NOVARTIS AG
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SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 6-K

REPORT OF FOREIGN PRIVATE ISSUER
PURSUANT TO RULE 13a-16 or 15d-16 OF
THE SECURITIES EXCHANGE ACT OF 1934

Report on Form 6-K dated February 14, 2007
(Commission File No. 1-15024)

Novartis AG

(Name of Registrant)

Lichtstrasse 35
4056 Basel
Switzerland
(Address of Principal Executive Offices)

Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F:

Form 20-F: x Form 40-F: o

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1):

Yes: o **No**: x

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7):

Yes: o **No**: x

Indicate by check mark whether the registrant by furnishing the information contained in this form is also thereby furnishing the information to the Commission pursuant to Rule 12g3-2(b) under the Securities Exchange Act of 1934.

Yes: o **No**: x

Enclosure: **Novartis AG publishes its Annual Report for 2006**

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.

CONTENTS

GROUP

Novartis is a world leader in providing medicines to protect health, prevent and treat disease, and to improve well-being.

Novartis is the only company with leadership positions in patented and generic pharmaceuticals, vaccines and over-the-counter medicines.

In 2006, Novartis continued to strengthen these strategic growth platforms to meet the needs of patients and society in a dynamically changing healthcare environment.

FINANCIAL HIGHLIGHTS

KEY FIGURES GROUP1

(In USD millions unless indicated otherwise)

	2006	**2005**
Group net sales	**37 020**	32 212
Group operating income	**8 174**	6 905
Return on sales (%)	**22.1**	21.4
Group net income	**7 202**	6 141
Research and development	**5 364**	4 846
Research and development as % of Group net sales	**14.5**	15.0
Free cash flow	**4 340**	4 673
Number of associates at year-end	**100 735**	90 924

1 Including discontinuing operations

GROUP NET SALES, OPERATING INCOME AND NET INCOME

(Index: 2002 = 100%)

1 Not adjusted for new IFRS accounting rules

2 Pro forma adjusted for new IFRS accounting rules

SHARE INFORMATION

	2006	**2005**
Return on average equity (%)	**19.3**	19.0

Earnings per share (USD)1	**3.06**	2.63
Operating cash flow per share (USD)	**3.76**	3.46
ADS price at year-end (USD)	**57.44**	52.48
Share price at year-end (CHF)	**70.25**	69.05
Pay-out ratio based on outstanding shares (%)	**36**	33

1 Average number of shares outstanding in 2006: 2 345 232 126 (2005: 2 332 848 144)

2006 GROUP NET SALES BY DIVISION

2006 OPERATING INCOME BY DIVISION1

1 Vaccines and Diagnostics had less than 1% impact on Divisional total operating income

NEWS IN 2006

GROUP	Dynamic 2006 performance from all divisions thanks to a mixture of organic growth and contributions from recent acquisitions. Group net sales up 15% (+14% in local currencies) to USD 37.0 billion, led by Pharmaceuticals. Operating income advances 18% as strong organic growth more than offsets acquisition-related costs.
PHARMACEUTICALS	Market share gains and double-digit growth in Cardiovascular and Oncology franchises drive 11% (+11% lc) net sales increase to USD 22.6 billion. Operating income improvement of 11% despite one-time acquisition costs; up 17% excluding these charges.
VACCINES AND DIAGNOSTICS	New strategic growth platform created following Chiron acquisition, making Novartis the world s second-largest supplier of influenza vaccines in the US. Double-digit net sales growth following April 2006 acquisition.
SANDOZ	Sandoz integration of Hexal and Eon Labs largely completed, performing well as sales up 27% (+25% lc) on good underlying retail generics growth. Operating income rises sharply on operational improvements.
CONSUMER HEALTH	OTC and Animal Health climb in global rankings thanks to strategic brands, targeted acquisitions and product innovations. Medical Nutrition, with 2006 sales of approximately USD 1.0 billion, to be divested during 2007. Net sales, excluding Medical Nutrition, rise 8% (+8% lc) while operating income advances 12%.
PIPELINE	One of the industry s strongest pipelines, with 138 projects in development, focusing on areas of high unmet need. Key R&D areas are cardiovascular/metabolic conditions, oncology and neuroscience as well as respiratory and infectious diseases.
RESEARCH	New discovery approaches and focus on biotechnology compounds at Novartis Institutes for BioMedical Research lead to increase in number of early-stage projects.
CORPORATE CITIZENSHIP	Novartis access-to-medicine programs for those in need reach 33.6 million patients in 2006 through contributions valued at USD 755 million.
DIVIDEND	Proposal to shareholders for 2006 of CHF 1.35 per share, an increase of 17% and representing the tenth consecutive year of paying a higher dividend.

DANIEL VASELLA, M.D.

DEAR SHAREHOLDERS:

It gives me great pleasure in our eleventh business year to report another set of record results.

- Group net sales rose 15% (+14% in local currencies) to USD 37 billion
- Operating income advanced 18% to USD 8.2 billion
- Net income grew 17% to USD 7.2 billion
- Earnings per share (EPS) were up 16%
- Free cash flow reached USD 4.3 billion

This outstanding performance reflects our continuous focus on innovation and building a broad portfolio around growth areas of the healthcare sector. Ultimately, the skills and commitment of our associates are the key factors for our success, and I would like to thank them for their contributions.

The pharmaceutical industry is confronted with conflicting trends. Demand is continually rising for healthcare services, medicines, vaccines and diagnostics, which is generating higher costs that in many countries are increasingly the focal point of political and social debate. Studies have repeatedly proven that appropriate use of medicines generally reduces treatment costs and also that the majority of healthcare cost increases are generated in hospitals. However, the pharmaceutical industry remains the primary target in the cost debate even though medicines account for only 10% to 20% of overall costs, depending on the country.

Still, the healthcare sector will remain a dynamic growth area in the future driven by the following trends:

- The aging of the world s population continues unabated, generating steadily increasing demand for medicines due to the rising incidence of degenerative diseases and cancer as people grow older. The approaching wave of retirements in the post-war baby boomer generation will further stimulate demand in our most important markets.

- The strong economic expansion in populous countries such as China, India and Russia is translating into over-proportional growth in demand for healthcare services. Accompanying this economic growth has been the increasing adoption of lifestyles typical of affluent, industrial countries. That, in turn, has led to a higher incidence of obesity, chronic cardiovascular disease, diabetes, cancer and lung diseases.

- Finally, new technologies are enabling the discovery and development of innovative medicines for patients suffering from otherwise untreatable diseases.

At the same time, our industry faces challenges ranging from government price controls and intensified competition to increasingly stringent regulatory controls that are escalating the costs of Research & Development. Product liability risks, which can be very costly, are another important factor that is attracting a great deal of attention and fueling fundamental distrust of the industry.

The most far-reaching cost reduction measures taken by various governments include promoting greater use of generic pharmaceuticals, sales of which are likely to experience double-digit growth in the coming years as opposed to the anticipated single-digit growth forecast for patent-protected medicines.

In these industry conditions, business as usual is no longer a viable long-term option. Identifying and addressing the needs of patients remains at the forefront of all that we do. This includes taking a serious look at the economic and political realities in which patients live because this plays a major role in determining how products are made available to them. This is why our business portfolio systematically reflects the dynamically changing healthcare market: growing demand for innovative

medicines (Pharmaceuticals), the rising support for greater use of cheaper generics (Sandoz), the increasingly prominent role of vaccines (Vaccines and Diagnostics) and greater empowerment of patients (Consumer Health).

We have the best portfolio to optimally leverage growth opportunities in healthcare in the interest of both our customers and shareholders while also reducing risks.

Novartis has defined the following strategic initiatives:

- Invest vigorously in R&D to continue bringing new and innovative products to the market
- Strengthen the Sandoz generics business, which provides affordable treatment options following the expiry of patents
- Expand businesses with synergy potential, such as between Pharmaceuticals, OTC and Animal Health
- Further build our new growth platform in Vaccines and Diagnostics by focusing on preventive medicine

We sharpened our focus on these **priorities** in 2006, which resulted in the healthcare businesses now accounting for 96% of total net sales compared to just 45% in 1995.

Pharmaceuticals is our most important division, again growing faster than the market. Strong demand for our top cardiovascular and oncology drugs led the performance. Sales growth in the US and in emerging markets such as China and Russia were particularly dynamic, with the performance in Europe less robust. The extraordinary success of our antihypertensive medicine ***Diovan*** is poised to continue its dynamic growth. Our cancer therapy ***Gleevec/Glivec*** generated sales of over USD 2.5 billion in only its fifth year. Two other cancer medicines, ***Zometa*** and ***Femara***, have also developed well.

Vaccines and Diagnostics enjoyed impressive growth, with the integration of the newly acquired Chiron business proceeding smoothly and the successful resolution of quality problems in influenza vaccine production. Our new cell culture production technology for influenza vaccines could save lives in the event of a pandemic flu outbreak due to the shorter lead times. A new seasonal influenza vaccine based on this technology was submitted for European approval in 2006. New diseases, such as avian flu and SARS as well as resistant bacterial and fungal infections, will continue to generate strong demand in the future for new vaccines and medicines.

Sandoz expanded its retail generics business, particularly in the US, Eastern and Southern Europe, Russia, Switzerland, Canada, and Australia. In Germany, the impact of severe price pressure was felt. Our recombinant growth hormone ***Omnitrope*** became the first follow-on version of an approved biotechnology drug to be granted US and European approvals. Given the large number of biotechnology drugs already without or set to lose patent protection in the coming years, these so-called biosimilars are expected to play an increasingly important role by providing patients with affordable, safe and effective alternatives to the original treatments.

The **Consumer Health** Division performed very well as the OTC and Animal Health businesses each posted double-digit net sales growth. In line with our continued focus on healthcare, we signed a definitive agreement to divest the Medical Nutrition business. I am convinced this transaction is an ideal solution for Medical Nutrition, one that offers the management and associates of this business the best future prospects. Proceeds from the transaction will further strengthen our financial position and provide greater strategic flexibility. Of course, the successes of our businesses depends not only on strategic objectives but also in executing them successfully, particularly in R&D.

We are planning to launch several innovative medicines during the next two years and will keep investing vigorously in R&D. We will also further complement our own R&D programs through alliances and collaborations for development compounds

and cutting-edge technologies.

Novartis has **138 projects in clinical development**. Among these are 50 new molecular entities (NMEs) and 88 life-cycle management projects with new indications or formulations. In 2006, over 20 new projects were added to the pipeline. Key areas of R&D are cardiovascular/metabolic diseases, cancer and neurological conditions as well as respiratory and infectious diseases.

Shortly before the end of 2006, we received approval from the US Food and Drug Administration (FDA) for ***Exforge*** (valsartan and amlodipine), a single-tablet combination of the two most prescribed antihypertensives in their respective classes, and expect European approval to follow during the course of this year. We also anticipate regulatory decisions in 2007 for two other important medicines: ***Tekturna/Rasilez*** (aliskiren), a renin inhibitor for the treatment of hypertension, and ***Galvus*** (vildagliptin), a once-daily oral treatment for patients with type 2 diabetes. The US regulatory agency extended its review after recently available data for both *Tekturna/Rasilez* and *Galvus* were submitted to clarify open questions. Delays are unfortunately part of our industry and inherent in the R&D process.

For two other development compounds, the submissions for US and European regulatory approvals were accelerated and completed earlier than planned in 2006. ***Tasigna*** (nilotinib)

is a new treatment option for patients with certain forms of chronic myeloid leukemia who have resistance and/or intolerance to treatment with our *Gleevec/Glivec*, while ***Aclasta/Reclast*** (zoledronic acid) is a convenient once-yearly infusion lasting only 15 minutes as a treatment for women with postmenopausal osteoporosis.

Among the many innovative compounds in late-stage development at Novartis, I would like to particularly highlight FTY720 and RAD001.

FTY720 (fingolimod) is seeking to become the first oral once-daily therapy for patients with relapsing multiple sclerosis, a condition estimated to affect more than 2.5 million patients worldwide and women at twice the rate as men. This compound is now in the final stage of development after an earlier Phase II trial showed positive results during two years of treatment in helping patients with this potentially debilitating neurological condition. Submission is on track for 2009.

RAD001 (everolimus) is a novel oral compound in development to inhibit a cell signaling pathway called mTOR considered to be an important therapeutic target in oncology. At effective and well-tolerated doses, RAD001 has demonstrated broad clinical activity in patients with various tumor types. This compound acts by directly inhibiting both the growth of tumor cells as well as the formation of new blood vessels (angiogenesis). If positive results are achieved in clinical trials with difficult-to-treat forms of cancer, the first regulatory submissions could be submitted as early as 2008.

The Novartis Institutes for BioMedical Research (NIBR), created four years ago to strengthen the company s long tradition in drug discovery, is bolstering the pipeline through new discovery approaches and an increasing focus on biotechnology compounds. We are expanding our existing development activities in China by establishing an integrated R&D institute in Shanghai that will focus on diseases particular to the region, such as liver cancer. This is not a typical China investment focused on cost savings but one aimed at gaining access to the country s vast talent pool and scientific promise. The choice of Shanghai reflects the vitality and economic potential of this city and the changing global economy; it is imperative to have a strong local presence in this fast-growing environment.

Novartis has been rapidly advancing its pipeline by complementing internal efforts with collaborations and targeted acquisitions. Last year, we acquired the UK biopharmaceuticals company NeuTec and added two compounds *Mycograb* for fungal infections and *Aurograb* for bacterial infections that will further strengthen our presence in the fast-growing hospital infections segment.

Let me close by offering some perspectives on the challenges facing the pharmaceutical industry and how we are addressing the significant social and political changes underway:

Innovation is our core activity. We must not allow the challenging political environment to distract us from our ultimate goal: discovering, developing and quickly bringing to the market new drugs with real therapeutic benefits to both individual patients and to society. The pharmaceutical industry is not without criticism, but thanks to the important contributions of medicines and vaccines, many infectious diseases can now be prevented or effectively treated. Survival rates for children suffering from cancer have doubled in the last 25 years, while the incidence of strokes and heart attacks have been significantly reduced. Novartis medicines from *Gleevec/Glivec* and *Neoral* to *Coartem* and *Clozaril/Leponex* have positively changed the lives of thousands, if not millions, of patients around the world. These patients have benefited enormously from the success of our industry and also Novartis.

Intellectual property rights are central to the economy. Without them, many of the breathtaking technological developments since the Industrial Revolution would not have occurred. Protecting innovation is the best protection for patients, laying the foundation for the massive investments made by the pharmaceuticals industry in R&D that are vital to medical progress. Novartis will continue to resist the pressure to soften its position on the need to vigorously protect intellectual property in favor of short-term political gain.

Reputation is valuable capital in the form of trust, but a resource that cannot be stockpiled. It must be earned daily. Novartis enjoys an excellent international reputation. However, we must better explain to the public the positive impact of our industry, how it functions, the benefits of our products for society and the relationship between risk,

reward and innovation. Our industry has failed to communicate effectively on the substantial role medicines play in reducing overall healthcare costs. It would be a serious setback if the demand for innovative medicines continues but without an understanding that innovation requires enormous investments and risks in other words, that innovation has its price.

Corporate citizenship is taken seriously at Novartis and is an integral component of our business strategy. Our access-to-medicine programs in 2006 reached over 33 million patients worldwide, with contributions totaling USD 755 million. This represented some 2% of our total Group net sales donated to disadvantaged patients.

The Novartis Institute for Tropical Diseases in Singapore has expanded its research activities to include malaria along with tuberculosis and dengue fever, diseases that are still troubling and common in developing countries. We decided in 2006 to sharply reduce the average treatment price of *Coartem*, the most effective

anti-malaria drug, to USD 1.00 a loss-making activity for us. More than 60 million treatments were delivered to endemic countries last year, a dramatic increase from only four million in 2004 due to our expanded production capacity.

We are doing what we believe is right: helping patients in need while also strengthening our position as a reliable partner in the health sector. At the same time, corporate citizenship also calls for a strong sense of reality, and this means rejecting overblown expectations of some stakeholders. We cannot assume the responsibilities of governments. Well-functioning access-to-medicine programs require governments to create the appropriate infrastructure and distribution networks, provide legal certainty and a safe environment all of which we cannot provide. This can only be achieved through the collaboration of all involved stakeholders. It is imperative that pharmaceutical companies, governments, international organizations and NGOs work together to ensure that patients in need receive proper care.

We must overcome a culture of blaming each other; the precarious situation in many developing countries is far too serious for symbolic posturing. We are seeking an open dialogue with all stakeholder groups, one based on mutual trust and tolerance with the aim of long-term success not only in access-to-medicine initiatives but also in day-to-day business activities.

Strong values are critical during this time of rapid change. Now more than ever, strong values are important to hold a company together: to concentrate energies, guide decisions and place greater focus on performance objectives. Our success during the last 10 years has been based on such values a consistent focus on performance and results, an open culture and acting responsibly for patients and societies. The values of a company become particularly evident during a takeover situation, where there is often a temptation to simply absorb the acquired company. I personally see acquisitions such as those during the last two years involving Hexal, Eon Labs and Chiron as learning opportunities and assurance that monotony, complacency and self-satisfaction have no chance of taking hold in our organization.

Balancing global aspirations and local identities is a constant task. The process of globalization is not a one-way street; to think so would be a dangerous illusion. We must respect local and national customs, whether they involve languages, cultural aspects or the law. At the same time, we have established and are implementing standards throughout Novartis particularly our Code of Conduct and our Corporate Citizenship Policy and guidelines. For example, Novartis has initiated a living wage program to set minimum pay standards around the world for its associates. We expect similar conduct from our business partners. We have also set strict global environmental and safety standards, ones that are the same at our Basel headquarters as in developing countries.

As a shareholder, you naturally have an interest in the performance of your company. Our innovative and risk-diversified portfolio has delivered strong returns when looking at share price gains, dividends and spin-offs. Indeed, the value of an investment in Novartis more than tripled from January 1, 1996, to December 31, 2006, exceeding the total shareholder return of most of our competitors. I am confident that Novartis will continue to be successful. **Since the creation of Novartis in 1996, our company has been a leader of change and progress, not a passive observer.** This remains the case today thanks to our forward-looking strategy, our considerable powers of innovation, operational excellence and solid basic values Novartis has what it takes to identify future opportunities and to translate them into commercial success.

Dr. Marc Moret, a talented leader who served as Chairman of the Board of Directors of Sandoz until the merger with Ciba-Geigy in 1996, passed away on March 17, 2006. One of his most impressive achievements was certainly the creation of Novartis. With a strategic foresight still admired today, he realized much earlier than others how such strong, global organizations could succeed in an increasingly competitive environment.

The skills, dedication, and integrity of our associates have enabled us to secure our place among the world s most respected and successful pharmaceutical companies. When it comes to setting the strategic direction, appointing the best talent to key positions and ensuring effective control, our Board of Directors plays a vital role. Dr. h.c. Birgit Breuel will leave the Board at the end of her term at the Annual General Meeting in March 2007. We would like to thank Dr. Breuel for her efficient and valuable contribution to the work of the Boards of both Ciba-Geigy AG and Novartis AG.

I would also like to again thank our associates, whose excellent performance during 2006 enabled Novartis to achieve both another year of record results and improve the lives of countless patients worldwide.

My thanks also to you, our shareholders, for the trust you continue to place in Novartis.

Sincerely,

Daniel Vasella, M.D.

Chairman and Chief Executive Officer

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PHARMACEUTICALS

Excellent performance in our biggest and most profitable business thanks to dynamic growth and market share gains. Approvals were received for new products and indications addressing the needs of patients worldwide.

Strong net sales growth of 11% (+11% lc) to USD 22.6 billion driven by many top-selling products growing at double-digit rates as well as outstanding performances in the US and priority emerging growth markets.

Operating income rises 17% excluding one-time charges related to integration of Chiron pharmaceuticals business, but up 11% to USD 6.7 billion on a reported basis, in line with sales growth.

Cardiovascular, Oncology and Neuroscience franchises all deliver double-digit net sales growth. Hypertension leader *Diovan* achieves USD 4.2 billion in net sales, while the Oncology drug *Gleevec/Glivec* tops USD 2.5 billion and *Femara* delivers 33% growth in local currencies.

2007 and 2008 set to be exciting years for new product launches, with approvals pending in the US and Europe particularly for *Exforge* and *Tekturna* (hypertension) as well as *Galvus* (type 2 diabetes) and *Lucentis* (blindness).

One of the industry s top-rated pipelines with six compounds moving into pivotal late-stage trials, led by FTY720 (multiple sclerosis), QAB149 (asthma and COPD), AGO178 (depression), RAD001 (cancer), ABF656 (hepatitis C) and SOM230 (Cushing s disease).

PHARMACEUTICALS

KEY FIGURES

(In USD millions unless indicated otherwise)

	2006	2005
Net sales	**22 576**	20 262
Operating income	**6 703**	6 014
Research and development	**4 265**	3 972
Research and development as % of net sales	**18.9**	19.6
Free cash flow	**6 501**	5 968
Net operating assets	**13 640**	8 807
Additions to property, plant & equipment[1]	**1 135**	686
Number of associates at year-end	**54 314**	49 308

1 Excluding impact of business combinations

NET SALES AND OPERATING INCOME

(Index: 2002 = 100%)

1 Not adjusted for new IFRS accounting rules

2 Pro forma adjusted for new IFRS accounting rules

NET SALES BY REGION

PORTFOLIO REJUVENATION

(Net sales in USD millions)

The Novartis Pharmaceuticals clinical pipeline holds a broad stream of 138 promising future products, with 104 projects in Phase II and beyond as of December 2006, including both new molecular entities and additional indications or formulations for marketed products.

Glossary of terms:

Compound Molecular entity

Generic name International Nonproprietary Name (INN) designated by the World Health Organization (WHO)

Indication A disease or condition for which a particular drug is believed to be an appropriate therapy

Phase I First clinical trials in patients to determine safety, tolerability and usually proof of concept

Phase II Clinical trials in patients to determine dose ranging, safety and efficacy

Phase III Large clinical trials to determine definitive safety and efficacy in patients

Submitted In registration

Therapeutic area	**Project/compound**	**Generic name**	**Indication**
Cardiovascular and Metabolism	*Galvus*	vildagliptin	Type 2 diabetes
	Tekturna1/Rasilez1	aliskiren	Hypertension
	Exforge1	valsartan, amlodipine	Hypertension
	Diovan/Starlix	valsartan, nateglinide	Prevention of new-onset type 2 diabetes, cardiovascular morbidity and mortality
	NAVIGATOR2		
	Lotrel ACCOMPLISH	amlodipine, benazepril	High-risk hypertension
Oncology & Hematology	*Tasigna1*	nilotinib	Chronic myeloid leukemia (CML)
	Tasigna1	nilotinib	Gastrointestinal Stromal Tumor (GIST)
	PTK7876	vatalanib	Colorectal cancer, solid tumors
	Gleevec/Glivec	imatinib mesylate	Glioblastoma multiforme
	EPO906	patupilone	Ovarian cancer and other solid tumors
	RAD001	everolimus	Renal cell cancer, pancreatic islet cell tumor and other solid tumors
	SOM230	pasireotide	Acromegaly, GEP9 tumors, neuroendocrine tumors, Cushing s Disease
	PKC412	midostaurin	Acute myeloid leukemia (AML)
	LBQ707	gimatecan	Solid tumors
	LBH589		Cutaneous T-cell lymphoma, hematologic tumors
Neuroscience	*Comtan*	entacapone	Parkinson s disease
	Exelon Patch	rivastigmine	Dementia
	LIC477	licarbazepine	Bipolar disorder
	AGO178	agomelatine10	Depression
	FTY720	fingolimod	Multiple sclerosis
	SAB378		Chronic pain
Respiratory	QAB149	indacaterol	COPD11
	MFF258	formoterol and mometasone	Asthma/COPD11
	NVA237	glycopyrronium bromide	COPD11
Ophthalmics	*Lucentis12*	ranibizumab	Age-related macular degeneration (AMD)
Dermatology	*Lamisil*	terbinafine	Fungal infection of the scalp in children
Gastrointestinal & Urology	PTK787	vatalanib	AMD14
	Elidel	pimecrolimus	Dry eye

(ODGU)			
	Zelnorm/Zelmac	tegaserod	Irritable bowel syndrome with constipation
	Zelnorm/Zelmac	tegaserod	Functional dyspepsia
Infectious Diseases, Transplantation & Immunology (IDTI)	*Certican*	everolimus	Prevention of organ rejection
	Tyzeka/Sebivo	telbivudine	Hepatitis B
	Mycograb	efungumab	Severe fungal infections
	LDC300	valtorcitabine	Hepatitis B
	Albuferon	Albumin interferon alpha 2-b	Hepatitis C
	NM28316	valopacitabine	Hepatitis C
	Aurograb		Severe Staphylococcus aureus infections
	AEB071		Transplantation (organ rejection)
Arthritis & Bone (AB)	*Aclasta17*	zoledronic acid	Paget s disease of the bone
	Aclasta17	zoledronic acid	Osteoporosis
	Prexige18	lumiracoxib	Osteoarthritis, acute pain, primary dysmenorrhea
	ACZ885		Muckle Wells syndrome
	ACZ885		Rheumatoid arthritis
	SMC021	calcitonin	Osteoporosis

Project/compound	Mechanism of action	Formulation	Plannedsubmissiondates	Phase I	Phase II	Phase III	Submitted
Galvus	Dipeptidyl peptidase 4 (DPP 4) inhibitor	Oral	Submitted EU, US	XXXXXXXXXXXXXXXXXXXXXXXX			
Tekturna1/Rasilez1	Renin inhibitor	Oral	Submitted EU, US	XXXXXXXXXXXXXXXXXXXXXXXX			
Exforge1	Angiotensin-II receptor antagonist (ARB) and calcium channel blocker	Oral	Submitted EU, (approved US)19	XXXXXXXXXXXXXXXXXXXXXXXX			
Diovan/Starlix NAVIGATOR2	Angiotensin-II receptor antagonist (ARB) and insulin secretagogue	Oral	>2010	XXXXXXXXXXXXXXXXXX			
Lotrel *ACCOMPLISH*	Angiotensin I converting enzyme (ACE) inhibitor and calcium channel blocker	Oral	2009	XXXXXXXXXXXXXXXXXX			
Tasigna1	Bcr-Abl3, c-Kit4 and PDGFR5 inhibitor	Oral	Submitted EU, US	XXXXXXXXXXXXXXXXXXXXXXXX			
Tasigna1	Bcr-Abl3, c-Kit4 and PDGFR5 inhibitor	Oral	2009	XXXXXXXXXXXX			
PTK7876	VEGFR7 inhibitor	Oral	2007	XXXXXXXXXXXXXXXXXX			
Gleevec/Glivec	Bcr-Abl3, c-Kit4 and PDGFR5 inhibitor	Oral	2008	XXXXXXXXXXXXXXXXXX			
EPO906	Microtubule depolymerization inhibitor	Intravenous	2009	XXXXXXXXXXXXXXXXXX			
RAD001	mTOR8 inhibitor	Oral	2008	XXXXXXXXXXXX			
SOM230	Somatostatin analogue	Injection	2009	XXXXXXXXXXXX			
PKC412	Signal transduction inhibitor	Oral	>2010	XXXXXXXXXXXX			
LBQ707	Topoisomerase-I inhibitor	Oral	>2010	XXXXXXXXXXXX			
LBH589	Deacetylase inhibitor	Oral	2008	XXXXXXXXXXXX			
Comtan	Catechol-O-methyltransferase inhibitor	Oral	Submitted Japan, (approved EU, US)	XXXXXXXXXXXXXXXXXXXXXXXX			
Exelon Patch	Cholinesterase inhibitor	Transdermal Patch	Submitted EU, US	XXXXXXXXXXXXXXXXXXXXXXXX			
LIC477	Voltage-sensitive sodium channel blocker	Oral	2008	XXXXXXXXXXXXXXXXXX			
AGO178	Melatonin (M1/2) receptor agonist and serotonin (5-HT2C) receptor antagonist	Oral	2008	XXXXXXXXXXXXXXXXXX			
FTY720	Sphingosine-1-phosphate receptor modulator	Oral	2009	XXXXXXXXXXXXXXXXXX			
SAB378	Cannabinoid-1 receptor agonist	Oral	>2010	XXXXXXXXXXXX			
QAB149	Once-daily beta-2 agonist	Inhalation	2008	XXXXXXXXXXXXXXXXXX			
MFF258	Once-daily beta-2 agonist and long-acting steroid	Inhalation	2008	XXXXXXXXXXXXXXXXXX			
NVA237	Long acting antimuscarinic	Inhalation	>2010	XXXXXXXXXXXX			
Lucentis12	VEGF13 blocker	Intra-vitreal injection	Submitted EU	XXXXXXXXXXXXXXXXXXXXXXXX			
Lamisil	Fungal squalene epoxidase inhibitor	Oral	Submitted US	XXXXXXXXXXXXXXXXXXXXXXXX			
PTK787	Angiogenesis inhibitor	Oral	>2010	XXXXXXXXXXXX			
Elidel	T-cell and mast cell inhibitor	Eye drops	>2010	XXXXXXXXXXXX			
Zelnorm/Zelmac	5HT4-receptor agonist	Oral	2007 (EU)15, (approved US)	XXXXXXXXXXXXXXXXXXXXXXXX			

Zelnorm/Zelmac	5HT4-receptor agonist	Oral	2008	XXXXXXXXXXXXXXXXX
Certican	Growth-factor-induced cell proliferation inhibitor	Oral	Submitted US, Japan, (approved EU)	XXXXXXXXXXXXXXXXXXXXXXX
Tyzeka/Sebivo	Viral polymerase inhibitor	Oral	Submitted EU, (approved US)	XXXXXXXXXXXXXXXXXXXXXXX
Mycograb	Anti-HSP90 antibody	Intravenous	2009 (US), (submitted EU)	XXXXXXXXXXXXXXXXXXXXXXX
LDC300	Viral polymerase inhibitor	Oral	2009	XXXXXXXXXXXXXXXXX
Albuferon	Long-acting interferon	Intravenous	2009	XXXXXXXXXXXXXXXXX
NM28316	Viral polymerase inhibitor	Oral	>2010	XXXXXXXXXXXX
Aurograb	Anti-Staph. aureus antibody	Intravenous	>2010	XXXXXXXXXXXX
AEB071	Protein Kinase C inhibitor	Oral	>2010	XXXXXXXXXXXX
Aclasta[17]	Bisphosphonate: osteoclast inhibitor	Intravenous	Submitted US, (approved EU)	XXXXXXXXXXXXXXXXXXXXXXX
Aclasta[17]	Bisphosphonate: osteoclast inhibitor	Intravenous	Submitted EU, US	XXXXXXXXXXXXXXXXXXXXXXX
Prexige[18]	Cyclo-oxygenase-2 inhibitor	Oral	2007 (US), (approved EU)	XXXXXXXXXXXXXXXXXXXXXXX
ACZ885	Anti-interleukin-1 beta (IL-1β) antibody	Injection	2009	XXXXXXXXXXXX
ACZ885	Anti-IL-1β antibody	Injection	>2010	XXXXXXXXXXXX
SMC021	Regulator of calcium homeostasis	Oral	>2010	XXXXXXXXXXXX

1 Trade name pending regulatory approval
2 NAVIGATOR trial examining combination therapy of *Diovan* and *Starlix*
3 Bcr-Abl: Breakpoint cluster region-Abelson fusion protein
4 c-Kit: an important receptor tyrosine kinase protein
5 Platelet-derived growth factor receptor protein
6 Co-development with Schering AG; registration strategy under review
7 Vascular endothelial growth factor receptor protein
8 Mammalian target of rapamycin protein
9 Gastroenteropancreatic
10 Licensed from Servier; Novartis has rights in the US
11 Chronic obstructive pulmonary disease
12 Approved in US; Novartis has rights outside North America
13 Vascular endothelial growth factor
14 Age-related macular degeneration
15 Novartis plans to appeal opinion from European Medicines Agency (EMEA) committee recommending against European approval of *Zelmac*
16 Idenix compound; Novartis has exercised option to license
17 Zoledronic acid (5 mg) is marketed under the trade name *Aclasta* in Europe and is awaiting US approval of a new trade name
18 Lumiracoxib is marketed under the trade name *Prexige* in various markets and is awaiting US approval of a new trade name
19 Tentative approval pending expiration of amlodipine besylate pediatric exclusivity

CARDIOVASCULAR AND METABOLISM

High blood pressure and its consequences affect one in four adults more than a billion people worldwide and kill more than 7 million people every year. Type 2 diabetes causes 3 million deaths annually. Both diseases remain under-diagnosed and poorly treated but Novartis is poised to expand its broad Cardiovascular and Metabolism portfolio, offering patients and physicians break-through innovations with the potential to transform treatment.

US regulatory approval of *Exforge* in December culminated a year packed with submissions and decisions for Novartis, setting the stage for a series of major launches over the next two years.

Exforge is the first treatment for high blood pressure to combine the two most prescribed, branded antihypertensive medicines in their classes *Diovan* and the calcium channel blocker amlodipine besylate. Tentative approval by the US Food and Drug Administration will permit the launch of *Exforge* in September 2007, after the expiration of market exclusivity for amlodipine besylate.

In an extensive clinical program involving over 5 000 patients, *Exforge* helped up to 9 out of 10 patients reach their treatment goal (diastolic blood pressure under 90 mm Hg, or more than a 10 mm Hg reduction in diastolic pressure from baseline). That high proportion of treatment success stands in sharp contrast to the estimated 7 of 10 people with high blood pressure today who either remain undiagnosed or fail to reach their blood pressure targets.

Exforge offers a potential solution to many people with high blood pressure who currently need two or more medicines to control their illness, says James Shannon, M.D., Head of Pharmaceutical Development at Novartis.

Meanwhile, two additional breakthrough medicines from Novartis are poised to fortify the dynamic portfolio of the Cardiovascular and Metabolism franchise. *Galvus* (vildagliptin) and *Tekturna1* (aliskiren) completed clinical testing last year and are now under regulatory review in both the US and Europe for treatment of type 2 diabetes and hypertension, respectively.

We are very confident of the efficacy and safety profiles of *Galvus* and *Tekturna*, says Thomas Ebeling, Head of the Pharmaceuticals Division and member of the Executive Committee of Novartis. And we are ready to roll as soon as we receive the go-ahead from regulators.

Both medicines have innovative mechanisms of action and may offer patients the added promise of delaying, or perhaps even preventing, disease onset. Novartis has embarked on major outcome trial programs for *Galvus* and *Tekturna* to realize their full medical and commercial potential. *Tekturna* was developed in collaboration with Speedel.

Outcome studies can span several years, involve thousands of patients and cost hundreds of millions of dollars but they are viewed as the gold standard in demonstrating safety and efficacy of a drug to patients and physicians. They also are considered the gold standard of value-for-money by cost-conscious governments, insurers and other payors.

We drove *Diovan* success by creating and continuously adding to outcome data, says John Glasspool, Head of the Cardiovascular and Metabolism Business Franchise at Novartis. We aim to do the same for *Galvus* and *Tekturna*, and move medical practice

1 Marketed under the brand name *Rasilez* outside the US

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forward with studies we believe will demonstrate that these novel therapies can prevent and modify progression of type 2 diabetes and hypertension, and ultimately help save lives.

The *Diovan* Heritage

Exforge builds upon the heritage of *Diovan*, the flagship antihypertensive treatment from Novartis. *Diovan* sustained buoyant growth during 2006 as sales climbed 15%, to USD 4.2 billion. Already the world s most prescribed angiotensin receptor blocker (ARB), *Diovan* is expected to pass branded amlodipine this year and become the top-selling medication for high blood pressure worldwide.

The success of *Diovan* has been fueled by powerful efficacy and a broad range of approved indications. Those multiple applications reflect a comprehensive program of outcome studies involving more than 40 000 patients across the cardiovascular continuum.

The megatrial program delivered new results in 2006 when the biggest clinical study of an ARB to date in Japan confirmed the efficacy of *Diovan*, as well as its excellent cardiovascular profile, compared to the other studied antihypertensive therapies. The JIKEI Heart Study involving more than 3 000 patients, and conducted by the Jikei University School of Medicine in Tokyo was halted early for ethical reasons after an interim statistical analysis showed *Diovan* had reduced stroke by 40%, and heart failure by 46%, compared to non-ARB therapies being used as comparators.

According to Professor Sebu Mochizuki, M.D., of Jikei University, Chairman of the JIKEI Heart Study executive committee, the significantly reduced incidence of stroke shown in the trial will be of particular interest to clinicians because there is a higher prevalence of stroke in the Japanese population than in Western society.

Biggest Killer

High blood pressure and its consequences affect an estimated one in four adults a billion people worldwide. The disorder is the leading cause of risk-attributable death, accounting for more than 7 million deaths per year. One person dies somewhere in the world from a hypertension-related disease every five seconds.

Blood pressure is very poorly controlled, says Matthew Weir, M.D., Professor of Medicine at University of Maryland. Even using a relatively unchallenging definition of normal blood pressure, Dr. Weir adds, only 30% of patients in the US achieve goal blood pressure. And America does better than anyplace else. Our friends in Europe have much lower percentages of people with high blood pressure under control.

Clinical studies have clearly demonstrated that effective treatment of high blood pressure reduces coronary and renal events, and strokes. Yet to the frustration of health authorities around the world, it s a formidable challenge to keep patients on therapy long enough to reap those benefits.

Physicians increasingly view combination therapy as an important tool to improve patient compliance. If you use two drugs as a single entity, as opposed to giving them as multiple tablets, there is significantly better adherence to therapy, Dr. Weir says. I think this is the way we have to go in the future and I suspect that sooner or later we will see the development of triple combinations as well.

In the *Exforge* clinical trial program, involving more than 5 000 people with hypertension, clinically significant blood pressure reductions and a good safety and tolerability profile were observed. *Exforge* really starts to separate from other highly effective agents in treatment of poorly controlled patients with severe hypertension, says Ameet Nathwani, M.D., Head of Clinical Development and Medical Affairs, Cardiovascular and Metabolism Business Franchise. One example, he says, is a study where *Exforge* produced greater blood pressure reductions than treatment with a combination of lisinopril and hydrochlorothiazide.

We believe *Exforge* may become the most efficacious agent in the antihypertensive category, Dr. Nathwani adds.

Promise of *Galvus*

An estimated 240 million people worldwide have diabetes today, and prevalence is expected to rise rapidly, reaching 380 million people by 2025, according to the International Diabetes Federation (IDF). Over the coming two decades, IDF estimates that the number of people with diabetes in Europe will rise by 20%. Corresponding increases will be 50% in North America, 85% in Latin America and a doubling of prevalence in Africa and South-East Asia.

Type 2 diabetes, which accounts for about 90% of total diabetes cases, has emerged as a public health epidemic, causing more than 3 million deaths a year. Diabetes is a leading cause of blindness in adults in developed countries, as well as the most common cause of non-accident-related amputation.

Treatment costs for diabetes account for between 5% and 10% of national healthcare budgets worldwide, according to IDF. Both the human and economic costs of the disease could be reduced by aggressive

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investment in prevention particularly early detection to avoid onset of diabetic complications.

That isn t happening, however, and at least half of all people with diabetes remain unaware of their condition. Type 2 diabetes, where control of blood sugar deteriorates over time, has traditionally been associated with advancing age and is more common in people who are overweight or obese, or have a family history of diabetes. That profile is changing, however, with younger people increasingly being diagnosed with the condition.

Dysfunction of insulin-producing islet cells in the pancreas is a major factor underlying type 2 diabetes, together with insulin resistance, or deterioration in the body s ability to use the insulin that islet cells manage to produce. Normally, blood glucose is maintained at optimal levels by an exquisite balance between insulin the hormone that removes sugar from the blood to be stored as energy in cells and glucagon, a hormone which releases sugar into the blood to feed the body s energy requirements.

Once beta islet cells which produce insulin and alpha islet cells that produce glucagon start failing, the usual fine control of blood glucose is disrupted. As insulin secretion dwindles, the usual check-and-balance on glucagon weakens. Alpha cells are unleashed to flood glucagon into the blood and drive up glucose levels, the hallmark of type 2 diabetes.

The mechanism of action of *Galvus* inhibiting an enzyme called DPP-4 increases insulin release and reduces secretion of glucagon, improving the ability of beta and alpha islet cells to appropriately sense and respond to sugar in the blood.

The impact of glucagon has been undervalued, and more and more physicians are recognizing that maintaining the glucagon/insulin balance not only can normalize islet function but also have an impact on insulin resistance by peripheral utilization, Dr. Nathwani says. That s one of the reasons why we are really excited by the new mechanism of action.

Galvus a once-daily oral agent has been evaluated both as monotherapy and in combination with other antidiabetic agents. In clinical studies involving more than 4 500 patients, *Galvus* demonstrated significant reductions in blood sugar that were sustained during treatment for up to two years.

Improved tolerability also sets *Galvus* apart from traditional oral antidiabetic medicines and could help to improve current low levels of compliance. The majority of patients who receive treatment for type 2 diabetes today fail to reach the target levels for blood glucose set by the American Diabetes Association.

Patients aren t treated optimally because existing drugs have significant limitations and aren t well tolerated, Dr. Shannon says. Patients don t like to move onto therapy because all drugs, including thiazolidinediones (TZDs), are encumbered by side effects, particularly edema and weight gain. By acting against patients when they are trying very hard to lose weight, those drugs create a significant psychological problem that weakens adherence to therapy.

In one head-to-head comparison between *Galvus* and rosiglitazone, an insulin sensitizer, patients treated with *Galvus* had a mean reduction of body weight greater than one kilogram; there was an overall mean difference of 2.8 kilograms between the *Galvus* and rosiglitazone groups. This weight loss was achieved with blood sugar-lowering efficacy comparable to rosiglitazone.

Extended Review

Late last year, Novartis announced a three-month extension of the US regulatory review of *Galvus* after the company decided to submit additional clinical data to the FDA. The original regulatory submission to the FDA had included data from approximately 2 800 patients, treated for up to 12 months, and the subsequent submission represented data from an additional 1 000 patient years of treatment with *Galvus*.

The submission of supplemental data came in response to questions from the FDA about lesions seen on the skin of some monkeys treated with *Galvus* in a study requested by the agency. In that study, however, monkeys received doses several orders of magnitude higher than the proposed therapeutic dose. The side effects hadn t been seen in previous studies by Novartis in monkeys given a therapeutic dose of *Galvus*. Moreover, there hasn t been a similar finding in any other species or in any human patient treated with *Galvus* in clinical trials lasting up to 24 months.

FDA has the right to extend the review period if they believe that a company already has in its possession sufficient data to address concerns the agency may have, Dr. Shannon says. We haven t seen anything even resembling this in our patient studies that s why we have submitted the additional data.

Underscoring that confidence, Novartis has embarked on a new round of clinical studies aiming to demonstrate the full potential of *Galvus*. A study known as GALIANT, involving more than 7 500 people in the US, is comparing safety and efficacy of *Galvus* and the TZD class of insulin sensitizers in a real-world, primary care setting. Importantly, the GALIANT study will assess the impact

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of *Galvus* in many different patient populations, including the elderly, different ethnic groups, and patients with varying degrees of body mass index.

GALIANT is seeking to confirm results of a smaller study where patients receiving *Galvus* as monotherapy had significant reductions in blood sugar similar to levels seen in patients treated with rosiglitazone, a drug in the TZD class.

The GLORIOUS program comprises five studies designed to demonstrate the disease modification potential of *Galvus*. The studies will explore the potential of *Galvus* both to prevent progression to diabetes in groups at high risk of developing the disease as well as to delay disease progression in people who already have developed type 2 diabetes.

Like GALIANT, the GLORIOUS studies will involve diverse patient populations. One will test the ability of *Galvus* to prevent progression to type 2 diabetes in Asian patients with impaired glucose tolerance, a major risk factor. Asian populations have a different pathophysiology and a very high conversion rate to diabetes, Dr. Nathwani says.

We re also looking to see if we can stabilize patients with type 2 diabetes by adding *Galvus* to metformin, the current standard of care, he adds. Most doctors are already using metformin and this study will provide cutting-edge information they want. Often, combination studies only appear years after a new medicine comes to market.

The GLORIOUS program will seek to confirm early indications that treatment with *Galvus* leads to meaningful reductions in blood pressure of patients, parallel with beneficial effects on blood sugar levels. We plan to look at a novel population of high-risk cardiovascular patients treated with *Galvus*. Endpoints will include both a reduction in cardiovascular events, as well as development of their diabetes, Dr. Nathwani explains.

It is an area of longstanding interest. Novartis believes that preventing diabetes will also lead to a reduction in cardiovascular consequences.

In parallel, groundbreaking data is expected from NAVIGATOR, an ongoing study in the *Diovan* megatrial program, that is exploring the possibility of preventing progression of type 2 diabetes and cardiovascular events in people with impaired glucose tolerance.

In the VALUE study, treatment with *Diovan* reduced new-onset diabetes by 23%, Dr. Nathwani says. We re confident that GLORIOUS and NAVIGATOR will provide definitive evidence that reducing new-onset diabetes can prevent heart attacks and stroke.

A Long Way to Go

Medicines blocking the renin-angiotensin-aldosterone system (RAAS), including ACE inhibitors and ARBs, have led to some impressive advances in treatment of high blood pressure. Yet current therapies have not delivered the major reductions of cardiovascular outcomes researchers and physicians had hoped for, Dr. Weir says. There is a long way yet to go.

Part of the problem seems to be a biological bypass route that, over time, circumvents the effect of some drugs that block the outputs of the RAAS. For several decades researchers have speculated that directly inhibiting the activation point of RAAS may be more effective. The enzyme renin is the key activator of the RAAS.

Tekturna, the new first-in-class direct renin inhibitor from Novartis, represents the first new treatment approach for high blood pressure in more than a decade.

Regulatory applications for *Tekturna* filed in Europe and the US last year included data from 44 clinical trials, involving almost 8 000 people with hypertension. Results show *Tekturna* produces sustained, double-digit reductions in blood pressure beyond 24 hours, with placebo-like tolerability within the expected therapeutic dose range.

In particular, clinical data presented late last year highlighted the power of *Tekturna* to offer beyond 24-hour blood pressure control during up to a full year of therapy. Control beyond 24 hours may give doctors confidence that if a patient does occasionally miss a dose, which happens fairly often in the real world, there would not be a blood pressure penalty to be paid, Dr. Weir says. And that could be a very positive attribute in selecting an antihypertensive.

The FDA s review of *Tekturna* was extended by three months in December to enable the agency to consider additional data submitted by Novartis to support the safety profile of the new medicine. Novartis continues to work closely with the FDA and is confident that the supplementary information will help secure approval of *Tekturna* in the US.

Demonstrating Concrete Benefits

A more definitive assessment of renin inhibition will come in the *Tekturna* outcome program called ASPIRE HIGHER a suite of studies involving more than 30 000 people with high blood pressure that will be conducted over the coming five years. ASPIRE HIGHER aims to demonstrate that *Tekturna* has the potential to redefine treatment standards and provide long-term benefits beyond blood pressure control such as preventing hypertension or the onset of diabetes, and reducing cardiovascular mortality

and morbidity among high-risk patients still at an early stage of the disease.

Direct renin inhibition may offer a beneficial effect for both the kidney and the heart. In studies to date, Novartis researchers have identified a dose-dependent increase in renal blood flow among patients treated with *Tekturna*. Results expected this year from studies called AVOID and ALOFT could give early insight into a possible protective effect of *Tekturna*.

Moreover, studies have shown that *Tekturna* reduces plasma renin activity (PRA) and some scientists believe that lowering PRA will reduce the risk of heart attacks and kidney failure. There is a huge hypertensive population out there at risk of developing cardiovascular and renal disease, Dr. Shannon says. But if there are concrete benefits beyond blood pressure from reducing PRA, we still have to demonstrate them in the ASPIRE HIGHER program.

One opportunity will be a study called ALTITUDE, part of the ASPIRE HIGHER program. Although the science is still emerging, direct renin inhibition may offer substantial benefits to patients, says Hans-Henrik Parving, M.D., a researcher at the Steno Diabetes Center in Denmark and lead investigator for ALTITUDE.

Patients and physicians around the world will be watching. Outcome trials such as Val-HEFT, VALIANT and JIKEI are worth gold to doctors, says Alan Gradman, M.D., Chief of Cardiovascular Diseases at The Western Pennsylvania Hospital in Pittsburgh, Pennsylvania.

Many patients have co-morbidities like kidney disease or a history of heart attack that I have to consider when treating them. These outcome trials not only advance cardiovascular medicine, they help me answer key questions about treating patients on a day-to-day basis, Dr. Gradman adds. We look forward to the results of megatrials like NAVIGATOR as well as the outcome trials Novartis is planning for *Tekturna* and *Galvus*.

ONCOLOGY AND HEMATOLOGY

Iron overload is a potentially life-threatening disorder a consequence of repeated blood transfusions required to treat disorders ranging from thalassemia to sickle cell disease. The promise of *Exjade* is greater convenience for patients currently receiving treatment and expansion of benefits to people who haven t previously been treated.

Cathi-Jo Langan CJ to her friends was born with beta thalassemia, a disease caused by a genetic mutation that damages red blood cells.

Ms. Langan has survived thanks to regular blood transfusions since the age of three yet those repeated transfusions also have a serious side effect, a potentially fatal build-up of iron in her body. For years, she kept the iron overload under control by injecting a medicine from Novartis called *Desferal*.

Desferal is an iron chelator that removes excess iron from the body. The drug is well tolerated and effective but requires cumbersome infusions via a portable pump that take up to 12 hours a day, five to seven days a week. Eventually, that lifelong regimen became all but unbearable to Ms. Langan.

Speaking at an open hearing at the US Food and Drug Administration, she described pushing and pushing with all my might to get this needle into my stomach but it would never penetrate, causing much aggravation and ending with me sitting on my floor, in pure desperation.

In 2003, she joined a clinical study testing a new oral iron chelator from Novartis. The drug is called *Exjade* (deferasirox) and it is formulated as a tablet that can be dispersed in a glass of juice or water. I cannot tell you how much *Exjade* has changed my life, Ms. Langan adds.

As the first and only once-daily oral iron chelator, *Exjade* is an important break-through in providing continuous protection against the harmful effects of excess iron due to blood transfusions. With a single daily dose, *Exjade* has the potential to greatly enhance acceptance of therapy not just among people with thalassemia, but also iron overload in transfused patients with sickle cell disease, myelodysplastic syndromes and other rare anemias.

Leyla Agaoglu, M.D., a hematologist based in Istanbul, Turkey, sees many people with thalassemia in her practice, reflecting the relatively high incidence of the disorder among people of Mediterranean origin or ancestry, as well as people of Asian and African descent. Dr. Agaoglu calls *Exjade* and *Glivec*, the breakthrough, targeted anticancer therapy from Novartis, the two most significant advances in hematology in decades.

Centuries of migration by people crossing borders in search of a better life have spread thalassemia and other transfusion-related anemias around the world but effective treatment hasn t kept pace. Up to two-thirds of the estimated 40 000 people in the US who have iron overload as a result of regular blood transfusions don t currently receive iron chelation therapy. If patients don t receive adequate chelation, iron can accumulate in the liver, the heart and various endocrine organs, eventually causing organ failure, significant morbidity and early death.

Ms. Langan insists that *Exjade* could make a positive impact on many people in the US, and around the world. As she told the FDA panel: Children could go to sleepovers without fear of ridicule and their parents could let them go without being afraid the kids would skip their medicine. Young adults would feel more confident and accepted at

college, she added. We patients would have free lives, no longer tethered to a pump. And we could have less of the anger and frustration that we can t get rid of right now.

Improving on *Desferal*

It took 14 years of research to deliver a successor to *Desferal*, a medicine launched more than 40 years ago and derived from a natural substance originally discovered in an iron-eating bacterium called Streptomyces pilosus. Novartis scientists repeatedly encountered obstacles in their hunt for a replacement and synthesized hundreds of molecules before choosing a candidate compound called ICL670 to enter clinical testing.

The clinical studies for ICL670 later given the brand name *Exjade* were the largest program ever for an investigational iron chelator. Data involving more than 1 000 patients with a broad range of underlying diseases demonstrated that *Exjade* is effective at managing and reducing body iron burden.

After a priority review which the FDA reserves for innovations that target major unmet medical need, *Exjade* was approved in November 2005 for treatment of chronic iron overload due to blood transfusions in adults and children age two and older. In August 2006, the European Commission also granted approval for *Exjade* in all 25 member states of the European Union to help patients with transfusional iron overload. By the end of 2006, *Exjade* was available in more than 70 countries worldwide.

In its first full year on the market, *Exjade* posted sales of USD 143 million. The uptake has exceeded our expectations and reflects the significant unmet medical need *Exjade* is addressing, says David Epstein, Head of Novartis Oncology. Importantly, initial data from the US and Switzerland show that patients who weren t previously receiving chelation therapy account for about 50% of *Exjade* prescription volume.

And treatment of transfusional iron overload could turn out to be just the beginning, Mr. Epstein adds. New studies in other disease areas may expand the number of people who can benefit from *Exjade*. One such study is already underway testing *Exjade* in treatment of hereditary hemochromatosis, a genetic disorder leading to abnormal accumulation of iron in the liver, heart and endocrine organs.

To address the needs of US patients undergoing chelation therapy, Novartis has implemented a patient support program called EPASS Complete Care. EPASS includes features ranging from convenient home delivery of prescription refills by a mail-order pharmacy, to ongoing compliance programs and individual case management regarding prescription reimbursement coverage.

Unmet medical need, and the opportunity for *Exjade*, may be even greater outside the US and Europe where the majority of thalassemic patients live, often without access to universal medical care. Writing in the New England Journal of Medicine in 2005, hematologists Deborah Rund, M.D., and Eliezer Rachmilewitz, M.D., noted that thalassemia is among the most common genetic disorders worldwide. Most patients with the disease, however, reside in less developed countries where safe transfusion and chelation are not universally available.

Many patients with thalassemia in underdeveloped nations die in childhood or adolescence. Programs that provide acceptable care, including transfusion of safe blood and supportive therapy including chelation, must be established, the authors added.

Recognizing the medical need for deferasirox, Novartis will work with local health authorities and others on a country-by-country basis to enhance access. For most countries, this will be accomplished through the *Exjade* brand but for low-income patients in countries in the Indian subcontinent and Africa, with high medical need and sufficient healthcare infrastructure to support treatment, Novartis will provide deferasirox through a specific brand at a preferential price.

Life-threatening Anemia

People with thalassemia have fewer red blood cells than normal and at the same time have inherited genetic mutations that reduce output of hemoglobin, the protein in red blood cells that carries oxygen to all parts of the body. The result is anemia that can be life-threatening.

Regular transfusions normalize both the number of red blood cells and hemoglobin levels but at the same time lead to excess levels of iron which can damage the liver, heart and other parts of the body. By the time a patient has received 10 transfusions, significant iron overload has already begun.

The body, however, has no mechanism to remove the excess iron. *Desferal*, the standard of care in chelation, has a half-life in the body of 20 30 minutes and must be given by continuous infusion. Survival is excellent if a patient takes treatment five or more days per week but falls off sharply if patients fail to comply with prolonged daily infusions.

Exjade, by contrast, has a half-life of 12 to 16 hours, so a single daily dose maintains effective levels of active chelator for more than 24 hours, ensuring that there are no gaps in chelation coverage. Clinical studies

consistently demonstrated that *Exjade* removes iron from the body in a dose-dependent manner.

Patients who received *Exjade* doses of 20 milligrams (mg) and 30 mg per kilogram of body weight had maintenance, or reduction, in body iron burden similar to that achieved with *Desferal*. In clinical trials, *Exjade* was shown to be generally well tolerated with most adverse events being mild to moderate in severity, and transient in nature.

In developed countries, virtually all patients with the severe form of thalassemia are routinely transfused and treated for iron overload. According to market research by Novartis, a majority of physicians anticipate that thalassemia patients receiving *Exjade* will be treated more days per year for iron overload than at present. Moreover, the 24-hour continuous chelation coverage provided by *Exjade* promises to make treatment even more effective.

Myelodysplastic Syndromes

While *Exjade* has the potential to improve compliance and efficacy among people already receiving chelation therapy, the medicine is also expected to expand use of chelation among undertreated patients with forms of transfusion-dependent anemia.

One example is Myelodysplastic Syndromes (MDS), a diverse group of bone marrow disorders that typically affect people over the age of 60. Estimates suggest that more than 200 000 people worldwide may be affected by MDS. Blood transfusions are the mainstay of supportive care to manage symptoms of anemia.

But the majority of MDS patients aren t receiving intensive chelation therapy, says Professor Norbert Gattermann, M.D., Dept. of Hematology at Heinrich-Heine University in Dusseldorf, Germany. There is no question whatsoever that *Exjade* is a breakthrough for iron chelation in thalassemia, Dr. Gattermann adds. But we don t yet have reliable data telling us how much morbidity and mortality in MDS can be attributed to iron overload.

Ongoing research is beginning to fill that vacuum. A study by hematologists at the University of Pavia (Italy) demonstrated that MDS patients who were transfusion dependent had significantly shorter survival than those whose conditions didn t require transfusions. The study found that developing a secondary iron overload had a significant, negative effect on the survival of transfusion-dependent MDS patients. By contrast, at the 2006 annual meeting of the American Society of Hematology, physicians from the University of British Columbia (Canada) presented the first data documenting improvement in clinical outcome in MDS patients receiving iron chelation therapy.

In May 2005, more than 30 leading international hematologists met in conjunction with the 8th International Symposium on Myelodysplastic Syndromes in Nagasaki, Japan and produced consensus guidelines for diagnosis, monitoring and management of iron overload in MDS. According to Dr. Gattermann, who was a participant, the Nagasaki Guidelines suggest that the MDS patients most likely to benefit from iron chelation are those in the low-risk group, with estimated median survival of five years or more. They are the candidates likely to develop clinically relevant problems of iron overload, he says.

Overall, Dr. Gattermann estimates that roughly a third of all MDS patients may be candidates for iron chelation. And even as research advances, demographics will expand use of chelation therapy, he adds.

Older age groups are expanding as a percentage of the total population in industrialized countries and older age groups are the ones with a particularly high incidence of MDS, so we ll see increasing numbers of MDS patients in coming years, Dr. Gattermann says. Hematologists and physicians have been reluctant to start iron chelation therapy because of all the trouble with compliance and complications associated with *Desferal*. But we ll see a greater awareness of the iron overload problem, and more willingness to begin chelation therapy in the future, because *Exjade* makes the problem so much easier to treat.

Sickle Cell Disease

Sickle cell disease is one of the most common inherited anemias treated with transfusions. According to the US National Institutes of Health, more than 70 000 Americans suffer from sickle cell disease and an estimated 250 000 children worldwide are born with the disorder every year.

The underlying cause is a mutation in the sickle cell gene resulting in abnormal, crescent-shaped red blood cells that can have difficulty passing through small blood vessels. Complications range from anemia and frequent infections, to acute chest syndrome a blockage of the flow of oxygen in tiny vessels in the lungs and a dramatically increased risk of stroke, when misshapen blood cells block major blood vessels that supply the brain with oxygen.

The mutation has persisted largely because it confers a survival advantage against falciparium malaria, the most deadly form of malaria, and the sickle cell mutation is common in people whose families come from sub-Saharan Africa, the Mediterranean region, Latin America and India.

In recent decades, advances in diagnosis and treatment have transformed sickle cell disease from a pediatric affliction often leading to early death, to a chronic disorder with a median life span exceeding 40 years. But improved management of the condition particularly broader use of chronic blood transfusions could offer further benefits, says Kwaku Ohene-Frempong, M.D., Professor of Pediatrics at the University of Pennsylvania and Director of the Sickle Cell Center at the Children s Hospital of Philadelphia.

We know that transfusions prevent strokes as well as other complications of sickle cell disease and we are moving into an era where more and more of our patients are going to receive transfusions on a chronic basis, Dr. Ohene-Frempong adds. But as blood transfusions grow more common, iron overload will become one of patients biggest problems. We are excited about the potential for *Exjade* to improve compliance as well as results of chelation therapy among our patients.

Dr. Ohene-Frempong has an intensely personal connection with sickle cell disease, and as one of the world s leading authorities in the field he has played a key role in landmark research projects that helped revolutionize diagnosis and treatment over the past four decades. A star athlete who represented his native Ghana in the 1968 Olympic Games, he wasn t aware that he carried a defective copy of the sickle cell gene until a routine physical examination before the Mexico City Olympics. There was a lot of concern about possible effects of the high altitude in Mexico City on people with the sickle cell trait, he recalls. Our doctor suggested that all team members be tested and it showed that I had the sickle cell trait.

Four years later, after Dr. Ohene-Frempong had begun medical studies at Yale University, his newborn son was diagnosed with sickle cell disease. At the time, Yale operated one of only two hospitals in the US that screened newborn babies for SCD. Hematology textbooks at the time still claimed that it was impossible to detect SCD in newborns, Dr. Ohene-Frempong says. We were lucky to have this great doctor who made the diagnosis, put my son on penicillin prophylaxis and began to teach my wife and me about the disease.

Today screening of newborns for sickle cell disease is required in 49 states in the US and is routinely conducted in many countries in Europe. Screening is credited for much of the improved life expectancy for people with the disorder in recent decades.

During a stint back home in Ghana to work on a thesis, Dr. Ohene-Frempong was able to foster his interest in sickle cell disease. Assembling data from a large urban hospital, he was dismayed to find that only a handful of children had been treated for sickle cell disease during the previous decade.

Doctors in Ghana simply didn t make the diagnosis and only a tiny part of the real burden of SCD was acknowledged, he muses. Unlike my son, many children were dying from this disease undiagnosed with nobody knowing what actually had killed them. When he returned to Yale, he switched the focus of his medical studies to hematology, with a special focus on sickle cell disease.

During the 1990s, scientists built on the success of newborn screening by developing a technique using ultrasound to identify young children at high risk of stroke and other severe complications. As soon as we see signs of severe disease we put the child on chronic transfusions and it helps prevent stroke, Dr. Ohene-Frempong adds. And we have found that transfusions also opened up the possibility to prevent other complications as well.

A landmark US study, called Stroke Prevention Trial in Sickle Cell Anemia (STOP) demonstrated that regular blood transfusions significantly reduced the risk of stroke in at-risk children identified by the ultrasound test. Moreover, transfusions also reduce the risk of repeat strokes, which occur in nearly two thirds of children with sickle cell disease unless they re treated.

As a medical student, Dr. Ohene-Frempong had planned to practice in Ghana but his distinguished career in the US postponed his return. In 1995, he finally realized that dream by opening Ghana s first center to screen newborn babies in Kumasi, the country s second-biggest city. Funded in part by the US National Institutes of Health, the Kumasi clinic has screened tens of thousands of newborns and provides treatment today for more than 10 000 people with sickle cell disease.

There has been a tremendous increase in awareness expectant mothers from around the country come to Kumasi so their babies can be tested, Dr. Ohene-Frempong says. Despite ongoing expansion of the clinic, however, resources are dwarfed by unmet need in Ghana, and across Africa, which bears the greatest share of the global burden of sickle cell disease. We don t have enough doctors or nurses, Dr. Ohene-Frempong says. And the thing that really pains me is that we don t have a good transfusion service in Ghana. It s hard and we need all the help we can get to develop these centers across Africa.

TRANSLATIONAL MEDICINE AT NIBR: THE BRIDGE FROM BASIC SCIENCE TO NEW DRUG

Discovering innovative medicines demands deep understanding of disease. Type 2 diabetes is a prime example where scientists at the Novartis Institutes for BioMedical Research (NIBR) have identified novel biological targets and dispatched promising compounds into the development pipeline while at the same time advancing fundamental knowledge about the disease through landmark studies with elite academic centers.

When Professor Mark Fishman, M.D., took the helm at the Novartis Institutes for BioMedical Research (NIBR), he spoke of revolutionizing the way major pharmaceutical companies like Novartis discover new medicines.

Underpinning that vision, Dr. Fishman delivered an uncompromising diagnosis of where change had to start. We simply don t know enough yet about the molecular causes of many diseases, and if you don t understand the mechanism, you can t make a drug for it, he said. Over the coming years we will understand more and more, but let s not presume to try and treat diseases we don t understand yet.

Today, that quest for understanding permeates NIBR labs worldwide. But the Diabetes and Metabolism Disease Area is arguably the best example so far of a NIBR unit advancing fundamental knowledge about a major disease, while at the same time continuing to identify novel biological targets, and churn out promising molecules ready to commence development.

Late last year, NIBR unveiled early results from a landmark study with a pair of academic partners to decipher genetic causes of diabetes. The initial findings provided strong support for a link between type 2 diabetes and previously unknown disease genes, including those that control function of mitochondria, tiny power plants found inside cells, that are a prime focus of diabetes research at NIBR.

At the same time, the collaboration uncovered other stunning genetic influences on diabetes that could lead to additional revolutionary approaches to therapy. The study is a three-way collaboration, with Sweden s Lund University, and the Broad Institute, a prestigious academic center located near NIBR headquarters in Cambridge, Massachusetts.

In essence, the collaboration is laying out a foundation for new hypotheses about type 2 diabetes, says Thomas Hughes, Ph.D., Head of the Diabetes and Metabolism Disease Area at NIBR. Which of those hypotheses will prove to have high impact on clinical and medical approaches to the disease will have to be proven over the course of the next few years, he adds. But no one in our shop will look at type 2 diabetes in the same way after this. And we are in a very privileged situation to be sitting with this information at this time.

Pragmatic Portfolio

The evolution of the Diabetes and Metabolism (D&M) Disease Area mirrors the dynamic expansion of NIBR which will celebrate its fifth anniversary later this year. Since Novartis decided to relocate global research headquarters to a new US center in Cambridge, almost a thousand scientists have been recruited, trained and placed in jobs at that center.

The recent history of our area provides a snapshot of the tremendous evolution at NIBR over the past few years, Dr. Hughes says. This organization has power unlike anything that Novartis has ever seen before.

From a core of 30 scientists who moved with Dr. Hughes to Cambridge from New Jersey in 2002, the D&M group has expanded to more than 150 people. During that build-up phase, however, there was no immunity from the relentless pressure on productivity and constant evaluation intrinsic to industrial research.

Pretty much everybody who was here at the beginning understood that there was no time to lose, Dr. Hughes says We had to establish a beachhead by finding first-in-class opportunities that could be phased so that we could reach sustainable productivity as rapidly as possible, while at the same time enabling our new people to learn about the various stages of the drug discovery process.

The solution was a pragmatic portfolio strategy, comprising short, medium and eventually long-term projects, with diverse degrees of innovation as well as varying levels of risk. The medium-term program revolved around a potential link between dysregulation of fatty acid metabolism and diabetes.

Fats play several roles in the body. They are critical raw materials required for production of cell membranes and they provide a very efficient energy source. When the body is exposed to excess fatty acids through a sedentary lifestyle or obesity cells have to decide whether to burn fats, producing energy, or to store the excess. Yet accumulation of fatty acids in some tissues, including skeletal muscle, appears to damage insulin signaling and drive the onset of insulin resistance.

To address the underlying problem, Novartis scientists zeroed in on biological switches believed to regulate the cell s decision to burn fats or store them testing the hypothesis that increasing fat oxidation might suppress development of insulin resistance and delay onset of type 2 diabetes, even in people exposed to high-fat diets.

These are not (biological) targets that we came up with on our own they were chosen on the basis of some very good scientific papers and advice we got from collaborators. But the program is very comprehensive and we are definitely competitive with other groups in the pharmaceutical industry working in this area, Dr. Hughes says.

Still, it looks like we re going to get more traction with the fatty acid program in the obesity area than insulin resistance, per se, he adds. That s fine we went into this with an open mind and there are compounds coming out of this program that appear to have good utility in the treatment of obesity. We will have a first compound from the program enter development by the end of 2006.

Cellular Power Plants

In 2003, with the fatty acid program underway, Dr. Hughes inaugurated a visionary project he had been dreaming about for years.

The opportunity emerged when Dr. Fishman established a Milestone program, aiming to give NIBR scientists breathing room to take on higher-risk projects. These projects offered the potential to continue the tradition of feeding the pipeline with truly innovative approaches to disease-modifying therapy.

For almost a decade, Dr. Hughes had been convinced that type 2 diabetes might be treated effectively by enhancing activity of mitochondria, tiny power plants that account for virtually all the energy generated in a cell. In my own mind, I concluded that we should find a way to treat diabetes by increasing the number or function of mitochondria, he recalls. So after stewing on this for so many

years, when Dr. Fishman started talking about the Milestone program, I said immediately I have one . And we finally got to take a crack at it.

The role of mitochondria had come into sharp focus as a result of observations that mitochondrial function was reduced in people with type 2 diabetes and elderly people who had impaired sensitivity to insulin. Those observations were supported by studies with electron microscopy showing that mitochondria were smaller and less functional in people with type 2 diabetes, compared to healthy controls.

Gerald I. Shulman, M.D., Professor of Medicine at Yale University School of Medicine, reported that insulin resistance was associated with low mitochondrial activity, especially in the elderly. Gradually the link between low mitochondrial activity and type 2 diabetes really began to cement itself, Dr. Hughes recalls.

Even as evidence accumulated, the researchers faced a major hurdle. No validated targets yet existed for either regulation of mitochondria, or generation of new ones, so-called mitochondriogenesis. We had to build from scratch, Dr. Hughes says.

The advent of a Milestone program around mitochondria coincided with the creation of a target discovery team within the D&M group. We built a brand new team of people who came in to NIBR with skill sets that had never been present in our group before, Dr. Hughes says. In the past, the only way we could get targets was by reading the scientific literature. Today, we invest about a quarter of our biology resources into these target-discovery initiatives.

The search for genes involved in regulation of mitochondria was a case study in systematic deployment of state-of-the-art research tools. Each gene in the human genome as well as yeast and fruit-fly genes was systematically tested in assays for activity on mitochondria. It s where we are in science today for the first time ever, we have the ability to be really comprehensive, Dr. Hughes says.

The Milestone program gave Novartis a head start in the field and D&M is currently working with multiple targets to enhance mitochondrial function for treatment of type 2 diabetes, and related metabolic disorders. Moreover, mitochondriogenesis has been recognized as a possible therapeutic approach in other disease areas including cardiovascular disease, muscle wasting and neurode-generation. D&M is collaborating with other NIBR disease areas to accelerate validation of pathways in these areas.

The real value of the mitochondria project may come out of the broader context of degeneration as a process, Dr. Hughes says. In the next few years, we are going to find ourselves focusing on a number of druggable targets that probably will deal with many of the underlying problems of aging that manifest themselves in different ways in different people. One person will develop type 2 diabetes, and deafness, while another will lose muscle strength or develop dementia.

This is going to be one of our larger programs, he adds. We have a fully integrated effort running, with chemists making molecules. We are finding targets that can be manipulated and when we manipulate those targets, the right things seem to happen, at least in animals.

And while Novartis traditionally has remained tight-lipped about preclinical programs, Dr. Hughes and his team speak openly about the company s interest in mitochondriogenesis at research updates for financial analysts, as well as at major scientific meetings. We re not saying exactly what we ve found, Dr. Hughes says. But it s been part of our mission to take the basic biology out to the public, to show how this is working.

Hiding in the Genome

In 2004, when Dr. Fishman agreed to join forces with the Broad Institute and Lund University to probe the genetic causes of type 2 diabetes, he told the journal Science that the three-year project was a statement to the world of medical science that the patient should come first.

It was the latest in a succession of major projects at Novartis attempting to unlock the full potential of the Human Genome Project by functionalizing the genome, unraveling the biological function of the estimated 30 000 human genes and ultimately their role in major diseases.

