3 865	3 276	3 699	3 166	14 006	2 611	2 663	2 959	3 204	11 437
Core net income	3 309	2 771	3 146	2 803	12 029	2 302	2 394	2 679	2 892	10 267
<i>Core basic earnings per share</i>	<i>1.45</i>	<i>1.20</i>	<i>1.36</i>	<i>1.14</i>	<i>5.15</i>	<i>1.01</i>	<i>1.05</i>	<i>1.17</i>	<i>1.26</i>	<i>4.50</i>

SUMMARY OF GROUP FINANCIAL DATA 2006–2010

USD millions unless indicated otherwise	2010	2009	2008	2007	2006
Net sales to third parties from continuing operations	50 624	44 267	41 459	38 072	34 393
Change relative to preceding year	% 14.4	6.8	8.9	10.7	16.8
Pharmaceuticals Division net sales	30 558	28 538	26 331	24 025	22 576
Change relative to preceding year	% 7.1	8.4	9.6	6.4	11.4
Vaccines and Diagnostics net sales	2 918	2 424	1 759	1 452	956
Change relative to preceding year	% 20.4	37.8	21.1	n.m.	
Sandoz Division net sales	8 518	7 493	7 557	7 169	5 959
Change relative to preceding year	% 13.7	-0.8	5.4	20.3	26.9
Consumer Health Division net sales from continuing operations	6 204	5 812	5 812	5 426	4 902
Change relative to preceding year	% 6.7	0.0	7.1	10.7	9.2
Alcon, Inc. net sales (consolidated from Aug. 25, 2010)	2 426				
Net sales from discontinued operations ¹				1 728	2 627
Operating income from continuing operations	11 526	9 982	8 964	6 781	7 642
Change relative to preceding year	% 15.5	11.4	32.2	-11.3	17.4
As a % of net sales	% 22.8	22.5	21.6	17.8	22.2
As a % of average equity	% 18.1	18.5	18.0	15.0	20.5
As a % of average net operating assets	% 16.6	18.9	19.1	16.7	22.4
Operating income from discontinued operations ¹			70	6 152	532
Net income from continuing operations	9 969	8 454	8 163	6 540	6 825
Change relative to preceding year	% 17.9	3.6	24.8	-4.2	16.1
As a % of net sales	% 19.7	19.1	19.7	17.2	19.8
Net income from discontinued operations ¹			70	5 428	377
Total Group net income	9 969	8 454	8 233	11 968	7 202
As a % of average equity	% 15.7	15.7	16.5	26.4	19.3
Dividends of Novartis AG²	5 354	4 486	3 941	3 345	2 598
As % of net income from continuing operations ³	% 54.7	53.4	48.5	51.3	38.2
Cash flows from operating activities⁴	14 067	12 191	9 769	9 210	8 304
Change relative to preceding year	% 15.4	24.8	6.1	10.9	7.1
As a % of net sales	% 27.8	27.5	23.6	24.2	24.1
Free cash flow⁴	7 860	5 505	4 301	3 761	4 045
Change relative to preceding year	% 42.8	28.0	14.4	-7.0	-13.1
As a % of net sales	% 15.5	12.4	10.4	9.9	11.8
Purchase of property, plant & equipment⁴	1 678	1 887	2 106	2 549	1 779
Change relative to preceding year	% -11.1	-10.4	-17.4	43.3	65.0
As a % of net sales	% 3.3	4.3	5.1	6.7	5.2
Depreciation of property, plant & equipment⁴	1 363	1 241	1 205	1 130	977
As a % of net sales	% 2.7	2.8	2.9	3.0	2.8
Core Research & Development⁴	8 080	7 287	6 776	6 186	5 155
As a % of Core net sales	% 16.0	16.5	16.4	16.2	15.0
Core Pharmaceuticals Division Research & Development	6 153	5 715	5 335	4 914	4 146
As a % of Pharmaceuticals Division Core net sales	% 20.1	20.0	20.3	20.4	18.4
Total assets	123 318	95 505	78 299	75 452	68 008
Liquidity	8 134	17 449	6 117	13 201	7 959
Equity	69 769	57 462	50 437	49 396	41 294
Debt/equity ratio	0.33:1	0.24:1	0.15:1	0.12:1	0.18:1
Current ratio	1.09:1	1.7:1	1.3:1	1.6:1	1.3:1
Net operating assets⁴	84 622	54 001	51 684	41 989	39 120
Change relative to preceding year	% 56.7	4.5	23.1	7.3	34.3
As a % of net sales	% 167	122	125	110	114
Personnel costs⁴	12 240	10 920	10 634	9 893	8 692
As a % of net sales	% 24.2	24.7	25.6	26.0	25.3
Full-time equivalent associates at year-end^{4,5}	119 418	99 834	96 717	98 200	94 241
Net sales per full-time equivalent associate (average) ⁴	USD 461 788	450 438	425 402	395 675	387 409

¹Including discontinued Consumer Health operations (Gerber, Medical Nutrition and Nutrition & Santé).

²2010: Proposed dividend for approval at the Annual General Meeting in February 2011. In all years, figure reflects only amounts paid to third party shareholders of Novartis AG.

³Based on net income from continuing operations attributable to the shareholders of Novartis AG

⁴Only continuing operations.

⁵2010 includes 16 700 Alcon, Inc. associates

n.m. - not meaningful

NOVARTIS SHARE DEVELOPMENTS IN 2010

- Swiss-listed Novartis shares fall 3% to CHF 54.95
- American Depositary Shares (ADS) rise 8% to USD 58.95

Novartis shares finished at CHF 54.95, a decrease of 3% from the 2009 year-end closing price of CHF 56.50. The Novartis American Depositary Shares (ADS) rose 8% to USD 58.95 from USD 54.43 in 2009, reflecting the appreciation in value of the Swiss franc against the US dollar. The Swiss Market Index (SMI) in comparison fell at a 1.7% pace in 2010, whereas the world pharmaceutical index (MSCI) fell by 1.6% in the year.

Over a longer-term period, Novartis has consistently delivered a solid performance, providing a 9.1% compounded annual total shareholder return between January 1, 1996, and December 31, 2010, clearly exceeding the compounded returns of 6.5% of its large pharmaceutical peers or the returns of 7.2% of the world pharmaceutical index (MSCI).

The market capitalization of Novartis amounted to USD 134 billion as of December 31, 2010, compared to USD 124 billion as of December 31, 2009.

CONTINUOUSLY RISING DIVIDEND SINCE 1996

The Board of Directors proposes a 5% increase in the dividend payment for 2010 to CHF 2.20 per share (2009: CHF 2.10) for approval at the Annual General Meeting on February 22, 2011. This represents the 14th consecutive increase in the dividend paid per share since the creation of Novartis in December 1996. If the 2010 dividend proposal is approved by shareholders, dividends paid out on the outstanding shares will amount to approximately USD 5.4 billion (2009: USD 4.5 billion), resulting in a payout ratio of 55% of net income attributable to Novartis shareholders (2009: 53%). Based on the 2010 year-end share price of CHF 54.95, the dividend yield will be 4.0% (2009: 3.7%). The dividend payment date has been set for March 1, 2011. With the exception of 159.4 million treasury shares, all shares issued are dividend-bearing.

SHARE REPURCHASE PROGRAMS

On December 15, 2010 we announced the reactivation of the sixth share repurchase program, along with the agreement for the merger with Alcon, Inc. This program had been suspended since April 2008 when we announced an agreement to potentially acquire majority ownership in Alcon, Inc, from Nestle S.A.

No shares were cancelled in 2010 as none had been repurchased in the 12 months to December 2009.

No shares were repurchased under the share repurchase program in 2010.

DIRECT SHARE PURCHASE PLANS

Novartis has been offering US investors since 2001 an ADS Direct Share Purchase Plan that provides investors an easy and inexpensive way of directly purchasing Novartis shares and of reinvesting dividends. This plan holds Novartis ADSs that are listed on the New York Stock Exchange under the trading symbol NVS. At the end of 2010, the ADS Direct Plan had 962 participants.

Starting in September 2004, Novartis began offering a Direct Share Purchase Program to investors residing in Switzerland, Liechtenstein, France and the United Kingdom, which was the first of its kind in Europe. This plan 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 end of 2010, a total of 9 314 shareholders were enrolled in this program.

INFORMATION ON NOVARTIS SHARES

Further information can be found on the Internet at <http://www.novartis.com/investors>.

NOVARTIS 2010 SHARE PRICE MOVEMENT

(in USD)



KEY NOVARTIS SHARE DATA

	2010	2009
Issued shares	2 637 623 000	2 637 623 000
<i>Of which treasury shares:</i>		
Reserved for share-based compensation	58 893 837	67 202 918
Not specifically reserved ¹	289 283 985	296 066 731
Treasury shares	348 177 822	363 269 649
Outstanding shares at December 31	2 289 445 178	2 274 353 351
Average number of shares outstanding	2 285 668 065	2 267 855 586

¹ Approximately 181 million treasury shares (2009: 189 million) are held in entities that limit their availability for use

PER-SHARE INFORMATION¹

	2010	2009
Basic earnings per share (USD)	4.28	3.70
Diluted earnings per share (USD)	4.26	3.69
Operating cash flow (USD)	6.15	5.38
Year-end equity for Novartis AG shareholders (USD)	27.60	25.23
Dividend (CHF) ²	2.20	2.10

¹ Calculated on average number of shares outstanding, except year-end equity per share

² 2010: Proposal to shareholders for approval at the Annual General Meeting on February 22, 2011.

NOVARTIS 1996–2010 TOTAL SHAREHOLDER RETURN

(in USD)



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

KEY RATIOS – DECEMBER 31

	2010	2009
Price/earnings ratio ¹	13.6	14.7
Enterprise value/EBITDA	10.4	9.8
Dividend yield (%) ¹	4.0	3.7

¹ Based on Novartis share price at the end of each year

KEY DATA ON AMERICAN DEPOSITARY SHARES (ADS) ISSUED IN THE US

	2010	2009
Year-end ADS price (USD)	58.95	54.43
High	59.77	56.16
Low	43.78	33.96
Number of ADSs outstanding ¹	251 330 166	275 495 384

¹ The depositary, JP Morgan Chase Bank, holds one Novartis AG share for every American Depositary Share (ADS) issued

SHARE PRICE (CHF)

	2010	2009
Year-end share price	54.95	56.50
High	60.25	56.90
Low	50.55	39.64
Year-end market capitalization (USD billions)¹	133.7	124.0
Year-end market capitalization (CHF billions)¹	125.8	128.5

¹ 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 Shares (ADSs) are listed on the New York Stock Exchange.

SYMBOLS

	SIX Swiss Exchange (Reuters/Bloomberg)	NYSE (Reuters/Bloomberg)
Shares	NOVN.VX/NOVN VX	
ADSs		NVS

WIDELY DISPERSED SHAREHOLDINGS

Novartis shares are widely held. As of December 31, 2010, Novartis had approximately 160 000 shareholders (2009: 159 000) listed in its share register, representing 75% of issued shares. Based on the Novartis AG share register and excluding treasury shares, approximately 45% (2009: 45%) of the shares registered by name were held in Switzerland and 42% were held in the US (2009: 42%). Approximately 13% of the shares registered in the share register were held by individual investors, while 87% were held by legal entities, nominees and fiduciaries.

NOVARTIS GROUP CONSOLIDATED FINANCIAL STATEMENTS

CONSOLIDATED INCOME STATEMENTS

(For the years ended December 31, 2010 and 2009)

	Note	2010 USD millions	2009 USD millions
Net sales	3	50 624	44 267
Other revenues		937	836
Cost of Goods Sold		- 14 488	- 12 179
Gross profit		37 073	32 924
Marketing & Sales		- 13 316	- 12 050
Research & Development		- 9 070	- 7 469
General & Administration		- 2 481	- 2 281
Other income		1 234	782
Other expense		- 1 914	- 1 924
Operating income	3	11 526	9 982
Income from associated companies	4	804	293
Financial income	5	64	198
Interest expense	5	- 692	- 551
Income before taxes		11 702	9 922
Taxes	6	- 1 733	- 1 468
Net income		9 969	8 454
<i>Attributable to:</i>			
Shareholders of Novartis AG		9 794	8 400
Non-controlling interests		175	54
Basic earnings per share (USD)	7	4.28	3.70
Diluted earnings per share (USD)	7	4.26	3.69

The accompanying notes form an integral part of the consolidated financial statements.

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

(For the years ended December 31, 2010 and 2009)

	Note	2010 USD millions	2009 USD millions
Net income		9 969	8 454
Fair value adjustments on financial instruments, net of taxes	8.1	- 33	93
(Losses)/gains from defined benefit plans, net of taxes	8.2	- 685	949
Novartis share of other items recorded in comprehensive income recognized by associated companies, net of taxes	8.3	- 94	- 43
Currency translation effects		554	789
Total comprehensive income		9 711	10 242
<i>Attributable to:</i>			
Shareholders of Novartis AG		9 524	10 180
Non-controlling interests		187	62

The accompanying notes form an integral part of the consolidated financial statements.

CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY

(For the years ended December 31, 2010 and 2009)

	Note	Share capital USD millions	Treasury shares USD millions	Share premium USD millions	Retained earnings USD millions	Total fair value adjustments attributable to Novartis USD millions	Total reserves USD millions	Non-controlling interests USD millions	Total equity USD millions
Total equity at January 1, 2009		959	- 139	198	49 825	- 555	49 468	149	50 437
Total comprehensive income					8 357	1 823	10 180	62	10 242
Dividends	9.1				- 3 941		- 3 941		- 3 941
Sale of treasury shares, net	9.2		1		224		224		225
Reduction of share capital	9.3	- 2	2						
Equity-based compensation	9.4		4		631		631		635
Changes in non-controlling interests								- 136	- 136
Total of other equity movements		- 2	7		- 3 086		- 3 086	- 136	- 3 217
Total equity at December 31, 2009		957	- 132	198	55 096	1 268	56 562	75	57 462
Total comprehensive income					9 700	- 176	9 524	187	9 711
Dividends	9.1				- 4 486		- 4 486		- 4 486
Sale of treasury shares, net	9.2		4		338		338		342
Equity-based compensation	9.4		3		596		596		599
Impact of change of ownership of consolidated entities	9.5				- 74		- 74		- 74
Excess of the purchase price for acquiring non-controlling interest compared to the recorded amounts	9.6				- 96		- 96		- 96
Changes in non-controlling interests	9.7							6 311	6 311
Total of other equity movements			7		- 3 722		- 3 722	6 311	2 596
Total equity at December 31, 2010		957	- 125	198	61 074	1 092	62 364	6 573	69 769

The accompanying notes form an integral part of the consolidated financial statements.

CONSOLIDATED BALANCE SHEETS

(At December 31, 2010 and 2009)

	Note	2010 USD millions	2009 USD millions
Assets			
Non-current assets			
Property, plant & equipment	10	15 840	14 075
Goodwill	11	29 692	12 039
Intangible assets other than goodwill	11	35 231	10 331
Investments in associated companies	4	8 385	17 791
Deferred tax assets	12	5 240	4 615
Financial assets	13	1 840	2 635
Other non-current non-financial assets		405	328
Total non-current assets		96 633	61 814
Current assets			
Inventories	14	6 093	5 830
Trade receivables	15	9 873	8 310
Marketable securities and derivative financial instruments	16	2 815	14 555
Cash and cash equivalents		5 319	2 894
Other current assets	17	2 585	2 102
Total current assets		26 685	33 691
Total assets		123 318	95 505
Equity and liabilities			
Equity			
Share capital	18	957	957
Treasury shares	18	- 125	- 132
Reserves		62 364	56 562
Issued share capital and reserves attributable to Novartis AG shareholders		63 196	57 387
Non-controlling interests		6 573	75
Total equity		69 769	57 462
Liabilities			
Non-current liabilities			
Financial debts	19	14 360	8 675
Deferred tax liabilities	12	7 689	4 407
Provisions and other non-current liabilities	20	6 842	5 491
Total non-current liabilities		28 891	18 573
Current liabilities			
Trade payables		4 788	4 012
Financial debts and derivative financial instruments	21	8 627	5 313
Current income tax liabilities		1 710	1 816
Provisions and other current liabilities	22	9 533	8 329
Total current liabilities		24 658	19 470
Total liabilities		53 549	38 043
Total equity and liabilities		123 318	95 505

The accompanying notes form an integral part of the consolidated financial statements.

CONSOLIDATED CASH FLOW STATEMENTS

(For the years ended December 31, 2010 and 2009)

	Note	2010 USD millions	2009 USD millions
Net income		9 969	8 454
Reversal of non-cash items	23.1	6 162	5 448
Dividends from associated companies		568	504
Dividends received from marketable securities		3	3
Interest received		170	106
Interest paid		-525	-268
Other financial payments		-145	-386
Taxes paid		-2 616	-1 623
Cash flows before working capital and provision changes		13 586	12 238
Restructuring payments and other cash payments from provisions		-1 281	-735
Change in net current assets and other operating cash flow items	23.2	1 762	688
Cash flows from operating activities		14 067	12 191
Purchase of property, plant & equipment		-1 678	-1 887
Proceeds from sales of property, plant & equipment		36	48
Purchase of intangible assets		-554	-846
Proceeds from sales of intangible assets		545	51
Purchase of financial assets		-124	-215
Proceeds from sales of financial assets		66	124
Purchase of non-current non-financial assets		-15	-23
Proceeds from sales of non-current non-financial assets		3	3
Acquisitions and divestments of businesses	23.3	-26 666	-925
Acquisition of non-controlling interests			-81
Purchase of marketable securities		-40 569	-14 103
Proceeds from sales of marketable securities		53 200	3 635
Cash flows used in investing activities		-15 756	-14 219
Acquisition of treasury shares		-311	-461
Disposal of treasury shares		711	685
Increase in non-current financial debts		5 674	7 052
Repayment of non-current financial debts		-5	-22
Change in current financial debts		2 610	-491
Proceeds from issuance of share capital to third parties by subsidiaries		19	39
Dividends paid to non-controlling interests and other financing cash flows		-96	-52
Dividends paid to shareholders of Novartis AG		-4 486	-3 941
Cash flows from financing activities		4 116	2 809
Net effect of currency translation on cash and cash equivalents		-2	75
Net change in cash and cash equivalents		2 425	856
Cash and cash equivalents at January 1		2 894	2 038
Cash and cash equivalents at December 31		5 319	2 894

The accompanying notes form an integral part of the consolidated financial statements.

1. ACCOUNTING POLICIES

The Novartis Group (Group or Novartis) consolidated financial statements comply with the International Financial Reporting Standards (IFRS) as published 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 preparation of financial statements requires management to make estimates and other judgments that affect the reported amounts of assets and liabilities as well as the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual outcomes could differ from those estimates.

SCOPE OF CONSOLIDATION

The consolidated financial statements include all companies that Novartis AG, Basel, Switzerland directly or indirectly controls (generally more than 50% of voting interest). Special purpose entities, irrespective of their legal structure, are consolidated in instances where the Group has the power to govern the financial and operating policies of an entity so as to obtain benefits from their activities.

Investments in associated companies (defined as investments in companies 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. In these situations, the Group records its share of the associated company's net income and equity. The share of results attributed to Novartis from these associated companies is included in the income statement line "Income from associated companies" and is calculated after the deduction of related taxes and non-controlling interests included in the financial results of the associated company.

PRINCIPLES OF CONSOLIDATION

The Group's financial year end is December 31, and the annual closing date of the individual financial statements incorporated into the Group's consolidated financial statements is December 31.

The acquisition method of accounting is used to account for business combinations by the Group in transactions where Novartis takes control of another entity, including consideration of IFRS 3 (revised) "*Business Combinations*" which was adopted with effect from January 1, 2010. The cost of an acquisition is measured as the fair value of the transferred assets as well as incurred or assumed liabilities at the date of acquisition. Up to December 31, 2009 contingent consideration would not have been generally recorded at the date of acquisition. From January 1, 2010 the fair value of any contingent consideration potentially due to former owners of the acquired business is also included in the cost of the acquisition.

Costs directly attributable to an acquisition were capitalized up to December 31, 2009. Costs for acquisitions subsequent to January 1, 2010 are expensed. Identifiable acquired assets as well as assumed liabilities and contingent liabilities obtained in a business combination are measured initially at their fair values as of the acquisition date, irrespective of the extent of any non-controlling interest. The excess of the consideration transferred to obtain a controlling interest and the fair value of any previous non-controlling interest in the acquiree, over the fair value of the Group's share of net identifiable assets in a business combination, is recorded as goodwill in the balance sheet and is denominated in the functional currency of the related acquisition. Up to December 31, 2009, the excess of the cost of an acquisition over the Group's share of the fair value of acquired net identifiable assets related to acquiring an additional interest in an already controlled entity was also recorded as goodwill. From January 1, 2010 such amounts are recorded in consolidated equity. Up to December 31, 2009 any difference between the proceeds received from reducing the interest in a controlled entity compared to the share of the related net assets was recorded in the consolidated income statement. From January 1, 2010 such amounts are recorded in consolidated equity. Up to December 31, 2009, for an acquisition of an entity in stages, any revaluation of an initial non-controlling interest in an entity required as a result of obtaining control was recognized in a separate component of comprehensive income. From January 1, 2010 such amounts are recorded in the consolidated income statement. Also from January 1, 2010 Novartis has elected to value any remaining outstanding non-controlling interest in a controlled subsidiary only at its proportionate share of the fair value of the net identified assets. Companies acquired or disposed of during the year are included in the consolidated financial statements from the date of acquisition or until the date of disposal.

Intercompany income and expenses, including unrealized profits from internal Novartis transactions and intercompany receivables and payables, are eliminated.

FOREIGN CURRENCIES

The consolidated financial statements of Novartis are expressed in US dollars (USD). The functional currency of certain Swiss and foreign finance companies used for preparing the consolidated financial statements is USD instead of the respective local currencies. This reflects the fact that the cash flows and transactions of these entities are primarily denominated in USD. Generally, the respective local currency is used as the functional currency for other entities. In the respective entity financial statements, monetary assets and liabilities denominated in foreign currencies are translated at the prevailing exchange rate at the balance sheet date. Transactions are

recorded using the approximate exchange rate at the time of the transaction. All resulting foreign exchange transaction gains and losses are recognized in the entity's income statement.

Income, expense and cash flows of the consolidated entities have been translated into USD using the average of monthly exchange rates during the year. Balance sheets are translated using year-end exchange rates. Translation differences arising from movements in exchange rates used to translate equity and long-term intercompany financing transactions relating to net investments in a foreign entity, retained earnings and other equity components and net income for the year are allocated directly to the cumulative translation effects included in the fair value adjustments in the consolidated statement of comprehensive income. Translation gains and losses accumulated in the consolidated statement of comprehensive income are included in the income statement when the foreign operation is completely or partially liquidated or is sold.

PROPERTY, PLANT & EQUIPMENT

Land is recorded at acquisition cost less accumulated impairment, if any. Prepayments for long-term leasehold land agreements are amortized over the life of the lease.

Other items of property, plant & equipment are recorded at acquisition cost or production cost and are depreciated on a straight-line basis to the income statement over the following estimated useful lives:

Buildings	20 to 40 years
Other property, plant & equipment:	
– Machinery and equipment	7 to 20 years
– Furniture and vehicles	5 to 10 years
– Computer hardware	3 to 7 years

Additional costs that enhance the future economic benefit of property, plant & equipment are capitalized. Government grants for construction activities and equipment are deducted from the carrying value of the assets. With effect from January 1, 2009 as required by IAS 23, borrowing costs associated with the construction of new property, plant and equipment projects are capitalized. Such costs related to projects commencing prior to January 1, 2009 have been expensed. Property, plant & equipment is reviewed for impairment whenever events or changes in circumstances indicate that the balance sheet carrying amount may not be recoverable.

Property, plant & equipment that are financed by leases giving Novartis substantially all risks and rewards of ownership are capitalized at the lower of the fair value of the leased asset or the present value of minimum lease payments at the inception of the lease. These are depreciated in the same manner as other assets over the shorter of the lease term or their useful life. Leases in which a significant portion of the ownership risks and rewards are retained by the lessor are classified as operating leases. These are charged to the consolidated income statement over the life of the lease, generally, on a straight-line basis.

INTANGIBLE ASSETS

GOODWILL

The excess of the consideration transferred to obtain a controlling interest and the fair value of any previous non-controlling interest in the acquiree, over the fair value of the Group's share of net identifiable assets in a business combination, is recorded as goodwill in the balance sheet and is denominated in the functional currency of the related acquisition. Goodwill is allocated to an appropriate cash-generating unit which is defined as the smallest group of assets that generates independent cash inflows that support the goodwill. All goodwill is tested for impairment at least annually. In addition, goodwill is evaluated for impairment at each reporting date for each cash-generating unit with any resulting goodwill impairment charge recorded under Other Expense in the consolidated income statement.

When evaluating goodwill for a potential impairment, the Group estimates the recoverable amount based on the "fair value less costs to sell" of the cash-generating unit containing the goodwill. In certain circumstances, its "value in use" to the Group is estimated if this value is higher than the "fair value less costs to sell". If the carrying amount exceeds the recoverable amount, an impairment loss for the difference is recognized. Considerable management judgment is required to estimate the discounted future cash flows and appropriate discount rates used to make these calculations. Accordingly, actual cash flows and values could vary significantly from forecasted cash flows and related values derived using discounting techniques.

OTHER INTANGIBLE ASSETS

All identifiable intangible assets acquired in a business combination are recognized at their fair value. Furthermore, all acquired Research & Development assets, including upfront and milestone payments on licensed or acquired compounds, which are deemed to enhance the intellectual property of Novartis, are capitalized at cost as intangible assets, when it is probable that future economic benefits will arise, even though some uncertainties exist as to whether the R&D projects will ultimately be successful in producing a commercial product.

All Novartis intangible assets are allocated to cash-generating units. In-Process Research & Development (IPR&D) and the Alcon brand name are the only classes of separately identified intangible assets that are not amortized. Both are tested for impairment on an annual basis or when facts and circumstances warrant an impairment test. Any impairment charge is recorded in the consolidated income statement under "Research & Development expenses" for IPR&D and under "Other Expense" for the Alcon brand name. Once a project included in IPR&D has been successfully developed and is available for use, it is amortized over its useful life in the income statement under "Cost of Goods Sold," where any related impairment charges are also recorded.

1. ACCOUNTING POLICIES (CONTINUED)

All other intangible assets are amortized over their estimated useful lives once they are available for use. The useful lives assigned to acquired intangible assets are based on the period over which they are expected to generate economic benefits, commencing in the year in which they first generate sales or are used in development. Acquired intangible assets are amortized on a straight-line basis over the following periods:

Trademarks	Over their estimated economic or legal life with a maximum of 20 years
Currently marketed products and marketing know-how	5 to 20 years
Technology	10 to 30 years
Software	3 to 5 years
Others	3 to 5 years
Alcon brand name	Indefinite useful life, not amortized

Amortization of trademarks, product and marketing rights is charged in the income statement to "Cost of Goods Sold" over their useful lives. Technology, which represents identified and separable acquired know-how used in the research, development and production process, is amortized in the income statement under "Cost of Goods Sold" or "Research & Development." Any impairment charges are recorded in the income statement in the same functional cost lines as the related amortization charges.

Intangible assets, other than the Alcon brand name and IPR&D, are reviewed for impairment whenever facts and circumstances indicate their carrying value may not be recoverable. When evaluating an intangible asset for a potential impairment, the Group estimates the recoverable amount based on the intangible asset's "fair value less costs to sell" using the estimated future cash flows a market participant could generate with that asset or, in certain circumstances, the "value in use" of the intangible asset to the Group, whichever is higher. If the carrying amount of the asset exceeds the recoverable amount, an impairment loss for the difference is recognized. For purposes of assessing impairment, assets are grouped at the lowest level for which there are separately identifiable cash-generating units. Considerable management judgment is necessary to estimate the discounted future cash flows and appropriate discount rates used to make these calculations. Accordingly, actual cash flows and values could vary significantly from forecasted cash flows and related values derived using discounting techniques.

FINANCIAL ASSETS

Investments in debt and equity securities are initially recorded at fair value on the trade date, and subsequently carried at fair value. The fair values of quoted investments are 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. These include the use of data from the most recent arm's length transactions, such as new financing rounds or partial disposals; reference to other instruments that are substantially the same; a discounted cash flow analysis; and other pricing models that make maximum use of market data. Loans are carried at amortized cost, less any allowances for uncollectable amounts. Exchange rate gains and losses and interest income using the effective interest rate method on loans are recorded in the consolidated income statement. All other changes in the fair value of financial assets are deferred as a fair value adjustment in the consolidated statement of comprehensive income and recycled to the income statement when the asset is sold. Any impairments in value below initial cost are immediately expensed in the consolidated income statement.

Novartis uses the equity method to account for investments in associated companies (defined as investments in companies that correspond to holdings of between 20% and 50% of voting shares or over which Novartis otherwise has significant influence).

Novartis considers investments in associated companies for impairment testing whenever there is a quoted share price and when this has a fair value less than the carrying value per share for the investment. For unquoted investments in associated companies recent financial information is taken into account to assess whether impairment testing is necessary. Where there is an indicator that separately identified assets of the associated company other than its implicit goodwill might be impaired, an impairment test is performed. Any impairment charge is recorded in the income statement under "Income from associated companies".

If the consolidated balance sheet carrying amount of investments in associated companies exceeds the higher of its value in use or fair value less costs to sell, an impairment loss is recognized for the difference. Value in use is defined as the present value of the future cash flows expected to be derived from an asset or cash-generating unit. For investments in associated companies, Novartis typically uses the Discounted Cash Flow method (DCF). The discounted cash flow method is based on a forecast of all expected future net cash flows generated by the business utilising external and Novartis internal projections. As an alternative methodology to compute value in use of associated companies the discounted dividend method may be used. The Discounted Dividend Method (DDM) is the value of all future dividends plus the residual value of the investment less costs of disposal. These cash flows, which reflect the risks and uncertainties associated with the investment, are discounted at an appropriate rate to net present value.

DERIVATIVE FINANCIAL INSTRUMENTS AND HEDGING

Derivative financial instruments are initially recognized in the balance sheet at fair value, and they are remeasured to their current fair value at the end of each subsequent period.

The method of recognizing the resulting gain or loss is dependent on whether a derivative contract is designed to hedge a specific risk and qualifies for hedge accounting. The purpose of hedge accounting is to match the impact of the hedged item and the hedging instrument in the consolidated income statement. To qualify for hedge accounting, the hedging relationship must meet several strict conditions with respect to documentation, probability of occurrence, hedge effectiveness and reliability of measurement. At the inception of a transaction, the Group documents the relationship between hedging instruments and hedged items as well as its risk management objective and strategy for undertaking various hedge transactions. This process includes linking all derivatives designated as hedges to specific assets and liabilities, to specific firm commitments or to forecasted transactions. The Group also documents its assessment, both at the inception of a hedge and on an ongoing basis, as to whether the derivatives used in hedging transactions are highly effective in offsetting changes in fair values or cash flows of hedged items. On the date a derivative contract is effective, the Group designates derivatives that qualify as hedges for accounting purposes as either a) a hedge of the fair value of a recognized asset or liability (fair value hedge), or b) a hedge of a forecasted transaction or firm commitment (cash flow hedge) or c) a hedge of a net investment in a foreign entity.

Changes in the fair value of derivatives that are fair value hedges and that are highly effective are recognized in the consolidated income statement along with any changes in the fair value of the hedged asset or liability attributable to the hedged risk. Any gain or loss on the hedging instrument relating to the effective portion of changes in the fair value of derivatives in cash flow hedges are recognized in the consolidated statement of comprehensive income. Gains or losses relating to the ineffective portion are recognized immediately in the consolidated income statement. In determining whether the impact of a cash flow hedge can be deferred in the consolidated statement of comprehensive income, management assesses the probability of the forecasted transaction occurring. Amounts are only deferred when management judges the forecasted transaction to be highly probable. Where a forecasted transaction or firm commitment relating to a non-financial asset or non-financial liability is hedged, the gains or losses previously recorded in the consolidated statement of comprehensive income are included in the initial measurement of the asset or liability. Otherwise, amounts recorded in the consolidated statement of comprehensive income are transferred to the consolidated income statement and classified as income or expense in the same period in which the forecasted transaction affects the consolidated income statement.

Hedges of net investments in foreign entities are accounted for similarly to cash flow hedges. All foreign exchange gains or losses arising on translation are included in cumulative translation effects and recognized in the consolidated statement of comprehensive income. Gains and losses accumulated in this statement are included in the consolidated income statement when the foreign operation is completely or partially liquidated or is sold.

Certain derivative instruments, while providing effective economic hedges under the Group's policies, do not qualify for hedge accounting. Changes in the fair value of any derivative instruments that do not qualify for cash flow hedge accounting are recognized immediately in the financial result in the consolidated income statement.

When a hedging instrument expires or is sold, or when a hedge no longer meets the criteria for hedge accounting, any cumulative gain or loss existing in the consolidated statement of comprehensive income at that time is recognized in the income statement when the committed or forecasted transaction is ultimately recognized in the consolidated income statement. However, if a forecasted or committed transaction is no longer expected to occur, the cumulative gain or loss recognized in the consolidated statement of comprehensive income is immediately transferred to the consolidated income statement.

INVENTORIES

Purchased products are valued at acquisition cost while own-manufactured products are valued at manufacturing cost including related production expenses. In the consolidated balance sheet, inventory is valued at historical cost determined on a first-in first-out basis, and this value is used for the Cost of Goods Sold in the consolidated income statement. Provisions are made for inventories with a lower market value or which are slow-moving. If it becomes apparent that such inventory can be reused, provisions are reversed with inventory being revalued up to the lower of its net realizable value or original cost. Inventory produced ahead of regulatory approval is provided for with the provision being released on obtaining approval. Unsalable inventory is fully written off.

TRADE RECEIVABLES

Trade receivables are initially recognized at fair value which represent the invoiced amounts, less adjustments for estimated revenue deductions such as rebates, chargebacks and cash discounts. Doubtful trade receivables provisions are established based upon the difference between the recognized value and the estimated net collectible amount with the estimated loss recognized in the consolidated income statement within Marketing & Sales expenses. When a trade receivable becomes uncollectible, it is written off against the doubtful trade receivables provisions.

1. ACCOUNTING POLICIES (CONTINUED)

CASH AND CASH EQUIVALENTS

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 presented within other bank and financial debt within current financial debts on the consolidated balance sheet.

MARKETABLE SECURITIES

Marketable securities consist of equity and debt securities which are principally traded in liquid markets. The Group has classified all its marketable securities as available-for-sale, as they are not acquired to generate profit from short-term fluctuations in price. All purchases and sales of marketable securities are recognized on the trade date, which is the date that the Group commits to purchase or sell the asset. Marketable securities are initially recorded at their acquired fair value and subsequently carried at fair value. Exchange rate gains and losses and interest income using the effective interest rate method on debt securities are recorded in the consolidated income statement. All other changes in the fair value of unhedged securities are deferred as a fair value adjustment in the consolidated statement of comprehensive income and recycled to the consolidated income statement when the asset is sold or impaired. Where hedge accounting is applied, the change in fair value of effectively hedged securities is recorded in the consolidated income statement where it offsets the gains or losses of the hedging derivative.

Unrealized losses on impaired marketable securities are included as a reduction of financial income in the consolidated income statement. 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.

REPURCHASE AGREEMENTS

Underlying securities related to repurchase agreements are included within marketable securities. Repurchase financing agreements for securities sold but agreed to be repurchased are recognized gross and included in short-term financial debts. Income and expenses are recorded net in interest income.

TAXES

Taxes on income are provided in the same periods as the revenues and expenses to which they relate. 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 subsidiary's 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 distri-

bution of subsidiaries' retained earnings are only taken into account where a dividend has been planned since generally the retained earnings are reinvested. Deferred tax assets or liabilities, measured at the tax rates that are expected to apply in the period of tax settlement or realization by the applicable entity, are included in the consolidated balance sheet as either a non-current asset or liability, with changes in the year recorded in the consolidated income statement in tax expense or in the consolidated statement of comprehensive income, if they relate to an item directly recorded in this statement. 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.

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 record 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.

DEFINED BENEFIT PENSION PLANS, OTHER POST-EMPLOYMENT BENEFITS AND OTHER NON-CURRENT BENEFITS OF ASSOCIATES

DEFINED BENEFIT PENSION PLANS

The liability in respect of defined benefit pension plans is the defined benefit obligation calculated annually by independent actuaries using the projected unit credit method. The defined benefit obligation is measured as the present value of the estimated future payments required to settle the obligation that is attributable to the service of associates in the current and prior periods. The service cost for such pension plans is included in the personnel expenses of the various functions where the associates are employed, while the expected return on assets and interest expense are recognized as Other Income or Expense. Plan assets are recorded at their fair value. Unvested past service costs arising from amendments to pension plans are charged or credited to income over the associates' remaining vesting period. Vested past service costs, including such costs for retired associates are immediately recognized in the consolidated income statement. Gains or losses arising from plan curtailments or settlements are accounted for at the time they occur. Any net pension asset is limited to the present value of future economic benefits available to the Group in the form of refunds from the plan or expected reductions in future contributions to the plan.

The effects of changes in actuarial assumptions and experience adjustments on the value of assets and liabilities of defined benefit plans are immediately recognized in the consolidated balance sheet with a corresponding movement in the consolidated statement of comprehensive income.

OTHER POST-EMPLOYMENT BENEFITS

Certain subsidiaries provide healthcare and insurance benefits for a portion of their retired associates and their eligible dependents. The cost of these benefits is actuarially determined and accrued over the service lives of the related associates. Service costs are included in the personnel expenses of the various functions where the associates are located, while the expected return on assets and interest expense are recognized as Other Income or Expense. The related obligation is recognized in non-current liabilities.

OTHER NON-CURRENT BENEFITS OF ASSOCIATES

Other non-current benefits of associates represent amounts due to associates under deferred compensation arrangements available in certain jurisdictions in which the Group conducts its operations. Benefit costs are recognized on an accrual basis in the personnel expenses of the various functions where the associates are located. The related obligation is recognized in other non-current liabilities.

EQUITY-BASED COMPENSATION

The fair value of Novartis shares, restricted shares, restricted share units (RSU) and American Depositary Shares (ADS), Alcon restricted share units (RSU) and related Novartis and Alcon options granted to associates as compensation is recognized as an expense over the related vesting or service period adjusted to reflect actual and expected vesting levels. The charge for equity-based compensation is included in the personnel expenses which are allocated to functional costs. An option's fair value at grant date is calculated using an option pricing valuation method. Novartis shares, restricted shares, RSUs and ADSs and Alcon RSUs are valued using the market value on the grant date.

REVENUE RECOGNITION

Revenue is recognized 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 fixed and determinable and collectability is reasonably assured. Where contracts contain customer acceptance provisions, typically with government agencies, sales are recognized upon the satisfaction of acceptance criteria. 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 revenues are recorded. They are calculated on the basis of historical experience and clinical data 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. Where there is an historical experience of Novartis agreeing to customer returns or Novartis can otherwise reasonably estimate expected future returns, Novartis records a provision for estimated sales returns. In doing so it applies the estimated rate of return, determined based on historical experience of customer returns or considering any other relevant factors, 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.

RESEARCH & DEVELOPMENT

Internal Research & Development (R&D) costs are fully charged to 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 relevant major market such as for the US, the EU, Switzerland or Japan.

Payments made to third parties in compensation for subcontracted R&D that is deemed not to enhance the intellectual property of Novartis such as contract research and development organizations 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 (In-Process Research & Development assets, "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 such additional payments 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 these additional payments 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

1. ACCOUNTING POLICIES (CONTINUED)

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 where 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.

IPR&D assets are amortized once the related project has been successfully developed and regulatory approval for a product launch obtained and acquired technologies included in intangible assets are amortized in the consolidated income statement over their estimated useful lives.

Laboratory buildings and equipment included in property, plant & equipment are depreciated in the consolidated income statement over their estimated useful lives.

GOVERNMENT GRANTS

Grants from the government are recognized at their fair value where there is a reasonable assurance that the grant will be received and the Group will comply with all attached conditions.

Government grants 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.

Government grants relating to property, plant and equipment are deducted from the carrying value of assets and released to the consolidated income statement on a straight-line basis over the expected lives of the related assets.

Government grants related to income are deducted in reporting the related expense.

PROVISIONS

Novartis records provisions when it is judged probable that a liability has been incurred and the amount can be reliably estimated. These provisions are adjusted periodically as assessments change or additional information becomes available.

Cost of future expenditures do not usually reflect any insurance or other claims or recoveries, as Novartis only recognizes insurance or other recoveries at such time the amount is reliably estimable and collection is virtually certain.

PRODUCT LIABILITIES

Provisions are made for present product liability obligations resulting from past sales including related legal and other fees and expenses. The provision is actuarially determined taking into consideration such factors as past experience, amount and number of claims reported and estimates of claims incurred but not yet reported. Individually significant cases are provided for when probable and reliably estimable.

LEGAL LIABILITIES

Provisions are made for anticipated settlement costs where a reliable estimate can be made of the probable outcome of legal or other disputes against the Group. In addition, provisions are made for legal and other fees and expenses arising from claims affecting Novartis.

ENVIRONMENTAL LIABILITIES

Novartis is exposed to environmental liabilities relating to its past operations, principally in respect to remediation costs. Provisions for remediation costs are made when expenditure on remedial work is probable and the cost can be reliably estimated. These remediation costs are calculated as the net present value of expected cash outflows including anticipated inflation, discounted at a rate based on the market yields for high quality corporate bonds. The increase in provisions due to the passage of time and the effect of changes in the discount rates are included in Interest Expense.

CONTINGENT CONSIDERATION IN A BUSINESS COMBINATION

From January 1, 2010, contingent considerations potentially due to former owners as part of the consideration paid for assets forming part of a business combination, e.g. in the form of milestone payments upon the achievement of certain development stages or sales targets as well as royalties, are recognized as liabilities at fair value as of the acquisition date. Any subsequent changes in amounts recorded as a liability are recognized in the consolidated income statement.

RESTRUCTURING CHARGES

Restructuring charges are accrued against operating income in the period in which management has committed to a plan and has raised the valid expectation of the plan's implementation in those affected and the amount can be reliably estimated. The Group recognizes the costs for terminating the employment contracts of associates when it is demonstrably committed to either terminating employment according to a detailed formal plan without possibility of withdrawal or when it is committed to providing termination benefits as a result of an offer made to encourage voluntary redundancy.

Restructuring charges or releases of related provisions are included in Other Expense or Other Income in the consolidated income statement.

DIVIDENDS

Dividends are recorded in the Group's consolidated financial statements in the period in which they are approved by the Group's shareholders.

TREASURY SHARES

Treasury shares are deducted from consolidated equity at their nominal value of CHF 0.50 per share. Differences between this amount and the amount paid for acquiring, or received for disposing of, treasury shares are recorded in consolidated retained earnings.

OPERATING SEGMENTS

Operating segments are reported consistently with the internal reporting to the chief operating decision maker. The chief operating decision maker, who is responsible for allocating resources and assessing the performance of the operating segments, has been identified as being the Executive Committee.

STATUS OF ADOPTION OF SIGNIFICANT NEW OR AMENDED IFRS STANDARDS OR INTERPRETATIONS

In 2009, sections of IFRS 9 "*Financial Instruments: Classification and Measurement*" and "*Financial Assets*" were issued but only require to be adopted by January 1, 2013 although earlier adoption is permitted. This standard 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. Novartis is currently evaluating the potential impact that this standard will have on the Group's consolidated financial statements.

2. SIGNIFICANT TRANSACTIONS, BUSINESS COMBINATIONS AND DIVESTMENTS

The following acquisitions, divestments, business combinations and other significant transactions occurred during 2010 and 2009. See notes 3 and 24 for further details of the impact of these transactions on the consolidated financial statements.

ACQUISITIONS IN 2010

Corporate – Alcon, Inc.

Novartis acquired its initial 25% interest in Alcon from Nestlé for USD 10.4 billion or USD 143 per share in July 2008. On August 25, 2010, Novartis completed the acquisition of the 52% interest in Alcon for approximately USD 28.3 billion or USD 180 per share. This increased the interest in Alcon to a 77% majority ownership.

The overall purchase price of USD 38.7 billion included certain adjustments for dividends and interest up to the August 25, 2010 closing date. Sources of financing for the 77% majority ownership, including the initial 25% stake purchased in mid-2008, were USD 17.0 billion of available cash, and USD 13.5 billion from bonds raised in March 2010 as well as in 2008 and 2009. In addition, during 2010, we raised funds through our commercial paper program, which was used for general corporate purposes of the Novartis Group, as well as for intercompany financing purposes in connection with the acquisition of the 52% interest in Alcon.

A summary of the financial impact of consolidating Alcon from August 25, is given in the table below:

	USD billions	USD billions
Purchase price for acquiring initial 25% of Alcon		10.4
Purchase price for additional 52% of Alcon		28.3
Total purchase price		38.7
Equity adjustments since acquiring the initial 25% interest		-0.4
Revaluation gain on initial 25% interest		0.4
Investment value on date of change of majority ownership		38.7
Net assets reported by Alcon (excluding its goodwill but including any US GAAP/IFRS differences)	5.9	
Estimated fair value adjustments		
– property, plant and equipment	0.1	
– intangible assets	24.5	
– inventory	0.5	
– other liabilities	-0.1	
– deferred tax liabilities	-3.8	
Fair value of net assets acquired		27.1
Less value attributed to 23% non-controlling interest		-6.3
Residual goodwill		17.9

The fair value of the net identified assets is final, except for any matters that may arise following 100% ownership. The residual goodwill is attributable to a number of factors such as the future growth platform and synergies that can be achieved. None of the goodwill is currently expected to be deductible for tax purposes. Divestments required from regulatory decisions are expected to occur in the first

quarter of 2011. These divestments vary by market and had 2010 sales of approximately USD 100 million.

For business combinations achieved in stages, IFRS requires that any previously held interest of an acquirer in an acquiree is adjusted to its fair value through the consolidated income statement as of the acquisition date. The agreement that Novartis entered into with Nestlé in 2008 specified an average price of up to USD 168 per share for all of the approximately 77% interest in Alcon held by Nestlé, including USD 143 per share for the initial 25% interest acquired by Novartis in 2008, and a maximum of USD 181 per share for the remaining 52%, including a premium for the change of majority ownership.

Novartis has re-assessed the fair value of the initial 25% non-controlling interest in Alcon it acquired from Nestlé in 2008 as follows:

	USD millions
Fair value of all the approximate 77% interest in Alcon acquired from Nestlé valued at USD 168 per share	38 663
Amount paid for the approximate 52% interest in Alcon on August 25, 2010 (including the premium for gaining majority ownership)	- 28 343
Estimated fair value for initial approximately 25% interest in Alcon as of August 25, 2010	10 320
Carrying value of 25% interest in Alcon as of August 25, 2010	- 9 942
Excess of fair value over carrying value	378
Recycling of losses accumulated in comprehensive income from July 7, 2008 to August 25, 2010	- 43
Gain recorded as of August 25, 2010 as a result of fair valuing the initial approximately 25% interest in Alcon	335

Novartis determined the fair value of approximately USD 38.7 billion for the total interest in Alcon currently owned by Novartis based on a price of USD 168 per Alcon share, which is the per share value of the proposed acquisition of the outstanding non-controlling interests and also the approximate average price per share paid by Novartis for the total interest acquired from Nestlé.

On December 15, Novartis announced that it has entered into a definitive agreement to merge Alcon into Novartis for Novartis shares and a Contingent Value Amount (CVA). Under the terms of the agreement, the merger consideration will include up to 2.8 Novartis shares and a CVA to be settled in cash that will in aggregate equal USD 168 per share. If the value of 2.8 Novartis shares is more than USD 168 the number of Novartis shares will be reduced accordingly. The total merger consideration for the non-controlling interest will be USD 12.9 billion, comprising of up to 215 million Novartis shares and a potential CVA to be settled in cash.

The merger is currently expected to be completed during the first half of 2011 and is conditional on clearance of a registration statement by the US Securities and Exchange Commission, two-thirds approval by the shareholders of each of Novartis and Alcon

voting at their respective meetings and other customary closing conditions.

The proposed acquisition of the remaining outstanding non-controlling interests in Alcon via the merger is considered to be a separate transaction following the previous acquisition of majority ownership in Alcon by Novartis. It will change the Novartis ownership in Alcon but will not result in a change of control, so it will be accounted for as an equity transaction as required by IAS 27R, meaning assets and liabilities are not revalued as of the date of the acquisition of the outstanding non-controlling interests via the merger, goodwill does not arise and any excess of the consideration paid to acquire the outstanding non-controlling interest over the proportionate share of the outstanding non-controlling interests' net assets is recognized against consolidated equity. Based on an estimated maximum number of Alcon shares outstanding at the effective time of the merger (other than Alcon shares owned by Novartis), Novartis therefore expects to deliver a total merger consideration valued at approximately USD 12.9 billion to the non-controlling minority shareholders of Alcon in connection with the merger. The excess of the value of the merger over the non-controlling interest recognized within equity for Alcon will result in a reduction in the consolidated equity of Novartis. This reduction in consolidated equity will be offset by an increase in consolidated equity in an amount equal to the market value at the effective time of the merger of the Novartis shares or Novartis ADSs that Novartis will deliver as part of the merger consideration.

Since it has been consolidated from August 25, 2010, Alcon contributed net sales of USD 2.4 billion and operating income of USD 323 million. Net sales and operating income of the combined entity would have been approximately USD 55.4 billion and approximately USD 11.6 billion, respectively had the acquisition occurred on January 1, 2010.

Pharmaceuticals – Corthera

On February 3, Novartis completed the 100% acquisition (announced on December 23, 2009) of the privately held US based Corthera Inc., gaining worldwide rights to relaxin for the treatment of acute decompensated heart failure and assumed full responsibility for development and commercialization for a total purchase consideration of USD 327 million. This amount consists of an initial cash payment of USD 120 million and USD 207 million of deferred contingent consideration. The deferred contingent consideration is the net present value of the additional milestone payments due to Corthera's previous shareholders which they are eligible to receive contingent upon the achievement of specified development and commercialization milestones. The final purchase price allocation resulted in net identified assets of USD 309 million and goodwill of USD 18 million. Results of operations since the acquisition date were not material.

Sandoz – Oriel Therapeutics

On June 1, Sandoz completed the 100% acquisition of the privately held US based Oriel Therapeutics Inc., to broaden its portfolio of projects in the field of respiratory drugs for a total purchase consideration of USD 332 million. This amount consists of an initial cash payment of USD 74 million and USD 258 million of deferred contingent consideration. Oriel's previous shareholders are eligible to receive milestone payments, which are contingent upon the company achieving future development steps, regulatory approvals and market launches, and sales royalties. The total USD 258 million of deferred contingent consideration represents the net present value of expected milestone and royalty payments. The final purchase price allocation, including the valuation of the contingent payment elements of the purchase price, resulted in identified net assets of USD 281 million and goodwill of USD 51 million. Results of operations since the acquisition date were not material.

ACQUISITIONS IN 2009

Sandoz – EBEWE Pharma

On May 20, Novartis announced a definitive agreement for Sandoz to acquire 100% of the specialty generic injectables business of EBEWE Pharma for EUR 925 million (USD 1.3 billion) in cash, to be adjusted for any cash or debt assumed at closing. This transaction was completed on September 22, 2009. The first payment of EUR 600 million (USD 0.9 billion) was made in 2009, with the balance paid in 2010. Based on a final purchase price allocation, EBEWE's identified net assets were USD 0.7 billion, which resulted in goodwill of USD 0.5 billion. Results of operations from this acquisition, which were not material in 2009, were included from the completion date of this transaction.

Vaccines and Diagnostics – Zhejiang Tianyuan

On November 4, Novartis announced a definitive agreement to acquire an 85% stake in the Chinese vaccines company Zhejiang Tianyuan Bio-Pharmaceutical Co., Ltd. Terms call for Novartis to purchase an 85% majority interest for approximately USD 125 million in cash. The transaction, which is expected to be completed in 2011, is subject to certain closing conditions, including receipt of government and regulatory approvals in China.

OTHER SIGNIFICANT TRANSACTIONS IN 2010

Corporate – Issuance of bond in US dollars

On March 9, Novartis issued a three-tranche bond totaling USD 5.0 billion registered with the US Securities and Exchange Commission as part of a shelf registration statement filed by Novartis in 2008. A 1.9% three-year tranche totaling USD 2.0 billion, a 2.9% five-year tranche totaling USD 2.0 billion and a 4.4% 10-year tranche totaling USD 1.0 billion were issued by the Group's US entity, Novartis Capital Corp. All tranches are unconditionally guaranteed by Novartis AG.

2. SIGNIFICANT TRANSACTIONS, BUSINESS COMBINATIONS AND DIVESTMENTS (CONTINUED)

Corporate – Change of pension plan in Switzerland

On April 23, the Board of Trustees of the Novartis Swiss Pension Fund agreed to amend the conditions and insured benefits of the current Swiss pension plan with effect from January 1, 2011. These amendments do not have an impact on existing pensions in payment or on plan members born before January 1, 1956. Under the previous rules, benefits from the plan are primarily linked to the level of salary in the years prior to retirement while under the new rules benefits are also partially linked to the level of contributions made by the members during their active service period up to their retirement. This has led to changes, recorded in the second quarter of 2010, in the amounts that need to be included in the Group's consolidated financial statements prepared using IFRS in respect of the Swiss Pension Fund.

As part of this change, Novartis, supported by the Swiss Pension Fund, will make transitional payments, which vary according to the member's age and years of service. As a result, it is estimated that additional payments will be made over a ten-year period of up to approximately USD 481 million (CHF 453 million) depending on whether or not all current members affected by the change remain in the plan over this ten-year period.

The accounting consequence of this change in the Swiss pension plan rules results in the Group's consolidated financial statements prepared under IFRS reflecting a net pre-tax curtailment gain of USD 265 million (CHF 283 million) in the second quarter of 2010. This calculation only takes into account the discounted value of transition payments of USD 202 million (CHF 219 million) attributed to already completed years of service of the affected plan members as calculated in accordance with IFRS requirements. It does not take into account any amount for transitional payments related to their future years of service.

OTHER SIGNIFICANT TRANSACTIONS IN 2009

Corporate – Issuance of bond in US dollars

On February 5, Novartis issued a two-tranche bond totaling USD 5.0 billion registered with the US Securities and Exchange Commission as part of a shelf registration statement filed by Novartis in 2008. A 4.125% five-year tranche totaling USD 2.0 billion was issued by the Group's US entity, Novartis Capital Corp., while a 5.125% 10-year tranche totaling USD 3.0 billion was issued by the Group's Bermuda unit, Novartis Securities Investment Ltd. Both tranches are unconditionally guaranteed by Novartis AG.

Corporate – Issuance of bond in euros

On June 2, Novartis issued a EUR 1.5 billion bond (approximately USD 2.1 billion) with a coupon of 4.25% under its EUR 15 billion Euro Medium Term Note Programme. The seven-year bond, issued by Novartis Finance S.A., Luxembourg, has a maturity date of June 15, 2016, and is guaranteed by Novartis AG.

Corporate – Novartis India Ltd.

On June 8, Novartis completed a tender offer to acquire additional shares from public shareholders and increased its stake in the majority-owned Indian subsidiary, Novartis India Ltd., to 76.4% from 50.9% for approximately INR 3.8 billion (USD 80 million). Almost all large institutional investors and quasi-institutional shareholders participated in the offer. This transaction resulted in USD 57 million of goodwill.

Pharmaceuticals – Idenix

On August 5, Novartis did not participate in an underwritten public offering by Idenix Pharmaceuticals, which reduced the Group's stake to 47% from the pre-offering level of 53%. As a result of this offering, Novartis no longer controls this company, so Idenix was deconsolidated with effect from September 1. Idenix has been accounted for on an equity basis since this date, which had no material impact on the Group's consolidated income statement.

3. SEGMENTATION OF KEY FIGURES 2010 AND 2009

OPERATING SEGMENTS

The wholly owned businesses of Novartis are divided operationally on a worldwide basis into four Divisions: Pharmaceuticals, Vaccines and Diagnostics, Sandoz and Consumer Health and Corporate activities. In addition, following our 2010 acquisition of a 52% majority stake in Alcon, Inc. (Alcon), Novartis owns 77% of Alcon, an independent Swiss corporation listed on the New York Stock Exchange, and it is treated as a separate segment. These segments, which are based on internal management structures and are managed separately because they manufacture, distribute, and sell distinct products which require differing marketing strategies, are as follows:

The Pharmaceuticals Division researches, develops, manufactures, distributes and sells branded prescription medicines in the following therapeutic areas: Cardiovascular and Metabolism; Oncology; Neuroscience and Ophthalmics; Respiratory; Integrated Hospital Care; and additional products. The Pharmaceuticals Division is organized into global business franchises responsible for the development and marketing of various products, as well as a business unit, called Novartis Oncology, responsible for the global development and marketing of oncology products. Novartis Oncology 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 Pharmaceuticals Division.

The Vaccines and Diagnostics Division consists of two activities: Vaccines and Diagnostics. Novartis Vaccines researches, develops, manufactures, distributes and sells human vaccines worldwide. Novartis Diagnostics researches, develops, distributes and sells blood testing and molecular diagnostics products.

The Sandoz Division 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, Biopharmaceuticals and Oncology Injectables (following the acquisition of EBEWE Pharma, which was completed in September 2009). In Retail Generics, Sandoz develops, manufactures, distributes and sells active ingredients and finished dosage forms of medicines, as well as supplying active ingredients to third parties. In Anti-Infectives, Sandoz develops, manufactures, distributes and sells 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, distributes and sells protein- or biotechnology-based products (known as “biosimilars” or follow-on biologics) and sells biotech manufacturing services to other companies. In Oncology Injectables, Sandoz develops, manufactures, distributes and sells cytotoxic products for the hospital market.

The Consumer Health Division consists of three business units: OTC (over-the-counter medicines), Animal Health and CIBA Vision. Each has its own research, development, manufacturing, distribution and selling capabilities. None are material enough to the Group to be separately disclosed as a segment. OTC offers readily available consumer medicine. Animal Health provides veterinary products for farm and companion animals. CIBA Vision markets contact lenses and lens care products.

Alcon, Inc. is the world’s leader in eye care. It has been dedicated to the ophthalmic industry for 65 years and researches, develops, manufactures and markets pharmaceuticals, surgical equipment and devices, contacts lens solutions and other vision care products that treat diseases, disorders and other conditions of the eye.

Inter-Segmental sales are made at amounts which are considered to approximate arm’s length transactions. Where practicable, the same accounting policies are applied by the Group and the segments. Currently, the Executive Committee principally evaluates segmental performance and allocates resources among the segments based on their operating income.

Segment net operating assets consist primarily of property, plant & equipment, intangible assets, inventories and trade and other operating receivables less operating liabilities.

CORPORATE

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 environmental liabilities, charitable activities, donations, sponsorships and research into strategic areas and into neglected diseases. Usually, no allocation of Corporate items is made to the segments. Corporate assets and liabilities principally consist of net liquidity (cash and cash equivalents, marketable securities less financial debts), investments in associated companies and deferred and current taxes and non-segmental specific environmental liabilities.