Results to date have exceeded expectations on both counts. We know that diabetes is a very strongly heritable disease. So surely the information that matters is hiding in the genome, Dr. Hughes says. We wanted to see if we could pull that knowledge out to show how to look at patient populations to determine who would be most likely to respond to certain drugs. And we hoped the knowledge would lead us into areas where we could find new pathways and nodes to target as well.

The collaboration is studying DNA samples from roughly 3 000 diabetic patients treated by Professor Leif Groop, M.D., and his team at Lund University in southern Sweden. The samples are complemented by carefully annotated patient histories though the identity of each patient has been scrupulously protected.

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Faculty at the Broad Institute which itself is a partnership between Massachusetts Institute of Technology, Harvard University and affiliated hospitals plus the Whitehead Institute for Biomedical Research includes many scientists who played key roles in the Human Genome Project.

We re basically sampling 500 000 places on the genomes of 3 000 people with type 2 diabetes. It s not all the genes but a huge and highly representative sample, Dr. Hughes says.

NIBR s focus on the needs of patients and physicians allowed us to filter out things of low relevance to physicians while answering the questions they really want to have answered, he adds. As a result we hope to learn about the key genetic drivers of diabetes plus genetic drivers of a number of other traits that are contained within this population from body mass index and insulin resistance itself, to levels of high- and low-density lipoprotein, blood pressure and a bunch of other things.

Novartis and the Broad Institute will put genetic variation data collected under the collaboration on a public website, accessible for researchers around the world.

It s a huge amount of information all of which has to be replicated in an independent population, Dr. Hughes says. But when you actually begin to see what the data are telling you, you realize very quickly that we ve been looking at the disease through the wrong end of the telescope. For example, there are changes in the genome in areas that control immune function that also are linked to type 2 diabetes. And there are genes that appear to influence development of the body in a way that eventually leads to susceptibility to type 2 diabetes. It s very, very strange and mysterious, and hard to understand.

This is information about this disease that we as an industry absolutely have to have. But it is too big for a single company to digest on its own, he adds. And it really belongs to humanity not just to a pharmaceutical company. So having and holding it actually isn t going to help us as much as having it and letting other people chew on it too.

VACCINES AND DIAGNOSTICS

Newly created strategic growth platform with strong performance in 2006. New division formed through acquisition of remaining stake in Chiron Corporation in April 2006.

Net sales of USD 956 million for the period from the acquisition in April 2006, up 42% over the comparable eight months of 2005 reported by Chiron, thanks to sharp increase in influenza vaccine deliveries to the US.

Novartis now the second-largest supplier of influenza vaccines in the US. Robust product portfolio also includes meningococcal, pediatric and travel vaccines that offer protection against many life-threatening viral and bacterial diseases.

Strong pipeline supports key franchises while exploring new disease areas. Primary focus on influenza vaccines utilizing modern cell-based manufacturing technology as well as pandemic/pre-pandemic H5N1 vaccines. Meningitis vaccines have potential to become a strong growth driver in the future.

Diagnostic business renamed Chiron, dedicated to preventing the spread of infectious diseases through novel blood-screening tools and very strong position in the US. Options are being evaluated to grow business and expand into molecular diagnostics.

VACCINES AND DIAGNOSTICS

KEY FIGURES

(In USD millions unless indicated otherwise)

	2006
Net sales	**956**
Operating income	**-26**
Research and development	**148**
Research and development as % of net sales	**15.5**
Free cash flow	**151**
Net operating assets	**4 536**
Additions to property, plant & equipment[1]	**113**
Number of associates at year-end	**3 935**

1 Excluding impact of business combinations

2005 FULL-YEAR NET SALES AS REPORTED BY CHIRON

2006 COMPARABLE FULL-YEAR NET SALES

VACCINES DEVELOPMENT PIPELINE

1	Flu cell culture vaccine; trade name pending regulatory approval
2	Influenza strain predicted most likely to cause a new influenza pandemic; H5N1 vaccine in Phase II in US
3	Neisseria meningitidis serogroups A, C, W and Y
4	Neisseria meningitidis serogroup B
5	Hepatitis C virus; therapeutic and prophylactic vaccine
6	Human immunodeficiency virus

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VACCINES AND DIAGNOSTICS

Vaccines are the most cost-effective public health intervention, saving millions of lives every year by preventing major human diseases. New research techniques and manufacturing technologies have sparked a revival and strong double-digit growth. The new Novartis Vaccine and Diagnostics Division holds leading positions in meningococcal vaccines as well as vaccines to prevent seasonal flu and potentially also pandemic influenza.

Acquiring full control of Chiron Corp. in April 2006 brought Novartis an attractive new strategic platform in vaccines, a resurgent industry where novel products and innovative manufacturing technologies are expected to fuel dynamic, double-digit growth over the next decade.

Integration proceeded smoothly with the creation of the new Vaccines and Diagnostics Division, comprising most operations of the former Chiron. Moreover, the Novartis Pharmaceuticals Division absorbed Chiron s biopharmaceuticals, while the Novartis Institutes of BioMedical Research gained a new research site, with a special emphasis on oncology programs.

An urgent priority for the new Division was continuation of the remediation program underway at the Liverpool influenza vaccine factory, where contamination problems had forced withdrawal of Chiron s US influenza vaccine in 2004. Those efforts continued to be successful and Novartis Vaccines became the first manufacturer to ship influenza vaccine to US customers for the 2006 07 season.

We are committed to bringing improved vaccines, diagnostics and treatments to protect the public health as well as to contribute to a secure and sufficient supply of vaccines to address the threat of a flu pandemic, says Daniel Vasella, M.D., Chairman and Chief Executive Officer of Novartis. In vaccines we have a challenging task, not just to fix lingering quality and productivity issues, but also to increase our capacity and bring innovative new vaccines to market.

To head the new Division, Dr. Vasella tapped Joerg Reinhardt, Ph.D., longtime head of Pharmaceutical Development at Novartis. Along with geographical expansion and operational excellence, Dr. Reinhardt sees innovation as a key to future success. There is substantial potential for innovative new vaccines to address unmet medical need around the world, with influenza and meningitis as key areas of focus for us and our competitors, he says.

Dr. Reinhardt moved aggressively to broaden the product base at Novartis Vaccines with major initiatives during 2006. In July, Novartis announced plans to build the first cell culture-derived influenza vaccine manufacturing plant in the US, at a new site in Holly Springs, North Carolina. Construction of the USD 600 million facility has already started. In parallel, Novartis is making additional investments to expand capacity for flu cell culture vaccine production in Marburg, Germany.

Cell Culture-Based Influenza Vaccines

Cell culture technology promises many advantages over traditional egg-based production, from greater reliability to a reduction in production lead time and shorter production cycles. Such advantages could be pivotal in the event of an influenza pandemic.

Underscoring its leading position in the new technology, Novartis Vaccines submitted the first application for a flu cell culture vaccine to European regulators in June of last year, following successful completion of Phase III clinical studies. In the US, clinical trials of the cell culture influenza vaccine began in 2005 and are ongoing.

The US government offered key support for the new technology when the Dept. of Health and Human Services (HHS) awarded Novartis a contract of up to USD 220 million to support development and manufacture of cell culture-derived influenza vaccine in the US. The contract is part of a larger HHS initiative to expand domestic infrastructure for influenza vaccines, as well as ensure domestic capacity to produce 600 million doses of pandemic influenza vaccine within six months of a pandemic declaration. The new Novartis facility would represent up to 150 million doses of that capacity. Part of the HHS contract will support planning and equipment for the new cell culture-based influenza vaccine manufacturing plant in Holly Springs, North Carolina.

Predecessor companies of Novartis Vaccines spent more than a decade developing proprietary technology that uses mammalian cell culture as an alternative host to chicken eggs for virus replication. The first clinical trial of this new flu cell culture vaccine was conducted in Germany in 2002 and, in all, six successful clinical trials involving more than 3 000 people have been completed to date.

Dispensing with eggs in production also promises benefits to people who are allergic to eggs. Currently, strains of seed virus used in seasonal influenza vaccine are selected partly because of their ability to grow well in eggs. This egg adaptation won t be needed with cell culture-based influenza vaccines, which could translate into better efficacy of seasonal vaccines by more closely matching the vaccine with the influenza strain in circulation.

Despite availability of safe and effective vaccines, seasonal influenza causes millions of infections and kills an estimated 250 000 people worldwide every year. Health authorities in many countries are gearing up to increase coverage rates for seasonal flu vaccine, in line with a recommendation from the World Health Organization (WHO) to reach 75% coverage of at-risk groups the elderly and people with chronic diseases by 2010. The US is leading the way, recommending seasonal flu vaccinations for all Americans over the age of 50, children from the age of two months to five years and other at-risk groups, including healthcare workers.

Buoyed by rising demand, sales of seasonal flu vaccine are expected to grow at double-digit rates over the next five years. Production capacity is also expected to rise sharply by 2009 yet the WHO acknowledges that the projected rise in capacity for seasonal flu vaccine won t reach levels sufficient to serve the worldwide population in case of a pandemic.

Pandemic Preparedness

Clearly, cell culture technology represents a potentially critical tool to boost production capacity, and thereby help to reduce the current gap between potential vaccine demand and supply anticipated during an influenza pandemic. The WHO s latest action plan for a global influenza pandemic warns that potential vaccine supply today is several billion doses short of the amount needed to provide protection to the global population.

During the 20th century, there were three pandemics, or simultaneous worldwide epidemics of influenza. The 1918 Spanish flu killed more than 20 million people. Subsequent pandemics in 1957 and 1968 were less severe but also killed millions around the globe.

A new influenza strain, known as H5N1, is spreading through bird populations in Asia, Africa and Europe. Only 244 human cases have been recorded so far, but chillingly, the fatality rate has been more than 50%. Though avian flu remains primarily an animal disease, if the virus develops the capacity for sustained, efficient human-to-human transmission, it could spread quickly around the globe.

Novartis Vaccines has long been in the front ranks of global pandemic preparedness. In 1999, the division was the first manufacturer to successfully test an experimental vaccine against a variant of the H5N1 influenza virus following the initial outbreak of avian flu in Hong Kong. Ironically, because the H5N1 strain that caused the outbreak was lethal to the egg cells that are needed in egg-based production to support virus replication, Novartis Vaccines was forced to use a closely related H5N3 strain to produce its vaccine.

That initial H5 vaccine also included a proprietary adjuvant called MF59. An adjuvant is a substance added to a vaccine to boost the body s immune response against the vaccine s active constituent, called the antigen. In 2003, a follow-up study showed that the adjuvanted H5 vaccine from Novartis also offered cross-protection against H5N1 strains that have circulated across Asia since the initial Hong Kong outbreak.

Importantly, the use of an adjuvant could provide effective protection at lower doses than nonadjuvanted vaccines, potentially enhancing production capacity, and supply, in the event of a pandemic. The WHO has

proposed clinical studies of H5N1 vaccines including MF59 and other adjuvants with a proven safety record in humans as part of its global pandemic action plan.

The Novartis cell culture-based pandemic vaccine is still in preclinical development but clinical trials are expected to begin this year. In Europe, Novartis was one of several vaccine producers in 2006 to file mock-up, or stand-by registrations for a pandemic vaccine that would enable the companies to begin production immediately if the WHO declares a pandemic. Novartis has also submitted a dossier to the European Medicines Agency (EMEA) for a H5N1 pre-pandemic vaccine that could be sold freely to private individuals and companies, in addition to governments and other payors.

Meanwhile, Novartis Vaccines has received orders from the US and UK to supply pre-pandemic H5N1 avian influenza vaccine in some cases containing MF59 adjuvant for national stockpiles.

We continue to work closely with regulatory agencies in Europe and North America, and we expect to have much more visibility regarding a pandemic, or pre-pandemic, vaccine in 2007, Dr. Reinhardt says. Together with other companies, we aim to make it possible for the public to obtain voluntary vaccination with a potential pandemic strain, in addition to the normal seasonal flu vaccinations.

Turning Point

Novartis Vaccines also is a world leader in the battle against meningococcal meningitis. According to the WHO, an estimated 500 000 cases, and 50 000 deaths from meningococcal meningitis are reported each year.

But it is a disease that casts a shadow far beyond what this incidence would suggest, says Peter Dull, M.D., Team Leader, Clinical Research, Development and Medical Affairs, at Novartis Vaccines. It strikes infants, and adolescents and young adults at the beginning of their productive lives in their prime. And it strikes in an overwhelming fashion, Dr. Dull adds.

Sometimes, meningococcal meningitis can lead to death only hours after the onset of symptoms, despite prompt treatment with antibiotics. A large proportion of people who survive meningococcal meningitis suffer major complications, such as neurological damage or amputations.

And the disease has epidemic potential, causing increased risk among people who come in close contact to someone with the disease. In sub-Saharan Africa, major epidemics are common and constitute a major public health threat. In developed countries, outbreaks occur unpredictably and while the UK and Australia have introduced nationwide vaccination programs against Neisseria meningitidis serogroup C (MenC), epidemics caused by N. meningitidis serogroup B (MenB) have occurred in countries ranging from Norway and New Zealand to the Normandy region of northern France.

One Novartis vaccine is already in use against a strain of MenB found only in New Zealand. Since the launch of the vaccine in 2004, the incidence of MenB disease in New Zealand has fallen by more than 80%.

A Novartis conjugate vaccine providing simultaneous protection against the A, C, W and Y strains of N. meningitidis has advanced to Phase III clinical trials. If trials are successful, the new MenACWY vaccine would be the first approved by regulators in major countries to treat infants and young children less than 11 years of age, a particularly vulnerable group which accounts for a majority of bacterial meningitis cases in the US every year.

In addition, a vaccine offering protection against most strains of MenB has advanced to Phase II clinical trials and, if successful, could represent a turning point in the way vaccines are discovered and developed. This universal MenB vaccine is a prototype for use of genomics for vaccine development a radically new approach called reverse vaccinology, pioneered by scientists at Novartis Vaccines.

Since the days of Louis Pasteur, vaccine development has been based on growth and inactivation of microorganisms that cause disease. But reverse vaccinology relies as much on computers as Petri dishes.

In 1997, Rino Rappuoli, Ph.D., research director at Novartis Vaccines, convinced maverick American gene hunter Craig Venter and the Institute for Genomic Research (TIGR) to sequence the genome of N. meningitidis. Searching the genome sequence for similarities to known genes, researchers uncovered dozens of novel targets. The whole scientific community working for 50 years had only found about a dozen antigens to use in a potential MenB vaccine, Dr. Rappuoli says. Using reverse vaccinology, we identified more than 90 antigens within 18 months.

That list of candidate antigens was narrowed to five finalists which have been combined into a multi-component vaccine. In tests, the universal MenB vaccine has shown capacity to kill more than 75% of MenB strains, a dramatic improvement over the best previous vaccines, which achieved coverage of about 20%. With clinical testing still at an early stage, Dr. Rapuoli cautions that it s premature to predict the long-term

utility of reverse vaccinology in providing new generation vaccines. But we believe we will have a universal MenB vaccine on the market in the next five years, he says.

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SANDOZ

Integration of Hexal and Eon Labs acquired in mid-2005 largely completed to create world s second-largest generics company based on sales. New product launches, differentiation through difficult-to-make generics and leading positions in key markets driving growth.

Net sales advance 27% (+25% lc) to USD 6.0 billion, benefiting from good underlying retail generics sales, particularly in the US, Eastern Europe and Russia.

Operating income more than doubles thanks to new product launches, strengthening positions in leading markets, and contributions from Hexal and Eon Labs.

Strengthening leading positions in fast-growing markets particularly the US and Eastern Europe as new product launches lead to market share gains. Leadership position in Germany maintained in a tough market.

Differentiating Sandoz against the competition through success in difficult-to-make generics and innovative product applications. Particular focus on applying new technologies, such as skin patches and inhalation devices.

Pioneer US and European approvals of *Omnitrope* as the first follow-on version of a previously approved recombinant biotechnology drug. Several similar projects are being developed to further transform the use of generics.

SANDOZ

KEY FIGURES

(In USD millions unless indicated otherwise)

	2006	**2005**
Net sales	**5 959**	4 694
Operating income	**736**	342
Research and development	**477**	434
Research and development as % of net sales	**8.0**	9.2
Free cash flow	**876**	685
Net operating assets	**13 464**	12 715
Additions to property, plant & equipment[1]	**264**	212
Number of associates at year-end	**21 117**	20 066

1 Excluding impact of business combinations

NET SALES AND OPERATING INCOME

(Index: 2002 = 100%)

1 Not adjusted for new IFRS accounting rules
2 Pro forma adjusted for new IFRS accounting rules

NUMBER OF PRODUCT LAUNCHES 20061

1 Launch definition based on new molecules (US: ANDAs)

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SANDOZ

Approval of *Omnitrope* in Europe and the US as the first follow-on version of an approved recombinant biotechnology medicine underscores the commitment and tenacity of Sandoz as it lives its strategy focusing on difficult-to-produce generics. With additional follow-on proteins under development in Sandoz labs, *Omnitrope* could be just the beginning.

Novartis achieved a major milestone in the first half of 2006 when European Union regulators and the US Food and Drug Administration approved *Omnitrope*, the company s recombinant form of human growth hormone, as the first follow-on version of a previously approved recombinant biotechnology medicine.

Follow-on recombinant proteins also known as biosimilars are subsequent versions of biological reference medicines that are not protected by patents. In coming years, a spate of biological drugs will lose patent protection and competition from biosimilars could help governments and other healthcare payors lower their costs, freeing resources for innovative drugs and providing an indirect stimulus to innovation.

Novartis is uniquely positioned in a healthcare market that faces intensified cost containment pressures due to increasing demand for drugs and services from an aging population, says Daniel Vasella, M.D., Chairman and Chief Executive Officer of Novartis.

We need to be able to offer truly differentiated innovative therapies that address unmet medical need. But patients and payors also should have access to less expensive generics, once innovator drugs have lost their patents. Generics actually drive innovation: knowing that innovative drugs have finite life cycles forces companies to innovate.

Sandoz, the generic pharmaceuticals division of Novartis, lives that vision as the first company to take advantage of the reg-ulatory pathway charted by the EU to allow approval of biosimilars.

By contrast, approval of *Omnitrope* in the US culminated a seven-year process where Sandoz worked in close collaboration with FDA officials to clarify issues and uncertainties then showed tenacity at critical moments when the process reached an apparent impasse.

The approval of *Omnitrope* shows the science is there to move forward on approval of follow-on biologics through abbreviated applications, says Andreas Rummelt, Ph.D., Head of Sandoz and member of the Executive Committee of Novartis. It shows that regulators are comfortable approving these products through an abbreviated process. And the *Omnitrope* case underscores the commitment and perseverance of Sandoz in making sure these products move forward, and increase access to treatment for whole sections of the patient population.

Biosimilars are a key component of Sandoz strategy. Development and marketing of difficult-to-produce generics is a dynamic and profitable complement to the Division s broad portfolio of more than 840 active ingredients, available in more than 5 000 dosage forms and marketed through a global network stretching across more than 100 countries.

Biosimilars are the epitome of difficult-to-produce products and Sandoz has more than 25 years of experience in production of biological medicines. For microbially expressed recombinant proteins produced using bacteria and yeast the Sandoz

facility in Kundl, Austria is one of the biggest development and manufacturing sites in the world, says Joerg Windisch, Ph.D., Head Technical Development and Clinical Manufacturing for Biopharmaceutical Operations.

Though Sandoz manufactures more than a dozen recombinant proteins on behalf of other companies, that pedigree isn t known because of confidentiality agreements with customers. So far, *Omnitrope* is the only biosimilar product developed and produced in Kundl that is being sold under the Sandoz name, Dr. Windisch adds.

Hatch-Waxman Act

There are parallels between regulatory issues facing biosimilars today and the rules that existed for traditional chemical drugs before legislation was passed in the US during the 1980s, creating the modern generics industry. At that time, patents had expired on a large number of prescription medicines, but no simple, or abbreviated, regulatory pathway had been defined for approval of generic copies.

The Hatch-Waxman Act, passed in 1984, contained two sets of changes. First, the new law provided patent-term extensions for innovator drugs, adding several years to patent protection to offset time spent during the FDA review process and the clinical testing phase.

But at the same time, Hatch-Waxman eliminated duplicative testing requirements for generic products, enabling manufacturers of generic pharmaceuticals to obtain FDA approval more quickly once the patent on an innovator product had expired. Generic manufacturers also were allowed to file abbreviated new drug applications based on development programs designed to prove bio-equivalence with the innovator medicine. Those changes dramatically shortened the average time between patent expiration and entry of the first generic to less than three months, from more than three years previously.

Sandoz believes that rigorous scientific criteria should be consistently applied to the approval process for all follow-on biotechnology medicines. Unnecessary duplication of animal studies and human clinical trials should be avoided, however, so that resources are not wasted that could otherwise be invested in innovation.

Biotechnology medicines are produced in living organisms, altered by recombinant technology. But by using advanced product development, analytical methodologies and manufacturing processes, Sandoz can manufacture biosimilars designed to have the same quality, efficacy and safety characteristics as the reference product.

Sophisticated analytical tools used today are more powerful than those available at the time when reference products were approved. Characterizations of molecules that weren t possible scientifically a decade ago are commonplace today, Dr. Windisch says. And Sandoz and Novartis have been part of that advance of science all the way.

Patient Safety Is Paramount

The manufacturer of a biosimilar eliminates some requirements of a conventional new drug application by establishing the bridge between the reference medicine and its own product. Streamlined requirements for clinical trials and the opportunity for competition once the originator drug has lost patent protection translate into lower prices for biosimilar products.

Above all, patient safety remains paramount for Sandoz and Novartis. From the outset of *Omnitrope* development in 1997, the medicine was tested in eight Phase III studies over a period of six years, involving more than 250 patients in five European countries. Safety and efficacy data from the studies conform to those of the reference product.

Omnitrope still had a circuitous route to market and was forced to overcome repeated legal hurdles in both Europe and the US. Initial approval in 2004 came in Australia, where *Omnitrope* was launched a year later for treatment of growth disorders in children.

But the first regulatory application to the European Medicines Agency (EMEA), the EU s main medical regulator, was submitted much earlier, in May 2001. *Omnitrope* received a positive review by EMEA s scientific committee two years later yet the EU decided not to approve *Omnitrope* in November 2003, for reasons relating to the approval pathway.

Sandoz filed suit in an EU Court in January 2004, contesting that negative decision on *Omnitrope* and resubmitted the regulatory application with additional clinical data in July 2004. At the beginning of 2006, EMEA s scientific committee once again recommended approval of *Omnitrope*.

This time, the European Commission followed EMEA s advice, and in March granted marketing authorization in all 25 EU member states. By year-end, *Omnitrope* had been launched in four EU markets, Germany, Austria, the Netherlands and the UK with plans to launch the product in additional EU countries during the first half of 2007.

In the US, Sandoz worked in close consultation with the FDA for several years to prepare an abbreviated application for *Omnitrope*. That application was submitted in July 2003. But a year later, FDA announced that while there were no deficiencies in the application, the agency was unable to reach

a decision on whether to approve *Omnitrope*. In September 2005, Sandoz filed a lawsuit, seeking to compel the FDA to act. In April of 2006, the US District Court for the District of Columbia granted summary judgement in favor of Sandoz, requiring the FDA to issue a decision on the *Omnitrope* application. On May 31, 2006, the FDA approved *Omnitrope* and by year-end it had been made available to US patients.

After working cooperatively with the FDA throughout the process, Sandoz felt compelled after many meetings and much correspondence to bring the lawsuit, Dr. Rummelt adds. Let s be very clear: the lawsuit was not to force an approval. Unfortunately, at a key point the process broke down and we sued to get it back on track and ensure FDA made the decision it was obligated to make, within the statutory timeframe.

While approvals of *Omnitrope* represent a breakthrough for biosimilars, major hurdles remain before regulatory pathways are comprehensively defined for all recombinant biological medicines. In the future, for example, the EU plans to assess applications for biosimilars on a case-by-case basis. In the US, *Omnitrope* was approved under a regulatory category called 505(b)(2), but the majority of recombinant protein medicines currently on the market were approved through a different legislative pathway, the Public Health Services Act (PHS). An abbreviated pathway for biosimilars comparable to the one used for *Omnitrope* hasn t yet been defined for reference products approved under the PHS.

Another key issue is substitution by pharmacists, which is widely allowed for generic versions of traditional chemical drugs. The possibility to substitute varies from country to country and at present there is no specific guidance on substitution of biopharmaceutical reference products by biosimilars. Sandoz believes in substitution but we understand that it will take time before substitution of biosimilars is widely accepted, Dr. Rummelt says.

Late last year, however, legislation was introduced in the US Congress that would authorize the FDA to approve abbreviated applications for biosimilars, without unnecessarily repeating expensive clinical trials. The Access to Life-Saving Medicines Act establishes a rigorous case-by-case scientific process for approving biosimilars to ensure they are as safe and as effective as brand name counterparts. Recent approvals by FDA of (biosimilar products) like *Omnitrope* show that this approach is scientifically feasible, the bill s sponsors said.

Sandoz is working constructively with other members of industry to assure that the regulations necessary to bring PHS reference medicines to the market under abbreviated applications will be put in place for the future.

CONSUMER HEALTH

OTC and Animal Health lead the performance and improve their global rankings thanks to strategic brands, expansion in key markets and targeted acquisitions.

Excluding Medical Nutrition, net sales advance 8% (+8% lc) to USD 6.5 billion, thanks to double-digit expansions in OTC and Animal Health.

OTC becomes the world s No. 4 OTC company based on net sales, moving up from No. 6. Strategic brands such as *Voltaren, Theraflu* and *Lamisil* deliver excellent growth, with market share gains in key countries.

Animal Health continues to grow faster than the market, moving up three positions and now ranking No. 5 in its industry. Growth comes from companion animal business and record performance by the US farm animal business.

Gerber is supported by the launch of innovative new toddler products in the US, where it is the leading baby nutrition company.

CIBA Vision successfully restarts global distribution of lens care supply materials.

Discontinuing Consumer Health operations comprise Nutrition & Santé, divested in February 2006, and Medical Nutrition business, to be divested to Nestlé for USD 2.5 billion in 2007.

CONSUMER HEALTH

KEYFIGURES CONTINUING OPERATIONS
(In USD millions unless indicated otherwise)

	2006	**2005**
Net sales	**6 540**	6 049
Operating income	**1 068**	952
Research and development	**288**	270
Research and development as % of net sales	**4.4**	4.5
Free cash flow	**778**	811
Net operating assets	**4 122**	4 433
Additions to property, plant & equipment[1]	**222**	233
Number of associates at year-end	**17 658**	16 831

1 Excluding impact of business combinations

NET SALES AND OPERATING INCOME CONTINUING OPERATIONS

(Index: 2002 = 100%)

1 Not adjusted for new IFRS accounting rules
2 Pro forma adjusted for new IFRS accounting rules

NET SALES BY REGION CONTINUING OPERATIONS

CONTINUING AND DISCONTINUING CONSUMER HEALTH OPERATIONS

CONSUMER HEALTH

Sales growth at the Novartis Animal Health Business Unit has outpaced the global market for three consecutive years fueled by successful veterinary versions of human medicines. It s a major synergy for Novartis and a competitive edge as Animal Health steadily improves its global ranking in a fragmented, but expanding industry.

El Pomar is a nine-year-old Labrador retriever, trained as a service dog for its quadriplegic owner, Jim Pearson.

Mr. Pearson and El Pomar have been together for seven years. During much of that time, however, the dog suffered from atopic dermatitis, a canine skin allergy with symptoms ranging from scratching, hair loss and secondary infections to unpleasant odor. El Pomar responds to dozens of commands but Mr. Pearson found himself constantly repeating two negative ones Leave it and Don t to prevent the dog from scratching or biting sores on its skin.

We ve only been apart one day in seven years, Mr. Pearson says. His happiness is my happiness and I d do anything for him.

Mr. Pearson tried virtually every therapy available but none provided more than temporary relief for El Pomar. Finally, a canine dermatologist ran a gamut of tests and recommended treatment with *Atopica*, an innovative medicine from Novartis Animal Health.

Within days of starting treatment, El Pomar stopped scratching, for the first time in years. A month later, the dog was off shots and steroids and remains itch-free today, Mr. Pearson says, thanks to one *Atopica* capsule every other day.

Atopica, a veterinary medicine for canine atopic dermatitis, contains the same active ingredient as *Neoral*, a Novartis medicine that also is approved for treatment of severe atopic dermatitis in humans. Like human allergies, canine atopic dermatitis is a life-long condition that can be controlled, but not cured. Veterinarians estimate that one dog in seven is afflicted with the disorder.

Atopica selectively targets specific immune cells to block the allergic response that causes the dog s scratching and other symptoms. Sales of the medicine rose more than 20% during 2006 and future prospects are upbeat. With a further simplification of the diagnosis, more veterinarians are expected to adopt *Atopica* to provide relief to the dogs and their owners.

Atopica is one of several human medicines from Novartis from painkillers to cardio-renal medications that have been successfully developed and registered for veterinary use. Novartis Animal Health has significantly outpaced growth of the global market for three consecutive years, fueled in part by successful versions of human-to-veterinary switches.

With research centers in Switzerland, the US, Canada and Australia, innovation at Novartis Animal Health covers companion animals, as well as food animals, including fish. Our success is based on innovative products that meet the evolving needs of our customers, says George Gunn, Head of Novartis Animal Health.

Developing veterinary formulations of medicines originally discovered for human indications will remain a valuable synergy for the Novartis Group, and a key competitive strength for Animal Health as we continue to strengthen our global position in a fragmented, but expanding industry.

Close Cooperation

While *Atopica* is approved for similar indications in humans and dogs, prescription medicines often have different activity profiles in different species. A drug that is effective for humans may not be useful or not safe for use in pets or vice versa.

The search for potential switch candidates at Novartis Animal Health focuses primarily on diseases afflicting the heart or kidney, where the human form is similar to that found in dogs and cats. Pain management is another priority indication.

Convenience of administration is a crucial attribute for potential veterinary medicines. *Deramaxx*, a painkiller from Novartis used widely to treat osteoarthritis in dogs, is available as a chewy, beef-flavored tablet. The development pipeline at Novartis Animal Health includes other novel formulations with flavors and textures that ease administration. Moreover, innovative topical medicines can be delivered by placing a few drops onto the skin of an animal.

Whenever possible, we look for ways to make it easier for owners to administer the medicine, says Peter Wells, Ph.D., Head of Research and Development at the Animal Health Business Unit.

Dr. Wells and the Development team work closely with scientists at the Novartis Institutes for BioMedical Research as well as other Novartis divisions. Certain anti-infectives marketed by Novartis Animal Health were discovered by researchers at Sandoz, but later developed exclusively for veterinary applications. We also have a number of projects in the development portfolio that have come out of cooperation with the Pharmaceuticals Division, Dr. Wells adds. We see real opportunities for the future.

From Chronic Pain to Separation Anxiety

Fortekor is a veterinary formulation of benazepril hydrochloride, the active ingredient in *Cibacen/Lotensin*, an ACE inhibitor from Novartis approved to treat people with high blood pressure, heart failure and chronic renal disease. Dogs and cats develop both heart disease and kidney disease, though the causes of their disorders are different than in humans. So it seemed logical to explore possible veterinary applications for benazepril.

When we started development of a veterinary version of benazepril, nobody was sure if it would work, recalls Jonathan King, Ph.D., International Project Leader for Development at Novartis Animal Health. Subsequent testing, however, showed that *Fortekor* was effective, and well tolerated, in both dogs and cats.

The big cardiovascular indication in dogs is chronic heart failure where ACE inhibitors already were the standard of care for humans, Dr. King says. *Fortekor,* however, is the only ACE inhibitor approved to date for veterinary use in cats to treat chronic renal insufficiency. *Fortekor* is very well tolerated, Dr. King adds.

Deramaxx, the painkiller launched by Novartis Animal Health in 2002, has been prescribed by more than 14 000 veterinary practices to treat chronic pain associated with osteoarthritis and postoperative pain in dogs. The first drug in the so-called coxib class approved to date by the US Food and Drug Administration for veterinary use, *Deramaxx* was licensed in by Novartis Animal Health largely because its pharmacokinetic profile made the compound more suitable for use in dogs than other coxibs, Dr. King says.

A further attraction of *Deramaxx* was clinical data in humans demonstrating that coxibs reduce the incidence of gastrointestinal ulcers, compared to treatment with non-selective nonsteroidal anti-inflammatory drugs (NSAIDs). That s what generated our interest in *Deramaxx* from the start, Dr. Wells says.

Osteoarthritis is the most common cause of chronic pain in dogs and as many as one in five adult dogs is afflicted with pain severe enough to make it difficult to jump, climb stairs, or even get in and out of cars. While there is no cure, routine screening by veterinarians is important for early detection of the disorder. And careful management can control pain and improve a dog s quality of life.

Another successful switch is *Clomicalm*, the veterinary version of the human antidepressant *Anafranil* originally discovered by Novartis. *Clomicalm* is the only medication approved for the treatment of separation anxiety in dogs. Dogs with separation anxiety are often well behaved when people are present but become anxious when left alone, which can lead to chewing and house soiling. Punishment by frustrated owners often aggravates the problem because dogs with the disorder can t control their behavior. *Clomicalm* is used together with behavioral training to help relieve anxiety, making it easier for a dog to learn new, positive behaviors. Therapy should only be undertaken by veterinarians familiar

with treatment of behavioral disorders.

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CORPORATE CITIZENSHIP

Corporate Citizenship at Novartis rests on four pillars: Commitments to Patients; to Our People; to Health, Safety and Environment (HSE); and to Ethical Business Conduct.

Treatments worth USD 755 million were contributed through access-to-medicine programs in 2006, reaching 33.6 million patients in need.

Novartis reduces average treatment price of *Coartem* to one US dollar, subsidizing access to this leading antimalarial medicine. Deliveries quintupled in 2006 to 62 million treatment courses.

Novartis named the healthcare sector leader in the Dow Jones Sustainability Index (DJSI), which tracks the performance of companies in terms of corporate sustainability.

Novartis included in the FTSE4Good index and also rated a top sustainability performer, with a triple-A score, in the 2006 Global Pharmaceutical Sector Report by Innovest.

Business Week magazine rates Novartis one of the 50 most valuable brands worldwide and across all industries.

Novartis named by Barron s magazine as one of the 25 most respected companies worldwide, while Fortune magazine lists Novartis among the world s 50 most admired companies.

KEY PERFORMANCE INDICATORS

Indicator[1]	2006		2005		2004		2003		2002	
Economic										
Group net sales in USD billions	**37.0**		32.2		28.2		24.9		20.9	
Group net income in USD billions (% of Group net sales)	**7.2**	**(19)**	6.1	(19)	5.6	(20)	4.9	(20)	4.7	(23)
Research & Development in USD billions (% of Group net sales)	**5.4**	**(15)**	4.8	(15)	4.1	(14)	3.7	(15)	2.8	(14)
Purchased goods and services[2] in USD billions (% of Group net sales)	**17.9**	**(48)**	15.7	(49)	13.0	(46)	11.0	(44)	9.1	(44)
Net value added (NVA) in USD billions (% of Group net sales)	**18.1**	**(49)**	15.7	(49)	14.9	(53)	13.7	(55)	12.5	(60)
to associates in USD billions (% of NVA)	**9.1**	**(51)**	7.9	(51)	7.0	(47)	6.3	(45)	5.1	(41)
retained for future growth in USD billions (% of NVA)	**5.2**	**(29)**	4.1	(26)	4.3	(29)	4.3	(31)	3.3	(26)
to authorities in USD billions (% of NVA)	**1.5**	**(8)**	1.3	(8)	1.3	(9)	1.2	(9)	1.1	(9)
to financial institutions in USD billions (% of NVA)	**0.3**	**(1)**	0.3	(2)	0.3	(2)	0.2	(2)	1.6	(13)
to shareholders/dividends in USD billions (% of NVA)	**2.0**	**(11)**	2.1	(13)	2.0	(13)	1.7	(13)	1.4	(11)
Social										
Number of associates (headcount)	**100 735**		90 924		81 392		78 541		72 877	
Resignations, separations, hiring (% of associates)	**8, 4, 19**		8, 4, 16		7, 3, 15					
Number of associates trained on Code of Conduct (e-learning courses)[3]	**14 574**		33 000							
Cases of misconduct reported	**651**		442	4	410	5				
Cases of misconduct substantiated	**228**		142	4	204	5				
Dismissals/resignations (related to misconduct)	**130**		78	4	107	5				
Access to Medicine[6]: value in USD millions	**755**		696		570		371		255	
Access to Medicine[6]: patients reached in millions	**33.6**		6.5		4.25		2.76			
Number of suppliers informed (turnover more than USD 10 000)	**42 200**		39 000		30 000					
Number of suppliers to confirm key standards (self-declaration)	**8 600**		5 500		4 600					
Number of suppliers audited (including labor standards)	**92**		55		5					
Health, Safety & Environment[7]										
Lost time accident rate [accidents per 200 000 hours worked]	**0.40**	**(8)**	0.44	(9)	0.48		0.7		0.71	
Resources										
Water use [million m^3]	**90.1**		91.5		86.4		92.6		89.9	
Energy [million GJ]	**18.0**		16.9		16.3		16.0		15.7	
Emissions										
Emission CO_2/GHG, Scope 1: Combustion and processes [1000 t]	**488**		458		470		477		471	
Emission into Air: hal- and nonhalogenated VOCs [t]	**1 769**		1 407		1 317		1 676		1 736	
Total Operational Waste [1000 t]	**303**		288		228		224		251	

1 Data reported in the Economic and Social sections above (except Number of suppliers items) include the entire Group;
Data reported in Number of suppliers items and Health, Safety and Environment section (except Lost time accident rate) exclude the new Vaccines and Diagnostics Division

2 Element of indirect economic contributions

3 Other mandatory courses: Human Rights, E-compliance and Records Management

4 From April to December 2005

5 From October 2003 to September 2004

6 See table page 50

7 Details see: www.novartis.com/hse

8 Excludes Hexal/Eon Labs and Vaccines and Diagnostics

9 Excludes Hexal/Eon Labs

CORPORATE CITIZENSHIP

Novartis places a strong emphasis on Corporate Citizenship because it is the right thing to do. But sustainable Corporate Citizenship initiatives are also good for business, increasing trust in the communities where we are located and with governments that regulate our operations.

Novartis has a longstanding commitment to active engagement in society, reflected in our Policy on Corporate Citizenship and its implementation through management processes across the Group. We pledge to recognize the interests of stakeholders, and the public at large, in our social behavior and the health, safety and environmental impacts of our business.

We seek to engage in an active dialogue with diverse stakeholder groups through community panels, focus groups and collaborations with patient advocacy organizations.

While remaining externally focused, we are building a reputation as an exciting place to work, where people can realize their professional ambitions. We strive for a motivating environment where creativity and effectiveness are encouraged and where cutting-edge technologies are applied.

Novartis places such a strong emphasis on Corporate Citizenship because it s the right thing to do. But sustainable Corporate Citizenship initiatives are also good for business. For a company to be successful, relationships with the communities it serves must be based on trust and good will. By doing the right thing, we are trusted by communities, and by the governments that give us an opportunitiy to operate, to innovate and to grow.

A strong Corporate Citizenship program reduces business risks and provides a competitive advantage by enhancing access to markets and customers for Novartis products and associates. Efficient use of energy and other natural resources saves money and at the same time mitigates environmental risks. Neighboring communities also benefit from sound stewardship of the environment.

Our Corporate Citizenship approach is based on our values and reflects our commitment to the United Nations Global Compact. The Global Compact asks companies to embrace, support and enact a set of core values in the areas of human rights, labor standards, the environment and efforts to combat corruption.

Our Corporate Citizenship Policy is supported by specific guidelines, covering material areas such as working conditions, business ethics, human rights and third-party management. Novartis fosters a culture where associates are expected to behave not only lawfully, but ethically. Besides complying with laws and regulations that govern our operations in more than 140 countries around the world, Novartis associates uphold the ideals and values defined in our Code of Conduct and Corporate Citizenship Policy, and in related policies and guidelines.

Corporate Citizenship at Novartis is firmly anchored at the Board level. The Audit and Compliance committee is responsible for auditing Corporate Citizenship implementation and compliance. The Executive Committee of Novartis is responsible for implementation and has established a steering committee which has overall responsibility for Corporate Citizenship Policy and guidelines.

The operating units within each of our Divisions establish appropriate structures, and allocate sufficient resources to reasonably meet the expectations of our Corporate Citizenship Policy. Through management reviews, as well as internal and external audits and assurances, we measure progress and verify compliance with the Policy, related guidelines and regulatory requirements.

Senior managers within Novartis are responsible for implementing these guidelines and performance is measured. Progress against our objectives is presented each year in our annual report and in an online report in accordance with the guidelines of the Global Reporting Initiative.

COMMITMENT TO PATIENTS

Through its uniquely broad portfolio of medicine-based businesses, Novartis has pioneered an array of models to enhance both affordability and access to treatment. We recognize that access to our medicines usually favors people who live in affluent, developed societies but we strive to be leaders and partners in finding solutions to help close the access gap.

Novartis endorses the right to health. We believe that each sphere of society government, medical professionals, individuals and business has a role to play in support of the right to health.

Our most important contribution to society and to the fulfillment of the right to health is to discover, develop, produce and distribute high-quality healthcare products, targeting unmet medical need. Our commitment to patients leads us to maintain one of the highest levels of research investment among top-tier pharmaceutical companies. Our drug development program has been one of the most productive in the global pharmaceutical industry in recent years.

We recognize, however, that access to our medicines clearly favors people who live in affluent, developed societies. We want to be leaders and partners in finding, and implementing, solutions to help close the access gap.

Thanks to our business results, we are able to help where there is immediate need with products, funds and other supportive measures, on a case-by-case basis. Last year, we were able to contribute products valued USD 755 million and reach more than 33 million patients in need through access-to-medicine projects around the world.

The Novartis Institute for Tropical Diseases based in Singapore is bringing the ongoing revolution in biomedical science and technology to bear on diseases of the developing world, initially tuberculosis and dengue fever, but now also malaria.

We provide medicines at no profit or sometimes free to patients in the developing world afflicted by diseases such as leprosy, malaria and tuberculosis. We also offer discounts and support programs to patients without medical insurance or other financial resources in industrialized countries.

For more than 25 years, the Novartis Foundation for Sustainable Development (NFSD) has made significant contributions to the health of people in need in the developing world. The NFSD supports patient-education programs against malaria, and is developing new patient-centered daily-observed-treatment systems for tuberculosis.

Inner Compass

Some nongovernmental organizations argue that drug prices and patents are the principal obstacles to access to medicine in the developing world. Yet the problem is much more complex involving virtually all aspects of poverty.

Novartis and other healthcare organizations strongly assert that medicines alone cannot solve the underlying problems of poverty, inadequate public health services or the lack of healthcare personnel and infrastructure that beset all developing countries. Moreover, weakening intellectual property rights would jeopardize, rather than expand, long-term access to medicines by removing incentives for innovation.

At the Group s biennial research conference last year, Daniel Vasella, M.D., Chairman

and Chief Executive Officer of Novartis, addressed the major trends influencing healthcare today. He acknowledged the challenges Novartis faces in dealing with a diverse array of stakeholders but also described the distinctive strategy Novartis has adopted to enhance both access and affordability through a broad portfolio of medicine-based businesses.

If we look at the outside world with which Novartis is dealing, it s an increasingly complex map of stakeholders, Dr. Vasella said. And expectations of these stakeholders are often contradictory, so we have to make a decision about how we are going to navigate. I think it s extremely important to follow the direction shown by our own inner compass.

Aging of populations, changing lifestyles, rapid economic growth in some emerging markets and the emergence of new infectious diseases potentially including pandemic influenza will create opportunities for future growth but at the same time impose intense cost pressures on healthcare systems.

The core of our business in the healthcare arena is the Pharmaceuticals Division highly innovative medicines to address still unmet medical needs, he added. Sandoz provides high-quality, low-cost medicines to reduce the financial burden for healthcare systems and other payers. Vaccines make sure people don t get sick in the first place, and Diagnostics prevents contamination of blood supply. Rounding out the picture is Consumer Health people taking responsibility for self-medication is important to us.

Pricing: An investment, not just a cost

Pharmaceutical manufacturers do not unilaterally determine the price of drugs. In most European countries, prices must be negotiated with national agencies which set the price based on the cost of existing therapies, overall healthcare impact and benchmarks in other countries. Moreover, price levels for pharmaceuticals, like other goods, depend on the economic ability and willingness of different countries and patients to pay.

Once a prescription medicine leaves the factory, there are markups at each link of the distribution chain, from wholesalers through retail pharmacies resulting in an average markup in the European Union of 30%. As a consequence, pharmacy prices, which are the ones most visible to consumers, vary much more than the ex-factory prices charged by manufacturers.

Novartis believes that healthcare spending is an investment, not simply a cost. Health Technology Assessment (HTA) represents an important tool for governments and other payers to develop mechanisms for evaluating the clinical and cost-effectiveness of medicines and other healthcare technologies. At the same time, however, HTA should not be used as a means to delay or exclude new medicines from reaching patients. To that end, Novartis urges that governments and other healthcare payers conduct HTAs guided by a clear transparent set of key principles.

Novartis is committed to providing timely, accurate and detailed information to governments and other health payers. Indeed, the Group works with external advisors to measure the impact of new therapies using HTA. By taking into account the perspective of payers and patients, Novartis is better able to highlight added value of its products.

Above all, the price of a medicine must always be viewed in relation to the value provided to patients and payers. A study presented at the World Aging & Generations Congress in St. Gallen, Switzerland last year showed that treatment of people with high blood pressure in the US reduced deaths from cardiovascular disease by two thirds between 1950 and 1994.

Without antihypertensive therapy, the study found, an estimated 86 000 excess premature deaths from cardiovascular disease and more than 800 000 hospitalizations for stroke and heart attacks would have occurred.

Treatment of hypertension was highly cost effective, creating USD 10 in value for each dollar spent for American women, and a payback of USD 6 per dollar spent for treatment of American men with high blood pressure.

To demonstrate the value of its medicines, Novartis conducts and supports extensive health economic research. The analysis is often based on large clinical trials but increasingly also real-world outcomes.

A study involving *Diovan*, for example, analyzed claims data from a US pharmacy benefit manager showing treatment outcomes for more than 140 000 patients with hypertension. The study found that patients who received *Diovan* in a usual care setting had better compliance with therapy than people who received either amlodipine or lisinopril, two other antihypertensive medicines. According to the authors, the findings suggest that choice of *Diovan* for chronic drug management of hypertension has the potential to affect patient drug-taking behavior and perhaps longer-term outcomes in a typical real-world setting.

Moreover, in one of the clearest examples yet of the value of a pioneering medicine, Novartis broke new ground with *Gleevec/Glivec*, an innovative treatment for people with chronic myeloid leukemia who were in an advanced stage of the disease, blast crisis or intolerant to interferon. After being designated an orphan drug, *Glivec* was

approved in record time on the basis of uncontrolled trials demonstrating improvements on surrogate outcomes: clearance of cancer cells from the bloodstream and the bone marrow.

Novartis managed to link these outcomes to long-term survival, and demonstrate the cost-effectiveness of *Glivec*. Sir Michael Rawlins, Chairman of the UK s National Institute for Health and Clinical Excellence (NICE), has used *Glivec* as an example for good health-economic analyses, and proof that NICE, a prototype agency for HTA, recognizes the full value of therapies and societal judgment in its appraisals.

For the past 50 years, the research-based pharmaceutical industry has been the only viable model to discover and develop effective treatments for many diseases. The industry and Novartis have contributed novel medicines to improve both mortality and morbidity rates in cardiovascular disease, cancer, diabetes, organ transplantation, gastrointestinal disease and many other disorders. Without such innovations, medicine would not be as effective as it is today, and many patients would suffer and die.

The challenge before the pharmaceutical industry is a difficult one. Companies like Novartis must balance an increased commitment to Corporate Citizenship in developing countries and elsewhere against the demands of investors and financial markets to generate sufficient financial returns on extensive investments in innovation.

Special pricing arrangements that allow prices for individual products to be adapted to the specific need of developing countries offer a solution by providing incentives for research, while at the same time preserving a wider distribution of medicines at an appropriate rate of return. These arrangements, however, must be supported by important safeguards, including provisions to ensure that artificially low prices for medicines offered to developing countries are not used subsequently as the basis for reference prices for drug reimbursement in developed countries. In addition, effective trade controls must prevent re-exportation of such low-priced medicines to affluent markets.

Unique Portfolio

With a unique position among world leaders in innovative medicines as well as generics, Novartis has pioneered a broad array of programs to enhance affordability of treatment.

The generic business highlights another dimension of value. Generic products account for more than half of all prescription drugs consumed in the US and fierce competition among manufacturers shrinks prices to a fraction of what the originator medicine fetched before loss of patent protection.

However, many European nations continue to forgo huge potential savings that competition could deliver. A study by the US Dept. of Commerce three years ago examined drug-price regulatory systems in 11 OECD countries that rely on some form of price controls to limit spending on pharmaceuticals. For patented drugs that were best sellers in the US, prices in other OECD countries were 18% to 67% less than US prices, representing a total of USD 27 billion in reduced sales.

Paradoxically, these same 11 OECD countries also employ regulatory practices that limit competition in generic pharmaceuticals. Higher utilization of generic drugs at lower prices could save up to USD 30 billion annually, according to the Commerce Dept. This range of potential savings suggests that if prices of on-patent drugs were to rise to competitive market levels, then the additional cost to OECD countries could be significantly or fully offset by a more competitive generic market, the study said.

Vaccines are widely regarded as among the most cost-effective interventions in healthcare but they remain underutilized throughout the world. The new Vaccines and Diagnostics Division at Novartis has a broad research program, focusing on major diseases such as pandemic influenza, meningo-coccal disease and HIV/AIDS. But even lesser-known diseases can result in acute unmet medical need.

Last year Novartis Vaccines announced the successful conclusion of a two-year vaccination campaign in New Zealand, the biggest in the country s history, using a meningococcal B vaccine tailor-made for the small Pacific-island nation.

The MeNZB vaccine, developed jointly by Novartis, the New Zealand government and drawing upon earlier work by Norway s Institute of Public Health, halted a 14-year epidemic that struck thousands of New Zealanders, killing more than 200 people and leaving more than a thousand people permanently disabled. The epidemic was caused by a strain of Neisseria meningitidis serogroup B (MenB) found only in New Zealand.

The vaccination campaign ran from July 2004 through June 2006. More than a million people were vaccinated, ranging from infants to adolescents up to 20 years of age. Since the launch of the vaccine, the incidence of MenB disease in New Zealand has fallen by more than 80%.

We set out to end an epidemic by undertaking the largest mass immunization program in New Zealand s history, says Minister of Health Pete Hodgson. We are now seeing dramatic declines in meningococcal B cases. And the rapid decline has given us the

confidence to push ahead with an extension of the campaign.

Still, the limited commercial potential for a vaccine tailor-made for a small country like New Zealand was a major hurdle to the MeNZB project. People questioned the decision to develop this vaccine many times, arguing that there was no money in it. And they were right. We more or less managed to cover our costs, says Rino Rappuoli, Ph.D., Head of Research at Novartis Vaccines.

So this was a philanthropic project but one that also added to our knowledge and helped the field to progress, he adds. We started from scratch and in four years we were eliminating the disease. A program like this normally takes closer to a decade. And we did it without compromising safety. It shows that when public-private partnerships are done the right way, with goodwill and close cooperation, things happen very quickly.

Public-Private Partnerships

In recent years, Novartis has forged a succession of public-private partnerships and not-for-profit initiatives with partners ranging from the World Health Organization (WHO) and the Economic Development Board of Singapore (EDB) to the Medicines for Malaria Venture and the Wellcome Trust. The initiatives target neglected diseases such as leprosy, malaria, dengue fever and tuberculosis. Since the year 2000, for example, Novartis has provided free treatment for all leprosy patients worldwide in a pioneering collaboration with the WHO. More than 4 million people with leprosy have been treated through use of effective multi-drug therapy (MDT) supplied by Novartis.

But the framework for support from Novartis is dynamic and increasingly, these initiatives are evolving as a result of recognition by payers of the value of a therapy, as well as countries rising ability to pay. The clearest example of this evolution to date is patient access initiatives for *Glivec*, the breakthrough, targeted anticancer medicine from Novartis.

When *Glivec* was launched, Novartis also introduced one of the most comprehensive and far-reaching patient assistance programs ever implemented on a global scale to help people who otherwise would not be able to afford treatment. The program has proved successful and in 2006 more than 15 000 people with certain forms of chronic myeloid leukemia (CML) or gastrointestinal stromal tumors (GIST) received treatment under the *Glivec* International Patient Assistance Program (GIPAP). A separate Patient Assistance Program in the US provided treatment for 3 500 patients last year.

GIPAP provides *Glivec* at no cost to eligible patients in developing countries with minimal reimbursement capabilities, and no available generic versions of *Glivec*. Access is provided to patients who are properly diagnosed, not covered by local reimbursement or insurance, and have no other financial resources.

Unlike traditional donation programs, GIPAP is based on a patient-direct model facilitating delivery of *Glivec* to patients by their treating physician. Indeed, local physicians are the cornerstone of the program, selected to participate because of their expertise and willingness to take time from busy schedules to bring treatment to people in need. GIPAP also provides information and referral assistance to patients, their family members and caregivers.

The flexible structure of the access programs makes it possible to maximize effectiveness in different countries. Because GIPAP does not supplement government obligation or insurance, access programs are able to adapt to changing healthcare policies reflecting local conditions, while supporting sustainability over the long term.

In a number of countries, local *Glivec* assistance programs have evolved toward a new shared contribution model. The traditional donation model GIPAP is increasingly being reserved for countries that can t afford to pay.

When we set up GIPAP, we didn t distinguish between very poor countries, which lack sufficient reimbursement capabilities, and emerging economies that have begun to develop reimbursement capacity in pace with rapid economic development, says Stephanie Lassarat, Head Global Patient Access at the Novartis Oncology Business Unit. Our commitment to shared contribution shows that Novartis believes in these emerging countries. We are helping them to bridge the gap, and make innovative therapies broadly available to patients through creative and sustainable public-private collaborations that enhance access to treatment.

Details vary from country to country but shared contribution means that local payers from national healthcare systems to insurers and charities assume a share of the cost of treatment with *Glivec*. Countries supporting expanded access to *Glivec* through a shared contribution model include Hong Kong, Colombia, Tunisia, Ukraine, Cuba and some provinces in China. In Russia, Novartis also continues to support treatment with *Glivec* for some patients in need during a transition period for the country s healthcare system.

Joining forces and dividing up the cost is an important step toward sustainable patient access, Ms. Lassarat adds. And once countries start paying part of the cost, they feel a bigger stake in the success of treatment. This, in turn, is leading to

enhanced interaction between Novartis and healthcare systems in many countries. And we believe shared contribution models can be a trigger for these emerging countries to ultimately broaden reimbursement of very innovative treatments like *Glivec* which are highly cost-effective.

In another major advance, regulatory authorities in Europe and the US approved *Gleevec/Glivec* to help patients afflicted with rare but potentially life-threatening disorders with limited treatment options. The action represented the first time that a regulatory authority has ever simultaneously approved one targeted medicine for so many disorders.

We continue to work on improving access at multiple levels, says David Epstein, Head of Novartis Oncology. You start by bringing a drug to market even though sometimes the therapy can be perceived as having small value in typical Western markets. But access in developed markets can also be hindered by having a restricted label, he adds.

So even if all these additional approvals for rare indications for *Gleevec/Glivec* won t make us all that much money, it means that patients in many countries, particularly in Europe, who previously haven t been able to get treatment through public health systems, will now have improved access.

Changing the Face of Malaria

In collaboration with the WHO and the United Nations Children s Fund (UNICEF), Novartis is changing the face of malaria by providing the pioneering antimalarial medicine *Coartem* on a non-profit basis for public sector use in developing countries where the disease is endemic. In the meantime, with the volume of deliveries still climbing rapidly, Novartis is moving to broaden distribution channels to include recognized international procurement agencies, from the UN s Development Program and Mission Pharma to Crown Agents and the International Dispensary Association, a not-for-profit foundation founded by pharmacists in the Netherlands during the 1970s to supply medicines to developing countries.

In September 2006, Novartis announced a significant reduction in the average price of *Coartem* for public sector use. The dramatic increase achieved in our production capacity plus the compelling need for an inexpensive and highly effective malaria treatment in low-income countries prompted our decision to provide *Coartem* below our costs, Dr. Vasella says. I am very pleased that the WHO and other organizations such as UNICEF and Médecins Sans Frontières can now become even more effective in rolling back malaria.

This price reduction is expected to have the greatest impact on children, who suffer disproportionately from malaria. Nearly 75% of all malaria patients taking *Coartem* are children and adolescents.

In another recent initiative, the Novartis Institute for Tropical Diseases (NITD), the Wellcome Trust, the Economic Development Board of Singapore (EDB) and Medicines for Malaria Venture (MMV) agreed to jointly support research aiming to discover and develop the next generation of drugs to treat malaria. The Wellcome Trust, EDB and MMV a non-profit foundation dedicated to developing affordable new antimalarials will provide funding of approximately USD 20 million for the new research partnership. NITD will manage the program and conduct research jointly with several institutions including the Genomics Institute of the Novartis Research Foundation and the Swiss Tropical Institute.

More than 60 countries 28 in Africa alone have rewritten their national malaria control guidelines in recent years, scrapping older, ineffective medicines and adopting artemisinin-based combination therapy (ACT), the class of medicines spearheaded by *Coartem*. In 2006 Novartis delivered more than 60 million treatments of *Coartem*, a 15-fold rise from the 4 million treatments delivered in 2004. Production capacity for *Coartem* is even higher 100 million treatments and could be utilized if demand exceeds current projections.

The scale-up of production capacity for *Coartem* has been the most rapid increase for any drug I know but especially remarkable for a product provided on a not-for-profit basis, Dr. Vasella says. Effective drugs are available now, but solving the problem of malaria is much more than just a question of drug availability. Malaria-endemic countries are facing a lack of physicians and nurses; the lack of an efficient distribution system and other preventive steps, such as treated bednets against unnecessary infection. Governments, health ministries, international organizations and industry all have roles to play in addressing and resolving this challenge, he adds.

Novartis also is pushing ahead with initiatives such as joint development of a new pediatric formulation of *Coartem* with MMV. Malaria takes a daunting toll among infants and young children in Africa, where a child is estimated to die of malaria every 30 seconds.

At the moment, parents crush adult *Coartem* tablets for young children but because *Coartem* has a bitter taste, infants and young children tend to spit out the medicine. A more palatable pediatric form could improve adherence to therapy and Novartis and MMV are developing a new *Coartem* formulation as a dispersible tablet.

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The price cut announced by Novartis in September 2006 reduced the average price per *Coartem* treatment course to USD 1.00, from USD 1.57 previously. The move reflected cost reductions as well as benefits from economy of scale and underscored the Group s commitment to remove price as a barrier to access to *Coartem*. Nevertheless, the price remains below cost, a potentially significant financial risk for Novartis because costs are dependent on both production volume and the volatile price of raw materials.

There is growing concern about the financial risks manufacturers have incurred to scale-up capacity, and to pay upfront the costs of raw material procurement, without any guarantee that the end product will actually find a market. In Saving Lives, Buying Time, a recent report on the economics of malaria drugs, the Institute of Medicine (IOM), a branch of the US National Academies, describes a chicken-and-egg dilemma surrounding ACT supply and demand. Without an assured market, potential manufacturers will not commit to adequate ACT production, nor will farmers expand the cultivation of Artemisia annua, the source plant. To jump start production, the IOM said, The global community must provide sufficient funds to encourage investments by manufacturers, guarantee purchases of ACTs and generally stimulate a robust world market.

Novartis and its partners, for example, invested more than USD 50 million during 2005 to expand plant and equipment plus an even larger dollar amount to secure raw material supplies. We need something that removes the risk of write-offs from companies so that when we embark on a 14-month production cycle we can be confident of at least covering our costs through binding forecasts or advance purchase commitments, says Silvio Gabriel, Executive Vice President Malaria Initiatives at Novartis. That risk can t be transferred to countries they obviously can t afford it.

Various models are under active discussion from binding multi-year forecasts by the Global Fund, to other forms of market guarantees to put the supply chain on a more predictable basis.

Distribution through the private sector is one of the biggest remaining challenges for the *Coartem* program. The private sector remains the primary source of care for a large proportion of Africa s working poor, particularly in remote rural areas or in countries where the public health system is underdeveloped.

A potential partner for Novartis in private sector distribution is Population Services International, the world s largest social marketing organization, which has expressed an interest in *Coartem* as part of integrated malaria control programs. Other pilot projects are under discussion where subsidies provided by Western donors would enable Novartis to offer *Coartem* at deeply discounted prices.

Tanzania is piloting an innovative private sector distribution system, aiming to strengthen delivery of healthcare products via shopkeepers certified by the government. Staff receive training and are allowed to dispense essential medicines under the status of Accredited Drug Dispensing Outlets.

Novartis remains confident that new partners will help *Coartem* become even more successful. The biggest hurdles in access-to-medicine programs in the developing world usually are funding and finding someone willing to take a financial risk in providing the drugs, Mr. Gabriel says. In the case of *Coartem*, he adds, both funding and the drug are already available so the missing links are sustainable procurement practices and improved processes for transfer of donor funds. Now we are talking about operational things, where countries can help themselves by going fast, using money and medicines effectively and showing positive results.

NOVARTIS FOUNDATION FOR SUSTAINABLE DEVELOPMENT

The mission of the Novartis Foundation for Sustainable Development is to ease conditions of life for the poorest of the poor. Contributions, while focused on health, extend far beyond medical care to shaping new healthcare models.

For more than 25 years, the Novartis Foundation for Sustainable Development (NFSD) has made significant contributions to ease life for the poorest of the poor in the developing world.

NFSD concentrates its efforts on health problems. But its definition of health goes beyond medical care the absence of disease or infirmity to encompass physical, mental and social well-being.

Since the year 2000, Novartis has provided free treatment for all leprosy patients worldwide in a pioneering collaboration with the World Health Organization (WHO). More than 4 million people with leprosy have been treated through the use of effective multi-drug therapy supplied by Novartis. In addition to providing free drugs, however, NFSD has improved access to treatment by helping to change the traditional stigma surrounding the disease, integrate effective diagnosis into public health services and sponsor comprehensive rehabilitation programs in both India and Sri Lanka.

Our focus has always been on doing things differently, says Professor Klaus Leisinger, President of NFSD. We try to find best practice, design pilot programs, and if they succeed we help to expand that model within a country, and in other countries.

Ongoing programs range from support for AIDS orphans in sub-Saharan Africa, and community-based health insurance in Mali, to developing new training technologies for health personnel in the area of Integrated Management of Childhood Illnesses. NFSD also conducts think-tank activities in fields including corporate social responsibility, and human rights and business.

While NFSD is a related party of Novartis, it manages development-related and humanitarian activities independently. Close links with the Group are reflected in the private sector perspective that the foundation often brings to public debate. Access to professional skills within Novartis is another benefit.

In one current example, the Human Resources function at Novartis will assist with an upgrade of operations and management processes planned by the Regional Psychosocial Support Initiative for Children Affected by AIDS, Poverty and Conflict (REPSSI) to expand support for AIDS orphans beyond Tanzania, to a dozen additional countries in southern Africa.

Psychosocial Support for AIDS Orphans

As a consequence of the epidemic of HIV / AIDS sweeping sub-Saharan Africa, more than 12 million children under the age of 18 have lost their father, mother or both parents. The number of orphaned children is expected to rise steadily, reaching 16 million by the year 2010.

Humuliza, a pilot project for AIDS orphans which NFSD has helped to develop in northwest Tanzania, provides a lifeline for more than 2 000 youths. The program aims to help empower the children by providing opportunities for education as well as training in agriculture and other types of employment.

As a result of the successful pilot phase, the project is being scaled up across southern Africa. NFSD and more than 140 nongovernmental organizations sponsoring REPSSI will roll out the Humuliza model in new countries ranging from the Republic of South Africa and Angola to Mozambique and Zambia. REPSSI is also consulting with governments in the region about broader introduction of psychosocial support programs.

Community-based Health Insurance

One of the latest examples of the support NFSD is providing at the local level in developing countries is a pilot program introducing health insurance in 72 remote villages in Mali. Launched by the rural commune of Cinzana in 2003, the insurance program seemed a risky initiative. Previous insurance schemes in the region had collapsed, leaving villagers who had paid premiums without care when they needed it most.

Over the past three years, however, more than 2 000 members have joined the Cinzana insurance program roughly 12% of all residents in the catchment area. The annual premium less than USD 3 covers 60% of the cost of basic healthcare at a local clinic, and a higher 75% of costs when obstetric complications require more sophisticated care at a regional health facility.

A co-founder of the Cinzana program, NFSD provides its local partners with funding, as well as managerial support ranging from planning and financial controlling to marketing. Along with basic health services, the program is stepping up efforts in preventive care including distribution of insecticide-treated bed nets to members.

Cinzana s program has become the biggest single health insurer in Ségou, a region of Mali with two million residents. From 2007, core elements of the Cinzana model will be scaled up and introduced throughout the Segou region, an important step toward creating bigger risk pools capable of financing more costly health interventions that are urgently needed.

NOVARTIS ACCESS-TO-MEDICINE PROJECTS 2006

Project	Objective	Target region	Value (USD millions)	Patients reached
Malaria/WHO1	Provide *Coartem* at cost for public sector use	Africa, Asia, Latin America	179	33 000 000
Leprosy/WHO2	Eliminate leprosy by providing free medications to all patients worldwide, with WHO, through 2010	Global	4	226 000
Tuberculosis2	Donation of fixed-dose combinations	Tanzania, Sri Lanka	3	134 000
Novartis Institute for Tropical Diseases (NITD)3	Discover novel treatments and prevention methods for major tropical diseases; NITD discoveries to be available in poor endemic countries without profit	Developing countries	11	
Novartis Foundation for Sustainable Development3	Work at policy and field level to improve access to healthcare for the world s poorest people	Developing countries	7	95 000
Patient Assistance Programs (PAP)2; excl. *Gleevec/Glivec*	Assistance to patients experiencing financial hardship, without third-party insurance coverage for their medicines	US	129	155 000
Gleevec US PAP2	Within capability of Novartis, continue to ensure access for patients in the US who cannot afford the drug	US	55	3 500
Glivec Global PAP2	Within capability of Novartis, continue to ensure access for patients outside the US who cannot afford the drug	Global (excluding US)	362	15 000
Together Rx Access	Discount program for the uninsured	US	1	15 000
Emergency Relief2	Support major humanitarian organizations	Global	4	
		Total	**755**	**33.6 million**

1 During 2006, Novartis shipped 62 million *Coartem* treatments for public sector use. Of these shipments, an estimated 33 million treatments actually reached patients by year-end, based on preliminary analysis of local distribution. Value of the *Coartem* program in 2006 was calculated using the number of treatments shipped 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 WHO. These payments were received through 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.

2 Ex-factory price to private market

3 Operating costs

COMMITMENT TO OUR PEOPLE

The employer value proposition at Novartis offers an achievement-based culture, intense focus on innovation and the opportunity to work with extraordinary people in a truly global organization. Rapid expansion of operations in China exemplifies how those commitments are being translated into concrete career advancement and development for local managers.

At Novartis, a high-performance, results-driven culture, combined with a steadfast focus on innovation and breakthrough medicines addressing unmet medical need, has been critical to success.

World-class performance is based on three priorities: offering the best products for patients and customers; promoting a fierce competitive spirit among associates; and developing skilled and cohesive teams. Looking ahead, Novartis will continue to concentrate on its medicine-based portfolio protecting health, preventing and treating disease, and improving well-being.

Last year, the Group turned to associates in an attempt to distill the qualities that make Novartis attractive, perhaps even unique, as an employer. Workshops with more than 4 000 associates identified six attributes as the core of an Employer Value Proposition (EVP). The Group s most distinctive features, associates said, ranged from the achievement-based culture, intense focus on innovation, and dynamic growth, to the opportunity to work with extraordinary people in a truly global organization, and to do work that really matters to the health and well-being of humanity.

Novartis is an attractive employer first of all because we are successful, says Juergen Brokatzky-Geiger, Ph.D., Head of Human Resources and member of the Executive Committee of Novartis. Our product pipeline is seen as one of the most promising in the pharmaceutical industry and our growth speaks for itself. But development of associates is a cornerstone of our culture. If you are willing to perform, you have a promising future with Novartis, Dr. Brokatzky-Geiger adds.

The great diversity of nationalities, educational backgrounds, cultures and interests across the Group is an enriching experience that opens up personal as well as professional horizons.

Following up the EVP project, Novartis launched the first, uniform Group-wide climate survey during 2006. In an initial stage, 50 000 associates from the Pharmaceuticals Division worldwide will have a chance to respond via a detailed questionnaire, offered in about 20 languages. Other Divisions are expected to complete the survey by the end of 2007.

China

One example of this commitment to people at Novartis is the China Leadership Development Center introduced three years ago.

Nurturing leaders is a perennial challenge for major international companies but it has assumed added urgency for Novartis in China amid rapid growth in recent years. Ambitious expansion plans include both a new research and development center in Shanghai, and a development and production plant in Changshu, which will begin operations this year.

We aren t just a local player any longer we are an international player in a strategic market, says James Deng, Head Country

Pharma Organization in China. Everyone is watching China and we have to upgrade our talent standard across the board.

It won t be easy. China s explosive economic growth has translated into accelerating management turnover rates, particularly at international companies. According to estimates, annual average turnover is approaching 20% and is even higher for sales executives.

The limited supply of local talent with appropriate skills isn t expected to improve significantly anytime soon. While China produces more than 3 million university graduates per annum, less than 10% have the skills required by an international group like Novartis. At the current rate of economic growth, China will need an estimated 75 000 managers able to assume managerial positions with international firms within five years. But only 5 000 executives with that training and background are available today.

At Novartis operations in China, the annual rate of management turnover is currently running below 15%, reflecting at least in part the rich array of career development programs now available. One key pillar of leadership development is the Beijing International MBA program (BiMBA), a popular MBA program at Peking University tailor-made for Novartis middle managers in collaboration with the China Center for Economic Research.

Another key leadership initiative is the Trailblazer rotation program, enabling senior Novartis sales executives in China to spend 12 18 months in the US, absorbing best practice from American peers. It s a major commitment. These are our best-performing sales managers and it disturbs our business to remove them from their normal jobs for such a long time, Mr. Deng says. But we re building for the future and the exposure these managers are getting in the US will enable them to develop in new directions and perform at an even higher level when they return home.

The first two Novartis cohorts in the BiMBA program comprise almost 200 middle managers, out of the Group s total work-force in China of roughly 2 000 associates. The cohort beginning the BiMBA program in 2007 will be significantly larger than in previous years.

Selection of participants in both the BiMBA and Trailblazer programs is closely coordinated with the global Organization and Talent Review at Novartis. The transparency of that process is an attractive feature of the program to top performers, says Jennifer Jin, Head of Human Resources for the Novartis Pharmaceuticals Division in China.

In China, people traditionally look first at seniority and expect managers who have been with the company longest to get these opportunities, Ms. Jin says. We say this is an opportunity you earn based on performance and high potential and that sends the right message through the organization.

Moreover, by targeting middle managers, the BiMBA program aims to shore up leadership and motivation of managers and associates at levels of the organization that haven t received significant attention in the past. As BiMBA participants improve their management skills and become more mature, they can play a critical role in reducing turnover within their teams, Ms. Jin says.