3. SEGMENTATION OF KEY FIGURES 2010 AND 2009 (CONTINUED)

(In USD millions)	Pharmaceuticals		Vaccines and Diagnostics	
	2010	2009	2010	2009
Net sales to third parties	30 558	28 538	2 918	2 424
Sales to other segments	157	175	60	46
Net sales of segments	30 715	28 713	2 978	2 470
Other revenues	422	377	433	390
Cost of Goods Sold	-5 361	-4 955	-1 551	-1 415
Gross profit	25 776	24 135	1 860	1 445
Marketing & Sales	-8 694	-8 369	-338	-297
Research & Development	-7 081	-5 840	-523	-508
General & Administration	-919	-870	-149	-176
Other income	687	414	35	27
Other expense	-971	-1 078	-273	-119
Operating income	8 798	8 392	612	372
Income from associated companies	-16	-14	7	
Financial income				
Interest 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	-726	-659	-100	-98
Amortization of intangible assets	-453	-366	-259	-312
Impairment charges on property, plant & equipment	4	-4	-14	
Impairment charges on intangible assets	-894	11		-18
Impairment charges on financial assets	-41	-37	-98	
Additions to restructuring provisions	-133	-19	-62	
Equity-based compensation of Novartis and Alcon equity plans	-559	-535	-34	-30
Total assets	24 681	24 013	5 631	6 704
Total liabilities	-9 469	-9 494	-827	-1 121
Total equity	15 212	14 519	4 804	5 583
Net debt / (liquidity)				
Net operating assets	15 212	14 519	4 804	5 583
Included in total assets and total liabilities are:				
Total property, plant & equipment	8 360	7 947	1 453	1 471
Additions to property, plant & equipment ²	777	922	159	437
Total goodwill and intangible assets	6 696	6 930	2 973	3 163
Additions to goodwill and intangible assets ²	414	809	9	12
Total investment in associated companies	2	19	8	2
Additions to investment in associated companies		22		
Cash, marketable securities and derivative financial instruments				
Financial debts and derivative financial instruments				
Current income tax and deferred tax liabilities				

¹Alcon, Inc. is consolidated from August 25, 2010

²Excluding impact of business combinations

Sandoz		Consumer Health		Alcon, Inc. ¹	Corporate (including eliminations)		Total Group	
2010	2009	2010	2009	2010	2010	2009	2010	2009
8 518	7 493	6 204	5 812	2 426			50 624	44 267
267	264	49	44		-533	-529		
8 785	7 757	6 253	5 856	2 426	-533	-529	50 624	44 267
16	10	65	59	3	-2		937	836
-4 854	-4 201	-2 173	-2 111	-1 082	533	503	-14 488	-12 179
3 947	3 566	4 145	3 804	1 347	-2	-26	37 073	32 924
-1 449	-1 330	-2 238	-2 054	-600	3		-13 316	-12 050
-658	-613	-359	-346	-254	-195	-162	-9 070	-7 469
-350	-385	-402	-376	-140	-521	-474	-2 481	-2 281
77	105	48	72		387	164	1 234	782
-295	-272	-41	-84	-30	-304	-371	-1 914	-1 924
1 272	1 071	1 153	1 016	323	-632	-869	11 526	9 982
3	7				810	300	804	293
							64	198
							-692	-551
							11 702	9 922
							-1 733	-1 468
							9 969	8 454
							9 794	8 400
							175	54
							103	156
-285	-276	-103	-99	-70	-79	-109	-1 363	-1 241
-293	-260	-94	-84	-32	-4	-3	-1 135	-1 025
			-5				-10	-9
-11	-6	-6	-13				-911	-26
					-19	-3	-158	-40
-66	-40						-261	-59
-23	-28	-63	-55	-22	-140	-129	-841	-777
17 002	17 685	4 480	4 508	47 553	23 971	42 595	123 318	95 505
-2 976	-2 534	-1 272	-1 340	-1 129	-37 876	-23 554	-53 549	-38 043
14 026	15 151	3 208	3 168	46 424	-13 905	19 041	69 769	57 462
					14 853	-3 461	14 853	-3 461
14 026	15 151	3 208	3 168	46 424	948	15 580	84 622	54 001
2 925	3 080	986	926	1 489	627	651	15 840	14 075
307	282	150	164	107	153	78	1 653	1 883
10 336	10 683	1 465	1 577	43 433	20	17	64 923	22 370
32	35	14	101	20	6	10	495	967
16	18			17	8 342	17 752	8 385	17 791
					23	29	23	51
					8 134	17 449	8 134	17 449
					22 987	13 988	22 987	13 988
					9 399	6 223	9 399	6 223

3. SEGMENTATION OF KEY FIGURES 2010 AND 2009 (CONTINUED)

The following countries accounted for more than 5% of at least one of the respective Group totals for the years ended December 31, 2010 and 2009:

Country USD millions	Net sales ¹				Total of selected non-current assets ²			
	2010	%	2009	%	2010	%	2009	%
Switzerland	584	1	604	2	14 631	17	13 204	24
United States	15 863	31	14 254	32	11 952	13	11 717	22
Germany	3 926	8	4 035	9	4 267	5	4 649	8
Japan	4 061	8	3 545	8	153		142	
France	2 369	5	2 355	5	317		349	1
Other	21 395	42	19 474	44	12 889	15	14 038	26
Total divisions excl. Alcon, Inc.	48 198	95	44 267	100	44 209	50	44 099	81
Alcon, Inc.	2 426	5			44 939	50	10 137 ³	19
Group	50 624	100	44 267	100	89 148	100	54 236	100
Europe	18 558	37	18 362	42	27 354	31	27 635	51
Americas	20 224	40	17 820	40	15 485	17	15 193	28
Asia/Africa/Australasia	9 416	18	8 085	18	1 370	2	1 271	2
Total divisions excl. Alcon, Inc.	48 198	95	44 267	100	44 209	50	44 099	81
Alcon, Inc.	2 426	5			44 939	50	10 137 ³	19
Group	50 624	100	44 267	100	89 148	100	54 236	100

¹Net sales from operations by location of third party customer.

²Total of property, plant and equipment, goodwill, intangible assets and investment in associated companies

³Value of the approximately 25% interest in Alcon, Inc. accounted for using the equity method

The Group's two largest customers account for approximately 8% each of net sales, and the third largest customer accounts for 7% of net sales. No other customer accounts for 2% or more of net sales.

The highest amounts of trade receivables outstanding were for these three customers. They amounted to 9%, 5% and 6%, respectively, of the Group's trade receivables at December 31, 2010.

PHARMACEUTICALS DIVISION THERAPEUTIC AREA NET SALES

Therapeutic areas

	2010 USD millions	2009 USD millions	Change USD %	Change cc %
Cardiovascular and Metabolism				
Hypertension medicines				
<i>Diovan</i>	6 053	6 013	1	0
<i>Exforge</i>	904	671	35	35
<i>Tekturna/Rasilez</i>	438	290	51	53
Subtotal	7 395	6 974	6	5
<i>Galvus</i>	391	181	116	122
<i>Lotrel</i>	266	322	-17	-18
Total strategic franchise products	8 052	7 477	8	7
Established medicines (Lescol included)	1 103	1 319	-16	-17
Total Cardiovascular and Metabolism products	9 155	8 796	4	4
Oncology				
BCR-Abl franchise				
<i>Gleevec/Glivec</i>	4 265	3 944	8	7
<i>Tasigna</i>	399	212	88	89
Subtotal	4 664	4 156	12	11
<i>Zometa</i>	1 511	1 469	3	2
<i>Femara</i>	1 376	1 266	9	9
<i>Sandostatin</i>	1 291	1 155	12	11
<i>Exjade</i>	762	652	17	16
<i>Afinitor</i>	243	70	nm	nm
Other	181	231	-22	-23
Total Oncology products	10 028	8 999	11	11
Neuroscience and Ophthalmics				
<i>Lucentis</i>	1 533	1 232	24	24
<i>Exelon/Exelon Patch</i>	1 003	954	5	6
<i>Comtan/Stalevo</i>	600	554	8	8
<i>Extavia</i>	124	49	nm	nm
Other	457	459	0	-1
Total strategic franchise products	3 717	3 248	14	14
Established medicines	567	575	-1	-4
Total Neuroscience and Ophthalmics products	4 284	3 823	12	11

Therapeutic areas

	2010 USD millions	2009 USD millions	Change USD %	Change cc %
Respiratory				
<i>Xolair</i>	369	338	9	12
<i>TOBI</i>	279	300	-7	-7
<i>Onbrez Breezhaler</i>	33	1	nm	nm
Total strategic franchise products	681	639	7	9
Established medicines	174	190	-8	-10
Total Respiratory products	855	829	3	4
Integrated Hospital Care (IHC)*				
<i>Neoral/Sandimmun</i>	871	919	-5	-7
<i>Myfortic</i>	444	353	26	23
<i>Aclasta/Reclast</i>	579	472	23	23
<i>Zortress/Certican</i>	144	118	22	25
<i>Ilaris</i>	26	3	nm	nm
Other	293	235	25	24
Total strategic franchise products	2 357	2 100	12	11
Established medicines	890	941	-5	-7
Total IHC products	3 247	3 041	7	5
Additional products				
<i>Voltaren (excl. OTC)</i>	791	797	-1	-1
<i>Ritalin/Focalin</i>	464	449	3	3
<i>Tegretol</i>	355	375	-5	-7
<i>Foradil</i>	353	357	-1	-1
<i>Trileptal</i>	253	295	-14	-14
<i>Everolimus stent drug</i>	240	215	12	7
Other	533	562	-5	-6
Total additional products	2 989	3 050	-2	-3
Total strategic franchise products	24 835	22 463	11	10
Total established medicines and additional products	5 723	6 075	-6	-7
Total Division net sales	30 558	28 538	7	6

* includes Transplantation
nm – not meaningful

The product portfolio of other segments is widely spread and none of the products or product ranges exceed 5% of the net sales of the Group.

4. ASSOCIATED COMPANIES

Novartis has the following significant investments in associated companies which are accounted for using the equity method:

	Balance sheet value		Net income statement effect	
	2010 USD millions	2009 USD millions	2010 USD millions	2009 USD millions
Roche Holding AG, Switzerland	8 173	7 471	380	321
Alcon Inc., Switzerland		10 137	433	- 28
Others	212	183	- 9	
Total	8 385	17 791	804	293

The results of the Group's associated companies are adjusted to be in accordance with IFRS in cases where IFRS is not already used.

Since up-to-date financial data are not available when Novartis produces its consolidated financial results, a survey of analyst estimates is used to estimate the Group's share of net income in Roche Holding. Any differences between these estimates and actual results will be adjusted in the Group's 2011 consolidated financial statements.

The following table shows summarized financial information of the major associated company for the year ended December 31, 2009 since 2010 data is not yet available:

	Asset billions	Liabilities billions	Revenue billions	Net income billions
Roche (CHF)	74.6	65.2	51.2	8.5

ROCHE HOLDING AG

The Group's initial holding in Roche voting shares was 33.3% at December 31, 2010 and 2009. This investment represents approximately 6.3% of Roche's total outstanding voting and non-voting equity instruments. The purchase price allocation used publicly available information at the time of acquisition.

The December 31, 2010 balance sheet value allocation is as follows:

	USD millions
Novartis share of Roche's reported net assets	2 740
Novartis share of net book value of additionally appraised intangible assets	2 077
Net book value of implicit Novartis goodwill	3 027
Total residual value of purchase price	7 844
Accumulated equity accounting adjustments and translation effects less dividend received	329
December 31, 2010 balance sheet value	8 173

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.

The income statement effects from applying Novartis accounting principles for this investment in 2010 and 2009 are as follows:

	2010 USD millions	2009 USD millions
Novartis share of Roche's estimated current-year consolidated net income	559	496
Prior-year adjustment	- 43	- 40
Amortization of fair value adjustments relating to intangible assets net of taxes of USD 41 million (2009: USD 41 million)	- 136	- 135
Net income effect	380	321

The market value of the Novartis interest in Roche (Reuters symbol: RO.S) at December 31, 2010, was USD 8.2 billion (2009: USD 9.3 billion) which was approximately the consolidated balance sheet carrying value.

ALCON, INC.

The Group's initial holding in Alcon voting shares was acquired on July 7, 2008, and amounted to 24.8% at December 31, 2009. In order to apply the equity method of accounting, Novartis estimated the fair values of Alcon's identified assets and liabilities at the time of the acquisition of this initial interest and, as a result, the implicit goodwill. The purchase price allocation used findings arising from due diligence performed by Novartis prior to the acquisition and from publicly available information. The identified intangible assets principally related to the value of currently marketed products and have been straight-line basis over their estimated average useful life of 10 years. In 2010, the Group completed its purchase of an additional 52% of Alcon resulting in approximately 77% ownership. As from August 25, 2010 Alcon is fully consolidated and no longer accounted for as an associated company.

The impact on the Group's consolidated income statement for the period from January 1, 2010 to August 25, 2010 and for the year ended December 31, 2009 from applying this approach (and taking into account any necessary adjustments for material accounting differences between US GAAP and IFRS), is the following:

	2010 USD millions	2009 USD millions
Novartis share of Alcon's current-year consolidated net income	385	493
Prior-year adjustment	2	5
Revaluation of initial 25% interest to deemed fair value	378	
Recycling of losses accumulated in comprehensive income from July 7, 2008 to August 25, 2010	- 43	
Depreciation and amortization of fair value adjustments relating to property, plant & equipment, inventory and intangible assets, net of taxes of USD 61 million (2009: USD 115 million)	- 289	- 526
Net income effect	433	- 28

5. FINANCIAL INCOME AND INTEREST EXPENSE

	2010 USD millions	2009 USD millions
Interest income	103	156
Dividend income	3	3
Net capital gains on available-for-sale securities		110
Impairment of available-for-sale securities	- 4	- 20
Income on options and forward contracts	66	97
Expenses on options and forward contracts	- 38	- 85
Other financial expense	- 39	- 23
Currency result, net	- 27	- 40
Total financial income	64	198
Interest expense	- 615	- 442
Expense due to discounting long-term liabilities	- 77	- 109
Total interest expense	- 692	- 551

6. TAXES

INCOME BEFORE TAXES

	2010 USD millions	2009 USD millions
Switzerland	4 679	4 281
Foreign	7 023	5 641
Total income before taxes	11 702	9 922

CURRENT AND DEFERRED INCOME TAX EXPENSE

	2010 USD millions	2009 USD millions
Switzerland	- 425	- 413
Foreign	- 1 749	- 1 593
Total current income tax expense	- 2 174	- 2 006
Switzerland	- 94	188
Foreign	535	350
Total deferred tax income	441	538
Total income tax expense	- 1 733	- 1 468

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:

	2010 %	2009 %
Expected tax rate	15.8	15.8
Effect of disallowed expenditures	3.0	3.0
Effect of utilization of tax losses brought forward from prior periods	- 0.1	- 0.4
Effect of income taxed at reduced rates		- 0.1
Effect of tax credits and allowances	- 2.1	- 1.4
Effect of tax benefits expiring in 2017	- 0.4	
Effect of write-down of investments in subsidiaries	- 0.7	- 1.7
Prior year and other items	- 0.7	- 0.4
Effective tax rate	14.8	14.8

The expected tax rate is impacted by the different mix in profitability of the Group's subsidiaries in the respective countries.

The utilization of tax-loss carry-forwards lowered the tax charge by USD 17 million in 2010 and by USD 45 million in 2009, 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.

	2010	2009
Basic earnings per share		
Weighted average number of shares outstanding (in millions)	2 286	2 268
Net income attributable to shareholders of Novartis AG (USD millions)	9 794	8 400
Basic earnings per share (USD)	4.28	3.70

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.

	2010	2009
Diluted earnings per share		
Weighted average number of shares outstanding (in millions)	2 286	2 268
Adjustment for dilutive shares and options (in millions)	15	9
Weighted average number of shares for diluted earnings per share (in millions)	2 301	2 277
Net income attributable to shareholders of Novartis AG (USD millions)	9 794	8 400
Diluted earnings per share (USD)	4.26	3.69

Options equivalent to 82.9 million shares (2009: 109.3 million) were excluded from the calculation of diluted EPS since they were not dilutive.

8. CHANGES IN CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

The statement of comprehensive income includes 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 marketable securities, actuarial losses or gains 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.

Following the adoption of IFRS 3R from January 1, 2010, any revaluation of previously held equity interests are now recorded directly in the consolidated income statement. Up to December 31, 2009 they were recorded in a separate component of the consolidated statement of comprehensive income.

The following table summarizes these fair value adjustments attributable to Novartis shareholders:

	Fair value adjustments to marketable securities USD millions	Fair value adjustments of deferred cash flow hedges USD millions	Actuarial Gains/losses from defined benefit plans USD millions	Revaluation of previously held equity interests USD millions	Cumulative translation effects USD millions	Total fair value adjustments USD millions
Fair value adjustments at January 1, 2009	142	- 227	- 3 509	685	2 354	- 555
Fair value adjustments on financial instruments	89	4				93
Net actuarial gains from defined benefit plans			949			949
Currency translation effects					781	781
Total fair value adjustments in 2009	89	4	949	685	781	1 823
Fair value adjustments at December 31, 2009	231	- 223	- 2 560	685	3 135	1 268
Fair value adjustments on financial instruments	- 73	41				- 32
Net actuarial losses from defined benefit plans			- 678			- 678
Currency translation effects					534	534
Total fair value adjustments in 2010	- 73	41	- 678	685	534	- 176
Fair value adjustments at December 31, 2010	158	- 182	- 3 238	685	3 669	1 092

8. CHANGES IN CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (CONTINUED)

8.1) The 2010 and 2009 changes in the fair value of financial instruments consist of the following:

	Fair value adjustments to marketable securities USD millions	Fair value adjustments of deferred cash flow hedges USD millions	Total USD millions
Fair value adjustments at January 1, 2010	231	- 223	8
Changes in fair value:			
– Available-for-sale marketable securities	19		19
– Other financial assets	- 226		- 226
– Associated companies' movements in comprehensive income	- 5		- 5
Realized net gains transferred to the consolidated income statement:			
– Marketable securities sold	- 39		- 39
– Other financial assets sold	- 15		- 15
Amortized net losses on cash flow hedges transferred to the consolidated income statement		44	44
Impaired marketable securities and other financial assets	164		164
Deferred tax on above items	28	- 3	25
Fair value adjustments during the year	- 74	41	- 33
Fair value adjustments at December 31, 2010	157	- 182	- 25

	Fair value adjustments to marketable securities USD millions	Fair value adjustments of deferred cash flow hedges USD millions	Total USD millions
Fair value adjustments at January 1, 2009	142	- 227	- 85
Changes in fair value:			
– Available-for-sale marketable securities	57		57
– Other financial assets	- 8		- 8
– Associated companies' movements in comprehensive income	19		19
Realized net gains transferred to the consolidated income statement:			
– Marketable securities sold	- 37		- 37
– Derivative financial instruments		- 36	- 36
– Other financial assets sold	- 8		- 8
Amortized net losses on cash flow hedges transferred to the consolidated income statement		36	36
Impaired marketable securities and other financial assets	71		71
Deferred tax on above items	- 5	4	- 1
Fair value adjustments during the year	89	4	93
Fair value adjustments at December 31, 2009	231	- 223	8

8.2) Actuarial (losses)/gains from defined benefit plans arise from:

	2010 USD millions	2009 USD millions
Defined benefit pension plans before tax	- 832	1 256
Other post-employment benefit plans before tax	- 24	- 19
Taxation on above items	171	- 288
Total after tax	- 685	949

8.3) 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 of Novartis in the category shown as the Novartis share of other items recorded in comprehensive income recognized by associated com-

panies, net of tax. These amounted to charges of USD 94 million (2009: USD 43 million).

Alcon, Inc. was accounted for as an associated company until August 25, 2010, when Novartis acquired an approximate 77% majority ownership and, as a result, Alcon has been fully consolidated from that date. USD 43 million of losses accumulated in the consolidated statement of comprehensive income since accounting as an associated company using the equity method began in July 2008, have been recycled into the consolidated income statement as of the date of obtaining majority ownership.

9. CHANGES IN CONSOLIDATED EQUITY

9.1) At the 2010 Annual General meeting, a dividend of CHF 2.10 per share was approved that amounted to USD 4.5 billion, and was paid in 2010 (2009: CHF 2.00 per share dividend payment that amounted to USD 3.9 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 Obligation.

9.2) In 2010 a total of 8.4 million shares net were sold for USD 342 million (2009: sale of 1.0 million for USD 225 million) and 6.7 million shares (2009: 8.5 million shares) were transferred to associates as part of the equity-based compensation, resulting in a net reduction of 15.1 million treasury shares (2009: 9.5 million treasury shares).

Since the suspension of the share repurchase program in 2008, no further shares were repurchased in 2009 or 2010. The net movements in treasury shares include shares bought and sold on the first and second trading lines of the SIX Swiss Exchange, transactions with associates and the exercising of options related to equity-based compensation.

9.3) No shares were cancelled in 2010. In 2009 a total of 6 million shares were cancelled.

9.4) Equity-settled share-based compensation is expensed in the consolidated income statement in accordance with the vesting or service period of the share-based compensation plans. The value for the shares and options granted, including associated tax, represents an increase in consolidated equity.

9.5) The reduction in consolidated equity attributable to Novartis of USD 74 million arises from a dilution of the Novartis interest in Alcon since its consolidation from August 25, 2010. This is due to an increase in Alcon's outstanding shares, principally due to the issuance of new shares and the use of Alcon treasury shares to satisfy conversion of Alcon's equity-based instruments held by associates.

9.6) As required by IAS 27R the excess of the consideration paid to acquire additional non-controlling interests over the proportionate share of the outstanding non-controlling interests' net assets is recognized against consolidated equity. This leads to a negative impact of USD 96 million, mainly driven by the acquisition of additional shares in Alcon.

9.7) This amount contains primarily the proportionate share of the fair values of the net identifiable assets of the non-controlling interests of Alcon as determined by the purchase price allocation at its date of consolidation of August 25, 2010.

10. PROPERTY, PLANT & EQUIPMENT MOVEMENTS

	Land USD millions	Buildings USD millions	Construction in progress USD millions	Machinery & other equipment USD millions	Total USD millions
2010					
Cost					
January 1	709	9 380	2 176	13 635	25 900
Impact of business combinations	95	474	244	606	1 419
Reclassifications ¹	12	616	- 1 407	779	
Additions	3	62	1 260	328	1 653
Disposals	- 2	- 49	- 28	- 295	- 374
Currency translation effects	10	191	82	76	359
December 31	827	10 674	2 327	15 129	28 957
Accumulated depreciation					
January 1	- 13	- 3 869	- 8	- 7 935	- 11 825
Reclassifications ¹		5		- 5	
Depreciation charge	- 4	- 343		- 1 016	- 1 363
Depreciation on disposals		29		264	293
Impairment charge		- 3	2	- 9	- 10
Currency translation effects	- 2	- 137		- 73	- 212
December 31	- 19	- 4 318	- 6	- 8 774	- 13 117
Net book value at December 31	808	6 356	2 321	6 355	15 840
Insured value at December 31					32 288
Net book value of property, plant & equipment under finance lease contracts					4
Commitments for purchases of property, plant & equipment					597

¹Reclassifications between various asset categories due to completion of plant and other equipment under construction.

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 294 million cost reimbursement for construction activities and equipment, of which USD 185 million was received by December 31, 2010. These grants were deducted in arriving at the 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.

Borrowing costs on new additions to property, plant and equipment have been capitalized since January 1, 2009 and amounted to USD 1 million in 2010 (2009: USD 1 million).

	Land USD millions	Buildings USD millions	Construction in progress USD millions	Machinery & other equipment USD millions	Total USD millions
2009					
Cost					
January 1	658	8 560	2 440	12 315	23 973
Impact of business combinations	2	21	2	39	64
Reclassifications ¹	50	782	-1 809	977	
Additions	5	93	1 453	332	1 883
Disposals	-19	-259	-7	-375	-660
Currency translation effects	13	183	97	347	640
December 31	709	9 380	2 176	13 635	25 900
Accumulated depreciation					
January 1	-18	-3 727	-1	-7 127	-10 873
Reclassifications ¹		5		-5	
Depreciation charge	-2	-318		-921	-1 241
Depreciation on disposals	7	251		327	585
Impairment charge		-1	-7	-1	-9
Currency translation effects		-79		-208	-287
December 31	-13	-3 869	-8	-7 935	-11 825
Net book value at December 31	696	5 511	2 168	5 700	14 075
Insured value at December 31					27 147
Net book value of property, plant & equipment under finance lease contracts					4
Commitments for purchases of property, plant & equipment					548

¹Reclassifications between various asset categories due to completion of plant and other equipment under construction.

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 & marketing know-how USD millions	Other intangible assets USD millions	Total of intangible assets other than goodwill USD millions
2010							
Cost							
January 1	12 624	3 216		1 271	11 737	954	17 178
Impact of business combinations	17 986	1 418	2 980	5 460	16 521	44	26 423
Reclassifications ¹		- 474			474		
Additions		344			62	89	495
Disposals		- 24			- 184	- 13	- 221
Currency translation effects	- 349	147		- 32	90	61	266
December 31	30 261	4 627	2 980	6 699	28 700	1 135	44 141
Accumulated amortization							
January 1	- 585	- 547		- 273	- 5 395	- 632	- 6 847
Reclassifications ¹				- 16		16	
Amortization charge				- 91	- 970	- 74	- 1 135
Amortization on disposals		22			95	12	129
Impairment charge		- 991			- 14	- 13	- 1 018
Reversal of impairment charge		2			105		107
Currency translation effects	16	- 51		10	- 75	- 30	- 146
December 31	- 569	- 1 565		- 370	- 6 254	- 721	- 8 910
Net book value at December 31	29 692	3 062	2 980	6 329	22 446	414	35 231

¹Reclassifications between various asset categories as a result of product launches of acquired In-Process Research & Development.

	Goodwill USD millions	Acquired research & development USD millions	Technologies USD millions	Currently marketed products USD millions	Other intangible assets USD millions	Total of intangible assets other than goodwill USD millions
2009						
Cost						
January 1	11 976	3 028	754	10 599	942	15 323
Impact of business combinations	548	161	427	241		829
Reclassifications ¹		- 790	60	724	6	
Additions	57	758		104	48	910
Disposals	- 128	- 21	- 1	- 52	- 59	- 133
Currency translation effects	171	80	31	121	17	249
December 31	12 624	3 216	1 271	11 737	954	17 178
Accumulated amortization						
January 1	- 691	- 477	- 201	- 4 561	- 550	- 5 789
Reclassifications ¹			- 6	6		
Amortization charge			- 51	- 875	- 99	- 1 025
Amortization on disposals	122	21		34	59	114
Impairment charge		- 71		- 33	- 28	- 132
Reversal of impairment charge		6		100		106
Currency translation effects	- 16	- 26	- 15	- 66	- 14	- 121
December 31	- 585	- 547	- 273	- 5 395	- 632	- 6 847
Net book value at December 31	12 039	2 669	998	6 342	322	10 331

¹Reclassifications between various asset categories as a result of product launches of acquired In-Process Research & Development.

SEGMENTATION OF GOODWILL AND INTANGIBLE ASSETS

The net book values at December 31, 2010 of goodwill and intangible assets are allocated to the Group's segments as summarized below:

	Goodwill USD millions	Acquired research & development USD millions	Alcon brand name USD millions	Technologies USD millions	Currently marketed products & marketing know-how USD millions	Other intangible assets USD millions	Total of intangible assets other than goodwill USD millions
Pharmaceuticals	2 862	1 812			1 841	181	3 834
Vaccines and Diagnostics	1 111	123		238	1 351	150	1 862
Sandoz	7 184	508		743	1 878	23	3 152
Consumer Health	605	4			855	1	860
Alcon	17 923	615	2 980	5 348	16 521	46	25 510
Corporate	7					13	13
Total	29 692	3 062	2 980	6 329	22 446	414	35 231
Potential impairment charge, if any, if discounted cash flows fell by 5%		3			8		11
Potential impairment charge, if any, if discounted cash flows fell by 10%		7			16		23

11. GOODWILL AND INTANGIBLE ASSET MOVEMENTS (CONTINUED)

Goodwill, the Alcon brand name and acquired In-Process R&D are tested for possible impairment annually and whenever events or changes in circumstances indicate the value may not be fully recoverable. If the initial accounting for an intangible asset acquired in the reporting period is only provisional, it is not tested for impairment unless an impairment indicator exists, and not included in the calculation of the net book values at risk from changes in the amount of discounted cash flows. An impairment is recognized when the consolidated balance sheet carrying amount is higher than the greater of “fair value less costs to sell” and “value in use.”

Novartis has adopted a uniform method for assessing goodwill for impairment and any other intangible asset indicated as possibly impaired. Under this method, the “fair value less costs to sell” of the related cash-generating unit is calculated and only if it is lower than the consolidated balance sheet carrying amount is the value in use determined. Novartis uses the Discounted Cash Flow (DCF) method to determine the “fair value less costs to sell” of a related cash-generating unit, which starts with a forecast of all expected future net cash flows. Generally, for intangible assets Novartis uses cash flow projections for the whole useful life of these assets, and for goodwill cash flow projections for the next five years are utilized based on a range of management forecasts, with a terminal value using sales projections in line or lower than inflation thereafter. Three probability-weighted scenarios are typically used. These cash flows, which reflect the risks and uncertainties associated with the asset, are discounted at an appropriate rate to net present value. The net present values involve highly sensitive estimates and assumptions specific to the nature of the Group’s activities with regard to:

- the amount and timing of projected future cash flows;
- the tax and discount rate selected;
- the outcome of R&D activities (compound efficacy, results of clinical trials, etc.);
- the amount and timing of projected costs to develop the IPR&D into commercially viable products;
- the probability of obtaining regulatory approval;
- long-term sales forecasts for periods of up to 20 years;
- sales price erosion rates after the end of patent protection and timing of the entry of generic competition; and
- the behavior of competitors (launch of competing products, marketing initiatives, etc.).

Factors that could result in shortened useful lives or impairment include entry into the market of generic or alternative products, lower than expected sales for acquired products or for sales associated with patents and trademarks; or lower than anticipated future sales resulting from acquired IPR&D. Changes in the discount rates used for these calculations also could lead to impair-

ments. Additionally, impairments of IPR&D and product and marketing rights may also result from events such as the outcome of R&D activity, obtaining regulatory approval and the launch of competing products.

The discount rates used are based on the Group’s weighted average cost of capital which is considered to be a good proxy for the capital cost of a market participant, which is adjusted for specific country and currency risks associated with the cash flow projections.

Due to the above factors, actual cash flows and values could vary significantly from the forecasted future cash flows and related values derived using discounting techniques.

The recoverable amount of a cash-generating unit and related goodwill is based on the higher of fair value less costs to sell or value in use. The following assumptions are used in the calculations:

	Pharmaceuticals %	Vaccines and Diagnostics %	Sandoz %	Consumer Health %
Sales growth rate assumptions after forecast period	0.6	2.0	0 to 2.0	–10.0 to 2.0
Discount rate	7.0	7.0	7.0	7.0

There has been no triggering event concerning Alcon between the date of acquisition of majority ownership of August 25, 2010 and December 31, 2010 that indicates that an impairment is necessary of any values determined as part of the final allocation of the purchase price as of August 25, 2010.

In 2010, Novartis recorded impairment charges totaling USD 1.0 billion. These relate to impairment charges of USD 356 million for *Mycograb*, USD 250 million for PTZ601, USD 228 million for albinterferon alfa-2b and USD 120 million for ASA404 as Novartis decided to discontinue the related development projects. Additionally, USD 40 million were recorded for various other impairment charges in the Pharmaceuticals Division. Novartis also recorded various impairment charges of USD 24 million in the Sandoz and Consumer Health Divisions.

In 2009, impairment charges of USD 132 million were recorded, mainly for terminated development projects or for where the anticipated cash flows from future sales no longer supported the carrying value of the intangible assets. These related to various impairment charges of USD 88 million, mainly for upfront and milestone payments in the Pharmaceuticals Division and USD 44 million in the Vaccines and Diagnostics, Sandoz and Consumer Health Divisions.

Changes in circumstances of products impaired in prior years led to reversals in 2010 that amounted to USD 107 million mainly relating to *Famvir* product rights (2009: USD 106 million).

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, 2009	121	410	866	1 358	211	1 477	- 20	4 423
Gross deferred tax liabilities at January 1, 2009	- 850	- 2 098	- 104	- 306		- 786		- 4 144
Net deferred tax balance at January 1, 2009	- 729	- 1 688	762	1 052	211	691	- 20	279
At January 1, 2009	- 729	- 1 688	762	1 052	211	691	- 20	279
(Charged)/credited to income	4	153	- 17	100	9	285	4	538
(Charged) to equity			- 288			- 71		- 359
Impact of business combinations	- 1	- 179		- 7		1		- 186
Other movements	- 31	- 29	- 52	9	12	28	- 1	- 64
Net deferred tax balance at December 31, 2009	- 757	- 1 743	405	1 154	232	934	- 17	208
Gross deferred tax assets at December 31, 2009	72	281	931	1 429	232	1 687	- 17	4 615
Gross deferred tax liabilities at December 31, 2009	- 829	- 2 024	- 526	- 275		- 753		- 4 407
Net deferred tax balance at December 31, 2009	- 757	- 1 743	405	1 154	232	934	- 17	208
At January 1, 2010	- 757	- 1 743	405	1 154	232	934	- 17	208
(Charged)/credited to income	- 11	431	- 127	165	- 49	32		441
Credited to equity			171			37		208
Impact of business combinations	- 54	- 4 163	203	237	60	357	- 2	- 3 362
Other movements	2	37	25	- 17	- 12	21		56
Net deferred tax balance at December 31, 2010	- 820	- 5 438	677	1 539	231	1 381	- 19	- 2 449
Gross deferred tax assets at December 31, 2010	131	251	1 086	1 792	241	2 007	- 19	5 489
Gross deferred tax liabilities at December 31, 2010	- 951	- 5 689	- 409	- 253	- 10	- 626		- 7 938
Net deferred tax balance at December 31, 2010	- 820	- 5 438	677	1 539	231	1 381	- 19	- 2 449
Deferred tax assets and liabilities after offsetting amounts of USD 249 millions recorded in companies within the same tax jurisdiction								
Deferred tax assets at December 31, 2010								5 240
Deferred tax liabilities at December 31, 2010								- 7 689
Net deferred tax balance at December 31, 2010								- 2 449

12. DEFERRED TAX ASSETS AND LIABILITIES (CONTINUED)

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 2.3 billion (2009: USD 1.8 billion) and deferred tax liabilities of USD 7.1 billion (2009: USD 3.5 billion) are expected to have an impact on current taxes payable after more than 12 months.

At December 31, 2010, unremitted earnings of USD 45 billion (2009: USD 38 billion) have been retained by subsidiary companies for reinvestment. 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.

	2010 USD millions	2009 USD millions
Temporary differences on which no deferred tax has been provided as they are permanent in nature related to:		
– Investments in subsidiaries	7 137	1 377
– Goodwill from acquisitions	– 24 711	– 6 652

The gross value of unused 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	2010 total USD millions
One year	155	1	156
Two years	67	4	71
Three years	159	8	167
Four years	159	18	177
Five years	58	158	216
More than five years	446	503	949
Total	1 044	692	1 736

	Not capitalized USD millions	Capitalized USD millions	2009 total USD millions
One year	14		14
Two years	139		139
Three years	65	102	167
Four years	142	9	151
Five years	145	18	163
More than five years	369	634	1 003
Total	874	763	1 637

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.

In 2010 USD 11 million (2009: USD 19 million) of unused tax-loss carry-forwards expired.

13. FINANCIAL ASSETS

	2010 USD millions	2009 USD millions
Financial investments, long-term loans and other investments	857	1 047
Loans to associated companies	1	3
Prepaid post-employment benefit plans	982	1 585
Total financial assets	1 840	2 635

Available-for-sale financial investments at December 31, 2010, totaling USD 712 million (2009: USD 891 million) are valued at market value, while long-term loans and other investments of USD 145 million (2009: USD 156 million) are valued at amortized cost or at cost, whose fair values approximate the carrying amount.

During 2010 and 2009, unrealized losses on available-for-sale financial investments occurred and amounted to a total of USD 160 million (2009: USD 51 million). In 2010 a reversal of unrealized losses of USD 2 million occurred (2009: USD 11 million). These amounts were recorded in the consolidated income statement under Other Expense or Other Income, respectively.

14. INVENTORIES

	2010 USD millions	2009 USD millions
Raw material, consumables	931	953
Finished products	5 162	4 877
Total inventories	6 093	5 830

The following summarizes movements in inventory write-downs deducted from inventory categories. Reversals of inventory provisions mainly result from the reassessment of inventory values manufactured prior to regulatory approval but for which approval was subsequently received:

	2010 USD millions	2009 USD millions
January 1	- 653	- 637
Impact of business combinations	- 101	- 3
Inventory write-downs charged to the consolidated income statement	- 1 106	- 506
Utilization of inventory provisions	593	298
Reversal of inventory provisions	396	230
Currency translation effects	- 8	- 35
December 31	- 879	- 653

15. TRADE RECEIVABLES

	2010 USD millions	2009 USD millions
Total gross trade receivables	10 094	8 453
Provisions for doubtful trade receivables	- 221	- 143
Total trade receivables, net	9 873	8 310

The following table summarizes the movement in the provision for doubtful trade receivables:

	2010 USD millions	2009 USD millions
January 1	- 143	- 182
Impact of business combinations	- 56	- 3
Provisions for doubtful trade receivables charged to the consolidated income statement	- 76	- 63
Utilization or reversal of provisions for doubtful trade receivables	56	111
Currency translation effects	- 2	- 6
December 31	- 221	- 143

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:

	2010 USD millions	2009 USD millions
Not overdue	8 684	6 703
Past due for not more than one month	366	976
Past due for more than one month but less than three months	320	230
Past due for more than three months but less than six months	217	182
Past due for more than six months but less than one year	208	148
Past due for more than one year	299	214
Provisions for doubtful trade receivables	- 221	- 143
Total trade receivables, net	9 873	8 310

Provisions for doubtful trade receivables are established based upon the difference between the receivable value and the estimated net collectible amount. Novartis establishes provisions for doubtful trade receivables based on historical loss experiences. Significant financial difficulties of a customer, such as probability of bankruptcy or financial reorganization or default/delinquency in payments are considered indicators that recovery of trade receivables are doubtful.

The maximum exposure to credit risk at the reporting date is the carrying value of net trade receivables mentioned above. Novartis does not expect to write off trade receivable amounts that are not past due nor unprovided for. The Group holds security amounting to USD 30 million as collateral for certain trade receivables.

Trade receivables include amounts denominated in the following major currencies:

Currency	2010 USD millions	2009 USD millions
CHF	230	163
EUR	2 108	2 259
GBP	168	153
JPY	1 494	1 289
USD	3 888	2 577
Other	1 985	1 869
Total trade receivables, net	9 873	8 310

16. MARKETABLE SECURITIES AND 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, 2010 and 2009. 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, 2010 and 2009.

DERIVATIVE FINANCIAL INSTRUMENTS

	Contract or underlying principal amount		Positive fair values		Negative fair values	
	2010 USD millions	2009 USD millions	2010 USD millions	2009 USD millions	2010 USD millions	2009 USD millions
Currency related instruments						
Forward foreign exchange rate contracts	4 814	4 735	38	52	- 44	- 64
Over-the-Counter currency options	4 000	139	3			- 1
Total of currency related instruments	8 814	4 874	41	52	- 44	- 65
Interest rate related instruments						
Interest rate swaps	61	1 000	1	13		
Total of interest rate related instruments	61	1 000	1	13		
Options on equity securities		15		23		- 15
Total derivative financial instruments included in marketable securities and in current financial debts	8 875	5 889	42	88	- 44	- 80

The following table shows by currency contract or underlying principal amount the derivative financial instruments at December 31, 2010 and 2009:

December 31, 2010	EUR	USD	JPY	Other	Total
	USD millions				
Currency related instruments					
Forward foreign exchange rate contracts	2 039	1 776	286	713	4 814
Over-the-Counter currency options		4 000			4 000
Total of currency related instruments	2 039	5 776	286	713	8 814
Interest rate related instruments					
Interest rate swaps			61		61
Total of interest rate related instruments			61		61
Options on equity securities					
Total derivative financial instruments	2 039	5 776	347	713	8 875

December 31, 2009	EUR	USD	JPY	Other	Total
	USD millions				
Currency related instruments					
Forward foreign exchange rate contracts	1 179	2 719	107	730	4 735
Over-the-Counter currency options	139				139
Total of currency related instruments	1 318	2 719	107	730	4 874
Interest rate related instruments					
Interest rate swaps		1 000			1 000
Total of interest rate related instruments		1 000			1 000
Options on equity securities	15				15
Total derivative financial instruments	1 333	3 719	107	730	5 889

16. MARKETABLE SECURITIES AND DERIVATIVE FINANCIAL INSTRUMENTS (CONTINUED)

DERIVATIVE FINANCIAL INSTRUMENTS EFFECTIVE FOR HEDGE ACCOUNTING PURPOSES

At the end of 2010 and 2009 there were no open hedging instruments for anticipated transactions.

MARKETABLE SECURITIES, TIME DEPOSITS AND DERIVATIVE FINANCIAL INSTRUMENTS

	2010 USD millions	2009 USD millions
Available-for-sale marketable securities		
Debt securities	2 596	7 240
Equity securities	106	169
Fund investments	55	107
Total available-for-sale marketable securities	2 757	7 516
Time deposits with original maturity more than 90 days		6 870
Derivative financial instruments	42	88
Accrued interest on debt securities	16	81
Total marketable securities, time deposits and derivative financial instruments	2 815	14 555

Debt securities and time deposits are denominated in USD except for debt securities of USD 580 million in CHF (2009: USD 361 million) and USD 176 million in EUR (2009: USD 319 million) respectively.

FAIR VALUE BY HIERARCHY

From January 1, 2009, as required by IFRS, financial assets and liabilities recorded at fair value in the consolidated financial statements were categorized based upon the level of judgment associated with the inputs used to measure their fair value. The IFRS hierarchical levels, based on an increasing amount of subjectivity associated with the inputs to derive fair valuation for these assets and liabilities, are as follows:

Level 1 – Inputs are unadjusted and use quoted prices in active markets for identical assets or liabilities at the measurement date.

The types of assets carried at level 1 fair value are equity and debt securities listed in active markets.

Level 2 – Inputs other than quoted prices included within level 1 that are observable for the asset or liability, either directly or indirectly. These inputs are derived principally from, or corroborated by, observable market data by correlation or other means at the measurement date and for the duration of the instruments' anticipated life.

The assets generally included in this fair value hierarchy are time deposits, foreign exchange and interest rate derivatives and certain investment funds. 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 derivatives and options on equity securities.

Level 3 – Inputs that are unobservable for the asset or liability. These inputs reflect the Group's best estimate of what market participants would use in pricing the asset or liability at the measurement date. Consideration is given to the risk inherent in the valuation techniques and the risk inherent in the inputs to the models.

The assets generally included in this fair value hierarchy are various investments in hedge funds and unquoted equity security investments of the Novartis Venture Funds investment activities. There were no liabilities carried at fair value in this category.

2010	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	1 285	1 311			2 596
Equity securities	86		20		106
Fund investments			55		55
Total available-for-sale marketable securities	1 371	1 311	75		2 757
Derivative financial instruments		42			42
Accrued interest on debt securities				16	16
Total marketable securities, time deposits and derivative financial instruments	1 371	1 353	75	16	2 815
Financial investments and long-term loans					
Available-for-sale financial investments	352		348		700
Fund investments			12		12
Loans to associated companies				1	1
Long-term loans, advances, security deposits				145	145
Total financial investments and long-term loans	352		360	146	858
Financial liabilities					
Derivative financial instruments		-44			-44
Total financial liabilities at fair value		-44			-44

2009	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	7 209	31			7 240
Equity securities	114		55		169
Fund investments			107		107
Total available-for-sale marketable securities	7 323	31	162		7 516
Time deposits with original maturity more than 90 days				6 870	6 870
Derivative financial instruments		88			88
Accrued interest on debt securities				81	81
Total marketable securities, time deposits and derivative financial instruments	7 323	119	162	6 951	14 555
Financial investments and long-term loans					
Available-for-sale financial investments	544		347		891
Loans to associated companies				3	3
Long-term loans, advances, security deposits				156	156
Total financial investments and long-term loans	544		347	159	1 050
Financial liabilities					
Derivative financial instruments		-80			-80
Total financial liabilities at fair value		-80			-80

The analysis above includes all financial instruments including those measured at amortized cost or at cost.

16. MARKETABLE SECURITIES AND DERIVATIVE FINANCIAL INSTRUMENTS (CONTINUED)

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:

2010	Equity securities USD millions	Fund investments USD millions	Available-for-sale financial investments USD millions	Total USD millions
January 1	55	107	347	509
Impact of business combinations		6		6
Gains recognized in the consolidated income statement	1	7	4	12
Impairments and amortizations		-4	-42	-46
Losses recognized in the consolidated statement of comprehensive income		-5		-5
Purchases			70	70
Redemptions		-48		-48
Proceeds on sales	-36		-36	-72
Currency translation effects		4	5	9
December 31	20	67	348	435
Total of gains and impairments, net recognized in the consolidated income statement for assets held at December 31, 2010		3	-36	-33

2009	Equity securities USD millions	Fund investments USD millions	Available-for-sale financial investments USD millions	Total USD millions
January 1	47	383	273	703
Gains recognized in the consolidated income statement		5	46	51
Impairments and amortizations	-2	-8	-50	-60
Gains recognized in the consolidated statement of comprehensive income	3	4	11	18
Purchases	6		183	189
Redemptions		-274		-274
Proceeds on sales			-120	-120
Currency translation effects	1	-3	4	2
December 31	55	107	347	509
Total of losses and impairments, net recognized in the consolidated income statement for assets held at December 31, 2009	-2	-1	-35	-38

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 35 million, respectively (2009: USD 8 million and USD 35 million).

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 these exposures. To manage the volatility relating to these exposures, the Group enters into a variety of derivative financial instruments. The Group's objective is to reduce, where it deems appropriate to do so, fluctuations in earnings and cash flows associated with changes in interest rates, foreign currency exchange rates and market rates of investments of liquid funds and of the currency exposure of certain net investments in foreign subsidiaries. It is the Group's policy and practice to use derivative financial instruments to manage 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. In the very long term, however, the difference in the inflation rate should match the foreign currency exchange rate movement, so that the market value of the foreign non-monetary assets will compensate for the change due to foreign currency movements. For this reason, the Group only hedges the net investments in foreign subsidiaries in exceptional cases.

COMMODITY PRICE RISK

The Group has only a very limited exposure to price risk related to anticipated purchases of certain commodities used as raw materials by the Group's businesses. A change in those prices may alter the gross margin of a specific business, but generally by not more than 10% of the margin and thus below the Group's risk management tolerance levels. Accordingly, the Group does not enter into significant commodity futures, forward and option contracts to manage fluctuations in prices of anticipated purchases.

INTEREST RATE RISK

The Group addresses its net exposure to interest rate risk mainly through the ratio of its fixed rate financial debt to variable rate financial debt contained in its total financial debt portfolio. To manage this mix, Novartis may enter into interest rate swap agreements, in which it exchanges periodic payments based on a notional amount and agreed upon fixed and variable interest rates.

EQUITY RISK

The Group purchases 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 in respect to their past financial track record (mainly cash flow and return on investment), their market potential, their management and their competitors. 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 has been reserved.

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 two largest customers account for approximately 8% each of net sales and the third largest one accounts for 7% of net sales. No other customer accounts for 2% or more of net sales.

The highest amounts of trade receivables outstanding were for these three customers. They amounted to 9%, 5% and 6%, respectively, of the Group's trade receivables at December 31, 2010. There is no other significant concentration of credit risk.

16. MARKETABLE SECURITIES AND DERIVATIVE FINANCIAL INSTRUMENTS (CONTINUED)

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 minimized 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. 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, net settlement agreements are contracted with significant counterparties.

The Group's cash and cash equivalents are held with major regulated financial institutions, the three largest ones hold approximately 14%, 9% and 8%, respectively (2009: 23%, 16% and 10%, 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 finance in order to maintain flexibility. Management monitors the Group's net debt or liquidity position through rolling forecasts on the basis of expected cash flows.

The following table sets forth how management monitors net debt or liquidity based on details of the remaining contractual maturities of financial assets and liabilities excluding trade receivables and payables at December 31, 2010 and 2009:

December 31, 2010	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	1		593	1 441	722	2 757
Derivative financial instruments and accrued interest on derivative financial instruments	14	33	11			58
Cash and cash equivalents	5 319					5 319
Total current assets	5 334	33	604	1 441	722	8 134
Non-current liabilities						
Financial debts				8 399	5 961	14 360
Total non-current liabilities				8 399	5 961	14 360
Current liabilities						
Financial debts	5 480	2 093	1 010			8 583
Derivative financial instruments	23	5	16			44
Total current liabilities	5 503	2 098	1 026			8 627
Net debt	- 169	- 2 065	- 422	- 6 958	- 5 239	- 14 853

December 31, 2009	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	2	8 598	4 383	791	693	14 467
Derivative financial instruments and accrued interest on derivative financial instruments	44	14	7	23		88
Cash and cash equivalents	2 774	120				2 894
Total current assets	2 820	8 732	4 390	814	693	17 449
Non-current liabilities						
Financial debts				2 775	5 900	8 675
Total non-current liabilities				2 775	5 900	8 675
Current liabilities						
Financial debts	3 573	705	955			5 233
Derivative financial instruments	25	36	4	15		80
Total current liabilities	3 598	741	959	15		5 313
Net liquidity	- 778	7 991	3 431	- 1 976	- 5 207	3 461

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, 2010	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	Total USD millions
Derivative financial instruments and accrued interest on derivative financial instruments					
Potential outflows in various currencies	- 1 842	- 467	- 935		- 3 244
Potential inflows in various currencies	1 830	485	928		3 243

December 31, 2009	Due or due within one month USD millions ¹	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	Total USD millions
Derivative financial instruments and accrued interest on derivative financial instruments					
Potential outflows in various currencies	- 30 612	- 781	- 498		- 31 891
Potential inflows in various currencies	2 535	743	494		3 772

¹The option to acquire the optional additional 52% interest in Alcon is included in this amount. Novartis exercised its option on January 4, 2010, however, the timing of the related cash flows depended on when regulatory approvals would be received.

16. MARKETABLE SECURITIES AND DERIVATIVE FINANCIAL INSTRUMENTS (CONTINUED)

Other contractual liabilities, which are not part of management's monitoring of the net debt or liquidity consist of the following items:

December 31, 2010	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
Contractual interest on non-current liabilities		-236	-261	-1 694	-835	-3 026
Trade payables		-4 788				-4 788

December 31, 2009	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
Contractual interest on non-current liabilities		-236	-96	-1 286	-843	-2 461
Trade payables		-4 012				-4 012

CAPITAL RISK MANAGEMENT

Novartis strives to maintain strong debt ratings. In managing its capital, Novartis focuses on a sound debt/equity ratio. Credit agencies in 2010 maintained their ratings for Novartis. Moody's rated the Group as Aa2 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 2010 year-end debt/equity ratio increased to 0.33:1 from 0.24:1 in 2009 principally due to additional financing programs.

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 10-day period is used because of an assumption that not all positions could be undone in one day given the size of the positions. The VAR computation includes the Group's financial debt, short-term and long-term investments, foreign currency forwards, swaps and options as well as anticipated transactions. Foreign currency trade payables and receivables as well as net investments in foreign subsidiaries 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 60 day period for the calculation of VAR amounts.

The estimated potential 10-day loss in pre-tax income from the Group's foreign currency instruments, the estimated potential 10-day loss of its equity holdings, and the estimated potential 10-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:

	Dec 31, 2010 USD millions	Dec 31, 2009 USD millions
All financial instruments	311	183
<i>Analyzed by components:</i>		
Instruments sensitive to foreign currency exchange rates	193	106
Instruments sensitive to equity market movements	27	43
Instruments sensitive to interest rates	219	108

The average, high, and low VAR amounts are as follows:

2010	Average USD millions	High USD millions	Low USD millions
All financial instruments	267	319	139
<i>Analyzed by components:</i>			
Instruments sensitive to foreign currency exchange rates	192	271	98
Instruments sensitive to equity market movements	49	76	27
Instruments sensitive to interest rates	164	219	70

2009	Average USD millions	High USD millions	Low USD millions
All financial instruments	202	309	152
<i>Analyzed by components:</i>			
Instruments sensitive to foreign currency exchange rates	152	212	104
Instruments sensitive to equity market movements	98	159	43
Instruments sensitive to interest rates	107	155	12

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 financial assets monitored by Group Treasury. For these calculations, the Group uses the worst movements during a period of six months over the past 20 years in each category. For 2010 and 2009, the worst case loss scenario was configured as follows:

	Dec 31, 2010 USD millions	Dec 31, 2009 USD millions
All financial instruments	406	265
<i>Analyzed by components:</i>		
Instruments sensitive to foreign currency exchange rates	286	139
Instruments sensitive to equity market movements	59	96
Instruments sensitive to interest rates	62	30

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. While it is highly unlikely that all worst case fluctuations would happen simultaneously, as shown in the model, the actual market can of course produce bigger movements in the future than it has historically. Additionally, in such a worst case environment, management actions could further mitigate the Group's exposure.

17. OTHER CURRENT ASSETS

	2010 USD millions	2009 USD millions
Withholding tax recoverable	103	102
Prepaid expenses		
– Third parties	735	398
– Associated companies	7	4
Other receivables		
– Third parties	1 735	1 590
– Associated companies	5	8
Total other current assets	2 585	2 102

18. DETAILS OF SHARES AND SHARE CAPITAL MOVEMENTS

	Number of shares ¹				
	Dec 31, 2008	Movement in year	Dec 31, 2009	Movement in year	Dec 31, 2010
Total Novartis shares	2 643 623 000	- 6 000 000	2 637 623 000		2 637 623 000
Treasury shares					
Shares reserved for share-based compensation of associates	72 195 401	- 4 992 483	67 202 918	- 8 309 081	58 893 837
Unreserved treasury shares	306 574 757	- 10 508 026	296 066 731	- 6 782 746	289 283 985
Total treasury shares	378 770 158	- 15 500 509	363 269 649	- 15 091 827	348 177 822
Total outstanding shares	2 264 852 842	9 500 509	2 274 353 351	15 091 827	2 289 445 178
	USD millions	USD millions	USD millions	USD millions	USD millions
Share capital	959	- 2	957		957
Treasury shares	- 139	7	- 132	7	- 125
Outstanding share capital	820	5	825	7	832

¹All shares are registered, authorized, issued and fully paid. All are voting shares and, except for 159 381 837 treasury shares at December 31, 2010 (2009: 167 690 918) are dividend bearing.

There are outstanding written call options on Novartis shares of 34 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 48.72 and they have contractual lives of up to 10 years.

19. NON-CURRENT FINANCIAL DEBTS

	2010 USD millions	2009 USD millions
Straight bonds	13 512	8 556
Liabilities to banks and other financial institutions ¹	942	144
Finance lease obligations	4	4
Total (including current portion of non-current financial debt)	14 458	8 704
Less current portion of non-current financial debt	-98	-29
Total non-current financial debts	14 360	8 675

Straight bonds

3.625% CHF 800 million bond 2008/2015 of Novartis AG, Basel, Switzerland, issued at 100.35%	842	763
3.5% CHF 700 million bond 2008/2012 of Novartis Securities Investment Ltd., Hamilton, Bermuda, issued at 100.32%	743	673
5.125% USD 3 000 million bond 2009/2019 of Novartis Securities Investment Ltd., Hamilton, Bermuda, issued at 99.822%	2 984	2 983
4.125% USD 2 000 million bond 2009/2014 of Novartis Capital Corporation, New York, United States, issued at 99.897%	1 994	1 993
4.25% EUR 1 500 million bond 2009/2016 of Novartis Finance S.A., Luxembourg, Luxembourg, issued at 99.757%	1 978	2 144
1.9% USD 2 000 million bond 2010/2013 of Novartis Capital Corporation, New York, United States, issued at 99.867%	1 996	
2.9% USD 2 000 million bond 2010/2015 of Novartis Capital Corporation, New York, United States, issued at 99.522%	1 986	
4.4% USD 1 000 million bond 2010/2020 of Novartis Capital Corporation, New York, United States, issued at 99.237%	989	
Total straight bonds	13 512	8 556

¹ Average interest rate 1.6% (2009: 2.1%)

	2010 USD millions	2009 USD millions
Breakdown by maturity		29
2010		
2011	98	44
2012	785	704
2013	2 023	17
2014	2 750	2 010
2015	2 841	763
After 2015	5 961	5 137
Total	14 458	8 704

		2010 USD millions	2009 USD millions
Breakdown by currency	USD	9 953	4 979
	EUR	2 104	2 262
	JPY	798	
	CHF	1 584	1 436
	Others	19	27
Total		14 458	8 704

	2010 Balance sheet USD millions	2010 Fair values USD millions	2009 Balance sheet USD millions	2009 Fair values USD millions
Fair value comparison				
Straight bonds	13 512	14 350	8 556	9 051
Others	946	946	148	148
Total	14 458	15 296	8 704	9 199

Collateralized non-current financial debt and pledged assets

	2010 USD millions	2009 USD millions
Total amount of collateralized non-current financial debts	30	42
Total net book value of property, plant & equipment pledged as collateral for non-current financial debts	108	94

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 63% at December 31, 2010, and 62% at the end of 2009.

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 2010 was 3.1% (2009: 3.6%).

20. PROVISIONS AND OTHER NON-CURRENT LIABILITIES

General

For some of the Group's pharmaceutical products, product liability insurance is not available. In connection with potential product liability exposures for these products the Group establishes provisions for estimated obligations for claims and related legal defense costs. The provisions are based on management's judgment, advice from legal counsel and actuarially determined estimates. Actual liabilities, however, could substantially exceed the provisions that Novartis has put in place. Novartis believes that its insurance coverage and provisions are reasonable and its provisions are the best estimate in light of its business and the risk to which it is subject.

The largest portion of product liability risk provisions has been actuarially determined taking into consideration factors such as past experience, number and amount of claims reported, estimates of claims incurred but not reported, the cost of defending claims and other assumptions. As actual experience becomes known the Group refines and adjusts its product liability estimates. If any of the assumptions used in these actuarial calculations turn out to be incorrect or require material adjustment, there could be a material discrepancy between the amount of provisions that have been recorded and the actual liability. At December 31, 2010, the discount rates used to calculate the actuarially determined provision are based on government bond rates and vary by payment duration and geography (US and non-US) between 2.2% and 2.5% (2009: between 2.3% and 2.5%). The consolidated income statement effect of a 1% increase or decrease in the discount rate is USD 26 million (2009: USD 21 million) income and USD 28 million expense (2009: USD 23 million), respectively.

	2010 USD millions	2009 USD millions
Accrued liability for employee benefits:		
– Defined benefit pension plans	2 317	2 013
– Other long-term employee benefits and deferred compensation	461	380
– Other post-employment benefits	1 057	852
Environmental provisions	1 066	952
Provisions for product liabilities and other legal matters	693	671
Other non-current liabilities	1 248	623
Total	6 842	5 491

ENVIRONMENTAL PROVISIONS

The material components of the environmental 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 exposure is less significant. The provision recorded at December 31, 2010 totals USD 1.1 billion (2009: USD 1.0 billion) of which USD 60 million (2009: USD 58 million) is included in current liabilities and consists of USD 875 million (2009: USD 812 million) provided for remediation at third party sites and USD 251 million (2009: USD 198 million) for remediation at owned facilities.

A substantial portion of the environmental provision relates to the remediation of Basel regional landfills in the adjacent border areas in Switzerland, Germany and France following the internal and external investigations completed during 2007 and the subsequent creation of an environmental remediation provision.

In the US, 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 requirement in the future for Novartis ultimately to take action to correct the effects on the environment of prior disposal or release of chemical substances by Novartis or other parties, and its costs, pursuant to environmental laws and regulations, is inherently difficult to estimate. The Novartis future remediation expenses are affected by a number of uncertainties which include, but are not limited to, the method and extent of remediation, the percentage of material attributable to Novartis at the remediation sites relative to that attributable to other parties, the financial capabilities of the other potentially responsible parties and the timing of expected expenditures. Novartis believes that its total provisions for environmental matters 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.

The following table shows the movements in the environmental liability provisions during 2010 and 2009:

	2010 USD millions	2009 USD millions
January 1	1 010	966
Cash payments	-20	-11
Releases	-2	-53
Interest expense arising from discounting provisions	39	66
Additions		23
Currency translation effects	99	19
December 31	1 126	1 010
Less current liability	-60	-58
Non-current environmental liability provisions at December 31	1 066	952

The expected timing of the related cash outflows as of December 31, 2010 is currently projected as follows:

	Expected cash outflows USD millions
Due within two years	118
Due later than two years, but less than five years	328
Due later than five years but less than ten years	550
Due after ten years	130
Total environmental liability provisions	1 126

LEGAL MATTERS

A number of Novartis subsidiaries are, and will likely continue to be, subject to various legal proceedings that arise from time to time, including proceedings regarding product liability, commercial disputes, employment and wrongful discharge, antitrust, securities, sales and marketing practices, health and safety, environmental, tax, 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 verdicts 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 flows.

Governments and regulatory authorities have been stepping up their compliance and law enforcement activities in recent years in key areas, including corruption, marketing practices, insider trading, antitrust and trade restrictions. Responding to such investigations is costly and a significant diversion of management's attention from our business. In addition, such investigations may affect our reputation and create a risk of potential exclusion from government reimbursement programs in the US and other countries. These factors have contributed to decisions by us and other com-

panies in our industry to enter into settlement agreements with governmental authorities around the world. Those settlements have involved and may continue to involve large cash payments, including the potential repayment of amounts allegedly obtained improperly and penalties up to treble damages. In addition, settlements of healthcare fraud cases typically involve corporate integrity agreements which are intended to regulate company behavior for a period of years. Also, matters underlying governmental investigations and settlements may be the subject of separate private litigation.

Below is a summary of selected legal proceedings to which Novartis or its subsidiaries are a party or were a party and which were concluded in 2010.