Because the Novartis BiMBA program is closed to outsiders, course material can be based on actual operations. We all come from some Novartis entity so our discussions are closely focused on daily issues and practices and Group policy, says Steele Zhang, Staffing Manager and Human Resource Manager at headquarters in China and a member of the initial BiMBA cohort. It s very useful and we can begin applying what we have learned immediately when we return to work.

Guang Yang, Brand Manager for Mature Products and another member of the initial BiMBA cohort, says he already is applying skills and techniques he learned during the course. As a manager you try to make decisions that are correct and fact-based, he says. But leading is different than managing. As a leader, you need to go further and make sure everybody understands the objectives of the team, and strives to achieve that broader goal.

STAFF FLUCTUATIONS 2006

Associates as of January 1, 2006	**90 924**	**100**	**%**
Separations	-3 908	-4	%
Retirements	-751	-1	%
Resignations	-7 420	-8	%
External hirings	16 982	19	%
Acquisition changes	4 908	5	%
Associates as of December 31, 2006	**100 735**	**111**	**%**

(Figures represent headcount)

Mixing managers from different divisions and functions also pays dividends, says Lucy Huang, a finance manager at the Novartis Animal Health Business Unit based in Shanghai. There is limited communication between Novartis Business Units in China and the BiMBA course gives us an opportunity to find out more about what s going on at the Corporate level and in the Pharmaceuticals Division, Ms. Huang says. Because we re all middle level managers and share the same background, it s easy to benefit from experience of other managers, how they handle problems, issues and pressures.

This course is very important for my personal development and I hope other talents growing up at Novartis here in China have the same chance to improve themselves, she adds.

Parallel with the BiMBA program, some Novartis executive learning programs previously held at elite business schools in the US or Europe have been shifted to China giving Novartis managers around the world an opportunity to see and understand the transformation of China and its economy first-hand. China used to be a country where companies like Novartis only focused on manufacturing or selling a small slice of their product range, says John Yang, Ph.D., Professor of Management at Peking University and a key figure in the Novartis BiMBA program.

Today China is a strategic country globally. And it is exciting for Novartis executives from around the world to come here, Dr. Yang says. They discuss why local culture, organization and management practice is so different in China from their own country. That s easier to understand while they are here in China and this actually is helping Novartis very much in terms of strategic implementation.

Diversity and Inclusion

Fostering Diversity and Inclusion at Novartis isn t just the right thing to do the program underscores a key business imperative for the organization around the world.

As our customer base grows increasingly diverse, a diverse talent pool becomes a critical bridge between the workplace and the marketplace. For example, more women and people from minority groups are entering the medical field than ever before. And today women and minorities account for the vast majority of households healthcare buying decisions worldwide.

The Novartis talent pool must evolve to mirror the market. Diversity of our workforce enhances customer insight and our ability to meet the needs of patients and other stake-holders.

In the US, Novartis associates have formed a dozen Employee Resource Groups (ERGs) internal support systems and peer networks linking dozens or hundreds of people with shared interests. The ERGs range from gender and ethnic groups, to ones comprising working parents, veterans of the armed forces, or associates who are living with cancer, or have loved ones afflicted with the disease.

Each ERG is sponsored by a member of the US Pharmaceuticals Division s executive committee who helps the group set annual, business-relevant objectives. The African American leaders group served as an in-house focus group during launch preparations by the *Exjade* brand team last year and is now working closely in a similar capacity with the *Galvus* brand team. Meanwhile, the Women in Leadership group partnered with the Cardiovascular Business Franchise and the American Heart Association in developing programs helping physicians promote good cardiovascular health in women.

ASSOCIATES BY REGION AND DIVISION AS OF DECEMBER 31, 2006

	US	**Canada and Latin America**	**Europe**	**Africa/Asia/ Australia**	**Total**
Pharmaceuticals	15 331	4 930	24 096	9 957	54 314
Vaccines and Diagnostics	791		2 986	158	3 935
Sandoz	1 286	2 088	14 125	3 618	21 117
Consumer Health	7 475	3 378	5 796	2 956	19 605
Corporate	677	32	902	153	1 764
Total	**25 560**	**10 428**	**47 905**	**16 842**	**100 735**

(Figures represent headcount)

Last year, more than 250 female managers from more than 30 countries gathered in Basel for the second Novartis Female Leadership Forum. Michelle Gadsden-Williams, Head of Diversity and Inclusion, said that in addition to attracting and fostering female managers, Novartis culture needs to accommodate many different management styles to retain that talent.

For the sixth consecutive year, Novartis and the University of Basel offered a mentoring program called Women into Industry that encourages promising female academics to consider careers in business and industry. Participants in the program meet monthly with professional managers from Novartis, and also assist in planning and networking.

Diversity and Inclusion is anchored on the pillars of Novartis Values and Leadership Standards, and complemented by the commitment to the Global Compact and Corporate Citizenship Policy and guidelines. We are committed to inclusive leadership behaviors that create and sustain dignity and respect. We strive to value differences that are reflected in society. We recognize that our customer base is growing more diverse in our existing markets as well as emerging growth markets. By understanding the needs and aspirations of our diverse customer base, we will be better able to provide tailored services resulting in increased loyalty and market share.

Living Wage

Novartis is one of the first international companies to develop and implement a voluntary commitment to pay a living wage to all its employees around the world.

As an initial step, Novartis commissioned the consulting firm Business for Social Responsibility (BSR) to establish a methodology to calculate living wage levels. Using those BSR calculations as a starting point, Novartis rolled out the living wage program, working in close consultation with local management in countries with divergent economic systems and standards of living. By early 2006, the Group had aligned the pay of more than 90 000 employees worldwide with living wage levels.

Novartis and BSR continue to work on further improvements, such as periodic adjustments of the initial living wage calculations for key factors such as inflation. For countries with a negative inflation, Novartis recommends that wages be kept at their current levels and not reduced.

Novartis believes that paying a living wage locally is a key benchmark of its commitment to the United Nations Global Compact as well as the Group s longstanding pledge to be a good corporate neighbor in communities where it operates. A key lesson in taking the living wage from idea to implementation is that active participation of local management in the decision-making process is critical to success. Local management bears the ultimate responsibility for the living wage to become accepted as a core principle of a company s operations and culture.

A living wage reflects the cost of a certain basket of goods and services that is required to cover certain basic goods, taking into account the social circumstances and requirements of the environment. A living wage generally is higher than the minimum wage in the same country, an hourly amount defined by law which employers must pay workers. While minimum wages apply only to discrete geographies, an increasing number of countries across the developed world has passed minimum wage laws over the past century. Many developing countries haven t yet enacted minimum wage laws, however.

Minimum wages often increase slowly over time and sometimes do not correspond to increases in the cost of goods. A minimum wage, for example, may be the result of a political process or a union negotiation, and not directly based on what that wage will be able to purchase, or if those purchases will provide for a family s basic needs or ensure an adequate standard of living.

Novartis considers the living wage initiative an opportunity to contribute to the improvement of labor standards, and have a positive impact on communities where the Group operates. Such concerns have become increasingly important as Novartis and other pharmaceutical companies have stepped up activities in developing countries, where legal protections for workers aren t as advanced as in industrialized nations.

The guideline on fair working conditions set the stage for the living wage initiative. Much of that guideline is rooted in the language of the third principle of the Global Compact principle addressing collective bargaining and freedom of association. Novartis chose to implement the living wage commitment within a framework of wage standards that extended beyond the boundary established by the Global Compact.

Following the conclusion of a 2005 round of consultations with affiliates, a review by Novartis HR found that 93 employees out of a total workforce of more than 90 000 were being paid less than the living wage level in their country of employment. Wages of those employees were increased bringing the entire global work-force in line with living wage levels.

COMMITMENT TO HEALTH, SAFETY AND ENVIRONMENT

Novartis believes that careful stewardship of natural resources, particularly tight control of greenhouse gas emissions and energy efficiency, is not only important for the Group but critical for global society and future generations. Social and environmental sustainability is an integral part of our strategy and a key reason for the success of Novartis.

Novartis continuously seeks innovative, sustainable strategies and systems to strengthen its commitment to Health, Safety and Environment (HSE) and Business Continuity Management.

Rigorous technical standards, reinforced with engineering solutions to ensure that the workplace is safe for associates, remain the foundation of HSE performance. At the same time, the Occupational Medicine organization offers proactive programs to maintain health, reduce absenteeism and enhance motivation to return to work after illness or injury.

In recent years 50 Novartis sites, out of 208 reporting units worldwide, have remained accident-free for more than a million consecutive working hours. Such stellar safety records owe as much to the prudent behavior of well-trained associates as to elaborately engineered systems.

Indeed, behavior-based programs are increasingly seen as the key to continued improvement of occupational health and safety, and HSE performance, in coming years.

In many countries, accidents related to work are less common than lost time due to injuries sustained by associates off the job. And helping associates modify personal behaviors to reduce the risk of cardiovascular disease, cancer and other forms of illness has become a core element of modern occupational health programs.

At Novartis, these support systems are the shared responsibility of line management and individual associates. Participation by associates, however, remains strictly voluntary.

Training is an indispensable element of the Group s commitment to HSE excellence. Annual workshops are held in all regions of the world, allowing specialists from HSE to share examples of best practice, and support local implementation of sustainability measures.

Energy and Climate

Similar behavior-based approaches are also being used to foster more efficient use of energy and other resources. The energy-efficiency program at Novartis reflects a balance of incentives and targets to build pride in achieving challenging objectives, and to maintain vigilance of associates at a continually high level.

A unit at the Sandoz site in Kundl, Austria that produces final dosage forms of antibiotics such as penicillins and cephalosporins has reduced energy consumption per production unit by 30% over the past three years. Energy-saving measures ranged from a heat recovery project, water-saving valves and reduced pressure in pumps, to turning down air conditioning and warm-water boiler temperature.

Novartis believes that careful stewardship of natural resources, particularly tight control of greenhouse gas (GHG) emissions and energy efficiency, is not only important for the Group but critical for global society and future generations in combating climate change.

In 2005, as a first step, Novartis made a voluntary commitment to reduce its GHG

emissions from global operations for the period 2008 2012 to a similar level as that prescribed in the Kyoto Protocol, i.e. 5% below the corresponding 1990 level.

Good progress has been made toward achieving this long-term GHG target. Scope 1 GHG emissions from internal operational processes and the Novartis vehicle fleet was stable in 2006, compared to 2005. Scope 2 GHG emissions from purchased energy increased by 6.2% last year. Both areas are receiving increased attention through the Group s energy efficiency target and programs.

GHG EMISSIONS 2003 2006
VERSUS TARGET PATH TO 2012

Still, fulfilling this voluntary target promises to be challenging in view of the rapid growth of the Group s operations. Novartis currently projects a gap in reduction of GHG emissions for the 2008 12 period, despite actual and forecast internal energy efficiency improvements. Consequently, the Group plans to make use of the Kyoto Flexible Mechanisms, compensating a potential increase in emissions with emission reduction and sequestration projects in developing countries.

Major initiatives include an overhaul of the Group s vehicle fleet with the goal of reducing CO_2 emissions by 10% by 2010. Vehicle emissions were measured and incorporated in Scope 1 for the first time in 2005. The target for vehicle emissions was established last year.

Currently, Novartis associates make use of over 24 000 cars worldwide which collectively emit about 200 000 tons of CO_2 annually. The environmental impact of the vehicle fleet can be substantially lowered through the introduction of hybrid gasoline-electric cars, and increased use of diesel engines fitted with particulate filters as well as other emission-reduction options such as liquid natural gas and bio-fuels. Taking a regional approach, and progressing at a pace determined partly by available supply of hybrid vehicles, these technologies will be phased-in over the replacement cycle of the car fleet.

To support its energy and climate strategy, Novartis applies a proactive policy for capital investments associated with energy conservation. As an exception to normal project requirements, energy projects are allowed to pay back the initial investment over the lifetime of the asset.

At the same time, energy-efficiency and renewable-energy challenges have become mandatory elements of the capital appropriation procedures for all major projects worldwide. Strong leadership and commitment by senior Group management to improved energy efficiency in Divisions is supported by organizational measures and intensified promotional activities.

The initial wave of energy-related investments has delivered significant financial benefits in every Division and Business

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Unit. This campaign has environmental value but also real economic value, says Keith Saveal, Head Corporate Health, Safety and Environment. We are seeing much faster payback times than had been expected initially for these energy efficiency projects.

Energy consumption is increasing at a considerably slower rate than sales. Since 2003, Group-wide energy use (including businesses acquired) has increased 12%, compared to a 49% rise in sales during the same period.

Energy intensity or energy use in relation to several normalizing factors such as sales, number of associates and production is closely followed and managed by all Divisions and Business Units. Energy efficiency has also improved significantly since 2003, and the original three-year energy efficiency target of 6% for 2006, set in 2003, has been substantially exceeded.

A new energy efficiency target has been set aiming for a further 10% improvement of energy efficiency by 2010, based on the 2006 performance.

Increasingly, divisions and business units are appointing energy managers and energy advisors for all their operations worldwide. Management tools and dedicated training programs are applied systematically, together with continuous monitoring of targets and performance.

Enhanced energy efficiency by itself will not enable Novartis to achieve the greenhouse gas target and the Group is focusing increasingly on energy systems with reduced carbon intensity. Novartis has almost completed the switch of fossil fuels from oil or coal to natural gas. The current challenge is to reduce carbon intensity further by fostering combined heat and power systems and renewable energy sources such as fuel from waste, bio-fuels or solar, wind and geothermal energy.

Bagasse, a locally available bio-fuel from sugar cane, together with corn and wastes from renewable sources available at sites, are being used as fuels for on-site energy systems wherever possible. A Sandoz plant near Frankfurt, Germany has begun using by-products from fermentation to generate biogas for electricity.

Last year, the Novartis site in East Hanover, New Jersey installed a 130-kilowatt array of solar panels. The array comprises more than 400 solar panels and produces an estimated 500 gigajoules of power a year, roughly 10% of electricity consumed in the building where it is located.

Employee Health

Lost Time Accident Rate (LTAR) is a benchmark indicator that allows direct comparison between the performance of Novartis units and country organizations.

LTAR for continuing operations at Novartis was further reduced, to 0.40 per 200 000 hrs worked in 2006 from 0.44 the previous year.

LOST TIME ACCIDENT RATE 2002 2006

(accidents per 200 000 hours worked)

We extend our condolences to the families of the two associates who died in a motorcycle accident during 2006.

Despite significant progress, the Group s long-term LTAR target hasn t yet been achieved at businesses acquired during the past two years. Programs to reduce LTAR and reach parity with the rest of Novartis have been introduced at units acquired by Sandoz, as well as at the new Vaccines and Diagnostics Division. The ultimate goal for both established and new businesses is to strive for zero accidents.

Risk Management

Novartis manages risks proactively by implementing appropriate preventive and contingency measures. This risk management process is designed to identify potential hazards and take action to reduce the risk of an event the likelihood of occurrence and severity of consequences to an acceptable minimum level.

Each year, Novartis sites update their risk portfolios, which are consolidated at Group level and reviewed by senior management. Action plans are developed for these HSE and business risks, ensuring reduction of the risks and a planned professional response to any incident. During 2006, measures were taken to reduce the priority risks included in the corporate risk portfolio of 2005, and implementation of action plans is ongoing.

In addition to a controlling function, regular HSE audits provide direct support and guidance to the Novartis sites being audited. Audits are conducted by both corporate and divisional specialists. Following audits, sites develop action programs. Implementation of measures to correct deficiencies is closely controlled by the

Divisions and also reviewed at the corporate level.

As a further element of our risk management strategy, Novartis has established an Emergency Management (NEM) system to safeguard employees, the public and the environment in case of an incident. Members of NEM Teams worldwide attend regular training programs. NEM is a compulsory, uniform system with defined roles and responsibilities, emergency reporting procedures and clear decision-making structures throughout the Group.

Anticipating incidents that could affect mission-critical functions and processes as well as adopting preventive and contingency measures are key requirements for Business Continuity Management. Novartis prepares response plans defining the actions that are necessary, and the resources that are needed to enable the organization to manage any interruption.

Minor violations, however, do occur from time to time. During 2006, Novartis paid a total of USD 27 568 in fines for minor HSE violations at a number of sites.

Minimizing Environmental Impacts

We strive to make efficient use of natural resources and to minimize the environmental impact of our activities, and our products over their life cycle. We assess HSE implications to ensure that the benefits of new products, processes and technologies outweigh remaining risks. We periodically review such assessments in light of new concerns or evidence.

Historical Landfills and Old Industrial Sites

Novartis strives to minimize all environmental impacts and some of the biggest challenges are inherited as a result of operations and practices in past years. Responsibility for historical landfills and brownfields inherited by Novartis from predecessor companies remains a relevant environmental issue today.

Novartis shares a number of confirmed or potential liabilities on the surveillance and remediation of old industrial premises and historical landfills with other companies.

In order to responsibly manage these cases and related environmental risks, Novartis, as a principle, takes a cautious science-based approach, in full cooperation with the respective local authorities and governmental agencies. Where and whenever potential risks are identified, investigations and assessments are carried out in a systematic manner and remediation actions taken when necessary. Novartis has set aside the financial reserves to manage these liabilities worldwide.

Air Emissions and Hazardous Waste to Landfills

One current environmental impact target is a voluntary reduction of emissions of halogenated volatile organic compounds (VOCs) by more then 90% from the 2005 level. In 2006, halogenated VOC emissions declined to 179 metric tons from 372 metric tons the previous year achieving the intermediate target.

The objective of lowering emissions of non-halogenated VOCs to below 800 tons in 2006 was not achieved because of additional solvent losses associated with increased production at manufacturing facilities. In these cases VOC abatement projects are under preparation.

The amount of hazardous waste disposed in landfills has been effectively minimized from 1 127 metric tons in 2005 to 467 metric tons in 2006. We are well on our way to reaching our voluntary target of disposing less than 100 tons of the remaining hazardous waste that cannot be incinerated in landfills by 2008.

Pharmaceuticals in the Environment

Novartis is committed to minimizing the environmental impact of our products. Pharmaceuticals entering the aquatic environment are an inevitable consequence of science-based healthcare and our business activity. Yet as scientific knowledge evolves in this field, we regularly benchmark our activities, and in addition actively support academia, regulators and other stakeholders in developing more efficient risk-management practices.

The levels of active pharmaceutical ingredients found in the environment are below doses approved as safe by medicinal regulatory agencies, according to current knowledge, and Novartis believes those levels do not present a health risk for humans.

We strive to minimize, to the extent practical, discharges of active pharmaceutical ingredients in our wastewater, and avoid landfilling of our pharmaceutical waste. That waste is incinerated in approved, state-of-the-art facilities. We work with third parties to ensure that they are guided by this policy in their waste minimization activities.

Novartis has also supported research by a group of German wastewater engineers by making available a selection of in-market medicines, as well as innovative compounds still in development. The aim of this pioneering effort is to demonstrate that affordable, reliable wastewater technology works in practice and helps remove existing, as well as new, pharmaceuticals from waste-water before they reach the environment.

Performance Management

Performance of operating units against key HSE indicators is monitored on a monthly basis at Novartis. Last year, a tailor-made HSE Data Management System was developed and introduced worldwide to facilitate data collection, in line with more stringent reporting standards. This new system for monitoring HSE performance provides all management levels throughout the Group with information needed to take early action if deviations against targets occur.

Novartis sets HSE targets covering periods of at least three years to allow better analysis, planning and implementation of programs. Progress towards targets is reviewed annually with each division and business unit, that are also involved in target setting based on recommendations by functional experts. (See table below for 2007 targets.)

Group HSE Targets

Target	Change	Date
VOC halogenated[1]	decrease 90%	by 2008
VOC nonhalogenated[1]	decrease 30%	by 2008
Hazardous waste to landfill	below 100 tons	by 2008
Energy efficiency improvement[2]	10%	by 2010
Contact water efficiency improvement[2]	10%	by 2010
CO_2 from vehicles[1]	decrease 10%	by 2010
Scope 1 GHG emissions from operations	5% below 1990 level	by 2008 2012[2]
Lost Time Accident Rate	down to 0.2	by 2010

1 Baseline level 2005

2 Change of 10% from 2006

HSE Reporting Principles

Global Reporting Initiative

Since 2004, Novartis has reported its HSE performance following the 2002 Guidelines for Sustainability Reporting of the Global Reporting Initiative (GRI). The Novartis GRI Report Index along with a more detailed overview of our HSE performance is available at: www.novartis.com

Reporting Entity

HSE performance data for 2006 was collected from 208 sites around the world, owned and managed by Novartis Group companies. This covers all sites with relevant HSE impacts, including all production, formulation, research and development sites as well as major headquarter offices. Hexal and Eon Labs, which were acquired in 2005, are now included in all performance management. Chiron, which was consolidated by Novartis for only part of 2006, is reported separately.

Reporting Scope

Novartis believes the performance data presented in this Annual Report and on the adjacent Novartis website represent a fair and balanced picture of the Novartis HSE performance. Performance Indicators follow GRI requirements for core environmental and social indicators.

NOVARTIS HEALTH, SAFETY AND ENVIRONMENT DATA 2006

	Novartis Group*		**Pharmaceuticals**		**Novartis Research**		**Sandoz***		**Consumer Health**		**Hexal*/Eon Labs**		**Former Chiron***
	2006	**2005**	**2006**	**2005**	**2006**	**2005**	**2006**	**2005**	**2006**	**2005**	**2006**	**2005**	**2006**
Associates													
HSE Personnel [number of associates working at least 50% for HSE]	**495**	523	**210**	214	**24**	23	**128**	159	**132**	125	**34**	29	**29**
Health/safety													
Lost time accident rate [accidents per 200 000 hours worked]	**0.40**	0.44	**0.43**	0.46	**0.18**	0.15	**0.54**	0.64	**0.32**	0.35	**0.93**	1.51	**0.78**
Production													
Total production [1000 t = metric tons]	**608**	655	**23**	24	**0**	0	**86**	92	**499**	505	**11**	10	**0.8**
Resources													
Water use [million m(3)]	**89.4**	91.5	**19.6**	18.9	**1.2**	1.1	**60.2**	64	**8.3**	7.4	**0.7**	0.7	**0.8**
Energy use [million GJ]	**17.1**	17	**5.4**	5.2	**1.0**	1.1	**6.7**	6.8	**4.0**	3.8	**0.9**	0.9	**1.2**
Emissions into water													
Effluent discharge [million m(3)]	**18.6**	19.2	**3.7**	3.8	**0.5**	0.5	**7.9**	8.7	**6.4**	6.1	**0.5**	0.5	**0.3**
Chemical oxygen demand COD [1000 t]	**3.77**	3.73	**0.62**	0.36	**0**	0	**2.64**	2.79	**0.50**	0.50	**0.05**	0.05	**0**
Emissions into air													
Sulfur dioxide, SO2 [t]	**141**	131	**9**	22	**0**	0	**126**	105	**6**	5	**0**	2	**0**
Nitrogen oxide NO2 [t]	**372**	343	**140**	136	**8**	10	**110**	93	**114**	101	**24**	22	**19**
Volatile organic compounds (VOC) halogenated [t]	**152**	289	**7**	10	**0**	0	**145**	280	**0**	0	**27**	83	**0**
Volatile organic compounds (VOC) nonhalogenated [t]	**1231**	1 117	**434**	217	**0**	0	**742**	837	**55**	63	**359**	416	**10**
Emissions CO2 / GHG													
Scope 1, Combustion and process [1000 t]	**454**	458	**144**	158	**11**	17	**156**	153	**144**	127	**34**	32	**35**
Scope 1, Vehicles [1000 t]	**190**	192	**143**	146	**0**	0	**17**	14	**25**	25	**10**	9	**1**
Scope 2, From purchased energy [1000 t]	**907**	858	**214**	197	**66**	61	**340**	334	**287**	262	**47**	41	**48**
Waste													
Nonhazardous operational waste [1000 t]	**179**	185	**19.8**	28.1	**2.3**	2.7	**13.1**	14.8	**144**	134	**3.8**	2.7	**2.5**
Hazardous operational waste [1000 t]	**115**	102	**71**	75.8	**0.8**	0.6	**40.8**	23.7	**2.1**	2.3	**4.8**	4.5	**0.6**
Debris, nonhazardous [1000 t]	**121**	349	**100**	347	**1.3**	0.1	**18.7**	0.9	**0.4**	0.8	**1.1**	0.2	**4.5**
Debris, hazardous [1000 t]	**13.0**	113	**12.9**	113	**0**	0.08	**0.15**	0.01	**0**	0.01	**0**	0	**0.12**
Hazardous operational waste landfilled [1000 t]	**0.46**	1.12	**0**	0.23	**0**	0	**0.45**	0.89	**0**	0.01	**0.01**	0	**0.07**

* HSE figures for Novartis Group exclude Hexal and Eon Labs and the former Chiron sites. Hexal and Eon Labs were consolidated by Novartis for only part of 2005, and are not included in the Sandoz data. The former Chiron sites were consolidated by Novartis for only part of 2006. Full-year data for the former Chiron sites are provided in a separate column in the table; comparable figures for 2005 are not available.

The Reporting Process

The HSE Data Management System and data-collection process are key elements of Corporate Citizenship Management at Novartis. In gathering this data, we take into account impacts originating from our own operations (Scope 1) as well as major material flows across boundaries and CO_2 emissions from purchased energy (Scope 2). We currently do not monitor impacts for the manufacture and delivery of purchased goods, nor use of energy and related CO_2 emissions for activities outside company boundaries (Scope 3), such as transportation by third parties.

HSE data is collected and reviewed on a quarterly basis. The 2006 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 2007. Significant deviations will be reported on our website and restated in next year s Annual Report. The Employees and Health/Safety data are actual from January through December 2006.

Restatement of 2005 data

The emission and resource data published in the 2005 Annual Report included estimates for the October through December period that in several areas required subsequent adjustments. Inaccuracies identified in data from previous years were also corrected. The Data Table in the 2006 Annual Report includes full-year actual values for 2005.

COMMITMENT TO ETHICAL BUSINESS CONDUCT

Even as senior management focuses more than ever on high standards of ethical behavior, and training programs are intensified, compliance can t be imposed from the top. Appropriate conduct is the responsibility of every manager and associate. It can t be delegated or separated from other aspects of doing business.

Today, a major international company like Novartis is judged by the quality of its products and financial performance, but also by the way it does business.

Our customers want good products and they like a company with a desire to win in the marketplace. But we need to behave with integrity to keep our license to operate, says Daniel Vasella, M.D., Chairman and Chief Executive Officer of Novartis. If we don t have a set of values and live by them the Group won t be successful.

Yet even as senior management focuses more than ever before on high standards of ethical behavior, compliance can t be imposed from the top. Compliance is the responsibility of every single manager and every single employee. It can t be delegated or separated from other aspects of doing business, says Thomas Wellauer, Ph.D., Head Corporate Services at Novartis.

The role of the Compliance organization at Novartis is to make sure the Group has a common set of rules and guidelines that not only is complete, but simple enough for people to understand and follow. Our compliance officers support managers throughout the Group with training and other tools, Dr. Wellauer adds. And we also need effective controls in place to find the occasional outlier because there always will be people who don t follow the rules.

Intensified Training

As part of the commitment to high standards of ethical business conduct, Novartis

has intensified training programs for associates. During 2006, e-learning courses were launched in 14 languages, covering topics from human rights and data protection to compliance with sales and marketing codes. Courses on the Code of Conduct, as well as Corporate Citizenship and Conflict of Interest policies, are mandatory for all associates worldwide. Novartis associates worldwide completed more than 218 000 online courses, investing more than 155 000 hours in ethics compliance training.

Implementation of the Ethics Compliance Program is monitored at country level. In 2006, self-assessments were received from 124 organizational units in 52 countries. The Group s Internal Audit function completed audits related to adherence to the Code of Conduct and marketing codes in 28 country organizations last year.

As in previous years, as part of a formal certification process, more than 23 000 Novartis managers and insiders were required to confirm their adherence to Group policies and standards during 2006.

Updated Code

Under Dr. Vasella s leadership as president of the International Federation of Pharmaceutical Manufacturers & Associations (IFPMA), Novartis coordinated adoption of a new, updated version of IFPMA s Code of Marketing and Promotional Practices. The code sets out standards for ethical promotion of pharmaceutical products and member companies interactions with healthcare professionals. The updated IFPMA code, which clarifies guidelines for events, sponsorships and other types of promotion, is consistent with the marketing code implemented by the Novartis Pharmaceuticals Division in 2003.

Last year, the Pharmaceuticals Division launched a program to streamline the function of clearance committees which review promotional materials and other business activities to ensure compliance with local regulations, as well as internal and external marketing codes. The new clearance procedures were piloted in the US and certain European countries during 2006 and will be introduced into additional markets this year.

Novartis really is on the leading edge here, Dr. Wellauer says. We are convinced that high ethical standards will help us sustain the success of our business long-term. But at the same time, we recognize that our associates face competition day after day from companies that don t observe equally strict internal codes. We appreciate the fact that our associates live our values and do the right thing.

Business Practices Office

In 2006, the Novartis Business Practices Office (BPO) continued expansion of Integrity Telephone Lines that enable associates to report actual or suspected cases of internal misconduct, in a manner guaranteeing confidentiality and nonretaliation for whistleblowers. Integrity Telephone Lines are now available in 51 languages.

During 2006, the BPO received reports of 651 alleged violations of our internal rules. Of these cases, 363 have been fully investigated and 228 fully or partly substantiated. Employment contracts of 130 associates were discontinued last year, and other relevant sanctions were taken against an additional 125 employees, as a result of misconduct.

As important as taking firm action against misbehavior is learning from these cases to prevent them from being repeated.

During 2007, Novartis will initiate more active and systematic follow-up of BPO investigations by establishing a cross-functional group including representatives from the compliance organization.

The group will meet regularly, analyze cases and disseminate recommendations about remedial steps, Dr. Wellauer says. We want them to ask what the root causes are and what we have to do to stop similar cases from happening in the future.

Animal Welfare

Novartis supports the use of animal experiments in our medical and biological research where such experiments are scientifically necessary and alternative approaches are inappropriate.

We have an Animal Welfare Policy that defines key principles, requirements and responsibilities governing the use of animal experiments and we strictly adhere to international conventions (e.g. EC Directive 86/609 and the US Animal Welfare Act) and health authority regulations and guidelines in all of the countries where we operate. We demand the same of those organizations with which we partner for research involving animal experiments.

We acknowledge the importance of animal welfare and support development of alternative research methods. Novartis is a strong adherent of the 3R concept Reduction, Refinement and Replacement of Animal Experimentation. We exceed the minimal animal welfare requirements wherever possible and we fully comply with all required inspections.

Novartis condemns the use of violence and campaigns of willful destruction by animal rights activists as a substitute for meaningful, productive dialogue.

RESULTS OF CORPORATE CITIZENSHIP-RELATED PROJECTS IN 2006 AND TARGETS FOR 2007

	Targets 2006	Results 2006	Targets 2007
UN Global Compact	Publish case study on implementation of guideline for third-party suppliers.	Held workshop in South Africa for 200 suppliers. Active engagement in Global Compact Networks and Learning Forums. Professor Klaus Leisinger served as Special Advisor to United Nations Secretary-General.	Publish case study on implementation of living wage initiative, plus third-party supplier case study delayed from 2006. Continue active engagement in country networks. Start conceptual work on project: accountability of nongovernmental organizations.
Fair Marketing Practices	Develop e-training modules at Sandoz and Consumer Health divisions. Train more than 90% of Group sales and marketing staff. Harmonize details of divisions Promotional Practices Policies at country level.	E-training modules developed. Training program launched by Novartis Consumer Health and completed by over 85% of division s associates. Sandoz to launch training program in first quarter of 2007. Completed harmonization of divisions Promotional Practices Policies.	Complete training of sales force for Sandoz. Ensure consistency with new IFPMA code in relevant businesses. Launch new guidance on grants in Pharmaceuticals Division.
Third-Party Management*	Complete audit of 25% of Class 3 suppliers selected for on-site audit of HSE/labor practices. Expand training. Establish improvement program for third-party suppliers.	Completed on-site audits of about 10% of Class 3 suppliers below target. Received self-assessments from 25% of Class 2 suppliers below target of 90%.	Targets for Class 3 and Class 2 suppliers unchanged. Improve internal processes to increase percentage of audits/self-assessments completed. Implement corrective actions based on audit findings.
Working Conditions	Increase salaries of 93 associates to level of Living Wage. Establish guidance for third-party suppliers regarding application of living wage initiative to all contract employees working on Novartis sites. Establish Group Diversity & Inclusion initiative and appoint external Diversity & Inclusion Advisory Council.	Salaries increased to level of local living wages early in year. Pilot to expand living wage policy to on-site third parties in Switzerland identified many challenges. First Diversity & Inclusion Advisory Council meeting with external members held in November.	Salaries of 21 associates to be increased in early 2007 as adjustment to Living Wage level of respective locations. Provide systematic framework for Diversity & Inclusion; define priorities, goals and actions for each division.
Product Safety	Align Product Stewardship boards with overall Group risk management process.	Product Stewardship integrated into Enterprise Risk Management function. Product Stewardship Officer recruited.	Develop key performance indicators for implementation of Product Stewardship board decisions. Implement real-time tracking tool for implementation and reporting. Improve alignment between divisions.
Respect for Human Rights	Publish position statements on Novartis website. Develop and implement e-training module devoted specifically to Human Rights guideline.	Human Rights e-training module developed 38 100 associates completed the course. Pilot Human Rights Compliance Assessment done in Turkey, in cooperation with the Danish Institute for Human Rights. Active participation in the Business Leaders Initiative on Human Rights.	Evaluate pilot Human Rights Compliance Assessment; carry out compliance assessment in one new country. Participate in debate on corporate content of the Right to Health. Work closely with UN Representative on Business and Human Rights, as well as Special Rapporteur on the Right to Health.

*Novartis has about 183 000 active suppliers worldwide. Class 3 suppliers represent a sub-group of about 900 suppliers (contract manufacturing, waste management, etc.) deemed to have a significant influence on Novartis business activities. Class 3 suppliers are subject to on-site audits for HSE/labor practices. In addition, a second category of 8 600 Class 2 suppliers (chemical products, construction, etc.) are required to submit self-assessments covering their HSE/labor practices.

	Targets 2006	Results 2006	Targets 2007
Management Framework	Establish external Corporate Citizenship Advisory Council. Develop key performance indicators for priority Corporate Citizenship targets. Develop Group Privacy Policy.	Decision on advisory council postponed. Responsibilities assigned for management and monitoring of Corporate Citizenship challenges.	Revise Code of Conduct and policy framework for Corporate Citizenship. Integrate new Vaccines and Diagnostics Division into Corporate Citizenship management processes.
Involvement of Employees	Conduct worldwide employee survey on Corporate Citizenship and Code of Conduct. Improve interactions between management and employee representatives in Europe.	Survey conducted. Substantial progress achieved on distribution of information about Code of Conduct. Code of Conduct included as integral part of contracts for 98.7% of associates. E-training on Corporate Citizenship/Code of Conduct completed by over 90% of associates. Guideline established to ensure proper information/involvement of European employee representatives.	Design and conduct annual employee climate survey for Novartis associates in all divisions.
Code of Conduct	Develop eight new courses on additional elements of Code of Conduct.	Nine e-training courses developed and five launched. Each associate completed on average four online training courses.	Develop two new e-training courses. Improve face-to-face training program. Launch training for new managers.
Stakeholder Engagement	Three meetings of Health Equality Europe (HEE). Expand programs with patient advocacy groups and other key stakeholders.	Executive Committee of Novartis approved policy for interaction with patient advocacy groups. HEE meetings held in London and Brussels.	Increase transparency in collaborations with patient advocacy groups. Expand systematic stakeholder engagement process.
Financial Community	Improve benchmarking and transparency of information to Socially Responsible Investment community.	Online reporting in accordance with Global Reporting Initiative (GRI). Novartis Healthcare sector leader in Dow Jones Sustainability Index. Triple-A rating by Innovest. Novartis in FTSE4Good index.	Update online GRI reporting.
Government Relations /Lobbying	Publish position papers on issues related to healthcare to increase transparency.	Publication of position papers delayed to 2007. Novartis spent USD 25 million for lobbying. Corporate Citizenship Ambassador training held in Switzerland and in Latin America.	Establish integrated policy development across divisions. Improve professional public affairs skills through internal training.
Transparent Reporting	Update reporting on Corporate Citizenship on novartis.com/corporatecitizen.	Internet updates ongoing. GRI and UN Global Compact reporting structured for easy reference and benchmarking.	Achieve further progress in UN Global Compact reporting. Define structure and content of online Corporate Citizenship reporting. Publish Corporate Citizenship brochure.

Access to Medicine	Fully meet *Coartem* demand from WHO under public-private partnership.	Successfully managed expanded cultivation of Artemisia annua in China and Africa. Avarage treatment price for *Coartem* reduced to one US dollar per treatment, subsidizing access to this leading antimalarial. Deliveries up five-fold to 62 million treatments; annual production capacity expanded to 100 million treatments.	Expand partnerships for *Coartem* distribution beyond World Health Organization. Establish research collaboration in malaria with Wellcome Trust.

INDEPENDENT ASSURANCE REPORT ON THE NOVARTIS GROUP CORPORATE CITIZENSHIP REPORTING

To the Audit and Compliance Committee of Novartis AG, Basel: We have performed evidence-gathering procedures to provide limited assurance on the following aspects of Corporate Citizenship (CC) and Health, Safety and Environment (HSE) reporting of Novartis AG, Basel and its consolidated subsidiaries (the Group), all for the year ended December 31, 2006 (hereafter jointly referred to as the subject matter):

- The management and reporting processes for CC that are designed to ensure the implementation of the CC Policy, the Code of Conduct, the Business Practices Office (BPO) misconduct reporting, the Third Party Management (3PM) initiative and the marketing practices across the Group, and the related 2006 CC key performance indicators on page 41 of the Novartis Annual Report (the Report);

- The Novartis access-to-medicine projects 2006 figures on page 50 of the Report;

- The management and reporting processes including the new HSE Data Management System, which are designed to collect and check HSE information;

- The HSE key figures Novartis Health, Safety and Environment Data 2006 on page 60 of the Report.

We have evaluated the subject matter against the following criteria: the CC Policy including the CC Guidelines and the Code of Conduct prepared by the Group, the CC and the compliance reporting guidance and the principles summarized in the section HSE Reporting Principles on page 59 of the Report which define the scope of the reporting, the inherent limitations of accuracy and completeness for the HSE information, and the fact that the CC management process is in its fifth year of operation.

The Board of Directors of Novartis AG, Basel is responsible for both the subject matter and the evaluation criteria.

Our responsibility is to provide a conclusion on the subject matter based on our evidence-gathering procedures in accordance with the International Standard on Assurance Engagements (ISAE) 3000 Assurance Engagements other than Audits or Reviews of Historical Information, approved December 2003 by the International Auditing and Assurance Standards Board (IAASB).

We planned and performed our evidence-gathering procedures to obtain a basis for our conclusions in accordance with an ISAE 3000 limited assurance engagement. The evidence gathering procedures are more limited than for a reasonable assurance engagement. We have not per formed an audit according to International Standards on Auditing. Accordingly, we do not express such an audit opinion.

Our evidence-gathering procedures included the following work:

- Interviewing personnel responsible for CC management and reporting at Group level;

- Visiting the Pharma, Sandoz, Consumer Health and Gerber global headquarters, selected country and business unit headquarters and specific sites in Canada, Germany, Spain, Switzerland, and the United States;

- Interviewing the personnel responsible for CC management, including CC reporting and key figures, Code of Conduct training, the 3PM implementation, the Compliance reporting, and marketing practices in the different headquarters where our visits took place;

- Performing tests on a sample basis of evidence supporting selected HSE parameters (for lost time accident rate, hazardous wastes, water use, energy efficiency and greenhouse gas emission) with regard to the reported data aggregation from the selected sites to Group level; and

- Reading and performing tests on a sample basis of the relevant documentation including Group policies, management and reporting structures, documentation and systems in place to collect, analyze and aggregate key figures reported for CC, HSE and Access to Medicine.

Based on our work described and the criteria detailed in this Assurance Report, nothing has come to our attention that causes us to believe that management assertions on the subject matter defined above are materially misstated. Additionally, nothing has come to our attention that causes us to believe that the management and reporting processes as defined under subject matter above are not functioning as designed, in all material respects.

From our work, we have provided the following recommendations to the management, which have been agreed:

- Continue to improve processes to measure and report on performance with regard to CC related training activities including improved tracking of face-to-face training completion rates.

- Continue to improve the implementation of cross-checks at local level to ensure quality of HSE data entered in the system, and make better use of the existing functionalities and reports.

PricewaterhouseCoopers AG

Dr. Thomas Scheiwiller
Basel, January 17, 2007

Thomas Frei

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RISK MANAGEMENT

Novartis takes a proactive approach toward risks that are an intrinsic part of doing business. The major focus during 2006 was pandemic preparedness to ensure business continuity, maintain provision of life-saving medicines to patients, and protect employees, their families and the reputation of Novartis in the event of a pandemic influenza outbreak.

The Corporate Risk Management function coordinates risk management throughout the Novartis Group, promoting anticipatory management of threats and opportunities, and providing the Board of Directors and the Executive Committee of Novartis with information necessary to manage overall risk exposure.

Novartis takes a proactive approach toward risks that are an intrinsic part of doing business. By managing risks in an anticipatory, comprehensive and professional manner, Novartis strives to gain maximum value from opportunities that guarantee long-term business success. Attainment of Group objectives, however, requires that risks be adequately assessed and addressed.

Within the context of risk, our major focus during 2006 was pandemic preparedness to ensure business continuity, maintain provision of life-saving medicines and services to patients, and protect associates and their immediate families, as well as the reputation of Novartis, in the event of an outbreak of pandemic influenza.

A Pandemic Preparedness Operational Plan was prepared to focus and define roles and responsibilities within Novartis in case of a pandemic influenza outbreak. The new plan complemented and reinforced the existing Novartis Emergency Management and Business Continuity Management programs.

The probability of a pandemic is relatively low, but the potential impact would be extremely severe, says Keith Saveal, Head Corporate Health, Safety and Environment. We have to take the risk seriously. No one would forgive us if, given the time we have to prepare, we didn t take adequate steps to provide for our patients and customers, as well as make plans to maintain our business at a satisfactory level.

A pandemic is a simultaneous outbreak of an infectious disease worldwide. It requires the emergence of a disease new to the population, caused by an agent that causes serious illness, and spreads easily and sustainably among humans. Three human influenza pandemics occurred in the 20th century, each resulting in illness in approximately 30% of the world population.

Current concern for a pandemic arises from an unprecedented outbreak of H5N1 influenza in birds that began in 1997 and has spread across bird populations in Asia, Europe and northern Africa. The H5N1 strain might ultimately adapt into a strain that is contagious among humans and potentially be as serious as the pandemic of 1918.

In the US National Strategy for Pandemic Influenza, the Homeland Security Council warns that a pandemic would have significant implications for the economy, for national security and for basic functioning of society. Similar sentiments have been expressed by other governments around the world.

Business-critical processes for divisions and functions were evaluated to be certain Novartis can maintain the ability to bring its medicines to the patients who need them. Furthermore, management implemented business continuity plans that would maintain the business at a satisfactory level even during the most severe phase of a pandemic. Where appropriate, this includes contingency inventories in strategic locations, to ensure we are able to meet the needs of patients.

Business-critical roles necessary to maintain the required level of business were identified and associates holding such positions were notified directly by line management. Masks and gloves, plus other appropriate protection, will be distributed to associates to ensure business continuity.

In the event of a pandemic, transportation likely would be severely affected, with commercial flights grounded in the first wave, cross-border travel restricted and cargo transport restricted to land and sea. To ensure continued supply of life-saving medicines and services to patients, Novartis has built stocks of these medications to guarantee uninterrupted supply during a pandemic.

Early last year, the Group prepared and distributed a brochure explaining necessary individual precaution and preparation measures. In addition, further information on what precautions to take during an epidemic are being prepared and will be distributed to all associates.

COMMITMENT TO CORPORATE GOVERNANCE

CONTENTS

COMMITMENT TO CORPORATE GOVERNANCE

Novartis is fully committed to good corporate governance.

The Applicable Corporate Governance Standards

The following standards apply to Novartis:

- The Directive on Information Relating to Corporate Governance issued by the SWX Swiss Exchange;
- The Swiss Code of Best Practices for Corporate Governance;
- The securities laws of the United States of America as these apply to foreign issuers of securities listed on major US stock exchanges; and
- The Rules of the New York Stock Exchange (NYSE).

Novartis has incorporated the above Swiss and US standards and the principles of corporate governance under the Swiss Code of Obligations into the Articles of Incorporation, the Regulations of the Board and the Charters of the Board committees. The Corporate Governance and Nomination Committee as described in detail below reviews these standards and principles regularly in light of prevailing best practices and makes recommendations for improvements for consideration by the full Board of Directors (the Board).

Novartis complies with Swiss law and US law as well as the rules and regulations of the SWX and the NYSE. As expressly permitted under US law and NYSE rules, Novartis deviates from US law and NYSE rules where they conflict with mandatory applicable Swiss corporate law. In particular:

- External auditors are appointed by the shareholders at the Annual General Meeting and not by the Audit and Compliance Committee, as required in the US.
- Equity compensation plans are established by the Compensation Committee or the management of local Novartis Group companies (under the principles approved by the Compensation Committee) but are not approved at the Annual General Meeting.
- Board committees submit all their reports to the Board but do not report to the shareholders directly (Novartis issues no proxy statement reports).

Printed copies of the aforementioned Novartis regulations can be obtained by writing to the following address: Novartis AG, Attn. Corporate Secretary, CH-4056 Basel, Switzerland. Further information on Corporate Governance can be found by visiting:

www.novartis.com/investors/en/corporate_governance.

Group Structure and Shareholders

Group Structure

The Divisions

The Novartis Group is divided operationally into four Divisions: Pharmaceuticals, Vaccines and Diagnostics, Sandoz (generic pharmaceuticals) and Consumer Health.

Novartis AG and Group Companies

The registered domicile of Novartis AG is Lichtstrasse 35, CH-4056 Basel, Switzerland.

Business operations are conducted through Novartis Group companies. Novartis AG, a holding company organized under Swiss law, owns directly or indirectly all companies worldwide belonging to the Novartis Group. Except as mentioned below, the shares of these companies are not publicly traded.

The most important Novartis subsidiaries and associated companies are listed in Note 32 to the Group s consolidated financial statements.

Majority Holdings in Publicly Traded Group Companies

The shares of Idenix Pharmaceuticals, Inc. and Novartis India Limited are traded on public stock exchanges. Novartis owns directly and indirectly:

- 55.8% of Idenix Pharmaceuticals, Inc. (a US company). The shares of Idenix Pharmaceuticals are listed for trading on the NASDAQ (Valor No. 1630029, ISIN US45166R2040, symbol: IDIX);

- 51% of Novartis India Limited. The remaining shares are registered for trading at the Bombay Stock Exchange (ISIN INE234A01025, symbol: HCBA).

Significant Minority Holdings in Publicly Traded Companies

Novartis AG directly or indirectly holds 33.3% of the bearer shares of Roche Holding AG, registered in Basel, Switzerland, and listed on the SWX Swiss Exchange (bearer shares: Valor No. 1203211, ISIN CH0012032113, symbol RO; nonvoting equity securities: Valor No. 1203204, ISIN CH0012032048, symbol: ROG; further securities of Roche Holding AG are ADSs for nonvoting equity securities, which are traded on the over-the-counter market in the US, symbol: RHHBY). The market value of this interest in Roche Holding AG on December 31, 2006, was USD 10.8 billion.

Roche is independently governed, managed and operated, meaning that Novartis does not control this company.

Shareholders of Novartis AG

As of December 31, 2006, there were more than 150 000 registered shareholders. Based on the share register, the largest registered shareholders were:

- The Novartis Foundation for Employee Participation, registered in Basel, Switzerland (holding 2.8% of the share capital); and
- Emasan AG, registered in Basel, Switzerland (holding 3.2%).

In addition:

- Mellon Bank, Everett, holds 2%, Nortrust Nominees, London, holds 2.7% and JPMorgan Chase Bank, New York, holds 7.6% of the registered shares as nominees.
- JPMorgan Chase Bank, the depositary for the shares represented by American Depositary Shares, is registered with 12.1% of the share capital as part of this role.

No other shareholder is registered as owner of more than 2% of the issued share capital and there are no cross-holdings equal to or higher than this amount.

Novartis has not entered into any shareholders agreement or other agreement regarding the voting or holding of Novartis shares.

Capital Structure

Share Capital of Novartis AG

The share capital of Novartis AG is CHF 1 364 485 500, fully paid-in and divided into 2 728 971 000 registered shares of CHF 0.50 nominal value each. Novartis has neither authorized nor conditional capital. There are no preferential voting shares. All shares have equal voting rights. No participation certificates, nonvoting equity securities (Genussscheine) or profit-sharing certificates have been issued.

Novartis shares are listed on the SWX Swiss Exchange and traded on Virt-X (Valor No. 001200526, ISIN CH0012005267, symbol: NOVN.VX) and on the New York Stock Exchange (NYSE) in the form of American Depositary Shares (ADS) (Valor No. 567514, ISIN US66987V1098, symbol: NVS).

Changes in Capital, Share Repurchase Programs

Since the merger creating Novartis in December 1996, Novartis AG has implemented four share repurchase programs with a total commitment as of December 31, 2006, of CHF 15 billion. Three programs have been completed, with the shares repurchased in the second and third programs being canceled, and the capital of Novartis AG correspondingly being reduced by shareholder resolution at the Annual General Meetings held in 2002, 2003, 2004, 2005 and 2006. In August 2004, Novartis announced the start of a fourth program to repurchase shares via a second trading line in the SWX Swiss Exchange. Since the start of the fourth program, a total of 25.4 million shares have been repurchased for USD 1.2 billion. No shares were repurchased in 2006. A fifth repurchase program with a maximum value of CHF 4 billion was approved by the shareholders at the Annual General Meeting held in 2005, but will only be started after completion of the fourth repurchase program.

Capital Reductions

Year of Reduction	Number of Shares Canceled	Amount of Capital Reduced in CHF
2002	61 054 680	30 527 340
2003	22 680 000	11 340 000

2004	24 260 000	12 130 000
2005	38 039 000	19 019 500
2006	10 200 000	5 100 000

A table with additional information on the development of the share capital structure of Novartis AG over the last two years can be found in Note 5 to the financial statements of Novartis AG.

Convertible or Exchangeable Bonds, Warrants, Options or Other Securities granting Rights to Novartis Shares

There has been no issuance of convertible or exchangeable bonds, warrants, options or other securities granting rights to Novartis shares other than securities granted to associates as a component of compensation.

Information about shares and share options granted as compensation is set forth below in this section under the heading Compensation, Benefits, Shareholdings and in the Notes to the consolidated financial statements.

Shareholders Rights

One Share One Vote

Each registered share entitles the holder to one vote at the Annual General Meeting.

Other Shareholder rights

Shareholders representing at least 10% of the share capital may request to convene an extraordinary General Meeting. Shareholders representing an aggregate nominal value of at least CHF 1 000 000, may request that an item be included in the agenda of an Annual General Meeting. Such requests must be made in writing at the latest 45 days before the date of the General Meeting, specifying the item to be included in the agenda and containing the proposal for which the shareholder requests a vote.

Shareholders have the right to receive dividends, appoint a proxy and hold such other rights as are granted under the Swiss Code of Obligations.

Registration as Shareholder

No restrictions exist regarding the transferability of Novartis shares. However, only those persons having their shares registered in the Novartis share register may exercise their voting rights. Pursuant to Swiss law, a person who wishes to register shares must make a declaration to the Novartis share register that the shares have been acquired in his/her own name and for his/her own account.

Only shareholders registered at least five days prior to the Annual General Meeting may vote their shares at the Annual General Meeting.

Voting Limitations

Each share carries one vote. However, the Articles of Incorporation provide that no shareholder shall be registered to vote for shares comprising more than 2% of the registered share capital unless the Board has granted, upon request, an exemption. Exemptions are in force for the two largest shareholders reported above (Novartis Foundation for Employee Participation and Emasan AG). In 2006, no other exemptions have been requested.

The statutory voting restrictions can be canceled with a two-thirds majority of the shares represented at the Annual General Meeting.

These voting restrictions have been imposed and retained to provide for voting diversity at the General Meeting and to ensure that no minority shareholder may dominate the General Meeting, where shareholder representation has been traditionally low for many companies.

Voting by Nominees

Nominees may not vote shares absent registration in the Novartis share register and, with registration, may only vote shares constituting an amount less than or equal to 0.5% of the registered share capital. The Board may register nominees with the right to vote in excess of that limit if the nominees disclose such particulars of the beneficial owners of the shares as the Board shall require. Groupings formed to circumvent this limitation are treated as a single person or nominee.

Voting by ADS Holders

Holders of American Depositary Shares (ADS) may vote by instructing JPMorgan Chase Bank to exercise the voting rights attached to the registered shares underlying the ADSs. JPMorgan Chase Bank, as depositary, may exercise the voting rights for deposited shares represented by ADS at its discretion to the extent the holders of the ADS have not given instructions as to how such underlying shares should be voted.

Resolutions and Elections at Annual General Meeting

Resolutions of shareholders at an Annual General Meeting are approved with a simple majority of the shares represented at the meeting, except in the following matters which by law (Swiss Code of Obligations, Art. 704) and the Articles of Incorporation require the approval of two thirds of the shares represented:

- Change of the purpose of Novartis AG;

- Creation of shares with privileged voting rights;
- Implementation or removal of restrictions regarding the transferability of shares;
- Authorized or conditional increase of the share capital;
- Increase of the share capital out of equity, or a contribution in kind or for the purpose of an acquisition of assets, and the grant of special benefits;
- Limitation or withdrawal of preemptive rights;
- Change of the domicile of Novartis AG; and
- Dissolution of Novartis AG without liquidation.

Change-of-Control Provisions

No Opting up, No Opting out

The Swiss Stock Exchange Act provides that whoever acquires more than 33 1/3% of the equity securities of a company shall be required to make a bid for all listed equity securities of that company. In its articles of incorporation, a company may increase this threshold to 49% (opting up) or, under certain circumstances, waive the threshold (opting out). No such measures have been adopted.

Provisions in Certain Employment Agreements

The table below indicates the notice period or guaranteed compensation period and whether or not extension clauses apply in a change of control situation for members of Senior Management (see section Senior Management Compensation for definition) as of January 1, 2007.

Number of agreements	Notice period or guaranteed compensation in case of termination (in months)	Additional notice period or guaranteed compensation in case of a change of control (in months)
5	36	24
2	12	12
1	36	
2	24	
3	18	
1	12	
1	6	

Board of Directors

Composition of the Board of Directors

The members of the Board are:

	Age	Board Member since	Term Expires
Daniel Vasella	53	1996	2007
Ulrich Lehner	60	2002	2008
Hans-Joerg Rudloff	66	1996	2007
Birgit Breuel	69	1996	2007
Peter Burckhardt	68	1996	2008
Srikant Datar	53	2003	2009
William W. George	64	1999	2009
Alexandre F. Jetzer	65	1996	2008
Pierre Landolt	59	1996	2008
Andreas von Planta	51	2006	2009
Wendelin Wiedeking	54	2003	2009
Rolf M. Zinkernagel	62	1999	2009

Further biographical information on each Board member can be found in the Annual Report (see pages 88 92).

Helmut Sihler retired from the Board, while Andreas von Planta was elected at the Annual General Meeting of February 28, 2006.

Board Member Independence

The Board has promulgated independence criteria for its members. These criteria are appended to the Regulations of the Board and can be found on the Internet at:

www.novartis.com/investors/en/corporate_governance.

Pursuant to these criteria, the Board has determined that all of its members, except for Daniel Vasella and Alexandre F. Jetzer, are independent and have no material dealings with Novartis AG or other companies of the Novartis Group outside their role as a Board member.

Daniel Vasella, the Chief Executive Officer, is the only executive Board member. Alexandre F. Jetzer is no longer a Novartis executive but supports various government relations activities under a consultancy agreement.

The combination of a large majority of independent Board members with a small minority of non-independent or executive Board members combines the knowledge and experience of current

or former Novartis managers with the diverse skills of the independent Board members.

Novartis conducts nonadvisory banking business with Barclays Capital, of which Hans-Joerg Rudloff is presently Chairman of the Executive Committee. The Board concluded that this relationship does not affect the independence of Hans-Joerg Rudloff pursuant to the Board s independence criteria.

Rolf M. Zinkernagel has been delegated to the Scientific Advisory Board of the Novartis Institute for Tropical Diseases (NITD). He is also a delegate to the Board of Directors of the Genomics Institute of the Novartis Research Foundation (GNF). The Board concluded that this relationship does not affect the independence of Rolf M. Zinkernagel pursuant to the Board s independence criteria.

No Board member is on the board of a listed company with which any Novartis Group company conducts a material amount of business.

Election and Term of Office

All Board members are elected individually.

The terms of office for which Board members are elected do not exceed three years. The specific terms of office of Board members are determined by shareholders in the election or re-election at Annual General Meetings. However, under Swiss law, a General Meeting of shareholders is entitled to remove Board members at any time notwithstanding their term of office.

The average tenure of the Board members is eight years and their average age is 60 years. In principle, a Board member is to retire after reaching 70 years of age. Under special circumstances, shareholders may grant an exemption from this rule and re-elect a member of the Board for further terms of office of no more than three years at a time.

Chairman and Chief Executive Officer

The Corporate Governance rules regarding the separation of the roles of the Chairman of the Board and the Chief Executive Officer vary from country to country. In most countries, companies have to make a choice and select the model that best ensures effective leadership, efficient decision-making and an adequate balance of power. The Board examines the question regularly. Presently, it is of the firm opinion that it is in the best interest of the company and the shareholders that Daniel Vasella serves as Chairman and Chief Executive Officer of the Group.

The Regulations of the Board provide that an independent Lead Director is appointed in case the Chairman of the Board also serves as Chief Executive Officer.

The Lead Director

The Board has appointed Ulrich Lehner as Lead Director (replacing Helmut Sihler, who retired from the Board on February 28, 2006). His responsibilities include ensuring an orderly process in the evaluation of the performance of the Chairman and Chief Executive Officer, chairing the Board s private sessions (i.e., the meetings of the Non-Executive Board members) and leading the independent members of the Board in case of a crisis or in matters requiring their separate consideration or decision. The Lead Director is also a member of all of the Board committees.

The non-executive independent Board members held two comprehensive private sessions, one of which was chaired by the former Lead Director, Helmut Sihler, and the other by the new Lead Director, Ulrich Lehner.

Role and Functioning of the Board

The Board holds the ultimate decision-making authority of Novartis AG for all matters except for those decisions reserved by law for shareholders.

The agendas of Board meetings are set by the Chairman. Any Board member may request a Board meeting or that an item be included on the agenda. Board members are provided, in advance of Board meetings, with adequate materials to prepare for the items on the agenda. Decisions are taken by the Board as a whole, with the support of its four committees described below (Chairman s Committee, Compensation Committee, Audit and Compliance Committee, and Corporate Governance and Nomination Committee). The primary functions of the Board include:

- Providing the strategic direction of Novartis;

- Determining the organizational structure and the manner of governance of the company;
- Supervising the business operations overall;
- Approving major acquisitions or divestments;
- Structuring the accounting system, the financial controls and the financial planning;
- Reviewing and approving the annual financial statements and results release of Novartis AG and the Group;

- Appointing and dismissing members of the Executive Committee, the Head of Internal Audit and other key executives;

- Promulgating fundamental corporate policies, in particular on financial matters, corporate governance and citizenship, personnel or environmental matters and overseeing compliance therewith;

- Preparing the matters to be presented at the General Meeting, including Novartis AG s financial statements and the consolidated financial statements for the Group;

- Evaluating regularly the performance of the Chairman and Chief Executive Officer and reviewing the performance of the members of the Executive Committee; and

- Performing a self-evaluation once a year.

Role and Functioning of the Board Committees

Each Board committee has a written charter outlining its duties and responsibilities and a chair elected by the Board. The Board committees meet regularly and consider the agenda determined by the Chair. Board committee members are provided, in advance of meetings, with adequate materials to prepare for the agenda items.

The Chairman s Committee:

The Chairman s Committee is composed of four Board members; the Chairman and Chief Executive Officer, the two Vice Chairmen, one of whom is the Lead Director and one other member of the Board.

The Chairman s Committee takes decisions on financial and other matters delegated by the Board to the Chairman s Committee in accordance with the Regulations of the Board. In addition, the Chairman s Committee also takes decisions and preliminary actions on behalf of the full Board in urgent cases.

The Compensation Committee:

The Compensation Committee is composed of three independent Board members.

The Compensation Committee reviews Group-wide compensation policies and programs, including share option programs and other incentive-based compensation, before the full Board makes final decisions. The Compensation Committee is responsible for reviewing and approving the compensation paid to members of the Executive Committee and other selected key executives as well as for determining the compensation for the Chairman and Chief Executive Officer. The Compensation Committee may seek outside expert advice from time to time to support its decisions and recommendations.

The Audit and Compliance Committee:

The Audit and Compliance Committee is composed of five independent members. The Board has determined that all the members of the Audit and Compliance Committee are independent as defined by the rules of the NYSE.

The Audit and Compliance Committee has determined that Ulrich Lehner, Srikant Datar and Hans-Joerg Rudloff possess the required accounting and financial management expertise required under the rules of the NYSE. Therefore, the Board has appointed them as the Audit and Compliance Committee s Financial Experts. The Board has also reassured itself that other members of the Audit and Compliance Committee have sufficient experience and ability in finance and matters of compliance to enable them to adequately discharge their responsibilities.

The Audit and Compliance Committee s main duties include:

- Evaluating and selecting the external auditors to be nominated for election at the Annual General Meeting;

- Reviewing the terms of engagement of these external auditors;

- Determining the scope and the review of the results of external and internal audits;

- Reviewing (together with external and internal auditors and the financial and accounting management of Novartis) whether the accounting policies and financial controls are appropriate, effective and compliant with the applicable accounting standards;

- Reviewing and approving the quarterly financial statements of the Group for the first three quarters of each year and the corresponding financial results releases;

- Reviewing internal control and compliance processes and procedures, including those for the management of business risks; and

- Reviewing processes and procedures to ensure compliance with laws and internal regulations.

The Corporate Governance and Nomination Committee:

The Corporate Governance and Nomination Committee is composed of five independent Board members.

The Corporate Governance and Nomination Committee develops corporate governance principles and recommends these to the Board for approval. Its duties include regular reviews of the Articles of Incorporation with a view to reinforcing shareholder rights, and of the composition and size of the Board and its committees. The Corporate Governance and Nomination Committee conducts an annual evaluation of the Board as a whole and gives guidance to

Board members on how to avoid potential conflicts of interest.

The Corporate Governance and Nomination Committee also proposes to the Board individuals who are qualified to become (or be re-elected as) Board members.

Board and Committees; Membership, Attendance, Number and Duration of Meetings

	Full Board	Chairman s Committee	Compensation Committee	Audit and Compliance Committee	Corporate Governance and Nomination Committee
Number of meetings in 2006	7	11	3	8	2
Approximate duration of each meeting (hours)	6 8	2	2	2 4	2
Daniel Vasella	7 1	11 1			
Helmut Sihler2	2	2	2	3	
Ulrich Lehner	7	9	1 3	7 1	1
Hans-Joerg Rudloff	7	11	3 1	8	2
Birgit Breuel	7			8	
Peter Burckhardt	7				
Srikant Datar	7			8	
William W. George	7	11	3		2 1
Alexandre F. Jetzer	7				
Pierre Landolt	6				2
Andreas von Planta3	5			5	
Wendelin Wiedeking	4				
Rolf M. Zinkernagel	7				2

1 Chair
2 Until February 28, 2006
3 Since February 28, 2006

Information and Control Systems

The Board:

The Board ensures that it receives sufficient information from the Executive Committee to perform its supervisory duty and to make the decisions that are reserved to the Board through several means:

- Since the Chairman is also the Chief Executive Officer of Novartis, who heads the meetings of the Executive Committee, he is fully informed on all current developments;

- The Chairman and Chief Executive Officer informs all Board Members regularly about current developments, including by way of a written monthly report;

- The Minutes of the Executive Committee meetings are made available to the Board members;

- Informal teleconferences are held as required between Board Members and the Chairman and Chief Executive Officer or the Lead Director;

- A session is held at each Board meeting with all members of the Executive Committee;

- The Board is informed in detail by each Division Head on a quarterly basis;

- By invitation, members of management 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 inside and outside of Board meetings and may visit any Novartis site.

Board Committees:

Board committees, in particular the Audit and Compliance Committee, regularly meet with management and outside consultants to review the business, better understand all laws and policies impacting the Group and support the management in meeting the requirements and expectations of stakeholders. In particular, the Chief Financial Officer and the representative of the external auditors are invited to the meetings of the Audit and Compliance Committee. Furthermore, the Head of Risk Management and the Business Practices Officer report on a regular basis to the Audit and Compliance Committee.

Internal Audit:

The Internal Audit function carries out operational and system audits; assists the 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 any actual or suspected irregularities to the Audit and Compliance Committee and the Chairman of the Board.

Corporate Risk Management:

The Corporate Risk Management function reports on a regular basis on risk management. Organizational and process measures have been introduced to 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 Quality Operations; Corporate Health, Safety and Environment; and Business Continuity providing support and controlling the effectiveness of the risk management by the Divisions.

Management of the Company

The Board has delegated to the Executive Committee the coordination of day-to-day business operations of Group companies. The Executive Committee is headed by the Chief Executive Officer. The internal organizational structure and the definition of the areas of responsibility of the Board and the Executive Committee are set forth in the Board Regulations.

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

Further biographical information on the members of Senior Management, a group of senior executives, can be found in the Annual Report.

Compensation, Benefits, Shareholdings

General Principles and Processes

Performance Based Compensation

Novartis aspires to be an employer of choice with the ability to attract, retain and motivate the most professional and high-caliber associates all around the world, who are critical to the company s success. The company compensation programs are designed to:

- endorse the employer of choice aspiration;
- align the objectives of our associates with the long-term interests of the shareholders;
- support a performance oriented culture and meritocracy that allows the company to reward high performing individuals who through their commitment and contribution, while adhering to best business practices , allow our company to achieve its goal to be one of the leading global industry performers;
- be comparable and competitive with a relevant group of other world class and industry peer companies who operate and compete for talent on a global basis.

Paying for performance is the guiding principle of the Novartis compensation policy. For superior performance, total compensation awarded to individual associates may reach levels comparable to the levels of compensation offered by the top quartile of relevant benchmark companies.

Under the performance-dependent variable compensation programs target incentive percentages (of annual base compensation) are typically defined for each participating associate at the start of the respective plan performance period. In general, these target percentages are multiplied at the end of the performance period with individual payout multipliers for each associate. The size of the multiplier depends on the incentive plan and on the actual performance achieved by the associate against individual objectives as agreed at the beginning of the performance period, compliance with the Novartis Values and Behaviors, and the overall performance of the Group or the relevant business unit.

Incentive payout multipliers can range from 0 to 2. For exceptional performance, higher payout multipliers may apply. Such cases require the approval of the Chairman and Chief Executive Officer and/or the Compensation Committee. All compensation programs and levels are reviewed regularly based on publicly available data as well as analyses of independent compensation research companies

and external compensation advisors. Trends and developments in the field of compensation and corporate governance are carefully analysed, reviewed and discussed on an ongoing basis with outside experts, accountants and consultants.

Performance Management Process

Each Novartis associate is subject to a formal performance and appraisal process. This process is intended to enable all associates to focus on clear and ambitious goals, to set directions and priorities, and to clarify expectations among the overall organization. Furthermore, this approach promotes a culture of continuous improvement, supports individuals in meeting their development aspirations and strengthens organizational capabilities. This is a core process for improving individual, team and overall business performance.

For each performance year, line managers and their direct reports jointly determine and agree upon performance measures and business objectives. These objectives are derived from the cascading-down of business objectives as established at the Group, Division, Function and/or Business Unit levels.

Two performance assessments are carried out each year a midyear and a year-end review. The reviews consist of formal meetings between each associate and his/her line manager to evaluate the associate s performance, both in light of the business objectives defined at the beginning of the year and Group-wide Novartis Values and Behaviors. Based on the year-end performance rating, line managers and next-level line managers determine the incentive award for each associate for the year under review as well as the target compensation for the coming year.

Share Ownership

In 2003, the Board established share ownership guidelines to further strengthen the ownership philosophy among Novartis senior executives. These guidelines require a small group of approximately 20 key executives to own a minimum multiple of their base salary in Novartis shares as described in more detail below under the heading Ownership of Novartis Shares and Share Options by Senior Management.

Compensation for Novartis Associates

Competitive compensation packages are designed in consideration of compensation levels of comparable jobs in relevant benchmark companies.

The benchmark companies for compensation differ depending on the nature of specific jobs. For specific pharmaceutical jobs, a peer group of pharmaceutical companies is considered that typically consists of Abbott Laboratories, Amgen, AstraZeneca, Bristol-Myers Squibb, Eli Lilly, GlaxoSmithKline, Johnson & Johnson, Merck, Pfizer, Roche, Sanofi-aventis, Schering-Plough and Wyeth. For other positions, a wider group of relevant benchmark companies is considered from a variety of different industry sectors, such as fast moving consumer goods and general industry. Benchmark information is adjusted as necessary to reflect the size and scope of the Novartis business and the specific requirements of a particular job.

As long as an associate achieves his/her performance targets, the total amount of compensation awarded is generally comparable to the level of compensation provided by relevant benchmark companies. In case of over- or underperformance, the actual total compensation delivered is adjusted upwards or downwards.

The compensation packages of associates consist of base compensation and variable compensation as described in the following paragraphs.

Base Compensation

The base compensation is intended to give each associate a regular and predictable salary that does not depend on the annual performance of the associate or of the Novartis business. Salary levels depend on job characteristics, market competitiveness as well as on the skills of each associate. The salary evolution depends on the individual performance of the associate.

Variable Compensation

Novartis has three variable compensation plans: a Bonus Plan, a Novartis Equity Plan Select and a Long-term Performance Plan. Under these plans, except the Bonus Plan, awards (if any) are mandatorily delivered in equity.

Bonus Plans

Most associates participate in bonus plans. Under these plans, awards are made each year based on the associate s individual year-end performance rating and company or business unit performance. Below a certain rating, no awards are granted under the plans.

Depending on the applicable plan, bonuses are either delivered in cash or in shares via the Leveraged Share Savings Plans as described below.

Novartis Equity Plan Select

Awards may be granted each year based on the associate s individual year-end performance rating and company or business unit performance. Below a certain rating, no awards are granted under the plan.

Participants in this plan can select to receive their incentive in the form of restricted shares, tradable share options, or a combination of both. The Compensation Committee allocates the number of shares and share options based on the individual choice of the participant before the predetermined grant date. The share options are tradable, expire on the tenth anniversary and are exercisable for one share each (1:1). The exercise price equals the market price of the underlying share at the predetermined grant date.

Shares and tradable share options have a vesting period of two years in Switzerland and three years in other countries. As a consequence, if a participant leaves Novartis, shares or options not yet vested are forfeited if not determined otherwise by the Compensation Committee (reorganizations, divestments etc.).

In 2006, a total of 8 744 participants received a total of 12.5 million tradable share options and 3 281 402 restricted shares under the Novartis Equity Plan Select. This represents a participation rate of approximately 10% of all associates worldwide. Approximately 11% of the total equity value awarded under the plan in 2006 was granted to Senior Management.