GOVERNMENTAL INVESTIGATIONS

Trileptal/Five Products investigation

In 2005, the US Attorney's Office for the Eastern District of Pennsylvania (EDPA) served an administrative subpoena pursuant to the Health Insurance Portability and Accountability Act (HIPAA) on Novartis Pharmaceuticals Corporation (NPC). NPC has been cooperating with parallel civil and criminal investigations by the EDPA into allegations of potential off-label marketing and promotion of the epilepsy therapy *Trileptal* as well as certain payments made to healthcare providers in connection with this medicine. NPC has also been cooperating with an investigation by the EDPA regarding potential off-label marketing and promotion as well as payments made to healthcare providers in connection with five other products, i.e. *Diovan*, *Exforge*, *Sandostatin*, *Tekturna* and *Zelnorm* (Five Products). On September 30, 2010, NPC reached a global settlement bringing the EDPA's investigations into *Trileptal* and the Five Products to a close. As part of the settlement, NPC agreed to plead guilty to one misdemeanor violation of misbranding under the US Food, Drug and Cosmetic Act and to pay a fine of USD 185 million for *Trileptal*. NPC also resolved civil allegations under the False Claims Act relating to *Trileptal* and the Five Products and agreed to pay USD 237.5 million. Moreover, NPC entered into a Corporate Integrity Agreement (CIA) with the Office of the Inspector General of the US Department of Health and Human Services. Under the terms of the CIA, which has a fixed term of five years, NPC will implement additional compliance-related measures. The entry of NPC's guilty plea took place on November 2, 2010, at a hearing in the US Federal District Court for the EDPA. The sentencing hearing in the same court is currently expected to take place on January 28, 2011. The total overall settlement amount of USD 422.5 million was fully provisioned for as of the end of the second quarter of 2010.

WDNY INVESTIGATION

In Q4 2010, NPC became aware of an investigation by the US Attorney's Office for the Western District of New York (WDNY) into informed consent issues relating to clinical trials in China and into marketing practices of a number of Novartis products. NPC is cooperating with the investigation which is civil in nature.

20. PROVISIONS AND OTHER NON-CURRENT LIABILITIES (CONTINUED)

EC DAWN RAID AT SANDOZ FRANCE

In October 2009, the European Commission (EC), together with the French competition authority, searched the offices of Sandoz S.A.S. in France (Sandoz France), alleging that Sandoz France may have entered into anti-competitive price coordination practices with other generic pharmaceuticals companies and via the French trade association for generic pharmaceuticals companies. Sandoz France is cooperating with the EC and the French authorities. No follow-up requests have been received from the EC so far.

EC REQUEST FOR INFORMATION ON PATENT SETTLEMENTS

On January 12, 2010, the EC addressed a request for information to certain pharmaceutical companies, including Novartis International AG and Sandoz International GmbH, asking them to submit copies of all of their patent settlement agreements as well as copies of all annexes, related agreements and amendments. The request covered patent settlement agreements concluded between originator and generic pharmaceutical companies in the period from July 1, 2008, to December 31, 2009, and relating to the European Union/European Economic Area. On February 12, 2010, both Novartis entities submitted their respective responses to the EC. On January 17, 2011, the two Novartis entities received a second request for information which covers the period from January 1, 2010, to December 31, 2010.

PRODUCT LIABILITY MATTERS

Zometa/Aredia product liability litigation

NPC together with other Novartis subsidiaries are defendants in approximately 692 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. All purported class actions have been dismissed. A trial that began in Montana in October 2009 resulted in a plaintiff's verdict which NPC appealed to the Montana Supreme Court. On December 30, 2010, the Montana Supreme Court affirmed the trial court's verdict. On October 6, 2010, after a trial in New Jersey state court, the jury returned a verdict in favor of NPC, which is currently on appeal. Another trial took place in November 2010 in North Carolina federal court and resulted in a plaintiffs' verdict. NPC filed post-trial motions and will, if necessary, file an appeal against this latest verdict. Two trials are currently scheduled for April and for July 2011, respectively.

Zelnorm product liability litigation

NPC together with other Novartis subsidiaries are defendants in approximately 135 cases brought in US and Canadian courts in which plaintiffs claim to have experienced cardiovascular injuries after being treated with *Zelnorm*, a medicine for irritable bowel syndrome and chronic constipation. A purported national class action was filed against a Novartis subsidiary in Canada. A statement to

defend was filed in this action. In May 2010, NPC reached a tentative agreement to settle 124 cases, which is contingent on obtaining consents from the individual plaintiffs. NPC is still waiting for such consents. One trial is currently scheduled for April 2011.

Hormone Replacement Therapy product liability litigation

NPC together with other Novartis subsidiaries are defendants, along with various other pharmaceutical companies, in approximately 109 cases brought in US courts in which plaintiffs claim to have been injured by hormone replacement therapy products. Discovery is ongoing.

Elidel product liability litigation

NPC together with other Novartis subsidiaries are defendants, in approximately 28 cases brought in US courts in which plaintiffs claim to have experienced injuries, mainly various types of cancer, after having been treated with *Elidel*, a medicine for atopic dermatitis. Discovery is ongoing.

OTHER MATTERS

Average Wholesale Price litigation

Claims have been brought against various pharmaceutical companies, including NPC and certain Sandoz entities, alleging that they fraudulently overstated the Average Wholesale Price and "best price", which are, or have been, used by the US federal and state governments in the calculation of, respectively, Medicare reimbursements and Medicaid rebates. In some cases, motions to dismiss or (cross-) motions for summary judgment have been made and are currently pending.

Sandoz Inc. (Sandoz) was a defendant in a trial in Alabama in 2009. The jury rendered a verdict against it and awarded compensatory damages of USD 28 million and punitive damages of USD 50 million. Sandoz appealed the verdict to the Supreme Court of Alabama in January 2010. The appeal is fully briefed. On September 1, 2010, plaintiff-appellee filed a motion seeking recusal and disqualification of all the justices on the Alabama Supreme Court and for the appointment of a special supreme court to handle Sandoz's appeal. On September 29, 2010, this motion was unanimously denied by the Alabama Supreme Court. A decision is expected in due course. The second trial involving Sandoz took place in Kentucky in June 2009. The jury rendered a verdict against Sandoz and imposed USD 16 million in compensatory damages, and the Court awarded USD 13.6 million in penalties, which were subsequently reduced to USD 11.2 million. No punitive damages were awarded. Sandoz appealed this verdict in March 2010. In Texas, Sandoz entities have reached an agreement in principle to settle all of the State's claims. This agreement, which is still contingent on US Department of Justice approval, resulted in a provision of USD 38 million in the first quarter of 2010, which remains unchanged as of December 31, 2010. The next trial

against Sandoz is currently expected to take place in Mississippi in April 2011.

Wage and Hour litigation

Certain pharmaceutical sales representatives filed suit in a state court in California and in the US Federal District Court for the Southern District of New York (SDNY) against NPC alleging that NPC violated wage and hour laws by misclassifying the pharmaceutical sales representatives as “exempt” employees, and by failing to pay overtime compensation. These lawsuits were consolidated and certified as a class action. They are part of a number of actions pending against pharmaceutical companies that challenge the industry’s long-term practice of treating pharmaceutical sales representatives as salaried employees. In January 2009, the SDNY held that the pharmaceutical sales representatives were not entitled to overtime pay under the federal Fair Labor Standards Act and corresponding state wage and hour laws. Plaintiffs appealed that judgment to the US Court of Appeals for the Second Circuit (Second Circuit). Amicus briefs supporting the plaintiffs’ position were filed by the National Employment Lawyers Association and by the US Department of Labor, and the US Chamber of Commerce filed a brief in support of NPC. On July 6, 2010, the Second Circuit vacated the judgment of the SDNY and remanded the case to the SDNY for further proceedings. On August 2, 2010, the remand mandate was stayed because NPC had decided to appeal the Second Circuit’s opinion to the US Supreme Court. On October 4, 2010, NPC filed its petition for a writ of certiorari with the US Supreme Court. Amicus briefs in support of NPC’s certiorari petition were filed on November 5, 2010, by the US Chamber of Commerce and Pharmaceutical Research and Manufacturers of America (PhRMA). The conference during which the US Supreme Court is expected to decide whether to grant or deny NPC’s petition is currently expected to take place on February 18, 2011.

Alcon minority shareholder litigation

Beginning on January 7, 2010, shareholder class action complaints relating to the Alcon transactions announced on January 4, 2010, were filed against Novartis AG and others by minority shareholders of Alcon, Inc. These actions were filed in the SDNY, in the US Federal District Courts for the Eastern District of New York (EDNY) and the Northern District of Texas (NDTX) and in several Texas state courts. The case in the EDNY was voluntarily dismissed without prejudice by the plaintiffs on March 18, 2010. The case in the NDTX was transferred to the SDNY and formally consolidated with the actions pending there on June 25, 2010. In the SDNY, Novartis AG’s motion to dismiss all cases pending there based on the doctrine of forum non conveniens (FNC) was granted on May 24, 2010, and the case was formally dismissed on July 2, 2010. On July 14, 2010, plaintiffs appealed this decision to the Second Circuit. On January 5, 2011, plaintiffs moved to dismiss this appeal. On January 6,

2011, the Second Circuit granted plaintiffs’ motion and dismissed this appeal. The actions pending in Texas state courts were consolidated for pre-trial proceedings in a Multi District Litigation on April 16, 2010. Novartis AG’s motion to dismiss the consolidated Texas state court actions based on FNC was filed on June 30, 2010. On November 17, 2010, Novartis AG’s motion was granted and all Texas state court class actions were dismissed. On December 17, 2010, plaintiffs appealed this decision to the Texas Fifth District Court of Appeals.

CONCLUDED LEGAL MATTERS

***TOBI* investigation**

The US Attorney’s Office for the Northern District of California in 2007 served an administrative subpoena pursuant to HIPAA covering several Novartis subsidiaries. The subpoena covered information regarding potential off-label marketing and promotion of *TOBI* (tobramycin), a treatment for patients with cystic fibrosis acquired through the purchase of Chiron Corporation in mid-2006. In September 2009, the Novartis subsidiaries reached an agreement in principle to pay USD 72.5 million to resolve all federal civil claims and state Medicaid claims relating to this investigation. After the settlement agreement with the relevant federal government offices had been executed on April 29, 2010, the execution of the settlement agreements with various states followed on September 14, 2010, and concluded this investigation.

Contact lenses patent litigation

Johnson & Johnson (J&J) and CIBA Vision (CV) reached a settlement agreement effective January 1, 2011, ending the previously disclosed patent litigation regarding CV’s silicone hydrogel patents in the US and in all European countries but the United Kingdom (UK) where CV filed a petition to the UK Supreme Court to hear its appeal of the invalidity rulings by the lower courts.

***Famvir* patent litigation**

In February 2010, Novartis and Teva reached a settlement ending the US patent litigation between them relating to *Famvir* after a trial against Teva in November 2009 had resulted in a jury verdict in favor of Novartis. After the expiration of the regulatory settlement review period, this litigation with Teva was dismissed and is therefore concluded.

***Zometa/Reclast* patent litigation**

Novartis and Teva have reached an agreement in the patent infringement litigation regarding the *Zometa* (zoledronic acid 4mg) and *Reclast* (zoledronic acid 5mg) injection patent. Teva has dropped the challenge against the Novartis patent and will not launch zoledronic acid in the US until after the *Zometa* and *Reclast* patent expires in March 2013. The case was dismissed in July 2010 and is therefore concluded.

20. PROVISIONS AND OTHER NON-CURRENT LIABILITIES (CONTINUED)

Gender discrimination litigation

In November 2004, certain female pharmaceutical sales representatives brought a class action lawsuit in the SDNY against NPC, Novartis Corporation and a Novartis executive alleging claims of gender discrimination. Novartis Corporation and the Novartis executive were subsequently dismissed from the lawsuit. The trial against NPC began in April 2010. On May 17 and 19, 2010, the jury rendered a liability verdict and awarded USD 3.4 million in individual compensatory damages to the class members testifying at trial and USD 250 million in punitive damages. On July 14, 2010, the SDNY preliminarily approved a class action settlement agreement between NPC and the plaintiffs to end the ongoing proceedings. On September 8, 2010, notice of the settlement was sent to all class members. The fairness hearing in the SDNY took place on November 19, 2010, and on November 30, 2010, the SDNY issued an order granting final approval of the settlement, dismissing the class action with prejudice and therefore concluding this case.

According to the class action settlement agreement NPC will make monetary payments to eligible class members for backpay and compensatory damages in the amount of up to USD 152.5 million and will fund, over three years, improvements to policies and programs valued at an estimated USD 22.5 million. As part of the measures, NPC will enhance many of its ongoing commitments to all employees and will add additional programs and initiatives to further strengthen its commitment to a diverse and inclusive environment. NPC will for example revise its sexual harassment policy and training, strengthen its complaint process to ensure employees can safely raise concerns and that those concerns will be addressed in a timely and thorough fashion, retain an external specialist to conduct adverse impact analyses aimed at identifying and remedying, with recommendations from plaintiffs' counsel, unjustified gender disparities and it will revise its performance management process to ensure it is fair to all employees.

Dispute with an inventor

An inventor of certain patents of Novartis Vaccines & Diagnostics Inc. (V&D) sued V&D in the SDNY for breach of a consulting contract and claimed he was entitled to at least a portion of settlement proceeds from arbitration proceedings relating to these patents. After the trial of this case in April 2009, the SDNY entered judgment in favor of the inventor. In July 2009, V&D filed an appeal in the Second Circuit. In May 2010, V&D and the inventor agreed to settle their dispute and conclude this case for a payment of USD 80 million to the inventor and a contribution of USD 20 million to a non-profit research organization.

The following table shows the movements in the legal and product liability provisions during 2010 and 2009:

	2010 USD millions	2009 USD millions
January 1	1 542	1 142
Impact of business combinations	15	
Cash payments	- 669	- 285
Releases of provisions	- 53	- 152
Additions to provisions	541	833
Currency translation effects	8	4
December 31	1 384	1 542
Less current liability	- 691	- 871
Non-current legal and product liability provisions at December 31	693	671

Novartis believes that its total provisions for legal and product liability matters are adequate based upon currently available information, however, given the inherent difficulties in estimating liabilities, it cannot be guaranteed that additional costs will not be incurred beyond the amounts provided.

21. CURRENT FINANCIAL DEBT

	2010 USD millions	2009 USD millions
Interest bearing accounts of associates	1 321	1 175
Other bank and financial debt	2 195	2 142
Commercial paper	4 969	1 887
Current portion of non-current financial debt	98	29
Fair value of derivative financial instruments	44	80
Total current financial debt	8 627	5 313

The consolidated balance sheet values 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 2.0% in 2010 and 2.3% in 2009.

22. PROVISIONS AND OTHER CURRENT LIABILITIES

	2010 USD millions	2009 USD millions
Taxes other than income taxes	556	484
Restructuring provisions	241	97
Accrued expenses for goods and services received but not invoiced	731	651
Provisions for royalties	327	334
Provisions for revenue deductions	3 097	2 094
Provisions for compensation and benefits including social security and pension funds	2 058	1 695
Environmental liabilities	60	58
Deferred income relating to government grants	79	90
Deferred purchase consideration		312
Provision for legal matters	691	871
Accrued share-based payments	200	128
Other payables	1 493	1 515
Total provisions and other current liabilities	9 533	8 329

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

Deductions from revenue are reported as a reduction of revenue. They include rebates, discounts, incentives to retail customers, government agencies, wholesalers, health insurance companies and managed care organizations. These deductions represent estimates of the related obligations, requiring the use of judgment when estimating the effect of these sales deductions. The following table shows the movement of the provision for deductions from revenue:

	2010 USD millions	2009 USD millions
January 1	2 094	1 665
Impact of business combinations	379	
Additions	8 752	6 245
Payments/utilizations	-8 172	-5 582
Changes in offset against gross trade receivables	68	-321
Currency translation effects	-24	87
December 31	3 097	2 094

22. PROVISIONS AND OTHER CURRENT LIABILITIES (CONTINUED)

RESTRUCTURING PROVISIONS

In 2010, additions to provisions of USD 89 million were incurred in conjunction with the adjustment of the field force structures to better support the portfolio of the primary care and neuroscience medicines business within the Pharmaceuticals Division in the United States. The charges comprised termination costs of associates of USD 78 million and other third party costs of USD 11 million. In total, approximately 1 400 associates were affected by the various restructuring plans, though none of them had left the Group as of December 31, 2010. It is anticipated that most or all of these associates will leave the Group in the first quarter of 2011.

Also in 2010, additions to provisions of USD 44 million were incurred in conjunction with the consolidation of regional units of the primary care medicines business and the integration of a research entity within the Pharmaceuticals Division in the United States. The charges comprised termination costs of associates of USD 44 million. In total, approximately 383 associates were affected by the various restructuring plans, all of whom had left the Group as of December 31, 2010.

2010 also saw additions to provisions of USD 62 million which were incurred in conjunction with the restructuring of the technical and commercial operations of the Vaccines and Diagnostics Division in England, France, Germany, Italy and the United States. The charges comprised termination costs of associates of USD 46 million and other third party costs of USD 16 million. As of December 31, 2010, 64 of the approximately 394 associates affected by the various restructuring plans have left the Group.

In 2010 and 2009, additions to provisions of USD 66 million and USD 40 million respectively were incurred in conjunction with the restructuring of the commercial operations of the Sandoz Division in Germany. The charges comprised termination costs of associates of USD 57 million and USD 37 million, respectively and other third party costs of USD 9 million and USD 3 million, respectively.

As of December 31, 2010, 81 of the approximately 387 associates affected by the various restructuring plans have left the Group.

Also in 2009, additions to provisions of USD 19 million were incurred in conjunction with the restructuring of the technical operations of the Pharmaceuticals Division in Switzerland. The charges comprised termination costs of associates of USD 19 million. In total, approximately 105 associates were affected by the various restructuring plans, all of whom have left the Group as of December 31, 2009.

It is anticipated that the majority of the restructuring provisions will be paid within the next twelve months.

The releases to income in 2010 and 2009 of USD 18 million and USD 42 million, respectively, were mainly due to settlement of liabilities at lower amounts than originally anticipated, which in 2010 were principally due to provisions made in relation with prior years restructuring initiatives.

Other third party costs are mainly associated with lease and other obligations due to the abandonment of certain facilities.

	Termination costs of associates USD millions	Other third party costs USD millions	Total USD millions
January 1, 2009	157	47	204
Additions	56	3	59
Cash payments	- 114	- 12	- 126
Releases	- 10	- 32	- 42
Currency translation effects	2		2
December 31, 2009	91	6	97
Additions	225	36	261
Cash payments	- 81	- 12	- 93
Releases	- 9	- 9	- 18
Currency translation effects	- 5	- 1	- 6
December 31, 2010	221	20	241

23. DETAILS TO THE CONSOLIDATED CASH FLOW STATEMENTS

23.1) REVERSAL OF NON-CASH ITEMS

	2010 USD millions	2009 USD millions
Taxes	1 733	1 468
Depreciation, amortization and impairments on		
Property, plant & equipment	1 373	1 250
Intangible assets	2 046	1 051
Financial assets	158	40
Income from associated companies	- 804	- 293
Gains on disposal of property, plant & equipment, intangible, financial and other non-current assets, net	- 429	- 94
Equity-based and settled compensation expense	655	642
Change in provisions and other non-current liabilities	802	1 031
Net financial income	628	353
Total reversal of non-cash items	6 162	5 448

23.2) CASH FLOWS FROM CHANGES IN WORKING CAPITAL AND OTHER OPERATING ITEMS INCLUDED IN OPERATING CASH FLOW

	2010 USD millions	2009 USD millions
Change in inventories	965	237
Change in trade receivables	26	- 934
Change in trade payables	490	512
Change in other net current assets and other operating cash flow items	281	873
Total	1 762	688

23.3) CASH FLOW ARISING FROM ACQUISITIONS AND DIVESTMENTS OF BUSINESSES

The following is a summary of the cash flow impact of acquisitions and divestments of businesses:

	2010 Acquisitions USD millions	2009 Acquisitions USD millions	2009 Divestments USD millions
Property, plant & equipment	- 1 419	- 64	
Currently marketed products & marketing know-how	- 16 521	- 241	
Alcon brand name	- 2 980		
Acquired research & development	- 1 418	- 161	
Technologies	- 5 460	- 427	
Software and other intangible assets	- 44		
Financial and other assets including deferred tax assets	- 904	- 58	
Inventories	- 1 112	- 80	
Trade accounts receivables and other current assets	- 1 696	- 122	
Marketable securities and cash	- 3 130	- 55	
Long-term and short-term financial debts	384	47	
Trade payables and other liabilities including deferred tax liabilities	6 626	467	
Net identifiable assets acquired	- 27 674	- 694	
Acquired / divested liquidity	2 176	55	- 63
Non-controlling interest	6 338		
Fair value of previously held equity interests	10 320		
Sub-total	- 8 840	- 639	
Goodwill	- 17 986	- 548	
Deferred consideration	160	325	
Net cash flow	- 26 666	- 862	- 63

Note 2 provides further information regarding acquisitions and divestments of businesses. All acquisitions were for cash.

24. ACQUISITIONS OF BUSINESSES

ASSETS AND LIABILITIES ARISING FROM ACQUISITIONS

2010	Acquiree's carrying amount USD millions	Revaluation due to acquisition accounting USD millions	Fair value USD millions
Property, plant & equipment	1 279	140	1 419
Currently marketed products & marketing know-how	186	16 335	16 521
Alcon brand name		2 980	2 980
Acquired research & development Technologies	104	1 314	1 418
Software and other intangible assets	689	4 771	5 460
Financial and other assets including deferred tax assets	44		44
Inventories	837	67	904
Trade accounts receivable and other current assets (net of provisions for doubtful trade receivables of USD 56 m)	645	467	1 112
Marketable securities and cash	1 696		1 696
Long-term and short-term financial debts	3 130		3 130
Trade payables and other liabilities including deferred tax liabilities	- 384		- 384
	- 2 362	- 4 264	- 6 626
Net identifiable assets acquired	5 864	21 810	27 674
Acquired liquidity			- 2 176
Non-controlling interest			- 6 338
Goodwill			17 986
Net assets recognized as a result of business combinations			37 146

2009	Acquiree's carrying amount USD millions	Revaluation due to acquisition accounting USD millions	Fair value USD millions
Property, plant & equipment	64		64
Currently marketed products	4	237	241
Acquired research & development Technologies		161	161
Financial assets including deferred tax assets		427	427
Inventories, trade receivables and other current assets (net of provisions for doubtful trade receivables of USD 3 m)	42	16	58
Marketable securities and cash	186	16	202
Long-term and short-term financial debts	55		55
Trade payables and other liabilities including deferred tax liabilities	- 47		- 47
	- 258	- 209	- 467
Net identifiable assets acquired	46	648	694
Acquired liquidity			- 55
Goodwill			548
Net assets recognized as a result of business combinations			1 187

Note 2 provides details on all the significant acquisition of businesses. The 2010 and 2009 goodwill arising out of the acquisitions reflects mainly the value of expected synergies, future products and the acquired assembled workforce.

25. POST-EMPLOYMENT BENEFITS OF ASSOCIATES

DEFINED BENEFIT PLANS

Apart from 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 vehicles which are legally separate from the Group. For certain Group companies, however, no independent assets exist for the pension and other long-term benefit obligations of associates. In these cases the related liability is included in the balance sheet.

Defined benefit pension plans cover a significant number of the Group's associates. The defined benefit obligations and related

assets of all major plans are reappraised annually by independent actuaries. Plan assets are recorded at fair value and their actual return in 2010 was a gain of USD 614 million (2009: gain of USD 1.7 billion). The latest IFRS interpretation of IAS 19 "Employee Benefits" has been applied in determining any limitation of recognition of fund surpluses. The defined benefit obligation of unfunded pension plans was USD 266 million at December 31, 2010 (2009: USD 279 million).

The following table is a summary of the status of the main funded and unfunded pension and other post-employment benefit plans of associates at December 31, 2010 and 2009:

	Pension plans		Other post-employment benefit plans	
	2010 USD millions	2009 USD millions	2010 USD millions	2009 USD millions
Benefit obligation at January 1	18 009	17 643	817	789
Service cost	350	411	58	48
Interest cost	667	705	45	41
Actuarial losses/(gains)	668	-310	29	19
Plan amendments	-290	-4		-47
Currency translation effects	1 193	329	3	7
Benefit payments	-1 078	-1 013	-57	-41
Contributions of associates	133	124	3	
Effect of acquisitions, divestments or transfers	916	124	349	1
Benefit obligation at December 31	20 568	18 009	1 247	817
Fair value of plan assets at January 1	17 611	16 065	8	5
Expected return on plan assets	778	698	5	
Actuarial (losses)/gains	-164	981	5	
Currency translation effects	1 340	373		
Novartis Group contributions	381	268	70	44
Contributions of associates	133	124	3	
Plan amendments	-21	-2		
Benefit payments	-1 078	-1 013	-57	-41
Effect of acquisitions, divestments or transfers	285	117	194	
Fair value of plan assets at December 31	19 265	17 611	228	8
Funded status	-1 303	-398	-1 019	-809
Unrecognized past service cost	3	5	-38	-43
Limitation on recognition of fund surplus	-35	-35		
Net liability in the balance sheet at December 31	-1 335	-428	-1 057	-852

25. POST-EMPLOYMENT BENEFITS OF ASSOCIATES (CONTINUED)

The movement in the net liability and the amounts recognized in the consolidated balance sheet were as follows:

	Pension plans		Other post-employment benefit plans	
	2010 USD millions	2009 USD millions	2010 USD millions	2009 USD millions
Movement in net liability				
Net liability in the consolidated balance sheet at January 1	- 428	- 1 572	- 852	- 802
Net periodic benefit income/(cost)	29	- 417	- 93	- 67
Novartis Group contributions	381	268	70	44
Plan amendments, net	- 1			
Effect of acquisitions, divestments or transfers	- 631	- 7	- 155	- 1
Change in actuarial (losses)/gains	- 832	1 291	- 24	- 19
Currency translation effects	147	44	- 3	- 7
Impact of limitation on recognition of fund surplus		- 35		
Net liability in the consolidated balance sheet at December 31	- 1 335	- 428	- 1 057	- 852
Amounts recognized in the consolidated balance sheet				
Prepaid benefit cost	982	1 585		
Accrued benefit liability	- 2 317	- 2 013	- 1 057	- 852
Net liability in the consolidated balance sheet at December 31	- 1 335	- 428	- 1 057	- 852

The net periodic benefit cost recorded in the consolidated income statement consists of the following components:

	Pension plans		Other post-employment benefit plans	
	2010 USD millions	2009 USD millions	2010 USD millions	2009 USD millions
Components of net periodic benefit cost				
Service cost	350	411	58	48
Interest cost	667	705	45	41
Expected return on plan assets	- 778	- 698	- 5	
Recognized past service cost	2		- 5	- 3
Curtailment and settlement losses/(gains)	- 270	- 1		- 19
Net periodic benefit (income)/cost	- 29	417	93	67

The following table shows the principal actuarial weighted average assumptions used for calculating defined benefit plans and other post-employment benefits of associates:

	Pension plans		Other post-employment benefit plans	
	2010 %	2009 %	2010 %	2009 %
Weighted average assumptions used to determine benefit obligations at December 31				
Discount rate	3.5%	3.9%	5.3%	5.7%
Expected rate of salary increase	3.5%	3.6%		
Current average life expectancy for a 65-year-old male/female	19/22 years	19/22 years	19/21 years	18/20 years
Weighted average assumptions used to determine net periodic pension cost for the year				
Discount rate	3.9%	4.1%	5.7%	6.3%
Expected return on plan assets	4.6%	4.6%		
Expected rate of salary increase	3.6%	3.7%		
Current average life expectancy for a 65-year-old male/female	19/22 years	19/22 years	18/20 years	19/21 years

The following table shows a five-year summary reflecting the funding of defined benefit pensions and the impact of historical deviations between expected and actual return on plan assets and experience adjustments on plan liabilities.

	2010 USD millions	2009 USD millions	2008 USD millions	2007 USD millions	2006 USD millions
Plan assets	19 265	17 611	16 065	18 355	17 515
Defined benefit obligations	-20 568	-18 009	-17 643	-17 105	-16 767
(Deficit)/Surplus	-1 303	-398	-1 578	1 250	748
Differences between expected and actual return on plan assets	-164	981	-3 006	4	13
Experience adjustments on plan liabilities	26	12	-72	-279	-398

The following table shows the weighted average asset allocation of funded defined benefit plans at December 31, 2010 and 2009:

	Pension plans		
	Long-term target %	2010 %	2009 %
Equity securities	15–40	31	29
Debt securities	45–70	43	49
Real estate	0–15	12	12
Cash and other investments	0–15	14	10
Total		100	100

Strategic pension plan asset allocations are determined with the objective of achieving an investment return which, together with the contributions paid, 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 periodically be permitted to deviate from policy targets. Expected return assumptions are reviewed periodically and are based on each plan's strategic asset mix. Factors considered in the estimate of the expected return are the risk free interest rate together with risk premiums on the assets of each pension plan.

The expected future cash flows to be paid by the Group in respect of pension and other post-employment benefit plans at December 31, 2010 were as follows:

	Pension plans USD millions	Other post-employment benefit plans USD millions
Novartis Group contributions		
2011 (estimated)	302	77
Expected future benefit payments		
2011	1 228	61
2012	1 238	65
2013	1 245	70
2014	1 253	76
2015	1 256	81
2016–2020	6 363	491

The healthcare cost trend rate assumptions for other post-employment benefits are as follows:

Healthcare cost trend rate assumptions used	2010	2009
Healthcare cost trend rate assumed for next year	7.9%	8.5%
Rate to which the cost trend rate is assumed to decline	5.0%	5.0%
Year that the rate reaches the ultimate trend rate	2019	2020

A one percentage point change in the assumed healthcare cost trend rates compared to those used for 2010 would have had the following effects:

	1% point increase USD millions	1% point decrease USD millions
Effects on total of service and interest cost components	13	-11
Effect on post-employment benefit obligations	139	-118

25. POST-EMPLOYMENT BENEFITS OF ASSOCIATES (CONTINUED)

The number of Novartis AG shares held by pension and similar benefit funds at December 31, 2010 was 19.8 million shares with a market value of USD 1.2 billion (2009: 24.8 million shares with a market value of USD 1.3 billion). These funds sold 5 million Novartis shares during the year ended December 31, 2010 (2009: nil). The amount of dividends received on Novartis shares held as plan assets by these funds at the time of the dividend payout was USD 48 million for the year ended December 31, 2010 (2009: USD 43 million).

DEFINED CONTRIBUTION PLANS

In many Group companies associates are covered by defined contribution plans and other long-term benefits. The liability of the Group for these benefits is reported in other long-term benefits of associates and deferred compensation and amounts to USD 461 million at December 31, 2010 (2009: USD 380 million). Contributions charged to the consolidated income statement for the defined contribution plans were USD 269 million (2009: USD 195 million).

26. EQUITY-BASED PARTICIPATION PLANS OF ASSOCIATES

The expense recorded in the consolidated income statement spreads the cost of each grant equally over the vesting period. Assumptions are made concerning the forfeiture rate which is adjusted during the vesting period so that at the end of the vesting period there is only a charge for vested amounts. The expense related to all Novartis equity plans and Alcon equity plans since August 25, 2010 in the 2010 consolidated income statement was USD 841 million (2009: USD 777 million) resulting in a total carrying amount for liabilities arising from share-based payment transactions of USD 200 million (2009: USD 129 million). The amount of related income tax benefit recognized in the consolidated income statement was USD 213 million (2009: USD 185 million). The total amount of cash used to settle awards in 2010 was USD 193 million (2009: USD 148 million). As of December 31, 2010, there was USD 649 million (2009: USD 533 million) of total unrecognized compensation cost related to non-vested equity-based compensation arrangements granted under the Plans. That cost is expected to be recognized over a weighted-average period of 2.00 years (2009: 2.09 years).

Equity-based participation plans can be separated into the following plans:

NOVARTIS EQUITY PLAN "SELECT"

Each year associates, including Executive Committee members, may be eligible for a grant under the Equity Plan "Select". The grant amount is determined on the basis of business and individual performance. No awards are granted for performance ratings below a certain threshold. Grants can be taken in the form of shares,

options, or a combination of both. In some jurisdictions Restricted Share Units (RSU) are granted rather than shares. In Switzerland, the participants in this plan can elect between shares or RSU and share options, or a combination of both.

Each share is entitled to voting rights and payments 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.

Each share option granted to associates entitles the holder to purchase one Novartis share at a stated exercise price that equals the closing market price of the underlying share at the grant date (January 19, 2010 for the performance grant in 2009).

If associates in North America choose to receive part or all of their grant under the Equity Plan "Select" in share options on American Depositary Shares (ADSs), the resulting number of options is determined by dividing the respective incentive amount by a value that equals 95% of the value of the options on ADSs as determined in accordance with IFRS. For associates in other countries, the divisor equals 90% of the IFRS value of options on shares.

Share options are tradable, when vested, and expire on their tenth anniversary. Shares and tradable share options have a vesting period of two years in Switzerland and three years in other countries. 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).

NOVARTIS EQUITY PLAN “SELECT” OUTSIDE NORTH AMERICA

Directors, executives and other selected associates of Group companies (collectively, the “Participants”) may receive equity awards. The vesting period for the plan is three years except Switzerland which had a vesting period of two years until 2010 and which will be increased to three years as of the 2011 performance onwards.

The expense recorded in the 2010 income statement relating to both shares and options under this plan amounted to USD 149 million (2009: USD 151 million). Participants in this plan were granted a total of 2.3 million shares at CHF 55.85 (2009: 1.7 million shares at CHF 53.65).

The following table shows the assumptions on which the valuation of options granted during the period was based:

	Novartis Equity Plan “Select” outside North America	
	2010	2009
Valuation date	January 19, 2010	January 20, 2009
Expiration date	January 17, 2020	January 18, 2019
Closing share price on grant date	CHF 55.85	CHF 53.65
Exercise price	CHF 55.85	CHF 53.65
Implied bid volatility	16.00%	21.00%
Expected dividend yield	4.74%	4.52%
Interest rate	2.29%	2.47%
Market value of option at grant date	CHF 6.13	CHF 8.83

The following table shows the activity associated with the 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 figures. The year-end prices are translated using the corresponding year-end rates.

	2010		2009	
	Options (millions)	Weighted average exercise price (USD)	Options (millions)	Weighted average exercise price (USD)
Options outstanding at January 1	32.9	51.6	25.5	53.2
Granted	9.9	54.5	9.4	46.7
Sold	-6.0	52.4	-0.8	48.6
Forfeited	-2.1	51.4	-1.2	51.1
Outstanding at December 31	34.7	52.3	32.9	51.6
Exercisable at December 31	18.2	53.6	17.5	51.3

All options were granted at an exercise price which was equal to the market price of the Group’s shares at the grant date and between 2000 and 2003 was greater than the market price of the Group’s shares at the grant date. The weighted average fair value of options granted in 2010 was USD 5.1. The weighted average exercise price during the period the options were sold in 2010 was USD 52.4. The weighted average share price at the dates of exercise was also USD 52.4. The amounts received by the associates was USD 16 million based on market value (intrinsic value USD 2 million). The weighted

average remaining contractual term for options outstanding at the year end was 6.8 years and 5.3 years for options exercisable. Options outstanding had an aggregate intrinsic value of USD 17 million and USD 6 million for options exercisable.

The following table summarizes information about options outstanding at December 31, 2010:

Range of exercise prices (USD)	Options outstanding			Options exercisable	
	Number outstanding (millions)	Average remaining contractual life (years)	Weighted average exercise price (USD)	Number exercisable (millions)	Weighted average exercise price (USD)
30–34	0.9	1.1	34.8	0.9	34.8
35–39	0.5	0.2	36.9	0.5	36.9
40–44	0.0	0.0	0.0	0.0	0.0
45–49	11.5	6.6	46.9	3.6	47.3
50–54	11.6	8.0	54.4	3.0	54.0
55–59	10.2	6.5	58.3	10.2	58.3
Total	34.7	6.8	52.3	18.2	53.6

NOVARTIS EQUITY PLAN “SELECT” FOR NORTH AMERICA

The plan provides for equity awards to North American based Directors, executives and other selected associates. The terms and conditions of the Novartis Equity Plan “Select” for North America are substantially equivalent to the Novartis Equity Plan “Select” outside North America. Options in this plan have only been tradable since 2004.

The expense recorded in the 2010 consolidated income statement relating to both shares and options under this plan amounted to USD 237 million (2009: USD 237 million). Participants in this plan were granted a total of 3.5 million units at USD 53.70 (2009: 3.0 million ADS at USD 46.42).

The following table shows the assumptions on which the valuation of options granted during the period was based:

	Novartis Equity Plan “Select” for North America	
	2010	2009
Valuation date	January 19, 2010	January 20, 2009
Expiration date	January 17, 2020	January 18, 2019
Closing ADS price on grant date	USD 53.70	USD 46.42
Exercise price	USD 53.70	USD 46.42
Implied bid volatility	14.60%	20.00%
Expected dividend yield	4.96%	4.61%
Interest rate	3.90%	2.45%
Market value of option at grant date	USD 6.47	USD 7.08

26. EQUITY-BASED PARTICIPATION PLANS OF ASSOCIATES (CONTINUED)

The following table shows the activity associated with the options during the period:

	2010		2009	
	ADS options (millions)	Weighted average exercise price (USD)	ADS options (millions)	Weighted average exercise price (USD)
Options outstanding at January 1	59.3	50.2	45.1	51.7
Granted	15.7	53.7	20.0	46.4
Sold or exercised	-10.3	49.5	-3.2	45.1
Forfeited	-4.7	51.7	-2.6	53.2
Outstanding at December 31	60.0	51.1	59.3	50.2
Exercisable at December 31	20.2	50.1	20.9	46.2

All options were granted at an exercise price which was equal to the market price of the ADS at the grant date. The weighted average fair value of options granted in 2010 was USD 6.4. The weighted average exercise price during the period the options were sold or exercised in 2010 was USD 49.5. The weighted average share price at the dates of exercise was USD 55.5. The amount received by the associates was USD 95 million based on market value (intrinsic value of USD 61 million). The weighted average remaining contractual term for options outstanding at the year end was 6.9 years and 4.5 years for options exercisable. Options outstanding had an aggregate intrinsic value of USD 471 million and USD 180 million for options exercisable.

The actual tax benefit from options exercised and restricted stock vested under the Select Plan for North America was USD 186 million.

The following table summarizes information about ADS options outstanding at December 31, 2010:

Range of exercise prices (USD)	ADS options outstanding			ADS options exercisable	
	Number outstanding (millions)	Average remaining contractual life (years)	Weighted average exercise price (USD)	Number exercisable (millions)	Weighted average exercise price (USD)
35-39	4.1	2.5	36.6	4.1	36.6
40-44	0.3	0.3	42.0	0.3	42.0
45-49	21.9	7.0	46.6	5.3	47.1
50-54	17.6	8.2	53.9	3.6	54.7
55-59	16.1	6.6	58.1	6.9	58.4
Total	60.0	6.9	51.1	20.2	50.1

Under the previous US Management ADS Appreciation Rights plan, Novartis associates on US employment contracts were entitled to cash compensation equivalent to the increase in the value of Novartis ADSs compared to the market price of the ADSs at the grant date. The income of US Management ADS Appreciation Rights Plan recorded in the 2010 income statement amounted to USD 2 million (2009: USD 1 million).

LONG-TERM PERFORMANCE PLAN

The Long-Term Performance Plan is an equity plan for key executives based on a three-year performance period.

At the beginning of the performance period, plan participants are allocated RSUs, which may be converted into Novartis shares after the performance period.

At the end of the performance period, the Compensation Committee adjusts the number of RSUs based on actual performance. The performance is measured by Group Economic Value Added (EVA), a formula to measure corporate profitability while taking into account the cost of capital. The performance target is the sum of three annual Group EVA targets. No incentive is awarded if actual Group EVA performance fails to meet a pre-determined threshold (or if the participant leaves during the performance period for reasons other than retirement, disability or death). For outstanding Group EVA performance the adjustment can go up to 200% of the target incentive.

At the award date, RSUs are converted into unrestricted Novartis shares without vesting period. In the United States, awards may also be delivered in cash under the Deferred Compensation Plan.

The expense recorded in the 2010 income statement related to this plan amounted to USD 32 million (2009: USD 35 million). During 2010 a total of 0.4 million performance share units (2009: 0.3 million performance share units) were granted to 116 key executives participating in this plan.

SPECIAL SHARE AWARDS

Selected associates may exceptionally receive special awards of restricted or unrestricted shares or RSUs. These special share awards are discretionary, providing flexibility to attract talent or to reward particular achievements or exceptional performance. They may also serve to retain key contributors.

Restricted special awards generally have a five-year vesting period. If an associate leaves Novartis for reasons other than retirement, disability or death, unvested shares or RSUs are generally forfeited. Worldwide 389 associates at different levels in the organization were awarded restricted shares in 2010. The expense recorded for such special share awards in the 2010 income statement amounted to USD 33 million (2009: USD 18 million). During 2010 a total of 1.1 million shares or RSUs (2009: 1.2 million shares or RSUs) were granted to executives and selected associates.

LEVERAGED SHARE SAVINGS PLANS

Associates in certain countries and certain key executives worldwide are encouraged to receive their annual incentive awards fully or partially in Novartis shares instead of cash by participating in a leveraged share savings plan.

Under leveraged share savings plans, Novartis matches investments in shares after a holding period. In general, no shares are matched under these plans if an associate leaves Novartis prior to

expiration of the holding period for reasons other than retirement, disability or death.

Novartis has three main leveraged share savings plans:

- The Swiss Employee Share Ownership Plan (ESOP) is available in Switzerland to approximately 11 600 associates. 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 granted under ESOP, each participant will receive one free matching share for every two Novartis shares granted. A total of 5080 associates chose to receive shares under the ESOP for their performance in 2009.
- In the United Kingdom, approximately 2 900 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 incentive in shares. Two invested shares are matched with one share after a holding period of three years. During 2010, 1 610 associates participated in this plan.
- 28 key executives worldwide were invited to participate in a Leveraged Share Savings Plan (LSSP) as part of compensation for performance in 2009. Their annual incentive was awarded in shares and blocked for five years. At the end of the period, Novartis matches the invested shares at a ratio of 1:1 (i.e. one share awarded for each invested share).

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

The expense recorded in the 2010 income statement related to these plans amounted to USD 366 million (2009: USD 335 million). During 2010, a total of 5.8 million shares (2009: 6.1 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, restricted share units (RSU) and American Depositary Shares (ADS)) for all plans:

	2010		2009	
	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	15.7	938.7	13.6	886.9
Granted	13.9	766.1	12.3	581.5
Vested	-10.3	-594.6	-9.2	-480.7
Forfeited	-1.6	-94.5	-1.0	-49.0
Non-vested shares at December 31	17.7	1 015.7	15.7	938.7

ALCON EQUITY PLANS

Under the Amended 2002 Alcon Incentive Plan, the Board of Directors of Alcon may award to officers, directors and key employees equity-based compensation, including stock options, share-settled stock appreciation rights (SSARs), restricted shares, restricted share units (RSUs), and performance share units (PSUs).

The total number of Alcon shares that may be issued with respect to such awards shall not exceed 40 million Alcon shares. The number of shares that may be delivered pursuant to exercise or after a lapse of a restriction period may not exceed 10% of the total number of shares issued and outstanding at that time. Alcon intends to satisfy all equity awards granted prior to December 31, 2003 and after December 31, 2007 with the issuance of new shares from conditional capital authorized for the Amended 2002 Alcon Incentive Plan.

The Board of Directors of Alcon has authorized the acquisition on the open market of Alcon shares to, among other things, satisfy the share-based awards requirements granted under the amended 2002 Alcon Incentive Plan.

The expense recorded in the 2010 income statement (from August 25 to December 31, 2010) relating to all Alcon equity plans amounted to USD 22 million. Participants in those plans were granted 0.2 million restricted share units (RSUs) during that same period.

Individual grants become exercisable generally on or after the third anniversary of the grant and lapse on the tenth anniversary of the grant.

At December 31, 2010, Alcon had reserved approximately 19.6 million Alcon common shares for issuance pursuant to the Amended 2002 Alcon Incentive Plan.

CHANGE OF CONTROL PROVISIONS

Upon the change of majority ownership in Alcon from Nestlé to Novartis, Alcon's equity-based compensation awards granted to employees prior to January 1, 2009 vested immediately. However, the vesting of similar awards granted after January 1, 2009 will accelerate only if the respective participant's employment with Alcon or its successor is terminated without cause, or by the participant under certain circumstances, within six months preceding or during the two years following a change of control. If Alcon is not the surviving corporation under a change in control, the equivalent value of the successor's securities may be substituted for Alcon shares under the awards.

26. EQUITY-BASED PARTICIPATION PLANS OF ASSOCIATES (CONTINUED)

ALCON STOCK OPTIONS AND SHARE-SETTLED STOCK APPRECIATION RIGHTS

The fair value of each stock option and share settled stock appreciation right (SSAR) grant was estimated as of the date of grant using the Black-Scholes option-pricing model. Compensation expense for equity awards was calculated on a straight-line basis over the three-year vesting period of the applicable equity awards, with acceleration of the expense for individuals meeting the requirements for retirement and under the change of control provisions, as described above. There were no grants of stock options or SSARs in 2010. The following table shows the activity associated with the options and SSARs during the period:

	2010		2010	
	Number of options (millions)	Weighted average exercise price (USD)	Number of SSARs (millions)	Weighted average exercise price (USD)
Outstanding at August 25	4.4	68.2	4.8	115.5
Sold or exercised	- 1.2	70.5	- 1.0	132.0
Outstanding at December 31	3.2	67.6	3.8	111.5
Exercisable at December 31	3.0	66.4	2.0	133.6

ALCON RESTRICTED SHARE UNITS AND PERFORMANCE SHARE UNITS

Alcon may grant restricted share units (RSUs). RSUs entitle the recipient to receive a specified number of common shares or the cash equivalent equal to the fair market value of such 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. Holders of RSUs have no voting rights and receive dividend equivalents prior to vesting.

RSUs are recognized over the required service period at the closing market price on the day of grant. Participants were granted 0.2 million RSUs during the period from August 25 to December 31, 2010. The fair value of those instruments amounted to USD 38 million. At December 31, 2010, there were 1.2 million RSUs outstanding with a fair value of USD 189 million.

Performance Share Units (PSUs) are designed to award additional compensation in the form of Alcon shares if certain earning per share targets are met. No PSUs were granted in 2010.

27. RELATED PARTIES

ROCHE/GENENTECH

Novartis has two agreements with Genentech, Inc., USA, a subsidiary of Roche Holdings AG (Roche) 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 Ophthalmics, part of the Novartis Pharmaceuticals Division, has licensed the exclusive rights to develop and market *Lucentis* outside the US for indications related to diseases of the eye. As part of this agreement, Novartis paid Genentech 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 US. *Lucentis* sales of USD 1.5 billion (2009: USD 1.2 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 are co-promoting *Xolair* in the US where Genentech records all sales.

Novartis markets *Xolair* and records all sales and related costs in Europe as well as co-promotion costs in the US. Genentech and Novartis share the resulting profits from sales in the US, Europe and some East Asia countries, according to agreed profit-sharing percentages. Novartis recognized total sales of *Xolair* of USD 369 million (2009: USD 338 million) including sales to Genentech for the US market.

The net expense for royalties, cost sharing and profit sharing arising out of the *Lucentis* and *Xolair* agreements with Genentech totaled USD 300 million (2009: USD 200 million).

Furthermore, Novartis has several patent license, supply and distribution agreements with Roche and several Novartis entities hold Roche bonds totaling USD 17 million (2009: USD 1 billion).

IDENIX

Novartis Pharma AG entered into a collaboration agreement with Idenix in May 2003 relating to the worldwide development and commercialization of drug candidates and purchased approximately 54% of the common stock of Idenix. As Novartis had the ability to exercise control, Idenix was fully consolidated. In August 2009, Novartis opted not to purchase shares that were issued pursuant to an underwritten offering and waived and amended certain rights under the development and commercialization agreement. As a result of this, the Novartis shareholding was diluted from the pre-offering level of 53% to 47% and since September 1, 2009 Idenix has been accounted for according to the equity method. Novartis has a license agreement with Idenix for *Tyzeka/Sebivo* and may pay additional license fees and development expenses for drug candidates that Novartis may elect to license from Idenix. The sales of *Tyzeka/Sebivo* totaled USD 95 million in 2010 (2009: USD 84 million).

EXECUTIVE OFFICER AND DIRECTOR COMPENSATION

During 2010, there were 14 Executive Committee members (“Executive Officers”), including those who stepped down (9 members in 2009).

The total compensation for members of the Executive Committee and the 12 Non-Executive Directors (11 in 2009) using IFRS 2 rules for accounting for equity-based compensation was as follows:

	Executive Officers		Non-Executive Directors		Total	
	2010 USD millions	2009 USD millions	2010 USD millions	2009 USD millions	2010 USD millions	2009 USD millions
Short-term benefits	14.4	12.6	17.7	6.0	32.1	18.6
Post-employment benefits	1.2	1.4	0.2		1.4	1.4
Termination benefits	7.9				7.9	
Equity-based compensation	62.4	86.4			62.4	86.4
Total	85.9	100.4	17.9	6.0	103.8	106.4

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.

During 2009, an Executive Officer acquired real estate for CHF 3.7 million from a consolidated entity. The transaction price was based on independent external valuation reports.

The disclosures required by the Swiss Code of Obligations on Board and Executive compensation are shown in note 11 to the Novartis AG financial statements.

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, 2010 the Group's commitments with respect to these leases were as follows:

	2010 USD millions
2011	363
2012	267
2013	183
2014	141
2015	121
Thereafter	2 087
Total	3 162
Expense of current year	350

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, 2010 the Group's commitments to make payments under those agreements were as follows:

	Unconditional commitments 2010 USD millions	Potential milestone payments 2010 USD millions	Total 2010 USD millions
2011	84	338	422
2012	58	501	559
2013	37	632	669
2014	31	192	223
2015	30	511	541
Thereafter	30	1 090	1 120
Total	270	3 264	3 534

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 liability is assessed based on a risk assessment and investigation of the various sites identified by the Group as at risk for environmental 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 certain legal and product liability claims. 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. PRINCIPAL CURRENCY TRANSLATION RATES

		2010 USD	2009 USD			2010 USD	2009 USD
Year-end exchange rates used for consolidated balance sheets:				Average of monthly exchange rates during the year used for consolidated income and cash flow statements:			
	1 CHF	1.063	0.965		1 CHF	0.961	0.923
	1 EUR	1.324	1.436		1 EUR	1.327	1.393
	1 GBP	1.552	1.591		1 GBP	1.546	1.564
	100 JPY	1.227	1.086		100 JPY	1.141	1.070

30. EVENTS SUBSEQUENT TO THE DECEMBER 31, 2010 BALANCE SHEET DATE

DIVIDEND PROPOSAL FOR 2010 AND APPROVAL OF THE GROUP'S 2010 CONSOLIDATED FINANCIAL STATEMENTS

The 2010 consolidated financial statements of the Novartis Group were approved by the Novartis AG Board of Directors on January 26, 2011. On January 19, 2011, the Board proposed a dividend of CHF 2.20 per share to be approved at the Annual General Meeting on February 22, 2011. If approved, total dividend payments would amount to approximately USD 5.4 billion.

SETTLEMENT OF LITIGATION

On January 3, 2011, Novartis and Johnson & Johnson signed an agreement to settle all litigations related to the silicone hydrogel patents (JUMP patents) referred to in note 20 above. Under the agreement, Novartis will receive a settlement payment and each party will grant to the other party a fully paid up, irrevocable, worldwide non-exclusive license with no right to sub-license under the respective patent rights. Novartis will record the resulting income in the first quarter of 2011.

TENDER OFFER FOR GENOPTIX, INC. (GENOPTIX)

On January 24, 2011, Novartis announced that it has entered into a definitive agreement to acquire Genoptix, Inc. (NASDAQ: GXDX), a specialized laboratory providing personalized diagnostic services to community-based hematologists and oncologists.

In accordance with the terms of the agreement, Novartis is to commence a tender offer for all outstanding shares of common stock of Genoptix at USD 25.00 per share in cash. This represents a total equity value of USD 470 million and an enterprise value of USD 330 million. The Novartis offer represents a premium of 39% over Genoptix's unaffected share price of USD 17.98 on December 13, 2010. It also implies a 27% premium over the closing price of USD 19.76 on January 21, 2011.

The Genoptix Board of Directors has unanimously approved the transaction and agreed to recommend that Genoptix stockholders tender their shares. The transaction is conditional upon the tender of at least a majority of the shares of Genoptix in the tender offer, receipt of regulatory approvals and other customary closing conditions. The transaction is expected to close within the first half of 2011.

31. PRINCIPAL GROUP SUBSIDIARIES AND ASSOCIATED COMPANIES

As at December 31, 2010	Share/paid-in capital ¹	Equity interest %	Activities	As at December 31, 2010	Share/paid-in capital ¹	Equity interest %	Activities
Argentina				Czech Republic			
Novartis Argentina S.A., Buenos Aires	ARS 61.3 m	100	◆▲	Novartis s.r.o., Prague	CZK 51.5 m	100	◆
Sandoz S.A., Buenos Aires	ARS 71.8 m	100	◆▼	Sandoz s.r.o., Prague	CZK 44.7 m	100	◆
Alcon Laboratorios Argentina S.A., Buenos Aires	ARS 3.9 m	77	◆	Denmark			
Australia				Novartis Healthcare A/S, Copenhagen	DKK 14.0 m	100	◆
Novartis Australia Pty Ltd., North Ryde, NSW	AUD 11.0 m	100	■	Sandoz A/S, Copenhagen	DKK 8.0 m	100	◆
Novartis Pharmaceuticals Australia Pty Ltd., North Ryde, NSW	AUD 3.8 m	100	◆▲	Ecuador			
Sandoz Pty Ltd., North Ryde, NSW	AUD 11.6 m	100	◆	Novartis Ecuador S.A., Quito	USD 4.0 m	100	◆
Novartis Consumer Health Australasia Pty Ltd., Melbourne, Victoria	AUD 7.6 m	100	◆▼	Egypt			
Novartis Animal Health Australasia Pty Ltd., North Ryde, NSW	AUD 3.0 m	100	◆▲	Novartis Pharma S.A.E., Cairo	EGP 33.8 m	99	▼
Alcon Laboratories (Australia) Pty Ltd., Frenchs Forest	AUD 2.6 m	77	◆	Finland			
Austria				Novartis Finland Oy, Espoo	EUR 459 000	100	◆
Novartis Austria GmbH, Vienna	EUR 1.0 m	100	■	France			
Novartis Pharma GmbH, Vienna	EUR 1.1 m	100	◆	Novartis Groupe France S.A., Rueil-Malmaison	EUR 103.0 m	100	■
Sandoz GmbH, Kundl	EUR 32.7 m	100	■◆▼▲	Novartis Pharma S.A.S., Rueil-Malmaison	EUR 43.4 m	100	◆▼▲
Novartis Animal Health GmbH, Kundl	EUR 37 000	100	◆	Sandoz S.A.S., Levallois-Perret	EUR 5.0 m	100	◆
EBEWE Pharma Ges.m.b.H Nfg., Unterach am Attersee	EUR 1.0 m	100	◆▼▲	Novartis Santé Familiale S.A.S., Rueil-Malmaison	EUR 21.9 m	100	◆▼
Bangladesh				Novartis Santé Animale S.A.S., Rueil-Malmaison	EUR 900 000	100	◆▼
Novartis (Bangladesh) Limited, Dhaka	BDT 162.5 m	60	◆▼	CIBA Vision S.A.S., Blagnac	EUR 1.8 m	100	◆
Belgium				Laboratoires Alcon S.A., Rueil-Malmaison	EUR 12.6 m	77	◆▼
N.V. Novartis Pharma S.A., Vilvoorde	EUR 7.1 m	100	◆	Germany			
N.V. Sandoz S.A., Vilvoorde	EUR 19.2 m	100	◆	Novartis Deutschland GmbH, Wehr	EUR 155.5 m	100	■
N.V. Novartis Consumer Health S.A., Vilvoorde	EUR 4.3 m	100	◆	Novartis Pharma GmbH, Nuremberg	EUR 25.6 m	100	◆▲
N.V. CIBA Vision Benelux S.A., Mechelen	EUR 62 000	100	◆	Novartis Pharma Produktions GmbH, Wehr	EUR 2.0 m	100	▼
S.A. Alcon-Couvreur N.V., Puurs	EUR 362.1 m	77	◆▼	Novartis Vaccines and Diagnostics GmbH, Marburg	EUR 5.0 m	100	◆▼▲
Bermuda				Jenahexal Pharma GmbH, Jena	EUR 260 000	100	◆▼▲
Triangle International Reinsurance Ltd., Hamilton	CHF 1.0 m	100	■	Sandoz International GmbH, Holzkirchen	EUR 100 000	100	■
Novartis Securities Investment Ltd., Hamilton	CHF 30 000	100	■	Sandoz Pharmaceuticals GmbH, Holzkirchen	EUR 5.1 m	100	◆
Novartis International Pharmaceutical Ltd., Hamilton	CHF 20 000	100	■◆▼▲	Sandoz Industrial Products GmbH, Frankfurt a. M.	EUR 2.6 m	100	◆▼
Trinity River International Investments (Bermuda), Ltd. Hamilton	USD 12 000	77	■	Hexal AG, Holzkirchen	EUR 93.7 m	100	■◆▼▲
Trinity River Insurance Co.Ltd., Hamilton	USD 370 000	77	■	Salutas Pharma GmbH, Barleben	EUR 42.1 m	100	◆▼
Brazil				1 A Pharma GmbH, Oberhaching	EUR 26 000	100	◆
Novartis Biociências S.A., São Paulo	BRL 255.8 m	100	◆▼	Novartis Consumer Health GmbH, Munich	EUR 14.6 m	100	◆▼▲
Sandoz do Brasil Indústria Farmacêutica Ltda., Cambé	BRL 190.0 m	100	◆▼▲	Novartis Tiergesundheits GmbH, Munich	EUR 256 000	100	◆
Novartis Saúde Animal Ltda., São Paulo	BRL 50.7 m	100	◆▼	CIBA Vision Vertriebs GmbH, Grossostheim	EUR 2.6 m	100	◆
Alcon Laboratorios do Brasil Ltda., São Paulo	BRL 7.7 m	77	◆▼	CIBA Vision GmbH, Grosswallstadt	EUR 15.4 m	100	◆▼▲
Canada				Alcon Pharma GmbH, Freiburg	EUR 511 292	77	◆
Novartis Pharmaceuticals Canada Inc., Dorval/Montreal	CAD 0 ²	100	◆▲	WaveLight GmbH, Erlangen	EUR 6.6 m	77	▼
Sandoz Canada Inc., Boucherville, Quebec	CAD 76.8 m	100	◆▼▲	Gibraltar			
Novartis Consumer Health Canada Inc., Mississauga, Ontario	CAD 2	100	◆	Novista Insurance Limited, Gibraltar City	CHF 130.0 m	100	■
CIBA Vision Canada Inc., Mississauga, Ontario	CAD 1	100	◆▼	Great Britain			
Novartis Animal Health Canada Inc., Charlottetown	CAD 2	100	◆▲	Novartis UK Limited, Frimley/Camberley	GBP 25.5 m	100	■
Alcon Canada Inc., Mississauga	CAD 0 ²	77	◆	Novartis Pharmaceuticals UK Limited, Frimley/Camberley	GBP 5.4 m	100	◆▼▲
Chile				Novartis Vaccines and Diagnostics Limited, Frimley/Camberley	GBP 100	100	▼
Novartis Chile S.A., Santiago de Chile	CLP 2.0 bn	100	◆	Novartis Grimsby Limited, Frimley/Camberley	GBP 230 m	100	▼
Alcon Laboratorios Chile Limitada, Santiago	CLP 2.0 bn	77	◆	Sandoz Limited, Bordon	GBP 2.0 m	100	◆
China				Novartis Consumer Health UK Limited, Horsham	GBP 25 000	100	◆▼
Beijing Novartis Pharma Co., Ltd., Beijing	CNY 132.1 m	100	◆▼	Novartis Animal Health UK Limited, Frimley/Camberley	GBP 100 000	100	◆▲
Novartis Pharmaceuticals (HK) Limited, Hong Kong	HKD 200	100	◆	CIBA Vision (UK) Limited, Southampton	GBP 550 000	100	◆
China Novartis Institutes for BioMedical Research Co. Ltd., Shanghai	USD 32.0 m	100	▲	Alcon Laboratories (UK) Limited, Hemel Hempstead	GBP 3.1 m	77	◆
Suzhou Novartis Pharma Technology Co. Ltd., Changshu	USD 62.0 m	100	▼	Greece			
Shanghai Novartis Trading Ltd., Shanghai	CNY 20.3 m	100	◆	Novartis (Hellas) S.A.C.I., Metamorphosis/Athens	EUR 14.6 m	100	◆
Shanghai Novartis Animal Health Co., Ltd., Shanghai	CNY 105.9 m	100	◆▼	Alcon Laboratories Hellas Commercial & Industrial S.A., Maroussi	EUR 1.7 m	77	◆
Sandoz (China) Pharmaceutical Co., Ltd., Zhongshan	CNY 21.4 m	100	◆▼	Hungary			
Alcon (China) Ophthalmic Product Co., Ltd., Beijing	USD 2.2 m	77	◆▼	Novartis Hungary Healthcare Limited Liability Company, Budapest	HUF 545.6 m	100	◆
Colombia				Sandoz Hungary Limited Liability Company, Budapest	HUF 4.0 m	100	◆
Novartis de Colombia S.A., Santafé de Bogotá	COP 7.9 bn	100	◆▼	India			
Laboratorios Alcon de Colombia S.A., Bogota	COP 20.9 m	77	◆	Novartis India Limited, Mumbai	INR 159.8 m	76	◆▼
Croatia				Sandoz Private Limited, Mumbai	INR 32.0 m	100	◆▼
Sandoz d.o.o., Zagreb	HRK 25.6 m	100	◆	Novartis Healthcare Private Limited, Mumbai	INR 60.0 m	100	▲
				Alcon Laboratories (India) Private Limited, Bangalore	INR 1.1 bn	77	◆
				Indonesia			
				PT Novartis Indonesia, Jakarta	IDR 7.7 bn	100	◆▼
				PT CIBA Vision Batam, Batam	IDR 11.9 bn	100	▼