As of December 31, 2006, a total of 55.7 million share options were outstanding, that provided the right to an equal number of shares, which corresponds to 2.0% of the total number of Novartis AG issued shares.

Long-term Performance Plan

Within the Novartis Compensation framework, a Long-term Performance Plan has been created and targeted to executives who are in key positions and have a significant impact on the long-term success of Novartis. Incentive awards under the Long-term Performance Plan as well as awards made under the Equity Plan Select intend to align the interest of the associates with the long term interest of shareholders.

Under the Long-term Performance Plan around 100 key executives throughout the Group may be granted Novartis shares. Actual grants (if any) depend on the Group s overall performance over a period of three years, measured in terms of Economic Value Added (EVA, as defined in the Novartis accounting manual) relative to predetermined targets, i.e. pay-outs are conditional to the achievement of the EVA objective. If the actual performance of the Group is below a threshold level or the participant leaves the company during the performance period, then no shares will be earned.

The Long-term Performance Plan has been redesigned by the Compensation Committee in 2005. In the new design, as mentioned above, the Group Economic Value Added determines the delivery of shares (if any) instead of the specific divisional or business unit Economic Value Added as was the case in the old plans.

The first new Long-term Performance Plan is introduced in 2006 and will have a first share delivery (if any) in February 2009. The old plans will run out via transition plans in the next years with conditional (i.e. if EVA targets are achieved) share releases in February 2007 and 2008.

Special Share Awards

In addition to the Base and Variable Compensation as described above, selected associates across the Group may receive special awards of restricted or unrestricted shares. These special awards are fully discretionary, providing the flexibility to reward particular achievements or exceptional performance of individual associates and to retain key contributors.

The restricted Special Share Awards generally have a five-year vesting period. If a participant voluntarily leaves Novartis, unvested shares generally forfeit. Around 70 executives at different levels of the organization were awarded restricted shares in 2006.

The Compensation Committee may decide to award restricted or unrestricted Novartis shares to individual associates as a special incentive to reward exceptional performance, or grant one-off or annual share awards in recognition of particular achievements or consistently outstanding performance.

Leveraged Share Savings Plans

As indicated under Bonus Plans above, associates are encouraged to receive their bonus awards fully or partially in Novartis shares instead of cash to achieve alignment with shareholders interests. To reinforce this alignment the company therefore sponsors Leveraged Share Savings Plans by matching investments in shares after a certain holding period.

There are several types of Leveraged Share Savings Plans. Participating associates in principle may only participate in one of these plans in a given year.

Shares invested in the Swiss Employee Share Ownership Plan (ESOP), which is available in Switzerland to approximately 12 000 associates, have a three-year blocking period and are matched at the end of the blocking period with one share for every two shares invested. In 2006 approximately 5 800 associates participated in this plan.

In the UK associates can invest up to 5% of their monthly salary up to a maximum of GBP 125 in shares, and might be invited to invest all or part of their net bonus in shares. Two invested shares are matched with one share immediately which will vest after three years. In 2006, approximately 1400 associates participated in these plans.

Approximately 30 of the most valued key executives in the world are invited to participate in a five-year Leveraged Share Savings Plan. The shares invested in this plan are blocked for a period of five years after the investment date. At the end of the blocking period, the invested shares are matched based on a ratio of 1:1, i.e. one share for each invested share.

No shares will be matched under the plans if an associate leaves Novartis prior to expiration of the blocking period other than due to retirement.

Source of the Shares Awarded

The shares awarded under the plans are not newly issued but are repurchased from the market.

Senior Management Compensation

For the purpose of this Annual Report, Senior Management has been defined to include members of the Executive Committee, Permanent Attendees to the Executive Committee and Business Unit Heads.

In 2006, a total of 19 executives comprised Senior Management. The employment of two executives was terminated during the year, while one Business Unit (Ophthalmics) was repositioned within the Pharmaceuticals Division and one Business Unit (Medical Nutrition) is in the process of being divested. Based on these changes, as of January 1, 2007, Senior Management is comprised of 15 executives.

The compensation policies, the performance management process and the incentive plans described above apply equally to Senior Management, including the Chairman and Chief Executive Officer.

The decisions on the compensation of Senior Management members are based on an evaluation of the individual performance of the member as well as the performance of the business for which the Senior Management member is responsible. The Compensation Committee considers the achievement of both short-term and long-term performance targets, including revenue growth, economic value creation (operating and net income, earnings per share and economic value added), market share growth and ongoing efforts to optimize organizational effectiveness and productivity.

Compensation of the Chairman and Chief Executive Officer

General Process

In the December Board Meeting the Board takes note, discusses and approves the company s financial objectives for the following year. The Chairman and Chief Executive Officer presents his individual objectives, targets and visions which are reviewed, discussed and approved by the Board. The Board particularly ensures that the Chairman and Chief Executive Officer s objectives are in line with the company s goals to guarantee sustainable long-term performance while not being compromised by short-term financial objectives, but on the contrary support the

long-term business objectives in the interest of all stakeholders.

For the year-end the Chairman and Chief Executive Officer prepares a self-appraisal, which is discussed with the Lead Director and the Board. The Lead Director also has individual discussions about the Chairman and Chief Executive Officer s performance with all Board Members.

In January, the Board approves the audited results of the company and evaluates the degree of achievement in respect of the

targeted financial objectives of the past year and compares the results with peer industry companies taking into account general financial criteria and industry development.

In a private session, the independent members of the Board only, discuss the overall performance of the Chairman and Chief Executive Officer and then share their appraisal with him.

Subsequently the Compensation Committee decides upon the total remuneration package for the last year and the target compensation (base and variable compensation, and special share awards) for the coming year, taking into account all relevant factors including available benchmark information.

The performance of the Chairman and Chief Executive Officer is also reviewed quarterly by the entire Board in connection with the discussion of the quarterly financial performance of the company.

Compensation of the Chairman and Chief Executive Officer in 2006

The Compensation Committee met in a separate session without the Chairman and Chief Executive Officer on January 17, 2006, to determine the amount of his variable compensation for 2005 and his target compensation for 2006. Based on the evaluation of the factors described above, the Compensation Committee concluded that the performance of the Chairman and Chief Executive Officer during 2005 was exceptional and that he had not only met, but exceeded, the performance targets defined at the beginning of the year. In recognition of this outstanding and sustained performance, the Compensation Committee decided to reward the Chairman and Chief Executive Officer accordingly (the Compensation Table below provides the details).

Compensation of Senior Management Members

General Process

The Board meets in January together with the Chairman and Chief Executive Officer to review and discuss the performance of the other members of Senior Management for the previous year, taking into account the audited financial results and the level of achievement of the individual financial and nonfinancial targets.In a separate session, the Compensation Committee decides, in presence of the Chairman and Chief Executive Officer, on the variable compensation for the members of Senior Management for the past year. At the same meeting, the Compensation Committee decides on the target compensation packages for the coming year.

In addition to the full-year assessment, the mid-year performance of Senior Management is reviewed in June. At the same time, the Board also carries out a mid-year review of the performance of the individual businesses.

During the year restricted Special Share Awards may be granted for performance or retention reasons.

Compensation of Senior Management Members in 2006

At its meeting on January 18, 2006, the Compensation Committee decided on the amount of the variable compensation for 2005 for the members of Senior Management by applying the principles described above.

Members of Senior Management (including the Chairman and Chief Executive Officer) received a total of USD 11 897 000 in salary and USD 4 579 000 in cash bonuses. The number of share options granted to members of Senior Management was 925 040 and the number of shares granted was 989 620 (excluding shares matched under the Leveraged Share Savings Plans; see pages 78 and 82). Other compensation in the amount of USD 2 865 000 was set aside for their pension, retirement and other benefits (excluding severance payments; see further below).

Disclosure of Individual Compensation to Members of the Executive Committee

The following Compensation Table provides details on the total compensation awarded to the members of the Executive Committee in 2006 (excluding shares matched under the Leveraged Share Savings Plans). The Variable compensation set forth in the table was awarded in 2006 for 2005 performance. Variable compensation for 2006 performance will be disclosed in the 2007 Annual Report. Novartis fast-track publication of its Annual Report determines this time sequence for the disclosure of executive compensation.

The term blocked shares used in the footnotes to the Compensation Table refers to the ability of associates in Switzerland to voluntarily and irrevocably commit not to sell their shares for a period of up to ten years (including any vesting period) from the date of grant. Novartis encourages associates to block their shares because doing so aligns the associates interests with the shareholders interests. The Swiss Federal Tax Administration, in its Kreisschreiben Nr. 5, Section 3.2, ascribes a net present value (the taxable value) to such blocked shares. For details see footnote 7 to the Compensation Table. Similarly, the Swiss tax authorities also ascribe a taxable value to tradable share options. In the view of Novartis, the taxable values represent the appropriate values to report in the Compensation Table.

The accounting cost of compensation for Senior Management and Board members, calculated in accordance with International Financial Reporting Standards, is reported in Note 28 in the consolidated financial statements.

Compensation Table Executive Committee

	Base Compensation	Variable compensation								
Name and Principal Position	**Currency**	**Cash (amount)**	**Bonus Cash (amount)**	**Shares (number)**1	**Equity Plan Select Shares (number)**2	**Options (number)**3	**Long-term Performance Plan Shares (number)**4	**Special Share Awards Shares (number)**5	**Other Compensation**6 **(amount)**	**Total**7 **(amount)**
Daniel Vasella Chairman & Chief Executive Officer	CHF	3 000 000		126 228	210 379		84 152	28 051	199 505	21 068 072
Urs Baerlocher Head of Legal and Tax Affairs	CHF	836 668		12 364	12 364	69 961	8 626		140 732	2 906 296
Raymund Breu Chief Financial Officer	CHF	1 071 670		18 409		416 667	11 045	15 000	140 732	6 553 054
Juergen Brokatzky-Geiger Head of Human Resources	CHF	615 000		8 416	8 416	47 620	6 312		147 088	2 603 647
Paul Choffat Head of Consumer Health	CHF	820 008	738 000		31 052		8 626		144 549	4 288 058
Thomas Ebeling Head of Pharmaceuticals	CHF	1 125 004	1 386 000		97 195		17 357	15 000	197 799	10 702 885
Mark C. Fishman Head of Biomedical Research	USD	895 833	13 481	13 352	33 993	124 876	13 289		260 662	6 443 462
Andreas Rummelt Head of Sandoz	CHF	890 004		13 149	39 447		7 890		135 650	4 791 974

1 Participants elected to invest in the Leveraged Share Savings Plans instead of receiving bonus in cash. Daniel Vasella, Urs Baerlocher and Raymund Breu have blocked all these shares for 10 years.

2 These shares include shares granted under the Novartis mandatory Equity Plan Select . Daniel Vasella, Urs Baerlocher and Raymund Breu have blocked all of these shares for 10 years. For the other members of the Executive Committee the combined vesting and voluntary blocking periods of these share awards range between 2-10 years.

3 Novartis employee share options are tradable. Options granted under the Novartis Equity Plan Select outside North-America have an exercise price of CHF 71.30 per share that corresponds to the share price at the predetermined grant date on February 6, 2006. In Switzerland, the options have a cliff-vesting period of two years after the date of grant and will expire on February 5, 2016. Options on US ADS granted to participants in North America have an exercise price of USD 54.70 per ADS that corresponds to the ADS price at the grant date. The US options have a cliff-vesting period of three years after the grant date and will expire on February 5, 2016.

4 These shares were released under the Long-term Performance Plan based on the achievement of EVA objectives. Daniel Vasella, Urs Baerlocher and Raymund Breu have blocked all these shares for 10 years; the other members of the Executive Committee have not blocked these shares.

5 These shares include unrestricted share awards for Daniel Vasella and restricted share awards for Raymund Breu and Thomas Ebeling for their outstanding performance. All these shares are blocked for 10 years.

6 Amounts include payments made by Novartis for pension and other benefits.

7 The total compensation amounts for all Executive Committee members with the exception of Mark C. Fishman have been calculated using the taxable value described above. As set out in the Kreisschreiben Nr. 5 issued by the Swiss Federal Tax Administration, the taxable value of share grants depends on the combined vesting and blocking period. The longer the combined vesting/blocking period, the lower generally the taxable value. The taxable value of a share award that is subject to a two-year vesting/blocking period, for example, equals 89% of its market value at the date of grant. The taxable value of a share award with a combined vesting/blocking period of 10 years equals 55.84% of its market value at the date of grant (see Section 3.2, Kreisschreiben Nr. 5). At the grant date the market value of the shares equaled CHF71.30 per share. Tradable share options under the Equity Plan Select have a taxable value of CHF 8.59 per option.

Equity awards are generally not taxed at grant in the US. Accordingly, there is no objective basis for calculating a tax value for Mark C. Fishman s equity awards. The total compensation amount for Mark C. Fishman is therefore presented on the basis of the market value of the shares and the trinomial value of the share options granted. At the grant date, the market value of the US ADS equaled USD 54.70 per ADS and the value of the US ADS options equaled USD 15.67 per option.

Benefits

General Policy

Pension benefits at Novartis are generally designed to provide a safety net against financial hardship that may result from disability or death as well as to provide a reasonable level of retirement income based on years of service with Novartis. As a general policy, the level of pension benefits provided to associates is country-specific and does not exceed local market practice.

Since a significant number of associates are employed either in Switzerland or the US, the pension and healthcare benefits in those countries are described in more detail below.

Pension Plans in Switzerland

Swiss Pension Fund

The Swiss Pension Fund operates a defined-benefit plan that provides retirement benefits and risk insurance for death or disability.

The Swiss Pension Fund is funded by contributions from Group companies and the insured associates. The Swiss Pension Fund insures remuneration up to a maximum base salary of CHF 220 000 per year, reduced with an offset of 30% of salary up to a maximum of CHF 24 120. The bonus of associates with a base salary below CHF 220 000 are insured through a defined-contribution incentive/bonus pension plan, which is financed through contributions by the company and the insured associates.

Swiss Management Pension Fund

The Swiss Management Pension Fund is basically a defined-contribution plan that also provides retirement annuity benefits and risk insurance for death and disability for components of remuneration in excess of the maximum insurable amount of base salary described in the previous paragraph. The Swiss Management Pension Fund insures base salary above CHF 220 000 and bonus, up to a maximum of CHF 774 000. The Swiss Management Pension Fund is funded through contributions by Novartis and the insured associates.

US-Based Employee Pension Plans

US Defined-Benefit Plan

The pension plan for certain US-based associates of Novartis Corporation and its US affiliates is a funded, tax-qualified, noncontributory defined-benefit pension plan. The amount of annual earnings covered by the pension plan is generally equal to the associate s base salary and annual bonus. The amount of annual earnings that may be considered in calculating benefits under this pension plan is limited by law (in 2006: USD 220 000). Novartis Corporation and its US affiliates also maintain various unfunded supplemental pension plans to cover associates for amounts over and above the limitation. The defined-benefit pension plans are closed plans ; new associates participate in the US defined-contribution plan.

US Defined-Contribution Plans

Associates of a Group company located in the US generally are eligible to participate in tax-qualified defined-contribution plans through which they may contribute a portion of their annual compensation (subject to the annual limitation described above) and receive a company match that is generally USD 1 for each USD 1 contributed by the participant. Associates can receive up to 6% of their base salary and annual bonus as employer contributions.

In addition, certain Group companies in the US sponsor defined-contribution plans, with contributions ranging from 3% to 10% of annual covered compensation. Associates who still accrue service years in the US defined-benefit plan do not receive such company contributions.

Novartis Corporation and its US subsidiaries also maintain various unfunded supplemental defined-contribution plans to cover associates for amounts over and above the aforementioned limitation.

Healthcare Plans

In Switzerland, Novartis does not provide healthcare benefits to associates. In other countries, healthcare plans have been established in accordance with local market practices.

In the US, all Group companies offer associates healthcare benefits which provide for a company subsidy. Certain Group companies also provide contributory post-retirement medical programs which integrate with US government-provided Medicare for participants over age 65.

Benefits to Senior Management

The members of the Executive Committee (with the exception of Mark C. Fishman) participate in the Swiss pension plans described hereinbefore in the same manner as other associates.

The US defined-benefit pension formula that applies to Mark C. Fishman is a pension equity plan (PEP) formula as it applies to other participating US associates. Benefits under the PEP formula are based on (i) the associate s highest average earnings for a five-calendar-year period during the last 10 calendar years of service with Novartis, and (ii) the associate s accumulated PEP credits (expressed as a percentage of final average earnings, and ranging from 2% to 13% for each year of service based on the associate s attained age in a particular year). Benefits accrued under the PEP plan are payable after retirement in the form of an annuity or a lump sum. The US defined-contribution plan that applies to Mark C. Fishman is the same plan that applies to other participating US associates; however, the aforementioned additional company contribution does not apply to him.

In 2006, a total of USD 308 000 was contributed to defined-benefit plans and USD 1 266 000 to defined-contribution plans for Senior Management members.

The pension benefits that have been accrued by Executive Committee members in the defined-benefit (DB) plans as of December 31, 2006, as well as the employer pension contributions in 2006, are summarized in the table next page.

The combined pension plans aim at a maximum target pension annuity of 60% of CHF 774 000 (= CHF 464 400) per annum.

Executive Committee Pension Benefits

	Currency	Accrued Benefit in DB Plans	Employer Contributions to DB plans	Employer Contributions to DC plans
Daniel Vasella	CHF	83 351	18 632	122 100
Urs Baerlocher	CHF	115 711	18 632	122 100
Raymund Breu	CHF	103 944	18 632	122 100
Juergen Brokatzky-Geiger	CHF	87 522	18 609	117 174
Paul Choffat	CHF	95 736	18 609	122 100
Thomas Ebeling	CHF	26 493	18 632	110 801
Mark C. Fishman	USD	45 761	21 000	54 750
Andreas Rummelt	CHF	84 232	18 609	110 801

DB - Defined benefit DC - Defined contribution

Allocation of Shares under the Leveraged Share Savings Plans

Recipients of bonus awards in 2001, respectively 2003, were invited to invest their bonus in the Leveraged Share Savings Plan (five-year plan) respectively ESOP (three-year plan). These plans matured in 2006. Based on associates previous investments under these plans and the investments of the associates in the UK in 2006, the company allocated 1 030 000 shares to 6 700 participants. From the total number of shares, 150 482 (14.6%) shares were issued to Senior Management. Members of the Executive Committee received the following number of matching shares. The percentages indicate the ratio by which they invested their past annual incentive in the Leverage Share Savings Plans: Daniel Vasella (107 360; 100%), Urs Baerlocher (8 600; 100%), Raymund Breu (12 880; 100%), Juergen Brokatzky-Geiger (860; 50%), Thomas Ebeling (11 600; 100%) and Andreas Rummelt (2 920; 85%). Daniel Vasella, Urs Baerlocher and Raymund Breu have blocked all of these shares for 10 years. The other Executive Committee members did not block these shares.

Ownership of Novartis Shares and Share Options by Senior Management

Ownership Guidelines

In 2003, the Board adopted share ownership guidelines that took effect in December 2003 under which Executive Committee members and other nominated executives are required to own at least a certain multiple of their base salary in Novartis shares or vested tradable options. The multiple equals five for the Chairman and Chief Executive Officer, three for other Executive Committee members and one or two for other nominated executives. Executives have three years from the date of nomination to comply with the minimal share holding requirements. The first measurement date is December 31, 2008. In the event of a substantial drop in the share price, the Board may, at its discretion, extend the time period to reach the minimal shareholding requirement. Based on the year-end share price, most designated executives, including all Executive Committee members, already complied with the share ownership guidelines as of December 31, 2006.

Shares Owned by Senior Management

The total number of Novartis shares owned by the 15 executives who belonged to Senior Management as of January 1, 2007, and by persons closely linked to them was 3 194 298. This implies an average holding of 212 953 shares. Persons closely linked to them 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. No member of Senior Management owned 1% or more of outstanding shares. As of December 31, 2006, the individual ownership of Novartis shares of Executive Committee members (including persons closely linked to them) was as follows:

	Number of Shares Owned Directly or Indirectly
Daniel Vasella	1 466 129
Urs Baerlocher	265 939
Raymund Breu	313 020
Juergen Brokatzky-Geiger	52 333

Paul Choffat	61 757
Thomas Ebeling	173 205
Mark C. Fishman	148 550
Andreas Rummelt	151 563
Total	**2 632 496**

Options Owned by Senior Management

The total number of Novartis share options owned by the 15 executives who belonged to Senior Management as of January 1, 2007, and by persons closely linked to them was 5 677 639. This

implies an average holding of 378 509 options. Broken down by grant year since 2002, the numbers of options held are:

Grant Year	Options Held 1 (number)	Exercise Price (CHF)	Term Life (years)
2006	905 424	71.30	10
2005	3 144 984	57.45	10
2004	736 301	57.45	10
2003	543 073	49.00	9
2002	281 977	62.00	9

1 Options granted under the Novartis Equity Plan Select are exercisable for one share each (1:1)

Loans, Severance Payments, Compensation to Former Members of Senior Management

No loans were granted by the Group to Senior Management during 2006 or were outstanding as of December 31, 2006.

During 2006, two members of Senior Management received USD 1 633 863 as severance upon the termination of their employment with Novartis.

In 2006, total compensation of USD 741 795 was paid to four former members of Senior Management. Due to an investment of past bonus awards in the Leveraged Share Savings Plans, the invested shares of one former member of Senior Management, were matched with 799 shares in 2006. The matched shares were not forfeited since he continues to be employed.

Non-Executive Director Compensation and Shareholdings

General Principles

The Compensation Committee determines the compensation of Non-Executive Directors. They receive an annual fee in an amount that varies with the Board and committee responsibilities of each Director. They receive no additional fees for attending meetings or acting as committee chairs.

Directors can choose to receive the annual fee in cash, shares or a combination of both. The conversion between cash and shares is based on the share price at the predetermined grant date. The grant date (February 6, 2006) and related share price (CHF 71.30) are the same as under the Novartis Equity Plan Select. As of January 1, 2003, share options were no longer offered to Directors, nor were shares granted to Directors in acknowledgement of business performance. Directors are reimbursed for travel and other necessary business expenses incurred in the performance of their services; the reimbursement of these expenses is not included in the compensation figures reported aside. No loans were granted to Non-Executive Directors.

Compensation to Non-Executive Directors in 2006

	Annual Cash Compensation (CHF)	Shares (number)
Ulrich Lehner Vice Chairman, Lead Director1 Chairman s Committee (Member) Compensation Committee (Member) Audit and Compliance Committee (Chair) Corporate Governance and Nomination Committee (Member)	656 250	5 523
Hans-Joerg Rudloff Vice Chairman Chairman s Committee (Member) Compensation Committee (Chair) Audit and Compliance Committee (Member) Corporate Governance and Nomination Committee (Member)	789 890	0
Birgit Breuel Audit and Compliance Committee (Member)	473 994	0
Peter Burckhardt	169 903	4 208
Srikant Datar Audit and Compliance Committee (Member)	298 125	2 131
William W. George Chairman s Committee (Member) Compensation Committee (Member) Corporate Governance and Nomination Committee (Chair)	375 000	3 156
Alexandre F. Jetzer2	13 911	4 909
Pierre Landolt Corporate Governance and Nomination Committee (Member)	128 402	4 124
Andreas von Planta		

Audit and Compliance Committee (Member)	360 766	1 578
Wendelin Wiedeking	112 490	3 608
Rolf M. Zinkernagel[3]		
Corporate Governance and Nomination Committee (Member)	471 198	3 009
Total	**3 849 929**	**32 246**

1 Ulrich Lehner succeeded Helmut Sihler as Lead Director; Helmut Sihler retired from the Board at the Annual General Meeting of February 28, 2006.

2 In addition, Alexandre F. Jetzer was compensated CHF 300 722 for other consulting services.

3 Rolf M. Zinkernagel s compensation includes CHF 250 000 for acting as the Board s delegate to the scientific advisory boards of the Genomics Institute of the Novartis Research Foundation (GNF) and the Novartis Institute for Tropical Diseases (NITD).

Ownership of Novartis Shares and Share Options by Non-Executive Directors

Ownership Guidelines

Under the share ownership guidelines, Non-Executive Directors are required to own at least 5 000 Novartis shares within three years after joining the Board. As of December 31, 2006, all Non-Executive Directors who have served at least three years on the Board comply with these share ownership guidelines.

Shares Owned by Non-Executive Directors

As of December 31, 2006, the individual ownership of Novartis shares by the Non-Executive Directors and persons closely linked to them was as follows:

Beneficial Owner	Number of Shares Owned Directly or Indirectly
Ulrich Lehner	16 788
Hans-Joerg Rudloff	109 791
Birgit Breuel	5 000
Peter Burckhardt	19 472
Srikant Datar	9 403
William W. George	118 865
Alexandre F. Jetzer	65 530
Pierre Landolt	15 670
Andreas von Planta	2 178
Wendelin Wiedeking	15 586
Rolf M. Zinkernagel	19 231
Total	**397 514**

The total number of Novartis shares owned as of December 31, 2006, by the Non-Executive Directors and persons closely linked to them was 397 514. This implies an average holding of 36 138 shares. Persons closely linked to them are (i) their spouse, (ii) their children below age 18, (iii) any legal entities that they own or otherwise control, or (iv) any legal or natural person who is acting as their fiduciary. None of the Non-Executive Directors and persons closely linked to them owned 1% or more of outstanding shares.

Options Owned by Non-Executive Directors

As of December 31, 2006, the Non-Executive Directors held a total of 159 407 Novartis share options. The options held for the previous five years are all from the grant year 2002 (the last year in which share options were granted to Directors) and have the following characteristics:

Grant Year	Options Held 1 (number)	Exercise Price (CHF)	Term Life (years)
2002	79 087	62.0	9

1 Options are exercisable for one share each (1:1)

Compensation to Former Non-Executive Directors

In 2006 an amount of USD 50 406 was paid to one former Non-Executive Director.

Auditors

Duration of the Mandate and Terms of Office of the Independent Auditors

Based on a recommendation by the Audit and Compliance Committee, the Board nominates an independent auditor for election at the Annual General Meeting. PricewaterhouseCoopers (PwC) assumed its existing auditing mandate for Novartis in 1996. The lead auditors responsible for the mandate, Robert P. Muir and Daniel Suter, began serving in their roles in 2005 and 2003, respectively.

Auditing and Additional Fees

PwC charged the following fees for professional services rendered for the 12-month period ended December 31, 2006:

	2006 USD 000	**2005 USD 000**
Audit Services	19 785	20 129
Audit-Related Services	1 356	490
Tax Services	329	800
Other Services	344	22
Total	**21 814**	21 441

Audit Services are defined as the standard audit work that needs to be performed each year in order to issue opinions on the consolidated financial statements of the Group, to issue opinions relating to management s assessment of internal controls over financial reporting and the effectiveness of the Group s internal controls over financial reporting, and to issue reports on local statutory financial statements. Also included are services that can only be provided by the Group auditor, such as auditing of nonrecurring transactions and implementation of new accounting policies, audits of significant and

newly implemented system controls, pre-issuance reviews of quarterly financial results, consents and comfort letters and any other audit services required for US Securities and Exchange Commission 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, contractual audits of third-party arrangements, assurance services on corporate citizenship reporting, and consultation regarding new accounting pronouncements.

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

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

Supervisory and Control Instruments

Audit and Compliance Committee

Management is responsible for creating the financial statements and managing the reporting process. Further, Management is responsible for designing internal controls over financial reporting and assessing and reporting on the effectiveness of those internal controls. The Audit and Compliance Committee reviews financial reporting processes on behalf of the Board.

For each quarterly and annual release of financial information, the Disclosure Review Committee reviews the release for accuracy and completeness of the release s disclosures. The Disclosure Review Committee is chaired by the Chief Financial Officer and is attended by the heads of Divisions, the heads of finance of Divisions and the heads of the following Corporate Functions: Legal & Tax Affairs, Treasury, Financial Reporting & Accounting, Internal Audit and Investor Relations. The decisions taken by the Disclosure Review Committee are reviewed by the Audit and Compliance Committee before publication of the financial release.

The Internal Audit function regularly carries out audits on operations and processes and performs such other functions as are assigned to it by the Board of Directors, the Chairman and Chief Executive Officer or the Audit and Compliance Committee. As a matter of principle, all organizational units of the Group are subject to audits from time to time. The Audit and Compliance Committee reviews regularly the internal audit scope, the audit plans and the results of the internal audits.

As the independent auditor, PwC is responsible for expressing an opinion on the conformity of the audited financial statements with International Financial Reporting Standards (IFRS) and compliance with Swiss law. Additionally, PwC is responsible for expressing an opinion on Management s assessment of the effectiveness of internal control over financial reporting and for providing an opinion on the effectiveness of internal control over financial reporting.

The Audit and Compliance Committee is responsible for overseeing the conduct of these activities by Management and PwC. During 2006, the Audit and Compliance Committee held eight meetings. PwC was invited to all those meetings to attend during those agenda points that dealt with accounting, financial reporting or auditing matters and all matters of importance were discussed. PwC provided to the Audit and Compliance Committee the written disclosures required by US Independence Standards Board Standard No. 1 (Communications with Audit Committees), and the Audit and Compliance Committee and PwC have discussed PwC s independence from Novartis and Novartis Management.

Based on the reviews and discussions with Management and PwC referred to above, the Audit and Compliance Committee recommended to the Board, and the Board approved, inclusion of the audited financial statements in the Annual Report for the year ended December 31, 2006.

Policy on Pre-Approval of Audit and Non-Audit Services of Independent Auditors

The Audit and Compliance Committee s policy is to pre-approve all audit and non-audit services provided by PwC. These services may include audit services, audit-related services, tax services and other services, as described above. Pre-approval is detailed as to the particular service 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 on a quarterly basis. The Audit and Compliance Committee may also pre-approve additional services on a case-by-case basis.

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Information and Communication Policy

Introduction

Novartis is committed to open and transparent communication with shareholders, investors, financial analysts, customers, suppliers and other interested parties. Material information pertaining to Novartis businesses is timely and broadly disseminated in a manner that complies with obligations under the rules of both the SWX Swiss Exchange and the New York Stock Exchange. Novartis voluntarily complies with Regulation FD of the United States Securities and Exchange Commission (SEC). Forward-looking statements, which reflect Managment s understanding of the situation and performance as of the date of such statements, are made in an effort to help stakeholders better understand the progress of Novartis businesses.

Information Materials

Each year a detailed Annual Report to shareholders is published, which provides information on the results and operations of Novartis businesses. The Annual Report also provides information on developments in efforts regarding Corporate Citizenship, Health, Safety and Environment and Human Resources. Central to the Annual Report is one section entirely devoted to Corporate Governance and another to the audited financial statements of the reported year.

Financial statements are prepared in accordance with International Financial Reporting Standards (IFRS) and a bridging statement to US GAAP is provided. Apart from the Annual Report, an annual report on Form 20-F is also produced and filed with the SEC.

Since 2003, on a quarterly basis, results have been filed with the SEC on Form 6-K. Financial results releases are disseminated in the same manner as press releases. The quarterly results press releases contain unaudited financial statements in accordance with IFRS and US GAAP.

Press releases are issued from time to time regarding developments in various Novartis businesses and other activities in which they are involved. All releases are disseminated broadly and simultaneously pursuant to the rules and regulations of the Swiss and New York Stock Exchanges. Press releases relating to financial results and material events are also filed with the SEC on Form 6-K. An archive containing Annual Reports to Shareholders, annual reports to the SEC on Form 20-F, and quarterly results releases as well as related materials, such as slide presentations and conference call webcasts, can be found on the Novartis Investor Relations website (www.novartis.com/investors). A press release archive is also maintained on:

www.novartis.com/news/en/media.shtml

Information contained in all reports and releases is deemed correct and accurate at the time of release. Past releases are not updated to take into account changes in the marketplace or Novartis businesses.

Investor Relations Program

Novartis has an Investor Relations program which includes the following:

- A full-year results presentation;
- Investor events focusing on the Novartis R&D pipeline;
- Themed events, covering areas of interest such as therapeutic advances in medicine, pharmaceutical research or the generics business (Sandoz);
- One-on-one and group meetings with investors and analysts at a Novartis site or during roadshows at major financial centers;
- Conference calls for quarterly results or in conjunction with other press releases; and
- Presentations at broker-sponsored industry conferences.

These activities focus on recently announced activities or financial results and are conducted in line with stock exchange disclosure rules and Regulation FD.

Presentations are regularly posted to the financial community in an archive on the Novartis Investor Relations website, as audio webcasts and/or PDF documents for slide presentations. These presentations are not regularly updated, but reflect the developments within Novartis over time.

Novartis Investor Relations is managed from the global headquarters in Basel, Switzerland. A team of professionals is located in New York to assist in coordinating responses to inquiries from the US. Their contact details as well as an Investor Relations mailbox are made available on the Novartis Investor Relations website

(www.novartis.com/investors).

On the Novartis website, you can also subscribe to the Novartis Investor Relations e-mail distribution system.

Performance Graph

This graph compares the total shareholder return of Novartis, the Morgan Stanley World Pharmaceuticals Index and the Swiss Market Index (SMI). The graph assumes an investment of CHF 100 in Novartis at the closing price on December 31, 1995, and an equal amount invested in each of the indices.

	Dec 95	Dec 96	Dec 97	Dec 98	Dec 99	Dec 00	Dec 01	Dec 02	Dec 03	Dec 04	Dec 05	Dec 06
Novartis	100	147	244	281	247	317	269	230	270	330	358	338
SMI	100	122	197	228	245	268	215	158	201	273	320	319
MSWPI	100	142	221	292	302	380	334	229	219	261	282	279

Further Information

Topic	Location
SHARE CAPITAL	
Capital Structure	Articles of Incorporation of Novartis AG (www.novartis.com/investors/en/corporate_governance)
Novartis Key Share Data	http://www.novartis.com/investors/en/share_information/key_share_data.shtml
SHAREHOLDER RIGHTS Information on the Novartis share and the shareholder s participation rights Articles of Incorporation of Novartis AG	(www.novartis.com/investors/en/corporate_governance) Investor Relation information: (www.novartis.com/investors)
BOARD OF DIRECTORS AND EXECUTIVE COMMITTEE	
Internal organization and allocation of responsibilities	Board Regulations and Board Committee Charters (www.novartis.com/investors/en/corporate_governance)
SENIOR MANAGEMENT	Management Team http://www.novartis.com/about_novartis/en/structure.shtml
NOVARTIS CODE FOR SENIOR FINANCIAL OFFICERS	(http://www.novartis.com/investors/en/corporate_governance)
ADDITIONAL INFORMATION Sources for further information and anticipated key reporting dates in 2007	IR Calendar (http://www.novartis.com/investors/en/contact_us/ir_calendar.shtml)

BOARD OF DIRECTORS

Daniel Vasella, M.D.
Chairman and CEO
Swiss, age 53

Ulrich Lehner, Ph.D.
Vice Chairman and Lead Director
German, age 60

Hans-Joerg Rudloff
Vice Chairman
German, age 66

Dr. h.c. Birgit Breuel
German, age 69

Peter Burckhardt, M.D.
Swiss, age 68

Srikant Datar, Ph.D.
American, age 53

William W. George
American, age 64

Alexandre F. Jetzer
Swiss, age 65

Pierre Landolt
Swiss, age 59

Andreas von Planta, Ph.D.
Swiss, age 51

Dr. Ing. Wendelin Wiedeking
German, age 54

Rolf M. Zinkernagel, M.D.
Swiss, age 62

Honorary Chairman

Alex Krauer, Ph.D.

Corporate Secretary

Bruno Heynen

Marc Moret, who was a key architect in the creation of Novartis and former Sandoz Chairman, died on March 17, 2006.

Daniel Vasella, M.D.

Swiss, age 53

Function at Novartis AG Since 1996 Dr. Vasella has served as Chief Executive Officer of the Group and as executive member of the Board of Directors. In 1999, he additionally was appointed Chairman of the Board of Directors.

Activities in governing or supervisory bodies Dr. Vasella is also a member of the Board of Directors of Pepsico, Inc.*, United States, a member of the Board of Dean s Advisors at the Harvard Business School, and a member of the INSEAD Board of Directors.

Professional background Dr. Vasella graduated with an M.D. from the University of Bern in 1979. After holding a number of medical positions in Switzerland, he joined Sandoz Pharmaceuticals Corporation in the US in 1988. From 1993 to 1995, Dr. Vasella advanced from Head of Corporate Marketing and Senior Vice President and Head of Worldwide Development to Chief Operating Officer of Sandoz Pharma Ltd. In 1995 and 1996, Dr. Vasella was a member of the Sandoz Group Executive Committee and Chief Executive Officer of Sandoz Pharma Ltd. He received the Harvard Business School s Alumni Achievement Award and the Appeal of Conscience Award as well as the AJ Congress Humanitarian Award and numerous other awards. Dr. Vasella was awarded an honorary doctorate by the University of Basel. He has also been honored with the Ordem Nacional do Cruzeiro do Sul (Brazil) and holds the rank of Chevalier in the Ordre National de la Légion d honneur (France).

Permanent management or consultancy engagements

Dr. Vasella is a member of the International Board of Governors of the Peres Center for Peace in Israel and a member of the International Business Leaders Advisory Council for the Mayor of Shanghai. He also serves as a member of several industry associations and educational institutions.

Ulrich Lehner, Ph.D.

German, age 60

Function at Novartis AG Ulrich Lehner was elected in 2002 to the Board of Directors of Novartis AG. He became Vice Chairman and Lead Director in 2006 and is Chairman of the Audit and Compliance Committee. He is a member of the

Chairman s Committee, the Compensation Committee and the Corporate Governance and Nomination Committee. The Board has appointed him as Audit Committee Financial Expert. He qualifies as an independent Non-Executive Director.

Activities in governing or supervisory bodies Ulrich Lehner is Chairman of the Management Board of Henkel KGaA, Germany. He also serves as a member of the Board of Ecolab Inc.*, United States, as member of the supervisory board of E.ON AG* and of HSBC Trinkaus & Burkhardt KGaA*, both in Germany.

Professional background Ulrich Lehner studied business administration and mechanical engineering. From 1975 to 1981, Ulrich Lehner 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, he returned to Henkel as Finance Director. From 1991 to 1994, Ulrich Lehner headed the Management Holding Henkel Asia-Pacific Ltd. in Hong Kong. From 1995 to 2000, he served as Executive Vice President, Finance/Logistics (CFO), of Henkel.

Hans-Joerg Rudloff

German, age 66

Function at Novartis AG Since 1996 Hans-Joerg Rudloff has served as Vice Chairman. In 1999, he became a member of the Chairman s Committee and the Compensation Committee and since 2002 he has been a member of the Corporate Governance and Nomination Committee. He qualifies as an independent, Non-Executive Director. Since 2004 Hans-Joerg Rudloff has been a member of the Audit and Compliance Committee.

Activities in governing or supervisory bodies Hans-Joerg Rudloff joined Barclays Capital* in 1998, where he is presently Chairman. Hans-Joerg Rudloff also serves on a number of boards of other companies, including the Boards of Directors of the TBG Group (Thyssen-Borne-misza Group), Monaco, Marcuard Group, Geneva, RBC, Russia and ADB Consulting, Geneva, Switzerland. In 2005, Hans-Joerg Rudloff became Chairman of the International Capital Markets Association (ICMA) and is Chairman of the Compensation Committee of ICMA. In 2006, he joined Rosneft and became Chairman of the Audit Committee and the Remuneration Committee. He also is the Chairman of the Board of Bluebay Asset Management Ltd.

Professional background Hans-Joerg Rudloff studied economics at the University of Bern and graduated in 1965. He joined Credit Suisse in Geneva and moved to New York in 1968 to join the investment banking firm of Kidder Peabody Inc. He was in charge of the Swiss operation and was elected Chairman of Kidder Peabody International and a member of the Board of Kidder Peabody Inc. in 1978. In 1980 he joined Credit Suisse First Boston and was elected Vice Chairman in 1983 and Chairman and CEO in 1989. From 1986 to 1990, Hans-Joerg 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 Hans-Joerg Rudloff was Chairman of MC-BBL in Luxembourg. In 1994, Hans-Joerg Rudloff was elected to the Board of Directors of Sandoz AG.

Permanent management or consultancy engagements Hans-Joerg Rudloff is a member of the Advisory Board of the MBA program of the University of Bern, Switzerland, of Landeskreditbank Baden-Wuerttemberg, Germany, and EnBW

(Energie Baden-Wuerttemberg), Germany.

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Dr. h.c. Birgit Breuel

German, age 69

Function at Novartis AG Since 1996, Birgit Breuel has served as a Member of the Board. In 1999, she became a member of the Audit and Compliance Committee. She qualifies as an independent, Non-Executive Director.

Professional background Birgit Breuel studied politics at the Universities of Hamburg, Oxford and Geneva. She was Minister of Economy and Transport (1978 1986) and Minister of Finance (1986 1990) of Niedersachsen (Lower Saxony), the second-largest state of Germany. In 1990, Birgit Breuel was elected to the Executive Board of the Treuhandanstalt, which was responsible for the privatization of the former East Germany s economy. In 1991, she also became the President of the Treuhandanstalt. From 1995 to 2000, she acted as the General Commissioner and CEO of the world exhibition EXPO 2000 in Hanover, Germany.

Peter Burckhardt, M.D.

Swiss, age 68

Function at Novartis AG Dr. Burckhardt has been a member of the Board of Directors since 1996. He qualifies as an independent, Non-Executive Director.

Activities in governing or supervisory bodies From 1982 to 2004 Dr. Burckhardt has been the Chairman of the Novartis (formerly Sandoz) Foundation for Biomedical Research in Switzerland. Since 1982, Dr. Burckhardt has been the Head of the Department of Internal Medicine at the University Hospital of Lausanne, then chief of medical service A, until 2004.

Professional background Dr. Burckhardt is a Professor of Medicine and the former Chairman of the Department of Internal Medicine at the University Hospital of Lausanne, Switzerland. He has an M.D. from the University of Basel and is a trained internal medicine and endocrinology specialist from the University of Lausanne and the Massachusetts General Hospital, Boston. In addition to his clinical activities, Dr. Burckhardt conducts clinical research, mainly in bone diseases and calcium metabolism. He has authored more than 300 scientific publications and is an editorial board member of several international scientific journals. He was president of the Swiss Society of Internal Medicine, a

member of the appeal committee of the national agency for drug controls, Chairman of National Societies and member of the Executive Committee of the International Foundation of Osteoporosis, and treasurer until 2006. Other experiences comprise board membership in several scientific societies including the Swiss Societies of Nutrition, Clinical Chemistry, Endocrinology, Bone and Mineral Research, the Committee for Endocrinology of the European Community and advisory roles to scientific foundations in Switzerland and Germany.

Permanent management or consultancy engagements Since 1990, he has been the organizer and chairman of the International Symposia on Nutrition and Osteoporosis.

Srikant Datar, Ph.D.

American, age 53

Function at Novartis AG Srikant Datar became a member of the Board in 2003. He qualifies as an independent, Non-Executive Director.

Activities in governing or supervisory bodies Srikant Datar is a member of the Board of ICF International, Fairfax, Virginia.

Professional background In 1973, Srikant Datar graduated with distinction in mathematics and economics at the University of Bombay. He is a Chartered Accountant and holds two masters degrees and a Ph.D. from Stanford University. Srikant Datar has worked as an accountant and planner in industry and as a professor at the Universities of Carnegie Mellon, Stanford and Harvard in the US. He currently holds the Arthur Lowes Dickinson Professorship at Harvard University. 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. Srikant Datar has advised and worked with numerous renowned firms such as General Motors, Mellon Bank and Morgan Stanley in research, development and training.

Permanent management or consultancy engagements Srikant Datar is Senior Associate Dean at the Graduate School of Business Administration of Harvard University, Boston, Massachusetts.

William W. George

American, age 64

Function at Novartis AG In 1999, William W. George was elected as a member of the Board of Directors. In 2000, he became a member of the Compensation Committee. In 2001, he became a member of the Chairman s Committee and also the Chairman of the Corporate Governance and Nomination Committee. He qualifies as an independent, Non-Executive Director.

Activities in governing or supervisory bodies William W. George is a member of the Boards of Directors of Goldman Sachs* and Exxon Mobil*.

Professional background William W. George received his BSIE from Georgia Institute of Technology in 1964 and his MBA from Harvard University in 1966. From 1966 to 1969, he worked in the US Department of Defense as special assistant to the Secretary of the Navy and as assistant to the Comptroller. After having served as President of Litton Microwave Cooking Products, William W. George held a series of executive positions with Honeywell from 1978 to 1989. Thereafter he served as President and Chief Operating Officer of Medtronic, Inc. in Minneapolis, and, from 1991 to 2001, as its Chief Executive Officer. From 1996 to 2002, he was Medtronic s Chairman. He has served as Executive-in-Residence at Yale School of Management and Professor of Leadership and Governance at IMD International in Lausanne, Switzerland.

Permanent management or consultancy engagements William W. George is Professor of Management Practice at Harvard Business School. In addition, he is a trustee of the Carnegie Endowment for International Peace and the World Economic Forum USA.

Alexandre F. Jetzer

Swiss, age 65

Function at Novartis AG Alexandre F. Jetzer has served as a Director since 1996. He is a Non-Executive Director.

Activities in governing or supervisory bodies Alexandre F. Jetzer is also a member of the Board of Directors of Clariden Bank, Zurich, Switzerland, of the Supervisory Board of Compagnie Financière Michelin, Granges-Paccot (FR), Switzerland, and of the Board of the Lucerne Festival Foundation, Lucerne, Switzerland.

Professional background Alexandre F. Jetzer graduated with Masters of law and economics from the University of Neuchâtel, Switzerland and is a licensed attorney. After serving as General Secretary of the Swiss Federation of Commerce and Industry (Vorort) from 1967 on, Alexandre F. Jetzer joined Sandoz in 1980. In 1981 he was appointed Member of the Sandoz Group Executive Committee in the capacity of Chief Financial Officer (CFO) and, as of 1990, as Head of Management Resources and International Coordination. From 1995 to 1996, he was Chairman and Chief Executive Officer of Sandoz Pharmaceuticals Corporation in East Hanover, New Jersey (US) and he additionally served as President and CEO of Sandoz Corporation in New York (NY). After the merger which created Novartis in 1996 until 1999, he was appointed as a member of the Executive Committee of Novartis and Head of International Coordination, Legal & Taxes.

Permanent management or consultancy engagements Alexandre F. Jetzer has a consultancy agreement with Novartis International AG (Government Relations Support). In addition he is a member of the International Advisory Panel (IAP) on Biotechnology Strategy of the Prime Minister of Malaysia and a member of the Development Committee of the Neuroscience Center of the University of Zurich, Switzerland.

Pierre Landolt

Swiss, age 59

Function at Novartis AG Pierre Landolt has served as a Director since 1996. He qualifies as an independent, Non-Executive Director.

Activities in governing or supervisory bodies Pierre Landolt is President of the Sandoz Family Foundation, Glaris, Switzerland, Chairman of the Board of Directors of Emasan AG, Basel, Switzerland, and of Vaucher Manufacture Fleurier SA, Fleurier, Switzerland. He is a member of the Board of Directors of Syngenta AG*, where he also serves as member of the Audit Committee, and of the Syngenta Foundation for Sustainable Agriculture, both in Basel, Switzerland. In addition, Pierre Landolt is Associate Partner of Banque Landolt & Cie, Lausanne, Switzerland, and Vice Chairman of the Board of Directors of Parmigiani Fleurier SA., Fleurier, Switzerland, and of the Fondation du Montreux Jazz Festival, Montreux, Switzerland.

Professional background Pierre Landolt graduated with a Bachelor of Law degree 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 arid Northeast region of Brazil and transformed it into a model farm for organic and biotechnological development. He also created an irrigation company, initially for his own farm and today active in the entire northern region of Brazil. Since 1997, Pierre Landolt has been Associate and Chairman of AxialPar Ltda, São Paulo, Brazil, an investment company focussed on sustainable development. In 2000, he co-founded EcoCarbone France, Paris, a company active in the design and development of carbon sequestration processes in Asia, Africa, South America and Europe.

Andreas von Planta, Ph.D.

Swiss, age 51

Function at Novartis AG In 2006, Andreas von Planta was elected to the Board of Directors of Novartis AG. He has been a member of the Audit and Compliance Committee since 2006. He qualifies as an independent, Non-Executive Director.

Activities in governing or supervisory bodies Andreas von Planta is Vice Chairman of Holcim Ltd* and the Schweizerische National-Versicherungs-Gesellschaft AG*, and is a member of the boards of various Swiss subsidiaries of foreign companies.

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

Permanent management or consultancy engagements Andreas von Planta sits on the Board of Editors of the Swiss Review of Business Law, and is a former Chairman of the Geneva Association of Business Law.

Dr. Ing. Wendelin Wiedeking

German, age 54

Function at Novartis AG Wendelin Wiedeking was elected as a member of the Board in 2003. He qualifies as an independent, Non-Executive Director.

Activities in governing or supervisory bodies Wendelin Wiedeking is Chairman of the Executive Board of Dr.-Ing. h.c. F. Porsche AG*, Germany.

Professional background Born in Ahlen, Germany, Mr. Wiedeking studied mechanical engineering and worked as a scientific assistant in the Machine Tool Laboratory of the Rhine-Westphalian College of Advanced Technology in

Aachen. His professional career began in 1983 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 the Glyco Metall-Werke KG in Wiesbaden as Division Manager, where he advanced by 1990 to the position of Chief Executive and Chairman of the Board of Management of Glyco AG. In 1991, he returned to Porsche AG as Production Director. A year later, the Supervisory Board appointed him spokesman of the Executive Board (CEO), and Chairman in 1993.

Rolf M. Zinkernagel, M.D.

Swiss, age 62

Function at Novartis AG In 1999, Dr. Zinkernagel was elected to the Board of Directors of Novartis AG. He has been a member of the Corporate Governance and Nomination Committee since 2001. He qualifies as an independent, Non-Executive Director.

Professional background Dr. Zinkernagel graduated from the University of Basel with an M.D. in 1970. Since 1992 he has been Professor and Director of the Institute of Experimental Immunology at the University of Zurich. Dr. Zinkernagel has received many awards and prizes for his work and contribution to science, the most prestigious being the Nobel Prize for Medicine which he was awarded in 1996. Dr. Zinkernagel was a member of the Board of Directors of Cytos Biotechnology AG*, Schlieren/Zurich, Switzerland until April 2003.

Permanent management or consultancy engagements Dr. Zinkernagel is a member of the Swiss Society of Allergy and Immunology, the American Associations of Immunologists and of Pathologists, the ENI European Network of Immunological Institutions, and President of the Executive Board of the International Union of Immunological Societies (IUIS). He is also a member of the Scientific Advisory Boards of: Bio-Alliance AG, Frankfurt, Germany; Aravis General Partner Ltd., Cayman Islands; Bioxell*, Milan, Italy; Esbatech, Zurich, Switzerland; Novimmune, Geneva, Switzerland; Miikana Therapeutics, Fremont CA (until January 2006); Nuvo Research* (until September 2005: Dimethaid), Toronto, Canada; Humab, San Francisco CA, US; xbiotech, Vancouver, Canada; ImVision, Hannover, Germany; MannKind*, Sylmar CA, US; and Laboratoire Koch, Lausanne, Switzerland (since 2006). Dr. Zinkernagel is also a Science Consultant to: GenPat77, Berlin/Munich, Germany; Liponova*, Hannover, Germany; Solis Therapeutics, Palo Alto, US; Ganymed, Mainz, Germany; and Zhen-Ao Group, Dalian, China.

EXECUTIVE COMMITTEE

Daniel Vasella, M.D.
Chairman and CEO
Member since 1996
Swiss, age 53

Juergen Brokatzky-Geiger, Ph.D.
Head of Human Resources
Member since 2005
German, age 54

Mark C. Fishman, M.D.
Head of Biomedical Research
Member since 2002
American, age 55

Thomas Wellauer, Ph.D.
Head of Corporate Services
Member since 2007
Swiss, age 51

Urs Baerlocher, J.D.
Head of Legal and Tax Affairs
Member since 1999
Swiss, age 64

Paul Choffat, J.D.
Head of Consumer Health
Member since 2002
Swiss, age 57

Joerg Reinhardt, Ph.D.
Head of Vaccines and Diagnostics
Member since 2007
German, age 50

Raymund Breu, Ph.D.
Chief Financial Officer
Member since 1996
Swiss, age 61

Thomas Ebeling
Head of Pharmaceuticals
Member since 1998
German, age 47

Andreas Rummelt, Ph.D.
Head of Sandoz
Member since 2006
German, age 50

Secretary
to the Executive Committee
Monika Matti

Daniel Vasella, M.D.

Swiss, age 53

Dr. Vasella graduated with an M.D. from the University of Bern in 1979. After holding a number of medical positions in Switzerland, he joined Sandoz Pharmaceuticals Corporation in the US in 1988. From 1993 to 1995, Dr. Vasella advanced from Head of Corporate Marketing and Senior Vice President and Head of Worldwide Development to Chief Operating Officer of Sandoz Pharma Ltd. In 1995 and 1996, he was a member of the Sandoz Group Executive Committee and Chief Executive Officer of Sandoz Pharma Ltd. After the merger that created Novartis in 1996, Dr. Vasella became Chief Executive Officer of the Group and executive member of the Board of Directors. In 1999 he additionally was appointed Chairman of the Board of Directors. Dr. Vasella is a director of Pepsico, Inc. (US). He is a member of the Board of Dean s Advisors at the Harvard Business School, and a member of the INSEAD Board of Directors. Dr. Vasella is also a member of the International Board of Governors of the Peres Center for Peace in Israel and the International Business Leaders Advisory Council for the Mayor of Shanghai. He was awarded an honorary doctorate by the University of Basel in 2002.

Urs Baerlocher, J.D.

Swiss, age 64

Urs Baerlocher earned his J.D. from the University of Basel and was admitted to the bar in 1970. After working as a tax lawyer, he joined Sandoz Ltd. in 1973, and held a number of key positions including Head of Strategic Planning and Head of Group Reporting. In 1987, he was made a member of the Sandoz Executive Board, responsible i.a. for Strategic Planning, Human Resources, Legal, Taxes, Patents and Trademarks. In 1990, he became CEO of the Sandoz Nutrition Division and in 1993 CEO of Sandoz Pharma Ltd. In 1995, Urs Baerlocher assumed the position of Chairman of the Board of Sandoz Deutschland GmbH (Germany) and Biochemie GmbH (Austria). After the formation of Novartis in 1996, Urs Baerlocher was appointed Head of Legal, Tax, Insurance, to which Corporate Security and International Coordination were added. In 1999, he became a member of the Executive Committee of Novartis. From 2000, he held the position of Head of Legal and General Affairs. His responsibilities were extended to include Corporate Intellectual Property and Corporate Health, Safety & Environment as well as from 2004, Corporate Risk Management and from 2005, Public Affairs and the functional reporting of Group Quality Operations. Since May 2006, Urs Baerlocher has been Head of Legal and Tax Affairs.

Raymund Breu, Ph.D.

Swiss, age 61

Raymund Breu graduated from the Swiss Federal Institute of Technology (ETH) in Zurich, Switzerland, with a Ph.D. in mathematics. In 1975, he joined the Treasury Department of the Sandoz Group, and, in 1982, became the Head of Finance for the Sandoz affiliates in the UK. In 1985, he was appointed Chief Financial Officer of Sandoz Corporation in New York, where he was responsible for all Sandoz Finance activities in the US. In 1990, he became Group Treasurer of Sandoz Ltd., Basel, Switzerland, and, in 1993, Head of Group Finance and Member of the Sandoz Executive Board. Following the formation of Novartis in 1996, Raymund Breu assumed his current position as Chief Financial Officer and member of the Executive Committee of Novartis. He is also a member of the Board of Directors of Swiss Re, the SWX Swiss Exchange and its admission panel, and the Swiss takeover commission.

Juergen Brokatzky-Geiger, Ph.D.

German, age 54

Juergen Brokatzky-Geiger graduated with a Ph.D. in Chemistry from the University of Freiburg, Germany in 1982. He joined Ciba-Geigy Ltd. in 1983 as a Laboratory Head in the Pharmaceuticals Division. After a job rotation in Summit, New Jersey (US) from 1987 to 1988 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, Juergen Brokatzky-Geiger was appointed Integration Officer of Technical Operations. Thereafter, he became the Head of Chemical and Analytical Development and served as the Global Head of Technical R&D from 1999 to August 2003. Juergen Brokatzky-Geiger was appointed to his present position as Head of Human Resources on September 1, 2003. He has been a member of the Executive Committee of Novartis since January 1, 2005.

Paul Choffat, J.D.

Swiss, age 57

Paul Choffat holds a J.D. from the University of Lausanne, Switzerland, and an M.B.A. from the International Institute for Management Development (IMD) in Lausanne. He started his professional career with Nestlé in Zurich, Switzerland, and London, UK. From 1981 to 1985, he was a project manager at McKinsey & Company in Zurich. Between 1987 and 1994, Paul Choffat held a number of senior positions at Landis

& Gyr in Zug, Switzerland, where he became a member of the Executive Board and Head of the Communications Division. In 1994, he moved to Von Roll in Gerlafingen, Switzerland, as CEO. Paul Choffat joined Sandoz Ltd. in 1995 as Head of Management Resources and International Coordination. He subsequently became a member of the Executive Board and was responsible for Group Planning and Organization. During the Novartis merger he headed the Integration Office. In 1996, Paul Choffat returned to line management as CEO of Fotolabo SA, Montpreveyres-sur-Lausanne, Switzerland, where he remained for three years before becoming an entrepreneur and private investor in 1999. He rejoined Novartis in January 2002 as Head of Novartis Consumer Health and member of the Executive Committee of Novartis.

Thomas Ebeling

German, age 47

Thomas Ebeling graduated from the University of Hamburg, Germany with a degree in psychology. From 1987 to 1991, he held several positions of increasing responsibility at Reemstma Germany. In 1991, he joined Pepsi-Cola Germany as Marketing Director. He became Marketing Director for Germany and Austria in 1993, and was National Sales and Franchise Director for Pepsi s retail and on-premise sales from 1994. He then served as General Manager of Pepsi-Cola Germany. In 1997, Thomas Ebeling joined Novartis as General Manager of Novartis Nutrition for Germany and Austria. After serving as CEO of Novartis Nutrition worldwide, he became CEO of Novartis Consumer Health Division and Chief Operating Officer of Novartis Pharma AG before attaining his present position in 2000. He has been a member of the Board of Directors of Idenix Pharmaceuticals Inc. since 2003.

Mark C. Fishman, M.D.

American, age 55

Dr. Fishman graduated with a B.A. from Yale College in 1972 and an M.D. from Harvard Medical School in 1976. He was appointed President of the Novartis Institutes for BioMedical Research (NIBR) in 2002. Before joining Novartis, Dr. Fishman was Chief of Cardiology and Director of the Cardiovascular Research Center at the Massachusetts General Hospital in Boston, Massachusetts. He continues to hold a professorship in the Department of Medicine at Harvard Medical School. Dr. Fishman serves on several editorial boards and 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 the Massachusetts General Hospital. 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 Fellow of the American Academy of Arts and Sciences.

Joerg Reinhardt, Ph.D.

German, age 50

Joerg Reinhardt graduated with a Ph.D. in Pharmaceutical Sciences from the University of Saarbruecken, Germany in 1981. In April 2006, he became CEO of the new Novartis Vaccines and Diagnostics Division that combines the vaccines and blood testing businesses of the former Chiron Corp. Previously, Joerg Reinhardt was Head of Development at the Novartis Pharmaceuticals Division, overseeing the company s clinical, pharmaceutical, chemical and biotechnological product development, as well as drug safety assessment and regulatory affairs. Joerg Reinhardt joined Sandoz Pharma Ltd. in 1982 and held positions of increasing responsibility in research and development for the company. In 1994, he was made Head of Development for Sandoz Pharma Ltd. After the merger that created Novartis in 1996, Joerg Reinhardt became Head of Preclinical Development and Project Management for Novartis and assumed the position of Head of Pharmaceutical Development in 1999. He chairs the Board of Directors of the Genomics Institute of the Novartis Foundation in La Jolla, California. He has been a member of the Executive Committee of Novartis since January 1, 2007.

Andreas Rummelt, Ph.D.

German, age 50

Andreas Rummelt graduated with a Ph.D. in Pharmaceutical Sciences from the University of Erlangen-Nuernberg, Germany. He joined Sandoz Pharma Ltd. in 1985 and held various positions in Development. From 1985 to 1994, he served as a Laboratory Head, then Group Head, and finally as Department Head in the area of Drug Delivery Systems. In 1994 he was appointed Head of Worldwide Technical Research & Development, a position he retained following the merger that created Novartis in 1996. From 1999 until October 2004, Andreas Rummelt served as Head of Technical Operations of Novartis Pharma AG. He was appointed to his present position as CEO of Sandoz on November 1, 2004 and has been a member of the Executive Committee of Novartis since January 1, 2006.

Thomas Wellauer, Ph.D.

Swiss, age 51

Thomas Wellauer graduated with a Ph.D. in Systems Engineering and an M.S. in Chemical Engineering from the Swiss Federal Institute of Technology (ETH). He also holds a M.B.A. from the University of Zurich. Thomas Wellauer joined Novartis in 2006 as Head of Corporate Services. He started his career with McKinsey and Company, becoming a Partner in 1991 and Senior Partner in 1996. In 1997, he was named CEO of the Winterthur Insurance Group, which later was acquired by Credit Suisse. At Credit Suisse he was a member of the Group Executive Board, initially responsible for the group s insurance business before becoming CEO of the Financial Services Division. Most recently before joining Novartis, Thomas Wellauer headed and completed the Clariant Performance Improvement Program, a global turnaround project at the specialty chemicals maker. He has been a member of the Executive Committee of Novartis since January 1, 2007.

BUSINESS UNIT HEADS

Name, nationality and age	Head of Business Unit	Active for Novartis since	Significant positions previously held	Education
David Epstein American, 45	Oncology	1989	Chief Operating Officer and member of the Executive Committee of Novartis Pharmaceuticals Corporation	Bachelor of Science, Pharmacy, Rutgers University, M.B.A., Columbia University
Larry Allgaier American, 48	OTC	2003	VP and General Manager, North America Baby Care, for Procter & Gamble	Bachelor of Science, Chemical Engineering, Christian Brothers University
George Gunn British, 56	Animal Health	2003	President Animal Health, Pharmacia Corp.; Head Animal Health, US and Region North America, for Novartis Animal Health	Bachelor of Veterinary Medicine and Surgery from the Royal Dick School of Veterinary Studies, Edinburgh, UK
Kurt T. Schmidt American, 49	Gerber	2002	Head, Novartis Animal Health Business Unit; Area Director Australasia, Kraft Foods; General Manager Food for Kraft Foods, Germany	Bachelor of Science, United States Naval Academy, Annapolis; M.B.A., University of Chicago
Michael Kehoe Canadian, 49	CIBA Vision	2006	President Global Oral Care for Procter & Gamble	Bachelor of Commerce, Queen s University, Kingston, Canada

Michael Kehoe succeeded Joseph Mallof, effective February 21, 2006

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DATES/CONTACTS

GROUP FINANCIAL HIGHLIGHTS 2006

GROUP KEY FIGURES

	2006 USD millions	2005 USD millions	% Change
Net sales	37 020	32 212	15
Operating income	8 174	6 905	18
Net income	7 202	6 141	17
Change in net liquidity	-1 826	-4 558	-60
Equity at year end	41 294	33 164	25
Earnings per share (USD)	3.06	2.63	16
Dividends per share (CHF)1	1.35	1.15	17

1 2006: Proposal to shareholders meeting

GROUP NET SALES GROWTH BY REGION (in %)

TOTAL ASSETS **TOTAL EQUITY & LIABILITIES**

NET SALES GROWTH1 (in %)

1 No comparisons available for newly acquired Vaccines and Diagnostics Division

OPERATING INCOME GROWTH1 (in %)

OPERATING MARGIN1

1 No comparisons available for newly acquired Vaccines and Diagnostics Division.

CASH FLOW FROM OPERATING ACTIVITIES AND FREE CASH FLOW (in USD millions)

1 Continuing operations

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KEY FINANCIAL DEVELOPMENTS IN 2006

GROUP NET SALES	advance 15% due to excellent performances from all divisions, a mixture of organic growth and contributions from recent acquisitions
PHARMACEUTICALS	posts sixth consecutive year of double-digit growth as net sales rise 11% thanks to cardiovascular and oncology franchises
VACCINES AND DIAGNOSTICS	delivers strong performance as new division benefits from sharp increase in seasonal influenza vaccine shipments to the US
SANDOZ	net sales advance 27% on new product launches and stronger positions in fast-growing generics markets, particularly in Europe, and were supported by the 2005 acquisitions
CONSUMER HEALTH[1]	net sales rise 8% from double-digit expansion in OTC and Animal Health businesses, which improved their global rankings
GROUP OPERATING INCOME	climbs 18% as the strong business expansion offsets the impact of acquisition-related expenses. Excluding these charges, operating income rose 28%
GROUP NET INCOME	up 17% thanks to strong business expansion. Excluding acquisition-related charges net income rose 25%
EARNINGS PER SHARE	rise 16%, a double-digit expansion for the fourth consecutive year
DIVIDEND	proposed to shareholders for 2006 of CHF 1.35 per share, 17% increase and representing the tenth consecutive year of paying a higher dividend

1 From continuing operations.

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OPERATING AND FINANCIAL REVIEW

This operating and financial review should be read in conjunction with the consolidated financial statements. The consolidated financial statements and the financial information discussed below have been prepared in accordance with International Financial Reporting Standards (IFRS). Please see Note 33 of the consolidated financial statements for a discussion of the significant differences between IFRS and US Generally Accepted Accounting Principles (US GAAP).

Overview

Novartis is a world leader in offering medicines to protect health, treat disease and improve well-being. The Group s goal is to discover, develop and successfully market innovative products to treat patients, ease suffering and enhance quality of life. Novartis is the only company with leadership positions in both patented and generic pharmaceuticals as well as human vaccines and OTC products.

The Group s businesses are divided on a worldwide basis into the following four operating divisions:

- Pharmaceuticals (brand-name patented pharmaceuticals)
- Vaccines and Diagnostics (human vaccines and molecular diagnostics)
- Sandoz (generic pharmaceuticals)
- Consumer Health (OTC, Animal Health, Gerber and CIBA Vision)

Vaccines and Diagnostics is a new Division formed in 2006 following the acquisition of the remaining stake in Chiron Corporation not already held by Novartis.

The Group s Medical Nutrition Business Unit was previously included in the Consumer Health Division, but has been classified as a discontinuing operation as a consequence of an announcement during 2006 to divest this Business Unit. The Nutrition & Santé activity of this Business Unit which was divested in February 2006 has also been classified as a discontinuing operation.

In 2006, the Group s businesses achieved net sales of USD 37.0 billion (2005: USD 32.2 billion) and net income of USD 7.2 billion (2005: USD 6.1 billion). Approximately USD 5.4 billion was invested in Research & Development (2005: USD 4.8 billion).

Headquartered in Basel, Switzerland, the Group employs approximately 101 000 people and has operations in approximately 140 countries around the world.

Factors affecting results of operations

There are a number of key factors that influence the Group s results of operations and the development of its business.

The overall global healthcare market is growing rapidly, due to a combination of socio-economic factors, including aging populations in many developed countries and rapid economic growth in many developing countries, which is leading to a change in life-styles and a growing demand for better healthcare. At the same time, the Group is operating in an ever more challenging competitive environment and the healthcare industry is generally subject to significant ongoing pricing pressures. Widespread efforts by both governments and private stakeholders to control and reduce healthcare cost create particular challenges for the Pharmaceuticals Division.

To address these challenges, Novartis has established several strategic growth platforms, both with brand-name patented medicines and beyond, including innovation-driven prescription medicines, cost-effective and high-quality generic medicines, leading self-medication (OTC) brands and human vaccines. The Group has invested heavily into these strategic growth platforms in recent years, including through the acquisitions of Chiron Corporation and NeuTec Pharma plc in 2006 and Hexal AG and Eon Labs, Inc., and the North American Consumer Medicines Business of Bristol-Myers Squibb in 2005.

Patent protection and the exclusive right to sell certain products in key markets are particularly important for the Pharmaceuticals Division. The loss of exclusivity with regard to one or more important products (e.g. due to patent expiration, generic challenges or competition from new branded products) can therefore have a significant negative impact on the results of operation of the Pharmaceuticals Division. As a result, the

Group s ability to identify and develop new breakthrough products and to bring these products to market is particularly important for the Group s long-term business prospects. To be able to meet this challenge, Novartis has invested heavily in Research & Development and plans to continue to do so in the future. The loss of patent protection for important products by competing pharmaceuticals companies, of course, can also create significant opportunities for the Sandoz Division to market generic versions of such products.

Finally, Novartis is constantly exploring ways to improve productivity across the Group, in particular to optimize its Marketing & Sales activities in the Pharmaceuticals Division. The failure or success of these initiatives can have a significant impact on the Group s overall business success.

Novartis believes that these factors, which are described in more detail below, will continue to be the principal drivers for the development of its business, its results of operations and its financial condition over the coming years.

Rapidly Growing Global Healthcare Market

The global healthcare market is growing rapidly based on a combination of many factors that include demographic changes and other socioeconomic developments. The most important demographic change is the increasingly aging population in developed countries and the fact that the incidence and prevalence of disease rises with age. Other key socio-economic factors include the rising number of people with chronic diseases related to lifestyle changes (particularly hypertension and diabetes) and the demand for better healthcare in many developing countries which are currently witnessing rapid economic growth.

Novartis believes that there are a large number of currently untreated patients worldwide that could benefit from the Group s products, particularly from products marketed by key therapeutic areas of the Pharmaceuticals Division and are to treat patients with cardiovascular/metabolic diseases, cancer, conditions related to the central nervous system or respiratory illnesses. According to the American Heart Association, for example, high blood pressure and its consequences affect one in four adults more than a billion people worldwide and kill more than seven million people every year while, according to the American Diabetes Association, type 2 diabetes causes three million deaths annually in the US. Both diseases remain under-diagnosed and insufficiently treated.

As a result of these and other factors, Novartis expects the overall healthcare market and its own business to continue to grow over the coming years, not only in developing countries, but also in the Group s key established markets such as the United States, Western Europe and Japan, even if annual industry sales growth in these established markets has slowed in recent years and is likely to continue to slow further due to the pressure of healthcare payors to reduce costs. However, rapid economic growth in many emerging markets such as China, India, Russia and Turkey is expected to increasingly support the global healthcare market. The overall economic expansion in these countries is leading to improvements in the provision of public healthcare. In line with changes in the standard of living and lifestyles, these countries are also experiencing an increasing incidence of chronic diseases.

Group net sales, which increased 14% in 2006 in local currencies to USD 37.0 billion, were still driven mainly by growth in the United States and other developed markets. However, during the same period, the Group s combined net sales in its priority emerging growth markets of China, India, Russia and Turkey rose at a sharply higher rate of 25%. Although net sales in these four countries only accounted for 4% of total Group net sales in 2006, Novartis expects these and other emerging markets to have an increasingly significant impact on the Group s future business prospects and results of operations.

Challenging Business Environment and On-going Pricing Pressures

While the overall healthcare market is growing, the competitive operating environment is becoming ever more challenging, particularly for the Pharmaceuticals Division, as a result of a combination of factors. These include industry-wide price reductions, government-mandated reference prices, an increase in parallel imports, the shifting of the payment burden to patients through higher co-payments and growing pressure on physicians to reduce the prescribing of patented prescription medicines. The outcome has been widespread efforts by various stakeholders to reduce pharmaceutical product prices. We expect this trend to continue as governments and other interested parties step up initiatives to reduce the overall cost of healthcare to patients, restrict the prescribing of new medicines, increase the use of generics and impose overall price cuts. One of the main reasons for these pressures is the cost associated with providing healthcare to an aging population. In addition to pricing pressures, there also appears to be a renewed focus on product safety by regulatory agencies following widely publicized recent product recalls such as Merck & Co., Inc. s recall of its pain medicine, Vioxx®.