As at December 31, 2010	Share/paid-in capital ¹	Equity interest %	Activities	As at December 31, 2010	Share/paid-in capital ¹	Equity interest %	Activities
Ireland				Russian Federation			
Novartis Ireland Limited, Dublin	EUR 25 000	100	◆	Novartis Pharma LLC, Moscow	RUR 20.0 m	100	◆
Novartis Ringaskiddy Limited, Ringaskiddy, County Cork	EUR 2.0 m	100	▼	ZAO Sandoz, Moscow	RUR 57.4 m	100	◆
Alcon Laboratories Ireland Limited, Cork	EUR 541 251	77	▼	Novartis Consumer Health LLC, Moscow	RUR 60.0 m	100	◆
Alcon Farmaceutika LLC, Moscow				Alcon Farmaceutika LLC, Moscow	RUR 44.1 m	77	◆
Italy				Singapore			
Novartis Farma S.p.A., Origgio	EUR 18.2 m	100	◆◆▼▲	Novartis Singapore Pharmaceutical Manufacturing Pte Ltd., Singapore Country	SGD 45.0 m	100	▼
Novartis Vaccines and Diagnostics S.r.l., Siena	EUR 41.5 m	100	◆◆▼▲	Novartis Asia Pacific Pharmaceuticals Pte Ltd., Singapore Country	SGD 1.0 m	100	◆
Sandoz S.p.A., Origgio	EUR 390 000	100	◆	Novartis Institute for Tropical Diseases Pte Ltd., Singapore Country	SGD 2 004	100	▲
Sandoz Industrial Products S.p.A., Rovereto	EUR 2.6 m	100	▼	CIBA Vision (Singapore) Pte Ltd, Singapore Country	SGD 400 000	100	◆
Novartis Consumer Health S.p.A., Origgio	EUR 2.9 m	100	◆	Novartis (Singapore) Pte Ltd, Singapore Country	SGD 100 000	100	◆▲
CIBA Vision S.r.l., Marcon	EUR 2.4 m	100	◆	Alcon Singapore Manufacturing Pte Ltd., Singapore Country	SGD 1 000	77	▼
Alcon Italia S.p.A., Milan	EUR 1.3 m	77	◆	Slovakia			
Japan				Novartis Slovakia s.r.o., Bratislava			
Novartis Holding Japan K.K., Tokyo	JPY 10.0 m	100	■	Lek Pharmaceuticals d.d., Ljubljana	EUR 73.6 m	100	◆◆▼▲
Novartis Pharma K.K., Tokyo	JPY 6.0 bn	100	◆▲	Sandoz Pharmaceuticals d.d., Ljubljana	EUR 1.5 m	100	◆
Sandoz K.K., Tokyo	JPY 100.0 m	100	◆◆▼▲	South Africa			
Novartis Animal Health K.K., Tokyo	JPY 50.0 m	100	◆▲	Novartis South Africa (Pty) Ltd., Kempton Park	ZAR 86.3 m	100	◆
CIBA Vision K.K., Tokyo	JPY 100.0 m	100	◆	Sandoz South Africa (Pty) Ltd, Kempton Park	ZAR 3.0 m	100	◆▼
Alcon Japan Ltd., Tokyo	JPY 0 ²	77	◆	Alcon Laboratories (South Africa) (Pty.) Ltd., Randburg	ZAR 201 820	77	◆
Luxembourg				South Korea			
Novartis Investments S.à r.l., Luxembourg-Ville	USD 2.6 bn	100	■	Novartis Korea Ltd., Seoul	KRW 24.5 bn	99	◆
Novartis Finance S.A., Luxembourg-Ville	USD 100 000	100	■	Alcon Korea Ltd, Seoul	KRW 33.8 bn	77	◆
Malaysia				Spain			
Novartis Corporation (Malaysia) Sdn. Bhd., Kuala Lumpur	MYR 3.3 m	100	◆	Novartis Farmacéutica, S.A., Barcelona	EUR 63.0 m	100	◆◆▼
CIBA Vision Johor Sdn. Bhd., Gelang Patah	MYR 5.0 m	100	▼	Novartis Vaccines and Diagnostics, S.L., Barcelona	EUR 675 450	100	◆
Mexico				Sandoz Farmacéutica, S.A., Madrid			
Novartis Farmacéutica, S.A. de C.V., Mexico City	MXN 205.0 m	100	◆▼	Sandoz Industrial Products, S.A., Les Franqueses del Vallés/Barcelona	EUR 9.3 m	100	◆◆▼▲
Sandoz S.A. de C.V., Mexico City	MXN 468.2 m	100	◆▼	Bexal Farmacéutica, S.A., Madrid	EUR 1.0 m	100	◆
Alcon Laboratorios, S.A. de C.V., Mexico City	MXN 5.9 m	77	◆▼	Novartis Consumer Health, S.A., Barcelona	EUR 876 919	100	◆
Netherlands				CIBA Vision, S.A., Barcelona			
Novartis Netherlands B.V., Arnhem	EUR 1.4 m	100	■	Alcon Cusi S.A., El Masnou	EUR 11.6 m	77	◆▼
Novartis Pharma B.V., Arnhem	EUR 4.5 m	100	◆	Sweden			
Sandoz B.V., Almere	EUR 907 570	100	◆▼	Novartis Sverige Participations AB, Täby/Stockholm	SEK 1.0 m	100	■
Novartis Consumer Health B.V., Breda	EUR 23 830	100	◆▼	Novartis Sverige AB, Täby/Stockholm	SEK 5.0 m	100	◆
Alcon Nederland B.V., Gorinchem	EUR 18 151	77	◆	CIBA Vision Nordic AB, Askim/Göteborg	SEK 2.5 m	100	◆
New Zealand				Alcon Sverige AB, Bromma			
Novartis New Zealand Ltd., Auckland	NZD 820 000	100	◆	SEK 100 000	77	◆	
Norway				Switzerland			
Novartis Norge AS, Oslo	NOK 1.5 m	100	◆	Novartis International AG, Basel	CHF 10.0 m	100	■
Pakistan				Novartis Holding AG, Basel			
Novartis Pharma (Pakistan) Limited, Karachi	PKR 24.8 m	99	◆▼	Novartis Research Foundation, Basel	CHF 29.3 m	100	■
Panama				Novartis Foundation for Management Development, Basel			
Novartis Pharma (Logistics), Inc., Panama City	USD 10 000	100	◆	Novartis Foundation for Employee Participation, Basel	CHF 100 000	100	■
Peru				Novartis Sanierungsstiftung, Basel			
Novartis Biosciences Peru S.A., Lima	PEN 6.1 m	100	◆	Roche Holding AG, Basel	CHF 2.0 m	100	■
Philippines				Novartis Consumer Health, Basel			
Novartis Healthcare Philippines, Inc., Makati/Manila	PHP 298.8 m	100	◆	Alcon, Inc., Hünenberg	CHF 60.8 m	77	■
Poland				Novartis Pharma AG, Basel			
Novartis Poland Sp. z o.o., Warsaw	PLN 44.2 m	100	◆	Novartis Pharma Services AG, Basel	CHF 350.0 m	100	◆◆▼▲
Lek S.A., Strykow	PLN 11.4 m	100	◆▼	Novartis Pharma Schweizerhalle AG, Muttenz	CHF 20.0 m	100	◆
Sandoz Polska Sp. Z.o.o., Warsaw	PLN 25.6 m	100	◆◆▼▲	Novartis Pharma Stein AG, Stein	CHF 251 000	100	▼▲
Alcon Polska Sp. z o.o., Warsaw	PLN 750 000	77	◆	Novartis Pharma Schweiz AG, Bern	CHF 5.0 m	100	◆▲
Portugal				Novartis Vaccines and Diagnostics AG, Basel			
Novartis Portugal SGPS Lda., Sintra	EUR 500 000	100	■	Sandoz AG, Basel	CHF 5.0 m	100	◆▲
Novartis Farma – Produtos Farmacêuticos S.A., Sintra	EUR 2.4 m	100	◆	Sandoz Pharmaceuticals AG, Steinhausen	CHF 100 000	100	◆
Sandoz Farmaceutica Lda., Sintra	EUR 5.0 m	100	◆	Novartis Consumer Health S.A., Nyon	CHF 30.0 m	100	◆◆▼▲
Novartis Consumer Health – Produtos Farmacêuticos e Nutrição Lda., Lisbon	EUR 100 000	100	◆	Novartis Consumer Health Schweiz AG, Bern	CHF 250 000	100	◆▲
Alcon Portugal-Produtos e Equipamentos Oftalmologicos Lda., Paco d'Arcos	EUR 4.5 m	77	◆	Novartis Animal Health AG, Basel	CHF 101 000	100	◆◆▼▲
Puerto Rico				Novartis Centre de Recherche Santé Animale S.A., St. Aubin			
Ex-Lax, Inc., Humacao	USD 10 000	100	▼	CIBA Vision AG, Embrach	CHF 250 000	100	▲
CIBA Vision Puerto Rico, Inc., Cidra	USD 1 000	100	▼	Alcon Pharmaceuticals Ltd., Fribourg	CHF 300 000	100	◆◆
Alcon (Puerto Rico) Inc., Catano	USD 100	77	◆	Alcon Pharmaceuticals Ltd., Fribourg	CHF 200 000	77	◆
Romania				ESBATEch, an Alcon Biomedical Research Unit GmbH, Schlieren			
Sandoz S.R.L., Targu-Mures	RON 105.2 m	100	◆▼	CHF 0 ²	77	▲	

31. PRINCIPAL GROUP SUBSIDIARIES AND ASSOCIATED COMPANIES (CONTINUED)

As at December 31, 2010	Share/paid-in capital ¹	Equity interest %	Activities	As at December 31, 2010	Share/paid-in capital ¹	Equity interest %	Activities
Taiwan				Venezuela			
Novartis (Taiwan) Co., Ltd., Taipei	TWD 170.0 m	100	◆▼	Novartis de Venezuela, S.A., Caracas	VEF 1.4 m	100	◆
Alcon Pharmaceuticals Taiwan Ltd., Taipei	CHF 50 000	77	◆	Alcon Pharmaceutical, C.A., Caracas	VEF 100	77	◆
Thailand							
Novartis (Thailand) Limited, Bangkok	THB 230.0 m	100	◆				
Alcon Laboratories (Thailand) Ltd., Bangkok	THB 2.1 m	77	◆				
Turkey							
Novartis Saglik, Gida ve Tarim Ürünleri Sanayi ve Ticaret A.S., Istanbul	TRY 98.0 m	100	◆▼				
Sandoz İlaç Sanayi ve Ticaret A.S., Istanbul	TRY 31.7 m	100	◆▼				
Alcon Laboratuvarlari Ticaret A.S., Istanbul	TRY 25.2 m	77	◆				
USA							
Novartis Corporation, East Hanover, NJ	USD 72.2 m	100	■				
Novartis Finance Corporation, New York, NY	USD 1.7 bn	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	▲				
Idenix Pharmaceuticals, Inc., Cambridge, MA	USD 72 863	43	▲				
Novartis Vaccines and Diagnostics, Inc., Cambridge, MA	USD 3.0	100	■◆▼▲				
Sandoz Inc., Princeton, NJ	USD 25 000	100	◆▼▲				
Eon Labs, Inc., Princeton, NJ	USD 1	100	◆▼				
Novartis Consumer Health, Inc., Parsippany, NJ	USD 0 ²	100	◆▼▲				
Novartis Animal Health US, Inc., Greensboro, NC	USD 100	100	◆▼▲				
CIBA Vision Corporation, Duluth, GA	USD 301.3 m	100	■◆▼▲				
Alcon Holdings Inc., Wilmington, DE	USD 10	77	■				
Alcon Laboratories, Inc., Wilmington, DE	USD 1 000	77	◆				
Alcon Refractive Horizons, LLC, Wilmington, DE	USD 10	77	■				
Alcon Research, Ltd., Wilmington, DE	USD 10	77	▼▲				
Falcon Pharmaceuticals, Ltd., Wilmington, DE	USD 10	77	◆				
Alcon LenSx, Inc., Wilmington, DE	USD 1	77	▼▲				

In addition, the Group is represented by subsidiaries, associated companies or joint ventures in the following countries: Algeria, Cayman Islands, Costa Rica, Dominican Republic, Guatemala, the former Yugoslav Republic of Macedonia, Morocco and Uruguay.

Equity interest % – above 50% and up to 100% of the voting rights – fully consolidated
– above 20% and up to 50% of the voting rights – investment in associated company – equity method accounting

¹Share/paid-in capital may not reflect the taxable share/paid-in capital amount and does not include any paid-in surplus.

²shares without par value

³Percentage 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.

32. 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 manage-

ment. 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 16 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, 2010. In making this assessment, it used the criteria established in *Internal Control – Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on its assessment, management has concluded that, as of December 31, 2010, 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 250 and 251.



Joseph Jimenez
Chief Executive Officer



Jonathan Symonds
Chief Financial Officer

Basel, January 26, 2011

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 180 to 248) for the year ended December 31, 2010.

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. 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, 2010 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 CO and article 11 AOA) and that there are no circumstances incompatible with our independence.

In accordance with article 728a paragraph 1 item 3 CO 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, 2010, based on criteria established in *Internal Control – Integrated Framework* 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 249. 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. An audit of internal control over financial reporting includes 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 includes 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, 2010, based on criteria established in *Internal Control – Integrated Framework* issued by the COSO.

PricewaterhouseCoopers AG



A handwritten signature in black ink, appearing to read 'Peter M. Kartscher'.

Peter M. Kartscher
Audit expert
Auditor in charge

A handwritten signature in black ink, appearing to read 'Michael P. Nelligan'.

Michael P. Nelligan
Global relationship partner

Basel, January 26, 2011

FINANCIAL STATEMENTS OF NOVARTIS AG

INCOME STATEMENTS

(For the years ended December 31, 2010 and 2009)

	2010 CHF millions	2009 CHF millions
Income		
Income from financial assets	6 472	12 720
Gain from disposal of intangible assets	85	111
License fees	1 476	1 141
Other income	4	4
Total income	8 037	13 976
Expenses		
Financial expense	- 782	- 318
Administrative expense	- 21	- 20
Amortization of intangible assets	- 15	- 17
Other expense	- 102	- 6
Taxes	- 89	- 135
Total expenses	- 1 009	- 496
Net income	7 028	13 480

PROPOSAL FOR THE APPROPRIATION OF AVAILABLE EARNINGS

	2010 CHF	2009 CHF
Available unappropriated earnings		
Balance brought forward	-	-
Net income of the year	7 027 682 826	13 480 188 062
Total available earnings	7 027 682 826	13 480 188 062
Appropriation		
Payment of a dividend of CHF 2.20 (2009: CHF 2.10) gross on 2 478 241 163 (2009: 2 469 932 082) dividend bearing shares with a nominal value of CHF 0.50 each	- 5 452 130 559	- 5 186 857 372
Transfer to free reserves	- 1 575 552 267	- 8 293 330 690
Balance to be carried forward	-	-

BALANCE SHEETS (PRIOR TO PROFIT APPROPRIATION)

(At December 31, 2010 and 2009)

	Note	2010 CHF millions	2009 CHF millions
Assets			
Non-current assets			
Intangible assets		176	191
Financial assets	3		
– subsidiaries		50 419	24 729
– others			24
Total non-current assets		50 595	24 944
Current assets			
Receivables			
– subsidiaries		2 992	26 674
– others		60	74
Marketable securities	4	57	68
Total current assets		3 109	26 816
Total assets		53 704	51 760
Equity and liabilities			
Equity			
Total share capital	5	1 319	1 319
Reserves			
Legal reserves	6		
– General reserve		320	320
– Reserve for treasury shares		3 374	3 872
Free reserves	7	40 065	31 274
Total reserves		43 759	35 466
Unappropriated earnings			
Net income of the year		7 028	13 480
Total unappropriated earnings		7 028	13 480
Total equity		52 106	50 265
Liabilities			
Bonds	8	792	790
Provisions		519	542
Accounts payable and accrued liabilities			
– subsidiaries		22	5
– others		265	158
Total liabilities		1 598	1 495
Total equity and liabilities		53 704	51 760

The 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 Code of Obligations (SCO).

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.

INTANGIBLE ASSETS

These are capitalized and amortized over a period of between five and twenty years. 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 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. FINANCIAL ASSETS

Included in financial assets are CHF 50 136 million (2009: CHF 21 345 million) of investments in subsidiaries and associated companies, CHF 284 million (2009: CHF 3 384 million) of loans to subsidiaries and nil (2009: CHF 24 million) of long-term receivables from third parties.

The principal direct and indirect subsidiaries and other holdings of Novartis AG are shown in note 31 to the Group's consolidated financial statements.

4. MARKETABLE SECURITIES

Included in marketable securities are treasury shares with a net book value of CHF 54 million (2009: CHF 54 million) (see notes 5 and 6 below).

5. SHARE CAPITAL

	Number of shares				
	Dec 31, 2008	Movement in year	Dec 31, 2009	Movement in year	Dec 31, 2010
Total Novartis AG shares	2 643 623 000	- 6 000 000	2 637 623 000		2 637 623 000
Treasury shares					
Treasury shares held by Novartis AG	113 988 000	- 6 000 000	107 988 000		107 988 000
Treasury shares held by subsidiaries	83 590 743	- 16 216 584	67 374 159	- 8 480 322	58 893 837
Total treasury shares	197 578 743	- 22 216 584	175 362 159	- 8 480 322	166 881 837

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 2010.

The total share capital decreased from CHF 1 321.8 million at December 31, 2008 to CHF 1 318.8 million at December 31, 2009 due to a share capital reduction as a result of the cancellation of 6 million shares with a nominal value of CHF 3 million that were previously repurchased. The cancellation was approved at the Annual General Meeting of February 24, 2009 and became effective on May 18, 2009.

Treasury share purchases totaled 0.7 million (2009: nil) with an average purchase price of CHF 60, treasury share sales totaled 2.9 million (2009: 13.0 million) with an average sale price of CHF 56 (2009: CHF 49) and net share-based compensation transactions totaled 6.3 million shares (2009: 3.2 million shares) respectively.

The number of treasury shares held by the Company and subsidiaries meet the definitions and requirements of Art. 659b SCO. Out of the 166 881 837 treasury shares held at December 31, 2010, 159 381 837 are non-dividend bearing with the balance held for share-based compensation and being dividend bearing. It should be noted that the Novartis Group's consolidated financial statements comply with IFRS SIC Interpretation No. 12. This requires consolidation of entities, mainly foundations, which do not qualify as subsidiaries in the sense of Article 659b SCO.

6. LEGAL RESERVES

GENERAL RESERVE

	2010 CHF millions	2009 CHF millions
January 1 and December 31	320	320

The general reserve must be at least 20% of the share capital of Novartis AG in order to comply with the SCO.

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 note 5.

RESERVE FOR TREASURY SHARES HELD BY THE GROUP

	2010 CHF millions	2009 CHF millions
January 1	3 872	5 062
Reduction due to cancellation of treasury shares in 2009: CHF 296 million of repurchased shares less their nominal value of CHF 3 million		- 293
Transfer to free reserves	- 498	- 897
December 31	3 374	3 872

7. FREE RESERVES

	2010 CHF millions	2009 CHF millions
January 1	31 274	21 001
Transfer from unappropriated earnings	8 293	9 376
Transfer from reserve for treasury shares	498	897
December 31	40 065	31 274

8. 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.

9. CONTINGENT LIABILITIES

	Outstanding liabilities Dec 31, 2010 CHF millions	Outstanding liabilities Dec 31, 2009 CHF millions
Guarantees in favor of subsidiaries to cover capital and interest of bonds and commercial paper program – total maximum amount CHF 24 353 million (2009: CHF 17 573 million)	16 650	10 013
Guarantees in favor of subsidiaries, associated companies and others – total maximum amount CHF 2 643 million (2009: CHF 2 581 million)	1 101	1 026
Total	17 751	11 039

10. 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 Novartis AG together with Novartis subsidiaries holding treasury shares, are as follows:

	% holding of share capital December 31, 2010	% holding of share capital December 31, 2009
Novartis Foundation for Employee Participation, Basel, Switzerland	4.3	4.6
Emasan AG, Basel, Switzerland	3.3	3.3

In addition:

Shareholders registered as nominees:

- JPMorgan Chase Bank, New York, US, holds 10.7% (2009: 10.2%), Mellon Bank, Everett, Massachusetts, US, holds 2.9% (2009: 2.9%) and Nortrust Nominees, London, GB, holds 2.8% (2009: 2.5%)

Shareholder acting as American Depositary Share (ADS) depository:

- JPMorgan Chase Bank, New York, US, holding 9.6% (2009: 10.5%)

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, 2010:

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

11. BOARD AND EXECUTIVE COMPENSATION DISCLOSURES

Novartis AG's financial statements have been prepared in accordance with the requirements of the Swiss law for companies, 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 valuation and expense recognition rules being applied.

11.1) COMPENSATION OF BOARD MEMBERS

GENERAL PRINCIPLES

The Chairman receives fixed annual compensation. One third is paid out in monthly cash installments; the remaining two thirds are in the form of unrestricted Novartis shares which are granted to him each year.

The other Board members receive an annual Board membership fee and additional fees for committee chairmanships, committee memberships and other functions to reflect their increased responsibilities and engagements. Board members do not receive additional fees for attending meetings.

Board members do not receive variable compensation underscoring their focus on the long-term corporate strategy and their supervisory role. The Board of Directors determines the compensa-

tion of the other Board members each year, based on a proposal by the Compensation Committee.

The fee rates for the other Board members are the following:

OTHER BOARD MEMBER ANNUAL FEE RATES

	Annual fee (CHF)
Board membership	350 000
Vice Chairman	50 000
Chairman's Committee membership	150 000
Audit and Compliance Committee membership	100 000
Risk Committee membership	50 000
Compensation Committee membership	50 000
Corporate Governance and Nomination Committee membership	50 000
Delegated board membership ¹	125 000

¹The 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).

The other Board members can choose to receive their fees in cash, shares or a combination of both. Board members do not receive share options.

11. BOARD AND EXECUTIVE COMPENSATION DISCLOSURES (CONTINUED)

COMPENSATION IN 2010 AND 2009

The following compensation tables disclose the compensation granted to Board members in 2010 with comparatives to 2009. In January 2010, the Board of Directors accepted the proposal of Daniel Vasella, M.D., to complete the succession process and hand over his responsibilities as Chief Executive Officer of Novartis to Joseph Jimenez, effective February 1, 2010. Dr. Vasella had served

as Chief Executive Officer for 14 years and as Chairman of the Board of Directors for 11 years. Dr. Vasella continues in his role as Chairman of the Board of Directors, concentrating on strategic priorities. The compensation granted to Dr. Vasella in 2009 in his role as Chairman and Chief Executive Officer is disclosed in the table of Executive Committee Member Compensation for Performance in 2009.

BOARD MEMBER COMPENSATION IN 2010¹

	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)	Shares (number)	Other (CHF) ²	Total (CHF) ³
Daniel Vasella	Chair		Chair	• ⁴	• ⁴	• ⁴	• ⁴		3 666 674	131 304	189 260	7 950 791 ⁵
Ulrich Lehner	•	•	•	•	•	•	Chair		1 110 000		59 034	1 169 034
Hans-Joerg Rudloff	•	•	•	•	•	•			750 000		37 666	787 666
William Brody ⁶	•					•		•	375 000	2 686		525 013
Srikant Datar	•			Chair	•	•			459 688	1 797		560 050
Ann Fudge	•						•		250 000	2 686		400 013
Alexandre F. Jetzer-Chung ⁷	•								350 000		17 722	367 722
Pierre Landolt ⁸	•						•		106 000	5 265	22 604	422 654
Andreas von Planta	•			•	Chair		•		453 000	1 916	28 344	561 307
Wendelin Wiedeking	•			•	•				150 875	6 252	26 593	526 642
Marjorie M.T. Yang	•					Chair			410 000		23 133	433 133
Rolf M. Zinkernagel ⁹	•						•	•	650 000		33 677	683 677
Total									8 731 237	151 906	438 033	14 387 702

¹ Does not include reimbursement for travel and other necessary business expenses incurred in the performance of their services as these are not compensation. All shares were granted as per January 19, 2010 against the prevailing share price of CHF 55.85.

² Pension and social security costs due by the individual and paid by the company.

³ A Board member who is tax resident in Switzerland can voluntarily choose to block the shares. In 2010, Daniel Vasella blocked his shares for ten years and Andreas von Planta for five years. The value of the shares reflected in this table has been calculated using the valuation methodology described under – Compensation 2010 – Compensation for Performance in 2010 – Valuation Principles.

⁴ Daniel Vasella attended the meetings of this Committee as a guest from February 1, 2010.

⁵ Does not include Board member compensation received from Alcon, Inc.

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 In addition, Alexandre F. Jetzer-Chung was paid CHF 380 004 for consulting services.

⁸ According to Pierre Landolt, the Sandoz Family Foundation is the economic beneficiary of the compensation.

⁹ 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).

NON-EXECUTIVE BOARD MEMBER COMPENSATION IN 2009¹

	Board directorship	Lead Director	Vice Chairman	Chairman's Committee	Audit and Compliance Committee	Risk Committee ²	Compensation Committee	Corporate Governance and Nomination Committee	Delegated board directorship	Annual cash compensation (CHF)	Shares (number)	Total (CHF) ³
Ulrich Lehner	•	•	•	•	•	•	•	Chair		1 107 172		1 107 172
Hans-Joerg Rudloff	•		•	•	•	•	Chair			736 337		736 337
William Brody	•									218 750	2 447	350 032
Srikant Datar	•				Chair	•	•			406 250	1 748	500 030
Ann Fudge	•							•		340 000	1 119	400 034
Alexandre F. Jetzer-Chung ⁴	•									367 722		367 722
Pierre Landolt ⁵	•							•		128 602	5 480	422 604
Andreas von Planta	•				•	Chair		•		426 576	1 864	501 305
Wendelin Wiedeking	•									112 692	4 795	369 944
Marjorie M.T. Yang	•						•			422 601		422 601
Rolf M. Zinkernagel ⁶	•							•	•	683 752		683 752
Total										4 950 454	17 453	5 861 533

¹ Does not include reimbursement for travel and other necessary business expenses incurred in the performance of their services as these are not compensation. All shares were granted as per January 20, 2009 against the prevailing share price of CHF 53.65.

² Established on December 2, 2009. The members of this Committee received no related fees for 2009.

³ A Non-Executive Director who is tax resident in Switzerland can voluntarily choose to block the shares. In 2009, Andreas von Planta blocked his shares for five years. The value of the shares reflected in this table has been calculated using the valuation methodology described under – Compensation 2009 – Compensation for Performance in 2009 – Valuation Principles.

⁴ In addition, Alexandre F. Jetzer-Chung was paid CHF 380 004 for consulting services.

⁵ According to Pierre Landolt, the Sandoz Family Foundation is the economic beneficiary of the compensation.

⁶ The Board 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).

11.2) COMPENSATION OF EXECUTIVE COMMITTEE MEMBERS

GENERAL PRINCIPLES

The compensation policies, performance management process and incentive plans apply equally to the Executive Committee members.

Decisions concerning the compensation of the Executive Committee members are based on an evaluation of the individual performance of the Members as well as on the performance of their respective business area or function. Compensation of Executive Committee members is highly linked to Company performance against performance objectives. The metrics of performance objectives, including net sales, operating income, market share, Group Economic Value Added (EVA) or innovation, 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 2010 AND 2009

The following compensation tables disclose the compensation granted to the Executive Committee members for performance in 2010 with comparatives to 2009. 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 2010 and 2009, including the future ESOP/LSSP match, are disclosed in full in the tables of 2010 and 2009.

DISCLOSURE STRUCTURE

The compensation tables show the compensation granted to each Executive Committee member for performance in 2010 and 2009.

The column “Future ESOP/LSSP match” reflects shares to be awarded in the future if the Executive Committee member remains with Novartis for at least three or five years. The Executive Committee members were invited to invest their annual incentive awards for 2010 and 2009 in the leveraged share saving plans – either the three-year Swiss Employee Share Ownership Plan (ESOP) or the five-year Leveraged Share Savings Plan (LSSP) – 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.

11. BOARD AND EXECUTIVE COMPENSATION DISCLOSURES (CONTINUED)

VALUATION PRINCIPLES

Shares, Restricted Share Units (RSUs) and share options under the variable compensation plans are generally granted with a vesting¹ period. In addition, associates in Switzerland, including the Executive Committee members, may block² shares received under any variable compensation plan for up to 10 years.

The Compensation Committee believes that such restrictions affect the value of the shares, RSUs and share options.

The Swiss Federal Tax Administration, in its “Kreisschreiben Nr. 5”, provides for a methodology pursuant to which unvested or blocked shares or share options shall be valued with a discount for each year they are unvested or blocked. In addition, for the valuation of share options, the Swiss Tax Authorities apply – in a standing practice for Novartis (since 1997) – an option valuation model based on Black-Scholes.

In the Compensation Committee’s view, this is the appropriate methodology to report the economic value of shares, RSUs and

share options for executive compensation under Swiss law because, unlike IFRS, it takes into account the trading restrictions due to vesting and blocking. The application of this methodology to determine the value of the shares, RSUs and share options granted for the years 2010 and 2009 are explained in footnote 9 to the following Executive Committee Member Compensation tables and applies to all Executive Committee members.

See note 27 to the Group’s consolidated financial statements for information on executive officer and Director compensation as reported under IFRS.

¹ Vesting refers to the waiting period under an share-based incentive plan that must expire before the associate becomes irrevocably entitled to the shares, RSUs or share options involved. The associate cannot sell or exercise unvested shares, RSUs or share options. If an associate leaves Novartis prior to the expiration of the vesting period for reasons other than retirement, disability or death, the associate will generally forfeit his or her rights to such shares, RSUs or share options.