At the same time, competition in the generic pharmaceuticals industry continues to intensify as companies in this industry are also affected by efforts to curb healthcare spending. Novartis is the only major pharmaceuticals company to have a leadership position in both branded pharmaceuticals through its Pharmaceuticals Division as well as in generics through its Sandoz Division. Although the volume of generic pharmaceuticals is growing, pressure is also increasing in some markets, particularly in Europe, to further reduce the price of these medicines.

In addition, research-based pharmaceutical companies have taken aggressive steps to counter the growth of the generics industry by selling their own branded products at sharply lower prices following the expiry of patent protection, which reduces the attractiveness of the generic versions. An important factor is that no significant regulatory approvals are required for a brand-name pharmaceutical manufacturer to sell directly or through a third party to the generic market. This is a significant competitive advantage for the branded pharmaceutical company since, by doing so, the companies offering the branded pharmaceutical are able to undercut the generic manufacturers revenues and profitability. Certain brand-name pharmaceutical companies are also continually seeking new ways to delay the introduction of generics and to reduce the impact of generic competition. Pricing pressure as well as various efforts by competitors of the Sandoz Division have had, and likely will continue to have, a negative effect on this Division s results of operations.

In the newly created Vaccines and Diagnostics Division, the demand for some human vaccines is seasonal, such as for the influenza vaccine *Fluvirin*, while others are dependent upon birth rates in developed countries. Many of these products are also considered to be commodities,

meaning that there is little therapeutic difference among the various vaccines offered by competitors. The

ability to develop effective and safe vaccines, to gain approval for national immunization recommendation lists, and to consistently produce and deliver the required vaccines in time for the relevant disease season are critical to the success of this Division.

Investing in Strategic Growth Platforms

To address the various challenges facing the healthcare industry, Novartis has established and has been making significant investments in a number of strategic growth platforms within all four of its operating Divisions. These strategic growth platforms include innovation-driven prescription medicines, cost-effective and high-quality generic medicines, leading self-medication (OTC) brands and human vaccines that address public health and therapeutic needs.

In the Pharmaceuticals Division, Novartis acquired the UK biopharmaceuticals company NeuTec Pharma plc in 2006, giving it access to *Aurograb* and *Mycograb*, two promising development compounds for the treatment of life-threatening infections. The Vaccines and Diagnostics Division was created in April 2006 following the acquisition of the remaining stake in Chiron Corporation not held by Novartis, providing access to the human vaccines market. In the Sandoz Division, Novartis acquired two generic pharmaceuticals companies (Hexal AG and Eon Labs, Inc.) in 2005, making Sandoz a global leader in generics with particular strengths in difficult-to-make generics and innovative product applications, including device technologies. In the Consumer Health Division, and also in 2005, Novartis acquired the rights to various OTC products in North America from Bristol-Myers Squibb Co. For more details on these acquisitions and how they have affected the Group s results of operations see Acquisitions below.

Novartis expects these strategic growth platforms to play a significant role in the ongoing success of the Group, providing opportunities for growth by offering a range of medicines and vaccines to patients, physicians and payors. Novartis will continue to evaluate potential opportunities for additional targeted acquisitions to further strengthen these platforms and to better position the Group for success in a dynamically changing healthcare market.

Loss of Exclusivity for Certain Products

The products of the Pharmaceuticals Division are generally protected by patents that give Novartis the exclusive right to market them in various countries. These exclusive marketing rights are, however, limited both in terms of geographical scope and impacted by the expiration of patents. For example, patents for the antifungal medicine *Lamisil* will expire in June 2007 in the US, where this product accounted for USD 574 million in annual sales, or 1.6% of the net sales from continuing operations in 2006 (3.9% of the sales in US). Similarly, patent protection for *Trileptal s* active ingredient has expired in the US and other major countries. In 2006, this product accounted for USD 549 million in sales in the US, or 1.5% of the net sales from continuing operations (3.8% of the sales in US).

In the ordinary course of its business, Novartis (like other major research-based pharmaceutical companies) defends its intellectual property against challenges by generic drug manufacturers. Patent infringement actions have been initiated for a number of the Pharmaceutical Division s products, including *Neoral, Lotrel, Trileptal, Femara, Visudyne, Exelon* and *Famvir*. Loss of exclusivity and the introduction of a generic version of the same medicine typically results in a significant and sharp reduction in net sales for the relevant product, given that generic manufacturers typically offer their versions of the same medicine at sharply lower prices. Some products that are still among the top-20 selling products of Novartis have already encountered generic competition in some markets, such as *Lamisil*, *Neoral*, *Sandostatin SC* and *Voltaren*. In addition, some of the Group s products do, or may in the future, face intense competition in the form of new branded products with potentially better safety/efficacy profiles or from generic versions of competing branded drugs indicated for treating the same diseases or indications.

Although Novartis has been rated by industry experts as having one of the lowest rates of net sales at risk to potential generic competition, a number of leading products could potentially face generic competition in the coming five to ten years in various markets, particularly the US and Europe. These include the top-selling products of Novartis: the anti-hypertension drugs *Diovan* and *Lotrel* as well as the oncology drugs *Gleevec/Glivec* and *Zometa*.

Importance of Research & Development and the ability to obtain approvals for New Products

The ability of Novartis to continue to grow its business and to replace any lost sales due to the loss of exclusivity for its products in the future depends upon the ability of the Group s R&D activities to identify and develop high-potential breakthrough products and to bring them to market.

Given that the development and regulatory approval for a new pharmaceutical product frequently takes more than 10 years and can involve costs of over USD 1 billion, the need for efficient and productive R&D activities is critical to the continued business

success of Novartis. Competition in the development of new pharmaceuticals is intense since other pharmaceutical companies are also searching for efficacious and cost-efficient medicines. The sharply rising resource requirements to access the full range of new technologies, particularly following the decoding of the human genome, has been one reason for industry consolidation as well as for the increase in collaborations between major pharmaceuticals companies and specialized niche players at the forefront of their particular field.

The quality of the current Novartis Pharmaceuticals Division development pipeline reflects investments made in the Group s own R&D activities, in many cases more than ten years ago, as well as recent acquisitions and licensing collaborations. The Group has consistently had one of the highest R&D investment rates in the industry as a percentage of net sales, reflecting its commitment to bring innovative and differentiated products to the market with novel therapeutic benefits.

Up to one-third of annual Pharmaceuticals Division R&D expenditures are used to reach licensing agreements with other companies, particularly specialized biotechnology companies, to co-develop promising pharmaceutical compounds. These co-development and alliance agreements are intended to allow the Group to capitalize on the potential of these compounds and to expand its development pipeline. Novartis has entered into more than 100 alliances during 2005 and 2006 to complement internal R&D activities. From time to time, Novartis also makes equity investments in a licensing partner or fully acquires a company to gain access to novel compounds, as in the case of the acquisition of NeuTec Pharma plc in 2006.

Funding requirements for R&D activities are likely to continue to grow in the future and may, at times, even grow at a faster rate than net sales. These investments, however, are critical for the continuing success of Novartis. In 2006, Novartis invested a total of USD 5.4 billion in Research & Development, an 11% increase over 2005.

As a result of past investments, Novartis has been able to successfully launch a number of new products in 2006, particularly *Exjade*, *Prexige* and *Xolair* and there are a number of additional product launches are scheduled for 2007. Subject to obtaining necessary regulatory approvals, Novartis is planning for multiple new product launches in the Pharmaceuticals Division in 2007 2008 and it expects some of these products to generate peak annual sales of over USD 1 billion. These products include *Tekturna/Rasilez* and *Exforge* for hypertension, *Galvus* for type 2 diabetes, *Tasigna* for cancer and *Lucentis* for blindness.

For further information see Operational Review Pharmaceuticals product pipeline .

Technology is Driving Innovation

Ongoing technological discoveries and developments are laying the foundation for both improvements upon existing therapies and for innovative treatments for diseases where none currently exist. Novartis expects the growth in new technologies, particularly those that analyze data from the mapping of the human genome, to have a fundamental impact on the pharmaceutical industry and upon its own future product pipeline, which in turn could have a significant impact on the Group s results of operations.

Continuing Efforts to Improve Productivity and to Optimize Marketing & Sales Efforts

As a response to the increasingly challenging operating environment for the healthcare industry as well as to support the launch of new products and improve profitability margins, Novartis is constantly exploring new ways to further improve productivity across the Group. The guiding principles of all productivity initiatives include innovation, cost savings, process excellence and accountability. In particular, Novartis is constantly reviewing its global production network to achieve efficiencies and to reduce production costs for important products. In the Pharmaceuticals Division, for example, an initiative is underway to reduce annual expenses by more than USD 1 billion when compared to a 2005 base by the end of 2008 through various initiatives that include streamlining and consolidating operations. Novartis will continue with its efforts to further improve productivity throughout 2007 and beyond, with the objective of making the Group more efficient and effective.

As the costs involved in developing a new drug and in obtaining the necessary regulatory approvals for marketing a new product continue to increase, and the time between innovative products and me-too versions or generic competition is continuing to decrease, the importance of effectively marketing a new or existing drug cannot be underestimated. A strong marketing message and rapid penetration of the potential market across different geographic territories are vital if a drug is to attain peak sales as rapidly as possible and maximize the total revenue achievable over its patented life. It is therefore critical to the Group s success that Novartis continually evaluates the appropriateness of its marketing models and optimizes its Marketing & Sales efforts, including by adjusting the size of its sales force in key markets to address changing demands (e.g. in anticipation of upcoming new product launches) or by responding to new developments such as the advent of direct-to-consumer advertising in the United States. As a result, Novartis has recently added approximately 1000 new sales representatives in the United States to support the launch of new products.

Acquisitions and Divestments

Novartis has made a number of significant acquisitions and divestments in recent years that have had, and are expected to continue to have, a significant impact on its financial condition and results of operations. In particular, the consolidation of Chiron Corporation following its acquisition in April 2006 and the full-year consolidation of Hexal AG and Eon Labs, Inc. in 2006 following their acquisition in mid-2005 had a significant impact on the Group s 2006 results of operations, as described in more detail below. Novartis will continue to evaluate potential opportunities for additional targeted acquisitions as well as divestments to better position the Group for success in a dynamically changing healthcare market. As a result of the Group s recent acquisitions, divestments and other factors, its operating income is also increasingly impacted by charges for the amortization of intangible assets as well as impairment charges and other one-time costs relating to the integration of acquisitions, as described in more detail under Impact of Intangible Asset Charges and Significant Exceptional Items .

Acquisitions in 2006

On April 19, 2006, the shareholders of Chiron Corporation approved the acquisition of the remaining 56% of the shares of Chiron Corporation that Novartis did not already own for USD 48.00 per share. The amounts paid for the shares, related options of associates and transaction costs totaled approximately USD 5.7 billion. The transaction was completed on April 20, 2006. For the period from January 1, 2006 until completion of the acquisition, the 44% minority interest in Chiron held by Novartis has been accounted for using the equity method. For the period after completion of the acquisition, Chiron has been fully consolidated with its identifiable assets and liabilities being revalued to their fair value at the date of acquisition. In 2006, acquisition-related charges of USD 451 million net of tax were recorded for this transaction.

Following the acquisition, Novartis created the new Vaccines and Diagnostics Division that consists of Chiron s human vaccines and molecular diagnostics businesses. Chiron s pharmaceuticals activities have been integrated into the Pharmaceuticals Division, while early-stage research projects were integrated into the Pharmaceuticals Division research unit, the Novartis Institutes for BioMedical Research (NIBR). For the period following the acquisition up to December 31, 2006, the income statement and cash flows from Chiron s pharmaceuticals activities have been consolidated into the Pharmaceuticals Division s results.

On July 14, 2006, Novartis announced that the majority of the shareholders of NeuTec Pharma plc (NeuTec), a biopharmaceuticals company specialized in hospital anti-infectives, had accepted its offer to acquire the company for GBP 10.50 per share. NeuTec has been fully consolidated from this date.

Impact of Intangible Asset Charges and Significant Exceptional Items

As a result of recent acquisitions, divestments and other factors, the operating income of Novartis is increasingly impacted by the amortization of intangible assets as well as impairment charges and exceptional costs relating to integration of acquisitions. The following shows operating income excluding these factors.

IMPACT OF INTANGIBLE ASSET CHARGES AND SIGNIFICANT EXCEPTIONAL ITEMS

	Pharmaceuticals		Vaccines and Diagnostics	Sandoz	
	2006 USD millions	2005 USD millions	2006 USD millions	2006 USD millions	2005 USD millions
Reported operating income	**6 703**	**6 014**	**-26**	**736**	**342**
Recurring amortization	268	178	172	279	189
Impairments	76	359		47	37
Intangible asset charges	**344**	**537**	**172**	**326**	**226**
Impairment charges on property, plant & equipment	3		7		14
Impact of increasing inventory acquired in business combinations to selling price less distribution margin	95		117		161
Restructuring and acquisition related integration costs	131		44	61	76
Exceptional restructuring and acquisition expenses	**229**		**168**	**61**	**251**
Exceptional gains/losses from divesting subsidiaries and major products	**-87**	**-231**		**7**	
Operating income excluding the above items	**7 189**	**6 320**	**314**	**1 130**	**819**

Novartis paid a total consideration of USD 606 million to acquire 100% of the shares of the company. NeuTec had no post-acquisition sales, although its expenses have been consolidated into the results of the Pharmaceuticals Division from the acquisition date.

In total for the whole Novartis Group, these acquisitions contributed USD 1.4 billion in net sales for 2006 and resulted in a USD 242 million operating loss for the Group.

Divestments/discontinuing operations 2006

During 2006 Novartis announced plans to divest the components of its Medical Nutrition Business Unit, which was part of the Consumer Health Division.

On February 17, 2006, Novartis completed the sale of Nutrition & Santé for USD 211 million to ABN AMRO Capital France, resulting in a pre-tax divestment gain of USD 129 million.

On December 14, 2006, Novartis announced the signing of a definitive agreement to divest the balance of the Medical Nutrition Business Unit to Nestlé S.A., Switzerland for USD 2.5 billion. This transaction, which is subject to customary regulatory approvals, is expected to be completed in the second half of 2007.

Both Nutrition & Santé and Medical Nutrition are disclosed as discontinuing operations in all periods in the Group s consolidated financial statements.

Acquisitions in 2005

On June 6, 2005, Novartis completed the 100% acquisition of Hexal AG for USD 5.3 billion in cash, with the results consolidated into the Sandoz Division from that date. Goodwill on this transaction at December 31, 2006, amounted to USD 3.7 billion.

On July 20, 2005, Novartis completed the acquisition of 100% of Eon Labs, Inc. for USD 2.6 billion, with the results consolidated into the Sandoz Division from that date. Goodwill on this transaction at December 31, 2006, amounted to USD 1.8 billion.

On July 14, 2005, the OTC Business Unit announced the acquisition of the rights to produce and market a portfolio of over-the-counter (OTC) brands from Bristol-Myers Squibb sold principally in the US for USD 660 million in cash. The closing date for the North American product portfolio was August 31, 2005; that for the South American portfolio, September 30, 2005 and for the Europe, Middle East and African portfolio, January 6, 2006 with the results consolidated into the OTC Business Unit of the Consumer Health Division from these dates.

Impact of Intangible Asset Charges and Significant Exceptional Items (Continued)

	Consumer Health continuing operations		Corporate		Total continuing operations		Consumer Health discontinuing operations		Total Group	
	2006 USD millions	2005 USD millions	2006 USD millions	2005 USD millions	2006 USD millions	2005 USD millions	2006 USD millions	2005 USD millions	2006 USD millions	2005 USD millions
Reported operating income	**1 068**	**952**	**-532**	**-506**	**7 949**	**6 802**	**225**	**103**	**8 174**	**6 905**
Recurring amortization	107	81	8	12	834	460	21	21	855	481
Impairments	3			5	126	401			126	401
Intangible asset charges	**110**	**81**	**8**	**17**	**960**	**861**	**21**	**21**	**981**	**882**
Impairment charges on property, plant & equipment	1				11	14			11	14
Impact of increasing inventory acquired in business combinations to selling price					212	161		21	212	182

less distribution margin										
Restructuring and acquisition related integration costs					236	76		19	236	95
Exceptional restructuring and acquisition expenses	**1**				**459**	**251**		**40**	**459**	**291**
Exceptional gains/losses from divesting subsidiaries and major products		**-8**			**-80**	**-239**	**-129**		**-209**	**-239**
Operating income excluding the above items	**1 179**	**1 025**	**-524**	**-489**	**9 288**	**7 675**	**117**	**164**	**9 405**	**7 839**

Effects of currency fluctuations

Novartis transacts its business in many currencies other than the US dollar, its reporting currency. In 2006, 45% of Group net sales were made in US dollars, 26% in euros, 6% in Japanese yens, 2% in Swiss francs and 21% in other currencies. During the same period, 39% of Novartis Group expenses arose in US dollars, 24% in euros, 16% in Swiss francs, 5% in Japanese yens and 16% in other currencies. As a result, the Group s business is affected by fluctuations in the exchange rates between these different currencies.

Because Novartis prepares its financial statements in US dollars, fluctuations in the exchange rates between the US dollar and other currencies may have an effect both on the Group s results of operations and on the reported value of its assets, liabilities, revenue and expenses as measured in US dollars, which in turn may significantly affect reported earnings (both positively and negatively) and the comparability of period-to-period results of operations.

For purposes of the Group s consolidated balance sheets, Novartis translates non-US dollar denominated equity items into US dollars at historical exchange rates and all other non-US dollar denominated assets and liabilities into US dollars at the exchange rates prevailing in the market as of the relevant balance sheet date.

For purposes of the Group s consolidated income statements, non-US dollar revenue and expense items are translated into US dollars at average exchange rates prevailing during the relevant period.

Consequently, even if the amounts or values of these items remain unchanged in the respective currency, changes in exchange rates have an impact on the amounts or values of such items in the Group s consolidated financial statements.

Novartis seeks to minimize its currency exposure by engaging in hedging transactions where Management deems it appropriate to do so. For 2006, Novartis entered into various contracts that change in value as foreign exchange rates change to preserve the value of assets, commitments and anticipated transactions. Novartis also uses forward contracts and foreign currency options to hedge certain anticipated net revenues in foreign currencies. For more information on how these transactions affect the Group s consolidated financial statements and on how Novartis manages its foreign exchange rate exposure, see also Derivative financial instruments and hedging under Note 1 of the Group s consolidated financial statements as well as Notes 5 and 15.

The average exchange rates between the US dollar and other important currencies for Novartis have remained relatively stable over the past two years as shown by the following table which sets forth the foreign exchange rates of the US dollar against the euro, the Swiss franc and the Japanese yen, respectively, that were used for foreign currency translation when preparing the Group s consolidated income statements.

	2006		2005	
Rates in units per USD	**Year end**	**Average for year**	**Year end**	**Average for year**
EUR	1.317	1.256	1.186	1.245
CHF	0.819	0.798	0.762	0.804
JPY	0.841	0.860	0.851	0.910

As a result, currency fluctuations have not had a significant effect on the Group s financial condition or results of operation over the periods under review, as shown by the following tables:

CURRENCY IMPACT ON KEY FIGURES

	Local Currencies Growth in % 2006	**Local Currencies Growth in % 2005**	**USD Growth in % 2006**	**USD Growth in % 2005**
Group net sales	14	13	15	14
Group operating income	19	10	18	10
Group net income	18	10	17	10

NET SALES AND OPERATING EXPENSES BY CURRENCIES

	Net sales %	**Net sales %**	**Expenses %**	**Expenses %**

	2006	2005	2006	2005
USD	45	42	39	34
EUR	26	27	24	26
CHF	2	2	16	16
JPY	6	8	5	5
Other	21	21	16	19
	100	100	100	100

LIQUID FUNDS AND FINANCIAL DEBT BY CURRENCIES

	Liquid funds % 2006	Liquid funds % 2005	Financial debt % 2006	Financial debt % 2005
USD	61	62	15	13
EUR	19	15	44	41
CHF	15	20	14	24
JPY			23	18
Other	5	3	4	4
	100	100	100	100

Critical accounting policies and estimates

The Novartis Group s principal accounting policies are set out in note 1 of the Group s consolidated financial statements and conform to International Financial Reporting Standards (IFRS). As a result of the uncertainties inherent in the Group s business activities, Management needs to make certain estimates and assumptions that require Management to make difficult, subjective and complex judgments. Because of the uncertainties inherent in such judgments, actual outcomes and results may differ from Management s assumptions and estimates. Application of the following accounting policies requires certain assumptions and estimates that have the potential for the most significant impact on the Group s consolidated financial statements.

Revenue

Novartis recognizes product sales when title and risks and rewards for the products are transferred to the customer, price is fixed and determinable, and collectability is reasonably assured. At the time of sale, Novartis also records estimates for a variety of sales deductions, including rebates, discounts and incentives, and product returns. Sales deductions are reported as a reduction of revenue.

Deductions from Revenues

As is typical in the pharmaceutical industry, the gross sales of Novartis are subject to various deductions, primarily comprised of rebates and discounts to retail customers, government agencies, wholesalers and managed healthcare organizations. These deductions represent estimates of the related obligations, requiring the use of judgment when estimating the impact of these sales deductions on gross sales for a reporting period. These adjustments are reported as a reduction of Gross Sales to arrive at Net Sales.

The following briefly describes the nature of each deduction and how the deduction is estimated. The US market has the most complex arrangements related to revenue deductions. Specific reference is therefore made to the US market and where applicable to the Pharmaceuticals Division s primary US operating unit, Novartis Pharmaceuticals Corporation (NPC). However, in a number of countries outside the US, including major European countries, Novartis provides rebates to government entities. These rebates are often legislatively mandated.

- The US Medicaid program is a state government-administered program that uses state and federal funds to provide assistance to certain vulnerable and needy individuals and families. In 1990, the Medicaid Drug Rebate Program was established to reduce state and federal expenditures for prescription drugs. Under the rebate program, certain Novartis subsidiaries have signed agreements to provide a rebate on drugs paid for by a state. Provisions for estimating Medicaid rebates are calculated using a combination of historical experience, product and population growth, price increases, the impact of contracting strategies and specific terms in the individual state agreements. These provisions are adjusted based upon established processes for re-filing data with individual states. For Medicaid, the calculation of rebates involves interpretation of relevant regulations, which are subject to challenge or change in interpretative guidance by government authorities. Since Medicaid rebate claims are typically submitted to Novartis up to six months after the products are dispensed to patients, any rebate adjustments may involve revisions of provisions for several periods.

- On January 1, 2006, an additional prescription drug benefit was added to the US Medicare program which funds healthcare benefits to individuals over the age of 65. Individuals that previously had dual Medicaid/Medicare drug benefit eligibility had their Medicaid prescription drug coverage replaced on January 1, 2006, by the new Medicare Part D coverage, provided through private prescription drug plans. The change led to a significant shift of plan participants between programs in which the US subsidiaries participate. Provisions for estimating Medicare Part D rebates are calculated using a combination of specific terms of individual plan agreements, product and population growth, price increases and the impact of contracting strategies.

- Novartis subsidiaries in the US participate in prescription drug savings programs (industry and government sponsored) that offer savings to eligible patients. These savings vary based on a patient s current drug coverage and personal income levels. Provisions for the subsidiaries obligations under these programs are based on historical experience, trend analysis and current program terms. The introduction of Medicare Part D has reduced the materiality of these programs.

- Wholesaler chargebacks relate to contractual arrangements that certain Novartis subsidiaries have with several indirect customers in the US to sell products at prices that are lower than the list price charged to wholesalers. A wholesaler chargeback represents the difference between the invoice price to the wholesaler and the indirect customer s contract discount price. Provisions for estimating chargebacks are calculated using a combination of factors such as historical experience, product growth rates and the specific terms in each agreement. Wholesaler chargebacks are generally settled within one to three months of incurring the liability by reducing accounts receivable.

- Customer rebates are offered to key managed healthcare plans, group purchasing organizations and other direct and indirect customers to sustain and increase Novartis product market share. These rebate programs provide that the customer receives a rebate after attaining certain performance parameters relating to product purchases, formulary status and/or pre-established market share milestones relative to competitors. Since rebates are contractually agreed upon, rebates are estimated based on the specific terms in each agreement, historical experience, anticipated reimbursement channel mix and product growth rates. Novartis considers the sales performance of products subject to managed healthcare rebates and other contract discounts and adjusts the provision periodically to reflect actual experience.

- In order to evaluate the adequacy of ending provision balances, Novartis uses both internal and external estimates of the level of inventory in the distribution channel and the rebate claims processing lag time. External data sources include periodic reports of wholesalers and third party market data purchased by Novartis. Management internally estimates the inventory level in the retail channel and in transit.

- Where a product with right of customer returns is sold, Novartis records a provision for estimated sales returns through a comparison of historical return data to related sales. Other factors are also considered, such as product recalls and, in the case of NPC in the US, introductions of generic products. In the US, historical rates of return are utilized and are adjusted for known or expected changes in the marketplace when appropriate. Sales returns amount to approximately 1% of gross product sales.

- The policy of Novartis relating to the supply of pharmaceutical products is to adjust shipping patterns in order to maintain customer inventories that are consistent with underlying patient demand. A process exists in the US to monitor on a monthly basis inventory levels at wholesalers based on gross sales volume, prescription volumes based on third party data and information received from the key wholesalers. Based on this information, the NPC inventories on hand at wholesalers and other distribution channels in the US are estimated to be approximately one month at December 31, 2006. Novartis believes the third party data sources of information are sufficiently reliable, however, the accuracy of some data sources cannot be verified.

- During 2006, NPC finalized fee-for-service agreements with certain US pharmaceutical wholesalers. These agreements cover items such as product returns, timing of payment, processing of chargebacks, provision of inventory data and the quantity of inventory held by the respective wholesaler. These agreements provide a financial disincentive for wholesalers to purchase quantities of product in excess of what is necessary to meet current demand, and should help to create a more efficient pharmaceutical supply chain.

- Cash discounts are offered to customers in the US and certain other countries to encourage prompt payment. Cash discounts, which are typically 2% of gross sales in the US, are accrued at the time of invoicing and are recorded as revenue deductions.

- Shelf-stock adjustments are generally granted to customers based on the existing inventory of a customer following decreases in the invoice or contract price of the related 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 is reasonably estimable and are based on estimated inventory levels expected to be subject to price adjustments.

- Other sales discounts, such as consumer coupons and discount cards, are also offered. These discounts are recorded at the time of sale or when the coupon is issued and estimated utilizing historical experience and the specific terms for each program.

- Discounts, rebates or other deductions shown on the invoice are generally recorded directly as a reduction in the gross to net sales value and do not pass through the provision account.

The following table shows the worldwide extent of revenue deductions, related payment experiences and provisions of Novartis:

PROVISIONS FOR REVENUE DEDUCTIONS

Provisions offset against gross trade accounts receivable at Jan 1, 2006	**Provisions at Jan 1, 2006**	**Impact of translation and business combinations**	**Payments/ utilizations**	**Income statement charge Adjustments of prior years**	**Current year**	**Provisions offset against gross trade accounts receivable at Dec 31, 2006**	**Provisions at Dec 31, 2006**

	USD millions	USD millions	USD millions	USD millions	USD millions	USD millions	USD millions	USD millions
US Medicaid, Medicare and State program rebates and credits including prescription drug savings card		497		-643	-35	719		538
US managed healthcare rebates		256		-457	-5	441		235
Other healthcare plans and programs (non-US) rebates		35	6	-108	2	141		76
Chargebacks (including hospitals)	379		7	-2 340	-3	2 286	329	
Direct customer discounts, cash discounts and other rebates	256	66	89	-989	-22	981	273	108
Sales returns and other deductions		408	43	-579	-13	612		471
Total	**635**	**1 262**	**145**	**-5 116**	**-76**	**5 180**	**602**	**1 428**

GROSS TO NET SALES RECONCILIATION

	Income statement charge				
	Charged through revenue deduction provisions 2006 USD millions	Charged directly without being recorded in revenue deduction provisions 2006 USD millions	Total 2006 USD millions	In % of 2006 gross sales	In % of 2005 gross sales
Group gross sales subject to deductions			**44 844**	**100**	**100**
US Medicaid, Medicare and State program rebates and credits including prescriptions drug savings card	-684	-28	-712	-1.6	-2.0
US managed healthcare rebates	-436		-436	-1.0	-1.3
Other healthcare plans and programs (non-US) rebates	-143	-83	-226	-0.5	-0.2
Chargebacks (including hospitals)	-2 283	-119	-2 402	-5.4	-4.6
Direct customer discounts, cash discounts and other rebates	-960	-2 022	-2 982	-6.5	-5.9
Sales returns and other deductions	-598	-468	-1 066	-2.4	-3.0
Total gross to net sales adjustments	**-5 104**	**-2 720**	**-7 824**	**-17.4**	**-17.0**
Group net sales			**37 020**	**82.6**	**83.0**

Acquisition accounting

The Group s consolidated financial statements and results of operations reflect an acquired business after the completion of the acquisition. Acquired businesses are accounted for using the purchase method of accounting which requires that the assets acquired and liabilities assumed be recorded at the date of acquisition at their respective fair values. Any excess of the purchase price over the estimated fair values of the net assets acquired is recorded as goodwill in the balance sheet and is denominated in the local currency of the related acquisition. Goodwill is allocated to operations using a concept which requires Management to define appropriate cash-generating units. Under IFRS 3 *Business Combinations,* In-Process Research & Development (IPR&D) is valued as part of the process of allocating the purchase price in a new business combination. This amount needs to be recorded separately from goodwill and is allocated to cash-generating units and must be assessed for impairment on an annual basis. Under IAS 38 (revised *Intangible Assets*), acquired assets in development, such as those related to initial and milestone payments on licensed or acquired compounds are capitalized as intangible assets, even if uncertainties exist as to whether the R&D will ultimately be successful in producing a saleable product. The judgments made in determining the estimated fair value assigned to each class of assets acquired and liabilities assumed, as well as asset lives, can materially impact the Group s results of operations. Accordingly, for significant acquisitions, Novartis obtains assistance from third party valuation specialists. The valuations are based on information available at the acquisition date and are based on expectations and assumptions that have been deemed reasonable by Management.

Impairment of long-lived assets

Long-lived assets, including identifiable intangible assets and goodwill are regularly reviewed for impairment, whenever events or changes in circumstance indicate that the balance sheet carrying amount of the asset may not be recoverable. In order to assess if there is any impairment, estimates are made of the future cash flows expected to result from the use of the asset and its eventual disposal.

All goodwill is considered to have an indefinite life and is subject to at least annual impairment testing. Any goodwill impairment charge is recorded in the income statement under Other Income and Expense and IPR&D must also be assessed for impairment on an annual basis and any impairment charge is recorded in 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 into Cost of Goods Sold where any related impairment charge is also recorded. Other long-lived assets are reviewed when there is an indication that an impairment may have occurred.

If the balance sheet carrying amount of the asset exceeds the higher of its value in use to Novartis or its anticipated fair value less costs to sell, an impairment loss for the difference is recognized. There are several methods that can be used to determine the fair value of assets. For intangible assets, including IPR&D or product and marketing rights, Novartis typically uses the discounted cash flow method. This method starts

with a forecast of all expected future net cash flows. These cash flows are then adjusted to present value by applying an appropriate discount rate that reflects the risks and uncertainties associated with the forecasted cash flow streams. Actual outcomes could vary significantly from the forecasted future cash flows. The development of discounted future

cash flows, in particular for IPR&D, involves 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 discount rate selected to measure the risks inherent in the future cash flows;
- the outcome of Research & Development 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;
- selling price erosion rates after the end of patent protection and 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 lower than anticipated sales for acquired products; or for sales associated with patents and trademarks; or lower than anticipated future sales resulting from acquired Research & Development; or the closing of facilities; or changes in the planned use of property, plant or equipment. Changes in the discount rates used for these calculations also could lead to impairments.

Novartis has adopted a uniform method for assessing goodwill for impairment and any other intangible asset indicated as possibly impaired. If no cash flow projections for the whole useful life of an intangible asset are available, cash flow projections for the next 5 years are utilized based on Management s range of forecasts with a terminal value using sales projections usually in line or lower than inflation thereafter. Typically three probability-weighted scenarios are used.

The discount rates used are based on the Group s weighted average cost of capital adjusted for specific country and currency risks associated with the cash flow projections. Since the cash flows also take into account tax expenses a post-tax discount rate is utilized.

The recoverable amount of a cash-generating unit and related goodwill is usually based on the value-in-use which is derived from applying discounted future cash flows using the key assumptions indicated below:

	Pharmaceuticals %	Vaccines and Diagnostics %	Sandoz %	Consumer Health %
Sales growth rate assumptions after forecast period	1	2	-1 to 6	-2 to 3
Discount rate	7 to 9	2	8 to 10	9 to 10

1 Forecast period covers useful life

2 No value-in-use analysis performed as newly acquired and no indication of impairment

In 2006, impairment charges of USD 126 million were recorded, principally relating to capitalized milestone payments in NIBR and marketed products in the Sandoz Division. In 2005, impairment charges of USD 401 million were recorded, principally relating to the impairment of NKS 104 marketing rights in the Pharmaceuticals Division of USD 332 million and USD 37 million of IPR&D in the Sandoz Division.

The amount of goodwill and other intangible assets on the Group s consolidated balance sheet has increased significantly in recent years, primarily as a result of the Group s recent acquisitions. Although Novartis does not currently have an indication of any significant additional impairments, impairment testing under IFRS 3 may lead to further impairment charges in the future. For more detail on the increasing impact of intangible asset charges on the Group s operating income as a result of recent acquisitions, see Impact of Intangible Asset Charges and Significant Exceptional Items above.

Investments in associated companies

Novartis has 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 it otherwise has significant influence) accounted for by using the equity method. Due to the various estimates that have been made in applying the equity method, the amounts recorded in the consolidated financial statements in respect to the investment in Roche Holding AG may require adjustments in the following year after more financial and other information becomes publicly available.

Retirement and other post-employment benefit plans

The Novartis Group sponsors pension and other post-employment benefit plans in various forms covering associates who meet eligibility requirements. These plans cover a significant portion of Group associates. Several statistical and other factors that attempt to anticipate future events are used in calculating the expense and liability related to the plans. These factors include assumptions about the discount rate, expected return on plan assets and rate of future compensation increases, as determined by Management within certain guidelines. In addition, the Group s actuarial consultants use statistical information such as withdrawal and mortality rates for their estimates. The actuarial assumptions used may differ materially from actual results due to changing market and economic conditions, higher or lower withdrawal rates or longer or shorter life spans of participants. The Group records differences between assumed and actual income and expense as gains or losses in the Statement of Recognized Income and Expense. The differences could have a significant impact on the Group s total equity. For more detail on the Group s obligations under retirement and other post-employment benefit plans and the underlying actuarial assumption, see note 26.1 of the Group s consolidated financial statements.

Equity-based compensation

The fair value of Novartis shares, Novartis American Depositary Shares (ADS) and related options granted to associates as compensation is recognized as an expense. Novartis calculates the fair value of the options at the grant date using the trinomial valuation method, which is a variant of the lattice binomial approach. Accurately measuring the value of share options granted to associates is difficult and requires an estimate of certain factors that Novartis inputs into the valuation model. The key factors involve an estimate of future uncertain events amongst others, the expected term of the option, the expected share price volatility factor and the expected dividend yield. Shares and ADSs are valued using the market value on the grant date. The amounts for options and other share-based compensation are charged to income over the relevant vesting or service periods, adjusted to reflect actual and expected levels of vesting. The charge for share-based compensation is included in the personnel expenses of the various subsidiaries where the associates are employed. For detailed information on Novartis equity-based compensation plans and on the assumptions on which the valuation of share options granted to associates was based for 2006, see note 27 of the Group s consolidated financial statements.

Contingencies and environmental liabilities

A number of Novartis Group entities are involved in various intellectual property, product liability, commercial, employment and wrongful discharge, environmental and tax litigations and claims, government investigations and other legal proceedings arising out of the normal conduct of their businesses. See note 19 of the Group s consolidated financial statements for further detail.

Novartis records accruals for contingencies when it is probable that a liability has been incurred and the amount can be reasonably estimated. These accruals are adjusted periodically as assessments change or additional information becomes available. For product liability claims, a portion of the overall accrual is actuarially determined and considers 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 reasonably estimable. Legal defense costs expected to be incurred in connection with a loss contingency are accrued when probable and reasonably estimable.

Provisions for non-recurring environmental remediation costs are made when expenditure on remedial work is probable and the cost can be reliably estimated. Cost of future expenditure does not reflect any insurance or other claims or recoveries, as Novartis only recognizes insurance or other recoveries at such time the amount is reasonably estimable and collection is virtually certain. Recurring remediation costs are provided under non-current liabilities and are estimated by calculating the discounted amounts of such annual costs for the next 30 years.

Segment reporting

Novartis is divided on a worldwide basis into four operating divisions (Pharmaceuticals, Vaccines and Diagnostics, Sandoz, Consumer Health) and Corporate activities. The Group s four operating divisions are based on internal Management structures. They are managed separately because they each manufacture, distribute and sell distinct products that require differing marketing strategies.

Inter-divisional sales are made at amounts considered to approximate arm s-length transactions. The accounting policies of the Divisions are the same as those of the Group. The Group principally evaluates Divisional performance and allocates resources based on operating income.

Pharmaceuticals Division

The Pharmaceuticals Division researches, develops, manufactures, distributes, and sells branded pharmaceuticals in the following therapeutic areas: cardiovascular and metabolism; oncology and hematology; neuroscience; respiratory and dermatology; infectious diseases, transplantation and immunology; arthritis, bone, gastrointestinal and urinary; and ophthalmics. The Pharmaceuticals Division is organized into global business franchises responsible for the marketing of various products as well as a Business Unit called Novartis Oncology responsible for the global development and marketing of oncology products. The Oncology Business Unit is not required to be separately disclosed as a segment, since it shares common long-term economic perspectives, customers, research, development, production, distribution and regulatory environments with the remainder of the Pharmaceuticals Division. The Pharmaceuticals Division is the most important division of Novartis, accounting in 2006 for USD 22.6 billion, or 61%, of Group net sales and for USD 6.7 billion, or 82%, of Group operating income.

Vaccines and Diagnostics Division

The Vaccines and Diagnostics Division is a new division focused on the development of preventive vaccine treatments and diagnostic tools. It was formed in April 2006 following the acquisition of the remaining stake in Chiron Corporation not already held by Novartis. The division has two activities: Novartis Vaccines and Chiron. Novartis Vaccines is the world s fifth-largest vaccines manufacturer of vaccines and the second-largest supplier of influenza vaccines in the US. Key products also include meningococcal, pediatric and travel vaccines. Chiron is a blood testing and molecular diagnostics business dedicated to preventing the spread of infectious diseases through the development of novel blood-screening tools that protect the world s blood supply. In 2006, the Vaccines and Diagnostics Division accounted for USD 956 million, or

3% of Group net sales, and produced a USD 26 million operating loss.

Sandoz Division

The Sandoz Division is a leading global generic pharmaceuticals company that develops, produces and markets drugs along with pharmaceutical and biotechnological active substances. Through Sandoz, Novartis is the only major pharmaceutical company to have leadership positions in both patented prescription drugs as well as generic pharmaceuticals. The Sandoz Division maintains a Retail Generics activity and an Anti-Infectives activity. In Retail Generics, Sandoz develops and manufactures active ingredients and finished dosage forms that are no longer covered by patents. Retail Generics includes the development and manufacture of biopharmaceuticals. Retail Generics also supplies certain active ingredients to third parties. In Anti-Infectives, Sandoz develops and manufactures off-patent active pharmaceutical ingredients and intermediates, mainly antibiotics, for internal use by Retail Generics and for sale to third-party customers. Sandoz offers some 840 compounds in over 5000 forms in 110 countries. The most important product groups include antibiotics, treatments for central nervous system disorders, gastrointestinal medicines, cardiovascular treatments and hormone therapies. Sandoz is the Group s third largest division, both in terms of Group net sales and operating income. In 2006, the Sandoz Division accounted for USD 6.0 billion, or 16%, of Group net sales and for USD 736 million, or 9%, of Group operating income.

Consumer Health Division

The Consumer Health Division consists of the following four Business Units: OTC (over-the-counter medicines), Animal Health, Gerber and CIBA Vision. Each has manufacturing, distribution and selling capabilities. However, none are material enough to the Group to be separately disclosed as a segment. The OTC Business Unit covers over-the-counter self medications. The Animal Health Business Unit covers veterinary products for farm and companion animals. The Gerber Business Unit covers foods as well as other products and services designed to serve the particular needs of babies and infants. The CIBA Vision Business Unit covers contact lenses, lens care products, and ophthalmic products.

The Medical Nutrition Business Unit was previously included in the Consumer Health Division, but has been classified as a discontinuing operation as a consequence of announcements during 2006 to divest the activities of this Business Unit. For more detail, see Factors Affecting Results of Operations Acquisitions and Divestments above. The Medical Nutrition Business Unit covers health and medical nutrition products.

In 2006, the Consumer Health Division (excluding discontinuing operations) was the Group s second largest division, both in terms of Group net sales and operating income and accounted for USD 6.5 billion, or 18%, of Group net sales and for USD 1.1 billion, or 13%, of Group operating income.

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 certain items of income and expense that are not attributable to specific Divisions. No allocation of Corporate items is usually made to the Divisions.

Factors affecting comparability of year-on-year results of operations

Recent Acquisitions and Divestments

The comparability of the year-on-year results of operations for the Group was significantly affected by a number of significant acquisitions and divestments both during 2005 and 2006. For more detail on these acquisitions and divestments and how they have affected the Group s results, see Factors Affecting Results of Operations Acquisitions and Divestments and Impact of Intangible Asset Charges and Significant Exceptional Items above.

Divestment of Medical Nutrition Business Unit

The results of the Medical Nutrition Business Unit of the Consumer Health Division are reported as discontinuing operations for both 2006 and 2005 in the Group s consolidated financial statements. As a result, the divestment of the Medical Nutrition Business Unit does not affect the comparability of year-on-year results of operation on a continuing operations basis, either for the Group or for the Consumer Health Division.

Currency Fluctuations

Despite movements in the exchange rate of the US dollar, the reporting currency of Novartis, compared to major currencies, currency fluctuations have not had a significant effect on the Group s results of operations in 2006. For more information, see Effects of Currency Fluctuations above.

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Results of operations

	Year ended Dec 31, 2006 USD millions	Year ended Dec 31, 2005 USD millions	Change in %
Net sales from continuing operations	**36 031**	**31 005**	**16**
Other revenues	718	314	129
Cost of goods sold	-10 299	-8 259	25
Marketing & sales	-10 454	-9 397	11
Research & development	-5 349	-4 825	11
General & administration	-1 957	-1 681	16
Other income & expense	-741	-355	109
Operating income from continuing operations	**7 949**	**6 802**	**17**
Income from associated companies	264	193	37
Financial income	354	461	-23
Interest expense	-266	-294	-10
Income before taxes from continuing operations	**8 301**	**7 162**	**16**
Taxes	-1 282	-1 090	18
Net income from continuing operations	**7 019**	**6 072**	**16**
Net income from discontinuing operations	183	69	165
Group net income	**7 202**	**6 141**	**17**
Attributable to Shareholders of Novartis AG	*7 175*	*6 130*	*17*
Minority interests	*27*	*11*	*145*

Group Overview

Group net sales increased 15% in 2006 to USD 37.0 billion. All divisions delivered strong performances due to a mixture of organic growth and contributions from acquisitions. Higher sales volumes added six percentage points to Group net sales growth and acquisitions seven percentage points. Net price changes and currency translation had a positive impact of one percentage point each. Pharmaceuticals accounted for 63% of net sales from continuing operations, Vaccines and Diagnostics for 3%, Sandoz for 16% and Consumer Health 18%. The results of the Medical Nutrition business unit for 2006 and prior years are shown as discontinuing operations in this financial report following decisions in 2006 to divest this business. The US remained the largest market for Novartis, representing 41% of Group net sales, Europe for 37% and the rest of the world for 22%.

Group operating income advanced 18% to USD 8.2 billion despite Chiron acquisition-related costs of USD 642 million. Excluding these, Group operating income increased by 28%. Operating income from continuing operations advanced 17%, at a rate higher than sales as productivity improvements and the strong sales volume expansion more than offset one-time costs related to acquisitions. Cost of Goods Sold rose 25% and increased as a percentage of net sales to 28.6%, mainly reflecting the impact of purchase price accounting and increased amortization of intangible assets from acquisitions. Marketing & Sales fell 1.3 percentage points to 29.0% of net sales primarily due to productivity improvements in the Pharmaceuticals Division. Research & Development expenses rose 11% as Novartis continued to have one of the industry s highest R&D investment rates at 14.8% of Group net sales and 18.9% of the Pharmaceuticals Division net sales.

The Group operating margin, defined as Group operating income as a percentage of Group net sales, increased to 22.1% from 21.4% in 2005, as underlying operating improvements were only partially offset by one-time acquisition-related costs. The operating margin from continuing operations increased to 22.1% from 21.9% in 2005.

Group net income rose 17% to USD 7.2 billion. Excluding the impact on Group net income of Chiron acquisition-related costs of USD 451 million it would have increased 25%. Net income from continuing operations increased 16% to USD 7.0 billion as the operating income increase was partially offset by the reduction in financial income. Group earnings per share rose 16% to USD 3.06 per share from USD 2.63 in 2005.

Net sales

Year ended Dec 31, 2006 USD millions	Year ended Dec 31, 2005 USD millions	Change in USD %	Change in local currencies %

Pharmaceuticals	**22 576**	**20 262**	**11**	**11**
Vaccines and Diagnostics	**956**			
Sandoz	**5 959**	**4 694**	**27**	**25**
Consumer Health	**6 540**	**6 049**	**8**	**8**
Net sales from continuing operations	**36 031**	**31 005**	**16**	**16**
Net sales from discontinuing operations	989	1 207	-18	-18
Group net sales	**37 020**	**32 212**	**15**	**14**

Pharmaceuticals Division

Strong net sales growth of 11% in local currencies (lc) was driven by dynamic performances from leading brands that have made Novartis a leader in its Cardiovascular, Oncology and Neuroscience franchises. Four products *Diovan, Gleevec/Glivec, Lotrel* and *Zometa* each achieved sales of more than USD 1 billion in 2006. Cardiovascular strategic brand sales were up 15% (+15% lc) to USD 6.5 billion as the leading hypertension medicines *Diovan* (+15% lc), which recorded sales exceeding USD 4.2 billion, and *Lotrel* (+26% lc) each gained market share, while the anti cancer drugs *Gleevec/Glivec* (+17% lc), which surpassed USD 2.5 billion in sales, and *Femara* (+33% lc) led the 16% (+15% lc) rise in Oncology net sales to USD 5.9 billion.

In the US, net sales rose 17% to USD 9.5 billion, led by excellent performances from *Diovan* (+20%), *Gleevec/Glivec* (+20%), *Lotrel* (+26%) and *Zelnorm/Zelmac* (+37%). Net sales in Europe were up 8% (+7% lc) as strong performances from the leading products *Diovan, Gleevec/Glivec* and *Femara,* as well as dynamic growth in the emerging European growth markets of Russia and Turkey, were partially offset by healthcare pricing pressure and generic competition for some products, particularly in France and Germany.

TOP TWENTY PHARMACEUTICALS DIVISION PRODUCT NET SALES 2006

Brands	Therapeutic Area	USA USD millions	% change in local currencies	Rest of world USD millions	% change in local curriencies	Total USD millions	% change in USD	% change in local currencies
Diovan/Co-Diovan	Hypertension	1 858	20	2 365	12	4 223	15	15
Gleevec/Glivec	Chronic myeloid leukemia	630	20	1 924	16	2 554	18	17
Lotrel	Hypertension	1 352	26			1 352	26	26
Zometa	Cancer complications	696	-1	587	12	1 283	5	4
Lamisil (group)	Fungal infections	574	7	404	-31	978	-14	-13
Neoral/Sandimmun	Transplantation	125	-17	793	-1	918	-4	-4
Sandostatin (incl. LAR)	Acromegaly	367	-2	548	4	915	2	2
Lescol	Cholesterol reduction	256	0	469	-8	725	-5	-5
Trileptal	Epilepsy	549	19	172	11	721	17	17
Femara	Breast cancer	338	40	381	27	719	34	33
Top ten products total		**6 745**	**15**	**7 643**	**7**	**14 388**	**10**	**10**
Voltaren (group)	Inflammation/pain	8	60	682	0	690	0	1
Zelnorm/Zelmac	Irritable bowel syndrome	488	37	73	20	561	34	34
Exelon	Alzheimer s disease	187	9	338	12	525	12	11
Tegretol (incl. CR/XR)	Epilepsy	120	10	271	-5	391	-1	-1
Visudyne	Macular degeneration	70	-62	284	-6	354	-27	-27
Miacalcic	Osteoporosis	199	-13	140	3	339	-7	-7
Comtan/Stalevo Group	Parkinson s disease	157	18	182	24	339	22	21
Foradil	Asthma	14	0	317	-1	331	0	-1
Ritalin/Focalin (group)	Attention deficit/hyperactive disorder	264	47	66	6	330	37	37
Famvir	Viral infections	166	10	102	-3	268	6	5
Top twenty products total		**8 418**	**14**	**10 098**	**5**	**18 516**	**9**	**9**
Rest of portfolio		1 054	43	3 006	14	4 060	21	21
Total Division net sales		**9 472**	**17**	**13 104**	**7**	**22 576**	**11**	**11**

Latin America delivered a strong expansion thanks to good performances from Brazil and Mexico, with sales in the region up 21% (+17% lc).

Chiron s pharmaceuticals business, acquired in mid-2006, added two percentage points to net sales growth in local currencies; volume increases added six percentage points; price increases added three percentage points, while the currency impact was immaterial.

Pharmaceuticals Division key product highlights

Note: All growth figures refer to 2006 worldwide sales growth in local currencies.

Diovan (USD 4.2 billion, +15% lc), the leading angiotensin-receptor blocker (ARB) by sales worldwide, generated further excellent growth and achieved a record market share in its segment based on new indications, higher-strength doses and strong new efficacy data. In the US, *Diovan* has benefited from a leading formulary position with healthcare payors. *Co-Diovan* (combination with a diuretic) was up 19% lc in Europe, reflecting increasing use of combination therapies.

Gleevec/Glivec (USD 2.6 billion, +17% lc), a targeted treatment for patients with certain forms of chronic myeloid leukemia (CML) and gastro-intestinal stromal tumors (GIST), continued to expand at a rapid rate through ongoing penetration of the CML and GIST markets. New landmark data showed nearly 90% of CML patients in a five-year study taking *Gleevec/Glivec* were still alive after five years. *Gleevec/ Glivec* also received four EU and five US

approvals for treating various rare diseases during 2006.

Lotrel (USD 1.4 billion, +26% only in US), the leading fixed-dose combination treatment for hypertension in the US since 2002, has delivered strong growth based on new dosing strengths as well as the increasing use of multiple therapies to treat hypertension, demographic factors and the impact of US disease awareness campaigns.

Zometa (USD 1.3 billion, +4% lc), an intravenous bisphosphonate for patients with bone cancer, was impacted by an overall slowing of the bisphosphonate segment in the US and Europe. However, *Zometa* has gained market share in treating patients with lung and prostate cancer and also benefited from a launch in Japan.

Lamisil (USD 978 million, 13% lc), an oral treatment for fungal nail infections, generated higher sales in the US, but this was offset by falling sales in Europe following the entry of generic competition in late 2005. In December 2006, the FDA confirmed the grant of a pediatric extension for *Lamisil* extending its marketing exclusivity through to June 2007.

Neoral/Sandimmum (USD 918 million, 4% lc), for transplantation, achieved steady sales despite generic competition in many markets.

Sandostatin (USD 915 million, +2% lc), for cancer, benefited from double-digit growth of the long-acting patent protected version.

Lescol (USD 725 million, 5% lc), for cholesterol reduction, maintained sales in the US but suffered a reduction in the rest of the world due to generic competition.

Trileptal (USD 721 million, +17% lc), against epilepsy, continued to grow significantly in its last year before generic competition is expected.

Femara (USD 719 million, +33% lc), a leading oral treatment for women with hormone-related breast cancer, was a key growth driver due to ongoing market share gains. Clinical data has confirmed the benefits of use in women after surgery (adjuvant) as well as after completion of tamoxifen therapy (extended adjuvant). Recent four-year data from a major trial confirmed *Femara* significantly reduces the risk of breast cancer returning.

Zelnorm/Zelmac (USD 561 million, +34% lc), for treatment of irritable bowel syndrome with constipation and chronic idiopathic constipation, has benefited from outstanding US growth due to broader use of the product and ongoing disease awareness programs.

Visudyne (USD 354 million, 27% lc), a treatment for the eye disease wet age-related macular degeneration, reported a sharp decline in net sales linked to off-label competition in the US and in other key markets, but sales in Japan were higher.

Exjade (USD 143 million), the first once-daily oral iron chelator for chronic iron overload, has performed well since its approval in the US and over 70 countries in 2006 as a new treatment for iron overload associated with blood disorders such as sickle cell anemia, myelodysplastic syndrome and thalassemia.

Xolair (USD 102 million), for severe allergic asthma, has now been launched in over 20 countries following EU approval in October 2005, with approvals received in over 50 countries. In the US, Novartis co-promotes *Xolair* with Genentech, which distributes it and shares a portion of operating income. *Xolair* had 2006 net sales of USD 425 million in the US, resulting in a contribution to Novartis of USD 140 million reported as Other Revenues.

Vaccines and Diagnostics Division

Vaccines and Diagnostics, a new division created following the acquisition of Chiron in April 2006, generated net sales growth of 42% in the eight months since acquisition over the comparable eight month 2005 period recorded by Chiron, mainly from increased seasonal influenza vaccine sales in the US. Sales of diagnostics products, primarily for testing of blood donations, also showed steady growth.

Sandoz Division

Net sales advanced 27% due to new product launches and stronger positions in fast-growing markets, particularly Europe and supported by Hexal AG and Eon Labs, Inc. following their mid-2005 acquisition. These transactions made Sandoz a global leader in generics. Sandoz maintained its leadership position in Germany in tough market conditions marked by price cuts during 2006. Key growth drivers have been differentiation through difficult-to-make generics and innovative product applications, including device technologies. Volume increases contributed seven percentage points to 2006 net sales growth; currency effects two percentage points and acquisition effects 24 percentage points, offset by a decline of six percentage points due to reduced prices.

Consumer Health Division continuing operations

Strong sales expansions in OTC and Animal Health, due to the increasing focus on strategic brands and product innovations underpinned the net sales growth of the continuing operations of 8%. OTC brands acquired from Bristol-Myers Squibb Co. in mid-2005 supported the sales expansion.

Discontinuing Consumer Health Division operations

Novartis announced plans in December to divest the remainder of the Medical Nutrition Business Unit in the Consumer Health Division for USD 2.5 billion to Nestlé S.A., Switzerland. This follows the sale of the Business Unit s Nutrition & Santé unit in February 2006. The sale of the remainder of Medical Nutrition, which is subject to customary regulatory approvals, is expected to be completed in the second half of 2007. The financial data for this Business Unit, including Nutrition & Santé is disclosed in 2005 and 2006 under Discontinuing operations.

Operating income

	Year ended Dec 31, 2006 USD millions	% of net sales	Year ended Dec 31, 2005 USD millions	% of net sales	Change %
Pharmaceuticals	**6 703**	**29.7**	**6 014**	**29.7**	**11**
Vaccines and Diagnostics	**-26**				
Sandoz	**736**	**12.4**	**342**	**7.3**	**115**
Consumer Health	**1 068**	**16.3**	**952**	**15.7**	**12**
Corporate, net	-532		-506		
Operating income from continuing operations	**7 949**	**22.1**	**6 802**	**21.9**	**17**
Discontinuing operations	225	22.8	103	8.5	118
Group operating income	**8 174**	**22.1**	**6 905**	**21.4**	**18**

Operating income from continuing operations advanced 17%, at a higher pace than sales growth as the strong sales volume expansion and productivity improvements were only partially offset by one-time and other acquisition-related costs related to the Chiron transaction of USD 642 million. Group operating income would have increased by 28% if these costs were excluded.

Pharmaceuticals Division

The Pharmaceuticals Division operating income (excluding Chiron acquisition-related costs of USD 309 million) advanced 17% and the corresponding operating margin reached 31%. Reported operating income kept pace with net sales, rising 11% from productivity gains in all areas and despite the impact of costs to integrate Chiron s pharmaceuticals business. These amounted to USD 226 million for restructuring and inventory step-up charges and USD 83 million for increased amortization of intangible assets. The Division also had lower divestment gains than in 2005. The operating margin on net sales remained at 29.7% despite these factors. Other revenues rose significantly, principally due to US co-promotion contributions for the asthma medicine *Xolair*. Cost of Goods Sold rose 17%, as one-time Chiron costs offset savings from good cost management and improved product mix. Marketing & Sales expenses rose at a slower pace than net sales, climbing 9%, as productivity gains offset marketing investments to support multiple planned new product launches, particularly in the US, as well as the expansion of activities in emerging growth markets such as China and Turkey. Research & Development expenses were up 7% to USD 4.3 billion as investments were made in key late-stage projects. Research & Development increased 17% if the exceptional USD 332 million NKS 104 impairment is excluded from the 2005 amounts.

Vaccines and Diagnostics Division

Although Vaccines and Diagnostics reported an operating loss of USD 26 million, this is after recording substantial acquisition-related costs. Excluding these, the Division had an operating income of USD 307 million for the period following the acquisition in April 2006. This strong performance was more than offset by one-time restructuring and other acquisition-related costs of USD 333 million comprised of restructuring charges of USD 44 million, one-time inventory step-up costs of USD 117 million and amortization of intangible assets of USD 172 million.

Sandoz Division

Sandoz operating income advanced significantly faster than net sales growth, rising 115% to USD 736 million due to operational improvements and the non-recurrence of integration costs in the year ago period. An accounting irregularity in France resulted in a USD 69 million operating income charge.

Consumer Health Division continuing operations

Consumer Health operating income rose 12% for continuing operations on strong performances of strategic brands in OTC and Animal Health, offset by a weak performance in CIBA Vision due to product supply issues.

Discontinuing Consumer Health Division operations

The Nutrition & Santé unit of the Medical Nutrition Business Unit generated USD 2 million operating income until its divestment in February 2006. The pre-tax divestment gain on selling this unit amounted to USD 129 million. The balance of the Medical Nutrition Business Unit generated operating income of USD 94 million in 2006.

Corporate Income & Expense, net

Net corporate expense totaled USD 532 million compared to USD 506 million in 2005.

Other revenues and operating expenses

	Year ended Dec 31, 2006 USD millions	Year ended Dec 31, 2005 USD millions	Change %
Net sales from continuing operations	**36 031**	**31 005**	**16**
Other revenues	718	314	129
Cost of goods sold	-10 299	-8 259	25
Marketing & sales	-10 454	-9 397	11
Research & development	-5 349	-4 825	11
General & administration	-1 957	-1 681	16
Other income & expense	-741	-355	109
Operating income from continuing operations	**7 949**	**6 802**	**17**
Operating income from discontinuing operations	225	103	118
Group operating income	**8 174**	**6 905**	**18**

Other revenues

Other revenues rose 129%, primarily due to additional royalty income arising in the new Vaccines and Diagnostics Division mainly from its diagnostic activities and also increasing co-promotion contributions in the Pharmaceuticals Division from sales of the asthma medicine *Xolair* in the US, where it is co-marketed and co-developed in partnership with Genentech and Tanox.

Cost of Goods Sold from continuing operations

Cost of Goods Sold rose 25% to USD 10.3 billion in 2006. As a percentage of net sales from continuing operations Cost of Goods Sold increased to 28.6% compared to 26.6% in 2005. The negative impact increased amortization charges for intangible assets and one-time inventory step-up costs from the Chiron acquisition more than offset lower costs in the Pharmaceuticals Division related to productivity gains and product mix improvements.

Marketing & Sales from continuing operations

Marketing & Sales expenses increased 11% to USD 10.5 billion and reflects an increase in the US Pharmaceuticals Division sales force. However, Marketing & Sales expenses declined as a percentage of net sales from continuing operations to 29.0% compared to 30.3% in 2005.

Research & Development from continuing operations

Research & Development expenses rose 11% to USD 5.3 billion as a result of ongoing investments in the Novartis Institutes for BioMedical Research in the US as well as clinical trials for late stage compounds. These compounds include FTY 720 (multiple sclerosis) and QAB 149 (respiratory diseases). R&D expenses as a percentage of net sales from continuing operations declined to 14.8% of net sales compared to 15.6% in 2005.

General & Administration from continuing operations

General & Administration expenses rose 16% to USD 2.0 billion in 2006, in line with net sales from continuing operations. General & Administration expenses remained at 5.4% of net sales from continuing operations.

Other Income & Expense from continuing operations

Other Income and Expense amounted to a net expense of USD 741 million in 2006 compared to USD 355 million in 2005. This increase was primarily due to USD 144 million of lower divestment gains in the Pharmaceuticals Division in 2006 and USD 175 million of acquisistion costs for Chiron in the Pharmaceuticals and Vaccines and Diagnostics Divisions.

Non-divisional Income & Expense

	Year ended Dec 31, 2006 USD millions	Year ended Dec 31, 2005 USD millions	Change %
Operating income from continuing operations	**7 949**	**6 802**	**17**
Income from associated companies	264	193	37
Financial income	354	461	-23
Interest expense	-266	-294	-10
Income before taxes from continuing operations	**8 301**	**7 162**	**16**
Taxes	-1 282	-1 090	18
Net income from continuing operations	**7 019**	**6 072**	**16**
Net income from discontinuing operations	183	69	165
Group net income	**7 202**	**6 141**	**17**
Attributable to Shareholders of Novartis AG	*7 175*	*6 130*	*17*
Minority interests	*27*	*11*	*145*

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 otherwise Novartis has significant influence over them. Income from associated companies is mainly derived from the Group s investment in Roche Holding AG (Roche). Income from its investment in Chiron Corporation has been accounted for using the equity method until Novartis acquired the remaining outstanding shares in April 2006.

For 2006, income from associated companies rose to USD 264 million from USD 193 million in 2005. The Group s 44% interest in Chiron before its acquisition contributed a loss of USD 44 million compared to a gain of USD 19 million in 2005, due to exceptional charges of USD 53 million in the period prior to full consolidation. This charge was principally related to the accelerated vesting of Chiron share options.

The Group s 33.3% interest in Roche voting shares, which represents a 6.3% interest in the total equity of Roche, generated income of USD 290 million, up from USD 166 million in 2005. This reflects an estimate of the Group s share of 2006 income from Roche, which is USD 404 million and includes a positive prior-year adjustment of USD 13 million. This income was reduced by a charge of USD 114 million for the amortization of intangible assets arising from the allocation of the Novartis purchase price to Roche s property, plant & equipment and intangible assets.

A survey of analyst estimates is used to predict the Group s share of net income in Roche. Any differences between these estimates and actual results will be adjusted in 2007.

Financial income and interest expense from continuing operations

Net financial income fell to USD 88 million from USD 167 million in 2005, reflecting the sharp decline of USD 3.8 billion in average net liquidity as a result of recent acquisitions. At December 31, 2006, Novartis had net liquidity of USD 656 million compared to USD 2.5 billion at the end of 2005. As a result, financial income fell to USD 354 million in 2006 from USD 461 million in the year-ago period.

Taxes

The tax rate for the Group, including discontinuing operations, was 15.5% in 2006, the same as in 2005. Tax expense on continuing operations rose 17.6% to USD 1.3 billion from USD 1.1 billion in the year-ago period. The Group s effective tax rate on continuing operations (taxes as a percentage of income before tax) was 15.4% in 2006 compared to 15.2% in 2005.

The Group s expected tax rate on continuing operations (weighted average tax rate based on the result before tax of each subsidiary) was 15.8% compared to 15.9% in 2005. The effective tax rate is different than the expected tax rate due to various adjustments to expenditures and income for tax purposes. See note 6 to the consolidated financial statements for details of the main elements contributing to the difference.

Net income from discontinuing operations

After-tax net income from discontinuing operations was USD 183 million. This comprises the result from the Medical Nutrition Business Unit of Consumer Health and also a pre-tax gain of USD 129 million from the Nutrition & Santé divestment in 2006.

Net income

Group net income advanced 17% to USD 7.2 billion from USD 6.1 billion in 2005, rising faster than net sales due to the strong underlying operating income performance which more than compensated the Chiron acquisition-related charges. These net charges of USD 451 million comprise USD 642 million of operating charges, offset by USD 244 million in related tax savings, however also included an exceptional reduction of income from associated companies of USD 53 million in the four months up to Chiron s full consolidation in April.

Excluding these acquisition-related effects net income rose 25%. Also effecting net income was lower net financial income due to the lower average net liquidity as a result of the 2006 acquisitions. Group net income increased to 19.5% of Group net sales compared to 19.1% in 2005. Net income from continuing operations was also 19.5% of the related net sales. The return on average equity arising from the Group net income was 19.3% compared to 19.0% in 2005.

Earnings per share

Earnings per share rose 16% to USD 3.06 from USD 2.63 in the year-ago period.

Condensed consolidated balance sheets

	Dec 31, 2006 USD millions	Dec 31, 2005 USD millions	Change USD millions
Total non-current assets	46 604	36 289	10 315
Cash, marketable securities and derivative financial instruments	7 955	10 933	-2 978
Other current assets	12 713	10 510	2 203
Assets related to discontinuing operations	736		736
Total assets	**68 008**	**57 732**	**10 276**
Total equity	41 294	33 164	8 130
Financial debts	7 299	8 454	-1 155
Other liabilities	19 208	16 114	3 094
Liabilities related to discontinuing operations	207		207
Total equity and liabilities	**68 008**	**57 732**	**10 276**

Total non-current assets increased by USD 10.3 billion principally from the Chiron acquisition. The Group s equity increased by USD 8.1 billion during 2006 to USD 41.3 billion at December 31, 2006, as a result of net income (USD 7.2 billion), positive translation adjustments (USD 1.5 billion), the revaluation of and change in accounting method for Chiron (USD 0.6 billion), valuation differences on marketable securities and cash-flow hedges, share-based compensation, net sale of treasury shares, actuarial net gains from defined benefit plans and other items (USD 0.8 billion), offset by the dividend payment (USD 2.0 billion). Total financial debts decreased by USD 1.2 billion. The valuation differences on available-for-sale marketable securities and deferred cash-flow hedges increased from unrealized gains of USD 304 million at December 31, 2005, to unrealized gains of USD 398 million at December 31, 2006. The year-end debt/equity ratio decreased to 0.18:1 from 0.25:1 in 2005 due to the increase in equity and a decrease in financial liabilities.

Novartis has long-term financial debt principally in the form of bonds. A total of USD 1.3 billion of straight bonds were outstanding at December 31, 2006, compared with USD 2.3 billion at December 31, 2005. For details on the maturity profile of debt, currency and interest rate structure, see note 18 to the consolidated financial statements.

Novartis debt continues to be rated by Standard & Poor s, Moody s and Fitch as AAA, Aaa and AAA for long-term maturities and A1+, P1 and F1+ for short-term debt, respectively making the Group one of the few non-financial companies worldwide to have attained the highest rating from these three benchmark rating agencies. The Group considers its financing arrangements to be sufficient for its present requirements.

Liquidity and capital resources

The following table sets forth certain information about the Group s cash flow and net liquidity.

	2006 USD millions	2005 USD millions	Change USD millions
Cash flow from operating activities of continuing operations	8 710	7 975	735
Cash flow used for investing activities of continuing operations	-6 575	-7 449	874
Cash flow used for financing activities of continuing operations	-4 970	-270	-4 700
Cash flow from discontinuing operations	308	76	232
Translation effect on cash and cash equivalents	25	-94	119
Cash and cash equivalents at the end of the year of discontinuing operations	-4		-4
Net change in cash and cash equivalents of continuing operations	**-2 506**	**238**	**-2 744**
Change in current and non-current marketable securities	-472	-3 197	2 725
Change in current and non-current financial debts	1 155	-1 599	2 754
Change in net liquidity	**-1 823**	**-4 558**	**2 735**

Net liquidity at January 1	2 479	7 037	-4 558
Net liquidity of continuing operations at December 31	**656**	**2 479**	**-1 823**
Net debts of discontinuing operations at December 31	-3		-3
Net liquidity at December 31	**653**	**2 479**	**-1 826**

Cash flow from continuing operating activities increased by 9% (USD 735 million) to USD 8.7 billion reflecting the strong business expansion and good working capital management of the Divisions.

Cash outflow due to continuing investing activities was USD 6.6 billion. A total net amount of USD 4.5 billion was spent on acquisitions principally Chiron Corporation and NeuTec Pharma plc, while investments in property, plant & equipment amounted to USD 1.8 billion and USD 0.3 billion was spent on other investing activities.

Cash flow used for continuing financing activities was USD 5.0 billion, an increase of USD 4.7 billion from 2005. USD 2.0 billion was spent on dividend payments. USD 2.9 billion net cash outflow was due to the repayment of current and non-current financial debts which included the repayment of USD 1.1 billion for an outstanding euro bond; repayment of USD 0.9 billion of

convertible bonds acquired with the Chiron transaction and repayment of USD 1.2 billion of current debt taken up to finance the 2005 Hexal AG acquisition.

Overall liquidity (cash, cash equivalents and marketable securities including financial derivatives) amounted to USD 8.0 billion at December 31, 2006. Net liquidity fell by USD 1.8 billion to a total of USD 656 million at December 31, 2006, compared to USD 2.5 billion at the start of the year, reflecting the acquisitions made during the year.

Group free cash flow

The Group defines free cash flow as cash flow from operating activities less purchase/sale of property, plant & equipment, intangible and financial assets and dividends paid. Cash effects on acquisition or divestment of subsidiaries, associated companies and minority interests are excluded from free cash flow. The following is a summary of the Group s free cash flow:

	2006 USD millions	2005 USD millions	Change USD millions
Cash flow from operating activities of continuing operations	**8 710**	**7 975**	**735**
Purchase of property, plant & equipment	-1 802	-1 157	-645
Purchase of intangible assets	-520	-358	-162
Purchase of financial assets	-825	-782	-43
Proceeds from sale of property, plant & equipment	87	73	14
Proceeds from sale of intangible and financial assets	632	957	-325
Dividends paid to shareholders of Novartis AG	-2 049	-2 107	58
Free cash flow from continuing operations	**4 233**	**4 601**	**-368**
Free cash flow from discontinuing operations	107	72	35
Group free cash flow	**4 340**	**4 673**	**-333**

Free cash flow from continuing operations decreased by 8% to USD 4.2 billion in 2006 from USD 4.6 billion in 2005 as the increase in cash flow from operating activities was offset by increased payments for property, plant, equipment and intangible assets and lower proceeds from asset disposals.

Capital expenditure for continuing operations on property, plant & equipment for 2006 amounted to USD 1.8 billion (5% of net sales of continuing operations compared to 3.7% in 2005). This level reflects the continuing investment in production sites as well as Research & Development facilities. In 2007 capital expenditures for property, plant and equipment are forecast to be approximately 5.5 to 6.0% of net sales. These expenditures will be funded from internally generated resources.

Free cash flow is presented as additional information since 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 which 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 Divisional calculation.

The following summarizes the free cash flow by Division:

	2006 USD millions	2005 USD millions	Change USD millions
Pharmaceuticals	6 501	5 968	533
Vaccines and Diagnostics	151		151
Sandoz	876	685	191
Consumer Health continuing operations	778	811	-33
Corporate and other	-2 024	-756	-1 268
Dividends paid to shareholders of Novartis AG	-2 049	-2 107	58
Total continuing operations	**4 233**	**4 601**	**-368**
Discontinuing operations	107	**72**	35
Group free cash flow	**4 340**	**4 673**	**-333**

Contractual obligations

The following summarizes the Group s contractual obligations and other commercial commitments and the effect such obligations and commitments are expected to have on the Group s liquidity and cash flow in future periods.

	Payments due by period				
	Total **USD millions**	**Less than 1 year** **USD millions**	**2-3 years** **USD millions**	**4-5 years** **USD millions**	**After 5 years** **USD millions**
Non-current financial debt	1 996	1 340	560	33	63
Operating leases	1 193	309	370	183	331
Unfunded pensions and other post-retirement obligations	1 860	99	205	222	1 334
Research & Development					
• unconditional	77	33	27	17	
• potential milestone payments	2 785	199	865	631	1 090
Purchase commitments					
• property, plant & equipment	563	376	158	29	
Total contractual cash obligations	**8 474**	**2 356**	**2 185**	**1 115**	**2 818**

The Group expects to fund the operating leases and long-term and other purchase commitments with internally generated resources.

Compliance with Sarbanes-Oxley Act of 2002 on internal control over Financial Reporting

In line with domestic US registrants with the Securities and Exchange Commission (SEC), Novartis successfully completed its assessment of internal control over financial reporting under Section 404 of the Sarbanes-Oxley Act in 2004 and 2005 and repeated this approach in 2006. Management s assessment was reviewed and attested in a report from its independent auditors. No material weaknesses were revealed in 2004, 2005 or 2006 from this review of the internal control over financial reporting.

Special purpose entities

The Novartis Group has no unconsolidated special purpose financing or partnership entities.

Earnings before interest, tax, depreciation and amortization (EBITDA)

The Group defines EBITDA as operating income before depreciation of property, plant & equipment and amortization of intangible assets, and any related impairment charges.

	2006 USD millions	2005 USD millions	Change USD millions
Operating income from continuing operations	**7 949**	**6 802**	**1 147**
Depreciation of property, plant & equipment	1 016	804	212
Amortization of intangible assets	834	460	374
Impairments of property, plant & equipment and intangible assets	137	415	-278
Group EBITDA continuing operations	**9 936**	**8 481**	**1 455**
EBITDA discontinuing operations	258	141	117
Group EBITDA	**10 194**	**8 622**	**1 572**

The segmentation of the Group EBITDA into the Divisions is as follows:

	EBITDA 2006 USD millions	% of net sales	EBITDA 2005 USD millions	% of net sales
Pharmaceuticals	7 601	33.7	7 041	34.7
Vaccines and Diagnostics	201	21.0		
Sandoz	1 295	21.7	777	16.6
Consumer Health	1 330	20.3	1 170	19.3
Corporate and other	-491		-507	
Group EBITDA continuing operations	**9 936**	**27.6**	**8 481**	**27.4**
EBITDA discontinuing operations	258	26.1	141	11.7
Group EBITDA	**10 194**	**27.5**	**8 622**	**26.8**

Enterprise value

Enterprise value represents the total amount that shareholders and debt holders have invested in Novartis, less the Group s liquidity. This is the base used by investors in Novartis to measure their EBITDA return.

	Dec 31,2006 USD millions	Dec 31, 2005 USD millions	Change USD millions
Market capitalization	135 105	122 887	12 218
Minority interests	183	174	9
Financial debts[1]	7 306	8 454	-1 148
Less liquidity[1]	-7 959	-10 933	2 974
Enterprise value	**134 635**	**120 582**	**14 053**
Enterprise value/EBITDA	**13**	**14**	

1 including discontinuing operations

Value added statement

A total of 48% of the revenue from net sales was used to purchase goods and services from our suppliers. Of the Net Value Added of USD 18.1 billion, 51% was paid either directly or indirectly to the employees, 29% was retained in the business for future expansion and 9% was paid to public authorities and financial institutions. Dividends paid to shareholders represented 11% of the Net Value Added.

ORIGIN OF VALUE ADDED

	2006 USD millions	2006 % of net sales	2005 % of net sales
Group net sales	**37 020**	**100**	**100**
Other revenues, change in inventory and own manufactured items	602	1.6	1.5
	37 622	101.6	101.1
Services bought from third parties:			
Material costs	-6 315	-17.0	-18.0
Other operating expenses	-11 584	-31.3	-30.9
Gross value added	**19 723**	**53.3**	**52.6**
Depreciation, amortization and impairments on property, plant & equipment and intangible assets	-2 020	-5.5	-5.3
Financial income	354	1.0	1.4
Net Value Added	**18 057**	**48.8**	**48.7**

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SUMMARY OF QUARTERLY FINANCIAL DATA FOR 2006 AND 2005

USD millions unless indicated otherwise	**Q1**	**Q2**	**Q3**	**Q4**	**2006**	**Q1**	**Q2**	**Q3**	**Q4**	**2005**
Net sales from continuing operations	**8 057**	**8 944**	**9 229**	**9 801**	**36 031**	**7 040**	**7 479**	**8 114**	**8 372**	**31 005**
Other revenues	93	163	205	257	718	73	71	74	96	314
Cost of goods sold	-2 182	-2 463	-2 753	-2 901	-10 299	-1 782	-1 817	-2 294	-2 366	-8 259
Gross profit from continuing operations	**5 968**	**6 644**	**6 681**	**7 157**	**26 450**	**5 331**	**5 733**	**5 894**	**6 102**	**23 060**
Marketing & sales	-2 292	-2 604	-2 567	-2 991	-10 454	-2 213	-2 352	-2 299	-2 533	-9 397
Research & development	-1 131	-1 259	-1 411	-1 548	-5 349	-1 082	-1 090	-1 187	-1 466	-4 825
General & administration	-406	-473	-463	-615	-1 957	-385	-390	-414	-492	-1 681
Other income & expense	-81	-266	-185	-209	-741		-80	-135	-140	-355
Operating income from continuing operations	**2 058**	**2 042**	**2 055**	**1 794**	**7 949**	**1 651**	**1 821**	**1 859**	**1 471**	**6 802**
Income from associated companies	104	1	88	71	264	33	28	65	67	193
Financial income	108	79	72	95	354	116	137	98	110	461
Interest expense	-58	-75	-76	-57	-266	-71	-76	-80	-67	-294
Income before taxes from continuing operations	**2 212**	**2 047**	**2 139**	**1 903**	**8 301**	**1 729**	**1 910**	**1 942**	**1 581**	**7 162**
Taxes	-373	-349	-296	-264	-1 282	-271	-282	-295	-242	-1 090
Net income from continuing operations	**1 839**	**1 698**	**1 843**	**1 639**	**7 019**	**1 458**	**1 628**	**1 647**	**1 339**	**6 072**
Net income from discontinuing operations	117	15	27	24	183	19	18	19	13	69
Group net income	**1 956**	**1 713**	**1 870**	**1 663**	**7 202**	**1 477**	**1 646**	**1 666**	**1 352**	**6 141**
Attributable to Shareholders of Novartis AG	*1 947*	*1 707*	*1 867*	*1 654*	*7 175*	*1 481*	*1 640*	*1 659*	*1 350*	*6 130*
Minority interests	*9*	*6*	*3*	*9*	*27*	*-4*	*6*	*7*	*2*	*11*
EPS (USD)										
• *total*	*0.83*	*0.73*	*0.80*	*0.70*	*3.06*	*0.63*	*0.70*	*0.71*	*0.58*	*2.63*
• *continuing operations*	*0.78*	*0.72*	*0.78*	*0.69*	*2.98*	*0.63*	*0.70*	*0.70*	*0.57*	*2.60*
• *discontinuing operations*	*0.05*	*0.01*	*0.01*	*0.01*	*0.08*	*0.01*	*0.01*	*0.01*	*0.01*	*0.03*
Net sales by Division										
Pharmaceuticals	**5 052**	**5 699**	**5 776**	**6 049**	**22 576**	**4 789**	**5 132**	**5 093**	**5 248**	**20 262**
Vaccines and Diagnostics		**127**	**374**	**455**	**956**					
Sandoz	**1 431**	**1 450**	**1 425**	**1 653**	**5 959**	**803**	**832**	**1 486**	**1 573**	**4 694**
Consumer Health	**1 574**	**1 668**	**1 654**	**1 644**	**6 540**	**1 448**	**1 515**	**1 535**	**1 551**	**6 049**
Total continuing operations	**8 057**	**8 944**	**9 229**	**9 801**	**36 031**	**7 040**	**7 479**	**8 114**	**8 372**	**31 005**
Discontinuing operations	244	238	255	252	989	301	320	301	285	1 207
Group net sales	**8 301**	**9 182**	**9 484**	**10 053**	**37 020**	**7 341**	**7 799**	**8 415**	**8 657**	**32 212**
Operating income by Division										
Pharmaceuticals	**1 626**	**1 677**	**1 779**	**1 621**	**6 703**	**1 364**	**1 611**	**1 681**	**1 358**	**6 014**
Vaccines and Diagnostics		**-38**	**10**	**2**	**-26**					
Sandoz	**238**	**207**	**87**	**204**	**736**	**110**	**79**	**34**	**119**	**342**
Consumer Health	**314**	**294**	**317**	**143**	**1 068**	**257**	**261**	**261**	**173**	**952**
Corporate income & expense, net	-120	-98	-138	-176	-532	-80	-130	-117	-179	-506
Total continuing operations	**2 058**	**2 042**	**2 055**	**1 794**	**7 949**	**1 651**	**1 821**	**1 859**	**1 471**	**6 802**
Discontinuing operations	144	18	33	30	225	29	28	29	17	103
Group operating income	**2 202**	**2 060**	**2 088**	**1 824**	**8 174**	**1 680**	**1 849**	**1 888**	**1 488**	**6 905**

SUMMARY OF GROUP FINANCIAL DATA 2002 2006

USD millions unless indicated otherwise		20061	2005	20043	20032	20023
Group net sales to third parties		**37 020**	**32 212**	**28 247**	**24 864**	**20 877**
Change relative to preceding year	%	14.9	14.0	13.6	19.1	11.3
Pharmaceuticals Division net sales to third parties		22 576	20 262	18 497	16 020	13 528
Change relative to preceding year	%	11.4	9.5	15.5	18.4	13.1
Vaccines and Diagnostics net sales to third parties		956				
Sandoz Division net sales to third parties		5 959	4 694	3 045	2 906	1 817
Change relative to preceding year	%	26.9	54.2	4.8	59.9	25.8
Consumer Health Division net sales to third parties		7 529	7 256	6 705	5 938	5 532
Change relative to preceding year	%	3.8	8.2	12.9	7.3	3.3
Group operating income		**8 174**	**6 905**	**6 289**	**5 666**	**5 092**
Change relative to preceding year	%	18.4	9.8	11.0	11.3	17.7
As a % of net sales	%	22.1	21.4	22.3	22.8	24.4
As a % of average equity	%	22.0	21.4	20.8	20.1	19.4
As a % of average net operating assets	%	22.9	25.1	27.0	25.9	26.4
Group net income		**7 202**	**6 141**	**5 601**	**4 905**	**4 725**
Change relative to preceding year	%	17.3	9.6	14.2	3.8	23.2
As a % of net sales	%	19.5	19.1	19.8	19.7	22.6
As a % of average equity	%	19.3	19.0	18.6	17.4	18.0
Dividends of Novartis AG4		**2 596**	**2 049**	**2 107**	**1 896**	**1 724**
Cash flow from operating activities		**8 828**	**8 080**	**6 689**	**6 627**	**5 229**
Change relative to preceding year	%	9.3	20.8	0.9	26.7	20.0
As a % of net sales	%	23.8	25.1	23.7	26.7	25.0
Free cash flow		**4 340**	**4 673**	**3 301**	**3 581**	**2 958**
Change relative to preceding year	%	-7.1	41.6	-7.8	21.1	20.6
As a % of net sales	%	11.7	14.5	11.7	14.4	14.2
Purchase of property, plant & equipment		**1 813**	**1 188**	**1 269**	**1 329**	**1 068**
Change relative to preceding year	%	52.6	-6.4	-4.5	24.4	33.3
As a % of net sales	%	4.9	3.7	4.5	5.3	5.1
Depreciation of property, plant & equipment		**1 028**	**821**	**780**	**737**	**592**
As a % of net sales	%	2.8	2.5	2.8	3.0	2.8
Research & development expenditure		**5 364**	**4 846**	**4 077**	**3 655**	**2 843**
As a % of net sales	%	14.5	15.0	14.4	14.7	13.6
Pharmaceuticals Division research & development expenditure		**4 265**	**3 972**	**3 371**	**2 995**	**2 355**
As a % of Pharmaceuticals Division net sales to third parties	%	18.9	19.6	18.2	18.7	17.4
Total assets		**68 008**	**57 732**	**52 488**	**48 378**	**45 025**
Liquidity		7 959	10 933	13 892	12 621	12 542
Equity		41 294	33 164	31 315	29 043	27 451
Debt/equity ratio		0.18:1	0.25:1	0.22:1	0.21:1	0.20:1
Current ratio		1.3:1	1.4:1	2.0:1	2.2:1	2.5:1
Net operating assets		**40 641**	**30 685**	**24 278**	**22 392**	**21 363**
Change relative to preceding year	%	32.4	26.4	8.4	4.8	24.2
As a % of net sales	%	109.8	95.3	85.9	90.1	102.3
Personnel costs		**9 138**	**7 941**	**6 984**	**6 252**	**5 128**
As a % of net sales	%	24.7	24.7	24.7	25.1	24.6
Number of associates at year end	number	**100 735**	**90 924**	**81 392**	**78 541**	**72 877**
Net sales per associate (average)	USD	386 311	373 872	353 241	318 041	282 041

1 Including discontinuing Medical Nutrition and sold Nutrition & Santé operations.

2 Income and cash flow statement data are based on pro forma data which takes into consideration the new accounting standards adopted from January 1, 2005. Balance sheet data is based on restated figures.

3 2002 data has not been adjusted from that reported in prior years, so is not always comparable with data for the years 2003 to 2006.

4 2006: Proposal to the shareholder s meeting. In all years this shows only those amounts paid to third party shareholders of Novartis AG.

EQUITY STRATEGY AND SHARE INFORMATION

Novartis share price increases 2% in Swiss Francs (ADSs increase 9% in USD) in 2006

Global equity markets showed further recovery during 2006, albeit after experiencing a turbulent mid-year period. The Swiss Market Index (SMI) increased 16% in 2006, while the Morgan Stanley World Pharmaceuticals Index rose 14% compared to 2005. The Novartis share price closed at CHF 70.25 on December 29, 2006, compared to CHF 69.05 at December 30, 2005, resulting in a 2% increase. The ADS performance in the US showed an increase of 9% as a result of the weakening US dollar. The market capitalization of Novartis amounted to USD 135 billion on December 31, 2006, compared to USD 123 billion at the end of 2005.

Continuously rising dividend since 1996

The Board is proposing a 17% increase in the dividend payment for 2006 to CHF 1.35 per share (2005: CHF 1.15) for approval at the Annual General Meeting. This represents the tenth consecutive increase in the dividend paid per share since the formation of Novartis in December 1996. If the 2006 dividend proposal is approved by the shareholders, dividends paid out on the outstanding shares will amount to USD 2.6 billion (2005: USD 2.0 billion), resulting in a payout ratio of 36% (2005: 33%). Based on the 2006 year-end share price of CHF 70.25, the Novartis dividend yield is 1.9% (2005: 1.7%). The dividend payment date for 2006 will be March 9, 2007. With the exception of 224.8 million treasury shares, all shares issued are dividend bearing.

Fourth and fifth share repurchase programs

In August 2004, Novartis announced the start of a fourth program to repurchase shares via a second trading line on the SWX Swiss Exchange for approximately USD 2.4 billion (CHF 3.0 billion). Additionally, a fifth share repurchase program for up to CHF 4.0 billion was approved at the Annual General Meeting on March 1, 2005.

Since the start of the fourth program, a total of 25.4 million shares have been repurchased for USD 1.2 billion. Novartis did not repurchase any shares in 2006 through its fourth share repurchase program via a second trading line on the SWX Swiss Exchange.

Direct share purchase plans

Since 2001, Novartis has been offering US investors the ADS Direct Plan, which provides these investors an easy and inexpensive way of directly purchasing Novartis shares and of reinvesting dividends. This plan holds Novartis American Depositary Shares (ADSs) which are listed on the New York Stock Exchange under the trading symbol NVS. At the end of 2006, the US ADS Plan had 571 participants.

Since September 1, 2004, Novartis has also offered 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. With this plan Novartis offers an easy and inexpensive way of directly purchasing Novartis registered shares and of depositing them free of charge with SAG SIS Aktienregister AG. As of December 31, 2006, a total of 9134 shareholders have enrolled in this program.

Information on Novartis shares

You can find further information on the Internet at **http://www.novartis.com/investors**.

Novartis 2006 share price movement

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KEY NOVARTIS SHARE DATA

	2006	2005
Issued shares	**2 728 971 000**	**2 739 171 000**
Of which treasury shares		
Reserved for share-based compensation	33 558 017	40 291 620
Not specifically reserved	347 181 524	362 962 880
Treasury shares	**380 739 541**	**403 254 500**
Outstanding shares at December 31	**2 348 231 459**	**2 335 916 500**
Average number of shares outstanding	**2 345 232 126**	**2 332 848 144**

PER SHARE INFORMATION[1] (IN USD EXCEPT DIVIDEND WHICH IS IN CHF)

	2006	2005
Basic earnings per share		
- total	3.06	2.63
- continuing operations	2.98	2.60
- discontinuing operations	0.08	0.03
Diluted earnings per share		
- total	3.04	2.62
- continuing operations	2.96	2.59
- discontinuing operations	0.08	0.03
Operating cash flow		
- total	3.76	3.46
- continuing operations	3.71	3.42
- discontinuing operations	0.05	0.05
Year end equity for Novartis AG shareholders	17.51	14.12
Dividend[2] (CHF)	1.35	1.15

1 Calculated on average number of shares outstanding except year end equity per share

2 2006: Proposal to shareholders meeting

KEY RATIOS DECEMBER 31

	2006	2005
Price/earnings ratio1	18.8	20.0
Enterprise value/EBITDA1	13.2	14.0
Dividend yield (%)	1.9	1.7

1 Based on share price at the year end

KEY DATA ON AMERICAN DEPOSITARY SHARES (ADSs) ISSUED IN THE US

	2006	2005
Year end ADS price (USD)	57.44	52.48
ADSs outstanding1	328 847 804	279 064 646

1 The depositary, JP Morgan Chase Bank, holds one Novartis AG share for every American Depositary Share (ADS) issued

SHARE PRICE (CHF)

	2006	2005
Year end	70.25	69.05
Highest	76.80	71.50
Lowest	64.20	55.35
Year-end market capitalization		
(USD millions)	**135 105**	**122 887**

Trading

Novartis shares are listed in Switzerland and traded on virt-x, an exchange for pan-European blue chip shares. The American Depositary Shares (ADSs) are listed on the New York Stock Exchange. Novartis shares are also traded on the International Retail Service (IRS) of the London Stock Exchange.

SYMBOLS

	virt-x (Reuters/Bloomberg)	IRS (Bloomberg)	NYSE (Reuters/Bloomberg)
Shares	NOVN.VX/NOVN VX	NOV LN	
ADSs			NVS

Widely dispersed shareholdings

Novartis shares are widely held. As of December 31, 2006, Novartis had approximately 153 000 shareholders (2005: 160 000) registered in its share register. Based on the Novartis AG share register, approximately 50% (2005: 53%) of the Novartis AG shares registered by name are held in Switzerland and 39% are held by approximately 800 holders in the US (2005: 36% and 850 holders, respectively). The above numbers are not representative of the actual number of beneficial owners located in Switzerland or the US since certain shares are held by brokers or other nominees. Approximately 14% of the shares registered in the share registry are held by retail or individual investors while 86% are held by institutions such as banks, nominees, insurers, pension funds and investment funds. A total of 24% of the Novartis AG shares are not entered in the share register.

Limitation of registration, voting rights and major shareholders

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. The Board of Directors may allow exemptions from the limitation for registration in the share register.

Based upon information available to the Group, shareholders owning 2% or more of Novartis AG s capital at December 31 are listed in the table below.

	% holding of share capital Decembre 31, 2006	% holding of share capital Decembre 31, 2005
Novartis Foundation for Employee Participation, Basel	2.8	2.9
Emasan AG, Basel	3.2	3.2

In addition:

- Mellon Bank, Everett, holds 2.0% (2005: 1.9%), Nortrust Nominees, London, holds 2.7% (2005: 2.5%) and JPMorgan Chase Bank, New York, holds 7.6% (2005: 8.3%) of the registered shares, respectively as nominees.

- JPMorgan Chase Bank, the depositary for the shares represented by American Depositary Shares, is registered with 12.1% of the share capital.

NOVARTIS GROUP CONSOLIDATED FINANCIAL STATEMENTS

CONSOLIDATED INCOME STATEMENTS (for the years ended December 31, 2006 and 2005)

	Note	2006 USD millions	2005 USD millions
Net sales from continuing operations	3/4	**36 031**	**31 005**
Other revenues		718	314
Cost of goods sold		-10 299	-8 259
Gross profit from continuing operations		**26 450**	**23 060**
Marketing & sales		-10 454	-9 397
Research & development		-5 349	-4 825
General & administration		-1 957	-1 681
Other income & expense		-741	-355
Operating income from continuing operations	3	**7 949**	**6 802**
Income from associated companies	10	264	193
Financial income	5	354	461
Interest expense		-266	-294
Income before taxes from continuing operations		**8 301**	**7 162**
Taxes	6	-1 282	-1 090
Net income from continuing operations		**7 019**	**6 072**
Net income from discontinuing operations	3	183	69
Group net income		**7 202**	**6 141**
Attributable to			
Shareholders of Novartis AG		*7 175*	*6 130*
Minority interests		*27*	*11*
Earnings per share	7		
Continuing operations earnings per share (USD)		2.98	2.60
Discontinuing operations earnings per share (USD)		0.08	0.03
Total earnings per share (USD)		3.06	2.63
Diluted earnings per share	7		
Continuing operations diluted earnings per share (USD)		2.96	2.59
Discontinuing operations diluted earnings per share (USD)		0.08	0.03
Total diluted earnings per share (USD)		3.04	2.62

The accompanying notes form an integral part of the consolidated financial statements.

CONSOLIDATED BALANCE SHEETS (at December 31, 2006 and 2005)

	Note	2006 USD millions	2005 USD millions
Assets			
Non-current assets			
Property, plant & equipment	8	10 945	8 679
Intangible assets	9	21 230	13 294
Associated companies	10	6 111	7 086
Deferred tax assets	11	3 903	3 401
Financial and other non-current assets	12	4 415	3 829
Total non-current assets		**46 604**	**36 289**
Current assets			
Inventories	13	4 498	3 725
Trade accounts receivable	14	6 161	5 343
Marketable securities & derivative financial instruments	15	4 140	4 612
Cash and cash equivalents		3 815	6 321
Other current assets	16	2 054	1 442
Total current assets from continuing operations		**20 668**	**21 443**
Assets related to discontinuing operations	23	736	
Total current assets		**21 404**	**21 443**
Total assets		**68 008**	**57 732**
Equity and liabilities			
Equity			
Share capital	17	990	994
Treasury shares	17	-140	-146
Reserves		40 261	32 142
Issued share capital and reserves attributable to shareholders of Novartis AG		**41 111**	**32 990**
Minority interests		183	174
Total equity		**41 294**	**33 164**
Liabilities			
Non-current liabilities			
Financial debts	18	656	1 319
Deferred tax liabilities	11	5 290	3 472
Provisions and other non-current liabilities	19	4 534	4 449
Total non-current liabilities		**10 480**	**9 240**
Current liabilities			
Trade accounts payable		2 487	1 961
Financial debts and derivative financial instruments	20	6 643	7 135
Current income tax liabilities		1 161	1 253
Provisions and other current liabilities	21	5 736	4 979
Total current liabilities from continuing operations		**16 027**	**15 328**
Liabilities related to discontinuing operations	23	207	
Total current liabilities		**16 234**	**15 328**
Total liabilities		**26 714**	**24 568**
Total equity and liabilities		**68 008**	**57 732**

The accompanying notes form an integral part of the consolidated financial statements.

CONSOLIDATED CASH FLOW STATEMENTS (for the years ended December 31, 2006 and 2005)

	Note	2006 USD millions	2006 USD millions	2005 USD millions	2005 USD millions
Net income from continuing operations			**7 019**		**6 072**
Reversal of non-cash items					
Taxes		1 282		1 090	
Depreciation, amortization and impairments on					
Property, plant & equipment		1 027		818	
Intangible assets		960		861	
Financial assets		39		48	
Income from associated companies		-264		-193	
Divestment loss/gain from disposal of subsidiaries		7		-8	
Gains on disposal of property, plant & equipment, intangible and financial assets, net		-135		-393	
Equity settled share-based compensation expense		522		415	
Net financial income		-88		-167	
Total reversal of non-cash items			3 350		2 471
Dividends from associated companies			114		96
Dividends received from marketable securities			8		4
Interest and other financial receipts			398		437
Interest and other financial payments			-281		-313
Taxes paid			-1 760		-1 345
Cash flow before working capital and provision changes from continuing operations			**8 848**		**7 422**
Restructuring payments and other cash payments out of provisions			-304		-285
Change in net current assets and other operating cash flow items	22		166		838
Cash flow from operating activities of continuing operations			**8 710**		**7 975**
Purchase of property, plant & equipment			-1 802		-1 157
Proceeds from disposals of property, plant & equipment			87		73
Purchase of intangible assets			-520		-358
Proceeds from disposals of intangible assets			113		250
Purchase of financial assets			-825		-782
Proceeds from disposals of financial assets			519		707
Acquisition of additional interests in associated companies					-300
Acquisitions and divestments of businesses	23		-4 522		-8 536
Acquisition of minority interests			-1		-30
Proceeds from disposals of marketable securities			5 112		6 724
Purchase of marketable securities			-4 736		-4 040
Cash flow used for investing activities of continuing operations			**-6 575**		**-7 449**
Acquisition or disposal of treasury shares, net			253		-231
Proceeds from issuance of share capital to third parties by subsidiaries			1		67
Increase in non-current financial debts			540		15
Repayment of non-current financial debts			-182		-886
Change in current financial debts			-3 266		2 904
Withholding tax recoverable			-232		
Dividend payments and cash contributions to minority interests			-35		-32
Dividends paid to shareholders of Novartis AG			-2 049		-2 107
Cash flow used for financing activities of continuing operations			**-4 970**		**-270**
Cash flow from discontinuing operations	23		308		76
Net effect of currency translation on cash and cash equivalents			25		-94

Cash and cash equivalents at the end of the year of discontinuing operations	-4	
Net change in cash and cash equivalents of continuing operations	**-2 506**	**238**
Cash and cash equivalents at the beginning of the year	6 321	6 083
Cash and cash equivalents at the end of the year of continuing operations	**3 815**	**6 321**

The accompanying notes form an integral part of the consolidated financial statements.

CONSOLIDATED STATEMENTS OF RECOGNIZED INCOME AND EXPENSE (for the years ended December 31, 2006 and 2005)

	Note	2006 USD millions	2005 USD millions
Net income from continuing operations		**7 019**	**6 072**
Fair value adjustments on financial instruments	24.1	94	-75
Actuarial gains/losses from defined benefit plans, net	24.2	141	-400
Novartis share of equity recognized by associated companies	24.3	-76	41
Revaluation of initial minority Chiron Corporation investment	24.4	592	
Translation effects1	24.5	1 486	-1 968
Amounts related to discontinuing operations			
net income		183	69
other		5	-10
Total recognized income and expense		**9 444**	**3 729**
Attributable to shareholders of Novartis AG		*9 416*	*3 720*
Attributable to minority interests		*28*	*9*

1 Thereof USD 1 million associated with minority interests (2005: USD -2 million)

The accompanying notes form an integral part of the consolidated financial statements.

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY (for the years ended December 31, 2006 and 2005)

	Note	Share capital USD millions	Treasury shares USD millions	Share premium USD millions	Retained earnings USD millions	Total fair values adjustments attributable to Novartis USD millions	Total reserves USD millions	Fair value adjustments of discontinuing operations USD millions	Minority interests USD millions	Total equity USD millions
Total equity at January 1, 2005		**1 008**	**-159**	**202**	**29 661**	**465**	**30 328**		**138**	**31 315**
Total recognized income and expense					**6 171**	**-2 451**	**3 720**		**9**	**3 729**
Dividends	25.1				-2 107		-2 107			-2 107
Acquisition of treasury shares, net	25.2		-1		-244		-244			-245
Reduction in share capital	25.3	-14	14							
Share-based compensation	25.4				445		445			445
Changes in minority interests									27	27
Transfers	25.5			-3	3					
Total of other equity movements		**-14**	**13**	**-3**	**-1 903**		**-1 906**		**27**	**-1 880**
Total equity at December 31, 2005		**994**	**-146**	**199**	**33 929**	**-1 986**	**32 142**		**174**	**33 164**
Total recognized income and expense					**7 099**	**2 317**	**9 416**		**28**	**9 444**
Transfers to discontinuing operations	25.5					1	1	-1		
Dividends	25.1				-2 049		-2 049			-2 049
Sales of treasury shares, net	25.2		2		246		246			248
Reduction in share capital	25.3	-4	4							
Share-based compensation	25.4				506		506			506
Changes in minority interests									-19	-19
Transfers	25.5			-1	1	-5	-5	5		
Total of other equity movements		**-4**	**6**	**-1**	**-1 296**	**-4**	**-1 301**	**4**	**-19**	**-1 314**
Total equity at December 31, 2006		**990**	**-140**	**198**	**39 732**	**327**	**40 257**	**4**	**183**	**41 294**

The accompanying notes form an integral part of the consolidated financial statements.

NOTES TO THE NOVARTIS GROUP CONSOLIDATED FINANCIAL STATEMENTS

1. Accounting policies

The Novartis Group (Group or Novartis) consolidated financial statements comply with the International Financial Reporting Standards (IFRS) and interpretations formulated by the International Accounting Standards Board (IASB) and with International Accounting Standards (IAS) and interpretations formulated by its predecessor organization the International Accounting Standards Committee (IASC), as well as with the following significant accounting policies. They are prepared in accordance with the historical cost convention except for items which 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 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 which Novartis AG, Basel, Switzerland directly or indirectly controls (generally over 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 where Novartis holds between 20% and 50% of a company s voting shares or over which it otherwise has significant influence) and joint ventures are accounted for by using the equity method, with the Group recording its share of the associated company s net income and equity. The Group s share in the results of its associated companies is included in one income statement line and is calculated after deduction of their respective taxes and minority interests.

Principles of consolidation

The annual closing date of the individual financial statements is December 31. The financial statements of consolidated companies operating in high-inflation economies are adjusted to eliminate the impact of high inflation.

The purchase method of accounting is used to account for business combinations by the Group in transactions where the Group takes control of another entity. The cost of an acquisition is measured as the fair value of the assets transferred to the seller and liabilities incurred or assumed at the date of exchange, plus costs directly attributable to the acquisition. Identifiable assets acquired and liabilities and contingent liabilities assumed in a business combination are measured initially at their full fair values at the acquisition date, irrespective of the extent of any minority interest. The excess of the cost of acquisition over the fair value of the Group s share of the identifiable net assets acquired is recorded as goodwill. Companies acquired or disposed of during the year are included in the consolidated financial statements from the date of acquisition or up to the date of disposal.

Novartis was formed on December 20, 1996 when all assets and liabilities of Sandoz AG and Ciba-Geigy AG were transferred by universal succession to Novartis AG. The uniting of interests method was used to account for this transaction. If it were undertaken today, the merger would require a different accounting treatment.

Intercompany income and expenses, including unrealized profits from internal Novartis transactions and intercompany receivables and payables have been eliminated.

Early adoption of new IFRS standards

IFRS 7, *Financial Instruments: Disclosures,* and the complementary *Amendment to IAS 1; Presentation of Financial Statements Capital Disclosures,* were early adopted in 2006. These standards introduce new disclosures relating to financial instruments, which have been incorporated into these consolidated financial statements. They do not have any impact on the classification and valuation of the Group s financial instruments.

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 financial statements is USD instead of the respective local currency. This reflects these entities cash

flows and transactions being primarily denominated in USD. Generally, the 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 rate prevailing 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 US dollars using the average of the monthly exchange rates during the year. Balance sheets are translated using the year end exchange rates. Translation differences arising from movements in the exchange rates used to translate equity and long-term intercompany financing transactions relating to the net investment 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 equity. Translation gains and losses accumulated in the fair value adjustments in equity are included in the income statement when the foreign operation is completely or partially liquidated or sold.

Derivative financial instruments and hedging

Derivative financial instruments are initially recognized in the balance sheet at fair value and subsequently remeasured to their fair value.

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 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 the 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 or to specific firm commitments or forecasted transactions. The Group also documents its assessment, both at the hedge inception and on an ongoing basis, as to whether the derivatives that are 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 entered into, the Group designates derivatives which 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 which are fair value hedges and that are highly effective are recognized in the income statement, along with any changes in the fair value of the hedged asset or liability that is 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 statement of recognized income and expense. The gain or loss relating to the ineffective portion is recognized immediately in the income statement. Where a forecasted transaction or firm commitment results in the recognition of a non-financial asset or non-financial liability, the gains or losses previously recorded in the statement of recognized income and expense are included in the initial measurement of the asset or liability. Otherwise, amounts recorded in the statement of recognized income and expense are transferred to the income statement and classified as revenue or expense in the same period in which the forecasted transaction affects the income statement.

Hedges of net investments in foreign entities are accounted for similarly to cash flow hedges. The Group hedges certain net investments in foreign entities. All foreign exchange gains or losses arising on translation are included in cumulative translation effects and recognized in the statement of recognized income and expense. Gains and losses accumulated in equity are included in the income statement when the foreign operation is completely or partially liquidated or 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 financial income 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 statement of recognized income and expense at that time is recognized in the income statement when the committed or forecasted transaction is ultimately recognized in the income statement. However, if a forecasted or committed transaction is no longer expected to occur, the cumulative gain or loss that was recognized in the statement of recognized income and expense is immediately transferred to the income statement.

Property, plant & equipment

Property, plant & equipment have been valued at cost of acquisition 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 and equipment:	
Machinery and equipment	7 to 20 years
Furniture and vehicles	5 to 10 years
Computer hardware	3 to7 years

Land is valued at acquisition cost except if held under long-term lease arrangements, when it is amortized over the life of the lease. Land held under long-term lease agreements relates to initial payments to lease land on which certain of the Group s buildings are located. Additional costs which enhance the future economic benefit of property, plant & equipment are capitalized. Property, plant & equipment is reviewed for impairment whenever events or changes in circumstances indicate that the balance sheet carrying amount may not be recoverable. Financing costs associated with the construction of property, plant & equipment are not capitalized. Property, plant & equipment which are financed by leases giving Novartis substantially all the risks and rewards of ownership are capitalized at the lower of the fair value of the leased property or the present value of minimum lease payments at the inception of the lease, and depreciated in the same manner as other property, plant & equipment over the shorter of the lease term or their useful life.

Intangible assets

For business combinations, the excess of the purchase price over the fair value of net identifiable assets acquired is recorded as goodwill in the balance sheet and is denominated in the local currency of the related acquisition. Goodwill is allocated to operations using a concept based on defining cash-generating units, which are at least one level below the divisional segmentation. All goodwill is considered to have an indefinite life and is subject to at least annual impairment testing. Any goodwill impairment charge is recorded in the income statement in Other Income and Expense. Goodwill that is embedded in the equity accounting for associated companies is also assessed annually for impairment with any resulting charge recorded in the results from associated companies.

Under IFRS 3, In-Process Research & Development (IPR&D) is valued as part of the process of allocating the purchase price in a new business combination. This amount needs to be recorded separately from goodwill and is allocated to cash-generating units and must be assessed for impairment on an annual basis. Any impairment charge is recorded in Research & Development (R&D) expenses. Once a project included in IPR&D has been successfully developed and is available for use, it is amortized over its useful life into Cost of Goods Sold where any related impairment charge is also recorded.

Under IAS 38 (revised), acquired assets in development, such as those related to initial and milestone payments on licensed or acquired compounds are capitalized as intangible assets, even if uncertainties exist as to whether the R&D will ultimately be successful in producing a saleable product.

Acquired intangible assets are amortized on a straight-line basis over the following periods with the charge recorded in the applicable functional cost lines in the income statement:

Trademarks	Over their estimated economic or legal life with a maximum of 20 years
Product and marketing rights	5 to 20 years
Core development technologies	Over their estimated useful life, typically between 15 and 30 years
Software	3 years
Others	3 to 5 years

Product and marketing rights are acquired either individually or as part of a business combination, in which case they are allocated to cash-generating units. The useful lives assigned to acquired product rights are based on the maturity of the products and the estimated economic benefit that such product rights can provide. Amortization of trademarks, product and marketing rights is charged to Cost of Goods Sold over their useful lives, commencing in the year in which the rights first generate sales. Core development technologies, which represent identified and separable acquired know-how used in the development process, is amortized into Cost of Goods Sold or R&D. Any impairment charges are recorded in the income statement in the same functional cost lines as the amortization charges.

Intangibles other than goodwill and IPR&D are reviewed for impairment whenever facts and circumstances indicate that their carrying value may not be recoverable. When there is an indication that the asset value may not be fully recoverable, the Group estimates its fair value less cost to sell based on the future cash flows expected to result from the use of the asset and its eventual disposition. If the balance sheet carrying amount of the asset is greater than the higher of its value in use to Novartis or its anticipated fair value less costs to sell, 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 discounted future cash flows. Accordingly, actual cash flows could vary significantly from forecasted cash flows.

Financial assets

Investments other than those related to associated companies and joint ventures are initially recorded at fair value on the trade date and subsequently carried at fair value. Debt and equity securities are 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 by using valuation techniques. These include the use of most recent arm s length transactions, such as new financing rounds or partial sales, reference to other instruments that are substantially the same or discounted cash flow analysis, and other pricing models making maximum use of market inputs and relying as little as possible on entity-specific inputs. Exchange rate gains and losses on loans are recorded in the income statement. Loans are carried at amortized cost, less any allowances for uncollectable amounts. All other changes in the fair value of financial assets are deferred as a fair value adjustment in the statement of recognized income and expense and recycled to the income statement when the asset is sold. Impairments in value are immediately expensed.

Inventories

Purchased products are valued at acquisition cost while own-manufactured products are valued at manufacturing cost including related production expenses. In the 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 income statement. Provisions are made for inventories with a lower market value or which are slow-moving. If it becomes apparent that the inventory can be used, provisions are reversed with inventory being revalued up to the lower of its estimated market value or original cost. Unsaleable inventory is fully written off.

Trade accounts receivable

The reported values represent the invoiced amounts, less adjustments for doubtful receivables, chargebacks and cash discounts. Doubtful receivable provisions are established based upon the difference between the receivable value and the estimated net collectible amount. The amount of the respective estimated loss is recognized in the income statement within Marketing & Sales expenses. When a trade account receivable becomes uncollectible, it is written off against the doubtful accounts receivable provisions.

Cash and cash equivalents

Cash and cash equivalents include highly liquid investments with original maturities of three months or less. This position is readily convertible to known amounts of cash. Bank overdrafts are presented within other bank and financial debt within current financial debts on the 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 fair value and subsequently carried at fair value. Exchange rate gains and losses on debt securities are recorded in the income statement. All other changes in the fair value of unhedged securities are deferred as a fair value adjustment in the statement of recognized income and expense and recycled to the 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 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 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 sold but agreed to be repurchased securities are recognized gross and included in short-term financial debts. Income and expenses are recorded in interest income and expense, respectively.

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 entity s balance sheet prepared for consolidation purposes, except for those temporary differences related to investments in entities and associated companies, where the timing of their reversal can be controlled and it is probable that the difference will not reverse in the foreseeable future. Furthermore, withholding or other taxes on eventual distribution of entities 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 income statement in tax expense or in the statement of recognized income and expense, if they relate to an item directly recorded in this statement. Deferred tax assets on an entity s taxable loss are recognized to the extent future taxable profits will probably be available against which they can be utilized.

Defined benefit pension plans, other post-employment benefits and other non-current benefits of associates

a) 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 at the present value of the estimated future cash flows. The charge for such pension plans, representing the net periodic pension cost, is included in the personnel expenses of the various functions where the associates are located. Plan assets are recorded at their fair values. 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 and amounts related to retired associates are immediately recognized in the income statement. Gains or losses arising from plan curtailments or settlements are accounted for at the time

they occur. Any recognized pension asset is limited to the present value of future economic benefits available in the form of refunds from the plan and/or expected reductions in future contributions to the plan.

Novartis adopts an alternative under IAS 19, with the effects of changes in actuarial assumptions and experience adjustments used for valuing the assets and liabilities of defined benefit plans at fair value at the balance sheet date, being immediately recognized in the balance sheet with a corresponding movement in the statement of recognized income and expense.

b) 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 amortized over the service lives of the related associates and included in the personnel expenses of the various functions where the associates are located. The related obligation is recognized in non-current liabilities.

c) Other non-current benefits of associates

Other non-current benefits of associates represent amounts due to associates under deferred compensation arrangements mandated by 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.

Share-based compensation

The fair value of Novartis shares, Novartis American Depositary Shares (ADS) and related options granted to associates as compensation is recognized as an expense. Novartis calculates the fair value of the options at the grant date using the trinomial valuation method, which is a variant of the lattice binomial approach. Shares and ADSs are valued using the market value on the grant date. The amounts for options and other share-based compensation are charged to income over the relevant vesting or service periods, adjusted to reflect actual and expected levels of vesting. The charge for share-based compensation is included in the personnel expenses of the various functions where the associates are located.

Revenue recognition

Revenue is recognized when title and risks and rewards for the products are transferred to the customer. Provisions for rebates and discounts granted to government agencies, wholesalers, 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. 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 a historical experience of Novartis agreeing to customer returns, Novartis records a provision for estimated sales returns by applying historical experience of customer returns to the amounts invoiced and the amount of returned products to be destroyed versus products that can be placed back in inventory for resale. Provisions for revenue deductions are adjusted to actual amounts as rebates, discounts and returns are processed.

Internal research & development

Internal research and development expenses are fully charged to the income statement. The Group considers that regulatory and other uncertainties inherent in the development of new products preclude it from capitalizing internal development costs.

Laboratory buildings and equipment included in property, plant & equipment are depreciated, and acquired core development technologies included in intangibles are amortized, over their estimated useful lives.

External research & development

Expenses for research & development contracts with external parties if they are not qualifying for capitalization are recognized based on their percentage of completion.

Government grants

Government grants are deferred and recognized in the income statement over the period necessary to match them with the related costs which they are intended to compensate.

Product liabilities

Provisions are made for present obligations resulting from past sales including supporting legal fees. 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 reasonably estimable.

Environmental liabilities

Novartis is exposed to environmental liabilities relating to its past operations, principally in respect to remediation costs. Provisions for non-recurring remediation costs are made when expenditure on remedial work is probable and the cost can be reliably estimated. 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 reasonably estimable and collection is virtually certain. Recurring remediation costs are provided under non-current liabilities and are estimated by calculating the discounted amounts of such annual costs for the next 30 years.

Restructuring charges

Restructuring charges are accrued against operating income in the period in which Management has committed to a plan, the liability has been incurred and the amount can be reasonably estimated. Restructuring charges or releases are included in Other Income & Expense.

Dividends

Dividends are recorded in the Group s financial statements in the period in which they are approved by the Group s shareholders.

Treasury shares

Treasury shares are deducted from 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 retained earnings.

2. Business combinations and other significant transactions

The following business combinations and other significant transactions occurred during 2006 and 2005. See notes 3 and 23 for further details of the impact of these transactions on the consolidated financial statements.

Acquisitions 2006

Corporate Chiron acquisition

On April 19, Chiron shareholders approved the acquisition of the remaining 56% of the shares of Chiron Corporation that Novartis did not already own for USD 48.00 per share. The amounts paid for the shares, related options of associates and transaction costs totaled approximately USD 5.7 billion. The transaction was completed on April 20. Novartis has created a new division called Vaccines and Diagnostics consisting of two activities: human vaccines named Novartis Vaccines and a diagnostics activity named Chiron. Chiron s biopharmaceuticals activities were integrated into the Pharmaceuticals Division.

For the period from January 1 to the date of acquisition, the prior 44% interest in Chiron has been accounted for using the equity method. From its date of acquisition Chiron has been fully consolidated with its identifiable assets and liabilities being revalued to their fair value at the date of acquisition. The acquisition of the remaining 56% of this company has resulted in the requirement to revalue the initial 44% interest by USD 0.6 billion to the proportionate share of the fair value of identified assets and liabilities.

Pharmaceuticals

As part of the Chiron transaction, which was completed on April 20 and discussed above, Chiron s pharmaceuticals activities have been integrated into the Pharmaceuticals Division. Included in this portfolio are products for the treatment of cystic fibrosis, renal/skin cancer and skin infections. Chiron s early-stage research has been incorporated into the Pharmaceuticals Division research unit, the Novartis Institutes for BioMedical Research (NIBR). For the period following the acquisition up to December 31, the income statement and cash flows from Chiron s pharmaceuticals activities have been consolidated into the Division s results. The balance sheet that has been consolidated is provisional pending finalization of the purchase price allocation as a result of continuing negotiations with Bayer-Schering AG concerning the rights of each party in connection with the *Betaseron* regulatory, development, manufacturing and supply agreements and the impact that this has on related intangible and other asset values. Due to this, and continuing tax related uncertainties as of the April 20, 2006 acquisition date, goodwill on this transaction at December 31, 2006, of USD 1.9 billion remains provisional.

On July 14, Novartis announced that its offer for the UK biopharmaceutical company NeuTec Pharma plc, which is specialized in hospital anti-infectives, became unconditional and the company has been consolidated from this date. Novartis paid a total consideration of USD 606 million (GBP 328 million) to fully acquire the company. NeuTec Pharma plc had no post-acquisition sales, although expenses and cash flows have been consolidated from the acquisition date. Goodwill on this transaction at December 31, 2006 amounted to USD 129 million.

Vaccines and Diagnostics

For the period following the Chiron acquisition up to December 31, the income statement and cash flows from the vaccines and diagnostics activities have been consolidated into the Division s results. Goodwill on this transaction at December 31, 2006, amounted to USD 1.1 billion. Due to continuing tax related uncertainties as of the April 20, 2006 acquisition date this goodwill amount remains provisional.

Pro forma data including acquisitions for all of 2006

Had the Chiron Corporation and NeuTec Pharma plc transactions been consummated on January 1, 2006, then pro forma 2006 twelve month Novartis net sales and operating income on continuing operations would have been approximately USD 36.4 billion and USD 7.5 billion, respectively.

Divestments/discontinuing operations 2006

Consumer Health

On February 17, Novartis announced the completion of the sale of its Nutrition & Santé unit, part of the Medical Nutrition Business Unit, for USD 211 million to ABN AMRO Capital France, resulting in a divestment gain before taxes of USD 129 million.

On December 14, Novartis announced its intention to divest the remainder of the Medical Nutrition Business Unit to Nestlé S.A., Switzerland for USD 2.5 billion. This transaction, which is subject to customary regulatory approvals, is expected to be completed in the second half of 2007.

Both the Nutrition & Santé unit and the remainder of the Medical Nutrition Business Unit are disclosed as discontinuing operations in all periods in the Group s consolidated financial statements.

Acquisitions 2005

Sandoz

On June 6, Novartis completed the 100% acquisition of Hexal AG for USD 5.3 billion in cash, with the results and cash flows consolidated from that date. Goodwill on this transaction at December 31, 2006, amounted to USD 3.7 billion.

On July 20, Novartis completed the acquisition of 100% of Eon Labs, Inc. for a total cost of USD 2.6 billion, with the results and cash flows consolidated from that date. Goodwill on this transaction at December 31, 2006, amounted to USD 1.8 billion.

Consumer Health

On July 14, the Novartis OTC Business Unit announced the acquisition of the rights to produce and market a portfolio of over-the-counter (OTC) brands from Bristol-Myers Squibb Company sold principally in the US for USD 660 million in cash. The closing date for the main North American product portfolio was August 31, 2005; that for the South American portfolio, September 30, 2005 and for the Europe, Middle East and Africa portfolio, January 6, 2006 with the results and cash flows consolidated from these dates. Goodwill on the transaction at December 31, 2006, amounted to USD 49 million.

3. Divisional segmentation of key figures 2006 and 2005

Operating Divisions

Novartis is divided operationally on a worldwide basis into four Divisions: Pharmaceuticals, Vaccines and Diagnostics, Sandoz and Consumer Health. These Divisions, 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 pharmaceuticals in the following therapeutic areas: cardiovascular and metabolism, oncology and hematology, neuroscience, respiratory and dermatology, arthritis, bone therapy, gastrointestinal and urinary tract diseases, infectious diseases, transplantation and immunology, and ophthalmics. The Pharmaceuticals Division is organized into business franchises responsible for marketing certain products, and a business unit responsible for the Novartis Oncology Business. The Oncology business unit is not required to be separately disclosed as a segment, due to the fact that it shares common long-term economic perspectives, customers, research, development, production, distribution and regulatory environments with the remainder of the Pharmaceuticals Division.

The Vaccines and Diagnostics Division consists of two activities: Vaccines and Chiron. Novartis Vaccines manufactures, distributes and sells vaccines worldwide, Chiron manufactures, distributes and sells blood testing and molecular diagnostics products.

The Sandoz Division is organized as a Retail Generics activity which also operates an Anti-Infectives activity. In Retail Generics, Sandoz develops and manufactures active ingredients and finished dosage forms that are no longer covered by patents. Retail Generics includes the development and manufacture of biopharmaceuticals. Retail Generics also supplies certain active ingredients to third parties. In Anti-Infectives, Sandoz develops and manufactures off-patent active pharmaceutical ingredients and intermediates mainly antibiotics for internal use by Retail Generics and for sale to third-party customers.

The Consumer Health Division consists of the following four Business Units: OTC (over-the-counter medicines), Animal Health, Gerber and CIBA Vision. Each has manufacturing, distribution and selling capabilities, however, none are material enough to the Group to be separately disclosed as segments. The OTC Business Unit activities cover over-the-counter self medications. The activities of the Animal Health Business Unit cover veterinary products for farm and companion animals. The activities of the Gerber Business Unit cover foods and other products and services designed to serve the particular needs of infants and babies. The activities of the CIBA Vision Business Unit cover contact lenses, lens care products, and ophthalmic products.

The Medical Nutrition Business Unit has been classified as a discontinuing operation for all periods in these consolidated financial statements as a consequence of the December 14, 2006 announcement to divest this activity. The activities of the Medical Nutrition Business Unit cover health and medical nutrition products. Also treated as a discontinuing operations for all periods is the Nutrition & Santé unit of the Medical Nutrition Business Unit which was divested in February 2006.

Inter-Divisional sales are made at amounts which are considered to approximate arm s length transactions. The accounting policies of the Divisions are the same as those of the Group. The Group principally evaluates Divisional performance and allocates resources based on operating income.

Division net operating assets consist primarily of property, plant & equipment, intangible assets, inventories and 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 certain items of income and expense which are not attributable to specific Divisions. Usually, no allocation of Corporate items is made to the Divisions. 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.

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DIVISIONAL SEGMENTATION OF KEY FIGURES 2006 AND 2005

(in USD millions)	Pharmaceuticals 2006	2005	Vaccines and Diagnostic 2006	Sandoz 2006	2005
Net sales to third parties	**22 576**	**20 262**	**956**	**5 959**	**4 694**
Sales to other Divisions	162	128	9	148	144
Net sales of Divisions	**22 738**	**20 390**	**965**	**6 107**	**4 838**
Other revenues	424	253	231	24	18
Cost of goods sold	-3 826	-3 275	-795	-3 420	-2 883
Of which amortization and impairments of product and marketing rights and trademarks	*-225*	*-195*	*-172*	*-288*	*-169*
Gross profit	**19 336**	**17 368**	**401**	**2 711**	**1 973**
Marketing & sales	-7 069	-6 485	-124	-1 061	-816
Research & development	-4 265	-3 972	-148	-477	-434
General & administration	-703	-657	-92	-311	-270
Other income & expense	-596	-240	-63	-126	-111
Of which amortization and impairments of capitalized intangible assets included in function costs	*-119*	*-342*		*-38*	-57
Operating income	**6 703**	**6 014**	**-26**	**736**	**342**
Income from associated companies	-44	19		7	2
Financial income					
Interest expense					
Income before taxes					
Taxes					
Group net income					
Attributable to Shareholders of Novartis AG					
Minority interests					
Included in operating income are:					
Depreciation of property, plant & equipment	-551	-490	-48	-233	-195
Amortization of intangible assets	-268	-178	-172	-279	-189
Impairment charges on property, plant & equipment	-3		-7		-14
Impairment charges on intangible assets	-76	-359		-47	-37
Impairment charges on financial assets	-34	-38			
Additions to restructuring provision	-85		-54	-30	-51
Divestment gains or losses from disposal of subsidiaries				-7	
Share-based compensation of Novartis equity plans	-450	-384	-1	-25	-9
Total assets	**20 418**	**14 655**	**5 609**	**15 009**	**14 057**
Total liabilities	-6 778	-5 848	-1 073	-1 545	-1 342
Total equity	**13 640**	**8 807**	**4 536**	**13 464**	**12 715**
Less net liquidity					
Net operating assets	**13 640**	**8 807**	**4 536**	**13 464**	**12 715**
Included in total assets are:					
Total property, plant & equipment	6 439	5 053	605	2 430	2 216
Additions to property, plant & equipment	1 135	686	113	264	212
Total intangible assets	6 071	1 670	3 632	9 542	9 331
Additions to intangible assets	351	211	13	38	24
Total investment in associated companies	2	1 471	1	15	10

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(in USD millions)	Consumer Health continuing operations 2006	2005	Corporate (including eliminations) 2006	2005	Total continuing operations 2006	2005	Discontinuing operation 2006	2005	Total Group 2006	2005
Net sales to third parties	**6 540**	**6 049**			**36 031**	**31 005**	**989**	**1 207**	**37 020**	**32 212**
Sales to other Divisions	39	23	-358	-295						
Net sales of Divisions	**6 579**	**6 072**	**-358**	**-295**	**36 031**	**31 005**	**989**	**1 207**	**37 020**	**32 212**
Other revenues	39	43			718	314	3		721	314
Cost of goods sold	-2 642	-2 374	384	273	-10 299	-8 259	-516	-609	-10 815	-8 868
Of which amortization and impairments of product and marketing rights and trademarks	*-79*	*-57*			*-764*	*-421*	*-11*	*-11*	*-775*	*-432*
Gross profit	**3 976**	**3 741**	**26**	**-22**	**26 450**	**23 060**	**476**	**598**	**26 926**	**23 658**
Marketing & sales	-2 200	-2 096			-10 454	-9 397	-302	-405	-10 756	-9 802
Research & development	-288	-270	-171	-149	-5 349	-4 825	-15	-21	-5 364	-4 846
General & administration	-435	-370	-416	-384	-1 957	-1 681	-50	-61	-2 007	-1 742
Other income & expense	15	-53	29	49	-741	-355	116	-8	-625	-363
Of which amortization and impairments of capitalized intangible assets included in function costs	*-31*	*-24*	*-8*	*-17*	*-196*	*-440*	*-10*	*-10*	*-206*	*-450*
Operating income	**1 068**	**952**	**-532**	**-506**	**7 949**	**6 802**	**225**	**103**	**8 174**	**6 905**
Income from associated companies			301	172	264	193			264	193
Financial income					354	461			354	461
Interest expense					-266	-294			-266	-294
Income before taxes					**8 301**	**7 162**	**225**	**103**	**8 526**	**7 265**
Taxes					-1 282	-1 090	-42	-34	-1 324	-1 124
Group net income					**7 019**	**6 072**	**183**	**69**	**7 202**	**6 141**
Attributable to Shareholders of Novartis AG					*6 992*	*6 061*	*183*	*69*	*7 175*	*6 130*
Minority interests					*27*	*11*			*27*	*11*
Included in operating income are:										
Depreciation of property, plant & equipment	-151	-137	-33	18	-1 016	-804	-12	-17	-1 028	-821
Amortization of intangible assets	-107	-81	-8	-12	-834	-460	-21	-21	-855	-481
Impairment charges on property, plant & equipment	-1				-11	-14			-11	-14
Impairment charges on intangible assets	-3			-5	-126	-401			-126	-401
Impairment charges on financial assets			-5	-10	-39	-48			-39	-48
Additions to restructuring provision					-169	-51			-169	-51
Divestment gains or losses from disposal of subsidiaries		8			-7	8	129		122	8
Share-based compensation of Novartis equity plans	-46	-34	-127	-101	-649	-528	-4	-4	-653	-532
Total assets	**6 480**	**6 863**	**19 756**	**22 157**	**67 272**	**57 732**	**736**		**68 008**	**57 732**
Total liabilities	-2 358	-2 430	-14 753	-14 948	-26 507	-24 568	-207		-26 714	-24 568
Total equity	**4 122**	**4 433**	**5 003**	**7 209**	**40 765**	**33 164**	**529**		**41 294**	**33 164**

Less net liquidity			-656	-2 479	-656	-2 479	3		-653	-2 479
Net operating assets	**4 122**	**4 433**	**4 347**	**4 730**	**40 109**	**30 685**	**532**		**40 641**	**30 685**
Included in total assets are:										
Total property, plant & equipment	1 006	1 030	465	380	10 945	8 679	69		11 014	8 679
Additions to property, plant & equipment	222	233	106	32	1 840	1 163	11	31	1 851	1 194
Total intangible assets	1 971	2 282	14	11	21 230	13 294	370		21 600	13 294
Additions to intangible assets	177	160			579	395	1	2	580	397
Total investment in associated companies			6 093	5 605	6 111	7 086			6 111	7 086

4. Supplementary segmentation of key figures 2006 and 2005

GEOGRAPHICAL SEGMENTATION (in USD millions)

	Europe	The Americas	Asia/Africa/ Australia	Total
2006				
Group net sales1	**13 591**	**17 929**	**5 500**	**37 020**
Group operating income2	**5 188**	**2 784**	**202**	**8 174**
Depreciation of property, plant & equipment included in operating income	634	336	58	1 028
Group assets	**45 378**	**19 194**	**3 436**	**68 008**
Additions to property, plant & equipment	1 097	486	268	1 851
Additions to intangible assets	75	499	6	580
Personnel costs	4 405	4 030	703	9 138
2005				
Group net sales1	**12 000**	**15 011**	**5 201**	**32 212**
Group operating income2	**4 518**	**1 916**	**471**	**6 905**
Depreciation of property, plant & equipment included in operating income	508	264	49	821
Gross assests	**37 977**	**17 049**	**2 706**	**57 732**
Additions to property, plant & equipment	683	396	115	1 194
Additions to intangible assets	162	210	25	397
Personnel costs	3 948	3 341	652	7 941

The following countries accounted for more than 5% of at least one of the respective Group totals as at, or for the years ended, December 31, 2006 and 2005:

Country	**Net sales1**				**Additions to property, plant & equipment**				**Additions to intangible assets**				**Total assets**			
USD millions	**2006**	**%**	**2005**	**%**	**2006**	**%**	**2005**	**%**	**2006**	**%**	**2005**	**%**	**2006**	**%**	**2005**	**%**
Switzerland	412	1	366	1	528	29	305	26	325	56	260	65	25 086	37	25 586	44
USA	14 998	41	12 587	39	409	22	332	28	235	41	86	22	16 327	24	15 601	27
Germany	3 187	9	2 470	8	129	7	89	7	3	1	13	3	5 189	8	1 870	3
Japan	2 464	7	2 591	8	13	1	16	1	5	1	1		1 933	3	1 605	3
France	1 763	5	1 856	6	25	1	27	2					975	1	934	2
UK	1 037	3	924	3	160	9	60	5					3 218	5	1 461	3
Austria	308	1	275	1	66	4	49	4	2		3	1	1 508	2	1 324	2
Slovenia	94		100		42	2	73	6	1		1		1 424	2	1 292	2
Other	12 757	33	11 043	34	479	25	243	21	9	1	33	9	12 348	18	8 059	14
Total Group	**37 020**	**100**	**32 212**	**100**	**1 851**	**100**	**1 194**	**100**	**580**	**100**	**397**	**100**	**68 008**	**100**	**57 732**	**100**
Less discontinuing operations	989		1 207		11		31		1		2		736			
Total continuing operations	**36 031**		**31 005**		**1 840**		**1 163**		**579**		**395**		**67 272**		**57 732**	

1 Net sales from operations by location of third party customer.

2 Operating income from operations as recorded in the legal entities in the respective region.

The largest customers account for approximately 10%, 9% and 7% respectively, of Group net sales. No other customer accounts for 5% or more of the Group s total net sales and trade accounts receivable. The highest amounts of trade accounts receivable outstanding are the ones for the largest customers and are approximately 12%, 8% and 7% respectively of Group s trade accounts receivable at December 31, 2006.

PHARMACEUTICALS DIVISION THERAPEUTIC AREA NET SALES

Therapeutic areas

	2006 USD millions	2005 USD millions	Change USD (%)
Cardiovascular			
Strategic franchise products			
Diovan	*4 223*	*3 676*	*15*
Lotrel	*1 352*	*1 075*	*26*
Lescol	*725*	*767*	*-5*
Other	172	128	34
Total strategic franchise products	**6 472**	**5 646**	**15**
Mature products	**648**	**665**	**-3**
Total Cardiovascular products	**7 120**	**6 311**	**13**
Oncology			
Strategic franchise products			
Gleevec/Glivec	*2 554*	*2 170*	*18*
Zometa	*1 283*	*1 224*	*5*
Sandostatin (group)	*915*	*896*	*2*
Femara	*719*	*536*	*34*
Exjade	*143*	*2*	
Other	295	268	10
Total Oncology products	**5 909**	**5 096**	**16**
Neuroscience			
Strategic franchise products			
Trileptal	*721*	*615*	*17*
Exelon	*525*	*467*	*12*
Tegretol (incl. CR/XR)	*391*	*393*	*-1*
Other	1 020	758	35
Total strategic franchise products	**2 657**	**2 233**	**19**
Mature products	**440**	**476**	**-8**
Total Neuroscience products	**3 097**	**2 709**	**14**
Respiratory & Dermatology			
Strategic franchise products			
Lamisil (group)	*978*	*1 133*	*-14*
Foradil	*331*	*332*	
Elidel	*179*	*270*	*-34*
Xolair	*102*	*5*	
Other	246	53	364
Total strategic franchise products	**1 836**	**1 793**	**2**
Mature products	**123**	**142**	**-13**
Total Respiratory & Dermatology products	**1 959**	**1 935**	**1**
Arthritis/Bone/Gastrointestinal/Urinary (ABGU)			
Strategic franchise products			
Zelnorm/Zelmac	*561*	*418*	*34*
Prexige	*47*	*8*	*488*
Other	117	47	149
Total strategic franchise products	**725**	**473**	**53**
Mature products	**1 526**	**1 581**	**-3**
Total ABGU products	**2 251**	**2 054**	**10**
Infectious Diseases, Transplantation & Immunology (IDTI)			

Neoral/Sandimmun	*918*	*953*	*-4*
Other	330	162	104
Total strategic franchise products	**1 248**	**1 115**	**12**
Mature products	**266**	**270**	**-1**
Total IDTI products	**1 514**	**1 385**	**9**
Ophthalmics			
Visudyne	*354*	*484*	*-27*
Other	372	350	6
Total Ophthalmics products	**726**	**834**	**-13**
Total strategic franchise products	**19 573**	**17 190**	**14**
Total mature products	**3 003**	**3 134**	**-4**
Prior-years US sales rebate accounting adjustment		**-62**	
Total division net sales	**22 576**	**20 262**	**11**

5. Financial income

	2006 USD millions	2005 USD millions
Interest income	367	405
Dividend income	8	3
Net capital gains	282	94
Impairment of marketable securities	-25	-49
Income on options and forward contracts	48	83
Expenses on options and forward contracts	-316	-144
Other financial income	1	3
Other financial expense	-49	-49
Currency result, net	38	115
Total financial income	**354**	**461**

6. Taxes

INCOME BEFORE TAXES

	2006 USD millions	2005 USD millions
Switzerland	4 090	2 081
Foreign	4 211	5 081
Total income before taxes for continuing operations	**8 301**	**7 162**

CURRENT AND DEFERRED INCOME TAX EXPENSE

	2006 USD millions	2005 USD millions
Switzerland	-328	-333
Foreign	-1 289	-1 142
Total current income tax expense	**-1 617**	**-1 475**
Switzerland	-69	43
Foreign	404	342
Total deferred tax income	**335**	**385**
Total income tax expense for continuing operations	**-1 282**	**-1 090**

Analysis of tax rate

The main elements contributing to the difference between the Group s overall expected tax rate (the weighted average tax rate based on the income before tax of each subsidiary) and the effective tax rate are:

	2006 %	2005 %
Expected tax rate for continuing operations	15.8	15.9
Effect of disallowed expenditures	2.2	1.6
Effect of utilization of tax losses brought forward from prior periods	-0.6	-0.7
Effect of income taxed at reduced rates	-0.2	-0.1
Effect of tax credits and allowances	-1.2	-1.1
Prior year and other items	-0.6	-0.4
Effective tax rate for continuing operations	**15.4**	**15.2**

The change in the expected tax rate is caused by the change in the profitability of the Group s subsidiaries in the respective countries.

The utilization of tax loss carryforwards lowered the tax charge by USD 48 million and USD 48 million in 2006 and 2005, respectively.

7. Earnings per share

Basic earnings per share (EPS) is calculated by dividing the net income attributable to shareholders of Novartis AG by the weighted average number of shares outstanding during the year, excluding from the issued shares the average number of shares purchased by the Group and held as treasury shares.

	2006	2005
Net income (USD millions)	7 175	6 130
Weighted average number of shares outstanding	2 345 232 126	2 332 848 144
Basic earnings per share (USD)	**3.06**	2.63

	2006	2005
Net income from continuing operations (USD millions)	6 992	6 061
Weighted average number of shares outstanding	2 345 232 126	2 332 848 144
Basic earnings per share (USD) on continuing operations	**2.98**	2.60

	2006	2005
Net income from discontinuing operations (USD millions)	183	69
Weighted average number of shares outstanding	2 345 232 126	2 332 848 144
Basic earnings per share (USD) on discontinuing operations	**0.08**	0.03

For diluted EPS, the weighted average number of shares outstanding is adjusted to assume conversion of all potentially dilutive shares arising from options on Novartis shares.

	2006	2005
Net income (USD millions)	7 175	6 130
Weighted average number of shares outstanding	2 345 232 126	2 332 848 144
Adjustment for dilutive share options	15 224 345	9 605 470
Weighted average number of shares for diluted earnings per share	2 360 456 471	2 342 453 614
Diluted earnings per share (USD)	**3.04**	2.62

	2006	2005
Net income from continuing operations (USD millions)	6 992	6 061
Weighted average number of shares outstanding	2 345 232 126	2 332 848 144
Adjustment for dilutive share options	15 224 345	9 605 470
Weighted average number of shares for diluted earnings per share	2 360 456 471	2 342 453 614
Diluted earnings per share (USD) on continuing operations	**2.96**	2.59

	2006	2005
Net income from discontinuing operations (USD millions)	183	69
Weighted average number of shares outstanding	2 345 232 126	2 332 848 144
Adjustment for dilutive share options	15 224 345	9 605 470
Weighted average number of shares for diluted earnings per share	2 360 456 471	2 342 453 614
Diluted earnings per share (USD) on discontinuing operations	**0.08**	0.03

Options equivalent to 4.4 million shares (2005: 16.7 million) were excluded from the calculation of diluted earnings per share as theywere not dilutive.

8. Property, plant & equipment movements

	Land USD millions	Buildings USD millions	Plant and other equipment under construction USD millions	Other property, plant and equipment USD millions	Total USD millions
2006					
Cost					
January 1	**419**	**6 067**	**912**	**9 116**	**16 514**
Cost of assets related to discontinuing operations	-4	-79	-18	-179	-280
Impact of business combinations	117	398	259	257	1 031
Reclassifications1	-2	369	-982	615	
Additions	17	124	1 306	393	1 840
Disposals	-5	-109	-18	-464	-596
Translation effects	28	384	86	696	1 194
December 31	**570**	**7 154**	**1 545**	**10 434**	**19 703**
Accumulated depreciation					
January 1	**-3**	**-2 621**		**-5 211**	**-7 835**
Accumulated depreciation of assets related to discontinuing operations		46		129	175
Depreciation charge	-3	-244		-769	-1 016
Depreciation of disposals		79		416	495
Impairment charge	-1	1		-11	-11
Translation effects		-178		-388	-566
December 31	**-7**	**-2 917**		**-5 834**	**-8 758**
Net book value December 31	**563**	**4 237**	**1 545**	**4 600**	**10 945**
Insured value December 31					**19 196**
Net book value of property, plant & equipment under finance lease contracts					**18**
Commitments for purchases of property, plant & equipment					**563**
2005					
Cost					
January 1	**403**	**6 029**	**1 363**	**9 051**	**16 846**
Impact of business combinations	34	265	45	321	665
Reclassifications1	5	421	-1 105	679	
Additions	12	74	753	355	1 194
Disposals	-1	-151	-23	-396	-571
Translation effects	-34	-571	-121	-894	-1 620
December 31	**419**	**6 067**	**912**	**9 116**	**16 514**
Accumulated depreciation					
January 1	**-2**	**-2 860**		**-5 487**	**-8 349**
Depreciation charge	-1	-170		-650	-821
Depreciation on disposals		114		376	490
Impairment charge		-8		-6	-14
Translation effects		303		556	859
December 31	**-3**	**-2 621**		**-5 211**	**-7 835**
Net book value December 31	**416**	**3 446**	**912**	**3 905**	**8 679**
Insured value December 31					**16 506**
Net book value of property, plant & equipment under finance lease contracts					**26**
Commitments for purchases of property, plant & equipment					**417**

1 Reclassifications between various asset categories due to completion of plant and other equipment under construction

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9. Intangible asset movements

	Goodwill USD millions	Acquired research & development USD millions	Core development technologies USD millions	Trademarks, product & marketing rights USD millions	Other intangible assets USD millions	Total USD millions
2006						
Cost						
January 1	**8 080**	**875**	**508**	**6 455**	**727**	**16 645**
Cost of assets related to discontinuing operations	-255			-216	-29	-500
Impact of business combinations	3 138	1 216	140	3 254	167	7 915
Reclassifications		-115		114	1	
Additions	1	407		12	159	579
Disposals	-59	-1		-11	-13	-84
Translation effects	499	89	12	391	34	1 025
December 31	**11 404**	**2 471**	**660**	**9 999**	**1 046**	**25 580**
Accumulated amortization						
January 1	**-801**	**-37**	**-10**	**-2 090**	**-413**	**-3 351**
Accumulated amortization of assets related to discontinuing operations	49			52	10	111
Reclassifications	-1		-25	6	20	
Amortization charge			-49	-666	-119	-834
Amortization of disposals	60			8	12	80
Impairment charge	-2	-67		-47	-10	-126
Translation effects	-50	-1	-2	-164	-13	-230
December 31	**-745**	**-105**	**-86**	**-2 901**	**-513**	**-4 350**
Net book value December 31	**10 659**	**2 366**	**574**	**7 098**	**533**	**21 230**
2005						
Cost						
January 1	**2 739**	**323**		**4 655**	**639**	**8 356**
Impact of business combinations	5 531	619	305	2 123	41	8 619
Reclassifications[1]	11	-251	210	67	-9	28
Additions	24	211		77	85	397
Disposals	-3	-1		-64	-12	-80
Translation effects	-222	-26	-7	-403	-17	-675
December 31	**8 080**	**875**	**508**	**6 455**	**727**	**16 645**
Accumulated amortization						
January 1	**-840**	**-23**		**-1 515**	**-349**	**-2 727**
Reclassifications[1]	-13	23		-12	2	
Amortization charge			-10	-382	-89	-481
Amortization of disposals	2			55	9	66
Impairment charge	-5	-38		-358		-401
Translation effects	55	1		122	14	192
December 31	**-801**	**-37**	**-10**	**-2 090**	**-413**	**-3 351**
Net book value December 31	**7 279**	**838**	**498**	**4 365**	**314**	**13 294**

1 Reclassifications between various assets categories as a result of recording final acquisition balance sheets and product launches of acquired research & development.