² Blocking refers to the ability of associates in Switzerland to opt for an extended trading restriction period of up to 10 years from the award date (including vesting). Novartis encourages associates to block their shares because doing so aligns the associates’ interests with those of shareholders.

EXECUTIVE COMMITTEE MEMBER COMPENSATION FOR PERFORMANCE IN 2010¹

	Currency	Base compensation		Variable compensation					Benefits		Total	Total compensation	
		Cash (Amount)	Short-term incentive plans			Long-term incentive plans		Pension benefits (Amount) ⁷	Other benefits (Amount) ⁸	(Amount) ⁹	Future ESOP/LSSP match ¹⁰ (Number)	Including future ESOP/LSSP match ^{11,12} (Amount)	
			Cash (Amount)	Shares (Number) ²	Equity Plan "Select"								
					Shares (Number) ³	Options (Number) ⁴							
Shares (Number) ⁵	Shares (Number) ⁶												
Joseph Jimenez (Chief Executive Officer since February 1, 2010)	CHF	1 458 334	590 000	16 180	124 552		37 088		166 162	92 287	11 060 421	16 180	11 721 780
Juergen Brokatzky-Geiger	CHF	678 338		12 432	24 863		11 435		146 470	11 965	2 729 841	12 432	3 109 563
David Epstein (since February 1, 2010) ¹³	USD	779 167	358 359	7 944	38 646		17 031		184 984	85 309	4 570 330	7 944	4 909 104
Mark C. Fishman	USD	968 000	14 036	16 716	67 847		31 006		256 555	122 518	7 094 527	16 716	7 807 400
Jeff George (since February 1, 2010) ¹³	CHF	595 833	589 783		10 782	129 613	4 913	9 167	62 006	47 226	2 574 092		2 574 092
George Gunn (since February 1, 2010) ¹³	CHF	756 250	862 217		27 364		13 840		98 780	14 529	3 820 992		3 820 992
Andrin Oswald (since February 1, 2010) ¹³	CHF	595 833	577 317		21 105		6 488	9 167	65 063	27 818	2 635 810		2 635 810
Jonathan Symonds (since February 1, 2010) ¹³	CHF	770 000		14 022	29 159		6 772		125 650		2 937 515	14 022	3 510 676
Thomas Werlen	CHF	725 008		10 010	10 010	120 330	13 718		122 617	22 366	2 442 364	10 010	2 670 839
Total¹⁴	CHF	7 397 668	3 006 825	77 304	354 328	249 943	142 291	18 334	1 246 206	432 452	40 339 284	77 304	43 276 326

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 incentive in the five-year Leveraged Share Savings Plan (LSSP) or the three-year Swiss Employee Share Ownership Plan (ESOP; if eligible) rather than to receive cash.

³ Juergen Brokatzky-Geiger, Andrin Oswald and Thomas Werlen have voluntarily blocked these shares for ten years, Jonathan Symonds for five years. These blocking periods include the two-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 19, 2021, have a two-year vesting period in Switzerland (three years in other countries) and have an exercise price of CHF 54.70 per share (the closing price of Novartis shares on the grant date of January 19, 2011). Share options on ADSs granted to participants in North America will expire on January 19, 2021, have a three-year vesting period and an exercise price of USD 57.07 per ADS (the closing price of Novartis ADSs on the grant date of January 19, 2011).

⁵ Awarded based on the achievement of Group Economic Value Added (EVA) objectives over the performance period ended December 31, 2010. Jonathan Symonds has voluntarily blocked these shares for five years.

⁶ Consists of a special award of RSUs to Jeff George and to Andrin Oswald, both awarded on September 1, 2010, against the closing share price of that day of CHF 54.05. These awarded RSUs have a five-year vesting period.

⁷ Service costs of pension and post-retirement healthcare benefits accumulated in 2010, and employer contributions to defined contribution pension plans in 2010.

⁸ Includes prerequisites and other compensation paid during 2010. Does not include cost allowances and tax-equalization payments regarding the international assignment of David Epstein, Jeff George and Andrin Oswald.

⁹ Values of shares and RSUs granted are discounted by 6% per year depending on the length of the combined vesting and blocking period. For example, the value of a share award subject to a two-year vesting/blocking period calculated in accordance with the methodology described in the Kreisschreiben Nr. 5 equals 89% of its market value at the grant date. The value of a share award with a combined vesting/blocking period of ten years equals 55.839% of its market value at the grant date. The closing share price on the grant date (January 19, 2011) was CHF 54.70

per Novartis share and USD 57.07 per ADS. The values of share options granted are reported based on the valuation principles contained in a tax ruling from the Swiss tax authorities, reflecting the principles as disclosed in the aforementioned Kreisschreiben Nr. 5. According to this methodology, tradable share options under the Equity Plan "Select" with a vesting period of two years have a value of CHF 0.89 per option at grant.

¹⁰ Reflects shares to be awarded in the future under the share saving plans, either the three-year Swiss Employee Share Ownership Plan (ESOP) or the five-year Leveraged Share Savings Plan (LSSP). Participants will receive additional shares ("matching shares") after the expiration of either the three- or five-year vesting period. If a participant leaves prior to the expiration of the vesting period, in general no matching shares are awarded. Thomas Werlen has voluntarily blocked these LSSP matching share units for 15 years (including the five-year vesting period). Juergen Brokatzky-Geiger has voluntarily blocked these LSSP matching share units for ten years (including the five-year vesting period).

¹¹ The values of shares, RSUs and share options reflected in this column have been calculated using the valuation methodology described in footnote 9. Regarding the valuation of matching shares (please see footnote 10) the following applies: if an Executive Committee member has chosen to block the shares to be received in the future under the five-year Leveraged Share Savings Plan for an additional 10 years, leading to a combined vesting/blocking period of 15 years, then the value of the matching shares reflected in the table will be 41.727% of the share price on the grant date. The closing share price on the grant date January 19, 2011 was CHF 54.70 per Novartis share and USD 57.07 per ADS.

¹² All amounts are gross amounts (i.e., before deduction of social security and income tax due by the executives). The employer's share of social security contributions is not included.

¹³ The base compensation and pension benefits in the table reflect the compensation over the period from February 1, 2010 to December 31, 2010. The granted variable compensation and other benefits reflect the compensation that is attributable to the period as an Executive Committee member. This means that for these compensation components 11/12 of the annual compensation is disclosed.

¹⁴ Amounts in USD for David Epstein and Mark C. Fishman were converted at a rate of CHF 1.00 = USD 0.961, which is the same average exchange rate used in the Group's consolidated financial statements.

11. BOARD AND EXECUTIVE COMPENSATION DISCLOSURES (CONTINUED)

EXECUTIVE COMMITTEE MEMBER COMPENSATION FOR PERFORMANCE IN 2009¹

	Currency	Base compensation	Variable compensation					Benefits		Total	Total compensation		
		Cash (Amount)	Short-term incentive plans		Long-term incentive plans			Pension benefits (Amount) ⁷	Other benefits (Amount) ⁸	(Amount) ⁹	Future ESOP/LSSP match ¹⁰	Including future ESOP/LSSP match ^{11,12}	
			Cash (Amount)	Shares (Number) ²	Equity Plan "Select"		Long-Term Performance Plan Shares (Number) ⁵				Special share awards Shares (Number) ⁶	Shares (Number)	Shares (Number)
					Shares (Number) ³	Options (Number) ⁴							
Daniel Vasella (Chairman and Chief Executive Officer)	CHF	3 000 000		113 018	161 146	1 630 435	74 987	37 279	146 503	295 395	16 947 340	113 018	20 471 929
Raymund Breu	CHF	1 125 504		18 210		736 957	13 963	11 639	106 109		3 275 938	506	3 289 187
Juergen Brokatzky-Geiger	CHF	663 924		11 997	28 792				163 128	30 006	3 251 278	11 997	3 751 966
Mark C. Fishman	USD	963 333	14 036	17 765	90 131		14 926		165 316	127 408	6 848 281	17 765	7 561 152
Joseph Jimenez	CHF	991 674	1 200 000		82 364		12 356		235 764	83 385	7 294 932		7 294 932
Joerg Reinhardt	CHF	1 200 000		23 206	77 351		17 300		162 496	3 826	6 285 022	23 206	7 253 512
Andreas Rummelt	CHF	920 004		9 884	32 946		11 367		165 299	58 408	3 828 691	9 884	4 136 934
Thomas Wellauer	CHF	650 838		9 354	22 450		8 070		156 051	10 800	2 481 809	9 354	2 872 193
Thomas Werlen	CHF	691 674		11 281	16 921	171 196	6 637		179 205	29 660	2 427 222	11 281	2 690 120
Total¹³	CHF	10 287 316	1 215 207	214 715	512 101	2 538 588	167 885	48 918	1 493 662	649 517	53 211 821	197 011	59 952 704

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 incentive in the five-year Leveraged Share Savings Plan (LSSP) or the three-year Swiss Employee Share Ownership Plan (ESOP; if eligible) rather than to receive cash. Daniel Vasella has voluntarily extended the five-year blocking period of these shares under LSSP to ten years. Raymund Breu has voluntarily extended the three-year blocking period of these shares under ESOP to ten years.

³ Daniel Vasella and Thomas Werlen have voluntarily blocked these shares for ten years (including the two-year vesting period). Joerg Reinhardt and Thomas Wellauer have voluntarily blocked these shares for five years (including the two-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 19, 2020, have a two-year vesting period in Switzerland (three years in other countries) and have an exercise price of CHF 55.85 per share (the closing price of Novartis shares on the grant date of January 19, 2010). Options on ADSs granted to participants in North America will expire on January 19, 2020, have a three-year vesting period and an exercise price of USD 53.70 per ADS (the closing price of Novartis ADSs on the grant date of January 19, 2010).

⁵ Awarded based on the achievement of Group Economic Value Added (EVA) objectives over the performance period ended December 31, 2009. Daniel Vasella and Raymund Breu have voluntarily blocked these shares for ten years, and Joerg Reinhardt and Thomas Wellauer for five years.

⁶ Consists of an unrestricted share award to Daniel Vasella, granted at January 20, 2009, against the prevailing share price of CHF 53.65, and an unrestricted share award to Raymund Breu, granted at January 19, 2010, against the prevailing share price of CHF 55.85. Daniel Vasella and Raymund Breu have voluntarily blocked these shares for ten years.

⁷ Service costs of pension and post-retirement healthcare benefits accumulated in 2009, and employer contributions to defined contribution pension plans in 2009.

⁸ Includes perquisites and other compensation paid during 2009.

⁹ Values of shares granted are discounted by 6% per year depending on the length of the combined vesting and blocking period. For example, the value of a share award subject to a

two-year vesting/blocking period calculated in accordance with the methodology described in the Kreisschreiben Nr. 5 equals 89% of its market value at the grant date. The value of a share award with a combined vesting/blocking period of ten years equals 55.839% of its market value at the grant date. The closing share price on the grant date (January 19, 2010) was CHF 55.85 per Novartis share and USD 53.70 per ADS. The values of share options granted are reported based on the valuation principles contained in a tax ruling from the Swiss tax authorities, reflecting the principles as disclosed in the aforementioned Kreisschreiben Nr. 5. According to this methodology, tradable share options under the Equity Plan "Select" with a vesting period of two years have a value of CHF 0.92 per option at grant.

¹⁰ Reflects shares to be awarded in the future under the share saving plans, either the three-year Swiss Employee Share Ownership Plan (ESOP) or the five-year Leveraged Share Savings Plan (LSSP). Participants will receive additional shares ("matching shares") after the expiration of either the three- or five-year vesting period. If a participant leaves prior to the expiration of the vesting period, in general no matching shares are awarded. Thomas Werlen has voluntarily blocked these LSSP matching share units for 15 years (including the five-year vesting period). Daniel Vasella and Andreas Rummelt have voluntarily blocked these LSSP matching share units for ten years (including the five-year vesting period). Raymund Breu has voluntarily blocked these ESOP matching share units for 13 years (including the three-year vesting period).

¹¹ The values of shares and share options reflected in this column have been calculated using the valuation methodology described in footnote 9. Regarding the valuation of matching shares (please see footnote 10) the following applies: if an Executive Committee member has chosen to block the shares to be received in the future under the five-year Leveraged Share Savings Plan for an additional 10 years, leading to a combined vesting/blocking period of 15 years, then the value of the matching shares reflected in the table will be 41.727% of the share price on the grant date. The closing share price on the grant date (January 19, 2010) was CHF 55.85 per Novartis share and USD 53.70 per ADS.

¹² All amounts are gross amounts (i.e., before deduction of social security and income tax due by the associate). The employer's share of social security contributions is not included.

¹³ Amounts in USD for Mark C. Fishman were converted at a rate of CHF 1.00 = USD 0.923, which is the same average exchange rate used in the Group's consolidated financial statements.

COMPENSATION FOR EXECUTIVE COMMITTEE MEMBERS WHO STEPPED DOWN DURING 2010

In January 2010, the Board of Directors accepted the proposal of Daniel Vasella, M.D., to complete the succession process and hand over his responsibilities as Chief Executive Officer of Novartis to Joseph Jimenez, effective February 1, 2010. Dr. Vasella had served as Chief Executive Officer for 14 years and as Chairman of the Board of Directors for 11 years. Dr. Vasella continues in his role as Chairman of the Board of Directors, concentrating on strategic priorities.

Raymund Breu stepped down from the Executive Committee as of February 1, 2010. He retired on March 31, 2010, having reached the mandatory retirement age.

With effect from February 1, 2010, Novartis simplified its leadership structure and reduced the size of the Executive Committee from 12 to 9 members. Joerg Reinhardt, Andreas Rummelt and Thomas Wellauer stepped down from the Executive Committee and decided to pursue their careers outside of Novartis.

COMPENSATION FOR EXECUTIVE COMMITTEE MEMBERS WHO STEPPED DOWN DURING 2010

	Total compensation (CHF) ¹
Daniel Vasella ²	14 179 305
Raymund Breu ³	2 370 073
Joerg Reinhardt ⁴	3 524 149
Andreas Rummelt ⁵	1 738 299
Thomas Wellauer ⁶	2 593 081
Total	24 404 907

¹ Compensation has been calculated using the valuation methodology described under Compensation 2010 - Compensation for Performance in 2010 - Valuation Principles.

² Compensation relates to the period until January 31, 2010 during which Daniel Vasella served in his role as Chairman and Chief Executive Officer. Includes shares to be awarded in the future under the Leveraged Shares Savings Plan (LSSP). Includes a one-time payment of CHF 12 million in the form of an insurance policy and the conclusion of his residual statutory and contractual employment entitlements.

³ Compensation relates to the period until January 31, 2010 when Raymund Breu stepped down from the Executive Committee. Includes a special award in recognition of his contributions to Novartis.

⁴ Compensation relates to the period until Joerg Reinhardt left Novartis.

⁵ Compensation relates to the period until Andreas Rummelt left Novartis. Includes a special award in recognition of his contribution to the A (H1N1) project.

⁶ Compensation relates to the period until Thomas Wellauer left Novartis. Includes a special award in recognition of his contributions to the procurement savings project. Also includes a special contribution to his pension fund.

TOTAL COMPENSATION TO EXECUTIVE COMMITTEE MEMBERS IN 2010

The aggregate amount of compensation awarded to all Executive Committee members in 2010 (incl. compensation awarded to Executive Committee members who stepped down during 2010) is CHF 67 681 233 (compared to CHF 59 952 704 in 2009).

TOTAL COMPENSATION TO EXECUTIVE COMMITTEE MEMBERS IN 2010

	Total compensation (CHF)
Executive Committee member compensation for performance in 2010	43 276 326
Compensation for Executive Committee members who stepped down during 2010	24 404 907
Total	67 681 233

11.3) SHARES AND SHARE OPTIONS OWNED BY BOARD MEMBERS

The total number of vested and unvested Novartis shares and share options owned by Board members and “persons closely linked”¹ to them as of January 19, 2011, and January 19, 2010, is shown in the following tables.

As of January 19, 2011, and January 19, 2010, none of the Board members 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 BOARD MEMBERS

	Number of shares ¹	
	As of January 19, 2011	As of January 19, 2010
Daniel Vasella	3 288 608	2 924 114
Ulrich Lehner	22 193	22 193
Hans-Joerg Rudloff	40 080	40 080
William Brody	5 133	2 447
Srikant Datar	17 342	15 545
Ann Fudge	6 008	3 322
Alexandre F. Jetzer-Chung	80 800	80 800
Pierre Landolt ²	35 061	29 791
Andreas von Planta	109 580	107 664
Wendelin Wiedeking	34 182	27 930
Marjorie M.T. Yang	18 000	18 000
Rolf M. Zinkernagel	22 800	22 800
Total	3 679 787	3 294 686

¹ Includes holdings of “persons closely linked” to Board members (see definition under 11.3).

² According to Pierre Landolt, the Sandoz Family Foundation is the economic beneficiary of all shares.

11. BOARD AND EXECUTIVE COMPENSATION DISCLOSURES (CONTINUED)

SHARE OPTIONS OWNED BY BOARD MEMBERS

	Number of share options ¹			
	Granted by Novartis in 2002 or earlier ¹	Share options acquired in the market ²	As of January 19, 2011	As of January 19, 2010
Daniel Vasella			3 565 366	5 743 787
Ulrich Lehner				
Hans-Joerg Rudloff	24 570		24 570	24 570
William Brody				10 000
Srikant Datar				
Ann Fudge				
Alexandre F. Jetzer-Chung	9 214		9 214	17 454
Pierre Landolt ³	6 911		6 911	13 111
Andreas von Planta				
Wendelin Wiedeking				
Marjorie M.T. Yang				
Rolf M. Zinkernagel	15 357		15 357	23 597
Total	56 052		3 621 418	5 832 519

¹The last year in which Novartis granted share options to non-executive Board members was in 2002. In 2002, Novartis granted 79 087 share options to non-executive Board members at an exercise price of CHF 62 and a term of nine years.

²Includes holdings of "persons closely linked" to Board members (see definition under 11.3).

³According to Pierre Landolt, the Sandoz Family Foundation is the economic beneficiary of all share options.

11.4) 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 (including share units but excluding unvested matching share units from leveraged share savings plans and unvested target units from the Long-Term Performance Plan) and the total number of share options owned by the Executive Committee members as of January 19, 2011, and January 19, 2010.

As of January 19, 2011, and January 19, 2010, no Executive Committee member together with "persons closely linked" to them (see definition under 11.3) owned 1% or more of the outstanding shares of Novartis, either directly or through share options.

SHARES OWNED BY EXECUTIVE COMMITTEE MEMBERS

	Number of shares ¹	
	As of January 19, 2011	As of January 19, 2010
Joseph Jimenez	298 366	120 546
Juergen Brokatzky-Geiger	199 600	141 296
David Epstein	245 201	NA
Mark C. Fishman	385 921	350 752
Jeff George	47 613	NA
George Gunn	210 932	NA
Andrin Oswald	90 347	NA
Jonathan Symonds	79 548	NA
Thomas Werlen	109 797	73 227
Total	1 667 325	685 821

NA – Not applicable.

¹Includes holdings of "persons closely linked" to Executive Committee members (see definition under 11.3).

SHARE OPTIONS OWNED BY EXECUTIVE COMMITTEE MEMBERS

	Number of share options ¹							As of	As of
	2011	2010	2009	2008	2007	Other	January 19, 2011	January 19, 2010	
Joseph Jimenez			552 076	157 266			709 342	709 342	
Juergen Brokatzky-Geiger			75 705	109 016	55 130	91 306	331 157	331 157	
David Epstein						590 229	590 229	NA	
Mark C. Fishman				184 870	142 724	523 215	850 809	971 809	
Jeff George	141 396					114 979	256 375	NA	
George Gunn						94 371	94 371	NA	
Andrin Oswald						5 633	5 633	NA	
Jonathan Symonds						54 348	54 348	NA	
Thomas Werlen	120 330	171 196	175 912			141 215	608 653	488 323	
Total	261 726	171 196	803 693	451 152	197 854	1 615 296	3 500 917	2 500 631	

NA – Not applicable.

¹Share options disclosed for a specific year were granted under the Novartis Equity Plan “Select.” The column “Other” refers to share options granted in 2005 or earlier, to share options granted to these executives while they were not Executive Committee members, and to share options bought by the Executive Committee members or “persons closely linked” to them (see definition under 11.3) on the market.

TERMS OF SHARE OPTIONS GRANTED

The share options granted to the Executive Committee members under the variable compensation plans are exercisable for one share each (1:1). The terms of the share options granted since 2007 are shown in the table below.

TERMS OF SHARE OPTIONS

Grant year	Exercise price (CHF/USD)	Vesting (years) (CH/other countries)	Term (years)
2011	54.70/57.07	2/3	10
2010	55.85/53.70	2/3	10
2009	53.65/46.42	2/3	10
2008	64.05/57.96	2/3	10
2007	72.85/58.38	2/3	10

11.5) LOANS AND OTHER PAYMENTS

LOANS TO BOARD MEMBERS OR EXECUTIVE COMMITTEE MEMBERS

No loans were granted to current or former Board members or Executive Committee members during 2010 and 2009. No such loans were outstanding as of December 31, 2010, and December 31, 2009.

OTHER PAYMENTS TO BOARD MEMBERS OR EXECUTIVE COMMITTEE MEMBERS

During 2010 and 2009, no payments (or waivers of claims) other than those set out in the Board Member Compensation tables, the Executive Committee Member Compensation tables and the table of compensation of Executive Committee members who stepped down during 2010 were made to current Board members or Executive Committee members or to “persons closely linked” to them (see definition under 11.3).

PAYMENTS TO FORMER BOARD MEMBERS OR EXECUTIVE COMMITTEE MEMBERS

During 2010 and 2009, no payments (or waivers of claims) were made to former Board members or Executive Committee members or to “persons closely linked” to them (see definition under 11.3), except for an amount of CHF 62 298 (2009: CHF 62 298) that was paid to the Honorary Chairman.

12. ALCON TRANSACTIONS

As described in detail in note 2 to the Group's consolidated financial statements, on August 25, 2010 Novartis AG completed the acquisition of a further 52% interest in Alcon, Inc. (Alcon) following on from the January 4, 2010 announcement that Novartis had exercised its call option to acquire Nestlé's remaining 52% Alcon interest for approximately USD 28.3 billion or USD 180 per share. This transaction increased the interest in Alcon to a 77% majority ownership as Novartis had already acquired an approximately 25% Alcon interest from Nestlé for USD 10.4 billion or USD 143 per share in July 2008. Subsequently, on December 15, 2010, Novartis

announced that it has entered into a definitive agreement to merge Alcon into Novartis by exchanging one Alcon share with 2.8 Novartis shares and a Contingent Value Amount (CVA) to be settled in cash so that the total consideration will in aggregate equal USD 168 per Alcon share. The merger is currently expected to be completed during the first half of 2011 and is conditional on clearance of a registration statement by the US Securities and Exchange Commission, two-thirds approval by the shareholders of each of Novartis and Alcon voting at their respective meetings and other customary closing conditions.

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 32 to the Group's consolidated financial statements.

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 252 to 266), for the year ended December 31, 2010.

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 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, 2010 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 CO and article 11 AOA) and that there are no circumstances incompatible with our independence.

In accordance with article 728a paragraph 1 item 3 CO 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



Peter M. Kartscher
Audit expert
Auditor in charge

Gerd Tritschler
Audit expert

Basel, January 26, 2011

ANNUAL REPORT PHOTOGRAPHY



FRONT COVER
Major research and teaching hospital; United States



INSIDE FRONT COVER
Catholic mission; Mji-Wa-Huruma, Musoma, Tanzania



2
The Senior; Bangkok, Thailand



6
Oncology Hospital; Ho Chi Minh City, Vietnam



13
USF Briosa (Family Health Unit); Coimbra, Portugal



14
British Hospital; Buenos Aires, Argentina



18
Hospital Pirovano; Buenos Aires, Argentina



22
Nguyen Tri Phuong Hospital; Ho Chi Minh City, Vietnam



28
Catholic mission; Mji-Wa-Huruma, Musoma, Tanzania



33
Oncology Hospital; Ho Chi Minh City, Vietnam



34
Novartis Institutes for BioMedical Research; Cambridge, Massachusetts, United States



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Novartis Vaccines and Diagnostics; Liverpool, United Kingdom



43
USF Briosa (Family Health Unit); Coimbra, Portugal



44
Novartis Institutes for BioMedical Research; Cambridge, Massachusetts, United States



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Pediatric center, Pediatria Palermo; Buenos Aires, Argentina



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The Horsepital; Nakhon Ratchasima, Thailand



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Amon & Sebald Optik; Aschaffenburg, Germany



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Cancer Diseases Hospital; Lusaka, Zambia



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FLENI Rehabilitation and Education Therapy Center; Buenos Aires, Argentina



66
Nguyen Tri Phuong Hospital; Ho Chi Minh City, Vietnam



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Hospital de São João; Oporto, Portugal



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Buddhist monk uses acupuncture at a patient's home; Bangkok, Thailand



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British Hospital; Buenos Aires, Argentina



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FLENI Rehabilitation and Education Therapy Center; Buenos Aires, Argentina



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Novartis Campus; Basel, Switzerland



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The Senior; Bangkok, Thailand



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Maharat Nakhon Ratchasima Hospital; Chiang Mai, Thailand



130
Kim Eng Securities; Bangkok, Thailand



INSIDE BACK COVER
Peace Village, Tu Du Hospital; Ho Chi Minh City, Vietnam



BACK COVER
Hospital Pirovano; Buenos Aires, Argentina

We thank everyone who contributed to this Novartis Annual Report by sharing personal experiences and knowledge with us.

We are particularly grateful to James Nachtwey for the photographs in this Novartis Annual Report, which capture his unique perspective of healthcare around the world.

Each year, Novartis commissions a photographer to provide an individual perspective on healthcare in the Group's Annual Report. The photographs mirror the diversity of patients, healthcare professionals and caregivers around the world. With the exception of Novartis associates, or other persons specifically identified in the photo captions, the people in these Annual Report photos have no actual or implied connection with Novartis or with the Group's products.

JAMES NACHTWEY

Motivated by the belief that public awareness is an essential element in the process of change, James Nachtwey has dedicated his career to documenting wars and critical social issues since 1981.

Among many other conflicts, he has covered civil wars in Central America, the breakup of the former Yugoslavia, genocide in Rwanda, the Palestinian-Israeli conflict and the wars in Afghanistan and in Iraq, where he was wounded in a grenade attack.

Mr. Nachtwey also has photographed healthcare in the developing world, homelessness, drug addiction, industrial pollution and crime. In 2007, he received a TED grant and created a global awareness campaign about tuberculosis.

Mr. Nachtwey also has earned numerous journalism awards, as well as recognition for contributions to art and humanitarian causes. In 2001, he received a Common Wealth Award along with geneticist J. Craig Venter and author Philip Roth. In 2003, he received the Dan David Prize and, in 2007, the Heinz Family Foundation Award. He has been awarded the Robert Capa Gold Medal for exceptional courage and enterprise five times, Magazine Photographer of the Year eight times, and the World Press Photo Award twice, among many other honors.



© Antonin Kratochvil

In 2002, "war photographer," a documentary about Mr. Nachtwey's work, was nominated for an Academy Award.

His work is included in the collections of the Museum of Modern Art, the Whitney Museum of American Art and the Bibliothèque nationale de France, among other

venues. He has been invited to speak at several international events, including the Bill and Melinda Gates Foundation Grand Challenge conference and the Pacific Health Summit. He has received four honorary doctorate degrees.

KEY DATES FOR 2011

Anticipated key reporting dates

Annual General Meeting	February 22, 2011
First Quarter 2011 Results	April 19, 2011
Second Quarter and First Half 2011 Results	July 19, 2011
Third Quarter and First Nine Months 2011 Results	October 25, 2011
Full Year 2011	January 2012

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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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Novartis on the internet

www.novartis.com

Novartis Annual Report on the internet

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FORWARD-LOOKING STATEMENTS

These materials contain forward-looking statements that can be identified by terminology such as "planned," "expected," "will," "potential," "pipeline," "outlook," or similar expressions, or by express or implied discussions regarding potential new products, potential new indications for existing products, or regarding potential future revenues from any such products; or regarding potential growth opportunities from the acquisition of a 77% majority ownership in Alcon, Inc. or regarding the expected merger with Alcon, or the potential impact on Alcon or Novartis of the expected merger; or regarding potential future sales or earnings of the Novartis Group or any of its divisions as a result of the expected merger or otherwise, or of Alcon, or any potential synergies, strategic benefits or opportunities as a result of the expected merger; or by discussions of strategy, plans, expectations or intentions. You should not place undue reliance on these statements. Such forward-looking statements reflect the current views of the Group regarding future events, and involve known and unknown risks, uncertainties and other factors that may cause actual results to be materially different from any future results, performance or achievements expressed or implied by such statements. There can be no guarantee that any new products will be approved for sale in any market, or that any new indications will be approved for existing products in any market, or that such products will achieve any particular revenue levels. Nor can there be any guarantee that the expected merger with Alcon will be completed in the expected form or within the expected time frame or at all. Nor can there be any guarantee that Novartis will be able to realize any of the potential synergies, strategic benefits or opportunities as a result of either Novartis' acquisition of a 77% majority ownership in Alcon, Inc., or as a result of the expected merger with Alcon. Nor can there be any guarantee that the Novartis Group, or any of its divisions, or Alcon will achieve any particular financial results, whether as a result of the merger or otherwise. In particular, management's expectations could be affected by, among other things, unexpected regulatory actions or delays or government regulation generally; unexpected clinical trial results, including additional analyses of existing clinical data or unexpected new clinical data; the Group's ability to obtain or maintain patent or other proprietary intellectual property protection; disruptions from the Alcon 77% implementation and the expected merger making it more difficult to maintain business and operational relationships, and relationships with key employees; unexpected product manufacturing issues; uncertainties regarding actual or potential legal proceedings, including, among others, litigation seeking to prevent the merger from taking place, product liability litigation, litigation regarding sales and marketing practices, government investigations and intellectual property disputes; competition in general; government, industry, and general public pricing and other political pressures; uncertainties regarding the after-effects of the recent global financial and economic crisis; uncertainties regarding future global exchange rates and uncertainties regarding future demand for our products; uncertainties involved in the development of new pharmaceutical products; the impact that the foregoing factors could have on the values attributed to the Group's assets and liabilities as recorded in the Group's consolidated balance sheet; and other risks and factors referred to in Novartis AG's current Form 20-F on file with the US Securities and Exchange Commission. Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove incorrect, actual results may vary materially from those described herein as anticipated, believed, estimated or expected. Novartis is providing the information in these materials as of this date and does not undertake any obligation to update any forward-looking statements as a result of new information, future events or otherwise.