In 2005 there was a net USD 28 million change in a provisional purchase price allocation that increased intangible assets and deferred tax liabilities by this amount.

Divisional segmentation of intangible assets for continuing operations

The net book values at December 31, 2006 of intangible assets are allocated to the Group s Divisions as summarized below:

	Goodwill USD millions	Acquired research & development USD millions	Core development technologies USD millions	Trademarks, product & marketing rights USD millions	Other intangible assets USD millions	Total USD millions
Pharmaceuticals	2 349	1 404		2 194	124	6 071

Vaccines and Diagnostics	1 111	465	160	1 853	43	3 632

Sandoz	6 567	336	414	2 160	65	9 542

Consumer Health continuing operations	632	161	880	298	1 971

Corporate				11	3	14
Total	**10 659**	**2 366**	**574**	**7 098**	**533**	**21 230**
Amount at risk if discounted cash flows fell by 5%	1			8		9
Amount at risk if discounted cash flows fell by 10%	4			20		24

Goodwill, acquired research and development and other intangible assets with indefinite useful lives 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 and is therefore not included in the calculation of the net book values at risk from changes in the amount of discounted cash flows. Novartis has adopted a uniform method for assessing goodwill for impairment and any other intangible asset indicated as possibly impaired. If no cash flow projections for the whole useful life of an intangible asset are available, cash flow projections for the next 5 years are utilized based on Management s range of forecasts with a terminal value using sales projections in line or lower than inflation thereafter. Typically three probability-weighted scenarios are used.

The discount rates used are based on the Group s weighted average cost of capital adjusted for specific country and currency risks associated with the cash flow projections. Since the cash flows also take into account tax expenses a post-tax discount rate is utilized. Use of the post-tax discount rate approximates the results of using a pre-tax rate applied to pre-tax cash flows.

The recoverable amount of a cash-generating unit and related goodwill is usually based on the higher of fair market value less cost of sale or on the value-in-use which is derived from applying discounted future cash flows using the key assumptions indicated below:

	Pharmaceuticals	**Vaccines and Diagnostics**	**Sandoz**	**Consumer Health**
	%	*%*	*%*	*%*
Sales growth rate assumptions after forecast period		1	2 -1 to 6	-2 to 3
Discount rate	7 to 9		2 8 to 10	9 to 10

1 Forecast period covers useful life

2 No value-in-use analysis performed as newly acquired and no indication of impairment

Additionally, impairments of acquired research & development products 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.

In 2006, impairment charges of USD 126 million were recorded, principally relating to capitalized milestone payments in the Pharmaceuticals Division and marketed products and IPR&D in the Sandoz Division.

In 2005, impairment charges of USD 401 million were recorded, principally relating to the impairment of NKS 104 marketing rights in the Pharmaceuticals Division of USD 332 million and USD 37 million of IPR&D in the Sandoz Division.

10. 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	
	2006 USD millions	2005 USD millions	2006 USD millions	2005 USD millions
Roche Holding AG, Switzerland	6 020	5 542	290	166
Chiron Corporation, USA		1 469	-44	19
Others	91	75	18	8
Total	**6 111**	**7 086**	**264**	**193**

The results of the Group s associated companies are adjusted to be in accordance with IFRS in cases where IFRS is not already used.

Due to the various estimates that have been made in applying the equity method accounting treatment for Roche Holding AG (Roche), adjustments may be necessary in succeeding years as more financial and other information becomes publicly available.

The following table shows summarized financial information of the major associated company for the year ended December 31, 2005 since the 2006 data is not yet available:

	Assets CHF billions	Liabilities CHF billions	Revenue CHF billions	Net income CHF billions
Roche	69.4	27.6	37.0	6.7

Roche Holding AG

The Group s holding in Roche voting shares was 33.3% at December 31, 2006 and 2005. This investment represents approximately 6.3% of the total outstanding voting and non-voting equity instruments. In order to apply the equity method of accounting, independent appraisers were used to estimate the fair value of Roche s identifiable assets and liabilities at the time of acquisition and, therefore, the amount of residual goodwill. The purchase price allocations were made on publicly available information at the time of acquisition of the shares.

The balance sheet value allocation is as follows:

	USD millions
Novartis share of Roche s reported net assets	1 795
Novartis share of net book value of additional appraised intangible assets	2 207
Net book value of Novartis goodwill	2 333
Total residual value of purchase price	**6 335**
Accumulated equity accounting adjustments and translation effects	-315
December 31, 2006 balance sheet value	**6 020**

The identified intangible assets principally relate to the value of currently marketed products and are being amortized straight-line over their estimated average useful life of 20 years.

The income statement effects from applying Novartis accounting for Roche in 2006 and 2005 are as follows:

	2006 USD millions	2005 USD millions
Depreciation and amortization of fair value adjustments relating to property, plant & equipment and intangible assets net of taxes of USD 34 million (2005: USD 35 million)	-114	-115
Prior year adjustment	13	2
Novartis share of estimated Roche current year consolidated net income	391	279
Net income effect	**290**	**166**

The market value of the Novartis interest in Roche at December 31, 2006 was USD 10.8 billion (Reuters symbol: RO.S).

Chiron Corporation

The Group held 44.1 % in the common stock of Chiron at December 31, 2005. The recording of the results was based on the Group s weighted average holdings in Chiron until the acquisition of the remaining shares of Chiron in April 2006. The interest in Chiron has been accounted for using the equity method for the period from January 1, 2006 to the date of acquisition and thereafter it is fully consolidated.

The income statement effects from applying Novartis accounting policies to Chiron up to its date of full acquisition in April 2006 and for 2005 are as follows:

	2006 USD millions	**2005 USD millions**
Prior year adjustment	24	-6
Novartis share of Chiron consolidated net income	-68	25
Net income effect	**-44**	**19**

11. 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 carry forwards USD millions	Other provisions and accruals USD millions	Valuation allowance USD millions	Total USD millions
Deferred tax assets at January 1, 2005	**22**	**43**	**1 006**	**791**	**47**	**655**	**-29**	**2 535**
Deferred tax liabilities at January 1, 2005	**-670**	**-189**	**-564**	**-235**		**-682**		**-2 340**
Net deferred tax balance at January 1, 2005	**-648**	**-146**	**442**	**556**	**47**	**-27**	**-29**	**195**
At January 1, 2005	-648	-146	442	556	47	-27	-29	195
(Charged)/credited to income	23	154	-77	211	-14	90		387
Credited to equity			192			123		315
Acquisitions/divestments	-66	-1 040	-2	2	6	79		-1 021
Other movements	20	10	4	-6	15	10		53
Net deferred tax balance at December 31, 2005	**-671**	**-1 022**	**559**	**763**	**54**	**275**	**-29**	**-71**
Deferred tax assets at December 31, 2005	**23**	**232**	**1 360**	**956**	**54**	**805**	**-29**	**3 401**
Deferred tax liabilities at December 31, 2005	**-694**	**-1 254**	**-801**	**-193**		**-530**		**-3 472**
Net deferred tax balance at December 31, 2005	**-671**	**-1 022**	**559**	**763**	**54**	**275**	**-29**	**-71**
At January 1, 2006	-671	-1 022	559	763	54	275	-29	-71
Deferred tax related to discontinuing operations	3	-3	-5		-1	1		-5
(Charged)/credited to income	-11	273	-298	152	2	215	2	335
Charged to equity			-97			-69		-166
Acquisitions/divestments	-17	-1 624	5	-37	145	115		-1 413
Other movements	-49	-12	30	-8	6	-34		-67
Net deferred tax balance at December 31, 2006	**-745**	**-2 388**	**194**	**870**	**206**	**503**	**-27**	**-1 387**
Deferred tax assets at December 31, 2006	**64**	**286**	**1 059**	**1 123**	**206**	**1 192**	**-27**	**3 903**
Deferred tax liabilities at December 31, 2006	**-809**	**-2 674**	**-865**	**-253**		**-689**		**-5 290**
Net deferred tax balance at December 31, 2006	**-745**	**-2 388**	**194**	**870**	**206**	**503**	**-27**	**-1 387**

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 1.8 billion (2005: USD 1.9 billion) and deferred tax liabilities of USD 4.6 billion (2005: USD 2.9 billion) are expected to be recovered after more than twelve months.

At December 31, 2006 unremitted earnings of USD 31 billion (2005: USD 30 billion) have been retained by subsidiary companies for reinvestment. No provision is made for income taxes that would be payable upon the distribution of such earnings. If the earnings were remitted, an income tax charge could result based on the tax statutes currently in effect.

	2006 USD millions	2005 USD millions

Temporary differences on which no deferred tax has been provided as they are permanent in nature related to:		
write-down of investments in subsidiaries	841	1 803
goodwill from acquisitions	6 262	3 383

The gross value of unused tax loss carryforwards which have, or have not, been capitalized as deferred tax assets, with their expiry dates is as follows:

	not capitalized USD millions	capitalized USD millions	2006 USD millions
One year	54		54
Two years	37	1	38
Three years	38	8	46
Four years	39	110	149
Five years	350	138	488
More than five years	643	522	1 165
Total	**1 161**	**779**	**1 940**

	not capitalized USD millions	capitalized USD millions	2006 USD millions
One year	5	1	6
Two years	57	7	64
Three years	29	2	31
Four years	252	28	280
Five years	180	7	187
More than five years	737	383	1 120
Total	**1 260**	**428**	**1 688**

Tax loss carryforwards are capitalized if it is probable that future taxable profits will be available to utilize the losses.

USD 12 million of unused tax loss carryforwards expired during 2006 (2005: USD 7 million).

12. Financial and other non-current assets

	2006 USD millions	2005 USD millions
Financial investments and long-term loans	2 313	1 910
Prepaid post-employment benefit plans	2 102	1 919
Total financial and other non-current assets	**4 415**	**3 829**

Financial investments are valued at market value (2006: USD 1 912 million, 2005: USD 1 455 million) and long-term loans at amortized cost.

During 2006, USD 21 million (2005: USD 43 million) of unrealized losses on available-for-sale investments and USD 18 million (2005: USD 5 million) on other investments were considered to be impaired and were charged to the income statement within other income and expense.

13. Inventories

	2006 USD millions	2005 USD millions
Raw material, consumables	810	665
Finished products	3 688	3 060
Total inventories	**4 498**	**3 725**

The following summarizes the movement 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:

	2006 USD millions	2005 USD millions

January 1	**-295**	**-260**
Provisions on inventory related to discontinuing operations	7	
Inventory write-downs charged to income statement	-659	-544
Utilization of inventory provisions	300	329
Reversal of inventory provisions	183	150
Translation effects	-27	30
December 31	**-491**	**-295**

14. Trade accounts receivable

	2006 USD millions	2005 USD millions
Total gross trade accounts receivable	6 359	5 546
Less provision for doubtful trade accounts receivable	-198	-203
Total trade accounts receivable, net	**6 161**	**5 343**

Provisions for chargebacks and discounts are adjusted based upon actual experience. Such adjustments to the historic estimates have not been material.

The following summarizes the movement in the provision for doubtful trade accounts receivable:

	2006 USD millions	2005 USD millions
January 1	**-203**	**-251**
Provisions on trade accounts receivable related to discontinuing operations	7	
Provision for doubtful trade accounts receivable charged to income statement	-158	-184
Utilization or reversal of provision for doubtful trade accounts receivable	167	211
Translation effects	-11	21
December 31	**-198**	**-203**

The following table sets forth details of the age of trade accounts receivable that are not overdue as the payment terms specified in the terms and conditions established with Novartis customers have not been exceeded as well as an analysis of overdue amounts and related provisions for doubtful trade accounts receivable:

	2006 USD millions	2005 USD millions
Total	**6 359**	**5 546**
Less provision for doubtful trade accounts receivable	-198	-203
Total trade accounts receivable, net	**6 161**	**5 343**
of which:		
Not overdue	5 313	4 593
Past due not more than one month	452	429
Past due more than one month and not more than three months	186	202
Past due more than three months and not more than six months	172	117
Past due more than six months and not more than one year	213	166
Past due more than one year	23	39
Provision for doubtful trade accounts receivable	-198	-203
Total trade accounts receivable, net	**6 161**	**5 343**

Provisions for doubtful trade accounts receivable are established based upon the difference between the receivable value and the estimated net collectible amount. Novartis establishes its provision for doubtful trade accounts receivable based on its historical loss experiences.

Trade accounts receivable include amounts denominated in the following major currencies:

Currency	2006 USD millions	2005 USD millions
CHF	124	132
EUR	1 523	1 295

GBP	181	131
JPY	890	914
USD	2 171	1 887
other	1 272	984
Total trade accounts receivable, net	**6 161**	**5 343**

15. 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, 2006 and 2005. Contract or underlying principal amounts indicate the volume of business outstanding at the balance sheet date and do not represent amounts at risk. The fair values are determined by reference to market prices or standard pricing models using observable market inputs at December 31, 2006 and 2005.

DERIVATIVE FINANCIAL INSTRUMENTS

	Contract or underlying principal amount		Positive fair values		Negative fair values	
	2006 USD millions	2005 USD millions	2006 USD millions	2005 USD millions	2006 USD millions	2005 USD millions
Currency related instruments						
Forward foreign exchange rate contracts	8 510	9 536	33	149	-54	-223
Over the counter currency options	2 252	44	4	1	-2	
Cross currency swaps	31	1 092		231	-27	-18
Total of currency related instruments	**10 793**	**10 672**	**37**	**381**	**-83**	**-241**
Interest rate related instruments						
Interest rate swaps		2 479		3		-3
Forward rate agreements		1 386				-1
Total of interest rate related instruments		**3 865**		**3**		**-4**
Options on equity securities	**21**	**9**				
Total derivative financial instruments included in marketable securities and in current financial debt	**10 814**	**14 546**	**37**	**384**	**-83**	**-245**

The contract or underlying principal amount of derivative financial instruments at December 31, 2006 and 2005 are set forth by currency in the table below.

	EUR USD millions	USD USD millions	JPY USD millions	Other currencies USD millions	Total 2006 USD millions	Total 2005 USD millions
Currency related instruments						
Forward foreign exchange rate contracts	4 027	3 844	59	580	8 510	9 536
Over the counter currency options	2 252				2 252	44
Cross currency swaps		31			31	1 092
Total of currency related instruments	**6 279**	**3 875**	**59**	**580**	**10 793**	**10 672**
Interest rate related instruments						
Interest rate swaps						2 479
Forward rate agreements						1 386
Total of interest rate related instruments						**3 865**
Options on equity securities		**21**			**21**	**9**
Total derivative financial instruments	**6 279**	**3 896**	**59**	**580**	**10 814**	**14 546**

DERIVATIVE FINANCIAL INSTRUMENTS EFFECTIVE FOR HEDGE ACCOUNTING PURPOSES

	Contract or underlying principal amount 2006 USD millions	Contract or underlying principal amount 2005 USD millions	Fair values 2006 USD millions	Fair values 2005 USD millions
Anticipated transaction hedges				
Forward foreign exchange rate contracts	103	2 003		-38
Over the counter currency options	724		1	
Total of derivative financial instruments effective for hedge accounting purposes	**827**	**2 003**	**1**	**-38**
included in other current assets and liabilities		**2 003**		**-38**
included in marketable securities and current financial debt	**827**		**1**	

All of the hedging instruments used for anticipated transactions mature within twelve months and were contracted with the intention of hedging anticipated transactions which are expected to occur in 2007. The instruments are intended to hedge the foreign currency risk arising from highly probable forecast intragroup transactions with consolidated foreign currency exchange risk. The gain or loss relating to the effective portion of the derivative instruments, previously deferred in equity, is recognized in the income statement within other income and expense when the hedged item affects profit or loss.

MARKETABLE SECURITIES, TIME DEPOSITS AND DERIVATIVE FINANCIAL INSTRUMENTS

	2006 USD millions	2005 USD millions
Available-for-sale marketable securities		
Equity securities	616	521
Debt securities	3 390	3 102
Total available-for-sale marketable securities	**4 006**	**3 623**
Time deposits with original maturity more than 90 days	27	505
Derivative financial instruments	37	384
Accrued interest on derivative financial instruments		19
Accrued interest on debt securities	70	81
Total marketable securities, time deposits and derivative financial instruments	**4 140**	**4 612**

During 2006, unrealized losses of USD 25 million on available-for-sale marketable securities were recognized in the income statement as impairment losses within financial income (2005: USD 49 million). None of the financial assets need additional impairment.

The maximum exposure to credit risk at the reporting date is the fair value of debt securities classified as available-for-sale and deposits and derivative financial instruments.

Market risk

Novartis is exposed to market risk, primarily related to foreign exchange, 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 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 exchange rate risk

The Group uses the USD as its reporting currency. As a result, the Group is exposed to foreign 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 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 foreign countries are long-term investments. Their fair value changes through movements of currency exchange rates. In the very long term, however, the difference in the inflation rate should match the currency exchange rate movement, so that the market value of the foreign non-monetary assets will compensate for the change due to 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, it does not enter into significant commodity futures, forward and option contracts to manage fluctuations in prices of anticipated purchases.

Interest rate risk

The Group manages its net exposure to interest rate risk through the proportion of fixed rate financial debt and variable rate financial debt 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. Three customers account for approximately 10%, 9% and 7%, respectively, of Group net sales in 2006. No other customer accounts for 5% or more of the Group s total net sales. The highest amounts of trade accounts receivable are approximately 12%, 8% and 7% respectively of Group trade accounts receivable at December 31, 2006, and there is no other significant concentration of credit risk.

The nominal value less impairment provision of trade accounts receivables and payables are assumed to approximate their fair value.

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 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.

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.

It uses a ten day period because of an assumption that not all positions could be undone in a single 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 currency rate movements over a 60 day period for the calculation of VAR amounts.

The estimated potential ten day loss in pre-tax earnings from the Group s foreign currency instruments, the estimated potential ten day loss on its equity holdings, and the estimated potential ten day loss in fair value of its interest rate sensitive instruments, primarily financial debt and investments of liquid funds under normal market conditions, as calculated in the VAR model, are the following:

	Dec 31, 2006 USD millions	**Dec 31, 2005 USD millions**
All financial instruments	49	113
Analyzed by components:		
Instruments sensitive to foreign currency rates	30	108
Instruments sensitive to equity market movements	28	22
Instruments sensitive to interest rates	27	4

The average, high, and low VAR amounts for 2006 are as follows:

	Average USD millions	**High USD millions**	**Low USD millions**
All financial instruments	90	138	49
Analyzed by components:			
Instruments sensitive to foreign currency rates	81	134	30
Instruments sensitive to equity market movements	29	40	21
Instruments sensitive to interest rates	11	29	4

The VAR computation is a risk analysis tool designed to statistically estimate the maximum potential ten day loss from adverse movements in foreign currency 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. For these calculations, the Group uses the worst movements during a period of six months over the past 20 years in each category. For 2006 and 2005, the worst case loss scenario was configured as follows:

	Dec 31, 2006 USD millions	**Dec 31, 2005 USD millions**
Bond portfolio	158	244
Money market and linked financial instruments	69	550
Equities	415	308
Foreign exchange risks	473	943
Total	**1 115**	**2 045**

In the Group s risk analysis, Novartis considered this worst case scenario acceptable inasmuch as it could reduce income, but would not endanger the solvency and/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.

The following table sets forth details of the remaining contractual maturities of financial assets and liabilities excluding trade accounts receivable and payable as at December 31, 2006 and 2005:

December 31, 2006	Due or due not later than one month USD millions	Due later than one month but not later than three months USD millions	Due later than three months but not later than one year USD millions	Due later than one year but not later than five years USD millions	Due after 5 years USD millions	Total USD millions
Current assets						
Marketable securities	16	42	929	1 726	1 390	4 103
Derivative financial instruments and accrued interest on derivative financial instruments	12	24	1			37
Cash and cash equivalents	3 014	801				3 815
Total current assets	**3 042**	**867**	**930**	**1 726**	**1 390**	**7 955**
Non-current liabilities						
Financial debts				656		656
Total non-current liabilities				**656**		**656**
Current liabilities						
Financial debts	3 438	1 352	1 770			6 560
Derivative financial instruments	47	5	23	8		83
Total current liabilities	**3 485**	**1 357**	**1 793**	**8**		**6 643**
Net liquidity of continuing operations	**-443**	**-490**	**-863**	**1 062**	**1 390**	**656**

December 31, 2005	Due or due not later than one month USD millions	Due later than one month but not later than three months USD millions	Due later than three months but not later than one year USD millions	Due later than one year but not later than five years USD millions	Due after 5 years USD millions	Total USD millions
Current assets						
Marketable securities	88	214	884	1 820	1 203	4 209
Derivative financial instruments and accrued interest on derivative financial instruments	145	2	256			403
Cash and cash equivalents	5 317	1 004				6 321
Total current assets	**5 550**	**1 220**	**1 140**	**1 820**	**1 203**	**10 933**
Non-current liabilities						
Financial debts				1 280	39	1 319
Total non-current liabilities				**1 280**	**39**	**1 319**
Current liabilities						
Financial debts	5 768		1 122			6 890
Derivative financial instruments	52	7	168	18		245
Total current liabilities	**5 820**	**7**	**1 290**	**18**		**7 135**
Net liquidity	**-270**	**1 213**	**-150**	**522**	**1 164**	**2 479**

The 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.

16. Other current assets

		2006 USD millions	2005 USD millions
Withholding tax recoverable		272	35
Life insurance subsidiary receivables		146	167
Prepaid expenses	third parties	237	202
	associated companies	7	20
Other receivables	third parties	1 382	1 005
	associated companies	10	13
Total other current assets		**2 054**	**1 442**

17. Details of shares and share capital movements

	Number of shares[1]				
	Dec 31, 2004	Movement in year	Dec 31, 2005	Movement in year	Dec 31, 2006
Total Novartis shares	**2 777 210 000**	**-38 039 000**	**2 739 171 000**	**-10 200 000**	**2 728 971 000**
Treasury shares					
Shares reserved for share-based compensation of associates	41 569 718	-1 278 098	40 291 620	-6 733 603	33 558 017
Unreserved treasury shares	398 145 155	-35 182 275	362 962 880	-15 781 356	347 181 524
Total treasury shares	**439 714 873**	**-36 460 373**	**403 254 500**	**-22 514 959**	**380 739 541**
Total outstanding shares	**2 337 495 127**	**-1 578 627**	**2 335 916 500**	**12 314 959**	**2 348 231 459**

	USD millions	USD millions	USD millions	USD millions	USD millions
Share capital	1 008	-14	994	-4	990
Treasury shares	-159	13	-146	6	-140
Outstanding share capital	**849**	**-1**	**848**	**2**	**850**

1 All shares are registered, authorized, issued and fully paid. All are voting shares and, except for 224 831 405 treasury shares, are dividend bearing.

There are outstanding written call options on Novartis shares of 18.4 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 37.99 and they have remaining contractual lives of up to 8 years.

18. Non-current financial debts

	2006 USD millions	2005 USD millions
Straight bonds	1 318	2 294
Liabilities to banks and other financial institutions[1]	666	128
Finance lease obligations	12	19
Total (including current portion of non-current financial debt)	**1 996**	**2 441**
Less current portion of non-current financial debt	-1 340	-1 122
Total non-current financial debts	**656**	**1 319**

Straight bonds			
USD	9.0% bonds 2006 of Gerber Products Company, Fremont, Michigan, US		34
EUR	4.0% EUR 900 million bond 2001/2006 of Novartis Securities Investment Ltd., Hamilton, Bermuda[2]		1 068
EUR	3.75% EUR 1 billion bond 2002/2007 of Novartis Securities Investment Ltd., Hamilton, Bermuda	1 318	1 192
Total straight bonds		**1 318**	**2 294**

1 Average interest rate 2.3% (2005: 3.9%)

2 Swapped into Swiss francs in 2002

		2006 USD millions	2005 USD millions
Breakdown by maturity	2006		1 122
	2007	1 340	1 224
	2008	32	23
	2009	528	19
	2010	17	14
	2011	16	
	Thereafter	63	39
Total		**1 996**	**2 441**

		2006 USD millions	2005 USD millions
Breakdown by currency	USD	6	9
	EUR	1 473	1 318
	CHF		1 069
	JPY	504	
	Others	13	45
Total		**1 996**	**2 441**

Fair value comparison	**2006 Balance sheet USD millions**	**2006 Fair values USD millions**	**2005 Balance sheet USD millions**	**2005 Fair values USD millions**
Straight bonds	1 318	1 318	2 294	2 321
Others	678	678	147	147
Total	**1 996**	**1 996**	**2 441**	**2 468**

Collateralized non-current financial debt and pledged assets	**2006 USD millions**	**2005 USD millions**
Total amount of collateralized non-current financial debts	29	19
Total net book value of property, plant & equipment pledged as collateral for non-current financial debts	118	91

The assets are pledged for bank overdraft facilities at usual market conditions.

The percentage of fixed rate financial debt to total financial debt was 27% and 28% at December 31, 2006 and 2005, respectively.

The 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 is 3.0% (2005: 4.2%).

19. Provisions and other non-current liabilities

	2006 USD millions	2005 USD millions
Accrued liability for employee benefits:		
defined benefit pension plans	1 343	1 480
other long-term employee benefits and deferred compensation	343	284
other post-employment benefits	993	1 033
Liabilities for life insurance subsidiary activities	638	559
Environmental provisions	239	189
Provision for legal matters	634	621
Other non-current liabilities	344	283
Total	**4 534**	**4 449**

19.1) Environmental matters

Novartis has provisions in respect of environmental remediation costs in accordance with the accounting policy described in Note 1. The provision recorded at December 31, 2006 consists of USD 141 million (2005: USD 105 million) provided for remediation at third party sites and USD 112 million (2005: USD 97 million) for remediation at owned facilities. 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 to certain sites. Novartis actively participates in, or monitors, the clean-up activities at the sites in which it is a PRP. The estimated 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 material components of the environmental provisions consist of costs to fully clean and refurbish contaminated sites and to treat and contain contamination at sites where the environmental exposure is less severe. 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, and the financial capabilities of the other potentially responsible parties.

In connection with the 1997 spin-off of CIBA Specialty Chemicals AG (CSC) from Novartis AG, a Novartis subsidiary has agreed to reimburse CSC 50% of the costs: (i) associated with environmental liabilities arising in the US from the operations of the specialty chemicals business of the US subsidiary of the former Ciba-Geigy AG, and (ii) which exceed provisions agreed between that subsidiary and CSC. The reimbursement obligations are not subject to any time or amount limits but could terminate for certain liabilities in the US upon the occurrence of certain contingencies which include the merger of CSC or the sale of its assets.

In connection with the acquisition of the Hexal group of companies, a subsidiary within the Sandoz Division has entered into a lease agreement for a factory in Radebeul, Germany owned by a Hexal company that was not acquired by Novartis. Because the Radebeul site has supported chemical manufacturing for many years Novartis is continuing, with the support of the local Saxony government, a thorough review of potential environmental contamination. Novartis believes that it has limited liability exposure for pre-existing environmental contamination or health risks associated therewith, if any, and should liability accrue, Novartis has been indemnified by the Sellers under the Hexal acquisition documents and separately by commitments of the local government.

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, it cannot be guaranteed that additional costs will not be incurred beyond the amounts provided. The effect of resolution of environmental matters on results of operations cannot be predicted due to uncertainty concerning both the amount and the timing of future expenditures and the results of future operations. 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 2006 and 2005:

	2006 USD millions	2005 USD millions
January 1	**202**	**218**
Impact of business combinations	18	
Cash payments	-15	-19
Releases		-1

Additions	36	26
Translation effects	12	-22
December 31	**253**	**202**
Less current liability	-14	-13
Non-current liability at December 31	**239**	**189**

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19.2) Legal matters

A number of Novartis subsidiaries are subject to various legal proceedings that arise from time to time in the ordinary course of business, including product liability, commercial, employment and wrongful discharge, securities, environmental and tax litigations and claims, government investigations, intellectual property matters, and other legal proceedings. As a result, claims could be made against them which, in whole or in part, might not be covered by insurance. While Novartis does not believe that any of the matters will have a material adverse effect on its financial position, litigation is inherently unpredictable and excessive verdicts do 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 in any particular period.

From time to time, Novartis subsidiaries may be subject to government investigations arising out of the normal conduct of their business. Consistent with the Novartis Code of Conduct and policies regarding compliance with law, it is Novartis policy to cooperate with such investigations.

In the interest of transparency, Novartis is providing information on the following matters:

Product Liability matters

HRT Litigation

Novartis subsidiaries are defendants, along with various other pharmaceutical companies, in approximately 177 cases brought by approximately 1 425 plaintiffs claiming to have been injured by hormone replacement therapy (HRT) products. Discovery is underway in these cases.

SMON (Subacute Myelo Optico Neuropathy)

In 1996 a subsidiary of Ciba-Geigy, one of the predecessor companies of Novartis, together with two other pharmaceutical companies, settled certain product liability issues related to sales of its product Clioquinol in Japan. Under the settlement, a Novartis subsidiary is required to pay certain future healthcare costs of the claimants.

***Zometa/Aredia* Litigation**

A Novartis subsidiary is a defendant in approximately 201 cases brought by approximately 253 named plaintiffs who claim to have experienced osteonecrosis of the jaw after having been treated with *Zometa or Aredia*. Three of these cases purport to be class actions. Discovery is continuing in these cases.

Novartis maintains property damage, business interruption, product liability and other insurance policies with third parties, covering claims on a worldwide basis. Changes in the product liability insurance market for originator pharmaceutical products have made purchase of such policies not economical. For certain pharmaceutical substances, coverage cannot be obtained at all. To cope with this change in market dynamics, Novartis has established provisions for the product liability risks of the Group up to certain limits. Since January 1, 2006, these provisions have provided the sole means for affirmatively managing the product liability risks of Novartis Pharmaceuticals Division. Product liability insurance coverage for all other Divisions continue to be acquired from third parties. Novartis records product liability provisions for estimated obligations for claims and related legal defense cost. Novartis believes that its insurance coverage and provisions are reasonable and provide the best estimate in the light of its business and the risks to which it is subject. The provisions are based on Management s judgement, opinion of legal counsel and actuarially determined estimates. However, events may occur which in whole or in part, might not be covered by insurance or the provisions that Novartis have put in place.

The largest portion of product liability risk provisions have been actuarially determined taking into consideration such factors as past experience, number and amount of claims reported, estimates of claims incurred but not reported, cost of defending claims and other assumptions. As actual experience becomes known the Group will continue to refine and adjust its product liability estimates. Actual experience may also include provisions for product liability litigation and claims that differ significantly in size or frequency from historical experience. Novartis will provide for those matters when known. If any of the assumptions used in this actuarial calculation were proven to be incorrect or require material adjustment, there could be a material discrepancy between the amount of provisions that have been booked and the potential liability.

At December 31, 2006 the following key assumptions were used for the actuarially determined provisions:

	%

Weighted average worldwide inflation rate used for defending and settling claims	5.8
Weighted average worldwide discount rate for determining the net present value of estimated product liabilities not yet reported	4.5

A one percentage point change in the difference between these two rates amounts to an approximate USD 30 million income statement effect.

Other matters

Average Wholesale Price Litigation

Claims have been brought against various pharmaceutical companies, including Novartis subsidiaries, alleging that they have fraudulently overstated the Average Wholesale Price (AWP) and best price , which are used by the US government to calculate, respectively, Medicare and Medicaid reimbursements. Discovery is ongoing in certain of these cases. Motions to dismiss the complaint or for summary judgment have been filed by the defendants in certain other of these cases.

Chiron/*Fluvirin*

The former Chiron Corporation, which Novartis acquired during 2006, was the subject of a number of legal proceedings arising out of Chiron s inability to deliver its *Fluvirin* influenza vaccine to the US market for the 2004/05 flu season, including class action lawsuits alleging breaches of the securities laws and of shareholder derivative lawsuits alleging breaches of fiduciary duties. The securities fraud class actions were settled in April 2006. Once the memorandum of understanding has been executed, it will be submitted to the court for approval. The share derivative litigations have all been dismissed.

Gender Discrimination

Certain US Novartis subsidiaries are defendants in a purported class action brought in Federal Court in New York by certain female pharmaceutical sales representatives who allege that they were discriminated against because of their gender. A motion for summary judgement has been filed by a Novartis subsidiary.

***Trileptal* Investigation**

The US Attorney s Office for the Eastern District of Pennsylvania served an administrative subpoena pursuant to the Health Insurance Portability and Accountability Act on a Novartis subsidiary. Novartis understands that the US Attorney s Office is conducting parallel civil and criminal investigations into allegations of potential off-label promotion of *Trileptal*. At this time, Novartis is unable to express an opinion as to the likely outcome of these investigations.

Wage and Hour Litigation

Certain pharmaceutical sales representatives have filed suit in State Court in California and in Federal Court in New York against US Novartis subsidiaries alleging that they violated wage and hour laws by failing to pay overtime pay to the sales representatives. Certain of the claims are brought on behalf of a purported class of plaintiffs. The California State Court action has been removed to Federal Court and transferred to New York for pretrial proceedings.

Intellectual Property matters

Contact Lenses

Several lawsuits are pending relating to the Nicolson patents, which protect CIBA Vision *NIGHT & DAY* and *O2OPTIX* silicone hydrogel contact lens technology. Johnson & Johnson filed a suit against CIBA Vision in 2003, seeking a declaration that their Acuvue® Advance product does not infringe the Nicolson patents and/or that the patents are invalid. Two subsequent additional suits were filed by Johnson & Johnson, seeking declaration that the launch of their Oasys and Advance toric products do not infringe these CIBA Vision patents. Discovery is ongoing in these cases. Similarly, CooperVision filed suit in April 2006 seeking a declaratory judgment of invalidity and non-infringement of the Nicolson patents, and alleging infringement of five patents relating to optical designs and edge profiles of certain kinds of contact lenses by CIBA Vision s product, *O2OPTIX*. Rembrandt Vision Technologies has also filed apatent infringement suit against CIBA Vision in October 2005. The asserted patent relates to the surface treatment of lenses and involves CIBA Vision s *O2OPTIX* and *NIGHT & DAY*, products.

Lotrel

Lotrel is a combination of benazepril hydrochloride and amlodipine besylate. Patent protection for the benazepril substance has expired in the US. Patent protection for the amlodipine besylate substance will expire in the US in March 2007. In addition to these patents, *Lotrel* is protected by an additional combination patent in the US until 2017. Generic manufacturers have challenged this patent, and Novartis has sued them. Our action against one of these manufacturers is currently stayed.

Several matters which Novartis previously disclosed were resolved in 2006, or are likely to be resolved in 2007 or afterwards, with no significant risk to the Group s financial position absent unforeseen events or circumstances. These matters are: Fen-Phen and PPA product liability litigation; Chiron Acquisition, Pharmaceutical Antitrust Litigation, Canadian Importation Litigation and Terazosin litigation; the UK Generics investigation; and intellectual property litigation involving the Group s products *Exelon*, *Famvir*, *Focalin*, *Miacalcin/Miacalcic*, *Neoral* and Omeprazole.

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. 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 and cash flows in a given period.

The following table shows the movements in the legal and product liability provisions during 2006 and 2005:

	2006 USD millions	2005 USD millions
January 1	**825**	**1 012**
Impact of business combinations	46	79
Cash payments	-159	-249
Releases	-56	-107
Additions	233	115
Translation effects	14	-25
December 31	**903**	**825**
Less current liability	-269	-204
Total non-current liability at December 31	**634**	**621**

20. Current financial debt

	2006 USD millions	2005 USD millions
Interest bearing employee accounts	972	897
Other bank and financial debt	2 809	4 047
Commercial paper	1 439	824
Current portion of non-current financial debt	1 340	1 122
Fair value of derivative financial instruments	83	245
Total current financial debt	**6 643**	**7 135**

The balance sheet values of current financial debt, other than the current portion of non-current financial debts, approximates to 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 accounts was 2.4% and 2.1% in 2006 and 2005, respectively.

21. Provisions and other current liabilities

	2006 USD millions	2005 USD millions
Taxes other than income taxes	335	270
Restructuring provisions	86	31
Accrued expenses for goods and services received but not invoiced	737	1 079
Provisions for royalties	269	205
Provisions for revenue deductions	1 428	1 262
Potential claims from life insurance activities	172	184
Provisions for compensation and benefits including social security and pension funds	878	650
Environmental liabilities	14	13
Deferred income relating to government grants	77	74
Deferred purchase consideration	9	
Provision for legal matters	269	204
Other payables	1 462	1 007
Total provisions and other current liabilities	**5 736**	**4 979**

Provisions are based upon Management s best estimate and adjusted for actual experience. Such adjustments to the historic estimates have not been material.

Restructuring charges

In 2006, charges of USD 139 million were incurred in conjunction with the acquisition of Chiron. The charges comprised employee termination costs of USD 119 milion and other third party costs of USD 20 million. In total, 1 640 employees are impacted by the various restructuring plans, 671 of them have left the Group in 2006.

In 2006 and 2005, charges of USD 30 million and USD 51 million, respectively, were incurred in conjunction with the acquisition of Hexal and Eon Labs as well as the closure of production facilities in Asia. The charges comprised employee termination costs of USD 13 million in 2006 and USD 36 million in 2005, and other third party costs of USD 17 million in 2006 and USD 15 million in 2005. In total, 990 employees were impacted by the various restructuring plans, all but 330 of them have now left the Group. All other significant actions associated with the plan were completed during 2006.

Other third party costs are mainly associated with lease and other obligations due to the abandonment of certain facilities.

It is anticipated that the majority of the restructuring provisions will be paid within the next twelve months.

The releases to income in 2006 and 2005 of USD 7 million and USD 19 million, respectively were mainly due to settlement of liabilities at lower amounts than originally anticipated.

	Employee termination costs USD millions	Other third party costs USD millions	Total USD millions
Balance at January 1, 2005	**24**	**6**	**30**
Cash payments	-26	-3	-29
Releases	-10	-9	-19
Additions	36	15	51
Translation effects	-2		-2
Balance at December 31, 2005	**22**	**9**	**31**
Cash payments	-92	-16	-108
Releases		-7	-7
Additions	132	37	169
Translation effects	1		1
Balance at December 31, 2006	**63**	**23**	**86**

22. Cash flows from continuing operations arising from changes in working capital and other operating items included in operating cash flow

	2006 USD millions	2005 USD millions
Change in inventories	-117	185
Change in trade accounts receivable	-513	-505
Change in trade accounts payable	258	-28
Change in other net current assets and other operating cash flow items	382	987
Change in other long-term liabilities	156	199
Total	**166**	**838**

23. Acquisitions and divestments of businesses

23.1) 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:

	2006 Acquisitions USD millions	2006 Divestments USD millions	2005 Acquisitions USD millions	2005 Divestments USD millions
Property, plant & equipment	-1 031	38	-665	
Currently marketed products including trademarks	-3 256	2	-2 123	
In-process research and development	-1 216		-619	
Other intangible assets	-307		-346	
Financial assets including deferred tax assets	-438	21	-199	
Inventories	-540	35	-692	
Trade accounts receivable and other current assets	-535	68	-409	
Marketable securities and cash	-1 771	1	-319	
Long-term and short-term financial debts	1 462	-150	338	
Trade accounts payable and other liabilities including deferred tax liabilities	2 346	-82	1 866	
Accrued liabilities to seller		11		
Translation effects		10		
Identifiable net assets acquired or divested	**-5 286**	**-46**	**-3 168**	
Proportionate fair value of acquired identifiable net assets of existing interest	2 154			
Acquired/divested liquidity	1 739	-1	155	
Sub-total	**-1 393**	**-47**	**-3 013**	
Refinancing of intercompany financial debt, net		129		
Goodwill	-3 155	23	-5 531	
Divestment gain		122		8
Net cash flow	**-4 548**	**227**	**-8 544**	**8**
thereof:				
Net cash flow from discontinuing operations		201		
Net cash flow from continuing operations	-4 548	26	-8 544	8

Notes 2 and 3 provide further information regarding acquisitions and divestments of businesses. All acquisitions were for cash.

23.2) Assets and liabilities arising from acquisitions

2006	Fair value[1] USD millions	Revaluation due to purchase accounting[1] USD millions	Acquiree s carrying amount USD millions
Property, plant & equipment	1 031	123	908
Currently marketed products including trademarks	3 256	2 699	557
In-process research and development	1 216	1 216	
Other intangible assets	307	307	
Financial assets including deferred tax assets	438	33	405
Inventories	540	224	316
Trade accounts receivable and other current assets	535	11	524
Marketable securities and cash	1 771		1 771
Long-term and short-term financial debts	-1 462	-18	-1 444
Trade accounts payable and other liabilities including deferred tax liabilities	-2 346	-1 656	-690
Net identifiable assets acquired	**5 286**	**2 939**	**2 347**
Goodwill	3 155		
Net assets recognized as a result of business combinations	**8 441**		

1 The acquisition of Chiron Corporation was the principal acquisition during the year. The fair value adjustments also include USD 637 million of IPR&D arising on the NeuTec Pharma plc acquisition which also contributed USD 129 million of goodwill and a reclassification reducing Hexal AG s PR&D by USD 221 million with a corresponding increase to goodwill of USD 134 million and reclassification of USD 87 million to other categories of assets and liabilities including a reduction in the purchase price of USD 6 million.

2005			
Property, plant & equipment	665	52	613
Currently marketed products including trademarks	2 123	2 093	30
In-process research and development	619	619	
Other intangible assets	346	339	7
Financial assets including deferred tax assets	199	4	195
Inventories	692	184	508
Trade accounts receivable and other current assets	409	2	407
Marketable securities and cash	319		319
Long-term and short-term financial debts	-338		-338
Trade accounts payable and other liabilities including deferred tax liabilities	-1 866	-1 037	-829
Net identifiable assets acquired	**3 168**	**2 256**	**912**
Goodwill	5 531		
Net assets recognized as a result of business combinations	**8 699**		

The goodwill arising out of the acquisitions reflects mainly the value of expected buyer specific synergies, future products and the acquired assembled workforce. The amount of goodwill expected to be deductible for tax purposes on the year s acquisitions is nil (2005: USD 3.6 billion).

Professional fees and related costs capitalized for the acquisitions amount to USD 43 million (2005: USD 28 million).

23.3) Assets and liabilities related to discontinuing operations

ASSETS RELATED TO DISCONTINUING OPERATIONS

	2006 USD millions
Property, plant & equipment	69
Intangible assets	370
Deferred tax assets	10
Other financial assets	8
Total non-current assets reclassified as assets related to discontinuing operations	**457**
Inventories	120
Trade accounts receivable	139
Other current assets	16
Cash and cash equivalents	4
Total current assets reclassified as assets related to discontinuing operations	**279**
Total assets related to discontinuing operations	**736**

LIABILITIES RELATED TO DISCONTINUING OPERATIONS

	2006 USD millions
Financial debts	2
Deferred tax liabilities	18
Provisions and other non-current liabilities	31
Total non-current liabilities reclassified as liabilities related to discontinuing operations	**51**
Trade accounts payable	69
Financial debts	5
Current income tax liabilities	17
Provisions and other current liabilities	65
Total current liabilities reclassified as liabilities related to discontinuing operations	**156**
Total liabilities related to discontinuing operations	**207**

23.4) Cash flow from discontinuing operations

The following is a summary of the cash flow components of the discontinuing operations:

	2006 USD millions	2005 USD millions
Cash flow from operating activities	118	105
Cash flow used for investing activities	190	-33
Cash flow used for financing activities		4
Total cash flow from discontinuing operations	**308**	**76**

24. Changes in consolidated statement of recognized income and expense

The statement of recognized income and expense 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 income statement. These include fair value adjustments to marketable securities, actuarial losses or gains on defined benefit pension and other post-employment plans and translation effects. These amounts are subject to significant volatility outside of the control of management due to such factors as share price, currency and interest rate movements.

The following table summarizes these fair value adjustments attributable to Novartis shareholders:

	Fair value adjustments on 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 initial minority interest in Chiron USD millions	Cumulative translation effects USD millions	Discontinuing operations USD millions	Total fair value adjustments USD millions
Fair value adjustments at January 1, 2005	**399**	**-20**	**-1 691**		**1 777**		**465**
Fair value adjustments on financial instruments	-76	1					-75
Actuarial net losses from defined benefit plans			-400				-400
Translation effects					-1 976		-1 976
Total fair value adjustments in 2005	**-76**	**1**	**-400**		**-1 976**		**-2 451**
Fair value adjustments at December 31, 2005	**323**	**-19**	**-2 091**		**-199**		**-1 986**
Transfers relating to discontinuing operations			8		-7	-1	
Fair value adjustments on financial instruments	67	27					94
Actuarial net gains from defined benefit plans			141				141
Revaluation of initial minority interest in Chiron				592			592
Translation effects					1 485		1 485
Fair value movements for discontinuing operations in year						5	5
Total fair value adjustments in 2006	**67**	**27**	**149**	**592**	**1 478**	**4**	**2 317**
Fair value adjustments at December 31, 2006	**390**	**8**	**-1 942**	**592**	**1 279**	**4**	**331**

24.1) The 2006 and 2005 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, 2006	**323**	**-19**	**304**
Changes in fair value:			
available-for-sale marketable securities	-27		-27
cash flow hedges		-31	-31
other financial assets	80		80
associated companies equity movements	-5		-5

Realized net losses transferred to the income statement:				
marketable securities sold	-2			-2
derivative financial instruments			65	65
other financial assets sold	-15			-15
Impaired marketable securities and other financial assets	46			46
Deferred tax on above	-10		-7	-17
Fair value adjustments during the year	**67**		**27**	**94**
Fair value adjustments at December 31, 2006	**390**		**8**	**398**
Fair value adjustments at January 1, 2005		**399**	**-20**	**379**
Changes in fair value:				
available-for-sale marketable securities	-81			-81
cash flow hedges			-14	-14
other financial assets	25			25
associated companies equity movements	-6			-6
Realized net gains transferred to the income statement:				
marketable securities sold	-69			-69
derivative financial instruments			15	15
other financial assets sold	-65			-65
Impaired marketable securities and other financial assets	92			92
Deferred tax on above	28			28
Fair value adjustments during the year	**-76**		**1**	**-75**
Fair value adjustments at December 31, 2005	**323**		**-19**	**304**

24.2) Actuarial gains/losses from defined benefit plans arise from:

	2006 USD millions	2005 USD millions
Defined benefit pension plans before tax	157	-502
Other post-employment benefit plans before tax	81	-90
Taxation on above	-97	192
Total after tax	**141**	**-400**

24.3) The Group has investments in associated companies, principally Roche Holding AG and Chiron Corporation up to April 2006 when it was fully acquired and thereafter consolidated. The Group s share in movements in these companies equity, are recognized directly in the Group s Statement of Recognized Income and Expense, net of tax. The translation effects and fair value adjustments of associated companies are included in the corresponding Group amounts.

24.4) The balance sheet carrying value of the minority investment in Chiron Corporation in April 2006 when Novartis acquired all the outstanding shares has been revalued to its proportionate share of the fair value of the identified assets and liabilities. The revaluation of USD 1.0 billion was reduced by USD 0.4 billion representing the Novartis carrying amount of Chiron s pre-acquisition goodwill.

24.5) As a result of the liquidation of a subsidiary, USD 46 million of cumulative translation effects have been transferred into financial income in 2005.

25. Changes in consolidated equity

25.1) At the 2006 Annual General Meeting a CHF 1.15 per share dividend was approved amounting to USD 2 billion which was paid in 2006 (2005: dividend payment was CHF 1.05 per share and amounted to USD 2.1 billion). The amount available for dividend distribution is based on the available distributable retained earnings of Novartis AG determined in accordance with the legal provisions of the Swiss Code of Obligation.

25.2) In 2006 no shares were acquired under the fourth share buy-back program on the SWX second trading line (2005: USD 0.5 billion). Overall in 2006, a total of 8 million shares net have been sold (2005: 3 million shares, net repurchased) for USD 0.2 billion (2005: USD 0.2 billion). These transactions include shares bought and sold on the first and second trading line, transactions with associates and the exercising of options related to share-based compensation.

25.3) Pursuant to a resolution approved at the February 28, 2006 Annual General Meeting, 10.2 million shares with a nominal value of USD 4 million were cancelled (2005: 38 million shares were cancelled with a nominal value of USD 14 million).

25.4) Equity settled share-based compensation is expensed in the 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 equity.

25.5) Transfers between components of equity are due to a transfer in 2006 of USD 14 million of cumulative translation effects and USD 10 million of actuarial losses from fair value adjustments to the discontinuing operations. In 2006 share premium has been reduced by USD 1 million (2005: USD 3 million) to the permitted minimum under Swiss company law of 20% of the Novartis AG share capital and Group retained earnings were increased by this amount.

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26. Post-employment benefits of associates

26.1) Defined benefit plans

The Group has, apart from the legally required social security schemes, numerous independent pension and other post-employment benefit plans. 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 values and their actual return in 2006 was USD 771 million (2005: USD 1 083 million). The defined benefit obligation of unfunded pension plans was USD 898 million at December 31, 2006 (2005: USD 804 million). The measurement dates for the pension plans and the other post-employment benefits were between September 30, 2006 and December 31, 2006 depending on the plan. Any changes between the measurement date and year-end are monitored and adjusted, if necessary.

The following is a summary of the status of the main funded and unfunded pension and other post-employment benefit plans of associates at December 31, 2006 and 2005:

	Pension plans		Other post-employment benefit plans	
	2006 USD millions	2005 USD millions	2006 USD millions	2005 USD millions
Benefit obligation at beginning of the year	**15 632**	**16 488**	**1 024**	**828**
Benefit obligations related to discontinuing operations	-49		-10	
Service cost	417	363	51	33
Interest cost	559	567	50	49
Actuarial losses	-144	869	-81	90
Plan amendments	-7	55	4	73
Translation effects	1 076	-1 921		1
Benefit payments	-865	-855	-51	-50
Contributions of associates	63	63		
Effect of acquisitions or divestments	85	3		
Benefit obligation at end of the year	**16 767**	**15 632**	**987**	**1 024**
Fair value of plan assets at beginning of the year	**16 059**	**17 663**	**24**	
Plan assets related to discontinuing operations	-21			
Expected return on plan assets	758	716	1	-1
Actuarial gains	13	367		
Translation effects	1 094	-2 119		
Novartis Group contributions	388	224	46	49
Contributions of associates	63	63		
Plan amendments				26
Benefit payments	-865	-855	-51	-50
Effect of acquisitions or divestments	26			
Fair value of plan assets at end of the year	**17 515**	**16 059**	**20**	**24**
Funded Status	**748**	**427**	**-967**	**-1 000**
Unrecognized past service cost	11	12	-26	-33
Net asset/(liability) in the balance sheet	**759**	**439**	**-993**	**-1 033**

The movement in the net asset and the amounts recognized in the balance sheet were as follows:

	Pension plans		Other post-employment benefit plans	
	2006 USD millions	2005 USD millions	2006 USD millions	2005 USD millions
Movement in net asset or (liability)				
Net asset or (liability) in the balance sheet at beginning of the year	**439**	**1 181**	**-1 033**	**-862**
Net asset or (liability) related to discontinuing operations	28		10	
Net periodic benefit cost	-199	-218	-96	-58
Novartis Group contributions	388	224	46	49
Past service costs arisen in the current year	-12	10		-6
Plan amendments, net	-1	-55	3	-65
Effect of acquisitions or divestments	-59	-3	-4	
Change in actuarial gain/losses	157	-502	81	-90
Translation effects	18	-198		-1
Net asset or (liability) in the balance sheet at end of the year	**759**	**439**	**-993**	**-1 033**
Amounts recognized in the balance sheet				
Prepaid benefit cost	2 102	1 919		
Accrued benefit liability	-1 343	-1 480	-993	-1 033
Net asset or (liability) in the balance sheet at the end of the year	**759**	**439**	**-993**	**-1 033**

The net periodic benefit cost recorded in the income statement consists of the following components:

	Pension plans		Other post-employment benefit plans	
	2006 USD millions	2005 USD millions	2006 USD millions	2005 USD millions
Components of net periodic benefit cost				
Service cost	417	363	51	33
Interest cost	559	567	50	49
Expected returns on plan assets	-758	-716	-1	1
Recognized past service cost	-11	4	-4	-7
Curtailment/settlement gains	-8			-18
Net periodic benefit cost	**199**	**218**	**96**	**58**

The principal actuarial weighted average assumptions used for calculating defined benefit plans and other post-employment benefits of associates are as follows:

	Pension plans		Other post-employment benefit plans	
	2006 *%*	2005 *%*	2006 *%*	2005 *%*
Weighted average assumptions used to determine benefit obligations at the end of year				
Discount rate	3.6	3.4	5.8	5.5
Expected rate of salary increase	3.7	2.7		
Weighted average assumptions used to determine net periodic pension cost for the year ended				
Discount rate	3.4	3.8	5.5	5.8
Expected return on plan assets	4.5	4.5		
Expected rate of salary increase	2.7	2.8		

The following 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 actuarial adjustments on plan liabilities.

	2006 USD millions	2005 USD millions	2004 USD millions	2003 USD millions	2002 USD millions
Plan assets	17 515	16 059	17 663	16 128	14 365
Defined benefit obligation	-16 767	-15 632	-16 488	-13 865	-11 320
Surplus	**748**	**427**	**1 175**	**2 263**	**3 045**
Differences between expected and actual return on plan assets	13	367	23	120	-2 143
Actuarial adjustments on plan liabilities	144	-869	-1 401	-695	1 108

The weighted average asset allocation of funded defined benefit plans at December 31, 2006 and 2005 was as follows:

	Pension plans Long-term target %	2006 %	2005 %
Equity securities	15 40	30	22
Debt securities	45 70	54	61
Real estate	0 15	8	8
Cash and other investments	0 15	8	9
Total		**100**	**100**

Strategic pension plan asset allocations are determined by the objective to achieve 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 current market and economic environments, actual asset allocation may periodically be permitted to deviate from policy targets. Estimated returns on assets are determined based on the strategic asset allocation and are reviewed periodically.

The expected future cash flows to be paid by the Group in respect of pension and other post-employment benefit plans at December 31, 2006 were as follows:

	Pension plans USD millions	Other post-employment benefit plans USD millions
Novartis Group contributions		
2007 (estimated)	177	53
Expected future benefit payments		
2007	954	53
2008	946	55
2009	957	58
2010	964	60
2011	974	62
2012 2016	5 042	347

The healthcare cost trend rate assumptions for other post-employment benefits are as follows:

Healthcare cost trend rate assumptions used	2006	2005
Healthcare cost trend rate assumed for next year	9.0 %	10.0 %
Rate to which the cost trend rate is assumed to decline	4.8 %	4.8 %
Year that the rate reaches the ultimate trend rate	2012	2012

A one-percentage-point change in the assumed healthcare cost trend rates compared to those used for 2006 would have the following effects:

	1% point increase USD millions	1% point decrease USD million

Effects on total of service and interest cost components	16	-13
Effect on post-employment benefit obligations	124	-104

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The number of Novartis AG shares held by pension and similar benefit funds at December 31, 2006 was 21.6 million shares with a market value of USD 1.2 billion (2005: 21.6 million shares with a market value of USD 1.1 billion). These funds sold no Novartis AG shares during the year ended December 31, 2006 (2005: 9.3 million). The amount of dividends received on Novartis AG shares held as plan assets by these funds were USD 20 million for the year ended December 31, 2006 (2005: USD 26 million).

26.2) Defined contribution plans

In some Group companies associates are covered by defined contribution plans and other long-term benefits of associates. The liability of the Group for these benefits is reported in other long-term benefits of associates and deferred compensation and at December 31, 2006 amounts to USD 343 million (2005: USD 284 million). In 2006 contributions charged to the consolidated income statement for the defined contribution plans were USD 123 million (2005: USD 118 million).

27. Share participation plans of associates

Associate and management share participation plans can be separated into the Novartis equity plan Select and other share plans (the Plans). The expense recorded in the 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. As permitted by the transitional rules of IFRS 2, grants prior to November 7, 2002, have not been included in the income statement. Total expense related to all Novartis equity plans in the 2006 income statement was USD 653 million (2005: USD 532 million) resulting in a total carrying amount for liabilities arising from share-based payment transactions of USD 154 million (2005: USD 149 million). The total amount of cash used to settle awards was USD 100 million (2005: USD 97 million). As of December 31, 2006, there was USD 478 million of total unrecognized compensation cost related to non-vested share-based compensation arrangements granted under the Plans. That cost is expected to be recognized over a weighted-average period of 1.75 years. The amount of related income tax benefit recognized in the income statement was USD 172 million (2005: USD 148 million). In addition, due to its majority owned US quoted subsidiary Idenix Pharmaceuticals Inc., Novartis recognized an additional share-based compensation expense of USD 9 million (2005: USD 6 million). Participants in the Novartis equity plans from discontinuing operations were granted 32 428 shares (2005: 58 194 shares) and 135 463 options (2005: 157 539 options). The expense recorded in the 2006 income statement amounted to USD 4 million (2005: USD 4 million).

27.1) Novartis Equity Plan Select

Under the plan called Select as adopted by the Board of Directors in 2004, participants can elect to receive their equity awards in the form of restricted shares, tradable share options, or a combination thereof. The Compensation Committee allocates the number of shares and share options based on the individual choice of the participant before the predetermined grant date. The share options are tradable, expire at the tenth anniversary and are exercisable for one share each (1:1). The exercise price equals the market price of the underlying share at the predetermined grant date. Shares and tradable share options have a vesting period of two years in Switzerland and three years in other countries. As a consequence, if a participant leaves Novartis, shares or options not yet vested are forfeited if not determined otherwise by the Compensation Committee (e.g. for reorganizations or divestments).

These long-term incentive awards in the form of restricted shares and/or tradable share options are made each year based on the associate s individual year-end performance rating. Participants in the Novartis equity plan Select were granted 1 171 478 shares (2005: 1 294 567 shares) for the Novartis Equity Plan Select outside North America and 2 109 924 ADS (2005: 2 270 646 ADS) for the Novartis Equity Plan Select for North America.

A) Novartis Equity Plan Select outside North America

Directors (through 2002), executives and other selected employees of Group companies (collectively, the Participants) may receive equity awards. These equity awards are made both in recognition of past performance and as an incentive for future contributions by the Participants. They allow the Participants to benefit as the price of the shares increases over time, and so provide a long-term incentive for improvements in the Group s profitability and success. The share options are tradable; therefore they can be used to purchase the underlying Novartis share or they can be transferred to a market maker. In 2004, the vesting period for the plan was changed from a two-year vesting period to a three-year vesting period for most countries. Due to pending new tax legislation in Switzerland, it was

decided not to implement the three-year vesting period in Switzerland. The current view is that the new law will not come into force before 2008, at the earliest, at which point the vesting period might be reviewed.

The following table shows the assumptions on which the valuation of share options granted during the period was based:

	Novartis Equity Plan Select outside North America 2006		Novartis Equity Plan Select outside North America 2005	
Valuation date	February 6, 2006		February 4, 2005	
Expiration date	February 5, 2016		February 3, 2015	
Closing share price on grant date	CHF 71.30		CHF 57.45	
Exercise price	CHF 71.30		CHF 57.45	
Volatility	16	%	16	%
Expected dividend yield	2.05	%	1.8	%
Interest rate	2.5	%	2.4	%
Market value of option at grant date	CHF 13.91		CHF 11.07	

The expense recorded in the 2006 income statement amounted to USD 111 million (2005: USD 95 million).

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.

	2006		2005	
	Options (millions)	Weighted average exercise price USD	Options (millions)	Weighted average exercise price USD
Options outstanding at January 1	**16.5**	**43.6**	**18.6**	**48.1**
Granted	4.5	54.0	7.1	47.8
Sold	-3.5	41.6	-8.6	35.9
Forfeited	-0.4	50.1	-0.6	46.8
Outstanding at December 31	**17.1**	**46.6**	**16.5**	**43.6**
Exercisable at December 31	**6.1**	**40.2**	**5.4**	**36.4**
Weighted average fair value of options granted during the year (USD)	9.7			14

All options were granted at an exercise price which, since 2004, 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 exercise price during the period the options were sold in 2006 was USD 41.6, which led to the realization of a total intrinsic value of approximately USD 45.9 million. The weighted average remaining contractual term for options outstanding at the year end was 7.3 years and 5.3 years for options exercisable. Options outstanding had an aggregate intrinsic value of USD 138 million and USD 69 million for options exercisable.

The following table summarizes information about share options outstanding at December 31, 2006:

	Options outstanding			Options exercisable	
Range of exercice prices (USD)	Number outstanding (millions)	Average remaining contractual life (years)	Weighted average exercise price (USD)	Number exercisable (millions)	Weighted average exercise price (USD)
30 34	2.1	4.8	34.5	2.0	34.6
35 39	1.2	3.8	36.7	1.2	36.7
40 44	0.4	3.2	42.7	0.4	42.7
45 49	9.1	7.7	47.3	2.5	46.1
50 54	4.3	9.0	54.0		
Total	**17.1**	**7.3**	**46.6**	**6.1**	**40.2**

B) Novartis Equity Plan Select for North America

The plan provides for equity awards to North America-based Directors (through 2002), executives and other selected associates, thus replacing the US Management ADS Appreciation Rights plan. 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. As of 2004, ADS options granted under the plan are tradable, therefore they can be used to purchase the underlying Novartis share or they can be transferred to a market maker.

The following table shows the assumptions on which the valuation of share options granted during the period was based:

	Novartis Equity Plan Select for North America 2006	**Novartis Equity Plan Select for North America 2005**
Valuation date	February 6, 2006	February 4, 2005
Expiration date	February 5, 2016	February 3, 2015
Closing ADS price on grant date	USD 54.70	USD 47.84
Exercise price	USD 54.70	USD 47.84
Volatility	15 %	15 %
Expected dividend yield	2.05 %	1.8 %
Interest rate	5.0 %	4.5 %
Market value of option at grant date	USD 15.67	USD 12.85

The expense recorded in the 2006 income statement amounted to USD 210 million (2005: USD 166 million).

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 expense of US Management ADS Appreciation Rights Plan recorded in the 2006 income statement amounted to USD 13 million (2005: USD 12 million).

	2006		2005	
Fair value comparison	**ADS options (millions)**	**Weighted average exercise price USD**	**ADS options (millions)**	**Weighted average exercise price USD**
Options outstanding at January 1	**42.8**	**41.2**	**44.1**	**39.1**
Granted	7.9	54.7	9.9	47.8
Sold or exercised	-10.4	37.0	-8.1	38.3
Forfeited	-1.7	48.0	-3.1	40.7
Outstanding at December 31	**38.6**	**44.7**	**42.8**	**41.2**
Exercisable at December 31	**16.2**	**38.0**	**10.8**	**39.0**
Weighted average fair value of options granted during the year (USD)	15.6			13

All share options were granted at an exercise price which was equal to the market price of the ADS at the grant date. The weighted average exercise price during the period the share options were exercised in 2006 was USD 37, which led to the realization of a total intrinsic value of approximately USD 200 million. Participants paid a total of USD 383 million as exercise price. The actual tax benefit from share options exercised was USD 92 million. The weighted average remaining contractual term for options outstanding at the year end was 7.1 years and 5.6 years for options exercisable. Options outstanding had an aggregate intrinsic value of USD 523 million and USD 328 million for options exercisable.

The following table summarizes information about ADS options outstanding at December 31, 2006:

	ADS options outstanding			ADS options exercisable	
Range of exercice prices (USD)	**Number outstanding (millions)**	**Average remaining contractual life (years)**	**Weighted average exercise price (USD)**	**Number exercisable (millions)**	**Weighted average exercise price (USD)**
35 39	13.0	5.8	36.7	13.0	36.7
40 44	2.5	4.2	42.0	2.5	42.0
45 49	15.6	7.6	47.1	0.6	46.9
50 59	7.5	9.0	54.7	0.1	54.7
Total	**38.6**	**7.1**	**44.7**	**16.2**	**38.0**

27.2) Other Long-Term Incentive Plans

A) Long-Term Performance Plan

Under the Long-Term Performance Plan around 100 key executives throughout the Group may be granted Novartis shares. Actual grants, if any, depend on the Group s overall performance over a period of three years, measured in terms of Economic Value Added (EVA), as defined internally by the Group, relative to predetermined targets, i.e. pay-outs are conditional on the achievement of the EVA objective. If the actual performance of the Group is below a threshold level or the participant leaves the Group during the performance period, then no shares will be earned.

The Long-Term Performance Plan has been redesigned by the Compensation Committee in 2005. In the new design the Group EVA determines the delivery of shares, if any, instead of the specific divisional or business unit EVA as was the case in the old plans.

The first new Long-Term Performance Plan was introduced in 2006 and will have a first share delivery, if any, in February 2009. The old plans will run out via transition plans in the next years with conditional (i.e. if EVA targets are achieved) share releases in February 2007 and 2008.

The expense recorded in the 2006 income statement amounted to USD 26 million (2005: USD 20 million). During 2006 a total of 542 238 shares (2005: 458 251 shares) were granted to executives.

B) Leveraged Share Savings Plans

There are several types of Leveraged Share Savings Plans. Participating associates in principle may only participate in one of these plans in a given year.

Shares invested in the Swiss Employee Share Ownership Plan (ESOP), which is available in Switzerland to approximately 12 000 associates, have a three-year blocking period and are matched at the end of the blocking period with one share for every two shares invested. In 2006 approximately 5 800 associates participated in this plan.

In the UK, associates can invest up to 5% of their monthly salary up to a maximum of GBP 125 in shares, and might be invited to invest all or part of their net bonus in shares. Two invested shares are matched with one share immediately which will vest after three years.

Approximately 30 of the most valued key executives in the world are invited to participate in a five-year Leveraged Share Savings Plan. The shares invested in this plan are blocked for a period of five years after the investment date. At the end of the blocking period, the invested shares are matched based on a ratio of 1:1, i.e. one share for each invested share.

No shares will be matched under the plans if an associate leaves Novartis prior to expiration of the blocking period other than due to retirement.

The expense recorded in the 2006 income statement amounted to USD 275 million (2005: USD 232 million). During 2006, 3 536 055 shares (2005: 3 792 981 shares) were granted to participants.

C) Special Share Awards

In addition to the components of compensation described above, selected associates across the Group may receive special awards of restricted or unrestricted shares. These special awards are fully discretionary. They provide the flexibility to reward particular achievements or exceptional performance of individual associates and to retain key contributors. The restricted share awards generally have a five-year vesting period. If a participant voluntarily leaves Novartis, unvested shares generally forfeit. Around 70 executives at different levels of our organization were awarded restricted shares in 2006. The expense recorded in the 2006 income statement amounted to USD 18 million (2005: USD 7 million). During 2006 a total of 830 856 shares (2005: 792 369 shares) were granted to executives and selected associates.

The table below provides a roll forward of non-vested shares under all plans mentioned above:

	Number of shares in millions 2006	Number of shares in millions 2005	Fair value in USD millions 2006	Fair value in USD millions 2005
Non-vested shares at January 1	**12.6**	**7.4**	**626.6**	**324.5**
Granted	8.2	8.6	466.1	424.1
Vested	-5.9	-3.0	-289.1	-104.4
Forfeited	-0.6	-0.4	-30.8	-17.6
Non-vested shares at December 31	**14.3**	**12.6**	**772.8**	**626.6**

27.3) Idenix Pharmaceuticals Inc.

Idenix Pharmaceuticals Inc. (Idenix), a majority owned subsidiary, recognizes compensation expense for share options granted to nonemployees. In May 1998, it adopted the 1998 Equity Incentive Plan, as amended (1998 Plan), which provides for the grant of incentive share options, nonqualified share options, share awards and share appreciation rights. It initially reserved 1 468 966 shares of common stock for issuance pursuant to the 1998 Plan. It subsequently amended the 1998 Plan and reserved an additional 3 600 000 shares of common stock for issuance under the 1998 Plan. In June 2005, it approved the 2005 Share Incentive Plan (2005 Plan). The 2005 Plan allows for the granting of incentive share options, nonqualified share options, share appreciation rights, performance share awards and restricted share awards (Awards). The 2005 Plan provides for the authorization of awards covering an aggregate of 3 000 000 shares of common stock. As of September 30, 2006, the last date when information is available to Novartis, Idenix had 964 513 shares available for grant under its equity incentive plans.

The following table shows the Idenix share-based compensation expense:

	Nine months ended September 30, 2006 USD millions	Year ended December 31, 2005 USD millions
Total share-based compensation expense	7	6

Idenix has an aggregate of USD 19 748 000 of share-based compensation as of September 30, 2006 remaining to be amortized over a weighted average life of 2.5 years.

The assumptions used for the Black-Scholes method are as follows:

	Nine months ended September 30, 2006	Year ended December 31, 2005
Expected dividend yield	0 %	0 %
Risk-free interest rate	4.81 %	3.94 %
Expected option term (in years)	5.0	5.0
Expected volatility	63 %	83 %

No dividend yield was assumed as Idenix does not pay dividends on its common stock. The risk-free interest rate is based on the yield of US Treasury securities consistent with the expected life of the option. The expected option term and expected volatility were determined by examining the expected option term and expected volatility of the Idenix shares as well as the expected terms and expected volatilities of similarly sized biotechnology companies. During 2006 and 2005, respectively, Idenix recorded no tax benefit associated with the exercise of

employee share options.

Information regarding outstanding share options for the nine months ended September 30, 2006 and year ended December 31, 2005 is as follows:

	Nine months ended September 30, 2006		Year ended December 31, 2005	
	Options (millions)	Weighted average exercise price USD	Options (millions)	Weighted average exercise price USD
Options outstanding at January 1	**3.6**	**12.2**	**3.2**	**7.5**
Granted	1.1	15.4	1.2	20.3
Exercised	-0.2	3.5	-0.6	3.4
Forfeited	-0.2	17.4	-0.2	10.7
Outstanding at September 30, 2006 or December 31, 2005	**4.3**	**13.3**	**3.6**	**12.2**
Exercisable at September 30, 2006 or December 31, 2005	2.3	10.7	1.8	8.3

Idenix granted 1 187 692 and 1 090 125 share options for the nine months ended September 30, 2006 and the year ended December 31, 2005, respectively. The weighted average fair value of options granted during the nine months ended September 30, 2006 and the year ended December 31, 2005 was USD 8.89 and USD 14.01, respectively. The weighted average remaining contractual term for options outstanding at September 30, 2006 was 7.7 years and 6.8 years for options exercisable. The total intrinsic value of options exercised during the nine months ended September 30, 2006 was USD 1 542 000. The intrinsic value was calculated as the difference between the market value as of September 30, 2006 and the weighted average exercise price of the shares.

28. Related parties

28.1) 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 as Novartis holds 33.3% of the outstanding voting shares of Roche.

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 an initial milestone and R&D reimbursement fee of approximately USD 47 million and the parties will share the cost of Genentech s ongoing Phase III and other related development expenses of this product. Novartis may pay additional payments for the achievement of certain clinical development and product approval milestone payments and will pay royalties on the net sales of *Lucentis* products outside the US. Since *Lucentis* has only been launched in some countries during 2006, sales of only USD 19 million have been recognized by Novartis.

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 have co-developed *Xolair* in the US, and Novartis and Genentech are co-promoting *Xolair* in the US and both are making certain joint and individual payments to Tanox. Novartis and Tanox have the non-US commercialization rights. Genentech records all sales and related costs in the US. Novartis markets the product and records all sales and related costs in Europe as well as co-promotion costs in the US. Genentech and Novartis share the resulting US and European operating profits, respectively, according to agreed profit-sharing percentages.

The net fund inflow out of the two agreements described above amounted to USD 116 million in 2006 (2005: USD 80 million). *Xolair* was launched in Europe in late 2005 and Novartis recognized total sales related to this product of USD 102 million in 2006 (including sales to Genentech for the US market).

28.2) Other Related Parties (except for Executives and Directors)

The Group has formed approximately 25 foundations, principally for charitable purposes, which have not been consolidated as the Group does not receive a benefit therefrom. The main charitable foundation fosters healthcare and social development in rural countries. Each of these foundations is autonomous and its board is responsible for its respective administration in accordance with the foundation s purpose and applicable law.

In 2006, the Group received short-term loans totaling USD 20 million (2005: USD 14 million) from the foundations.

As of December 31, 2006 these foundations held approximately 6 million shares of Novartis, with a cost of approximately USD 32 million.

28.3) Executive and Director Compensation

In 2006, there were 19 (2005: 20) Executive Committee members, Permanent Attendees to the Executive Committee and Business Unit Heads (Executives), including those who retired or terminated their employment in 2005.

The total compensation for the Executives and the 11 (2005: 11) non-Executive Directors using IFRS 2 rules for accounting for share-based compensation was as follows:

	Executives		**Non-Executive Directors**		**Total**	
	2006 USD millions	**2005 USD millions**	**2006 USD millions**	**2005 USD millions**	**2006 USD millions**	**2005 USD millions**
Short-term benefits of associates	16.3	15.5	5.2	4.7	21.5	20.2
Post-employment benefits	2.1	1.7			2.1	1.7
Termination benefits	1.8	0.3			1.8	0.3
Share-based compensation1	80.2	64.8			80.2	64.8
Total	**100.4**	**82.3**	**5.2**	**4.7**	**105.6**	**87.0**

1 If the transitional rules of IFRS 2 of only using grants after November 7, 2002 had not been used the fair value of share-based compensation in 2006 would have been USD 82.0 million (2005: USD 67.8 million)

The annual incentive award, which includes share-based compensation, is granted in February in the year following the reporting period. At that time it is partly at the Executive s discretion to choose the portion to be received in cash or as share-based compensation. Therefore the split between cash and share-based compensation is estimated.

29. Commitments and contingencies

Leasing commitments

	2006 USD millions
Commitments arising from fixed-term operational leases in effect at December 31 are as follows:	
2007	309
2008	222
2009	148
2010	96
2011	87
Thereafter	331
Total	**1 193**
Expense of current year	**339**

Research & Development commitments

The Group has entered into long-term research agreements with various institutions including potential milestone payments which may be capitalized. As of December 31, 2006 they are as follows:

	Unconditional commitments 2006 USD millions	**Potential milestone payments 2006 USD millions**	**Total 2006 USD millions**
2007	33	199	232
2008	17	321	338
2009	10	544	554
2010	9	277	286
2011	8	354	362
Thereafter		1 090	1 090
Total	**77**	**2 785**	**2 862**

Other commitments

The Novartis Group entered into various purchase commitments for services and materials as well as for equipment as part of the ordinary business. These commitments are not in excess of current market prices in all material respects 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 19 contains a more extensive discussion of these matters.

In the opinion of Group 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 in a given period.

30. Principal currency translation rates

			2006 USD	2005 USD
Year end exchange rates used for the consolidated balance sheets:	1	CHF	0.819	0.762
	1	EUR	1.317	1.186
	1	GBP	1.965	1.726
	100	JPY	0.841	0.851
Average of the monthly exchange rates during the year used for the consolidated income and cash flow statements:	1	CHF	0.798	0.804
	1	EUR	1.256	1.245
	1	GBP	1.842	1.820
	100	JPY	0.860	0.910

31. Events subsequent to the December 31, 2006 balance sheet date

The 2006 consolidated financial statements of the Novartis Group were approved by the Novartis AG Board of Directors on January 17, 2007. At the same time a dividend of CHF 1.35 per share was proposed for approval at the Annual General Meeting. If approved this would amount to approximately USD 2.6 billion.

32. Principal Group subsidiaries and associated companies **As at December 31, 2006**

The following describe the various types of entities within the Group:

n **Holding/Finance:** This entity is a holding company and/or performs finance functions for the Group.

u **Sales:** This entity performs sales and marketing activities for the Group.

q **Production:** This entity performs manufacturing and/or production activities for the Group.

p **Research:** This entity performs research and development activities for the Group.

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

1 Share/paid-in capital may not reflect the taxable share/paid-in capital amount and does not include any paid-in surplus.

2 shares without par value

m = million; bn = billion

	Share/paid-in capital(1)			Equity interest %	Activities			
Argentina								
Novartis Argentina S.A., Buenos Aires	ARS	36.4	m	100	u			
Sandoz S.A., Buenos Aires	ARS	11.8	m	100	u	q		
Australia								
Novartis Australia Pty Ltd., North Ryde, NSW	AUD	11.0	m	100	n			
Novartis Pharmaceuticals Australia Pty Ltd., North Ryde, NSW	AUD	3.8	m	100	u		p	
Sandoz Pty Ltd., North Ryde, NSW	AUD	11.6	m	100	u			
Novartis Consumer Health Australasia Pty Ltd., Mulgrave, Victoria	AUD	7.6	m	100	u	q		
Novartis Animal Health Australasia Pty Ltd., North Ryde, NSW	AUD	3.0	m	100	u		p	
Austria								
Novartis Pharma GmbH, Vienna	EUR	1.1	m	100	u			
Sandoz GmbH, Kundl	EUR	32.7	m	100	n	u	q	p
Novartis Animal Health GmbH, Kundl	EUR	37 000		100	u			
Bangladesh								
Novartis (Bangladesh) Limited, Dhaka	BDT	162.5	m	60	u	q		
Belgium								
N.V. Novartis Management Services S.A., Vilvoorde	EUR	7.5	m	100	n			
N.V. Novartis Pharma S.A., Vilvoorde	EUR	7.1	m	100	u			
N.V. Sandoz S.A., Vilvoorde	EUR	4.2	m	100	u			
N.V. Novartis Consumer Health S.A., Vilvoorde	EUR	4.3	m	100	u			
N.V. CIBA Vision Benelux S.A., Mechelen	EUR	62 000		100	u			
Bermuda								
Triangle International Reinsurance Ltd., Hamilton	CHF	1.0	m	100	n			
Novartis Securities Investment Ltd., Hamilton	CHF	30 000		100	n			
Novartis International Pharmaceutical Ltd., Hamilton	CHF	10.0	m	100	n	u	q	p
Brazil								
Novartis Biociências S.A., São Paulo	BRL	255.8	m	100	u	q		
Sandoz do Brasil Indústria Farmacêutica Ltda., Cambé	BRL	139.5	m	100	u	q	p	
Novartis Saúde Animal Ltda., São Paulo	BRL	50.7	m	100	u	q		
Canada								
Novartis Pharmaceuticals Canada Inc., Dorval/Montreal	CAD	0	2	100	u		p	
Sandoz Canada Inc., Boucherville, Quebec	CAD	76.8	m	100	u	q	p	
Novartis Consumer Health Canada Inc., Mississauga, Ontario	CAD	2		100	u			
CIBA Vision Canada Inc., Mississauga, Ontario	CAD	1		100	u	q		
Novartis Animal Health Canada Inc., Ontario	CAD	2		100	u		p	
Chile								

Novartis Chile S.A., Santiago de Chile	CLP	2.0	bn	100			u		
China									
Beijing Novartis Pharma Co., Ltd., Beijing	CNY	111.3	m	100			u	q	
Novartis Pharmaceuticals (HK) Limited, Hong Kong	HKD	200		100			u		
Shanghai Novartis Trading Ltd., Shanghai	CNY	20.3	m	100			u		
Colombia									
Novartis de Colombia S.A., Santafé de Bogotá	COP	20.9	bn	100			u	q	
Croatia									
Lek Zagreb d.o.o., Zagreb	HRK	25.6	m	100			u		
Czech Republic									
Novartis s.r.o., Prague	CZK	51.5	m	100			u		
Sandoz s.r.o., Prague	CZK	44.7	m	100			u		
Denmark									
Novartis Healthcare A/S, Copenhagen	DKK	12.0	m	100			u		
Sandoz A/S, Odense	DKK	8.0	m	100			u		
Ecuador									
Novartis Ecuador S.A., Quito	USD	4.0	m	100			u		
Egypt									
Novartis Pharma S.A.E., Cairo	EGP	33.8	m	99				q	
Novartis Egypt (Healthcare) S.A.E., Cairo	EGP	250 000		95			u		
Finland									
Novartis Finland Oy, Espoo	EUR	459 000		100			u		
France									
Novartis Groupe France S.A., Rueil-Malmaison	EUR	103.0	m	100		n			
Novartis Pharma S.A.S., Rueil-Malmaison	EUR	43.4	m	100			u	q	p
Sandoz S.A.S., Levallois-Perret	EUR	2.6	m	100			u		
Novartis Santé Familiale S.A.S., Rueil-Malmaison	EUR	21.9	m	100			u	q	
Novartis Santé Animale S.A.S., Rueil-Malmaison	EUR	900 000		100			u	q	
Novartis Nutrition S.A.S., Revel	EUR	300 000		100			u	q	
CIBA Vision S.A.S., Blagnac	EUR	1.8	m	100			u		
Germany									
Novartis Deutschland GmbH, Wehr	EUR	155.5	m	100		n			
Novartis Pharma GmbH, Nuremberg	EUR	25.6	m	100			u		p
Novartis Pharma Produktions GmbH, Wehr	EUR	2.0	m	100				q	
Sandoz International GmbH, Holzkirchen	EUR	100 000		100		n			
Sandoz Pharmaceuticals GmbH, Ismaning	EUR	5.1	m	100			u	q	
Sandoz Industrial Products GmbH, Frankfurt a. M.	EUR	2.6	m	100			u	q	
Hexal Aktiengesellschaft, Holzkirchen	EUR	93.7	m	100		n	u	q	
Salutas Pharma GmbH, Barleben	EUR	42.0	m	100			u	q	
1 A Pharma GmbH, Oberhaching	EUR	26000		100			u		
Novartis Consumer Health GmbH, Munich	EUR	14.6	m	100			u	q	p
Novartis Nutrition GmbH, Munich	EUR	23.5	m	100			u	q	p
CIBA Vision Vertriebs GmbH, Grossostheim	EUR	2.6	m	100			u		
CIBA Vision GmbH, Grosswallstadt	EUR	15.4	m	100			u	q	p
Gibraltar									
Novista Insurance Limited, Gibraltar	CHF	130.0	m	100		n			
Great Britain									
Novartis UK Limited, Frimley/Camberley	GBP	25.5	m	100		n			
Novartis Pharmaceuticals UK Limited, Frimley/Camberley	GBP	5.4m		100			u	q	p
Novartis Grimsby Limited, Frimley/Camberley	GBP	230	m	100				q	
Sandoz Limited, Bordon	GBP	2.0	m	100			u		
Novartis Consumer Health UK Limited, Horsham	GBP	25 000		100			u	q	
Novartis Animal Health UK Limited, Royston	GBP	100 000		100			u		p
Vericore Limited, Royston	GBP	2		100			u	q	
CIBA Vision (UK) Limited, Southampton	GBP	550 000		100			u		
Greece									
Novartis (Hellas) S.A.C.I., Athens	EUR	14.6	m	100			u		
Hungary									
Novartis Hungary Healthcare Limited Liability Company, Budapest	HUF	545.6	m	100			u		
Sandoz Hungary Limited Liability Company, Budapest	HUF	3.0	m	100			u		
India									
Novartis India Limited, Mumbai	INR	159.8	m	51			u	q	

Sandoz Private Limited, Mumbai	INR	32.0	m	100		u	q		
Indonesia									
PT Novartis Indonesia, Jakarta	IDR	7.7	bn	100		u	q		
PT CIBA Vision Batam, Batam	IDR	11.9	bn	100			q		
Ireland									
Novartis Ireland Limited, Dublin	EUR	25 000		100		u			
Novartis Ringaskiddy Limited, Ringaskiddy, County Cork	EUR	2.0	m	100			q		
Italy									
Novartis Farma S.p.A., Origgio	EUR	18.2	m	100	n	u	q	p	
Sandoz S.p.A., Origgio	EUR	390 000		100		u			
Sandoz Industrial Products S.p.A., Rovereto	EUR	2.6	m	100			q		
Novartis Consumer Health S.p.A., Origgio	EUR	2.9	m	100		u			
CIBA Vision S.r.l., Marcon	EUR	2.4	m	100		u			
Japan									
Novartis Holding Japan K.K., Tokyo	JPY	10.0	m	100	n				
Novartis Pharma K.K., Tokyo	JPY	6.0	bn	100		u		p	
Ciba-Geigy Japan Limited, Tokyo	JPY	3.8	bn	100			q		
Sandoz K.K., Tokyo	JPY	100.05	m	100		u	q	p	
CIBA Vision K.K., Tokyo	JPY	495.0	m	100		u			
Novartis Nutrition K.K., Tokyo	JPY	100.0	m	100		u		p	
Liechtenstein									
Novista Insurance Aktiengesellschaft, Vaduz	CHF	5.0	m	100	n				
Luxembourg									
Novartis Investments S.à r.l., Luxembourg	USD	2.6	bn	100	n				

	Share/paid-in capital(1)			Equity interest %	Activities		
Malaysia							
Novartis Corporation (Malaysia) Sdn. Bhd., Kuala Lumpur	MYR	3.3	m	70	u		
Mexico							
Novartis Farmacéutica, S.A. de C.V., Mexico City	MXN	205.0	m	100	u	q	
Productos Gerber, S.A. de C.V., Querétaro	MXN	12.5	m	100	u	q	
Netherlands							
Novartis Netherlands B.V., Arnhem	EUR	1.4	m	100	n		
Novartis Pharma B.V., Arnhem	EUR	4.5	m	100	u		
Sandoz B.V., Almere	EUR	907 570		100	u	q	
Novartis Consumer Health B.V., Breda	EUR	23 830		100	u	q	
Netherlands Antilles							
Sandoz N.V., Curação	USD	6 000		100	nu		
New Zealand							
Novartis New Zealand Ltd., Auckland	NZD	820 000		100	u		
Norway							
Novartis Norge AS, Oslo	NOK	1.5	m	100	u		
Pakistan							
Novartis Pharma (Pakistan) Limited, Karachi	PKR	24.8	m	98	u	q	
Panama							
Novartis Pharma (Logistics), Inc., Panama	USD	10 000		100	u		
Philippines							
Novartis Healthcare Philippines, Inc., Makati/Manila	PHP	298.8	m	100	u		
Poland							
Novartis Poland Sp. z o.o., Warsaw	PLN	44.2	m	100	u		
Lek S.A., Strykow	PLN	2.6	m	100	u	q	
Alima-Gerber S.A., Warsaw	PLN	57.1	m	100	u	q	
Portugal							
Novartis Portugal SGPS Lda., Sintra	EUR	500 000		100	n		
Novartis Farma Produtos Farmacêuticos S.A., Sintra	EUR	2.4	m	100	u		
Novartis Consumer Health Produtos Farmacêuticos e Nutrição Lda., Lisbon	EUR	100 000		100	u		
Puerto Rico							
Ex-Lax, Inc., Humacao	USD	10 000		100		q	
Gerber Products Company of Puerto Rico, Inc., Carolina	USD	100 000		100	u	q	
CIBA Vision Puerto Rico, Inc., Cidra	USD	1 000		100		q	
Romania							
Sandoz S.R.L., Targu-Mures	RON	19.3	m	100	u	q	
Russian Federation							
Novartis Pharma ZAO, Moscow	RUR	17.5	m	100	u		
ZAO Lek, Moscow	RUR	57.4	m	100	u		
Singapore							
Novartis Institute for Tropical Diseases Pte Ltd., Singapore	SGD	2 004		100			p
Ciba Vision Asian Manufacturing and Logistics Pte Ltd, Singapore	SGD	1.04	m	100		q	
Slovenia							
Lek Pharmaceuticals d.d., Ljubljana	SIT	11.6	bn	100	nu	q	p
South Africa							
Novartis South Africa (Pty) Ltd., Spartan/Johannesburg	ZAR	86.4	m	100	u	q	
Sandoz South Africa (Pty) Ltd, Kempton Park	ZAR	3.0	m	100	u	q	
South Korea							
Novartis Korea Ltd., Seoul	KRW	24.5	bn	99	u		
Spain							
Novartis Farmacéutica, S.A., Barcelona	EUR	63.0	m	100	nu	q	
Sandoz Farmacéutica, S.A., Barcelona	EUR	270 450		100	u		
Sandoz Industrial Products, S.A., Les Franqueses del Vallés/Barcelona	EUR	9.3	m	100	u	q	p
Novartis Consumer Health, S.A., Barcelona	EUR	876 919		100	u		

CIBA Vision, S.A., Barcelona	EUR	1.4	m	100	u		
Sweden								
Novartis Sverige Participations AB, Täby/Stockholm	SEK	1.0	m	100	n		
Novartis Sverige AB, Täby/Stockholm	SEK	5.0	m	100	u		
CIBA Vision Nordic AB, Askim/Göteborg	SEK	2.5	m	100	u		
Switzerland								
Novartis International AG, Basel	CHF	10.0	m	100	n		
Novartis Holding AG, Basel	CHF	100.2	m	100	n		
Novartis Research Foundation, Basel	CHF	29.3	m	100			p
Novartis Foundation for Management Development, Basel	CHF	100 000		100	n		
Novartis Foundation for Employee Participation, Basel	CHF	100 000		100	n		
Roche Holding AG, Basel	CHF	160.0	m	33	nu	q	p
Novartis Pharma AG, Basel	CHF	350.0	m	100	nu	q	p
Novartis Pharma Services AG, Basel	CHF	20.0	m	100	u		
Novartis Pharma Schweizerhalle AG, Schweizerhalle	CHF	18.9	m	100		q	
Novartis Pharma Stein AG, Stein	CHF	251 000		100		q	p
Novartis Pharma Schweiz AG, Bern	CHF	5.0	m	100	u		
Sandoz AG, Basel	CHF	5.0	m	100	u		p
Sandoz Pharmaceuticals AG, Steinhausen	CHF	100 000		100	u		
Novartis Consumer Health S.A., Nyon	CHF	30.0	m	100	nu	q	p
Novartis Consumer Health Schweiz AG, Bern	CHF	250 000		100	u		
Novartis Animal Health AG, Basel	CHF	101 000		100	nu	q	p
Novartis Centre de Recherche Santé Animale S.A., St. Aubin	CHF	250 000		100			p
CIBA Vision AG, Embrach	CHF	300 000		100	nu		
Taiwan								
Novartis (Taiwan) Co., Ltd., Taipei	TWD	170.0	m	100	u	q	
Thailand								
Novartis (Thailand) Limited, Bangkok	THB	230.0	m	100	u		
Turkey								
Novartis Saglik, Gida ve Tarim Ürünleri Sanayi ve Ticaret A.S., Istanbul	TRY	98.0	m	100	u	q	
Sandoz Ilaç Sanayi ve Ticaret A.S., Gebze-Kocaeli	TRY	31.7	m	100	u	q	
USA								
Novartis Corporation, Florham Park, NJ	USD	72.2	m	100	n		
Novartis Finance Corporation, New York, NY	USD	1.7	bn	100	n		
Novartis Pharmaceuticals Corporation, East Hanover, NJ	USD	5.2	m	100	u	q	p
Novartis Institutes for BioMedical Research, Inc., Cambridge, MA	USD	1		100			p
Novartis Institute for Functional Genomics, Inc., San Diego, CA	USD	1 000		100			p
Novartis Vaccines and Diagnostics, Inc., Emeryville, CA	USD	3		100	nu	q	p
Idenix Pharmaceuticals, Inc., Cambridge, MA	USD	56 023		56			p
Sandoz Inc., Princeton, NJ	USD	25 000		100	u	q	p
Lek Pharmaceuticals, Inc., Wilson, NC	USD	200 000		100	u		
Eon Labs, Inc., Lake Success, NY	USD	1		100	u	q	
Novartis Consumer Health, Inc., Parsippany, NJ	USD	0	2	100	u	q	p
Novartis Animal Health US, Inc., Greensboro, NC	USD	100		100	u	q	p
Novartis Nutrition Corporation, Minneapolis, MN	USD	50 000		100	u	q	p
Gerber Products Company, Fremont, MI	USD	10		100	nu	q	p
Gerber Life Insurance Company, White Plains, NY	USD	148.5	m	100	u		
CIBA Vision Corporation, Duluth, GA	USD	301.3	m	100	nu	q	p
Venezuela								
Novartis de Venezuela, S.A., Caracas	VEB	1.4	bn	100	u		
Novartis Nutrition de Venezuela, S.A., Caracas	VEB	877.8	m	100	u	q	

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, Peru and Uruguay.

33. Significant differences between IFRS and United States Generally Accepted Accounting Principles (US GAAP)

The Group s consolidated financial statements have been prepared in accordance with IFRS, which as applied by the Group, differs in certain significant respects from US GAAP. The effects of the application of US GAAP to net income and equity are set out in the tables below.

	Notes	2006 USD millions	2005 USD millions
Net income from continuing operations under IFRS		**7 019**	**6 072**
US GAAP adjustments:			
Available-for-sale securities	33.2	-114	278
Inventory	33.3	103	20
Associated companies	33.4		-6
Intangible assets	33.5	-1 743	-1 238
Property, plant and equipment	33.6	58	53
Pensions and other post-employment benefits	33.7	-198	-181
Deferred taxes	33.8	125	178
Share-based compensation	33.9	-5	-44
Minority interests	33.10	-27	-11
Others	33.11	-68	
Net income from continuing operations under US GAAP		**5 150**	**5 121**
Net income from discontinuing operations under US GAAP	33.12	114	69
Net income under US GAAP		**5 264**	**5 190**
Earnings per share under US GAAP	33.13		
Continuing operations earnings per share (USD)		2.19	2.19
Discontinuing operations earnings per share (USD)		0.05	0.03
Total earnings per share (USD)		2.24	2.22
Diluted earnings per share under US GAAP	33.13		
Continuing operations diluted earnings per share (USD)		2.18	2.19
Discontinuing operations diluted earnings per share (USD)		0.05	0.03
Total diluted earnings per share (USD)		2.23	2.22

	Notes	2006 USD millions	2005 USD millions
Equity under IFRS		**41 294**	**33 164**
US GAAP adjustments:			
Available-for-sale securities	33.2	-37	-24
Inventory	33.3	-11	-23
Associated companies	33.4	-307	25
Intangible assets	33.5	1 349	4 092
Property, plant and equipment	33.6	-436	-409
Pensions and other post-employment benefits	33.7	15	3 133
Deferred taxes	33.8	130	-1 438
Share-based compensation	33.9	-186	-96
Minority interests	33.10	-183	-174
Others	33.11	61	
Net assets related to discontinuing operations	33.12	-19	50
Total US GAAP adjustments		**376**	**5 136**
Equity under US GAAP		**41 670**	**38 300**

Impact due to adoption of SFAS 158 *Employers Accounting for Defined Benefit Pension and Other Postretirement Plans.*

See note 33.7 for further details.

	USD millions
US GAAP equity at December 31, 2006 prior to adoption of SFAS 158	**44 121**
Adoption of SFAS 158	-3 215
Deferred tax on above	764
US GAAP equity after adoption of SFAS 158 at December 31, 2006	**41 670**

Notes to the US GAAP Reconciliation

33.1) Acquisition accounting differences

33.1.1) Merger between Sandoz and Ciba-Geigy in 1996

The accounting treatment for the 1996 merger of Sandoz AG and Ciba-Geigy AG under IFRS was different from the accounting treatment under US GAAP. For IFRS purposes the merger was accounted for under the uniting of interests method, however, for US GAAP the merger did not meet all of the required conditions of Accounting Principles Board Opinion No. 16, *Business Combinations* for a pooling of interests and therefore was accounted for as a purchase under US GAAP. Under US GAAP, Sandoz was deemed to be the acquirer with the assets and liabilities of Ciba-Geigy being recorded at their estimated fair values with the results of Ciba-Geigy being included from December 20, 1996. Under US GAAP, the cost of Ciba-Geigy to Sandoz was approximately USD 28.5 billion. The entire purchase price was allocated to identified property, plant & equipment and intangible assets with a definite useful life. There was no residual goodwill arising from the accounting for this transaction.

The components of equity and the income statement adjustments related to the US GAAP purchase accounting adjustment of Ciba-Geigy for 2006 and 2005 are as follows:

	2006 components to reconcile		
	Net income USD millions	Translation effects USD millions	Equity USD millions
Intangible assets related to product rights and trademarks	-530	199	2 506
Property, plant & equipment	55	-42	-562
Deferred taxes	119	-39	-493
Total IFRS to US GAAP adjustment1	**-356**	**118**	**1 451**

1 The 2005 balances of USD 129 million for the investment in Chiron and a related USD 32 million deferred tax asset have been adjusted for as part of the Chiron acquisition. See note 33.1.2

	2005 components to reconcile		
	Net income USD millions	Translation effects USD millions	Equity USD millions
Intangible assets related to product rights and trademarks	-678	-510	2 837
Property, plant & equipment	55	96	-575
Investments in Chiron		-20	129
Deferred taxes	156	109	-604
Total adjustment	**-467**	**-325**	**1 787**

33.1.2) Chiron acquisition

On April 20, 2006, Novartis acquired the remaining shares of Chiron Corporation that it did not already own. Prior to the date of the acquisition, the interest in Chiron was accounted for using the equity method. Prior to the acquisition, the US GAAP to IFRS differences in the accounting for the investment in Chiron related to a net USD 310 million of goodwill included in the investment in associated companies balance resulting from the Sandoz/Ciba-Geigy acquisition and a USD 113 million deferred tax asset representing the outside tax basis of the investment. As a result of the acquisition, a balance of USD 388 million of the original investment in associated companies remains as an equity difference associated with goodwill with an adjustment to the revaluation reserves in equity of USD 78 million related to IPR&D capitalized under IFRS. The deferred tax asset has been adjusted through an increase to goodwill of USD 145 million and a USD 32 million increase in income. As part of the fair value adjustment to the initial 44% investment in Chiron under IFRS, USD 0.4 billion of Chiron s own goodwill has been eliminated. Under the step acquisition accounting approach under US GAAP this Chiron related goodwill is retained.

The acquisition of the remaining interest in Chiron was accounted for as a step acquisition under SFAS 141, *Business Combinations.* Under IFRS, the acquired identified assets and liabilities are revalued to 100% of their fair value and a revaluation reserve on the initial interest is recorded in equity. Under SFAS 141, only the newly acquired portion of the identified assets and liabilities are revalued to their fair value. As a result, under US GAAP only the newly acquired portion of 56% of the identified assets and liabilities was revalued to its full fair value with the 44% balance remaining at its historic value. The effect of these differences between IFRS and US GAAP is a USD 1.0 billion reduction of US GAAP equity. The amortization, depreciation and cost of sales will be adjusted for the lower asset values under US GAAP.

In addition to the revaluation adjustment, the acquisition also created other IFRS to US GAAP differences related to purchase accounting, including accounting for fair value adjustments, IPR&D and other intangible assets, contingent liabilities, as well as certain restructuring costs.

As part of the purchase price adjustments, an amount of USD 499 million was written off under US GAAP associated with various assets and liabilities.

The following shows the IFRS to US GAAP adjustments for Chiron at December 31, 2006:

	2006 components to reconcile	
	Net income USD millions	Equity USD millions
Intangible assets related to:		
Goodwill	64	648
Product rights and trademarks	89	-972
In-process research & development	-470	-800
Other	-58	-192
Property, plant & equipment	-8	-51
Inventories	91	
Liabilities	-68	61
Deferred taxes	-43	734
Total IFRS to US GAAP adjustment	**-403**	**-572**

33.2) Available-for-sale marketable securities and derivative financial instruments

Under IFRS, fair value changes which relate to the underlying movement in exchange rates on available-for-sale debt securities have to be recognized in the income statement. US GAAP requires the entire movement in the fair value of these securities to be recognized in equity, including any part that relates to foreign exchange movements. This resulted in an additional US GAAP expense of USD 114 million in 2006 (2005: income USD 278 million).

Under IFRS, the Group remeasures its investment in privately held companies to fair value. Under US GAAP such investments are accounted for at cost. A revaluation gain of USD 37 million (2005: USD 24 million) was recorded in the IFRS equity and reversed in the US GAAP equity.

The carrying value of marketable securities under US GAAP is as follows:

	2006 USD millions	2005 USD millions
Carrying values of marketable securities (note 15)	3 997	3 623
Adjustment to carrying values of financial investments (note 12)	1 884	1 431
Total marketable securities and other investments under US GAAP	**5 881**	**5 054**

The components of available-for-sale marketable securities under US GAAP at December 31, 2006 and 2005 are the following:

	Cost USD millions	Gross unrealized gains USD millions	Gross unrealized losses USD millions	Carrying value and estimated fair value USD millions
As at December 31, 2006				
Available-for sale securities:				
Equity securities	1 004	422	-1	1 425
Debt securities	4 317	192	-53	4 456
Total	**5 321**	**614**	**-54**	**5 881**
As at December 31, 2005				
Available-for sale securities:				
Equity securities	717	259	-2	974
Debt securities	3 995	120	-35	4 080
Total	**4 712**	**379**	**-37**	**5 054**

Proceeds from sales of available-for-sale securities were USD 1.8 billion and USD 4.4 billion in 2006 and 2005 respectively. Gross realized gains were USD 67 million and USD 88 million on those sales in 2006 and 2005 respectively. Gross realized losses were USD 19 million and USD 70 million on those sales in 2006 and 2005 respectively. The gain or loss on these sales was determined using the weighted average cost method. As of December 31, 2006 there were no unrealized losses on equity securities (2005: nil) and USD 19 million on debt securities (2005:

USD 15 million) that existed for more than 12 months.

The maturities of the available-for-sale debt securities included above at December 31, 2006 are as follows:

	2006 USD millions
Within one year	905
Over one year through five years	1 807
Over five years through ten years	927
Over ten years	817
Total	**4 456**

33.3) Inventory

According to the Group policy, pre-launch inventory in the Pharmaceuticals Division is impaired as the technical feasibility is not guaranteed until final marketing approval is obtained. If the final approval is granted and the shelf life of the pre-launch inventory permits its sale, then the impairment charge is reversed under IFRS. Under US GAAP impairment reversals are not permitted and inventory remains impaired. US GAAP inventory values are therefore lower than IFRS amounts at December 31, 2006 by USD 11 million (2005: USD 23 million). This results in a USD 12 million US GAAP income statement difference (2005: USD 20 million).

The acquisition of Chiron created an initial revaluation difference in inventory of USD 91 million, which was consumed in 2006 resulting in USD 91 million being reversed in the US GAAP income statement.

33.4) Associated companies

Investments in associated companies include purchase price adjustments and amortization differences due to diverging implementation rules for US GAAP SFAS 141 and IFRS 3 on accounting for business combinations and investments in associated companies. The impact of the US GAAP adjustments on the net income and on the carrying value of the investments in Roche and Chiron are as follows:

	2006 Translation effects USD millions	**Equity USD millions**
Roche	-22	-307
Total adjustments between IFRS and US GAAP for associated companies1	**-22**	**-307**

1 The 2005 investment in Chiron has been adjusted for as part of the acquisition accounting. See note 33.1.2

	2005 Net income USD millions	Translation effects USD millions	Equity USD millions
Roche		45	-285
Chiron	-6	-20	310
Total adjustments between IFRS and US GAAP for associated companies	**-6**	**25**	**25**

As of December 31, 2006, the market value of the Group s interest in Roche exceeded the US GAAP carrying value by USD 5.1 billion. Chiron has been fully consolidated with effect from April 20, 2006.

33.5) Intangible assets

The significant differences relating to intangible assets between IFRS and US GAAP are explained below:

INTANGIBLE ASSET ADJUSTMENTS UNDER US GAAP:

	2006 USD millions	2005 USD millions
Goodwill		
Differences in carrying amount from the Gerber Products Company acquisition	2 870	2 870
Differences in carrying amount from the Chiron acquisition	648	
Purchase price and purchase price allocation differences on other acquisitions	-482	-359
Other differences	-470	-444
Differences in carrying amount of goodwill	**2 566**	**2 067**
Product rights and trademarks		
Differences from Ciba-Geigy purchase accounting	2 506	2 837
Differences from Chiron purchase accounting	-972	
Other differences	26	26
Differences in carrying amount of product rights and trademarks	**1 560**	**2 863**
IPR&D		
IPR&D from Chiron acquisition	-800	
IPR&D from other acquisitions	-1 164	-627
Acquired intangible assets capitalized under IAS 38 and expensed as IPR&D under US GAAP	-621	-211
Total differences in the carrying amount of IPR&D	**-2 585**	**-838**
Differences from Chiron purchase accounting	-192	
Total differences in the carrying amount of other intangible assets	**-192**	
Total US GAAP increase in intangible assets	**1 349**	**4 092**

ADDITIONAL US GAAP INTANGIBLE ASSET CHARGES:

	2006 USD millions	2005 USD millions
Hedging loss on business combinations		118
Difference in impairment and amortization of goodwill under IFRS prior to 2005		28
Difference in goodwill from Chiron	-64	
Total charges related to goodwill	**-64**	**146**
Additional amortization & impairments of product rights and trademarks	530	680
Reversal of amortization of products rights and trademarks on account of Chiron	-89	
Total charges related to product rights & trademarks	**441**	**680**
IPR&D from Chiron, expensed under US GAAP	470	
IPR&D from other acquisitions, expensed under US GAAP	933	830
Related IFRS amortization and impairment charges	-95	-418
Total charges related to IPR&D	**1 308**	**412**
Total charges related to other intangible assets	**58**	

Total US GAAP additional expense	**1 743**	**1 238**

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Goodwill

The difference in the carrying amount of goodwill between IFRS and US GAAP is on account of purchase price differences on acquisitions, various differences prior to the implementation of SFAS 141 and IFRS 3, and timing differences in the implementation of certain accounting standards.

The largest difference arises from the goodwill associated with the acquisition of Gerber Products Company of USD 2870 million which was written off to equity in accordance with the IFRS standards in place before 1995. US GAAP does not allow such a write-off to equity. Gerber Products Company goodwill is reviewed annually for potential impairments, however, there were no impairment charges necessary in 2006 and 2005.

Additional goodwill differences arise from the purchase accounting associated with the Chiron acquisition, primarily related to differences in accounting for the step acquisition. The impact of these adjustments increased equity by USD 648 million.

Under IFRS a deferred tax liability of USD 364 million (2005: USD 241 million) was recorded related to acquired IPR&D on other acquisitions. As a result of recording the deferred tax liability, goodwill was increased by the same amount. Under US GAAP, IPR&D is expensed without tax effect and the carrying value of goodwill is lower under US GAAP by the amount of the deferred tax. This amount includes an adjustment of USD 69 million on account of the refinements to the purchase price allocations for Hexal. Other purchase price differences relate to the hedging of the purchase price of certain acquisitions of USD 118 million (2005: USD 118 million). Under IFRS, the hedging gains and losses on the purchase price are included as part of the cost of acquisition; however, this is not permitted under US GAAP. The impact of these adjustments reduced equity by USD 482 million (2005: USD 359 million).

Other goodwill differences, primarily related to IPR&D included in goodwill under IFRS prior to March 31, 2004, SFAS 142 *Goodwill and Other Intangible Assets* and IFRS 3 transition differences and differences in impairments, reduced equity by USD 470 million (2005: USD 444 million).

The income statement difference of USD 64 million relate to the Chiron acquisition for expenses recognized under IFRS but considered as part of the goodwill under US GAAP. There were no differences between IFRS and US GAAP due to impairment and amortization of goodwill in the current year (2005: USD 28 million additional expense).

The changes in the carrying amount of goodwill under US GAAP for the years ended December 31, 2006 and 2005 are as follows:

	Pharmaceuticals Division USD millions	**Vaccines and Diagnostics Division USD millions**	**Sandoz Division USD millions**	**Consumer Health Division USD millions**	**Total USD millions**
January 1, 2005	**23**		**732**	**3 685**	**4 440**
Additions	15		4 958	223	5 196
Impairment losses	-9		-8	-16	-33
Goodwill written off related to disposal of businesses				-1	-1
Reclassification from separately identified intangible assets	-4		-20	12	-12
Translation effects	5		-176	-24	-195
December 31, 2005	**30**		**5 486**	**3 879**	**9 395**
Goodwill associated with discontinuing operations				-256	-256
Additions	2 276	1 350	213	-174	3 665
Impairment losses				-2	-2
Goodwill written off related to disposal of businesses					
Translation effects	10		405	8	423
December 31, 2006	**2 316**	**1 350**	**6 104**	**3 455**	**13 225**

Product rights and trademarks

The differences in the product right and trademarks between IFRS and US GAAP of USD 1560 million (2005: USD 2863 million) consists mainly of the fair value adjustments of the Ciba-Geigy AG products at the time of the merger with Sandoz AG which increased equity by USD 2506 million, (2005: USD 2837 million), purchase accounting differences on the step acquisition of Chiron which decreased equity by USD 972 million and other differences which increased equity by USD 26 million (2005: USD 26 million).

The additional amortization under US GAAP for product rights and trademarks primarily related to the Ciba-Geigy products amounted to USD 530 million (2005: USD 680 million). The reversal of amortization related to Chiron amounted to an income of USD 89 million.

The total carrying value of marketed products and significant capitalized trademarks and product rights are as follows:

	Gross carrying value Dec 31, 2006 USD millions	**Accumulated amortization Dec 31, 2006 USD millions**	**Net carrying value Dec 31, 2006 USD millions**	**Net carrying value Dec 31, 2005 USD millions**
Famvir	*1 716*	*790*	*926*	*1 011*
Voltaren	*1 869*	*1 168*	*701*	*782*
Tegretol	*607*	*380*	*227*	*254*
Other pharmaceutical products	5 313	3 114	2 199	1 677
Total Pharmaceuticals Division	**9 505**	**5 452**	**4 053**	**3 724**
Vaccines and Diagnostics Division	**1 319**	**90**	**1 229**	
Sandoz Division	**2 611**	**602**	**2 009**	**2 194**
Consumer Health Division	**2 358**	**991**	**1 367**	**1 310**
Total	**15 793**	**7 135**	**8 658**	**7 228**

Novartis applies the straight-line amortization method. For Pharmaceuticals Division products the patent life generally reflects the useful life although in certain circumstances a value is also given to the non-patent protected period. For other Divisions the maximum useful life used is 20 years.

Famvir

The value of *Famvir* has been bifurcated, with the majority of the value assigned to its sales under patent protection. This portion is amortized over the remaining patent life until 2010.

The remainder is amortized over an additional 10 year period representing its value as a branded non-patent protected product. This amortization charge is half of the amount during the patent period.

Voltaren

Voltaren is a branded pain relief drug sold primarily in Europe where it is off patent in most countries. Novartis applies a straight-line amortization period and the useful life is considered to end in 2011.

Tegretol

Tegretol is off-patent. Novartis applies a straight-line amortization period and the useful life is considered to end in 2011.

IPR&D

Under IFRS, IPR&D is separately identified and recorded as an intangible asset subject to annual impairment tests for all post-March 31, 2004 business combinations. Under US GAAP, IPR&D is considered to be a separate asset that needs to be written-off immediately following the acquisition, as the feasibility of the acquired research and development has not been fully tested and the technology has no alternative future use. During 2006, additional IPR&D expenses arose on the acquisitions of Chiron of USD 470 million and NeuTec Pharma plc of USD 637 million. Also, the IPR&D expense recognized in 2005 was reduced by USD 186 million in 2006 based on the refinements to the purchase price

allocations for Hexal. During 2005, IPR&D of USD 619 million arose on the acquisitions of Hexal and Eon Labs.

Starting January 1, 2005, Novartis capitalized for IFRS purposes development acquired outside a business combination. During 2006, acquired development of USD 482 million (2005: USD 211 million) was expensed under US GAAP.

During 2006, the amortization and impairment charges under IFRS for intangible assets already expensed as IPR&D under US GAAP were USD 95 million (2005: USD 418 million).

The total additional net IPR&D expense for 2006 was USD 1308 million (2005: USD 412 million). The impact of IPR&D reduced US GAAP equity by USD 2585 million (2005: USD 838 million).

Other intangible assets

The difference in other intangible assets relates to differences in purchase accounting from the acquisition of Chiron.

The Group estimates that the 2006 aggregate amortization for intangible assets of USD 1.2 billion will be approximately USD 1.3 billion for each of the next five years when taking into account recent acquisitions and currently known divestments.

33.6) Property, plant and equipment

The income statement difference of USD 58 million (2005: USD 53 million) results from the purchase accounting of the Ciba-Geigy acquisition of USD 55 million of income (2005: USD 55 million) and an expense of USD 8 million from the revaluation differences on the step acquisition of Chiron. There are also differences between IFRS and US GAAP in relation to interest capitalized during the construction period under US GAAP resulting in additional income of USD 11 million (2005: USD 2 million expense).

The balance sheet difference totals USD 436 million (2005: USD 409 million) and results from the proportionate reduction of non-

current assets due to the negative goodwill from the Ciba-Geigy acquisition of USD 562 million (2005: USD 575 million), decrease from the revaluation differences on the step acquisition of Chiron of USD 51 million and an increase from capitalized interest of USD 177 million (2005: USD 166 million) under US GAAP.

33.7) Pensions and other post-employment benefits

Under the Group s adoption of an alternative under IAS 19, actuarial gains and losses arising from differences between expected and actual changes in the fair value of assets and liabilities in the Group s pension and post-employment defined benefit plans are recognized immediately in the statement of recognized income and expense. Under US GAAP, these differences are recognized in the income statement only when they fall outside the corridor of the higher of 10% of plan assets or liabilities. Differences in the amounts of net periodic benefit costs and the prepaid benefit cost also exist due to different accounting policy adoption dates and transition rules, pre-1999 accounting rule differences and different provisions for recognition of a prepaid pension asset and past service costs. However with the adoption of SFAS 158 *Employers Accounting for Defined Benefit Pension and Other Postretirement Plans* as of December 31, 2006, which requires the immediate recognition in equity of actuarial gains and losses on pension and other post-employment benefit plans, all the existing IFRS to US GAAP difference in equity, except for amounts due to past service costs unrecognized under IFRS, are eliminated. Differences will continue to exist in the recognition of expense in the income statement. The following is a reconciliation of the balance sheet and income statement amounts recognized for IFRS and US GAAP for pension plans. Also the impact of the new US GAAP requirement on US GAAP equity at December 31, 2006 is presented.

	2006 USD millions	2005 USD millions
Pension plans:		
Net asset recognized for IFRS	759	439
Difference in unrecognized amounts	3 470	3 566
Additional minimum liability	-475	-760
Net asset recognized for US GAAP before adoption of SFAS 158	**3 754**	**3 245**
Adoption of SFAS 158	-3 006	
Net asset recognized for US GAAP after adoption of SFAS 158	**748**	
Net periodic pension cost recognized for IFRS	-199	-218
Difference in recognition of actuarial and past service amounts	-187	-153
Net periodic pension cost recognized for US GAAP	**-386**	**-371**

The funded status of other post-employment benefit plans under US GAAP is comparable to that presented in note 26. The plans are substantially foreign and the differences in income statement and balance sheet treatment of actuarial losses are as follows:

	2006 USD millions	2005 USD millions
Other post-employment benefit plans:		
Liability recognized for IFRS	-993	-1 033
Difference in unrecognized amounts	235	327
Liability recognized for US GAAP prior to adoption of SFAS 158	**-758**	**-706**
Adoption of SFAS 158	-209	
Liability recognized for US GAAP after adoption of SFAS 158	**-967**	
Net periodic post-employment benefit cost recognized for IFRS	-96	-58
Difference in recognition of actuarial and past service amounts	-11	-28
Net periodic post-employment benefit cost recognized for US GAAP	**-107**	**-86**
Total US GAAP income statement difference on pensions and other post-employment benefits	**-198**	**-181**
Total US GAAP equity difference on pensions and other post-employment benefits prior to adoption of SFAS 158	**3 230**	**3 133**
Adoption of SFAS 158 recognition of actuarial gains/losses	-3 288	
Adoption of SFAS 158 Past service costs	73	
Total US GAAP equity differences after adoption of SFAS 158	**15**	

Next year s amortization of past service cost/credits and actuarial gains/losses is expected to be in line with this year s amount.

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SUMMARY OF PENSION PLANS

	Swiss pension plans		Foreign pension plans	
	2006 USD millions	2005 USD millions	2006 USD millions	2005 USD millions
Benefit obligation at beginning of the year	**10 835**	**11 920**	**4 797**	**4 568**
Benefit obligations related to discontinued operations			-49	
Service cost	208	167	209	196
Interest cost	316	340	243	227
Actuarial losses	-138	631	-6	238
Plan amendments			-7	55
Foreign currency translation	820	-1 646	256	-275
Benefit payments	-634	-630	-231	-225
Contributions from associates	52	53	11	10
Effect of business combinations or divestments			85	3
Benefit obligation at end of the year	**11 459**	**10 835**	**5 308**	**4 797**
Fair value of plan assets at beginning of the year	**12 660**	**14 436**	**3 399**	**3 227**
Fair value of plan assets related to discontinued operations			-21	
Actual return on plan assets	352	770	419	313
Foreign currency translation	957	-1 969	137	-150
Novartis Group contributions			388	224
Contributions from associates	52	53	11	10
Effect of business combination or divestments			26	
Benefit payments	-634	-630	-231	-225
Fair value of plan assets at end of the year	**13 387**	**12 660**	**4 128**	**3 399**
Funded Status	**1 928**	**1 825**	**-1 180**	**-1 398**
Unrecognized past service cost			-22	-27
Unrecognized net actuarial losses	2 702	2 585	801	1 020
Additional minimum liability			-475	-760
Net asset/(liability) in the balance sheet before adoption of SFAS 158	**4 630**	**4 410**	**-876**	**-1 165**
Adoption of SFAS 158	-2 702		-304	
Net asset/(liability) in the balance sheet after adoption of SFAS 158	**1 928**		**-1 180**	
Components of net periodic benefit cost				
Service cost	208	167	209	196
Interest cost	316	340	243	227
Expected returns on plan assets	-531	-504	-227	-212
Recognized actuarial losses	119	107	72	50
Recognized past service cost			-15	
Plan amendments			-8	
Net periodic benefit cost	**112**	**110**	**274**	**261**
Accumulated benefit obligation	10 735	10 125	4 938	4 447
Principal actuarial assumptions used	**%**	**%**	**%**	**%**
Weighted average assumptions used to determine benefit obligations at the end of year				
Discount rate	3.0	2.8	5.0	4.8
Expected rate of salary increase	3.7	2.2	3.8	3.6
Weighted average assumptions used to determine net periodic pension cost for the year ended				
Discount rate	2.8	3.3	4.8	5.2
Expected return on plan assets	4.0	4.0	6.5	6.6
Expected rate of salary increase	2.2	1.5	3.6	3.6

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33.8) Deferred taxes

Unrealized profits resulting from intercompany transactions are eliminated from the carrying amount of assets, such as inventory. In accordance with IAS 12 (revised) *Income Taxes,* the Group calculates the tax effect with reference to the local tax rate of the company that holds the inventory (the buyer) at period-end. However, US GAAP requires that the tax effect is calculated with reference to the local tax rate in the seller s or manufacturer s jurisdiction. The effect of this difference decreased US GAAP net income in 2006 by USD 66 million (2005: USD 69 million) and reduced equity by USD 647 million (2005: USD 581 million).

The deferred tax effect related to the US GAAP purchase accounting of Ciba-Geigy resulted in an additional USD 119 million income (2005: USD 156 million) and reduced equity by USD 493 million (2005: USD 604 million).

The deferred tax effect on other US GAAP adjustments for 2006 resulted in an additional USD 72 million income (2005: USD 91 million) and increased equity by USD 1 270 million (2005: reduction of USD 253 million).

The deferred tax asset less valuation allowance at December 31, 2006 and 2005 comprises USD 1 997 million and USD 1 455 million of current assets and USD 2 196 million and USD 2 798 million of non-current assets, respectively. The deferred tax liability at December 31, 2006 and 2005 comprises USD 729 million and USD 552 million of current liabilities and USD 4 720 million and USD 5 210 million of non-current liabilities, respectively.

33.9) Share-based compensation

There are differences in the transitional rules on adopting the expensing of share-based compensation between IFRS and US GAAP, which results in a difference in the income statement charge between IFRS and US GAAP. As a result of this difference, an additional expense was recognized under US GAAP in 2006 of USD 5 million (2005: USD 44 million).

In addition, under IFRS, the Group accounts for all share-based compensation equity-settled transactions in equity. However, under US GAAP an arrangement which is a fixed monetary amount that is settleable with a variable number of the issuer s equity shares is classified as a liability. The USD 186 million booked in the IFRS equity at December 31, 2006 (2005: USD 96 million) was reversed for US GAAP purposes.

33.10) Minority Interests

In contrast to IFRS, minority interests are deducted in the determination of US GAAP net income and excluded from total equity.

33.11) Other differences

In 2006 there were other income statement differences associated with the Chiron acquisition which included the recognition of USD 58 million of liabilities under US GAAP previously considered as contingent liabilities under IFRS as well as USD 10 million representing fair value adjustments that were recorded in the revaluation reserve in equity under IFRS but which were considered a post-acquisition charge under US GAAP.

The other balance sheet differences of USD 61 million consist of the remaining separately recognized contingent liabilities recorded under IFRS as part of the Chiron acquisition.

33.12) Discontinuing operations

The net assets related to discontinuing operations are associated with a decrease in equity of USD 19 million (2005: USD 19 million) from other goodwill differences recognized due to SFAS 142 and IFRS 3 transition differences (2005: USD 69 million increase in equity due to differences in carrying amounts of goodwill written off to equity under IFRS prior to 1995).

Differences of USD 69 million due to carrying amounts of goodwill written off to equity under IFRS were reversed due to divestments, reducing net income from discontinuing operations from USD 183 million under IFRS to USD 114 million under US GAAP.

33.13) Additional US GAAP disclosures

(i) Earnings per share

Basic earnings per share	**2006**	**2005**
Net income under US GAAP (USD millions)	5 264	5 190
Weighted average number of shares outstanding	2 345 232 126	2 332 848 144
Basic earnings per share under US GAAP (USD)	**2.24**	**2.22**

	2006	**2005**
Net income from continuing operations under US GAAP (USD millions)	5 150	5 121
Weighted average number of shares outstanding	2 345 232 126	2 332 848 144
Basic earnings per share under US GAAP (USD) from continuing operations	**2.19**	**2.19**

	2006	**2005**
Net income from discontinuing operations under US GAAP (USD millions)	114	69
Weighted average number of shares outstanding	2 345 232 126	2 332 848 144
Basic earnings per share under US GAAP (USD) from discontinuing operations	**0.05**	**0.03**

Diluted earnings per share	**2006**	**2005**
Net income under US GAAP (USD millions)	5 264	5 190
Weighted average number of shares outstanding	2 345 232 126	2 332 848 144
Adjustment for dilutive share options	15 224 345	9 605 470
Weighted average number of shares for diluted earnings per share	2 360 456 471	2 342 453 614
Diluted earnings per share US GAAP (USD)	**2.23**	**2.22**

	2006	**2005**
Net income from continuing operations US GAAP (USD millions)	5 150	5 121
Weighted average number of shares outstanding	2 345 232 126	2 332 848 144
Adjustment for dilutive share options	15 224 345	9 605 470
Weighted average number of shares for diluted earnings per share	2 360 456 471	2 342 453 614
Diluted earnings per share US GAAP (USD) from continuing operations	**2.18**	**2.19**

	2006	**2005**
Net income from discontinuing operations US GAAP (USD millions)	114	69
Weighted average number of shares outstanding	2 345 232 126	2 332 848 144
Adjustment for dilutive share options	15 224 345	9 605 470
Weighted average number of shares for diluted earnings per share	2 360 456 471	2 342 453 614
Diluted earnings per share US GAAP (USD) from discontinuing operations	**0.05**	**0.03**

For diluted EPS, the weighted average number of shares outstanding is adjusted to assume conversion of all potentially dilutive shares arising from options on Novartis shares.

(ii) Effect of New Accounting Pronouncements

US GAAP

In June 2005, the FASB ratified EITF Issue 05-5, *Accounting for Early Retirement or Post-employment Programs with Specific Features.* Novartis will adopt EITF 05-5 in the first quarter of 2007. The adoption of EITF 05-5 is not expected to have a material impact on the Group s consolidated financial statements.

In June 2006, the FASB issued FASB Interpretation (FIN) 48, *Accounting for Uncertainty in Income Taxes, an Interpretation of SFAS 109, Accounting for Income Taxes,* to create a single model to address accounting for uncertainty in tax positions taken or expected to be taken in a tax return. Under FIN 48, the tax benefit from an uncertain tax position may be recognized only if it is more likely than not that the tax position will be sustained, based solely on its technical merits. The Group plans to adopt FIN 48 beginning January 1,2007. The cumulative effect of adopting FIN 48 will be recorded in retained earnings. The Group is currently evaluating the potential impact, if any, that the adoption of FIN 48 will have on the Group s consolidated financial statements.

In September 2006, the FASB issued SFAS 157, *Fair Value Measurements.* This Statement defines fair value, establishes a framework for measuring fair value in US GAAP, and expands disclosures about fair value measurements. This Statement applies to other accounting pronouncements that require or permit fair value measurements, the FASB having previously concluded in those accounting pronouncements that fair value is the relevant measurement attribute. Accordingly, this Statement does not require any new fair value measurements. The Group plans to adopt this Statement beginning January 1, 2007.

IFRS

There are no new IFRS pronouncements not yet implemented which are considered to have a significant impact on 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, 2006. 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 our assessment Management has concluded that, as of December 31, 2006, the Novartis Group s internal control over financial reporting is effective based on those criteria.

Management has excluded Chiron Corporation and NeuTec Pharma plc, from its assessment of internal control over financial reporting as of December 31, 2006 because they were acquired by the Novartis Group in business combinations during 2006. Total assets and total revenues of Chiron Corporation, and NeuTec Pharma plc, represent approximately 16%, or USD 10.9 billion and 4%, or USD 1.6 billion, respectively, of the related consolidated financial statement amounts as of and for the year ended December 31, 2006.

Management s assessment of the effectiveness of internal control over financial reporting as of December 31, 2006 has been audited by PricewaterhouseCoopers AG, Switzerland, an independent registered public accounting firm, as stated in their report which is included in this Financial Report on pages 192 and 193.

Daniel Vasella, M. D.
Chairman & Chief Executive Officer

Raymund Breu, Ph. D.
Chief Financial Officer

Basel, January 17, 2007

REPORT OF THE GROUP AUDITORS ON THE NOVARTIS CONSOLIDATED FINANCIAL STATEMENTS AND INTERNAL CONTROL OVER FINANCIAL REPORTING

To the general meeting of Novartis AG, Basel

As auditors of the Group, we have audited the consolidated financial statements of the Novartis Group for the year ended December 31, 2006. We have also audited Management s assessment on internal control over financial reporting as of December 31, 2006. Our opinions, based on our audits, are presented below.

Consolidated financial statements

As auditors of the Group, we have audited the consolidated financial statements (comprising consolidated balance sheet, income statement, cash flow statement, statement of recognized income and expense, statement of changes in equity and notes), set out on pages 126 to 190 of the Novartis Group for the year ended December 31, 2006.

These consolidated financial statements are the responsibility of the Board of Directors. Our responsibility is to express an opinion on these consolidated financial statements based on our audit. We confirm that we meet the legal requirements concerning professional qualification and independence.

We conducted our audit in accordance with 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 about whether the consolidated financial statements are free of material misstatement. An audit of consolidated financial statements includes examining, on a test basis, evidence supporting the amounts and disclosures in the consolidated financial statements, assessing the accounting principles used and significant estimates made and evaluating the overall consolidated financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Novartis Group, the results of its operations and its cash flows in accordance with International Financial Reporting Standards (IFRS) and comply with Swiss law.

We recommend that the consolidated financial statements submitted to you be approved.

Internal control over financial reporting

We have also audited Management s assessment, included in the accompanying Report of Novartis Management on Internal Control over Financial Reporting appearing on page 191, that Novartis maintained effective internal control over financial reporting as of December 31, 2006, based on criteria established in *Internal Control Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

Novartis Board of Directors and Management of the 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. Our responsibility is to express opinions on Management s assessment and on the effectiveness of the Novartis Group s internal control over financial reporting based on our 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, evaluating Management s assessment, testing and evaluating the design and operating effectiveness of internal control, and performing such other procedures as we consider necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinions.

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, Management s assessment that the Novartis Group maintained effective internal control over financial reporting as of December 31, 2006, is fairly stated, in all material respects, based on criteria established in *internal Control Integrated Framework* issued by the COSO.

Also, in our opinion, the Novartis Group maintained, in all material respects, effective internal control over financial reporting as of December 31, 2006, based on criteria established in *Internal Control Integrated Framework* issued by the COSO.

As described in the Report of Novartis Management on Internal Control over Financial Reporting , Management has excluded Chiron Corporation and NeuTec Pharma plc from its assessment of internal control over financial reporting as of December 31, 2006 because they were acquired by the Novartis Group in business combinations during 2006. We have also excluded Chiron Corporation and NeuTec Pharma plc from our audit of internal controls over financial reporting. Chiron Corporation and NeuTec Pharma plc are wholly-owned businesses whose total assets and total revenues represent approximately 16% or USD 10.9 billion and 4% or USD 1.6 billion, respectively, of the related consolidated financial statement amounts as of and for the year ended December 31, 2006.

PricewaterhouseCoopers AG

R. P. Muir
Auditor in Charge

D. Suter

Basel, January 17, 2007

FINANCIAL STATEMENTS OF NOVARTIS AG

INCOME STATEMENTS (for the years ended December 31, 2006 and 2005)

	2006 CHF millions	2005 CHF millions
Income		
Income from financial assets	10 574	6 472
Income from marketable securities, cash and short-term deposits	72	42
Changes to provisions and value of financial assets		54
Gain from disposal of intangible assets	190	168
License fees from subsidiaries	935	825
Other income	3	2
Total income	**11 774**	**7 563**
Expenses		
Financial expenses	-699	-271
Administrative expenses	-21	-26
Amortization of intangible assets	-33	-29
Other expenses	-9	-3
Taxes	-130	-109
Total expenses	**-892**	**-438**
Net income	**10 882**	**7 125**

PROPOSAL FOR THE APPROPRIATION OF AVAILABLE EARNINGS

	2006 CHF	2005 CHF
Available unappropriated earnings		
Balance brought forward		
Net income of the year	10 881 681 969	7 124 758 251
Waived dividends on treasury shares		8 717 739
Total available earnings	**10 881 681 969**	**7 133 475 990**
Appropriation		
Payment of a dividend of CHF 1.35 (2005: CHF 1.15) gross on 2 504 139 595 (2005: 2 481 027 457) dividend bearing shares with a nominal value of CHF 0.50 each	-3 380 588 453	-2 853 181 576
Transfer to free reserves	-7 501 093 516	-4 280 294 414
Balance to be carried forward		

BALANCE SHEETS (PRIOR TO PROFIT APPROPRIATION) (at December 31, 2006 and 2005)

	Notes	2006 CHF millions	2005 CHF millions
Assets			
Non-current assets			
Intangible assets		278	310
Financial assets	3	27 488	21 568
Total non-current assets		**27 766**	**21 878**
Current assets			
Receivables			
subsidiaries		3 869	1 456
others		26	39
Marketable securities	4	265	1 016
Cash and short-term deposits			1
Total current assets		**4 160**	**2 512**
Total assets		**31 926**	**24 390**
Equity and liabilities			
Equity			
Total share capital	5	**1 365**	**1 370**
Reserves			
Legal reserves	6		
General reserve		320	320
Reserve for treasury shares		7 470	8 653
Free reserves	7	10 930	6 048
Total reserves		**18 720**	**15 021**
Unappropriated earnings			
Net income of the year		10 882	7 125
Waived dividends on treasury shares			9
Total unappropriated earnings		**10 882**	**7 134**
Total equity		**30 967**	**23 525**
Liabilities			
Provisions		526	592
Accounts payable and accrued liabilities			
subsidiaries		289	160
others		144	113
Total liabilities		**959**	**865**
Total equity and liabilities		**31 926**	**24 390**

The notes form an integral part of these unconsolidated financial statements

NOTES TO THE FINANCIAL STATEMENTS OF NOVARTIS AG

1. Introduction

The financial statements of Novartis AG comply with the requirements of the Swiss law for companies, the Code of Obligations (SCO).

2. Accounting Policies

Exchange rate differences

Current assets denominated in foreign currencies are converted at year end exchange rates. Exchange differences 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 to twenty years.

Financial assets

These are valued at acquisition cost less adjustments for impairment of value.

Marketable securities

These are valued at the lower of cost and market value.

Provisions

Provisions are made to cover general business risks of the Group.

3. Financial Assets

Included in financial assets are CHF 11 700 million (2005: CHF 11 615 million) of investments in subsidiaries and CHF 15 788 million (2005: CHF 9 953 million) of loans to subsidiaries and other related entities.

The principal direct and indirect subsidiaries and other holdings of Novartis AG are shown on pages 178 and 179.

4. Marketable Securities

Included in marketable securities are treasury shares with a net book value of CHF 262 million (2005: CHF 1 013 million) (see 5 and 6 below).

5. Share Capital

	Number of shares Dec 31, 2004	Movement in year	Dec 31, 2005	Movement in year	Dec 31, 2006
Total Novartis AG shares	**2 777 210 000**	**-38 039 000**	**2 739 171 000**	**-10 200 000**	**2 728 971 000**
Treasury shares					
Treasury shares held by Novartis AG	159 067 000	-33 474 472	125 592 528	-13 483 063	112 109 465
Treasury shares held by subsidiaries	132 395 603	230 077	132 625 680	-7 877 561	124 748 119
Total treasury shares	**291 462 603**	**-33 244 395**	**258 218 208**	**-21 360 624**	**236 857 584**

The Novartis AG share capital consists of registered shares with a nominal value of CHF 0.50 each.

The total share capital reduced from CHF 1 369.6 million at December 31, 2005 to CHF 1 364.5 million at December 31, 2006 due to a share capital reduction and subsequent cancellation of 10.2 million shares with a nominal value of CHF 5.1 million approved at the Annual General Meeting of February 28, 2006, which became effective on May 17, 2006.

The total share capital reduced from CHF 1 388.6 million at December 31, 2004 to CHF 1 369.6 million at December 31, 2005 due to a share capital reduction and subsequent cancellation of 38.0 milllion shares with a nominal value of CHF 19.0 million approved at the Annual General Meeting of March 1, 2005, which became effective on May 25, 2005.

Treasury share purchases totaled 0.5 million (2005: 14.7 million) with an average purchase price per share of CHF 68 (2005: CHF 57) and treasury share sales totaled 11.7 million (2005: 9.9 million) with an average sale price of CHF 70 (2005: CHF 59)

The number of treasury shares held by the Company and subsidiaries meet the definitions and requirements of Art. 659b SCO. Out of the 236 857 584 treasury shares held at December 31, 2006, 224 831 405 are non-dividend bearing with the balance held for share-based compensation and being dividend bearing. Novartis Group s consolidated financial statements comply with IFRS SIC Interpretation No. 12. This requires consolidation of entities which do not qualify as subsidiaries in the sense of Article 659b SCO.

6. Legal Reserves

GENERAL RESERVE

	2006 CHF millions	2005 CHF millions
January 1	**320**	**281**
Gain on merging a subsidiary into Novartis AG		39
December 31	**320**	**320**

RESERVE FOR TREASURY SHARES HELD BY THE GROUP

	2006 CHF millions	2005 CHF millions
January 1	**8 653**	**10 573**
Reduction due to cancellation of treasury shares (CHF 586 million of repurchased shares less their nominal value of CHF 5 million, 2005: CHF 2 183 million and CHF 19 million, respectively)	-581	-2 164
Transfer from/to free reserves	-602	244
December 31	**7 470**	**8 653**

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.

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7. Free Reserves

	2006 CHF millions	2005 CHF millions
January 1	**6 048**	**2 036**
Transfer from unappropriated earnings	4 280	4 256
Transfer to reserve for treasury shares	602	-244
December 31	**10 930**	**6 048**

8. Contingent Liabilities

	Outstanding liabilities Dec 31, 2006 CHF millions	Outstanding liabilities Dec 31, 2005 CHF millions
Guarantees in favor of group companies to cover capital and interest of bonds and commercial paper program total maximum amount CHF 5 502 million (2005: CHF 6 709 million)	3 125	3 964
Guarantees in favor of group companies, associated companies and others total maximum amount CHF 3 071 million (2005: CHF 2 856 million)	1 809	2 308
Total	**4 934**	**6 272**

9. 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.

As far as can be ascertained from the information available, shareholders owning 2% or more of the Company s capital at December 31 are as follows:

	% holding of share capital December 31, 2006	% holding of share capital December 31, 2005
Novartis Foundation for Employee Participation, Basel	2.8	2.9
Emasan AG, Basel	3.2	3.2

In addition:

- Mellon Bank, Everett, holds 2% (2005: 1.9%), Nortrust Nominees, London, holds 2.7% (2005: 2.5%) and JPMorgan Chase Bank, New York, holds 7.6% (2005: 8.3%) respectively, of the registered shares as nominees.

- JPMorgan Chase Bank, the depositary for the shares represented by American Depositary Shares, is registered with 12.1% of the share capital.

REPORT OF THE AUDITORS ON THE NOVARTIS AG FINANCIAL STATEMENTS

To the General Meeting of Novartis AG, Basel

As statutory auditors, we have audited the accounting records and the financial statements (balance sheet, income statement and notes), pages 194 to 198, of Novartis AG, Basel, for the year ended December 31, 2006.

These financial statements are the responsibility of the Board of Directors. Our responsibility is to express an opinion on these financial statements based on our audit. We confirm that we meet the legal requirements concerning professional qualification and independence.

Our audit was conducted in accordance with Swiss Auditing Standards, which require that an audit be planned and performed to obtain reasonable assurance about whether the financial statements are free from material misstatement. We have examined on a test basis evidence supporting the amounts and disclosures in the financial statements. We have also assessed the accounting principles used, significant estimates made and the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the accounting records and financial statements and the proposed appropriation of available earnings comply with Swiss law and the Company s articles of incorporation.

We recommend that the financial statements submitted to you be approved.

PricewaterhouseCoopers AG

G.Tritschler
Auditor in Charge

R.P.Muir

Basel, January 17, 2007

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KEY DATES FOR 2007

Anticipated key reporting dates

Annual General Meeting for the financial year 2006	March 6, 2007
First Quarter 2007 (sales and results)	April 23, 2007
First Half 2007 (year to date and second quarter sales and results)	July 17, 2007
Nine Months 2007 (year to date and third quarter sales and results)	October 18, 2007
Full Year 2007 (year to date and fourth quarter sales and results)	January 2008

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Novartis on the Internet

www.novartis.com

Novartis Annual Report on the Internet

www.novartis.com/annualreport2006

INSIDE BACK COVER : HOSPITAL DO CÂNCER ; SÃO PAULO , BRAZIL

BACK COVER : GRUPO DE APOIO AO ADOLESCENTE E À CRIANÇA COM CÂNCER ; SÃO PAULO , BRAZIL

We would like to thank everyone who contributed to this report by sharing personal experience and knowledge with us.

We are particularly grateful to Alex Majoli for the artistic photographs in our Annual Report.

Alex Majoli was born in Ravenna, Italy in 1971. At the age of 15, he joined the F45 Studio in Ravenna, working alongside Daniele Casadio. While studying at the Art Institute in Ravenna, he became a photojournalist and joined the Grazia Neri Agency. After graduation, he traveled to Yugoslavia to document the conflict in that country. He returned many times in later years.

For almost a decade Majoli photographed psychiatric hospitals around the world, including an intimate portrait of a mental institution on the island of Leros, Greece. This project culminated in the publication of Majoli s first major monograph, Leros.

With the aim of documenting life in harbor cities around the world, Majoli started the large-scale personal project Hotel Marinum that was further developed as a theatrical multimedia show. At the same time, he began experimenting with cinematography and made a series of short films and documentaries.

After becoming a full member at Magnum Photos, Majoli covered the fall of the Taliban regime in Afganistan and two years later the invasion of Iraq. He continues to follow and document conflicts worldwide for various magazines such as Newsweek, The New York Times Magazine, Granta and National Geographic.

Majoli was recently involved in a project for the French Ministry of Culture entitled BPS, or Bio-Position System, about the social transformation of the city of Marseille.

He lives and works in New York and Milan.

Forward-Looking Statements

This Annual Report contains certain forward-looking statements within the meaning of the securities laws of the United States relating to the Company s business, which can be identified by the use of forward-looking terminology such as will, growth, future, likely, anticipated, s on track, submitted, to divest, planning, expect, anticipate, seeking to become, development, could be , pipeline, planned, strategy, or similar expressions, or by express or implied discussions regarding potential future growth in the healthcare industry or in Novartis revenues, potential new products, potential new indications for existing products, or regarding potential future revenues from such products, or by discussions of strategy, plans, intentions or expectations. Such forward-looking statements 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 Novartis revenues, or the healthcare industry will grow in the future, or that they will achieve any particular levels. Neither can there be any guarantees that any of the development projects described will succeed or that any new products or indications will be brought to market. Similarly, there can be no guarantee that Novartis or any future product or indication will

achieve any particular level of revenue. In particular, management s expectations could be affected by, among other things, uncertainties involved in the development of new pharmaceutical products, including unexpected clinical trial results; unexpected regulatory actions or delays or government regulation generally; the company s ability to obtain or maintain patent or other proprietary intellectual property protection; competition in general; government, industry, and general public pricing and other political pressures; as well as factors discussed in the Company s Form 20-F filed 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 in this Annual Report as anticipated, believed, estimated or expected. Novartis is providing the information in this handout as of the date of the publication of this Annual Report, and does not undertake any obligation to update any forward-looking statements contained in this Annual Report as a result of new information, future events or otherwise.

The business policy of Novartis takes into account the OECD s Guidelines for Multinational Enterprises, with their recommendations on the disclosure of information.

Our Annual Report is originally published in English, with French and German versions available.

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SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, Novartis AG has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

NOVARTIS AG

Date: February 14, 2007

By: /s/ Malcolm Cheetham

Name: Malcolm Cheetham
Title: *Head Group Financial Reporting and Accounting*